

### **Authors' Biographies**

<u>Howard J. Eng, MS, DrPH, RPh</u> is an Assistant Professor in the Division of Community, Environment and Policy and Director of the Southwest Border Rural Health Research Center, Center for Rural Heath in the Mel and Enid Zuckerman College of Public Health, University of Arizona. He has more than 35 years of experience in health care. He has been a faculty member in the Colleges of Pharmacy, Medicine, and Public Health. Dr. Eng's training and expertise includes health services and policy research, health economics, epidemiology, public health, border health, rural health, and pharmacy. He has more than 18 years of experience working along U.S.-Mexico Border on various projects that have increased access to health services by border populations.

<u>Ana Celia Hernandez Martinez, MD, MPH, CHES</u> is a Doctoral Student Research Assistant in the Southwest Border Rural Health Research Center, Center for Rural Health in the Mel and Enid Zuckerman College of Public Health, University of Arizona. Dr. Hernandez Martinez is a bilingual and bicultural physician with more than 10 years of experience in community-based clinical practice and public health. She has developed several chronic disease prevention programs including asthma, diabetes, gestational diabetes and hypertension targeting low-income, underserved communities in the California and Arizona Border Region.

Jasmen Dorian, MSE, MHA is a Doctoral Student Research Assistant in the Southwest Border Rural Health Research Center, Center for Rural Heath in the Mel and Enid Zuckerman College of Public Health, University of Arizona. Ms. Dorian has 3 years of experience in health services delivery projects. Her areas of focus have been patient satisfaction, decision optimization in patient financial services, use of information systems in evidence-based medicine, and electronic health record clinical workflow analysis. Ms. Dorian's training and expertise include health services and policy research, health informatics, public health, electrical and biomedical engineering, engineering management and operations research.

The Southwest Border Rural Health Research Center (SBRHRC) was one of the members of a network of rural health policy research centers originally funded by the Federal Office of Rural Health Policy in 1988. The Center has received project funding from federal agencies, private foundations, and the State of Arizona. Its mission is to conduct policy-relevant research which addresses health issues that affect rural, and the Southwestern United States, and the U.S.-Mexico border region, and the nation; to disseminate research results to influence health policy; to carry out program evaluations which focus on the same issues; to provide learning opportunities for university students to develop their skills and expertise in research and evaluation, and to provide technical assistance in these two areas to rural communities, and state agencies and organizations; and to collaborate with institutions and communities throughout the Southwestern United States and Mexico.

### **Executive Summary**

Community Health Workers (CHW) are used throughout the world to promote good health, provide health education, assist in the prevention of disease, and provide basic health and medical care in their communities. CHWs serve the role of front line public health workers in the U.S.-Mexico border region. In the border region, these workers are commonly known as promotoras/promotores de salud (health promoters/promoters) in communities, except on Indian reservations where they are referred to as community health representatives (CHRs).

The purpose of this assessment study was to identify the training needs of CHWs to help design effective training programs in the U.S.-Mexico border region. It is hoped that improving the effectiveness of those programs could lead to better health outcomes for the populations served by CHWs.

The assessment used a cross-sectional study design to examine the four U.S. Border States community health worker training needs. The assessment used *SurveyMonkey* as the data collection instrument. Thirty-one CHW employers, located in the four U.S. Border States, participated in the assessment. The study is comprised of three components: (1) literature review that identified the CHW roles and some of trainings that that has been implemented in the border region, (2) CHW employers' identification in the four Border States, and (3) collection of data from CHW employers and reporting of results.

The assessment identified two categories of organizational need that could be addressed using the CHW workforce: outreach and health education. It also identified the federal government as the primary source of funding for the CHW programs. Different roles were performed by paid community health workers compared with volunteer community health workers, reported by employers. As expected, CHW employers sought out individuals who were knowledgeable about their communities. Similar top minimum skill areas were sought by employers for both paid and volunteer CHWs; however, the desired skills and traits were different for paid and volunteer CHWs. The top 3 greatest training needs reported were: language skills, computer training, and advocacy. Employers utilized various methods to train their CHWs.

Based on the analysis of the survey data, the following recommendations are made to set the future direction of research and action: (1) conduct a study to assess how well the CHW training programs are meeting the needs of the U.S. –Mexico border region in terms of their effectiveness in improving the health outcomes of the border populations, and (2) establish a border resource-training clearing house that will assist employers in identifying effective CHW training programs.

### Acknowledgements

The authors would like to thank the Federal Office of Rural Health Policy for funding the study; Sharon Van Skiver for her assistance in editing and formatting the report; the four U.S.-Mexico Border Health Offices, Innovative Consultants International, Inc., and Regional Center for Border Health for their assistance in identifying potential CHW employers; and the employers who participated in the study.

Author's Biographies	i
Executive Summary	ii
Table of Contents	iii
List of Tables	iv
List of Figures	V
Introduction	1
CHW Historical Development CHW Roles in the U.S. Health Care System	2
National Training CHW Training Studies	
Methodology	0
Results	7
Respondents CHW Employers CHW Functions, Knowledge, Skills, and Traits CHW Trainings	7 9
Conclusions/Recommendations	15
References	16
Appendix	25
A. SurveyMonkey Questionnaire	

### **Table of Contents**

### List of Tables

Table	1	Summary of CHW Training and Certification
		Programs in the Four Border States: 2005
Table	2	Respondents' Type of Organization
Table	3	Organizational Needs Satisfied by the CHW's Role
Table	4	Job Function Comparisons of Paid or Volunteer Community Health Workers Reported by Employers9
Table	5	Knowledge Base Sought by Employers for Paid or Volunteer Community Health Workers10
Table	6	Knowledge Base Sought by Employers for Paid or Volunteer CHWs that Are Easily Found at Hire or Can be Developed through Trainings
Table	7	Minimum Skills and Desired Skills that Employers Are Seeking in Paid or Volunteer Community Health Workers at Time of Hire
Table	8	Traits that Employers Are Looking for in Paid or Volunteer Community Health Workers at Time of Hire12
Table	9	Areas of Training Provided to Paid or Volunteer Community Health Workers
Table	10	Internal Training Provided to Paid or Volunteer Community Health Workers
Table	11	External Training Provided to Paid or Volunteer Community Health Workers
Table	12	Greatest Training Needs Reported by CHW Employers14

### List of Figures

Figure	1	Study Methodology	б
Figure	2	Respondents' Positions in their Organizations	7
Figure	3	Primary Funding Sources for CHW Programs	8

### Introduction

Community Health Workers (CHW) have been used throughout the world to promote good health, provide health education, assist in the prevention of disease, and provide basic health and medical care in their communities. In the United States, CHWs are sometimes referred to, but not limit to, as community health advisors, *promotoras/promotores de salud* (health promoter/promoters) community health representatives (CHRs), outreach workers, lay health advocates, peer health promoters, peer health educators, patient navigators, navigator promotoras (*navegadores para pacientes*), community health aides, and lay health workers.<sup>1-3</sup> The American Public Health Association (APHA) and Centers for Disease Control and Prevention (CDC) have formally recognized CHWs as frontline public health workers. They help individuals and groups in their own community access health and social services and educate community members about various health issues.<sup>1-3</sup> In 2005, there were more than 120,000 CHWs working in neighborhoods, homes, schools, work sites, faith- and community-based organizations, community health centers, health departments, clinics, and hospitals.<sup>1</sup>

The purpose of this assessment study was to identify the training needs of CHWs to help design effective training programs in the U.S.-Mexico border region. It is hoped that improving the effectiveness of those programs could lead to better health outcomes for the populations served by CHWs.

<u>CHW Historical Development</u>: The first volunteer and paid CHW programs emerged in 1950s.<sup>4</sup> The Indian Health Service was the first federal government agency to employ and utilize CHWs as community health representatives in1968.<sup>5</sup> The Health Resources and Services Administration (HRSA) 2007 Community Health Worker National Workforce Study Report describes the development of the U.S. CHW workforce in four distinct time periods (phases):<sup>1</sup>

- Early documentation of the use of CHWs (1966-1972).
- Utilization of CHWs in special projects, funded by short-term public and private grants (1973-1989).
- State and federal initiatives relating to CHW programs (1990-1998).
- Public policy actions that included the passage of several state legislations addressing CHWs, their use and certifications, the passage of the first major federal CHW legislation (a Patient Navigator bill) in 2005, and the 2003 Institute of Medicine report on reducing health disparities which made recommendations regarding the CHW roles (1999-2006).

Starting in 2007, the CHW workforce development has entered into its fifth phase: the formal recognition of the CHW as a frontline public health worker. Indicators of formal recognition of CHWs as health workers include: federal funded health programs that included CHW services; reimbursement of services provided by CHWs; inclusion in the Department of Labor Standard Occupational Classification; and formation of national and regional associations.

