



POPULATION MEDICINE & RESEARCH NEWSLETTER

Connecting you with valuable resources
and innovative research from the Division
of Population Medicine

 **College of
Medicine**
Family and Community Medicine



MESSAGE FROM THE DIRECTOR

We are excited that Spring is here as it is a time of renewal and growth. We are enthusiastic as we are embarking on a collaborative study with West Virginia University to study the effectiveness of computerized cognitive behavioral therapy for patients in rural areas who are diagnosed with depression. We hope to kick off the study this summer and have been actively recruiting clinics who may be interested in participating.

We completed our lung cancer screening study in Northeastern Kentucky in collaboration with St. Claire Regional Medical Center late last year. This three year-long study tested quality improvement strategies to increase lung cancer screening and tobacco cessation education in primary care clinics. Our preliminary results show significant impact of our intervention for both lung cancer screening and tobacco cessation. We are now poised to submit a grant to the National Institutes of Health to test this modality in a large cohort of clinics to address the devastating effects that lung cancer has in our Kentucky communities.

In this issue we are thrilled to provide research updates from several of our investigators. Moreover, we'll be launching a new internet-based community to connect our KAN members and other UK Family Medicine partners called 'DFCM Connect.'

We are excited that we are growing as a research network and are able to bring state of the art research opportunities to all members that will have a real impact on the populations and patients we serve. Thank you for your continued engagement!



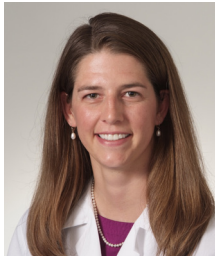
Roberto Cardarelli, DO, MHA, MPH
Director, KAN
Professor and Chief of Population
Medicine



OUR TEAM



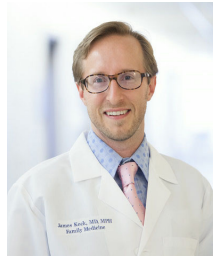
Roberto Cardarelli,
DO, MHA, MPH



Mary Sheppard,
MD



Carol Hustedde,
PhD



James Keck, MD,
MPH



Karen Roper, PhD



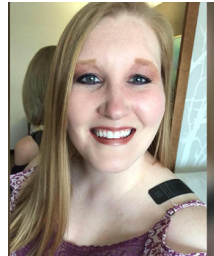
Lars Peterson, MD,
PhD



Kim Haney, MLS



Kacie Bledsoe



Madeline Slimack



Jackie King

IN THIS ISSUE

- Research update: Dr. James Keck on diabetes prevention
- KAN Member Research Opportunity: Implementing eCBT into primary care clinics
- Terminate Lung Cancer: Making an impact in Kentucky and beyond
- DFCM Connect: A new way to connect with peers and share resources
- Research update: Dr. Mary Sheppard working toward new treatments for Marfan syndrome



Preventing diabetes through lifestyle medicine

Utilizing Diabetes Prevention Programs in primary care

Dr. James Keck, clinical faculty at UK Family and Community Medicine, recently completed a collaborative research project with the Barnstable Brown Diabetes Center (described below) with the goal of improving outcomes for patients at risk for diabetes, and even preventing a diabetes diagnosis entirely.

Describe the work you did surrounding prediabetes and increasing referrals.

We created a collaboration between UK's Department of Family and Community Medicine and the Barnstable Brown Diabetes Center (BBDC) to increase referrals of primary care patients with prediabetes to the Diabetes Prevention Program housed at BBDC. This intensive lifestyle change program endorsed by the CDC is about 50% effective at preventing or delaying progression to diabetes, but is vastly underutilized. Our implementation study collected baseline information from patients, clinicians, and the electronic health record (EHR) to understand our prediabetes care practices and opportunities for improvement. Using this information we implemented an EHR referral to the DPP, provided lists of patients with prediabetes care practices. Over 1/5 years, our intervention clinicians had 3.8 times increased odds of referring a patient with prediabetes to the DPP compared to the control clinicians.

How does this work impact patients in the primary care setting?

As a clinically active primary care physician, I am well aware of the seemingly ever-growing list of clinical priorities encouraged by various reporting metrics, clinic QI initiatives, and specialty interest groups. With prediabetes affective about 1 in 3 adult patients in Kentucky, I am comforted to know that there is a highly effective, evidence-based lifestyle program that I can share with my patients. This program relieves me of the burden of lifestyle counseling and brings my patient many additional benefits, like weight loss, reduction in cardiovascular disease risk, and likely improvements in cognitive and mental health. A challenge facing clinicians and patients is the availability of this lifestyle program and its cost. However, more and more insurers are recognizing its value and Medicare began coverage last year. Also, there are now organizations that deliver the curriculum remotely.

