



Community Health Workers & *Promotores*  
in the Future of Medi-Cal

# Resource Package #3: Data and Evaluation Considerations for CHW/Ps Supporting Health and Social Care Integration for Medi-Cal Members

A Project of the California Health Care Foundation

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# Table of Contents

<b>Introduction .....</b>	<b>3</b>
About the Project and Resource Package.....	3
Background and Key Concepts.....	5
<b>Key Implementation Approaches.....</b>	<b>8</b>
The Role of CHW/Ps in Collecting Data.....	8
Initial Data Considerations for CHW/P Program Design .....	9
Infrastructure and Supports to Help CHW/Ps Collect Data .....	11
Designing Evaluation Strategies for CHW/P Activities .....	13
<b>Infrastructure Barriers and Solutions .....</b>	<b>18</b>
Insufficient Health Information Exchange .....	18
Varying Data Infrastructure Across CBOs .....	19
Lack of Standard SDOH Data Collection Measures .....	19
Concerns Around Privacy and Consent.....	19
Lack of Standardized Evaluation Measures for CHW/P Activities.....	20
<b>Collaboration with Partner Organizations .....</b>	<b>22</b>
<b>Resources and Tools .....</b>	<b>23</b>
Designing Programs that Engage CHW/Ps to Collect Data .....	23
SDOH Screening Tools .....	23
Evaluating Programs that Employ CHW/Ps .....	24
Evidence of CHW/Ps Improving Health Outcomes.....	24
Return on Investment.....	24
<b>Appendix .....</b>	<b>25</b>
<b>Acknowledgments.....</b>	<b>26</b>

## Introduction

### About the Project and Resource Package

As California aims to improve the quality of life and health outcomes for its residents, particularly Medi-Cal members, one strategy is to better integrate community health workers and *promotores* (CHW/Ps) into health care coordinated by managed care plans (MCPs) and providers. According to the American Public Health Association, a community health worker is a “frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the CHW to serve as a liaison, link, or intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery.”<sup>1</sup> *Promotores de salud*, or *promotoras*, are a subset of community health workers who serve Spanish-speaking communities and are characterized as lay health workers with the ability to provide culturally appropriate services informed by their lived experiences.<sup>2</sup>

CHW/Ps have been employed across public health, medical, and behavioral health settings with different job titles and in a range of roles. The topic of CHW/P roles is covered in depth in the first resource package of this project, *The Role of CHW/Ps in Health Care Delivery for Medi-Cal Members*.<sup>3</sup> Currently, most CHW/Ps work for Federally Qualified Health Centers (FQHCs), public health agencies, or health plans, but increasingly hospitals and health systems are exploring CHW/P interventions.<sup>4</sup> CHW/Ps have an extensive history within community-based and social service organizations serving communities that are most likely to experience health inequities. In some organizations, job positions for unlicensed professionals may include shared roles with those often performed by CHW/Ps, such as case management, engagement, health coaching, health care and housing navigation, employment services, and outreach. However, in different settings these professionals may not use the titles of CHWs or *promotores*, which is frequently the case with behavioral health and social service providers. For this resource package, unlicensed professionals performing these roles — including but not limited to those formally titled CHWs or *promotores* — will be described as the community-connected health workforce to emphasize their shared characteristics and broad importance across multiple sectors. This term, community-connected health workforce, is also used to elevate the value of this workforce.

This project aims to advance the role of CHW/Ps in the future of Medi-Cal, within the context of the California Advancing and Innovating Medi-Cal (CalAIM<sup>5</sup>) initiative. It seeks to enhance Medi-Cal MCPs and their partners’ readiness to implement effective, evidence-based CHW/P activities that advance health equity. To further this goal, the project is producing four resource packages — informed by stakeholders — containing resources and tools that support CHW/Ps’ integration into programs for Medi-Cal enrollees.



The packages cover the following topics:

- ▶ Roles of CHW/Ps in improving care delivery for Medi-Cal members<sup>6</sup>
- ▶ Training for CHW/Ps and their employers<sup>7</sup>
- ▶ Data and evaluation considerations for CHW/Ps
- ▶ Program financing and sustainability

The resource packages are being released between February and August 2021. In September 2021, the four resource packages will be adapted into a comprehensive toolkit with updates related to the CalAIM initiative. The resource package development occurs within a larger stakeholder engagement process, with recommendations and input provided from a health plan council, an advisory council, and a stakeholder group. CHW/Ps and other stakeholders share insights throughout this resource package. A list of the individuals participating in the process is included in the [Acknowledgments](#) section.

The resource packages are designed to align with CalAIM objectives and to help MCPs more effectively meet the needs of California residents, including acknowledging the important role nonclinical interventions play in addressing health-related social needs and reducing health inequities. Two CalAIM components are particularly relevant for programs that employ CHW/Ps: (1) a requirement for MCPs to provide an enhanced care management (ECM) benefit to address clinical and nonclinical needs for people with complex health and social needs, and (2) authorization for MCPs to deliver in-lieu of services (ILOS), which are cost-effective alternatives to covered services that improve health, such as housing navigation services. As the CalAIM proposal is finalized and MCPs develop plans for these services, MCPs are uniquely positioned to lead the integration of this valuable workforce by including CHW/Ps in their strategies.

This third resource package, *Data and Evaluation Considerations for CHW/Ps: Supporting Medi-Cal Member Health and Social Care Integration*, highlights these topics:

- ▶ Evidence to support CHW/P interventions and the return on investment in programs that employ CHW/Ps
- ▶ Goals and considerations for designing programs with CHW/P partners
- ▶ CHW/P roles in data collection and information sharing between MCPs, health systems, and community-based organizations (CBOs)
- ▶ Strategies for MCPs to include the CHW/P workforce in data collection
- ▶ Considerations for measuring the impact of programs that employ CHW/Ps or CHW/P interventions
- ▶ Infrastructure barriers and challenges in data exchange
- ▶ Considerations for partnering with health systems, CBOs, or training organizations
- ▶ Curated resources and sample tools from programs that employ CHW/Ps

## Background and Key Concepts

### CHW/Ps' Connection to Members

To improve health outcomes for members with complex health and social needs, California — in the context of CalAIM's ECM and ILOS services — is redesigning its health care system to integrate health and social sectors and rethink how MCPs and other health care entities provide care. This integration will require new models that rely on existing community-connected health workforces and leverage roles that bridge health systems and social service entities. CHW/Ps are well suited to connect health care and social care, and the data and digital tools they use can help further this integration.

CHW/Ps serve as a bridge between the health care system, social service agencies, and CBOs for members with complex health and social needs. CHW/Ps are a hub of information and provide a “finger on the pulse” of a given community. They are a critical component of the community-connected health workforce who can help achieve health and social service integration as envisioned under CalAIM.

*“Build the rapport [with the client] before you start asking questions. The quality of the information is going to depend on how much the patient trusts you.”*

— CHW/P

### Individual and Population Health Data

Most providers are familiar with individual health data. Examples include body mass index, cholesterol level, or chronic disease incidence, like heart disease or diabetes. Providers or other stakeholders may be less familiar with the term “population health,” which is defined as “the health outcomes of a group of individuals, including the distribution of such outcomes within the group.”<sup>8</sup> A population health focus aims to improve the health of an entire population.<sup>9</sup> Shifting to a population health focus has significant implications for data collection and outcome measurement. The need to improve population health creates the imperative to collect data to enable a range of entities – providers, MCPs, and health and social systems – to accurately assess their member population's health needs. This resource package refers to both individual and population health indicators.

