Environmental Scan of Community Health Workers (CHWs) in Pennsylvania

FINAL REPORT TO:
The Pennsylvania Department of Health
Bureau of Health Promotion and Risk Reduction
Division of Cancer Prevention and Control

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ENVIRONMENTAL SCAN OF COMMUNITY HEALTH WORKERS (CHWs) IN PENNSYLVANIA
EXECUTIVE SUMMARY

The use of community health workers (CHWs) to reduce disparities in health care access and in health outcomes represents a promising approach that has received increasing attention in recent years. Alternatively referred to as community health advisors, doulas, lay health advisors, outreach workers, patient navigators, peer counselors, peer educators, and promotoras/promotores de salud (health promoter/promoters), CHWs help individuals navigate complex health care systems, access primary and preventive care services, maintain healthy behaviors, and manage chronic conditions in culturally and linguistically relevant ways (Goodwin & Tobler, 2008).

The Alliance of PA Councils (Alliance) was engaged by the Pennsylvania (PA) Department of Health, Bureau of Health Promotion and Risk Reduction – Division of Cancer Prevention and Control, to assess the current CHW environment in the state. Members of the Alliance include Adagio Health in Pittsburgh, Family Health Council of Central PA in Camp Hill, Family Planning Council in Philadelphia, and Maternal and Family Health Services in Wilkes Barre. Phase I of the environmental scan included an extensive review of the CHW literature and development of the survey methodologies and procedures implemented in phase 2. The survey instrument included the following seven domains: types of organizations engaging CHWs; use of paid vs. volunteer CHWs; target populations for CHW efforts; CHW roles and functions; CHW funding; CHW educational requirements and training programs; and policy/systems changes needed to support CHW sustainability. Respondents had the option of completing a paper or an online (Survey Monkey) version of the survey.

Purposive sampling (Spradley, 1979) was the strategy used to identify the pool of potential survey respondents. In brief, this strategy involves the selection of individuals who are familiar with the phenomenon of interest, in this case the CHW workforce in PA. Based on Alliance members' knowledge of the service delivery systems in their respective regions, assembly of the survey pool began with staff from each agency identifying individuals in leadership roles at "local" organizations that utilized (or potentially utilized) CHWs. Of the 295 members of the survey pool, 159 completed the survey; the resulting response rate (53.9%) is considered adequate for the purposes of analysis and reporting (Rubin & Babbie, 2009). Given that an environmental scan of the CHW workforce in PA represents a relatively new area of inquiry, snowball sampling (Crosby, Salazar, & DiClemente, 2006) was used to recruit additional respondents. Since 18 respondents were identified via snowball sampling, a total of 177 surveys were included in the analyses.

Survey findings indicate several key recommendations for consideration in PA:

1. Review opportunities to use Medical Assistance administrative match funds to pay for CHWs conducting outreach and Medicaid enrollment activities – particularly critical with implementation of requirements in the Affordable Care Act.
2. Expand Medicaid Fee-For-Service reimbursable CHW services beyond the scope of mental health to assist persons with accessing care, educating clients on the importance of

preventive health care (versus over-utilization of emergency care), and to assess clients diagnosed with specific diseases (e.g., cancer, diabetes, etc.) to assure they are adhering to medication and diet requirements and receiving all necessary follow-up care.

3. All safety net providers of health care services to our most vulnerable populations should be able to bill Medicaid, Medicaid Managed Care, and CHIP for CHW education, follow-up, and coordination services. These important services should be considered reimbursable for community health centers, federally qualified health centers (FQHCs), family planning providers, and similar organizations serving low-income, often uninsured clients.
4. Consider securing Section 1115 and/or Section 1915 Medicaid waivers that provide coverage for CHW services shown to reduce overall health care costs and/or improve health outcomes.
5. Care coordination and patient navigation are often used interchangeably but are sometimes limited in scope of services. In PA, care coordination is a key component of the state-funded Healthy Beginnings Plus prenatal program that includes psychosocial services in addition to the traditional medical and obstetric services provided during a pregnancy. Patient navigation is often provided, through private foundation funding, for persons diagnosed with cancer. For example, the Komen and Avon Foundations often fund navigation services to assure clients diagnosed with breast cancer follow-up with recommended treatment, have transportation to appointments, and are able to access ancillary support services. These important services should be considered a core component of care for persons diagnosed with cancer and other chronic diseases.
6. Numerous individuals contacted during the environmental scan requested clarification on CHW definitions, locations, activities, and roles, thus indicating the need to develop a more explicit and concrete definition of CHWs in PA. This is especially important in terms of program planning, funding, and evaluation as the field of CHW services potentially expands with implementation of the Affordable Care Act and Patient Navigation initiatives.
7. It is important to explicitly state the focus of work performed by CHWs including potential liability issues when providing services such as basic health screenings and care management. CHWs must have a strong understanding of the health care system and resources in their communities. Those assisting with care management may require disease-specific education and training as well as access to trained health professionals whom they can call with questions.
8. Development of the CHW movement in PA – programs, definitions, roles, scope of practice, training, certification – should be grounded in evaluation research. This research should focus on such issues as identification of best practices relative to CHW training and service delivery, service utilization patterns, costs vs. benefits, and client outcomes.

I. INTRODUCTION

This report provides an overview of the environmental scan of the community health worker workforce in Pennsylvania (PA) conducted by the Alliance of PA Councils (Alliance) on behalf of the PA Department of Health (DOH) Bureau of Health Promotion and Risk Reduction, Division of Cancer Prevention and Control. The environmental scan involved a review of the CHW literature and a survey that assessed the extent to which health care and social service providers in PA utilize community health workers (CHWs), the target populations for CHW initiatives, the range of services CHWs provide, and the funding mechanisms that support CHW efforts. Respondents were recruited in all regions of the Commonwealth by the member agencies of the Alliance (Adagio Health in Pittsburgh, Family Health Council of Central PA in Camp Hill, Family Planning Council in Philadelphia, and Maternal and Family Health Services in Wilkes Barre). The sections that follow provide a brief synopsis of key issues identified in the CHW literature, an overview of the initial phase of the project, a description of the survey methodology, and a summary of survey results and corresponding recommendations. (*Please Note*: The initial progress report and companion documents submitted on April 12, 2013 are available in **Attachment 1**)

II. SYNOPSIS OF CHW LITERATURE

A. CHW Roles and Functions

The use of CHWs to reduce disparities in health care access and in health outcomes represents a promising approach that has received increasing attention in recent years. Alternatively referred to as community health advisors, doulas, lay health advisors, outreach workers, patient navigators, peer counselors, peer educators, and promotoras/promotores, CHWs help individuals navigate complex health care systems, access primary and preventive care services, maintain healthy behaviors, and manage chronic conditions in culturally and linguistically relevant ways (Goodwin & Tobler, 2008). Table 1 provides an overview of the seven core roles of CHWs identified in the National Community Health Advisor Study (Rosenthal et al., 1998) and associated functions (Rosenthal et al., 2011).

Table 1. CHW Roles and Functions

Roles	Functions
1. Bridging/cultural mediation between communities & health care systems	• Educating community members about how to use health care/social service systems • Educating health & social service systems about community needs & perspectives to, among other things, change attitudes/behaviors & ways in which services are delivered • Interpretation & translation
2. Providing culturally appropriate & accessible health education & information	• Teaching concepts of health promotion & disease prevention • Helping to manage chronic illness • Training other community health advisors
3. Assuring that people get the services they need	• Case finding • Making referrals • Motivating/encouraging people to obtain care • Taking people to services • Providing follow-up
4. Providing informal counseling & social support	• Providing individual support & informal counseling • Leading support groups

Table 1. CHW Roles and Functions

Roles	Functions
5. Advocating for individual & community needs	• Acting as spokespersons for clients • Acting as intermediaries between clients & health/social service systems • Advocating for community needs & perspectives
6. Providing direct services	• Providing clinical services • Delivering basic first aid & screening services such as vision, hearing, dental blood pressure & blood glucose checks • Meeting basic needs (assuring people have basic determinants of good health such as food, adequate housing, clothing, & employment)
7. Building individual & community capacity	• Building individual capacity • Building community capacity • Assessing individual & community needs

The roles and functions of a CHW are dictated by such factors as the setting in which he/she works (e.g., health care clinic, faith-based or social service organization, public health program), the target population, service/intervention goals, and skills and competencies needed to achieve those goals (Wilger, 2012). For example, if a CHW program is designed to support individuals with chronic health conditions, the CHW may function primarily as a health educator or care coordinator. In contrast, if a program is designed to improve community access to health services, the CHW may function primarily as an outreach worker, patient navigator, and/or advocate. Arvey and Fernandez (2012) have noted that such variability in CHW roles and the settings in which they deliver services presents challenges to conducting research on the effectiveness of CHW programs and translating that research into practice.

Despite the fact that CHWs provide a wide range of services in a number of diverse settings, a common thread believed to define them is an ethnic, linguistic, cultural, and/or experiential connection with their respective target populations (National Healthcare for the Homeless Council, 2011). At the same time, Arvey and Fernandez (2012) point out that in order to design effective programs researchers and program planners must fully explore ways in which the complex forces of social context influence CHW effectiveness. For example, it is unclear which elements of culture and social context should be shared for CHWs to be effective.

B. Best Practices

A recent Cochrane Collaborative review examined 43 "lay health worker" intervention studies, the majority of which took place in the United States (US), Canada, and the United Kingdom (Lewin et al., 2009). Study diversity limited the focus of the meta-analysis to interventions that (a) promoted breast cancer screening, immunization, and breastfeeding uptake and (b) sought to improve diagnosis/treatment for selected infectious diseases. Promising benefits were found in interventions to (a) promote breastfeeding and immunization uptake in children and adults and improve outcomes for several infectious diseases. In contrast, small effects were found in interventions promoting breast cancer screening, when compared to usual care. The authors concluded that (a) there was not enough evidence to assess level of effectiveness for interventions targeting other health issues (e.g., hypertension management) and (b) it is not known how best lay health workers should provide services and how much training they need to be effective.

In an effort to promote awareness of promising practices, the Agency for Healthcare Research and Quality (AHRQ) has established the Health Care Innovations Exchange website (http://www.innovations.ahrq.gov/). The table below includes examples of CHWs interventions listed on the website that have moderate to strong evidence of effectiveness.

Table 2. Examples of Promising CHW-Related Interventions

Project/Developers	Target Population	Goal	Outcomes	Evidence Level
Prevention/Access to Care & Treatment (PACT) Brigham & Women's Hospital, Partners in Health in Boston, MA http://www.brighamandwomens.org/Departments_and_Services/medicine/services/socialmedicine/pact.aspx	Low-income individuals with HIV/AIDS	CHWs deliver home-based support services to help individuals prioritize health care concerns, adhere to medication schedules, keep appointments, communicate with providers, & negotiate complex social issues that negatively affect their ability to manage their disease	Significant reductions in HIV viral load & inpatient utilization & costs	Moderate
Culturally Appropriate Resources & Education (CARE) Maternal/Child Health Clinic Saint Alphonsus Regional Medical Center in Boise, ID Widener et al., 2010	Pregnant refugee women	Clinic offers a pre-care visit to ease stress/build rapport with the patient & peer health advisers who serve as advocates & educators, real-time interpreters, & incentives to promote healthy behaviors during pregnancy	Decreases in patient anxiety & no-show rates	Moderate
Telephone-Based Mentoring (Long, 2012) Philadelphia Veterans Affairs Medical Center in Philadelphia, PA Long et al., 2012	African-American veterans with diabetes who had uncontrolled blood glucose levels	Following a 1-hour training, peer mentors phone/ sometimes meet with assigned patients on a regular basis for a 6-month period to address such issues as diet, exercise, & insulin use	Significant reduction in blood glucose levels	Strong
Pathways Model to Enhance Access Access El Dorado (ACCEL) in Placerville, CA http://www.acceledc.org	Low-income families with children ≤18 years	8 cross-agency care pathways (based on Pathways model) use CHWs to help families obtain health insurance, navigate the health care system, & access appropriate medical services	Increases in insurance enrollment & access to primary, mental health & specialty care; decreases in ER visits/costs	Moderate
Native Sisters Program Multiple organizations (e.g., American Indian Family Resource Center, Denver Health Hospital, Los Angeles American Indian Clinic, Native American Cancer Research) in Denver, CO & Los Angeles, CA Burhansstipanov et al., 2010	American Indian & native Alaskan women	Cultural adaptation of Patient Navigator model; lay health advisers (Native Sisters) help urban American Indian women overcome barriers to breast cancer screening & treatment. Culturally sensitive methods are used to provide education, screening, & advocacy/ support throughout the screening & follow-up treatment process	Significant increases in proportion of women receiving mammograms within recommended guidelines	Strong

C. CHW Funding

In 2007, the US Department of Health and Human Services, Health Resources and Services Administration released the results of a national CHW workforce study. Based on survey results and a comprehensive review of the literature, HRSA estimated that approximately 33% of the CHWs in this country serve in a volunteer capacity and 67% are paid employees.

Dower et al. (2006) have categorized the primary funding sources for CHW programs as follows: government agency and charitable foundation grants and contracts; private or public insurance (with a particular focus on Medicaid); government general funds; and hospital, managed care organization, and employer budgets. The majority of CHW programs rely on multiple funding sources, many of which are time-limited (e.g., federal or private foundation grants). As such, a paucity of steady funding streams represents an important barrier relative to the expansion and sustainability of CHW efforts, a dilemma that may be eased to some degree with the full implementation of the Affordable Care Act (ACA) of 2010. In fact, ACA implementation represents the impetus for the development of the State of Washington's *Community Health Worker Training System*, which can be accessed at: http://www.doh.wa.gov/PublicHealthandHealthcareProviders/PublicHealthSystemResourcesandServices/LocalHealthResourcesandTools/CommunityHealthWorkerTrainingSystem.aspx.

D. CHW Training/Certification

Training and certification standards can help to enhance recognition of CHW roles and provide greater opportunities for reimbursement though Medicaid programs and third-party insurers (Goodwin & Tobler, 2008). At the same time, concern has been raised about the potential ramifications of certification requirements, as some advocacy groups assert that such requirements will significantly reduce the number of CHWs, in particular for programs that rely on volunteers and the assistance of undocumented immigrants (Goodwin & Tobler, 2008).

Based on their national review of policies and programs relative to CHW training and certification, May and colleagues (2005) advise that such policies/programs carefully consider the definitions, roles, and purposes which CHWs fulfill within their sponsoring organizations. In addition, given the diversity of roles and functions that characterize the CHW workforce, May and colleagues caution against a "one size fits all" approach to training/certification, a sentiment echoed by Arvey & Fernandez (2012).

As of December 31, 2012, fifteen states and the District of Columbia had laws in place addressing issues relative to CHW workforce development (Centers for Disease Control, 2013). For example, five states have enacted laws that authorize creation of a CHW certification process, or require CHW certification (i.e., Massachusetts, Minnesota, Ohio, Oregon, and Texas). In addition, six legislatures have authorized the creation of standardized CHW training curricula that specify core competencies and skills (i.e., District of Columbia, Massachusetts, Ohio, Oregon, Texas, and Washington State).

E. Overview of Phase 1

The primary activities for the initial phase of the project included a review of the CHW literature and development of the survey methodologies and procedures. (As mentioned previously, the initial progress report and companion documents detailing phase 1 activities are available in **Attachment 1**). Articles focusing on CHW initiatives in the US, Europe, and Mexico published during 2006-2013 were eligible for inclusion in the literature review. The PubMed and EBSCO MegaFILE databases were used to identify relevant articles; primary search terms included *environmental scan, case manager, community health worker,* lay *community health worker, lay health worker, lay health advisor, peer counselor, peer educator, promotora,* and *patient navigator*. In addition, bibliographies of relevant articles were searched to identify articles that

did not appear in our initial searches. (*Please Note*: A summary of CHW models in other states generated by the literature review is provided in **Attachment 2**).

Based on literature review findings, an operational definition of CHWs selected for the environmental scan was the one proposed by the American Public Health Association (2009).

> A community health worker is a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the CHW to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. A CHW also builds individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support and advocacy.

Given the limited timeframe (4 months) for this project, a recently completed environmental scan conducted by the Center for Public Policy and Administration at the University of Utah (McCormick et al., 2012) provided the foundation for the Alliance's survey instrument and sampling plan implemented in phase 2.

III. METHODOLOGY

A. Survey Instrument

The seven key domains, and corresponding items, included in the survey conducted as part of the Utah environmental scan provided the template for the Alliance's survey instrument. These domains included: types of organizations engaging CHWs; use of paid vs. volunteer CHWs; target populations for CHW efforts; CHW roles and functions; CHW funding; CHW educational requirements and training programs; and policy/systems changes needed to support CHW sustainability. (The survey instrument is provided in **Attachment 3**).

Both paper and online (Survey Monkey) versions of the survey were created. First, the paper version was field-tested with eight Alliance staff members; based on their feedback, minor changes were made and then verified. Next, the Survey Monkey version was created and field-tested by four Alliance staff members and one DOH colleague, Gerald Miller; an incorrect skip pattern for one of the questions was identified and corrected prior to initiation of survey administration.

B. Sampling and Recruitment

Purposive sampling was the strategy used to identify potential respondents. In brief, this strategy involves the selection of respondents who are familiar with the phenomenon of interest, in this case the CHW workforce in PA (Spradley, 1979). Once the pool of potential respondents was finalized, a variant of purposive sampling, snowball sampling (Crosby, Salazar, & DiClemente, 2006) was used to recruit additional respondents. To this end, respondents completing the paper version of the survey were asked to provide the names of (and contact information for) individuals they know whose programs utilize CHWs; similarly, respondents completing the online version were asked to forward the Survey Monkey link to such individuals.

Based on knowledge of the service delivery systems in their respective regions, assembly of the survey pool began by staff from the member agencies of the Alliance identifying individuals in leadership roles at "local" organizations that utilized (or potentially utilized) CHWs. This activity resulted in the identification of 454 potential survey respondents. Next, Alliance staff verified contact information for potential respondents in their respective regions. During the verification process:

- 123 potential respondents who were members of larger systems (e.g., individual health centers in an FQHC network) reported that surveys needed to be completed by their respective administrative entities, thereby reducing the survey pool to 331 *and*
- 22 potential respondents indicated they did not want to take part in the survey because their organizations do not utilize CHWs, further reducing the survey pool to 309.

Following completion of the verification process:

- Packets containing an invitation to take part in the survey and a blank survey form were mailed to the 309 members of the survey pool on 5/21/13; a second mailing was sent to non-respondents on 6/11/13 to encourage survey completion.
- Email invitations containing a link to the Survey Monkey version of the survey were sent to members of the survey pool for whom we had email addresses on 5/21/13; non-respondents received two follow-up messages to encourage survey completion, one on 5/30/13 and the second on 6/7/13.
- Of the 309 survey packets distributed, 14 were deemed "undeliverable" by the US Postal Service. Since individuals with "undeliverable" packets did not have the opportunity to accept/decline the invitation to take part in the survey, the pool of potential respondents was reduced to 295.
- Of the 295 members remaining in the survey pool, 159 submitted surveys by the deadline date for inclusion in the analyses presented herein (7/5/13). Since 18 respondents recruited via snowball sampling also submitted surveys, analyses were based on a total of 177 surveys;
- Almost three-quarters (70.1%) of the respondents completed the paper version of the survey.

The survey response rate was 53.9% (159/295). (*Please Note*: The 18 respondents identified via snowball sampling were excluded from the response rate calculation because they were recruited after the survey pool was finalized). According to Rubin and Babbie (2009), a response rate of at least 50% is considered adequate for analysis and reporting purposes.

C. Data Management

Ease of use and minimization of data entry burden and data entry errors represent important benefits of survey administration via Survey Monkey. In an effort to ensure timely processing of survey forms and minimize data entry errors, an optical mark recognition (OMR) software application, Remark OMR® 8.0, was used to scan responses into a data management file; data were then exported to SPSS 20.0 for analysis. Frequency tables generated for all survey questions can be found in **Attachment 4**.

IV. KEY FINDINGS

A. Summary

Since an assessment of the CHW workforce in PA represents a relatively new area of inquiry and such resources as a centralized CHW registry do not exist, it is important to note that survey findings are based on respondents identified using non-probability sampling procedures. As such, the degree to which the findings presented herein are representative of the total CHW population cannot be known. Nevertheless, the fact that providers utilizing CHWs in all regions of the Commonwealth were included in the survey sample suggests that the findings provide important insight into the CHW workforce in PA.

Of the 177 survey respondents, 126 (71.2%) reported that their organizations utilized CHWs in some capacity. Among the 51 respondents whose organizations did not utilize CHWs, 42.0% indicated a potential interest in doing so in the future. Survey findings in the sections that follow are based on the responses of the 126 respondents whose organizations utilized CHWs.

Attachment 4 includes summary tables of frequencies for responses to all survey questions. (*Please Note*: Respondents were able to "select all" responses applicable to them for many questions. As a result, the total number of responses for a given question can exceed 126; similarly, percentage totals can exceed 100%).

B. Environmental Scan of Pennsylvania – Key Findings

Types of organizations using CHWs

One of the survey items asks respondents to describe their organization by selecting all applicable response options. Of the 126 respondents from organizations that utilize CHWs, 47.6% selected 'community-based/non-profits providing health and/or social services', 19.8% 'community health center/FQHC', 14.2% 'mental health agency', 13.5% 'inpatient facility', and 7.9% 'private provider'. Examples of additional responses included 'day care/schools for grades K-12' (2.4%), 'faith-based' (4.0%), 'county/local health department' (4.8%), 'outpatient facility' (4.0%), and 'health system' (4.0%). Staffing patterns at respondents' organizations varied considerably; while 27.8% had a maximum of 20 employees, 23.8% had more than 200 employees.

Types of CHW

One of the survey questions asks respondents to characterize the CHWs at their organizations by selecting one or more of the following response options: 'volunteers', 'paid employees', 'independent contractors', 'AmeriCorps/Vista workers', 'interns/students enrolled in service learning classes', and/or 'other'. Of the 126 respondents with CHW staff, 86.5% indicated their CHWs were paid employees. In descending order, 35.7% of the respondents reported that interns, 27.8% that volunteers, 10.3% that independent contractors, and 4.8% that AmeriCorps/Vista workers served as CHWs at their organizations.

Ninety-four respondents (74.6%) indicated their organizations had paid full-time CHWs, most commonly 1-5 in number. Fifty-three respondents (42.1%) indicated they had paid part-time CHWs, again most commonly 1-5 in number; almost half of the part-time CHWs worked less than 20 hours per week. While the questions on salary were frequently skipped, 54.4% of those

who provided responses (n=68) indicated that the average hourly salary for CHWs was between $13-$19 per hour, or approximately $31,000-$42,000 per year. Thirty-six respondents (28.6%) reported having CHWs who served in a volunteer capacity (again most commonly 1-5 in number); almost half of the volunteers worked less than 20 hours per week. About half of the organizations provided volunteers some form of compensation.

Specific Populations for CHW Services

One of the survey items asks respondents to describe the target client populations for their CHW initiatives. Of the 126 respondents from organizations with CHWs, 71.4% indicated their clients were "income eligible" (e.g., uninsured, met criteria for publicly-funded benefits). More than 50% of respondents indicated their clients included the following groups: adolescents; homeless individuals; persons with physical disabilities; persons with behavioral health disorders; infants and children; senior citizens; pregnant women; and racial and ethnic minorities (most commonly Blacks and Hispanics). Other less common client categories included persons at risk for disease, those with substance abuse disorders, and migrant workers.

Specific Conditions and Risk Factors Targeted by CHWs

One of the survey items asks: *On what specific diseases/conditions and/or risk factors do CHWs focus at your organization?* Of the 126 respondents from organizations with CHWs, 72.2% indicated that the target populations for their CHW services included individuals with the following diseases/conditions: behavioral health disorders, diabetes, heart disease and high blood pressure (31 to 34 respondents/condition), as well as high cholesterol, HIV, cancer, and asthma (25 to 28 respondents/condition).

In terms of risk factors, 95 respondents indicated that the target populations for their CHW services included individuals exhibiting the following risks: unintended pregnancy, tobacco use, obesity, and nutrition inadequacies (38 to 45 respondents/condition). A slightly less common risk factor identified by 29 respondents was 'risk of hospital readmission'.

As can be seen in Tables 3 and 4 below, health focal areas vary slightly by organizational type. Most frequently cited diseases and risk factors for each type are indicated in **bold** print.

Table 3: Specific Diseases/Conditions by Most Frequently Cited Organization Type

Disease	Mental Health (n=18)	Inpatient Facility (n=17)	CBO (n=60)	FQHC (n=25)
No focus on specific diseases	0%	17.6%	27.6%	25.0%
Asthma	12.5%	23.5%	22.4%	**41.7%**
Cancer	0%	29.4%	24.1%	25.0%
Diabetes	18.8%	**47.1%**	20.7%	**58.3%**
Heart Disease	18.8%	**58.8%**	19.0%	**50.0%**
High blood pressure	18.8%	**52.9%**	24.1%	**58.3%**
High cholesterol	18.8%	35.3%	17.2%	**41.7%**
HIV/AIDs	0%	29.4%	**31.0%**	25.0%
Mental health conditions	**87.5%**	23.5%	13.8%	29.2%
Other	0%	21.5%	21.7%	4.0%

Table 4: Specific Risk Factors by Most Frequently Cited Organization Type

Risk Factor	Mental Health (n=18)	Inpatient Facility (n=17)	CBO (n=60)	FQHC (n=25)
No focus on specific risk factors	31.2%	35.3%	22.4%	20.8%
Nutrition	25.0%	**41.2%**	36.2%	**58.3%**
Obesity	25.0%	**47.1%**	31.0%	**50.0%**
Tobacco use/smoking	31.2%	**52.9%**	39.7%	**58.3%**
Environmental risks (e.g., pesticides)	12.5%	5.9%	12.1%	12.5%
Low community-level vaccination rates	12.5%	11.8%	17.2%	20.8%
Risk of hospital re-admission	**62.5%**	35.3%	17.2%	29.2%
Pregnancy	12.5%	23.5%	**46.6%**	**45.8%**
Other	6.2%	5.9%	10.3%	0%

CHWs at mental health agencies most frequently focused on behavioral health conditions and risk of hospital admission. Those at inpatient facilities and FQHCs had wide-ranging concerns with foci on diabetes, heart disease, high blood pressure, nutrition, obesity and tobacco use/smoking. FQHCs also indicated asthma, high cholesterol and pregnancy as specific areas of focus. Community-based organizations (CBOs) most commonly focused on HIV/AIDS and pregnancy.

Geographical areas served

Survey results indicate that CHW services are provided in all 67 PA counties. Fifty-five respondents (43.7%) indicated they provided CHW services in two or more counties; fifty-nine respondents (46.8%) indicated services were limited to a one-county area. Twelve respondents left county selection blank. Figure 1, shown on the following page, illustrates the geographic distribution of CHWs by the county in which the main organization is located. Forty-two counties in PA are the base of operations for CHW services that span all 67 counties in the state. As can be seen from this map, CHW services appear to be most prevalent in our rural areas. PA's most urbanized counties (Philadelphia, Delaware, Allegheny, Montgomery, Bucks and Lehigh) have far fewer CHW FTEs than our more rural counties, such as Warren, Bradford and Tioga counties with fewer than 54 persons per square mile.

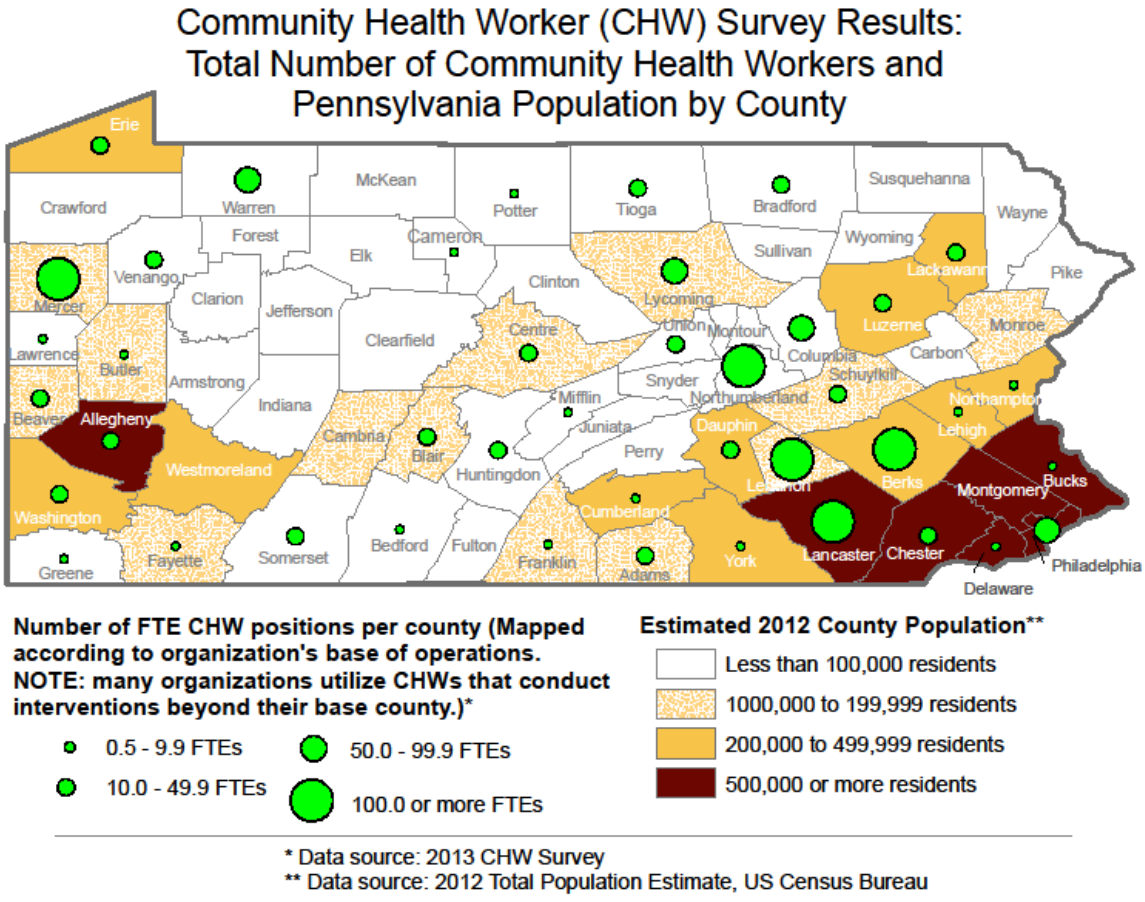
CHW functions/roles and activities

Respondents were able to select all of the functions/roles (e.g., health education, care coordination) and activities (e.g., interpretation, transportation) listed on the survey instrument applicable to the CHWs at their organizations. Roles and functions relate to the characteristic and expected social behaviors of an individual; in this context, roles and functions are "the part a CHW has to play". Activities, on the other hand, are the actions taken by a CHW to achieve their aims.

