Community Health Workers
A Brief Report

Who are Community Health Workers?

Community Health Workers are known by many different names in different countries. The umbrella term “Community Health Worker” (CHW) embraces a variety of community health aides selected, trained, and working in the communities from which they come.

A widely accepted definition was proposed by WHO for Community Health Workers:

1. Should be members of the communities where they work
2. Should be selected by the communities
3. Should be answerable to the communities for their activities
4. Should be supported by the health system but not necessarily a part of its organization
5. Should have shorter training than professional workers

CHWs might be known by other names (e.g., promotores de salud, coaches, lay health advisors, community health representatives, peer mentors, peer navigators).

- CHWs are trained to carry out one or more functions related to health care. They may receive training that is recognized by the health services and national certification authority, but this training does not form part of a tertiary education certificate.
- While early programs emphasized the role of CHWs as not only (and possibly not even primarily) health care providers, but also as advocates for the community and agents of social change. Today’s programs emphasize their technical and community management function.
- The profile of community health workers internationally is very diverse. While there are some broad trends, they can be men or women, young or old, literate, or illiterate.
- In almost all cases they come from the communities they serve. Most importantly, there is broad agreement that who and what CHWs are must respond to local societal and cultural norms and customs to ensure community acceptance and ownership.

What do Community Health Workers do?

CHWs perform a wide range of tasks:

1. Home visits
2. Environmental sanitation
3. Provision of water supply
4. First aid and treatment of common ailments
5. Health education
6. Nutrition and surveillance
7. Maternal and child health and family planning activities
8. Chronic and endemic infectious disease care:
    a. TB and HIV/AIDs care (i.e., counseling, peer and treatment support, and palliative care)
    b. Malaria control
    c. Treatment of acute and respiratory infections
9. Communicable disease control
10. Community development activities
11. Referrals and recordkeeping
12. Collection of data on vital events

These tasks are performed in many different combinations and with different degrees of breadth and depth.

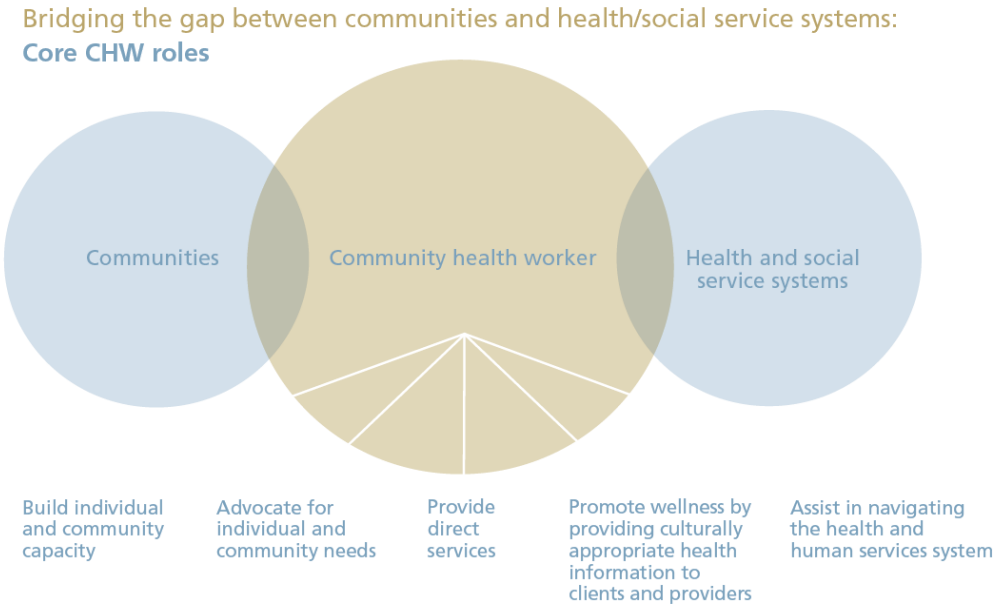
A key issue of debate concerns the question of what functions individual CHWs can effectively perform considering:

1. Level of education
2. Type and duration of training
3. Health needs of the community
4. Size and geographical spread of the population to be covered

There is little scientific evidence as to the optimal number and mix of CHW functions and tasks, but the consensus is that no one person can perform all these activities.

