DCPCA
District of Columbia
Primary Care Association

Prevention EmpowerS ME

A Healthy Tomorrow Starts Today

Prevention EmpowerS ME Evaluation Report

Prepared by DARE Global Innovations for the District of Columbia Primary Care Association

EXECUTIVE SUMMARY

The Centers for Disease Control and Prevention (CDC) created the Community Transformation Grant (CTG) in 2011 with the intent to sustainability transform the health of communities by preventing chronic disease. Of the 10 leading causes of death in the United States, 7 are a result of chronic disease[1], resulting in an estimated $1 trillion in costs annually[2]. District of Columbia Primary Care Association (DCPCA) was funded by the District of Columbia Department of Health (DOH) to implement the CTG initiative, *Prevention EmpowerS ME*, a program to establish a sustainable and coordinated system of chronic disease self-management education (SME) and prevention.

The program builds upon existing networks of community organizations and community health workers (CHWs) to promote chronic disease SME--a tool that encourages patients living with chronic disease to be active participants in their care by managing the day-to-day aspects of treatment and maintenance on their own[3]. *Prevention EmpowerS ME* focuses on Wards 1, 4, 5, 7, and 8 in the District of Columbia, areas shown to have a high burden of chronic disease.

DCPCA partnered with the Institute for Public Health Innovation (IPHI) and DARE Global Innovations (DARE) to plan and implement an evaluation of *Prevention EmpowerS ME*. The evaluation sought to examine 1) What conditions are required for the sustainability of CHW work in organizations across Washington DC? 2) Does the *Prevention EmpowerS ME* model increase CHWs' awareness of chronic disease SME? And 3) Does the *Prevention EmpowerS ME* model enhance CHWs' capacity to train other CHWs and clients about chronic disease SME? The evaluation team conducted a mixed-method evaluation and included both community health workers (CHWs) and community-based organizations.

The team found that overall CHWs were shown to have increased knowledge after participating in *Prevention EmpowerS ME* training sessions, and felt comfortable discussing what they had learned with clients. Organizations reported that technical assistance in establishing CHW programs, additional training for CHWs, and funding were primary concerns when considering the implementation of CHW programs.

I. Program Design

RATIONALE

In an effort to combat the impact of chronic disease in communities across the country, CDC created Community Transformation Grants (CTGs), intended to prevent chronic disease and promote health for an estimated 130 million Americans. Over $100 million was awarded to 61 state and local government agencies, including the District of Columbia, to design and implement community-level programs that would help residents of funded jurisdictions to "lead healthier, more productive lives". As an awardee, the District of Columbia Department of Health (DC DOH) was funded to implement programming that will achieve the following goals:

- Increase physical activity opportunities
- Reduce weight and improve nutrition
- Reduce tobacco use and secondhand smoke exposure; and
- Improve chronic disease outcomes

As a part of this initiative, the District of Columbia Primary Care Association (DCPCA) was funded by the DC DOH to increase the number of organizations that promote chronic disease prevention strategies and chronic disease self-management education by September 2014. DCPCA applied the funds towards the creation of *Prevention EmpowerS ME*, a unique program designed to promote chronic disease self-management education (SME) among CHWs and residents of the District of Columbia.

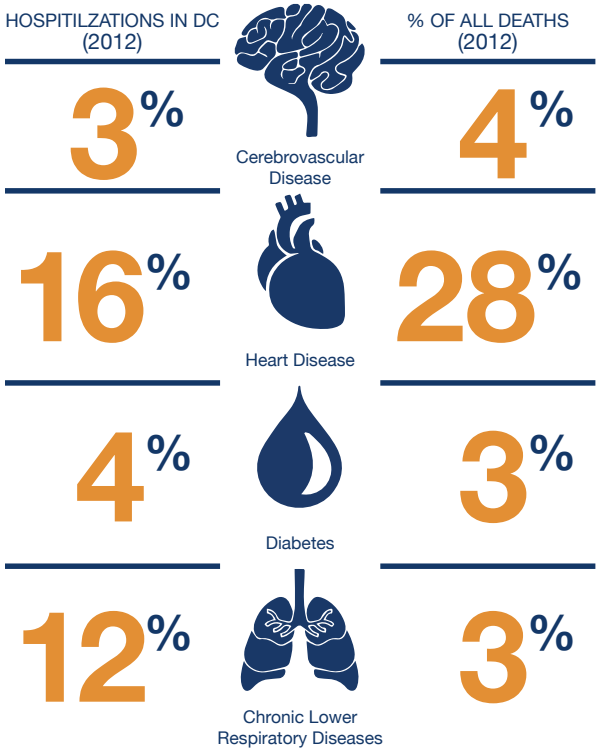
WHAT ARE *COMMUNITY HEALTH WORKERS* (CHWs)?

Community health workers (CHWs) are "front-line public health workers who serve as a link between health and social services and the community. CHWs facilitate access to services, and improve the quality and cultural competence of service delivery."[4]

CHWs are important because they increase access to health care and health care literacy, improve the quality of care by educating providers about the needs of the community, and reduce the cost of care through education, prevention and navigation of healthcare services with the intent of improving health outcomes for people at greatest risk of disease due to environment or socio-economic factors. DCPCA has a history of investing in CHWs as a method of improving health and decreasing health-care related costs in Washington DC. In 2010 they sponsored a pilot program at the University of the District of Columbia that delivered a 7-month training course to CHWs who wished to improve their capacity to deliver client services. DCPCA's support of community health work, and their existing relationship with the Community Health Worker Professional Network of Washington, DC, drove them to consider the use of CHWs to promote chronic disease SME through their program. By leveraging DC's existing network of CHWs and the organizations they work for, DCPCA was able to adopt CHWs as their model for prevention, branding it as *Prevention EmpowerS ME*. This evaluation explored the use of CHWs to establish a sustainable and coordinated system of chronic disease self-management education (SME) and prevention, particularly for medically vulnerable communities.

WHAT IS *PREVENTION EMPOWERS ME*?