### CHW/Ps' Demonstrated Role in Improving Health Outcomes

Research confirms the effectiveness of CHW/Ps in improving health outcomes and quality of care.<sup>10</sup> Findings from multiple studies demonstrate that CHW/Ps contribute significantly to improvements in members' access to and continuity of care; screening and other prevention activities; and adherence to treatment for various conditions and diseases.<sup>11</sup> Programs using CHWs show a return on investment ranging from \$2.28 to \$4.80 for every dollar spent on CHWs.<sup>12</sup>

The Appendix provides a finite list of research studies confirming the value of CHW/P interventions and activities. MCPs, health providers, and CBOs can use the Appendix to help address questions from chief financial officers or other stakeholders regarding the evidence of CHW/Ps for improving health outcomes, reducing health care costs, and advancing health equity.<sup>13</sup>

### Evidence-Based Model of Care

The Transitions Clinic Network (TCN) is a program that supports health systems in implementing an evidence-based model of care for people with chronic conditions returning to the community from incarceration. All TCN partner clinics employ CHWs with histories of incarceration as an integral part of the primary care team. A randomized controlled trial found a 51 percent reduction in emergency department (ED) visits for members of the TCN program, which embeds CHWs in primary care to deliver enhanced care management.<sup>14</sup>

### Social Determinants of Health Data

Social determinants of health (SDOH) are the conditions in which people are born, grow, live, work, and age.<sup>15</sup> Social, environmental, and behavioral factors have a bigger impact on health outcomes than medical interventions or genetics combined.<sup>16</sup> It is important for health care entities to document SDOH in the communities they serve to understand how to better serve people with complex health and social needs. Addressing SDOH requires cross-sector collaboration and partnerships that extend beyond the health care system. Under an SDOH framework, care for members may involve linking them to services that are not delivered by health care providers. For example, while blood pressure screenings and medication management are critical factors to control high blood pressure, access to fresh foods and physical activity are also important.

Standardized data collection on SDOH factors can help health care entities identify the root causes of poor health in the community and target resources and interventions to address those needs. CHW/Ps can support efforts to address SDOH by helping people navigate complex health and social services programs and collecting SDOH data for use by MCPs, CBOs, and other social service organizations. For example, CHWs employed by Transitions Clinic Network programs use a mobile app to collect data on members' health related social needs. The tool allows them to make updates in real time, regardless of whether they are in the field or in the clinic and provides the care team with accurate contact information or a person's immediate need for food or housing resources.

*“It’s important to remember that while the data is out there, the personal connection with somebody -- that’s what makes it. That’s where you are able to see the full story.”*

— CHW/P

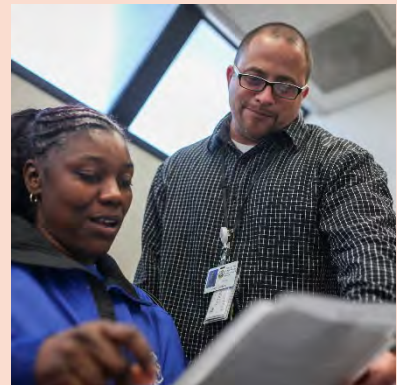
## Data Considerations for Health Equity

Data collection and stratification are key to advancing health equity, as they allow MCPs to identify disparities and collaborate with CHW/Ps to design approaches to address health inequities. CHW/Ps, with their lived experience and understanding of the communities they serve, play a vital role in collecting data on housing status, access to transportation, sense of safety, and other information that might otherwise exacerbate barriers to accessing health care. CHW/Ps, who are well-positioned to establish member trust, can help explain the reasons for collecting sensitive information and address concerns about privacy and data sharing.

From a health equity perspective, it is important that CHW/Ps be integrally involved in program design and implementation to focus on community needs. A CHW/P's work with one individual often creates a ripple effect through their families, their neighbors, and their social circles. For example, perhaps a CHW/P starts working with a member with a history of heart disease and substance use disorder. When the CHW/P visits the home, they meet the member's partner who is pregnant with their second child. The CHW/P then engages the member's partner assesses the need for prenatal care, and connects them to health services and social care resources. CHW/Ps' expansive role in the community links MCPs to people at the neighborhood and family level, thereby addressing health inequities in a more expansive way. It is important to note, however, that the inclusion of CHW/Ps in health care delivery is a step toward addressing health disparities, but it is insufficient on its own to solve systemic and pervasive health inequities.

### Expert Insight on CHW/P Role in Data Collection: Transitions Clinic Network

At the age of 23, Joe Calderon started serving a life sentence. After nearly 20 years incarcerated, he knew he wanted to meaningfully and positively give back to his native San Francisco community upon his release. He currently works as a Senior CHW and Trainer at the Transitions Clinic Network, a national organization dedicated to improving health and reentry outcomes for those returning to the community from incarceration. His lived experience allows him to deeply connect to his clients who find it challenge to connect back into society. His clients look up to him as a role model and trust him as a resource as he also navigated similar challenges. Given the reentry community's negative experiences with unjust institutions, collecting individual's data is often a challenge. Joe understands the nuances of this and emphasizes hiring those with lived experience is the key to building trust with populations who have been most marginalized by systems of oppression. He elaborates: "One question that could be liberating for one, could be disrespectful to another. So when you're asking about the social determinants of health (access to nutritious food, reliable transportation, steady housing, etc.), some people are prideful—they might not want to tell you they're hungry at night. When we think about using Community Health Workers to collect this social health data, we must do so correctly by and hiring people from the community they serve. They'll understand how to walk on that rice paper, make it happen, and get the data most useful for the health system and MCPs."



## 🔑 Key Implementation Approaches

To facilitate integration between health and social sectors, contracted providers, health delivery systems, MCPs, and CHW/Ps will need to develop roles, responsibilities, and infrastructure to support successful data collection, exchange, and evaluation. This section can help guide MCPs designing programs that employ CHW/Ps to use data effectively to support health and social care integration and evaluate the effectiveness of these CHW/P activities. It outlines a variety of issues for consideration organized under the following broad categories: (1) the role of CHW/Ps in collecting data on member health and social factors and implications for program design; (2) initial data considerations and goal setting for CHW/P program design; (3) infrastructure and supports to help CHW/Ps collect data; and (4) strategies and metrics to evaluate CHW/P activities.

### The Role of CHW/Ps in Collecting Data

CHW/Ps can play a valuable role in collecting data, transferring information between health and social service systems, and informing MCPs, FQHCs, hospital systems, and the state about community needs. CHW/Ps can also help provide the most up-to-date information on elements such as member housing status, contact information, and any immediate or emergent health risks. Whether CHW/Ps coordinate care as part of an interdisciplinary primary care team in an office-based setting or engage community members in the field, they are well positioned to collect this type of information.

