Message from the Director

This issue of the CM&R highlights a variety of accomplishments and new activities within the Division of Community Medicine and the Kentucky Ambulatory Network. A team will be embarking on a new study that will assess the cost impact of unnecessary discharge delays secondary to system and social factors. Meanwhile, our work in Northeast (NE) Kentucky with our community partners, the NE AHEC and St. Claire Regional Medical Center, continues to transform their primary care clinics in improving their lung cancer screening and tobacco cessation rates. Preliminary results are promising as we are implementing quality improvement methods using a practice facilitator model. Related to this study, which is funded by the Association of American Medical College (AAMC), is the planning of the 2nd Annual Lung Cancer and Tobacco Cessation Symposium to be held on September 22, 2017 at the Center for Health, Education and Research in Morehead, KY.

We also congratulate Dr. Karen Roper who was accepted into, and now completed, the PBRN Certification program. This 1-year program provides a mentor-guided curriculum related to conducting practice-based research. It is exciting to enter the Spring season with many research and educational activities related to community health and practice-based research that aligns with the health needs of our populations. Please engage us in the various opportunities as we strive to resolve the health issues faced by Kentuckians.
NEW STUDY: Cost Impact of Delayed Hospital Discharges on a Family Medicine Hospital Service

Drs. Jayaraj Sinduja, Wade Rankin, Karen Roper, and Roberto Cardarelli are leading a new study recently approved by the UK Institutional Review Board that will assess the cost impact of delayed hospital discharges from the Family Medicine hospital service located at UK Good Samaritan Hospital. Transition factors and living circumstances are often a reason patients remain in the hospital after the acute condition that led to their hospitalization is resolved. Reasons for unnecessary extended stays include rehabilitation placement, waiting for approval for home services, and residential issues, just to name a few. This study will help to further our understanding of the underlying social and/or system factors that contribute to unnecessary hospital stays, and evaluate the associated cost implications. Results from this preliminary study will lead our team to design and test future intervention strategies that better target the underlying causes. The study will commence in April 2017 and be completed in late summer.

Implementation Research Panel at the 2017 12th Annual Center for Clinical and Translational Science (CCTS) Spring Conference

Dr. Ann Sales, an expert in implementation research, served as the keynote speaker at this year's 12th Annual CCTS Spring conference. Dr. Sales serves as Professor in the Department of Learning Health Sciences at the University of Michigan Medical School, and Research Scientist of the Center for Clinical Management Research at the VA Ann Arbor Healthcare System. Dr. Sales joined a breakout session moderated by Dr. Jing Li and with Drs. Roberto Cardarelli, Christina Studts, and Jill Kolesar as they presented their work in Kentucky in the area of implementation science.

The applicability of a growing number of implementation frameworks to the various session presentations was apparent. It was also recognized that implementation science is still a rapidly growing area of research that is highly adaptable to targeted changes of interest.

Dr. Cardarelli discussed the University of Kentucky Division of Community Medicine and KAN's work in implementing guidelines about chronic pain management and lung cancer screening/tobacco cessation in Appalachian rural clinics. In his presentation, he highlighted that the likelihood of successful transformation in primary care clinics has been the engagement of both system and clinic leaders, identifying clinic champions, and allowing a degree of “nimbleness” in the actual process design and implementation within clinic workflows.

The Division of Community Medicine and KAN is dedicated to bringing studies of importance to our Kentucky partners and stakeholders and providing tools and resources to improve the care we deliver to our populations.
Welcoming Dr. Key Douthitt, Medical Director of the UK North Fork Valley Community Health Center