Given present pressures on health systems and their proven inability to respond adequately, the existing evidence strongly suggests that, particularly in poor countries, CHW programs are not an easy investment, but a good one, since the alternative, in reality, is no care at all for the poor living in geographically peripheral areas.

Services provided by community health workers are expected to be more appropriate to the health needs of populations than those of clinic-based services, to be less expensive, and to foster self-reliance and local participation. Furthermore, because CHWs are more accessible and acceptable to clients in their communities, they are expected to improve the overall coverage of services as well as equity (i.e. increased service use by poorer individuals and households).



Where they can be Implemented:

Community Health Workers work in all geographic settings, including rural, urban, and metropolitan areas, border regions (colonias), and Native American nations. Community Health Worker programs are usually found in areas that are less accessible due to geographic location, such as rural areas. Further, public services like hospitals and clinics are hard to reach due to personal and public transportation challenges. CHWs are also utilized in sections of the inner city that house small communities from similar cultural and economic backgrounds as seen in

New York City, Chicago, and Detroit, Michigan. Although their role varies depending on locale and cultural setting, they are most often found working in underprivileged and marginalized communities.

Economic Impact of Community Health Workers

Community Health Workers (CHWs) can be a link between the community and health care providers which can improve care quality and decrease costs. CHWs help to reduce unnecessary hospitalizations, urgent care, and emergency room visits, and assist patients with self-managing their care. Studies on the effectiveness of cost savings have been limited but have shown promising results.

A Sanford Community Health Paramedic program out of Bismarck, ND is showing some promising financial results. We interviewed a Community Health Paramedic and it was estimated that the hospital saved $1.1 million in nine months with only one person in the position. The program is presently free of charge to patients and is cost mitigation for the hospital. Patients who have frequent visits to the hospital and/or Emergency Department are flagged in the Electronic Health Record and referred for community health visits. The program is expected to grow and shows how the implementation of CHWs could benefit North Dakota.

Molina Healthcare, a care organization in New Mexico, used the state university to identify people with complex medical and social needs. CHWs were able to help individuals access needed resources which saved approximately $2 million in health care costs. The return on investment was nearly 4:1 and benefited 448 patients over one year (Center for Health Care Strategies, Inc., 2020). An Arkansas CHW program saw a three-to-one return on investment of Medicaid expenses by helping individuals access home and community-based services. These services were an alternative to nursing homes. Additionally, a Denver health program utilized CHWs to contact males in underserved communities with the goal of increasing health care access. They had cost savings with a return on investment of more than $2 for every $1 spent on the program (National Conference of State Legislatures, 2015). Another example of cost reduction was seen after CHWs were added to a patient-centered home in South Bronx, New York. The hospital reported saving $2.30 for every $1 of investment into CHWs. Furthermore, Emergency Department visits fell by a rate of 5%, patients with diabetes and other chronic conditions reduced their hospitalizations by 12.6%, a net savings of $1135 per patient was reported, and a net saving per CHW of $170,213 was generated annually (American Medical Association, n.d.). These results demonstrate how the implementation of CHWs can positively impact clinical outcomes and economic outcomes.

Funding of Community Health Care Workers

A lack of consistent financial support is a barrier for CHWs. Traditionally, many CHW programs were run by community-based organizations using grant funds or their own operating budgets. The Centers for Medicare and Medicaid Services implemented a rule change in 2014 that expanded preventive services reimbursement. This enabled the reimbursement of CHW services by state Medicaid programs. The change allows community-based preventive services to be delivered by CHWs and reimbursed if recommended by a licensed provider. If North Dakota wanted to move forward a state plan amendment would be necessary. This plan would define the role of CHWs and list services they can provide (National Conference of State Legislatures, 2015).

States can use Medicaid to fund Community Health Workers in several ways. These include: state plan amendments (SPAs) for reimbursing preventive services, defined reimbursement through section 1115 waivers, state legislation and state plan amendments (SPAs) for broader Medicaid reimbursement, reimbursement through managed care contracts, and funding through other health system transformation efforts.