Based upon the information provided by the 126 survey respondents utilizing CHWs in their programs, CHWs perform all seven core roles identified by the National Community Health Advisor Study (Rosenthal, 1998), though at varying levels. Over 68% of respondents listed assuring people get the services they need (e.g., care coordination, case finding, motivating and accompanying patients to appointments and follow-up care, making referrals and promoting continuity of care) as a primary role of CHWs. Nearly 59% listed providing culturally appropriate health education and information (e.g., prevention related information and

managing/controlling illnesses such as diabetes and asthma). This was followed closely by providing informal counseling and social support to improve mental and physical health (54.8%,), advocating for individual and community needs (53.2%), and providing cultural mediation between communities and the health and social services system – how to use the systems, increasing preventive care, decreasing emergency care (50.0%). Additional responses included doula services, housing counseling, assisting with insurance enrollment, marketing and fundraising, determining program eligibility, breastfeeding assistance, and providing professional nursing care.

Figure 1: CHW Capacity in PA, by Organization's Administrative Location



Since CHWs perform a variety of activities, respondents were asked the following: "Please indicate whether an activity [listed below] is a *core function*, a *secondary function*, or is *not a function* performed by CHWs at your organization at this time". Among the 126 respondents with CHWs, the five most frequently cited core activities included health education (55.6%), patient advocacy (52.4%), risk assessment that might lead to a referral for services (42.1%), outreach (35.7%), and social support-including visiting homebound clients (29.4%). Secondary activities included counseling, compliance follow-up, and cultural competency training.

Across organizational type, CHWs play different roles and perform different activities. (It is important to remind the reader that respondents could select more than one of the organizational types listed on the survey to describe their organizations). Sixty respondents classified their organizations as CBOs. The three most predominant roles played by CHWs in CBOs are assuring people receive the services they need (75.0%), informal counseling and social support (65.0%), and provision of culturally appropriate health education and information (63.3%). The most widely cited core activities for CHWs working in CBOs included health education (61.7%), patient advocacy (53.3%), and outreach (46.7%).

Twenty-five respondents reported that their organizations were FQHCs. CHWs engaged by FQHCs most often provide culturally appropriate health education and information (64.0%) and assure that people receive the services they need (56.0%). CHWs in this type of organization most often perform outreach (84.0%) and health education (52.0%) activities.

Sixteen respondents classified their organizations as mental health agencies. The primary role of CHWs in these settings is provision of informal counseling and social support (66.7%), followed by assuring people receive needed services (61.1%). A core activity for CHWs working in mental health agencies is patient advocacy (50.0%). About one-third of respondents (n=6) also identified outreach, social support, and counseling as core activities.

Seventeen respondents classified their organizations as inpatient facilities; all of these respondents identified the provision of culturally appropriate health education and information as a key function of CHWs. More than 94% (n=16) selected assuring people get the services they need and more than 82% (n=14) selected providing cultural mediation as key roles of their CHWs. The top three core activities performed by CHWs in inpatient facilities are health education (76.5%), patient advocacy (64.7%), and outreach (47.1%).

Ten private providers responding to the survey utilize CHWs. CHWs in this type of setting provide cultural mediation (90.0%), assure people get the services they need (90.0%), provide culturally appropriate health education and information (80.0%), and provide informal counseling and social support (80.0%). Three core activities are most often performed by CHWs affiliated with private providers: health education and patient advocacy (each 80.0%) and risk assessment that might lead to a referral for services (70.0%).

Respondents from all other organization types (day care/schools, faith-based, and county/local health department) indicated CHWs perform a number of functions, including providing culturally appropriate health education and information, assuring clients receive the services they need, informal counseling and social support and advocating for individual and community needs. Core activities for CHWs in faith-based organizations (n=5) include health education, social support, and patient advocacy, each at 60% of respondents. Though response from day care/schools and county or local health departments was quite low (three respondents each), core activities identified in those setting include health education, outreach, patient advocacy, and counseling.

Respondents reported that CHWs services are provided in a variety of locations. Fifty-nine (46.8%) indicated services are provided in community locations (e.g., recreation centers) and

fifty-six respondents (44.4%) indicated services are provided in health care settings. More than 36% of respondents (n=46) also indicated CHW services are provided in client/group homes and nearly 36% provide services via telephone or text messaging (n=45). Nearly 29% of respondents indicated services were delivered at worksites (n=36). Service delivery locations varied by type of organization; see Table 5 below for details by the most prevalent organization types. The service locations most often cited by organization type are indicated in **bold** print.

Table 5: CHW Service Locations by Type of Organization

CHW Service Locations	Mental health agency (n=18)	Inpatient facility such as a hospital or care center (n=17)	Community based organizations (n=60)	Community health center/FQHC (n=25)	Private provider (n=10)
Community locations (e.g.,	**61.1%**	58.8%	**56.7%**	**32.0%**	40.0%
Faith-based organizations	11.1%	29.4%	26.7%	12.0%	30.0%
Health care organizations	33.3%	**88.2%**	53.3%	44.0%	**70.0%**
In client/patient homes or	**61.1%**	47.1%	36.7%	20.0%	40.0%
Schools	33.3%	35.3%	35.0%	20.0%	30.0%
Telephone / text messaging	50.0%	58.8%	38.3%	24.0%	40.0%
Worksites	16.7%	41.2%	30.0%	28.0%	40.0%
Other locations	5.6%	11.8%	11.7%	24.0%	30.0%

As discussed previously, respondents utilize a variety of CHWs – paid, volunteer, independent contractors, interns, AmeriCorps/Vista workers – within their organizations. See Table 6 below for details on service locations by type of CHW. The most frequently cited service location by type of CHW is indicated in **bold** print.

Table 6: Service Location by Type of CHW in PA

CHW Service Locations	Volunteer CHWs (n=35)	Paid Employee CHWs (n=109)	Independent Contractor CHWs (n=13)	AmeriCorps or VISTA CHWs (n=6)	Interns as CHWs (n=45)	CHWs engaged in OTHER ways (n=7)
Community locations (e.g., recreation centers)	**57.1%**	**45.9%**	**76.9%**	50.0%	**53.3%**	**28.6%**
Faith-based organizations	37.1%	17.4%	30.8%	0.0%	26.7%	14.3%
Health care organizations	48.6%	**46.8%**	61.5%	**83.3%**	**55.6%**	**28.6%**
In client/patient homes or group homes	40.0%	34.9%	53.8%	16.7%	37.8%	**28.6%**
Schools	45.7%	31.2%	53.8%	33.3%	44.4%	0.0%
Telephone / text messaging	40.0%	34.9%	46.2%	16.7%	46.7%	14.3%
Worksites	25.7%	33.0%	23.1%	16.7%	33.3%	0.0%
Other locations	14.3%	16.5%	7.7%	16.7%	11.1%	**28.6%**

Other locations for provision of CHW services include prisons, labor camps, mobile medical units, recovery/re-entry programs, shelters/soup kitchens, WIC nutrition centers, and "where it is most convenient for consumer".

Funding for CHW services

Respondents were able to select multiple funding sources for their CHW programs. Medicaid was the most frequently cited source of funding (17.6%). This varied across organizational type. Mental health organizations most often paid for CHW programs through Medicaid (85.7%). This would be expected since PA provides Medicaid coverage for Peer Support Services in the mental health field. FQHCs had the widest ranging sources for funding CHWs, with nearly 58% of programs funded through Medicaid, Medicare, and Federal grant categorical funding. Slightly more than 49% of respondents having CHWs include funding for programs in their core operating budgets (see Table 7 below).

Table 7: CHW Funding Sources by Most Frequently Cited Organization Type

	Mental Health (n=18)	Inpatient Facility (n=17)	CBO (n=60)	FQHC (n=25)	Private Provider (n=10)
Medicaid	**66.7%**	**58.8%**	33.3%	**44.0%**	**40.0%**
Medicare	16.7%	41.2%	18.3%	**44.0%**	20.0%
Commercial health insurance	16.7%	41.2%	21.7%	40.0%	30.0%
Research grant or contract	11.1%	35.3%	16.7%	32.0%	20.0%
Private foundation	5.6%	17.6%	33.3%	24.0%	20.0%
Program fees	16.7%	11.8%	16.7%	28.0%	0
Federal grant categorical funding	22.2%	29.4%	**41.7%**	**44.0%**	0
State Government	38.9%	11.8%	26.7%	8.0%	0
Local Government	27.8%	0	8.3%	4.0%	0
Other funding	16.7%	41.2%	33.3%	16.0%	**40.0%**

Write-in responses regarding funding sources by organization type are provided verbatim below:

Mental Health Agency: "community mental health state funding", "county MH/ID office", "DPW", "Federal funds", "reinvestment dollars";

Private Provider (including private physician office): "Health system", "health system budget", "on payroll", "organizational budget";

Inpatient Facility: "Healthy Beginnings Plus", "health system/health system budget", "hospital", "organizational budget", "paid by Wellspan";

FQHC: "general operations", "Health Promotion Council of Southeastern PA", "BPHC/HRSA Tobacco Dependence Treatment Programs", "HRSA", "HUD SSO Homeless grant";

CBO: "Community Development Block Grant (City of Pittsburgh)", "Community Health Center funding", "contractual and fundraising", "Dept. of Health and Dept. of Public Welfare", "Dept. of Ed grant (federal)", "Dept. of Health", "Federal govt pays for our waiver program", "funded by health system (LG Health)", "funding for STD program clients and women between the ages of 40 and 49 who are enrolled in the HealthyWoman Program", "general operations", "Head Start", "Headstart Community Block grant", "Health Beginnings plus", "health system", "HOPWA-United Way", " hospital, organizational budget", "paid by Wellspan", "Ryan White through the HIV/AIDS consortia", "state tobacco settlement money-state STI program", "USDA Breastfeeding Peer Counselor Program";

Day Care/School: "Head Start";

Faith Based Organization: "DOH-Centers for Schools and Communities", "general operations";

County/Local Health Department: "County MH/ID Office"

Training and education requirements

Respondents were asked about "the minimum level of education required of CHWs engaged by your organization". Of the 126 respondents with CHWs, almost one-third reported a minimum requirement of a GED/high school diploma and nearly one-quarter a minimum requirement of a bachelor's degree. Nineteen respondents (15.1%) indicated an associate's degree was required, 3.2% indicated there was no educational requirement of their CHWs, and 12.7% identified 'other' requirements. Six respondents indicated their CHWs had nursing licensure (RN or LPN). Other educational requirements cited include 'civil service qualified', 'Peer Support Specialist certification', 'bilingual' (English/Spanish), 'masters in social work', and 'varies with position' (e.g., 'bachelors degree for Healthy Beginnings Plus program'; 'ranging from none to bachelors and masters degrees'). It was noted that Promotores had no educational requirements.

Over 65% of CHWs (n=83) work directly with clinical professionals. (Details of the nature of this CHW-clinical professional relationship was beyond the scope of this environmental scan). Nearly 85% (n=107) of respondents utilizing CHWs in their programs provide training, typically

multiple types of training. Eighty-nine respondents (70.6%) provide on-the-job training by shadowing others, fifty-nine (46.8%) include structured in-house training, fifty-seven (45.2%) include web-based training, forty-one (32.5%) provide clinic-based training, and thirty-four (27.0%) provide training through a formal educational institution. Twenty-two respondents (17.5%) also provide structured external training such as the "Welfare to Work" program. Training varied by type of organization. Only five organizations indicated they were faith-based and they most often provide on-the-job training, structured in-house training, and web-based training. Mental health agencies most often provide on-the-job and web-based training (61.1% each) as well as structured in-house training (71.4%). CHWs in mental health organizations also receive Peer Support Specialist certification and Tobacco Cessation Certification/training. All inpatient facilities provide on-the-job training to their CHWs and none use structured external training. FQHCs most often provide on-the-job training (64%). One respondent also mentioned "taking our 10 week course". CBOs train through on-the-job shadowing (78.3%), structured in-house training (55.0%) and web-based training (48.3%). Respondents affiliated with CBOs also mentioned conferences, health department, Peer Support Specialist certification, training through the Family Health Council of Central PA, and "taking our 10 week course". Similar to inpatient facilities, all private providers indicated on-the-job training was provided to CHWs.

Policy or systems changes for sustainability of CHW services

This environmental scan provided respondents the opportunity to comment on policy or system changes to sustain CHW services on an on-going basis. The majority (23) of comments dealt with funding issues, e.g., adequate funding, increased funding, funding for more qualified workers, funding for training and hiring of dedicated CHWs (rather than provision of CHW services by support staff), and "program funding rather than unit funding". Ten comments also addressed insurance-reimbursable services such as more flexibility with Medicaid reimbursed services and ability to bill private insurance providers for CHW services separately from physician services. Several respondents addressed specific reimbursement issues such as travel reimbursement for CHWs when transporting clients and tuition reimbursement for CHWs. Other issues included getting approval to include the CHW in the list of job descriptions within the hospital, restoring HIV/AIDS funding at higher allocations for prevention, standardizing the "P4P" programs so the measurements are the same, and continuation of Healthy Choice funding.

V. Summary and Recommendations

A. Payment Models and Financing

CHW programs in PA utilize three of the four payment models described by Dower et al (2006), as discussed previously. The only exception is the "government general funds" model, such as that utilized in the state of Massachusetts. The PA Medical Assistance Fee-For-Service Program provides reimbursement for Peer Support Specialist services and this is the primary source of program funding utilized for CHW programs in mental health agencies, as discussed previously. Program evaluations of CHW services show improved health outcomes and reduction in the costs associated with more expensive health care, such as that provided in emergency departments. Furthermore, the Affordable Care Act recognizes the importance of CHW services (specifically those services provided by Patient Navigators) in reducing barriers to accessing care, reducing delays in accessing care, and in assuring all necessary follow-up services for a specific health episode are obtained. This is especially critical when working with racial and

ethnic minorities, as well as persons from low socioeconomic classes, who may face additional obstacles such as geographic distance, language barriers and cultural barriers. A detailed report on Cost Effectiveness, Payment Models, and Funding Mechanisms is in **Attachment 5.**

B. Education, Training and Best Practices

CHWs improve access to health care among our most vulnerable populations (racial and ethnic minorities, low-income and under-served persons), improve quality of care, and reduce health care costs. The formal development and recognition of CHW programs and services is supported by the American Public Health Association, the Centers for Disease Control and Prevention and the National Rural Health Association (HRSA, 2006). While the successful outcomes of CHW programs have been documented, training and education for CHWs remains fragmented and inconsistent, often becoming the responsibility of organizations employing them. In the National Community Health Advisor Study (Rosenthal et al, 1998), eight core skill clusters were identified. These core CHW skills include communication skills, interpersonal skills, knowledge of the community/specific health issues/health and social service systems, service coordination skills, capacity-building skills, advocacy skills, teaching skills, and organizational skills.

In its 2006 report to the US Department of Health and Human Services, the Advisory Committee on Interdisciplinary, Community-based Linkages recommended that Congress "should recognize that community health workers are a valuable part of the safety net workforce and should provide funding preferences to interdisciplinary academic and CBOs that provide education to community health workers" (DHHS, 2006). Numerous programs across the county have shown the value of well-trained CHWs. A Texas program won an innovative practice award from the Centers for Medicare and Medicaid Services for their work in enrolling children into its SCHIP. By nature of their definition, CHWs are already culturally and linguistically competent as well as skilled in reaching disadvantaged people in our most vulnerable neighborhoods. It would benefit all to extend funding resources and incentives for additional CHW training programs.

The Community Health Worker National Education Collaborative (CHW-NEC) began in 2004 to identify and promote curricula and educational programs that best represent promising practices for non-traditional CHW success. This collaborative was in response to a growing trend in CHW education shifting from employer-provided on-the-job training programs to increasing college interest in developing CHW education programs that were responsive to the needs of CHWs. The goal of this collaborative was to design a framework and make recommendations for model CHW training and college educational programs. These recommendations can be found in its 2008 guidebook "Key considerations for opening doors: developing community health worker education programs". Among others, recommendations include promoting CHW leadership, implementing a competency-based and basic core skills curriculum, developing specialty health track modules, avoiding prerequisite requirements for basic course of study, starting with an entry-level basic certificate program, using flexible class scheduling, and assessing prior learning for credit.

A national survey of regional and state CHW certification and training programs was conducted by the Southwest Rural Health Research Center on behalf of The Office of Rural Health Policy (May, Kash, and Contreras, 2005). At the time of this study, one-third of US states had some

type of state-sponsored training program for CHWs. Through detailed interviews with seventeen states, three major training and certification trends were identified: (1) community college-based training provides academic credit and career advancement opportunities, (2) on-the-job training is offered to improve CHW capacities and enhance standards of practice, and (3) certification at the state level recognizes and legitimizes the work of CHWs and allows for potential reimbursement opportunities for their services. Several important recommendations for CHW training and education programs came from this study.

1) Programs for CHW training and certification should consider the definitions, roles, and purposes which CHWs fulfill in their organizations. This implies a need for quite varied training programs since CHWs have many roles.
2) Training and certification programs should include a wide range of practice skills specializations that are sufficient to meet CHW obligations for the work they are to fulfill. CHWs serve a wide variety of groups that vary by the types of clients they serve, the diseases or risk factors they address, their geography, and the organizations for whom they work.
3) Training and certification programs should be guided by on-going evaluation research. This evaluation should include training, certification, utilization, performance, and outcome (both patient/client outcomes and cost-effectiveness outcomes of the CHW programs).

As discussed previously, results of this environmental scan illustrate a wide range of CHW education requirements and training. Only one specific training program in the PA scan was mentioned – Peer Support Specialist certification. Due to the short timeframe for this scan, it was not possible to conduct interviews with respondents to collect detailed information or curriculum on the training they provided to their CHWs.

C. Current CHW Capacity and Service Gaps

A number of maps are included as **Attachment 6** to show the distribution of CHW full-time equivalents (FTEs) by the disease and/or risk factor they target as the map layer and the distribution of the related morbidity or mortality for that disease/risk factor as proportionate markers. We have also included a corresponding map showing the distribution of all CHWs (regardless of any disease focus) with the same disease/risk factor markers. For example, in reviewing the map on cancer, it can be seen that Erie County has higher than state rates for both colon cancer and bronchus/lung cancer. The first map illustrates there are no CHWs in Erie County whose primary service focus is on cancer but the bottom map shows there are a total of 9.99 to 24.99 CHW FTEs in Erie County. Likewise, there are similar discrepancies for Washington and Greene counties. This illustrates the opportunity to meet with CHW providers in these counties for potential expansion of their programs to target cancer. Maps are included for cancer incidence (female breast, colon, and bronchus/lung), percent of adult smokers, proportion of adults ever told they had diabetes, cardiovascular disease mortality, mental and behavioral disorder mortality, pregnancy and birth weight indicators, percent of adults with no health insurance, and percent of adults needing to see a doctor but who could not due to cost. These maps highlight opportunities for enhancing current CHW services to target those diseases and/or risk factors most prevalent in their communities.

Results from both the PA environmental scan and as identified in the extensive literature review indicate several key recommendations for consideration in PA:

1. Review opportunities to use Medical Assistance administrative match funds to pay for CHWs conducting outreach and Medicaid enrollment – particularly critical with implementation of requirements in the Affordable Care Act
2. Expand Medicaid Fee-For-Service reimbursable CHW services beyond the scope of mental health to assist persons with accessing care, educating clients on the importance of preventive health care (versus overutilization of emergency care), and to assess clients diagnosed with specific diseases (e.g., cancer, diabetes, etc.) to assure they are adhering to medication and diet requirements and receiving all necessary follow-up care
3. All safety net providers of health care services to our most vulnerable populations should be able to bill Medicaid, Medicaid Managed Care, and CHIP for CHW education, follow-up, and coordination services. These important services should be considered reimbursable for community health centers, FQHCs, family planning providers, and similar organizations serving low-income, often un-insured clients.
4. Consider securing Section 1115 and/or Section 1915 Medicaid waivers that provide coverage for CHW services shown to reduce overall health care costs and/or improve health outcomes.
5. Care coordination and patient navigation are often used interchangeably but are sometimes limited in scope of services. In PA, care coordination is a key component of the state-funded Healthy Beginnings Plus prenatal program that includes psychosocial services in addition to the traditional medical and obstetric services provided during a pregnancy. Patient navigation is often provided, through private foundation funding, for persons diagnosed with cancer. For example, the Komen and Avon Foundations often fund navigation services to assure clients diagnosed with breast cancer follow-up with recommended treatment, have transportation to appointments, and are able to access ancillary support services. These important services should be considered a core component of care for persons diagnosed with cancer and other chronic diseases.
6. Numerous individuals contacted during the environmental scan requested clarification on CHW definitions, locations, activities, and roles, thus indicating the need to develop a more explicit and concrete definition of CHWs in PA. This is especially important in terms of program planning, funding, and evaluation as the field of CHW services potentially expands with implementation of the Affordable Care Act and Patient Navigation initiatives.
7. It is important to explicitly state the focus of work performed by CHWs including potential liability issues when providing health services such as screenings and care management. CHWs must have a strong understanding of the health care system and resources in their communities. Those assisting with care management may require disease-specific education and training as well as access to trained health professionals whom they can call with questions.
8. Development of the CHW movement in PA – programs, definitions, roles, scope of practice, training, certification – should be grounded in evaluation research. This research should focus on such issues as identification of best practices relative to CHW training and service delivery, service utilization patterns, costs vs. benefits, and client outcomes.

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LIST OF ATTACHMENTS

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Attachment 1: Phase I Report

Assessment of the Community Health Worker (CHW) Workforce in PA

Initial Progress Report – Phase I

April 12, 2013

The initial focus of the "CHW Assessment" project was successful completion of the Phase 1 literature review, as specified in the Work Statement. The purpose of this review was to help shape the design of the environmental scan of the CHW workforce in PA by identifying: (a) potential data elements, data collection instruments, and methodologies (including survey frame construction and implementation strategies); (b) operational definitions of CHWs; and (c) existing CHW structural models. The sections that follow include a summary of key literature review findings and recommendations regarding the design of the Alliance's environmental scan instruments and protocols. Given that the Department of Health (DOH) and Alliance partners on this project have agreed to use a recent CHW assessment conducted by the University of Utah's Center for Public Policy and Administration as the prototype for our environmental scan, a modified version of the Utah survey is included as an appendix.

A. Literature Review Methodology

Inclusion criteria for the literature review included articles that: focused on CHWs in the US, European countries, and Mexico and were published between 2006-2013 (inclusive). The PubMed and EBSCO MegaFILE databases were used to locate relevant articles in peer-reviewed journals. The search terms *environmental scan*, *case manager*, *community health worker*, lay *community health worker*, *lay health worker*, *lay health advisor, peer counselor, peer educator, promotora*, and *patient navigator* were used to identify relevant articles. In addition, bibliographies of relevant articles were searched to identify articles that did not appear in our initial searches.

B. Literature Review Findings

Literature review findings have been divided into the following three categories: environmental scan methodologies, CHW definitions, and CHW structural models.

Environmental Scan Methodologies:

A search for national-level and state-level CHW assessments and environmental scans was conducted, resulting in review of 3 national assessments and 14 state-level (or multi-state level) assessments.

National level assessments included the following:

- *The National Community Health Advisor Study (1997)*
- *Community Health Workers and Community Voices: Promoting Good Health (2003)*
- *Community Health Worker National Workforce Study (2003)*

The *National Community Health Advisor Study (1997)* is widely referenced as the premier study of CHW across the nation. Their analysis addressed four key areas: (1) core roles and competencies of CHW, (2) evaluation of the impact of CHW programs, (3) strengthening the CHW field and establishing its place in the health care delivery setting, and (4) CHW adaptations to the changing health care environment. Findings from this research remain core to comprehensive assessments of CHW programs. This study identified seven core roles played by

CHW. These seven core roles are often used in assessing the type of work performed by CHW and include the following:

- bridging cultural mediation between communities and the health and social service system
- providing culturally appropriate health education and information
- assuring people get the services they need
- providing informal counseling and social support
- advocating for individual and community needs
- providing direct service
- building individual and community capacity

This national study highlighted additional key findings. While CHWs can influence a wide range of health issues, there are numerous obstacles to rigorous, multi-site evaluations of these programs. This study provides a four-part framework for guiding CHW programs in their evaluation efforts. This framework includes the following four recommendations: make evaluation essential, promote a CHW research agenda, develop evaluation guidelines and tools, and recognize CHWs as partners in program evaluation. Secondly, it is important to develop strategies that promote CHW career paths. These include improving the recognition of qualities and skills required of CHWs, developing clear program and agency standards, and strengthening CHW networks to enhance the development of the CHW field. Finally, CHW programs were strongest within the nonprofit and public health fields. However, CHWs were emerging as key players within managed care programs through the roles they played in linking managed care and communities through outreach, patient education about managed care systems and health issues, and providing follow-up services. This national level report found that CHWs had significant benefit to community residents as well as those who finance health care.

The *Community Health Workers and Community Voices: Promoting Good Health (2003)* report is a Community Voices Publication of the National Center for Primary Care at Morehouse School of Medicine. The report documents how CHWs address problems of health disparities, poor access to care, and the rising cost of health care. This report identifies obstacles to sustainability of CHW programs that include lack of stable funding, the need for training and certification, and the need to institutionalize and integrate CHW programs into existing health systems. One part of the financing solution is states' use of outreach and education dollars made available under Medicaid (including Medicaid waiver systems) and the State Children's Health Insurance Plan. Medicaid Managed Care Organizations can also either be encouraged or mandated to support CHWs in the conduct of community-based outreach and education. CHW workforce recommendations include standardizing CHW training and certification based on core roles and competencies required in the position. Furthermore, it is important to ensure that hiring policies for CHWs are appropriate for the skills and knowledge that they bring and do not present unnecessary barriers. There is also an opportunity to link CHW employment to job training programs and to establish CHWs as one step in a health /medical career ladder. This report also advocates for the integration of CHWs into the health care delivery system. CHW programs are common in various segments of health care, such as diabetes, asthma, maternal and child health, HIV/AIDS, cardiovascular disease. Poor visibility and understanding of CHW programs has led to an underutilization of CHWs in the health care system. However, in

designing effective health care systems, it is critically important to factor in community needs to better understand the integral function and value of CHWs in health care systems.

The *Community Health Worker National Workforce Study (2007)* provided key information related to identification of specific CHW activities that included culturally appropriate health promotion and health education, assistance in accessing medical and non-medical services and programs, translation/interpretation services, counseling, mentoring, social support, and transportation services. This study identified six key functional areas for CHW activity that match those identified in the National Community Health Advisor Study conducted in 1997. Study findings classified CHW programs into five prevailing models of care. These include: (1) member of care delivery team, (2) navigator, (3) screening and health education provider, (4) outreach-enrolling-informing agent, and (5) organizer.