*Federal Health Agencies*: Several government health agencies have acknowledged the CHW contributions to the improvement of the nation's health and/or included them in their funded health

programs. These agencies include: Health Resources and Services Administration (HRSA), Centers for Disease Control and Prevention (CDC), Office of Minority Health (OMH), and Agency for Healthcare Research and Quality (AHRQ). The areas of funding have included health programs utilizing CHWs or studies relating to CHW programs. Examples of funding include:

- HRSA has funded CHW projects (e.g., *Border Vision Frontereza*) and National CHW studies (e.g., 2005 Community Health Worker (CHW) Certification and Training: A National Survey of Regionally and State-Based Programs Study and 2007 Community Health Worker National Workforce Study).<sup>1,6</sup>
- Many of the CDC health initiatives have community health workers (e.g., Health Disease and Stroke Prevention (HDSP) programs, Diabetes Prevention and Control Programs (DPCP), National Breast and Cervical Cancer Early Detection Program (NBCCEDP), and REACH U.S.).<sup>3</sup>
- OMH's *Promotores de Salud Initative* carries out the Health and Human Services (HHS) 2011 Action Plan to reduce racial and ethnic health disparities. The program includes establishment of a National Steering Committee for *Promotores*; developing a national training curriculum and uniform national recognition for them; creating a national database system to facilitate recruitment and track training of *Promotores*; and supporting and linking *Promotores*' networks across the Nation.<sup>7</sup>
- AHRQ has funded the 2009 Outcomes of Community Health Worker Intervention Assessment.<sup>8</sup>

*Reimbursement for CHW Services*: One of the major challenges for CHWs is the establishment of sustainable funding sources for reimbursement of their services. Most CHW programs' support come from short-term and grants funding (e.g., federal, state and local government, and private and nonprofit organizations). As a result of unstable funding, paid employment opportunities for CHW have been limited. As of July 1, 2007, the Provider Taxonomy of the National Uniform Claims Committee has a provider code for CHWs, which can be used in fee-for-service claim systems;<sup>9</sup> unfortunately, many third party payers have been unwilling to pay for CHW services. Minnesota and Alabama are the only states that allow the billing of Medicaid for CHW services.<sup>3</sup>

*CHW Occupation Recognition*: In the January 21, 2009 *Federal Register*, the Office of Management and Budget officially published 2010 Standard Occupational Classifications (SOC) that included Community Health Workers (SOC 21-1094).<sup>10</sup>

*CHW Associations*: There are four national CHW associations: American Association of Community Health Workers, American Public Health Association CHW Section, National Association of Community Health Representatives, and National Hispanic CHW Association.<sup>3</sup> Seventeen states have CHW associations (Arizona, California, Florida, Georgia, Illinois, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New Mexico, New York, Ohio, Oregon, Rhode Island, Texas, and Washington State).<sup>3</sup>

<u>CHW Roles in the U.S. Health Care System</u>: The HRSA 2007 Community Health Worker National Workforce Study Report defines community health workers as: <sup>1</sup>

"Community health workers are lay members of communities who work either for pay or as volunteers in association with the local health care system in both urban and rural environments and usually share ethnicity, language, socioeconomic status and life experiences with the community members they serve.

They have been identified by many titles such as community health advisors, lay health advocates, "promotores(as)," outreach educators, community health representatives, peer health promoters, and peer health educators.

CHWs offer interpretation and translation services, provide culturally appropriate health education and information, assist people in receiving the care they need, give informal counseling and guidance on health behaviors, advocate for individual and community health needs, and provide some direct services such as first aid and blood pressure screening."

The study divides the CHW roles into five categories:<sup>1</sup>

- 1. Member of care delivery team
- 2. Navigator
- 3. Screening and health education provider
- 4. Outreach/enrolling/informing agent
- 5. Organizer

In the four U.S.-Mexico Border states, the *promotores de salud*/community health workers perform similar roles. They serve as community organizer/mobilizer;<sup>11-15</sup> health service navigator;<sup>16-18</sup> health education and screening provider;<sup>19-24</sup> while targeting specific health areas such as cardiovascular diseases,<sup>19-32</sup> diabetes,<sup>33-47</sup> asthma,<sup>48</sup> child and maternal health,<sup>49-53</sup> cancer,<sup>54-62</sup> infectious diseases,<sup>63-64</sup> and environmental health.<sup>65-66</sup>

In 2010, the four U.S. Border States were among the top six states with the largest numbers of American Indian people. The Indian Health Service (IHS) has utilized community health representatives (CHR)/community health workers since 1968. IHS describes the CHR's roles as follows:<sup>5</sup>

- "Visiting clients in the home and referring people in need of care to the proper facilities.
- Explaining the available health programs, the health policies and procedures that the community members must abide by when seeking health care.
- Organize community health promotion and disease prevention events and facilities the learning.
- Educate people of the health hazards of behaviors.
- Offer transportation to health promotion facilities for those in need.
- Enter diagnostic patient specific data into official patient medical record through the use of the CHR component of the RPMS (Resource and Patient Management System).
- Arrange for police/ambulance transport in accident or emergency situations."

The CHRs receive formal training and are certified. In the literature, the CHRs are also been referred to as health aides, community health aides, outreach workers, peer counselors, indigenous lay health workers, lay health advisors, and native peer facilitators.<sup>67-82</sup>

The 2010 Patient Protection and Affordable Care Act (PPACA) included community health workers in several sections, including the classification of CHWs as "health professionals" and as part of the "health care workforce."<sup>83</sup> In the Act, community health workers are defined using the Department of Labor Standard Occupational Classification (21-1094).<sup>3</sup> The PPACA provides grants, to public or nonprofit private entities, to promote positive health behaviors and outcomes for populations in medically underserved communities, through the use of community health workers.<sup>3</sup>

<u>National CHW Training Studies</u>: Four national CHW training studies were examined: the National Community Health Advisory Study (NCHAS, 1998), the Community Health Worker (CHW) Certification and Training: A National Survey of Regionally and State-Based Programs (CHW-CT, 2005), the Community Health Worker National Workforce Study (CHW-NWS, 2007), and National Community Health Worker Advocacy Survey (NCHWAS, 2010).

The NCHAS study, funded by the Annie E. Casey Foundation was conducted by the University of Arizona's Rural Health Office during 1995 to 1997.<sup>84</sup> The study focused on four areas of CHW policy and practice: core roles and competencies, evaluation of CHW programs, career and field development issues, and CHW's role in changing health care system. Surveys were sent to CHW supervisors and CHWs; respondents came from 29 states and the Distinct of Columbia. The NCHAS reported that the most common training modality indicated by the respondents was "on the job" (83%), followed by "experience on the job" (79%), and "school-based training" (21%).<sup>84</sup>

The CHW-CT examined the professional development in selected CHW training and certification programs in the United States. The study was conducted by the School of Rural Public Health, Texas A&M University Health Science Center and was funded by Health Resource and Services Administration. The study was national survey of CHW training and certification programs that included: public health officials, healthcare associations, CHW networks, community colleges, and service providers of 19 states. Table 1 summarizes the findings of the four Border States.

The CHW-NWS was conducted by the Regional Center for Health Workforce Studies of the University of Texas Health Science Center, funded by Health Resource and Services Administration during 2004 to 2007.<sup>1</sup> The study examined the CHW workforce development, workforce estimates, education and trainings, employers, research and evaluations, and current trends. A comprehensive literature review, survey of CHW employers in all 50 states, in-depth interviews of CHWs and employers in four states were conducted. The NCH-NWS reported that most employers required post-hire training of CHWs through either continuing education (68%) with classroom instruction (32%) or through mentoring (47%) and on-site technical assistance (43%).<sup>1</sup>

State	Agencies Providing Training	Training Emphases	State Leg.	CHW Certification	Starting Year
Arizona	Four community colleges throughout the state and some AHEC centers	Health education and out- reach; core competencies	No	Possibility in the future	1999
California-Southern (San Diego)	Local agencies, mental health services, environmental agencies and nutrition experts	Health outreach, community development and mental health	No	Possibility in the future	1997
California-Bay Area	San Francisco Community College, and Blue Cross & Blue Shield; program provides training for other agencies	Social determinants of health, health education and outreach	No	No	1992
New Mexico	Through New Mexico Department of Health agencies: AHEC	Health education and out- reach	No	Moving towards certification	1991
Texas	Certified training centers including community colleges	Health education and out- reach; core competencies	Yes	Yes	1999

 Table 1.
 Summary of CHW Training and Certification Programs in the Four Border States: 2005

Source: Community Health Worker (CHW) Certification and Training: A National Survey of Regionally and State-Based Programs