As a trusted voice, the outreach CHW/Ps do with people experiencing homelessness, migrant farmworkers, or other people who are disconnected from the health care system provides the MCP with information that may not be collected in a traditional manner. A key marker for data that is important to MCPs, providers, and CHW/Ps is related to the purpose of the interaction with the member. If the purpose is to engage members, then accurate demographic information such as current address and phone number is most important. Other important elements include age, race/ethnicity, gender, income, employment and housing status, and internet access.

In addition to supporting MCPs' delivery of ECM and ILOS, data collected by CHW/Ps may help MCPs refine their strategies to improve overall population health (which will be required by CalAIM as of January 2022). For example, data collected by CHW/Ps employed by MCPs in Oregon helped the plans increase access to priority populations previously disengaged from services.<sup>17</sup> From an evaluation perspective, CHW/Ps' involvement in data collection and analysis can also help them learn what works in their interventions and support opportunities for program growth and development.





## Initial Data Considerations for CHW/P Program Design

The overall goal of data collection is to support health and social care integration with programs that employ CHW/Ps and evaluate the effectiveness of CHW/P activities. With this broad goal in mind, there are key considerations for MCPs to address in designing data strategies for CHW/P interventions. Following is a discussion of key factors to guide CHW/P data strategies, including setting initial data collection goals, identifying shared goals for programs that employ CHW/Ps, determining the information that CHW/Ps need to support members effectively, and recognizing CHW/P priorities in data collection and outcome measurement.

### Goal Setting

Whether MCPs design their own CHW/P intervention, contract directly with CHW/Ps, or partner with CBOs or other social service entities, they will need to assess what data are required for effective CHW/P activities. Key questions to guide this assessment include

- ▶ What is the goal in collecting data?
- ▶ What is the best method of data collection to meet that goal?
- ▶ What data are most important to support care coordination?
- ▶ How can data flow bidirectionally from programs that employ CHW/Ps, to providers and MCPs?
- ▶ How can effective data sharing from the health care setting back to the MCPs be facilitated via health information technology (HIT) or electronic health record (EHR) systems?
- ▶ How can MCPs and CBOs partner with CHW/Ps as they work to obtain the necessary authorizations and consents, as required by CalAIM?

### Lessons from Whole Person Care: Understanding Program Goals

As new state programs are rolled out, it is important to understand the underlying goals the state will use to determine success and the data that will be required to gauge progress. For example, the overarching intent of Whole Person Care is the coordination of health, behavioral health, and social services in a person-centered approach, with the goal of improved member health and well-being through more efficient use of resources. Many MCPs included CHW/Ps in their approach, demonstrating their confidence this workforce will help achieve the programmatic goals set by the state. A UCLA report indicates that 19 out of the 26 counties participating in WPC incorporated CHW/Ps in their approach.<sup>18</sup>

### Shared Data Goals in Programs that Employ CHW/Ps

MCPs will benefit by establishing data-sharing agreements with programs employing CHW/Ps who collect data in the field. For CHW/Ps who are embedded in a primary care setting, health care delivery entities, such as primary care providers and health systems, will need to consider how to extract and exchange data between entities and with the MCP. To support CHW/Ps, providers should not only authorize “read-only” access to EHRs, but also give CHW/Ps time in their day to record SDOH and other social needs data into EHRs. With this information and access to these tools, CHW/Ps can accelerate care coordination, highlight any red flags, and inform care delivery.

## Information CHW/Ps Require to Meet Member Needs

The most important consideration for CHW/Ps and the care team is meeting member's health and social needs by focusing on member-centered goals. MCPs and organizations that employ CHW/Ps should collaborate on the scope of data collection to ensure that the right information is shared and available to meet member needs. If too little information is made available — often due to misunderstood HIPAA concerns — then the care team may miss out on CHW/P insights and feedback. If too much information is shared, there is a risk of “information overload” whereby CHW/Ps spend valuable time sifting through paperwork or multiple digital apps.

## CHW/Ps' Priorities in Data Collection and Outcome Measurement

Understanding CHW/Ps' experiences in collecting data from members can help guide MCP strategies around data collection and evaluation. As part of the activities to inform this resource package, a group of CHW/Ps met in February 2021 to share insights on collecting member data. The following synthesizes the participating CHW/Ps' perspectives on best practices for data collection:

- ▶ **Results of the member's health assessment and their identified health goals.** CHW/Ps value and prioritize member-centered goals. Results from health assessments, care planning with providers, or patient surveys help shape a full picture when CHW/Ps begin their outreach and engagement with members. At the same time, CHW/Ps want information gathering to be balanced with their primary task of building trust and establishing a good relationship.
- ▶ **Demographic and health information about the member's community.** In many instances, CHW/Ps are from the communities they serve. While CHW/Ps often have strong community ties, MCPs have access to sophisticated and highly informative data sets on the health of a given community. MCPs can contribute to CHW/P effectiveness by using this data to help focus on what type of interventions a CHW/P may want to offer their members in that community. At the same time, a CHW/P's reflection on member health can provide a feedback loop to the MCP to revise program design or goals.
- ▶ **Member's history.** CHW/Ps want to know what has been tried in the past and what worked or did not work with members regarding their care. CHW/Ps rely on MCPs and providers to share this information and other relevant claims/diagnosis-level information to support their work. From a CHW/P perspective, some members require high-touch relationship building that can be captured throughout the data collection process. For example, CHW/Ps may ask an individual with behavioral health needs questions about what medications they may take and if they have had any inpatient hospitalizations. This helps CHW/Ps have background context while still letting the story come from the members themselves. In this instance, CHW/Ps may learn about certain factors that cause a member to use the emergency room instead of going to a primary care provider. The CHW/P can use that historical information to educate the member on appropriate emergency department use and can then assess the member's readiness for change.
- ▶ **Member's access to resources.** CHW/Ps are often in the best position to refer members to resources and help them navigate health and social sectors. Infrastructure that supports data exchange can capture the dozens of ways CHW/Ps support members' access to and use of services through documentation of “closed-loop referrals.” Closed-loop referrals ensure that information is sent back to the CHW/P and other organizations once the member connects with the referral.

*“CHWs could be really helpful to collect data as part of the assessment. There are a lot of questions that are uncomfortable — and can feel judgmental — so there is a real benefit to identifying and integrating CHWs into the assessment process.”*

— MCP

## Infrastructure and Supports to Help CHW/Ps Collect Data

To ensure successful integration of CHW/Ps within health and social service delivery, MCPs, providers, and health systems need to build infrastructure that equips CHW/Ps to collect and analyze data, track improvements, and participate in the design of the intervention. CHW/Ps also need the appropriate tools and training to do this work. This preparation will support CHW/Ps’ full participation on the care team, better job satisfaction, and more effective systems to best serve members.<sup>19</sup> MCPs can start by assessing if there is sufficient technology and resources to enable successful data collection and information sharing where CHW/Ps are employed (primary care setting or CBO, for example). Further, seamless data exchange across statewide health and social sectors will require significant infrastructure to support data collection and integration. Following are considerations to guide the development of necessary data infrastructure supports.

