CHSR Analytics

Analytical Support Team

The CHSR Analytics team provides analytical support to stakeholders across UK to meet their health services research and operational data needs. This support includes data collection and management, extraction of data from clinical data management systems, survey development, program evaluation, study design, methodology, and statistical analysis such as descriptive statistics describing the population of interest and/or a multivariate analysis, etc. UK Researchers can fill out the Analytic Request Form via the CHSR website.

https://chsr.med.uky.edu/chsr-analytics

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Message from the Director

This issue of our newsletter reflects the Center’s continued success serving as a connector, catalyst, and creator for UK and UK HealthCare. Embarking on our second year, the Center for Health Services Research (CHSR) continues to grow with a recent focus on building our analytic capabilities. The CHSR Analytics team (pages 1 and 7) is featured in this issue of the newsletter and now connects numerous research faculty and staff at UK HealthCare with big data, particularly the enterprise data warehouse. We are especially proud of Dan Cleland’s active participation on the team selecting the vendor for UKHC’s new Enterprise Information Management and Analytics Suite. UKHC plans to invest $35 million in the effort to “support reporting and analytics focusing on care delivery, operations, regulatory, research, revenue cycle, and finance domains.” This transformational investment will allow us to leverage big data and connect with other health systems via robust data networks, a necessary step if we hope to deliver on the promise of population health management.

The growth of the Office for Value & Innovation in Healthcare Delivery (OVIHD), a catalytic neighbor in our offices, includes Patient Safety, Performance Improvement and Infection Prevention and Control. All three actively engage in projects across the entire health system ranging from outpatient to inpatient, and from the emergency department to the ICUs. OVIHD serves as the application arm of the CHSR working directly with our analytics team. This strong connection will certainly catalyze improvements in care delivery and help us create a culture of performance improvement focused on delivering value. Support for projects in the UK OptimalCare portfolio (e.g., glycemic control) exemplifies this effort. The analytics team also is helping with infection control data reporting and evaluating patient experience data.

We continue our collaborative efforts both locally and externally. In just the past few months we partnered with Westat, possibly the largest survey company in health care, and Dr. Cardarelli in UK’s Department of Family Medicine to pursue a contract with the Agency for Research & Healthcare Quality (AHRQ). Though not successful, it builds on prior efforts. Westat is an integral member of Project ACHIEVE (https://achieve.med.uky.edu/) and Dr. Cardarelli is about to resubmit a proposal to PCORI to evaluate Transitional Care Management in his primary care practice-based research network.

New collaborations evolved as we built the team for the proposed Hospitalist Engagement and Leadership in Primary Palliative Care (HELP-PC) submitted to PCORI on July 31, 2015. HELP-PC aims to establish hospitalist-led team-based primary palliative care practice in 20 hospitals across the U.S. This would create a new approach to delivering the evidence-based palliative care that hospitalized patients deserve. In this effort, the CHSR connected UK research faculty to patients, caregivers, and numerous elite institutions and organizations including: Northwestern University, Massachusetts General Hospital, The Hastings Center, Johns Hopkins, American Society of Clinical Oncology, and the Society of Hospital Medicine. We look forward to hearing a response in December. Regardless of the outcome, we know that we connected to talented people who will work with us in the future.

Finally, our external advisory board honored us with a visit to Lexington, Kentucky this past summer (see story on page 4). Conversations with our leadership—President Eli Capilouto, EVP for Healthcare Mike Karpf and Provost Tim Tracy—provided essential guidance as we continue to develop and build the CHSR. Next step will be formal strategic planning.

On a separate note, our newsletter needs a name! Please submit suggestions to chsr@uky.edu and the winner will receive a Starbucks gift card.

connect • catalyze • create
Staff Updates

Introducing...

Michelle Arnold, MS  
*Research Program Manager*  
Masters in Clinical Research Organization & Management  
*Area of Interest:* Clinical Research

Andy Kelly, MS  
*Data Research Analyst*  
Masters in Applied Statistics  
Masters in Rural Sociology & Demography  
*Area of Interest:* Exploratory data analysis for research

Megan McIntosh, BA  
*Administrative Support I*  
Bachelor of Arts

Zihan Zhu, MS  
*Data Management Analyst*  
Masters in Information Technology & Management  
*Area of Interest:* Data analysis & management
**CHSR Activities**

**External Advisory Board Meeting**

The first in-person meeting of the External Advisory Board (EAB) of the Center for Health Services Research (CHSR) was held at the Gratz Park Inn and Keeneland. The initial evening meeting featured welcome statements by UK’s President Eli Capilouto, Executive VP for HealthCare Mike Karpf and Provost Tim Tracy. All expressed their delight about the EAB’s expertise and eagerness to learn from them. The next day’s meeting at Keeneland generated numerous recommendations and suggestions from the EAB to advance the mission and vision of the Center. The visit was also an excellent opportunity for the center’s Internal Advisory Board (IAB) and EAB to meet in-person to exchange ideas and discuss center progress.

