A Letter from the Director

Reviewing the accomplishments of the Center for Health Services Research (CHSR) documented in this third Annual Report humbles me. Since its establishment in 2014, CHSR’s collaborative growth has progressed far faster than my most optimistic projections. Reflecting on the achievements triggers reminiscing on my personal path, and the values and mission that drive my determination. In a reflection on the last page of this annual report, I describe transformative and defining events early in my life that guide me. My father reinforced to me through words and actions, “learn all you can and use it to help others.” Traveling from these experiences to facilitating the accomplishments of my colleagues today, I am humbled. The achievements of the University of Kentucky’s CHSR reflect the integrated efforts of a remarkable team of talented and committed faculty and staff aiming to improve the health and care delivery for patients at UK HealthCare (UKHC) and the citizens of the Commonwealth of Kentucky.

We have grown from 2 to 40 people in the Center. In less than three years the Center’s team secured more than $20 million in awards including funding from the National Institutes for Health (NIH), the Centers for Medicare & Medicaid Services (CMS), the Agency for Healthcare Research & Quality (AHRQ), and the Patient Centered Outcomes Research Institute (PCORI). Distinct, integrated, and collaborative teams evolved with a focus on expertise in quality improvement and education (Office for Value & Innovation in Healthcare Delivery—OVIHD), data analytics (Data, Analytics and Statistical Core—DASC) and research (faculty and staff). Their endeavors and accomplishments are delineated in this report.

Within the pages of this 2017 Annual Report of the Center for Health Services Research, you can read about the remarkable accomplishments of our faculty and staff. We are conducting groundbreaking research demonstrated by carrying out the largest observational study of home care transitions in the U.S.; by testing an innovative chronic condition care model (ICAN) considering the relationship between the patient’s life circumstances, health care goals, and their capacity advance their health situation; and by conducting and evaluating novel interprofessional team-based bedside rounds (ITIM) incorporating a patient-centered plan of care.

Supporting the College of Medicine Dean DiPaola’s vision for expanding implementation science efforts at UK, we undertook focused efforts to address the disconnection and gap between research discoveries and practices. With the launch of the Value of Innovation to Implementation Program (VI2P), we strive to make UKHC and affiliates a “living laboratory” to adopt, adapt, and implement new knowledge and evidence-based practices. Our eventual goal is to foster a learning network of implementation researchers and practitioners at UK, and to develop strategies to build internal dissemination and implementation capacity including infrastructure for the requisite work (e.g. methods, technical support, and coordinating capacities), information networks, and workforce.

Earlier this year, we received an Accountable Health Communities award from CMS. This $4.5 million contract will allow us to initiate the building of an infrastructure across Appalachia and in Louisville to screen patients for social needs and connect them with community services. The combination of helping to serve the needs of disadvantaged patients while simultaneously conducting implementation science research to figure out how best to identify social needs and connect with community resources exemplifies our mission. It also represents an example of the “coproduction of health care” recently described and promulgated at Cincinnati Children’s Medical Center.1 This approach partners with patients to improve health care and epitomizes the “coproduction of health care” recently described and promulgated at Cincinnati Children’s Medical Center. This approach partners with patients to improve health care and epitomizes the “coproduction of health care” recently described and promulgated at Cincinnati Children’s Medical Center.

The Center’s research projects represent just a portion of CHSR’s efforts. We are collaborating with faculty across the University and people all over Kentucky. One example is the new hosting of Health Literacy Kentucky within the Center. All these efforts exemplify why the Center’s dedicated team passionately pursues our mission of applying research to optimize care© while serving the University for Kentucky. It’s humbling and an honor to be a member of this extraordinary team.

Mark Williams

Mark V. Williams, MD, FACP, MHM
Professor & Vice Chair, Department of Internal Medicine
Professor of Health Policy and Management
Director, Center for Health Services Research
University of Kentucky

The Center for Health Services Research (CHSR) advances scholarship, education, and transformative health care delivery initiatives that bridge health care services and population health to impact patients in both clinical and community settings across Kentucky and beyond. The 2016 - 2017 Annual Report details CHSR focal activities for Kentucky, including stakeholder and community engagement to grow research and improve holistic care for patients adversely impacted by social determinants of health across the Commonwealth, and the establishment of innovative collaborations and programs to facilitate translational research for health systems and communities across the state.

The Annual Report documents:

- Initiation of the Kentucky Consortium for Accountable Health Communities (KC-AHC), a $4.5 million project serving vulnerable patients across the Commonwealth
- Translational Research and Capacity Building through tracking and Evaluation for the UK Center for Clinical and Translational Science (CCTS); and by fostering implementation and dissemination of evidence based practices into health care delivery through the Value of Innovation to Implementation Program (VI2P)
- Establishment of an institutional home and collaborative partnership with Health Literacy Kentucky (HLK)
- Commitment to the Gill Junior Researchers Program for disadvantaged high school students in the Lexington area

Vision

Become a national leader in health services research focusing on interprofessional team-based practice, education, and research to advance the science of health and health care delivery.