The UK Department of Family & Community welcomes Dr. Key Douthitt as the new medical director and faculty member at our North Fork Valley Community Health Center in Hazard, KY! Dr. Douthitt is a Kentucky native, growing up in Breathitt County in the Southeast portion of the state. He completed his undergraduate degree in Biology and attended medical school at the University of Kentucky. During medical school, he received the Richard W. Emerine Award for excellence in Family Medicine and performed poetry readings of his original poetry at the Singletary Center for the Arts on four separate occasions. He went on to attend the University of Kentucky East Kentucky Family Medicine Residency in Hazard, Kentucky. During that time, he was a three-time winner of the KAFP Resident Medical Quiz Bowl Competition and received first place in the resident research competition in 2010 for his work in the outpatient treatment of urinary tract infections. His dedication to teaching earned him the Gold Foundation Humanism and Excellence in Teaching Award from Pikeville College of Medicine and upon graduation, he returned to practice in Breathitt County. Dr. Douthitt practiced outpatient and inpatient medicine for the next six years during which time he was a volunteer physician for hospice and chairman of the Patient Care Committee at the local hospital. He came back to the University of Kentucky Family Medicine Residency in Hazard in December of 2016, where he serves as assistant professor and medical director of the North Fork Valley Community Health Center. His population health interests include providing quality healthcare for underserved communities in rural areas. He enjoys pediatric care, diabetes management, and coaching a local elementary and middle school academic team.

“The annual list of unhealthiest counties in Kentucky is almost always a reshuffling of counties in rural Appalachia. I’m excited about the opportunity to try and improve healthcare access and quality to this population. This area is my home and has always been my home. If those of us from here do nothing, how can we ever hope to improve it?”
Introduction to Social Medicine and Health Disparities, 2017 Edition

Dr. Hustedde recently concluded the most recent offering of her course, “Introduction to Social Medicine and Health Disparities.” Enrollment was the largest yet, with 31 first- and second-year medical students attending the elective course. The course is intended to complement the volunteer experiences that all first-year medical students have at the free, student-run Salvation Army Clinic. There, they confront health disparities and health access issues firsthand.

Given the current uncertainty about the future of the Affordable Care Act, the guest lecturers were able to present data and predictions as to how changes in current health care policies could impact underserved populations. Dr. Cardarelli spoke about community health workers, a topic that really resonated with the students. Other topics included Federally Qualified Health Centers as a model for comprehensive health care, the structure and reimbursement policies of the US health care system, providing primary care for the LGBTQ population, and the impact of injection drug use on health outcomes in eastern Kentucky.

Dr. Cardarelli featured in a public service announcement supporting 211 and United Way of the Bluegrass

The 211 system is a vital resource for many individuals in the U.S and is supported by United Way Worldwide (http://www.211.org/). The tagline “There’s 411 and 911, but you can text or call 211 when you need help and don’t know where to turn” embodies its mission to be a local contact center, connecting people with local and often critical resources that can improve their life and prevent life-threatening crises. Resources include supplemental food and nutrition programs, shelter and housing opportunities, utilities assistance, emergency information and disaster relief, and employment and education opportunities.

In a majority of the US, 211 coverage is available border-to-border for the residents of a state. In Kentucky, however, only one-third of the counties are currently served by 211 (mostly throughout the central Kentucky region). Recent efforts have been made to expand 211 in Kentucky, such as a UWBG - led expansion effort in 2015 that brought 211 to nine additional counties in Kentucky through grants and collaborations.

To promote this vital resource, UWGB developed a Public Service announcements that featured Dr. Cardarelli and other key figures, who spoke about the significance and impact of community resources on patient health outcomes and chronic disease management. The link to Dr. Cardarelli’s segment can be located at: https://www.youtube.com/watch?v=B5dWQcZLhzQ

Coverage in Kentucky

Found at http://www.uwbg211.org/
Family Medicine Medical Student Published!

Based on work completed last summer as part of the UK Division of Community Medicine Summer Research Fellowship (CM-SRF), third year UK medical student Erica Schuster has published a paper along with her advisor, Dr. Lars Peterson. We congratulate them on their article, which will appear in an upcoming volume of the journal *Family Medicine*, the official journal of the Society of Teachers of Family Medicine.

**ABSTRACT**

Resident and Residency Characteristics Associated with Self-Reported Preparedness for Population Health Management

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**Introduction:** Population health management (PHM) is an important function of primary care with potential to improve outcomes and decrease costs, but is among the most difficult strategies to implement in both practices and residency training. Our objective was to determine resident and residency program characteristics associated with graduates’ reported preparation to perform PHM.

