

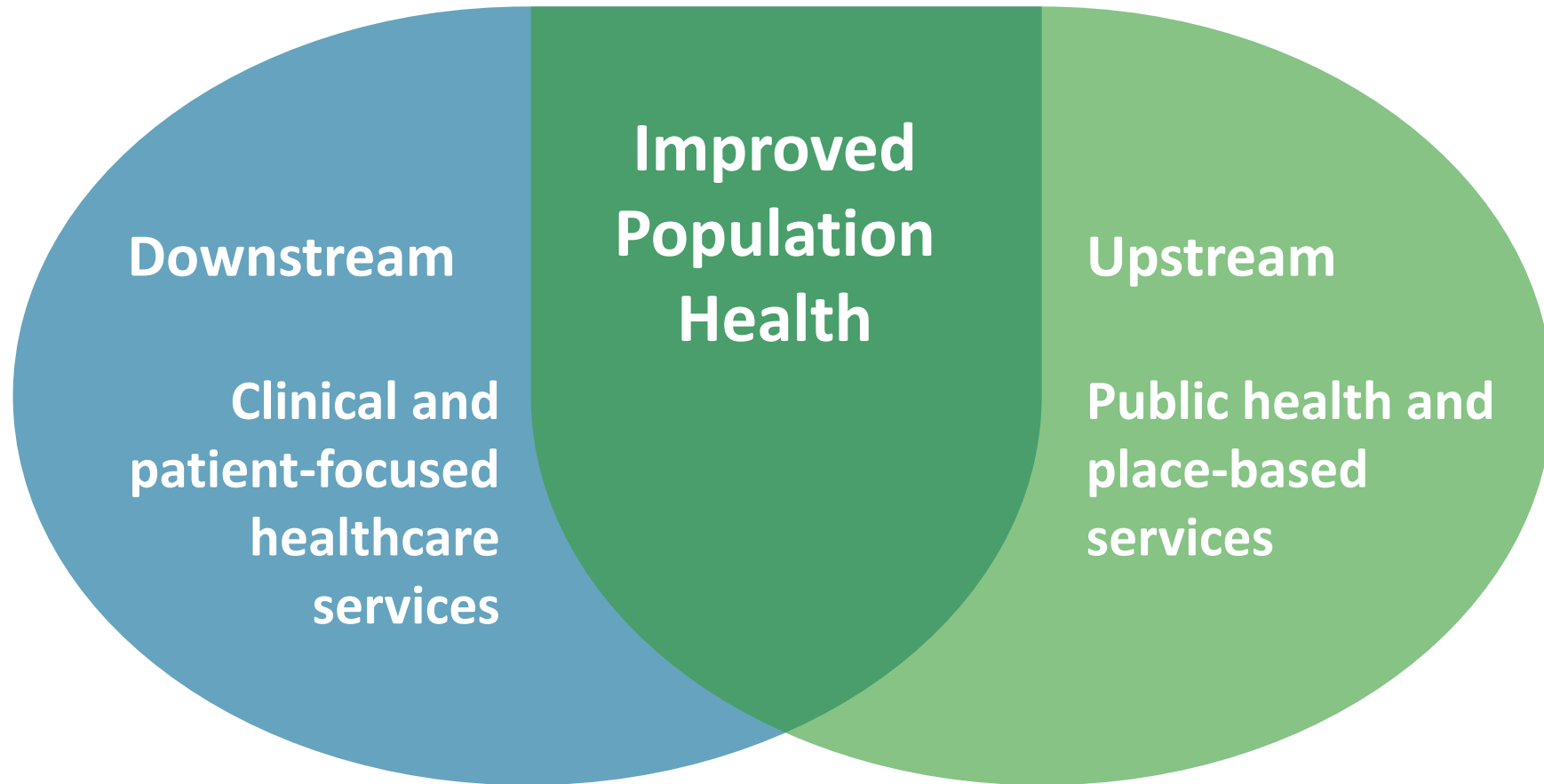


CHW Learning Community Webinar
**MAKING THE CASE: State of Evidence Documenting the
Value of CHWs**

September 9, 2019

Phone line: 646 876 9923 | Meeting ID: 120-534-063

Why Are State Health Agencies Promoting CHWs to Achieve Population Health Goals?