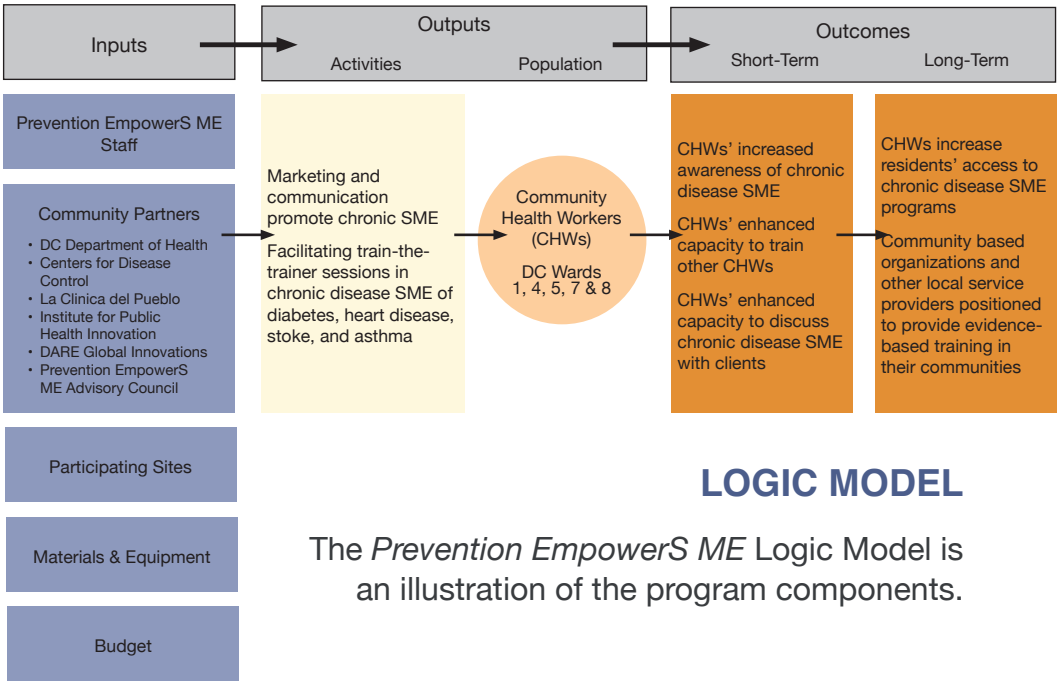
Prevention EmpowerS ME is a program that raises awareness of chronic disease Self-Management Education (SME) in Washington DC. Self-Management Education (SME) teaches individuals how to prevent chronic disease or better manage pre-existing conditions. *Prevention EmpowerS ME* was developed by DCPCA staff in response to current trends in chronic disease morbidity and mortality in DC. Data from DC's 2014 Annual Health Report showed a high burden of morbidity and mortality due to heart disease, cerebrovascular disease, diabetes and chronic lower respiratory disease. People living with these conditions were more likely to be from a minority population and have an income less than $24,000/year. A high burden of disease was shown among residents of Wards 1, 4, 5, 7, and 8[5].



METRICS FOR SUCCESS

The goal of *Prevention EmpowerS ME* is to promote community transformation by raising awareness of chronic disease SME in the District of Columbia, specifically in Wards 1, 4, 5, 7 and 8. The project aims are to:

- Develop and implement SME train-the-trainer education sessions, using evidenced-based curricula for health and wellness, diabetes, heart disease, stroke, and asthma for CHWs;
- Promote chronic disease SME to over 200,000 unique District of Columbia residents through the use of an innovative marketing and communication strategy, and measure increased awareness of SME by community health centers, community organizations and faith-based organizations.



LOGIC MODEL

The *Prevention EmpowerS ME* Logic Model is an illustration of the program components.

II. Prevention Empowers ME Inputs

PREVENTION EMPOWERS ME STAFF

Prevention EmpowerS ME staff was responsible for guidance of the promotional campaign, establishing partnerships with participating sites, identifying sources for training materials, and administration of trainings. Staffing for the program included a part time program manager, project coordinator, responsible for curriculum development and training and support staff including data manager.

COMMUNITY PARTNERS

Prevention EmpowerS ME's community partners consisted of organizations identified by the *Prevention EmpowerS ME* staff that provided support for the administration of the project, including providing technical assistance for locating training materials, recruiting participating sites, and providing evaluation support for the project. Community partners were vital to the successful implementation of the project as an add-on to existing initiatives and services already provided by CHWs throughout the city.

DCPCA's model for *Prevention EmpowerS ME* required the creation of additional partnerships with organizations that would allow the program to reach different segments of Washington DC's diverse population. *Prevention EmpowerS ME* staff reached out to representatives at La Clinica Del Pueblo, and formed a partnership in which staff from La Clinica would assist DCPCA in identifying participating sites, help to ensure that training materials were culturally competent, and provide translation of documentation and materials where necessary.

Infographic order to build community support for *Prevention EmpowerS ME*, DCPCA reached out by phone and email to community based organizations, faith based organizations, hospitals, advocacy groups, professional organizations, and other organizations providing care and services to residents of Washington DC, to create the *Prevention EmpowerS ME* Advisory Board. The Advisory Board consisted of 37 individuals total who represented 34 organizations. The advisory board first convened on August 29th, 2013 and met with *Prevention EmpowerS ME* staff on a quarterly basis for project updates on implementation and to provide guidance on curriculum design and training. Organizations with members participating in the Advisory Board were considered for designation as partner sites.

PARTICIPATING SITES

In efforts towards fulfilling *Prevention EmpowerS ME*'s purpose to create a bridge between traditional health care and the community, DCPCA worked to establish agreements with 8 primarily non-traditional sites that were providing culturally competent services through CHWs in the target wards. DCPCA defined a non-traditional site as a site that did not provide medical services, including, but not limited to community and faith based organizations. The goal of additional outreach was to focus on recruiting non traditional partners or organizations that can expand the reach of CHWs and chronic disease self-management skills. The project team collaborated with staff at La Clinica Del Pueblo to recruit four sites serving primarily Spanish-speaking populations with the project team responsible for recruiting the remaining four sites. As part of the agreement, sites agreed to produce their CHWs for trainings, and provide training space if possible. Partnerships were successfully

attained with the following organizations: 1) Calvary Health Care 2) Capital Clinical Integrated Network 3) Community Education Group 4) DC Public Housing Authority Advisory Board 5) Healing Our Village 6) The Institute for Public Health Innovation (IPHI) 7) Regional Alliance of Students and Professionals (RASP) 8) Providence Hospital Services – Fort Lincoln Medical Center. The figure below illustrates partnering sites.

PROGRAM ACTIVITIES

Program activities are events that are integral to the program and are deemed necessary in order to achieve anticipated outcomes. *Prevention EmpowerS ME* project team focused on implementing the following activities:

1. Develop SME training curriculum and modules focused on chronic disease education
2. Provide chronic disease SME trainings to CHWs at community based organizations
3. Design and distribute promotional materials to raise awareness of chronic disease SME in Washington DC

CURRICULUM

Curriculum development for *Prevention EmpowerS ME* focused on a train-the-trainer model. DCPCA staff conducted extensive literature reviews for the selection of user-friendly and culturally competent evidence-based training materials. Where appropriate training materials were not available, DCPCA staff developed or compiled materials to create their own curricula. Training was broken into four modules as indicated in the table below.