The University of Arizona's Centers for Disease Control and Prevention-funded Prevention Research Center conducted the NCHWAS. The focus of the study was to describe the CHW workforce. Twenty-one states and the District of Columbia participated in the survey. The NCHWAS reported that most common training experiences were "on the job" (80%), CHW certificate programs (60%), shadowing (36%), and a college class (28%).<sup>84</sup>

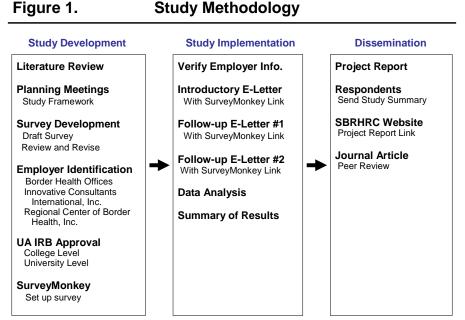
As reported in the literature, there are many different methods used by employers to train CWHs. Some of these include: one-on-one training, mentoring, in-service training, ad hoc training sessions by staff, training manuals, web-based training and tutorials, third-party workshops, certified CHW, third-party training programs, and CHW conferences.<sup>85-97</sup> O'Brien and associates found a wide variations in the length of CHW training, ranging from 5 hours to 6 months, depending on the complexity and extent of the CHW role.<sup>97</sup>

There is no single depository of CHW information available. There are many resources available to support CHW programs in the U.S.-Mexico border region. The CDC has several CHW training manuals such as *Community Health Worker's Heart Disease and Stroke Prevention Sourcebook:* A Training Manual for Preventing Health Disease and Stroke, Your Heart, Your Life: A Lay Health Educator's Manual for the Hispanic Community, The Road to Health Toolkit, and Handbook for Enhancing Community Health Worker Programs: Guidance for the National Breast and Cervical Cancer Early Detection Program Part I.<sup>3</sup> Harris County Hospital District offers the Texas Department of State Health Services (DSHS) Community Health Worker Training and Certification Program.<sup>98</sup> The Indian Health Service has yearly trainings for its community health representatives.<sup>5</sup> HRSA Federal Office of Rural Health Policy has developed a Community Health Worker Evidence-Based Model Toolbox for CHW programs.<sup>99</sup> Annie E. Casey had funded the development of the Community Health Worker Evaluation Tool Kit.<sup>100</sup>

### Methodology

The assessment used a cross-sectional study design to examine the four U.S. Border States community health worker (CHW) training needs. One hundred and seventy-nine potential employers of community health workers were identified (California = 86, Arizona = 46, New Mexico = 13, and Texas = 34) by the four U.S.-Mexico Border Health Offices, Innovative Consultants International, Inc., and Regional Center for Border Health, Inc. Each employer were contacted to confirm that they used community health workers and to identify who should received the assessment survey. As result, 78 employers were identified and sent an assessment invitation. Employers represented: educational institutions, health facilities, health departments, social service agencies, advocacy organizations, Indian Health Service facilities, and others.

The assessment used *SurveyMonkey* as the data collection instrument. The information collected included: respondent and the CHW employer demographic information; CHW job functions; CHW desirable knowledge level sought by employers; CHW minimum and desired skills sought by employers; CHW training areas provided by employers; CHW internal and external training methods used by employers; CHW traits sought by employers; and greatest CHW training needs identified by employers. Majority of the questions used in the survey came from the HRSA 2007 Community Health Worker National Workforce Study Report and CDC Community Health Worker Program materials. The research team, Innovative Consultants International, Inc., and Federal Office of Rural Health Policy provided the additional questions. In addition to the initial survey emailing, there were two email follow-ups used to increase the respond rate. The assessment had received University of Arizona IRB approval. Figure 1 summarizes the research methodology used.



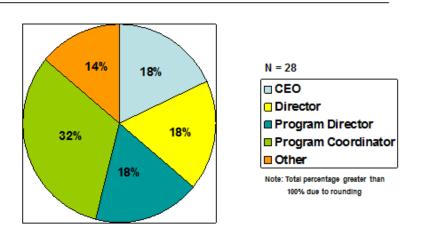
### Study Methodology

### Results

Of the 78 CHW employers who were sent assessment invitations, 6 emails were returned. Of the 72 who received the assessment invitation, 31 responded to the invitation (43.1 percent response rate. This section is divided into four segments.

<u>Respondents</u>: One third of the organization respondents were program coordinators. Figure 2 summarizes the respondents' current positions in their CHW organizations.





Fifty-seven percent of the respondents reported that they have worked ten year or less in their organization (fewer than 5 years -25% and 5 to 10 years -32%).

Eighty-two percent (82.1%) of the respondents work directly with community health workers. Of these, 60 percent of the respondents reported that they had worked directly with community health workers for ten year or less in their organization (fewer than 5 years -24% and 5 to 10 years -36%).

Only 14.3 percent (4) of the respondents indicated they worked as a community health worker in the past. Of these, two worked for 8 years, one worked for 5 years, and one worked for 1 year.

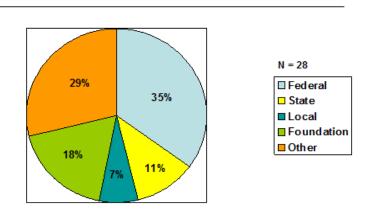
<u>CHW Employers</u>: Most of the reported CHW employers were non-profit (96.3%). More than third of the organizations were health facilities. Table 2 summarizes the types of employers of community health workers.

Of the 27 responded to the question: "Have you had your CHW program for more than one year?" one indicated that its CHW program was in operation for less than a year. The other CHW programs had operated: 5 for 1 to 5 years (19.2%), 11 for 5 to 10 years (42.3%), and 10 for more than 10 years (38.5%).

Table 2. Respondents' Types of Organization

Position N=27	Percent
Educational Institution (e.g., high school, college, and university)	21.4%
Health Facility (e.g., physician office, outpatient departments, community	35.7%
centers, medical clinics, and IHS facility).	
Health Department (e.g., local, state, and federal)	17.9%
Social Service Agency (e.g., family services, children services, and adult services)	3.6%
Advocacy Organization (e.g., government, local, state, federal)	3.6%
Other	17.9%

The primary reported source of funding for CHW programs was the federal government (35.7%) and followed by Foundations (17.9%). There was no funding from international sources. Figure 3 summarizes the primary funding source for CHW programs.



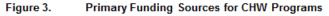


Table 3 summarizes the reported organizational needs satisfied by the community health worker role. The top two reported were: outreach and health education.

### Table 3. Organizational Needs Satisfied by the CHW's Role

Outreach (12); health education (8); health promotion (2); referrals (2); clinical/medical assistant (2); advocacy (2); community assessment (2); disease management; enrollments; access to health care/services; intervention; program management; take information to the community; and community training.

(#) = number of respondents who indicated the organizational need satisfied by the CHW's role

<u>CHW Functions, Knowledge, Skills, and Traits</u>: Tables 4 and 8 summarize the CHW functions, knowledge, skills, and traits that employers were seeking.

There were different functions performed by paid community health workers and volunteer community health workers, reported by employers. The top 5 functions performed by paid CHW were related to the delivery of health services. These included: (1) determine eligibility for services, (2) counseling, (3) provide health screenings, (4) enroll population into health insurance programs, and (5) assistance in gaining access to medical services or programs. While, the top 5 functions performed by volunteer CHW were related to building individual and community capacity, and the referral to health and social services. The volunteer CHWs' top 5 functions reported were: (1) community advocacy, (2) refer population to social services system, (3) building individual capacity, (4) refer population to health care system, and (5) building community capacity. Table 4 compares the functions performed by paid and volunteer CHWs.

Reported Functions N=26	Paid CHW	Vol. CHW
Assistance in gaining access to medical services or programs	92.0%	28.0%
Assistance in gaining access to social services or programs	80.0%	36.0%
Building community capacity	86.4%	36.4%
Building individual capacity	91.3%	39.1%
Case management	90.0%	15.0%
Community advocacy	78.3%	43.5%
Counseling	100.0%	23.1%
Cultural mediation	83.3%	33.3%
Interpretation	90.9%	18.2%
Mentoring	87.5%	31.3%
Patient navigation	90.5%	23.8%
Provide culturally appropriate health promotion/education	88.0%	36.0%
Provide direct services	95.2%	19.0%
Risk identification	89.5%	31.6%
Social support	90.9%	31.8%
Translation	91.7%	16.7%
Transportation	86.7%	33.3%
Conducting surveys of target population	89.5%	31.6%
Enroll population into health insurance programs	100.0%	23.5%
Determine eligibility for services	100.0%	22.2%
Provide health screenings	100.0%	15.0%
Refer population to health care system	87.5%	37.5%
Refer population to social services system	86.4%	40.9%

Table 4.Job Function Comparisons of Paid or Volunteer Community Health<br/>Workers Reported by Employers

Employers were seeking different primary knowledge areas for paid and volunteer CHWs. The top 5 knowledge areas sought by employers for paid CHWs were related to health, health services, and CHW roles and functions: (1) general health, (2) health care system, (3) Medicaid, Medicare, and

State Children Health Insurance Program, (4) health insurance coverage, and (5) CHW roles and functions. The primary knowledge areas sought for volunteer CHWs were related to their communities: (1) main access barriers as perceived by the community, (2) pressing issues as felt by the community, (3) history of the community, (4) traditional beliefs and healing practices used in the community, and (5) health insurance coverage. Table 5 compares the paid and volunteer CHWs' knowledge areas sought by employers.

