Minnesota has a standardized, competency-based Community Health Worker (CHW) curriculum, and the state provides Medicaid payment for diagnostic-related education and self-management services provided by CHW certificate holders. But very few healthy housing providers, including those focused on asthma, have yet integrated CHWs into their teams. In contrast, more than 60% of in-home asthma care programs in California use CHWs, promotoras, or community health promoters to conduct home visits, according to the Oakland-based Regional Asthma Management and Prevention Program (RAMP).

In February 2018 the Minnesota Community Health Worker Alliance offered an informational workshop and roundtable to increase the knowledge of healthy housing providers about CHW roles and benefits, to spotlight successful CHW models, and to increase understanding of barriers and opportunities for CHW integration. The Alliance also offered a one-day training event for CHWs in partnership with Sustainable Resources Center to build healthy housing knowledge and skills for home visiting.
INTRODUCTION

Healthy Homes
According to the National Center for Healthy Housing, “healthy homes” is a century-old concept that promotes safe, decent, and sanitary housing as a means for preventing disease and injury (http://nchh.org/information-and-evidence/healthy-housing-policy/). Today, public health professionals and policy-makers are paying considerable attention to healthy housing because of the wealth of scientific evidence linking health conditions – such as asthma, lead poisoning, and injuries – to home health hazards. Healthy home services are provided by a variety of organizations, such as local public health departments, neighborhood associations, community action agencies, and other nonprofits.

Facts about Minnesota Health and Housing
According to the Minnesota 2017 Healthy Housing Fact Sheet, National Center for Healthy Housing (http://nchh.org/resource-library/Healthy-Housing-Fact-Sheet_MN.pdf), in Minnesota:

- 24% of children live in households with a high housing-cost burden, and 13% of children live in poverty.
- Two in five homes have elevated levels of radon in their indoor air.
- In 2015, 1,397 children tested had an elevated blood lead level (5 μg/dL or more); 216 of them had blood lead levels of 10 μg/dL or more.
- Approximately 7.4% of adults and 6.4% of children had asthma in 2015.
- Unintentional falls were responsible for 118 per 100,000 deaths of adults over the age of 65 in 2015; the national rate was 61 per 100,000.
- 57% of the state’s housing was built prior to 1978 and is likely to contain lead-based paint.
- Children from the Twin Cities metro area are nearly twice as likely to visit an emergency department for asthma as those living in Greater Minnesota.

Healthy Homes Principles

Healthy homes are:

- Dry
- Clean
- Pest-free
- Safe
- Contaminant-free
- Ventilated
- Maintained
- Thermally controlled

WORKSHOP PRESENTATION SUMMARIES

Spotlight: King County Asthma Program, Seattle, WA  
Jim Stout, MD, MPH, Medical Director and Bradley Kramer, MPA, Program Manager

King County’s nationally-recognized Asthma Program builds on a rich research legacy. Since 1997, agency leaders have innovated, demonstrated, and evaluated use of the CHW model to address uncontrolled asthma among low-income communities. In a 2011 article in the American Journal of Preventive Medicine, researcher and program founder James Krieger, MD and his co-authors reported, “Practical considerations have led us to use CHWs [in the delivery of in-home asthma services] because they are well suited to work with low-income, ethnically diverse clients. CHWs have social and cultural connections to clients that facilitate the development of rapport and trust.”

Dr. Jim Stout and Bradley Kramer provided an overview of findings of their most recent study funded by Patient Centered Outcomes Research Initiative (PCORI). The study compares a CHW and non-CHW asthma intervention for low-income and minority patients, both children and adults, among enhanced and non-enhanced clinic groups. The goal of the study is to work with community health centers, health plans, and patients in their homes to improve asthma care and reduce asthma health disparities. After one year of intervention with CHWs, the study found:

- Improved asthma-related quality of life,
- More days free of asthma symptoms,
- Improved physical health status,
- Fewer people with poorly controlled asthma,
- Fewer asthma-related hospital, emergency room, and urgent care visits,
- Decreased nights awakened, and
- Reduced use of rescue medicines.

Bottom line, the study showed that conducting well-designed interventions using trained and trusted CHWs as home visitors is a proven healthy homes model with a strong return on investment. Study outcomes are consistent with positive results from prior CHW research. A previous randomized control study of a streamlined, evidence-based CHW asthma home visit program for low-income children with uncontrolled asthma at Public Health-Seattle & King
County improved health outcomes and yielded a return on investment of 1.90 (Campbell et al, American Journal of Public Health, Nov 2015). The current Asthma Program team includes four CHWs from the Latino, Somali and African American communities, a program manager and coordinator, a nurse/clinical lead, a health department administrator and peer staff, a motivational interviewing expert as a core trainer, evaluators, and a community advisory board.

