## EvidenceNOW Advancing Heart Health in Primary Care



#### **Cooperative Name:**

Healthy Hearts for Oklahoma (H2O)

http://ophic.ouhsc.edu/healthyhearts-oklahoma

#### **Principal Investigator:**

F. Daniel Duffy, M.D., University of Oklahoma Health Sciences Center

#### **Cooperative Partners:**

University of Oklahoma Health Sciences Center

Public Health Institute of Oklahoma

Community Service Council of Greater Tulsa

Oklahoma Center for Healthcare Improvement

National Resource Center for Academic Detailing

Oklahoma Foundation for Medical Quality

Brigham and Women's Hospital

**Geographic Area:** Oklahoma

Project Period: 2015-2018

# **Oklahoma Cooperative**

**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.

## **Region and Population**

Oklahoma has a population of 3.9 million, of which 75.1 percent is white, 7.7 percent is African American, 9.0 percent is Native American, 2.1 percent is Asian, and 9.8 percent is Hispanic.<sup>1</sup> Oklahoma's health statistics are among the worst in the Nation, with cardiovascular disease (CVD) as the most frequent cause of premature death. Within the State, 22 percent of residents are current smokers, 36.2 percent have hypertension, 33.2 percent are physically inactive, and 33.9 percent are obese.<sup>2</sup>

### **Specific Aims**

- Construct an effective, sustainable Oklahoma Primary Healthcare Improvement Cooperative (OPHIC) that can serve as a resource to the emerging Oklahoma Primary Healthcare Extension System (OPHES), supporting dissemination and implementation of patient-centered outcomes research (PCOR) findings into practices.
- 2. Provide technical support to primary care practices to help them implement PCOR-based methods to improve their management of patients at risk for CVD events, especially methods such as smoking cessation, blood pressure control, statins, and low-dose aspirin.
- **3.** Evaluate the impact of the intervention's support strategy and of contextual factors, such as practice characteristics, on practice performance and outcomes.







#### Reach: Number of Participating Practices: 226

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\* Clinician-owned practices account for 86 of the total 226 participating practices in the Oklahoma Cooperative.

\* There are regional differences in these proportions. Tribal practices have a significant presence in the southern part of the State; Tulsa has more hospital- and system-owned practices than Oklahoma City.

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

Each participating practice will receive a 1-year intervention consisting of:

- Baseline and quarterly *performance feedback and biweekly coaching.* Lessons learned from high performing practices will be disseminated to all practices to help them improve performance.
- Academic detailing (expert consultation) visits, at the start and midpoint of the intervention, with practice clinicians and staff that involve conversations about findings from evidence, what the practice is currently doing, and lessons learned from high performing practices. These conversations will lead to a quality improvement plan.
- *Practice facilitation*, in which practice enhancement assistants become temporary members of the practices, acting as change agents to facilitate tailored solutions through Plan-Do-Study-Act (PDSA) quality improvement cycles.
- Information technology support to help practices make more effective use of their electronic health records (EHRs) and MyHealth Access Network, the State's Health Information Exchange Organization (HIEO).
- Participation in a collaboration *website and listserv* to support ongoing quality improvement.
- *Community-level interventions*, such as smoking quit line referral and blood pressure medication assistance programs, in selected counties to encourage patients to address CVD risk factors.

#### <u>Update</u>

The Oklahoma Cooperative originally planned to obtain ABCS data from the State's HIEO and supplement them with measures generated by the practices' EHRs. However, the Cooperative found that certified EHRs often don't have the necessary capability to document and report the measures needed. In addition, connecting to the HIEO is more complicated than initially anticipated and the measures from the HIEO sometimes differ substantially from those generated by the EHRs. This difficulty necessitated greater reliance on EHR-generated measures. Additionally, when neither the EHR nor the HIEO could generate satisfactory measures, the Cooperative relied on manual chart abstraction to augment missing or obviously flawed measures.

The challenges faced by the Oklahoma Cooperative in working with EHRs and the HIEO highlight the importance of developing national standards for health IT and, ideally, providing measure specifications at the same time that new clinical guidelines are introduced.

Oklahoma made these observations about working with practices on quality improvement:

- Relationships between the practice clinicians, staff and practice facilitators are key and provide real value to practices.
- Assuring financial security is the most important goal for most practices.
- Just as clinicians learn from case review with their peers, practice facilitators learn from discussing with each other their experiences facilitating practice improvement.
- When working with practices owned by health systems, facilitators learned it was more effective to work directly with the system's central quality improvement department and avoid getting between the practice and its health system.
- Graphic representations of the ABCS data make the information more understandable and actionable to practices.