Table 5.	Knowledge Base Sought by Employers for Paid or Volunteer
	Community Health Workers

Knowledge N=26	Paid CHW	Vol.CHW
CHW roles and functions	91.7%	25.0%
General health	100.0%	18.2%
Health care system	93.3%	33.3%
Health insurance coverage	92.3%	38.5%
Medicaid, Medicare, SCHIP	92.9%	28.6%
Specific diseases/health issues	89.5%	31.6%
History of the community	86.4%	40.9%
Pressing issues as felt by the community	85.7%	42.9%
Main access barriers as perceived by the community	85.0%	45.0%
Traditional beliefs and healing practices used in the community	83.3%	38.9%
Factors that prevent or promote community members to seek care	90.9%	36.4%
Levels of formal education in the community	87.5%	37.5%
Other organizations working in the community	90.5%	33.3%
Ability to work at community empowerment and mobilization	86.4%	36.4%

The knowledge base sought by employers for both paid and volunteer CHWs that were easily found at hire was related to their community (see Table 6). Employers reported that knowledge related to health and health services could be developed through trainings.

The top minimum skill sought by employers for both paid and volunteer CHWs was interpersonal skills that include – friendliness, sociability, counseling and relationship building skills, ability to provide support and set appropriate boundaries (see Table 7). Five of the top 6 minimum skill areas sought by employers for paid CHWs were the same for volunteer CHWs: interpersonal skills, confidentiality skills, communication skills, service coordination skills, and capacity building skills. Although the top minimum skills were similar for paid and volunteer CHWs, *desired skills* were different. The top 5 *desired skill areas* sought by employers for paid CHWs were: (1) bilingual skills, (2) organizational skills, (3) interpersonal skills, (4) communication skills, and (5) confidentiality skills; while, for volunteer CHWs' desired skills were: (1) organizational skills, (2) computer skills, (3) teaching skills, (4) capacity building skills, and (5) service coordination skills. Table 7 compares the minimum and *desired* skills that employers were seeking in CHWs at time of hire.

Table 6.Knowledge Base Sought by Employers for Paid or Volunteer CHWs<br/>that Are Easily Found at Hire or Can be Developed through Trainings

		Paid CHWs		Volunteer CHWs	
Knowledge N=26	At Hire	Training	At Hire	Training	
CHW roles and functions	48.0%	68.0%	28.0%	40.0%	
General health	41.7%	75.0%	16.7%	37.5%	
Health care system	36.4%	77.3%	9.1%	45.5%	
Health insurance coverage	25.0%	80.0%	10.0%	45.0%	
Medicaid, Medicare, SCHIP	26.3%	84.2%	5.3%	36.8%	
Social service system	45.5%	63.6%	9.1%	45.5%	
Specific diseases/health issues	34.8%	73.9%	13.0%	47.8%	
History of the community	80.0%	20.0%	32.0%	20.0%	
Pressing issues as felt by the community	72.7%	27.3%	27.3%	27.3%	
Main access barriers as perceived by the community	73.9%	30.4%	34.8%	21.7%	
Traditional beliefs and healing practices used in the Community	71.4%	28.6%	28.6%	19.0%	
Factors that prevent or promote community members to seek care	59.1%	54.5%	22.7%	22.7%	
Levels of formal education in the community	59.1%	50.0%	22.7%	36.4%	
Other organizations working in the community	58.3%	54.2%	25.0%	33.3%	
Ability to work at community empowerment and Mobilization	56.5%	52.2%	30.4%	39.1%	

# Table 7.Minimum Skills and Desired Skills that Employers Are Seeking in<br/>Paid or Volunteer Community Health Workers at Time of Hire

	Paid	CHWs	Volunteer	CHWs
Skills N=26	Minimum	Desired	Minimum	Desired
Advocacy skills – ability to "speak up" for patients and	46.2%	50.0%	23.1%	23.1%
communities to overcome barriers, act as intermediary				
with bureaucracy				
Bilingual skills – be fluent in the preferred language of	38.5%	65.4%	23.1%	19.2%
Clients, translate technical terms				
Capacity building skills – empowerment skills; Leader-	56.0%	56.0%	24.0%	32.0%
ship skills; influence communities and individuals to				
change behavior and take more control of their own				
health				
Communication skills – ability to listen, use oral and	57.7%	57.7%	26.9%	30.8%
Written language confidently				
Computer skills	52.2%	56.5%	13.0%	34.8%
Confidentiality skills – ability to keep matters private, comply with HIPAA laws	57.7%	57.7%	34.6%	23.1%

## Table 7.Minimum Skills and Desired Skills that Employers Are Seeking in Paid<br/>or Volunteer Community Health Workers at Time of Hire (Cont'd)

	Paid (	CHWs	Volunteer	r CHWs
Skills N=26	Minimum	Desired	Minimum	Desired
Interpersonal skills – friendliness, sociability, Counsel-	61.5%	57.7%	42.3%	23.1%
ing and relationship building skills, ability to provide				
support and set appropriate boundaries				
Organizational skills – ability to set goals and develop	52.0%	60.0%	28.0%	36.0%
An action plan, manage time, keep records				
Service coordination skills – ability to identify and	56.0%	56.0%	24.0%	32.0%
access resources; network and build coalitions; make				
and follow-up on referrals				
Teaching skills – ability to share information, respond	54.2%	54.2%	20.8%	33.3%
to questions and reinforce ideas, adapt methods to				
various audiences				

There were different traits that employers were looking for in paid and volunteer community health workers at time of hire (see Table 8). The top three traits that employers were looking for paid CHWs were: (1) commitment and motivation to work and undergo training to improve community health, (2) similar demographics as target population, and (3) shared health experience. While, the top 3 traits for volunteer CHWs were: (1) membership in the community, (2) recognized community leader and (3) similar demographics, as target population.

# Table 8.Traits that Employers Are Looking for in Paid or Volunteer<br/>Community Health Workers at Time of Hire

Traits N=	25 Paid CHV	Vs Volunteer CHWs
Membership in the community	73.7%	57.9%
Recognized community leader	72.7%	54.5%
Shared cultural experience	78.3%	52.2%
Shared health experience	78.6%	50.0%
Similar demographics as target population	85.7%	52.4%
Commitment and motivation to work and undergo	90.9%	50.0%
Training to improve community health		

<u>CHW Trainings</u>: There were more training provided to paid CHWs than volunteer CHWs by employers (Table 9). The top 5 areas of internal training provided by employers to paid CHWs were: (1) service coordination, (2) advocacy skills, (3) capacity building skills, (4) confidentiality skills, and (5) ability to present need or issue. While, the top 5 internal training areas to volunteer CHWs were: (1) interpersonal skills, (2) organizational skills, (3) service coordination, (4) teaching skills, and (5) communication skills.

Most of the CHW trainings were provided internally by the employers. The top 5 areas of training provided to paid CHWs that were outsourced by the employers included: (1) bilingual skills, (2) Medicaid, Medicare and State Children Health Insurance Program coverage, (3) social services

system, (4) health insurance coverage, and (5) computer skills. The outsourced of the top 5 training areas for volunteer CHWs were: (1) bilingual skills, (2) Medicaid, Medicare and State Children health insurance program coverage, (3) social services system, (4) health insurance coverage, and (5) specific diseases/health issues.