State-level assessments and CHW reports included:

- *Report on Community Health Worker Programs (2012)* – a review of seven state programs for the development of an infrastructure for training and certifying CHWs in the state of North Dakota
- *Southern California Promotores (Community Health Workers) Needs Assessment, San Diego and Imperial Counties, 2010-2011- "South CA"*
- *Four U.S. Border States' Community Health Worker Training Needs Assessment (2011)- California, Arizona, New Mexico, Texas ("Border States")*
- *Community Health Workers in Utah – An Assessment of the Role of CHWs in Utah and the National Health Care System (2012)*
- *Community Health Workers in Rhode Island (2009)*
- *Texas Community Health Worker Study (2012)*
- *Paving a Path to Advance the Community Health Worker Workforce in New York State (2011)*
- *Indiana Community Health Worker Workforce Assessment (2012)*
- *Community Health Workers – Policy Recommendations to the State of Illinois (2012)*
- *The Alaska Community Health Aide Program: An Integrative Literature Review and Visions for Future Research (2003)*
- *Community Health Workers in Massachusetts: Improving Health Care and Public Health (2009)*
- *Minnesota Community Health Worker Employer Survey (2002)*
- *Final Report on the Status, Impact, and Utilization of Community Health Workers (2006) - Virginia*
- *Michigan Department of Community Health, Community Health Care Worker Survey (2011)*

These fourteen state level assessments and environmental scans provided great insight into the practice, scope, work, and environment of CHWs across the nation. Following the Patient Protection and Affordable Care Act (PPACA) and the Health Care and Education Reconciliation Act (HCERA) of 2010, many states undertook projects either to review CHW programs that currently existed in their state or to assess projects in other states as a basis for creating their own CHW infrastructure. Three states, however, conducted reviews and/or scans of CHW projects long before passage of the PPACA and HCERA: Alaska, Massachusetts, and Minnesota.

Alaska is the sole state where Community Health Aides (CHA) are used to provide non-physician primary care in extremely remote, frontier communities. While overseen by physicians, CHAs provide clinical primary care, unlike most CHWs in other programs across the nation. These indigenous CHA receive extensive training, beginning with credentialing and ending with certification under their state certification board. This certification is required to be eligible for reimbursement under the state Medicaid program. *The Alaska Community Health Aide Program: An Integrative Literature Review and Visions for Future Research (2003)* is a comprehensive analysis of CHAs, including training, oversight, reimbursement, and outcomes. It also introduces their new Dental Health Aide program, which will provide dental services in remote, frontier communities similar to the primary care provided by CHAs. Due to the extensive clinical nature of CHAs, this study was excluded from our analysis. The *Community Health Workers in Massachusetts (2008)* is a widely referenced report for its state-initiated, policy-focused analysis of using CHWs to reduce barriers to insurance and primary care, reducing inappropriate utilization of health care services and care related to chronic disease, and in developing a stronger CHW workforce that insures high standards, cultural competency, and quality of service. This study's methodology included focus groups with CHWs as well as a CHW employer survey. Four primary CHW strategies were identified: client advocacy, health education, outreach, and health system navigation. Both employers and CHWs cited these four strategies as essential components of their work. While a state-mandated certification was not in place at the time of the study, CHWs, employers, funders, and payers all agreed that a standardized CHW certification was critical to the advancement and professionalization of the workforce. Presently, the state of Massachusetts requires a Certificate of Competency to practice as a certified CHW, issued by the Board of Certification of Community Health Workers. The state of Minnesota is often cited as the gold standard in the field of community health work. The Blue Cross and Blue Shield of Minnesota Foundation launched the "Growing Up Healthy in Minnesota" initiative in 2001 to address the challenges and cultural barriers faced by persons of different cultures, races, and ethnicities when interacting with the health care system. This was followed by a statewide survey (2002) of health and human service organizations to learn more about the use, training, and employment of CHWs and medical interpreters. The primary goal of this investigation was to learn about CHW and medical interpreter roles within health-related organizations rather than to measure the prevalence of CHWs and interpreters. As such, the sampling frame included health and human service organizations in counties having a minority population of 5% or greater, an Indian reservation, or an organization serving bicultural/bilingual clients. The survey instrument had a greater focus on CHW employment than on interpreter employment and included multiple choice and open-ended questions related to the employment, training, functions, effectiveness, and future needs of CHWs. In 2007, Minnesota received Federal approval for CHW reimbursement under a Medicaid State Plan Amendment and, in 2008, Federal approval for CHW expansion to provider types supervised by Certified Public Health Nurses and Dentists. For Medicaid reimbursable services, CHWs are trained health educators who work with Minnesota Health Care Programs (MHCP) recipients who may have difficulty understanding providers due to cultural or language barriers. CHW Medicaid services are defined as "a diagnosis-related, medical intervention, not a social service."

The *Indiana Community Health Worker Workforce Assessment Surveys (2012)* methodology included two survey links – one for CHWs and one for CHW employers and Payers. Surveys were available in hard copy and on-line. Survey invitations were distributed to more than 400

persons identified by the Indiana CHW Coalition and was accompanied by a letter from the Indiana Commissioner of Health. All recipients were encouraged to widely share the link, creating a snowball sampling effect. On-line surveys were live for three weeks with invitations repeated weekly via email and postal mail during the three-week period. This methodology had highly successful return rates: nearly 80% of CHWs were eligible and qualified for the survey and 89% of CHW employers/potential employers qualified. No "payers" responded to the survey. The top five core roles of CHW in Indiana were (1) health education and promotion, (2) assuring access to care, (3) counseling and support, (4) cultural mediation, and (5) community advocacy. Most CHWs and employers of CHWs in Indiana report that CHWs work on specific health issues – diabetes, nutrition, tobacco control, mental health, and high blood pressure. CHWs and employers identified what they felt were the most pressing needs of those served by CHWs. These included health information, disease management, social support, transportation, and employment. While most CHWs delivered their services on a one-to-one basis, other formats included telephone, community meetings/forums, group classes, and texting.

Community Health Workers in Utah (2012) is a comprehensive assessment of CHWs in both the nation and the state. Following the PPACA in 2010, the Utah Department of Health's Heart Disease and Stroke Prevention Program initiated an assessment of the role of CHWs in Utah. This included an extensive literature review, a nationwide survey, and a Utah-specific survey on current practices and impacts of programs that utilize CHWs. The literature review informed the creation of the national survey instrument, and the national assessment was conducted to form the context for their state assessment. Methodology for their national assessment included a guided interview with leaders of state level CHW associations (typically the executive director). Where no state level association existed, organizations were identified through state referrals or internet searches. One state representative completed an on-line version so that she could view the topics to be covered in the survey. Ten states were included in the national survey because of their active CHW programs, one of which was chosen because of its close proximity to Utah and its similar demographic composition and political environment. Their national assessment included questions on the titles of CHWs, target populations, financing, certification and training, state legislation, and recommendations for the state of Utah.

Utah's state assessment was based on data gathered through the literature review and the national assessment and used to build a base knowledge of CHWs in Utah – mimicking DOH requirements for the environmental scan of Pennsylvania. Methodology for this assessment included an on-line survey link forwarded to 200 individuals or organizations. It was also forwarded to others using a snowball sample where it was sent to a known target population with requests to forward it to others as appropriate. Eighty-eight responses were collected with a rough response rate of 44%. Their snowball sampling approach limited calculation of accurate response rates. This survey consisted of 22 multiple choice and open-ended questions and took less than 15 minutes to complete. Input was solicited in the following areas:

- type of organizations engaging CHWs and if they were paid or volunteer
- populations targeted and in what areas of the state
- CHW roles and functions
- funding for services
- requirements for educational level and type of training received
- types of policy or systems changes required to make sustainability of CHWs easier

Community Health Workers in Rhode Island (2009) is a state level assessment of the CHW workforce and a prediction of the demand for CHWs in the present and future. More than 70% of the Rhode Island CHW workforce is employed in Nursing & Residential Care Facilities and Ambulatory Health Services. Nearly 20% are employed or volunteering at one third of the state's hospitals. For those organizations having full-time CHWs, 51% required Bachelor's Degrees and 8% required Advanced Degrees. The top five functions of CHWs in Rhode Island included: (1) assist people in receiving care they need, (2) assist people in accessing appropriate health education and information, (3) provision of direct services such as blood pressure screening, (4) provision of informal counseling and guidance on behaviors, and (5) promoting healthy living through education. The *Report on Community Health Worker Programs (2012)* is a study of CHW programs in seven states for use by the North Dakota Department of Health to inform potential development of a CHW infrastructure in the state. Ten core CHW programmatic questions were asked of representatives in Minnesota, Massachusetts, New Mexico, New York, Colorado, Washington, and Wisconsin. Questions centered around the existence of CHW, the setting in which they worked, state policies for reimbursement, state level CHW organizations or alliances, state level education, training, and/or certification programs, and if a current CHW curriculum existed. Michigan's *Community Health Care Worker Survey (2011)* included responses from 54 CHWs. It provided a profile of Michigan's CHW workforce, their experience as a CHW, job security, barriers to effective work, internal relationships, and training. Most Michigan CHWs do most of their work in client homes. Three-quarters most often have contact with other CHWs and about 39% have contact with clinical staff (e.g., physicians, nurses). Racial and ethnic minorities are the most targeted population, including African-American, Mexican, and Arab-American/Middle Eastern clients with the prime age group under age 30. The five highest-ranking activities performed by CHWs in Michigan include: (1) health education and information, (2) collaboration with other agencies, (3) office work that included scheduling client follow-up appointments, (4) referrals, and (5) helping clients enroll in health plans.

A number of the above referenced state reviews were excluded from our investigation of environmental scan methodologies. Five state reviews and scans (Border States, Southern CA, Virginia, Illinois, and New York) focused on CHW core competencies, training, CHW perceived needs, certification, and performance standards and measures. The *Paving the Path to Advance the CHW Workforce in New York State (2011)* is a policy brief written by the New York State Community Health Worker Initiative. This initiative was formed to advance the CHW workforce by establishing statewide recommendations for CHW Scope of Practice, Training and Credentialing, and Financing. The *Texas Community Health Worker Study (2012)* resulted in seven recommendations to the Texas legislature. These recommendations included CHW education, professional development, and recognition as well as investigation of sustainable funding through Medicaid, Medicaid Managed Care contracts, and the Texas Healthcare Transformation and Quality Improvement Program 1115 Waiver. This study also explored efforts to incorporate CHWs into Patient Centered Medical Homes and related care management structures.

CHW Definitions:

Through our extensive literature review, numerous definitions of "community health workers" were identified. The National Community Health Advisor study used the following definition:

> "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." (1997)

The most common definition of community health worker is that adopted by the American Public Health Association (APHA) in their 2009 policy statement – *Support for Community Health Workers to Increase Health Access and to Reduce Health Inequities.* This definition is as follows:

> "A Community Health Worker is a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the CHW to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. A CHW also builds individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support and advocacy."

Several variations of these two primary definitions were identified:

Texas: "A CHW provides cultural mediation between members of a community and health and social services, with or without compensation. To serve in this capacity, a CHW: (a) is a trusted member of the community and has a close understanding of the ethnicity, language, socio-economic status, and life experiences of the community served; (b) helps people gain access to needed services; and (c) increases health knowledge and self-sufficiency of the community through activities such as outreach, patient navigation and follow-up, community health education and information, informal counseling, social support, advocacy, and participation in clinical research."

Ohio: "Community Health Workers are individuals who, as community representatives, advocate for individuals and groups in the community by assisting them in accessing community health and supportive resources through the provision of education, role modeling, outreach, home visits and referral services."

Rhode Island: "CHW are trusted members of or have a close understanding of the community they serve. This enables these workers to minimize social and cultural barriers between

community, health and social service institutions. They often act as a bridge to complement and enhance the work performed by many other health and social service professionals."

Utah (used an abbreviated version of the APHA definition): "CHWs are defined by the American Public Health Association as frontline public health workers who are trusted members of and/or have an unusually close understanding of the community served."

Massachusetts: The Massachusetts Dept. of Public Health defines CHWs as "public health workers who apply their unique understanding of the experience, language, and/or culture of the populations they serve in order to carry out one or more of the following roles: (a) providing culturally appropriate health education, information, and outreach in community-based settings, such as homes, schools, clinics, shelters, local businesses, and community settings; (b) bridging/culturally mediating between individuals, communities, and health and human services, including actively building individual and community capacity; (c) assuring that people access the services they need; (d) providing direct services, such as informal counseling, social support, care coordination, and health screenings; (e) advocating for individual and community needs; and (f) additional roles as may be identified by the board that may emerge in the development of community health worker practice."

CHW Structural Models:

The *Community Health Worker National Workforce Study (2007)* identified five prevailing models of care engaging CHWs. These include: (1) member of care delivery team, (2) navigator, (3) screening and health education provider, (4) outreach-enrolling-informing agent, and (5) organizer. In the 'member of care delivery team' model, the CHW was most often subordinate to a clinical lead provider such as a physician, nurse, or social worker. CHW tasks were specific and delegated by the lead clinical provider. The 'navigator' role placed a greater emphasis on the CHW's ability for helping individuals negotiate complex health and social service systems. This model required the CHW to have a high degree of knowledge about the health care system but not necessarily a high degree of clinical knowledge. In this particular model, the CHW's major contribution was that of improving access and educating consumers on the timely use of primary care. The 'screening and health education provider' model was relatively common and often included in categorically funded initiatives (e.g., specific chronic diseases such as asthma and diabetes). In this model, CHWs taught self-care methods, administered basic screening instruments and took vital signs. There were concerns about the quality of services, however, which prompted for close evaluation of the CHW's training and close supervision of their services. Outreach Worker was a common job title for the 'outreach-enrolling-informing agent' where CHWs identified people who were eligible for benefits and/or services. They encouraged the client to apply for help or to go to a provider location for care. The 'organizer' model often involved volunteer CHWs who became involved in a community over a specific health issue, promoting self-directed change and community development.

The Massachusetts study (2009) identified four main strategies for CHW functions. These include client advocacy, health education, outreach, and health system navigation. In addition to

the seven core roles identified in the National Community Health Advisor Survey, the literature review identifies the following broad functions of CHWs:

- client advocacy
- health education
- outreach
- health care system navigation
- care coordination
- translation/interpretation
- insurance enrollment
- support for medication adherence
- health screening
- chronic disease self-management
- emergency preparedness

Key to the work of CHW is the manner in which they *differ* from other health care workers. CHWs relate to community members as a peer and have expertise based on shared cultural or life experiences with the clients they serve. CHWs are trusted members of the community because of their personal understanding of the community in which they work. CHW often provide services in the client's home though they are sometimes provided in a number of community-based settings (such as churches, community meetings, etc.). In most CHW programs, the CHWs do not hold clinical licenses though a number of states mandate certification through an approved CHW program.

The literature review identified numerous types of organizations utilizing CHWs. These include educational institutions, ambulatory health services, hospitals, nursing and residential facilities, health plans or insurers, community based organizations (including social assistance programs, public housing authorities, immigrant and refugee assistance programs, faith based organizations), health providers (including community health centers, public outpatient health clinics, private medical providers, health departments, inpatient health facilities), mental health agencies, charitable organizations, and advocacy organizations. Additionally, numerous names are used by those providing community health work. These include: community health worker, community health representatives, lay health advisor, peer health promoter, lay health advocate, promotora/promotora de salud, peer support specialists, patient navigator, and a number of titles relating to 'outreach' – including outreach worker, outreach educator/specialist, and street outreach worker.

C. Recommendations for the Assessment of the CHW Workforce in PA

1. Utilize the APHA definition of CHW, as identified in their 2009 policy brief
2. Include all titles/names for CHWs as identified in the preceding paragraph
3. The *Community Health Workers in Utah – An Assessment of the Role of CHWs in Utah and the National Health Care System (2012)* will be used as the initial base for survey development
4. Minor modifications/additions based on assessments from the Minnesota and Indiana surveys
5. Scan frame to be developed by the Alliance of PA Councils, using their statewide network of providers, HealthyWoman Program Regional Managers, WiseWoman program partners

6. Phone verification to be conducted on all organizations identified in the initial scan frame
7. survey mode must be both on-line and in paper format
8. three to four weeks is adequate time frame for survey go-live period
9. non-responders will be contacted by phone and email on weekly basis til close of survey
10. utilize snowball sampling methods to increase potential number of respondents

Our proposed methodology for the PA environmental scan can be found on pages 11-13. An enhanced 'brief summary' bibliography for the national and state scan reports can be found on pages 14-19.

Please note that the draft survey instrument is a separate document and attached to this report.

Community Health Worker Environmental Scan – Methodology

As per on-going discussions with the PA Department of Health (DOH), the purpose of this environmental scan is to obtain information on the current Community Health Worker workforce in PA. There are three primary objectives:

1. Identify organizations in PA that currently utilize some type of CHW in their organization
2. Collect detailed information on these programs
3. Utilize information gathered through an extensive literature review, the scan of CHW programs in the State, and other available data (e.g., Census data, various chronic disease rates, etc.) to identify existing CHW resources, gaps in service provision, and make recommendations to the DOH.

Survey Instrument:

An extensive literature review identified several tested survey instruments. With input from DOH, the assessment tool used in the Community Health Workers in Utah – An Assessment of the Role of CHWs in Utah and the National Health Care System (2012) was identified as a base instrument for use in the environmental scan of PA. We will add additional questions to this baseline survey based on findings from the literature review and in consultation with the DOH. These may include adding items such as obesity, nutrition, tobacco (to address risk factors for disease) under the CHW function section. While the Utah survey has been tested and used by a number of other state organizations conducting CHW scans, we will pilot test the final draft of the instrument for ease in completing, understandability, and to obtain feedback on its content. We expect to pilot the survey instrument the week of April 22-26, 2013. Any necessary revisions will be made April 29-30, 2013.

Survey Mode:

The survey mode will by both mail and on-line. The mailed survey instrument will be created using Remark software which generates "bubble" surveys that can be easily scanned and summarized. Data in the Remark software can be exported to Excel and imported into a statistical analysis package, such as SPSS. This will reduce the potential for data entry errors. The on-line survey will be created using Survey Monkey.

Survey Elements:

a. The types of organizations that engage CHWs in their programs
b. How CHWs are paid (or if they are volunteers)
c. Do the CHWs work with a specific population (e.g., African-Americans, Hispanics, etc.)
d. Do the CHWs focus on a specific problem or condition (e.g., maternal & child health, CVD, cancer, diabetes, etc.) Do CHWs address risk factors for disease? (e.g., smoking, obesity, etc.)
e. Do the CHWs target specific geographical areas
f. Function or role served by CHWs
g. How CHW services are funded
h. Training/education levels required
i. Input on policy or system changes to make it easier to sustain CHWs

The survey instrument will consist of both close-ended (multiple choice) and open-ended questions. Open-ended questions will focus on policy and systems change for CHW in PA.

Scan Frame:
We will utilize the extensive network of the four partners of the Alliance of Pennsylvania Councils to identify organizations that use community health workers. For purposes of the scan, 'community health worker' includes, but is not limited to, community health workers, promotora, peer advocate, peer support specialist, lay health advisor, patient navigator, community health representative, lay health advocate, peer health promoter. Representatives from the four family planning councils in PA have identified a preliminary list of contacts for the environmental scan. Contacts for the scan were identified by HealthyWoman Project Regional Program Managers, field office managers, and via the literature review (e.g., "peer specialists" working in behavioral health programs in PA). For this phase, the scan will focus on identifying employers throughout the Commonwealth who utilize the services of community health workers and obtaining details on their projects. The initial list included 75 unduplicated organizations. However, an additional 53 organizations have been identified as of 4/10/2013. Alliance partners are continuing to compile names of contacts for the scan frame and will continue to do so until April 19.

All organizations identified on the final scan frame will be contacted by phone to verify they have this type of worker within their organization. During the phone verification, if the organization utilizes some type of CHW within their organization, the caller will tell them about the environmental scan being conducted, the importance of it to the State, and inform them of when the survey will be received. We will also collect the name of the person to whom the survey should be directed, and verification of their address and e-mail.

The proposed timeline and activities for conducting the environmental scan are identified below.

PROPOSED TIMELINE:

April 8, 2013	Alliance partners receive script for use in contacting potential survey recipients
April 12, 2013	Submit to DOH: Literature Review, Preliminary Review of State Models, Initial Summary of Financing and Payment Models, Methodology for Environmental Scan, Draft Survey Instrument [AH, FPC]
April 19, 2013	Survey Stage I: List of potential organizations to receive survey complete and submitted to Linda Snyder, Adagio Health [AH, FPC, FHC-CP, MFHS representatives]
April 22-26, 2013	Survey Stage II: Phone verification that organizations on contact sheet actually have CHW/patient navigators/etc. working in their organization. (a uniform script has been provided to all project partners) [FHC-CP, MFHS]
April 22-26, 2013	Survey Stage III: Validation of survey instrument. [AH, FPC]
April 29-30, 2013	Survey Stage IV: Revisions to survey instrument as needed. [AH]

May 1-3, 2013	Survey Stage V: Survey instruments mailed/on-line survey links emailed. Survey goes live. [AH]
May 20-21, 2013	Survey Stage VI: Wave 2 mailing/emailing of survey to non-responders [AH]
May 21-24, 2013	Survey Stage VII: Phone contact with non-responders to encourage completion of survey. [FHC-CP, MFHS]
June 4, 2013	SURVEY CLOSES
May 6-June 4, 2013	On-going review and validation of survey data. [AH, FPC]

Bibliography & Literature Review Summary – National CHW Assessments

Rosenthal, E. Lee. National Community Health Advisor Study. A Policy Research Project of the University of Arizona, 1997.

The National Community Health Advisor Study (1997) is widely referenced as the premier study of CHW across the nation. Their analysis addressed four key areas: (1) core roles and competencies of CHW, (2) evaluation of the impact of CHW programs, (3) strengthening the CHW field and establishing its place in the health care delivery setting, and (4) CHW adaptations to the changing health care environment. Findings from this research remain core to comprehensive assessments of CHW programs. This study identified seven core roles played by CHW that continue to be used in assessing the type of work performed by CHW. These roles include bridging cultural mediation between communities and the health and social service system, providing culturally appropriate health education and information, assuring people get the services they need, providing informal counseling and social support, advocating for individual and community needs, providing direct service, and building individual and community capacity.

Ro, Marguerite J., et al. Community Health Workers and Community Voices: Promoting Good Health. A Community Voices Publication. National Center for Primary Care, Morehouse School of Medicine, 2003.

The report documents how CHWs address problems of health disparities, poor access to care, and the rising cost of health care. This study identified seven core roles played by CHW. These seven core roles are often used in assessing the type of work performed by CHW and include the following: bridging cultural mediation between communities and the health and social service system, providing culturally appropriate health education and information, assuring people get the services they need, providing informal counseling and social support, advocating for individual and community needs, providing direct service, and building individual and community capacity. It concludes with seven policy recommendations: (1) establishing public funding streams to support CHWs (e.g., Medicaid, SCHIP), (2) encouraging states to support the use of CHWs through their Medicaid managed care contracts, (3) including CHWs as part of health care teams that coordinate care for special populations and vulnerable populations, (4) involving CHWs in planning efforts to reform health systems, (5) support/finance/develop training and certification programs for CHWs, (6) supporting research efforts that evaluate CHW programs, and (7), supporting demonstration programs that examine the role and utilization of CHWs in improving access to care.

Community Health Worker National Workforce Study. U.S. Department of Health and Human Services, Health Resources and Services Administration, 2007.

This is a report on a comprehensive national study of the CHW workforce and the factors that affected its utilization and development. Verified CHW employers in all 50 states were part of the assessment as well as in-depth interviews of employers and CHWs in four states. Through this study, specific CHW activities included culturally appropriate

health promotion and health education, assistance in accessing medical and non-medical services and programs, translation/interpretation services, counseling, mentoring, social support, and transportation services. This study identified six key functional areas for CHW activity that match those identified in the National Community Health Advisor Study conducted in 1997. Study findings classified CHW programs into five prevailing models of care. These include: (1) member of care delivery team, (2) navigator, (3) screening and health education provider, (4) outreach-enrolling-informing agent, and (5) organizer. Consistent with other assessments and the literature, funding was considered a major barrier to the development of the CHW workforce, including short-term funding and reliance on multiple funding sources.

Bibliography & Literature Review Summary – State CHW Assessments

Matos, Sergio, et al. Paving a Path to Advance the Community Health Worker Workforce in New York State: A New Summary Report and Recommendations, October 2011.

A project of the New York State CHW Initiative to advance the CHW workforce by establishing statewide recommendations for the employment, training, certification, and financing of CHW programs. Committee made recommendations on CHW Scope of Practice, CHW Training and Credentialing, and CHW Financing.

Community Health Workers in Rhode Island. Rhode Island Department of Labor and Training, September 2009.

This brief is an assessment of the size of the Rhode Island CHW workforce, including salary information and prediction of the demand for CHW in the present and the future.

Community Health Workers, Policy Recommendations to the State of Illinois. Mid-America Regional Public Health Leadership Institute, Technical Assistance Project, December 2012.

This policy brief developed recommendations to the State of Illinois on the following: (1) A standard definition of a community health worker, (2) A model for statewide certification, (3) Foundation for developing CHW curriculum, and (4) criteria to develop statewide performance standards and measures. Authors also researched CHW policy models in other states: Alaska, California, Indiana, Massachusetts, Michigan, Minnesota, New York, and Texas.

The Alaska Community Health Aide Program: An Integrative Literature Review and Visions for Future Research. Alaska Center for Rural Health and the Health Resources and Services Administration, August 2003.
Comprehensive review of the Community Health Aide program in Alaska. Included program history, training, funding, and health outcomes. Provided a brief overview of a new program focusing on dental health.

Community Health Workers in Massachusetts: Improving Health Care and Public Health. A report of the Massachusetts Department of Public Health Community Health Worker Advisory Council, December 2009.

This report is a comprehensive assessment of the Massachusetts community health worker workforce, including an overview of CHW programs in the state. The report makes recommendations for a sustainable CHW program in Massachusetts in four areas: (1) conduct a statewide CHW identity campaign, (2) strengthen workforce development, (3) expand financing mechanisms, (4) establish an infrastructure to ensure implementation of recommendations. Massachusetts is widely quoted in CHW

assessments as it had included CHWs in its health care reform law of 2006 and pays for CHWs under Medicaid administrative match.

Michigan Department of Community Health, Community Health Care Worker Survey. Glengariff Group, Inc., October 2011.

Assessment of community health workers in Michigan conducted via telephone interviews. Summary information on CHW demographics, experience, job security, where they do their job, who they serve, services provided, barriers to effective service, internal relationships, and training.

Hang, Kaying and Joan Cleary. Critical Links: Study Findings and Forum Highlights on the Use of Community Health Workers and Interpreters in Minnesota. The Foundation - Blue Cross Blue Shield of Minnesota, May 2003.

Findings from an employer survey of community health workers and interpreters in Minnesota, highlighting six key findings. Also provided profiles of three community health worker projects: Woman to Woman Program (cancer screening and treatment, Laotian, African-American, Latina women), PathFinder Program (navigating the health care system, Hispanic clients), and Neighborhood House (HIV and STDs, Latinas). Minnesota is also widely recognized as a premier state in CHW initiatives with their passing of legislation for Medicaid reimbursement of CHW conducting patient education and care coordination services.

Crum, Robert. "Promoting Community Health Workers to Reduce Health Disparities in Minnesota." Robert Wood Johnson Foundation, December 2012.

This report summarizes the Minnesota Community Health Worker Alliance's creation of a statewide standardized training and their development of a sustainable funding stream to support CHW services in Minnesota. This report also provides key lessons learned from the funded project.

Final Report on the Status, Impact, and Utilization of Community Health Workers. House Document No.9, Report of the James Madison University, 2006.

Mandated by Virginia House Joint Resolution No. 195, this report focuses on ways to elevate the role of community health workers in the health care delivery system, more effective means of integrating these workers in public agencies, an examination of the use of CHWs as a best-practice quality measure for Medicaid and other contracted providers, exploration of the development of a statewide core curriculum for the training of CHWs (paid and volunteer), and recommendations for maximizing the value and utilization of CHWs.

Ritchie, Dannie, M.D., M.P.H. Community Health Workers: Building a Diverse Workforce to Decrease Health Disparities. The Transcultural Community Health Initiative, May 2004.

Report on the Rhode Island Foundation Roundtable Series for Community Health Worker curriculum development and sustainability. This roundtable had two objectives: development of a strategic plan for the creation of a core curriculum for CHW training programs and the creation of action steps to facilitate placement of CHW program graduates in paid positions.

Texas Community Health Worker Study – Report to the Texas Legislature. Department of State Health Services and the Health and Human Services Commission, December 2012.

This report is in response to the legislative charge in Texas H.B. 2610 (48.102, Texas Health and Safety Code) which charged the state of Texas to undertake a study of the desirability and feasibility of employing promotores and/or community health workers in Texas and to explore methods of funding and reimbursement.

2012 Annual Report, Promotor(a) or Community Health Worker (CHW) Training and Certification Advisory Committee. Texas Department of State Health Services, CHW Publication No. 24-14024.

This is an excellent summary of the work of a well-established CHW Advisory Committee formed at the state level. It provides details on their goals, objectives, activities, and outcomes of their work.

McCormick, Sara, et al. Community Health Workers in Utah: An Assessment of the Role of CHWs in Utah and the National Health Care System. Center for Public Policy & Administration, The University of Utah, 2012.

This is an excellent overview of community health workers. An extensive literature review was conducted as well as a national assessment (10 states) and a Utah state assessment of employers of CHWs. The state survey consisted of 23 questions on the type of organization, specifics of how CHWs were engaged (paid/volunteer, wages, number of CHWs working and hours, benefits, etc.), CHW roles/functions, type of clients and any specific diseases they target, educational requirements, training, how CHWs are paid, specific geographic areas, and some open-ended questions on systems/policy changes. Assessed Impact on Health Outcomes; Economic Impact; Training and Integration into Current Health Care Infrastructure. This survey has been used in other statewide assessments of CHW programs.

