COMMUNITY HEALTH WORKERS IN CALIFORNIA:
Sharpening Our Focus on Strategies to Expand Engagement

JANUARY 2015
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ACKNOWLEDGEMENTS

This project was carried out by the California Health Workforce Alliance (CHWA), a statewide public-private partnership of educational institutions, health professions, employers, constituency groups, and local, state, and federal agencies. CHWA holds quarterly statewide meetings and periodic special meetings and processes to advance comprehensive, coordinated strategies to build a health workforce that effectively meets the needs of our increasingly diverse communities.

CHWA operates under the fiscal auspices of the Public Health Institute (PHI), a private, nonprofit organization based in Oakland, California, that is engaged in research, technical assistance, and training programs at the state, national, and international levels.

We would like to thank the Blue Shield of California Foundation for their generous support of this project. The foundation’s understanding of the need for in-depth inquiry and engagement with safety net providers is critically important in this time of profound change in the nation’s approach to health care and improving community health.

We would also like to thank the many administrative and clinical leaders of California safety net institutions for taking time from their often impossible schedules to provide thoughtful input at each of the three half-day working sessions in Los Angeles, Fresno, and Oakland. Their willingness to participate in this process reflects a keen interest in finding a way to scale and formalize the engagement of CHWs and promotores and take optimal advantage of their understanding of the complex dynamics in our communities. In the process, we will significantly increase our potential to achieve the Triple Aim objectives to provide better care at lower cost, enhance patient experience, and improve health outcomes; it is particularly important to achieve these goals in our increasingly diverse communities.

PHI Research Program Director Andrew Broderick, MA, MBA, served as lead researcher on the study and the lead author of this report. Staff support was provided by Kerent Amaya, PHI Program Coordinator. CHWA Co-Director Kevin Barnett, DrPH, MCP, served as the principal investigator and co-author, and provided oversight for all aspects of this project.
EXECUTIVE SUMMARY

Overview
The Patient Protection and Affordable Care Act (ACA) provides a policy framework to reimagine a system of care that emphasizes health and wellness through new models of primary care and population health interventions. These new models offer the potential to deliver care services at a lower cost, to detect and treat disease earlier, to deploy data and technology to improve population health outcomes, and to address social and environmental conditions that impede efforts to improve health. The ACA recognizes community health workers and promotores (CHWs) as integral members of the workforce and acknowledges the key role they play in achieving the goals of health reform.

A 2013 report from the California Health Workforce Alliance (CHWA), a program of the Public Health Institute (PHI), identified several factors that are impeding the engagement of CHWs as integral members of primary care and prevention teams:

• A lack of stable funding streams and reimbursement mechanisms
• Limited analytic capacity and access to external data sources
• Limited knowledge of, and access to, evidence-based practices

As a follow up to the statewide assessment, CHWA hosted in 2014 three regional technical consultation meetings with approximately 70 clinical and administrative leaders from across the state’s health care safety net system. The meetings were intended to acquire detailed input on specific needs, challenges, and emerging opportunities identified in the statewide assessment.

The combined findings from the statewide assessment and regional meetings are intended to provide a credible evidence base to inform the effective integration of CHWs into team-based care models in a variety of settings; assist with the design of technical assistance for safety net organizations; to build technical and analytical capacity; and serve as a resource for the development of public policies to scale and sustain the engagement of CHWs.

Four discussion themes were selected for the regional meetings:

• Design Considerations in Team-Based Care
• Skills, Recruitment and Training of CHWs
• Organizational Capacity for CHW Engagement
• Building Analytic Capacity

Findings

Design considerations. Participants noted the varying roles of CHWs depending on their level and form of integration with the health care delivery process. Some CHWs work in the community independent of the care delivery process; others work as extensions of the care delivery process, with designated roles in facilitating community-based health education but with limited feedback loops to the provider organization; and some work as integrated members of primary care and prevention teams. Participants raised questions about how CHWs should balance their roles as service providers and as advocates for patients and their communities. Participants also expressed concern that integrating CHWs into an organization makes the workers less flexible, as they are required to comply with the protocols and regulations of the organization. Some participants noted that they engaged CHWs in both clinical and community settings, and suggested that a more integrated approach may offer the optimal path. The development of formal protocols to facilitate information sharing between CHWs and members of care teams was identified as a key element to ensure optimal integration.
EXECUTIVE SUMMARY (cont.)

Skills. Participants indicated that the most important consideration was to find individuals who reflect the socio-cultural diversity of the local populations served by the organization. Employers seek personal characteristics and attributes such as demonstrated empathy (often referred to as an individual’s heart), cultural humility, and tenacity; many of these attributes reflecting a lived as much as learned experience.

Training. Participants discussed the difficulty of using standardized training models, given the diversity of organizations that provide training and CHWs’ varying formal education and immigration status. Some were worried that the use of a standardized model would favor more narrow clinical care access and management skills over the broad spectrum of skills and experience in the community.

Participants noted that for CHWs to advance in their profession, they need access to pathways to traditional health professions that formalize seniority and experience. To address this problem, some employers maintain different job tiers within the same job classification to reflect differences in seniority based on education, language, and experience.

Organizational capacity for CHW engagement. A number of discussants identified strong and consistent commitment by administrative and/or clinical leaders as being essential to the effective use of CHWs. This sets the tone for others in the organization, making it clear that CHWs are essential members of the team. Others framed it in terms of establishing an organizational culture that understands the importance of addressing the social determinants of health. A number of participants identified the need for training of other members of the primary care and prevention team through traditional health professions’ educational programs and through the development of formal training programs that may serve multiple providers at the regional level.

Analytic capacity. Participants said the most significant obstacle to caring for patients with complex needs – and providing the most efficient utilization patterns – is the lack of interoperability among data systems for real-time sharing of information. Participants also cited the need to incorporate measures related to patient self-efficacy and their readiness for change with patient biometric data. They also noted the need to link data from CHWs’ patient engagement activities, such as home visits and support groups, to clinical and financial performance measures. Progress towards these goals would help attract funding and build a case for reimbursement for CHW services.

Participants envisioned far greater potential for electronic data capture by CHWs, including the use of mobile tools for real-time data collection. There was general agreement on the need to allow CHWs to chart directly into the EHR and have access to patient records to view providers’ care recommendations. Participants suggested that CHWs could input data on social determinants of health directly into EHRs that clinicians could use in their clinical assessments.

More detailed findings from the three regional meetings, including direct quotes from many of the participants, are included in this report.
Recommendations
Findings from the CHWA statewide assessment and technical consultation meetings provide a credible evidence base to inform the design of strategies that strengthen the engagement of CHWs in team-based care. The following are brief summaries of recommendations; more detailed language for the recommendations are offered in this report.

R1: Establish a statewide clearinghouse to facilitate the rapid sharing of innovations, tools, best practice delivery models, and research support resources.

R2: Develop a landscape analysis that outlines a scope of practice for CHWs that accommodates alternative team-based models and other team members and the full range of services and activities in clinical and community-based settings.

R3: Conduct an independent assessment of employer-based, independent, and academic institution-based training programs that describes content scope and intensity, time frame, prerequisites, pedagogical models, geographic focus, and competencies.

R4: Develop competency-based certification standards for new and existing training programs and for individuals who complete the appropriate training.

R5: Identify regional sites to pilot the establishment of centralized data repositories that facilitate the integration of community-level data collection efforts and support the expanded use of collaborative data sharing tools for patient care management.

R6: Provide targeted technical assistance to community health clinics to develop or adapt existing evaluation tools to monitor and disseminate program outcomes.

R7: Partner with mobile health technology organizations to support mobile data collection, point of care decision support, and case management by CHWs and pilot those interventions with selected communities and organizations.

R8: Develop standard metrics that effectively capture outcomes associated with services and activities undertaken by CHWs to address the social determinants of health.

Summary
While California safety net providers have been actively innovating in the use of CHWs, there remains an urgent need to focus attention and resources, rapidly disseminate emerging lessons and existing tools, and strategically build on what has been accomplished so far.