	Paid CHWs		Volunteer CHWs	
Trainings N=25	Internal (by your org.)	External (outsourced)	Internal (by your org.)	External (outsourced)
Advocacy skills	84.0%	28.0%	36.0%	24.0%
Bilingual skills	21.4%	85.7%	14.3%	42.9%
Capacity building skills	83.3%	37.5%	29.2%	29.2%
Communication skills	73.9%	39.1%	39.1%	26.1%
Computer skills	72.2%	50.0%	27.8%	27.8%
Confidentiality skills	83.3%	12.5%	37.5%	16.7%
Interpersonal skills	73.9%	30.4%	43.5%	21.7%
Organizational skills	76.2%	28.6%	42.9%	19.0%
Teaching skills	78.3%	30.4%	39.1%	30.4%
Ability to present need or issue	83.3%	33.3%	37.5%	20.8%
Service coordination	90.9%	13.6%	40.9%	18.2%
General health	75.0%	41.7%	37.5%	29.2%
Health care system	77.3%	45.5%	27.3%	27.3%
Health insurance coverage	68.4%	52.6%	15.8%	42.1%
Medicaid, Medicare, SCHIP Coverage	52.6%	63.2%	15.8%	42.1%
Social services system	73.7%	57.9%	26.3%	42.1%
Specific diseases/health issues	68.2%	45.5%	31.8%	31.8%

# Table 9.Areas of Training Provided to Paid or Volunteer Community Health<br/>Workers

There were different primary internal training methods used by organizations for paid and volunteer CHWs. The top 3 training methods used for paid CHWs were (1) in-service training, (2) web-based training and computer tutorials, and (3) group briefings/guest speakers. These were different than the top 3 training methods used for volunteer CHWs: (1) mentoring, (2) ad hoc training sessions by staff, and (3) group briefings/guest speakers. Table 10 compares the internal training methods used for paid and volunteer community health workers.

The most popular external training method used for paid CHWs was third party web-based trainings and online tutorials. Third party workshops and training manuals were commonly used for both paid and volunteer CHWs. Table 11 compares the external training methods used for paid and volunteer community health workers.

# Table 10.Internal Training Provided to Paid or Volunteer Community Health<br/>Workers

Training	N = 24	Paid CHWs	Volunteer CHWs
Mentoring		81.0%	52.4%
In-service Training		95.7%	30.4%
Ad hoc training sessions by staff		86.4%	40.9%
Group briefings/guest speakers		91.3%	39.1%
Internal communications		90.0%	35.0%
Web-based training and computer tutorials		94.1%	35.3%
Books and references		89.5%	36.8%

# Table 11.External Training Provided to Paid or Volunteer Community Health<br/>Workers

Training	N=23	Paid CHWs	Volunteer CHWs
Health Education Training Centers		86.7%	46.7%
CHW certification training program		93.8%	25.0%
Conferences		90.5%	33.3%
Third party CHW seminars		93.8%	31.3%
Third party CHW workshops		95.0%	35.0%
Third party training manuals		94.1%	41.2%
Third party web-based trainings and online tutoria	ls	100.0%	31.3%

Table 12 summarizes the greatest training needs reported by employers. The top 3 greatest needs reported were: (1) language skills, (2) computer training, and (3) advocacy.

### Table 12. Greatest Training Needs Reported by CHW Employers

Language skills --English, Spanish, Bilingual (7); computer training (4); advocacy (3); cultural sensitive/competency (2); health issues (2); test (2); behavioral health; available social services; eligibility requirements; general health; fitness training; independent self-starter; team player; time; transportation; electronic records; diseases; depression and stress; violence and injury prevention; chronic disease prevention; trained instructors; and money

(#) = number of respondents who indicated the greatest training needs

### **Conclusion/Recommendations**

The American Public Health Association and Centers for Disease Control and Prevention have recognized CHWs as frontline public health workers who help individuals and groups in their own community access health and social services and educate community members about various health issues. The assessment identified two categories of organizational need that could be addressed using the CHW workforce. It also identified the federal government as the primary source of funding for the CHW programs.

Different functions were performed by paid community health workers compared with volunteer community health workers, as reported by employers. The top 5 functions performed by paid CHW are related to the delivery of health services; while, the top 5 functions performed by volunteer CHW are related to building individual and community capacity, and providing referrals to health and social services.

At the time of hiring, CHW employers were seeking individuals who were knowledgeable about their communities. For paid CHW, employers were also seeking knowledge related to health, health services, and CHW roles and functions. Employers reported that knowledge related to health and health services could be developed through trainings.

Five of the top 6 minimum skill areas sought by employers, for paid CHWs, were the same as those of the volunteer CHWs. Those skills were: interpersonal skills, confidentiality skills, communication skills, service coordination skills, and capacity building skills. However, the *desired skills* were different for paid and volunteer CHWs. At the time of hire, employers were seeking different traits in paid versus volunteer community health workers.

Employers provided more training was given to paid CHWs than volunteer CHWs. The training focus areas were different for paid and volunteer CHWs. Most of the CHW trainings were provided internally by the organizations. There were different internal training methods used by employers for paid and volunteer CHWs. Third party workshops and training manuals were common methods used for both paid and volunteer CHWs. The top 3 greatest training needs reported were: language skills, computer training, and advocacy.

<u>Recommendations</u>: Based on the analysis of the survey data, the following recommendations are made to set the future direction of research and action: (1) conduct a study to assess how well the CHW training programs are meeting the needs of the U.S. –Mexico border region in terms of their effectiveness in improving the health outcomes of the border populations, and (2) establish a border resource-training clearing house that will assist employers in identifying effective CHW training programs.

12-06-11 hje

### References

- 1. Health Resources and Services Administration (HRSA). Community Health Worker National Workforce Study. 2007. <u>http://bhpr.hrsa.gov/healthworkforce/reports/chwstudy</u> 2007.pdf. Access September 16, 2011.
- 2. Rosenthal EL, Wiggins N, Brownstein JN, Johnson S, Borbon, IA, de Zapien JG. Final Report of the National Community Health Advisor Advisory Study. 1998a. Baltimore, MD: Annie E. Casey Foundation.
- Brownstein JN, Andrews T, Wall H, Mukhtar Q. Addressing Chronic Disease through Community Health Workers: A Policy and Systems-Level Approach – A Policy Brief on Community Health Workers. 2011. <u>http://www.cdc.gov/dhdsp/docs/chw\_brief.pdf</u>. Access September 16, 2011.
- 4. Rosenthal EL. The evolution of the Community Health Worker field in the United States: The shoulders we stand on. In Berthold T, Miller J, Avila A, eds. Foundations for community health workers. San Francisco, CA: Jossey-Bass; 2009;23-44.
- 5. Indian Health Service. Community Health Representative. <u>http://www.ihs.gov/</u><u>nonmedicalprograms/chr/index.cfm?module=mission</u>. Access September 26, 2011.
- 6. May ML, Kash B, Contreras R. Community Health Worker (CHW) Certification and Training: A National Survey of Regionally and State-Based Programs. 2005.
- 7. The Office of Minority Health. Promotores de Salud. <u>http://www.minorityhealth.</u> <u>hhs.gov/templates/browse.aspx?lvl=2&lvlID=207</u>. Access September 22, 2011.
- 8. Viswanathan M, Krashnewski J, Nishikawa B., et al. Outcomes of Community Health Worker Interventions. Rockville (MD) Agency for Healthcare Research and Quality (US); 2009 Jun. (Evidence Report/Technology Assessment, No. 181.)
- 9. Goodwin K, Tobler L. Community Health Workers Expanding the Scope of the Health Care Delivery System. National Conference of State Legislatures April 2008.
- 10. Federal Register. 2010 Standard Occupational Classification (SOC) OMB's Final Decisions Vol. 74, No. 12/Wednesday, January 21, 2009/Notices.
- 11. Kelly E, McFarlane J, Rodriguez R, Fehir J. Community health organizing: Whom are we empowering? *Journal of Health Care for the Poor and Underserved*. 1993;4(4):358-362.
- 12. Baker EA, Bouldin N, Durham M, et al. The Latino health advocacy program: A collaborative lay health advisor approach. *Health Education and Behavior*. 1997;24(4):495-509.

- 13. Meister JS. Community outreach and community mobilization: options for health at the U.S.-Mexico Border. *Journal of Border Health*. 1997;2(4):32-38.
- 14 Gonzalez AL, Ortiz L. Neighborhood and community organizing in colonias: A case study in the development and use of promotoras. *Journal of Community Practice*. 2004;12(1/2):23-35.
- 15. Ingram M, Sabo S, Rothers J, Wennerstrom A, de Zapien JG. Community health workers and community advocacy: Addressing health disparities. *Journal of Community Health*. 2008;33(6):417-424.
- 16. Williams DM. La Promotora linking disenfranchised residents along the border to the U.S. health care system. *Health Affairs*. 2001;20(3):212-218.
- 17. Castañeda X, Clayson ZC, Rundall T, Dong L, Sercaz M. Promising outreach practices: enrolling low-income children in health insurance programs in California. *Health Promotion Practice*. 2003;4(4):430-438.
- 18. United States-Mexico Community Health Workers Border Models of Excellence, Transfer/Replication Strategy. Community Access Program of Arizona (CAPAZ) and *Entre Amigas* (Between Friends) Model Yuma County, Arizona. El Paso (TX): United States-Mexico Border Health Commission. 2004.
- 19. Buchanan TJ. Health promotion behaviors of Mexican American adults participating in a Promotoras project. Thesis (M.S.N.)--Texas Tech University Health Sciences Center. August 1999, 76 pages.
- 20. Hunter JB, de Zapien JG, Papenfuss M, Fernandez ML, Meister J, Giuliano AR. The impact of a promotora on increasing routine chronic disease prevention among women aged 40 and older at the U.S.-Mexico border. *Health Education and Behavior*. 2004;31(4):18S-28S.
- 21. Staten LK, Gregory-Mercado KY, Ranger-Moore J, et al. Provider counseling, health education, and community health workers: The Arizona WISEWOMAN project. *Journal of Women's Health*. 2004;13(5):547-556.
- 22. United States-Mexico Community Health Workers Border Models of Excellence, Transfer/Replication Strategy. REACH 2010 Promotora Community Coalition Model, Rio Grande Valley in Texas. El Paso (TX): United States-Mexico Border Health Commission. 2004.