Eng, Howard J. Four U.S. Border States' Community Health Worker Training Needs Assessment. The Southwest Border Rural Health Research Center, 2011.

A cross-sectional study design was used to examine the four U.S. Border States community health worker training needs. This study utilized a literature review to identify CHW roles and current training models in the border region, identification of

CHW employers in the four Border States, and collection of data from CHW employers on training needs. The three greatest training needs were language skills, computer training, and advocacy.

Southern California Promotores (Community Health Workers) Needs Assessment, San Diego and Imperial Counties, 2010-2011. California Department of Public Health, Office of Binational Border Health, 2011.

The goal of this study was to understand and determine existing barriers and challenges employers may perceive and/or experience when utilizing promotores or CHW. Questionnaires were administered to both employers of CHW as well as promotores. Results showed that promotores need to be trained in a variety of core competencies as well as having knowledge about the specific health issues addressed by their organization. Major challenges identified included promotora reliability due to lack of funds for salaries, transportation, childcare, and incentives.

Dickson, Lynette and Rachel Yahna. Report on Community Health Worker Programs. The University of North Dakota, School of Medicine and Health Sciences, 2012.
The North Dakota Coordinated Chronic Disease Prevention Program designated funds to develop an infrastructure for training and certifying CHWs. Ten core programmatic questions were asked in their review of seven states: Minnesota, Massachusetts, New Mexico, New York, Colorado, Washington, and Wisconsin. Questions focused on CHW programs in the state, title used by the CHW, settings in which they work, if their CHW programs were assessed, state policy related to reimbursement for CHW programs, state-level interest groups leading CHW efforts, formal certification and training curricula.

Indiana Community Health Worker Workforce Assessment Surveys. Community Resources, LLC under supervision of the Indiana Department of State Health Services, 2012.

This study assessed CHWs, Employers of CHWs and Payers across the state of Indiana. Data was collected on the CHW environment (organization type, race of CHW, urban/rural status, wages, relationship to community served, factors influencing their decision to become a CHW, training and capacity building, core roles and skills, health issues addressed by CHWs, most pressing needs of those served, how/where services are delivered and new areas for expansion of CHW initiatives.

Attachment 2: Overview of CHW Models in 10 States

Attachment 2: Overview of CHW Models in 10 States

The tables below provide information regarding CHW models in the following 10 states: Alaska, Florida, Indiana, Massachusetts, Minnesota, New Mexico, New York, Ohio, Rhode Island, and Texas

ALASKA	
Title & Definition:	Alaska uses the terms "Community Health Aide" (CHA) and "Dental Health Aide" (DHA) for its community health workers.
Focus Areas & Scope of Practice:	CHA provide non-physician primary care in very remote frontier communities and act as a mid-level clinician performing primary and emergency medical services. DHA perform routine dental health services in remote frontier communities.
Training & Certification:	There is a state operated training and certification program – CHA/P Certification Board (1998) under 25 USC Section 1616, and DHHS, Indian Health service, and Alaska Area Native Health Services. There is no state licensing. The certification is a second layer put on top of initial training now called "credentialing".
State CHW Network:	Alaska's *Community Health Aide Program* employees work for tribal organizations acting as contractors to the Indian Health Service under P.L. 93-638 or the Indian Self-Determination and Education Assistance Act.
Studies & Outcomes:	The Alaska Community Health Aide Program: An Integrative Literature Review and Visions for the Future (2003). This study noted a 27% decrease in neonatal infant mortality rates, a 40% decrease in accidental death rates; increases in Pap testing rates, and increases in pregnant women accessing prenatal care in the first trimester.

FLORIDA	
Title & Definition:	Florida uses the terms Community Health Worker and Promotoras. A Community Health Worker is a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the CHW to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. A CHW also builds individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support and advocacy. Some activities performed by the CHW include providing information on available resources, providing social support and informal counseling, advocating for individuals and community health needs, and providing services such as first aid and blood pressure screening. They may also collect data to help identify community health needs.
Focus Areas & Scope of Practice:	The Rural Women's Health Project focuses on building health literacy, modeling preventive behaviors and increasing access to health care services in Hispanic communities. The South Florida Center for Reducing Cancer Disparities (SUCCESS) focuses on eliminating cervical cancer disparities among Hispanic, Haitian, and African-American women. Community Health Workers provide information on available resources, social support and informal counseling, advocate for individuals and community health needs, and provide direct services (e.g., first aid, blood pressure screening).
Training & Certification:	The *Florida Community Health Worker Coalition* is working on establishing core elements of standards for CHW curriculum and establishing requirements for a CHW certification process and training requirements.
State CHW Network:	The *Florida Community Health Worker Coalition*. Information is available at URL: www.FloridaCHW.org
Studies & Outcomes:	In 2011, the Florida Department of health and the statewide cancer council received a grant from the CDC to develop and promote the work of CHWs in the state. Key issues for this group include policy, networking, curriculum, and sustainability of CHWs. There are numerous projects and studies under the Rural Women's Health Project in which CHWs are used extensively for women's health, cancer, HIV/STDs, etc.: *Creando Nuestra Salud* focuses on improving early breast cancer detection activities among Hispanic women, *Voices of Immigrants in Action (VIA)* focuses on HIV/AIDS among Hispanic farm workers, *Project S.A.L.U.D.* focuses on access to care and completing medical recommendations, *Entre Nosotras* focuses on reducing barriers to HIV/STD prevention, and *Vivir A Todo Pulmon* works on raising awareness of tuberculosis in the Hispanic community.

INDIANA	
Title & Definition:	Indiana uses the term Community Health Worker and has adopted the APHA's definition: A Community Health Worker is a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the CHW to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. A CHW also builds individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support and advocacy.
Focus Areas & Scope of Practice:	Community Health Workers in Indiana focus on diabetes, nutrition, smoking, mental health, pregnancy and related areas (e.g., breastfeeding, infant health). Their scope of practice includes navigation, care coordination, organizing/peer support, outreach/informing/enrollment agent, and member of the care delivery team. Most CHWs in Indiana are based out of hospitals, community based organizations, or local health departments.
Training & Certification:	The Indiana State Department of Health, Division of Maternal and Child Health, developed Indiana's first certification for CHWs in care coordination. Affiliated Service Providers of Indiana offer training and ongoing technical assistance to persons seeking designation as a Certified Recovery Specialist, for gambling, mental health, and addiction. Information at URL: www.aspin.org
State CHW Network:	The *Indiana Community Health Worker Coalition*. Information can be found at URL: http://inchw.betterme.info/
Studies & Outcomes:	Indiana Community Health Worker Workforce Assessment (2012).

MASSACHUSETTS	
Title & Definition:	Massachusetts uses the term Community Health Worker. The Massachusetts Department of Public Health) defines CHWs as public health workers who apply their unique understanding of the experience, language, and/or culture of the populations they serve in order to carry out one or more of the following roles: (a) providing culturally appropriate health education, information, and outreach in community-based settings, such as homes, schools, clinics, shelters, local businesses, and community settings; (b) bridging/culturally mediating between individuals, communities, and health and human services, including actively building individual and community capacity; (c) assuring that people access the services they need; (d) providing direct services, such as informal counseling, social support, care coordination, and health screenings; (e) advocating for individual and community needs; and (f) additional roles as may be identified by the board that may emerge in the development of community health worker practice. "Community Health Worker" is an umbrella term used for a number of job titles that include outreach worker, community health educator, family advocate, peer leader, Promotor de Salud and health advocate.
Focus Areas & Scope of Practice:	There are four main strategies for CHW functions in Massachusetts: Client Advocacy, Health Education, Outreach, and Health System Navigation. Special focus areas include access and enrollment into Medicaid plans, chronic disease, perinatal health, and substance abuse.
Training & Certification:	CHWs in Massachusetts are required to have a Certificate of Competency to practice as a certified CHW, issued by the Board of Certification of Community Health Workers. Two formal CHW training opportunities exist in the state: Boston Public Health Commission's Community Health Education Center and Central MA Area Healthy Education Center Outreach Worker Training Institute. Both address similar core competencies and are 45-55 hours long, with linkages to higher education. The CHW Initiative of Boston has a Career Pathway Model in which there are three levels of CHW: (a) CHW I: wages up to $11.95/hour or $24859/year; (b) CHW II with wages $11.95-$16.82/hour or $25000-$35000/year; (c) CHW III with wages $16.82-$19.23/hour or $35000-$40000/year.
State CHW Network:	The *Massachusetts Association of Community Health Workers (MACHW)*. Information is available at URL: www.machw.org
Studies & Outcomes:	A comprehensive study, Community Health Workers in Massachusetts: Improving Health Care and Public Health was conducted in 2009.

MINNESOTA	
Title & Definition:	Minnesota uses the term Community Health Worker. They define this position in the following manner: "CHW come from the communities they serve, building trust and vital relationships. This trusting relationship enables the CHWs to be effective links between their own communities and systems of care. This crucial relationship significantly lowers health disparities in Minnesota because CHWs: provide access to services, improve the quality and cultural competence of care, create an effective system of chronic disease management, and increase the health knowledge and self-sufficiency of underserved populations. For Medicaid reimbursable services, CHWs are trained health educators who work with Minnesota Health Care Programs (MHCP) recipients who may have difficulty understanding providers due to cultural or language barriers. CHW Medicaid services are defined as "a diagnosis-related, medical intervention, not a social service."
Focus Areas & Scope of Practice:	CHWs bridge the gap between communities and the health and social service systems, navigate the health and human services system, advocate for individual and community needs, provide direct services, and build individual and community capacity. Special focus areas include chronic disease (includes heart/stroke), maternal/child/teens, diabetes, cancer, oral health, and mental health. Minnesota defined a scope of practice and professional standards that define the role of CHWs in the health care delivery system.
Training & Certification:	Minnesota requires state certification. This certificate is acquired from the Minnesota State Colleges and Universities system-approved CHW curriculum (14 credit hours). Minnesota's statewide standardized curriculum is available for purchase ($400)
State CHW Network:	*Minnesota Community Health Worker Alliance*. Information available at URL: www.dhs.state.mn.us/provider/chw
Studies & Outcomes:	The Minnesota Community Health Worker Employer Survey (2002); Financing Strategies Study (University of CA – San Francisco, 2006). Funded by BC/BS of Minnesota Foundation, the CHW Employer Survey found the following outcomes: understanding of health care options improved from 16% to 60%; understanding levels of care improved from 14% - 56%; no-show rates for appointments decreased from 43% to 35% in high risk populations; client ability to independently complete paper work improved from 23% to 59%; client ability to independently schedule appointments improved from 22% to 64%

NEW MEXICO	
Title & Definition:	New Mexico uses the terms Community Health Worker, Promotores de Salud, and Community Health Representatives. Community Health Representatives are trained by the Indian Health Service to serve Native Americans. CHWs often work in rural areas where access to medical care is limited or non-existent.
Focus Areas & Scope of Practice:	Most programs began with a focus on maternal and child health outcomes but have added additional risk factors as their target. These include access to care/Medicaid enrollment, substance abuse, smoking cessation, diabetes, breast and cervical cancer, and HIV/AIDS. Community Health Workers also serve as interpreters and doulas.
Training & Certification:	There is no state required training but a training curriculum was developed in 1993. The curriculum, *Reaching Out: A Training Manual for Community Health Workers* includes 40 hours of training, predominantly focusing on maternal and child issues (such as prenatal care, labor & delivery, postpartum care, breastfeeding and nutrition, substance abuse, domestic violence, sexuality, family planning, sexually transmitted infections, and early childhood development). Other training topics have been developed through request by the New Mexico Community Health Workers Association members. These include evaluation, meeting facilitation, public speaking, grant writing and fundraising, and mental health.
State CHW Network:	The *New Mexico Community Health Workers Association*, formed in 1993.
Formal reimbursement mechanisms:	CHW programs in New Mexico are funded in part by state, federal and private foundation dollars. Some programs, however, have developed ways to bill for services under Medicaid dollars and CHIP funding.
Studies & Outcomes:	Impact of CHWs providing community-based support services to enrollees who are high consumers of health resources in a Medicaid managed care system was assessed. A significant reduction in both numbers of claims and payments after the CHW intervention was found. Johnson. D. et al. (2012). Community health workers and Medicaid managed care in New Mexico. *Journal of Community Health, 37*, 563-571. doi: 10.1007/s10900-011-9484-1

NEW YORK	
Title & Definition:	New York uses the term Community Health Worker, as defined by the APHA: A Community Health Worker is a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the CHW to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. A CHW also builds individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support and advocacy.
Focus Areas & Scope of Practice:	New York CHWs have seven core roles: Outreach and Community Mobilization; Community/Cultural Liaison; Case Management and Care Coordination; Home-based Support; Health Promotion and Health Coaching; System Navigation; Participatory Research. Their community health worker program focuses on women at highest risk for poor birth outcomes (LBW and infant mortality) as well as chronic disease, asthma, and enrollment of children into Medicaid and Child Health Plus.
Training & Certification:	While there are no state requirements for certification or training, there is a Community Health Worker Network of NYC curriculum, evidence-based, available as a 35-hour and 70-hour course of study (core competencies). Also available are disease-specific topic training modules up to 35 additional hours (which include diabetes, asthma, hypertension, cardio-vascular disease, nutrition).
State CHW Network:	*New York State Community Health Worker Association*. Information available at URL: http://www.chwnetwork.org
Studies & Outcomes:	Funded by the Commonwealth Fund: Using Community Groups and Student Volunteers to Enroll Uninsured Children in Medicaid and Child Health Plus. The Children's Defense Fund-New York pilot tested a community-based enrollment system to streamline Medicaid and CHP application processes using culturally and linguistically compatible staff at community locations. The Student Health OUTreach Project (SHOUT) placed 25 student volunteers from Columbia University in seven community organizations to educate families about Medicaid and CHP, to assist with application forms and documentation requirements, and conduct necessary follow-up. In six months, SHOUT enrolled nearly 200 children and adults in Medicaid or CHP. The new York Presbyterian Hospital has used CHWs in their childhood asthma program (as care coordinators) and has reduced asthma-related ED visits and hospitalization rates by more than 50%, as well as reductions in length of hospital stays.

OHIO	
Title & Definition:	Ohio uses the terms Community Health Worker and Community Health Advocate. They are defined as individuals who, as community representatives, advocate for individuals and groups in the community by assisting them in accessing community health and supportive resources through the provision of education, role modeling, outreach, home visits and referral services. Ohio's Community Health Worker Model empowers communities to eliminate health disparities by employing CHWs to provide a comprehensive link to community resources through family-based services that focus on success in health, education and self-sufficiency. The Community Health Advocate Program is an integral component of the Center for Healthy Communities. CHAs provide information on community resources, necessary support and follow-up. They provide client navigation and referral and conduct outreach services.
Focus Areas & Scope of Practice:	CHWs are supervised by RNs and may perform some limited scope of health-related activities, but no dispensing of medications. CHAs provide information on community resources, provide support and follow-up. Their special focus areas include chronic disease, cancer, and outreach.
Training & Certification:	There are two training programs in Ohio: Community Health Workers (CHW) and Community Health Advocates (CHA). Ohio CHW training programs must be approved by the state. The Ohio Board of Nursing oversees certification of CHWs. There are four approved CHW training programs in the state. Training curriculum includes 100 hours of didactic instruction and 130 hours of clinical experience. Application fee of $35 and renewal biennially with continuing education requirements (15 contact hours). The Center for Healthy Communities developed a 6-week course "Introduction to Community Health Advocacy". This course covers community health concepts, resources, and skills related to the role and responsibilities of CHAs. Special emphasis is on factors to consider when working in community-based settings, characteristics of health models and plans, impact of culture and socioeconomic status on the health of the individual, communication, barriers to health care services, health care needs across the lifespan, and related community resources. A second course (18 classes) is "Promoting Health/Preventing Heart Disease, Stroke, and Cancer".
State CHW Network:	*The Ohio Community Health Workers Association (OCHWA).* Information can be found at URL: www.med.wright.edu/chc/programs/ochwa
Studies & Outcomes:	Community Health Access Program, "Pathways" reduced low birth weight and premature deliveries using CHWs.

RHODE ISLAND	
Title & Definition:	Rhode Island uses the term Community Health Workers. CHWs are trusted members of or have a close understanding of the community they serve. This enables these workers to minimize social and cultural barriers between community, health and social service institutions. They often act as a bridge to complement and enhance the work performed by many other health and social service professionals.
Focus Areas & Scope of Practice:	CHWs assist people in receiving care they need, assist them in accessing appropriate health education and information as well as provide some direct services (blood pressure screening, personal care, homemaking).
Training & Certification:	While there is no state required training or certification program, Community Health Innovations of Rhode Island (CHI-RI) provides the first comprehensive core skills CHW certificate program consisting of 15, 3-hour workshops as well as required field work. Most CHWs in Rhode Island work in formal health care settings, such as hospitals. Many perform CHW duties as a smaller part of their routine clinical (e.g., RN/LPN) duties. Annual salary for CHW in 2009 averaged $47,540; median wage was $34,730 with wages ranging from $26,000-$83,200. Average hourly for part-time CHWs ranged from $10-$45/hour (average $13.04).
State CHW Network:	*Community Health Worker Association of Rhode Island (CHWARI).* Information is available at URL: http://www.chwassociationri.org/
Studies & Outcomes:	Funded by the Rhode Island Foundation, the Rhode Island Foundation Roundtable Series - Community Health Workers: Building a Diverse Workforce to Decrease Health Disparities. Rhode Island has been recognized by the CDC for its use of CHW in asthma management. In their *Home Asthma Response Program (HARP)*, children saw improvement in daytime symptoms, nighttime symptoms and in their activity limitations.

TEXAS	
Title & Definition:	Texas uses the terms Community Health Worker and/or Promotor(a). They define a CHW as providing cultural mediation between members of a community and health and social services, with or without compensation. To serve in this capacity, a CHW: (a) is a trusted member of the community and has a close understanding of the ethnicity, language, socio-economic status, and life experiences of the community served; (b) helps people gain access to needed services; and (c) increases health knowledge and self-sufficiency of the community through activities such as outreach, patient navigation and follow-up, community health education and information, informal counseling, social support, advocacy, and participation in clinical research.
Focus Areas & Scope of Practice:	CHW/Promotora focus on chronic disease and maternal & child health outcomes. Their scope of practice includes health education/promotion, information and referral, system navigation/access to services, informal counseling and social support, direct services, individual and community capacity building, cultural liaison/mediation, individual and community advocacy.
Training & Certification:	There is a state operated certification program, under the Department of State Health Services (URL: www.dshs.state.tx.us/mch/chw.shtm). DSHS approved CHW certification course is 160 hours. Course competency areas include skills in communication, interpersonal, service coordination, capacity building, advocacy, teaching, organization, and knowledge base on specific health issues. Certificate is renewed biennially and requires 20 hours of continuing education credits. Legislation in 2001 (SB751) required all state HHS agencies use certified promotores for recipients of Medicaid and SB1051 mandated all promotores or CHW being compensated for their services be certified. State legislature (S.B. 751, 2001) also directed the Health and Human Services Commission to require health and human service agencies, to the extent possible, to use certified CHWs in health outreach and education programs for Medicaid recipients. The Texas DSHS has on-line provider education modules (Texas Health Steps) on a wide range of topics, which also provides continuing education credit for CHWs. Texas also has a federally-approved CHW apprenticeship model being implemented by the Texas Area Health Education Center - East.
State CHW Network:	*Community Health Worker Texas*. There are eight regional Promotora/CHW associations or networks, located in the north, central, south, east, and west regions of Texas. State network information can be found at URL: www.chwtexas.org.
Studies & Outcomes:	Texas Community Health Worker Study, Report to the Texas Legislature (DSHS and Health and Human Services Commission, 2012). The *Salud Para Su Corazon* model showed positive changes in CVD risk factors and *Transformacion Para Salud* resulted in improvements in clinical and behavioral outcomes. Several other studies in Texas showed improvements in clients' ability to access non-emergency care; decreased hospital readmissions and ED visits, reduced average cost of care. The *Auntie-Tia* program was successful in decreasing adverse birth outcomes, specifically infant mortality, as well as increased breastfeeding rates; Gateway Community Health Center used CHWs in a diabetes management program with significant reductions in hemoglobin A1c among Latino and uninsured clients.

Attachment 3: Environmental Scan Survey Instrument

Pennsylvania Department of Health Community Health Worker Survey

Instructions: Please write the answer on the line or fill in the circle of the answer that best applies to you. The circle should be marked like this: ● Not like this: ✓ ✗ /

1. Name of your organization: _____
2. Name of your program/department: _____
3. Street address (line 1): _____

   Street address (line 2): _____

   Town/City: _____

   State: _____ Zip Code: _____

4. Please indicate your primary role(s) in your organization. (*Mark all that apply*)

   O Executive director or senior manager

   O Manager or supervisor of CHWs and/or other staff

   O Administrator, such as human resources and/or trainer

   O Clinical staff, for example, nurse or other licensed medical clinician

   O Administrative assistant

   O Other, please specify: _____

5. Select the response that best reflects the total number of employees at your organization.

   O 20 or less

   O 21-50

   O 51-100

   O 101-200

   O More than 200

6. Which response, or responses, best describe your organization? (*Mark all that apply*)

- O Day care or school for grades K-12
- O College (2- or 4-year) or post-high school training program
- O Faith-based organization
- O Health plan or insurer
- O Mental health agency
- O Inpatient facility, such as a hospital or care center
- O Community-based/nonprofit organization providing health, health-related, and/or social services
- O County or local health department
- O Community health center/FQHC
- O Private provider, including a primary care provider or physician office
- O Other, please specify: _____

7. Does your organization engage CHWs in any of the following ways? (*Mark all that apply*)

- O Not applicable: our organization does not engage CHWs or employees serving in similar capacities. **SKIP to Question 30**
- O Volunteers
- O Paid employees
- O Independent contractors
- O AmeriCorps and/or Vista workers
- O Interns and/or students enrolled in service learning classes
- O Other, please specify: _____

8. Please estimate the number of full-time (40 hours/week) paid CHWs in your organization. If none, enter '0': _____

9. Please estimate the number of part-time (less than 40 hours/week) paid CHWs in your organization. If none, enter '0': _____

10. On average, how many hours per week do your part-time CHWs work? (*Mark only one)*

- O Not applicable (we do not have any part-time CHWs)
- O Less than 10 hours
- O 10 – 20 hours
- O 21 – 30 hours
- O 31 – 39 hours
- O Other, please specify: _____

11. What is the **average** wage for your CHWs? (*Answer either hourly or annually. Mark only one)*

Hourly wage			Annual salary
O	Less than $9.00		O Less than $18,699
O	$9.00 – $10.99		O $18,700 - $21,859
O	$11.00 – $12.99	**OR**	O $22,860 - $27,019
O	$13.00 – $14.99		O $27,020 - $31,179
O	$15.00 – $19.99		O $31,180 - $41,579
O	$20.00 or more		O $41,580 or more

12. If you use VOLUNTEER CHWs, please estimate the number of volunteer CHWs affiliated with your organization, regardless of how many hours they volunteer. If none, enter '0': _____

13. Do you provide some compensation for unpaid volunteers (e.g., gift cards, free meals, travel reimbursement, etc.)?

O Yes O No O Not applicable – we do not use unpaid volunteer CHWs

14. *CHWs provide a wide array of services in the community. The National Community Health Advisor Study categorized their functions or roles into seven core areas. If the CHWs at your organization perform any of the functions or roles described below, mark the appropriate box. Mark all that apply.*

Functions/Roles

- O Providing cultural mediation between communities and the health and social services system (how to use these systems, increase use of preventive care and decrease urgent or emergency care)
- O Providing culturally appropriate health education and information (prevention related information, managing and controlling illnesses such as diabetes and asthma)
- O Assuring that people get the services they need (care coordination, case finding, motivating and accompanying patients to appointments and follow-up care, making referrals and promoting continuity of care)
- O Providing informal counseling and social support (individuals and groups, to improve mental and physical health)
- O Advocating for individual and community needs (serve as intermediaries between clients and bureaucratic entities)
- O Providing direct services (basic first aid, administering some health screening tests)
- O Building individual and community capacity (facilitate health behavior change, act as community leaders to bring about community-wide change)
- O Other function not described above (please specify): _____

15. Following is a list of activities CHWs might perform. Please indicate whether an activity is a *core function*, a *secondary function*, or is *not a function* performed by CHWs at your organization at this time.

Activity	Core Function	Secondary Function	Not a Function	Don't Know
Outreach, such as "on the street" health education	O	O	O	O
Patient advocate	O	O	O	O
Social support, such as visiting homebound clients	O	O	O	O
Counseling	O	O	O	O
Transportation, such as taking people to appointments	O	O	O	O

Activity	Core Function	Secondary Function	Not a Function	Don't Know
Health education	O	O	O	O
Compliance follow-up, such as visiting clients to observe that medications are taken	O	O	O	O
Risk assessment that might lead to a referral for services	O	O	O	O
Cultural competence training	O	O	O	O
Spoken language interpretation and/or translation of written materials	O	O	O	O

16. Please indicate what **types of clients** the CHWs at your organization serve. (*Mark all that apply)*

Types of clients served

- O Adolescents
- O Homeless individuals
- O Income eligible (e.g., those who are uninsured and meet criteria for publicly-funded benefits)
- O Individuals with physical disabilities or special needs
- O Individuals with vision and/or hearing disabilities
- O Individuals with developmental/cognitive disabilities
- O Individuals with behavioral health disorders
- O Individuals with substance abuse disorders
- O Individuals with a specific disease or at risk for a disease
- O Infants and/or children
- O Refugees and/or immigrants
- O Migrant workers
- O Military veterans
- O Older adults/senior citizens
- O Pregnant women
- O Racial and ethnic minorities
- O Areas where health care clinicians are in short supply
- O Any individual that requests assistance regardless of their status
- O Target population not listed above. Please specify groups/populations served:

_____

_____

17. If your CHWs serve clients from racial and ethnic minorities, please indicate the specific racial/ethnic populations that are served. (*Mark all that apply)*

- O American Indians/Alaska Natives
- O Asians
- O Pacific Islanders/Hawaiian Natives
- O Other, please specify: _____
- O Not applicable - no racial/ethnic minorities are served
- O Blacks/African Americans
- O Hispanics/Latinos

On what specific diseases/conditions and/or risk factors do CHWs focus at your organization? (*Mark all that apply)*

18. Disease/Condition

- O Not applicable - we don't focus on specific diseases or conditions
- O Asthma
- O Cancer, *please specify type:* _____
- O Diabetes
- O Heart disease
- O High blood pressure
- O High cholesterol
- O HIV/AIDS
- O Mental health conditions
- O Other, *please specify:* _____ _____

19. **Risk Factor**

- O Not applicable - we don't focus on specific risk factors
- O Nutrition
- O Obesity
- O Tobacco use/smoking
- O Environmental risks (e.g., pesticides)
- O Low community-level vaccination rates
- O Risk of hospital re-admission
- O Pregnancy
- O Other, *please specify:* _____ _____

20. Do CHWs at your organization work directly with clinical professionals? For example, do clinical professionals refer patients to CHWs for services such as diabetes education or do CHWs report specific information to clinical professionals?

O Yes O No

21. Where do CHWs at your organization provide services? *(Mark all that apply)*

O Community locations (e.g., recreation centers)

O Faith-based organizations

O Health care organizations

O In client / patient homes or group homes

O Schools

O Via telephone / text messaging

O Worksites

O Other, please specify:

_____

22. What is the minimum level of education required of CHWs engaged by your organization? *(Mark only one)*

O No educational requirement

O GED/high school diploma

O Associate degree

O Bachelor degree

O Master degree or above

O Other, please specify:

_____

23. Do CHWs engaged by your organization receive training?

O Yes O No

24. If on Question 23 you responded "Yes", what type(s) of training do CHWs at your organization receive? *(Mark all that apply)*

O On-the-job training by shadowing others

O Structured in-house training

O Training provided by a formal educational institution

O Clinic based training

O Web-based training

O Structured external training (e.g. "Welfare to Work" program)

O Other, please specify:

_____

25. To gain a better understanding of how CHW services are funded, please indicate the sources of funds your organization currently uses to support the CHW program. *(Mark all that apply)*

- O Medicaid
- O Medicare
- O Commercial health plan/insurance
- O Research grant or contract
- O Funding from a private foundation or entity
- O Program fees
- O Federal grant categorical funding, e.g., maternal child health, diabetes, heart disease
- O State government. Please specify: _____
- O Local government. Please specify: _____
- O Other, please specify: _____

26. Does your organization employ any CHWs under your CORE OPERATING budget for the purpose of cost saving, revenue generation, or other outcomes valued by the organization?

    For example, do you employ a CHW to educate a client on chronic disease management to avoid higher cost services such as an emergency department visit?

    [Core operating budget does NOT include funding received specifically for implementing a CHW program.]

O Yes O No

To help us gain a better understanding of where CHWs work within PA, please answer the next two questions.

