Community Health Workers: Evidence of Their Effectiveness

Community health workers (CHWs) are critical to improving individual and community health through their ability to build trust and relationships and deepen communication between patients and providers. CHWs have a deep understanding of their communities through lived experience, which makes them uniquely qualified to address social and behavioral determinants of health.

As states advance efforts to expand financing for and use of this workforce, it will be critical to make an evidence-based business case for policymakers and providers. Existing studies on CHWs focus on assessing their effectiveness in improving health outcomes, reducing healthcare costs, and bridging the gap in health disparities. The number of research articles on the impact of CHW-led interventions and programs has escalated dramatically over the past fifty years, and the scientific rigor of study designs has improved notably.

Figure 1. Number of studies on community health workers.

<table>
<thead>
<tr>
<th>Period</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964–1973</td>
<td>14</td>
</tr>
<tr>
<td>1994–2003</td>
<td>252</td>
</tr>
<tr>
<td>2014–2016</td>
<td>574</td>
</tr>
</tbody>
</table>

Source: Medline Search

The sections below serve as a summary of research studies demonstrating the effectiveness of CHWs across multiple settings and health issues. This wide array of research allows CHW champions to demonstrate what research already exists or to select evidence that is most resonant with their audience.

### SYSTEMATIC REVIEWS ON CHW INTERVENTIONS

- **Effects of CHW 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 underserved communities.

- **CHW Interventions to Improve Glycemic Control in People with Diabetes: Findings from 13 Randomized Controlled Trials (RCTs)**
  
  CHW interventions showed a modest reduction in hemoglobin compared to usual care.

- **Mental Health Interventions with CHWs: Findings From Nine Studies in the United States**
  
  CHW-supported interventions show promise, particularly given evidence of feasibility and acceptability with underserved populations.

### RANDOMIZED CONTROL TRIALS (RCTs):

- **Patient-Centered CHW Intervention to Improve Posthospital Outcomes (RCT Study) Through the Development of Individualized Action Plans for Recovery and Tailored Support**
  
  Increased likelihood of obtaining primary care, increased mental health improvements, and reduced likelihood of multiple 30-day readmissions from 40% to 15.2%.

- **CHW Support for Disadvantaged (High-Poverty and Publicly Insured Patients) with Multiple Chronic Diseases (RCT Study)**
  
  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.)
RETURN ON INVESTMENT (ROI)
STUDIES ON CHW INTERVENTIONS

- **Nevada** CHW ROI Study: Health Plan Hired Three CHWs to Work With an Average of 37 Patients Each for 30-60 Days
  Average medical costs decreased from $1,223 pre-intervention to $983 post-intervention.

- **Maryland** CHW Outreach Program on Healthcare Utilization
  Patients saw savings of $2,245 per year with a total saving of $262,080 across 117 patients per year.

- **Kentucky** Homeplace Program ROI Study
  Rural Health Information Hub
  The ROI was $11.20 saved for every $1 spent on CHW training.

- **New Mexico**: 448 High-Resource-Consuming Medicaid Managed Care Clients Received Support From CHWs for Six Months
  Total cost differential across categories of services provided was $2,044,465 less post-intervention compared to pre-intervention.

- **Social ROI** Research Report on CHWs in Cancer Outreach and Education Across the United States
  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.

- **East Texas** ROI From Employment of CHWs in Two Hospitals Working with Emergency Department Patients
  There was an ROI ranging from 3:1 to over 15:1.

- **Denver** Health Community Voices Program Piloted a CHW Outreach Program for 590 Men
  The ROI was $2.28 for every $1 spent with a total annual savings of $95,941.

- **CMMI Health Care Innovation Awards (HCIA) Meta-Analysis and Evaluators Collaborative**
  An investigation of over a hundred innovative care delivery models revealed that only those using CHWs lowered cost ($138 per beneficiary per quarter).

INTERVENTIONS FOR CHRONIC DISEASE MANAGEMENT

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

- **Florida CHW-Led Educational Program and Service Coordination to Address Diabetes and Cardiovascular Disease**
  The project saw successes in motivating participants to take steps to delay or prevent diabetes and/or cardiovascular disease, and increased patients’ reported desire to take better care of their health.

CHW PROGRAM SUCCCESES IN RURAL SETTINGS

- **Texas** Health Educators Provided Asthma and General Health Promotion Education to Elementary School Children in a Rural School District
  Improved asthma knowledge, self-management, and self-efficacy for managing symptoms and using metered dose inhalers.

- **North Dakota** Patient Navigator/Community Health Representative Program Aimed to Reduce Cancer Disparities Among American Indians
  Individuals with cancer who received services during radiation treatment had an average of three fewer days of treatment interruptions.

- **Alabama** CHWs Delivered Cognitive Behavioral Training Intervention for Rural Patients with Diabetes and Chronic Pain
  80% of the program participants completed the training, of whom 95% reported satisfaction.