Mark Williams, MD, Director of the CHSR, provided the EAB with updates on the activities and progress of the center since January 2014. This included information on center development (including center expertise and capacity building) and activities related to research, education and training, healthcare transformation, and engagement/collaboration. CHSR leadership also asked the EAB for guidance on setting priorities and identifying key signature areas of focus. Overall, the EAB was pleased with the center’s progress; achievements and milestones reached. The EAB expressed enthusiasm about the future direction of the center and offered suggestions and recommendations to help guide the overall direction and future endeavors of the center.

**News from the Center**

**What We are Reading**

The Center for Health Services Research will now provide synopses of recent cutting edge studies in health services research. We have created this monthly series—What We Are Reading—to acquaint CHSR members and affiliates with highlights and key messages from recent studies. Find out what we’re currently reading at: https://chsr.med.uky.edu/chsr-what-were-reading-now
New CHSR Members

Ion “Adi” Mitrache  
*Assistant Research Professor*  
Director of Clinical and Research Analytics  
Institute for Pharmaceutical Outcomes and Policy (IPOP)  
College of Pharmacy

Matthew L. Bush  
*Assistant Professor*  
Department of Otolaryngology – Head and Neck Surgery  
University of Kentucky Medical Center

H. Dan O’Hair  
*Dean & Professor*  
College of Communication and Information

Join Today!

Obtaining Membership

Become a member of the CHSR! Membership in the Center is free and applications are available online at [http://chsr.med.uky.edu/chsr-our-members](http://chsr.med.uky.edu/chsr-our-members). Members join a broad network of established researchers and enjoy a number of valuable benefits. Faculty members from any college or department, as well as clinical or community faculty from affiliated health systems who are engaged or interested in health services research are encouraged to apply.

As a UK-CHSR member, you will receive many benefits, including:
- Professional Development – seminars, workshops, training programs.
- A broad network of researchers, clinicians, educators, and industrial partners.
- Mentor/Mentee opportunities.
- Access to resources and research support services.
- Quarterly Newsletter – with information on CHSR activities, new HSR publications, and news of the profession.

The following individuals are eligible for membership in the UK Center for Health Services Research:
- UK faculty from any college or department who are engaged in peer-reviewed, health services research (HSR).
- Clinical faculty who engage in HSR or provide leadership in developing translational, health care access or community based outreach research studies designed to advance the understanding of HSR.
- Community faculty or faculty at Norton Healthcare, Appalachian Regional Hospital or affiliate hospitals who express interest in the CHSR research activities.
Project ACHIEVE was funded by the Patient-Centered Outcomes Research Institute (PCORI) to identify transitional care components that matter most to patients and caregivers in addition to improving health outcomes and are of high value to patients and their caregivers. PCORI officials recently visited the CHSR to conduct an annual project management oversight visit. The visitors included PCORI’s Improving Healthcare Systems Program Director—Steven Clauser, PhD, MPA; Penny Mohr, MA, Senior Program Officer; Lauren Azur, MHA, Senior Program Associate; and Scott Yoo, Contacts Administrator.

The Project ACHIEVE team, led by the Project PI Dr. Mark Williams and co-investigator Dr. Jing Li, provided the PCORI team with information regarding overall project management, the process for integration and decision-making across all partner sites, and project progress. In particular, Drs. Glen Mays, Arnold Stromberg, Jing Li and Heather Bush discussed the data management and analysis plans of evaluating the complex transitional care interventions while Dr. Allison Scott Gordon reviewed the lessons learned and findings from facilitating the focus groups and key informant interviews and their impact on the second phase of study.

The PCORI team also met with the Project ACHIEVE UK Coordinating Center team, which includes Robert Duff (project manager), Emily Clear, Hannah Keeler, Dan Cleland, Jane Guo and Zihan Zhu. The PCORI team was pleased with the project progress and commended CHSR for demonstrating a cohesive project management system, and deemed the visit as engaging and beneficial for understanding the complexity of the project and potential challenges to implementation.

Drs. Mark Williams, Jing Li and Glen Mays presented Project ACHIEVE as an exemplar case study of the intersection of comparative effectiveness research of health systems with implementation science and PCORI’s mission.