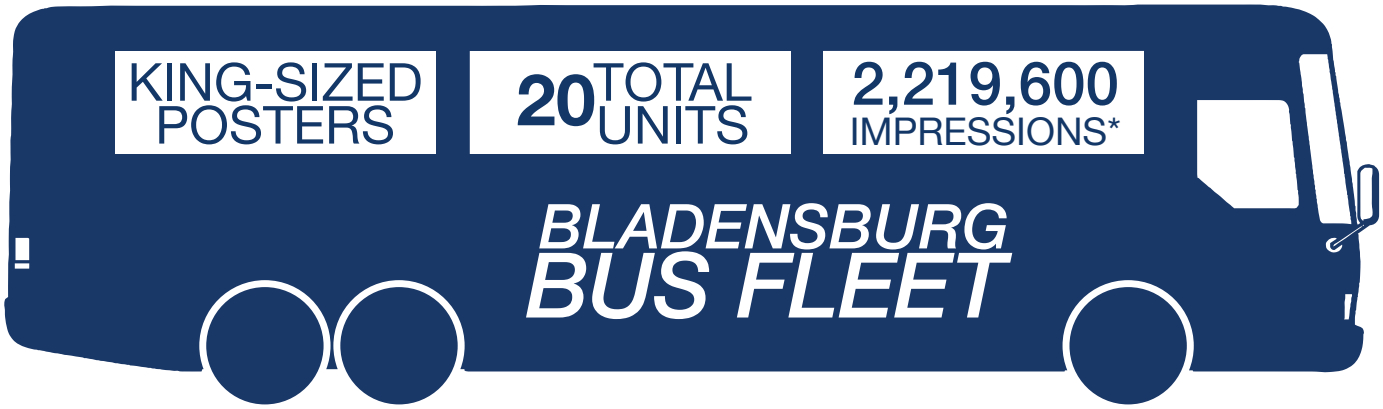
MODULE	CURRICULUM SOURCE	FACILITATOR
Module I – Wellness	Developed in-house by DCPCA	DCPCA Facilitator
Module II – Diabetes	Materials purchased from the American Diabetes Association (ADA)	ADA Facilitator
Module III – Heart Disease & Stroke	Materials purchased from the National Heart, Lung and Blood Institute (NHLBI)	DCPCA Facilitator
Module IV – Asthma	Developed in-house by DCPCA	DCPCA Facilitator

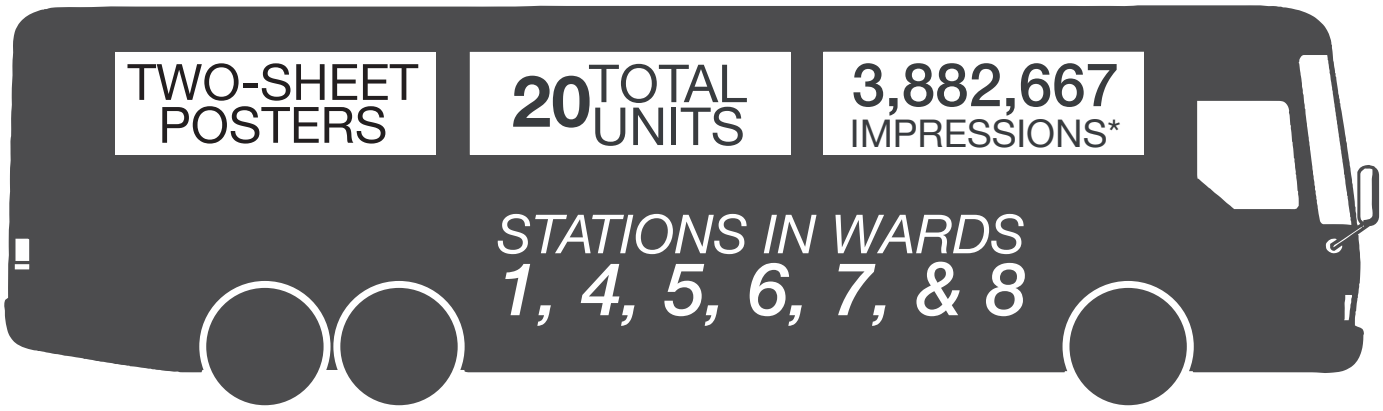
TRAINING

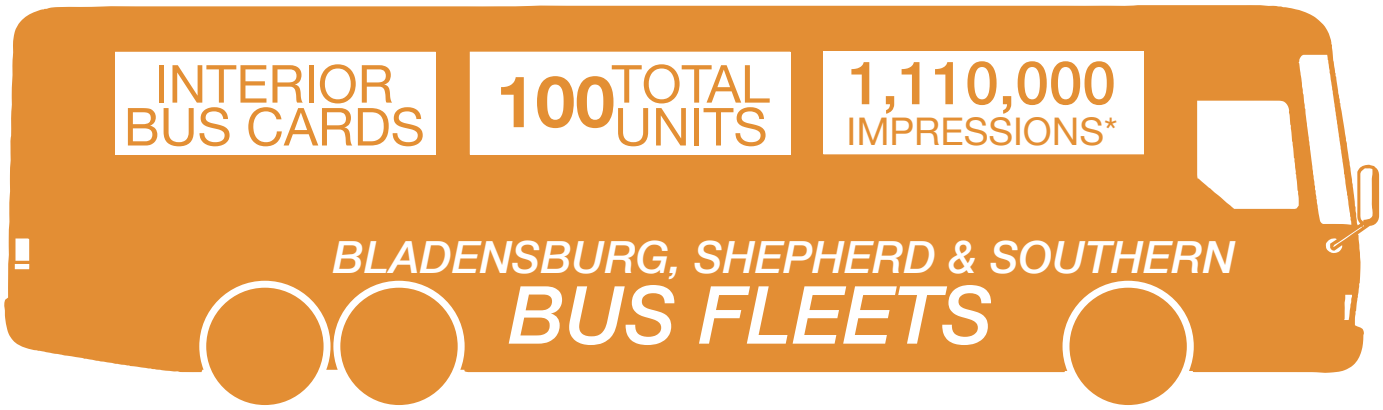
The training goal was to educate 50 CHWs in chronic disease SME over the course of the program. Trainings took place at partner sites when space was available, and at alternative sites throughout the community. Training was delivered lecture style in a classroom setting with pre- and post-tests.

MARKETING

For the *Prevention EmpowerS ME* marketing campaign DCPCA utilized partners at Pensare Design Group (PDG) to design a series of materials including, posters and palm cards, for distribution throughout the duration of the program. Materials were displayed in buses, on bus routes, and on metro platforms at metro stations in order to increase their likelihood of being seen by members of at-risk populations. Circulation was scheduled for a period of 4 weeks, but may have been extended in some areas and can be viewed to the right.







* THE NUMBER OF PEOPLE WHO MIGHT HAVE HAD AN OPPORTUNITY TO BE EXPOSED TO THE PRODUCT

III. Evaluation Design

Evaluation is a systematic way to examine a program's quality, value, and/or significance[6]. The evaluation team conducted an outcomes evaluation to determine if the program was successful at meeting its goals. Evaluations are essential for programs because they provide objective information to determine if a program offers a real solution, is cost-effective, and is unique.

Taking a mixed-method approach, the evaluation sought to answer the overarching evaluation question below:

1. What conditions are required for the sustainability of CHW work in organizations across Washington DC?

2. Does the *Prevention EmpowerS ME* model increase CHWs' awareness of chronic disease SME?

3. Does the *Prevention EmpowerS ME* model enhance CHWs' capacity to train other CHWs and clients about chronic disease SME?