We look forward to working with colleagues, community stakeholders, and CHWs to realize community health workers' and promotores' full potential as critical intermediaries between the health care delivery system and broader efforts to improve health in our communities.
INTRODUCTION

The Patient Protection and Affordable Care Act (ACA) provides a policy framework to reimagine a system of care that emphasizes health and wellness through new models of primary care and population health interventions. Implementation of the ACA law provides an opportunity to expand the focus of care beyond the traditional provider-centric model to address the broader array of social and environmental factors that impact health outcomes. More than 22 years ago, research by William Foege and Michael McGuinness documented that the primary causes of death involved interactions between individual behavior and social and physical environments. In the decades since their seminal study, other researchers have built upon these findings. The fundamental reality is that health care accounts for only a small proportion of what contributes to health and wellness. As such, there is an imperative for provider organizations to both develop internal innovations and to partner with diverse stakeholders in communities to address the social determinants of health. These innovations and partnerships offer the potential to deliver care services at a lower cost, to detect and treat disease earlier, to deploy data and technology toward the goals of improved population health outcomes, and to address the conditions that are drivers of risk behaviors that contribute to poor health, disease, and premature death.

The ACA recognizes community health workers and promotores (CHWs) as integral members of the health care workforce and for the key role they can play in achieving the goals of health reform through participation in community-based health teams as part of patient-centered medical homes. Although the ACA does not appropriate funds for CHWs, it provides significant opportunity and increasingly the financial incentives to advance their integration across a continuum of care at the individual, community and population levels. Since CHWs most often share common life experience with community members, they understand the community’s culture, beliefs, and norms. This trust and rapport enables them to more effectively engage community members in their care.

CHWs are ideally suited to enhance primary care and prevention through roles ranging from care coordination and referrals to community-based primary prevention activities and policy advocacy. There is ample evidence that CHWs help improve access and outcomes, strengthen health care teams, and enhance the quality of life for individuals in underserved communities. However, to build primary care and population health capacity, it will be necessary to promote greater understanding among primary care providers of the specific roles that CHWs play and distinct benefits they deliver as part of team-based care. New payment mechanisms will be needed to stabilize their engagement as members of care teams, and increased analytical capacity will be needed among providers to effectively document their specific contributions to the Triple Aim objectives.

A 2013 report from the California Health Workforce Alliance (CHWA), a program of the Public Health Institute (PHI), indicated that a lack of stable funding streams and reimbursement mechanisms, limited analytic capacity and access to external data sources, and knowledge of and access to evidence-based practices impedes efforts to expand the engagement of CHWs as integral members of primary care and prevention teams.

Based on these findings, CHWA in 2014 hosted three regional technical consultation meetings with approximately 70 clinical and administrative leaders from across the state's health care safety net system. The purpose was to acquire more detailed input on specific needs, challenges, and emerging opportunities associated with the financial, professional, and technical issues identified in the statewide assessment.

The combined findings from the statewide assessment and regional meetings will provide a credible evidence base to inform the design of team-based care delivery models that integrate CHWs into distinct roles, technical assistance to build analytical capacity, and public policy development and targeted resource allocations to facilitate the engagement of CHWs at scale.
COMMUNITY HEALTH WORKERS IN CALIFORNIA: Sharpening Our Focus On Strategies To Expand Engagement

BACKGROUND

CHWs have a well-established history as agents and advocates for improving health in local communities. The implementation of health reform has increased interest in using CHWs to reduce health care costs through coordination of primary care and community-based prevention services and activities, particularly in communities where health inequities are concentrated.

The Institute of Medicine (IOM) brought national attention to the CHW workforce by highlighting its importance as a bridge between health care providers and the communities that they represent. The IOM recommended their inclusion in multidisciplinary teams as part of a strategy to improve health care delivery, implement secondary prevention strategies, and enhance risk reduction. More recently, federal policy developments — specifically the Affordable Care Act and the Department of Labor’s Standard Occupational Classification Code for CHWs (SOC 21-1094) — formally recognize CHWs as distinct professional members of the U.S. health care workforce. States have also implemented legislation and regulations that promote the use of CHWs and their integration into the health care workforce through expanding their roles and strengthening financial support to create more sustainable programs.

The integration of CHWs into multi-disciplinary teams for primary care and community-based prevention can significantly enhance the capacity of providers to address the social determinants of health. CHWs can be particularly effective in facilitating patient access to care services and navigation of the care system, coordinating care and providing referrals to locally available health and human services, and increasing patients’ use of primary and preventive care services.

As frontline workers with unique knowledge of the complex interactions among socio-cultural and physical environmental factors that influence health, CHWs provide the surveillance to inform the design of culturally appropriate, community-responsive care. Their knowledge also positions them well to advocate for actions to address issues at the community level that may negatively

ADVANTAGES OF INTEGRATING CHWS INTO TEAM-BASED CARE

• CHWs can play a broad range of roles in providing support to care teams in the promotion of health and in the prevention and control of chronic conditions.

• CHWs’ roles in the engagement of patients are typically different from, yet complementary to, those of other members of the health care team.

• CHWs expand providers’ capacity to address the broader determinants of health with the potential to advance individual and population health outcomes.

• Standard communication protocols to facilitate targeted information sharing between CHWs and the care team can lead to improved outcomes.

• Effective integration requires re-imagining care delivery and reimbursement structures as well as providing ongoing CHW training, supervision, and support.

impact health, such as a lack of access to healthy foods, limited transportation links, few safe options for physical exercise, and violations of housing ordinances.

The patient-centered medical home (PCMH) provides the lens through which providers recognize the value that CHWs offer when integrated into care teams. In particular, the placement of CHWs within community health teams operating in support of the PCMH enables the bi-directional flow of information that can help providers modify actions to make care more effective. Evidence shows that patients in medical homes have better access to care, are more likely to receive recommended preventive services, and have better-managed chronic conditions. The National Association of Community Health Centers and its partner organizations have conducted research that identified 16 social determinants of health domains that are important to patient outcomes (See Table 1). Their team is developing a protocol for integration of these elements into EHRs with examples of workflows and format options to measure and assess each domain assessment.⁶

### Table 1

<table>
<thead>
<tr>
<th>LIST OF DOMAINS</th>
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<table>
<thead>
<tr>
<th>Social Determinate of Health Factor</th>
<th>Social Determinate of Health Factor</th>
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<tbody>
<tr>
<td><strong>Education</strong></td>
<td><strong>Insurance Status</strong></td>
</tr>
<tr>
<td><strong>Employment Status and Occupation:</strong> (includes unemployed, underemployed)</td>
<td><strong>Certain Health Behaviors:</strong> (includes only diet and physical activity)</td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td><strong>Transportation</strong></td>
</tr>
<tr>
<td><strong>Housing Circumstances:</strong> (includes homelessness, unstable housing foreclosure, quality of home environment and living conditions, number of people living in household)</td>
<td><strong>Material Security:</strong> (includes difficulty paying for resources required for daily living, such as food, clothing, prescriptions, and utilities such as heating lighting, and water)</td>
</tr>
<tr>
<td><strong>Workplace Environment and Conditions:</strong> (includes occupational safety, stressful working conditions, and exposure to toxins/pesticides/hazards)</td>
<td><strong>Self Efficacy and Confidence:</strong> (includes an individual’s beliefs regarding his/her power to affect situations, complete tasks, and reach goals)</td>
</tr>
<tr>
<td><strong>Legal Risk:</strong> (includes imprisonment and other incarceration conviction in civil and/or criminal proceedings without imprisonment, problems related to release from prison discord with counselors)</td>
<td><strong>Stress and Resilience:</strong> (Stress includes chronic and acute stress; former and ongoing adverse life events such as incarceration, exposure to abuse or violence. Resilience includes an individual’s ability, willingness, and resources to counter adverse effects of stress.)</td>
</tr>
<tr>
<td><strong>Health Literacy</strong></td>
<td><strong>Limited English Proficiency</strong></td>
</tr>
<tr>
<td><strong>Neighborhood and Built Environment:</strong> (includes exposure to toxins/hazards; safety; violence; walkability; and community resources such as grocery stores, parks, public transportation, educational and job opportunities, social services)</td>
<td><strong>Social Support and Stability:</strong> (includes social cohesion and sense of belonging, civic participation, social support in familial and friend relationships, social isolation, and social disruption in major life events, such as acculturation, loss of loved ones)</td>
</tr>
</tbody>
</table>

Among low-income populations, access to primary care is associated with better preventive care, better management of chronic conditions, and reduced mortality. However, their integration into such models potentially requires CHWs to assume a range of roles and responsibilities that will require common job definitions, recognized standards for core competencies, and a well-defined scope of practice. Experience to date suggests that the scope may vary in different models of team-based care, but a clear delineation of roles is important for optimal coordination and efficiency.