The use of section 1115 waivers, which must be approved by Centers for Medicare and Medicaid Services (CMS), have been used on CHWs in models that look at specific Medicaid populations. California expanded family planning services, and Massachusetts helped children in Medicaid with asthma using CHWs. SPAs for broader Medicaid reimbursement can reimburse CHWs for wide-ranging services if states expand their list. In 2007, Minnesota passed legislation to reimburse health education provided by CHWs related to a person's specific health condition. Reimbursement through Managed care contracts (MCOs) may be a good option as 70 percent of Medicaid beneficiaries are covered under managed care. MCOs have flexibility in covering services not covered traditionally. States can require MCOs to make CHWs available to beneficiaries, establish a ratio of CHWs/beneficiaries, compose a list of services CHWs can provide, and set other requirements. New Mexico has successfully used an MCO to provide funding for a variety of CHW activities for specific populations. Health system transformation efforts can improve care quality while reducing health care costs. Social determinants of health and care coordination are often the focus and CHWs can be invaluable in these efforts. These can be part of Medicaid or extend beyond such as State Innovation Models (SIM). States that have SIM grants receive funds to help with not only with Medicaid care but also for private insurance. The goal is to improve the quality of care, cost reduction, and make the health system better (Families USA, 2016).

Even with various options, reimbursement is still problematic with few state Medicaid programs providing reimbursement for any portion of the work. The Medical Assistance and Medicaid programs in our neighboring state of Minnesota has covered CHW services that include care coordination, patient services, and diagnosis-related health education since 2009. Providers including mental health professionals, dentists, physicians, and public health nurses can supervise CHWs. For services to be reimbursable, a CHW must have a certificate from a set curriculum within the Minnesota State College and University System (Minnesota Department of Health, 2020). In Idaho, CHWs are used to deliver primary care in underserved areas with primary funding from Centers for Medicare and Medicaid Services, and the State Innovation Model Grant. Oregon has a program called Patient-Centered Primary Care which covers services provided by certified CHWs. Key funding for this is through the Medicaid State Plan Amendment (National Conference of State Legislatures, 2015).

North Dakota can utilize the funding blueprints for CHWs that have already been established by other states. With various funding avenues available and evidence for significant cost savings, the promotion of CHWs in North Dakota could generate many positive economic outcomes.

Licensing and Training

Licensing and training are most easily broken down by provider title. This will naturally correspond with what licensing (if any) the provider needs prior to being employed as a community health worker. For instance, there is a great difference in the entry skill-level of a community health representatives, the various levels of community health workers, and community paramedics.

- For someone to be employed as a community health worker, the employment requirements depend on the level of care that the worker will provide. Many community health workers function as “promoters of community health”, meaning that they are not providing formal medical services. These providers are also often labeled as “community health representatives” or “promotor(a)s”. These non-medical positions do not require previous medical experience or formal medical training. In contrast, some community health workers do provide formal medical services in the form of mental health assessments or basic medical care. These positions require additional training. They may also require advanced degrees or formal medical licensure. For all community health workers, the applicant must at a minimum have no legal charges related to abuse of vulnerable populations. In some states, community health workers are required to be licensed in community health work through a state certification board via a formal review process. This is regardless of the medical or non-medical nature of the work.

    - Rhode Island: certification board requires a minimum amount of 500 hours of paid, on-the-job experience with formal supervision (or 1,000 hours of volunteer, on-the-job experience), a portfolio outlining work and volunteer experience, and 70 hours of education (to include workshops, continuing education, or 6 credits of formal college).
    - Texas: certification requires state residency; must be at least 16 years of age; and completion of a state-certified, 160-hour competency-based training program OR at least 1,000 hours of experience within the past three years (verified by supervisor).
    - Minnesota: received a certificate from a Minnesota State Colleges and Universities System approved community health worker curriculum; or at least five years of supervised experience with an enrolled physician, registered nurse, advanced practice registered nurse, mental health professional, or dentist; community health workers must also work under the direct supervision of an enrolled physician, registered nurse, advanced practice registered nurse, mental health professional, or dentist
    - North Dakota: having the NDDOH oversee certification would utilize licensing and certifying systems already in place in North Dakota.

- A high level of baseline training is required for a community paramedic. A paramedic applying to a community paramedic position must already possess all licensure required to work as a paramedic, plus they must typically have at least three years of fulltime experience as a paramedic. A paramedic is already a highly trained healthcare provider with licensure to assess complex cardiac rhythms, perform advanced airway interventions, administer a broad range of drugs to include narcotics and sedatives, and the ability to treat complex traumatic injuries. Becoming a community paramedic requires the paramedic to complete additional training in advanced skills. This is viewed as a certification that is added to a paramedic’s license. Most community paramedic certification programs are offered through formal, accredited EMS programs at universities. Community paramedics may also need to complete a certain number of on-the-job clinical hours as part of the certification program.

