Community Health Workers: Addressing Client Objectives Among Frequent Emergency Department Users

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ABSTRACT
Objectives: To evaluate effectiveness of a community health worker (CHW) program designed to address client objectives among frequent emergency department (ED) users.
Design: Program evaluation using secondary analysis of client objectives from program records. Client objectives were characterized according to the World Health Organization's social determinants of health framework. Hierarchical generalized linear modeling was used to assess factors associated with objective achievement.
Setting: An ED and the surrounding community in an economically disadvantaged area of Buffalo, New York.
Participants: A total of 1600 adults over age 18 eligible for Medicaid and/or Medicare and who had at least 2 ED visits in the prior year.
Intervention: Clients worked with CHWs in the community to identify diverse needs and objectives. Community health workers provided individualized services to help achieve objectives.
Main Outcome Measure: Achievement of client-focused objectives.
Results: Most objectives pertained to linkage to community resources and health care navigation, emphasizing chronic medical conditions and connection to primary care. Clients and CHWs together achieved 43% of total objectives. Objective achievement was positively associated with greater client engagement in CHW services.
Conclusions: Low objective achievement may stem from system- and policy-level barriers, such as lack of affordable housing and access to primary care. Strategies for improving client engagement in CHW services are needed. Community health workers and their clients were most successful in areas in which public health policies and systems made resources easy to access or where the program had formalized relationships with resources, such as primary care.

KEY WORDS: community health workers, frequent emergency department use, health care reform, social determinants of health

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Frequent use of the emergency department (ED) is a driver of the high cost of health care in the United States and has been targeted by health care reform efforts.[1] For instance, the Centers for Medicare & Medicaid Services funded Health Care Innovation Awards to address frequent ED use.[2]

Frequent ED use represents true acute need and rational decision making, rather than inappropriate or misuse of the ED solely for the sake of convenience or habit.[3] People of low socioeconomic status tend to prefer the ED over ambulatory care because they perceive it as "less expensive, more accessible and of higher quality."[4(p.1196)] Characteristics of frequent ED users include chronic and/or severe illness (eg, asthma, diabetes, human immunodeficiency virus infection, seizures, coronary artery disease), need for pain management, poverty, government insurance, substance abuse and mental illness, and social comorbidities, such as homelessness.[5-10] These characteristics reflect inequity among the social determinants of health (SDOH), defined by Healthy People 2020 as "conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks."[11]

Although those with private health insurance appear less likely to use the ED and losing such insurance increases ED use,[12,13] those with Medicaid coverage have been shown to use the ED more than those who are uninsured.[10] With increased Medicaid coverage in the United States due to the Patient Protection and Affordable Care Act (ACA)—or alternatively, loss of insurance given the uncertainty of the ACA's future—ED use is expected to continue to increase.[14] The ED use by Medicaid beneficiaries may be especially likely to be due to SDOH and unmet psychosocial needs and a backlog of chronic disease management needs. Thus, to reduce frequent ED use at the population level—and perhaps more importantly, the cascade of high-cost care that follows[15-17]—health care systems must better address the complex social and chronic disease management needs of the patient population.[5,18]

Emergency department use reduction strategies such as case management,[19] care coordination,[20] patient navigators,[21] and community health worker (CHW) programs[22,23] help reduce barriers to access and connect patients to community resources to address psychosocial needs. As members of the community or sharing similar experiences and understanding of the community served, CHWs are especially well-suited to address psychosocial issues for patients dealing with complex health needs in a fragmented health care system.[24,25] Like navigators, CHWs can refer and connect patients to primary care and community resources and also provide longer-term education and support in the home and community.

Longer-term, intensive support in the community is a distinguishing characteristic of CHW models compared with other care coordination services. Community health workers can contribute to improving health outcomes, addressing disparities, and reducing the use of resource-intensive services by helping high-need populations access and navigate fragmented health and social service systems, make positive changes in their behaviors, and adhere to complicated treatment regimens.[26] Community health workers can help improve access to services and may reduce health care utilization and costs among frequent ED users.[22] By working in the community with clients over time and providing support for basic, psychosocial, and chronic disease management needs, CHWs are thought to be able to address the underlying, upstream SDOH factors that contribute to poor health outcomes, high use of resources, and disparities, within the context of the existing health care system and health policy. Community health worker models are a mechanism for health care reform noted by the ACA, under Title V.[27] As a result, health care organizations are facing decisions about which new care delivery models to implement and the workforce and training needed. To inform these decisions, it is important to understand the scope of client needs CHWs can address, and what additional providers, systems, and policies may be required to help meet patients' needs.

