

CHWA

California Health Workforce Alliance

TAKING INNOVATION TO SCALE:
Community Health Workers, Promotores, and the Triple Aim

A Statewide Assessment of the Roles and Contributions of California's Community Health Workers

Final Report

DECEMBER 2013

CHWA
California Health Workforce Alliance

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This study 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.

CHWA would like to thank the Blue Shield of California Foundation (BSCF) for its leadership and generous funding support for this study at a critical juncture in the federal health reform process. The study provides a statewide assessment of the contributions of community health workers and promotores (CHWs) engaged with safety-net institutions, at a time when there is growing interest in prevention as a means to reduce health care costs. These workers serve as a bridge between clinical services and community-based prevention, and their contributions to the achievement of the Triple Aim objectives of reduced costs, improved patient experience, and improved population health are of particular interest as coverage expands to new enrollees in low- and moderate-income communities. This statewide assessment is intended to inform the design of practical strategies and policies to take the engagement of CHWs to scale.

We appreciate the engagement of a Project Leadership Team with broad and in-depth expertise and experience in the engagement of CHWs. These leaders were involved all along the way, from providing early and ongoing input in the design and dissemination of an online survey instrument, to the review of findings and recommendations. A list of members is included at the end of this report. We appreciate the support of the California Primary Care Association (CPCA) in facilitating outreach for the survey to its membership of California's community health centers; these organizations were the primary focus of the study, and support from CPCA contributed to a high response rate to our survey. We also appreciate input from the broader CHWA membership at a series of quarterly meetings in Los Angeles and Oakland. Special sessions were held at each of the meetings in December 2012 and March, June, and September 2013 to seek input on study design, findings, and draft recommendations.

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Andrew Broderick, MA, MBA, PHI Research Program Director served as lead researcher on the study and the lead author of this report. Staff support for outreach to survey respondents was provided by Sara Harrier, PHI Program Administrator. CHWA Co-Director Kevin Barnett, DrPH, MCP, served as the principal investigator and provided oversight for all aspects of the study.

EXECUTIVE SUMMARY

The US health care system has entered an era that will require nothing short of a fundamental transformation in the way that care is delivered. Expanded enrollment of uninsured populations and movement towards global budgeting will create incentives for increased investment in new models of primary care and population health interventions to reduce the demand for high cost specialty and inpatient care. There is growing acknowledgement of the need to adopt a broader perspective on *what* kinds of services, *where* services are delivered, and *who* is most appropriate to provide different types of services. This evolution in thinking is leading inexorably to the recognition that we must look beyond traditional services in order to address the social and environmental conditions that perpetuate and exacerbate poor health in our communities. Community health workers and promotores (CHWs) have been engaged for decades by many of our community health clinics to serve as bridges between traditional service models and community-based prevention. The time has come to more strategically engage these important members of primary care teams and to bring them into the mainstream of the US health care system.

In the United States, recognition for the roles that CHWs play has historically been limited to specific populations, such as American Indians and Alaska Natives[1], and communities, such as seasonal and migrant farm workers.[2] More recently, a number of federal policy developments indicate that this situation is fast changing. In particular, the Patient Protection and Affordable Care Act (ACA) recognizes CHWs as integral members of the health care workforce and for the key role that they can play in achieving the goals of health care reform through participation in community-based health teams and patient-centered medical homes.[3] Further, the US Department of Labor's introduction of a Standard Occupational Classification Code for CHWs (SOC 21-1094) formally recognizes them as a distinct health care profession and as members of the US health care workforce.[4]

States also have been implementing legislation and regulations to promote the use of CHWs and their integration into the health care workforce, including approaches that expand their roles and strengthen their financial support to create sustainable programs.[5] The establishment of an infrastructure with statewide standards around a scope of practice, training, certification, and financing mechanisms is seen as critical to building and sustaining the CHW workforce in many states.[6] State-level actions have ranged from creating a commission to investigate the impact of CHWs in achieving health care savings or eliminating health disparities among populations, to enacting policies that either create a certification process for CHWs or require CHWs to be certified, that encourage or require the integration of CHWs into team-based models of care, and that authorize Medicaid reimbursement for some CHW services.

[1] Indian Health Services, 2013
[2] Migrant Health Promotion, 2013
[3] United States Government Printing Office, 2010
[4] United States Department of Labor, 2012
[5] Brownstein JN, 2011
[6] Matos S, 2011

Research Design

This report presents the findings and recommendations from the California Health Workforce Alliance's (CHWA) assessment of the current level of engagement and roles of CHWs among California's health care safety net providers and their contributions towards the achievement of the Triple Aim objectives.[7] The report findings and recommendations are intended to inform dialogue and action in the public and policy arenas, particularly in articulating CHW contributions to the achievement of the Triple Aim objectives, and to develop practical strategies and policies that will address financial and professional concerns and will take their engagement to scale.

Our sample frame of health care safety net providers represents urban and rural community health centers and clinics that offer health care services to low-income people, including those without insurance. Our study builds on earlier efforts to assess the CHW field, specifically the *Community Health Worker National Workforce Study*[8] (CHW/ NWS) funded by the US Health Resources and Services Administration. Using a broader sample of safety net provider organizations than that used in CHWA's survey, CHW/ NWS estimated that 13,000 CHWs were engaged by Californian organizations, including schools, universities, clinics, hospitals, physician offices, individual-family-child services, and educational programs in 2005. CHWA survey respondents reported 1,644 CHWs in California in 2013.

Survey Findings

In 2013, CHWA conducted outreach to 281 rural and urban health care safety net providers in California. Surveys from 121 organizations (43% response rate) were included in our analysis. Our analysis of findings focuses on the level of engagement of CHWs among these provider organizations; the extent to which these organizations have experienced barriers to engagement; identifiable actions that will promote broader engagement; and their assessment of CHWs' performance and contributions. Key findings include:

- 65.3% (79/121) of surveyed organizations currently engage 1,644 CHWs in a broad range of roles, across a wide range 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) of respondents collect data on CHW contributions, focusing mainly on measures related to the number of screenings, health-education classes, and referrals facilitated by CHWs;
- data collection related to the Triple Aim was at limited levels, with measures related to improving access to care reported most frequently (42%) and to reducing per capita cost of care least (21%);
- 68.4% (54/79) of providers engaging CHWs have experienced barriers with both increasing their number (46/54) and with existing workers doing more (36/50).

[7] The Institute for Healthcare Improvement's "Triple Aim" states that an optimized health care system achieves three objectives – Improving the Experience of Care; Improving the Health of Populations; and Reducing the Per Capita Costs of Health Care.
[8] Health Resources and Services Administration, 2007

Key Observations

Key observations related to CHWA's review of the survey findings indicate a limited recognition among safety-net health care providers of how to effectively integrate CHWs into team-based care in order to better meet the Triple Aim objectives and other priority health care goals. Survey findings also indicate that a lack of occupational identity, recognition by other health professionals, sustainable funding, and post-hire training programs prohibit CHWs from having clearly defined career-path opportunities and limit their potential contributions to achieving health care goals. Key observations include:

- the broad array of titles used by CHWs indicates a potential lack of awareness and use of the Department of Labor's CHW standard occupational classification code;
- the roles of CHWs as described by titles tend to be defined by categorical funding sources, which limits their roles and potential contributions to the achievement of the Triple Aim objectives;
- health care 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;
- a lack of technical and analytic capacity and access to external data impedes the ability of health centers to document the contributions of CHWs to the achievement of the Triple Aim objectives;
- a lack of awareness and knowledge exists across the provider community about innovations and delivery models that address financial and professional concerns for expanding their engagement.

Core Recommendations

This report offers recommendations based on a review of the relevant literature, data from the statewide survey of California's health care safety-net providers, and review and inputs from the California Health Workforce Alliance's membership and the project's leadership team. Key recommendations to increase CHWs' level of engagement and bring it to scale on a sustainable basis focus on three core actions:

- **Conduct a statewide CHW campaign** - Disseminate broadly the findings and analysis and convene key stakeholders across the statewide health system to translate recommendations into policies that address financial and professional requirements for expanding the engagement of CHWs.
- **Implement a statewide infrastructure for CHW education, training, and certification** - Expand the statewide education, training, and certification infrastructure capacity to support the effective integration of CHWs into team-based care by developing an integrated strategy that involves training, higher education, certification, and career development.
- **Promote sustainable financing mechanisms** - Recognize the value realized from services provided by CHWs so that their work can be appropriately compensated. Develop a strategy for the creation of innovative financing models that support the sustainable integration of CHWs into team-based care.

Exhibit 1: CHWA Recommendations and Timeline for Action

	Immediate (Year 1)		Short Term (2-3 Years)	Medium Term (3-5 years)
 **Statewide Campaign**	>Broadly distribute survey findings & recommendations >Convene diverse stakeholders to build shared knowledge & develop action plan >Engage elected officials to develop legislative agenda	>Secure formal recognition of CHW as a professional job category >Advocate to establish State registrar to document practices	>Establish information clearinghouse to document, disseminate, and replicate innovations in the engagement of CHWs >Secure passage of legislation to codify engagement of CHWs as members of primary care & prevention teams (see below)	
 **Integrated Training Infrastructure**	>Establish a competency-based framework for CHW education and training that includes recognition for experience, communication skills, & community standing >Assess distinct and common professional & practical skills with other members of primary care and prevention team	>Assess training needs of mainstream providers to take optimal advantage of the engagement of CHWs	>Develop hybrid model of training certification that accommodates diverse approaches of formal educational institutions and regional training centers >Develop a phased education and training strategy for skill requirements in primary care & prevention for all members of team	>Scale the integration of CHWs into primary care and prevention team >Develop and implement models to facilitate career ladder and promotion opportunities for CHWs
 **Sustainable Financing Models**	>Develop strategy & secure State approval of reimbursement structure for CMS regulatory support of CHW health education services >Develop a strategy for the incremental development of capitated financing mechanisms >Support research on innovative financing models	>Provide technical assistance on HIT development >Encourage strategic investments by hospitals to build CHC analytic capacity & develop interoperable HIT systems	>Develop uniform metrics & evaluation models to document the Triple Aim contributions of CHWs >Establish voluntary frameworks for real-time data sharing >Document near term impacts of investments in HIT and analytic capacity building	>Document and broadly disseminate Triple Aim contributions of CHWs with particular attention to broader elements of primary prevention

Case Studies

A goal of this project has been for the findings from the statewide assessment to provide important insights into intervention strategies that integrate the cost of CHWs into reimbursement models, address quality-of-care concerns, and build links between clinical care and population health improvement. The statewide assessment includes case study profiles of two health plans and two safety-net health care providers. Common features in the four profiles include: strong collaborative partnerships with other care providers and the community at large; high-touch, in-person engagement and the use of behavior-change strategies to realize targeted outcomes; and direct connections between CHWs and in-house care management teams to address broader needs. Profiles include:

- **Molina Healthcare's Community Connector Program** targets members who Molina has identified as having high-cost utilization patterns, complex medical or behavioral health needs, or chronic conditions. The program's original pilot site in New Mexico resulted in a return on investment of 4:1 when comparing the six-month study-period data with data for the six months preceding and following the intervention. With evidence from the New Mexico program, Molina's leadership fully supports the Community Connector Program and has made the decision to now expand the model enterprise-wide across nine states, including California.
- **Inland Empire Health Plan's Health Navigator Program** is a high-touch, home-visitation model using a full-time, in-house team of community health workers to connect members with primary care physicians and reduce avoidable emergency department (ED) utilization. Inland Empire Health Plan prioritizes its outreach efforts and eligibility for participation on the basis of members having two or more avoidable ED visits in the preceding twelve months and not being current with immunizations or well-child visits. Between July 1, 2010 and June 30, 2013, the program completed a total of 2,356 final visits involving 7,056 members, which contributed to a 42% decrease in avoidable ED visits.
- **La Clinica de la Raza's Patient Navigator Program** integrates a community health educator in the role of Patient Navigator in the Sutter Solano Emergency Department who refers uninsured patients to an enrollment specialist to assist with coverage, connects them to a primary care provider at La Clinica, and identifies other needs such as food, transportation, and employment. La Clinica has just completed the year-long pilot, and preliminary findings highlight the positive impacts on patient access goals through providing assistance with enrollment, referrals, and scheduling appointments.
- **St. John's Well Child and Family Centers** has long recognized that many factors affect community health and that the delivery of primary health care services is more effective when addressing health in the broader community context. Its Right To Health Committees, Healthy Homes Healthy Families initiative, and Diabetes Classes are profiled to illustrate how they engage community health workers in a variety of capacities that extend beyond the traditional health care delivery models to address the the broader determinants of health.

Next Steps

CHWA will seek funding for a second phase of the project in early 2014 to support the establishment of a formal CHW Statewide Task Force and to host a series of state and regional convenings to translate the findings and recommendations into action through education and advocacy for the development of public policies and regulatory reforms, and through the facilitation of changes in institutional practices that contribute to achievement of the Triple Aim objectives and take the engagement of CHWs to scale.

Activities will focus on the establishment of the task force, the convening of stakeholders at the state and regional levels, the engagement of policy makers to facilitate the design of potential administrative and legislative policies that support the integration of CHWs into health care reimbursement structures as part of Medicaid expansion, and the engagement of leaders in the California safety-net health care system to facilitate institutional practices consistent with the recommendations of this report.

INTRODUCTION

Innovations that broaden the scope of services and links to community-based prevention, the settings in which services are delivered, and the workforce resources to deliver such services offer considerable potential to improve outcomes, reduce inefficiencies, and lower health care costs. The Triple Aim provides an overarching framework to guide organizations as they redesign structures and processes to meet the increased demand for primary care associated with expanded enrollment in the implementation of national health reform. CHWs have the ability to play a critically important role as a member of the primary care team, and they can both help to meet the increased demand for clinical services and serve as a key resource in the implementation of broader population health improvement strategies. More detailed information is needed, however, about accomplishments to date, challenges, and opportunities to help design strategies to scale up their engagement.

There is a strong historical context to engaging peer-identified members of the community as leaders with the knowledge and resources to facilitate education, advocacy, and connection to health and social services.[9] [10] However, CHWs are an extremely diverse and poorly defined part of the health workforce. Their roles and responsibilities range from activities that broadly support community health (such as outreach, organizing, capacity building, and participatory research) to those that involve the delivery of more specialized health-related services (such as health education, case management, and patient navigation). Their personal relationship with and knowledge of the communities that they serve is the core feature that is common across all activities -- and the unique value that they bring through their roles to team-based care approaches.

With the implementation of national health care reform, more in-depth knowledge of innovations that broaden the scope of services and links to community-based prevention, the settings in which services are delivered, and the workforce resources that will deliver such services are needed to help improve outcomes and lower health care costs. CHWs are well-positioned to contribute to the achievement of the Triple Aim objectives through their established roles and in a way that distinguishes their value relative to other health professions. In order to become more formally recognized and integrated in team-based care, there is a need to better articulate CHW contributions, expand the capacity to meet the increased demand for primary care services in the near term, and improve health in the community context to reduce the overall demand for medical services.

CHWA's use of the term CHW refers collectively to community health workers and promotores de salud, and the definition provided is consistent with those definitions that have been adopted by the US Department of Labor[11], the Affordable Care Act[12], and the American Public Health Association[13]. CHWA's definition recognizes a shared feature across the broad range of roles that describe CHWs. Namely, that their strength and value comes from their relationship to the community as a lay and trusted member of that community. These shared attributes instill a sense of trust that not only enables them to serve as an intermediary connecting individuals

[9] World Health Organization, 2006
[10] World Health Organization, 1978
[11] United States Department of Labor, 2012
[12] United States Government Printing Office, 2010
[13] American Pubic Health Association, 2013

CHWA DEFINITION OF A CHW

A person who is a trusted member of and/ or who has an unusually close understanding of the community served in the delivery of health-related services through either working directly with providers or their partner organizations. This trusting relationship with the community enables CHWs to serve as a liaison between health and social services and the community to facilitate members' access to services and improve the quality and cultural competence of services delivered. CHWs build individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support, and advocacy.

from the community to health and social services, but also serves to strengthen both individual and community capacity through increasing health knowledge and self-sufficiency within the community.[14] Further, CHWs can improve the quality and cultural competence of services delivered through educating providers about the unique needs of the community.

An effective health system is one that will foster quality, coordinated health care services, and community conditions that support health and safety. Advocates for strengthening the role of CHWs recommend their full participation in "community health teams" as part of "medical homes". [15] In doing so, community perspectives and priorities are brought into the process of improving health care systems; the impact of the full range of roles and responsibilities of CHWs is optimized through their roles as members of clinical care teams and as part of community-based prevention efforts. The concept of community-centered health homes[16], which has been proposed as a model to address broader patient needs by integrating health services with community prevention efforts, emphasizes such an approach for maintaining the integrity of the quality of medical services delivered while addressing environmental and other social determinants of health.

A major challenge to the formal integration of CHWs into care delivery and payment systems continues to be a lack of understanding among providers and policy makers about the potential roles and responsibilities of CHWs, as well as the specific contributions that CHWs can make to the achievement of the Triple Aim objectives. Professional concerns related to a lack of standardized training and credentialing requirements pose additional challenges to CHWs' integration into the health care workforce and payment systems. Broader recognition of CHWs as a distinct occupation, and their formal integration into care delivery teams, require the development of a standard scope of practice for CHWs and standard core competencies for their training and certification in order to be able to establish a formal reimbursement mechanism for their services. As patient-care delivery models and performance incentives evolve under health care reform, evidence of CHW contributions to improving care access, outcomes, and cost-effectiveness is also needed to inform the design of practical strategies and policies that can more effectively incorporate CHWs into team-based care models.

[14] Brownstein JN, Hirsch GR, 2011
[15] Balcazar HG, 2011
[16] Prevention Institute, 2011

With federal policy initiatives in place that promote the integration and use of CHWs in team-based primary care, states have also been implementing legislation and regulations to promote the use of CHWs and to integrate them into the health care workforce. Such approaches expand their roles and strengthen their financial support to create sustainable programs.[17] The establishment of an infrastructure with statewide standards around a scope of practice, training, certification, and financing mechanisms is seen as critical to building and sustaining the CHW workforce in many states.[18] State-level actions have ranged from: creating a commission to investigate the impact of CHWs in achieving health care savings or eliminating health disparities among populations; enacting policies that either create a certification process for CHWs or require CHWs to be certified; encouraging or requiring the integration of CHWs into team-based models of care; and authorizing Medicaid reimbursement for some CHW services.

[17] Brownstein JN, 2011
[18] Matos S, 2011

BACKGROUND

The implementation of health care reforms, combined with workforce shortages — particularly among the primary care providers — and difficult socio-economic conditions that challenge underserved populations create favorable conditions and an unprecedented receptiveness for the health care system to consider new models for health care delivery that expand access and improve patient outcomes while cutting costs. Through expanding the scope of health care, the place where it is delivered, and the workforce that provides it, the US health care system could make significant advances in improving population health outcomes and reducing inefficiencies in care delivery.[19] One promising approach to the revitalization of primary care and the transformation of the health system is the adoption of multi-disciplinary, team-based approaches to care that will expand the health system's current care delivery capacity to address a broader scope of care needs.

Safety net health care providers are well positioned to play a key role in the implementation of health care reforms and to contribute towards achieving the goals of the Triple Aim. In particular, community health centers' focus on the coordination of primary and preventive services, the utilization of multi-disciplinary, team-based care, and the delivery of community-responsive and culturally-appropriate care can:

- promote reductions in health disparities;
- overcome geographic, cultural, linguistic, and other barriers that underserved populations often face in access to and receipt of quality care;
- contribute to reductions in costs to health systems through reducing patient use of costlier care options, such as emergency departments and hospitals.[20] [21]

Moreover, the ability of safety net health care providers to realize improved health outcomes will rely on their ability to also incorporate strategies that address interrelated social and economic determinants of health, which can have considerable bearing on individual and population health outcomes.[22]

The implementation of health care reforms and the anticipated influx of large numbers of newly insured people atop existing caseload constraints within provider organizations will initially place higher-than-usual demands on safety-net health care providers to meet demand for services that address patients' medical and non-medical needs. In particular, individuals who gain health insurance coverage for the first time may actually increase the amount of health care services they consume, particularly in primary care and within low-income and/or underserved communities.[23] Primary care providers in these communities are being advised to assess their staffing needs and strategies in preparation for this influx of newly-insured persons into the health care system. As a result, innovations that redistribute tasks and restructure and reorient health care through broadening conceptions of services delivered, the settings in which care services are delivered, and the workforce resources used to deliver services can potentially relieve pressure on the system and help meet the expected increase in demand, while at the same time improving the system's overall performance.

[19] Balcazar HG, 2011
[20] National Association of Community Health Centers, 2012
[21] Health Resources and Services Administration, 2012
[22] National Association of Community Health Centers, 2012
[23] Health Resources and Services Administration, 2013

Health Care Safety-Net Providers

Not-for-profit community clinics and health centers (CCHCs), which provide primary and preventive care as well as dental, mental health, substance abuse, and pharmacy services, are an essential segment of service providers in the safety net. Compared to other primary care providers, CCHCs have a higher rate of accepting new patients, and are a leading source of primary care for underserved populations. Together with their cultural competencies in delivering care, health centers also serve as a usual source of care for these patients.[24] With the expansion of Medicaid under health care reform, a sustainable source of primary care will be critical for improving health outcomes and containing costs. While health care centers can provide patients with a reliable source of primary care, the likelihood that demand will exceed supply on the provider side will require significant changes in the way the safety net delivers primary and preventive care to be able to meet that demand.

In many California counties, CCHCs are responsible for providing a significant proportion of comprehensive primary care services to publicly subsidized or uninsured populations. The California Primary Care Association (CPCA) reports that there were 121 Federally Qualified Health Centers and more than 934 CCHC sites in California in 2012, of which there were 516 Federally Qualified Health Center sites, 38 Federally Qualified Health Center look-alike sites, and 20 rural health center sites.[25] These community clinics and health centers combined served more than 5 million people annually. Nearly two-thirds of patients were under the federal poverty level, with one-third of patients eligible for Medi-Cal, and 30% uninsured.[26] [27] Medicaid payments represent the largest source of financing for community health centers. Over a five-year period between 2007 and 2011, Medi-Cal was the largest single source of revenue, averaging 34.3% of clinic revenue.[28]

To address the broader social determinants of health and remove common barriers to care confronted by communities, many health centers offer enabling services that facilitate patients' access to health care. These services include such things as enrollment assistance, transportation, and home visitation, as well as employment counseling, housing assistance, food banks, and meals.[29] In 2012, the top community services delivered by California's health centers were outreach, health education, nutrition, and social services.[30]

The roles that CHWs play span a continuum of service functions, addressing the broad determinants of health and related social, behavioral, and medical needs. Yet CHWs have yet to be formally recognized and integrated into multi-disciplinary health teams, which are comprised of diverse health professions working collaboratively to address the broad determinants of health and care needs of the populations they serve.