What motivates you to do this kind of research?

I am a preventionist at heart. My first training was in Preventive Medicine, and I would much rather prevent illness/promote health than provide sick care to my patients. Family Medicine doctors are well-versed in preventive healthcare, but we still have room to improve with our use of lifestyle medicine. So I work to study ways to improve our delivery of preventive healthcare. I like that the research has a clear impact on patient wellness—our intervention resulted in at least 50 more patient referrals and some of these will result in prevented cases of diabetes!

Dr. Keck's research in this area has led to two peer-reviewed publications, "Patient and clinician perceptions of prediabetes: A mixed methods primary care study", and "Prediabetes knowledge, attitudes, and clinical practices at an academic family medicine practice", as well as a podium presentation at the upcoming American Diabetes Association Annual Conference.



Research Opportunity: Integrating eCBT into primary care

West Virginia University researchers in collaboration with the University of Kentucky have received a \$13.3 million award from the Patient-Centered Outcomes Research Institute (PCORI) to improve access to mental health care for depressed patients in rural areas.

The study (dubbed the **Appalachian Mind Health Initiative**) will compare the effectiveness of guided versus unguided remote eCBT (Cognitive Behavioral Therapy) for patients diagnosed with Major Depressive Disorder in rural Kentucky and West Virginia.

8,000 patients and 200 providers will take part in this study—both the Kentucky Ambulatory Network (KAN) and WVPBRN will have integral roles in recruiting practice sites, clinicians, and patients into the study.

If you're interested in participating or want to learn more about the Appalachian Mind Health Initiative, please contact Kim Haney, KAN Coordinator at KAN@uky.edu.



Terminate Lung Cancer: Making an impact in Kentucky and beyond

The University of Kentucky, in collaboration with St. Claire Regional Medical Center in Morehead, KY, recently completed the three year-long Terminate Lung Cancer study.

The study tested quality improvement strategies to increase lung cancer screening and tobacco cessation education in primary care clinics. Data analysis is ongoing, however, preliminary results show that the interventions had significant impacts for both lung cancer screening and tobacco cessation. Five clinics in Northeastern Kentucky participated, and are seeing the positive results from the strategies introduced through the TLC study.

We are now poised to submit a grant to the National Institutes of Health to test this modality in a large cohort of clinics to address the devastating effects that lung cancer has in our Kentucky communities.

Launching July 2019:

DFCM connect

A new way to connect with your peers and share resources

The University of Kentucky College of Medicine, Department of Family and Community Medicine (UK DFCM) is proud to provide an exclusive online space for members of the Kentucky Ambulatory Network (KAN), UK Family Medicine-appointed Volunteer Faculty members, and other valued UK Family Medicine partners. Our goal is to enhance resource dissemination and help foster bi-directional learning for members of DFCM Connect, creating a "one-stop-shop" of information and connecting groups with their most valuable resource—each other.

Collaborate with your peers in members-only discussion forums and access a rich library of resources and best practices. Keep up to date with the latest projects and events, and learn how you can be part of KAN's quality improvement-driven research or become a Voluntary Faculty Member.

The benefits are endless and only grow richer as more individuals become engaged and join in discussions and share resources.

Look for your invitation to join to arrive in your email inbox in the coming weeks! We look forward to making DFCM Connect a valuable resource for its members.