Mission

Applying Research to Optimize Care®
# Table of Contents

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>A Letter from the Director</td>
</tr>
<tr>
<td>02</td>
<td>UK CHSR Vision &amp; Mission</td>
</tr>
<tr>
<td>04</td>
<td>Center Development</td>
</tr>
<tr>
<td>24</td>
<td>Advancing Health Services Research &amp; Scholarship</td>
</tr>
<tr>
<td>26</td>
<td>Data, Analytics, &amp; Statistical Core</td>
</tr>
<tr>
<td>28</td>
<td>The Next Generation</td>
</tr>
<tr>
<td>30</td>
<td>Education &amp; Training</td>
</tr>
<tr>
<td>34</td>
<td>Noteworthy Accomplishments</td>
</tr>
<tr>
<td>36</td>
<td>Project ACHIEVE</td>
</tr>
<tr>
<td>38</td>
<td>MARQUIS-2</td>
</tr>
<tr>
<td>39</td>
<td>Collaboration with Mayo Clinic Study</td>
</tr>
<tr>
<td>40</td>
<td>Center for Clinical &amp; Translational Science</td>
</tr>
<tr>
<td>42</td>
<td>Kentucky Consortium for Accountable Health Communities</td>
</tr>
<tr>
<td>44</td>
<td>Health Care Transformation</td>
</tr>
<tr>
<td>46</td>
<td>Faculty Development</td>
</tr>
<tr>
<td>52</td>
<td>CHSR Led Proposals</td>
</tr>
<tr>
<td>54</td>
<td>Collaborative Proposals</td>
</tr>
<tr>
<td>56</td>
<td>Appendices</td>
</tr>
<tr>
<td>59</td>
<td>A Personal Note on Being Humbled</td>
</tr>
</tbody>
</table>
Center Development

Our strategic plan guided the continued evolution, direction, and prioritization of CHSR initiatives during 2016-2017. CHSR broadened its capacity to impact underserved patients across the Commonwealth by recruiting research-active faculty members with specific expertise in social determinants of health and health disparities, and growing staff with diverse skill sets and competencies to support research and practice in innovative health care delivery models. Inter-institutional and inter-disciplinary collaborations were fostered by CHSR through innovative grant funding mechanisms and infrastructure supports to advance dissemination and implementation of evidence and best practices to clinical and community settings.

2016 - 2017 Strategic Plan

CHSR is an active contributor to the University for Kentucky’s focused efforts to become a national model for a thriving public, residential, research-intensive campus and support UK HealthCare to serve the health care needs of Kentucky and beyond. CHSR’s five year strategic plan closely aligns with UK’s vision. The plan serves as a guidepost to direct acquisition and investment of resources in faculty recruitment, grant development funding, and other mechanisms to promote health services research at UK and to enhance the quality and value of health care delivered by a well-integrated health system.

Our strategic plan was developed with critical input from diverse stakeholders, including our External Advisory Board (EAB), Internal Advisory Board (IAB), and Steering Committee (SC). The CHSR IAB and SC are composed of College Deans, multi-disciplinary faculty, and leaders from UK HealthCare. As a living document, the strategic plan organizes a management approach that is both purposeful and tactical, guides long term direction for CHSR leadership and members, and focuses on alignment and coordination with UK and UK HealthCare.

The pages that follow detail our efforts and progress achieved during 2016-2017 on the overarching strategic goals of the CHSR:

· Advance UK Health Services Research and the Science of Health Care Delivery

· Catalyze the Transformation of UK HealthCare into a Learning Health System

· Create and Enhance Health Services and Value Care Education and Training

· Enhance the Center’s Capacity to Achieve its Mission by Ensuring Adequate Resources and Operational Effectiveness and Efficiency
Strategic Plan Accomplishments for FY17

- **ADVANCE HSR & HEALTH CARE DELIVERY**: 93%
- **CATALYZE UK HEALTHCARE**: 100%
- **HEALTH SERVICES/CARE EDUCATION & TRAINING**: 100%
- **ENHANCE CENTER’S CAPACITY**: 73%
Advance HSR & Health Care Delivery

Undertake, facilitate, and coordinate inter-professional collaborative research aimed at improving population health through delivering high value health care and community health, and provide leadership in the science of health care delivery and guidance across the University of Kentucky while engaging faculty and staff from the relevant Colleges.

Research

Grow Extramurally Funded Research through Collaborative Efforts

- **01** Submit $\geq 2$ peer-reviewed, nationally competitive research applications per year to NIH, AHRQ, HRSA, PCORI, or CMMI
- **02** With guidance from senior faculty mentors, $\geq 1$ Assistant Professors in the Center will submit a career award application to NIH or AHRQ within 3 years
- **03** $\geq 50\%$ of full-time regular or research faculty members will receive nationally competitive research as a Co-Investigator within 3 years; $\geq 40\%$ of faculty members will receive peer-reviewed, nationally competitive research funding as PI within 5 years

Future Objectives

- **04** Establish partnerships with peer centers at two other institutes by 2019*

*20% complete
**Faculty**

Increase the Center’s Output of Peer-Reviewed Articles, Presentations, and Briefs