Michigan CHW Alliance, for example, developed a comprehensive outline of CHW roles and tasks (see Table 2) as part of care-based teams for vulnerable community members to impact social determinants of health and improve outcomes. A qualitative study in New York to document the integration of CHWs into a PCMH found that successful integration was enabled by a clear definition of their care coordination role, meticulous recruitment, training and supervision by a senior CHW, shared leadership on the care management team, and documented impact of the financial returns. CHWs’ most significant contribution to the PCMH, however, was found to have been their assistance in helping the team understand the patients’ backgrounds, constraints, and preferences. As part of their training, the CHWs were trained in the core competencies recommended for New York: outreach and community mobilization, community/cultural liaison, case management and care coordination, home-based support, health promotion and health coaching, system navigation, and participatory research.

By playing a key role in engaging patients and promoting health in the prevention and control of chronic conditions, CHWs deliver value from multiple perspectives. For the patient they help facilitate understanding of the relationship between behaviors and health, connectivity to a usual source of care, and continuity in care received once patients return to the community setting. For the provider, they can provide education and insights into obstacles to patient behavior change associated with family/home dynamics, practical economic issues, and community and cultural characteristics. Of equal importance, they may be able to offer creative options to overcome many obstacles. For payers, they can reduce system costs and improve outcomes by assisting community members in avoiding unnecessary hospitalizations and utilization of costly acute care services. With patient engagement being the blockbuster drug of the 21st century, integrating CHWs into team-based care can impact the Triple Aim objectives through several priority actions:

- Target hot spots of ‘high utilizers’ of care (i.e., by targeting specific geographies, populations or conditions).
- Provide targeted community-based health education program interventions to improve self-management of chronic diseases (i.e., diabetes, hypertension).
- Deliver home visitation services to high-priority patients or other vulnerable, at-risk populations (i.e., at-risk pregnant women).
- Provide coordination of care as members of community health teams for patients in patient-centered medical homes.

### Table 2

<table>
<thead>
<tr>
<th>ROLE</th>
<th>DESCRIPTION AND RELATED TASKS</th>
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<tbody>
<tr>
<td>1</td>
<td>Case Management and Care Coordination</td>
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<tr>
<td>2</td>
<td>Community-Cultural Liaison</td>
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<tr>
<td>3</td>
<td>Health Promotion and Health Coaching</td>
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<tr>
<td>4</td>
<td>Home-Based Support</td>
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<tr>
<td>5</td>
<td>Outreach and Community Mobilization</td>
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<tr>
<td>6</td>
<td>Participatory Research</td>
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<tr>
<td>7</td>
<td>System Navigation</td>
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BACKGROUND (cont.)

THE NATIONAL EVIDENCE BASE FOR CHWs

A growing body of research indicates the effectiveness of CHWs in three performance categories – access, outcomes, and cost-effectiveness for targeted subpopulations:

- **ACCESS** — CHWs have contributed significantly to improving population health and reducing health disparities by facilitating community members’ access to care through enrollment in health insurance programs and helping patients navigate the health care system.

- **OUTCOMES** — Studies have shown the effectiveness of CHWs in helping improve both preventive and treatment outcomes across a range of populations and conditions through conducting case management and participating in team-based care approaches to coordinating patients’ access to appropriate services.

- **COST-EFFECTIVENESS** — Evidence of cost-effectiveness from CHW interventions reflects cost savings resulting from patient adoption of positive health behaviors in the self-management of chronic conditions, increased attendance or visits for preventive and primary care, and reduced use of more costly and preventable services such as emergency departments and hospitalizations.

A review of the evidence base for CHW policy components of individual chronic disease interventions reported that 8 of 14 components have a strong evidence basis, 3 have promising evidence, and 3 have emerging evidence and could benefit from further study. The policy component with the strongest evidence base is the authorization of CHWs to provide chronic disease care services, although the authors noted that more comprehensive systematic review could inform how this component should be implemented (e.g., evidence could identify effective service delivery strategies or discuss implementation barriers). Conclusions about the status of the evidence base and recommended steps for improvement include the following:

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Table 3: Conclusions and Next Steps for CHW Evidence Development

<table>
<thead>
<tr>
<th>Category</th>
<th>Components</th>
<th>Conclusions about evidence basis and next steps</th>
</tr>
</thead>
</table>
| BEST                 | • Chronic Care                                   | • This component has been systematically reviewed for its effect on diabetes- and hypertension-related outcomes.  
• It has the strongest evidence basis among all the CHW policy components assessed, achieving the highest possible quality and impact scores, and it seems to have much support among experts.  
• More comprehensive systematic reviews (e.g., by the Community Guide) will help to confirm its effects as well as to identify barriers and facilitators to its implementation. |
| PROMISING QUALITY    | • Team-based Care  
• Core Certification  
• Supervision  
• Standard Core Curriculum  
• Medicaid  
• Specialty Certification  
• Certification Development | • These components have been part of CHW interventions that improved health-, equity-, and efficiency-related outcomes and there is also expert opinion to support them.  
• They could next be tested independently in experimental studies or included in systematic reviews. |
| PROMISING IMPACT     | • Standard Specialty Curriculum                 | • This component has been part of several CHW interventions that improved health- and equity-related outcomes, but the size of public health impact needs to be measured.  
• Additionally, evidence on this component’s efficiency impacts, such as relative cost and economic outcomes, is needed.  
• More expert opinion could also contribute to its evidence basis. |
| EMERGING             | • Scope of Practice                              | • Conversely, this component has been widely recommended by experts but has not been part of CHW interventions studied empirically.  
• It needs to be included in future empirical CHW studies in order to approximate its health, equity, and efficiency impacts. |
|                      | • Curriculum Development                         | • This component is very close to becoming a Best component and only needs a little more evidence to replicate positive health, equity, and efficiency findings and/or it needs more supporting expert opinion. |
|                      | • Private Insurers  
• Campaign  
• Grants                                      | • These components are supported by several recommendations from experts, including states that are pioneering CHW policy.  
• They should be included in future empirical CHW studies (e.g., policy evaluations) to measure their health, equity, and efficiency impacts.  
• More supporting expert opinion is also needed. |

BACKGROUND (cont.)

There will be a wealth of new findings on the contributions of CHWs through current research demonstrations among grantees of the Centers for Medicare & Medicaid Innovation Center (CMMI). More than one-third of the first round CMMI projects involve CHWs, while all but one of the State Innovation Model test states are advancing the role of CHWs.

Anticipated outcomes include evidence of the impact that CHWs can have through their potential to reduce costs of care, to improve patient engagement, to coordinate care across the health and human services sectors, and to advance population health approaches. In Massachusetts a survey of community health centers to assess the current status of CHWs seven years into the state’s health reform process found that their greatest value was working with high-cost, high-risk patients. In particular, CHWs were reported to have improved outcomes and reduced costs of care for these patients more than others.\(^{12}\)

In 2013, the California Health Workforce Alliance conducted a statewide assessment to better understand the current level of engagement of CHWs with California’s health care safety net providers, to document their current roles and responsibilities, and to articulate their contributions to the achievement of the Triple Aim objectives and, in doing so, develop a profile of CHWs in California in areas related to services (i.e., titles used to refer to CHWs, and operational roles, program areas, and service delivery sites), evaluation (i.e., core measures used to assess performance as well as the data sources and collection methods used) and challenges and opportunities for bringing their engagement to scale (i.e., specific barriers experienced with engagement and priority actions to increase engagement).

KEY FINDINGS FROM CHWA’S 2013 STATEWIDE ASSESSMENT

- Two-thirds of survey respondents (79/121) engage 1,644 CHWs in a broad range of roles, across a variety of program areas, and in diverse settings.

- Respondent organizations reported growing roles for CHWs in care coordination, particularly for chronic conditions, during the next five years.

- 71.8% (56/78) collect data on performance measures related to the number of screenings, health education classes, and referrals facilitated.

- Data collection related to the Triple Aim was at limited levels, with measures related to reducing per capita cost of care reported least frequently.

- A majority of respondents (54/79) that engage CHWs have experienced barriers to increasing their numbers and expanding the roles of existing workers.