### Embed CHW/Ps in Program Infrastructure and Workflows

To support and elevate the CHW/P role, MCPs, CBOs, and health care delivery systems will need to consider how to embed CHW/Ps into the program infrastructure and workflows. CHW/Ps will need to be included in initial program design and the required contracting to achieve data collection goals. MCPs and contracted providers will need to define and coordinate key data collection features of programs that employ CHW/Ps. These include

- ▶ Infrastructure, technology, and tools to carry out effective data collection regardless of setting or entity, and data-sharing agreements among these organizations
- ▶ Data collection standards created with CHW/P input
- ▶ Well-defined roles and responsibilities
- ▶ Documented processes and workflows for CHW/Ps within provider or CBO settings

These investments in establishing a shared understanding and infrastructure for data collection and use are essential for creating an integrated seamless experience for members. Such investments will create a more effective system to share and retrieve data among health and social service providers and give MCPs the population data required to effectively manage patient populations.

### Tools to Help CHW/Ps Assess Health-Related Social Needs

CHW/Ps can employ a host of tools and screenings to assess health-related social needs.<sup>20</sup> For example, the Patient Health Questionnaire-Anxiety and Depression Scale screening combines the PHQ-9 and Generalized Anxiety Disorders surveys into a depression and anxiety screening tool.<sup>21</sup> The Protocol for Responding to and Assessing

Patients' Assets, Risks, and Experiences screens for a range of social risk factors including income and housing instability;<sup>22</sup> the Hunger Vital Sign assesses food insecurity and hunger;<sup>23</sup> and the Hurt, Insult, Threaten, and Scream instrument screens for interpersonal violence.<sup>24</sup> The Centers for Medicare & Medicaid Services also developed a comprehensive *Accountable Health Communities Screening Tool*, which adapts questions from the other screenings in one tool.<sup>25</sup>

MCPs should understand if the program employing CHW/Ps tracks referrals to food assistance, housing, or other social services and the extent to which it has a process to document when members have received the services to which they were referred. This demonstrates the closed-loop referral process, which is an important component of the technology infrastructure, tools, and platforms needed to integrate social care into the health care delivery system. Programs that employ CHW/Ps will have varying levels of technology infrastructure, applications, and resources to contribute to meaningful data exchange. For example, because CHW/Ps go into the community and into people's homes, they may encounter weak internet connections that may deter them from collecting data on a phone or tablet application and should have a plan to collect encounter data on paper.

MCPs conducting health risk screenings can use the CHW/P workforce either by direct contract or through an established CBO or human service agency to collect these data for both the plan and the provider — with the goal of addressing gaps in care and improving member health outcomes. These screening tools typically look at a variety of factors related to SDOH and health-related social needs, including language, housing status, education, employment, transportation, exposure to violence, and social integration, among other factors. However, regardless of the tool used, screening tools provide population data that can be used to inform the growth of CHW/P activities, population health programs, targeted community investments, new collaborations, and planning with payers and the state. Further, it is important for MCPs to collect Z-codes<sup>26</sup> so that SDOH assessments can be used as part of risk adjustment and, ultimately, rate setting. Many SDOH screening tools “cross-walk” to Z-codes that are important for documentation.

### **Sharing Member Data**

Because building trust is a critical component of the CHW/P-member relationship, CHW/Ps may want to know how the information they are collecting will be used by the member's care team. If a CHW/P is employed by an MCP or CBO, there are different considerations to maintain trust between CHW/Ps and those they serve. MCPs, CBOs, and other entities will need to ensure that privacy policies and protocols are in place and that they are well communicated to the CHW/Ps so that they can, in turn, clearly communicate that to members.

Programs that employ CHW/Ps will also need to balance building rapport with members with the need for assessments and data collection and be mindful that for CHW/Ps building and maintaining trust is a priority. CHW/Ps will need to explain the need for sensitive data collection transparently and describe how, why, and to what extent the information will be shared. MCPs and CBOs should consider creating a feedback loop for CHW/Ps to share members' questions and concerns about data being collected (items and question construction) and routinely support the program team in culturally appropriate approaches to collecting data from diverse communities.

## Technology Considerations

As health care systems adapt to the changing dynamics of health and social service delivery and the ongoing need to integrate both sectors, several important questions arise, including what kind of technology infrastructure is needed to facilitate such integration. The HIT and health information exchange infrastructure in California, as in most states, relies on a patchwork of disconnected systems and platforms, which impede meaningful, real-time data exchange between health entities and among health and social sectors.

Important efforts are underway in California to help state and regional stakeholders address the regulatory, policy, and technical challenges to establish seamless data transfer between health and social sectors.<sup>27</sup> There are important considerations for MCPs to weigh in integrating a CHW/P workforce into their HIT infrastructure. At a minimum, MCPs should use standardized tools and data collection methods, as well as platforms, to connect CHW/P encounter data with members' EHRs.

Despite the tremendous challenges of seamless and meaningful integration of health and social data, there are promising signs of innovations that will achieve these goals. The Impact Model's use of HOMEBASE and the Pathways HUB Model are two examples of technologies that support CHW/Ps' data collection and integrate health and social service data (see sidebar for details).<sup>28</sup>

## Training on Data Collection

Before program implementation, MCPs should work with CHW/Ps to identify the knowledge, skills, and abilities that would enable CHW/Ps to be successful at data collection and reporting. Through a series of CHW/P stakeholder convenings and interviews for this resource package, CHW/Ps expressed the need for adequate training and support in their data collection efforts while balancing any requirements for lengthy screenings with the other important roles they play in establishing trust and building relationships with members. Further feedback from stakeholders indicated that the CHW/P workforce has a varied skill set for data collection. Stakeholders underscored the need for training and capacity building for organizations that employ CHW/Ps. They also noted that the need for data collection and writing skills should be clear on the CHW/P job description. More information on training for both CHW/Ps and other members of the interdisciplinary team is addressed in a companion publication, *Resource Package #2: Training Approaches for Community Health Workers and Promotores to Support Medi-Cal Members*.<sup>29</sup>

## Designing Evaluation Strategies for CHW/P Activities

Designing an evaluation strategy is an important component of initial program design. After identifying the priority population and conducting a needs assessment, an MCP will need to identify which quantitative and qualitative measures to use to demonstrate the program is meeting individual member needs or population health goals. In addition, evaluation data can track both the level of engagement from individual members and priority population access to services and overall health and wellness. This section outlines considerations for qualitative and quantitative data to evaluate CHW/P interventions and CHW/Ps role in quality improvement.

## Using Quantitative Measures to Evaluate CHW/P Activities

Metrics established before the launch of a program and adapted over time enable plans and providers to measure quality, evaluate the program, and identify and close gaps in care. For example, CHW/Ps are experts in engaging members into primary care. Measuring member engagement is a good marker to determine greater access to services and opportunities to address health equity. Examples of outcome measures to evaluate CHW/P activities, as seen in Exhibit 1, include percentage of member engagement, completion of closed-loop referrals, and supervisor feedback.

