



CM&R

Community Medicine & Research Newsletter

Fall 2016

Message from the Director

While most academic medical centers measure their research acumen by the number of NIH grants and publications in high-impact research journals, we also find assessing and reporting community value derived from our research to be just as important. It is through bi-directional collaborations that we are able to sustain academic-community partnerships through service, education, and research. We have an opportunity in research to make an economic and health impact through such partnerships. The Division of Community Medicine (DCM) recently analyzed the value-proposition impact of the work we have been doing since 2013. In this issue we report on the number of jobs we have created in the community, alignment with health priority areas identified by the community, and the reach we had on learners in Kentucky and beyond. The translation of research into practice and communities takes an average of over 10 years. However, in the DCM, we are placing our focus and energy to reduce this unacceptable translation gap in areas that mean the most to Kentuckians.

An important part of this approach is to engage a pipeline of future physician primary care and health service researchers. Our Summer Research Program Student, Doctor Schuster, is an exemplar of such a person as we highlight her work conducted with Dr. Lars Peterson. We encourage our members to submit thoughts and ideas as “real-world” application of research starts in the community!



Roberto Cardarelli, DO, MPH, FFAFP
Director, KAN
Professor and Chief of Community Medicine



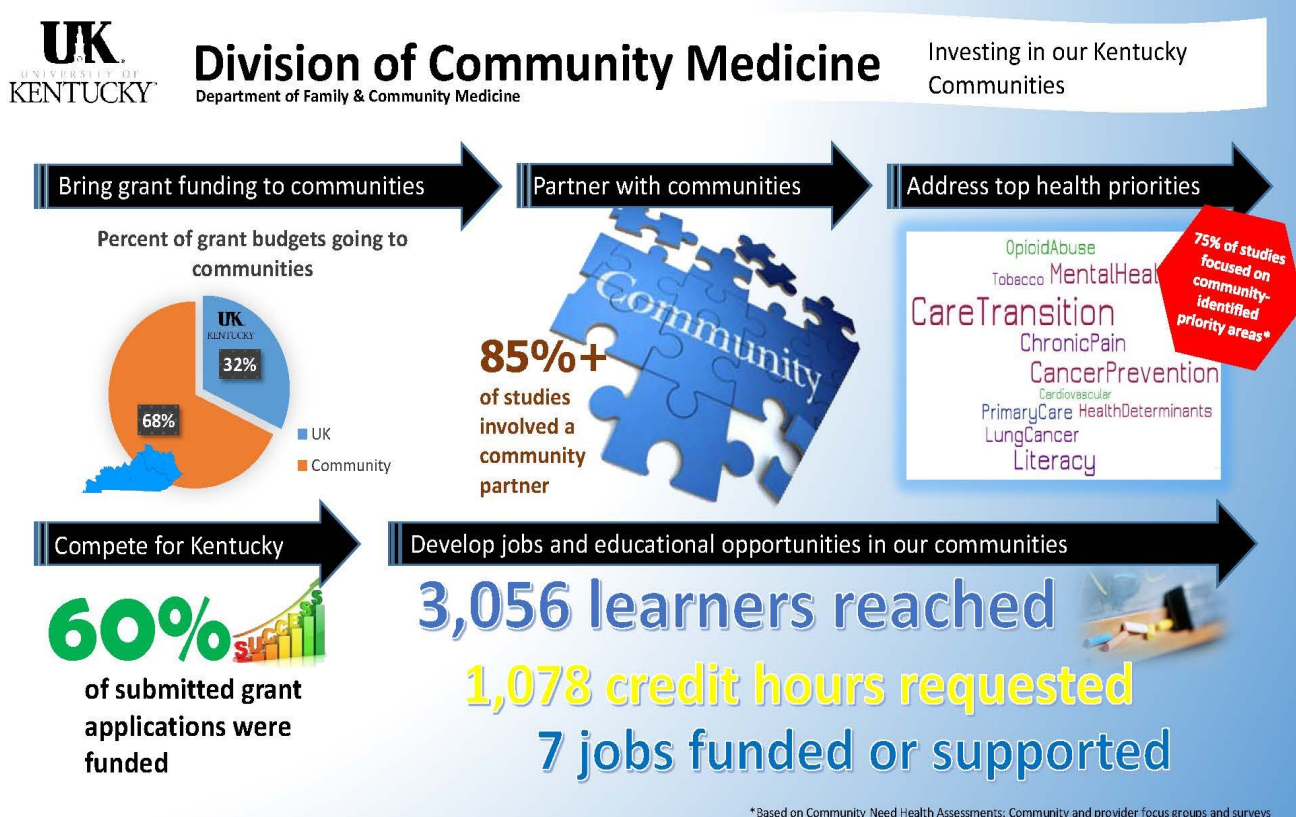
Fall in Kentucky

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Division of Community Medicine Invests in Kentucky Communities