The Better Health through Social and Health Care Linkages beyond the Emergency Department (or "HealthiER") project was a CHW program funded in 2012 with a Health Care Innovation Award. HealthiER was designed to improve care, generate better health outcomes, and lower health care costs for patients who routinely seek care in an ED by addressing SDOH. The World Health Organization (WHO) offers a conceptual framework for understanding SDOH within the context of the larger health care system and policies.[28] According to the WHO, socioeconomic status (reflecting social class, gender, race/ethnicity, education, occupation, and income) is considered a *structural determinant* of health, while material circumstances, behavioral and biological factors, psychosocial factors, and the health system are considered *intermediary determinants* of health. Characterizing the needs of frequent ED users according to the WHO SDOH framework, and evaluating the extent to which CHWs are able to address these needs, may inform both the scope of services appropriate for CHWs, and policy and systems changes needed to support the work of CHWs.

Therefore, the purpose of this analysis is to evaluate the effectiveness of the HealthiER program, defined as the extent to which clients and CHWs together achieved client-focused objectives reflecting SDOH, and factors associated with objective achievement.

Methods

Program description and setting

HealthiER operated out of an integrated hospital system in Buffalo, New York. Buffalo is an economically disadvantaged city, with 30.9% of the population living at or below the federal poverty level.[29] Community health workers recruited eligible clients in the ED and a primary care clinic; clients consented to participate. Most CHW services were provided in the community, primarily in the client's home. Following recruitment, CHWs scheduled home visits to complete assessments and create service plans and objectives, driven by client needs, goals, assets, and priorities (see Supplemental Digital Content Table S1, available at http://links.lww.com/JPHMP/A295).

Community health workers were full-time, paid employees with at least a high school education; medical backgrounds were not required. Qualified applicants were offered a position based on impressions gathered using an interview tool with ratings on technical, communication, time management, and other skills. Community health workers were supervised by master's level social workers and presented challenging cases to a medical oversight committee. Supervision is required for high-quality performance of CHWs.[30] Supervisors were expected to meet weekly with each CHW for case review, which included reviewing client needs and objectives, corresponding service activities and resources, and progress toward achieving objectives. New hires completed a 3-week-long comprehensive training on topics such as the health care system and motivational interviewing.

Design

This analysis is part of a comprehensive program evaluation. Using a participatory evaluation approach,[31] the external evaluation team collaborated with program leadership and staff to set evaluation priorities, gather data, and interpret and disseminate findings. The evaluation questions were guided by the RE-AIM framework.[32] This analysis considers elements of reach, effectiveness, and implementation of the program. During early engagement of the CHWs in evaluation planning, the CHWs indicated that achievement of objectives (ie, are they meeting clients' needs?) would be a valuable outcome to assess the effectiveness of the program. Data from electronic client files were used to evaluate (1) client objective types, (2) rate of objective achievement overall and by objective type, and (3) factors associated with achievement of objectives. The evaluators'

institutional review board reviewed the evaluation protocol and deemed it not human subjects research.

Participants

To be eligible to participate, clients were 18 years of age or older, lived in the city of Buffalo, had (or were eligible for) Medicaid or Medicare, had 2 or more ED visits in the past 12 months, did not live in a long-term institution, and agreed to participate. Exclusion criteria included serious mental illness and substance abuse.

Data sources

The primary data source for this analysis was the program client files in a Web-based client management software application. Data include case records in structured fields and text fields for progress notes and narratives. Community health workers were expected to complete a comprehensive assessment and then establish 2 to 4 objectives with each client, each of which should be presumed achievable within 6 weeks. Community health workers were to prioritize access to primary care and health insurance if needed.

Community health workers recorded the objective creation date, objective type, and objective status (Met/Not Met) in structured fields. Status was updated manually as it changed (eg, an objective was met) or upon discharge from the program. Community health workers created service records for each contact or attempted contact with a client and recorded the date of the service and the setting in which the contact occurred (in-person, telephone, text message, e-mail). Details of the objectives and services provided during each contact were recorded in text fields. Two evaluators conducted a chart review of a random 20 client charts to independently code the CHW notes for objectives, objective type, and indications that an objective had been met; agreement among CHWs and evaluators was deemed acceptable.