01 Each full time faculty will publish ≥ 3 peer-reviewed manuscripts per year; ≥ 1 of the published articles will be as 1st or corresponding author

02 Each faculty will give 2 presentations per year at regional and national meetings

**Capacity**

Expand the Center’s Research Capacity, Expertise, and Output and Serve as a Connector

01 Increase collaborations with the 6 health colleges at UK and others (e.g., College of Arts and Sciences Departments of Sociology and Psychology, Communication and Information, Gatton College of Business, College of Engineering, College of Education, etc.) to develop research ideas/projects and grant submissions. Collaborate on ≥ 1 proposal submission for external funding per year

02 Host monthly Health Services Research (HSR) seminars and promote campus and external collaborations

03 Collaborate with ≥ 1 external partner on research project or proposal submission per year

**Future Objectives**

04 Utilize Work-in-Progress (WIP) sessions to enable faculty communication and collaboration. Increase the frequency of WIP sessions to 2 per month by 2020*

*80% complete
Catalyze UK HealthCare

Align with UK HealthCare’s (UKHC) strategic plan related to providing patient-centered care, growth in complex care, strengthening partnership networks, and value-based care and payment. Provide essential knowledge, skills, and resources needed for UKHC to become a learning health system as defined by the Institute of Medicine and provide guidance to health care teams to optimize the value of care for patients by leveraging expertise in information technology, analytics, implementation science, survey methodology, decision making, and quality improvement.

Dissemination

Enhance Health through the Translation and Dissemination of Evidence-Based Research and Practices, and Translate Quality Improvement Experiences into Scholarship

01 Initiate ≥ 1 evidence-based practice implementations at UKHC and affiliated organizations per year
02 Connect UKHC and affiliated organizations to regional or national translational and implementation projects
03 Translate ≥ 1 UKHC quality improvement project(s) into a peer-reviewed publication per year
Operations

Support Operations, Process Improvement (PI), and Implementation Research Projects within UKHC and Regionally

01 Initiate and lead ≥3 new improvement projects per year through the support of and collaboration with the Office for Value and Innovation in Healthcare Delivery (OVIHD)
02 Provide expert support and facilitate ≥8 improvement projects for units and service lines within UKHC per year. Assist others seeking to undertake quality improvement (QI) and PI within UKHC
03 Provide QI/PI education and training to develop sustained PI capability and support infrastructure at UKHC

Future Objectives

04 Secure funds from UKHC to continue support for OVIHD and host an annual symposium on contemporary health care delivery issues that involves participation by faculty, community stakeholders, professional associations, regional health systems, and representatives from state government by 2020*

*20% complete
Health Services/Care Education & Training

Enhance the delivery of rigorous and cutting-edge academic and professional training that prepares current and future health services researchers to be leaders in the field.

Education

Contribute to Health Services Research (HSR) Degree and/or Certificate Programs at the University of Kentucky

01 Grow active e-learning and/or hybrid HSR courses supported by the Center
02 Center's faculty give ≥ 2 guest lectures per year to relevant Master and/or PhD program courses offered by health and affiliated colleges
03 Further develop relationships with local and regional health systems to provide internships and practicum experiences on applied research

Future Objectives

04 Collaborate in the development of a Health Services and Outcomes Master's Degree Program at UK
Communication

Communicate Latest HSR Developments

01 Communicate with our stakeholders on recent publications that are relevant to health services researchers and health policymakers
02 Evaluate social media strategies for optimization
03 Leverage information and communication technologies (CTs) for communicating HSR accomplishments

Training

Enhance UK HealthCare Online Workplace Training Offerings

01 Expand and refine orientation e-learning programs
02 Develop ≥ 2 web-based training offerings per year for clinicians, nurses, and other frontline staff

Visibility (Future Goal)

Develop Open-Source HSR Educational Tools, Disseminate Information, and Enhance the Visibility of the Center

01 Develop a resources section on the Center’s website to support HSR professionals seeking direction in improving health services by 2019*
02 Develop podcast series on Center’s activities by 2019

*10% complete
Enhance the Center’s Capacity

Grow and develop the expertise needed for the Center to become a national leader in Health Services Research and for UK HealthCare to become a learning health system.

Feedback

Regularly Seek Feedback from Stakeholders to Guide the Direction and Communication of the Center

01 Utilize the Center’s Steering Committee, Internal Advisory Board, and External Advisory Board to elicit feedback and guidance
02 Provide a feedback survey to DASC Customers
03 Engage staff & faculty in an annual retreat to gain feedback on work environment and progress of the Center
04 Publish an annual report to be disseminated to stakeholders
**Infrastructure**

Grow Research and Quality Improvement Infrastructure

- 01 Add technical capabilities for data intake, management, and analysis
- 02 Add the capability to perform de-identification of datasets by HIPAA expert determination methodology
- 03 Provide multimedia support for projects within UK and UKHC

![Progress Bar](image)

- Objective 01: 233% complete
- Objective 02: 50% complete
- Objective 03: 25% complete

**Development**

Enable Staff Professional Development

- 01 Enable each staff member’s development by supporting attendance at 1 conference, seminar, or other educational opportunity per year
- 02 Generate annual professional development plan for each staff
  - A Offer at least 2 professional development trainings/workshops
  - B Require each staff member to attend at least 1 individual professional development training related to their position