27. In what counties do your CHWs provide services? *(Mark all that apply)*

O All PA Counties	O Delaware	O Montgomery
O Adams	O Elk	O Montour
O Allegheny	O Erie	O Northampton
O Armstrong	O Fayette	O Northumberland
O Beaver	O Forest	O Perry
O Bedford	O Franklin	O Philadelphia
O Berks	O Fulton	O Pike
O Blair	O Greene	O Potter
O Bradford	O Huntingdon	O Schuylkill
O Bucks	O Indiana	O Snyder
O Butler	O Jefferson	O Somerset
O Cambria	O Juniata	O Sullivan
O Cameron	O Lackawanna	O Susquehanna
O Carbon	O Lancaster	O Tioga
O Centre	O Lawrence	O Union
O Chester	O Lebanon	O Venango
O Clarion	O Lehigh	O Warren
O Clearfield	O Luzerne	O Washington
O Clinton	O Lycoming	O Wayne
O Columbia	O McKean	O Westmoreland
O Crawford	O Mercer	O Wyoming
O Cumberland	O Mifflin	O York
O Dauphin	O Monroe	

28. Within the counties you operate, are there specific geographic regions you focus on? Feel free to name a specific city, town, or area such as "the east side of..." if relevant.

_____

_____

29. What kind of policy or system changes might make it easier for your organization to sustain CHW services on an ongoing basis?

_____

_____

_____

_____

30. If your response to question 7 was "Our organization does not engage CHWs or employees serving in similar capacities", would your organization consider or be interested in utilizing CHWs in the future?

O Yes. If so, please specify in what way you see your organization using CHWs:

_____

_____

O No

O Not applicable - our organization already utilizes CHWs

31. If you know of any other organizations that engage CHWs, please provide the organization's name, a contact person, and a phone number so that we can contact them. If not, please continue to the next question.

_____

_____

32. Please provide any additional thoughts or comments you have regarding CHWs.

_____

_____

_____

_____

33. We may be conducting follow-up interviews with some of the survey respondents. Would you be willing to participate in a follow-up interview?

O Yes O No

34. Contact information:

First and last name: _____

Email address: _____

Phone number: _____

Thank you for completing this survey – We appreciate your input!

Please return the completed survey to:

Linda Snyder, DrPH
Adagio Health Inc.
960 Penn Avenue, Suite 600
Pittsburgh, PA 15222

Fax (412) 288-9036
Email: lsnyder@adagiohealth.org

Attachment 4: Survey Response Summary Tables

Attachment 4: Survey Response Summary

The survey will collect information on the following areas:

a. The types of organizations that engage CHWs in their programs (Q5/6)
b. How CHWs are paid (or if they are volunteers) (Q7/8/9/10/11/12/13)
c. Do the CHWs work with a specific population (Q16/17)
d. Do the CHWs focus on a specific problem or condition (e.g., maternal & child health, CVD, cancer, diabetes, etc.). Do CHWs address risk factors for disease? (Q18/19)
e. Do the CHWs target specific geographical areas (Q27/28)
f. Function or role served by CHWs (Q14/15/20/21)
g. How CHW services are funded (Q25/26)
h. Training/education levels required (Q22/23/24)
i. Input on policy or system changes to make it easier to sustain CHWs (Q29/30)

a. What types of Organizations engage CHW?

Q6. Which response, or responses, best describe your organization? (*Mark all that apply*)

Organization description	**Number (if answered survey)**	**Number (if using CHW)**
Total	177	126
Day care or school for grades K-12	4	3
College (2- or 4-year) or post-high school training program	0	0
Faith-based organization	5	5
Health plan or insurer	0	0
Mental health agency	25	18
Inpatient facility, such as a hospital or care center	24	17
Community-based/nonprofit organization providing health, health-related, and/or social services	77	60
County or local health department	5	3
Community health center/FQHC	39	25
Private provider, including a primary care provider or physician office	11	10
Other	40	30

Other, please specify:	**Number**	**Number**
Admin Unit	1	0
Behavioral Health	1	1
Community Action	1	0
Community Action Agency	2	1
Community Action Program	1	1
Community, Housing, and Workforce Development	1	1
County government	2	2
County Government - Social Services CYS/ID/ATOD/Crisis (MH)	1	0
County mental health / developmental disabilities administrative office	1	1
County MH/ID/EI agency	1	0
County Program	1	0
County-based Area Agency on Aging	1	1

Developmental Disability Provider	1	1
Halfway House - community corrections	1	1
Head Start/Early Head Start (Early Childhood Education, Birth - 5 yrs)	1	1
Health System	5	5
Hospital department and outpatient clinic	1	1
IDD and Early Intervention Case Management Services	1	1
Integrated health care delivery system	1	1
Intellectual and Developmental Disabilities Support Services	1	1
Joinder of Counties	1	1
Local Government	1	0
Nutrition program for Women, Infants and Children	1	1
Outpatient Care facility	1	1
Outpatient Hospital Facility	1	1
Outpatient medical care facility OB/GYN dept.	1	1
Prenatal to 5 educational program with social services and family engagement	1	1
Probation	1	1
Public child welfare agency	1	0
Research University	1	1
Rural Health Clinic	1	1
Ryan White-funded Hospital Outpatient Clinic	1	1
Social Services Agency	1	0
Substance abuse clinic	1	0

Q5. Total number of employees at your organization.

Employee Total	**Number (if answered survey)**	**Percent (if answered survey)**	**Number (if using CHW)**	**Percent (if using CHW)**
20 or less	50	28.2%	35	27.8%
21-50	34	19.2%	23	18.3%
51-100	27	15.3%	22	17.5%
101-200	24	13.6%	16	12.7%
More than 200	42	23.7%	30	23.8%

b. How CHWs are paid (or if they are volunteers) ? *For those using CHW*

Q7. Does your organization engage CHWs in any of the following ways? (*Check all that apply*)

CHW types	**Number**	**Percent**
Volunteers	35	27.8%
Paid employees	109	86.5%
Independent contractors	13	10.3%
AmeriCorps and/or Vista workers	6	4.8%

Interns and/or students enrolled in service learning classes	45	35.7%
Other	7	5.6%

Other, please specify	**Number**
all staff work together to provide such services. Currently we do not have the resources to hire one	1
collaborative efforts with CHW in the surrounding community	1
Contract with a promotores project through university	1
Faith Community Nurse	1
Referrals	1
Serve as oversight to providers	1
Missing response	1

Q8. Estimate the number of full-time paid CHWs.

Number category	**Number**	**Percent**
0	20	15.8%
1-5	51	40.5%
6-10	16	12.7%
11 - 20	9	7.1%
21-40	9	7.1%
41-200	9	7.1%
Total paid full-time	94	74.6%
Missing + not sure	12	9.5%

Q9. Estimate of part-time CHWs

Number category	**Number**	**Percent**
0	57	45.2%
0.5 - 5	34	27.0%
6-10	10	7.9%
11 - 20	5	4.0%
21-40	2	1.6%
41-200	2	1.6%
Total paid part-time	53	42.1%
Missing + not sure	16	12.7%

Q10. On average, how many hours per week do your part-time CHWs work?

Hours	**Number**	**Percent**
Less than 10 hours	5	4.0%
10 - 20 hours	23	18.3%
21-30 hours	18	14.3%
31-39 hours	25	19.8%
Total	71	56.3%

Not applicable	37	29.4%
Missing	14	11.1%
Other	4	3.2%

Other, please specify	Number
Missing	2
40	1
none-paid 10-20 hours a week	1

Q11a. Average hourly salary for CHW

Hourly salary range	Number
Less than $9.00 per hour	1
$9.00 – 10.99 per hour	6
$11.00 – 12.99 per hour	11
$13.00 – 14.99 per hour	18
$15.00 – 19.99 per hour	19
$20.00 or more per hour	13
missing	58

Q11b. Average annual salary for CHW

Yearly salary range	Number
<$18,700	0
$18,700 – $21,859	4
$22,860 - $27,019	2
$27,020 - $31,179	10
$31,180 - $41,579	17
>$41,579	13
missing	80

Q12. Please estimate the average number of volunteer CHWs affiliated with your organization on either part-time or full-time basis.

Number category	Number	Percent
0	67	53.1%
1 - 5	24	19.0%
6-10	4	3.2%
11 - 20	6	4.8%
28	1	0.8%
1200	1	0.8%
Total with volunteer CHW	36	28.6%
Missing + not sure	23	18.3%

Q13. Do you provide some compensation for unpaid volunteers (e.g., gift cards, free meals)?

Compensation	Number	Percent
Yes	21	16.7%
No	33	26.2%
Not applicable	59	46.8%
Missing	13	10.3%

c. Do the CHWs work with a specific population?

Q16. What type of clients do CHWs at your organization serve ? (*Mark all that apply*).

CHW client type	Number	Percent
Adolescents	66	52.4%
Homeless individuals	67	53.2%
Income eligible (e.g., those who are uninsured and meet criteria for publicly-funded benefits)	90	71.4%
Individuals with physical disabilities	71	56.3%
Individuals with vision and/or hearing disorders	50	39.7%
Individuals with developmental/cognitive disabilities	57	45.2%
Individuals with behavioral health disorders	68	54.0%
Individuals with substance abuse disorders	60	47.6%
Individuals with a specific disease or at risk for the disease	60	47.6%
Infants/children	68	54.0%
Refugees and/or immigrants	42	33.3%
Migrant workers	27	21.4%
Military veterans	40	31.7%
Older adults/senior citizens	71	56.3%
Pregnant women	69	54.8%
Racial and ethnic minorities	77	61.1%
Rural populations or where health care clinicians are in short supply	25	19.8%
Any individual that requests assistance regardless of their status	56	44.4%
Target population not listed above.	22	17.5%
Missing	3	2.4%

Other groups served which are not listed above	Number
all of the above marked that are open with mental health	1
Community, school	1
COPD, CHF	1
Farm safety - unintentional injuries	1
HIV/AIDS	2
HIV+ individuals	1
Incarcerated females	1

Individuals with serious, persistent mental illness	1
Latina women	1
Latino immigrants	1
Live in Cumberland, Dauphin, Juniata, Mifflin or Perry County	1
Offenders	1
Oncology patients	1
Patients with cancer	1
people who self-identify as LGBT and/or MSM	1
post-partum, breastfeeding women	1
Sexual minorities	1
un- and under-insured	1
Under-insured (may not meet criteria for public funding)	1
We primarily use CHWs in our Family-Nurse Partnership and Health Beginnings Plus Program	1
We serve only those who have a ID diagnosis	1

Q17. If you answered *yes* to "racial and ethnic minorities", please indicate specific racial and/or ethnic populations your CHWs serve. (*Check all that apply*).

Racial and ethnic minorities served	**Number**	**Percent**
American Indians/Alaska Natives	29	23.0%
Asian Americans	58	46.0%
Blacks/African Americans	95	75.4%
Hispanics/Latinos	87	69.0%
Pacific Islanders/Hawaiian Natives	30	23.8%
Not applicable	31	24.6%
Other, please specify	18	14.3%
missing	4	3.2%

Other racial and ethnic minorities served	**Number**
???	1
Africans	1
All	3
All ethnic	1
All populations	1
All Races as Needed	1
Any and all if referred	1
any racial/ethnic group	1
Biracial	1
Do not discriminate regardless of race or ethnicity	1
Mid-eastern	1
Nepali Refugees	1

Refugees from eastern Europe, Russia, Africa (especially eastern Africa) and Southeast Asia	1
Target groups are not based on race	1
We serve all requests for support with no specific "specialty" regarding race or ethnicity	1
Missing	1

d. Do the CHWs focus on a specific disease/condition or risk factors for disease?

Q18. On what specific diseases/conditions do CHWs focus at your organization? (*Check all that apply*).

Specific diseases/conditions	**Number**	**Percent**
Not applicable, no focus on specific diseases/conditions	31	24.6%
Asthma	25	19.8%
Cancer	25	19.8%
Diabetes	32	25.4%
Heart disease	31	24.6%
High blood pressure	34	27.0%
High cholesterol	25	19.8%
HIV/AIDS	28	22.2%
Mental health conditions	33	26.2%
Missing	4	3.2%
Other, *please specify*	17	1.5%

Other specific diseases/conditions	**Number**
All pregnancy-related factors	1
All types of cancer	1
Breast and Cervical Cancer Screening	1
breast, cervical, ovarian, testicular, prostate	1
COPD	1
Drug and alcohol	1
Intellectual Disabilities	1
Maternal and Child Health	1
Nicotine Dependence	1
Obesity - Children; Pregnancy	1
Pregnancy	1
Pregnancy,	1
pregnant and post partum women	1
reproductive cancers, STI's, unintended pregnancy prevention	1
STDs	1
STDs, reproductive & sexual health	1
Stroke	1

Q19. On what specific risk factors do CHWs focus at your organization? (*Check all that apply*).

Specific risk factors	Number	Percent
Not applicable, no focus on specific risk factors	27	21.4%
Nutrition	43	34.1%
Obesity	38	30.2%
Tobacco use/smoking	45	35.7%
Environmental risks (e.g., pesticides)	12	9.5%
Low community-level vaccination rates	16	12.7%
Risk of hospital re-admission	29	23.0%
Pregnancy	42	33.3%
Missing	4	3.2%
Other,	11	8.7%

Other specific risk factors	Number
Drug & alchohol history	1
drugs and alcohol for teens and other risky behaviors	1
High risk sexual behaviors, IV drug use, women living with HIV who are pregnant (risk of perinatal transmission)	1
Homelessness	1
Incarcerated, drug use	1
Physical inactivity	1
Risks for HIV	1
sexual risk taking	1
Sexually transmitted diseases	1
Social behaviors that lead to use of drugs	1
substance abuse	1
suicidality/self harm	1

e. Do CHWs target specific geographical areas?

Q27. In what counties do your CHWs provide services? (*Check all that apply*).

County served	Number		County served	Number
All PA Counties	1		Juniata	7
Adams	5		Lackawanna	4
Allegheny	8		Lancaster	12
Armstrong	2		Lawrence	6
Beaver	8		Lebanon	4
Bedford	3		Lehigh	6
Berks	6		Luzerne	7
Blair	7		Lycoming	7
Bradford	7		McKean	3
Bucks	3		Mercer	7
Butler	7		Mifflin	6
Cambria	7		Monroe	3
Cameron	2		Montgomery	2
Carbon	3		Montour	4
Centre	2		Northampton	5
Chester	4		Northumberland	5
Clarion	6		Perry	8
Clearfield	1		Philadelphia	8
Clinton	4		Pike	3
Columbia	3		Potter	4
Crawford	6		Schuylkill	7
Cumberland	8		Snyder	5
Dauphin	8		Somerset	1
Delaware	3		Sullivan	5
Elk	2		Susquehanna	5
Erie	2		Tioga	9
Fayette	2		Union	5
Forest	2		Venango	5
Franklin	5		Warren	3
Fulton	1		Washington	2
Greene	3		Wayne	3
Huntingdon	6		Westmoreland	1
Indiana	6		Wyoming	6

Jefferson	7		York	5
Missing	1			

Q28. Within the counties you operate, are there specific geographic regions you focus on?

Specific geographic regions	Number
???	1
10 counties	1
10 counties, 32 locations	1
all of Lebanon county	1
Allegheny County to include Moon area, Coraopolis, Airport Corrider	1
Allentown, Bethlehem, Easton	1
Berwick	1
Carlisle, Harrisburg	1
Central Bucks County	1
Central/Northeastern PA	1
Chester	1
Chester City, Upper Darby, PA (Delwaware County); Coatesville, PA (Chester County)	1
City of Erie	1
City of Philadelphia	1
Coatesville, Kennett Square, Oxford, West Chester, Phoenixville	1
East shore of Hbg - primarily 17104 zip code	1
Entire County	1
Franklin County	1
Gettysburg, McSherrystown, Chambersburg, Waynesboro	1
Greater Hazelton area	1
Innercity Allentown, rural Caron County	1
Lancaster City; Columbia City	1
Lancaster County and surrounding areas	1
Lancaster, Berks, Dauphin Counties are Primaries	1
Lebanon County and surrounding areas/municipalities	1
Lower Bucks County	1
Main base is Huntingdon County but serve a portion of the surrounding counties	1
Most clients reside in Bradford County	1
Mount Union, Huntingdon, McVeytown, Lewistown, Mill Creek	1
NA	1
New Castle, PA area	1
no	1
No - our prenatal patients whom we serve elect to seek are at our facility	1
North Philadelphia	2

Philadelphia broadly, but high incidence HIV/STD impacted communities	1
Pittsburgh	1
Pittsburgh, near southern suburbs (Prospect Park)	1
Pittsburgh, Surrounding boroughs, McKeesport	1
Primary - Lancaster City	1
Punxsutawney	1
Reading PA across city 19601, 19602 and 19604	1
Scranton and Lackawanna County	1
Snyder, Unio and Northumberland are our primary service areas	1
South & Southwest Philadelphia	1
South Allison Hill community	1
Southwest Philadelphia, West Philadelphia	1
Uptown Harrisburg"" - about 60% of our patients are within walkable distance to us from this part of Harrisburg; our focus is also on all of Dauphin Co, we have a high percentage of patients from Cumb	1
We provide services to all areas of Schuylkill County.	1
We serve the entire county, bout our offices are in Reading and Pottsville. We see more clients from those areas.	1
We work specifically with migrant and seasonal farmworkers wherever they are located	1
We would require a cluster of cases in any geographical setting to make outreach activities cost-effective.	1
West Waynesburg, Nemacolin	1

f. What functions/roles do CHWs serve in Pennsylvania? *For those using CHWs*

Q14. CHWs provide a wide array of services in the community. The National Community Health Advisor Study categorized their functions or roles into seven core areas. If the CHWs at your organization perform any of the functions or roles described below, mark the appropriate box. Mark all that apply.

Key Function	**Number**	**Percent**
Providing cultural mediation between communities and the health and social services system (how to use these systems, increase use of preventive care and decrease urgent or emergency care)	63	13.5%
Providing culturally appropriate health education and information (prevention related information, managing and controlling illnesses such as diabetes and asthma)	74	15.8%
Assuring that people get the services they need (care coordination, case finding, motivating and accompanying patients to appointments and follow-up care, making referrals and promoting continuity of care)	86	18.4%
Providing informal counseling and social support (individuals and groups, to improve mental and physical health)	69	14.7%
Advocating for individual and community needs (serve as intermediaries between clients and bureaucratic entities)	67	14.3%
Providing direct services (basic first aid, administering some health screening tests)	46	9.8%
Building individual and community capacity (facilitate health behavior change, act as community leaders to bring about community-wide change)	49	10.5%
Other function not described above (please specify):	14	3.0%

Other functions included the following responses:

- Case management, HIV testing & counseling, STD clinician
- Case management/care coordination
- Community Education re Preventative Health
- Doula services
- Housing counselor working with mentally ill clients
- Insurance (CHIP & Medicaid) enrollment assistance
- Marketing, Advertising, Newspaper Column writing, assistance with fundraising
- Meet with new patients to determine what services they are eligible for and also recommend other age
- Provide Housing
- Providing access for medical and dental appointments
- providing basic breastfeeding information and encouragement to pregnant and breastfeeding WIC participants
- Providing professional nursing care for more than basic first aid and health screening tests – actua

Q15. Following is a list of activities CHWs might perform. Please indicate whether an activity is a *core function*, a *secondary function*, or is *not a function* performed by CHWs at your organization at this time.

Activity	**Core Function**		**Secondary Function**		**Not a Function**	
Outreach	45	35.7%	32	25.4%	32	25.4%
Patient advocate	66	52.4%	34	27%	11	8.7%
Social Support, such as visiting homebound clients	37	29.4%	27	21.4%	44	34.9%
Counseling	33	26.2%	42	33.3%	33	26.2%
Transportation services	8	6.3%	29	23%	66	52.4%
Health education	70	55.6%	30	23.8%	10	7.9%
Compliance follow-up, such as observing medications are taken properly	15	11.9%	34	27%	56	44.4%
Risk assessment that might lead to referral for services	53	42.1%	41	32.5%	15	11.9%
Cultural competence training	12	9.5%	34	27%	52	41.3%
Spoken language interpretation and/or translation of written materials	14	11.1%	30	23.8%	57	45.2%

Q20. Do CHWs at your organization work directly with clinical professionals? For example, do clinical professionals refer patients to CHWs for services such as diabetes education or do CHWs report specific information to clinical professionals?

Yes: 83 (65.9%)
No: 28 (22.2%)

Q21. Where do CHWs at your organization provide services? *(Mark all that apply)*

Location	**Number**	**Percent**
Community locations (e.g., recreation centers)	59	18.4%

Faith-based organizations	24	7.5%
Health care organizations	56	17.4%
In client/patient homes or group homes	46	49.6%
Schools	36	40.7%
Via telephone/text messaging	45	14.0%
Worksites	36	11.2%
Other	19	5.9%

Other service locations listed include the following (each with one response)

- At our sites
- At the prison
- At their facility
- FQHC
- Head Start facilities
- Here at our center
- Hospital
- In office
- Labor camps
- Medical Assistant
- Mobile medical unit
- Office
- Our office, the maternal-fetal medicine office, and the children and teen pediatric clinic
- Our offices
- Outpatient Oncology Clinics
- Recovery program; re-entry program
- Shelters, soup kitchens
- Their neighborhoods
- Where it is most convenient for consumer
- WIC Nutrition Centers

g. How CHW services are funded?

Q25. Please indicate the sources of funds your organization currently uses to support the CHW program. *(Check all that apply)*

Funding Source	**Number**	**Percent**
Medicaid	53	17.6%
Medicare	29	9.6%
Federal grant categorical funding	41	13.6%
Commercial health plan/insurance	32	10.6%
Research grant or contract	19	6.3%
Funding from a private foundation or entity	29	9.6%
Program fees	18	6.0%
State government	33	11.0%
Local government.	14	4.7%
Other sources. Please specify	33	11.0%

Other funding sources identified included the following:

- Community Development Block Grant (City of Pittsburgh)
- Community Health Center Funding
- Community Mental Health state funding
- Contractual & fundraising
- County MH/ID office
- Dept of Health and Dept of Public Welfare
- Dept. of Ed grant - federal
- DOH
- DOH, Centers for Schools and Communities
- DPW
- Federal funds
- Federal govt. pays for our waiver program
- Funded by health system (LG Health)
- Funding for STD Program clients and women between the ages of 40 & 49 who are enrolled in the HealthyWoman Program
- General operations
- Head Start
- Head Start, Community Block Grant
- Health Beginnings plus
- Health Promotion Council of Southeastern PA.; BPHC/HRSA Tobacco Dependence Treatment Programs
- Health system
- Health system budget
- HOPWA, United Way
- Hospital
- HRSA
- HSSAP
- HUD SSO Homeless grant
- On payroll
- Organizational budget
- Paid by Wellspan
- Reinvestment dollars
- Ryan White Part B through the Commonwealth of Pennsylvania; Ryan White Part C through HRSA
- Ryan White through the HIV/AIDS consortia
- state tobacco settlement money, state STI program
- USDA Breastfeeding Peer Counselor Program

Q26. Does your organization employ any CHWs under your core operating budget?
Yes: 32 (25.4%)
No: 75 (59.5%)

h. What training and/or educational levels are required of Pennsylvania CHWs?

Q22. What is the minimum level of education required of CHWs engaged by your organization? *(Mark only one)*

Educational Requirement	Number	Percent
No educational requirement	4	3.2%
GED/high school diploma	39	31.0%
Associate degree	19	15.1%
Bachelor degree	31	24.6%

Master degree or above	0	
Other	16	12.7%

Other requirements mentioned include the following:

- Civil Service Qualified
- Depends on position, ranges from no educational requirement to a Bachelor's degree and Masters degree
- Individually determined
- must be bilingual English/Spanish
- No educational requirements, but a minimum of 5 years experience, or minimum of bachelors degree and 3 years experience
- nursing license...LPN or RN
- Paid FT CHW is a MSW; Americorps are college graduates; promotores have no educational requirements
- Peer Support Specialist certification
- Retired RN
- RN
- RN and MSW
- RN license, regardless of degree
- RN or higher
- varies by position, usually bachelor's
- Varies with position (Bachelor degree for Healthy Beginnings Plus)

Q23. Do CHWs engaged by your organization receive training?
Yes: 107 (84.9%)
No: 5 (4.0%)

Q24. If on Question 23 you responded "Yes", what type(s) of training do CHWs at your organization receive? *(Mark all that apply)*

Type of Training	Number	Percent
On-the-job training by shadowing others	89	70.6%
Structured in-house training	59	46.8%
Training provided by a formal educational institution	34	27.0%
Clinic based training	41	32.5%
Web-based training	57	45.2%
Structured external training (e.g., "Welfare to Work" program)	22	17.5%
Other	12	9.5%

Other types of training included the following:

- Conferences
- don't know
- Funder Training
- Health Department (city/state)
- PA-C, MD
- Peer Support Specialist certification
- Pertinent conference or trainings that may become available
- Structured training by OMHSAS endorsed trainers
- Taking our 10 week course
- Tobacco Cessation Certification/Training
- Training provided by the Family Health Council of Central PA

i. Respondent input on policy or system changes that would make it easier to sustain CHWs.

Q29. What kind of policy or system changes might make it easier for your organization to sustain CHW services on an ongoing basis?

- Additional funding.
- adequate funding
- Be able to bill for their services separate from physician
- Billing for necessary travel
- Electronic Health Record - Shared; Electronic Health Record - Shared across D&A and MH; Home visit collaboration
- Federal Funding for Operating Costs to cover salaries!
- Flexibility in Medicaid reimbursable services. CHWs interface more directly with people and their situations which should be a reimbursable service.
- funding
- Funding
- Funding for higher paid/qualified individuals
- funding for training and hire of dedicated CHWs instead of ad hoc provision by support staff.
- Funding is always a question with these types of positions because they do not generate revenues.
- Funding to ensure the full-time capacity of multi-lingual and multi-cultural staff
- funding to support ongoing efforts
- Getting approval to include the CHW in the list of ""job descriptions"" within the hospital
- government funding to support CHWs so that we can compensate better, including tuition
- I have not identified a problem with sustaining CHWs. Of course, we do always need to make sure there is adequate funding.
- Improvement in reimbursement from insurers.
- Increase in funding - federal and state
- Increased funding
- Insurance reimbursement for services
- Less funding cuts for human services at the state level
- make it easier to bill to an MCO
- Medicaid reimbursement for CHW services
- Monies allocate specifically for CHW on every level of service provision
- More direct funding mechanism
- More funding
- More funding opportunities
- More secure funding
- n/a
- Not cutting funding
- Our grant will end, therefore having monies dedicated to sustaining Patient Navigation would be helpful. Would also like to have para or lay professionals to do on the ground work to compliment the pro
- Patient centered medical home
- Program funding rather than unit funding
- Reimbursement for qualified/trained CHW services through MA or similar programming
- Reimbursement of CHW expenses from institutional beneficiaries such as healthcare providers and insurers
- Restore HIV/AIDS funding at higher allocations for prevention
- Standardize the P4P programs so the measurements are the same.
- The continuation of Healthy Choice funding is critical.
- Travel reimbursement when CHW transports consumer to events, appointments, or meetings
- Tuition Reimbursement, More promotion opportunities, Higher Wages
- We are currently looking at the possibility of utilizing CHWs in our high-risk superutilizer program called Care Connections. We need to look at ways to train and pay persons engaged in this work. H

- We consider our full staff as CHWs, so sustaining our operations sustains the CHWs. All four staff have some CHW
- We need this work to be included in reimbursable services for insured patients.

Q30. If your response to question 7 was "Our organization does not engage CHWs or employees serving in similar capacities", would your organization consider or be interested in utilizing CHWs in the future?

Total respondents answering this question: 77
Yes: 7 (5.6%)
No: 2 (1.6%)
Not Applicable, our organization already utilizes CHWs: 68 (54%)

Of those organizations answering "Yes" to Q30, they were requested to specify ways in which their organization might use CHWs. Six respondents provided the following:

a. Care Management is using ""health coaches"" for recently discharged in patients- a new model
b. CHWs would be used for defined patient education and coordination of support services.
c. Peer support
d. transportation, community outreach, translation
e. We could utilize more CHWs due to an increasing need for mental health presentations in the community
f. With changes in health care the need to connect physical and mental health as the same value and look at the needs of the individual as a whole

Attachment 5: Cost Effectiveness, Payment Models and Funding Mechanisms

Attachment 5: Cost Effectiveness, Payment Models, and Funding Mechanisms

To operate successfully, programs require adequate payment models for CHW positions and stable funding sources. To justify funding, CHWs services should be cost-effective in terms of health care spending. The following sections describe current literature on these three interrelated CHWs topics:

1. Cost effectiveness / funding rationale for CHW services
2. Payment Models for CHW positions
3. Program Funding

Cost effectiveness / funding rationale

Evidence of cost effectiveness is important in determining whether to allot funds or seek funding for CHW programs. While many researchers have examined whether use of CHWs has been associated with positive health outcomes for patients, other evaluation projects have centered on determination of cost effectiveness or cost savings of various CHW programs.

Unfortunately, the research literature on CHW intervention cost-effectiveness is somewhat limited. Several reviews of CHW programs have noted a lack of research on cost-effectiveness. For example, A 2009 US Agency for Healthcare Research and Quality (AHRQ) report published in 2009 noted that definitive conclusions on cost-effectiveness of CHW programs relative to non-CHW interventions was very challenging due to the lack of analysis according to standardized and commonly accepted measures (Viswanathan, et al., 2009).