Measures and variables

Client objectives

Objective categories are reported on the basis of both WHO framework factors and categories from program records (Table S1).

Objective achievement

The primary outcome variable was client achievement of at least 1 objective, dichotomized due to bimodal distribution of proportion of objectives achieved.

Correlates of objective achievement

Three domains of potential correlates of achieving objectives were selected: (1) client demographics (age, gender, insurance status at baseline), (2) client engagement in services (the number of objectives created, the number and types of contacts with CHWs, lost to contact as indicated by receipt of an inactive letter), and (3) client psychosocial and health care factors at baseline, including having a primary care provider (PCP) at enrollment, patient activation (measured using the Patient Activation Measure [PAM][33]), and depression symptoms (measured using the 9-item Patient Health Questionnaire [PHQ-9][34]). The PAM score is derived by converting raw scores (0-100) to interval scores that correspond to 1 of 4 levels of patient activation.[33] The PHQ-9 is scored by summing each item (symptoms rated on a scale from 0 = *not at all* to 4 = *nearly every day*) to compute a total score.[34]

Analysis

Raw data were exported from the client service files and analyzed in SAS version 9.4 (SAS Institute, Cary, North Carolina). Descriptive statistics (frequencies, percentages, range, interquartile ranges [IQRs], means [M], and standard deviations [SD]) were used to characterize patient demographics. Independent-samples *t* tests were used for comparison of continuous variables and chi-square tests for the comparison of demographic variables between those with and without objectives. Descriptive statistics were used to characterize the range of objective types and rate of achievement by objective type, and to describe frequency and type of contacts between CHWs and clients, time between enrollment and discharge for the overall sample, and separately for those who achieved zero versus 1 or more objectives.

Hierarchical generalized linear models with a binary distribution and a logit link were utilized to estimate the odds of achieving at least 1 objective, among those with objectives. The general model estimated was $\eta_{ij} = \beta_{0j} + \beta_{1j} \cdot X_{1ij} + \beta_{2j} \cdot X_{2ij} + \beta_{3j} \cdot X_{3ij} + \beta_{4j} \cdot X_{4ij}$. Subjects were nested within individual CHWs for the model-building process. The model presented earlier represents the log odds of a given client (i) assigned to a CHW (j) achieving at least 1 objective (η_{ij}), where β_{0j} is the intercept, X_{ij} is a client-level predictor for client i assigned to CHW j, and $\beta_{1j} - \beta_{4j}$ represents the slope associated with each client-level predictor.

Model building started with an unconditional model with a random intercept used to measure within- and between-CHW variability in the odds of achieving at least 1 objective. Subsequently, univariate analysis was performed for each hypothesized correlate of the outcome of interest (achievement of at least 1 objective). Variables reaching $P \geq .25$ in bivariate analyses were selected for possible inclusion in the multivariable analysis. These variables were then tested for significance ($P < .05$) and confounding (a 20% change in any parameter estimate in comparison to the full model). Variables that were not significant and not confounders were excluded from the final adjusted model.

Results

Sample characteristics

Among the 1600 clients who enrolled in the program, fewer than half (n = 740; 46.2%) made subsequent contact with a CHW and set objectives (Table 1). Those with objectives did not differ from the full sample in terms of gender ($P = .07$); however, they were 3.5 years older on average ($P < .001$) and were more likely to be enrolled in Medicare and/or Medicaid ($P < .001$) than those without objectives.

Client objectives

Across the 740 clients with at least 1 objective, there were 1518 total objectives set; among these clients, the median number of objectives per client was 2 (range = 1-11, IQR = 1-2). As shown in Table 2, objectives largely fell into the categories of "material circumstances" and "biological factors and the health system." The most common objective category was primary care, representing one-third of all objectives. The next most common objective categories pertained to health insurance, health education/promotion, and chronic medical conditions. This is consistent with program priorities, indicating both that CHWs followed protocol and that clients had needs in accordance with those program priorities.