TOP PRIORITY FOR ALL STATES: Sustainable CHW Financing

Requires a “both/and” approach

Commonality across all strategies: Policymakers and employers want to see the **evidence** before making a policy change or hiring an employee.



Objectives >>>

- Provide an overview of the state of evidence around the value of community health workers, including evidence of cost-savings of CHW interventions.
- Discuss how states can frame the evidence for policymakers, employers, and other stakeholders.
- States share updates since the last cross-state call.



POLL QUESTION

State of Evidence

NUMBER OF CHW STUDIES HAS INCREASED DRAMATICALLY (Medline using “community health worker” search term)

1964-2016: 1,948	1964-1973: 14	1994-2003: 252
	1974-1983: 146	2004-2013: 864 (550 between 2010-2013)
	1984-1993: 259	2014-2016: 574

COMMON OUTCOMES STUDIED:

- Diabetes
- Mental health
- Prenatal care
- Hypertension
- Asthma
- Heart disease
- Social determinants of health
- Health inequities
- Rx utilization
- Preventive screenings
- Hospital readmissions

Reference: <http://www.astho.org/Community-Health-Workers/Call-Series/Evaluation-Slides/>

State of Evidence

MULTIPLE PURPOSES OF EVALUATION:

1. Improve interventions.
2. Demonstrate CHW contributions.
3. Make the case to integrate/finance CHW positions.

CHALLENGES:

1. Selecting consistent measures.
2. Existing evidence focuses on medical and cost outcomes rather than population health improvements.
3. State policymakers want to see data specific to their own unique state/context.

Reference: <http://www.astho.org/Community-Health-Workers/Call-Series/Evaluation-Slides/>

SYSTEMATIC REVIEWS: CHW interventions show consistent promise in mental health, chronic disease management among certain populations

Effects of Community-Based Health Worker Interventions to Improve Chronic Disease Management and Care Among Vulnerable Populations

- Interventions by CHWs appear more effective when compared with alternatives and are cost-effective for certain health conditions, particularly among low-income, underserved, and racial and ethnic minority communities.
- *Amer. Journal of Public Health*, 2016, 106(4). <https://www.ncbi.nlm.nih.gov/pubmed/26890177>

CHW Interventions to Improve Glycemic Control in People with Diabetes

- CHW interventions (13 RCTs) showed a modest reduction in Hemoglobin compared to usual care.
- *J. Gen. Intern. Medicine*, 2015, 30(7). <https://www.ncbi.nlm.nih.gov/pubmed/25735938>

Mental Health Interventions with CHWs in the U.S.

- Findings across nine studies suggest CHW-supported mental health interventions show promise, particularly given evidence of feasibility and acceptability with underserved populations.
- *J. Health Care Poor Underserved*. 2018, 29(1). <https://www.ncbi.nlm.nih.gov/pubmed/29503292>

RANDOMIZED CONTROL TRIALS (RCTs): Increased use of primary care, improved reported mental health, lower inpatient readmissions

Patient-Centered CHW Intervention to Improve Posthospital Outcomes (RCT):

- **WHAT:** CHWs worked with low-SES hospital patients to create individualized action plans for recovery; provided tailored support for at least two weeks.
- **OUTCOMES:** Increased likelihood of obtaining primary care, greater improvements in mental health, increased patient activation, lower likelihood of multiple 30-day readmissions (40% reduced to 15.2%).
- *JAMA Inter. Med, 2014, 174(4).* <https://bit.ly/2m2halp>

CHW Support For Disadvantaged Patients With Multiple Chronic Diseases (RCT):

- **WHAT:** High-poverty, publicly insured patients with multiple chronic conditions worked with a CHW to achieve a disease management goal over six months.
- **OUTCOMES:** Improvements in mental health, increased support for disease self-management (63% compared to 38% control group), lower hospitalization (16% compared to 17.8% after six months, 23% compared to 32% after one year).
- *Univ. of Penn. 2017.* <https://bit.ly/2IB00jl>