Exhibit 1. Sample Measures to Evaluate CHW/P Activities <sup>30</sup>	
Category	Measures
<b>Health-Related Services</b>	<ul style="list-style-type: none"> <li>▶ Number of members enrolled</li> <li>▶ Number of members served</li> <li>▶ Number of appointments made and % of appointments kept (no show rate)</li> <li>▶ Number of CHW visits</li> </ul>
<b>Referrals</b>	<ul style="list-style-type: none"> <li>▶ Number from primary care providers</li> <li>▶ Number from hospital/discharge</li> <li>▶ Number from hospital/ED</li> <li>▶ Number to CBOs</li> <li>▶ Number to social service agencies</li> </ul>
<b>Education and Support</b>	<ul style="list-style-type: none"> <li>▶ Number of group sessions</li> <li>▶ Number of individual sessions</li> <li>▶ Percent member completion rate in educational series on diet, smoking, exercise, etc.</li> <li>▶ Behavioral health assessment and support</li> <li>▶ Screening for alcohol use and counseling</li> </ul>
<b>Satisfaction</b>	<ul style="list-style-type: none"> <li>▶ Member satisfaction surveys</li> <li>▶ Documentation of member-centered goals</li> <li>▶ Willingness to recommend family or friends</li> </ul>
<b>Clinical Indicators and Population Health</b>	<ul style="list-style-type: none"> <li>▶ Blood glucose levels</li> <li>▶ Blood pressure</li> <li>▶ Body mass index</li> <li>▶ Increase in post-hospital primary care</li> <li>▶ Screening for depression and follow-up</li> </ul>
<b>Cost Savings</b>	<ul style="list-style-type: none"> <li>▶ Decreased ED visits</li> <li>▶ Decreased admissions</li> <li>▶ Decreased readmissions</li> <li>▶ Total cost per member of the population served</li> </ul>

## Collecting Anecdotal Data to Evaluate CHW/P Activities

The principle of “no stories without data, and no data without stories” is well-suited when evaluating CHW/P activities.<sup>31</sup> CHW/P program success largely depends on CHW/Ps’ ability to establish and maintain trusting relationships with members of the community.

*“We get clients into their primary care provider, and we get them well-established on their medications. We get them on a straight path and that's how we measure our success.”*

— CHW/P

Through their ground-level, patient-focused work, CHW/Ps amass extensive qualitative data — member’s self-reported health status; stories from family members about how things are going with a member whom they have not been able to reach; stories from friends at a house of worship letting them know a member is isolated at home with a new baby; and countless other anecdotes culminating in a rich picture of a member’s life and family circumstances. During interviews for this resource package, several MCP executives indicated that while empirical evidence is important when making the case for investing in programs that employ CHW/Ps, members’ stories truly showed the value of the program and were a decisive factor in agreeing to invest.<sup>32</sup> MCPs can use a variety of strategies to capture qualitative data, including surveys, interviews, and focus groups to collect anecdotal information and stories. Collecting data on CHW/P activities and measuring the impact of the program is also about refining the CHW/P model to ensure that the model adapts and evolves.

## CHW/Ps’ Value in Achieving Better Quality Metrics

CHW/Ps can assist MCPs in improving quality metrics. For example, an MCP can focus on increasing well-child visits and rates of developmental screenings and CHW/Ps can work toward this objective. When goals are well-defined, CHW/Ps are clear about what is being measured and can use their skills and relationships to work on these defined goals. In one example from Health Share, a coordinated care organization in Oregon, the plan analyzed data stratified by race, ethnicity, and language preference, and found rates of well-child visits plummeted after five years of age for Russian-speaking communities. To improve these rates, the plan collaborated with a culturally-specific CHW/P to engage adolescent girls in the community and reestablish their links to a primary care provider. After this outreach was piloted, well visits improved as a direct result of the CHW/P intervention.<sup>33</sup>

*“Patients with chronic multiple comorbidities [high blood pressure, diabetes] ...we kind of want to monitor them just to make sure that they're managing and staying stable.”*

— CHW/P

Making linkages to primary care is just one-way CHW/P skills can be effectively tapped in their communities. CHW/Ps can be employed in countless ways: to conduct outreach to high-risk individuals, support member engagement in chronic disease management, facilitate improved birth outcomes, support behavioral health connections for individuals reentering the community following incarceration, and conduct outreach to people experiencing homelessness. On a systems level, CHW/Ps can provide MCPs and other entities with valuable data to analyze community health trends.

Plans can identify what measures will be used to track population health outcomes (and if they expect providers to track population health) and what measures they expect providers to use to track individual health outcomes. One programmatic best practice is to create a treat-to-target model which looks for improvements within the population and at the individual level.<sup>34</sup> Anticipated targets are set, and if they are not reached, the provider adjusts the intervention (for example, more education for staff on specific conditions or changing the type of treatment). The MCP can also ask providers to adjust how they are delivering services. If improvements are not seen at the population level, CHW/Ps can be part of a treat-to-target approach as part of a larger team.

### **The Impact of “Buying-in” to the CHW Model**

L.A. Care, a managed care plan participating in the Health Home Program and Whole Person Care in L.A. County, shared insights on how to build or strengthen the role of CHW/Ps into their model of care and how this role can impact outcomes.

Realizing Impact and Outcomes Take Time. The MCP team emphasized that collecting data and seeing the needle move from the work of the care team takes time. The plan is in the process of compiling a report that will highlight outcomes from the health home program and contributions by the CHW/P workforce. Staying the course before outcomes are available can be tricky for any program or new initiative. (Note: findings from L.A. Care’s Health Home Program assessment will be made available through a future resource package or toolkit.)

### **Establishing Evaluation Metrics for Programs that Employ CHW/Ps**

Conducting an evaluation to measure the impact of programs that employ CHW/Ps can help improve quality of care. While currently there are no standard clinical quality measures specific to CHW/P activities, there are promising models across the country. The Pathways HUB model standardizes quality measures and outcomes for CHWs related to risk mitigation across clinical and social categories.<sup>35</sup> Transitions Clinic Network, which uses a CHW/P-based model of care, uses a fidelity tool to evaluate clinics that have successfully implemented the model of care to assure the clinics are following the evidence-based model and have similar outcomes.

The growing interest in developing standard quality metrics will help states, health systems, payers, providers, and CBOs measure the impact of programs that employ CHW/Ps, not only at the health care system level or the member level, but at the community level.<sup>36</sup>



## Models and Technologies to Support CHW/P Data Collection and Integration

**The Pathway Community HUB Model.** One approach that integrates health and social sectors in “hubs” across the country is the Pathways Community HUB 2.0 Model, which helps communities work together to support their vulnerable populations. This certified methodology is used by MCPs to standardize quality measures and outcomes for CHWs related to risk mitigation across clinical and social categories. The HUB acts as a community care coordination system focused on reducing modifiable risk factors for high-risk individuals and populations using a community-connected workforce, including CHW/Ps, to connect members to needed health and social services. These critical member connections to community services are achieved through closed-loop referrals and streamlined data collection, communication, and information exchange.