The statewide assessment findings indicated that professional and financial barriers limit providers’ capacity to effectively engage CHWs at scale and to integrate them as part of team-based care, and that technical barriers in analytical capacity and data sharing limit their capacity to document their contributions to the achievement of the Triple Aim objectives.

The assessment found safety net providers are often not aware of existing evidence-based interventions to integrate CHWs into team-based care, address quality of care concerns, and build links between clinical care and population health improvement. Promoting professional understanding of the roles and responsibilities of CHWs and developing providers’ technical capacity to document the contributions of CHWs to the Triple Aim were identified as priorities to overcoming these barriers.

<table>
<thead>
<tr>
<th>KEY CHALLENGES</th>
<th>KEY OBSERVATIONS</th>
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<tbody>
<tr>
<td><strong>Professional Recognition</strong> – Limited understanding among health care professionals on the specific roles and responsibilities of CHWs</td>
<td><strong>Develop greater awareness of CHW’s occupational identity</strong> - The broad array of titles used to refer to CHWs is driven by categorical funding streams and may not be captured in the Department of Labor’s standard occupational classification code for CHWs, SOC 21-1094.</td>
</tr>
<tr>
<td><strong>Evidence-based Interventions</strong> – An array of innovative practices, but a lack of quantitative data and analytic capacity to provide an evidence-base for integration of CHWs into team-based care models</td>
<td><strong>Share evidence-based best practices for effectively integrating CHWs into team-based care</strong> - A lack of awareness and knowledge exists across the provider community about innovations and delivery models that address professional, financial, and technical concerns.</td>
</tr>
<tr>
<td><strong>Sustainability</strong> – Limited federal and state policies that provide formal reimbursement and sustainable funding</td>
<td><strong>Communicate CHWs’ unique value in team-based care</strong> – Many providers lack awareness of the unique value that CHWs provide compared with other health professions (e.g., MAs, RNs) who often serve overlapping functions with CHWs.</td>
</tr>
</tbody>
</table>
BACKGROUND (cont.)

A legal and regulatory framework is needed to address the professional, financial, and technical issues around integrating CHWs into team-based care models. The framework should include scope of practice standards, core competencies for training and certification, and targeted funding and policies to strengthen analytical capacity and encourage HIT interoperability for documentation of measurable outcomes. These actions would provide the foundation for the establishment of formal reimbursement mechanisms. The establishment of an infrastructure with statewide standards around scope of practice, training, and certification with financing mechanisms has been central to building and sustaining this CHW workforce at the state level in other states.¹³

The issue of sustainability is a persistent challenge to employers when it comes to the engagement and sustainability of the CHW workforce. The Massachusetts survey¹⁴ found that current funding sources remain largely grant-based but that payment reform and the transition to global payment from fee-for-service would make the use of CHWs in care more feasible. The authors identified the importance of further investigation into potential payment methods to support long-term sustainability of the workforce.

In Connecticut, research indicated that public and private payers prefer global- or value-based payment methods to incorporate CHWs into health care delivery.¹⁵ The research revealed that the predominant payment methods currently in use nationally under health delivery reform include management fees (when CHWs are engaged by federally qualified health centers as part of PCMHs and accountable care organizations in New York, Arizona, Tennessee, Washington) and Medicaid payments (Texas, Arkansas, Minnesota, Oregon).

DISCUSSION THEMES

To move toward a more strategic engagement of the CHW workforce in California, CHWA convened three regional technical consultation meetings in 2014 across the state with the clinical and administrative leadership of health care safety net providers. Approximately 70 individuals participated in one of the three half-day regional meetings (see Appendix A for listing of participants).

The purpose was to acquire more specific information on the needs and challenges associated with the financial, professional and technical issues documented in the statewide assessment, and to identify emerging innovations to be shared with others in the field. Four discussion themes were selected for the technical consultation meetings:

- Design Considerations in Team-Based Care
- Skills, Recruitment, and Training of CHWs
- Organizational Capacity for CHW Engagement
- Building Analytic Capacity

In each discussion theme area, a summary background presentation was provided and a set of focus questions were posed for facilitated discussion. Each convening closed with a focus on forms of technical assistance, targeted resource allocation, and policy development that would best contribute to the optimal engagement of CHWs.

DISCUSSION THEME #1:
Design Considerations in Team-Based Care

Our statewide assessment revealed that the operational roles, professional titles, and program areas of focus involving CHW workforce members vary depending on the source of funding and the setting in which they work. Respondent organizations that selected community settings for the delivery of services were more likely than organizations that selected provider settings to engage CHWs as community health outreach workers to conduct health screening, promotion, and education in program areas related to nutrition/obesity, family planning, and adolescent health. Organizations that selected provider settings were more likely to engage CHWs as CHW Case Manager/Case Workers in case management, care coordination and care navigation roles in program areas related to diabetes and mental health.

Statewide survey respondents also indicated recognition of the growing importance of CHWs for the effective implementation of health care reform, particularly in facilitating access to care for chronic conditions as financing mechanisms move towards global budgeting, for example. When respondents were asked to prioritize operational roles for CHWs in the next five years, responses indicated a growing interest in CHWs providing case management, especially for chronic conditions.

When asked to prioritize the program areas that will be the focus for CHWs in the next five years, mental health and cardiovascular disease ranked higher than family planning and adolescent health. Respondents also prioritized roles that support the management of chronic diseases including health screening, promotion, and education, and providing assistance with access to medical services.
DISCUSSION THEMES (cont.)

The following core questions were posed to meeting participants:

• What does team-based care look like for your organization?
• What factor has contributed most to the integration of CHWs into team care?
• What would you identify as the most challenging aspect to integration?

Participants indicated that CHW roles vary broadly depending on their level and how they are integrated into health care delivery. Engagement models include, but are not limited to:

• CHWs working in the community independently of the care delivery process in areas related to community advocacy and outreach;
• CHWs working as community extensions of the care delivery process, with designated roles in facilitating community-based health education but with limited feedback loops to the provider organization; and
• CHWs working as integrated members of primary care and prevention teams in roles of care navigation, care transitions, and the case management of high-risk patients.

Participants identified the following core contributions that CHWs provide as part of team-based care and that distinguish their contributions and complement and extend the standard range of services that providers offer to patients in their communities:

• **Build relationships** and establish trust with community members
• **Serve as a vital bridge** between communities and providers

• **Remove communication barriers** patients experience during visits
• **Build the cultural competency** of care teams in delivering services
• **Link providers to the patient’s home**
• **Coordinate wraparound services** for complex, costly patients
• **Break down silos** between programs/in large clinic networks

**Service Provider or Patient Advocate?** A number of participants raised questions about the balance of the roles of CHWs as service providers and/or as advocates for patients and their communities. Some questioned the adaptability of the current biomedical-based clinical care model to the socio-ecological model of care and engagement provided by the CHW. As stated by one participant:

“…having them outside of the system gives them the leverage to be more supportive and actually more creative, in finding more resources and breaking down the barriers.”

Some expressed concerns that the integration of CHWs risks a loss of flexibility as they are required to comply with the protocols and regulations of the organization:

“Our promotores are not yet embedded, they are external. Sometimes when they become embedded they start functioning as a system worker and then they lose flexibility, because they are required to follow all the rules and regulations of the system that they are working in, and sometimes they are less accessible to the community.”

Others noted that they engaged CHWs in both clinical and community settings, and suggested a more integrated approach may offer the optimal path:
“Some of our CHWs do health education in the community and are not in a clinic, but they also make referrals to our case management staff. We also have CHWs in clinics where they do more work directly with doctors and nurses. I just wanted to point out that we use various models.”

“As we talk about integration into team care, we should not talk about communities and institutions as separate entities. There is not enough attention to thinking about how institutions and delivery of primary care can be transformed through integration of CHWs into care teams.”

Organizations building interdisciplinary teams to support high-risk and chronic disease patients tend to co-locate CHWs in the clinic setting so they can be connected to the primary care providers to address their concerns and to facilitate a direct connection to the community to conduct follow-up and support patients. In essence, the CHW serves as a multi-level problem solver.

“Our CHWs really changed the way we do things and have become the first point of contact for our patients. When patients get home, the CHWs call and offer to come over. We have a simple assessment to identify barriers for patients that prevent them from getting well. The CHW is essentially our eyes and ears, and works with the case manager and the pharmacist to fix problems they find and do follow up on some of the practical issues, those obstacles that were identified.”