In North Dakota, all EMS providers are licensed through the NDDOH. Implementing community paramedic programs with accredited EMS programs and having the NDDOH oversee certification would promote continuity

COVID-19 Impact

Community health workers are in a role that is primed to make a significant community impact during crises such as the Sars-CoV-2 Pandemic. Across the country, community health workers at every level are providing crucial services within their community. These services range from ensuring our vulnerable, elderly community members are able to get groceries and medications all the way to providing complex medical care at home, keeping patients out of hospitals and reducing community spread. On many tribal reservations, community health representatives are also performing the vital function of contact tracing, utilizing their knowledge and personal connection with their communities. In New York City, community health workers conducted over 12,000 wellness checks since March. They also initiated 2,000 virtual social service referrals across the city. In Bismarck, Sanford's community paramedic stated that he saw an 800% increase in home care referrals due to the pandemic, all of which helped keep patients from tying up hospital resources and helped prevent unnecessary community contact for sick and vulnerable patients. Community health workers are an under-utilized resource, and that has become especially apparent during the current health crisis.

Case-studies of CHWs:

The NHLBI and the Indian Health Service Develop *Honoring the Gift of heart health*

Overview

American Indians and Alaska Natives have some of the highest rates of heart disease, smoking, and diabetes in the country. Combining their resources, expertise, and commitment to reducing health disparities, in 2003 the NHLBI and the Indian Health Service (IHS) developed *Honoring the Gift of Heart Health* (HGHH), an evidence-based manual and training program for American Indian/Alaska Native communities.

Implementation strategies

HGHH's focus was on capacity building and community mobilization in tribal communities. It also included intensive education for community and tribal health care workers on heart disease prevention. The NHLBI and IHS held a national training workshop in 2003 and six regional trainings from 2004 through 2006. Nationwide, enthusiasm for HGHH resulted in many local-level training efforts around the country, lasting through 2010. The widespread training had another positive outcome: the creation of a core group of trainers and educators who were prepared to lead heart health education classes and program activities in their own communities.

The new HGHH manual was first piloted in New Mexico. After some revisions, the NHLBI and IHS widely distributed the materials, along with a coordinated training strategy. Key users of HGHH include community health representatives (CHRs), disease prevention and health promotion professionals, diabetes educators, nutritionists and dietitians, and health educators.

Pueblo San Ildefonso, New Mexico

In Pueblo San Ildefonso, NM, a team composed of CHRs, health and wellness/diabetes program staff, a youth coordinator, and a lay community member conducted an HGHH program for youth and adults in the community. The class met twice a week for five weeks, instead of the usual 10-week program. The flexibility of the HGHH manual allowed the team to change the

program's length to meet the community's needs. The team also incorporated local traditions into the HGHH program. By recognizing and including the community's youth as "young leaders," the HGHH team at Pueblo San Ildefonso succeeded in inspiring the program's participants to spread health and wellness messages to families and peers throughout the community.

Catawba Healthy Senior Hearts Project, South Carolina

At the Catawba Senior Center on the Catawba reservation, a registered dietitian and CHR (from the IHS Catawba Service Unit) implemented HGHH as part of a healthy senior's program. Making the program as convenient as possible for the participants was a key factor for success. Instead of holding classes at the clinic, the HGHH team brought the program to the senior center so that participants could easily attend. Additionally, HGHH classes were scheduled when senior center attendance was highest: after lunch on bingo day. This proved to be an excellent strategy for retaining participants. Information about heart-healthy eating was presented in hands-on cooking demonstrations and in-depth discussions. The recipes and lesson plan integrated tribal traditions. HGHH remains one of the most popular and well-received programs held at the senior center.

Key Results/Outcomes

The NHLBI's and IHS's collaborative approach has resulted in a program that has been well received by tribal communities and used widely across Indian Country. Its popularity can be credited to the following factors:

1. Participants appreciate the professional quality of the materials.
2. Participants report that the activities are fun and are flexible enough to be modified for different tribes.
3. Activities and materials are adaptable, enabling sites to change the manual's length, incorporate various cultural traditions, and modify activities.