Objective achievement

Among the 740 clients with objectives, 360 clients (48.7%) met at least 1 objective. Overall, rate of achievement of objectives was just less than 43%, wherein 651 of 1518 objectives were achieved by discharge from the program; achievement varied widely across objective types. Table 2 shows achievement of objectives by objective type. Achieving objectives related to government resources was the highest at 72%, while employment/education, housing, dental care, and life skills had the lowest rate of achievement, all less than 30%.

The total within- and between-CHW variability in objective achievement was determined using

TABLE 1
Characteristics of Clients Enrolled in CHW Services

	All Enrolled (n = 1600)	1+ Objective (n = 740)	Without Objective (n = 860)	P
Age: M (SD)	41.7 (15.4)	43.6 (15.2)	40.1 (15.4)	<.001
Gender: N (% of enrolled)				
Female	886 (55.4%)	392 (53.0%)	494 (57.4%)	.07
Insurance at enrollment: N (% of enrolled)				
Medicaid	897 (56.1%)	442 (59.7%)	455 (52.9%)	
Medicare	70 (4.4%)	38 (5.1%)	32 (3.7%)	
Dual eligible	66 (4.1%)	46 (6.2%)	20 (2.3%)	
Self-pay	165 (10.3%)	74 (10.0%)	91 (10.6%)	
Other	68 (4.3%)	26 (3.5%)	42 (4.9%)	
Unknown	334 (20.9%)	114 (15.4%)	220 (25.6%)	
Medicare/Medicaid	1,033 (64.6%)	526 (71.1%)	507 (59.0%)	<.001[a]

[a] Compared Medicare/Medicaid/dual versus no insurance.

TABLE 2
Characterization and Achievement of Client Objectives by World Health Organization (WHO) Social Determinants of Health (SDOH) Framework Factors

WHO SDOH Factor	Objective Types (n = 1518)	Frequency, n (% of All Objectives)	Achievement of Objectives, n (% Met Within Category)
Structural determinants			
Education, occupation, income	Employment/education	98 (6.5%)	25 (25.5%)
Intermediary determinants			
Material circumstances	Unspecified social determinants	69 (4.5%)	23 (33.3%)
	Link to housing services	64 (4.2%)	19 (29.7%)
	Health insurance	126 (8.3%)	64 (50.8%)
	Community services	46 (3.0%)	21 (45.7%)
	Government resources	18 (1.2%)	13 (72.2%)
	Transportation	83 (5.5%)	45 (54.2%)
	Subtotal	*406 (26.7%)*	*185 (45.6%)*
Behavioral factors	Life skills	10 (0.7%)	1 (10.0%)
	Health education/promotion	116 (7.6%)	61 (52.6%)
	Subtotal	*126 (8.3%)*	*62 (49.2%)*
Biological factors and the health system	Chronic medical	115 (7.6%)	54 (47.0%)
	Acute medical	30 (2.0%)	15 (50.0%)
	Medications	18 (1.2%)	8 (44.4%)
	Dental	57 (3.8%)	14 (24.6%)
	Primary care	512 (33.7%)	217 (42.4%)
	Specialist care	88 (5.8%)	37 (42.0%)
	Subtotal	*820 (54.0%)*	*345 (42.1%)*
Psychosocial factors	Mental health	29 (1.9%)	16 (55.2%)
	Substance abuse	7 (0.5%)	4 (57.1%)
	Subtotal	*36 (2.4%)*	*20 (55.6%)*
	Other	32 (2.1%)	14 (43.8%)
	Total	*1518*	*651 (42.9%)*

unconditional multilevel regression models. The between-CHW variance component was 0.01 and the within-CHW variance component was 0.17 (both z tests significant at $P < .05$), indicating that 94.5% of the variance in proportion of objectives achieved was within-CHW. This was largely attributable to one CHW with much higher objective achievement than the rest, and one with much lower objective achievement. That is, a small portion of the variance in objective achievement was attributable to variations in CHW characteristics, whereas most of the variance was observed at the individual client level. To account for this small but significant variance attributed to CHW, further analyses considered clustering of clients within CHWs in hierarchical linear models.

Correlates of objective achievement

As shown in Table 3, client demographics were associated with objective achievement. In bivariate models, odds of achieving at least 1 objective were significantly associated with gender (in favor of men) and insurance at enrollment (in favor of being on Medicare and/or Medicaid at enrollment), but not age.