The King County Asthma Program is now pursuing sustainable financing through multiple sources: a Medicaid 1115 Waiver, healthy housing partnerships that combine weatherization plus health pursuant to state funding, and contracts with Medicaid MCOs in the Seattle area.

Workshop participants asked about case-finding, use of asthma action plans, CHW recruitment and training, access to electronic health records, bi-directional communication, and care coordination. Dr. Stout explained that the program is: guided by a set of 20 protocols (https://www.kingcounty.gov/depts/health/chronic-diseases/asthma/health-care-providers/past-programs/asthma-home-visit.aspx); has a strong educational base plus ongoing professional development for the CHW team; promotes coordination across care settings; fosters CHW-clinician communications; partners with clinics and health plans; and is committed to a work environment that sets up CHWs for success.

For more information, contact Bradley Kramer at Bradley.kramer@kingcounty.gov or 206-263-1270.

Overview of the CHW Field in Minnesota

Joan Cleary, MM, Executive Director, Minnesota CHW Alliance

Community Health Workers (CHWs) are trusted, knowledgeable front-line health personnel who bridge cultural and linguistic barriers, expand access to coverage and care, and improve health outcomes. They provide outreach, health education, care coordination, and advocacy for underserved patients of all ages. CHWs are uniquely equipped to advance health equity and the Triple Aim as well as diversify our health workforce. They often reside in the communities that they serve and share language, cultural, ethnic, and educational backgrounds and/or life experiences.

Some key distinctions between CHWs and other health professions are that CHWs:

CHW Model for Core Asthma Service
King County, WA

- CHW visits 3 to 5 times over four months
- CHW uses home environmental checklist
- CHW is guided by cultural competence, motivational interviewing, and self-management goal setting
- CHW is provided with tools, supplies, resources and community referrals

Learn more at: https://www.kingcounty.gov/depts/health/chronic-diseases/asthma.aspx
Do not typically hold a U.S. license in another health discipline,
Have expertise based in life experiences and/or cultures shared with the populations they serve,
Spend significant parts of their jobs working in homes and community settings, and
Focus on the social determinants of health, upstream and downstream.

Minnesota’s four key CHW building blocks include:

- **A scope of practice** that has been updated to reflect the national CHW Core Consensus ("3C") Project.
- **Model statewide, competency-based curriculum.** Minnesota is the first state in the U.S. to provide standardized CHW training in higher education. The 14-credit model curriculum is offered as a CHW certificate program by seven post-secondary schools. It provides foundational training and an educational pathway leading to a certificate that is recognized by employers and the state’s Medicaid agency.
- **Coverage by Minnesota Health Care Programs** (Minnesota Medicaid and MinnesotaCare, the state’s subsidized coverage program for low-income working families) for patient education and self-management services provided by CHW certificate holders under clinical supervision, under both managed care and fee-for-service payment.
- **Integral role of the Minnesota CHW Alliance and its partners** as catalyst, convener, consultant, expert, and leader on CHW education, models, leadership development, sustainability, research and policy to advance health equity and healthier communities.

Over 700 CHWs from Minnesota’s diverse communities have earned a certificate and address the needs of underserved populations. They work in a wide variety of settings, including clinics, hospitals, local public health, community-based groups, faith-based organizations, schools, oral health providers, and mental health agencies. To learn more, visit: [www.mnchwalliance.org](http://www.mnchwalliance.org).
What’s Ahead for Healthy Housing

*Dave Jacobs, PhD, CIH, Chief Scientist, National Center for Healthy Housing (NCHH)*

Dr. Jacobs shared exciting local, state, national, and international developments. Highlights included:

- The World Health Organization will issue international healthy homes guidelines, followed in six months by an implementation guide.

- NCHH is anchoring the National Safe and Healthy Housing Coalition comprised of over 300 organizations working to improve housing conditions nationwide by promoting policies for safe and healthy housing with special emphasis on those who are disproportionately impacted.

- A California Supreme Court ruling against paint companies will lead to a $1 billion investment in lead hazard control over the next four years following court action.

- In Chicago, a proposed ordinance to include CHWs in home inspections using funding from landlord fees would double the size of the city health department’s inspection staff. This would substantially deepen reach into urban neighborhoods with substandard housing with the goal of improving health status.