The Community Health Worker Workforce

CHWs' roles can be organized along a service continuum that ranges from broad, population-based, community-health management at one end (i.e., community organizing to create healthier community conditions and public health interventions such as dental screenings) to individualized, specialized care management on the other (i.e., care coordination and case management for chronic conditions). Along that continuum four main types of interventions by CHWs exist: advocacy, access, education, and care support. Exhibit 2 summarizes the roles and responsibilities corresponding to each.

[24] National Association of Community Health Centers. 2012
[25] California Primary Care Association. 2012
[26] California Primary Care Association. 2012
[27] State of California Office of Statewide Health Planning and Development. 2011
[28] California Primary Care Association. 2012
[29] National Association of Community Health Centers. 2012
[30] California Primary Care Association. 2012

Exhibit 2: Categories of CHW Interventions by Roles and Responsibilities

	Role	Responsibilities	Skill Requirements
Advocacy	> Promote advocacy by building individual and community capacity for change	> Collect data related to community health needs > Advocate for enforcement or development of public and/or institutional policies that address individual or community needs > Engage community members to build knowledge and skills for self-directed change and community development	> Client and community assessment > Effective communication > Apply public health concepts and approaches
Access	> Promote access by facilitating effective linkages between the community and health system on the basis of their personal relationship with and knowledge of the community	> Conduct case finding in the community and home visits to provide limited clinical services to persons identified as being at-risk > Assess client eligibility for benefits and services and provide assistance with enrollment > Connect individuals to the health system/ medical homes > Assist with timely access to the health system through referrals and coordination of care > Provide health-related transportations and other social supports that are barriers to access to care	> Support, advocate, and coordinate care for clients > Outreach methods and strategies
Education	> Provide health education and information by imparting knowledge and developing critical reasoning and decision-making skills	> Teach basic concepts of health promotion and disease prevention > Employ behavior change strategies that promote and encourage positive behavior change > Disseminate educational resources to support health promotion and chronic disease self-management	> Health education and behavior change
Care Support	> Support delivery of clinical care services by providing direct care support to individuals or enabling services that facilitate access to quality care	> Provide routine screenings and testing > Provide direct medical translation and interpretation to patients during receipt of care services > Provide informal counseling and / or social support (individually or in group) > Educate medical and social providers about community needs	> Culturally-based communication and care > Writing and technical communication skills

The unique value that CHWs offer as members of multi-disciplinary, care management teams is based on their shared life experiences with community members and their direct personal understanding of the community's culture, beliefs, norms, and behaviors. This shared experience with the patient population, which has been described as "experience-based expertise",[31] promotes a level of trust and rapport with patients, as well as an understanding of the cultural factors in the patient's care and issues influencing their adherence with care plans.

The CHWs' connection to the community as a lay and trusted member of that community, together with their deep understanding of the social and cultural contexts of patients' lives and their unique community-based roles as connectors, facilitators, educators and advocates, can strengthen provider-patient communications.[32] By integrating CHWs into multidisciplinary team-based care delivery models, CHWs can therefore improve the capacity of safety net health care providers in better serving the needs of populations through removing barriers that patients experience in accessing and receiving quality care, and that providers face in engaging patients in their care.

Three organizational models for the engagement of CHWs have been identified in the US health system:[33] (1) the employment of CHWs as extensions of hospital systems; (2) the management of CHWs through community-based nonprofit organizations, and (3) the management of CHWs by entities that operate at the interface between health systems and the community. The first two reflect historical practice models for extending the health care system's reach and for engaging in community activism and health education. The third represents a synthesis of the previous two models, while borrowing principles for scalability and financial sustainability from global program experiences; this provides a service model that could more cost effectively support health systems with the recruitment, training, and supervision of CHWs for roles in interventions that might otherwise be delivered by more extensively trained health care workers and that are difficult to coordinate in community settings.

An innovative practice model in the United States that moves towards the third model and adopts more expansive definitions of product, place, and provider is the Prevention and Access to Care and Treatment (PACT) program. PACT supplements comprehensive medical care with "wraparound" antipoverty services for HIV-positive and other chronically ill patients using trained and paid CHWs to accompany patients to visits, serve as patient advocates, and conduct home visits. As a result, CHWs have helped patients more effectively self-manage their illnesses. HIV-positive patients, for example, have experienced significant improvement in clinical outcomes and preventable resource utilization, while costs to Medicaid have dropped significantly and realized net savings.[34] [35]

[31] Gilkey ME, 2011
[32] Brownstein JN, Hirsch GR, 2011
[33] Singh P, 2013
[34] Onie R, 2012
[35] Prevention and Access to Care and Treatment, 2011

Prevention and Access to Care and Treatment Program

Based on the *accompagnateur* model pioneered in rural Haiti, the **Prevention and Access to Care and Treatment (PACT)** project focuses on effectively integrating CHWs into primary care and mental health teams. The program has realized strong results to date. HIV-positive patients, for example, have experienced improvement in clinical outcomes and preventable resource utilization, while costs to Medicaid have dropped significantly and realized net savings. By accompanying patients to visits and communicating regularly with licensed clinicians, CHWs ensure that treatment recommendations are patient-centered. CHWs visit patients' homes to provide directly observed therapy, supervising patients while medication is being administered, and helping them overcome structural and psychosocial hurdles to wellness. Their tasks range from motivating medication adherence to surveying patients' pantries and helping them identify ways to make healthy, affordable meals. In so doing, CHWs help patients more effectively self-manage their illnesses. One year post-enrollment in PACT's HIV program, 70% of patients witnessed improvement in their health (viral load suppression and CD4 improvements). Analysis of Massachusetts's Medicaid program (MassHealth) claims reveals a 16% net savings in total medical expenditure two years after enrollment. This is attributed to a 35% reduction in length of stay and inpatient costs. The PACT model is now being replicated in New York City, Miami, and the Navajo Nation.

The Evidence Base for Community Health Workers

A growing body of research indicates the effectiveness of CHW interventions in three categories:

- care access through facilitating enrollment in health insurance programs and helping patients navigate the health care system;
- care outcomes through conducting case management and participating in team-based approaches to coordinating patients' access to appropriate health and social services;
- and cost-effectiveness of care delivered through increasing patients' use of preventive services, foregoing the use of more resource-intensive services, and helping individuals adopt positive health behaviors in the management of chronic conditions.[36] [37]

To date, CHWs have demonstrated their greatest effectiveness in promoting the use of primary and follow-up care for the prevention and management of chronic conditions, improving birth outcomes, and maintaining child wellness.[38] [39] Interventions that have integrated CHW services into team-based health care delivery systems have also been associated with reductions in chronic illnesses[40], increased patient engagement[41], and improvements in overall community health.[42] Evidence of cost-effectiveness and return on investment is emerging.[43]

[36] Martinez J, 2010
[37] Balcazar HG, 2011
[38] Brownstein JN, Hirsch GR, 2011
[39] Rosenthal EL, 2010
[40] Allen JK, 2011
[41] Heisler M, 2009
[42] Brownstein JN, Andrews T, 2011
[43] Rosenthal EL, 2010

Access

CHWs can contribute significantly to improving population health and reducing health disparities through facilitating community members' access to care. In Massachusetts, CHWs were identified as having played an important role in helping more than 200,000 uninsured to enroll in health insurance as mandated under state law.[44] A randomized trial of a CHW intervention to increase insurance among Latino children in Boston found that children in the CHW intervention group were significantly more likely to be insured and to be insured continuously, compared with children in the control group.[45]

Access El Dorado

Formed in 2002, **Access El Dorado (ACCEL)** is a community-wide collaborative among public and private agencies that seeks to create healthier communities, especially within vulnerable populations, identify specific barriers to a healthy community, and develop systematic improvements that include all partners and serve the entire community. ACCEL utilizes a Care Pathways approach that includes step-by-step actions for resolving problems and tracking outcomes as part of the process. ACCEL has developed and implemented eight Care Pathways designed to increase access to care by identifying and helping individuals who need to secure health insurance coverage, assisting individuals in securing a medical home, using a medical home appropriately, and gaining access to local care services. Community Health Outreach Workers from participating agencies help individuals and families navigate medical systems and providers to ensure that the problem or barrier to accessing appropriate health care is resolved and that clients learn related self-care behaviors. Care Pathways has successfully assisted more than 3,300 children. Notably, the Care Pathway that connects children who visit the emergency department (ED) with a medical home was estimated to yield an estimated 43% reduction in hospital ED costs among those children who were successfully established with a medical home (86% of referrals).[46]

Once enrolled in coverage, CHWs in Massachusetts were identified as having improved the quality and cost-effectiveness of care by supporting patients with self-management aspects of chronic diseases, providing assistance with the navigation of care services, and coordinating care for patients with chronic conditions. In New York City, CHWs enrolled more than 30,000 previously uninsured persons from low-income communities in health insurance, and in doing so facilitated access to care through completing immunizations for 8,000 children and contributed to improvements in asthma management for 4,000 families.[47] Similar interventions to facilitate enrollment in health insurance programs have also been demonstrated to improve access.[48]

[44] Rosenthal EL, 2010
[45] Flores G, 2005
[46] Agency for Healthcare Research and Quality, 2009
[47] Perez M, 2006
[48] Martinez J, 2010

Clinic Transitions Program for Recently Released Prisoners

Eleven community health centers nationally have adopted the **Transitions Clinic Program** to care for recently released prisoners with chronic medical and mental health conditions. The Transitions Clinic Program does this by providing transitional and primary health care and case management services, including referrals to needed social services. The original clinic, which operates out of designated space at the Southeast Health Center in San Francisco, is staffed by medical staff and trained CHWs who have experienced incarceration. The CHWs provide ongoing case management services that include counseling, assistance in navigating the health care system, chronic disease self-management support, and referrals to substance abuse and mental health services, as well as assistance with non–health care needs, such as housing, transportation, child care, employment, and legal aid. Results from a randomized controlled trial of 200 individuals, half of whom were assigned to the Transitions Clinic and the remainder to another safety-net clinic that did not provide case management services, found the program increased access to medical care for recently released prisoners, as evidenced by increases in the number seeking medical care and by above-average attendance at their initial and follow-up appointments, and led to decreased emergency department use.[49]

Outcomes

Studies have shown the effectiveness of CHWs in helping improve both preventive and treatment outcomes across a range of populations and conditions. CHWs have been shown to increase women's knowledge about the benefits of health screenings for cancers, which has subsequently led to improved screening outcomes.[50] In the management of chronic diseases, studies have demonstrated that CHWs can support patients with diabetes through providing basic health education and encouraging the adoption of positive health behaviors.[51] Other studies have demonstrated that interventions using CHWs have helped patients to improve control of asthma, hypertension, cardiovascular disease, depression, and mental illness.[52] The use of CHWs to provide individualized asthma education during home visits to inner-city children indicate improved asthma control. Specifically, symptom frequency was reduced by 35% and urgent-health resource utilization by 75% between pre- and post-intervention periods, resulting in an estimated cost saving of more than $5 to $1 spent on the intervention.[53]

Evidence supporting the involvement of CHWs in the prevention and control of chronic disease highlights the value of integrating CHWs into multidisciplinary care teams. In particular, the team-based approach has emerged as an effective strategy for improving the control of hypertension among high-risk populations through helping patients with reminders for appointments, medication adherence, and reducing risk behaviors.[54] Other team-based interventions involving

[49] Wang EA, 2010
[50] Mock J, 2007
[51] Martinez J, 2010
[52] Matos S, 2011
[53] Margellos-Anast H, 2012
[54] Brownstein JN, 2007

nurses have led to significant improvements in controlling blood pressure[55] and managing cardiovascular diseases.[56] The Institute of Medicine's *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* recommended the use of CHWs in team-based care as early as 2002 to better serve the diverse US population and improve the health of underserved communities as part of "a strategy for improving health care delivery, implementing secondary prevention strategies, and enhancing risk reduction."[57] African-Americans with diabetes were found to have improved HbA1c, cholesterol triglycerides, and blood pressure in a randomized controlled trial when managed by a team comprised of a nurse case manager and a CHW.[58]

Team-Based Home Visiting Program for Childhood Asthma

Cambridge Health Alliance, an integrated health system in Massachusetts that focuses on public health and safety-net populations, deployed a team consisting of a CHW and a registered nurse as part of its Childhood Asthma Program. The team made at least three home visits to pediatric asthma patients and was supported by a web-based registry that tracked information about pediatric patients with asthma, including information about medical history, condition severity, treatment plan, and evidence-based treatment protocols. The team sought to help parents reduce or eliminate asthma triggers and optimize medication management for children. The percentage of children with annual asthma-related admissions dropped from 10% in 2002 to 2% in 2009. The percentage of asthma-related emergency department visits fell from 20% in 2002 to 8% in 2009. The program has shown a return on investment of $4 for every $1 invested. The Alliance is extending the model to reducing obesity, managing diabetes, and improving complex care for patients.[59]

Telehealth technology can enable the integration of CHWs into team-based care models, particularly in rural and underserved communities, to effectively improve outcomes. Project ECHO, a remote care-delivery model using videoconferencing at the University of New Mexico, connects front-line primary care clinical teams, including CHWs, with specialist care teams at university medical centers for training in new areas of care delivery and to facilitate the co-management of local patients with chronic conditions requiring complex care. Originally launched in 2003 in the treatment of Hepatitis C (HCV), Project ECHO is now being used in the treatment of asthma, mental illness, chronic pain, diabetes and cardiovascular risk reduction, high-risk pregnancy, HIV/AIDS, pediatric obesity, rheumatology, and substance abuse. A study involving 407 patients with HCV who had received no previous treatment for infection found that the cure rates for patients treated through Project ECHO (58.2 percent) and at the University of New Mexico Medical Center (57.5 percent) were significantly higher than cure rates achieved in previous community-based treatment studies for HCV. Project ECHO was also found to reduce racial and ethnic disparities in treatment outcomes by bringing services to minority communities.[60]

[55] Becker D, 2005
[56] Allen JK, 2011
[57] Brownstein JN, 2011
[58] Gary TL, 2004
[59] Bielaszka-DuVernay C, 2011
[60] Robert Wood Johnson Foundation, 2011

Technology-Enabled Team-Based Care Approach to Medication Management

Videoconferencing technologies have been used to optimize the use of health care workforce resources in the management of medications with socially isolated and geographically dispersed older, minority populations. A videoconferencing model pioneered by the **Connecticut Pharmacists Association** used CHWs to engage patients' trust and cooperation and provide language interpretation together with pharmacists for their knowledge of appropriate medication use. A study to evaluate the platform's effectiveness for improving medication use among widely dispersed clusters of older Cambodian Americans residing in Connecticut, Massachusetts, and California, while demonstrating cost savings, showed significant improvement in medication use-related behaviors between participants' first and the final visit. Overall, 562 (93%) of the 604 medication-related problems identified were resolved. Inappropriate medication use declined by 35%. Adherence behavior improved 23%. Nearly all patients had resolved, stable, or improved clinical outcomes by the final visit. Total health expenditure savings exceeded the cost of providing medication treatment management services by a ratio of 4.8:6.1. Virtual medication management services may find use within care models that support team approaches, bundled payments, and accountable care for individuals with complex, chronic health conditions.[61]

Cost-effectiveness

Evidence of cost-effectiveness primarily reflects cost savings resulting from improved health, increased attendance or visits for preventive and primary care, and reduced use of emergency departments and hospitalizations rather than due to the substitution of comparable health professional services with lower-cost CHW interventions.[62] Pilot programs have provided evidence of both reductions in spending for Medicare and Medicaid populations and clinical improvements in areas such as medication adherence and glycemic control.[63] However, systematic reviews of published studies have noted a general lack of cost data such that the evidence base for the cost-effectiveness and return on investment from interventions by CHWs remains limited.[64 65 66]

The calculation of cost-effectiveness and return on investment from the engagement of CHWs faces a number of challenges:[67] (1) the lack of a single standard measure for measuring return on investment in CHW interventions given the wide variation in roles and functions performed by CHWs; (2) differences in the interests and perspectives of various stakeholders, such as payers and providers, and the influence that the prevailing organizational and payment structures have thereon; (3) the impacts or benefits from interventions may extend well beyond the timeframe

[61] Center for Technology and Aging, 2012
[62] Rush C, 2012
[63] Singh P, 2013
[64] Viswanathan M, 2009
[65] Brownstein JN, 2005
[66] Lewin SA, 2006
[67] Rush C, 2012

used in designing interventions and calculating return on investment; and (4) the emergence of new opportunities to reconsider CHW roles and return on investment under various new proposed payment structures for health care (i.e., patient-centered medical homes, accountable care models, pay-for-performance, global or bundled payment systems).

A number of studies demonstrate savings in total cost of care as a result of CHW interventions:

- A Baltimore study involving home-based outreach by CHWs with African-American Medicaid patients with diabetes and hypertension achieved reductions of 40% in emergency department visits and 33% reductions in both emergency department admissions to hospitals and total hospital admissions. These outcomes led to a 27% reduction in Medicaid costs for the group and annual savings of $2,245 per patient per year, with a total savings of $262,080 for 117 patients. This resulted in estimated gross savings to the participating hospital — per CHW — of $80,000–$90,000 per year.[68]
- A Denver Health study found that CHWs employed by Denver Health Community Voices saved $2.28 for every $1 invested in outreach with low-income men to increase their access to health services and to establish continuity of care. Moreover, primary- and specialty-care visits increased after patients met with a CHW, and more costly urgent care, inpatient, and outpatient behavioral health care utilization decreased. The shift of inpatient and urgent care to primary care was attributed to the role of CHWs' in helping clients establish a medical home, select a primary care provider, and navigate the health system.[69]

A recent trend has been to use evidence from demonstration projects to inform policy decisions:[70]

- Officials in Ohio made decisions using unpublished research data to expand a CHW prenatal care program using CHWs statewide. The intervention had reduced low birth-weight and premature deliveries and infant mortality in a high-risk population, thereby leading to reductions in Medicaid expenses related to neonatal intensive care.
- In Arkansas, the Community Connector Program (see box) helped the state Medicaid program to cost-effectively connect disabled and elderly residents at risk for long-term care with community-based long-term care services and thus enable those at risk to remain at home.
- On the basis of Children's Hospital of Boston's Community Asthma Initiative realizing a reduction of 65% in ED visits and 81% in hospitalizations, state legislators introduced an amendment to the Medicaid budget to establish a bundled payment for the management of high-risk pediatric asthma patients, including home visits by CHWs.

[68] Fedder DO, 2003
[69] Whitley EM, 2006
[70] Rush C, 2012

The Community Connector Program

The **Arkansas Community Connector Program**, which employs approximately six full-time CHWs to provide home and community-based long-term care outreach, used specially trained CHWs to identify people at risk for long-term care in three disadvantaged counties and to connect them to Medicaid home and community-based services. To the authors knowledge, this was the first US initiative to test a mechanism of using CHWs specifically for the purpose of providing targeted outreach to residents in need of home and community-based long-term care services and identifying priority Medicaid-eligible adult populations with unmet long-term care needs that they could then "connect" to community-based agencies offering appropriate services. The result was a 23.8% average reduction in annual Medicaid spending per participant during the period 2005 - 2008. Net three-year savings to the state Medicaid program equaled $2.619 million and a substantial return of nearly $3 for every $1 invested in the program.[71]

There are signs that care providers, too, are willing to make resource allocation decisions to engage CHWs without requiring detailed justification or rigorous research designs. Two hospital systems in East Texas reported returns on investment ranging from 3:1 to more than 15:1 as a result of savings in the total cost of care from employing CHWs to work with patients utilizing the emergency department. On the basis of cost savings demonstrated in a state-funded pilot project involving CHWs working in the children's emergency department, a hospital in San Antonio, Texas, decided to integrate several CHW positions into its core budget. In another example, a New York hospital moved costs related to the use of CHWs in an asthma project from a grant-funded position to their internal budget on the basis of reductions in inpatient admissions and length of stay. Both hospitals plan to expand CHW services to include working with adult emergency department and congestive heart failure patients, respectively.[72]

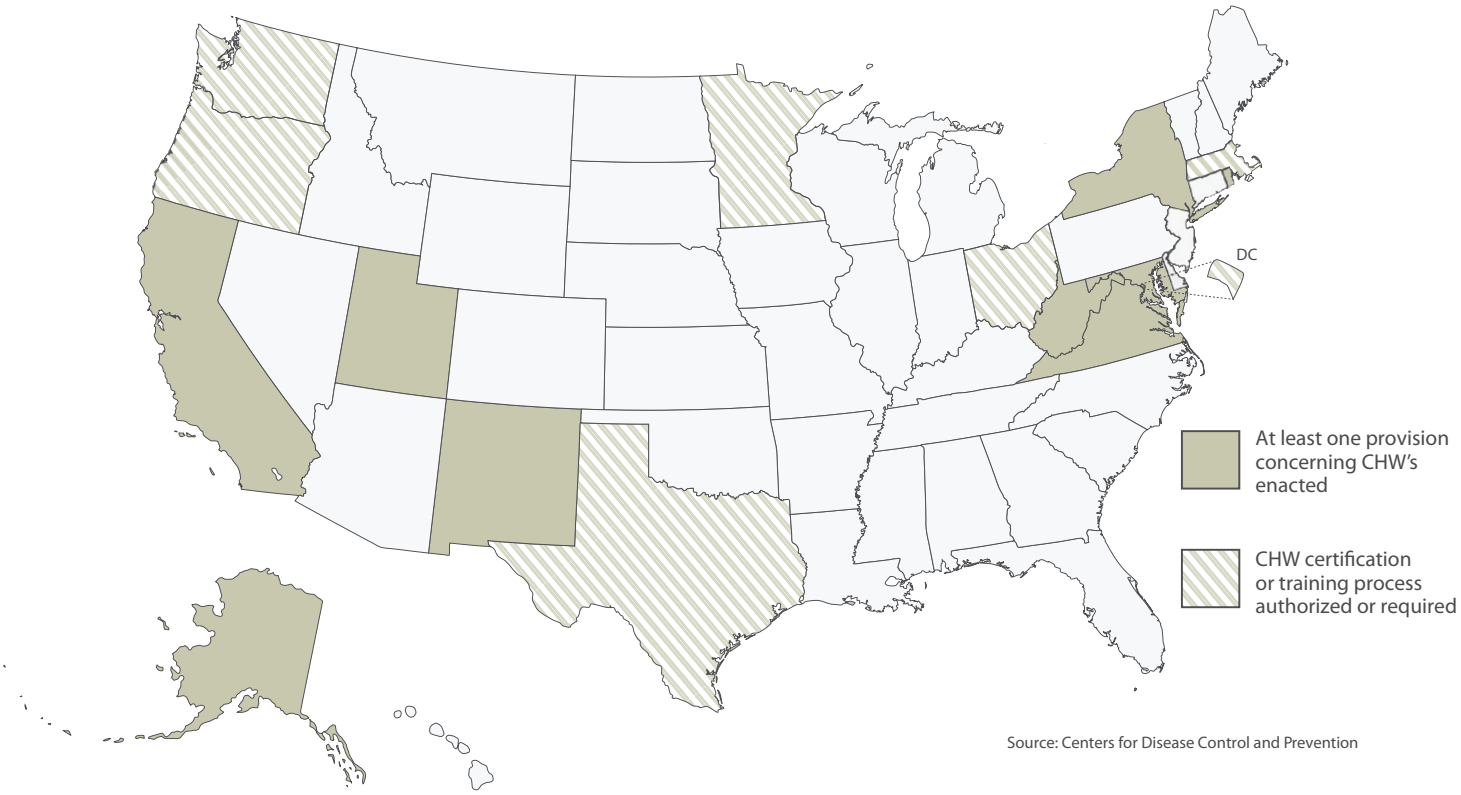
State Policy Actions

The establishment of a fundamental infrastructure with statewide standards around a scope of practice, training, certification, and financing mechanisms has been central to building and sustaining the CHW workforce at the individual state level.[73] Minnesota and Massachusetts are two particular states that offer guidance on the successful introduction of legislation and regulations to support sustainable CHW programs.[74] In Minnesota, legislation now makes CHW services reimbursable under Medicaid and the state regulates CHW training, supervision, enrollment criteria, and billing policy. In Massachusetts, the relationship between increased professional status for the field and the ability for CHWs to attain greater financial sustainability was central to achieving sustainability of the CHW workforce.[75] Other states should consider building on the Massachusetts and Minnesota examples as they seek to formally integrate CHWs into their workforce strategies to prevent disease, improve chronic care management, and reduce costs and disparities in health care.