- 23. Staten LK, Scheu LL, Bronson D, Pena V, Elenes JJ. *Pasos Adelante*: the effectiveness of a community-based chronic disease prevention program. Preventing Chronic Disease [Serial Online]; 2005 Jan. <u>http://www.ncbi.nlm.nih.gov/pubmed/15670471</u>. Access September 30, 2011.
- 24. Reinschmidt KM, Hunter JB, Fernandez ML, Lacy-Martinez CR, Guernsey de Zapien J, Meister J. Understanding the success of promotoras in increasing chronic diseases screening. *Journal of Health Care for the Poor and Underserved*. 2006;17(2):256-264.
- 25. Alcalay R, Alvarado M, Balcázar H, Newman E, Huerta E. Salud para su corazon: A community-based Latino cardiovascular disease prevention and outreach model. *Journal of Community Health*. 1999;24(5):359-379.
- 26. Balcázar H, Hollen LM. The Promotores De Salud Community Health Outreach Model *Salud para su Corazon* (Health For Your Heart) CD ROM. Fort Worth (TX): The North Texas Salud para su Corazon National Heart, Lung, and Blood Institute CVD EDUC Initiative, and University of North Texas Health Science Center School of Public Health. 2004.
- 27. May ML, Contreras RB, Callejas L, et al. Mujer y Corazón: community health workers and their organizations on the U.S.-Mexico Border. An exploration study. College Station, TX: The Southwest Rural Health Research Center, School of Rural Public Health, Texas A&M University System Health Science Center. 2004.
- 28. Balcázar H, Alvarado M, Hollen ML, Gonzalez-Cruz Y, Pedregon V. Evaluation of salud para su corazon (health for your heart) National council of la raza promotora outreach program. *Preventing Chronic Disease*. 2005;2(3):A09.
- 29. Balcázar H, Alvarado M, Hollen ML, et al. Salud para su corazon-NCLR: A comprehensive promotora outreach program to promote heart-healthy behaviors among Hispanics. *Health Promotion and Practice*. 2006:7(1);68-77.
- 30. Balcázar H, Alvarado M, Cantu F, Pedregon V, Fulwood R. A promotora de salud model for addressing cardiovascular disease risk factors in the US-Mexico border region. *Preventing Chronic Disease*. 2009;6(1):A02.
- 31. Balcázar HG, Byrd TL, Ortiz M, Tondapu SR, Chavez M. A randomized community intervention to improve hypertension control among Mexican Americans: Using the promotoras de salud community outreach model. *Journal of Health Care for the Poor and Underserved*. 2009;20(4):1079-1094.
- 32. Balcázar HG, de Heer H, Rosenthal L, et al. A promotores de salud intervention to reduce cardiovascular disease risk in a high-risk Hispanic border population, 2005-2008. *Preventing Chronic Disease*. 2010;7(2);A28.

- 33. Brown SA, Hanis CL. A community-based, culturally sensitive education and groupsupport intervention for Mexican Americans with NIDDM: A pilot study of efficacy. *Diabetes Educator*. 1995;21(3):203-210.
- 34. Corkery E, Palmer C, Foley ME, Schechter CB, Frisher L, Roman SH. Effect of a bicultural community health worker on completion of diabetes education in a *Hispanic population*. *Diabetes Care*. 1997;20(3):254-257.
- 35. Brown SA, Hanis CL. Culturally competent diabetes education for Mexican Americans: the Starr County Study. *Diabetes Education*. 1999;25(2):226-236.
- 36. Brown SA, Garcia AA, Kouzekanani K, Hanis CL. Culturally competent diabetes selfmanagement education for Mexican Americans: the Starr County border health initiative. *Diabetes Care*. 2002;25(2):259-268.
- 37. Ingram M, Gallegos G, Elenes JJ. Diabetes is a community issue: The critical elements of a successful outreach and education model on the U.S.-Mexico Border. *Preventing Chronic Disease*, [Serial Online]; 2005 Jan <u>http://www.cdc.gov/pcd/issues/2005/</u> jan/04\_0078.htm. Access September 30, 2011.
- Teufel-Shone NI, Drummond R, Rawiel U. Developing and adapting a family-based diabetes program at the U.S.-Mexico Border. Preventing Chronic Disease [Serial Online];
   2005 Jan <u>http://www.cdc.gov/pcd/issues/2005/jan/04\_0083.htm</u>. Access September 30, 2011.
- 39. Culica D, Walton JW, Prezio EA. CoDE: Community diabetes education for uninsured Mexican Americans. *Baylor University Medical Center Proceedings*. 2007;20(2):111-117.
- 40. Ingram M, Torres E, Redondo F, Bradford G, Wang C, O'Toole ML. The impact of promotoras on social support and glycemic control among members of a farmworker community on the US-Mexico border. *The Diabetes Educator*. 2007;33(6):172S-178S.
- 41. Joshu CE, Rangel L, Garcia O, Brownson CA, O'Toole ML. Integration of a promotoraled self-management program into a system of care. *The Diabetes Educator*. 2007;33 (6):151S-158S.
- 42. Thompson JR, Horton C, Flores C. Advancing diabetes self-management in the Mexican American population: A community health worker model in a primary care setting. *The Diabetes Educator*. 2007;33(6):159S-165S.
- 43. Lujan J, Ostwald SK, Ortiz M. Promotora diabetes intervention for Mexican Americans. *The Diabetes Educator*. 2007;33(4):660-670.
- 44. Sixta CS, Ostwald S. Texas-Mexico border intervention by promotores for patients with type 2 diabetes. *The Diabetes Educator*. 2008;34(2):299-309.

- 45. Sixta CS, Ostwald S. Strategies for implementing a promotores-led diabetes selfmanagement program into a clinic structure. *The Diabetes Educator*. 2008;34(2):285-298.
- 46. McCloskey J, Rao SP. Promotores as partners in a community-based diabetes intervention program targeting Hispanics. *Family & Community Health*. 2009;32(1):48-57.
- 47. Deitrick LM, Paxton HD, Rivera A, et al. Understanding the role of the promotora in a Latino diabetes education program. *Qualitative Health Research*. 2010;20(3):386-399.
- 48. Martin MA, Hernandez O, Naureckas E, Lantos J. Reducing home triggers for asthma: The Latino community health worker approach. *Journal of Asthma*. 2006;43(5):369-374.
- 49. Carrillo JM, Pust RE. Dar a Luz: A perinatal care program for Hispanic women on the U.S.- Mexico Border. *American Journal of Preventive Medicine*. 1986;2(1):26-29.
- 50. Warrick LH, Wood AH, Meister JS, de Zapien JG. Evaluation of a peer health worker prenatal outreach and education program for Hispanic farmworker families. *Journal of Community Health*. 1992;17(1):13-26.
- 51. Meister JS, Warrick LH, de Zapien JG, Wood AH. Using lay health workers: case study of a community-based prenatal intervention. *Journal of Community Health*. 1992;17(1):37-51.
- 52. Stremler J, Lovera D. Insight from a breastfeeding peer support pilot program for husbands and fathers of Texas WIC participants. *Journal of Human Lactation*. 2004;20(4):417-22.
- 53. Wasserman M, Bender D, Lee SY. Use of preventive maternal and child health services by Latina women: A review of published intervention studies. *Medical Care Research and Review*. 2007;64(1):4-45.
- 54. Brownstein JN, Cheal N, Ackermann SP, Bassford TL, Campos-Outcalt D. Breast and cervical cancer screening in minority populations: A model for using lay health educators. *Journal of Cancer Education*. 1992;7(4):321-326.
- 55. Navarro AM, Senn KL, Kaplan RM, McNicholas L, Campo MC, Roppe B. Por La Vida intervention model for cancer prevention in Latinas. *Journal of the National Cancer Institute Monographs*. 1995;(18):137-145.
- 56. Ramirez AG, McAlister A, Gallion KJ, et al. Community level cancer control in a Texas barrio: Part I--Theoretical basis, implementation, and process evaluation. *Journal of the National Cancer Institute Monographs*. 1995;(18):117-22.