Communication on Care Teams – The involvement of CHWs in case management meetings was identified as an effective mechanism (more so than programmatic meetings) for their integration into teams, and to facilitate real-time information exchange. A number of participants pointed to the need for formal mechanisms/protocols to ensure that CHWs meet regularly with other team members to share information, to be informed of larger program activities, and to receive feedback and coaching on their performance. Comments from participants identified both strategies and continuing challenges:

“Our outreach workers have direct connections to clinic directors. They also have a supervisor who continually checks in with them. They have their own group to network and meet monthly to collaborate. We also created a leadership team within our network that gives them a seat at the management table. They provide input and show their value at that level and that trickles down and motivates their colleagues.”

“There needs to be real time feedback between CHWs seeing patients in their home and primary care providers in clinic. Mechanisms are needed to get that back in real time to providers and to have a plan communicated back to the CHW.”

“We just do not have that mechanism for connecting the patient with the clinic provider. Health educators talk more with patients and they share more how they arrived at that visit – e.g., they met a promotor, attended a health fair, did a screening – but they won’t share that with the provider – we need to work on that aspect of the communication.”

“We are developing a care coordination/social services case management system to allow CHWs to record different diagnoses and lifestyle changes, and thereby have something concrete that allows the health care professional to have a quick assessment of what is going on with that patient and inform appropriate care decisions related to medications, etc.”
DISCUSSION THEMES (cont.)

Some referred to the tendency among some providers to discount the value to the care process of what CHWs may have to contribute. This may be reinforced in some cases by limited English language skills among some CHWs, which may in turn contribute to a lack of confidence in asserting the importance of input.

Participants also cited the contributions CHWs make through active participation on advisory committees to inform organizational leadership and strategic processes on community and dynamics, and the ways in which care processes are interpreted by patients:

“(Engagement of CHWs) is essentially a diversity issue for mainstream providers, particularly in the context of the Medicaid expansion. There is a sense of needing a workforce that reflects the diversity of the population; not only in terms of ethnicity, immigration status, but also social backgrounds in order to be more efficient and effective in meeting the needs of diverse populations.”

Participants pointed to technological tools as important resources to facilitate more timely and robust communications among primary care and prevention teams:

“We use technology tools to help different members of the interdisciplinary team communicate with each other. It’s not a one-to-one relationship. Use of these tools to coordinate care is really important when we think about how to make this more efficient and scalable.”

“It is important for us to identify unified communication tools so that we don’t miss some valuable feedback. Things we talk about are transportation, housing, violence, food insecurity, etc.”

We’re looking at a care coordination platform that allows for task management within a team based on identified gaps in care that is accessible by tablets or mobile phones while CHWs are in the field. Within six months we hope to put those resources in one platform like Yelp. These are the kinds of tools that would make the jobs of CHWs and those in the community a lot easier.”

DISCUSSION THEME #2: Skills, Recruitment, and Training of CHWs

Respondents to the CHWA statewide assessment identified communication, confidentiality, interpersonal, knowledge of the community, and cultural competency skills as “extremely important” requirements for health care safety-net providers when engaging CHWs. These are of particular importance as they relate to the ability of CHWs to effectively engage, create relationships with, and build trust with both community and health-team members.

Skills related to the delivery of direct care services (i.e., chronic disease management, health education, and home visitation skills) and organizational management processes (i.e., organizational, data entry, and capacity building skills) were rated as “important,” and anecdotal evidence suggests that organizations are more likely to provide post-employment training to CHWs to build these kinds of content skills.

The following core questions were posed to meeting participants:

- What specific requirements does your organization have when recruiting CHWs into positions?
- What types of training does your organization provide to CHWs to address skill gaps that exist?
• Are there formal career ladders available to CHWs within your organization to support their professional development?

Technical consultation meeting participants indicated that the most important consideration was to find individuals who reflect the socio-cultural diversity of the local population served by the organization. Desired skills at hiring tend to be personal characteristics and attributes such as demonstrated empathy (often referred to as an individual’s heart), cultural humility, and tenacity; many of these attributes reflecting a lived as much as learned experience.

While meeting participants identified proficiency in English as a second language as a sought-after requirement when hiring, they also identified it as a skill gap and one that is often addressed through post-hire training; they also noted language training as something that CHWs openly seek as a benefit of employment. Additional skill gaps identified include health literacy, notably in occupational health and safety, digital literacy, and numeracy skills.

Participants identified three types of training for CHWs. One is aimed at providing more generalized employee orientation for new hires in practices and procedures of the organization, including regulations for handling protected health information, as well as their understanding of local issues and available resources. This type of on-the-job training helps orient new hires for roles involving outreach, patient confidentiality, and data collection.

The other type of CHW training tends to be on-the-job. For example, CHWs can shadow existing staff and partner with other team members with complementary clinical or technical skills. Team meetings are also important venues to provide feedback and address any skill gaps. For the third type of training, employers may partner with local health organizations to provide training, internships, and other opportunities for CHWs to acquire required skills.

Participants also identified the need for career pathways to traditional health professions and/or that formalize seniority and experience to offer clear opportunities for advancement. Some employers have established different job tiers within the same job classification to reflect differences in seniority, education, language, and/or experience. An approach highlighted by one participant offered a variety of pathway opportunities tied to both on the job training and motivation and prior experience and education:

“We have different levels of CHWs – Levels 1, 2, and 3 based on experience, language, skills such as for data collection. We also have CHWs with bachelor’s degrees. We have CHWs who vary from bachelor’s to high school level education. A CHW advances to a level 2 based on better communication with providers and they aspire to that. We look for that motivation and drive when hiring. We have those who have developed computer literacy skills now doing electronic charting and putting notes in to describe what they did with the patients.”

An increasing number of organizations are looking to CHWs to play a surveillance role in the identification of social determinants of health that impact patient and population health. A number of participants discussed ways in which CHWs are taking on issues ranging from food access to housing.
DISCUSSION THEMES (cont.)

“Housing is one of the basic foundations for health; people who are homeless move around, they don’t have their documents, they can’t find their Medi-Cal card, there’s no consistency with taking medication, etc. There are so many aspects in terms of suitability of housing or advocacy, so CHWs work very closely with other agencies around eviction prevention and tenants’ rights, to address what is going with each individual family.”

In general, participants pointed to a wide range of potential contributions of CHWs in health care and community health improvement. In consideration of the potential scope, one participant encouraged a “stages of life” approach:

“What role do CHWs play in screenings and prevention? In acute care, what might the CHW do when a client is in crisis or enters an acute care situation? We are looking at chronic disease, but what about palliative care issues? If we broke it down this way it would reframe the question of the value of CHWs throughout the stages of life and the care process.”

Formalization of CHW Training – An important discussion at the state level is whether some form of certification and formalization of training processes is needed to standardize and clarify the skills and competencies of CHWs. Participants noted that this is a controversial issue, given the diversity of organizations that provide training, and the formal education and immigration status of existing CHWs. In addition, there are concerns that the broad spectrum of skills and experience in community, culture, and a focus on the social determinants of health would be de-emphasized in favor of more narrow clinical care access and management skills.

“When we talk about certification and standardization one of things we miss is the diversity that exists within group of paraprofessionals. Need to focus on how to systematically acknowledge diversity of community health work and types of individuals that get recognized as CHWs.”

“We need to acknowledge the indigenous roots of the promotor model. I would hate to see the effectiveness of a promotor who comes to this with heart and context be institutionalized within bureaucracy that limits that person’s ability to be effective.”

“It is important to understand the limits of formalized standardized training and to what degree are organization-based training practices appropriate in addressing CHW skill gaps within the context of the community’s needs.”

There are a number of obstacles to the advancement of the CHW workforce as members of team-based care. From a hiring perspective, the availability of standardized assessment methods that distinguish among life experience, formal training, and on-the-job training would help organizations in their ability to assess a candidate’s effectiveness for roles.

From a training perspective, better alignment of available community-based training programs with the workforce training needs of employers, and the availability of standardized credentialing programs and defined career paths would benefit CHWs seeking to pursue formal career advancement opportunities.
DISCUSSION THEME #3: Organizational Capacity for Engagement

The following core question was posed to meeting participants:

• What skills, protocols, and/or organizational culture elements are needed to effectively engage CHWs?