A 2006 National Fund for Medical Education report specific to CHW financing issues also noted that robust research on cost-effectiveness of CHW interventions was quite limited. However, the authors cited a recent study that had found a Colorado-based intervention to be quite cost effective and went on to note, "Additional evidence from numerous sources, though of weaker research design, indicates significant savings and cost-effectiveness of CHW programs and services" (Dower, Knox, Lindler, & O'Neil, 2006). In a 2011 review of the literature, Martinez, et al. describe three specific areas where CHWs have shown positive impacts on costs of care:

1. *Helping eligible individuals connect to and enroll in health insurance programs*. Evaluations of programs in New York and Texas and have shown that CHW interventions led to increased enrollment in Medicaid and other health plans. In Massachusetts, CHWs played a particularly important role in assisting thousands of individuals enroll in subsidized health insurance plans after the state's enactment of health care reform legislation (Anthony, Gowler, Hirsch, & Wilkinson, 2009)
2. *Coordinating timely access to primary care and preventive services*. CHW programs have been found to be effective in increasing the number of at-risk individuals accessing preventive

services such as mammography and cervical cancer screening, potentially decreasing health costs in the long-term. By educating and helping them navigate the health care system, CHWs can assist individuals access less costly primary care services, as opposed to using more expensive emergency room or inpatient care services.

The most frequently cited report on cost effectiveness of CHW programs involves a program operated by Denver Health, the primary health care safety net for Denver, Colorado. Denver Health employs multiple CHWs to conduct outreach with residents in specific neighborhoods and among populations with special needs (e.g. pregnant women). Outreach for the program involves community-based screening and health education, assistance with enrollment in publicly funded health plans, referrals for services, assistance with system navigation and care management. Researchers examined data on service utilization, charges, and reimbursements for 590 men in the nine month period prior to first contact with a CHW and the nine month period following first CHW contact. Analysis showed primary and specialty care visits increased and urgent care, inpatient, and outpatient behavioral health care utilization decreased. The shift from more resource intensive services to less resource intensive services resulted in a reduction of monthly uncompensated costs by $14,244. CHW program costs were $6,229 per month, resulting in a return on investment ratio of 2.28:1.00 and an annualized savings total of $95,941. (Whitley, Everhart, & Wright, 2006)

3. *Helping individuals manage chronic conditions.* By helping people manage chronic diseases such as asthma, cancer, and HIV/AIDS according to treatment protocols, CHWs can facilitate reductions in emergency care and preventable hospitalization. Martinez, et al. (2011) describe a Baltimore program in which CHWs worked with residents with diabetes to better manage their health. Analysis showed the program generated a savings of $2,200 per patient per year.

Payment models for CHWs

A significant factor in CHW program funding involves remuneration for individuals providing CHW services. A defining characteristic of individual CHW programs is the payment model, specifically whether CHWs serve as volunteers or receive monetary compensation for their services.

Cherrington, et al. (2010) state that differences in paid versus volunteer positions stem from "philosophical differences, programmatic needs and financial realities". The authors cited numerous examples of programs that utilize volunteer CHWs and programs in which CHWs are paid. Based on these examples, several observations regarding volunteer and paid CHW positions were drawn. Paid CHW positions are more appropriate than volunteer positions for programs that require labor-intensive and highly-structured interventions. On the other hand, volunteer CHWs may be seen as perceived as having greater allegiance with the community, as they are not being paid by an external organization. This perceived allegiance to the community can make volunteer CHW positions more appropriate for

programs in which initiating and maintaining communication with members of the target population is difficult.

In 2007, the U.S. Department of Health and Human Services Health Resources and Services Administration (HRSA) released the results of national CHW Workforce Study. Using survey results and a comprehensive review of the literature, HRSA estimated approximately one-third of CHWs served in voluntary positions, with the remaining two-thirds operating in paid CHW positions.

Prior to 2010, the United States Bureau of Labor Statistics (BLS) did not directly track employment or wage statistics on CHWs. However, due to interest in the CHW model, BLS introduced a distinct CHW Standard Occupation Code in 2010 to collect employment data specific to this workforce (United States Department of Labor Bureau of Labor Statistics, 2009). Paid positions that match the following criteria are now categorized by a CHW-specific code - SOC 21-1094:

> Assist individuals and communities to adopt healthy behaviors. Conduct outreach for medical personnel or health organizations to implement programs in the community that promote, maintain, and improve individual and community health. May provide information on available resources, provide social support and informal counseling, advocate for individuals and community health needs, and provide services such as first aid and blood pressure screening. May collect data to help identify community health needs. Excludes "Health Educators" (United States Department of Labor Bureau of Labor Statistics, 2013)

In March 2013, BLS provided national, state, and metropolitan area estimates on the number of CHWs in the paid workforce, as well as wage information and industry profile for May 2012 (United States Department of Labor Bureau of Labor Statistics, 2013). The BLS data is summarized in the following tables:

Community Health Workers Estimated Occupational Employment and Wages, May 2012			
	Number of individuals employed	Mean hourly wage	Mean annual age
United States	38,020	$18.02	$37,490
Pennsylvania	1,290	$19.30	$40,150

Pennsylvania Metropolitan Areas - Community Health Workers Estimated Occupational Employment and Wages, May 2012			
	Number of individuals employed	Mean hourly wage	Mean annual age
Allentown-Bethlehem-Easton, PA-NJ	80	$16.73	$34,790
Erie, PA	Estimate not released	$16.24	$33,790
Newark-Union, NJ-PA Metropolitan Division	70	$19.79	$41,160

Philadelphia, PA Metropolitan Division	900	$20.81	$43,290
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1,090	$20.14	$41,900
Pittsburgh, PA	110	$17.29	$35,960
Youngstown-Warren-Boardman, OH-PA	Estimate not released	$13.47	$28,020

CHW wages and salaries vary across paid positions. It is worth noting that some programs have implemented innovative payment models for CHWs. In particular, the Ohio Community Health Access Project offers CHW financial bonuses to meet certain measurable outcomes. In this model, all CHWs are paid a base salary, but have the opportunity to make significantly more money by reaching goals related to service quality, number of home visits, number of active clients, and number of targeted outcomes achieved. (Dower, Knox, Lindler, & O'Neil, 2006)

Funding CHW programs

Overview of funding techniques

Stability of funding for CHW programs has long been a concern. Even for programs utilizing volunteer CHWs, funding is necessary to support infrastructure, cover administrative costs, and provide incentives and non-monetary compensation for CHWs. (Cherrington, et al., 2010). Unstable or time-limited funding can lead to low employee morale and high turnover. (Dower, Knox, Lindler, & O'Neil, 2006)

In the 2006 *Advancing Community Health Worker Practice and Utilization: the Focus on Financing* report, Dower, et al. provide a summary of the status of CHW program funding in the United States. According to the authors, funding for CHW programs is often pieced together from a variety of sources. The most common source of funding is time-limited grants from government agencies or charitable foundations. These grants are often tied to specific parameters, e.g., working with particular populations or addressing specific health conditions. The *Financing Community Health Workers: Why and How* report echoes concerns with the current status of CHW funding, suggesting that its current piecemeal and prescriptive nature can have deleterious effects on CHW programs, including limiting the amount of time programs can operate, restricting programs' scope of work and size, and preventing programs from working with populations that could benefit from CHW interventions (Public Sector Consultants, Inc., 2007).

While funding programs can be challenging, many organizations have discovered ways to achieve workable funding solutions. Dower, et al. (2006) describe four types of funding models in use by CHW programs:

1. Government agency and charitable foundation grants and contracts
2. Private or public insurance (with a particular focus on Medicaid)

3. Government general funds
4. Hospital, Managed Care Organization and Employer budgets

It is important to note that many organizations use multiple funding sources from one or more of the above categories to support CHW programs.

The following sections provide details about funding models according to the outline presented by Dower, et al. (2006).

Funding Model 1: Government agency and charitable foundation grants and contracts. Time-limited grants and contracts are the most common funding sources for CHW programs. Government agencies such as the National Institutes of Health and the Health Resources and Services Administration provide grant funding to programs dedicated to addressing various health issues, e.g. asthma, family planning, prenatal care and maternal and child health. While grant funding can allow a program to thrive in the short-term, the unstable nature of grants makes long-term planning and implementation difficult. Furthermore, grant opportunities may not be available to meet the needs of all populations or communities (Dower, Knox, Lindler, & O'Neil, 2006).

Funding Model 2: Private or public insurance (with a particular focus on Medicaid). In some instances, organizations have implemented CHW programs using funding from public or private insurance. Of particular note to organizations considering CHW programs are organizations or systems that have secured Medicaid funding, since this funding sources is relatively stable.

CHWs are not recognized as reimbursable service providers under current Medicaid regulations. However, CHW programs have obtained Medicaid funding through the following mechanisms:

- Direct reimbursement through a permanent state plan amendment: Minnesota, a state with a very organized and proactive CHW workforce, applied for and received a Medicaid state plan amendment enabling direct reimbursement for CHW services. There are several important items to note about Minnesota's Medicaid state plan amendment. In 2005, the state's Community Health Worker Alliance developed both a detailed "scope of practice" describing appropriate CHW activities and a standardized, statewide credit-based curriculum offered at community and technical colleges. The curriculum required completion of 14 credits for certification purposes. By citing literature showing a greater investment in CHWs would be budget neutral, the Alliance was able to convince the state legislature to approve direct hourly reimbursement for CHW work under Medicaid. The following year, the Centers for Medicare and Medicaid Services (CMS) approved a Medicaid state plan amendment authorizing payment for CHWs who work under the supervision of approved clinicians (Rosenthal, 2010).

- Reimbursement through a §1115 Waiver Project: several states have received Medicaid §1115 Waivers, allowing at least short-term Medicaid funding for CHW services. These research and demonstration grants are designed to further the objectives of the Medicaid program. (Dower, Knox, Lindler, & O'Neil, 2006). In 2011, Oregon received a §1115 demonstration waiver to implement "Coordinated Care Organizations". These organizations must offer CHW services to

assist patients in navigating the healthcare system and provide linkages to community and social support services. Through the waiver, CHW services will be Medicaid reimbursable. As part of the waiver program, Oregon Health Authority must establish training and certification programs for CHWs, which fall into three classes – community health workers, peer wellness specialists, and personal health navigators. (Peers for Progress, 2012)

- Reimbursement through Administrative funds for Medicaid outreach or coordination services. Community based programs can receive federal Medicaid administrative match funds for Medicaid Administrative costs. CHWs in several states have used these matching dollars to partially fund programs. (Dower, Knox, Lindler, & O'Neil, 2006). For instance, the Ingham County (Michigan) Health Department and the Michigan Department of Community Health received CMS approval to develop a Medicaid reimbursement process for specific CHW outreach activities. Reimbursable activities include teaching residents about Medicaid eligibility and benefits, assisting with Medicaid applications, and providing a variety of other outreach services. These services are reimbursed by Medicaid at a 50% match rate. The Health Department uses a variety of other funds to cover the other 50% of program costs. (Public Sector Consultants, Inc., 2007). Another example of Medicaid administrative cost reimbursement involves a program in Virginia employing bilingual CHWs. While the actual CHW salaries are not reimbursed through Medicaid, 40% of the *administrative costs* associated with operating the program are reimbursed (Dower, Knox, Lindler, & O'Neil, 2006).

- Funding via capitation payments through Medicaid managed care contracts: Within federal, state, and location regulations, Medicaid managed care organizations (MCOs) have discretion over how to spend capitation payments. Some MCOs have used capitation moneys to fund CHW services. In some cases, MCOs directly hire and house CHWs. For instance, a Medicaid MCO providing services to 280,000 New York City residents employs CHWs to deliver targeted outreach to enrollees, as well as provide general community education services. (Dower, Knox, Lindler, & O'Neil, 2006). In other instances, the MCO contracts with other organizations to provide CHW services. An example of this arrangement can be found in New Mexico, where a Medicaid MCO contracts with another organization to provide services geared at reducing costs and improving care for certain high-risk members (Public Sector Consultants, Inc., 2007).

While Medicaid funding offers greater stability than other types of funding for CHW programs, the literature suggests several potential drawbacks. First, a significant amount of resources must be devoted to plan amendment or waiver application processes. Analysis must show CHW programs would be budget neutral, which has the potential to negatively affect other programs, possibly making other stakeholders reluctant about adding CHW reimbursement to state Medicaid plans (Peers for Progress, 2012). To receive Medicaid reimbursements, organizations must have the capacity to handle ongoing billing, accounting and reporting requirements, which may be challenging for some CHW programs. Finally, not all populations are eligible for Medicaid services. (Dower, Knox, Lindler, & O'Neil, 2006)

Funding Model 3: Government General Funds. In this mechanism, government entities at the federal, state or local level use general funds to pay for CHW services. In other words, CHWs are included as

dedicated line item within operating budgets. Examples of this funding mechanism can be found in Fort Worth, TX, the Kentucky State Cabinet for Health Services, and the San Francisco Department of Public Health. (Dower, Knox, Lindler, & O'Neil, 2006)

Funding Model 4: Hospitals, Managed Care Organizations and Employers. Similar to Funding Model 3 above, CHWs programs in this model are funded through an organization's general operating budget. Dower, et al. (2006) cite examples in which hospitals, managed care organizations directly fund CHWs with the expectation that their services will achieve cost savings, particularly by reducing inappropriate emergency department use and preventing costly diseases.

Emerging funding opportunities

Community health workers are explicitly described within the 2010 Patient Protection and Affordable Care Act (PPACA) as important members of the health care workforce with the ability to positively impact quality of health care for many people (Rosenthal, 2010). In addition to the actual reference to CHWs in the PPACA, many of the act's goals are well aligned with the CHW service delivery model. These include a focus on patient-centered care, mechanisms to encourage patients' increased engagement with services, promotion of preventive services, and an emphasis on cost-effective and high-quality care coordination. (Martinez, Ro, Villa, Powell, & Knickman, 2011)

Two specific areas of promise within the PPACA include endorsement of Accountable Care Organizations (ACOs) and patient-centered medical homes. ACOs are clinical and administrative systems capable of providing evidence-based health care and engagement services and coordinating care among providers. CHWs can play important roles in ACO's engagement and care coordination services. (Martinez, Ro, Villa, Powell, & Knickman, 2011)

CHWs are also well-suited to activities within a patient-centered medical home model, in which a health care team works with patients to deliver coordinated and comprehensive care that incorporates understanding of each patient's unique needs, culture, values, and preferences. In explaining how CHWs could play an important role in the health team, Rosenthal (2010) points toward CHWs' expertise in cultural competence, as well as their ability to facilitate communication between providers and patients. Martinez, et al. (2011) also cite the unique value CHWs can offer patient-centered medical homes:

> CHWs can play a valuable role on the team by providing contextual data about patients' attitudes, behavior, and environment that can inform development of an effective care plan. In the implementation of such a care plan, CHWs work with patients to help them understand what is being asked of them by providers; assist them with navigating medical, behavioral, and social services; and provider critical feedback to providers to ensure that care plans are tailored appropriately to the needs of each patient.

ACOs and patient centered medical home payment structures outlined in PPACA have the potential to provide sustainable funding for CHWs in the long-term (Martinez, Ro, Villa, Powell, & Knickman, 2011)

The PPACA also created a number of grant programs that could potentially support CHW programs. An organization called Peers for Progress recently compiled a list of PPACA grants applicable to CHW programs. The table below summarizes information from Peers for Progress's *Opportunities for Peer Support in the Affordable Care Act* (2012).

Grant Opportunity	PPACA Section	Status of appropriation
Community Health Teams to Support the Patient Centered Medical Home	§3502	Unappropriated
Patient Navigator Program	§3509	Appropriated
National Diabetes Prevention Program	§10501	Appropriated
Medicaid Incentives for the Prevention of Chronic Diseases	§4108	Appropriated
Grants to Promote the Community Workforce	§5313	Unappropriated
Community Health Center Fund	§10503	Appropriated
Cultural Competency, Prevention, and Public Health and Individuals with Disabilities Training	§5307	Unappropriated
Grants for Small Businesses to Provide Comprehensive Workplace Wellness Programs	§10408	Unappropriated
Prevention and Public Health Fund	§4002	Appropriated
Community Transformation Grants	§4201	Appropriated
Medicare's Hospital Readmission Reduction Program	§3025	Appropriated

While grant funding can be an important component of CHW programs, its limitations have been noted earlier (e.g. time-limited nature of funding and limitation on program scope).

In looking at funding possibilities in the current and emerging health care system, Martinez et al. (2011) outline several models of relevance to CHW programs.

1. **Capitation.** Through this model, health care service providers are paid a pre-determined amount for each person assigned to them. Providers could potentially recognize cost-savings by incorporating CHWs into their health delivery model by helping patients access less resource intensive primary care and prevention health services.

2. **Bundled payment**. In this model (also referred to as episode-of-care payment, case rate, etc.) a single payment for all services related to a treatment would be disbursed. This payment could extend to multiple providers in varied settings. CHWs could offer a cost-effective approach to assist in care coordination and health management.

3. **Shared savings**. This model is relevant to the ACOs promoted in the PPACA. Through a shared savings approach, a per-person health spending target would be determined by Medicare. If

providers could reduce Medicare spending below the predetermined target, they would be eligible to share the financial savings with the government. As part of an ACO, CHWs could assist with the identification of costly community health issues, serve as liaisons to health care providers and the community, and tailor and deliver interventions for patients at high risk of utilizing more resource intensive health services.

4. **Pay-for-performance**. Financial incentives would be available to health care providers who achieve specified performance goals in this model. By conducting outreach, education, patient navigation and other services, CHWs could assist health organizations in meeting performance targets.

While there is agreement throughout the literature that more stable funding models should be sought out for CHW programs, authors differ regarding the most promising type of model. Martinez, et al. (2011) concluded, "Fully or partially capitated payments systems that include outcome-based incentives hold the most potential for supporting CHWs." Rosenthal (2010) emphasized the potential of stable funding through Medicaid, CHIP and other major funding sources.

Regardless of type of funding pursued, Dower et al. (2006) noted common elements of successfully funded CHW programs. The authors list the following characteristics:

- A mandate or mission to provide services to a specific targeted population with insufficient resources to do so in the traditional manner.
- Identification of a specific healthcare need that was not being met in a particular population or community and a clear articulation of the role CHWs might play in meeting that need.
- The big picture in view and/or responsibility for a population's, or group of enrollees' entire health care.
- An individual or small group of champions who believe in the value of the CHW role and who can find ways to successfully win support.
- Solid outcomes data indicating positive impact on access, costs or health status.
- Targeted training of the CHWs that focuses on the services and population being served.

Summary

While the literature regarding cost effectiveness of CHW programs remains limited, evidence appears to indicate CHW programs can play a valuable role in providing high-quality and cost-effective health services. Current payment models for CHWs include volunteer and paid positions, with new BLS data providing information about the state of the CHW workforce and wages. Experts in the field often note the inadequacy of current CHW funding sources. However, recent reports suggest that health care reform and the development of new funding models may bring about greater opportunities for CHW programs.

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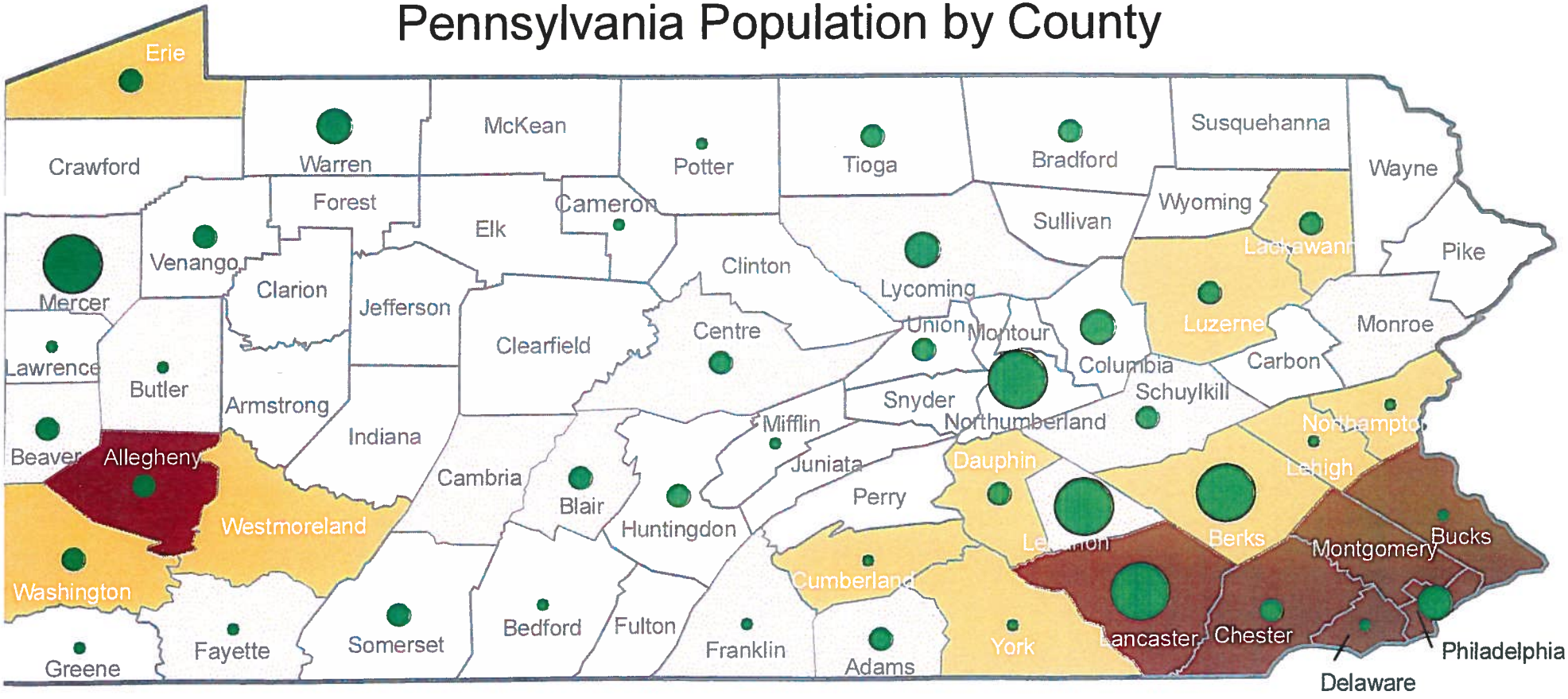
Attachment 6: Maps of CHW FTEs and Disease/Risk Factors

- **CHW FTEs by Base of Operation & PA Population, by county**
- **Cancer Incidence**
- **Smoking Incidence**
- **Diabetes**
- **Cardiovascular Disease Mortality**
- **Mental and Behavioral Disorder Mortality**
- **Pregnancy and Birth Weight**
- **Breastfeeding**
- **Health Insurance Status**
- **Lack of Health Care due to Costs**

Notes on data elements for all maps.

Community Health Worker (CHW) Survey Results: Total Number of Community Health Workers and Pennsylvania Population by County



Number of FTE CHW positions per county (Mapped according to organization's base of operations. NOTE: many organizations utilize CHWs that conduct interventions beyond their base county.)*

- 0.5 - 9.9 FTEs
- 10.0 - 49.9 FTEs
- 50.0 - 99.9 FTEs
- 100.0 or more FTEs

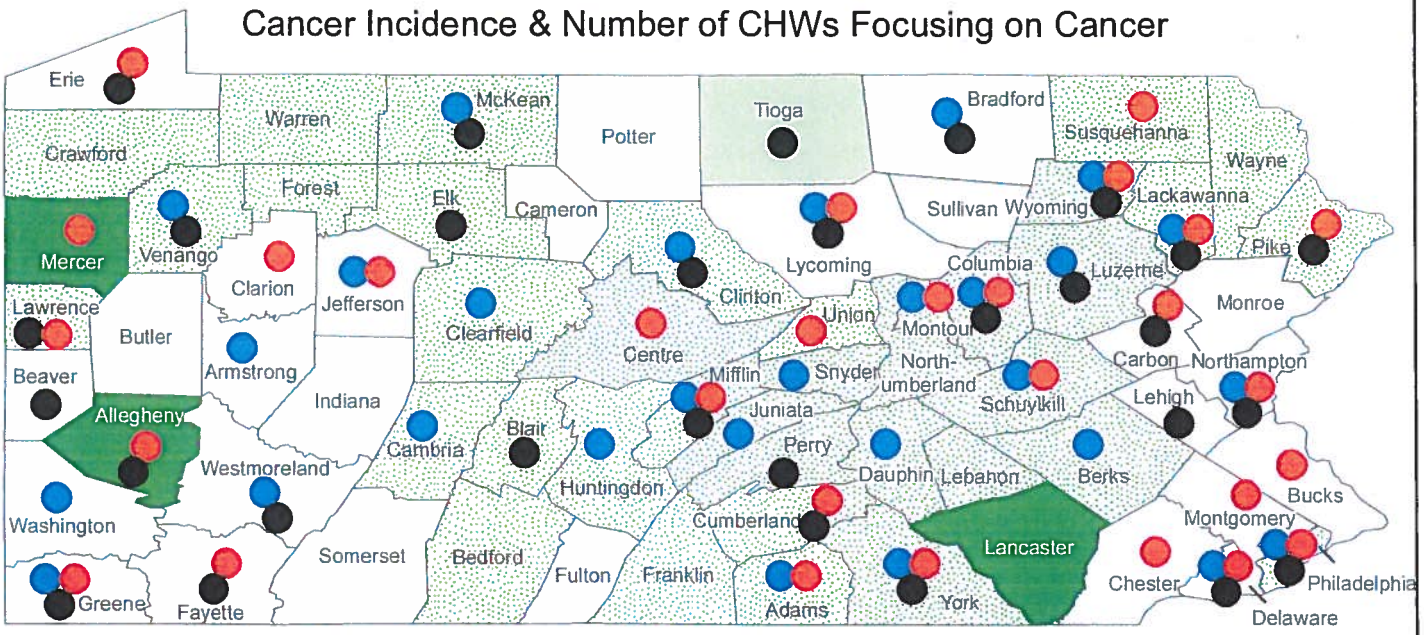
Estimated 2012 County Population**

- Less than 100,000 residents
- 1000,000 to 199,999 residents
- 200,000 to 499,999 residents
- 500,000 or more residents

* Data source: 2013 CHW Survey

Community Health Worker (CHW) Intervention Areas and 2010 Cancer Incidence by Pennsylvania County

Cancer Incidence & Number of CHWs Focusing on Cancer



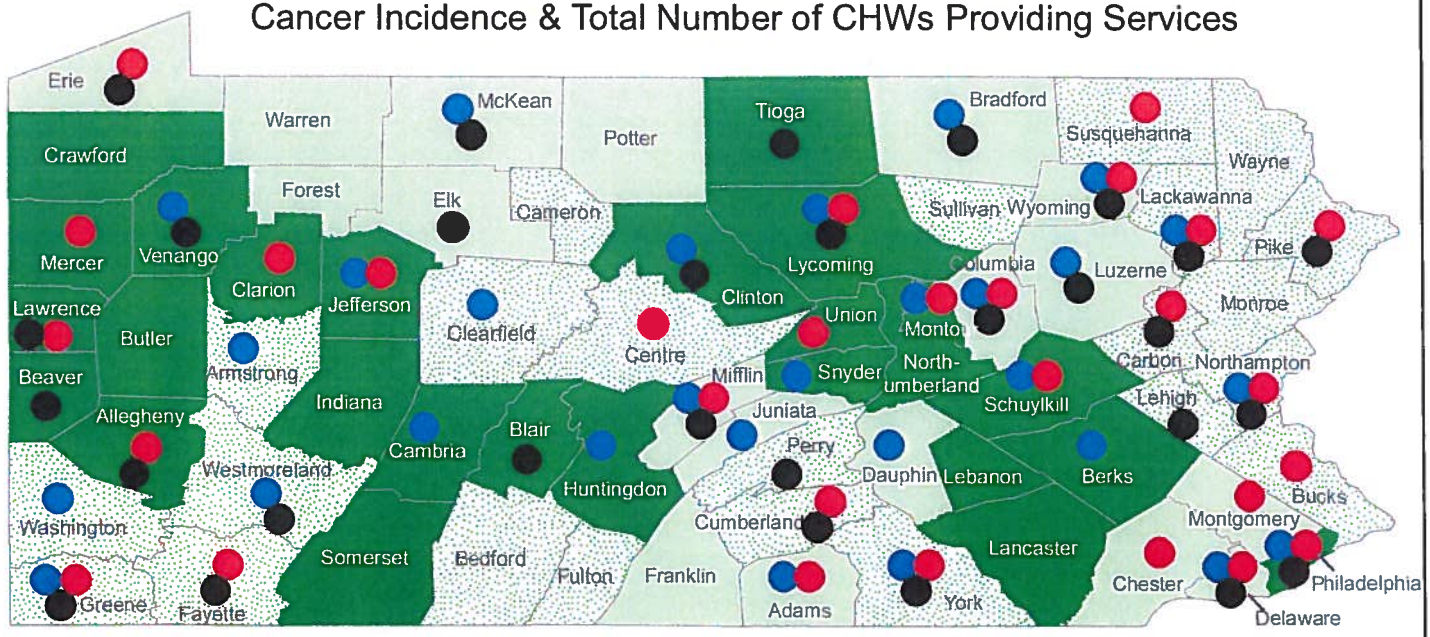
Counties with Cancer Incidence Rates above overall Pennsylvania Incidence Rate