- 57. Fox SA, Stein JA, Gonzalez RE, Farrenkopf M, Dellinger A. A trial to increase mammography utilization among Los Angeles Hispanic women. *Journal of Health Care for the Poor and Underserved*. 1998;9(3):309-321.
- 58. Navarro AM, Senn KL, McNicholas LJ, Kaplan RM, Roppe B, Campo MC. Por La Vida model intervention enhances use of cancer screening tests among Latinas. *American Journal of Preventive Medicine*. 1998;15(1):32-41.
- 59. Hunter JB, de Zapien JG, Papenfuss M, Fernandez ML, Meister J, Giuliano AR. The impact of a promotora on increasing routine chronic disease prevention among women aged 40 and older at the U.S.-Mexico border. *Health Education and Behavior*. 2004;31(4):18S-28S.
- 60. Hansen LK, Feigl P, Modiano MR, et al. An educational program to increase cervical and breast cancer screening in Hispanic women: A southwest oncology group study. *Cancer Nursing*. 2005;28(1):47-53.
- 61. Larkey L. Las mujeres saludables: Reaching Latinas for breast, cervical and colorectal cancer prevention and screening. *Journal of Community Health*. 2006;31(1):69-77.
- 62. O'Brien MJ, Hughes Halbert C, Bixby R, Pimentel S, Shea JA. Community health worker intervention to decrease cervical cancer disparities in Hispanic women. *Journal of General Internal Medicine*. 2010;25(11):1186-1192.
- 63. McQuiston C, Flaskerud JH. "If they don't ask about condoms, I just tell them": A descriptive case study of Latino lay health advisers' helping activities. *Health Education and Behavior*. 2003;30(1):79-96.
- 64. Ramos RL, Hernandez A, Ferreira-Pinto JB, Ortiz M, Somerville GG. Promovision: Designing a capacity-building program to strengthen and expand the role of promotores in HIV prevention. *Health Promotion Practice*. 2006;7(4):444-449.
- 65. Tillett T. Promoting health in Texas colonias. *Environmental Health Perspectives*. 2005;113(7):A454-A455.
- 66. Forster-Cox SC, Mangadu T, Jacquez B, Fullerton L. The environmental health/home safety education project: A successful and practical U.S.-*Mexico* border initiative. *Health Promotion Practice*. 2010;11(3):325-331.
- 67. O'Hara-Devereaux M, Reeves W, Curtis E. The Alaskan health aide: a successful model of family and community health. *Family and Community Health*. 1980;3(2):71-84.
- 68. Haraldson SS. The Alaskan community health aide scheme: A successful rural health program. *New York State Journal of Medicine*. 1990;90(2):61-63.

- 69. Caldera D, Daniels S, Ashenfelter W. The role of the community health aide in rural Alaska. *Arctic Medical Research Report*. 1991;Suppl:157-160.
- 70. Caldera DL, Community Health Aide Program: health care for rural Alaska Natives by rural Alaska Natives. *Arctic Medical Research Report*. 1991;Suppl:166-9.
- 71. Quick R, Bashshur R. Three perspectives on community health aides: surveys of health aides, consumers and providers in Western Alaska. *Arctic Medical Research Report*. 1991;Suppl:161-165.
- 72. Landen JB. Community health representatives: The vital link in Native American health care. *IHS Primary Care Provider*. 1992;17(7):101-102.
- 73. Orr AL. Training outreach workers to serve American Indian elders with visual impairment and diabetes. *Journal of Visual Impairment and Blindness*. 1993;87(9):336-340.
- 74. Hummel J, Cortte R, Ballweg R, Larson E. Physician assistant training for Native Alaskan community health aides: The MEDEX northwest experiences. *Alaska Medicine*. 1994;36(4):183-188.
- 75. Long DG, Funk-Archuleta MA, Geiger CJ, Mozar AJ, Heins JN. Peer counselor program increases breastfeeding rates in Utah Native American WIC population. *Journal of Human Lactation*. 1995;11(4):279-284.
- 76. May-Garcia, Stephanie Ann. Indigenous lay health workers in rural Arizona. [Thesis, M.S. Nursing University of Arizona]. 1997, 105 pages.
- 77. Sox CH, Dietrich AJ, Goldman DC, Provost EM. Improved access to women's health services for Alaska natives through community health aide training. *Journal of Community Health*. 1999;24(4):313-323.
- 78. Satterfield D, Burd C, Valdez L, Hosey G, Eagle Shield J. The "In-Between People": participation of community health representatives in diabetes prevention and care in American Indian and Alaska Native communities. *Health Promotion Practice*. 2002;3(2):166-175.
- 79. Kegler MC, Stern R, Whitecrow-Ollis S, Malcoe HL. Assessing lay health advisor activity in an intervention to prevent lead poisoning in Native American children. *Health Promotion Practice*. 2003;4(2):189-196.
- 80. Struthers R, Hodge FS, De Cora L, Geishirt-Cantrell B. The experience of native peer facilitators in the campaign against type 2 diabetes. *Journal of Rural Health*. 2003;19(2):174-180.

- 81. Kegler MC, Malcoe LH. Results from a lay health advisor intervention to prevent lead poisoning among rural Native American children. *American Journal of Public Health*. 2004;94(10):1730-1735.
- 82. Landon B, Loudon J, Selle M, Doucete S. Factors influencing the retention and attrition of community health aides/practitioners in Alaska. *Journal of Rural Health*. 2004;20(3):221-230.
- 83. Lagone Medical Center. Community Health Worker Policy. <u>http://prevention-research.med.nyu.edu/dissemination/policy-advocacy/community-health-worker-policy</u>. Access September 22, 2011.
- 84. Rosenthal EL, Wiggins N, Ingram M, Mayfield-Johnson S, De Zapien JG. Community Health Workers Then and Now: An Overview of National Studies Aimed at Defining the Field. *The Journal of Ambulatory Care Management*. 2011;34(3):247-259.
- 85. Fedorak SA. A nontraditional work/training program for community health workers. *Educational Gerontology*. 1987;13(3):239-248.
- 86. Keeling RP, Engstrom EL. Refining your peer education program. *Journal of American College Health.* 1993;41(6):259-263.
- 87. Hale WD, Bennett RG, Oslos NR, Cochran CD, Burton JR. Project REACH: a program to train community-based lay health educators. *The Gerontologist*. 1997;37(5): 683-687.
- 88. Morrow G, Andersen R, Tripp M. VISTA means vision: three winning strategies for training diverse outreach workers. Austin (TX): Texas Department of State Health Services. 1998.
- 89. Promotora Program Development Committee. Report on the feasibility of voluntary training and certification of promotores(as) or community health workers. Austin (TX): Texas Department of State Health Services. 2000.
- 90. Ramos IN, May M, Ramos KS. Environmental health training of promotoras in colonias along the Texas-Mexico Border. *American Journal of Public Health*. 2001:91(4),568-570.
- 91. Proulx DE. Core curriculum guidebook for a community health workers basic certificate program. Tucson, AZ: University of Arizona. 2002.
- 92. Proulx DE, Collier N. Project jump start curriculum guidebook. Tucson, AZ: University of Arizona. 2003.

- 93. Berrios C. Promotor(a) or community health worker training and certification information and resources. Austin (TX): Texas Department of State Health Services. 2004.
- 94. Love MB, Legion V, Shim JK, Tsai C, Quijano V, Davis C. CHWs get credit: a 10-year history of the first college-credit certificate for community health workers in the United States. *Health Promotion and Practice*. 2004;5 (4):418-428.
- 95. Instructional Programs Community Health Worker [Internet]. El Paso (TX): El Paso Community College; 2011. <u>http://www.epcc.edu/InstructionalPrograms/Pages/</u> <u>CommunityHealthWorker.aspx</u>. Access November 11, 2011.
- 96. Kash BA, May ML, Tai-Seale M. Community health worker training and certification programs in the United States: Findings from a national survey. *Health Policy*. 2007;80(1):32-42.
- 97. O'Brien MJ, Squires AP, Bixby RA, Larson SC Role development of community health workers: An examination of selection and training processes in the intervention literature. *American Journal of Preventive Medicine*. 2009;37(6):S262-9.
- 98. Harris County Hospital District. Community Health Worker Training and Certification Program. <u>http://www.hchdonline.com/health/chw.htm</u>. Access September 22, 2011.
- 99. Health Resources and Service Administration Office of Rural Health Policy. Community Health Workers Evidence-Based Models Toolbox. August 2011. <u>http://www.hrsa.gov/</u>ruralhealth/pdf/chwtoolkit.pfd. Access September 30, 2011.
- 100. Meister JS, Moya EM, Rosenthal EL. et al. Community health worker evaluation tool kit. El Paso (TX): Funded by The Annie E. Casey Foundation and produced by The University of Arizona Rural Health Office and College of Public Health. 2000.