The Division of Community Medicine (DCM) has been very active in making an impact for Kentucky! We are happy to report success in obtaining grant awards and bringing grant funds to Kentucky communities, addressing top health priorities in our area, and developing jobs and educational opportunities for the citizens and healthcare providers in our region. As shown by the infographic below, 68% of grant budgets that DCM has been awarded have gone to fund activities and jobs in the community, and 85% of DCM studies involved at least one community partner. The Division has received funding for 60% of the grant applications submitted, and 75% of those studies focused on community-identified priority areas. Many of our projects involve (or have a component which involves) creating, presenting, and disseminating resources which increase primary care providers' knowledge. Since 2013, over three thousand learners have been reached, and over one thousand continuing medical education hours have been requested from DCM-created resources or activities.



Division of Community Medicine Retreat Recap

The UK Division of Community Medicine had a working retreat in August 2016. Discussion at this retreat centered around the future direction of the Division, based on a recent Departmental and divisional SWOT (Strengths, Weaknesses, Opportunities, Threats) analyses. **Our niche lies in implementation science, and using sound quality improvement methodologies to address the top health and healthcare priorities in Kentucky.** Our team sought to invest and advance the areas of Divisional strengths and strategic opportunities. These specific areas are: **chronic pain, lung cancer screening and tobacco cessation, cardiovascular disorders, care transitions, health literacy, and medication adherence.**

KAN Advisory Board



From Top to Bottom:

Gerry Stover
David Bolt
David Greene, MD
Stephanie Moore, BHS, MPA
Brent Wright, MD, MMM
Marshall E. Prunty, MD

KAN Member Clinic Visits

This Fall, Jennifer, our KAN Coordinator, has been on the road visiting member clinics in north, south and southeastern Kentucky. The purpose of these brief visits with practice managers and/or practice providers is to touch base with members, to assess their interests and needs, and to share the latest [free resources](#) created for our members and colleagues. If you have not received a visit from Jennifer, expect to be contacted about scheduling one soon. Feel free to reach out to Jennifer to get your clinic on the schedule at: KAN@uky.edu.

Do you have a clinical or practice related question?

Do you have a question regarding clinical or health/ disease related issues? Or a question based on experiences in your medical practice? We want to hear from YOU about the issues you see and experience in your primary care practice. We may be able to help you find an answer, or perhaps even turn your question into a research project. Fill out this 5 question online survey [here](#) , or email KAN@uky.edu.

Idea Generator



Use this form to submit your questions regarding clinical or health/ disease related issues, or something you have experienced in your medical practice.

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| Last <small>* must provide value</small> | <input type="text"/> |
| Email <small>* must provide value</small> | <input type="text"/> |
| Phone Number | <input type="text"/> |
| Type of Question <small>* must provide value</small> | <input type="text"/> |
| Please share your question or idea here. <small>* must provide value</small> <div style="border: 1px solid black; height: 60px; width: 100%;"></div> | |
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The ***Terminate Lung Cancer (TLC)*** project (now complete) sought to increase lung cancer screening in Kentucky through a community engagement and outreach approach. The messages about lung cancer screening were derived through focus groups of individuals who met criteria to be candidates for lung cancer screening. The community outreach intervention consisted of offering providers information on screening guidelines, roundtable events, and dissemination of the [TLC website](#). Post card lung cancer screening messages were also distributed to primary care offices and health departments. The communities also received messaging about screening through newspaper and radio ads, particularly in two Eastern Kentucky intervention regions (Morehead and Hazard). Results show that rates of Low Dose CT (LDCT) increased significantly in the two intervention regions (more than doubling in the Morehead region, and increasing from 0, to over 10 per 100,000 in the Hazard region), however, there was no statistically significant changes of LDCT's in the control region (Pikeville). *The TLC project was made possible through a grant from University of Kentucky Markey Cancer Center and the Appalachian Translation Research Network/ Center for Clinical Translational Science and partners throughout Kentucky.*