![Progress Bar](image)

- Objective 01: 100% complete
- Objective 02: 138% complete

*Objective 2A: 250% complete. Objective 2B: 26% complete*
**Faculty**

Ensure the Center Has Sufficient Faculty Depth and Breadth to Support and Conduct High Quality Research

Future Objectives

  01  Create an endowed faculty position at the Center by 2017
  02  Recruit 1 faculty member with expertise in qualitative research methods to better enable the Center to successfully compete for mixed-methods grants from PCORI, NIH, and AHRQ within the next 3 years*
  03  Recruit 1 faculty member with expertise in organizational studies or implementation science to further enable the Center to successfully compete for implementation science awards from PCORI, AHRQ, and NIH within the next 3 years
  04  Recruit 1 faculty member with expertise in health care finance and health delivery model evaluation to further enable the Center to successfully compete for grants from the state, HRSA, and CMMI within the next 3 years
  05  Have ≥ 1 adjunct faculty at each health college by 2020**

*100% complete
**66% complete
Strategic Plan Objectives for the Next Five Years

01 Research: Establish partnerships with peer centers at 2 other institutes by 2019, **20% complete**
02 Capacity: Increase the frequency of WIP sessions to 2 per month by 2020, **80% complete**
03 Operations: Secure funds from UKHC to continue support for OVIHD and host an annual symposium on contemporary health care delivery issues by 2020, **20% complete**
04 Education: Collaborate in the development of a Health Services & Outcomes Master’s Degree Program at UK by 2022, **0% complete**
05 Visibility: Develop a resources section on the Center’s website to support HSR professionals seeking direction in improving health services by 2019, **10% complete**
06 Visibility: Develop podcast series on Center’s activities by 2019, **0% complete**
07 Faculty: Create an endowed faculty position at the Center by 2017, **0% complete**
08 Faculty: Recruit 1 faculty member with expertise in qualitative research methods within the next 3 years, **100% complete**
09 Faculty: Recruit 1 faculty member with expertise in organizational studies or implementation science within the next 3 years, **0% complete**
10 Faculty: Recruit 1 faculty member with expertise in health care finance and health delivery model evaluation within the next 3 years, **0% complete**
11 Faculty: Have ≥ 1 adjunct faculty at each health college by 2020, **66% complete**
Collaboration & Involvement Across the US

The Center emphasizes collaborative partnerships with institutions across the Commonwealth and nationally to conduct innovative research and improve patient care.

Boston Medical Center
Brigham and Women’s Hospital
Caregiver Action Network
Centers for Medicare & Medicaid Services
Essential Health Institute
Health Research & Educational Trust
Kaiser Permanente

Kentucky Primary Care Association
Louisiana State University
Mayo Clinic
National Association of Area Agencies on Aging
Northwestern University
Norton Healthcare
Project Patient Care

St. Elizabeth’s Hospital
Telligen
United Hospital Fund
University of Illinois - Chicago
University of Pennsylvania
Westat

*Includes Project ACHIEVE Hospitals
Center Faculty/Staff Growth Over the Years

Since the Center’s establishment in 2014, we have grown from 2 to 40 people. Over the past three years, collaborative teams have evolved with a focus on expertise in quality improvement and education (Office for Value & Innovation in Healthcare Delivery—OVIHD), data analytics (Data, Analytics, and Statistical Core—DASC) and research.
The faculty and staff at the Center are composed of a diverse set of people with variety in their knowledge base, professional studies and backgrounds, and areas of expertise.

Faculty & Staff Composition

Length of Employment
- 46% < 1 year
- 23% 1-2 years
- 31% ≥ 2 years

Age
- 30% 20-30
- 52% 30-40
- 18% 40+

Education
- 31% undergrad
- 42% graduate
- 27% professional

Staff Roles
- 31% analytics
- 52% research
- 17% operations
The Center employs people from a variety of ethnic backgrounds including Chinese, Tamil - Sri Lankan, Swahili - Kisii & Kipsigis, Gullah, Romani, Bengalis, Marathi, Mexican, Japanese, English, Irish, and German.

**Center Diversity**

- Caucasian: 50%
- Asian: 28%
- Asian Indian: 6.25%
- Hispanic: 6.25%
- African American: 9.4%

UK CHSR Annual Report 2016 - 2017
Value of Innovation to Implementation Program (VI²P)

This funding mechanism provides a new opportunity and resources to support innovative, collaborative research projects that will identify, develop, test, evaluate and/or refine strategies to disseminate and implement evidence-based practices into clinical practice and community settings. Examples include: quality improvement programs; diagnostic, treatment, and disease management interventions; behavioral interventions; and prevention and early detection programs.

The goal of VI²P is to foster transdisciplinary collaboration among scientists and practitioners to form project teams. In addition, VI²P aims to support studies to advance dissemination and implementation research methods and measures, and studies of de-implementation of clinical or community practices that are widely adopted but are wasteful or not evidence-based.