Participants identified a wide array of organizational qualities and characteristics that are needed to effectively engage CHWs. A key factor identified by a number of discussants was strong and consistent commitment by administrative and/or clinical leaders. This set the tone for others in the organization, making it clear that CHWs are essential members of the team. Others framed it in terms of establishing an organizational culture that understands the importance of addressing the social determinants of health. This reinforces the key role played by CHWs in serving as the critical link to resources that build on clinical care management.

In general, organizations have also found that providing CHWs with a professional identity within the organization is pivotal to building their confidence and commitment, while encouraging active participation in team and leadership meetings is key to developing a sense of empowerment and motivation.

“It is important to not forget training of the teams into which CHWs integrate. One must identify who is supervising this workforce and make sure they understand what CHWs do and how to use and work with CHWs. It is a huge potential gap.”

“What language should I use to convince providers on effectiveness of CHW? Is there something written up to share? Providers usually want to hear from peers. What have been successful strategies with providers and messaging used?”

“There is a need for focused funding for extension centers to convene regional partners and have a learning collaborative within to learn amongst each other – annual or biannual conference – also take lead to provide TA to assist with design, implementation and evaluation.”
DISCUSSION THEMES (cont.)

A number of participants identified the need for training of other members of the primary care and prevention team. Some pointed to the integration of formal training on the potential roles, contributions, and engagement of CHWs in health professions education institutions. Others called for the development of formal training programs that may serve multiple providers at the regional level.

“We had a new social worker join our team, and it was difficult at first to figure out what the respective roles were between him and our CHW. It took a bit of discussion to see that the contributions of our CHW are different. The CHW has more time to spend with patient and family and make the connection, and can be a help to the social worker.”

Participants also discussed the need to identify specific roles with clear boundaries in care delivery and coordination. To date, there is disagreement about the degree to which CHWs should be performing specific clinical tasks (e.g., taking vitals). These issues will become increasingly important to resolve as larger, mainstream provider organizations engage CHWs. Participants in the technical consultation meetings suggested (as did anecdotal evidence in the field) that the resolution of these concerns is readily achieved, but tends to be unique to each organization. The approach of one organization was shared by a participant:

“Whatever the member complexities we have subject matter experts on team – if there are behavioral health issues we tell the health connectors to go talk to the expert. We define the parameters of that as we don’t want them to go beyond scope of their duties. We set boundaries.”

In general, organizations appear to rely primarily on internal processes, protocols, and policies in determining the specific roles of CHWs. As stated by one participant:

“Any type of education they are providing has to go through a vetting process internally – medical leadership or nutritionists – it needs to be in line with clinical practice guidelines of the organization. We use scenarios to educate on scope of practice issues.”

“Health professions students need to be formally educated as to how CHWs are part of the health care team. I don’t think medical or nursing schools do this, but it is important in preparing organizations in making them knowledgeable and respectful of how CHWs fit into their teams.”

“Communication breaks down when someone thinks that they have more expertise than a CHW, and we’ve been really lucky to put some systems in place to minimize that type of interaction. Our medical students get training around sensitivity, and learning from CHWs is an explicit part of their work. Without this I think the partnership would have broken down already.”

Participants also highlighted the key role of supervisors, and ensuring they understand their scope of practice, and establishing boundaries between their work and personal roles in the community. Organizations also ensure that supervisors receive the appropriate training so they understand their responsibilities in this regard.

Training for supervisors should address not only the roles and responsibilities of CHWs within teams but also techniques they can use to support and optimize CHW effectiveness. Territorial issues can at times challenge organizations to carefully consider where to place CHWs in team-centered care delivery models. As shared by one participant:
DISCUSSION THEME #4: Building Analytic Capacity

In the statewide assessment a majority of the respondents reported that they collect data on performance measures assessing the contributions of CHWs in facilitating patient access to care, such as the number of education programs facilitated, persons screened, and referrals provided; but most are not documenting the impact on specific Triple Aim objectives.

Internal data sources were used more frequently than external sources for performance measurement, with many relying on a combination of electronic and manual methods for collection. In addition to the role of CHWs in the collection of more standard measures of health care access and quality, a majority of respondents reported that CHWs collect additional information that can contribute to the provider’s understanding of the broader determinants of a patient’s health and well-being.

The following core questions were posed to meeting participants:

- What metrics are used by your organization to assess achievement of the Triple Aim objectives?
- What specific roles do CHWs play in data collection? What data elements are collected?
- What contributions of CHWs would you identify at the most difficult to document?
- What form of data is available from external sources, and in what format?
- What are the biggest obstacles to accessing these forms of data?

Participants indicated that the achievement of the Triple Aim objectives is central to their organization’s future, and that quality improvement metrics are required reporting for many health centers (i.e., UDS, HEDIS). Some participants indicated that they use dashboards to provide real-time review and tracking of organizational and individual

PRIORITY ACTIONS: ORGANIZATIONAL CAPACITY FOR ENGAGEMENT

- Develop evidence-based models that demonstrate the business case to assist internal champions build support among providers within the organization.
- Develop toolkits with resources that support providers to effectively implement team-based models incorporating CHWs and their integration into the workflow.
- Develop targeted education for members of the primary care and prevention team on the value, cost-effectiveness, and strategies to engage CHWs.
- Conduct landscape analysis that clarifies the roles of CHWs within the context of primary care and prevention teams to address scope of practice concerns.
- Establish communication protocols and clear boundaries regarding scope of practice for CHWs to be effective in team-based care.
- Support the development of public policies that incentivize and sustain the engagement of CHWs in specific roles as part of team-based interventions.
DISCUSSION THEMES (cont.)

provider progress toward related clinical and financial performance goals. Incentives to meet such goals are built in to their managed care contracts and viewed as lost revenue or opportunity costs if not met. Participants view the lack of interoperability and integration of data systems for real-time sharing of information as critical to their being able to identify patients with complex care needs and impact utilization.

“It is a challenge to get data back for participants from clinic partners. It requires establishing MOUs on an individual organization basis. It is important not to lose sight of the health of the population in building data models and having systems talk with each other.”

“When opportunities do present themselves we need to be prepared as a region to take advantage and articulate our story and have collaborative concepts. Much of the opportunity is not about individual organizations but collaborations between multiple organizations across the continuum.”

CHWs typically collect service performance data related to outreach, referrals, health education classes, patient satisfaction, and enabling services that are used to assess productivity. They also compile data related to social determinants of health that can be used to identify and assess factors or needs, such as the lack of insurance coverage, that potentially serve as barriers to care or result in the utilization of preventable, costly care services.

Participants cited the need to incorporate measures related to patient self-efficacy and their readiness for change with patient biometric data as well as the need to link data from CHWs’ patient engagement activities, such as home visits and support groups, to clinical and financial performance measures. Progress towards these goals would help attract funding and build a case for reimbursement for CHW services.

Data collection by CHWs is mostly manual, with some use of EHRs to capture health education activities and outcomes when part of a care plan. Participants envisioned far greater potential for electronic data capture by CHWs, including the use of mobile tools for real-time data collection. As stated by one participant:

“We do not know how we are going to collect data. Because the workforce is mobile we need to have mobile data collection approaches where CHWs can enter data in real time in the field. We center data collection on things that can be useful in improving program. People recommend entering data in open text. Providers do not find that useful. Providers don’t want 100 open text notes in an EMR.”

There was general agreement on the need to allow CHWs to chart directly into the EHR as well as have access to patient records to view providers’ care recommendations. Potential opportunities include the ability for CHWs to input data on social determinants of health directly into EHRs that clinicians could use in their clinical assessments.

Participants also identified opportunities to train CHWs to collect clinical data, teach them protocols for the electronic collection and handling of protected health information, and have them train patients in the use of eHealth tools supported by health centers (e.g., patient portals) for their self-management of care.
From a technology perspective at the health center level, data collection and real-time analysis at a regional population health management level is best supported by disease registries (i.e., i2i Tracks) rather than EHRs. Participants reported that many organizations struggle with their EHR systems for a variety of reasons (i.e., money, time, training, complexity), and that small-scale organizations, in particular, often face technical and financial constraints to support the use of health information technology.