[71] Felix, HC, 2011
[72] Rush C, 2012
[73] Matos S, 2011
[74] Rosenthal EL, 2010
[75] Massachusetts Department of Public Health, 2009

As of December 2012, fifteen states and the District of Columbia had enacted some form of related policy. (See Exhibit 3 for select states and types of CHW laws in effect as of December 2012):

Exhibit 3
States with Select CHW Laws in Effect, December 2012



Source: Centers for Disease Control and Prevention

Since the late 1990s, a number of states have sought to enact statutes, legislation, and regulations at varying levels of authority (i.e., required, authorized, prohibited) as a tool to address CHW infrastructure, professional identity, workforce development, and financing to facilitate the formal integration of CHWs into the health care workforce and strengthen their financial support to create sustainable programs.[76] (See Exhibit 4 for select states and description of CHW laws in effect as of December 2012):

- Six state legislatures created an advisory body or ordered a study to investigate the impact of CHWs in achieving health care savings or eliminating health disparities.
- After these studies were released, two states, Massachusetts and Oregon, enacted additional policies to regulate CHWs.
- Three of the eight states that codify a CHW scope of practice have specified a role for CHWs in chronic disease prevention and care.

[76] Centers of Disease Control, 2013

- Five states have enacted workforce development laws that create a certification process for CHWs or require CHWs to be certified.
- Six states authorize the creation of standardized curricula on the basis of core competencies and skills, four of which authorize a certification board to set education requirements and oversee the certification process.
- Seven states have enacted policies authorizing Medicaid reimbursement for some CHW services. No state requires private insurers to cover or reimburse CHW services.
- Maryland authorized the creation of health enterprise zones to help address health disparities in which CHWs and their employers are eligible for tax incentives.
- Seven states have enacted laws to encourage or require the integration of CHWs into team-based care models for at least some health care organizations or services.

Exhibit 4: States with Select CHW Laws in Effect, December 2012

State	Infrastructure	Professional Identity	Workforce Development		Financing	
	Establish CHW advisory body	CHW scope of practice	CHWA certification or training process	Standard curriculum with core skills	State reimburses or creates incentives for CHW services	Integrates CHWs into team-based care
AK		Yes			Required[1]	
CA						Authorized[1]
DC				Authorized[1]		
MD					Authorized	
MA	Yes	Yes	Authorized	Authorized	Authorized	Authorized
MN			Required[1]		Required[1]	
NM	Yes	Yes			Authorized	Authorized
NY					Authorized	Authorized
OH		Yes	Required*	Required*		
OR	Yes	Yes[1]	Required*	Required[1]	Required[1]	Required*
RI	Yes	Yes				
TX	Yes	Yes	Required*	Required[1]		
UT	Yes					
VA	Yes					
WA		Yes[1]		Authorized[1]	Required[1]	Authorized[1]
WV					Required[1]	Required[1]

Empty cells indicate that state law is silent on this issue or no law was identified.
Yes indicates state law either authorizes or requires in full or in part the select recommendation.
*State has multiple enacted laws with varying degrees of authority.
[1]Law has exception or only applies in certain circumstances (i.e., tuberculosis control).

Source: Centers for Disease Control and Prevention

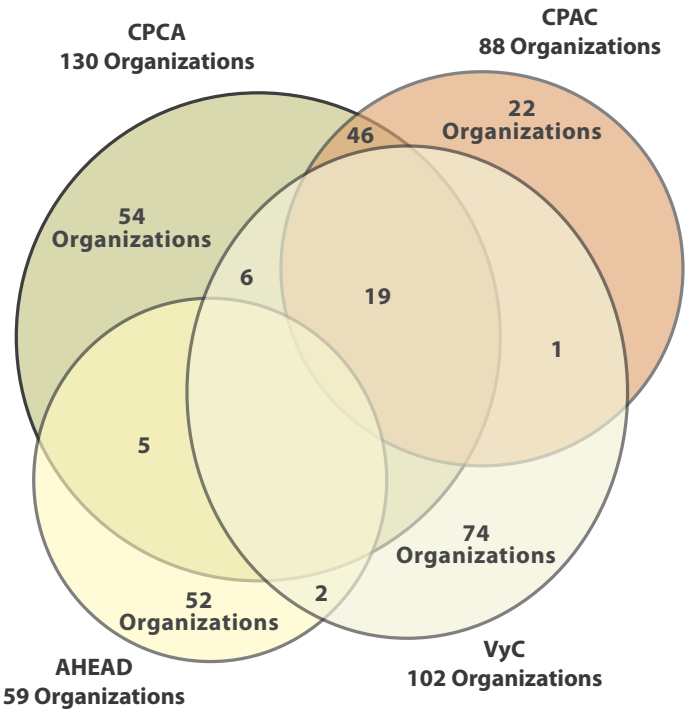
RESEARCH METHODOLOGY

A statewide survey was conducted online to systematically assess the roles and contributions of CHWs among California's health care safety-net providers, and their contributions towards the achievement of the Triple Aim objectives. In particular, the survey addressed (1) delivery models and specific roles of CHWs and promotores; (2) impacts upon utilization patterns and in the care delivery process; (3) contributions to broader population health improvement; (4) current challenges (e.g., analytic capacity, reimbursement) and opportunities (e.g., strategies for scaling-up practices) for bringing their engagement to scale.

The design of the CHWA survey instrument was informed by the CHW National Workforce Study funded by the US Health Resources and Services Administration.[77] The Project Leadership Team helped to refine the instrument, and it was field tested with six organizations in California prior to launch. Statewide promotion and outreach for the survey was conducted in partnership with the California Primary Care Association, Vision y Compromiso, California Program on Access to Care, and Advocates for Health, Economics and Development.

Between January and June 2013, CHWA conducted outreach for an online survey, with the support of our project partners, to the senior leadership of 281 of California's rural and urban health care safety-net providers. (See Exhibit 5) Clinic leaders were asked to either complete the survey or supervise the submission of administrative, operational, and clinical data related to the roles and contributions of CHWs. In instances where organizations operate more than one clinic, individual respondents provided inputs for all clinics affiliated with that organization.

Exhibit 5: Survey Outreach Efforts



Survey response rate of 43%

202 unique and 79 shared safety-net provider organizations were contacted through outreach and promotion efforts

[77] Health Resources and Services Administration, 2007

Responses were received from 125 organizations representing 685 sites. The total number of surveys accepted and included in our final analysis was 121 (response rate = 43%), of which 117 were fully completed. (See Exhibit 6 for a breakdown of the respondents by clinic type). A combined total of 668 sites were represented by the 121 respondent organizations. Eighty-five (70.2%) of the respondent organizations operate multiple sites, representing a total of 632 sites. More than half (62%) of the respondents were either individual organizations with one site or small-sized organizations with between two to four sites. (See Exhibit 7 for a breakdown of respondents by organizational size)

Exhibit 6: Respondents by Clinic Type

Clinic Type	Individual Site (n=36)	Multiple Sites (n=85)
FQHC	14	65
FQHC Look-Alike	8	7
Free Clinic	1	3
Non-FQHC Clinic	4	6
Hospital-Owned Clinic	2	9
Mobile Clinic	0	20
Other	7 (includes Rural Health Clinic, Hospital-owned Community Outreach Center, HIV Specialty Clinic, Public Health Clinic, and Wellness Center)	16 (includes Adult Day Health Center, Dental Clinic, Satellite Clinic, School-based Clinic, Medical Group-owned Clinic with Specialty and Sub-Specialty, HIV Treatment Clinic, Teen Health Center, Youth Enhancement Center and WIC Clinic)

Exhibit 7: Respondents by Organizational Size

Organization Size	Response Count	Response Representation
Individual (=1)	36	30%
Small (2-4)	39	32%
Medium (5-9)	23	19%
Large (10+)	23	19%
TOTAL	**121**	**100%**

FINDINGS FROM THE CALIFORNIA COMMUNITY HEALTH WORKER SURVEY

Although there have been previous efforts to evaluate the contributions of CHWs across the nation, estimates as to the size of this workforce vary considerably. Among the most comprehensive assessments conducted to date, the CHW/NWS estimated that California had more than 13,000 CHWs engaged by health employers in the public and private sectors in 2005 — the largest total number of CHWs reported for any individual state. More recently, the occupational employment statistics released in May 2012 by the Department of Labor indicate that 5,350 CHWs were employed in California.

Respondents to the 2013 CHWA survey report that 1,644 CHWs were engaged in California. This finding is lower than the two preceding estimates reported for California's public and private health-service sector.[78] [79] This is due to CHWA's sample frame and outreach specifically to urban and rural community health centers and clinics, which represent a subset of the larger statewide health care safety-net provider system and of the even larger health care system beyond the safety net. CHWA recognizes that a larger number of CHWs would have been reported had our sample frame included a broader categorization of service organizations.

The Community Health Worker Engagement Profile

Approximately two-thirds (65.3%) of surveyed health care safety net providers, representing 515 sites, engage CHWs in a broad range of roles and across a broad range of program areas and in diverse settings. Of the seventy-nine organizations that engage CHWs, a total of 1,644 CHWs were engaged in some capacity, including 799 on a full-time basis. Of these organizations, fifty-two (65.8%) operate clinics in urban locations. Using the California Economic Strategy Panel Regions to group reporting counties by regions, the majority of respondents, sites, and CHWs engaged were located in the Bay Area, Southern California, Southern Border, and San Joaquin Valley counties. (See Exhibit 8)

Exhibit 8: Respondents by Regional Classification

Region	Counties**	Orgs	Sites	Total CHWs	Full-Time CHWs
BAY AREA	Alameda, Contra Costa, Marin, Napa, San Benito, San Francisco, Santa Clara, Santa Cruz, Solano, Sonoma	34	181	555	149
CENTRAL COAST	Santa Barbara, San Luis Obispo, Monterrey	4	30	18	6

Continued on next page

[78] United States Department of Labor, 2012
[79] Health Resources and Services Administration, 2007

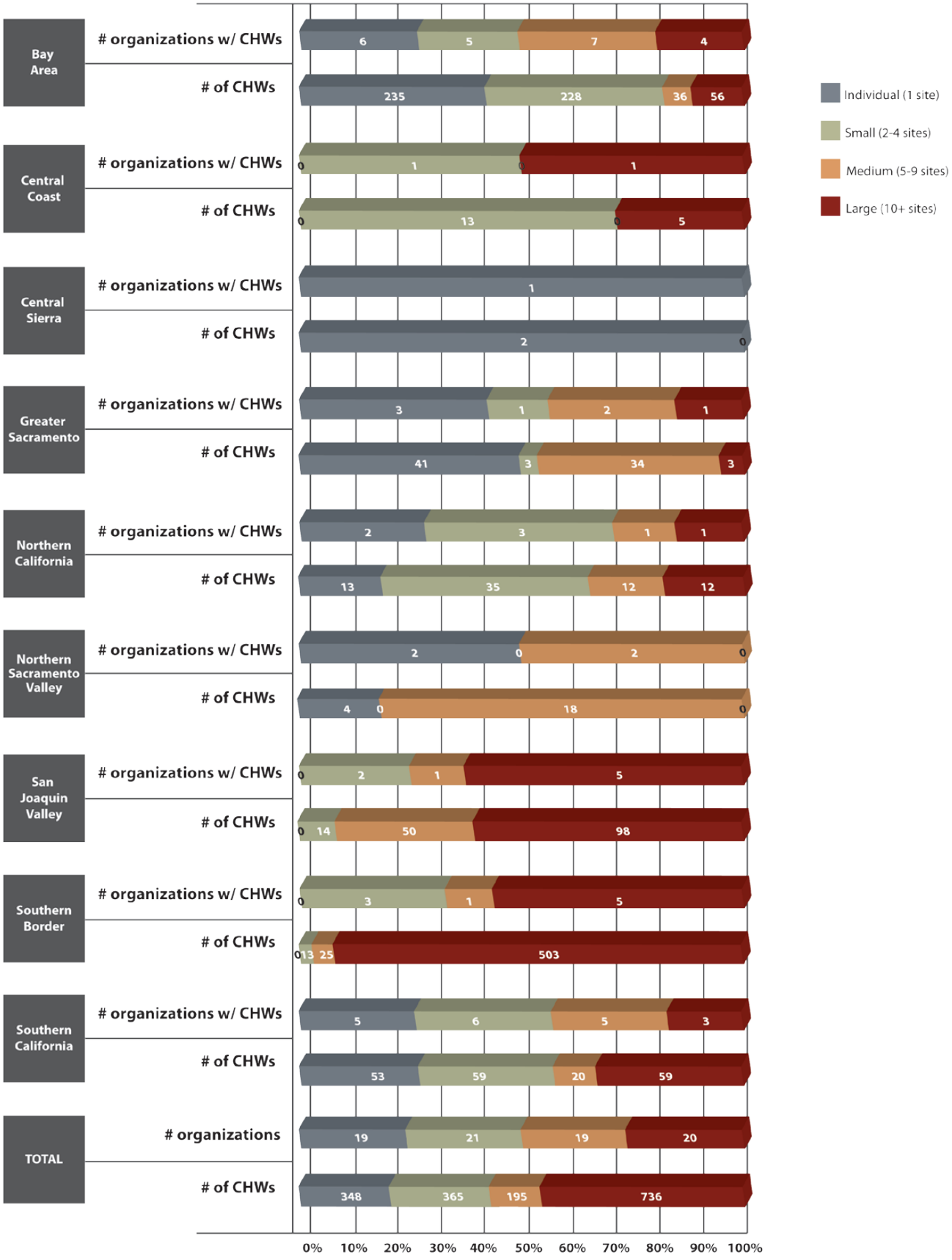
Exhibit 8: Respondents by Regional Classification (cont)

Region	Counties**	Orgs	Sites	Total CHWs	Full-Time CHWs
CENTRAL SIERRA	Inyo, Tuolumne	3	29	2	2
GREATER SACRAMENTO	El Dorado, Sacramento, Sutter, Yolo, Yuba	7	32	81	33
NORTHERN CALIFORNIA	Humboldt, , Lake, Lassen, Mendocino, Modoc, Nevada, Siskiyou	15	37	72	64
NORTHERN SACRAMENTO	Shasta	4	12	22	22
SAN JOAQUIN VALLEY	Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare	11	126	162	125
SOUTHERN CALIFORNIA	Los Angeles, Orange, San Bernardino, Riverside, Ventura	32	134	191	134
SOUTHERN BORDER	San Diego, Imperial	11	87	541	264
	TOTAL	**121**	**668**	**1,644**	**799**

* Groupings based on California Economic Strategy Panel Regions
** Counties not represented above because there was no representation of organizations from those counties in the survey include: Bay Area (San Benito, Santa Mateo), Central Sierra (Alpine, Amador, Calaveras, Mariposa, Mono), Greater Sacramento (Placer), Northern California (Del Norte, Plumas, Sierra, Trinity), Northern Sacramento Valley (Butte, Colusa, Glenn, Tehama), San Joaquin Valley (Fresno)

Three-quarters (75.9%) of the organizations engaging CHWs were multi-site organizations (496 sites). Of 1,296 CHWs engaged at multi-site organizations, 693 were on a full-time basis. When reviewing the data analyzed, it is important to note that the number of CHWs were disproportionately distributed among surveyed organizations in the Bay Area and Southern Border areas. (See Exhibit 9) Of the twenty-two organizations in the Bay Area counties engaging 555 CHWs, two individual and one small-sized respondent reported 375 CHWs. In the Southern Border counties, one large organization reported 300 CHWs.

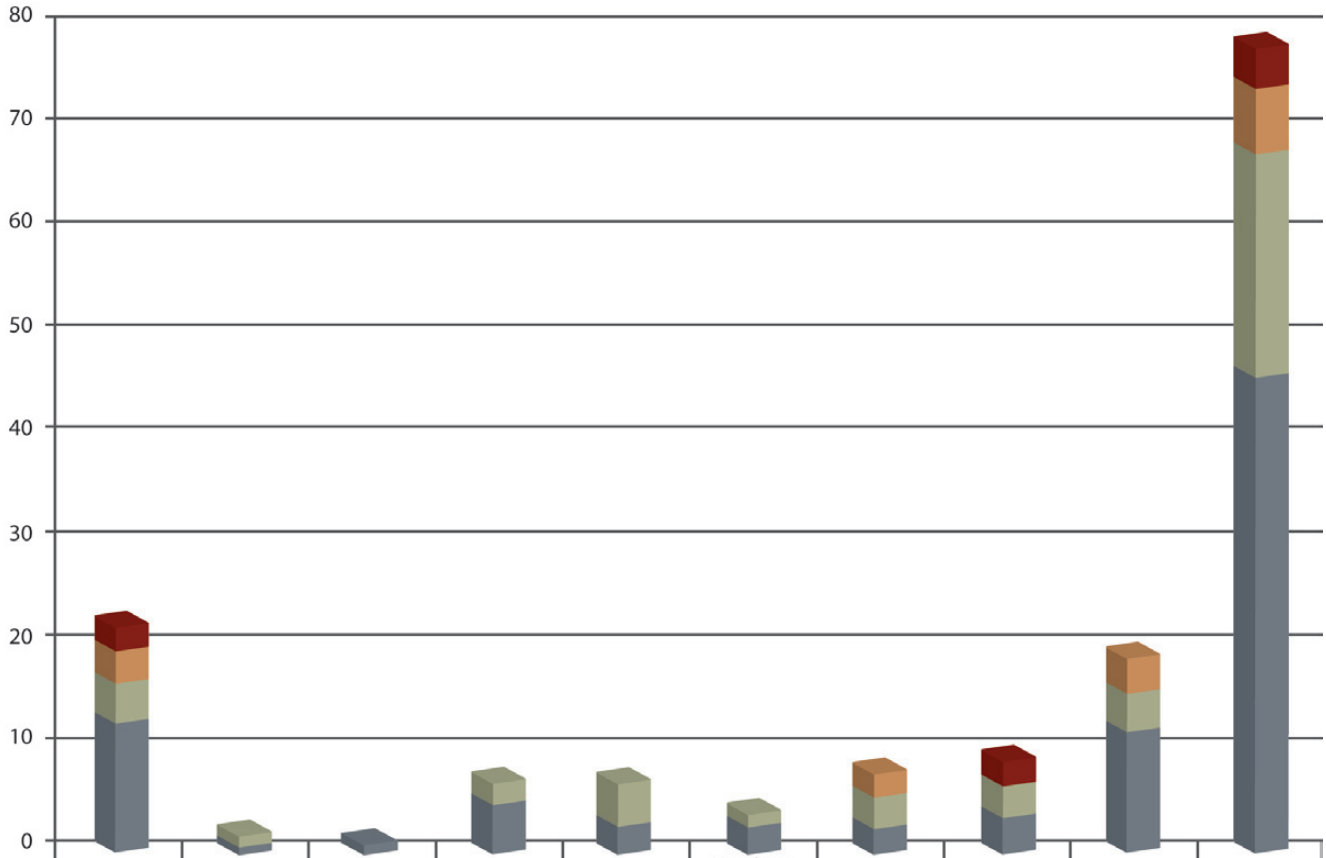
Exhibit 9: Distribution of CHWs by Organization Size and Region



Of the thirty-six respondent organizations operating a clinic at one site only, nineteen (53%) engaged 348 CHWs, 105 of whom were engaged on a full-time basis. Of these nineteen organizations, the main types of health care provider organization represented were FQHC community clinics (seven), followed by FQHC look-alike community clinics (five), and non-FQHC community clinics (three). "Other" organizations (four) included an HIV-specialty clinic, wellness center, public health clinic, and hospital-owned community outreach center. The location for these organizations was predominantly urban (thirteen out of nineteen).

Of the survey respondents that engage CHWs, forty-seven (59.5%) engage between one and ten CHWs; twenty-two (27.8%) between eleven and thirty CHWs; six (7.6%) engage between thirty-one and sixty CHWs; and four (5.1%) engage more than sixty. (See Exhibit 10) Of the six organizations engaging between thirty-one and sixty CHWs, all were multi-site, predominantly FQHC community clinics (with the exception of one free clinic) and urban (with the exception of two rural health centers). The four organizations engaging more than sixty CHWs were all urban and included one FQHC community clinic, one free clinic, one hospital-based clinic, and one non-FQHC community clinic.