CHSR Announces Four Awarded VI²P Projects

Applications for the Program were open to all Faculty across the University inclusive of all Colleges and Centers. The Center provided a training workshop for interested applicants who planned to serve as Principal Investigator or Co-Principal Investigator.

There were twenty-six letters of intent (LOIs), and twelve LOIs were invited for full proposal. The CHSR VI²P Review Panel conducted rigorous reviews following NIH review criteria and selected four projects to be funded.
### VI²P Awarded Projects

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>College</th>
</tr>
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<tbody>
<tr>
<td>Tobacco Use in Pregnancy Intervention for Cessation (ToPIC)</td>
<td>Kristin Ashford, PhD</td>
<td>College of Nursing</td>
</tr>
<tr>
<td>Partnership for Identification and Primary-care Based Enrollment to a Prevention Intervention for Diabetes (PIPE to Prevent Diabetes)</td>
<td>James Keck, MD MPH</td>
<td>College of Medicine</td>
</tr>
<tr>
<td>Implementing Oncology Precision Medicine in Kentucky</td>
<td>Jill Kolesar, PharmD, MS</td>
<td>College of Pharmacy</td>
</tr>
<tr>
<td>Adaptation and Pilot Implementation of the Family Check-Up for Deaf and Hard of Hearing Children</td>
<td>Christina Studts, PhD</td>
<td>College of Public Health</td>
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#### Tobacco use in Pregnancy Intervention for Cessation (ToPIC)

Smoking in pregnancy is a modifiable cause of adverse birth and maternal outcomes, yet nearly one-third of pregnant Medicaid patients in Kentucky use tobacco. The purpose of this project is to evaluate the effectiveness and implementation success of a Tobacco use in Pregnancy Intervention for Cessation (ToPIC) in Kentucky.

#### Partnership for Identification and Primary-care Based Enrollment to a Prevention Intervention for Diabetes (PIPE to Prevent Diabetes)

An estimated 86 million U.S. adults have prediabetes, a condition of abnormal blood glucose that significantly increases the risk of developing diabetes. Approximately 90% of individuals with prediabetes are unaware of their condition and at increased risk of diabetes. An evidence-based Diabetes Prevention Program (DPP) consisting of structured nutrition counseling and weight reduction can reduce progression to diabetes by 50%; however, identification of prediabetics and utilization of DPPs has remained low in Kentucky and nationally. The objective of our study is to increase enrollment of University of Kentucky’s (UK) Department of Family and Community Medicine prediabetic patients in the DPP sponsored by the Barnstable Brown Diabetes Center.

#### Implementing Oncology Precision Medicine in Kentucky

Most lung cancer patients are candidates for precision medicine interventions, and randomized controlled trials have demonstrated that precision medicine interventions are more effective, less toxic and improve quality of life when compared to standard cancer treatments. However, few patients with lung cancer in Kentucky receive these interventions. Barriers to precision medicine interventions occur at the patient, provider, and payer levels. To help overcome the barriers of implementing precision medicine throughout Kentucky, our team has developed a novel multilevel implementation strategy to overcome barriers and leverage facilitators to implementing precision medicine interventions.

#### Adaptation and Pilot Implementation of the Family Check-Up for Deaf and Hard of Hearing Children

Deaf and hard of hearing (DHH) children are at increased risk for disruptive behavior problems, but are less likely than normal-hearing peers to receive behavioral interventions. The project aims to expand upon our existing partnership with the Kentucky Commission for Children with Special Healthcare Needs (CCSHN), systematically adapt the evidence-based Family Check-Up (FCU) BPT, and pilot the adapted FCU for parents of deaf and hard of hearing children in two CCSHN clinics.
Health Literacy Kentucky

In June 2017, Health Literacy Kentucky (HLK) signed its first Memorandum of Understanding with the Center for Health Services Research. The Center will provide a much-needed home for HLK with administrative and operational infrastructure support.

With this new collaboration, the CHSR and HLK will continue to develop and expand a framework of cooperation to develop mutually beneficial programs, projects, and activities to further health literacy in the Commonwealth of Kentucky.

The CHSR will provide administrative and operational infrastructure support; and support the development, dissemination, and implementation of health literacy evidence-based guidelines. The Center will also support HLK's mission and help raise awareness of the issues related to health literacy in communities across the state, enhance training, and foster interdisciplinary research teams to pursue extramural funding opportunities.

Steering Committee Members | Institution
--- | ---
Katie Bathje, MA, LPCC | Kentucky Cancer Consortium
Emily Beauregard, MPH | Kentucky Voices for Health
Susan Buchino, PhD, OTR/L | UL Health Promotion & Behavioral Sciences, Commonwealth Institute of Kentucky (CIK), School of Public Health & Information Sciences
Liz Edghill, BA, RN, BSN | Family Health Centers - Americana, Refugee & Immigrant Services, Community Health Worker Program
Jean Edward, PhD, RN | UK CHSR
Charles Jackson (Committee Lead) | Humana Foundation
Jing Li, MD, MS | UK CHSR, OVIHD, Department of Internal Medicine
Carlos Marin | UK Community & Cultural Engagement, AHEC
Brian Martin, RN, MBA, MS | KentuckyOne Health, System Clinical Education
Heather Norman | UK Department of Dietetics & Human Nutrition
James C. Norton, PhD | UK Center for Interprofessional Health Education, Departments of Psychiatry & Neurology
Kim Parson | Humana Inc, Proactive Care Strategies
David T. Susman, PhD | UK Department of Psychology, Psychological Services Center
Mark V. Williams, MD, FACP, MHM | UK CHSR, Department of Internal Medicine, Division of Hospital Medicine
R. Brent Wright, MD, MMM | UL School of Medicine, Rural Health, Department of Family & Geriatric Medicine
Health Literacy Kentucky is a statewide coalition working for a healthier Commonwealth through improved health literacy. Members include representatives from:

- State government, state and local public health departments
- Universities, Area Health Education Centers (AHECs), Cooperative Extension
- Community health centers, hospitals, academic medical centers
- Libraries, adult education, literacy organizations
- Insurance companies

Health Literacy is “the degree to which individuals have the capacity to obtain, communicate, process, and understand health information and services needed to make appropriate health decisions.” (Affordable Care Act, 2010)

The impact of low health-literacy is well-documented, with outcomes that include:

- Poorer overall health status
- Higher rates of emergency department use
- Lower utilization of preventive services
- Increased difficulty managing chronic conditions, such as diabetes and congestive heart failure
- Financial costs up to $238 billion every year nationwide

Health Literacy Kentucky hopes to:

- Encourage cross-discipline partnerships for health literacy programs across the state
- Raise awareness of the issues related to health literacy in communities across the state
- Provide training for health care professionals and health care systems
- Foster the development of ongoing health literacy research in Kentucky
- Share Kentucky-specific health literacy challenges, interventions, successes, and failures
Advancing Health Services Research & Scholarship

By the Numbers: Faculty Productivity

31 Peer-Reviewed Publications

12 Conference Presentations

7 manuscripts in Review

Grant funding

Cumulative grant funding for the CHSR, FY14 - FY17

FY14 FY16
$15.7 m

FY15
$15 m

FY16 $15.7 m

FY17 $20.7 m

$26,394
The Center has collaborated with researchers within and outside the University of Kentucky to develop and submit 16 grant proposals through multiple funding agencies, including the National Institutes of Health (NIH), the Centers for Medicare and Medicaid Services (CMS), the Patient-Centered Outcomes Research Institute (PCORI), and the Gordon & Betty Moore Foundation. Values shown below are a depiction of proposals completed in FY17. A full list of CHSR and Collaborative Proposals can be found on pages 52-55.
Data, Analytics, & Statistical Core

The Data, Analytics, and Statistical Core (DASC) 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, dashboard design, server support for datasets, and statistical analysis.

Development

With the installation of the new Enterprise Data Warehouse, UKHC acquired an enterprise license for Tableau Server. This allows for analytic groups like CHSR DASC to setup easy-to-use, self-service dashboards to support quality improvement, operations and research at UKHC. With an enterprise license, every employee in UKHC can have read access to view analytic tools that will enable evidence-based decision making. In the first year with this new technology, DASC has 77 active workbooks with a total of 665 dashboard pages. These dashboards range from daily monitoring for certain conditions or lab results to executive dashboards to monitor overall performance of different initiatives over long periods of time. Automating these type of tools allows for the DASC team to dedicate more time to creating such dashboards as well as doing more in depth and complex analyses for quality improvement and research projects.

Beyond utilizing new Dashboard tools, the DASC team grew the portfolio of statistical support projects, data collection tool roll out, and ad-hoc analysis. DASC strives to build collaborative relationships and encourage the sharing of knowledge by hosting a monthly Analytics Collaboration meeting and a monthly Analytics Open Lab. This collaboration is enabled by bringing together analytic staff from the Center for Health Services Research, UKHC IT, the Cancer Research Informatics Shared Resource Facility, Finance Decision Support, the Institute for Biomedical Informatics, the Center for Clinical and Translational Science, KMSF, Radiology, and Quality Reporting.
DASC Projects by Unit

- Quality Improvement Project
- Research Project
The Next Generation

The Center for Health Services Research (CHSR) provides opportunities for highly motivated and talented undergraduate students to develop skills as young researchers and to further explore their interest in health services research. Each student is associated with one or two specific research projects, where he/she works closely with faculty and other researchers. In addition, the undergraduate students are given the opportunity to attend HSR seminars and Work-in-Progress (WIP) sessions that expose them to a broad range of health service research areas, techniques, and approaches.

Supporting Student Development & Opportunity

**DASC Student Internships**

The Data, Analytics, and Statistical Core (DASC) within the CHSR has been providing internship opportunities for students interested in analytics. DASC participated in the Gill Junior Researchers program to provide internships to economically disadvantaged high school students who are interested in health care careers. These Gill Junior Researcher positions, as well as undergraduate internships, are providing opportunities for students to get hands-on experience with survey development, data extraction and integration, reporting, dashboard development, and statistical analysis in UKHC. Students also acquire skills in agile analytics development, customer service, effective communication, information security, and a wide variety of technologies.