Client engagement in services was also associated with achievement of objectives. Clients who were enrolled longer, who had more contacts with the CHW, and who set more objectives had greater odds of achieving at least 1 objective. Clients achieving at least 1 objective were enrolled for an average of 181 days, or approximately 6 months—the upper limit of the length of time the program expected to be providing services to any individual clients. There was no evidence that client psychosocial and health care factors (having a PCP, patient activation, and depression symptoms) at enrollment were associated with achievement of objectives. However, PAM and PHQ-9 scores were available only for the subset of clients that completed these measures, and thus estimates may be unreliable.

Discussion

The program provided targeted CHW services to a Medicaid/Medicare-eligible population of frequent ED users in Buffalo, New York. The scope of objectives was broad and inclusive of multiple factors within the WHO SDOH framework. Many objectives focused on connecting clients to primary care and improving clients' material circumstances—driven by both the stated goals of the program and client-focused needs. Achieving objectives was often

TABLE 3
Factors Associated With Odds of Achieving at Least 1 Objective Among Clients Setting Objectives[a]

	Overall (n = 740) Mean (SD)	0 Objectives Achieved (n = 380) Mean (SD)	1+ Objective Achieved (n = 360) Mean (SD)	Odds of Achieving 1+ Objectives	
				OR (95% CI)	Adj. OR (95% CI)[b]
Age	43.6 (15.2)	41.9 (15.8)	45.3 (14.4)	**1.02 (1.01-1.03)**	
Gender, n (% female)	392 (53.0%)	218 (57.4%)	174 (48.3%)	**0.73 (0.54-0.99)**	
Insurance, n (% Medicare and/or Medicaid)	526 (71.1%)	254 (66.8%)	272 (75.6%)	**1.55 (1.11-2.16)**	**1.64 (1.09-2.47)**
Number of objectives	2.1 (1.4)	1.6 (0.8)	2.6 (1.7)	**2.48 (2.05-3.00)**	**1.99 (1.59-2.48)**
Days enrolled (unit of change = 10 enrollment days)	149.6 (155.6)	119.7 (147.0)	181.2 (158.3)	**1.03 (1.02-1.04)**	**0.998 (0.996-1.00)**
Total contacts (in-person + telephone)	9.4 (12.2)	4.5 (6.5)	14.5 (14.5)	**1.49 (1.39-1.63)**	**1.15 (1.11-1.20)**
Total in-person contacts	2.5 (4.1)	1.1 (2.2)	3.9 (5.0)	**1.22 (1.17-1.27)**	
Total telephone contacts	6.9 (9.0)	3.4 (4.8)	10.7 (10.7)	**1.17 (1.13-1.20)**	
Lost to contact (receipt of inactive letter)	50 (6.8%)	33 (8.7%)	17 (4.7%)	0.56 (0.30-1.06)	
Patient reports PCP (baseline) (n = 423)	271 (64.1%)	92 (63.9%)	179 (64.2%)	1.06 (0.67-1.67)	
PHQ-9 > 9 (baseline) (n = 238)	8.0 (6.1)	8.3 (6.3)	7.9 (6.1)	0.99 (0.94-1.03)	
PAM score (baseline) (n = 252)	40.3 (5.6)	39.9 (5.8)	40.4 (5.5)	1.02 (0.97-1.07)	

Abbreviations: CI, confidence interval; OR, odds ratio; PAM, Patient Activation Measure; PCP, primary care provider; PHQ-9, 9-item Patient Health Questionnaire.
[a] OR in bold indicates statistically significant at $P < .05$ (ORs do not include 1.0). Adjusted ORs reported for multivariable model with all covariates included in the final adjusted model.
[b] Adjusted models initially included age, gender, insurance, the number of objectives, total contacts between CHW and client, and days enrolled, where significant in simple regression models; age and gender were not significant in multivariable models and thus were excluded from the final adjusted model presented here.

difficult, such that only 43% of objectives were met as of discharge from the program. Client-level correlates of objective achievement included insurance status (in favor of those on Medicaid and/or Medicare) and sustained client engagement with the CHW. While patients who stayed engaged may have been the most motivated, our best indicator of motivation (patient activation) was no different between those who achieved objectives, and those who did not. Keeping clients engaged through regular, in-person contact was critical. The highest-performing CHWs were those who exhibited resourcefulness, persistence, accountability, and ability to establish rapport with clients. Anecdotally, clients stayed engaged when the CHWs demonstrated they could help the client in a timely and meaningful manner, such that the relationship between the number of contacts and objective achievement could be bidirectional.