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## **Oklahoma Cooperative**

- In addition to training in how to use their EHR, clinicians and staff need training on how to maximize the workflow potential of their EHR and assure that the data entered is available for both patient care and quality improvement.
- In general, based on this Cooperative's experience with the EHR data quality, most practices are not prepared to use quality data for either quality improvement or payment reform.

#### **Evaluation**

The Cooperative is using a geographic stepped-wedge design, in which practices are randomized by county and stratified by geographic quadrant into four waves of 58-72 practices, with each wave beginning a few weeks after the previous wave. A second randomization assigns practices to work first on either smoking cessation and blood pressure control or lipid management and low-dose aspirin, switching to the other pair after 6 months.

#### <u>Update</u>

In addition to the regular data cleaning, processing, and submission to ESCALATES, the Cooperative's own evaluation team is generating frequency statistics at baseline. Staff plan to compose a manuscript based on these descriptive statistics to illustrate the state of primary care practices in Oklahoma.

The Cooperative is also analyzing the association between baseline data from the practice-level Practice Characteristic Survey, Practice Member Survey, and ABCS measures. Staff are also working with other cooperatives to share data for broader comparison.

The Oklahoma Cooperative has developed a software product (called the Electronic Practice Record) for the project that captures both quantitative and qualitative data from each encounter between practice facilitators and participating practices. The Cooperative is analyzing the coded characteristics of support contacts contained in the Electronic Practice Record to compare and contrast facilitation styles among staff members, regions, and types of practices. The number of contacts per practice ("dose") of facilitation intervention will be correlated with the facilitator assessment of practice responsiveness and ABCS outcomes.

## **Comment from Principal Investigator**

"The success of the H2O project depends on the collaboration among health systems, quality improvement organizations, and information technology specialists to introduce a completely new form of continuing clinician education. Improving practice quality takes more than learning the evidence for guidelines. It also requires changing roles of clinicians and staff and maximizing electronic health records to assure consistent and reliable work processes aimed at achieving higher outcome goals. These changes do not occur through lectures, but require the 'shoulder-to-shoulder' facilitation in the practice with clinicians and staff reviewing their own data and learning from the impact changes make on their practice outcomes."

#### Daniel Duffy, M.D.

### **Publications and Other Dissemination Activities**

The Oklahoma Cooperative has made presentations at several national conferences as well as produced a press release highlighting Oklahoma University's involvement in the EvidenceNOW program.

#### Presentations:

- Collective Efforts to Overcome Quality Measurement Challenges: Lessons from a Primary Care Learning Community [Academy Health, 2017]
- Quality Improvement through Collaboration [Breakout Workshop CPC Face-to-Face, OCHI Fall Forum and EvidenceNOW-Healthy Hearts for Oklahoma, 2017]
- The Effect of Quality Improvement Orientation and Organizational Change on Cardiovascular Care in Oklahoma Primary Care Practices [Graduate Research Education and Technology (GREAT) Symposium, 2017]
- Disseminating and Implementing Research into Practice: Oklahoma Primary Healthcare Extension System [Quality Summit, 2016 and Healthy Stephens County Monthly Meeting, 2016]
- Overview of the H2O Project [Oklahoma Primary Care Association Annual Meeting, 2016; PHIO/CHIO Annual Conference, 2016; and Annual OKPRN Convocation at Tulsa Zoo Education Center, 2016]
- The Effect of Quality Improvement Orientation and Organizational Change on Cardiovascular Care in Oklahoma Primary Care Practices: A First Look [NAPCRG, 2016]
- What is the H2O Study? Healthy Hearts for Oklahoma: Oklahoma Cooperative for AHRQ's EvidenceNOW Grant [Oklahoma Hospital Association's Health Improvement Program, 2016; Oklahoma State Health Department, 2016; and Oklahoma City Area Indian Health Service Clinical Learning Conference]
- Three presentations at the ICKM 2017- 13th International Conference on Knowledge Management (BIG DATA IN



THE BIG D) on October 25-27. Presentations include: 1) Visualizing Complex Healthcare Data to Support Provider-Level Quality Improvement Processes by Dr. Duffy, 2) Assessing Misclassification Error on Estimated Cardiovascular Care Performance by Juell Homco, and 3) Managing Valuable Knowledge as a Tangible Asset: Creating Inventories of Organizational Knowledge by Chuck Tryon.

#### Press Release:

• OU researchers get \$15 million federal grant to improve heart health in state [Tulsa World, May 28, 2015; Oklahoma University web site, 2015: The Norman Transcript, 2015]

> <sup>1</sup> http://www.census.gov/quickfacts/table/PST045215/40. Accessed August 15, 2017. <sup>2</sup> http://www.healthyamericans.org/states/?stateid=OK. Accessed August 15, 2017.