**OVIHD Student Internships**

Since April 2015, the Office for Value & Innovation in Healthcare Delivery (OVIHD) has collaborated and provided year-long internship opportunities for MHA students from the College of Public Health. Recognized as a popular internship opportunity, OVIHD receives around a dozen applicants for two positions that start early Spring each year. Students are selected for their interest in learning a skill set that will challenge their ability to facilitate teams and grow their leadership capacity in process improvement. Interns receive extensive training in FOCUS-PDSA and work alongside a senior health systems engineer who serves as their preceptor. Interns embark on a process improvement project where they have the opportunity to work alongside a team comprised of clinicians, leaders, and staff. They gradually develop their skill set for conducting productive meetings including meeting preparation, presentation building, and team facilitation. This provides the basis for instilling and sustaining change in health care.
Jada Biggers on being a Gill Junior Researcher

At the beginning of my sophomore year, I became a part of a program at the University of Kentucky, Gill Heart Junior Researchers. Gill Heart Junior Researchers gives underserved minority students that are interested in healthcare the opportunity to get a head start in a sense. While being a member of this program, along with much more, I had the opportunity to earn my CPR certification, observe in the Cardiac Catheterization Lab, and they helped me get my current job at the Center for Health Services Research. During my time working for the Center I have developed many analytical skills that will be of great use during my upcoming undergraduate career. For the first time ever I became acquainted with Excel, Aqua Data Studio, Tableau, and Endnote, all of which many do not develop skills for until their graduate programs. In addition to these skills, this job has given me the opportunity to get an idea of what it will be like as a working adult. They have held me to the same standards as all other staff/faculty members and have taught me many important life skills along the way. The Center has made it a point to guide me while I transition from high school to college. I am 16, an early graduate from Bryan Station High School in May with a weighted 4.58 and 3.9 unweighted GPA. In the fall, I will be studying Biology with a track in Cellular/Physiology at the University of Louisville, where all of my expenses are covered. Although I worked very hard during my high school career and some might say I have earned this position, I will always be grateful for this rewarding experience seeing that many students who worked just as hard were not given this opportunity.
### Education & Training

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Teacher/Presenter</th>
<th>Date</th>
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<tbody>
<tr>
<td>CPH 755: Leading Change with Healthcare Teams</td>
<td>Mark Williams, Audrey Yates, &amp; Chris Ross</td>
<td>Fall 2016</td>
</tr>
<tr>
<td>NUR 790 Guest Lecture</td>
<td>Jean Edward</td>
<td>October 2016</td>
</tr>
<tr>
<td>NUR 978 Guest Lecture</td>
<td>Jean Edward</td>
<td>December 2016</td>
</tr>
<tr>
<td>UKPAS 645</td>
<td>Audrey Yates &amp; Chris Ross</td>
<td>Fall 2016 - Spring 2017</td>
</tr>
<tr>
<td>UKHC/Gatton Executive Healthcare Leadership Training</td>
<td>Audrey Yates &amp; Chris Ross</td>
<td>December 2016 - April 2017</td>
</tr>
<tr>
<td>VIFP Dissemination &amp; Implementation Training Workshop</td>
<td>Jing Li</td>
<td>February 2017</td>
</tr>
<tr>
<td>CPH 978 Guest Lecture</td>
<td>Jean Edward</td>
<td>February 2017</td>
</tr>
<tr>
<td>CPH 683 Guest Lecture - 5S</td>
<td>Audrey Yates</td>
<td>March 2017</td>
</tr>
<tr>
<td>College of Pharmacy Graduate Journal Club Guest Lecture</td>
<td>Hilary Surratt</td>
<td>March 2017</td>
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<tr>
<td>FOCUS PDSA</td>
<td>OVIHD Team</td>
<td>Quarterly</td>
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### CPH 755: Leading Change with Healthcare Teams

This course focuses on developing the skills necessary to successfully facilitate teams to achieve sustainable change in health care systems. The course introduces the foundations of change management, key features of successful teams and factors that lead to team failures; and specific behaviors and communications that enhance effective team interaction. By the end of this course students have a better understanding of team dynamics and the tools of implementation with special emphasis on applications to improve health care quality, safety, satisfaction and efficiency.

### NUR 790: Knowledge Development in Nursing

This course focuses on the nature of nursing science and approaches to knowledge development for use in nursing practice. In October 2016, Jean Edward, PhD, RN was invited as a Guest Lecturer to speak on Examining Social Determinants of Healthcare Access.

### NUR 978: Population Health Seminar

In this course, students are challenged to analyze the roots of population health and to consider the role which public health, economics, technology, public policy, and politics plays in population health initiatives. In December 2016, Jean Edward, PhD, RN was invited as a Guest Lecturer to speak on Addressing Social Determinants of Health - Practice Research, and Policy.