Exhibit 10: Number of CHWs Engaged by Region

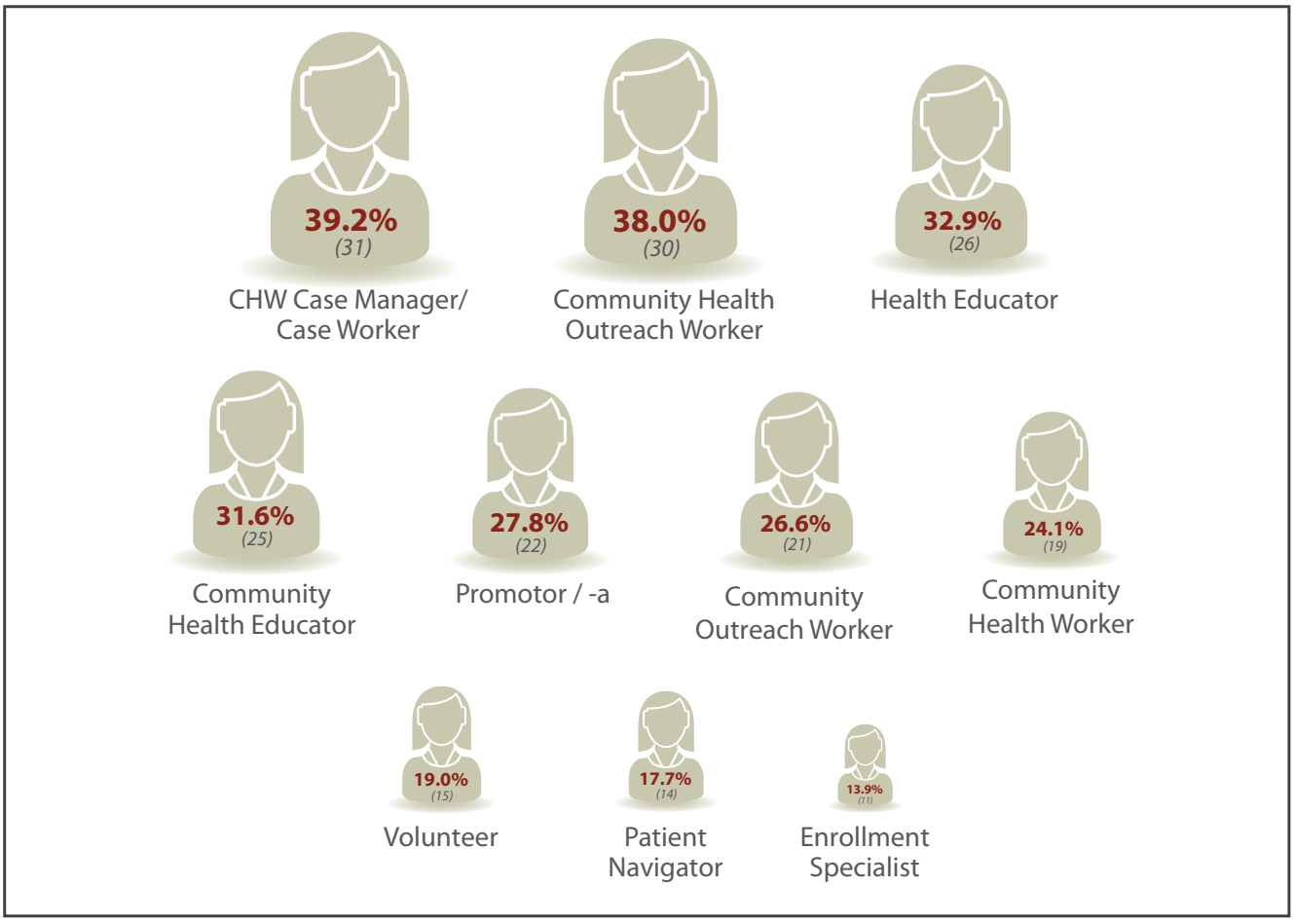


	Bay Area	Central Coast	Central Sierra	Greater Sacramento	Northern California	Northern Sacramento Valley	San Joaquin Valley	Southern Border	Southern California	TOTAL
# of CHWs (61-300)	2	0	0	0	0	0	0	2	0	4
# of CHWs (31-60)	2	0	0	0	0	0	2	0	2	6
# of CHWs (11-30)	4	1	0	2	4	1	3	3	4	22
# of CHWs (1-10)	14	1	1	5	3	3	3	4	13	47

The Community Health Worker Service Profile

Provider organizations use a broad range of titles to refer to persons engaged in the delivery of community health-related services. (See Exhibit 11) Organizations responding to the survey said the professional titles used most frequently to refer to CHWs in California were "CHW Case Manager/ Case Worker," "Community Health Outreach Worker", "Health Educator", and "Community Health Educator." "Promotor/-a", "Community Outreach Worker", and "Community Health Worker" were reported less frequently. The ranking of the "CHW Case Manager / Case Worker" title as the most frequently used is notable as it was used less frequently than "Community Health Worker", "Health Educator", and "Promotora" by respondents in the national CHW/ NWS survey.

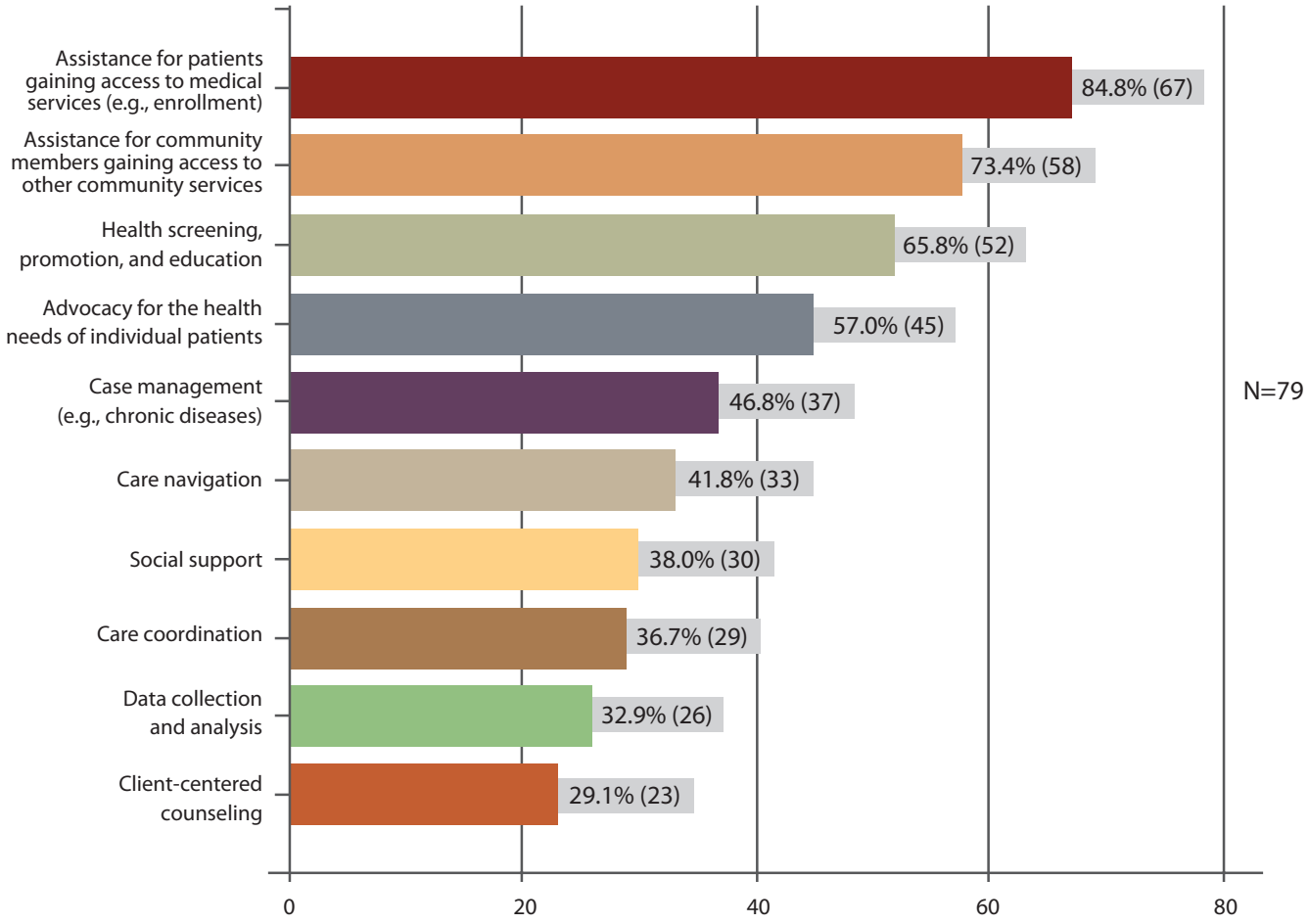
Exhibit 11: Professional Titles Used to Refer to CHWs



The selection of "CHW Case Manager/Case Worker" as the leading professional title to refer to CHWs appears valid. For the thirty-one organizations that indicated "CHW Case Manager/Case Worker" as a professional title used to refer to engaged CHWs, the choice is consistent with other selections these organizations made related to the program areas and operational roles. For example, the program areas for CHWs in organizations that selected "CHW Case Manager/Case Worker" focus overwhelmingly on diabetes (67.7%), nutrition obesity (58.1%), and mental health (54.8%), and the operational roles of CHWs had an emphasis on case management (87.1%), care coordination (74.2%), and care navigation (64.5%).

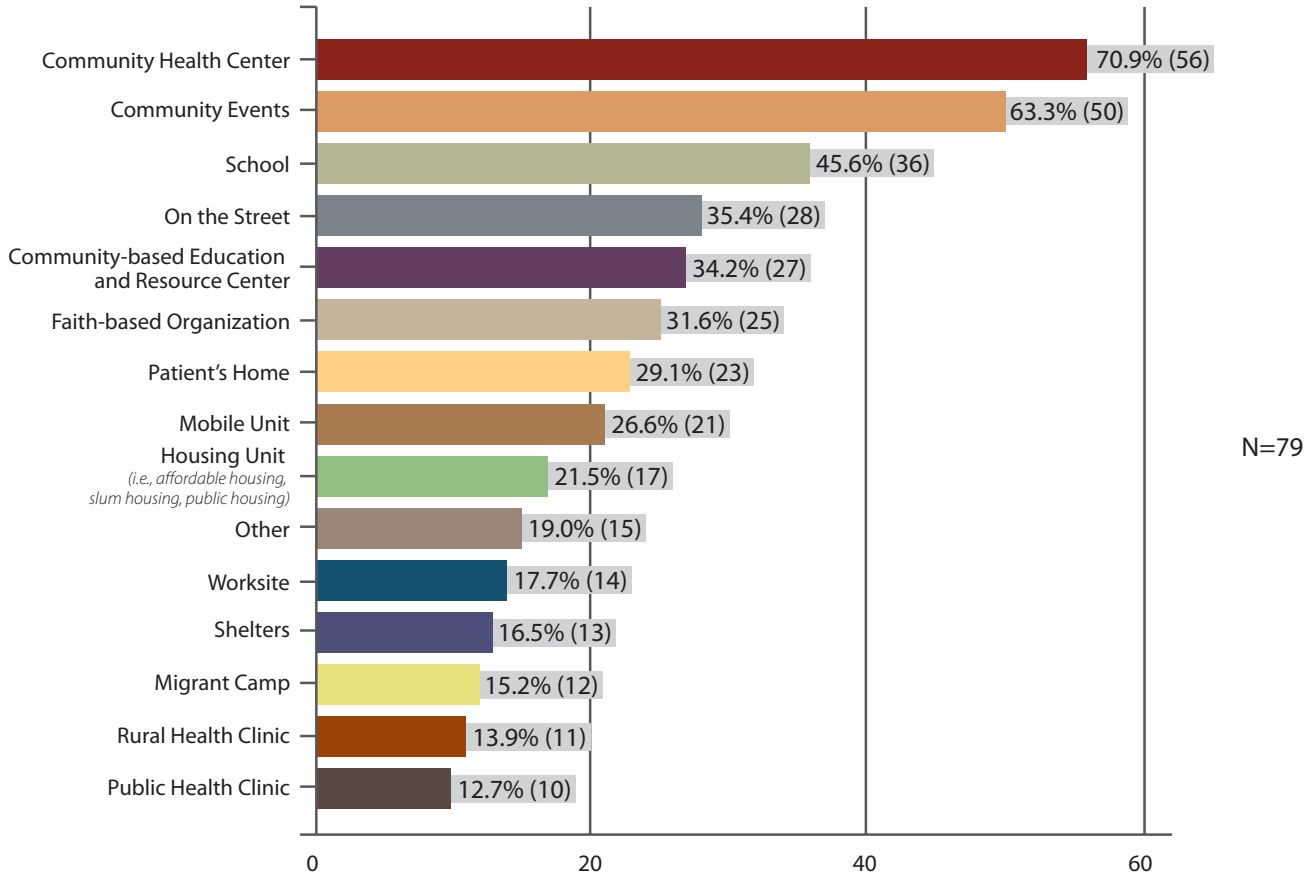
CHWs perform a wide range of operational roles. The pattern of responses for operational roles that California's CHWs perform parallels closely the patterns reported by respondents in the national CHW/ NWS survey. The two roles noted by more than three-quarters of seventy-nine respondents were "providing assistance for patients with gaining access to medical services" (84.8%) and "providing assistance for community members with gaining access to other community services" (73.4%). (See Exhibit 12) More than half of the respondents reported "health screening, promotion, and education" (65.8%) and "advocacy for the health needs of individual patients" (57.0%) as activities that CHWs perform. Roles that focus on advocacy, such as "policy advocacy" (8.9%) and "community organizing and advocacy" (24.1%) tend to be more subordinate to the patient care management and navigation roles.

Exhibit 12: Operational Roles of CHWs



Previous surveys of the CHW workforce in California have indicated that CHWs participated in a wide range of models of care that encompass a focus that is either health care institution-centric or community-centric. Respondents to the CHWA survey indicate that their CHWs deliver services both in health institution settings as well as in a broad range of community-based settings. The two sites most commonly associated with the delivery of services are "community health center" (70.9%) and "community events" (63.3%), followed by "school" (45.6%), "on the street" (35.4%), "community-based education and resource center" (34.2%), and "faith-based organization" (31.6%). Other health care institutions that respondents identified as locations where CHWs deliver services included "mobile unit" (26.6%), "rural health clinic" (13.9%), "public health clinic" (12.7%), "hospital (i.e., acute in-patient care hospital, skilled nursing facility bed hospital)" (7.6%), and "private clinic" (6.3%). (See Exhibit 13)

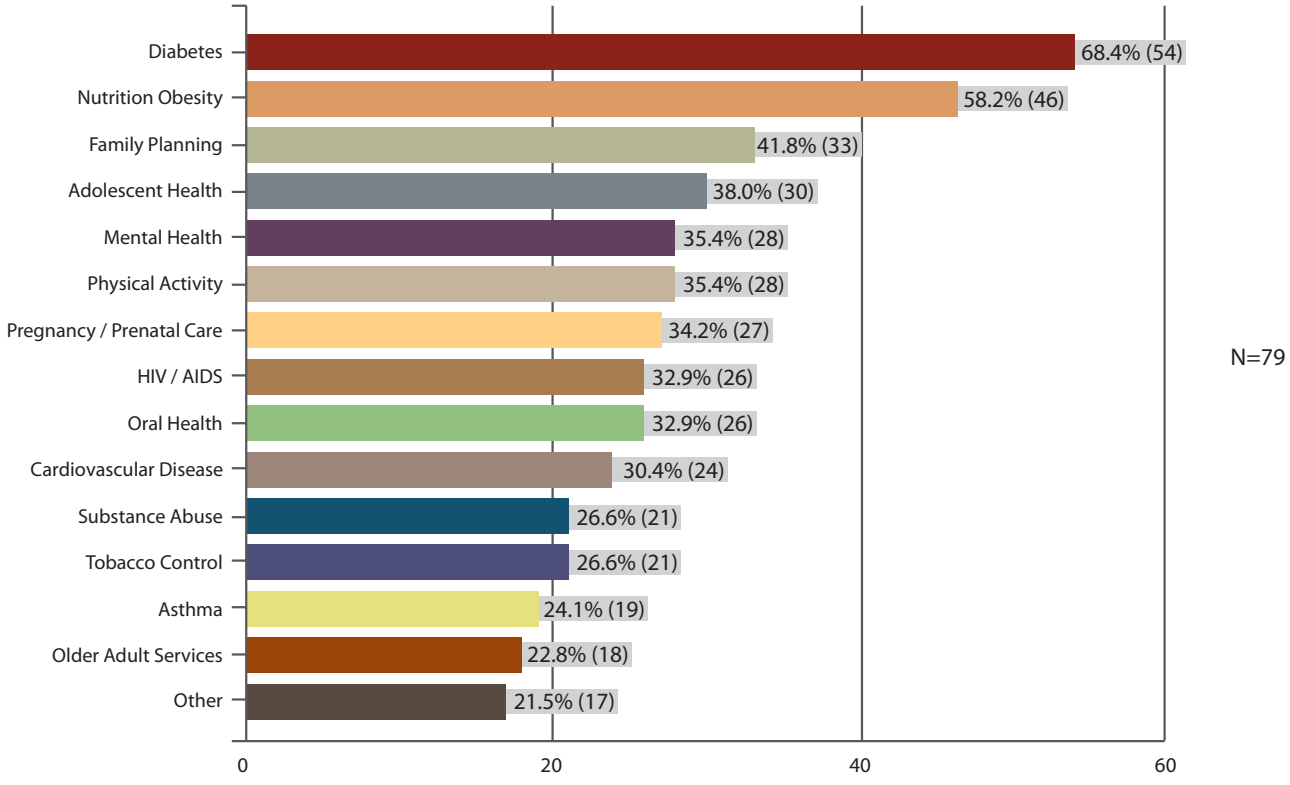
Exhibit 13: Sites for Service Delivery



When responses are grouped by categories of settings, those settings that are public venues, such as "community events", "on the street", or "school", are the leading categorical type of setting where CHWs deliver services compared with provider-based (i.e., "community health center", "hospital" and the different types of clinics) and residential (i.e., "housing unit", "patient's home", "assisted living facility") settings. Respondent organizations that selected "community events" as a setting for the delivery of services selected the professional title "Community Health Outreach Worker" most frequently compared with "CHW Case Manager/Case Worker" for organizations that selected a "community health center" as a setting. Operational roles of CHWs in organizations that selected the "community events" setting have a greater emphasis on "health screening, promotion, and education" compared with those respondents that selected "community health center".

Survey respondents overwhelmingly identified "diabetes" (68.4%) and "nutrition obesity" (58.2%) as the leading program focus areas for CHWs, followed by "family planning" (41.8%), "adolescent health" (38.0%), "mental health" (35.4%), and "physical activity" (35.4%). (See Exhibit 14) Respondents reported a lower level of CHW engagement with "pregnancy/prenatal care" programs (34.2%) and programs dealing with other prevalent chronic conditions, particularly "cardiovascular disease" (30.4%) and "asthma" (24.1%). Respondents that selected the "community events" setting for the delivery of services were more likely to select "nutrition obesity", "family planning", and "adolescent health" compared with organizations that selected "community health center". Those organizations that selected "community health center" were morelikely to select "diabetes" and "mental health".

Exhibit 14: Program Areas of Focus for CHWs



Organizations recognize the growing importance of the CHW role in implementing health care reform. The care coordination role for chronic conditions will be increasingly important under reforms, as financing mechanisms move towards global budgeting, for example. When respondents were asked to prioritize operational roles for CHWs in the next five years, a growing interest in providing "case management" emerges, especially for chronic conditions. (See Exhibit 15) When asked to prioritize the program areas that will be the focus for CHWs in the next five years, "mental health" and "cardiovascular disease" rose relative to "family planning" and "adolescent health". (See Exhibit 16) Additional operational roles prioritized by respondents that support chronic disease management include "health screening, promotion, and education", "care coordination", and "care navigation".