INSTRUMENTS

The evaluation team developed four evaluation instruments. Two of the instruments focused on program process and two focused on program outcomes. The table on the following pages provides information about each tool and associated evaluation procedures.

Evaluation Method	Tool Type & Data Collection	Tool Development & Dissemination	Target Audience (Target N)	Recruitment	Responses (Response Rate)	Purpose	Timeline
Environmental Scan	Quantitative - *Community Health Worker Survey/Promotores de Salud Survey* Survey was emailed to target audience through Constant Contact and submitted electronically	This survey tool developed by DCPCA, with feedback provided by the evaluation team and consisted of 19 multiple choice and open-ended questions. The tool was translated into Spanish by program collaborators at La Clinical del Pueblo. Responses were submitted online through Constant Contact. Members were requested to forward the survey to CHWs within their networks who were not members of the organization	Open to all Community Health Workers currently working in Washington, DC (150)	The survey was distributed via Constant Contact to members of the CHW Professional Network of DC.	60 (40%) Community Health Worker Survey – 33 Promotores de Salud Survey – 27	- Determine approximate number of CHWs currently working in target wards - Determine the types of sites (i.e. community based organization, faith based organization, hospitals) CHWs are employed with in target wards	8/1/13 – 6/30/14
Environmental Scan	Quantitative - *Community Health Worker Program Assessment* Survey was emailed to target audience through Survey Monkey and submitted electronically	This 30 question multiple choice survey tool was developed by the evaluation team, with feedback provided by DCPCA. Responses were submitted online through Survey Monkey. Board members were requested to forward the survey to representatives at other organizations.	Open to all Community Organizations, Hospitals, Faith Based Organizations, and other care-related organizations in Washington, DC (52)	The survey was distributed via Survey Monkey to members of the *Prevention EmpowerS ME* Advisory Board.	18 (35%)	- Determine the proportion of sites that utilize CHWs to provide services in target wards - Determine the current number of programs addressing chronic disease	9/27/13 – 6/30/14
Environmental Scan Gap Analysis	Qualitative - *Gap analysis protocol* Tool was used to guide discussions during interviews. Interviewees took notes and recorded answers either on paper or saved them to a Microsoft Word document.	The evaluation team developed the gap analysis protocol, with feedback provided by DCPCA. This tool consisted of 6 open-ended questions and was utilized as a guide during in-person and phone interviews conducted by members of the evaluation team. Interviews were conducted by phone or in person and responses were recorded by interviewees electronically and on paper.	*Prevention EmpowerS ME* Partner Organizations (9)	Gap analysis interviews were scheduled with all partner sites as a part of their agreements made with DCPCA.	9 (100%)	- Determine the capacity of partner organizations to engage with DCPCA to implement *Prevention EmpowerS ME* - Assess data collection capabilities at partner sites - How do partner sites currently utilize their community health workers	2/4/14 – 6/10/14

Evaluation Method	Tool Type & Data Collection	Tool Development & Dissemination	Target Audience (Target N)	Recruitment	Responses (Response Rate)	Purpose	Timeline
Training Pre- & Post-tests	Quantitative Pre-test was administered on paper before the training. Post-test was administered on paper after training. After the Wellness module, CHWs were given an ID number during each session to link their pre- and post-test results	The evaluation team developed pre- and post-test questions for the Wellness, Heart Disease & Stroke, and Asthma modules based on content from their respective curricula. The American Diabetes Association developed pre- and post-test questions for the Diabetes module. The tests were administered by module facilitators at the beginning and end of each training session. Responses were collected on paper and entered into Formstack, an online survey application, by DCPCA staff.	CHWs participating in *Prevention EmpowerS ME* training sessions (50)	Tests were administered at each training module to all CHWs who attended.	**Wellness:** 113 (226%) **Diabetes:** 63 (126%) **Heart Disease & Stroke:** 61 (122%) **Asthma:** 53 (106%)	- Assess baseline knowledge and skills of chronic disease self management education - Assess the extent to which training improved knowledge and skills related to chronic disease prevention and self-management -	12/18/13 – 8/30/14
Enhanced Asthma Evaluation	Two Quantitative surveys – electronic Surveys were administered using the QuickTap application on iPads. The first survey was administered before training, and the second survey was administered after training.	The evaluation team developed this two-part survey tool, with feedback provided by DCPCA. The survey was developed in the QuickTap survey application. The first survey was developed to assess self-efficacy in asthma SME at baseline. The second survey assessed self-efficacy in asthma SME after training, and evaluated the structure of the training.	CHWs trained in asthma SME through *Prevention EmpowerS ME* (50)	Evaluation was administered at each asthma training module to all CHWs who attended	12 (24%)	- Assess CHW self-reported comprehension of asthma self-management and ability to effectively train peers or educate clients at baseline - Assess the extent to which self-reported comprehension of asthma self-management and ability to effectively train peers and educate clients was changed as a result of receiving training in asthma self-management	8/1/14 – 8/30/14
Follow-up Interviews	Qualitative – *Follow-up Interview protocol* Tool was used as a guideline to initiate discussions with CHWs. Sessions were recorded	The evaluation team developed the interview protocol, with feedback provided by DCPCA. Interviews were conducted in person and by phone, and were recorded for future review. Interview subjects were told that they would remain anonymous, and were compensated for their time with a $25 Visa gift card.	CHWs trained in chronic disease SME through *Prevention EmpowerS ME* (8)	DCPCA contacted 9 CHWs by phone or in person to request that they meet with the evaluation team to be interviewed.	4 (50%)	- Obtain CHW feedback on the training organization and structure	9/24/14 – 10/17/14

ANALYSIS

The evaluation team utilized commercial off the shelf products for analysis of results from all survey tools. The accessibility of these products allows for this model to be replicated easily in other settings. Tools and methods used in the analysis are detailed in the table below:

EVALUATION TOOL	AUDIENCE	ANALYSIS TOOL(S)	NOTES
Community Health Worker/Promotores de Salud Survey	Open to all Community Health Workers currently working in Washington, DC	Microsoft Excel	Results of the Promotores de Salud survey were translated to English by DARE staff and combined with results of the Community Health Worker survey for analysis.
Community Health Worker Program Assessment	Open to all Community Organizations, Hospitals, Faith Based Organizations, and other care-related organizations in Washington, DC	Survey Monkey Microsoft Excel	Results were separated into two sections; organizations with CHWs and organizations without CHWs; for analysis.
Gap Analysis Protocol	Representatives of partner sites	Microsoft Word Microsoft Excel	Positive or negative responses to the interview questions were treated as quantitative and analyzed in Excel. Additional interviewee questions or comments were organized by theme for inclusion and discussion in findings.
Training Pre- and Post-tests	CHWs participating in *Prevention EmpowerS ME* training sessions	Microsoft Excel	Pre- and post-tests were comprised of a mix of open-ended, true/false, multiple-choice and multi-select questions. For multiple-choice and true/false questions, one point was awarded for each correct answer. For multi-select questions, a point was awarded for each correct answer, and deducted for each incorrect answer. For open-ended questions scoring criteria were developed. Responses that successfully met the scoring criteria were awarded one point for each correct answer that was given.
Enhanced Asthma Evaluation	CHWs trained in asthma SME through *Prevention EmpowerS ME*	QuickTap Microsoft Excel	CHW baseline responses were compared to responses given after training for questions relating to training ability and ability to provide accurate information to clients. All other questions are analyzed
CHW Follow-up Interviews	CHWs trained in chronic disease SME through *Prevention EmpowerS ME*	Webex Microsoft Excel Microsoft Word	Responses to each question were organized in Excel. Quotes were transcribed and responses organized by theme