PCORI contracted with Westat to create and facilitate a Transitional Care Evidence-to-Action Network (TC-E2AN)—a learning network that brings together thirteen PCORI transitional care awardees, including the CHSR (i.e., Project ACHIEVE) to share knowledge and support in the areas of mutual interests. The overarching goal of the TC-E2AN is to accelerate care transition research processes and turn evidence into action across the care delivery system. TC-E2AN participants will share knowledge on research methods, intervention design and implementation methods, dissemination of evidence, and sustainability strategies. Dr. Mark Williams presented an overview of Project ACHIEVE during the TC-E2AN session at PCORI’s 1st Annual Meeting.
Since February the CHSR Analytics team has been assisting UK HealthCare in the RFP proposal review and evaluation of the upgraded enterprise data warehouse (EDW). The EDW is a database that pulls together needed data from many internal and external data sources and combines the data so robust reporting and analysis can be done. A current capabilities and future state assessment was conducted initially to identify gaps in information services needed to improve the value of care. The process included analyzing the technology, organizational structures, and governance of UK HealthCare’s data.

Proposals were accepted from several vendors covering every aspect of the technology upgrade, from hardware to databases to dashboard software. The selection team, which includes active membership by Dan Cleland of CHSR’s analytic team, is expected to finish the decision and purchasing process this Fall and by next summer have the first dashboards and reports deployed.

The Analytics team has been working with Infection Prevention and Control at OVIHD to identify ways to streamline reporting of Hospital Acquired Infections to the CDC’s National Healthcare Safety Network (NHSN). Currently, the reporting process is cumbersome due to the number of different data systems needed to gather information to meet the NHSN’s reporting requirements. The long-term goal of this project is to leverage electronic medical records data in the Enterprise Data Warehouse to reduce the amount of time it takes to create NHSN reports.

The CHSR website now features an Analytics Support Request Form.
The eLearning Innovation Initiative (eLII) grant funded hybrid course is well underway. Faculty members, Drs. Sarah Wackerbarth and Mark Williams along with the Center’s Instructional Designer Jason Souders, spent the summer finalizing the syllabus and creating engaging eLearning modules to present useful information and learning tools in dynamic ways. The course will utilize ongoing projects from the Office of Value and Innovation in Healthcare Delivery (OVIHD) to immerse students in real-world, industry change processes. Four teams will focus on projects to improve care delivery in multiple settings including the Markey Cancer Center, Kentucky Children’s Hospital, and UK Chandler Hospital.

Awarded in March of 2015, the $25,000 eLII grant enabled the Center for Health Services Research, in collaboration with the College of Public Health, to offer a special topics course to Graduate Students and Professionals alike. The course entitled The Role of Teamwork In Change, will help students develop the skills necessary to successfully facilitate teams to achieve sustainable change in healthcare systems. The class began on August 26th and runs throughout the Fall semester.

**Practice to Scholarship**

SWARMing is a novel rapid approach to RCAs—developed by UKHC—with the goal of establishing a consistent approach with centralized support to investigate adverse or undesirable events. This process fosters a culture that values safe behaviors and facilitates learning from mistakes to drive system changes in an effort to ultimately prevent patient harm and save lives. SWARMing provides consistent evidence of the hospital’s commitment to transparency and to a non-punitive, systems-based approach to quality and safety. Collaborating with colleagues at UKHC, Dr. Jing Li led the development and submission of a manuscript describing the SWARM process. This manuscript will be published in The Joint Commission Journal on Quality and Patient Safety and will highlight UKHC’s leadership in patient safety nationally.

**The Office for Value Innovation in Healthcare Delivery (OVIHD)**

The Office For Value Innovation in Healthcare Delivery (OVIHD) was established with the aim of continuously improving the quality, safety, and efficiency of patient care and transforming UK HealthCare into a learning health system. As the translational arm of the CHSR, OVIHD will facilitate the implementation of evidence-based programs and evidence-informed approaches to deliver value-driven care to the population served by UK HealthCare (UKHC). OVIHD also aims to generate more practice-based evidences. CHSR director Mark Williams, MD, is co-director for OVIHD and serves as UKHC’s Chief Transformation & Learning Officer (CTLO) while CHSR administrative director, Jing Li, MD, MS, serves as deputy director for OVIHD. OVIHD is also co-directed by UKHC’s Chief Medical Officer Bernard Boulanger, MD, MBA.
**Proposal Development and Collaboration**

**HELP-PC**
CHSR recently led the development and submission of a multi-institution collaborative proposal entitled Hospitalist Engagement and Leadership in Primary Palliative Care (HELP-PC) in response to the Patient-Centered Outcome Research Institute’s (PCORI) Pragmatic Trials Funding Opportunity. The overarching goal of Project HELP-PC is to evaluate the impact of properly trained hospitalists in providing patient-centered primary palliative care for hospitalized patients with serious, complex, and potentially life-threatening or life-limiting medical conditions. HELP-PC collaborators include Jamie Von Roenn, MD of the American Society of Clinical Oncologists; Nancy Berlinger, PhD of The Hastings Center; Randi Belisomo of Life Matters Media; Amy Berman of the John A. Hartford Foundation; Carol Levine of the United Hospital Fund; Martin Hatlie, JD of Project Patient Care; Jason Morrow, MD, PhD of the University of Texas Health Science Center; Eric Howell, MD of Johns Hopkins University; Josh Hauser, MD and Gordon Wood, MD of Northwestern University; and Jeff Greenwald, MD of Massachusetts General Hospital. If funded, this proposed $11 million project will be implemented in twenty hospitals across the nation.

