Million Hearts State Learning Collaborative
State Snapshot

ARKANSAS

State Health Agency: Arkansas Department of Public Health
State Health Official: Nathaniel Smith, MD, MPH

As a result of the Heart Disease and Stroke Prevention State Learning Collaborative, the Arkansas Department of Health (ADH) in collaboration with local physicians developed a hypertension team-based care model for care coordination at Local Health Units (LHUs) in 4 counties. This model showed successful impacts through ASTHO funding, care coordination, EMR adaptation, data-driven action, policy development, standardizing clinical practice, and community-clinical linkages. Additionally, the ADH utilized a novel algorithm to identify persons with undiagnosed and uncontrolled hypertension in LHU electronic medical records (EMR). The ADH built a hypertension algorithm into the EMR (Greenway) to detect all patients with two or more readings of elevated blood pressures with and without a diagnosis of clinical hypertension using ICD-9 codes. Patients with two elevated blood pressure readings and a diagnosis of hypertension were classified as diagnosed and uncontrolled, and those with two elevated blood pressure readings and no diagnosis of hypertension were classified as undiagnosed and uncontrolled. These patients were then reffered to services to help control their blood pressure.

Current Reach: *The Team-Based Care Initiative identified 1,479 adults with hypertension of which 214 were referred to LHUs. The statewide electronic health record initiative identified 3,904 adults with undiagnosed hypertension who were then referred to services.*

Potential Reach: *By expanding the Team-Based Care Initiative to 15 additional counties, Arkansas could potentially reach another 3,000 patients with hypertension.*

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TRANSFORMING SYSTEMS SAVING LIVES

AIM STATEMENT

By June 2017, the Arkansas Million Hearts Learning Community Team will improve HTN diagnosis, treatment, and control in Arkansas communities to increase the percentage of newly diagnosed hypertensive patients by 5% (from baseline) and decrease the percentage of uncontrolled hypertensive adults by 5% (from baseline) among persons aged 18-85 years, in Nevada, Poinsett, Madison and Bradley Counties, AR, through data driven team-based care and improving performance metrics to expand comprehensive systems of care across the state.

KEY PARTNERS

State

- Arkansas Department of Health
- American Heart Association

Local/Regional

- Greater Delta Alliance for Health
- Poinsett County Local Health Unit
- Nevada County Local Health Unit
- Bradley County Local Health Unit
- Madison County Local Health Unit

Community/Clinical

- Humana
- Greenway Health

BURDEN OF HYPERTENSION

According to the 2013 Behavioral Risk Factor Surveillance System Survey, 38.9% of Arkansans age 18 and older have self-reported hypertension. That is higher than the national average. About 54% of those adults have uncontrolled hypertension, the leading cause of both fatal and non-fatal cardiovascular events. According to the CDC National Center for Health Statistics, Arkansas death rates for hypertension-associated conditions are up to 33% higher than the US death rates. Additionally, the direct medical costs linked with hypertension-associated conditions were $1.5 billion in 2010 in Arkansas (Arkansas Department of Health).

TARGET POPULATIONS

Those with diagnosed and undiagnosed hypertension in four counties: Poinsett County, Nevada County, Bradley County, and Madison County. The total population of the four counties is 45,452, with an estimated 20,260 people suffering from hypertension. Additionally, the EHR initiative was implemented in all 95 LHUs in all 75 counties statewide.

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EVIDENCE-BASE/BEST PRACTICES USED

- Team-Based Care Approach for Hypertension control
- Medication Adherence Counseling
- Dietary and Weight Loss Counseling
- Hypertension Care Coordinators
- Use Electronic Health Records to Identify Undiagnosed Hypertension

KEY PROJECT SUCCESSES

Hypertension Team-Based Care Initiative:

- Since January 2015, a total of 1,479 adults with hypertension were identified from local physician practices.
- 214 of these patients were referred to LHUs for regular monitoring of their blood pressures; dietary, weight loss and medication adherence counseling; and navigation services as required for management of their hypertension from LHU hypertension care coordinators.
- 109 (50.9%) patients returned for follow-up with the hypertension care coordinators.
- Of the 109 patients with two or more LHU visits, 91 (83.5%) were adherent to anti-hypertensive medication.
- As a result of team-based care, 7 (6.4%) patients reduced their blood pressures exclusive of control, and 51 (46.8%) patients controlled their blood pressures exclusive of reduction.
- Of the 109 hypertensive patients, 26 (23.9%) patients experienced both blood pressure reduction and control.

Statewide Local Health Units Initiative for the Detection of Undiagnosed/diagnosed and Uncontrolled Hypertension:

- This initiative was implemented at 96 Local Health Units (LHUs) located in 75 counties.
- Through this initiative, a total of 129,689 persons attending LHUs were identified retrospectively as having received hypertension screening.
- Of these, 5,996 (4.6%) had either elevated systolic and/or diastolic blood pressures.
- Of 5,996 patients, 2,092 (34.9%) had a diagnosis of hypertension, and 3,904 (65.1%) were undiagnosed for hypertension. Of the 2,092 diagnosed hypertensives, 640 (30.6%) were uncontrolled for both systolic and diastolic blood pressures (i.e. BP ≥140/90 mmHg for persons <60 years of age, and BP≥150/90 mmHg for those ≥60 years of age).
- Of the 3,904 persons with undiagnosed hypertension, 211 (5.4%) were uncontrolled for both systolic and diastolic blood pressures.
- Patients who were identified through this process were given EMR-generated referral letters to their providers.

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PROJECT SCALABILITY AND SPREAD

Over the next one to three years, the ADH plans to expand the Team-Based Care Model to 15 counties in Arkansas, with a potential to reach 3,000 people with hypertension and provide team-based care. As a recipient of the ASTHO State Public Health Collaborative to Improve Cardiovascular Health Outcomes grant award in June 2017, the ADH will collaborate with a private payer, a healthcare coalition, and a hospital in Jefferson County, Arkansas, to develop a payer model for transition of care for hypertension from emergency departments to team-based care and medical homes. Additionally, the ADH plans to sustain the EHR Initiative statewide to detect undiagnosed/diagnosed and uncontrolled hypertension, and refer them to primary care and team-based hypertension care. Moving forward, the ADH will also attempt to work with Humana to address “superusers” in regional hospitals through applying team-based care as part of a cost-sharing pilot in Jefferson County, in which Humana will pay for referrals to Local Health Units. Finally, the ADH is also currently working to increase medication adherence and blood pressure control among patients and their families in Poinsett County by connecting them to community resources through the Arkansas Care Partner Program.

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