The next step in our mission to reduce lung cancer burden in Kentucky is currently underway. ***Reducing the lung cancer burden in Northeast Kentucky through an academic/ community partnership: A Terminate Lung Cancer (TLC) Study*** will offer several educational opportunities. The first of these (The Lung Cancer Symposium) was held in September in Morehead, KY. In attendance were 68 healthcare professionals and 13 community members. Presentations included *The State of Lung Cancer and Tobacco Disorders, Lung Cancer Screening, Tobacco Cessation and State Policies, An Update on Tobacco Dependence Treatment in Clinical Setting and the Community, Shared Decision Making, and Treating Nicotine Dependence*. In addition to the educational component of this project, five St. Claire Regional Medical Center primary care clinics are participating in a tailored implementation approach to increase screening and tobacco cessation counseling. This project is made possible by funding from a *AAMC/ Donaghue Foundation Grant*.





[The Central Appalachia Inter-Professional Pain Education Collaborative \(CAIPEC\)](#) project is now complete. The overarching goal for the study was to improve the delivery of chronic pain management to Central Appalachia residents through an evidence-based and inter-professional approach. The program reached over 1,200 participants who accessed various activities in West Virginia and Kentucky that included 8 community round tables, 4 state conferences, and 8 webcasts modules. These activities resulted in approximately 1,000 requested hours of continuing education credit.

Chronic Pain Management Education:

Learners at the CAIPEC educational events included physicians, nurse practitioners, nurses, physician assistants, massage therapists, physical therapists, behavioral specialists and other health professionals. Participants were asked whether the activity that they participated in will impact their overall knowledge, clinical performance, and patient outcomes.

- 92.1% of learners agreed that the activity increased their knowledge.
- 86.4% of learners agreed that the activity will improve their performance in managing patients with chronic pain.
- 81.4% of learners agreed that the activity will help improve patient outcomes in their practice.



The CAIPEC website www.cecentral.com/caipec remains accessible and includes enduring materials and a quality improvement toolkit. The toolkit is a collection of resources and templates for clinics to adapt based on their specific needs. The toolkit aligns with the educational content of the seven modules of the CAIPEC chronic pain management program and functions as a “how-to” for providers.

Chronic Pain Practice Improvement Project

The implementation research program involved a quality improvement study incorporating 8 clinics and 20 healthcare providers across West Virginia and Eastern Kentucky and assessed management of chronic pain patients at baseline and 3 months after implementation of their chosen clinic processes to improve upon. The Kentucky Clinics included University of Kentucky Family Medicine, St. Claire Regional Medical Center Family Medicine, London Women's Care, and UK North Fork Valley Community Health Center. Based on approximately 700 chart reviews, there were statistically significant improvements in 10 process measures out of 16. These improvements included 91% increase in workflow implementation, 12.9% increase in urine drug testing, 10.7% improvement in controlled medication agreements, a significant increase in the use of adjuvant medications (11.8%), alternative therapies (8.5%), and other specialists (16.1%), and significant improvements in risk assessments (11.9%), mood disorder assessments (8.2%), pain level assessments (15%), and functional assessments (16.2%).

[To read the full CAIPEC Impact report, click here.](#)

2016 UK Community Medicine Summer Research Program



The UK Community Medicine Summer Research Program (CM-SRP) provides an 8-week summer research experience to rising 2nd-year medical students interested in summer research. The goal of the CM-SRP is to provide medical students the opportunity to participate in a research project and expose them to the research environment of an academic medical center and the activities of academic physicians and other faculty.

Erica Schuster was selected for this past (Summer 2016) internship, and worked with Dr. Lars Peterson to complete her project entitled *Resident and Residency Characteristics Associated with Preparedness for Population Health Management*. Erica will present a poster on her project at the upcoming North American Primary Care Research Group's Annual meeting, held in Colorado Springs this November. Read Schuster's Abstract below for a summary of her project:

Introduction: Population health management (PHM) is an important function of primary care with potential to improve outcomes and decrease healthcare costs. However, it is among the most difficult strategies to implement into both existing practices and residency training. Our objective was to determine resident and residency program characteristics associated with graduates' 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 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 residency programs. Sixty eight percent (n=4,240) of respondents reported being either extremely or moderately prepared to perform PHM. Characteristics independently associated with preparedness included being an international medical graduate (RR=1.38 [1.17 – 1.12]), being an international medical graduate from a commonwealth nation (RR=3.20 [2.20-4.67]), male sex (RR=1.17 [1.04-1.33]), over the age of 35 (RR=1.22 [1.05-1.04]), of Hispanic ethnicity, and having a greater preparedness to use health information tools. Residency size or rural location were not associated with PHM preparedness.