**Xerox**
CHSR was invited by Xerox to participate in a proposal in response to the Commonwealth of Kentucky Cabinet for Health and Family Services (CHFS) For Medicaid Enterprise Management System and Fiscal Agent Replacement program. If funded, CHSR will lead a transformation unit that will incorporate evidence-based quality improvement (QI) strategies and health analytics into the proposed healthcare transformation agenda.

**Westat**
CHSR was invited by Westat, a research consulting firm, to collaborate on a proposal submitted to the Agency for Healthcare Research and Quality (AHRQ) to develop a new model for delivering care to recently discharged hospital patients in primary care clinics. This invitation resulted from the CHSR’s current partnership with Westat on the PCORI funded Project ACHIEVE. Although not funded, the collaboration was an avenue for the CHSR to demonstrate its commitment to “connect, catalyze and create” research opportunities in health services research at UK. CHSR facilitated linkages between Westat and UK’s Department of Family Medicine (Dr. Roberto Carderelli) and the UKHC Office for Value and Innovation in Healthcare Delivery (OVIHD) Department of Performance Improvement (Audrey Yates).

**Pedi-BOOST**
Facilitated by Dr. Mark Williams, UKHC Kentucky Children’s Hospital became the first PediBOOST pilot site in the nation! PediBOOST is the pediatric adaptation of Project BOOST, an evidence-based care transition model to optimize the hospital discharge process, promote patient-centered care and provide resources to engage family caregivers in their children’s medical decision-making. The overall goal is to improve patient- and family-centered outcomes. The Pedi-BOOST Toolkit combines Project BOOST’s proven best processes for discharge care transitions with unique pediatric-specific elements. The UKHC PediBOOST team is meeting and planning project implementation along with an official “Kick Off” this Fall.
Upcoming Seminars & Lectures

October 20, 2015
HG 611
12:00pm-1:00pm
“Promoting Healthy Homes in the Primary Care Setting”
Ellen Hahn, PhD, RN
Professor
Marcia A. Dake Professorship
College of Nursing, University of Kentucky

December 15, 2015
HG 611
12:00pm-1:00pm
“Improving Dental Care Across Kentucky: The Role of Health Services Research”
Jeffery Ebersole, PhD
Alvin L. Morris Professor of Oral Health Research, College of Dentistry
University of Kentucky

Recent Events

Seminars

June 23, 2015
Jeff Talbert, PhD
Director of the College of Pharmacy’s Institute for Pharmaceutical Outcomes and Policy (IPOP)
“Prescription Drug Abuse”

August 18, 2015
Glen Mays, PhD
F. Douglas Scutchfield Endowed Professor in Health Services and Systems Research
Department of Health Management Policy
University of Kentucky
“Estimating Patient-Centered and Community-Centered Treatment Effects: Examples From Medical Care and Public Health.”

September 22, 2015
Terry Davis, PhD
Professor of Medicine and Pediatrics
Louisiana State University at Shreveport
Terry Davis is a pioneer in the field of Health Literacy, and has led an interdisciplinary team investigating the impact of patient literacy on health and healthcare.

Work-In-Progress Sessions

CHSR continues to hold its monthly Work-in-Progress sessions, a supportive and interdisciplinary opportunity to receive constructive feedback on their ideas, potential studies or grant proposals.

July
Amanda Fallin, Assistant Professor in the College of Nursing, presented on smoking cessation for pregnant women with substance use disorders.

August
Adolfo Pena Salazar, Assistant Professor in the College of Medicine, Hospitalist in UK HealthCare presented on the development and validation of a survey to assess barriers to hospital discharge and factors influencing prolonged length of stay.

September
Hefei Wen, Assistant Professor in the College of Public Health presented on the effect of insurance expansion by the Affordable Care Act (i.e., ObamaCare) for low-income adults on health insurance coverage and access to care among adults with behavioral health conditions.
The Center for Health Services Research (CHSR) and the Office for Value Innovation in Healthcare Delivery (OVIHD) collaborate and work next door. CHSR and OVIHD staff work hard and need to unwind occasionally to recharge those batteries. The two organizations found some time to enjoy “America’s Pastime” and caught a local Lexington Legends baseball. A very humid and rainy beginning to the game, but the weather eventually cooled off later in an early match up against the mighty Savannah Sand Gnats on a July evening.

The Center for Health Services Research and Office for Value & Innovation in Healthcare Delivery staff and their families participated in an end-of-summer party on September 11th.
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