Moreover, greater investment in technical human resources is required to support data analytics and make data more meaningful and actionable for health centers, as are systems that can unify disparate data to provide a more integrated view of a patient’s care. For example, a system that supports a shared care plan that would allow patients to electronically submit data and also push information out to patients is often missing from the coordinated interdisciplinary approach.

KEY ISSUES: DATA AND ANALYTICAL CAPACITY

- Limitations to the functional capacity of EHRs to document, monitor, and communicate patient status in broader individual and population health terms
- Limited use of mobile technology impedes the timely capture and sharing of qualitative elements in patient health status
- Limited opportunities for CHWs to chart into EHRs as well as to have access to see providers’ care recommendations
- Growing realization of need to link data from CHW patient activities to clinical and financial performance measures
- The integration of data on social determinants with clinical data is critical for referral of wraparound and structural determinant services
- Limitations to health centers’ human resources capacity in data analytics to make data more meaningful and actionable
DISCUSSION THEMES (cont.)

PRIORITY ACTIONS: DATA CAPACITY

• Build community partnerships to address workforce capacity development (i.e., training in technology use, data collection, and analysis).

• Train CHWs in the use of EHRs for coordinating care and the collection of clinical data and charting into EHRs on a routine basis.

• Support the development of HIEs that permit information sharing and evaluation of ROI for population health improvement.

• Conduct testing and refinement of the use of mobile technology for data collection and the linking and integration of data with health information systems.

• Develop protocols that support timely two-way flow of information between CHWs and other members of team.

• Develop databases to collect data on social determinants of health and link to advocacy and social justice initiatives.

At the community and regional levels, community health clinics recognize the need to have the cost savings realized from their efforts recognized by providers. Consequently, there is a need to develop shared and integrated data models at a community level to centralize data collection efforts such as centralized data repositories (e.g., data warehouses, health information exchanges) to allow organizations to track patient care at a community or regional level as well as collaborative data sharing tools (e.g., shared care plans, unified data communication systems) to coordinate patient care.

The development of a care coordination/social services case management system would help integrate workflow and referrals between community-based organizations engaging CHWs with health and social services systems.

Participants also identified the need to develop electronic knowledge repositories for CHWs that would provide current information on available local community resources, and to advance the role of mobile technology in real-time data collection. Organizations, however, would require financial, human, and technical resources to support this.
PRIORITY ACTIONS: RESOURCES

• Facilitate development and dissemination of innovations in metrics, monitoring and evaluation.

• Establish state clearinghouse for innovation-based practice models, toolkits, and other shared technical resources.

• Integrate CHWs into reimbursement structures and establish broad scope of contributions.

• Create a system for skill sharing that ensures access to quality training and common standards by region.

• Conduct a comprehensive assessment of training services available by region to identify gaps in meeting employer needs.

• Leverage public health data sets to develop improved data-driven intervention strategies at a community level.

• Build and maintain electronic repositories of community resources that support CHWs in assisting patients.
TAKING THE ENGAGEMENT OF CHWs TO SCALE: RECOMMENDATIONS

The combined findings from the CHWA statewide assessment and technical consultation meetings provide a credible evidence base to inform the design of strategies that strengthen the engagement of CHWs in comprehensive team-based care in a variety of settings. While CHWs are extensively engaged by safety net providers in the state of California, there is no organized infrastructure to facilitate the rapid dissemination of innovations, develop expanded models of care that include primary prevention activities, build analytic capacity, develop functional links with mainstream providers, and ensure regional access to externally-validated training programs for CHWs and other providers.

Common job definitions, recognized standards for core competencies, and a well-defined scope of practice that clarifies working relationships with other members of the care team are needed for both safety net organizations that currently engage CHWs, as well as mainstream organizations that are considering their engagement. These steps will not only provide a clear delineation of their roles and responsibilities, but also a framework for organizations to provide ongoing CHW training, supervision, and support to ensure optimal coordination and efficiency.

There is also a need to evaluate, refine, and replicate new delivery models and better document their impact upon patient experience, cost savings, and population health outcomes. Public policy development and targeted resource allocations are needed to build stable funding mechanisms, facilitate data sharing and service coordination across institutions, and to help organizations scale and formalize their engagement.

To ensure definitive progress in these areas — and to use the invaluable input provided by leaders from safety net organizations who participated in the three regional technical consultation meetings — we offer the following eight recommendations.

Recommendation #1
Establish a statewide clearinghouse to facilitate the rapid sharing of innovations, tools, best practice delivery models, and research support resources. The clearinghouse would engage a statewide network of stakeholders; this network would serve several functions: contribute knowledge, expertise, and resources; serve as a learning collaborative to inform the field on the design and evaluation of practical strategies; support the development of shared resources for the implementation of programs; and advocate for public policies to bring the engagement of community health workers to scale.

Recommendation #2
Develop a landscape analysis that outlines a scope of practice for CHWs that accommodates alternative approaches to team-based care and variations in the roles of other team members, and encompasses the full range of services and activities in clinical and community-based settings. The scope will also identify specific core competencies that will be required to demonstrate that CHWs have acquired or developed the necessary skills to complete the tasks to a satisfactory proficiency level through educational qualifications and/or work experience.

Recommendation #3
Conduct an independent assessment of employer-based, independent, and academic institution-based training programs across the state of California that describes content
scope and intensity, time frame, prerequisites, pedagogical models, geographic focus, and identified competencies. Findings from the assessment will be used to develop a comprehensive strategy to strengthen existing programs and ensure optimal regional access to training resources for both the entry of new CHWs and the additional skill development and advancement of existing CHWs.

**Recommendation #4**

Implementation of recommendation #3 will provide an evidence-based framework for consideration of competency-based **certification standards** for both new and existing training programs and for the individuals who complete the appropriate training. Certification of existing CHWs would be enabled through an employer-based examination process. A key consideration in the establishment of certification standards is to be cautious about the establishment of formal education prerequisites that may marginalize current CHWs with advanced knowledge, but lack formal educational training. On a parallel basis with the development of certification standards, the field would benefit from the development and promulgation of employer guidelines for effective recruitment, deployment, and professional development, and formalizing seniority and experience.

**Recommendation #5**

Identify regional sites to **pilot the establishment of centralized data repositories** that facilitate the integration of community-level data collection efforts and support the expanded use of collaborative data sharing tools for patient care management. These could start with a focus on Medicaid and uninsured populations among a subset of safety net and mainstream providers, and serve as precursors to regional health information exchanges. These pilot efforts would allow organizations to track and coordinate patient care at a community or regional level and enable the documentation and allocation of cost savings among providers and community-based partners.

**Recommendation #6**

Provide targeted technical assistance to community health clinics to **develop or adapt existing evaluation tools to monitor and disseminate program outcomes**. Technical assistance will include analysis and potential care redesign and team member role adjustment to facilitate increased accountability, clarity of function, and attribution of outcomes. Where appropriate, tools developed and/or refined as part of technical assistance will be disseminated as a clearinghouse function (see Recommendation #1).

**Recommendation #7**

Partner with mobile health technology organizations that are working internationally to adapt existing tools and leverage lessons learned to **support mobile data collection, point of care decision support, and case management by CHWs** and pilot those interventions with selected communities and organizations.

**Recommendation #8**

Develop a set of **standard metrics that effectively capture outcomes associated with services and activities undertaken by CHWs to address the social determinants of health**. The combined use of mobile technology by CHWs (recommendation #7) with standard metrics to document social determinants of health would inform strategies to develop social support systems and contribute to improved health outcomes at the population health level.
Expanding the engagement of CHWs offers an immense opportunity to both enhance quality in our health care delivery system and to significantly expand efforts to address the social determinants of health in our communities, particularly in low-income neighborhoods where health inequities are concentrated.

While California safety net providers have been actively innovating in the use of CHWs, there remains an urgent need to focus attention and resources, rapidly disseminate emerging lessons and existing tools, and strategically build on what has been accomplished so far. The input provided by safety net providers through the CHWA statewide assessment and three regional technical consultations has informed the specific actions recommended in this report.

