EvidenceNOW: Advancing Heart Health in Primary Care is an initiative of the Agency for Healthcare Research and Quality (AHRQ) to transform health care delivery by building a critical infrastructure to help smaller primary care practices improve the heart health of their patients by applying the latest medical research and tools. EvidenceNOW established seven regional cooperatives composed of public and private health partnerships that provide a variety of quality improvement services typically not available to small primary care practices. The goal of this initiative is to ensure that primary care practices have the evidence they need to help their patients adopt the ABCS of cardiovascular disease prevention: Aspirin in high-risk individuals, Blood pressure control, Cholesterol management, and Smoking cessation. The initiative also includes an independent national evaluation designed to determine if and how quality improvement support can accelerate the dissemination and implementation of new evidence in primary care.

**Cooperative Name:**
Heart Health Now!
Advancing Heart Health in NC Primary Care
www.hearthealthnow.org

**Principal Investigator:**
Samuel Cykert, M.D.,
University of North Carolina at Chapel Hill

**Cooperative Partners:**
University of North Carolina at Chapel Hill, Cecil G. Sheps Center for Health Services Research
North Carolina Healthcare Quality Alliance
Community Care of North Carolina, Inc.
North Carolina Area Health Education Centers Program

**Geographic Area:**
North Carolina

**Project Period:**
2015-2018

**Region and Population**
North Carolina’s population of more than 10 million is racially and ethnically diverse, with 71 percent white, 22.2 percent African American, and 9.2 percent Hispanic.¹ The burden of cardiovascular disease (CVD) in the State is large, and almost one-third of deaths are caused by CVD (the CVD mortality rate is 251 per 100,000).² CVD risk factors are common among the population; 65 percent of adults are obese/overweight, 32 percent are hypertensive, nearly 10 percent are diabetic, 20 percent smoke, and 54 percent do not meet physical activity targets.³ Only half of patients treated for hypertension currently have their blood pressure under control, and only half of patients aged 40 to 64 with elevated cholesterol have been treated to recommended levels.⁴

**Specific Aims**
Evaluate the effect of primary care practice support on:

1. Evidence-based CVD prevention
2. Patient-level health outcomes
3. Implementation of clinical practice and office systems changes to improve evidence-based CVD prevention
4. Practice capacity to implement new patient-centered outcomes research (PCOR) findings
North Carolina Cooperative

Reach: Number of Participating Practices: 228

Location
- 48% Urban
- 52% Rural*

Number of Clinicians
- 18.6% Solo
- 39.5% 2-5
- 13.6% 6-10
- 17.5% 11 or more*
- 10.7% Unknown

Ownership
- 41.8% Clinician owned
- 9.0% Health system-owned
- 14.1% FQHC
- 24.3% Other/multiple
- 10.7% Unknown

* Rural is defined as a population less than 20,000 and at least 15 miles away from a larger city.
+ Indicates number of clinicians reported for an entire healthcare organization, not for an individual practice.

Note: These preliminary data are provided for illustrative purposes. Numbers are subject to change based on final data analyses. Data courtesy of ESCALATES, the EvidenceNOW independent national evaluator under AHRQ grant number R01HS023940-01. For more information about the national evaluation, visit: www.escalates.org

Updates on Key Project Components

Support Strategy
All practices receive 12 months of intense practice support, including onsite quality improvement facilitation, academic detailing (expert consultation), and electronic health record (EHR) and health information exchange (HIE) support. Components of the practice support include:

- Optimizing the use of the EHR to extract clinical quality data on a monthly basis to guide the change process.
- Developing patient registries to identify needed care and outliers from the practices' patient population.
- Promoting use of decision support tools and templates to support practice workflow.
- Encouraging proactive, team-based care with assigned roles and responsibilities to help providers engage patients throughout the entire visit process.
- Implementing evidence-based protocols and clinical algorithms to encourage the use of standing orders and clinical decision support tools in the EHR.
- Enhancing self-management support for patients within the practice and developing a strong process of referral to external patient support resources.

- Up to 80 percent improved on statin therapy.
- Prescribing for statins is up by 50 percent across participating practices.
- Blood pressure control among patients has increased close to an absolute of 5 percentage points.

Evaluation
The Cooperative is conducting a stepped-wedge, stratified, cluster randomized trial, where the practices are randomized on geography (East vs. West) and degree of practice readiness for change (determined by the Organizational Readiness for Implementing Change [ORIC] scales). Based on the results of the practice readiness stratification and subsequent follow-up with practice facilitators early in the intervention, practices were placed in either a high-readiness or low-readiness intervention wave. Twelve months after starting the intervention, each practice enters a maintenance period during which practice facilitators are available to support practices on an as-needed basis.

Update
The Cooperative collected baseline practice characteristics surveys for 77 percent of the final enrolled practices as well as baseline practice member surveys from 86 percent of the final enrolled practices. Twelve-month follow-up surveys began in early 2017 and will continue through the end of 2017. Eighteen-month follow-up surveys began in August 2017 and will continue through the end of the project.

All practices are now submitting at least two ABCS measures and more than 90 percent of practices have submitted three measures. Over 90 percent of practices have access to CVD risk stratification tools.
Comment from Principal Investigator

“The engagement of North Carolina primary care providers has been remarkable. Despite the limitations in many EHRs to create new measures, build registries, and perform risk stratification tasks, most participants have been able to work with the practice facilitators to put together data in imaginative ways and demonstrate marked improvements for their patients. They’ve come a long way from the days when I kept my billing data on index cards in shoe boxes.”

Samuel Cykert, M.D.

Publications and Other Dissemination Activities

The North Carolina Cooperative has published one article and made presentations at several national conferences.

Publications:

- Advancing Heart Health in North Carolina Primary Care: the Heart Health NOW Study Protocol [Implementation Science, 10/1/15]

Presentations:

- Clinician Burnout in Small North Carolina Primary Care Practices Appears Lower Than Expected: An Initial Snap Shot from Evidence NOW [SGIM, 2017]
- Factors Associated with Baseline Hypertension Control: Insights from the Heart Health NOW Study [SGIM, 2017]
- The NC Heart Health NOW (HHN) Project—Building the Business Case for Practice Facilitation Services -- A Look at the First Six Months [NAPCRG, 2017]

References:

6 http://www.implementationscience.com/content/9/1/7

Last updated date: November 2017