- Female Breast Cancer (State Rate: 124.9)
- Colon Cancer - Both Genders (State Rate: 43.7)
- Bronchus and Lung Cancer - Both Genders (State Rate: 66.0)

Community Health Workers providing interventions related to cancer

- None
- 0.1 to 9.99 FTEs
- 9.99 to 24.99 FTEs
- 24.99 or more FTEs

Cancer Incidence & Total Number of CHWs Providing Services



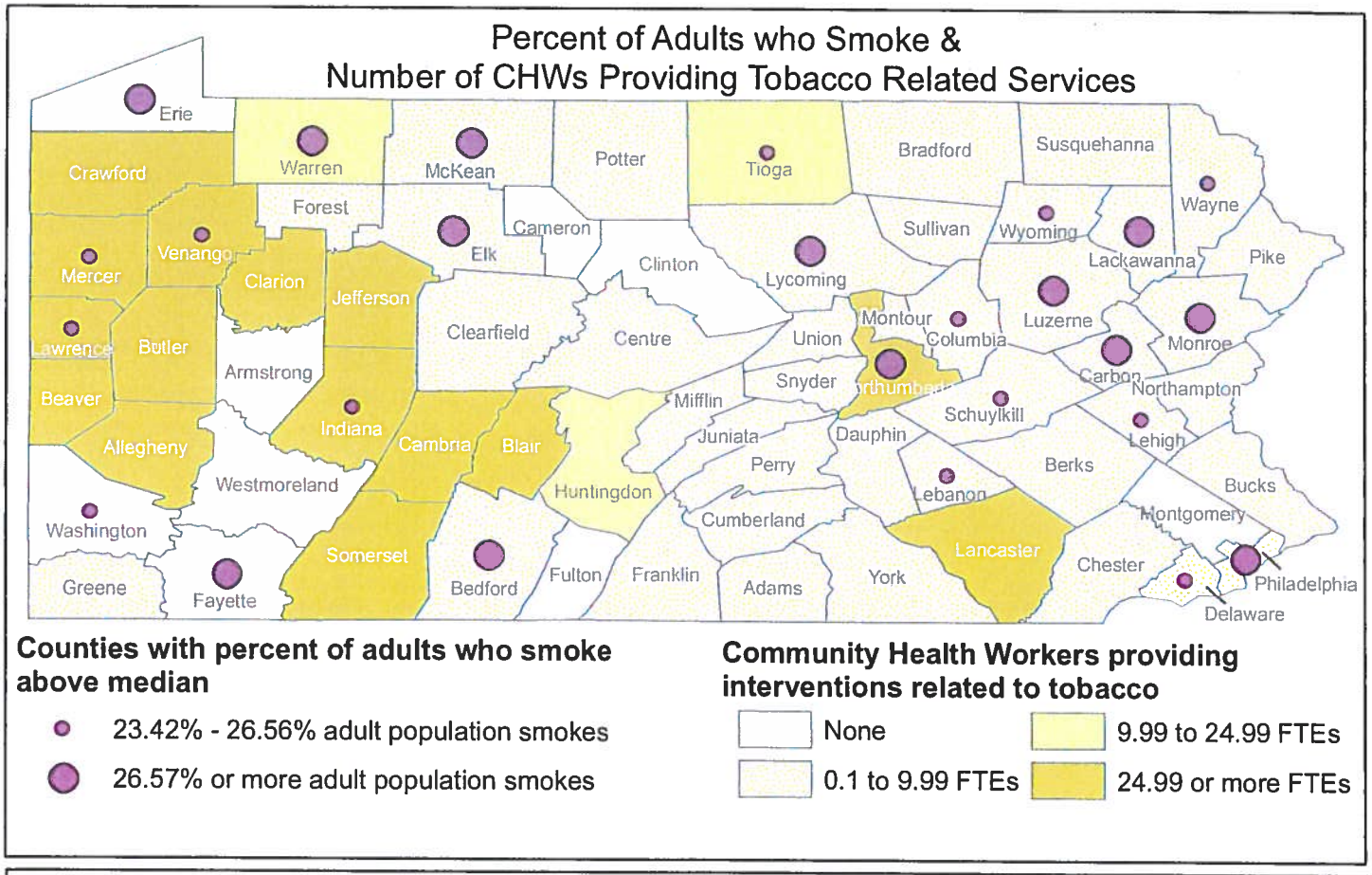
Counties with Cancer Incidence Rates above overall Pennsylvania Incidence Rate

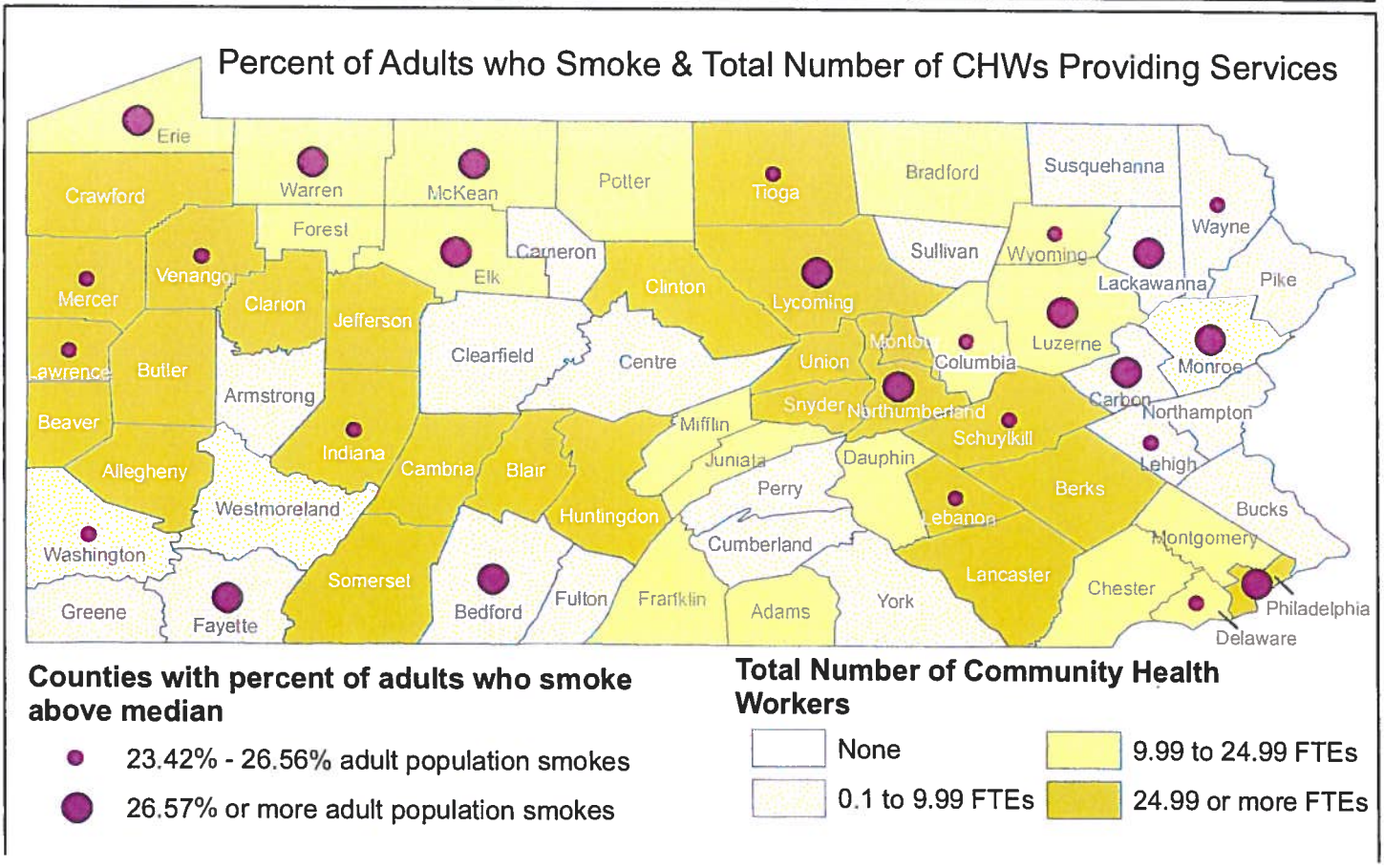
- Female Breast Cancer (State Rate: 124.9)
- Colon Cancer - Both Genders (State Rate: 43.7)
- Bronchus and Lung Cancer - Both Genders

Total Number of Community Health Workers

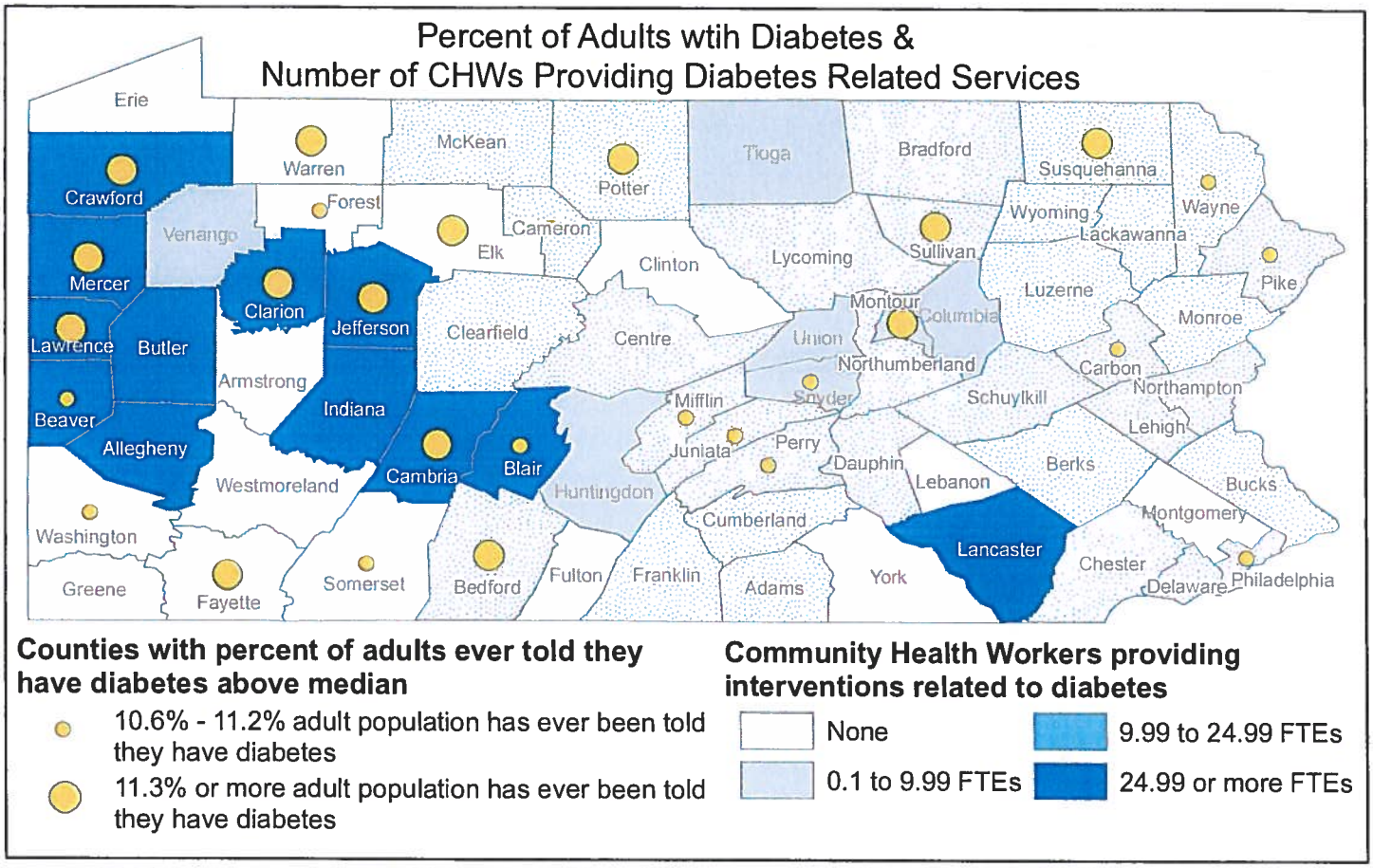
- None
- 0.1 to 9.99 FTEs
- 9.99 to 24.99 FTEs
- 24.99 or more FTEs

Community Health Worker (CHW) Intervention Areas and 2010 Percent of Adults who Smoke by Pennsylvania County





Community Health Worker (CHW) Intervention Areas and 2010 Percent of Adults with Diabetes by Pennsylvania County

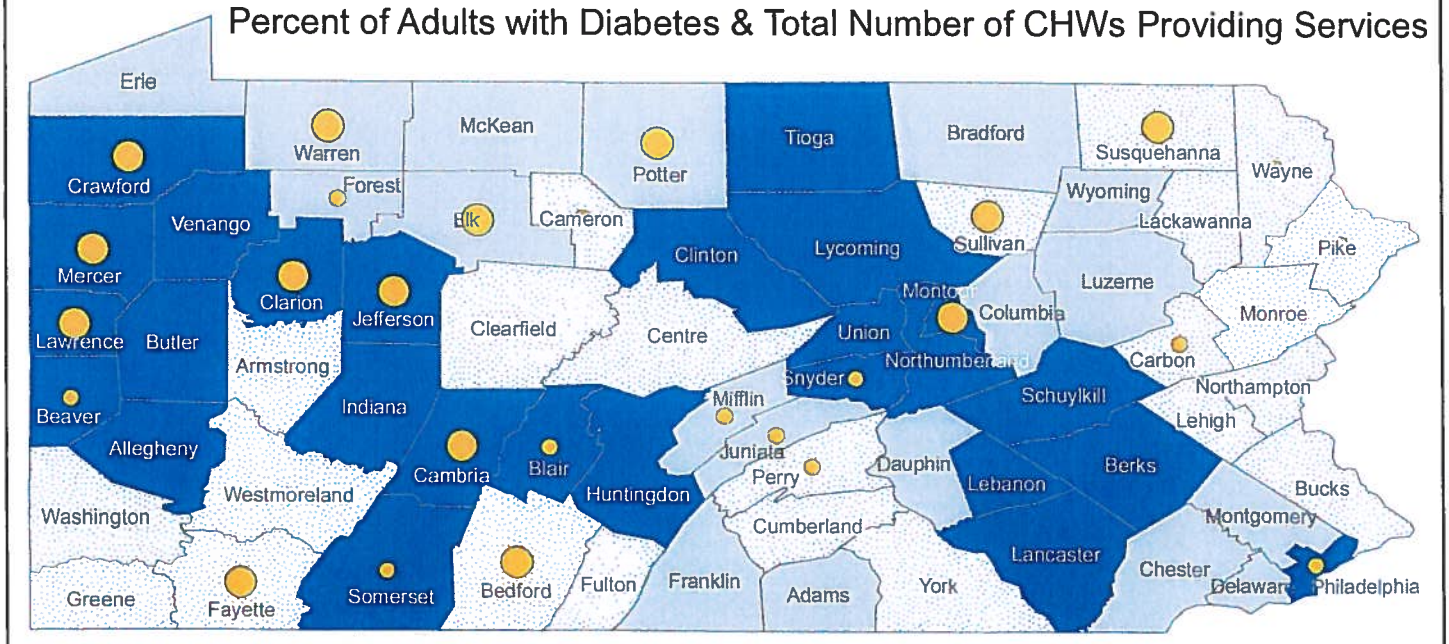


Counties with percent of adults ever told they have diabetes above median

- 10.6% - 11.2% adult population has ever been told they have diabetes
- 11.3% or more adult population has ever been told they have diabetes

Community Health Workers providing interventions related to diabetes

- None
- 0.1 to 9.99 FTEs
- 9.99 to 24.99 FTEs
- 24.99 or more FTEs



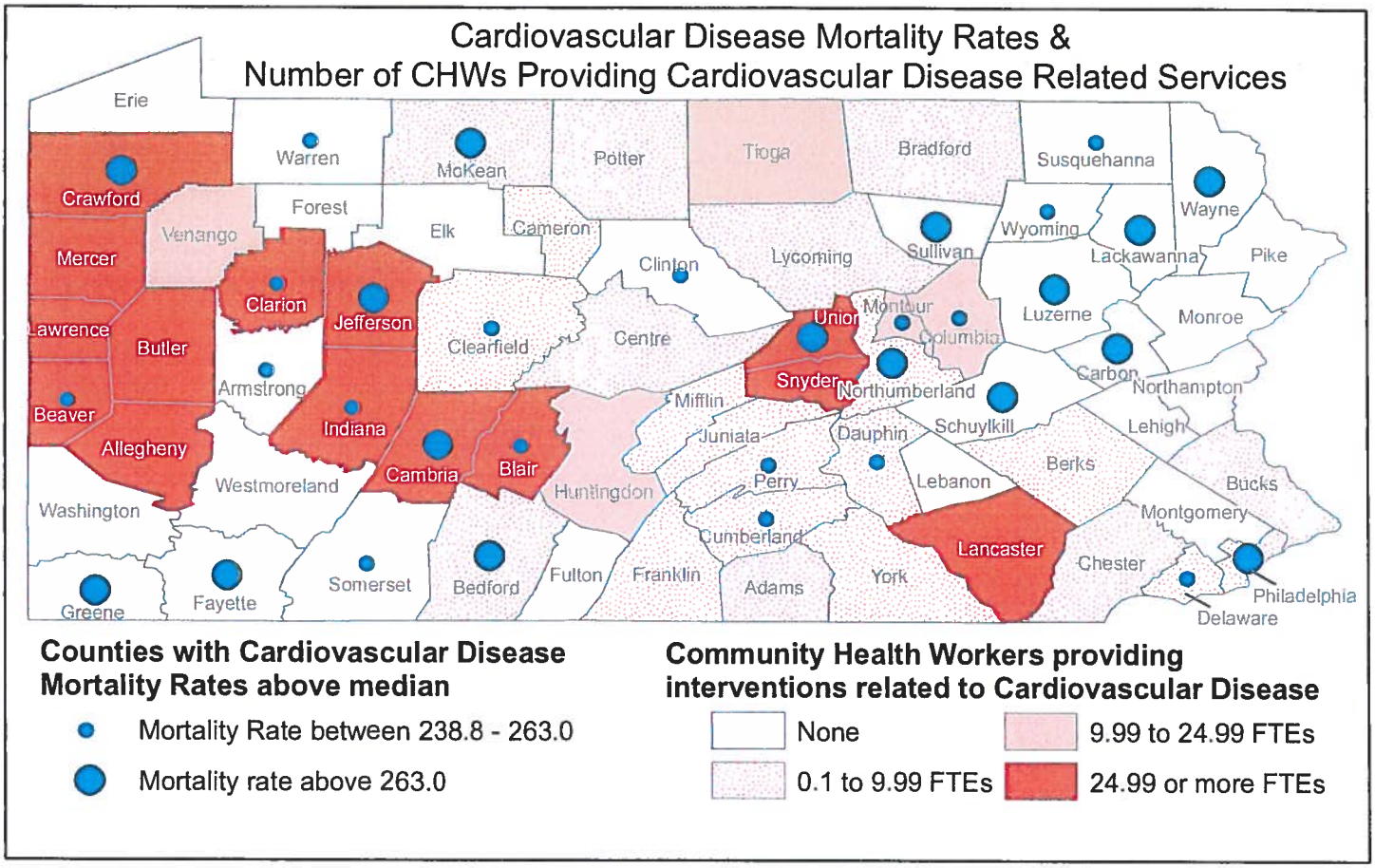
Counties with percent of adults ever told they have diabetes above median (10.5)

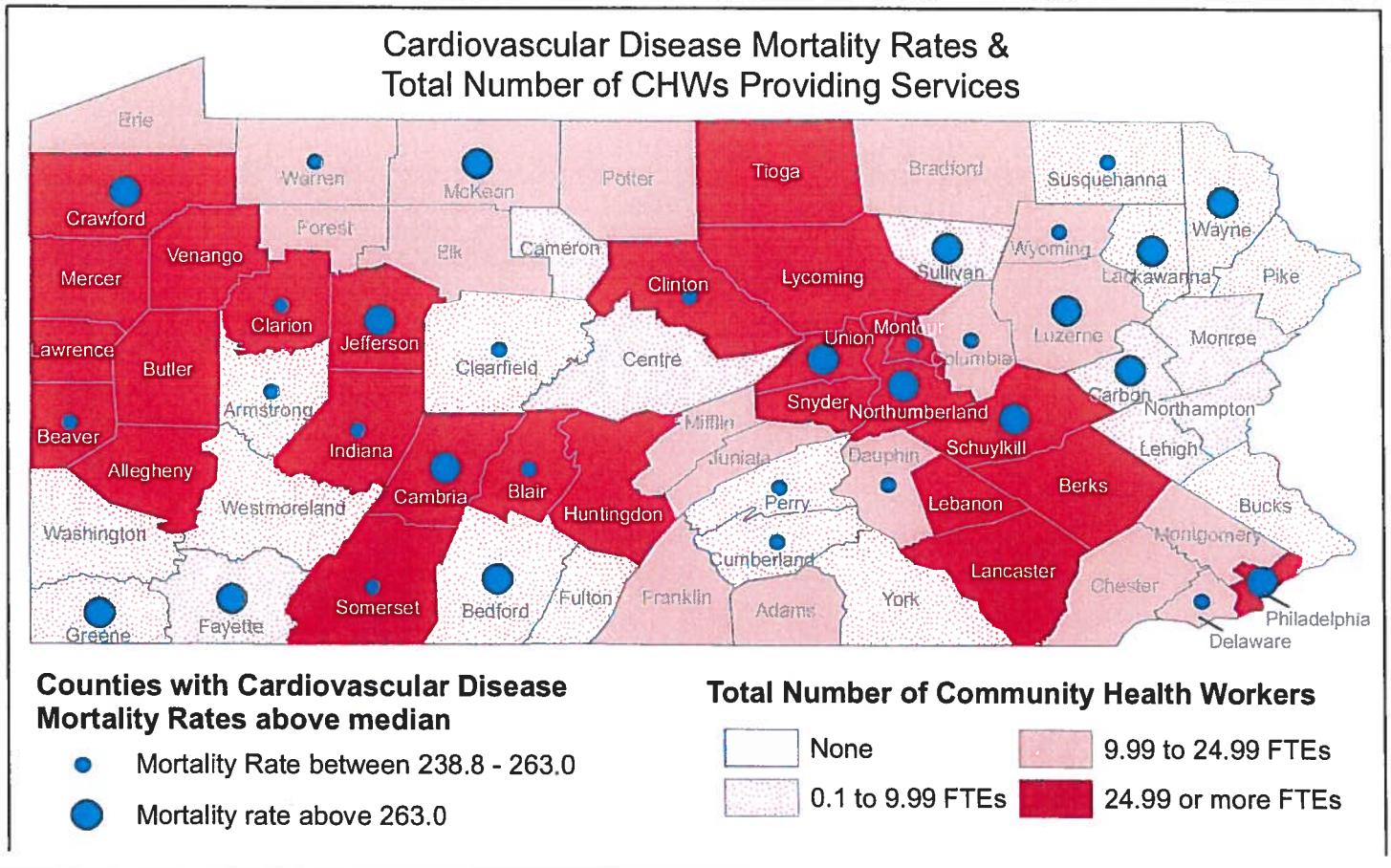
- 10.6% - 11.2% adult population has ever been told they have diabetes
- 11.3% or more adult population has ever been told they have diabetes

Total Number of Community Health Workers

- None
- 0.1 to 9.99 FTEs
- 9.99 to 24.99 FTEs
- 24.99 or more FTEs

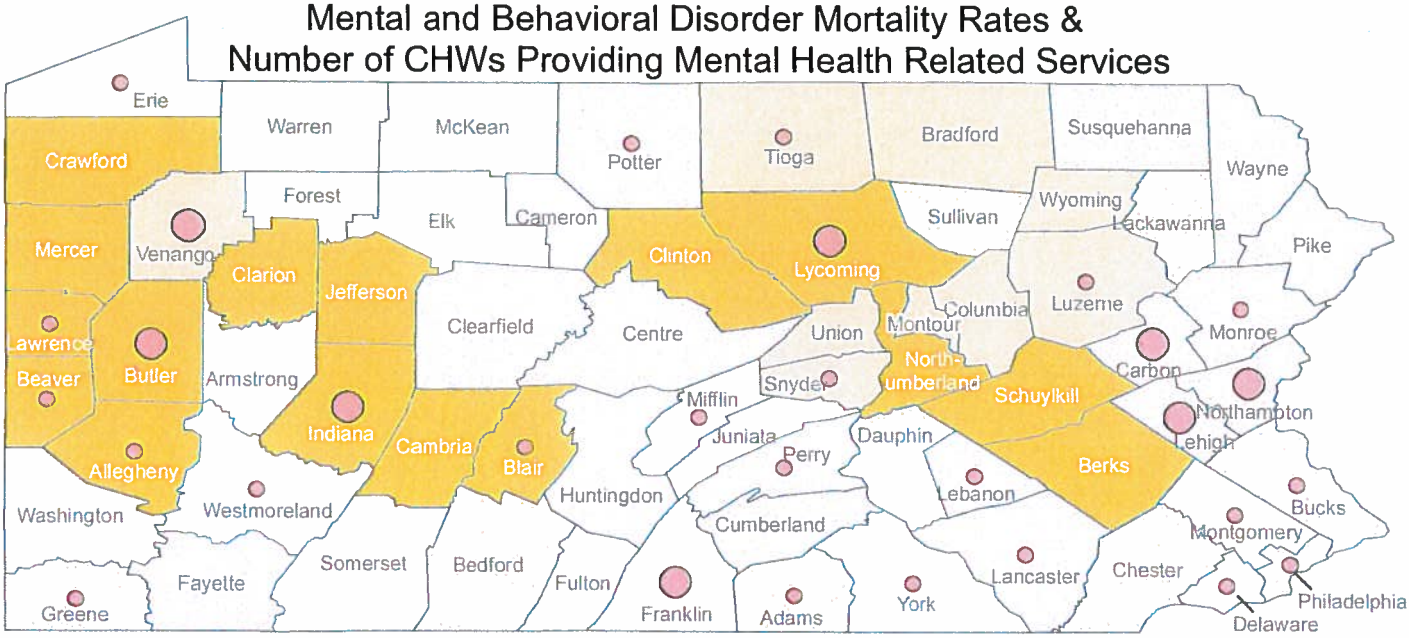
Community Health Worker (CHW) Intervention Areas and 2010 Cardiovascular Disease Mortality Rate by Pennsylvania County





Community Health Worker (CHW) Intervention Areas and 2010 Mental and Behavioral Disorder Mortality Rate by Pennsylvania County

Mental and Behavioral Disorder Mortality Rates & Number of CHWs Providing Mental Health Related Services



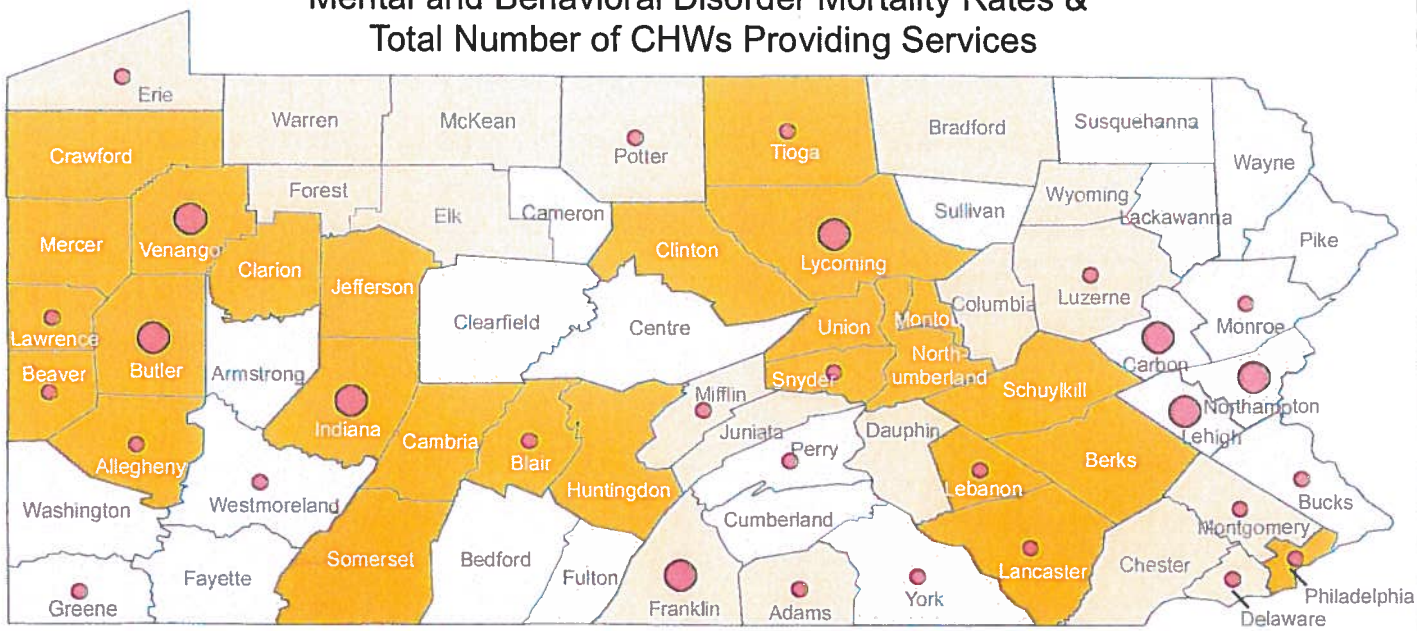
Counties with Mental and Behaivoral Disorder Mortality Rates above median