IV. Evaluation Findings

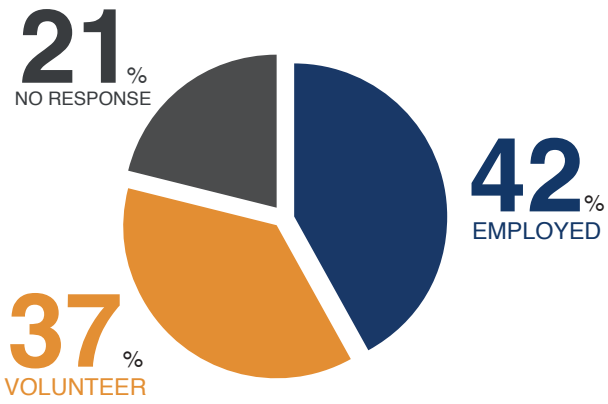
Evaluation findings are organized into three sections. The first section provides descriptive information for both CHWs and CBOs. This section is critical for understanding who are CHWs and whether they represent the populations impacted by chronic disease. The second section of the findings focus on answering evaluation questions related to CHWs specifically. The third section focuses on findings that answer evaluation questions related to CBOs or environment in which a CHW SME program can successfully be sustained. Each section is organized by evaluation question.

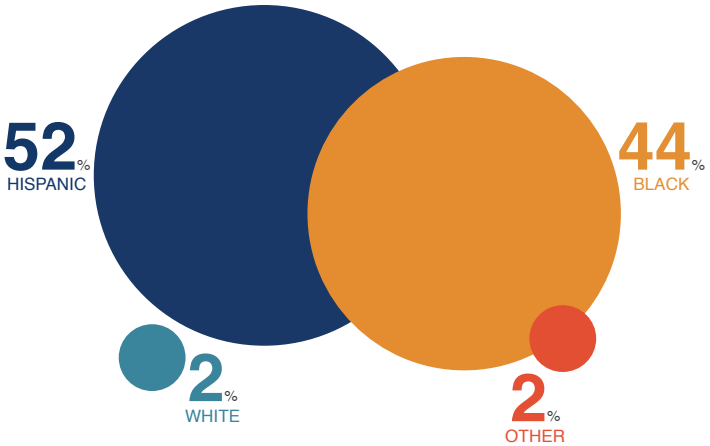
GENERAL DESCRIPTIVE FINDINGS

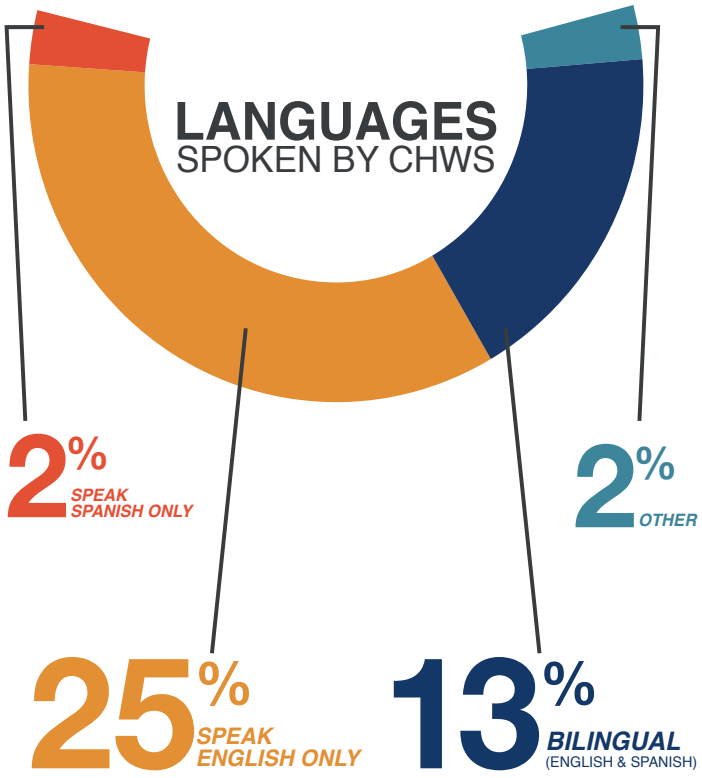
Literature reviews conducted in preparation for implementation of *Prevention EmpowerS ME* showed a lack of information on the CHW population in DC, the type of work that they do, the types of organizations that they work with, the skills that are required to be a CHW, the types of training they receive, or how programs using CHWs are funded. The following two sections provide descriptive information on Community Health Workers and the organizations they work with.

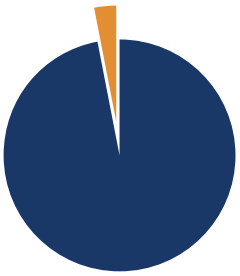
WHO ARE COMMUNITY HEALTH WORKERS?

This section provides a description of the population and background on CHW work in Washington, DC.

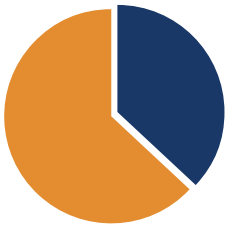






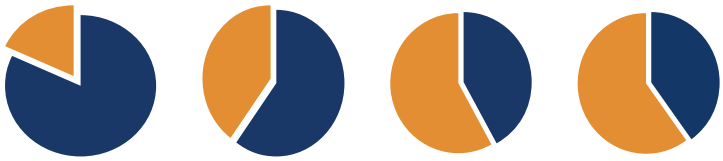


97% WOULD LIKE TO RECEIVE ADDITIONAL TRAINING



37% UDC CHW CERTIFICATION COURSE

CHWs SAID THEY WOULD LIKE TO RECIEVE ADDITIONAL TRAINING IN:



82% TRAINING IN **DIABETES**

60% TRAINING IN HEART DISEASE

42% TRAINING IN CEREBROVASCULAR DISEASE

40% TRAINING IN **ASTHMA**

In CHW follow-up interviews, CHWs were asked about the relevance of their jobs and whether or not they faced challenges in their work. Themes and quotes from their responses are below.

CHWs were shown to provide services in wards across DC, and were culturally representative of populations shown to be at risk for chronic disease in Washington, DC. Despite CHW race and ethnicity being reflective of populations they sought to serve, the vast majority of CHWs surveyed, and all of those interviewed, were women, showing a lack of gender diversity. Survey results showed that almost as many CHWs volunteered for positions as were currently in paid positions as CHWs, and some did both. This coincides with results from qualitative interviews, in which CHWs expressed commitment to the work that they do and to the people they serve. CHWs were also receptive to receiving training, which indicates opportunities for future investment.