RETURN ON INVESTMENT (ROI): CHW Program Successes

Nevada CHW ROI Study

- **WHAT:** Health Plan of Nevada (Medicaid managed care organization) hired three CHWs to work with an average of 37 patients each for 30-60 days on service referrals, transportation, patient education, accessing treatment specialists, and other services.
- **OUTCOMES: Total ROI Calculation: 1.81 (\$503,384 medical/RX savings versus \$278,331 program cost)**
 - Average medical costs decreased: \$1,223 PMPM pre-intervention to \$983 PMPM post-intervention. Prescription costs reduced from \$539 PMPM to \$491 PMPM.
 - Decreased number of acute admissions (-18%), readmissions (-20%), ED visits (-14%), and urgent care visits (-6%).
- *Nevada Department of Health and Human Services, May 2017. <https://bit.ly/2sBdtDu>*

Maryland CHW Outreach Program on Healthcare Utilization

- **WHAT:** CHWs in West Baltimore City conducted weekly home visits and phone calls to Medicaid beneficiaries with diabetes to provide education and maintain appropriate visits to primary care.
- **OUTCOMES: Savings of \$2,245 per patient per year. Total savings of \$262,080 across 117 patients per year**, along with improved quality of life. Driven by decrease in ED visits (-40%), hospital admissions (-33%), and Medicaid reimbursements (-27%).
- *Ethn Dis., 2003 Winter, 13(1). <https://www.ncbi.nlm.nih.gov/pubmed/12723008>*

ROI: Program Successes (continued)

Kentucky: Homeplace program trains CHWs with a focus on care coordination and serves low-income clients at no charge.

- **OUTCOME: ROI is \$11.20 saved for every \$1 invested for trainings.**
- *Rural Health Information Hub.* <https://www.ruralhealthinfo.org/project-examples/785>

New Mexico: 448 high-resource-consuming Medicaid managed care clients in 11 counties received patient education, advocacy, and social support from CHWs for six months

- **OUTCOME:** Lowered ED costs (\$425,551 total), lowered inpatient costs (\$425,551 total), lower non-narcotics prescriptions (\$699,129 total). **Total cost differential: \$2,044,465 less post-intervention compared to pre-intervention, compared to total CHW salary costs of \$521,343.**
- *J. Community Health, 2011.* <https://bit.ly/2lFEc0Y>

Social ROI Research Report on CHWs in Cancer Outreach and Educations across the U.S.

- **OUTCOME:** CHWs generated **lifetime benefits of \$12,348 per person** served by a CHW, or **\$851,410 by every CHW that serves at least 69 individuals per year.** Compared to total direct costs (salary, benefits, administrative costs) of \$41,184 per CHW per year.
- *Wilder Research, 2012.* <https://bit.ly/2ktAKGA>

ROI Program Successes (Continued)

East Texas ROI from employment of CHWs in two hospitals working with ED patients

- **OUTCOME:** ROI ranging from 3:1 to more than 15:1.
- *Rush, Carl. J Ambul Care Manage. 2012, 35(2).* <https://www.ncbi.nlm.nih.gov/pubmed/22415287>

Denver Health Community Voices Program Piloted a CHW Outreach Program for 590 Men

- **OUTCOME:** The ROI of 2.28:1 was achieved through reduced service utilization and charges over 9 months. Monthly program costs were \$6,229, compared to a reduction in monthly uncompensated costs of \$14,244.
- *J. Health Care Poor Underserved. 2006, 17(1 Suppl).* <https://www.ncbi.nlm.nih.gov/pubmed/16520499>

CMMI Health Care Innovation Awards (HCIA) Meta-Analysis and Evaluators Collaborativ

- **OUTCOME:** "Of six types of innovation components... (i.e., used health IT, used community health workers, medical home intervention, focus on behavioral health, used telemedicine, workflow/process redesign intervention), only innovations using CHWs were found to lower total costs (by \$138 per beneficiary per quarter)." Clinicians also reported spending between 30-50% less time arranging and coordinating social services and referrals.
- *CMMS, February 2018.* [HCIA Meta Analysis and Evaluators Collaborative.pdf](#)