Exhibit 15: Priority Ranking of Operational Roles in Next 5 Years

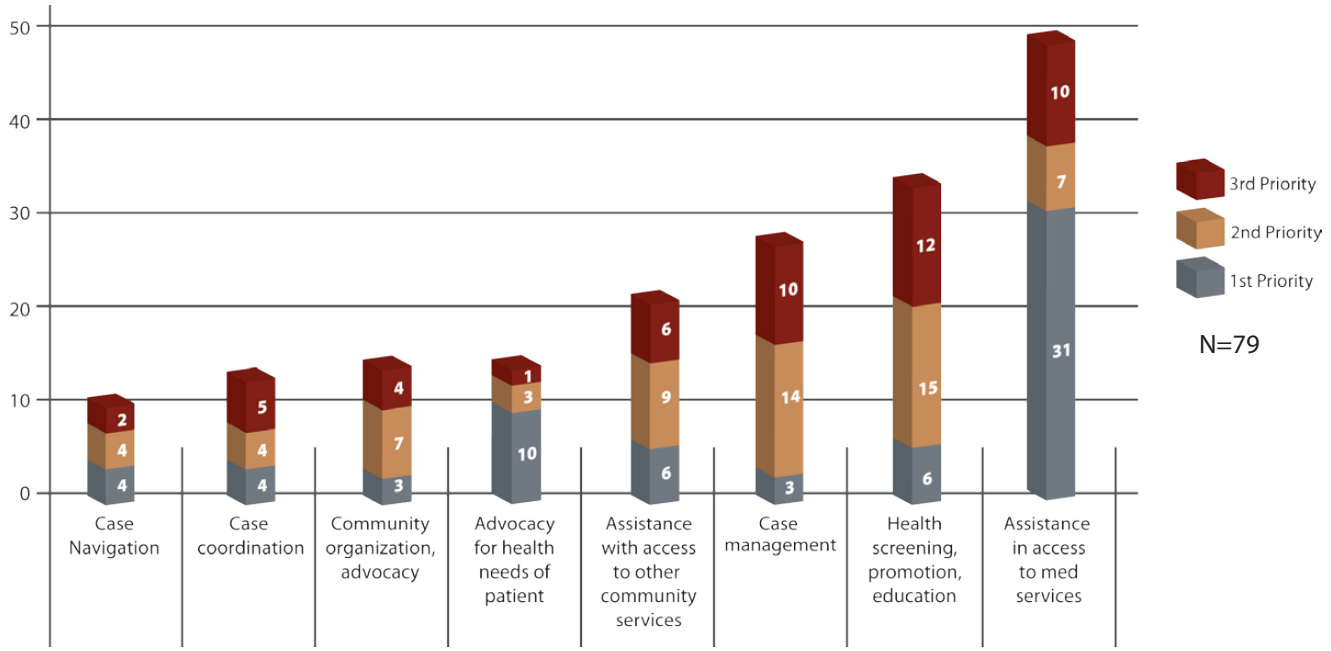
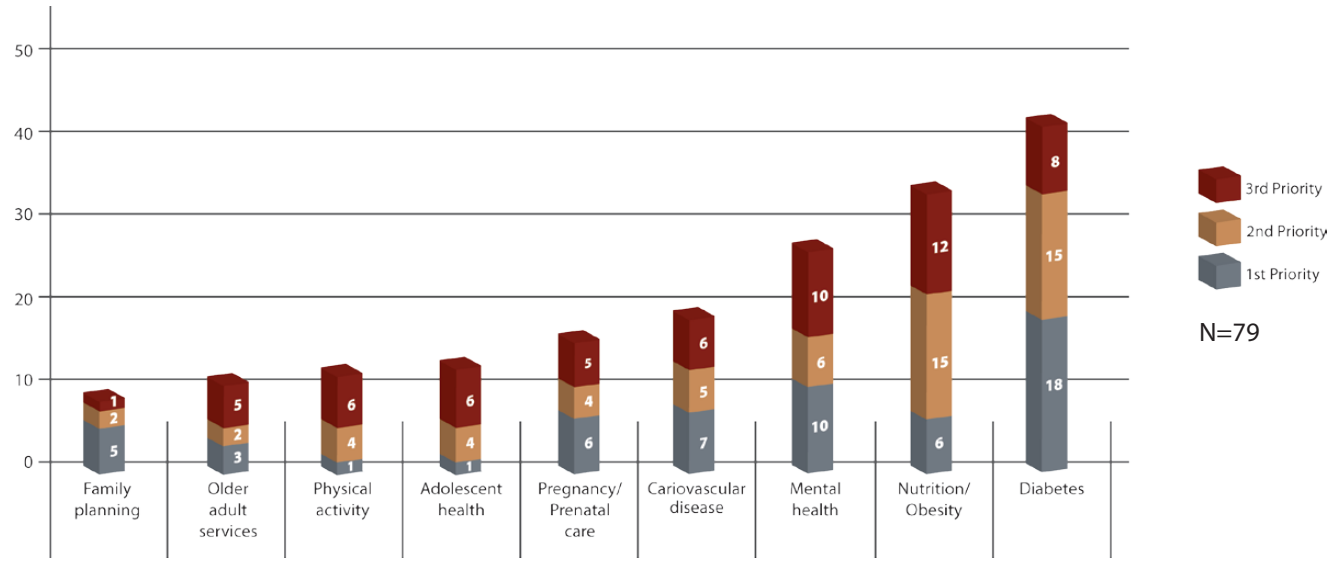


Exhibit 16: Priority Ranking of Program Areas in Next 5 Years

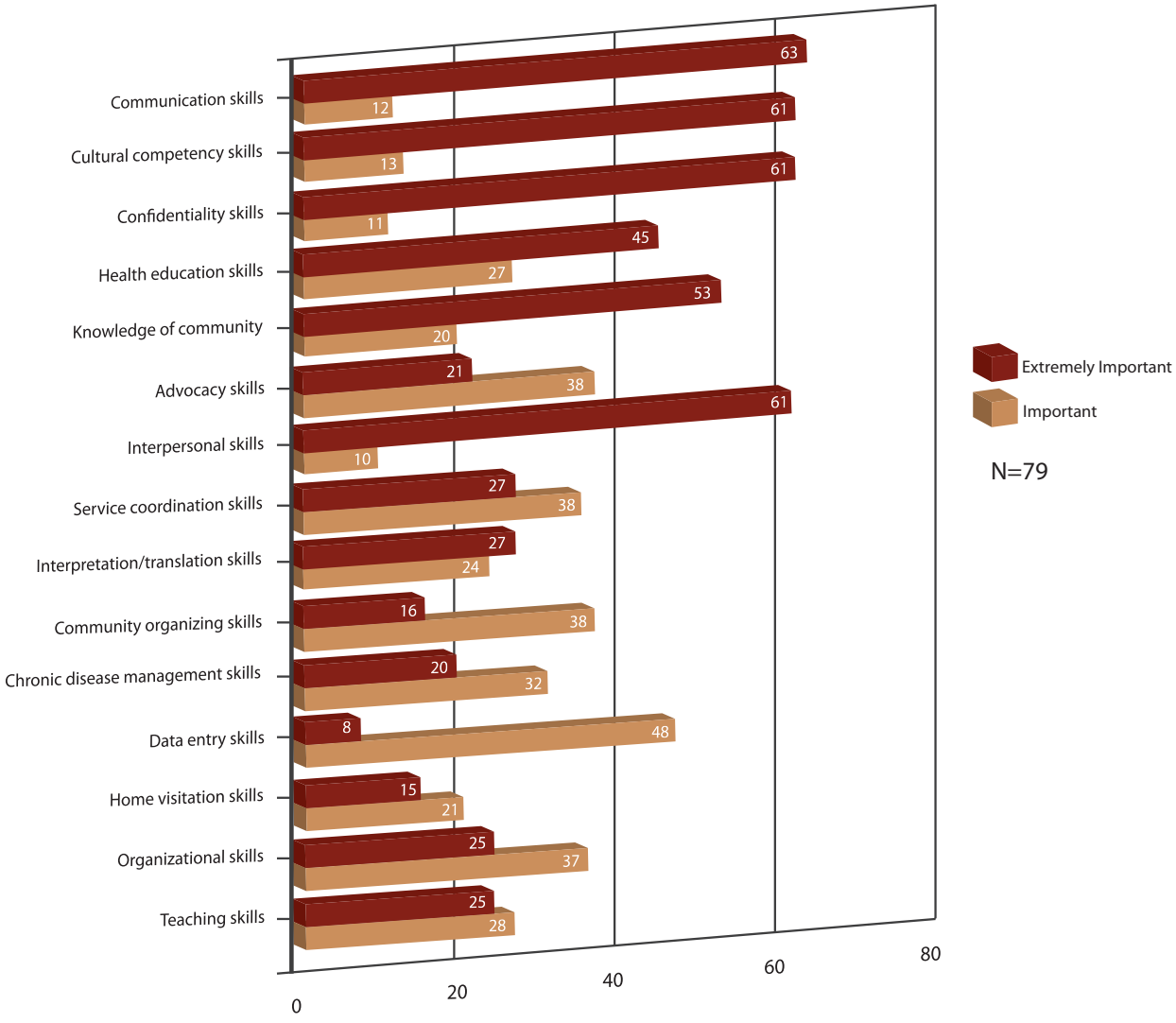


The Community Health Worker Skill Profile

"Communication" and "cultural competency" skills are viewed as "extremely important" requirements for safety-net providers engaging CHWs. (See Exhibit 17) Respondents to the CHWA survey engaging CHWs consider "communication" combined with "confidentiality", "interpersonal", and "cultural competency" skills as "extremely important" requirements, particularly as they relate strongly to the ability to engage, create relationships, and build trust with both community and health-team members. Other skills required as extremely important include "health education" and "knowledge of the community" skills.

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) are regarded as being "important". It is likely that organizations provide post-employment training to address health knowledge or clinical skill gaps that support their ability to provide direct care, particularly as they relate to acquiring competencies that support specific health programs and roles related to the prevention and management of certain conditions.

Exhibit 17: Skills Required by Organizations Engaging CHWs

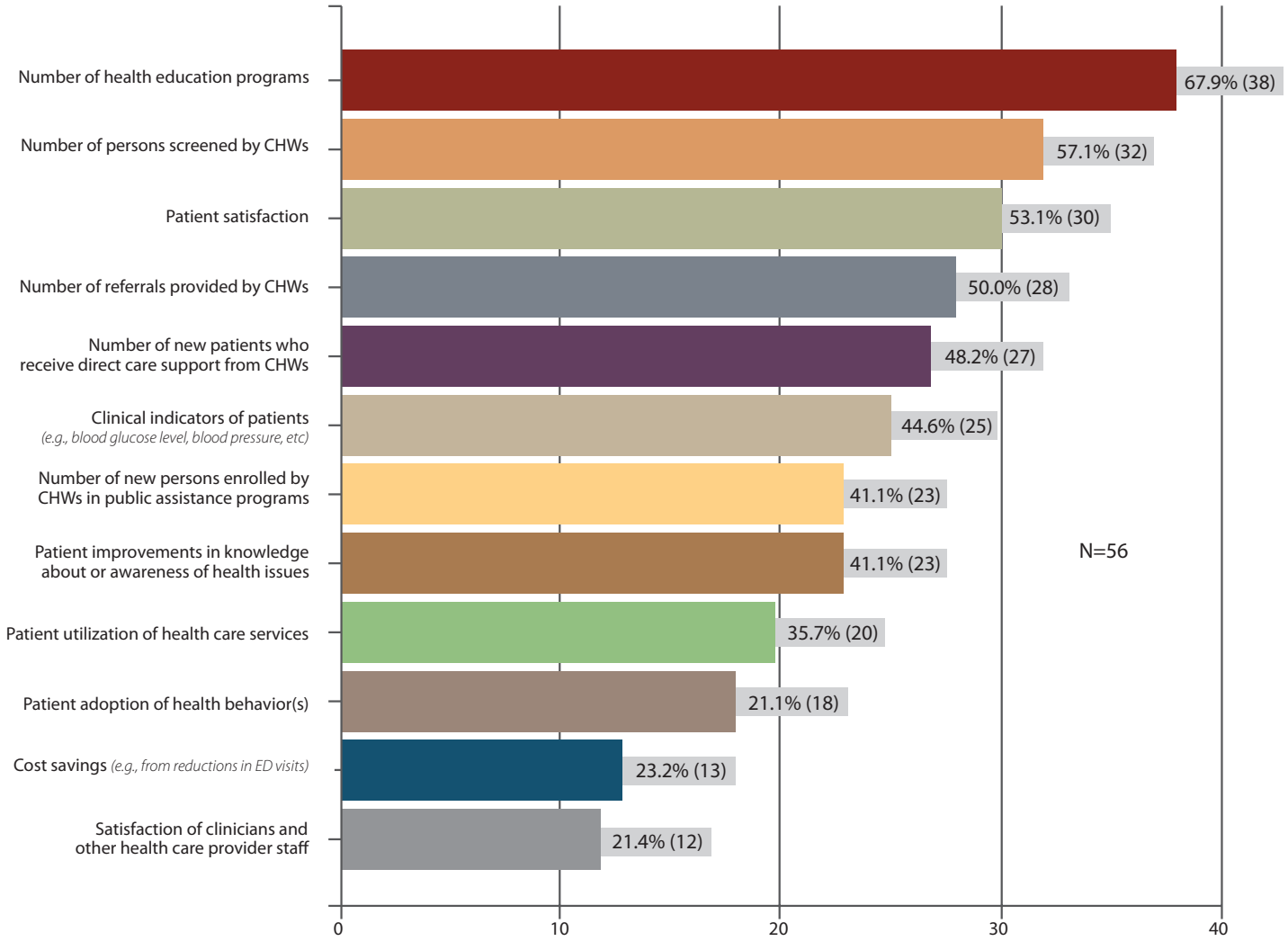


The Community Health Worker Data Capacity and Performance Measurement Profile

A majority of organizations engaging CHWs collect data on performance and contributions, but most are not documenting their impact on specific Triple Aim objectives. (See Exhibit 18) Among the seventy-eight respondents to the question of whether they collect data on the performance and contributions of CHWs, nearly three-quarters (71.8%) reported that they do. Performance measures related to assessing the contributions of CHWs to improved patient access to care rank highest (i.e., "number of health education programs facilitated by CHWs", 67.9%; "number of persons screened by CHWs" 57.1%; "number of referrals provided by CHWs", 50.0%; and "number of new persons enrolled by CHWs in public assistance programs", 41.1%).

Performance measures related to savings in the total cost of care (i.e., "cost savings e.g., from reductions in ED visits" 23.2%) ranked lowest. The "number of new patients who receive direct care support from CHWs" and "clinical indicators of patients (e.g., blood glucose levels, blood pressure)" were used by 48.2% and 44.6% of the fifty-six respondent organizations respectively.

Exhibit 18: Measures Used to Assess Performance



Internal data sources are used most frequently for performance measurement. The most frequent sources of data reported by fifty-six organizational respondents are "administrative records" (58.9%), "client surveys" (48.2%), and "electronic health records" (37.5%). While we did not ask respondents about the status of electronic health record (EHR) implementation in their organization, the percentage of organizations reporting EHRs as a source of data is similar to the percentage of organizations reporting full-implementation status of their EHR in CPCA's Health Information Technology Landscape Survey with member and non-member CCHCs in June 2012.[80]

Only ten (17.9%) respondents indicated they collect data "electronically" related to performance measurement compared with two-thirds (66.1%) of respondents who collect data "electronically and manually". This low level of electronic-only data collection reflects a potential lack of standard protocols for electronic data collection related to the work and contributions of CHWs. Only fifteen (26.8%) organizations reported use of external data, with just four (26.7%) of those organizations reporting the use of "emergency department utilization" data. Three organizations (20.0%) reported collecting data on "hospital admissions".

In addition to the collection of more standard measures of health care access and quality, such as "types of health education services provided" (69.6%) and "patient satisfaction with services provided" (48.2%) in the course of their service to individuals, families, and communities, fifty-six respondents reported that CHWs collect additional information that can contribute to the provider's broader understanding of a patient's life and related determinants of health and well-being. These include information related to a patient's "living conditions (e.g., housing quality, economic status, consumption patterns, neighborhood dynamics)" (39.3%) and "patient personal profile (e.g., family dynamics, state of mind, obstacles to compliance)" (42.9%).

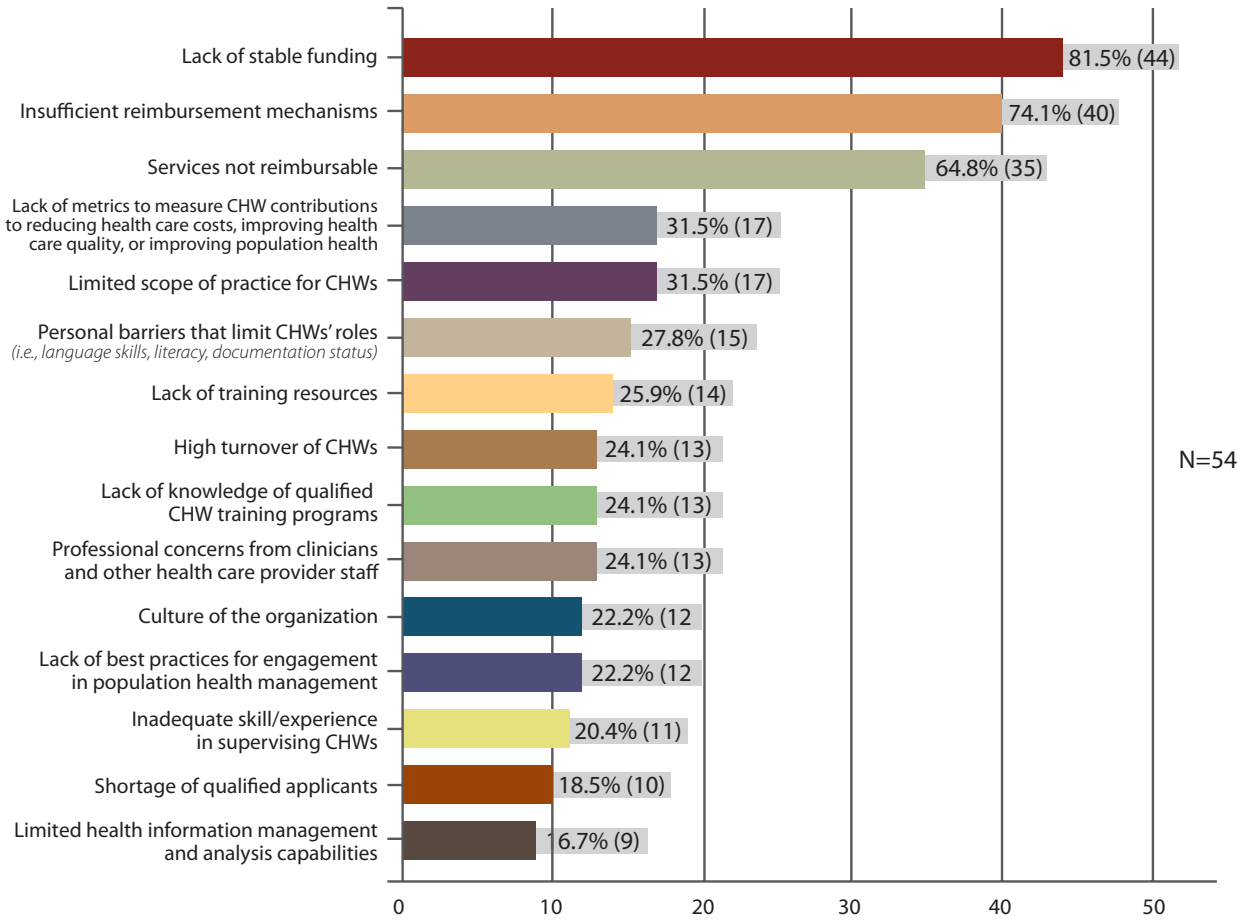
[80] California Primary Care Association, 2012

EXPANDING ENGAGEMENT: CHALLENGES AND OPPORTUNITIES

More than two-thirds (68.4%) of providers engaging CHWs cited barriers to expanding their engagement. (See Exhibit 19) Forty-six of these respondents (85.2%) cited "challenges in increasing the number of CHWs" engaged, and thirty-six (72.0%) cited "challenges to existing CHWs doing more work". Respondents overwhelmingly identified financial issues related to "lack of stable funding" (81.5%) and "insufficient reimbursement mechanisms" (74.1%) and "services not reimbursable" (64.8%) as the leading barriers. These were followed by barriers related to workforce capacity (i.e., "personal barriers that limit CHWs' roles (i.e., language skills, literacy, documentation status)", "shortage of qualified applicants"), organizational capacity (i.e., "culture of the organization", "inadequate skill/ experience in supervising CHWs"), and workforce regulation (i.e., "limited scope of practice for CHWs") barriers.

Among the thirty-six respondents that identified barriers to engaging existing workers in other types of work compared with those respondents that identified challenges in increasing the number of CHWs, "limited scope of practice for CHWs" and "professional concerns from clinicians and other health care provider staff" ranked more highly as barriers for these organizations.

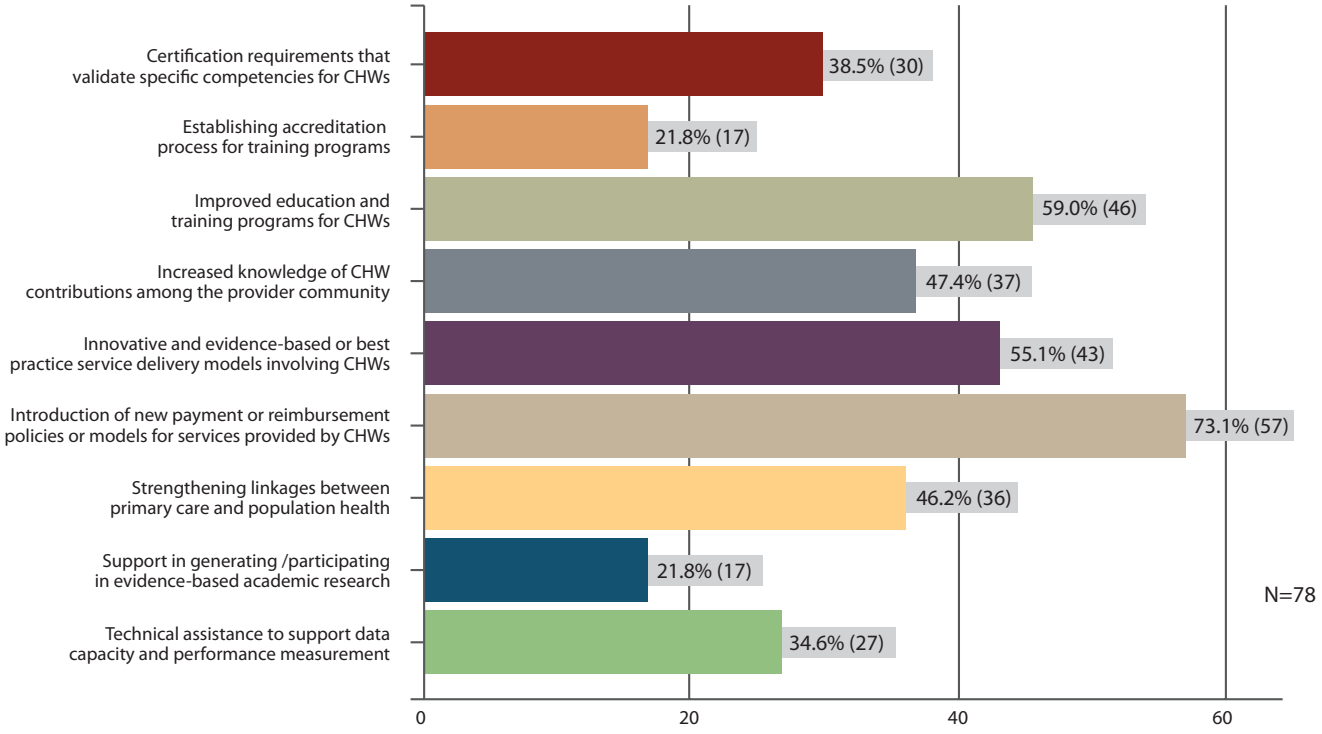
Exhibit 19: Specific Barriers Experienced



Priority actions that seventy-eight respondent organizations engaging CHWs identified to support expanding their engagement include the "introduction of new payment or reimbursement policies or models for services provided by CHWs" (73.1%), "improved education and training programs for CHWs" (59.0%), and "innovative and evidence-based best practice service delivery models involving CHWs" (55.1%). (See Exhibit 20) Among the thirty-six respondents that identified barriers to existing CHWs doing more work compared with those respondents that identified challenges in increasing the number of CHWs, "improved education and training programs for CHWs", "establishing accreditation process for training programs", and "certification requirements that validate specific competencies for CHWs" ranked more highly as actions.