**IMPACT Model.** The Penn Center for Community Health Workers is a national center of excellence focused on advancing health equity through effective, sustainable community health worker programs. This center developed IMPACT, a standardized, scalable model to implement CHW/P activities across the country. The IMPACT model uses HOMEbase, a secure, cloud-based technology platform designed for CHW workflow and evaluation. This technology integrates with EHRs to pull real-time patient data such as hospital admissions. It also provides patient updates to other members of the care team and allows CHW/Ps to document patient interactions in an easy-to-use format. HOMEbase includes automated reports that allow supervisors and directors to track Triple Aim metrics such as chronic disease control, patient satisfaction, and hospital admissions. Reports also include CHW caseload, frequency of contact, and achievement of patient-centered goals.<sup>37</sup>

## Infrastructure Barriers and Solutions

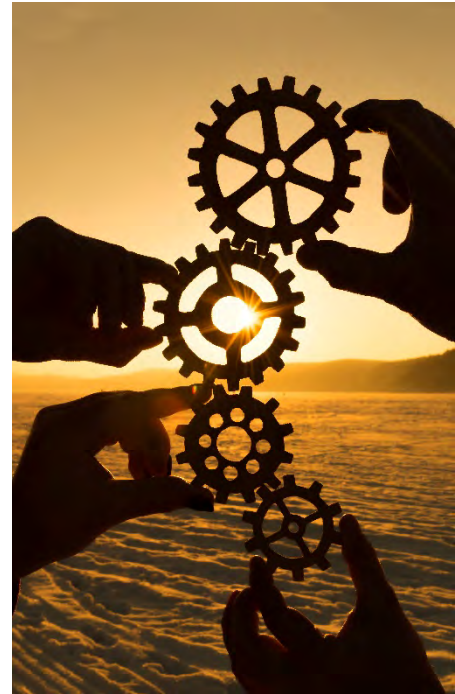
### Insufficient Health Information Exchange

There are longstanding and systemic challenges in health and social sectors such as privacy, HIT and health information exchange infrastructure investment, and data interoperability, which are not specific to the inclusion of the CHW/P workforce. Manatt Health Strategies developed the CalAIM Data Exchange Roadmap, which describes seven use cases that define information system requirements and data-sharing activities that are necessary to enable ECM and ILOS.<sup>38</sup> Many ECM and ILOS participants including providers, human service agencies, county agencies, CBOs, and MCPs do not have information technology capabilities needed to support cross-sector data exchange. There are additional challenges in regions where the data needs to go from a CBO to different provider organizations, to the MCP, and then to the state. This level of data exchange will require not only state and federal regulatory changes but all stakeholders to participate in a coordinated effort, as outlined in the Data Exchange Roadmap.

Following are key considerations gleaned from the Data Exchange Roadmap in the context of CHW/P activities:

- ▶ **There is a widespread need for data standards, data-sharing specifications, and technology infrastructure** especially for housing, justice, and other social sector data. CHW/Ps are involved in each of these domains and can inform the standards and practices needed to build an integrated system.
- ▶ **There are major challenges of interoperability and data sharing** between health care and social care because of a lack of infrastructure and data collecting and data-sharing standards among organizations.
- ▶ **There is a risk of increasing health disparities** by “exacerbating the digital divide and by codifying bias within health systems.”<sup>39</sup>
- ▶ **There are no agreed-upon best practices for data sharing** to integrate social care with health care.

While fully integrated, interoperable data systems are the goal, MCPs need to identify what reasonably works for them and their partners to (1) report to the state, (2) identify and share key data to support the program, and (3) simplify the effort at the provider and care team level when possible. As ECM and ILOS are implemented by MCPs, they have an opportunity to reflect on previous data-reporting efforts and identify opportunities to improve and streamline the data-sharing workflow. Further, MCPs can consider the roles that different components of a community-connected health workforce team, specifically CHW/Ps, can play to enhance both data collection and sharing.



## Varying Data Infrastructure Across CBOs

CHW/Ps are employed by providers such as FQHCs, directly by MCPs, and a range of CBOs, including programs that provide medical, mental health, substance use treatment, and/or social services.<sup>40</sup> Significant variation exists among the technical infrastructure and data-collecting capabilities within CBOs. Many CBOs are unfamiliar with health system information platforms and use a different rubric to evaluate their programs. It is important for MCPs to support community partners and stakeholders to assess their data collection and information exchange capabilities and leverage resources to address the gaps in infrastructure, tools, and platforms. Seamless data transfer between health and social sectors, including CBOs, will require new investments and resources. Few CBOs will have the ability to interface with various health system technology infrastructure, products, and tools. There will need to be deliberate considerations about how to create new opportunities for CBO and health sector collaboration.

## Lack of Standard SDOH Data Collection Measures

While numerous SDOH measurement resources exist, a systematic analysis of the strategies used to assess SDOH found wide variation on the SDOH categories being used and no consensus on a standard set of indicators.<sup>41</sup> Because ECM and ILOS services prioritize the social and behavioral needs of members, it will be important for stakeholders to engage in a process to standardize data collection and SDOH measures.

MCPs have expressed the need to standardize SDOH data collection to produce data sets they can use. In thinking about the ECM target population, one plan expressed the need to match potentially eligible members to the right providers and programs: “the more information MCPs have about their members [such as SDOH information] and the more successful we are in getting that data and using it to match members to the right program, the better likelihood that members will agree to engage in the program and services.”<sup>42</sup> The integrated care team, and CHW/P in particular, is a key component in assessing members’ needs. The team should be supported with tools and training to operationalize a better understanding of this aspect of member care along with standard screening tools and methods of data collection on health-related social needs.

## Concerns Around Privacy and Consent

There are significant considerations concerning data integration and information sharing and the underlying patchwork of federal and state laws governing privacy. The CalAIM initiative will require various health and social service entities — housing, substance use programs, programs for justice-involved people — to share data seamlessly, in some cases requiring substantial capacity building.

Integrated care and the need for data exchange among these entities will require a state effort to update privacy and consent laws and regulations. Many CBOs and social service organizations involved in data sharing will need training on informed consent for individual member interactions and larger data-sharing agreements that support bidirectional flow of information. For example, 42 C.F.R. Part 2 protects patient information regarding health records as it pertains to substance use disorder. Under this rule, patient information cannot be exchanged without patient consent except in limited circumstances.<sup>43</sup> Therefore, there are specific challenges integrating health and social sectors with respect to the specific federal regulations governing the treatment of substance use disorder.

## Existing Federal and State Privacy Regulations

Physical health information exchange is subject to HIPAA, which addresses disclosures of protected health information between “covered entities” that include health care providers and payers.

Federal rules including 42 C.F.R. Part 2 and state rules including the California Health & Safety Code 11845.5 regulate certain forms of behavioral health data with narrower allowances for data sharing that require more rigorous patient consent.

Homeless Management Information Systems (HMIS) data is subject to the Housing 2004 HMIS Data and Technical Standards, which permits disclosure of data only among housing agencies.

Per findings from the Manatt Health Strategies CalAIM Data Exchange Roadmap, policymakers and a range of stakeholders — MCPs, CBOs, health and social entities, justice-related entities — will need to work together to overhaul privacy and consent requirements within the context of ECM and ILOS to transition to integrated health and social care.<sup>44</sup>

## Lack of Standardized Evaluation Measures for CHW/P Activities

While there has been tremendous progress documenting the numerous positive outcomes of CHW/P interventions, the lack of standardized measures to assess these activities has made it challenging to aggregate data across health care entities, systems, and regions. The Patient-Centered Outcomes Research Institute indicates that “despite evidence of CHWs’ effectiveness, three factors impede widespread engagement of CHWs in clinical care and research: (1) a lack of understanding of CHWs’ unique contributions to clinical care, (2) a lack of common indicators to measure CHW program effectiveness, and (3) inconsistent involvement of CHWs in all phases of research.”<sup>45</sup> In addition, because CHW/Ps perform multiple roles in tandem — educator, health coach, and health and social system liaison — it is challenging to disaggregate these roles and evaluate just one component of this complex and multidimensional position.

