Million Hearts Learning Collaborative
State Snapshot

COLORADO

State Health Agency: Colorado Department of Public Health and Environment
State Health Official: Larry Wolk, MD, MSPH

The Colorado Department of Public Health and Environment (CDPHE), in conjunction with a team of state and local partners, developed a model to engage local public health agencies (LPHAs) and primary care clinics to improve hypertension diagnosis and control in two frontier counties, Las Animas and Huerfano. The Las Animas Huerfano Counties District Health Department (LAHCDHD Department was selected as a *2017 Model Practice by the National Association of County and City Health Officials* Model Practices Program. The selection of the Las Animas-Huerfano Counties Million Hearts Learning Collaborative as a model practice means that it demonstrates exemplary and replicable qualities in response to a local public health need. The model reflects a strong local health department role, collaboration, innovation, and has demonstrated its value by undergoing a vigorous peer-evaluation.

Key partners implemented system-level changes that improve the use and sharing of clinical data to better identify individuals with undiagnosed or uncontrolled hypertension and to improve management of diagnosed patients with hypertension. Key partners with CDPHE included the LAHCDHD, three primary care clinics (Mt. San Rafael Hospital Clinic, Spanish Peaks Family Clinic and Spanish Peaks Outreach and Women's Clinic, and Mt. Carmel Health, Wellness and Community Center), home healthcare (Mountain Creek Home Health) and behavioral health (Health Solutions).

> **Project Reach**
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> **Current Reach: 10,838**
> Defined as the estimated number of individuals within the target population (ages ≥18) in Las Animas and Huerfano counties that have been notified by a provider that they have high blood pressure (approximately 30% of total population).
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> **Potential Reach: 54,229**
> Defined as the estimated number of individuals (ages ≥18) in Las Animas, Huerfano, and immediately surrounding counties that have been notified by a provider that they have high blood pressure (approximately 30% of total population).
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> *Estimates established with:*
> *CO BRFSS Rates (2013&2014 combined data)*
> **ACS 5-year averages (2010-2014)*

Each partner referred patients with hypertension to the LPHA for evidence-based lifestyle interventions, self-management support and blood pressure checks. The local public health nurses were included in the primary care clinical team by obtaining access to the electronic health records at two clinic sites through a Memorandum of Understanding. Having a bi-directional communication system allowed the LAHCDHD nurses to provide feedback to clinical staff. Other system-wide changes included implementing a community-wide home blood pressure monitoring program, including developing workflows for referrals. Additionally, public health nurses at LAHCDHD assisted in the identification of patients with undiagnosed hypertension through blood pressure checks at worksites and other community outreach events.

Aim Statement

By June 30, 2017, Las Animas and Huerfano counties will reduce by 10% the number of individuals with the most recent blood pressure greater than 140/90 by key stakeholders through a clinical-community linkage referral system for medical care and healthy lifestyle interventions.

Burden of Hypertension

Approximately 26.3 percent of adults in Colorado have hypertension, compared to the national rate of 31.4 percent (CO BRFSS 2013 & 2015). However, in Las Animas County, 38 percent of residents have been diagnosed with hypertension, and 31 percent of Huerfano County residents have been diagnosed with hypertension. In addition, both counties have higher rates than the statewide average for adult obesity, uninsured residents, and heart disease mortality, which are all risk factors for hypertension (CO BRFSS 2013).

Target Populations

The Colorado Million Hearts Learning Collaborative focused on low-income and geographically isolated residents of Las Animas and Huerfano Counties. Both counties are identified as frontier (meaning they have population density of six or fewer people per square mile) and are designated Health Professional Shortage Areas.

Key Partners

State
- Colorado Department of Public Health and Environment

Local/Regional
- Colorado Rural Health Center
- Las Animas-Huerfano Counties District Health Department

Community/Clinical
- Health Solutions
- Mountain Creek Home Healthcare
- Mt. Carmel Health Wellness and Community Center
- Mt. San Rafael Hospital Clinic
- Spanish Peaks Family Care
- Spanish Peaks Outreach and Women's Clinic

Evidence-base/Best-Practices Used

- AHA's *Check. Change. Control*. Self-monitoring blood pressure program
- Million Hearts Undiagnosed Hypertension Prevalence Estimator
- Standardized blood pressure measurement protocol
- Standardized referral workflow to clinical care or lifestyle change programs
- Patient reminders through automated calls to get free blood pressure checks at Local Public Health Department
- Team based care through the development and use of a centralized community hypertension registry

2

Key Project Successes

Clinical

- 10,125 total patients identified with hypertension through registries from all clinic partners.
- 778 referrals made to primary care and community resources.
- 44 patients enrolled in Home Blood Pressure Monitoring Program.
- 405 patients with uncontrolled hypertension with improved blood pressure values.
- 178 patients identified with high blood pressure in the community at worksite wellness events.

Data

- Implemented system-level changes that improve the use and sharing of clinical data to better identify individuals with undiagnosed or uncontrolled hypertension and to improve management of diagnosed patients with hypertension.
- The average hypertension control rate across clinic partners and home healthcare increased from 68.1% in June 2016 to 75.8% by June 2017.

Community-Clinical Linkages

- Engaged stakeholders to update the Las Animas-Huerfano Counties Million Hearts Partnership Agreement.
- Developed a model that engages local public health, home health, and primary care clinics to improve hypertension diagnosis and control.
- Identified community members with undiagnosed hypertension in clinical and community settings making subsequent referrals to primary care and community resources.

Standardizing Practice

- Expanded clinical care team to include local public health nurses through Memorandum of Understandings with two clinics by granting LPHA nurses access to electronic health records.
- Implemented and utilized a standardized blood pressure control protocol across all partner sites.

Project Scalability and Spread

As a result of the ASTHO Million Hearts Initiative, Colorado will continue to develop further recommendations for improving hypertension control rates and identifying undiagnosed hypertension throughout Colorado. Next steps include:

1. Continue to engage multi-sector partnerships; including Local Public Health Agencies, health systems and practices, community based organizations and quality improvement organizations to implement system changes to facilitate the integration of public health and primary care.

2. Continue to develop tools, guidance, and resources for this model of care with key partners, including identifying lessons learned challenges, successes and evidence.