Twenty-five of the organizations engaging CHWs that have not experienced barriers cited "improved education and training programs for CHWs" (66.7%), "innovative and evidence-based or best practice service-delivery models involving CHWs" (62.5%), "increased knowledge of CHW contributions among the provider community", and "strengthening linkages between primary care and population health" (both 45.8%) as more significant than the "introduction of new reimbursement and payment policies or models for services provided by CHWs" (33.3%). For organizations not currently engaging CHWs, "increased knowledge of CHW contributions among the provider community", "certification requirements that validate specific competencies for CHWs", "innovative and evidence-based or best practice service delivery models", and "improved education and training programs for CHWs" are seen as priority actions after the "introduction of new payment or reimbursement policies or models for services provided by CHWs" that will support expanding the engagement of CHWs.

Exhibit 20: Priority Actions to Increase Engagement



CASE STUDIES

It is a goal of this project to use the findings from the statewide assessment to provide important insights into the design of intervention strategies that: integrate the cost of CHWs into reimbursement models; address quality of care concerns; and build links between clinical care and population health improvement. The statewide assessment includes four case profiles that highlight a diversity of organizations and innovative models of engagement, as well as share many similarities in their goals and design features. (See Appendices) In our selection of the case studies we sought to select those interventions that included one or more of the following criteria: defined role(s) for CHWs in specific patient and/or population health interventions; use of established metrics for patient or population health outcomes, health care utilization, and/or patient satisfaction; data capacity to capture the total cost of care for identified patient populations; experience of six months or longer in implementation; and an identified strategy to sustain the engagement of CHWs.

CHWA selected two health plans and two safety-net health care providers. While these types of organizations are very different in their goals and priorities as they relate to the similar populations they serve, common to all are their CHW-intervention goals to: improve their respective populations' access to care in appropriate settings; connect them to a health home; decrease overall costs associated with their care; deliver improved quality of care and improved health outcomes.

Common features to the respective CHW interventions include: strong collaborative partnerships with other care providers and the community at large; high-touch, in-person engagement that employs behavior change strategies to realize targeted outcomes; and direct connections between CHWs and in-house care management teams to address patients' broader needs.

Significant differences arise in the staffing models that organizations have used to engage CHWs, as well as in the data protocols related to the data sources and types of data that are used to assess the performance of CHWs.

- **Molina Healthcare's Community Connector Program** provides a bridge between case managers and the communities with which they work by using CHWs' personal relationships and ability to build trust to connect individuals to appropriate care. Since home visits are a central feature of their engagement, CHWs are in a position to identify social and environmental factors that may serve as impediments to desired health behaviors. In their role as Community Connectors, CHWs function as place-based extensions of case managers. The program, which targets members who Molina has identified as having high-cost utilization patterns, complex medical or behavioral health needs, or chronic conditions, originated in New Mexico in 2004.

There have been changes in the approach to primary care as a result of Molina's promotion of the service to primary care providers in the community; they may now opt to refer non-compliant members to the Community Connectors. Members are also referred to Community Connectors to assist with their completion of preventive screenings. While it is not necessarily possible to equate improved health outcomes with cost savings, the Community Connector Program in the original pilot site of New Mexico resulted in a return on investment of 4:1 when comparing the six-month study period data with data for the six months preceding and following the intervention. With evidence from the New Mexico program, Molina's leadership fully supports the Community Connector Program and has made the decision to now expand the model enterprise-wide across nine states, including California.

- **Inland Empire Health Plan's Health Navigator Program** is a high-touch home visitation model that uses a full-time, in-house team of community health workers. Inland Empire Health Plan prioritizes its outreach efforts and eligibility for participation on the basis of member's: having two or more avoidable emergency department (ED) visits in the preceding twelve months; not being current with immunizations or well-child visits; and, in one targeted community, having a child under the age of five residing in the home. The goal is to increase members' preventive-care visits and reduce avoidable emergency visits and hospitalizations by connecting members with contracted primary care physicians.

  Results to date have had a measurable impact on families' related knowledge change and behaviors in health care access and utilization patterns. For example, between July 1, 2010 and June 30, 2013, the program completed a total of 2,356 final visits involving 7,056 members, leading to a 42% decrease in avoidable ED visits. While there are no current plans to expand the program to new populations, the health plan recognizes that, with additional resources, the program could easily be expanded to meet the needs of other target populations such as seniors, persons with disabilities, and chronically ill patients. Independent practice associations, providers, and hospitals have also expressed interest in learning more about the program's high-touch approach in order to model its best practices among their patient populations.

- **La Clinica de la Raza's Patient Navigator Program** at its North Vallejo Health Center integrates a community health educator in the role of Patient Navigator with an existing emergency department diversion project, "Right Care, Right Place". The role of the Patient Navigator is to connect patients to a primary care provider at La Clinica, refer uninsured patients to an enrollment specialist to assist with coverage, and identify other needs such as food, transportation, and employment. In October 2012, La Clinica launched a pilot intervention with Sutter Solano Medical Center to use on-site Patient Navigators in the Sutter Solano Emergency Department. The pilot has been tracking metrics for reporting purposes related to the number of people who are receiving assistance with referrals and scheduling appointments. In September 2013, the role of Patient Navigator was expanded to one Patient Navigator position on a full-time basis, rather than two on a part-time basis, to be able to successfully manage the high volume of uninsured patients and support follow-up to ensure continuity of care. The pilot intervention has been a continual process of learning and adaptation regarding data collection, communication, and evaluation protocols. While the program has been successful in its pilot, key factors for the program's future success include having standardized systems in place for communications and referrals to increase patient access to services, and regular staff meetings to identify areas for ongoing improvement.

- **St. John's Well Child and Family Centers** has long recognized that many factors affect community health and that the delivery of primary health care services is more effective when addressing the broader context of an individual's life. A core value that permeates St. John's work is community and patient engagement. In pursuing its mission of social justice and health equity, St. John's places a high priority on research and advocacy, and provides supportive services to address educational, socio-economic, and environmental and health needs. Further, St. John's has strong community partnerships with various health, educational, social service, and development agencies to design and deliver services responsive to community needs.

  St. John's currently uses its community health workers in a variety of capacities and in areas related to health education, insurance enrollment, home remediation of harmful environmental health triggers, and community-led organizing and advocacy to supplement the primary and preventive health services it offers to address health disparities experienced among the population. Through Right To Health committees, for example, St. John's has perpetuated community advocacy and civic engagement to provide input into St. John's senior-management decision-making in areas related to clinic operational performance and strategic initiatives such as quality improvement. Its Healthy Homes Healthy Families initiative and Diabetes Classes are two examples of how close integration between clinical services and the broader community can successfully address community-level risk factors as well as present opportunities for health promotion. St. John's vision is to eventually integrate their traditional community-based roles with clinical care practices such that their roles, which may include accompanying patients to visits and charting in the electronic health record, can be billed.

RECOMMENDATIONS

A major challenge to the formal integration of CHWs into care delivery and payment systems continues to be a general lack of awareness among providers and policy makers about CHWs' actual roles, responsibilities, and specific contributions as part of care teams. Challenges also include professional concerns related to a lack of standardized training and credentialing requirements. Broader recognition of CHWs as a distinct occupation and their formal integration into care delivery teams will require the development of a standard scope of practice for CHWs and standard core competencies for their training and certification, together with the establishment of formal reimbursement mechanisms for the services provided. Progress in the development of reimbursement mechanisms is currently impeded by a lack of analytic capacity and HIT interoperability that would inform the documentation of measurable outcomes. Targeted investment and encouragement of data sharing is needed to inform the design of new delivery models and the documentation of their impact upon patient experience, cost savings, and population health outcomes. This will in turn contribute to a more accelerated integration of community health workers into team-based care models with global financing structures that incentivize keeping populations healthy

Federal policy has made significant advances recently in formally recognizing CHWs and the roles and contributions they can make. However, there is still a need for comprehensive policy and practice changes in order to strengthen the role of CHWs in the implementation of health reform. The main barriers facing CHWs in the clarification of CHW roles and contributions are a lack of sustainable funding for a core curriculum for professional training and certification and research that contributes to refinement of the curriculum as practices evolve in the context of national health reform. The establishment of an infrastructure with statewide standards around a scope of practice, training, and certification is seen as critical to building and sustaining the CHW workforce in many states, and as a critical and feasible step towards establishing a formal reimbursement mechanism for the services provided by CHWs.[81]

States have been implementing legislation and regulations to promote the use of CHWs and their integration into the health care workforce, including approaches that expand their roles and strengthen their financial support to create sustainable programs.[82] State-level actions have ranged from creating a commission to investigate the impact of CHWs in achieving health care savings or eliminating health disparities among populations, to enacting policies that either create a certification process for CHWs or require CHWs to be certified, to encouraging or requiring the integration of CHWs into team-based models of care, to authorizing Medicaid reimbursement for some CHW services. Minnesota has developed a state-standardized curriculum that qualifies certified CHWs to enroll for reimbursement under the state's Medicaid program.

California has yet to implement substantive legislation regarding CHWs. While the certificate that graduates of San Francisco's City College CHW Curriculum Program receive is a credential used for jobs in city and state health departments, state policy in California does not require certification

[81] Matos S, 2011
[82] Brownstein JN, 2011

or other standard qualifications for CHWs. The state has established specific credentials that authorize reimbursement for specific CHW roles, such as Certified Application Assistors providing assistance with applications. The California Department of Health Services' Family Pact Program authorizes providers to use CHWs to deliver family-planning services under a Section 1115 Waiver. Proposed changes to Medicaid regulations may allow the state Medicaid program to reimburse for community-based pediatric asthma preventive services provided by CHWs effective January 1, 2014. As referenced previously, there are three core recommendations based upon the findings from the statewide survey that will be the focus of CHWA activities in the coming years that are reflected in Exhibit 21 and summarized below.

Conduct a Statewide Community Health Worker Campaign

Findings from CHWA's statewide survey clearly indicate a need for increased awareness and knowledge among safety-net health care providers in a number of areas related to the engagement of CHWs. Dialogue with CHWA's diverse membership in the course of this study also suggests there is a similar need for increased awareness and knowledge among mainstream health care providers, payers, educational institutions, and policymakers.

Knowledge of the full scope of potential contributions of CHWs is limited by categorical funding streams that channel CHWs into more narrow roles, and the exploration of broader contributions is also impeded by a lack of sustainable funding. While the broad array of job titles indicates the scope of contributions when viewed from the statewide level, there is less awareness of this potential among individual organizations. These factors, as well as a lack of targeted funding to support continuing training and education of employed CHWs, limits career path opportunities.

There is also a lack of knowledge and awareness of CHW potential contributions to the Triple Aim objectives and of innovative delivery models that integrate CHWs into team-based care. As outlined in the background section of this report, there is a wealth of examples across the country where measurable outcomes have been achieved, and many others that are currently being implemented through national initiatives such as the Centers for Medicare and Medicaid Innovation (CMMI) initiative. Greater knowledge and dialogue about accomplishments to date and innovations in play would significantly inform dialogue and help to address quality and scope of practice concerns.

With these and related issues in mind, a core recommendation of this study is to convene diverse stakeholders at the statewide and regional level to share and solicit input in the interpretation of the findings, and to discuss and translate the recommendations into collaborative action. Those actions include the development of institutional and public policies that address financial and professional requirements for expanding the engagement of CHWs. Specific actions will include, but are not limited to, the following:

- Convene a statewide task force comprised of diverse stakeholders including CHWs and Promotores, primary care providers, researchers, and policymakers;
- Convene a series of regional forums to build knowledge and a shared agenda for action;
- Present findings and recommendations before relevant stakeholder groups (e.g., provider groups, trade associations) to solicit input and build common knowledge;
- Engage policymakers and coordinate the development of public hearings to build knowledge and develop and implement a legislative agenda.

Exhibit 21: CHWA Recommendations and Timeline for Action

	Immediate (Year 1)		Short Term (2-3 Years)	Medium Term (3-5 years)
 **Statewide Campaign**	›Broadly distribute survey findings & recommendations ›Convene diverse stakeholders to build shared knowledge & develop action plan ›Engage elected officials to develop legislative agenda	›Secure formal recognition of CHW as a professional job category ›Advocate to establish State registrar to document practices	›Establish information clearinghouse to document, disseminate, and replicate innovations in the engagement of CHWs ›Secure passage of legislation to codify engagement of CHWs as members of primary care & prevention teams (see below)	
 **Integrated Training Infrastructure**	›Establish a competency-based framework for CHW education and training that includes recognition for experience, communication skills, & community standing ›Assess distinct and common professional & practical skills with other members of primary care and prevention team	›Assess training needs of mainstream providers to take optimal advantage of the engagement of CHWs	›Develop hybrid model of training certification that accommodates diverse approaches of formal educational institutions and regional training centers ›Develop a phased education and training strategy for skill requirements in primary care & prevention for all members of team	›Scale the integration of CHWs into primary care and prevention team ›Develop and implement models to facilitate career ladder and promotion opportunities for CHWs
 **Sustainable Financing Models**	›Develop strategy & secure State approval of reimbursement structure for CMS regulatory support of CHW health education services ›Develop a strategy for the incremental development of capitated financing mechanisms ›Support research on innovative financing models	›Provide technical assistance on HIT development ›Encourage strategic investments by hospitals to build CHC analytic capacity & develop interoperable HIT systems	›Develop uniform metrics & evaluation models to document the Triple Aim contributions of CHWs ›Establish voluntary frameworks for real-time data sharing ›Document near term impacts of investments in HIT and analytic capacity building	›Document and broadly disseminate Triple Aim contributions of CHWs with particular attention to broader elements of primary prevention

Implement Statewide CHW Education, Training, and Certification Infrastructure

The CHWA statewide survey findings highlight the need to build knowledge among health care providers of the contributions of CHWs as an integral member of a primary care team and to create a bridge between clinical service delivery and place-based population health improvement. There is a current tendency among providers in the engagement of CHWs to focus on near-term needs such as patient enrollment and management of chronic diseases. At the same time, gradual movement towards shared risk and global budgeting arrangements will require a much more significant focus on addressing the social determinants of health. As such, there will be a growing need to build the population health capacity of primary care teams. In this context, CHWs can play an increasingly important role as an extension of the team to directly address many issues and to partner with other stakeholders to address social and environmental factors at the community level.

Currently, the lack of a clear and consistent framework for the training of CHWs undermines confidence in the competencies of trainees among prospective employers and raises quality of care concerns among primary care providers. Of equal importance, it impedes efforts to examine scope of practice issues that would contribute to building primary care capacity in rural and urban inner city areas.

As such, a core recommendation is to assess, integrate, and expand as appropriate the statewide education and training infrastructure capacity for CHWs to support their effective integration into team-based care. This would involve consideration of the important contributions of independent regional training structures, as well as programs in California Community Colleges, the California State University system, and emerging models at the high school level. An optimal product would be a hybrid, competency-based model of training and education that captures the complementary contributions of different kinds of institutional and organizational stakeholders. Once developed, this hybrid model would provide a basis for the development of a certification framework that both validates the important contributions of CHWs and creates a clear path for career advancement.

Promote Sustainable Financing Mechanisms

CHWA statewide survey respondents overwhelmingly identified the lack of sustainable funding and inefficient reimbursement mechanisms as the most significant barriers to expanding engagement of CHWs. Of equal importance, the lack of technical and analytic capacity and access to external data among community health centers impedes their ability to document the contributions of CHWs to care outcomes, return on investment, and achievement of broader Triple Aim objectives. Few of the community health center respondents indicated that they had access to proximal hospital utilization data that would enable them to calculate the total cost of care, and hence the contributions of CHWs to reduced preventable utilization.

Given these findings, a core recommendation and focus for CHA going forward is to explore strategies to build analytic capacity and support the development and implementation of innovative financing models that a) contribute to the appropriate compensation of CHWs, b) support the sustainable integration of CHWs into team-based care, and c) promote the broad engagement of CHWs by mainstream health care providers.

Consistent with the core mission and principles of CHWA, we will work with the broad spectrum of stakeholders to implement these recommendations with close attention to both the highest scientific standards and the practical lessons that emerge from those who are engaged on the ground in our communities. A central focus will be to demonstrate how a more robust engagement of CHWs contributes to both the elimination of health inequities and enhances economic opportunity for racial and ethnic populations in our communities who are under-represented in the health professions.

APPENDICES

MOLINA HEALTHCARE: COMMUNITY CONNECTOR PROGRAM

Molina Healthcare's Community Connector Program provides a vital bridge between case managers and the communities with which they work by using CHWs' personal relationships with the community and their ability to build trust to connect targeted individuals to appropriate care. In the role of Community Connectors, CHWs function as extenders for case managers. The program, which targets members who Molina has identified as having high-cost utilization patterns, complex medical or behavioral health needs, or chronic conditions, originated in New Mexico in 2004.

There have been changes in the approach to primary care as a result of Molina's promotion of the service to primary care providers in the community; they now may opt to refer non-compliant members to the Community Connectors. Members are also referred to Community Connectors to assist with their completion of preventive screenings. While it is not necessarily possible to equate improved health outcomes with cost savings, the Community Connector Program in the original pilot site of New Mexico resulted in a return on investment of 4:1 when comparing the six-month study period data with data for the six months preceding and following the intervention.

With evidence from the New Mexico program, Molina's leadership fully supports the Community Connector Program and has made the decision to now expand the model enterprise-wide across nine states, including California.

Background

Molina Healthcare's Community Connector Program plays a highly visible role in connecting its members with health care providers and the community at large. The program is structured with two primary components: collaborative partnerships and behavior change designed to improve members' access to care in appropriate settings in order to decrease overall costs associated with their care, and to deliver improved quality of care and improved health outcomes for members. In the role of Community Connectors, these community health workers provide education, support, and advocacy that empower members to develop self-management skills which contribute to improved quality of life.

The Community Connector Program targets members who Molina has identified as having high-cost utilization patterns, complex medical or behavioral health needs, or chronic conditions. Members are identified through various internal Molina reports, such as members with three or more ED visits in the previous quarter, and internal case management referrals. Face-to-face contact is a key feature of the program, as is the participation of health care providers. Community Connectors invest considerable effort in providing members with critical education on the importance of being connected to a health home as well as important self-management skills and understanding of their health conditions.

The Community Connector Program originated in New Mexico in 2004 through a contractual agreement with the University of New Mexico's Health Sciences Center and the Community Access to Resources and Education in New Mexico Consortium. The goal was to provide Molina members with education on alternatives to frequenting the emergency department for non-

emergency conditions, to identify barriers to their care, and to assist them with health care navigation. Poor self-management skills with chronic conditions, a high frequency of use of the emergency department for non-emergency conditions, and a high cost associated with care for emergency department visits and re-hospitalizations were the clinical and financial issues that the intervention addressed in the target population.

Introduction

The Community Connector Program has been designed to target specific populations who could benefit from direct contact interventions. Members are identified through various internal reports, which flag members with high-utilization rates for the emergency department as well as high-dollar costs associated with their care, and case management referrals. Specific interventions with the member may include:

- connecting members to a health home;
- educating members on alternatives to visiting the emergency department;
- removing barriers members may face in accessing care;
- bridging communication between members and health care providers;
- teaching members concepts of prevention and chronic disease management;
- guiding members in the practice of self-management skills;
- linking members to community resources.

The Community Connector is a vital member of the integrated care management team in Molina's health care services department. As an extender to the case manager, the Community Connector serves as the "eyes and ears" of the case manager in the community and thereby plays a highly visible role in connecting members with appropriate health care services. Through the Community Connector's presence in the member's home, they are able to assess immediate needs; in the provider's office they are able to listen to provider treatment recommendations; and in the community setting they are able to ensure they access appropriate resources. All of the Community Connector 's activities are documented in Molina's electronic care management software platform, Clinical Care Advance System.

A unique feature of the program is the high-touch, face-to-face approach in the member's home, health care, and community settings. Critical to the program's ultimate success is the initial contact made by Community Connectors with members and the opportunity that affords to build trust. One of the key challenges identified prior to implementation was the inability to contact or locate members of the target population, as some were homeless, and the possibility that members may refuse face-to-face interventions. The ability of Community Connectors to develop trusting relationships with members ensures members' acceptance of the education, advocacy, and support that Community Connectors provide in order to facilitate members' access to the health care system. Moreover, members are also more likely to become empowered to develop self-management skills that contribute to an improved quality of life. Further to the program's success has been the ability to improve health outcomes and decrease health care costs.

Program Description

The initial contact with a member generally takes place in the member's home. Subsequent contacts may occur when the Community Connector accompanies a member to a health care appointment or while providing assistance to connect them to community resources. The length of time that a member receives direct face-to-face services from a Community Connector is dependent on the individual member's needs. A health risk assessment (HRA) may be completed by a Community Connector during the initial visit to a member's home. The assessment identifies each individual's primary health concerns. Specific interventions with members through the Community Connector Program may involve health coaching, care coordination, health education, chronic disease self-management, system navigation, and cultural liaising.

Program Recruitment and Training

Core skill requirements sought in the recruitment of Community Connectors include communication, cultural competency, health promotion, health literacy, ethics, and an understanding of the managed care environment. All newly assigned Community Connectors are required to participate in initial and ongoing training of specific core competencies and in areas of clinical documentation that Molina employs. Molina has purchased a training curriculum that addresses many of these components. It also provides additional trainings, including:

- diabetes training
- motivational interviewing
- communication and advocacy
- HIPPA and medical ethics
- behavioral health
- cultural competence
- understanding poverty
- tobacco risks and cessation
- essentials of medical terminology
- nutrition and healthy eating

The Community Connectors function as an extender for case managers. They receive guidance and coaching from the case managers in identifying specific tasks and interventions that will be required to ensure the successful realization of targeted goals. As Molina currently rolls the Community Connector Program out in nine other states where Molina is present, it is using a train-the-trainer model that involves a week-long orientation on the role of community health workers as Community Connectors. Upon return to their respective states, training participants then train hired community health workers in the role.

Program Results

The enterprise roll-out of the Community Connector Program is based on evidence from an evaluation of the impact that community health workers providing community-based support services have on high consumers of health resources in Molina's New Mexico Medicaid managed-care plan. The retrospective study, involving 448 enrollees assigned to Community Connectors compared with a control group who did not receive the intervention between October 2007 and October 2009, found a significant reduction in both numbers of claims and payments related to emergency department, inpatient service, non-narcotic and narcotic prescriptions, as well as outpatient primary care and specialty care after the community health-worker intervention. The calculated return on investment based on comparing the six-month study period data with data for the six months preceding and following the intervention was 4:1. The total cost differential post intervention, compared to pre intervention, was $2.04 million. The estimated program costs, including salaries and benefits of employees managing the program and services provided by the University of New Mexico Medical Group and Hidalgo Medical Services, was $520,000.