**Methods:** We used data from the American Board of Family Medicine (ABFM) certification examination registration questionnaire in 2014 and 2015 and ABFM administrative data. Resident PHM preparedness was assessed via a single self-reported question. Bivariate analysis and logistic multilevel regression were performed to determine independent associations between characteristics and reported PHM preparedness. Odds ratios were converted to risk ratios given the high prevalence of the outcome.

**Results:** Our sample included 6,135 residents from 442 family medicine residencies. Sixty-nine percent (n=4,240) reported being extremely or moderately prepared to perform PHM. No residency program characteristics showed an association with reported PHM preparedness. Resident characteristics independently associated with reported preparedness included being an international medical graduate (IMG) (RR=1.21 [1.07 – 1.35]) and of Hispanic ethnicity. Reporting greater preparedness to use health information tools, lead quality improvement projects, and provide care in different settings were also associated with reported PHM preparedness.

**Discussion:** Similar to a study of practicing physicians, we found that IMGs are more likely to report preparedness to perform PHM. This suggests that elements of international medical education may better inculcate PHM principles, and that these elements could be used to produce physicians better prepared to manage population health.
PBRN certificate program: Dr. Karen Roper

A Certificate Program in Practice-Based Research Methods has been developed for the purpose of a new generation of PBRN investigators, and is offered through a collaboration of 8 AHRQ-funded Centers of Primary Care Practice Based Research & Learning. The program is now in its second year and included one of our own in the 2017-2018 cohort: Karen Roper, PhD, Associate Research Director for the Division of Community Medicine at UK was one of 54 (43 U.S, 11 Canada) accepted fellows, out of nearly double that many applicants. The program is experiencing tremendous growth and interest from PBRN researchers desiring additional training in concepts, skills, and methods for conducting practice-based research and betiding PBRNs.

Dr. Roper has been active in her fellowship activities since September, which has included participation in webinars and developing a PBRN study in collaboration with her mentor for the program, Dr. Roberto Cardarelli, as well UK DFCM faculty member Dr. Nena Thomas-Eapen. She is currently preparing the final product, a grant-ready Specific Aims section on her topic. Based on work that has been on-going with the Central Appalachia Inter-Professional Pain Education Collaborative, she proposed to develop a patient-provider communication tool for chronic pain patients. Specifically, she is working on an inter-active document that could be used during appointments to create a more informed, engaged, and bi-directional conversation between the patient and provider. Using participatory research for its development, Dr. Roper hopes to facilitate shared decision-making and greater self-care through development of this chronic pain plan resource.

Dr. Roper will present her project at the program’s culminating 2-day convocation of fellows and mentors that will immediately precede the NAPCRG PBRN Conference in Bethesda, MD in July 2017. Information on the program can be found at http://www.collaborativeohioinquirynetwork.com/pbrn-certificate-program.html

Use our free online resources to learn, and earn CME’s. Others have!

Healthcare providers and professionals are learning and earning a lot through our free online modules on Population Health Management and Chronic Pain Management! To date, here are the numbers:

Population Health Management: 2,676 downloads, and 19 CME’s requested
Chronic Pain Management: 244 downloads, and 627 CME’s requested
UK Division of Community Medicine Team:

Staff: Karen Roper, PhD; Linda Asher; Jennifer Schilling, MPH; Sarah Weatherford, MSc; Ashley Gibson, MS
Administrative Support: Madeline Slimack, Jackie King

Faculty: Roberto Cardarelli, DO, MHA, MPH; Mary Sheppard, MD; Carol Hustedde, PhD; James Keck, MD, MPH;
Get Engaged with KAN and the Division of Community Medicine

We often hear the question, “We are primary care, why should we be involved with 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 the medicine 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, and may even benefit you in your daily practice. **We welcome your ideas and engagement with the numerous resources and opportunities that we offer!**