CHW Program Successes: Chronic Disease Management

Chicago CHWs Improve **Asthma Management** among African-American Children

- **WHAT:** Trained CHWs from targeted communities provided individualized asthma education during three to four home visits over 6 months.
- **OUTCOME:** Asthma control was reduced by 35% among adolescents working with CHWs
- *PubMed, 2012; 49(4).* <https://www.ncbi.nlm.nih.gov/pubmed/22348448>

Colorado *Promotoras* Conducting **Breast Cancer Screenings**

- **WHAT:** *Promotoras* offered breast cancer screening and education in churches from 1999 to 2005 to Latinas.
- **OUTCOME:** Among Latinas who received the intervention, mammogram rate increased from 59% to 61%.
- *CDC Preventing Chronic Disease, Oct. 2007, 4(4).* https://www.cdc.gov/pcd/issues/2007/oct/06_0150.htm

CHW Program Successes: Chronic Disease Management

Maryland Study on Effects of Nurse Care Managers and CHWs on **Diabetes-Related Health Complications** among African Americans

- **WHAT:** Patients with diabetes were assigned to one of four care groups: 1) usual care, 2) usual care + nurse manager, 3) usual care + CHW, or 4) usual care + nurse manager + CHW.
- **OUTCOME:** Patients receiving services from both a CHW and a nurse case manager had the greatest declines in A1C (glycosylated hemoglobin) values, cholesterol triglycerides, and diastolic blood pressure.
- *Prev. Med., 2003, 37(1).* <https://www.ncbi.nlm.nih.gov/pubmed/12799126>

Florida CHW-Led Educational Program and Service Coordination to Address **Diabetes and Cardiovascular Disease**

- **WHAT:** CHWs provided community-based, behavior-changed educational programs and care coordination among under-resourced, rural, ethnically disparate populations in Gadsden County.
- **OUTCOME:** The Project H.I.G.H. saw successes in motivating participants to delay or prevent diabetes and/or cardiovascular disease, and participants reported intent to take care of their health.
- *Evaluation and Program Planning, April 2016, 55.* <https://bit.ly/2kl5Lq7>

CHW Program Successes: Rural Context

Texas lay health educators provided **asthma or general health promotion** education to elementary school children in a rural school district.

- **OUTCOME:** Improved asthma knowledge, self-management, and self-efficacy for managing symptoms and using metered dose inhalers.
- *J. School Health, Sept. 2008, 78(9).* <https://bit.ly/2k1s0r4>

North Dakota patient navigator/community health representative program aimed to reduce **cancer disparities** among American Indians.

- **OUTCOME:** Individuals with cancer who received navigation services during radiation treatment had an average of 3 fewer days of treatment interruptions.
- *Cancer Control, July 2008, 15(3).* <https://bit.ly/2k0kgWf>

Alabama CHWs delivered cognitive behavioral training intervention for rural patients with **diabetes and chronic pain**.

- **OUTCOME:** 80% of the program participants completed the training, of whom 95% reported satisfaction.
- *Fam. Community Health, 2018, 41(3).* <https://bit.ly/2kwjrEP>

Tips for Effectively Communicating Your Evidence

- Make sure your request/top-line message is clear.
- Translate the evidence for your audience. Show how your proposal benefits the decisionmaker and fixes one of their problems.
- Know how and when it's most effective to engage:
 - What stage of the policy process or year?
 - “Sneaker mail”?
 - Who has a relationship and/or is the best person to deliver your message?

Message Mad Lib

I'm here today to talk to you about (features)...

We're making an impact by (features)...

It's important to you because (benefits) ...

Let me tell you a story (benefits)...

That's why I'm asking you to...

Source: “Public Health and Public Policy Goals: Making the Connection” Emily J. Holubowich, MPP @healthfunding (2015).

DISCUSSION: Framing Messages for Policymakers and Employers

- **Considering the evidence shared in today's presentation, do you think there is still a need for state-specific information?**
 - If so, why?
- **How are you currently engaging with policymakers and employers?**
 - Do you have promising strategies to share?
 - Do you have challenges to share?



OPEN CROSS-STATE DISCUSSION:

Updates from those on the phone

Recap of top state priorities

How have your team's focus areas shifted over the past year?

What questions do you have for other states?

Thank you!

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CHW Resources Online: www.astho.org/community-health-workers