Boston Community Asthma Initiative

The Boston Children's Hospital Community Asthma Initiative (CAI) was developed to help improve the health and quality of life of children with asthma and their families. Since asthma hospitalizations and Emergency Department visits are disproportionately high for African-American and Latino children, the hospital wanted to address this important health disparity.

CAI serves children who live in Boston, are 2 to 18 years old, and have been either seen in Boston Children's Emergency Department or hospitalized for asthma. We also accept referrals from primary care providers and asthma specialists within the hospital's network.

The program works with each family to understand their child's asthma and the medications used to treat it and to identify and reduce asthma triggers in the home and other places where the child spends time.

CAI also works with partners and coalitions to address asthma health disparities through changes in policies at the local and state levels.

Policy Advocacy

- They work in coalitions to improve both housing and school environmental conditions that often trigger a child's asthma.
- With partners, we seek to ensure that asthma education, home-visiting services, devices, and environmental supplies, such as HEPA vacuum cleaners, will be covered by health insurance, as needed.
- We are working with other asthma home-visiting groups in the city to establish home-visiting standards and a trained workforce that can serve the diverse and multilingual community in Boston. We are also working with groups in other parts of the country to bring similar services to their communities.

Result

As of December 2016, there are over 1,769 patients who have enrolled in the Community Asthma Initiative. So far, their involvement has led to:

- 80% reduction in the percentage of patients with asthma-related hospitalization
- 58% reduction in the percentage of patients with Emergency Department visits
- 45% reduction in the percentage of patients with missed school days for children
- 53% reduction in the percentage of patients with lost workdays for parents

Kentucky Homeplace

Compared to the rest of the state and country, eastern Kentucky residents are statistically poorer, have less formal education, and have inadequate health insurance. Also, a majority of the counties in Kentucky are designated as Medically Underserved Areas. Rural, poverty-stricken community members lack proper knowledge of their health conditions and run into barriers of social/cultural inhibitors, financial burdens, and transportation.

Kentucky homeplace was created in 1994 by the University of Kentucky Center of Excellence in Rural Health and funded by the Kentucky General Assembly to combat health disparities in rural areas of the state. This community health worker (CHW) initiative was first based in the eastern town of Hazard, KY, and has since connected thousands of rural Kentucky residents with medical, environmental, and social services. Currently, 30 counties located in the Appalachian region of eastern Kentucky are being served by Kentucky Homeplace.

Services Offered

Kentucky Homeplace trains CHWs, usually individuals who were born and raised within the community, to provide access to numerous health and social services.

A majority of the clients are at 100%-133% of the federal poverty level. Kentucky Homeplace does not charge clients for services provided. Within their communities, these services include:

- Free health information
- Health Coaching for clients and family members
- Eye exams and eyeglasses
- Hearing aids at reduced rates
- Reduced or no-cost medications
- Reduced fee for dental services and low-cost dentures
- Sliding fee referrals for doctor visits
- Enrollment/re-enrollment for Medicaid and Kentucky Children's Health Insurance Program (KCHIP)
- Medicare D information

Results

From July 2001 to June 2019, Kentucky Homeplace served 166,227 clients and provided 5,012,152 services with a combined medication and service value of $340,095,050. The return on investment (ROI) is $11.34 saved for every $1 invested.

Super utilizer pilot project

A pilot project in Billings and the rural communities of Helena and Kalispell, Montana, addressed the needs of high-risk patients to prevent unnecessary hospitalizations and emergency department (ED) visits. In addition to physical health, this project addressed mental health, substance use disorders, and social determinants of health like housing, transportation, health literacy, and social isolation.

Services offered

Patients who visited the ED multiple times or were admitted as inpatients at least twice in a six-month period were identified as "super-utilizers." In addition, patients who had ambulatory-sensitive conditions like high blood pressure or diabetes benefited from this model and additional primary care extended support. Thirty to 90 days after super-utilizers were discharged from the hospital, CHWs and RNs performed the following activities:

- Travel to patients' homes to identify any barriers to health or healthcare
- Coordinate community resources such as rides to appointments
- Build plans of care for better collaboration across healthcare and social service providers

Result

With the project's first 36 patients, the Kalispell team saved more than $1.8 million in hospital costs.

One patient reported that her Medicare costs went from $100,000 in a six-month period (when she was living in her car) to less than $6,000 in a seven-month period after she found affordable housing.

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