BENEFIT OF CHWS TO THE TRADITIONAL HEALTH SYSTEM

"I think that we are definitely assets to the health field…I think that we've made a difference"

"Sometimes participants may have to wait…a month or two months to have an appointment"

"They tell me things that they probably don't tell their doctor or nurse"

"I think for the most part that they do welcome us when they realize what we do. I think the community does embrace us"

Participants noted the benefits of CHWs to clients and organizations, stating that CHWs are often more accessible than physicians, that clients are more open with them than other medical professionals, and engage with them on a more personal level, which can be helpful to the health professionals that CHWs engage with. Interview subjects mentioned that CHWs often handle situations attributed to outside social influences such as dealing with client families. CHWs also help clients to advocate for their own needs. One CHW recounted an instance in which they accompanied a client to their medical visit and encouraged the client to be more transparent with their physician about their condition.

Though all CHWs interviewed felt that their duties were distinct in comparison to those of case managers or patient navigators, interviewees mentioned that clearly defining their role within an organization can be challenging, especially when their role is not clearly communicated to others. When CHWs were asked if they felt appropriately compensated for their work, all replied yes. However, CHWs also noted that they often had a high volume of work and continued working outside of their allotted hours. Other challenges mentioned included having sufficient time and appropriate information to follow up with clients, and helping clients to understand how CHWs can be helpful to them.

"What I have found in my particular instance is that a lot of times people would rather talk to me than a case manager, and it becomes awkward because as a community health worker there are things that I can't do that a case manager can do"

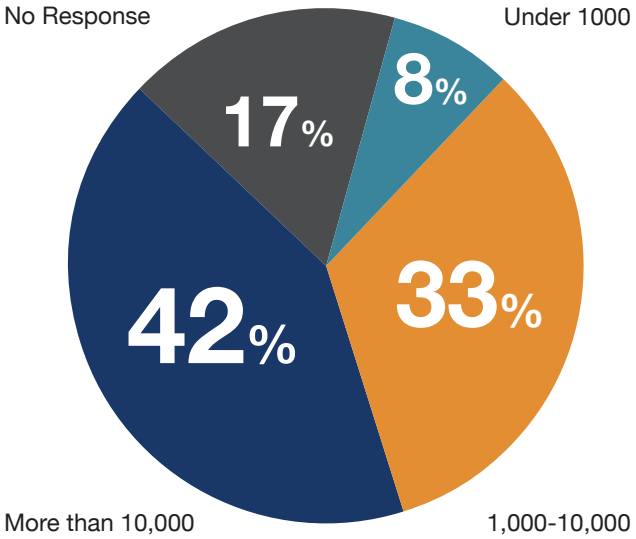
"I think the major challenge is communication, and I think with the CHW field being relatively new to a lot of people…I don't think sometimes they understand the concept and I'm not sure if they feel threatened or intimidated by the position as opposed to looking at it as someone else to help out"

"You have to find your position. I'm not a Case Manager, I'm not a Social Worker, but being a CHW puts us in that venue…as far as our clients because they have other life and social barriers and issues other than just their health…I can give them resource information to places but I can't do it for them, so that's been kind of hard"

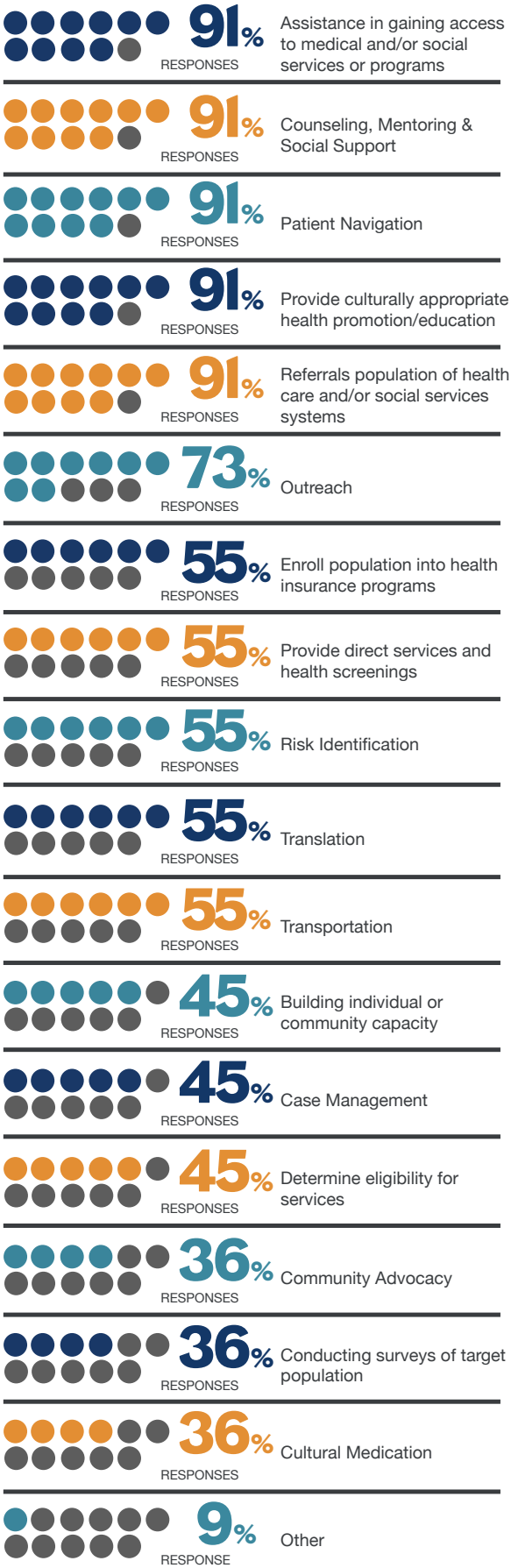
WHAT TYPES OF ORGANIZATIONS EMPLOY COMMUNITY HEALTH WORKERS?

This section describes the demographics of organizations that employ CHWs, the activities they utilize CHWs for, and how CHW training takes place within their organization:

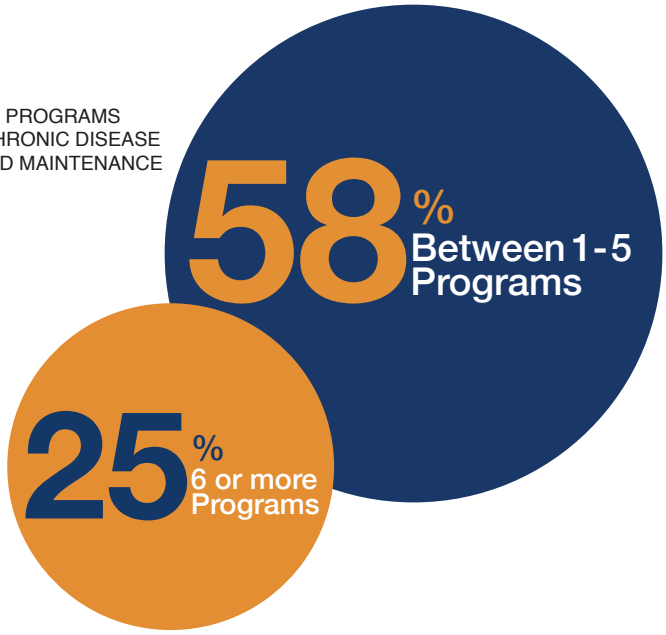
CLIENTS SERVED ANNUALLY



What tasks did organizations require their CHWs to perform?