Discussion: Similar to a study of practicing physicians, we found that international medical graduates are more likely to be prepared to perform PHM. Our findings suggest that elements of international medical education better inculcates PHM principles. Identification of these elements could guide U.S. medical educators in producing physicians better prepared to manage population health.



UK Family & Community Medicine Resident Projects Spotlight:

Diabetes Management in Rural Kentucky: Improving Patient Care

Druen, Catrina; Ramey, Amanda

*Department of Family & Community Medicine,
University of Kentucky Rural (Morehead) Program
University of Kentucky, Lexington, KY*

BACKGROUND: Diabetes is a serious health condition impacting millions of people in the United States. It serves as a significant risk factor for the development of heart disease, peripheral vascular disease, kidney failure, and vision problems. In Rowan County, the prevalence of diabetes is 10%, higher than the national average.

PROJECT QUESTIONS: Can we improve the percentage of patients receiving eye and foot exams by implementing visual aids and educational lectures?

METHODS: We conducted chart reviews on 95 random diabetic patients in the St. Claire Regional Medical Center Family Medicine clinic and assessed baseline guideline measures including completed eye exams, foot exams. Flu vaccine, pneumonia vaccine, hemoglobin A1c levels, and if they were on an ACE-inhibitor and statin. After the initial results, we decided to work on improving the percentage of patients who get foot and eye exams yearly. We implemented patient education posters in all exam rooms and conducted an education session with all provider and nursing staff.

RESULTS: We plan to conduct chart reviews at the end of 6 months after the implementation of our education intervention. We anticipate an improvement in the percentage of patients with documented annual foot and eye exams.

CONCLUSION: Currently, the percentage of diabetic patients receiving eye and foot exams is suboptimal. As a result of educating our providers and nursing staff and placing education in the exam rooms, we anticipate an improvement in patient care outcomes. Diabetes is a major health concern for the people in our region. We are hoping to serve our patients better and ensure they are getting the best healthcare possible.

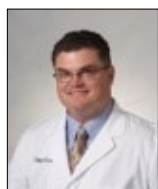


UK Division of Community Medicine Welcomes Dr. Keck!

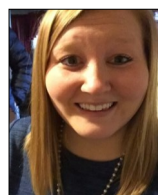
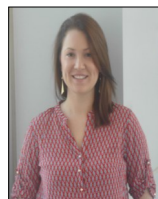
Dr. James Keck grew up in Minnesota and studied Philosophy and Biology before working as a bike messenger in Sydney, Australia. He attended medical school at the University of Minnesota where he completed an internship in Internal Medicine and Pediatrics followed by a Preventive Medicine Residency at Johns Hopkins University, which included time as a consultant with the WHO in Ecuador. He went on to investigate communicable diseases in Alaska as an Epidemic Intelligence Service Officer with the CDC. While there, Dr. Keck received the Department of Health and Human Services Innovation Award for his work on a new influenza surveillance system. From the Arctic he moved to sub-Saharan Africa where he was the Director of Monitoring and Evaluation for Partners in Health – Malawi and provided clinical care at their district hospital. He subsequently trained in Family Medicine in Boston. Dr. Keck has appointments in the Departments of Family & Community Medicine and Preventive Medicine & Environmental Health at the University of Kentucky. His population health interests center on the measurement and improvement of health care quality in under-resourced and global settings. Clinically Dr. Keck enjoys providing care for immigrants and emigrants (travel medicine), pediatrics, and tropical medicine.



UK Division of Community Medicine Team:



Faculty: Roberto Cardarelli, DO, MPH; Mary Sheppard, MD; James Keck, MD, MPH; Carol Hustedde, PhD



Staff: Karen Roper, PhD; Linda Asher; Jennifer Schilling, MPH; Sarah Weatherford, MSc; Ashley Gibson, MS

Administrative Support: Madeline Slimack, Jackie King

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!**

Community. Medicine. Research.

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Contact Us

Give us a call for more information about our program and research.

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