- Mortality Rate between 34.9 to 43.9
- Mortality rate above 43.9

Community Health Workers providing interventions related to mental health

- None
- 0.1 to 9.99 FTEs
- 9.99 to 24.99 FTEs
- 24.99 or more FTEs

Mental and Behavioral Disorder Mortality Rates & Total Number of CHWs Providing Services



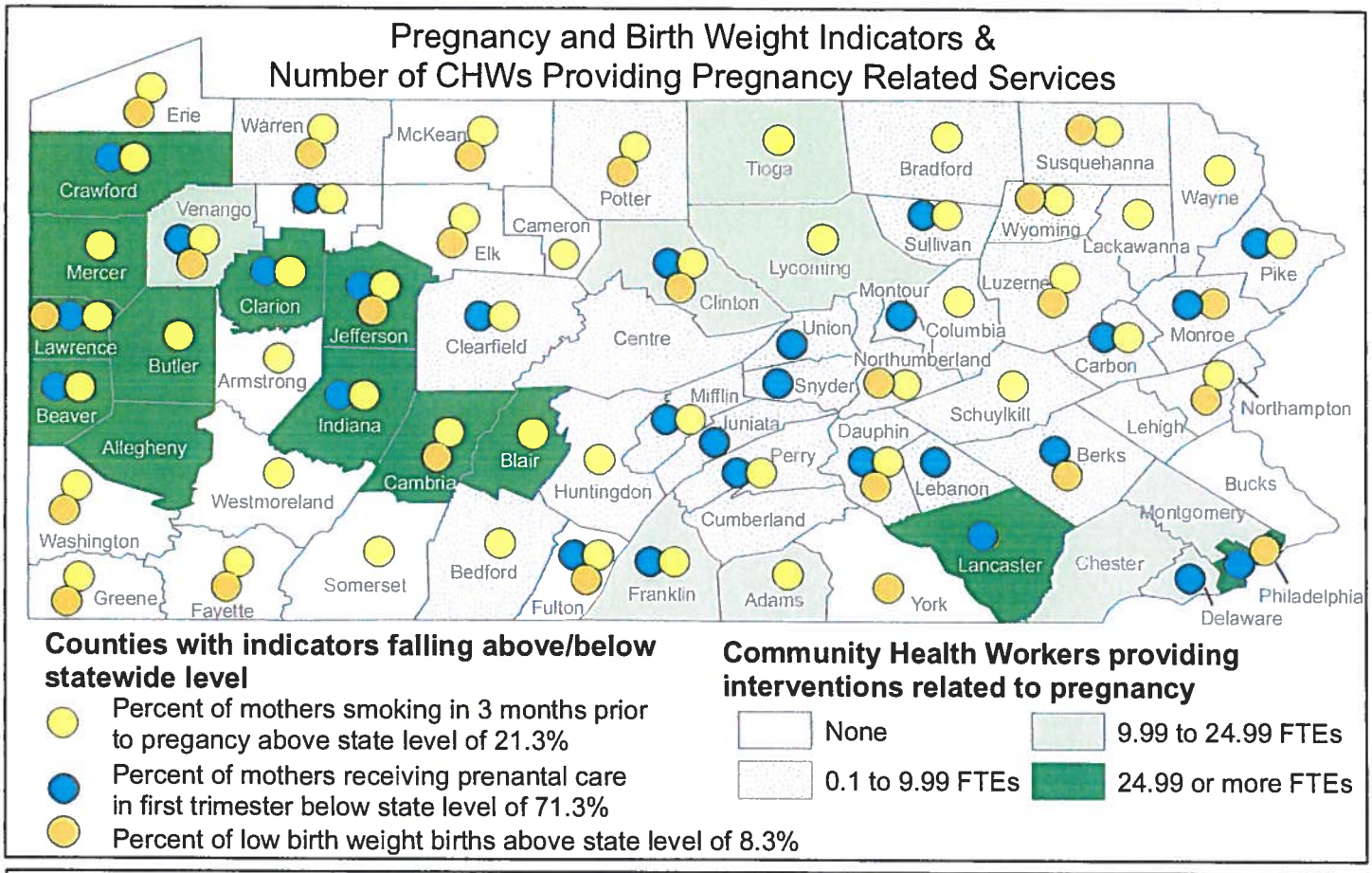
Counties with Mental and Behaivoral Disorder Mortality Rates above median

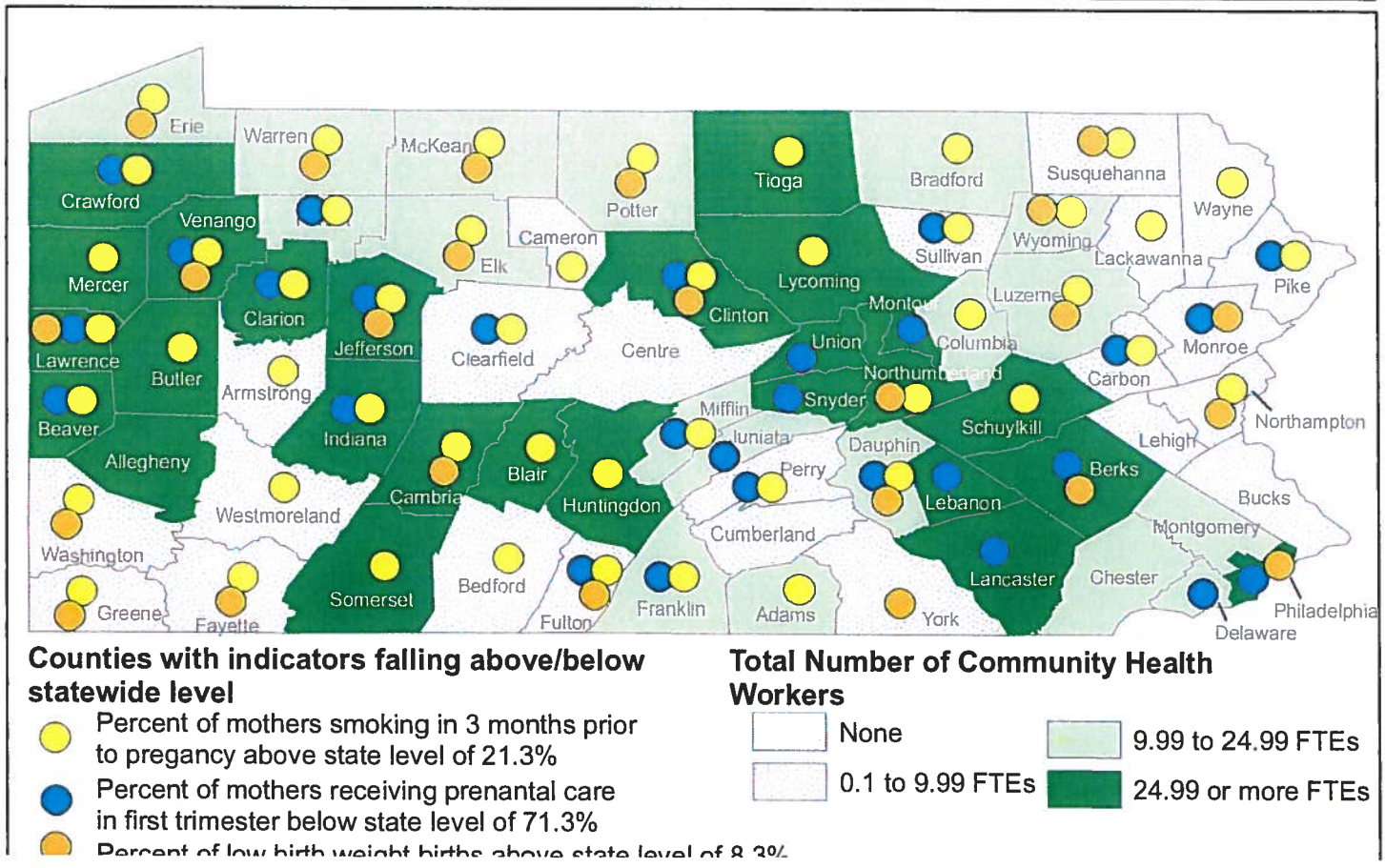
- Mortality Rate between 34.9 to 43.9
- Mortality rate above 43.9

Total Number of Community Health Workers

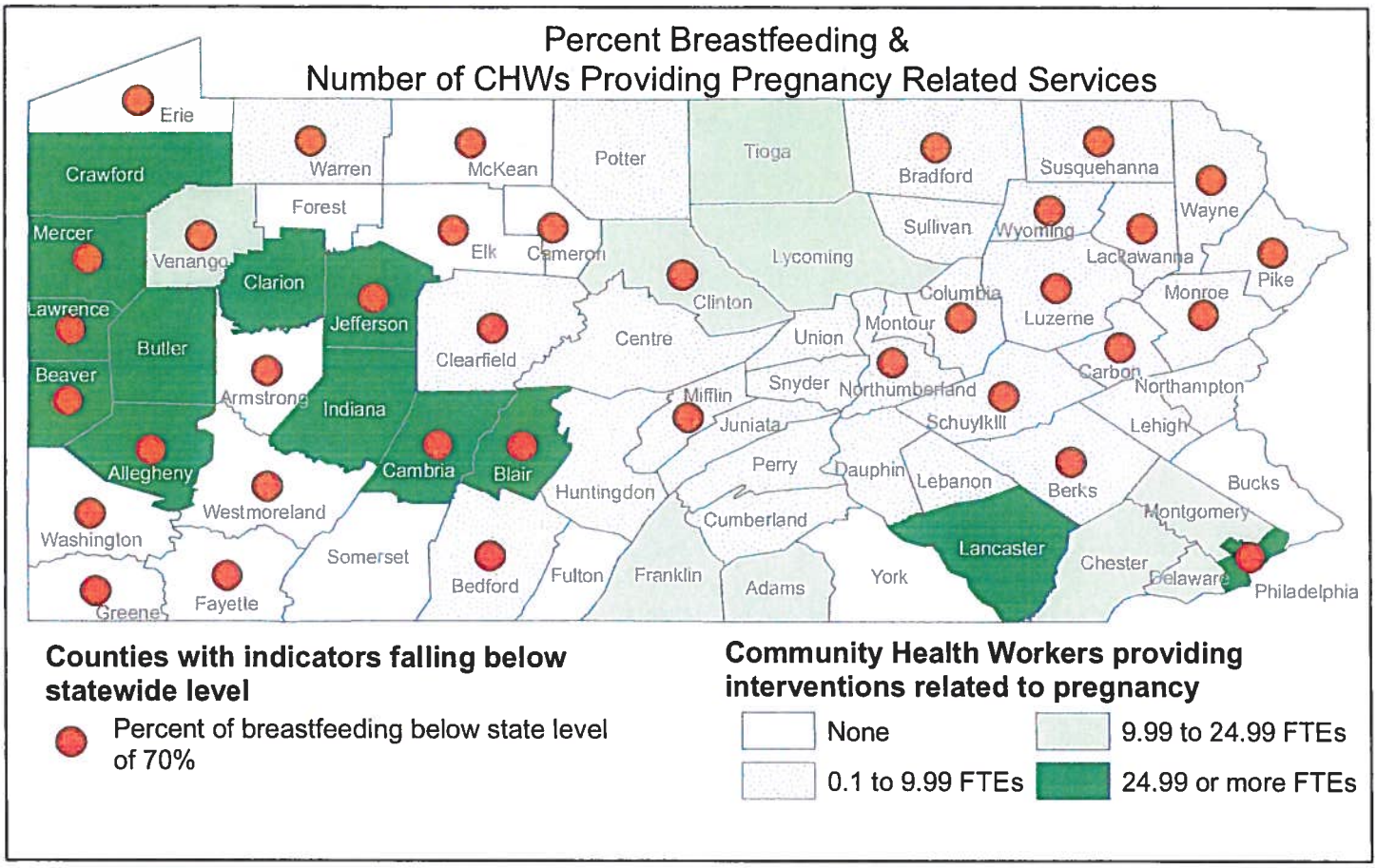
- None
- 0.1 to 9.99 FTEs
- 9.99 to 24.99 FTEs
- 24.99 or more FTEs

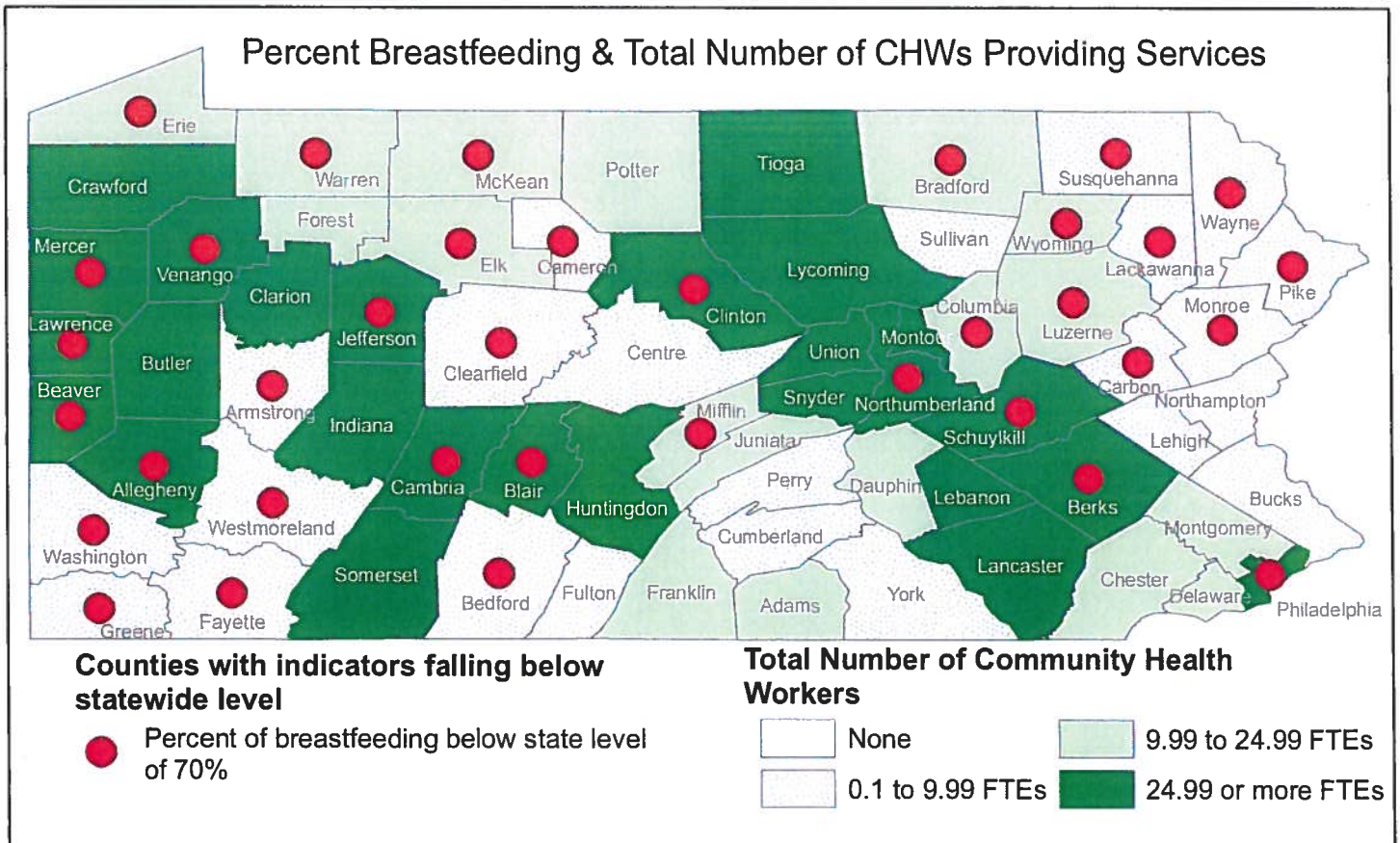
Community Health Worker (CHW) Intervention Areas and 2010 Pregnancy and Birth Weight Indicators by Pennsylvania County





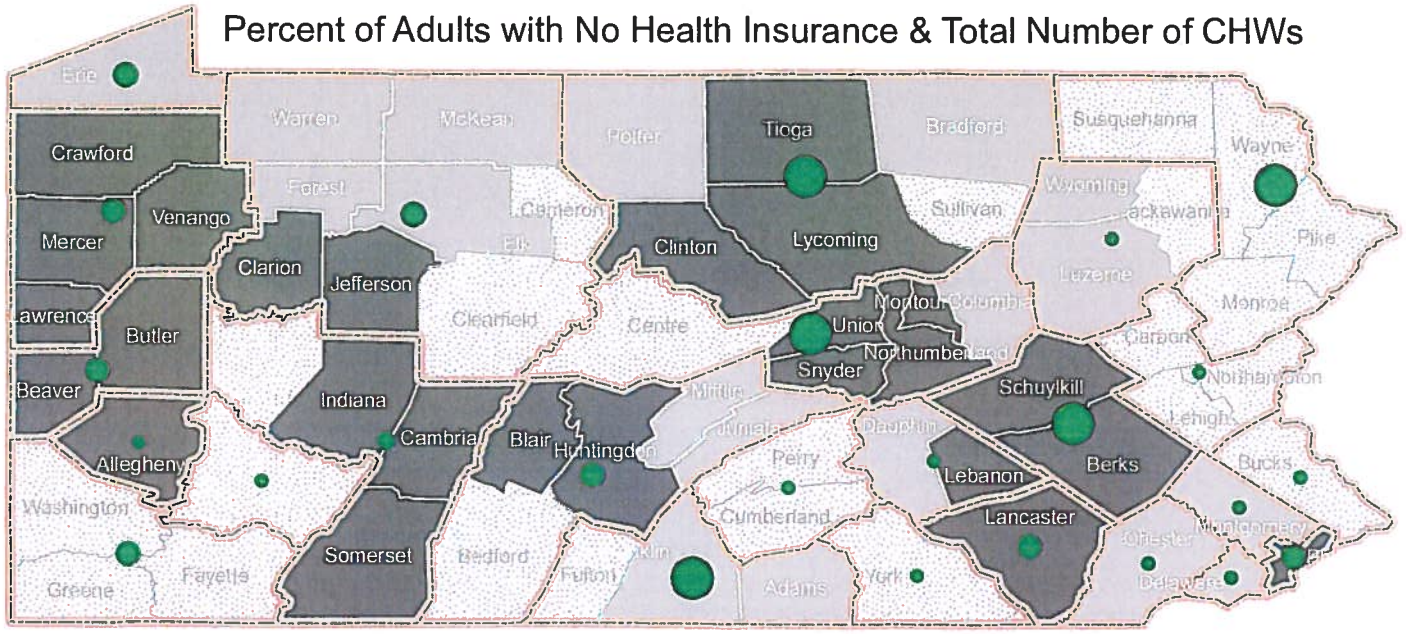
Community Health Worker (CHW) Intervention Areas and 2010 Percent Breastfeeding by Pennsylvania County





Community Health Worker (CHW) Intervention Areas and 2010 Health Insurance and Personal Health Care Provider Indicators

Percent of Adults with No Health Insurance & Total Number of CHWs



Percent of Adults with No Health Insurance by BRFSS Region

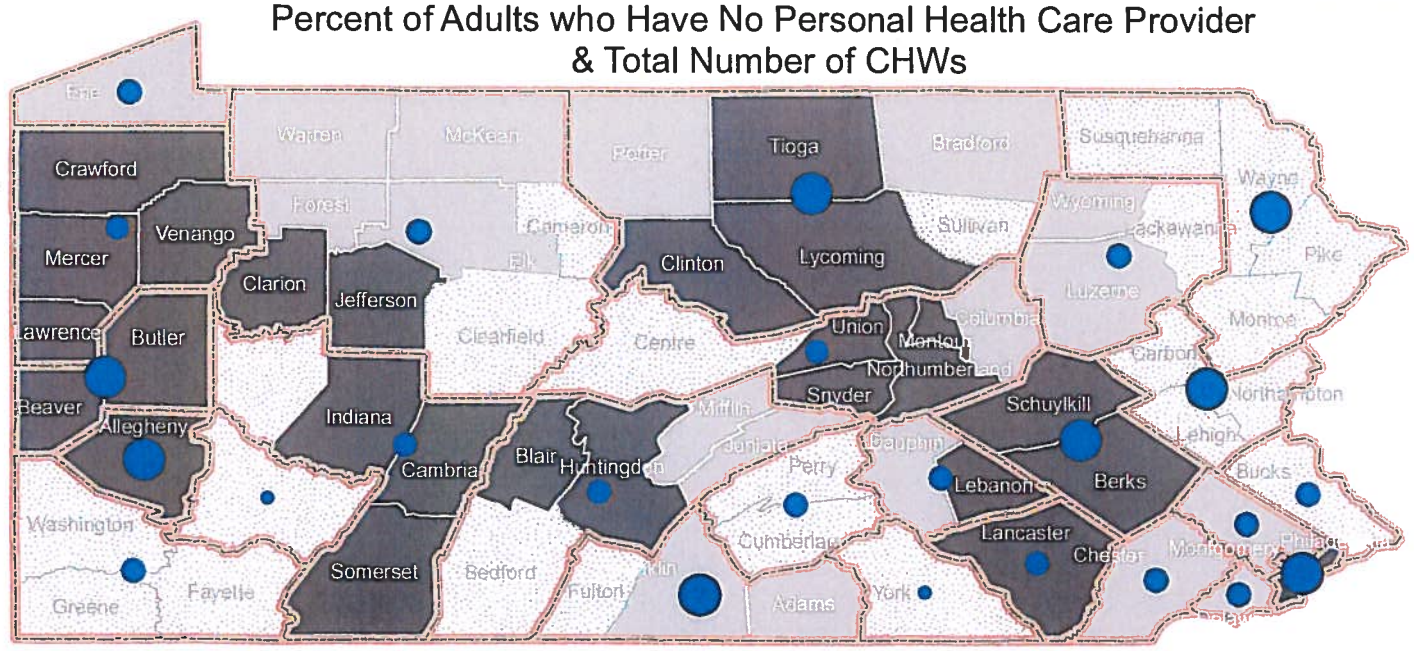
- 8% - 12%
- 12.1% - 16%
- 16.1% or more

BRFSS Region Boundary:

Total Number of Community Health Workers by County

- None
- 0.1 to 9.99 FTEs
- 9.99 to 24.99 FTEs
- 24.99 or more FTEs

Percent of Adults who Have No Personal Health Care Provider & Total Number of CHWs



Percent of Adults who have no Personal Health Care Provider by BRFSS Region

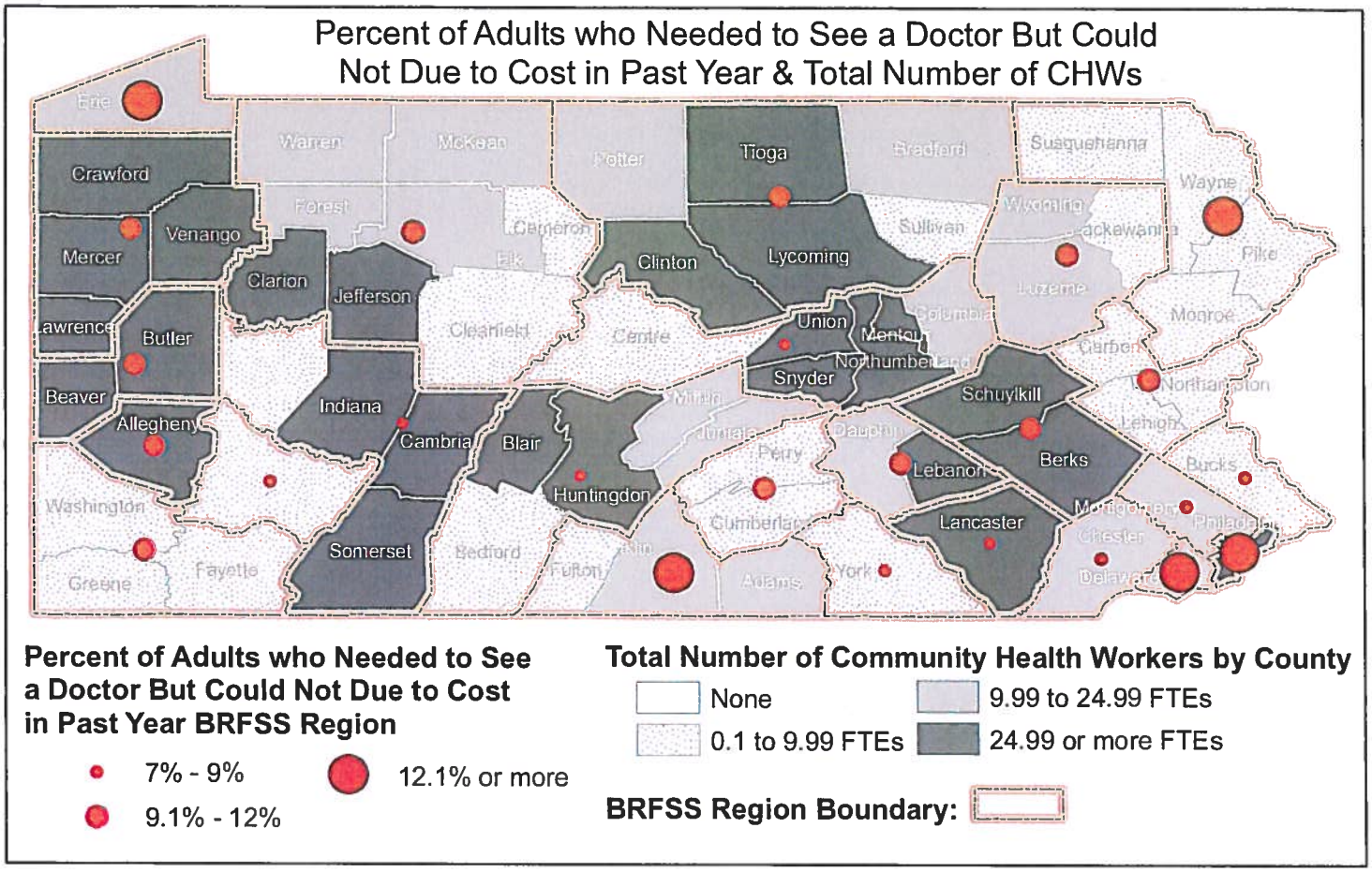
- 6% - 8%
- 8.1% - 10%
- 10.1% or more

BRFSS Region Boundary:

Total Number of Community Health Workers by County

- None
- 0.1 to 9.99 FTEs
- 9.99 to 24.99 FTEs
- 24.99 or more FTEs

Community Health Worker (CHW) Intervention Areas and 2010 Lack of Health Care Due to Cost by Pennsylvania County



Data Notes on Appendix Maps

Total number of Community Health Workers: Total number of CHWs by county was obtained from the 2013 CHW survey. First, the total number of FTEs was calculated from data on the number of full-time and part-time CHWs employed by each agency. Total FTEs was then divided by the number of counties being served by the agency's CHWs. This quotient, the number of CHWs per county for that agency, was then assigned to each county served by CHWs at that agency. For instance, if an agency submitted a survey reporting that it employed two full-time CHWs serving Lawrence, Beaver, and Butler Counties, for mapping purposes, each county would be estimated to have 0.667 FTE Community Health Workers from that agency. The total of all agencies' per county CHW FTEs was summed for each county and displayed in the maps.

Community Health Workers Providing Interventions Related to [condition or risk factor]: The number of CHWs providing interventions related to each condition or risk factor (cancer, smoking, cardiovascular disease, mental or behavioral health disorders, and pregnancy) was also obtained from the 2013 CHW survey. The agency's number of CHW FTEs per county (as obtained from the methodology described above) was assigned to each risk condition or risk factor the agency reported that CHWs addressed. The calculations for all agencies' with CHWs providing interventions related to that condition or risk was summed for each county and displayed in the maps.

Incidence Rate / Mortality Rate / Population Percentage: The following 2010 data was obtained from the Pennsylvania Department of Health Epidemiologic Query and Mapping System (EpiQMS):

- Female breast cancer incidence rate
- Colon/rectum cancer incidence rate
- Lung/bronchus cancer incidence rate
- Percent of adults ever told they have diabetes
- Percent of adults who are obese
- Percent of adults who are smokers
- Mortality rate – cardiovascular disease
- Mortality rate – mental and behavioral disorders
- Percent non-smoking mothers (3 months prior to pregnancy)
- Percent of breastfeeding mothers
- Percent of low birth weight births