While measuring the impact of programs that employ CHW/Ps is important, it is crucial to make the distinction between health system performance and community health performance. While it is imperative for health and social systems to become fully integrated, community health indicators have tremendous value to health systems. Leading community health indicators include access to health services; clinical preventive services; environmental quality; family and child health; mental health; nutrition, physical activity, and obesity; oral health; and reproductive and sexual health.<sup>46</sup> CHW/Ps can play an important role in collecting data on community health factors to inform program design and investment.

Further, while health systems are designed to understand direct value of interventions through things such as improved screening rates or reduced emergency room utilization, MCPs and other entities may pay less attention to the indirect value of improved community health. While these indirect social benefits — including improved well-being of community members — are difficult to isolate and measure, these considerations should not be overlooked and should be acknowledged by MCPs and other health entities.<sup>47</sup> The Common Indicators project provides a set of measures that could help MCPs standardize their programs.

## CHW Common Indicators Project

Based on the need to develop a common set of criteria to measure CHW/P activities, the Michigan CHW Alliance (MiCHWA) created a common set of evaluation indicators to understand the unique contributions of CHWs to successful program outcomes and their added value to health care and human services systems. This initial goal led MiCHWA to combine efforts with Oregon and other states to establish the national CHW Common Indicators Project.

The goal of the CHW Common Indicators Project is to develop and adopt — through a collaborative process — a core set of common process and outcome constructs and indicators for CHW/P activities. Ancillary goals include raising awareness of CHW/P interventions and functions, promoting sustainable funding models, maintaining CHW/P involvement in the measurement process, and growing grassroots programs that employ CHW/Ps. See the **Resources and Tools** section for information about the project's early findings.

## Need for Greater Investment

The fourth resource package for Community Health Workers & Promotores in the Future of Medi-Cal will focus on financing and sustaining programs that employ CHW/Ps. This package will highlight the role of funding CHW/Ps through the proposed ECM benefit and ILOS in CalAIM. The package will also discuss considerations for MCPs regarding

- ▶ Identifying what variables are important to consider when estimating the financial requirements of programs
- ▶ Assessing core competencies of potential ECM and ILOS providers
- ▶ Developing partnership and contractual arrangements with potential ECM and ILOS providers
- ▶ Determining community capacity for CHW/Ps such as local health needs
- ▶ Advancing health equity through CalAIM in coordination with partner organizations
- ▶ Sustaining CHW/P activities. Sustainability in this package will be focused on financial and workforce sustainability issues in programs that employ CHW/Ps such as staff retention and pay equity

## Collaboration with Partner Organizations

Integrating CHW/Ps more broadly into health care delivery systems will require MCPs to collaborate with multiple partners whether through CBOs or directly as employers. MCPs should identify opportunities to leverage the skills and assets of external organizations such as providers, health systems, CBOs, academic institutions, training organizations, and state and county authorities. Based on their unique experience, these organizations can lend specific expertise and enhance the MCP's efforts to collaborate with CHW/Ps and build their data collection skills.

MCPs — along with partner organizations — should develop a shared agenda and shared goals with a mutual exchange of information to leverage each other's expertise. By bringing together a diverse set of stakeholders —including provider organizations, CBOs, social service organizations, and justice organizations — to collaborate meaningfully, MCPs can facilitate the development of realistic shared goals around community health indicators, data collection and program measurement, and transparent data sharing to support ongoing improvement.



Here are some key areas for MCPs to address as they collaborate with partners to develop CHW/P roles in data collection and measurement.

- ▶ **Partnering with CBOs.** A host of organizations have tailored frameworks for working collaboratively with CHW/Ps to design effective program evaluation tools. For MCPs to meet the goals of CalAIM implementation, it will likely require broadening the types of health care organizations being contracted to include organizations with track records employing CHWs who extend medical, mental health, and substance use services into the community.
- ▶ **Coordinating across systems.** There will be a tremendous need to partner with new stakeholders and engage in new conversations about supporting integrated care through data sharing and information exchange. These partnerships will require MCPs to develop trusting relationships with all the health and social service entities that interface with members.
- ▶ **Convening partners.** Bringing partners with similar goals together to collectively address member needs and standardize screening tools, assessments, and performance metrics may support even more detailed evidence of CHW/P efficacy. Special focus should be on collaborating with technology partners with a demonstrated track record in incorporating SDOH data and referral platforms to design approaches that achieve program goals.

## Resources and Tools

This section of the resource package contains practical resources and tools provided by project contributors or collected from subject matter experts in the field in California and across other states. It provides links to publicly available resources and internal documents that provide practical examples to inform other programs. Please cite materials appropriately if you use these tools in your own programs. Note, this is not inclusive of the resources cited throughout this resource package, which can be found in the endnotes.

### Designing Programs that Engage CHW/Ps to Collect Data

RESOURCE	BRIEF DESCRIPTION
<a href="#">CalAIM Data Exchange Roadmap</a>	This webinar provides an overview of the roadmap to the ECM benefit and ILOS under the CalAIM initiative.
<a href="#">Integrating Community Health Workers on Quality Improvement Teams: Lessons from the Field (PDF)</a>	This Health Leads report demonstrates how to equip CHWs with the tools to collect and analyze data, design, and track improvements, and ensure stronger integration into care teams.
<a href="#">Community Resource Referral Platforms: A Guide for Health Care Organizations (PDF)</a>	This report, developed by Social Interventions Research and Evaluation Network (SIREN) researchers, is a guide for safety-net health care providers regarding the current landscape of these community resource referral technology platforms.
<a href="#">CHW Common Indicators Project: Proposed Indicators for Priority Constructs (PDF)</a>	This draft list, developed by the Common Indicators project, is a set of evaluation indicators and measures to understand the unique contributions of CHW/Ps to successful program outcomes.
<a href="#">CHW Common Indicators Project: Full List of Recommended Constructs with Definitions (PDF)</a>	This draft list, developed by the Common Indicators project, includes a list of process and outcome constructs along with definitions for programs to use to evaluate CHW/Ps.
<a href="#">Addressing Health-Related Social Needs among Medicaid Beneficiaries: Mapping Cross-Sector Partnership Roles (PDF)</a>	This framework was developed by the Center for Health Care Strategies to support managed care organizations, health care providers, and community partners in mapping potential cross-sector partnership roles for addressing health-related social needs based on the relative strengths of each partner.
<a href="#">The Health Leads Social Health Data Toolkit (PDF)</a>	This toolkit is designed for a range of healthcare teams seeking to effectively collect and apply social health program data, including steps to develop a social needs program and tips for tackling common screening challenges.

### SDOH Screening Tools

RESOURCE	BRIEF DESCRIPTION
<a href="#">Standardized Screening for Health-Related Social Needs in Clinical Settings: The Accountable Health Communities Screening Tool (PDF)</a>	This paper from Center for Medicare & Medicaid Services describes the considerations and processes that shaped the screening tool, including the component questions.
<a href="#">Place-Based Interventions Utilizing Community Health Workers (PDF)</a>	This presentation from Desert Healthcare District and Foundation shows how CHWs can be useful in assessing and identifying community needs and priorities.