These findings may also suggest that inability to achieve objectives reflected low system capacity or resource availability. For instance, there is a severe shortage of affordable housing in Buffalo. While CHWs spent considerable time helping clients complete Section 8 housing applications and searching online for apartments, the wait time for obtaining a housing subsidy is several years and there was often no available inventory. Lack of affordable, quality housing is a known barrier to achieving optimal community health and contributes to health inequities.[35]

Similarly, CHWs struggled to find a PCP accepting new Medicaid patients and with timely appointments available. Lack of primary care system capacity has been noted as a problem in health care reform efforts.[36] When the program developed a partnership with a set of local primary care practices, CHWs found it easier to connect clients to primary care in a timely manner; conversely, when these practices experienced internal process challenges, CHWs faced delays in scheduling appointments. Building and leveraging strong partnerships with key stakeholders, including the hospital and ED, PCPs, and social service agencies, during the project planning phase and throughout program implementation are recommended to improve program adoption and implementation, support the ability of CHWs to help clients achieve objectives, and therefore engage and retain clients in services.

In addition to focusing on the individual needs of clients, CHWs can help inform system-level policy changes to address SDOH at a population level.[37] Changes in system policy and procedures can impede or promote CHW effectiveness. Policy changes at both the system and organizational levels likely promoted achievement of health insurance and transportation objectives. For instance, Medicaid was expanded in New York in 2013, the middle of the grant period, and the partnering hospital increased focus on enrolling eligible patients in Medicaid. In addition, when the local vendor for Medicaid transportation changed in 2014, policies around required documentation and referrals from providers were simplified, and CHWs were better able to address transportation objectives.

Limitations

This was a secondary analysis of program records, used primarily for program management and service delivery. Thus, there may be concerns about the validity of the data. Ensuring accurate, timely documentation was a routine focus of the evaluators and program director. A limitation was the lack of a comparison group, or an objective benchmark for success. Is achieving 43% of objectives high or low for a CHW program providing services to Medicaid/Medicare beneficiaries who are frequent ED users? Lacking published data on this topic, this article provides a benchmark for other programs. Finally, the use of "objective achievement" is a novel outcome metric for CHW programs. Community health workers recommended that "achieving objectives" be the primary client-centered outcome for evaluation, but the relevance or validity of this metric is unknown. Objective achievement (eg, helping a client fill out a housing or employment application) does not necessarily mean the larger goal (eg, finding an apartment or a job) has been met. Objective achievement may not be necessary or sufficient to achieve program goals pertaining to cost and utilization or improved health; further analysis on these outcomes is under way.

Some program stakeholders questioned whether it is the responsibility of the health care system to address needs such as education, employment, and housing, which are arguably in the domain of social service entities. When social service entities are not able to meet these needs, to what extent is it in health care's best interest to intervene, such as through advocacy or CHWs services? Given the scope and scale of social changes needed to address disparities due to SDOH, the health care and social services sectors, along with other sectors such as education, should collaborate to achieve "collective impact."[39] Furthermore, from an ethical perspective it may not matter if it is in the health care system's *economic* interest to address SDOH, as it is a matter of health equity. As Michael Marmot of the Commission on Social Determinants of Health has said, "The time for action [on social determinants of health] is now, not just because better health makes economic sense, but because it is right and just."[40]

Implications for Policy & Practice

Health care organizations facing decisions about what service models best meet the needs of their patient populations should bear in mind 3 key findings.

■ First, a significant factor in achieving objectives was keeping clients engaged and in contact with their CHWs—often for 6 months or longer. Patients should have continued access to these services over the long term.

■ Second, CHWs were most effective at addressing objectives for which policy and program partnerships were in place to facilitate access to resources, such as partnerships with primary care. Health care organizations employing CHWs should identify priority objectives among their particular population and establish policies and partnerships CHWs will need to be effective.

■ Third, among low-income populations, many objectives pertain to factors upstream from health outcomes—that is, SDOH—which can be difficult to address given the complex, interrelated nature of systems and culture of education, employment, poverty, racism, oppression, and access to care.[38]

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