He identified the CHW conversation as relevant to two important trends in the healthy housing field: 1) the need to be more proactive, and 2) the renewed realization that we need generalists as well as specialists. He sees hope for the future based on healthy homes programming, the mounting evidence linking housing and health, and the value of CHWs to this work.

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**Examples of CHW Models in Healthy Housing**

- **King County, Seattle**
  [https://www.kingcounty.gov/depts/health/chronic-diseases/asthma.aspx](https://www.kingcounty.gov/depts/health/chronic-diseases/asthma.aspx)

- **Esperanza Community Housing, Los Angeles**

- **Sinai Health, Chicago**

- **Le Bonheur CHAMP, Memphis**
WORKSHOP DISCUSSION

Opportunities and Challenges for CHW Integration

Key themes explored during the roundtable discussion included:

Team Models: Some healthy housing providers focus primarily on the health of the home and favor staffing models with housing specialists who bring technical expertise in building science. Others center their work on the health of the housing occupant(s) and employ staff with a background in public health nursing, respiratory therapy, and health education. As members of the communities they serve, CHWs add value to both team models – bringing trust and cultural competence.

Role Differentiation: Roundtable participants discussed the respective roles of public health nurses, health educators, and CHWs. Each discipline brings key strengths to the team. CHWs help other team members to work “at the top of their license.” CHWs provide culturally-appropriate outreach, education, and self-management support. Plus they support reduction of in-home environmental triggers through referrals to specialized resources. They also focus on the social determinants of health and refer clients to a wide range of services related to food, income support, health care coverage, and other basic needs. Issues of occupational “lane lines” may arise when emerging health professions such as CHWs are introduced without essential organizational groundwork, including inter-professional education, strong supervision and team support, and clear roles based on their training, community expertise, and scope of practice.

Payment: Many healthy housing providers in attendance were not aware of payment under Minnesota Health Care Programs for CHWs providing diagnostic-related patient education and self-management. Additional information on billing guidelines by the Alliance would help build a sustainable model for CHW services. Although some healthy homes services are based in community organizations that are not qualified as Medicaid providers, they could potentially hire CHWs to provide client education using current funding streams or by contracting with Medicaid-eligible providers.

Examples and Outlook: Several roundtable participants whose organizations currently employ CHWs discussed their approach and the outlook for CHW services. St. Paul-Ramsey County Public Health organizes its healthy homes services across two home visits. The first visit pairs a public health nurse and environmental health inspector who conduct an assessment. During the second visit, the CHW provides supplies and education to the family. Dakota County Public Health is seeing a growing role for CHWs in family home visits, where their cultural connections are a key strength and valued asset to the team.
Key Take-Aways

In a round-robin discussion, participants shared some take-aways from the half-day convening:

**What I found most valuable from the workshop:**
- Meeting new people and agencies with the potential of forging new partnerships
- King County model and its results
- Learning about CHW roles, implementation possibilities and funding
- Hearing about how CHWs are effective and how to pair them with nurses
- Realization that we are all working toward the same goals
- Need for further interaction

**What I would like to learn more about:**
- How to obtain reimbursement for CHW home visits
- Partnerships with nonprofits
- CHW job opportunities that would be a good fit for our home buyers, who are 90% people of color
- CHWs as community liaisons

**Key action steps I plan to take:**
- Continue to promote CHW healthy homes training
- Explore new funding methods through weatherization
- Pilot CHW program
- Collaborate
- Bring information back to Minnesota Department of Health programs, think about new ways to partner, and reconnect with the Minnesota Department of Commerce on weatherization
- Find out if our hospital partner will use CHWs (“care guides”) to assess homes and conduct safety checks for our partnership focused on aging in place
- Share the healthy homes benefits and impacts of CHWs with my agency’s leadership

“Training for CHWs is critical to the success of the healthy homes workforce because CHWs advocate for family health and well-being. Healthy homes training enables CHWs to have ‘new eyes’ to identify housing issues and to provide helpful services and resources. As trained and trusted members of the communities they serve, CHWs work at the grassroots, doing in-home visits and advocating for families who are disproportionately impacted by housing-related health risk factors.”

-Rachelle Menanteau Peleska, MPH, Sustainable Resources Center, Minneapolis, Training Partner for the National Healthy Homes Training Center
Call to Action from the Alliance

Using a Health Equity Lens to Guide Healthy Homes Programs

While Minnesota is typically ranked as one of the nation’s healthiest states, a closer look at key indicators by race and income tells a story of deep health disparities. People of color and low-income populations in Minnesota are more likely to live in sub-standard housing and experience housing-related health threats.