## Evaluating Programs that Employ CHW/Ps

RESOURCE	BRIEF DESCRIPTION
<a href="#">Rubric for Assessing Community Health Workers Providing Direct Client Services (PDF)</a>	This rubric was developed by City College of San Francisco's Community Health Worker Certificate Program to assess CHW performance.
<a href="#">Rubric for Evaluating Agency Support for CHWs (PDF)</a>	This is a draft rubric for assessing how well organizations support the success of CHW employees developed by the City College of San Francisco.
<a href="#">Building a Community Health Worker Program: The Key to Better Care, Better Outcomes, &amp; Lower Costs (PDF)</a>	This toolkit, developed by the American Health Association and the National Urban League, is intended to help administrative and clinical leaders across the United States evaluate CHW programs.
<a href="#">Community Health Worker Assessment Toolkit: A Framework for Assessing Skills Proficiency and Fostering Professional Development (PDF)</a>	This report, developed by Community Health Worker Core Consensus Project, helps CHW employers (supervisors and program managers) and CHWs in assessing their skills both during the hiring process and on the job.

## Evidence of CHW/Ps Improving Health Outcomes

RESOURCE	BRIEF DESCRIPTION
<a href="#">Community Health Workers Improve Mental Health Outcomes</a>	This resource from MHP Salud explains how CHW/Ps improve mental health outcomes.
<a href="#">Community Health Workers: Key Partners in Improving Children's Health and Eliminating Inequities (PDF)</a>	This brief from Families USA highlights the value of integrating CHWs into maternal and child health care delivery to effectively address a range of health care concerns and conditions for children and families.
<a href="#">AltaMed Health Services: The Evolution of our Community Health Worker Program (PDF)</a>	This presentation demonstrates the measures of community health worker success both for process and outcome measures at AltaMed.

## Return on Investment

RESOURCE	BRIEF DESCRIPTION
<a href="#">Community Health Worker Impact Estimator Tools: Asthma and Diabetes</a>	These interactive Community Health Worker Impact Estimator Tools, developed by Families USA, are customizable and will provide estimates on a wide range of budget, quality, and impact measures, including return on investment and social impact.
<a href="#">ROI Educational Tool</a>	This toolkit, developed by MHP Salud, was designed to calculate the ROI of a CHW/P intervention.
<a href="#">Community Health Workers: Evidence of Their Effectiveness (PDF)</a>	This compendium of resources from Association of State and Territorial Health Officials and National Association of Community Health Workers serves as a summary of research studies demonstrating the effectiveness of CHW/Ps across multiple settings and health issues.



## Appendix

Key Research Studies Demonstrating the Value of CHW/P Activities
<b>Prevention</b>
Several studies of programs that employ CHW/Ps have shown significant improvements in patients' use of prevention services, such as mammography and cervical cancer screenings among low-income and immigrant women. <sup>48</sup>
<b>Chronic Disease Management</b>
An evaluation by the Centers for Disease Control and Prevention found strong evidence that integrating CHW/Ps as part of multidisciplinary teams improved health-related outcomes in people with chronic diseases. <sup>49</sup>
CHW/Ps have had positive effects on chronic disease management and treatment adherence, including significant impacts on healthy food choices, increased physical activity, and improved clinical outcomes, such as decreased hemoglobin A1C levels, among patients with diabetes. <sup>50</sup>
A randomized control trial demonstrated that a standardized CHW/P intervention improved chronic disease control, mental health, quality of care, and hospitalizations for patients in underserved communities. <sup>51</sup>
In New York's childhood asthma program, over a 12-month period of care coordination, CHWs reduced asthma-related emergency room visits and hospitalization rates by more than 50%. <sup>52</sup>
<b>Reduced Costs</b>
A meta-analysis conducted by the Center for Medicare and Medicaid Services and Center for Medicare and Medicaid Innovation in partnership with RTI International found that CHW/Ps lowered total costs by \$138 per beneficiary per quarter. Of six types of innovation components that researchers evaluated (i.e., used HIT, used CHWs, medical home intervention, focus on behavioral health, used telemedicine, workflow/process redesign intervention), only innovations using CHWs were found to lower total costs. <sup>53</sup>
A propensity matched study found a reduction in preventable hospitalizations and days spent re-incarcerated among members of the Transitions Clinic Network program. <sup>54</sup>
A study conducted by the University of New Mexico found that CHWs, as part of Medicaid managed care that provided supportive services to high resource-consuming enrollees, improved access to preventive and social services and reduced resource utilization and cost. <sup>55</sup>
<b>ROI</b>
Estimates from Molina Healthcare of New Mexico found that their CHW/P program saved an estimated \$2 million in health care costs in one year across 448 patients, suggesting close to a 4:1 ROI. <sup>56</sup>
In Baltimore, African American Medicaid patients with diabetes who participated in a CHW intervention had a 40% decrease in emergency room visits, a 33% decrease in emergency room admissions, a 33% decrease in total hospital admissions, and a 27% decrease in Medicaid reimbursements. <sup>57</sup>
<b>Workflow and Care Coordination</b>
In delivery systems that utilized CHW/Ps, researchers found quantifiable impacts on workflow, with clinicians spending between 30% and 50% less time arranging and coordinating social services and referrals. <sup>58</sup>
<b>Cultural Shifts in Provider Attitudes</b>
An analysis found a shift in provider attitudes and increased respect for the CHW/P role. Providers noticed CHW/Ps' ability to build trust and identify and respond to patient needs, amounting not only to many providers becoming champions for CHW/Ps, but to a widespread cultural shift within some organizations. <sup>59</sup>
<b>Advancing Health Equity</b>
A report by Families USA analyzed nine Patient-Centered Outcomes Research Institute studies of CHW/Ps and found that, across health care settings and conditions, CHW/Ps advanced health equity in diverse communities by empowering members to increase their self-efficacy and by building trust in the health care system. <sup>60</sup>

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*The Health Plan Council is composed of a subset of the Medi-Cal managed care plan CEOs who anticipate direct involvement in CalAIM or who have historically engaged in California's Whole Person Care pilots or Health Homes Program.*

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*The Advisory Council is composed of representatives of California-based and national organizations and subject matter experts who have relevant knowledge or expertise in advancing the role of the CHW/P workforce in the Medicaid context.*

**Mayra Alvarez** (Children’s Partnership); **Heidi Behforouz** (Los Angeles County Department of Health Services); **Tim Berthold** (San Francisco City College); **America Bracho** (Latino Health Access); **Amanda Clarke** (California Association of Public Hospitals / California Health Care Safety Net Institute); **Alexander Fajardo** (El Sol Neighborhood Educational Center); **Elia Gallardo** (County Behavioral Health Directors Association of California); **Brian Hansen** (California Department of Health Care Services); **Nancy Ibrahim** (Esperanza Community Housing); **Ashley Kokotaylo** (Contra Costa Health Services); **Denys Lau** (National Committee for Quality Assurance); **Maria Lemus** (*Visión y Compromiso*); **Brianna Lierman** (Local Health Plans of California); **Rishi Manchanda** (HealthBegins); **Andie Martinez** (California Primary Care Association); **Amber Roth** (Worker Education & Resource Center); **Carl Rush** (Community Resources); **Kiran Savage** (California Pan-Ethnic Health Network); and **Holly Webb** (WellSpace Health)

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### ENDNOTES

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