UPCOMING EVENTS



Family Physician Health and Well-Being Conference

June 5-8, 2019
Phoenix, AZ

2019 Healthcare Transformation Survival Seminar (Lexington)

June 13, 2019
Lexington, KY

Pediatric Emergencies Conference: Early Assessment and Treatment of Children

June 15, 2019
Lexington, KY

Aligning Care & Community Workshop Series

June 19, 2019
Bowling Green, KY

2019 Healthcare Transformation Survival Seminar (Bowling Green)

June 20, 2019
Bowling Green, KY

2019 Healthcare Transformation Survival Seminar (Paducah)

June 21, 2019
Paducah, KY

NAPCRG Practice-Based Research Network Conference

June 24-26, 2019
Bethesda, MD

NAPCRG International Conference on Practice Facilitation

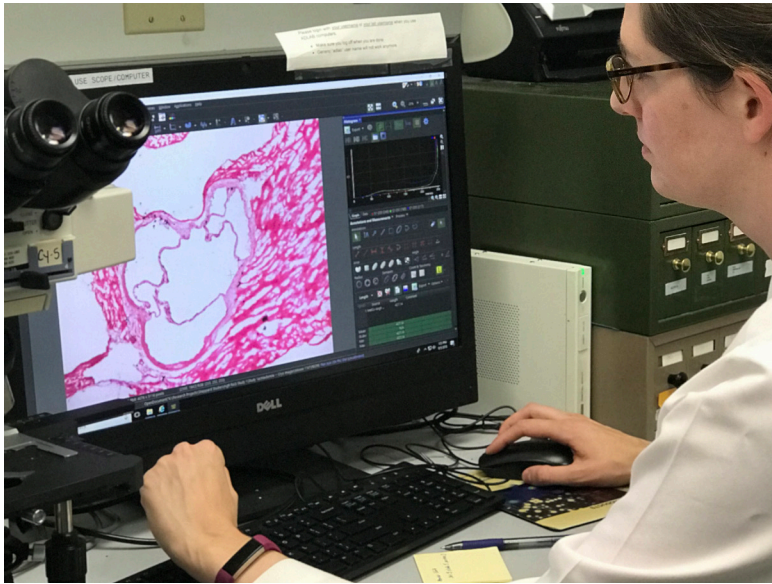
June 26-27, 2019
Bethesda, MD

Direct Primary Care Summit

June 28-30, 2019
Chicago, IL

AAFP National Conference of Family Medicine Residents & Medical Students

July 25-27, 2019
Kansas City, MO



Dr. Mary Sheppard and team publish in *Circulation Reports*

Dr. Mary Sheppard, Clinical Faculty at UK DFCM and Assistant Professor of Family Medicine, along with her research team, have published their work, titled "Aortic Strain Correlates with Elastin Fragmentation in Fibrillin-1 Hypomorphic Mice," in the journal *Circulation Reports*.

It's been shown that thoracic aortic aneurysms associated with mutations in fibrillin-1 display elastic fragmentation, which may affect aortic strain. Dr. Sheppard's research examined the relationship between elastin fragmentation and aortic circumferential strain and wild-type and fibrillin-1 hypomorphic mice using 2-D high-frequency ultrasound. Dr. Sheppard and her team's research into these mechanisms provide hypotheses that can translate to future diagnostic modalities and therapies.

Dr. Sheppard is passionate about diagnosing and treating patients with Marfan syndrome and aortic disease. She currently uses mouse models of Marfan syndrome and acquired aortic disease to try to identify new pharmacologic treatments. She also has clinical trials evaluating blood markers in patients with aortic disease. Please feel free to reach out to her if she can assist you in any way.

Do you have a clinical or practice related question?

Do you have a question regarding clinical or health/disease related issues?

Do you have a question based on experiences in your medical practice?

We want to hear from you! Tell us about the issues you see and experience in your primary care practice. We may be able to answer your question, connect you with colleagues who share your concerns, or perhaps even turn your question into a research project.

Reach out any time at KAN@uky.edu.



KAN Member Visits

Kim Haney, our KAN Coordinator, is visiting member clinics across the state to touch base with members, assess potential needs and interest, and share the latest updates and free resources. If you have not yet received a visit from Kim, expect to be contacted about scheduling one soon. Feel free to reach out to Kim at KAN@uky.edu to get your clinic on the schedule and share your thoughts about KAN.

If you know of a colleague who may be interested in becoming a KAN member, please invite them to join, and forward them this newsletter!

Get engaged with KAN and the Division of Population Medicine

We often hear the question "We are primary care, why should we be involved in research?" Our responses are always the same, "Because if we don't do it, no one will create the knowledge and evidence we need to practice medicine that our patients and communities expect and deserve from us."

Primary care providers have a vital role in advancing the knowledge of our professions. Practice-based research groups grew from the realization that much of the research that is done in tertiary medical centers has little applicability to the practice of outpatient and ambulatory medicine. KAN invites all its members to participate in research that will have little hindrance to daily practice.

We welcome your ideas and engagement with the numerous resources and opportunities we offer!

CONTACT US

KAN/Division of Population Medicine
Department of Family & Community Medicine
2195 Harrodsburg Rd, Suite 125
Lexington, KY 40504-3504

P: 859.323.7354
F: 859.323.6661

KAN@uky.edu

<http://bit.ly/Kentucky-Ambulatory-Network>