NUMBER OF PROGRAMS ADDRESSING CHRONIC DISEASE PREVENTION AND MAINTENANCE



ORGANIZATIONAL TRAINING

Forty-four percent (44%) of organizations that participated in the gap analysis, and 64% of organizations that participated in the Community Health Worker Program Assessment, conducted trainings for their CHWs in-house. Trainings usually consisted of lectures by subject matter experts, dependent upon the needs of the organization. Trainings were provided for disease specific subjects as well as core CHW skills and competencies. Training sources are either created internally or gathered from external sources such as the Centers for Disease Control and Prevention (CDC), the American Academy of Family Physicians, and other community based organizations. Organizations who participated in the gap analysis that did not train CHWs cited that they had no capacity (i.e. funding, personnel, or other resources) to do so (56%).

Organizations were asked whether or not they had the ability to collect information on the effectiveness of their programs and their clients' health information.

- 89% of organizations collect information to assess their health and wellness programs
- 78% of organizations captured data on clients
- CHWs have access to client medical records at 44% of organizations

Of the organizations that did not currently use CHWs:

- 88% said that they would be interested in employing them in the future, and were interested in seeking funding options to support a CHW program.
- Only 29% of organizations interested in employing CHWs said they would be able to identify internal funding for their CHW programs
- 71% said they would be willing to engage in CHW programs without funding

The variety of tasks that CHWs are asked to perform indicates that organizations require CHWs to be flexible and utilize numerous skills in tandem. Based on this, training is an area in which organizations may welcome funding and growth to improve the capacity of their CHWs to serve clients. Findings from the gap analysis on the accessibility of data to evaluate program effectiveness and monitor client health suggest that participating sites have the capacity to successfully monitor their CHW programs and evaluate their effectiveness. Organizations that indicated through the Community Health Worker Program Assessment survey that they did not currently employ CHWs demonstrated that they saw value in adding CHW services to their organizations, as indicated by willingness to engage in CHW programming without funding.

COMMUNITY HEALTH WORKERS: IMPROVEMENT OF KNOWLEDGE

The evaluation asked, "Does the *Prevention EmpowerS ME* model increase CHWs' awareness of chronic disease SME?" In order to address this question, we examine the extent to which CHWs' knowledge and skills related to chronic disease self-management and prevention improved after training. The module pre- and post-tests were used to evaluate change in CHWs knowledge and skill level as a result of training.

MODULE	NUMBER OF TRAININGS
Module I - Wellness	12
Module II - Diabetes	10
Module III - Heart Disease & Stroke	6
Module IV - Asthma	6
Total number of trainings:	***34***

MODULE (# OF CHWS WHO ATTENDED TRAINING)	# OF CHWS WITH BOTH PRE & POST TEST SCORES	TOTAL POSSIBLE SCORE	AVERAGE PRE-TEST SCORE	AVERAGE POST-TEST SCORE	% OF CHWS WITH INCREASED SCORE
MODULE I – WELLNESS VERSION 1 (19)	19	7	6.2	6.9	32%
MODULE 2 – WELLNESS VERSION 2 (94)	64	22	11.2	14.0	75%
MODULE II – DIABETES (63)	63	11	7.2	7.3	30%
MODULE III – HEART DISEASE & STROKE (61)	59	8	6.9	6.9	24%
MODULE IV – ASTHMA (53)	53	21	15.4	16.1	58%

With the exception of the Heart Disease & Stroke module, the average post-test score was shown to be higher than the average pre-test score in all modules. At least 24% of CHWs had an improved score on the post-test of each training module. Version 2 of the Wellness module showed the highest increase in score between the pre- and post-test overall. For many CHWs, pre-test scores were already high, limiting the amount the scores could improve. Also, despite a low percentage of CHWs improving scores, the qualitative findings demonstrate that participants believed they gained knowledge from their participation. A more difficult pre- and post-test may be better to demonstrate knowledge gain. Several verbatim quotes are included below.

KNOWLEDGE AND SKILLS ATTAINED

"I thought cholesterol was cholesterol"

"I'm more knowledgeable about the different aspects of the human body…there's more to it than just taking your medicine everyday.

"It was easy to follow along with my participants"

Overall, results suggested that CHWs gained a deeper understanding of several of the topics covered during training, and had even used some of the training in their personal lives to take charge of their own health.

The evaluation asked, "Does the *Prevention EmpowerS ME* model enhance CHWs' capacity to train other CHWs and clients about chronic disease SME?" In order to address this question, we examine the extent to which CHWs' efficacy related to self-management prevention improved. Specifically, we asked:

1. How comfortable do you feel training other community health workers?
2. How comfortable do you feel sharing information from the training with your clients?

Although all CHWs felt that they had acquired a wealth of knowledge from attending the training sessions, none said that they would be immediately comfortable training peers. When asked if they would feel comfortable facilitating training of other CHWs if they had additional training or were aided by one of the *Prevention EmpowerS ME* facilitators, CHWs said they would feel more comfortable training peers under those circumstances.

The enhanced asthma evaluation was administered 14 people during Module IV training. Twelve individuals completed the baseline evaluation, and eight completed the follow-up evaluation. Of those who received the survey, 36% (5) completed both the baseline and post-training evaluation. Ninety-two percent of participants who had taken the baseline evaluation had not participated in asthma SME training prior to attending *Prevention EmpowerS ME*. In order to answer evaluation question 4a, participants were asked three questions to determine their knowledge of asthma SME, and their level of comfort providing information to clients and peers:

- How would you rate your ability to speak with a client about his/her asthma?
- How would you rate your ability to train a peer/fellow CHW in asthma self-management education?

Prior to receiving training, 25% rated their ability to speak to clients about their asthma as high/very high and 33% rated their ability to train a peer in asthma SME as high/very high. After training, 88% rated their ability to speak to a client about their asthma as high/very high, and 75% rated their ability to train a peer in asthma SME as high/very high. Among individuals who took both evaluations, 40% rated their current knowledge of asthma SME as being higher after the training than before; 60% rated their ability to speak to a client about their asthma as being higher after training than at baseline; and 40% rated their ability to train a peer in asthma SME as higher after training than at baseline. Additional results of the evaluation can be seen in the table below:

QUESTION	AGREE/STRONGLY AGREE (%)
The objectives for each topic of this training session were identified and followed	88
The content was organized and easy to follow	100
The content was relevant to my job and the services that I provide	100
The materials distributed were pertinent and useful	100
The trainer was knowledgeable	100
The quality of instruction was good	100
Class participation and interaction were encouraged	100
The trainer met the training objectives	100
Adequate time was provided for questions and discussion	100

CHW FEEDBACK ON TRAINING AND TRAINING MATERIALS

"…the trainers themselves spoke eloquently, you could understand what they were talking about. And as they were talking to us about it and training us they were talking with us…they gave us the chance to interact with that and ask questions"

The interview participants enjoyed the interactive nature of the training, and were appreciative of the opportunity to engage, not only with the trainers, but also with one another. CHWs helped one another to retain information by filling in information that others may have missed during the training.