# APPENDIX A SURVEYMONKEY QUESTIONNAIRE

### **Subject Disclaimer Form**

University of Arizona Mel and Enid Zuckerman College of Public Health Rural Health Office Four U.S. Border States Community Health Workers Training Needs Assessment Survey

### Subject Disclaimer Form

Title of the Project: Four U.S. Border States Community Health Workers Training Needs Assessment.

You are invited to participate voluntarily in the above-titled survey. The purpose of this survey is to identify the skills, traits, and qualifications needed and desired by employers hiring Community Health Workers (CHWs) in order to help design effective training programs to meet those needs.

You are one of a select group of employers of CHWs workers, who have been asked to participate in this survey. We would appreciate your assistance in helping us identify training needs of community health workers along the U.S.-Mexico border region. Your participation in this survey is crucial in obtaining an accurate picture of these needs and how to improve the effectiveness of CHWs in serving their communities.

Your participation in this project is voluntary and involves the completion of the following survey. You can choose not to answer any of the questions and may log off from the survey at any time. There are no known risks from your participation and no direct benefit from your participation is expected. There are no costs related to your participation except for approximately 15 minutes of your time. You will not be compensated for your participation. No personal information will be reported, and all the results will be provided in aggregated format. By participating in the survey you are agreeing to the use of your data for research purposes.

You can obtain further information from the Principal Investigator, Howard J. Eng, MS, DrPH, Director, Southwest Border Rural Health Research Center, Rural Health Office, University of Arizona Mel and Enid Zuckerman College of Public Health, at hjeng@email.arizona.edu or (520) 626-5840. If you have questions concerning your rights as a research subject, you may call the University of Arizona Human Subject Protection Program Office at (520) 626-6721.

We would like to thank you in advance for taking the time to complete this survey. We sincerely appreciate your feedback in helping us identify the training needs in the U.S. – Mexico Border Region.

### Introduction

Community Health Workers (CHWs) are lay persons who assist residents in their community in improving their health status. For the purpose of this survey, we use the title Community Health Workers to also refer to: community health advisors, lay health advocates, promotores (as), outreach educators, community health representatives, peer health promoters, and peer health educators.

### **Survey Instructions**

Please check the MOST appropriate answer for each question; unless given different instructions.

### Profile of the Respondent

1. What is your current position in the organization?	
◯ CEO	
Director	
Program Director	
Program Coordinator	
Other (please specify)	
2. How many years have you worked in your current position?	
3. Do you work directly with CHWs?	
Yes	
No	
4. How many years have you worked with CHWs?	
5. Did you work as a CHW in the past?	
5. Did you work as a CHW in the past? $\bigcirc$ No	
No No	

### **Profile of the Organization**

# 6. Please identify your business form: For profit 7. Please identify the type of your organization: Educational Institution(e.g., high school, college, university) Health Facility (e.g., physician office, outpatient departments, community health centers, medical clinics, IHS) Health Department (e.g., local, state, federal) Social Service Agency (e.g., family services, children services, adult services) Advocacy Organization (e.g., government, local, state, federal) Other (please specify) Stheve you had your CHW program for more than one year? No Yes- How long have you had the CHW program? (in months)

# 9. What are your primary sources of funding for CHWs? Please CHECK ALL POSSIBLE ANSWERS.

) Federal
State
Local
Foundations
International funds
Other (please specify)

### 10. What organizational needs are satisfied by the CHW's role?

### **Community Health Worker (CHW) Job Description**

### **11. Please describe the job function of paid or volunteer CHWs in your organization. Please CHECK ALL POSSIBLE ANSWERS.**

	Paid CHW	Volunteer CHW
Assistance in gaining access to medical services or programs		
Assistance in gaining access to social services or programs		
Building community capacity		
Building individual capacity		
Case management		
Community advocacy		
Counseling		
Cultural mediation		
Interpretation		
Mentoring		
Patient navigation		
Provide culturally appropriate health promotion/education		
Provide direct services		
Risk identification		
Social support		
Translation		
Transportation		
Conducting surveys of target population		
Enroll population into health insurance programs		
Determine eligibility for services		
Provide health screenings		
Refer population to health care system		
Refer population to social services system		
Other (please specify)		

### CHW Qualifications: Knowledge

# 12. What knowledge base do you seek when looking for CHWs? Please CHECK ALL POSSIBLE ANSWERS.

Paid CHW	Volunteer CHW

# 13. Are the knowledge-bases that you are seeking in CHWs, as an employer, easily found at hire? Can they be developed through training? Please CHECK ALL POSSIBLE ANSWERS.

	Paid CHWs- At hire	Paid CHWs- Training	Volunteer CHWs- At hire	Volunteer CHWs- Training
CHW roles and functions				
General health				
Health care system				
Health insurance coverage				
Medicaid, Medicare, SCHIP				
Social service system				
Specific diseases/health issues				
History of the community				
Pressing issues as felt by the community				
Main access barriers as perceived by the community				
Traditional beliefs and healing practices used in the community				
Factors that prevent or promote community members to seek care				
Levels of formal education in the community				
Other organizations working in the community				
Ability to work at community empowerment and community mobilization				
Other (please specify)		1		

### **CHW Qualifications: Skills**

# 14. What are the minimum and desired skills that you are seeking in paid and volunteer CHWs, at the time of hire? Please CHECK ALL POSSIBLE ANSWERS.

	Paid CHWs- Minimum	Paid CHWs- Desired	Volunteer CHWs- Minimum	Volunteer CHWs- Desired
Advocacy skills- ability to "speak up" for patients and communities to overcome barriers, act as intermediary with bureaucracy				
Bilingual skills- be fluent in the preferred language of clients, translate technical terms				
Capacity building skills- empowerment skills; leadership skills; influence communities and individuals to change behavior and take more control of their own health				
Communication skills- ability to listen, use oral and written language confidently				
Computer skills				
Confidentiality skills- ability to keep matters private, comply with HIPAA laws				
Interpersonal skills- friendliness, sociability, counseling and relationship building skills, ability to provide support and set appropriate boundaries				
Organizational skills- ability to set goals and develop an action plan, manage time, keep records				
Service coordination skills- ability to identify and access resources; network and build coalitions; make and follow-up on referrals				
Teaching skills- ability to share information, respond to questions and reinforce ideas, adapt methods to various audiences				

Other (please specify)



### **CHW Training**

15. In what areas	is TRAINING provi	ided? Please CHE	CK ALL POSSIBLE	ANSWERS.
	- Paid CHWs - Internal (By	Paid CHWs - External	Volunteer CHWs - Internal	Volunteer CHWs - External
	your org.)	(Outsourced)	(By your org.)	(Outsourced)
Advocacy skills				
Bilingual skills				
Capacity building skills				
Communication skills				
Computer skills				
Confidentiality skills				
Interpersonal skills				
Organizational skills				
Teaching skills				
Ability to present need or issue				
Service coordination				
General health				
Health care system				
Health insurance coverage				
Medicaid, Medicare, SCHIP coverage				
Social services system				
Specific diseases/health issues				
Other (please specify)				
16. What type of I POSSIBLE ANSW		NG is used in you	r organization? Plea	ase CHECK ALL
Mentoring			Paid C.HV	Vs Volunteer CHWs
In-Service Training				
Ad hoc training sessions by	staff			
Group briefings/guest speak	ers			
Internal communications				
Web-based training and cor	nputer tutorials			$\Box$
Books and references			П	$\square$
Other (please specify)				

# 17. What type of EXTERNAL TRAINING methods is used by your organization? Please CHECK ALL POSSIBLE ANSWERS.

Health education training centers

CHW certification training programs

Conferences

Third party CHW seminars

Third party CHW workshops

Third party training manuals

Third party web-based trainings and online tutorials

Other (please specify)

Paid CHWs

Volunteer CHWs

### **CHW Qualifications: Traits**

# 18. Are there any other traits that you look for in CHWs? Please CHECK ALL POSSIBLE ANSWERS.

Membership in the community

Recognized community leader

Shared cultural experience

Shared health experience

Similar demographics as target population

Commitment and motivation to work and undergo training to improve community health

Other (please specify)

Paid CHWs	Volunteer 0

CHWs

### \*19. What are your greatest CHWs training needs?

### **Closing Statement**

Thank you for your time and interest in completing this survey. Your input is extremely valuable and highly appreciated. If you have any further questions regarding this survey, please contact Dr. Howard J. Eng at hjeng@email.arizona.edu or (520) 626-5840.

If you know of other employers of CHWs who may be interested in completing this survey, please provide us with their names and contact information, including their email addresses, and we will email a survey to them. Thank you for your assistance.