We look forward to working with colleagues, community stakeholders, and CHWs to realize community health workers’ full potential as critical intermediaries between the health care delivery system and broader efforts to improve health in our communities.
APPENDIX A:
CHWA Technical Consultation Meetings*
List of Attendees

*Fresno, Los Angeles, Oakland
### Appendix A: CHWA Technical Consultation Meetings List of Attendees

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Role</th>
<th>Organization</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>Baharak Amanzadeh</td>
<td>Health Sciences Assistant Clinical Professor; Course Director, Community Clinic Externship Course</td>
<td>UCSF School of Dentistry</td>
<td>Oakland</td>
</tr>
<tr>
<td>Marco Angulo</td>
<td>MD Family Medicine</td>
<td>UC Irvine Family Health Center</td>
<td>Los Angeles</td>
</tr>
<tr>
<td>Eva Antonakopoulou</td>
<td>Patient Navigation Center Advice Clinician</td>
<td>Asian Americans for Community Involvement</td>
<td>Oakland</td>
</tr>
<tr>
<td>Lisa Ashton</td>
<td>Director, Pharmacy Innovation</td>
<td>Health Services Advisory Group-Sacramento</td>
<td>Oakland</td>
</tr>
<tr>
<td>Mayra Barcenas</td>
<td>Program Manager, Clinical CHW Initiative</td>
<td>El Sol Neighborhood Educational Center</td>
<td>Los Angeles</td>
</tr>
<tr>
<td>Felicia Batts</td>
<td>Strategic Projects Manager</td>
<td>Golden Valley Health Center</td>
<td>Fresno</td>
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<td>Lucinda Bazile</td>
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<tr>
<td>Juan Carlos Belliard</td>
<td>Assistant Vice President for Community Partnerships &amp; Diversity Associate Professor in Global Health</td>
<td>Loma Linda University</td>
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<tr>
<td>John Billimek</td>
<td>Assistant Adjunct Professor, Health Policy Research Institute &amp; Division of General Internal Medicine School of Medicine</td>
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<td>Vanessa Bohn</td>
<td>Programs Director</td>
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<td>Jen Burstedt</td>
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<td>Pacific Business Group on Health</td>
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<td>Diane Bush</td>
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<td>Erinn Carusetta</td>
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<td>Denise Chapel</td>
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<td>Myra Chow</td>
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<td>Erica Cubas</td>
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<td>Shom Dasgupta</td>
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<td>Marison De La Vega</td>
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<td>Crispin Delgado</td>
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<td>Victoriano Diaz</td>
<td>Marketing and Outreach Coordinator</td>
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<td>Wayne Dysinger</td>
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<td>Alexander Fajardo</td>
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<td>El Sol Neighborhood Educational Center</td>
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<tr>
<td>George Flores</td>
<td>Program Manager</td>
<td>California Endowment</td>
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### Appendix A: CHWA Technical Consultation Meetings List of Attendees

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<thead>
<tr>
<th>Name</th>
<th>Title/Position</th>
<th>Organization/Location</th>
<th>Location</th>
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<tbody>
<tr>
<td>Nancy Frappier</td>
<td>Program Manager, Wellness Center and New Beginnings</td>
<td>Homeless Prenatal Program</td>
<td>Oakland</td>
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<tr>
<td>Odilia Garcia</td>
<td>Clinical Community Health Worker Support</td>
<td>El Sol Neighborhood Educational Center</td>
<td>Los Angeles</td>
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<tr>
<td>Rosemary Garrone</td>
<td>Division Manager, Public Health Nursing</td>
<td>Department of Public Health</td>
<td>Fresno</td>
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<tr>
<td>Neelam Gupta</td>
<td>Senior Program Analyst</td>
<td>Worker Education &amp; Resource Center</td>
<td>Los Angeles</td>
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<tr>
<td>Nancy Halpern Ibrahim</td>
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<td>Esperanza Community Housing Corporation</td>
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<tr>
<td>Elisa Herrera</td>
<td>Executive Director</td>
<td>Latino Leadership Council</td>
<td>Oakland</td>
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<tr>
<td>Clemens Hong</td>
<td>Instructor, Harvard Medical School; Chief Science and Innovation Officer</td>
<td>Los Angeles Department of Health Services</td>
<td>Los Angeles</td>
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<tr>
<td>Erynne Jones</td>
<td>Associate Director of Policy</td>
<td>California Primary Care Association</td>
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<tr>
<td>Matt Keane</td>
<td>Executive Director</td>
<td>Community Clinic Association of San Bernardino County</td>
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<tr>
<td>Kristian Lau</td>
<td>Manager, Strategic Initiatives</td>
<td>Community Health Center Network</td>
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<tr>
<td>Lily Martinez</td>
<td>Director of Health Education &amp; Outreach</td>
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<tr>
<td>Marie Mayen-Cho</td>
<td>Director, Providence Access Care</td>
<td>Providence Health and Services</td>
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<tr>
<td>Katie McCall</td>
<td>Human Resource Generalist</td>
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<td>Pamela Moore</td>
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<tr>
<td>Nichole Mosqueda</td>
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<tr>
<td>Abhinaya Narayanan</td>
<td>Workforce Development Manager</td>
<td>California Academy of Family Physicians</td>
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<tr>
<td>Armando Nieto</td>
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<td>Thelma Nieto</td>
<td>HCS Manager, Community Connector Program</td>
<td>Molina Healthcare</td>
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<td>Angela O’Brien</td>
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<tr>
<td>Elisa M. Orona</td>
<td>Patient Navigation Center Project Administrator</td>
<td>Asian Americans for Community Involvement</td>
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<tr>
<td>Maria Osorio</td>
<td>Director of Human Resources</td>
<td>St. John’s Well Child and Family Center</td>
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### Appendix A: CHWA Technical Consultation Meetings List of Attendees (cont.)

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<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Suneel Ratan</td>
<td>Chief Strategy Officer</td>
<td>Community Health Center Network</td>
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<tr>
<td>Ruby Raya-Morones</td>
<td>Chief Medical Officer</td>
<td>South Central Family Health Centers</td>
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<tr>
<td>Leslie Reed</td>
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<td>The California Endowment</td>
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<tr>
<td>Ellen Reinhardt</td>
<td>Director of Business and Community Relations</td>
<td>Alameda Health Systems</td>
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<tr>
<td>Mary Renner</td>
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<tr>
<td>Maria Reyes</td>
<td>Community Health Education Manager</td>
<td>La Clinica de La Raza, Inc./Alameda County</td>
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<td>Sharon Rose</td>
<td>Program Manager</td>
<td>UCSF Clinical and Translational Science Institute</td>
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<tr>
<td>Fernando Sanud</td>
<td>Chief Executive Officer</td>
<td>Vista Community Clinic</td>
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<tr>
<td>Shoshanna Scholar</td>
<td>Executive Director</td>
<td>LA Community Health Project</td>
<td>Los Angeles</td>
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<tr>
<td>Steyci Sepeda</td>
<td>CHW Coordinator</td>
<td>Tulare Community Health Clinics</td>
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<td>Nannette Stamm</td>
<td>Director, Health Promotion Center</td>
<td>Vista Community Clinic</td>
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<td>Alma Torres-Nguyen</td>
<td>Program Coordinator</td>
<td>Kaweah Delta Medical Center</td>
<td>Fresno</td>
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<tr>
<td>Theo Tsoukalas</td>
<td>Principal Investigator</td>
<td>Public Health Institute</td>
<td>Oakland</td>
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<tr>
<td>Ramona Valdez</td>
<td>Registered Dietician</td>
<td>Central Valley Dietetic Association</td>
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<td>Alma Vasquez</td>
<td>Case Manager</td>
<td>Homeless Prenatal Program</td>
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<tr>
<td>Liliana Velasco</td>
<td>Site Coordinator</td>
<td>Livingston Community Health</td>
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<tr>
<td>Nenick Vu</td>
<td>Collaborative Coordinator</td>
<td>Hmong Health Collaborative</td>
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<tr>
<td>Lisa White</td>
<td>Senior Policy Analyst</td>
<td>California School-Based Health Alliance</td>
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<tr>
<td>Maia White</td>
<td>Manager Care Transitions Program</td>
<td>Alameda County Medical Center</td>
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<tr>
<td>Winston Wong</td>
<td>Medical Director, Community Benefit, and Director, Disparities Improvement and Quality Initiatives</td>
<td>Kaiser Permanente, National Program Office</td>
<td>Oakland</td>
</tr>
<tr>
<td>May Ying Ly</td>
<td>Executive Director</td>
<td>Southeast Asian Assistance Center</td>
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