"It was very visual and they were able to really…identify their issues of concern in terms of the chronic illnesses"	"Excellent material"	"It was easy to follow along with my participants"
"You're able to really engage the participant from that material"	"Somebody really went beyond the call of duty as far as making it very, very simple… easy to use and to follow"	"Its [sic] something that everybody can connect with and I like that"

CHWs found the training materials engaging, easy to use, and visually pleasing to look at. Several mentioned that they had shared the training materials not only with their clients, but with their peers as well. CHWs also liked that the materials were culturally competent and relatable for the different types of clients that they may engage with.

SUGGESTIONS FOR FUTURE *PREVENTION EMPOWERS ME* TRAININGS

Overall, the participants of *Prevention EmpowerS ME* gained valuable knowledge of chronic disease self-management. CHWs interviewed indicated that they would benefit from more frequent trainings that were longer in length, additional training materials, and occasional refresher courses in order to maintain the information they learned.

COMMUNITY BASED ORGANIZATIONS: CONDITIONS REQUIRED FOR SCALE UP

The evaluation asked, "What conditions are required for the sustainability of CHW work in organizations across Washington DC?" In order to address this question, we asked organizations participating in the gap analysis what would be necessary to create a sustainable system in which community organizations utilize CHWs to work with more traditional sites to extend care to people in the community.

"*Resources for CHW programs*" was cited most often as a need for sustainability. The ability to monitor and training CHW programs was also discussed, as CHWs must be well trained to provide accurate information, specifically information that can be used to evaluate their effectiveness in communities and help others to understand the value of community health work. Currently, no universal standards exist for community health work. Creating standards and sharing best practices among the CHW community was discussed as a method of legitimizing community health work. The creation of standards focus on demonstrating and measuring how CHWs improve health outcomes is a recommendation that can facilitate the concept of Medicaid reimbursement for CHW activities, a potential avenue for acquiring resources to sustain and scale up the CHW programs locally and nationally.

A reoccurring there is organizations desire for greater incentives for CHWs in order to provide trainings on routinely. Accessibility of training was also a theme. Daytime trainings impacted CHWs ability to attend trainings. Online webinars may provide CHWs with greater access to trainings on a more flexible schedule.

Organizations discussed the need for technical assistance to identify best practices and opportunities for funding, and promote awareness of the role of CHWs in the workplace to other staff members. Finally, organizations indicated that in order to promote and sustain community health work, it is necessary to show others the utility of CHW model; specifically, determining whether or not CHWs are able to successfully assist clients in avoiding negative health outcomes.

V. Limitations

The initial release of the Community Health Worker Survey yielded few responses. In order to improve the response rate, the project team developed a plan that included re-sending the survey through the CHW Professional Association at regular intervals, and following up with individuals who had partially completed surveys. Due to the low response rate of the survey the evaluation team was unable to determine the number of CHWs working in Wards 1, 4, 5, 7 & 8. The Community Organization Scan received a similarly low response rate. Reaching out to representatives at specific organizations and re-releasing the survey along with an infographic describing the findings of the Community Health Worker Survey increased participation; however, at the end of the survey's distribution, only 42% of the 55 invited participants had responded.

VI. Conclusions

Prevention EmpowerS ME was able to meet, and in some cases exceed, its program goals. CHWs who participated in trainings showed an increase in knowledge attained, and indicated feeling well prepared to discuss what they had learned with clients. Though CHWs did not indicate feeling fully prepared to train other CHWs, additional training or technical assistance from *Prevention EmpowerS ME* facilitators would likely improve the ability of CHWs to attain this goal. Organizations indicated that funding, though a primary barrier to sustainability of community health work was not the only requirement for creating a sustainable system. Technical assistance, increased awareness of CHW work amongst their peers, training, consistent standards and the ability to show the benefits of community health work are all necessary in order to successfully maintain CHW programs. The *Prevention EmpowerS ME* training curricula were highly praised by CHWs, and should be evaluated further in order to identify the program and curricula as a promising practice.

VII. Recommendations

OBSERVATION	CHALLENGE	RECOMMENDATION
Though they had previously been engaged, many of the representatives interviewed in the gap analysis were unclear on the specifics of the program.	Participating sites were unclear of the reporting chain of command/ who they should speak to about problems that arise.	For future programming and training, additional materials may be necessary in order to communicate to leaders and employees within partner organizations what the purpose, goal and procedure for training will be.
Site representatives expressed concerned about the "train-the-trainer" part of the MOU.	Sites were unsure of who they could reach out to provide SME training. There appears to be a misunderstanding in the way this deliverable was communicated to sites.	In order to facilitate and help sustain future SME trainings at partner sites, DCPCA may need to provide technical assistance.
While being interviewed for the gap analysis, some representatives indicated that seeing the exact materials that would be presented to their staff would have been useful.	Due to the limited funding DCPCA also had limited internal personnel to conduct all of the program activities, resulting in delayed timelines and negatively impacting relationships with partners. Specifically, the production of in-house materials and the purchase of external materials were delayed, causing some partners to cite a lack of materials as a reason for their inability to continue working with the program.	As several organizations requested that they be able to view the training materials in advance, future trainings should ideally provide potential partner organizations with training materials in advance so that they may be approved beforehand. This may improve retention of partner organizations in the future.
No names were used and no unique identifiers were assigned to CHWs who attended trainings. Unique IDs were provided only for CHW pre- and post-tests to link them for comparison, but allow the test taker to remain anonymous.	Without names or identifiers it is not possible to determine the total number of CHWs who received training from *Prevention EmpowerS ME*.	Providing a CHW sign-in sheet at future trainings would provide facilitators with an accurate count of program participants, and allow pre- and post-test results to remain anonymous,
Despite feedback received from CHWs on the knowledge attained during the training sessions, there was little difference in scores between the pre- and post-tests for all of the modules.	The discrepancy between CHW experience and test results suggests that the tests themselves may not have been effective at measuring the knowledge attained during training.	For future implementation, pre- and post- tests with a higher degree of difficulty may be required to accurately measure an increase in knowledge.
The program staff at DCPCA has invested considerable time and effort into creating Wellness and Asthma curricula that were used in this training. Both the trainings and training materials have received positive feedback from CHWs.	There is currently not enough information on the implementation and impact of these curricula to identify the training as a promising practice.	Continued evaluation of the curricula over the next few years will be necessary to identify the training as a promising practice.

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