Program Evaluation and Data Capacity

Clinical reviews of all open cases are conducted monthly to ensure that health behavior changes through the application of self-management skills contribute to improved health outcomes and cost savings. From a health plan perspective, HEDIS measures related to members compliance with prevention screenings are tracked as a core metric. Another important source and type of data used to assess the performance of community health workers in this intervention are claims data, specifically pre- and post-claims costs of members who are eligible to participate in the intervention. However, member satisfaction, provider satisfaction, and social determinants impact are recognized as substantial and positive community health-worker contributions — but they are difficult to measure.

INLAND EMPIRE HEALTH PLAN: HEALTH NAVIGATOR PROGRAM

The Health Navigator Program is a high-touch, home-visitation model using a full-time, in-house team of community health workers. Inland Empire Health Plan prioritizes its outreach efforts and eligibility for participation on the basis of members having two or more avoidable ED visits in the preceding twelve months, not being current with immunizations or well-child visits and, in one targeted community, having a child under the age of five residing in the home. The goal is to increase members' preventive care visits and reduce avoidable emergency visits and hospitalizations by connecting members with contracted primary care physicians. Results to date have had a measurable impact on families' related knowledge change and behaviors in health care access and utilization patterns. For example, between July 1, 2010 and June 30, 2013, the program completed a total of 2,356 final visits involving 7,056 members that contributed to a 42% decrease in avoidable ED visits. While there are no current plans to expand the program to new populations, the health plan recognizes that, with additional resources, the program could easily be expanded to meet the needs of other target populations, such as seniors, persons with disabilities, and chronically ill patients. Independent practice associations, providers, and hospitals have also expressed interest to learn more about the program's high-touch approach in order to model best practices.

Background

Inland Empire Health Plan, a local, not-for-profit, public health plan that serves more than 620,000 residents of Riverside and San Bernardino counties, is the first health plan in the country to have introduced a full-time, in-house team of community health workers dedicated to helping members navigate the health care system. With the goal of increasing preventive care visits and reducing avoidable emergency visits and hospitalizations, the Health Navigator program was designed in consultation with Dr. America Bracho, from Latino Health Access, around the concept of a community health worker/ promotora and home-visitation model. The program provides a high-touch approach to home visits designed to educate members and help them better understand how, when, and where to receive appropriate medical care.

The Health Navigator Program, which was launched in June 2010 as a pilot in Riverside and San Bernardino with five Health Navigators, has since expanded to include the high desert area and to employ nine Health Navigators. The Health Navigators are part of a larger team in the Community Outreach Department, working alongside marketing representatives who conduct outreach in the community at large, enrollment advisors who assist families with applying for insurance, and Medicare representatives who conduct outreach to Medicare beneficiaries as well as assist other eligible persons with applications. While the Health Navigators participate in meetings with other team members in the Community Outreach Department, they independently manage their own caseloads.

Collaboration with Inland Empire Health Plan's contracted primary care physicians has been a key element for the program's success. Today, the Health Navigator Program serves as an effective link between them and Inland Empire Health Plan's members through facilitating better communication and access to care. Results to date have demonstrated a measurable impact on families' related knowledge change and behaviors in health care-access and utilization patterns.

The program currently averages between 1,500 to 2,000 members annually, and Inland Empire Health Plan recognizes that the program has impacted just a fraction of members that could potentially benefit. Future plans for expansion, including targeted populations and geographic areas, are contingent on the availability of funding and competing strategic priorities within the organization.

Introduction

Today, the Health Navigator Program serves populations residing in San Bernardino proper, Riverside metro, and high desert areas. The program is jointly funded by the Inland Empire Health Plan and First 5 San Bernardino. With more than half a million members, Inland Empire Health Plan prioritizes its outreach efforts and eligibility for participation in the program on the basis of two or more avoidable ED visits in the preceding twelve months, not being current with immunizations or well-child visits, and for San Bernardino county, that a child under the age of five resides in the home. An avoidable ED visit is defined as one due to a non-urgent issue, such as a cough, cold, or fever, rather than an exacerbation of an underlying condition that may be associated with a pre-existing chronic condition such as asthma or diabetes.

A key element of the program's success in the design and implementation has been Dr. Bracho's advice on specific policies, processes, and workflow considerations, as well as the potential pitfalls and risks of a corporate entity's not understanding the value of the program's approach. From the start, the leadership at Inland Empire Health Plan has been fully supportive of the program and its alignment with the organization's mission-driven focus on the community. However, a lot of discussion took place internally around the appropriate staffing model for the program and whether to operate the program in-house or on a contract. A key concern in designing the program was the potential liability that Inland Empire Health Plan would assume with an in-house staffing model.

Because this is a high-touch program, a main reason why an in-house staffing model was eventually chosen is because of the direct control it provides the health plan over activities; it also assures the quality of training, follow-up, and links to other units. Moreover, it provides the Health Navigators with the ability to connect members with other departments within the organization that provide care services and that can influence members' behaviors. Because a lot of community-based organizations would not have that contextual knowledge about plan membership, managed care, and utilization patterns, for example, the in-house Health Navigators are therefore better positioned to connect members to the health plan's care management and health education programs that might successfully address their needs.

Program Description

The Health Navigators, who are bilingual in English and Spanish, schedule in-home visits with Inland Empire Health Plan members and their families. To prepare for the first visit, the Health Navigators utilize the members' health records maintained by Inland Empire Health Plan to identify any medical needs, such as immunizations and preventive-care services. Furthermore, during the first visit, the Health Navigators conduct an initial assessment to determine any other medical and social service needs. These efforts allow the Health Navigators to provide

personalized education, guidance, and advice on subsequent visits. After the initial visit, the Health Navigators conduct two more visits to continue education and to see if the members' knowledge on how to access care has increased. To measure this outcome, an assessment is done at the final visit.

Specifically, Health Navigators educate members about the following:

- what services their primary care physician provides;
- when they should see their primary care physician for a medical need;
- the importance of preventive care to stay healthy and prevent disease;
- three options to get non-emergent medical help:
    - primary care physicians
    - the Inland Empire Health Plan 24-Hour Nurse Advice Line
    - extended or after-hours urgent care clinics;
- community resources they may find helpful.

Program Recruitment and Training

Health Navigators are recruited on the basis of a combination of interpersonal, cultural competency, community involvement, and organizational-management skills. The entire team has been through extensive initial training involving both internal and external programs. Once in the role, regular one-on-one meetings with their direct managers provide opportunities for the Health Navigators to receive feedback on their performance, as well as coaching in areas where they can improve. During team meetings, Health Navigators receive training to augment team-based skills.

The core responsibilities of Health Navigators are to manage their own caseload, make contact with families to invite them to participate in the program, and conduct the three home visits. The primary role of Health Navigators is to help families learn to navigate the health care system but not to handle care coordination themselves. Health Navigators transmit information from members in the form of questions, concerns, and case histories to management for that purpose. Cases that surpass the scope of the Health Navigator's role are relayed through appropriate channels within the company to facilitate the appropriate referral to a doctor, to internal case management units, or to other resources in the community.

Program Results

Between July 1, 2010 and June 30, 2013, the program completed a total of 2,356 final visits involving 7,056 members. The total number of primary care physician visits scheduled was 2,513. There has been a measurable impact since the first year on families' knowledge change on how to navigate health care, as well as behavior changes that relate primarily to service-utilization measures, including:

- 42% decrease in avoidable ED visits;
- 99% of families visited now know what the Inland Empire Health Plan 24-Hour Nurse Advice Line is and how to use it compared to 58% at the first visit;
- 99% of families visited now know the difference between urgent care and ED compared to 12% at the first visit;
- 32% increase in 24-Hour Nurse Advice Line usage;
- 15% increase in urgent care usage.

Inland Empire Health Plan will continue to evaluate the program's success by evaluating the trend of preventive-care visits, reduction of avoidable ED visits and hospitalizations, and the members' knowledge on appropriate ways to access care. In addition, the program will continue to share best practices and look for additional funding to expand to other target populations and underserved areas.

Program Evaluation and Data Capacity

The effectiveness of Health Navigators is assessed through participating members' knowledge change using pre- and post-surveys, qualitative feedback from members through anonymous surveys that are completed after the final visit, the accompaniment of Health Navigators by managers during home visits, and actual encounter data reported to the health plan by physicians or hospitals. However, in the case of encounter data, there can be a time lag of several months with reporting that can delay the ability to assess the impact of the program at any one time. Most of the data collected by the Health Navigators is documented in the assessments or in the case progress notes. When a case is outside the scope of the Health Navigator, information is shared with medical services.

Although the health plan can demonstrate reductions in utilization to date, the related cost savings is difficult to measure due to other benefits of the program that cannot be as easily quantified in comparison to the direct costs involved. Calculation of a return on investment from the program is challenging, particularly in aspects that are more difficult to measure, such as the program's ability to instill lifelong health behaviors that improve health care access, utilization, and prevention. Non-health care outcomes, such as members' access to and utilization of social and other support resources as a result of their participation in the program, are difficult to track from the program perspective.

LA CLINICA DE LA RAZA: SOLANO COUNTY PATIENT NAVIGATOR PROGRAM

La Clinica de la Raza's Patient Navigator Program at its North Vallejo Health Center integrates a community health educator in the role of Patient Navigator with an existing emergency department diversion project, "Right Care, Right Place". The role of the Patient Navigator is to connect patients to a primary care provider at La Clinica, refer uninsured patients to an enrollment specialist to assist with coverage, and identify other needs such as food, transportation, and employment, for example. In October 2012, La Clinica launched a pilot intervention with Sutter Solano Medical Center to use on-site Patient Navigators in the Sutter Solano Emergency Department. For reporting purposes, the pilot has been tracking metrics related to the number of people who are receiving assistance with referrals and scheduling appointments. In September 2013, the role of Patient Navigator was expanded to one Patient Navigator position on a full-time basis rather than two on a part-time basis to be able to successfully manage the high volume of uninsured patients and support follow-up to ensure continuity of care. The pilot intervention has been a continual process of learning and adaptation regarding data collection, communication, and evaluation protocols. While the program has been successful in its pilot, key factors for the program's future success include having standardized systems in place for communications and referrals to increase patient access to services, as well as regular staff meetings to identify areas for ongoing improvement.

Background

La Clínica de la Raza is a large, multi-site Federally Qualified Health Center that provides health care services to low-income populations in the East San Francisco Bay Area. Since its first volunteer-run free clinic opened in 1971, La Clínica has grown to become one of the largest community health center networks in the State of California. Today, La Clinica employs more than 1,000 employees and provides primary care, dental, optical, and mental health services to more than 80,000 patients across 32 sites in Alameda, Contra Costa, and Solano counties.

To reduce unnecessary use of emergency department services for non-urgent and ambulatory-sensitive conditions, La Clinica introduced an innovative project to increase community access to primary care services in an area where few primary care resources, and no county hospital, exist. The North Vallejo Patient Access Partnership's "Right Care, Right Place" project has led to a reduction in rates of "avoidable" emergency department use and enabled patients to establish a regular, coordinated source of care where they are more likely to receive preventive health and chronic disease management services.

La Clinica has sought to strengthen the coordination of ED-related referrals and improve outcomes even further through using community health educators as Patient Navigators with the "Right Care, Right Place" project. La Clinica's Patient Navigator Program is a new pilot intervention between Sutter Solano Medical Center and La Clinica to refer uninsured patients using the emergency department to Patient Navigators who verify their eligibility for insurance and enroll them in coverage, connect them to a primary care provider, and refer them to providers of social services that are available in the local community.

Introduction

In partnership with and funding from local health care and government partners in the Vallejo, California area, the North Vallejo Patient Access Partnership's "Right Care, Right Place" project was established in 2008. The project established a community-based, emergency department-to-federally qualified health center model to better coordinate referrals between the local not-for-profit hospital partner, Sutter Solano Medical Center, and La Clinica's North Vallejo Health Center. The close physical proximity and strong collaboration between the hospital's emergency department and the health center quickly led to the availability of a comprehensive primary- and urgent-care alternative to the hospital emergency department that not only addressed avoidable emergency department use and primary care access, but also offered the opportunity for patients to establish a regular, coordinated source of care where they are more likely to receive preventive care services and chronic disease management.[83]

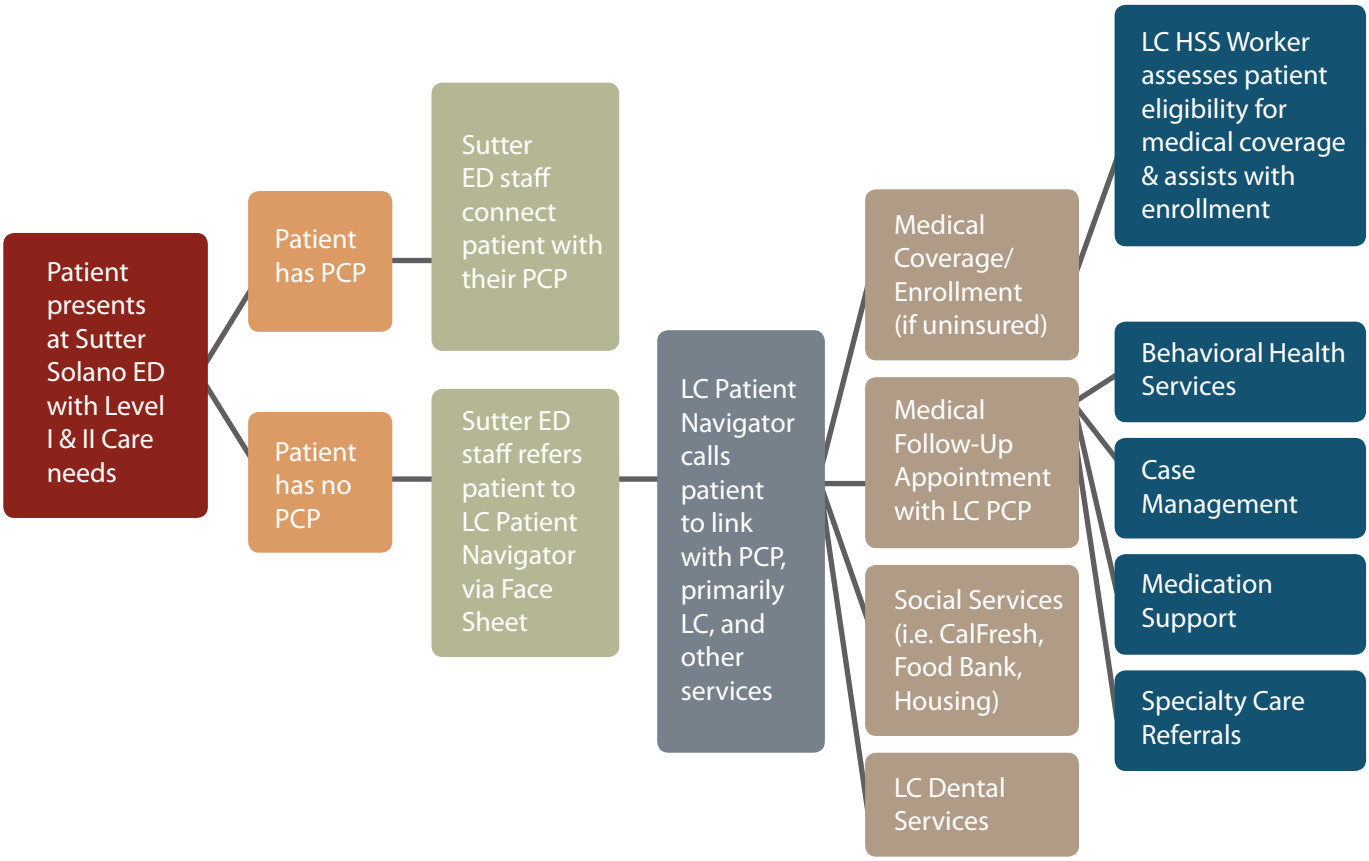
In 2012, Sutter Solano Medical Center approached La Clinica with the idea of piloting an approach involving the use of a Patient Navigator in the emergency department to strengthen the coordination of referrals and care for uninsured patients. The Patient Navigator Program had originally been piloted at another Sutter facility through a collaboration with The Effort, a federally qualified health center in Sacramento. In October 2012, La Clinica launched a pilot intervention with Sutter Solano Medical Center to use on-site Patient Navigators in the Sutter Solano Emergency Department to verify the eligibility of referred uninsured patients for insurance and to enroll them in coverage as well as to connect them to primary care and other care resources they might need

Program Description

Under the protocols of the Patient Navigator Program (Exhibit 24), an in-take staff member refers any uninsured patient who is discharged from the Sutter Solano Emergency Department to a Patient Navigator for an initial assessment. The screening criteria that the in-take staff use for referring patients to the Patient Navigator include: patients have a condition that requires follow-up care such as a chronic condition; patients do not have any insurance coverage and have no primary care provider assigned to them. But even for patients who do have coverage and who have been assigned a primary care provider, La Clinica's experience is that that these patients can also benefit from participation in the Program. The main role of the Patient Navigator is to make participating patients aware that they have been assigned to a primary care provider and to assist those patients with any supplemental needs related to scheduling appointments with that provider or finding another provider who is more accessible. Another role of the Navigator is to educate frequent users of the emergency department about accessing more appropriate sources of care.

[83] North Vallejo Patient Access Partnership: "Right Care, Right Place" Project Evaluation. May 2011. Lois Green, M.H.S.A., and Glenn A. Melnick, Ph.D.. Center for Health Financing, Policy, and Management, University of Southern California.

Exhibit 24: La Clinica Patient Navigator Program



Patients referred to the Patient Navigator have a face sheet that is a one-page summary of basic information generated at the time of the emergency department visit. The Patient Navigator uses information from the face sheet to fill out an in-take form with basic demographic information, as well as information collected through questioning patients on their utilization history of the emergency department in the proceeding three months, their primary care provider and insurance status, and whether a patient has any additional medical needs or challenges with accessing social services and various community-based providers. The Patient Navigator can then provide patients with written information resources related to any identified unmet needs. For those patients with no primary care provider, the Patient Navigator hands them off to La Clinica registration staff to assist with enrollment in coverage and connection to a primary care home. For those patients referred for care within La Clinica, the staff person also registers and schedules primary care visit appointments for patients. A case manager at La Clinica is also available to provide screening for patients that have been referred to La Clinica to identify the environmental and psychosocial needs of patients. The case manager is available to provide consultations for psychosocial assessments and behavioral health support and treatment.

The pilot was originally designed to employ two part-time Patient Navigators in the emergency department three days a week, for four hours a day. The program was expanded in September 2013 to have one Patient Navigator position on a full-time basis (increased from twelve hours to forty hours per week) in order to be able to successfully manage the high volume of uninsured patients that were being seen in the emergency department on a regular basis. Another reason to

engage one person on a full-time basis was the practicality of having one person manage follow-up to ensure continuity of care. The Patient Navigator's goals are to connect patients to a primary care provider at La Clinica, refer uninsured patients to an enrollment specialist to assist with coverage, and identify other needs such as food, transportation, and employment, for example.

The role of a Human Service Specialist to assist with enrollment was also introduced as a full-time role in the Sutter emergency department in September 2013 to assist patients with enrollment as they are discharged from the emergency department and to address delays that patients were experiencing in their access to care as a result of the need to return for a scheduled appointment with an enrollment specialist following their initial assessment with the Patient Navigator. Now patients can immediately start the enrollment process at the time of their first encounter with the Patient Navigator.

Program Recruitment and Training

A community-based staffing model is central to La Clinica's efforts to ensure community members have access to clinical services. The Patient Navigator role is currently filled by a person who originally started as a promotora and later became a health educator. La Clinica's Community Health Education Department offers an in-house community health worker or promotores training program, Centro de Promotores (or Health Promoter Training Center), which prepares community members for roles as community health educators to empower patients with the knowledge, skills, and tools to make informed decisions and to take responsibility for the management of their health. The curriculum focuses on providing participants with basic leadership skills, analytical skills to conduct community health assessments, facilitation skills, and communication and team-based collaboration skills, as well as health education topics that vary depending on the site and community health education project needs.

Criteria that La Clinica sought for filling the role of the Patient Navigator were that the person not only be bilingual, but that the person also have personal qualities such as being compassionate and a good communicator, come from the community, and understand barriers that members from that community may face in accessing care. Other skills required for the role, such as the data collection and referral protocols, were learned while the person was in the role. A major challenge in preparing the person for the role was the relatively aggressive timeline to implementation, which did not leave much time to develop or provide additional training. Resources used in the pilot, such as the in-take form and resource binder of community resources, continue to be adjusted over the course of the pilot, based on learnings following implementation.

Program Results

For reporting purposes, the pilot has been tracking metrics related to the number of people who are receiving assistance with referrals and scheduling appointments. La Clinica has just completed the pilot, and data for the first year highlight the impacts on patient-access goals. It is worth noting that during the pilot period, an enterprise-wide roll out of the NextGen electronic medical record system reduced the capacity to schedule clinical appointments, as clinical staff at two sites have had their appointment capacity reduced by half during the NextGen implementation phase.

Key Findings from the pilot include (Exhibit 25):

- patient appointments have a greater than 70% show rate and continue to offset the number of patients returning to the emergency department;
- the number of appointments kept and show rate for patients referred by Patient Navigator to La Clinica in September were higher than in any previous quarter;
- the ability to see patients face-to-face has decreased need for contact by phone and increased the number of people referred. In September, four times as many people received referrals than in the preceding two months;
- the training that Patient Navigators received on NextGen to schedule enrollment appointments with La Clinica's Human Service Specialist has expedited and increased the number of appointments booked;
- in September, the return rate for patients returning to the emergency department after having been seen at La Clinica was the lowest ever reported (4%).