The Institute of Medicine, the Centers for Disease Control and Prevention, and the American Public Health Association are among many leading health authorities that point to the value and importance of team-based CHW approaches to addressing preventable and costly racial, ethnic, and socioeconomic gaps that impact our entire society.

Health equity is an explicit aim of the Minnesota Department of Health (MDH) 2017-2020 Healthy Homes Grant Program. (For program details, contact Katie Haugen, MDH Lead and Healthy Homes, katie.haugen@state.mn.us.) All grant applicants were invited to this roundtable and workshop to learn about CHW strategies and their role in reducing health inequities.

Going forward, the Minnesota Community Health Worker Alliance sees tremendous opportunities for integrating CHW strategies into healthy homes programs in order to help achieve health equity goals. The MDH grant program presents exciting starting points. State grant monies can be used for capacity-building, developing model programs and implementing best practices, with the potential for CHWs to join healthy homes providers. MDH staff and/or supervised interns could track CHW participation on grantees’ healthy homes teams and begin to identify correlations between workforce changes, increased cultural competence, and improved health of those facing the greatest housing-related health risks. Further, the data collected – as well as information from this roundtable – can be incorporated into targeted policy initiatives that will advance health equity goals.

In short, CHW strategies are health equity strategies. The Alliance looks forward to collaboration with and among healthy homes providers, payers, government leaders and other partners to address barriers and embrace opportunities so that the full benefits of CHW integration can be realized in healthy housing initiatives.
“Research has shown that cultural familiarity and rapport can be a key determinant of effective education. That cultural familiarity and rapport can often be readily established with Community Health Workers or promotoras. While RAMP’s efforts to increase access to asthma services can involve an array of providers, CHWs can play a particularly useful role in tackling racial and ethnic asthma disparities.”


**RESOURCES**

- **American Lung Association in Minnesota**
  [http://www.lung.org](http://www.lung.org)

- **CHW Core Consensus (“C3”) Project**
  [https://www.hlc.org/app/uploads/2016/05/02-C-Rush-HLC-Policy-Cte-10-5-17-1.pdf](https://www.hlc.org/app/uploads/2016/05/02-C-Rush-HLC-Policy-Cte-10-5-17-1.pdf)

- **EPA Asthma Community Network**

- **HUD Healthy Homes and Lead Hazard Control**
  [https://www.hud.gov/healthyhomes/](https://www.hud.gov/healthyhomes/)

- **King County Asthma Program**
  [https://www.kingcounty.gov/depts/health/chronic-diseases/asthma.aspx](https://www.kingcounty.gov/depts/health/chronic-diseases/asthma.aspx)
  For examples of CHW Protocols:

- **Minnesota Community Health Worker Alliance**
  [http://www.mnchwalliance.org](http://www.mnchwalliance.org)

- **Minnesota Department of Health Healthy Homes Grantees, 2017-2020**
  [http://www.health.state.mn.us/divs/eh/homes/hhgrant.html](http://www.health.state.mn.us/divs/eh/homes/hhgrant.html)

- **Minnesota Department of Health Healthy Homes Information**
  [http://www.health.state.mn.us/topics/healthyhomes/](http://www.health.state.mn.us/topics/healthyhomes/)
• Minnesota CHW Tool Kit

• Minnesota Healthy Housing Fact Sheet
  http://nchh.org/resource-library/Healthy-Housing-Fact-Sheet_MN.pdf

• National Center for Healthy Housing
  http://www.nchh.org

• Regional Asthma Management and Prevention (RAMP)
  http://www.rampasthma.org/

• Success with CHWs: Asthma
  http://successwithchws.org/asthma/
  This Minnesota CHW Alliance microsite familiarizes asthma providers – including school-based and home visiting programs – with CHW research, models, tools, and results for asthma prevention and management among underserved populations.

• Sustainable Resources Center
  www.src-mn.org or 612-870-4255
  SRC offers Healthy Homes for CHWs Course as a National Healthy Housing Training Partner.

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ABOUT THE ALLIANCE

The Minnesota Community Health Worker Alliance is a nonprofit partnership that serves as a statewide leader, catalyst, convener, expert, and resource on achieving health equity and the Triple Aim (better care, better population health, and lower costs) through culturally appropriate, holistic CHW strategies focused on underserved populations. The vision of the Alliance is equitable and optimal health outcomes for all communities. The mission is to build community and systems capacity for better health through the integration of community health worker strategies. Learn more or sign up for the Alliance newsletter at mnchwalliance.org/contact/.