Exhibit 25: La Clinica Patient Navigator Program Pilot Results

Percentage of Appointments Kept by Patients: Patients Referred by Sutter Solano via Phone Call to La Clinica and Scheduled by La Clinica Staff

ANNUAL GOAL
By September 30, 2013, 85% of visits will be kept by those patients referred from Sutter Solano

	Baseline (Jan-May 2012)	1st Quarter	2nd Quarter	3rd Quarter	4thQ July	4thQ August	4thQ September
Total # Appointments	194	317	251	339	131	90	95
Appointments Kept	148	246	164	233	100	71	68
Show Rate	76%	78%	65%	69%	76%	79%	72%

Percentage of La Clinica Appointments Kept by Patients Referred by Patient Navigator to La Clinica

ANNUAL GOAL
By September 30, 2013, 85% of visits will be kept by those patients referred by Patient Navigator

	1st Quarter	2nd Quarter	3rd Quarter	4thQ July	4thQ August	4thQ September
Total # Appointments	49	47	41	18	9	52
Appointments Kept	30	27	26	9	4	40
Show Rate	61%	57%	63%	50%	44%	77%

Number of Referrals Made by Patient Navigators to Various Medical and Social Services

ANNUAL GOAL
By September 30, 2013, Patient Navigator Will Provide Referrals for Additional Medical and Social Services to at Least 150 People

	1st Quarter	2nd Quarter	3rd Quarter	4th Q July	4th Q August	4th Q September
Total # Referrals Made	314	209	215	105	77	374
Total # People Contacted to Offer Referrals or PCP Appt	171	117	313	43	41	145
Total # People who Declined Referral Services	41	31	192	11	8	15
Total # People Referred	130	86	121	32	33	130

Number of Uninsured Patients Referred by Sutter Solano Medical Center Who are Assisted with Applications for Insurance Coverage

ANNUAL GOAL
By September 30, 2013, assist at least 50 SSMC-referred uninsured patients with applications for health insurance

	1st Quarter	2nd Quarter	3rd Quarter	4th Q July	4th Q August	4th Q September
# Applications Completed	1	6	15	0	2	14
# Applications Approved	-	5 Pending Approval 1 Denied	5 Approved 10 Pending	0	1 Approved 1 Pending	14 Pending

Number of Referred Patients Seen at La Clinica with Reduced Visits to the Sutter Solano ER

ANNUAL GOAL
By September 30, 2013, 15% of patients referred by SSMC and seen at La Clinica will not return to Sutter Solano ED for non-urgent conditions

	1st Quarter	2nd Quarter	3rd Quarter	4th Q July	4th Q August	4th Q September
# Patients Seen at La Clinica	287	240	223	131	90	95
# Patients Seen at SSMC after La Clinica Visit	16	59	35	14	14	4
Return Rate	6%	25%	16%	11%	16%	4%

Following the pilot launch, reporting was updated from a quarterly to a monthly basis during the fourth quarter (July, August, and September). The impact from expanding the Patient Navigator role to a full-time position is evident in the preliminary data from this reporting period. For example, the number of patients who received information about referrals increased more than threefold for September, when the Patient Navigator went full-time, compared with the preceding months of July and August. A similar threefold increase was seen in the number of people who received medical and enrollment appointments when comparing September with July and August.

Program Evaluation and Data Capacity

Data collection for the Patient Navigator Program has relied on manual methods through the paper-based in-take form, and then manual data entry into an electronic database. The full implementation of the NextGen electronic medical record system at La Clinica now provides future opportunities to improve efficiencies through allowing direct data entry and scheduling of appointments as necessary. The Patient Navigator will need to receive training on using NextGen for scheduling clinical appointments.

On communication protocols, the Patient Navigator previously phoned the enrollment counselor to schedule an appointment and coordinate between the patient and counselor to finalize an appointment. That would take time and subject the patient to delays in accessing care. The Patient Navigator can now schedule appointments directly by referring patients to the Human-Service Specialist located on-site at the Sutter Emergency Department, or by scheduling an appointment for the patient through NextGen. The Patient Navigator still has to schedule clinic appointments with each site by phone.

For now, the Patient Navigator Program is focusing on clinical process indicators, specifically the number of appointments that have been made and kept. Future sustainability of the Patient Navigator Program may rely on assessing other indicators, such as the level of revenue that La Clinica generates from patients who have been diverted from the emergency department and retained by La Clinica as patients, or the number of patients who actually follow up and use the services to which they have been referred.

ST. JOHN'S WELL CHILD AND FAMILY CENTERS

St. John's Well Child and Family Centers has long recognized that many factors affect community health and that the delivery of primary health care services is more effective when addressing the broader context of an individual's life. A core value that permeates St. John's work is community and patient engagement. In pursuing its mission of social justice and health equity, St. John's places a high priority on research, advocacy, and providing supportive services to address educational, socio-economic, environmental, and health needs. Further, St. John's has strong community partnerships with various health, educational, social service, and development agencies to design and deliver services responsive to community needs. St. John's currently uses its community health workers in a variety of capacities in areas related to health education, insurance enrollment, home remediation of harmful environmental health triggers, and community-led organizing and advocacy to supplement the primary and preventive health services it offers in order to address health disparities experienced among the population.

Through Right To Health committees, for example, St. John's has perpetuated community advocacy and civic engagement to provide input into St. John's senior-management decision-making in areas related to clinic operational performance and strategic initiatives such as quality improvement. Its Healthy Homes Healthy Families initiative and Diabetes Classes are two examples of how close integration between clinical services and the broader community can successfully address community-level risk factors, as well as present opportunities for health promotion. St. John's vision is to eventually integrate their traditional community-based roles with clinical-care practices such that their roles, which may include accompanying patients to visits and charting in the electronic health record, can be billed.

Background

St. John's Well Child and Family Center is a nonprofit safety net provider that serves low-income persons of all ages through a network of federally qualified health centers in Central and South Los Angeles and Compton. In 2012, St. John's provided more than 150,000 medical, dental, and mental health visits to just under 50,000 low-income patients. In addition to providing a broad range of preventive and primary health care services, St. John's programs and services extend beyond the traditional health care delivery model to embrace the broader context of individual well-being. For example, St. John's offers innovative programs and services in areas related to health education, insurance enrollment, home remediation of harmful environmental health triggers, and community-led organizing and advocacy to supplement the primary and preventive health services it offers in order to address health disparities experienced among the population:

- The Right to Health Committees (RTHs), which are comprised of community members, are patient-driven and social in orientation. RTHs serve two purposes: civic engagement (e.g., increase voter registration or campaigning against funding cuts), and quality improvement (e.g., provide feedback on issues related to the patient care experience, such as patient wait-times).
- The Healthy Homes Healthy Families (HHHF) was an initiative developed in response to patients receiving treatment for conditions related to substandard housing conditions. St. John's systematic collection of data during clinic visits on standard health and housing conditions has been used to develop a strategic action plan with other community partners to improve local housing conditions.

- The Diabetes Class program involves community health workers working with a registered dietician to offer classes that provide knowledge and resources to participants to help them more effectively manage their diabetes and improve their condition by lifestyle aspects such as fitness and nutrition. Class participants have also become RTH members and are a vital link to advocacy for diabetes prevention at a community level.

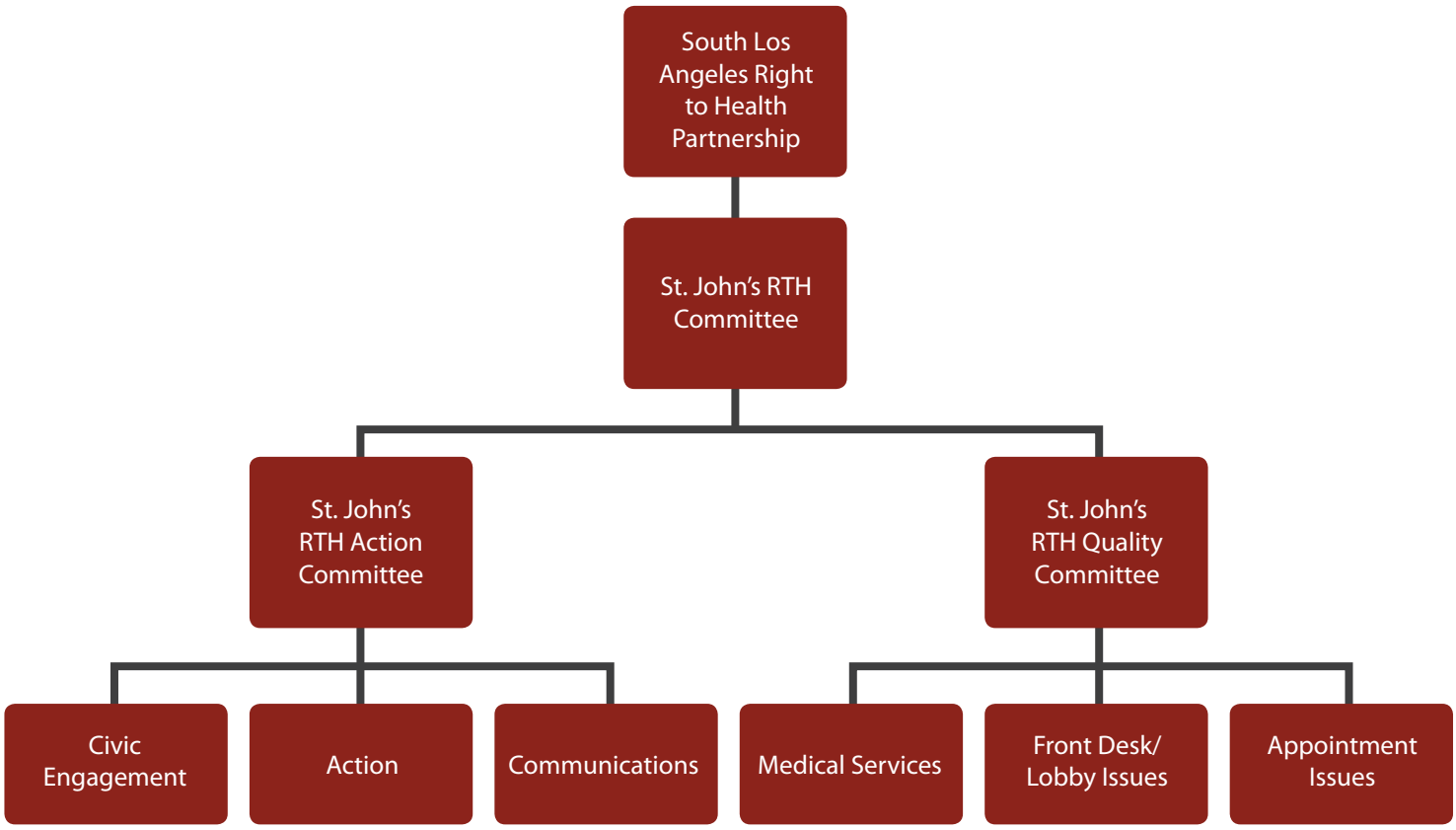
Introduction

St. John's mission is to eliminate health disparities and foster community well-being by providing and promoting the highest quality care. A core value that permeates St. John's work is community and patient engagement. Through the RTHs, for example, St. John's has perpetuated community advocacy and civic engagement. Its HHHF and Diabetes Class are two examples of close integration between clinical services and the broader community in a manner that addresses community-level risk factors as well as opportunities for health promotion. The non-clinical human resource elements, such as the community health workers and RTH members, are integral to St.John's senior-level management decision-making in areas related to clinic operational performance and strategic initiatives such as quality improvement.

Right to Health Committee - The RTHs, which were established in 2009 to support community advocacy and civic engagement, are led and made up of community residents to improve the St. John's Health Care System by ensuring that care is accessible, affordable, and of high quality. The RTHs' major activities have recently involved grassroots advocacy and mobilization around the impacts of Medicaid cuts to federally qualified health centers at the state level. One of the four members on the medical leadership quality committee at St. John's is an RTH member.

St. John's is currently redesigning its internal committee structure to comprise two subcommittees: the St. John's Right to Health Action Committee and the St. John's Right to Health Quality Committee (Exhibit 26). The redesigned RTH structure will allow St. John's to further develop its internal organizing capacity to advocate for health care access while continuing to pursue its mission to improve the quality of care it delivers while also pursuing new development opportunities. A recent quality-improvement initiative to address patient concerns that the pharmacy was not meeting patient needs led to the hiring of a pharmacy director; this illustrates how patients are empowered to understand their rights and to take the initiative to address their concerns.

Exhibit 26: St John's Right to Health Committee Organization Chart



To build its long-term grassroots outreach and advocacy capacity, St. John's is establishing Right to Health Committees in each of the locations or in the communities where clinics are located. The House Meeting Campaign is an example of an initiative that St. John's has introduced locally to build and strengthen the neighborhood network around the clinics through facilitating interaction between committee members and staff. It provides opportunities to meet with local community members and to identify new Right to Health Committee members and leaders.

House meetings take place in a Right to Health Committee members' home or community setting, such as a library, school, or church. A Right to Health Committee member typically opens the meeting by giving a personal introduction and explaining the purpose of the meeting, after which participants are invited to share their stories related to a particular issue with the goal of identifying the interests of people at the meeting and ascertaining a sense of what issues motivate them.

Healthy Homes Healthy Families – The HHHF initiative originated as a result of clinicians at St. John's noting that a number of the patients they were treating had conditions that they inferred might be related to substandard housing conditions. For example, patients were being treated for cockroaches in their ears, chronic lead poisoning, skin diseases, and insect and rodent bites. To better assess the situation, St. John's incorporated questions into office visits to collect data on standard health (e.g., allergies, bites, severe rashes, gastrointestinal symptoms) and housing conditions (e.g., presence of cockroaches, rats, or mice).[84]

[84] Prevention Institute, 2011

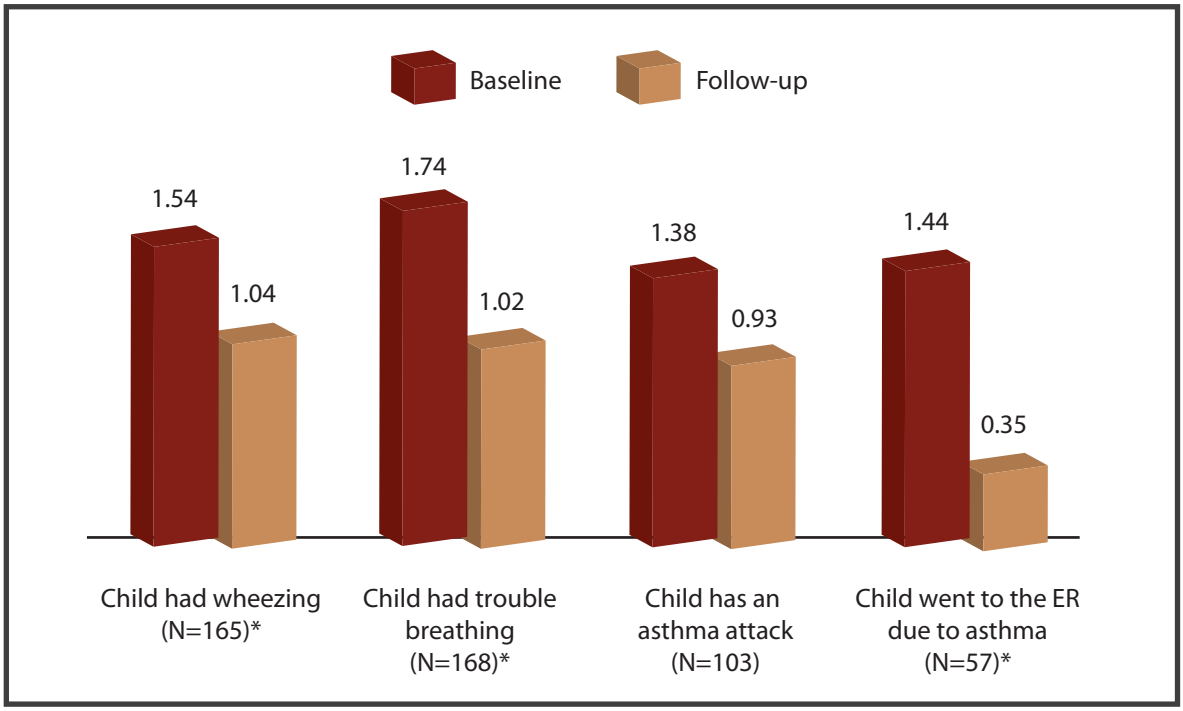
St. John's joined forces with local partner organizations representing a local housing agency, a human rights organization, and a tenant rights organization to address sub-standard housing in the communities surrounding St. John's clinics. The data that St. John's was collecting through clinic interactions with community members was valuable to the collaborative, as were its efforts to develop a broad-based strategic plan comprising community engagement, research, medical care and case management, home assessments, health education, litigation, and advocacy to address substandard and slum housing and improve housing conditions in the Los Angeles area.

During clinic visits clinicians can, based on their clinical assessment, make a direct referral for patients through St. John's electronic medical record system to the HHHF program, which then contacts a community-based organization, such as Esparanza Community Housing and Strategic Actions for a Just Economy (SAJE). For example, families are contacted by Esparanza's community health workers to schedule a home assessment visit and carry out direct improvements. More serious issues are handled by SAJE through their community organizing and advocacy networks to alert authorities of sub-standard housing conditions and to enforce housing codes.

The collaborative's efforts led to the passage of local administrative policies and secured agreements from high-level leadership at local government agencies, such as LA City Attorney's Office and LA Department of Public Health, which have subsequently led to improved landlord compliance with standard housing requirements. St. John's now serves a surveillance role, reporting landlords who perpetuate substandard housing, and the community now has the infrastructure in place to ensure that landlords not in compliance face the appropriate financial and legal consequences.

Between 2009-2012, an analysis of measurements taken at baseline and again at the follow-up visit (six-months post-intervention) for 361 children who received assistance from the program indicates that most have been positively impacted (Exhibit 27). In particular, statistically significant decreases were reported in the number of times children had wheezing or trouble breathing. At follow-up, there was also a statistically significant decrease in the number of children who were reported as missing one-to-three days of school due to asthma (from fifty-nine at baseline to thirty-five children at follow-up), and a statistically significant increase in children who missed no days of school (from twenty-seven at baseline to fifty-three at follow-up). At follow-up, significantly fewer children reported ED visits in the previous four weeks than at baseline (seventy-one children).

Exhibit 27: St Johns Healthy Homes Health Families Program Impact



**** denotes a statistical significance***

Diabetes Prevention Class – Lack of access to primary health care, combined with the low-income status of St. John's patients, results in a population that is extremely vulnerable to chronic disease. According to information from UCLA's Center for Health Policy Research, South Los Angeles had worse outcomes in every health-related indicator compared to those in Los Angeles County overall. Diabetes and obesity remain among St. John's greatest challenges. According to the Los Angeles County Department of Public Health, St. John's service area has the highest percentage of adults diagnosed with diabetes (12.3%), hypertension (29%), and obese adults (35.4%).

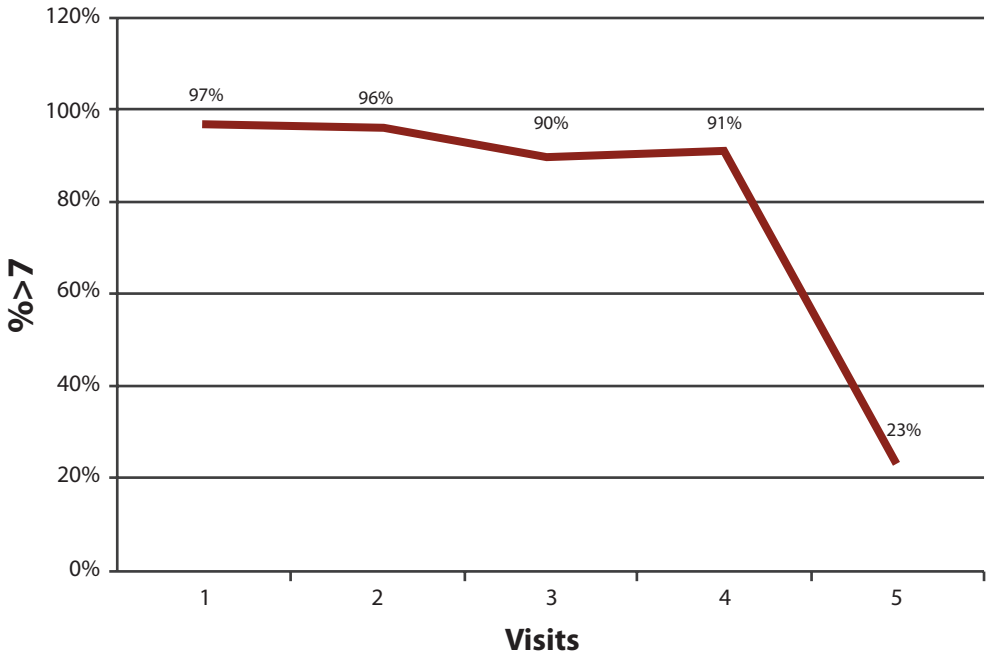
St. John's current chronic disease management strategy addresses the multi-faceted nature of chronic conditions by providing a range of culturally and linguistically competent medical, pharmaceutical, mental health, specialty care, dietetic, fitness, and support services. As part of its goal to create a more comprehensive, coordinated, effective, and empowering diabetes care management program, St. John's has recently expanded its diabetes services to include additional diabetes self-management skill-building and education classes to foster and support behaviors and treatment compliance that occur outside of medical visits. In addition to the classes, St. John's offers group medical visits for patients who are comfortable discussing diabetes management in a group setting. Patients typically access the program through internal referral and outreach efforts of community health workers. A community health worker assists the registered dietician with registering patients, testing blood sugar, and running exercise sessions during classes, as well as navigating the care system.

Six weekly classes, each lasting 2.5 hours, are offered at three sites and cover techniques for dealing with the symptoms of diabetes, appropriate exercise, healthy nutrition, appropriate medication use and blood testing, and effective health care provider relations. Class participation across the three sites is approximately ninty patients. Participants make weekly action plans, share experiences, and problem solve together regarding barriers to self-management. Participants in these classes have also become RTH members, which affords additional opportunities to engage community members to support diabetes prevention and management activities at the community level, such as organizing community-based walking events or improving access to healthy foods.

Data from the diabetes control and management program indicate effectiveness in terms of improvements in patient's HbA1c after attending three to four sessions, and St. John's is trying to expand the program to engage more patients, as well as create novel billing mechanisms to reimburse costs. (Exhibit 28)

Exhibit 28: St Johns Diabetes Program Impact

Percentage of those with A1c greater than 7 at each interval
St. Johns Well Child and Family Center



Conclusion

St. John's is currently reviewing ways to operationalize the clinical role of its community health workers and to create better linkages for sharing information between community health workers and the clinical care team. One potential means under consideration is to identify ways to formally document the information that community health workers collect in the electronic medical record system, and thereby create formal data protocols to integrate their work with that of the clinical team. The ability to formalize the documentation of CHWs' work with patients and their contributions to the clinical management of patients would potentially allow organizations in the future to bill for their work, thereby contributing towards the sustainability of the CHW positions.

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Taking Innovation to Scale: Community Health Workers, Promotores, and the Triple Aim

A Statewide Assessment of the Roles and Contributions Of California's Community Health Workers

Final Report | December 2013