### UKPAS 645: Master’s Project I

This course is designed to guide the physician assistant student (PAS) in completing a Masters Project that satisfies the requirements of the Graduate School’s Plan-B, non-thesis Masters of Science degree. The purpose of the project is to have the student demonstrate a “satisfactory” level of analytic and synthetic ability and contextual learning in a focused area of medicine or health care delivery.
**UKHC/Gatton Executive Healthcare Leadership Training**

The Executive Leadership Session is a collaboration between UK HealthCare (UKHC) and the Gatton College of Business and Economics. This program has been occurring for many years; enrolling participants were nominated after displaying recognizable leadership attributes. The Executive Leadership Session covers many topics including Lean methodology, finance, team dynamics, strategic planning, etc. At the end of the session, participants complete a process improvement project utilizing tools taught during the session by OVIHD.

**CPH 978: Eliminating Racial and Ethnic Health Disparities**

This course focuses on understanding differences in minority populations in order to help build and lobby for the infrastructure needed to prevent excess disease and death among underserved populations. A special emphasis is placed on understanding the role of culture in influencing the adaptation of health attitudes, practices, and behaviors. In February 2017, Jean Edward, PhD, RN was invited as a Guest Lecturer to speak on Racial and Ethnic Disparities in Healthcare.

**CPH 683: Strategic Human Resources Management in Health Care**

The overall mission of the Department of Health Management and Policy (HMP) is to conduct innovative health services and systems research, educate the next generation of health-sector leaders, practitioners, and researchers, and translate knowledge to practitioners, policy-makers, and society to improve health systems and population health. The MHA Program's mission is to provide students with critical competencies required to succeed in leadership positions in health systems, hospitals, and other complex health-related organizations and build a solid foundation for their future career development. The Program focuses on preparing students early in their career for positions that require management and strategic abilities, and places special emphasis on needs and opportunities in health care organizations within Kentucky and beyond.

**eLearning Module Development**

The CHSR invested resources in software and staff to develop multiple eLearning modules for faculty and staff. These initiatives advance the Center's goals of transforming learning experiences and enhancing the dissemination of leading edge educational materials. Initial projects include a hospitalist orientation manual, Teach-Back training, and the Lean model in health care. The eLearning hospitalist orientation manual is a series of twenty-three eLearning training modules that consist of twenty to thirty minute interactive presentations that offer a concise and convenient method for providing orientation to new hospitalists starting in the Division of Hospital Medicine at UK HealthCare.

**FOCUS-PDSA**

The Office for Value and Innovation in Healthcare Delivery (OVIHD) has adapted its teaching style to the needs of the today's learners. eLearning modules were developed to enable students interested in learning about UK HealthCare's (UKHC) approach to FOCUS-PDSA problem solving. These Web Based Training (WBT) modules have been combined with didactic training, which provides students the added benefit of hands-on learning with an instructor. Hands-on learning includes working in teams and walking through a case study to reinforce process improvement learning concepts. Participants gain an appreciation of the basics of making problems transparent and utilizing a step-by-step methodology. Each module walks through each portion of the UKHC Storyboard providing the mechanics on how to successfully utilize FOCUS-PDSA (Find, Organize & Clarify, Understand & Select, Plan, Do, Study, and Act). The WBTs are self-paced and serve as an introduction to the in-person workshop. The OVIHD Toolkit provides additional tutorials to compliment the training. Upon completion, staff will be prepared to work on projects individually or seek project assistance from OVIHD.

**Simul8 Training**

In April 2017, the OVIHD staff had the opportunity to participate in simulation training using Simul8. This software enables health care processes such as patient flow in a clinic setting to be tested in a safe, virtual environment with no potential risks to patients and staff. When combined with volume, wait times, and other process constraints, Simul8 provides a thorough picture for leaders to make operational decisions to optimize quality, safety, and efficiency.
CHSR Monthly Seminars

CHSR Monthly Seminars provide an opportunity for UK faculty and staff to learn from nationally recognized researchers and experts in health services research. The seminars enhance dialogue and exchange ideas to foster research collaborations, communicate future research directions, and advance educational and professional development opportunities at UK. On occasion, CHSR monthly seminars are combined with Internal Medicine Grand Rounds to expand exposure to the health system and colleges.

<table>
<thead>
<tr>
<th>Presentation Title</th>
<th>Visiting Professor</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Palliative Care as High Value Health Care: Evidence and Opportunities</td>
<td>Jean Kutner, MD, MSPH</td>
<td>University of Colorado Denver</td>
</tr>
<tr>
<td>Utilizing Big Data and Social Network Analysis for Organization Design and Restructuring</td>
<td>Giuseppe (Joe) Labianca, PhD</td>
<td>UK Gatton College of Business &amp; Economics</td>
</tr>
<tr>
<td>Transitional Care Model: A Journey from Evidence to Impact</td>
<td>Mary D. Naylor, PhD, RN, FAAN</td>
<td>University of Pennsylvania School of Nursing</td>
</tr>
<tr>
<td>Research Opportunities in the Kentucky Federal Statistical Research Data Center</td>
<td>James P. Ziliak, PhD</td>
<td>UK Gatton College of Business &amp; Economics</td>
</tr>
<tr>
<td>Eradicating Dental Caries in Kentucky</td>
<td>Stephanos Kyrkanides, DDS, MS, PhD</td>
<td>UK College of Dentistry</td>
</tr>
<tr>
<td>The Evolving Needs and Prospects for the Learning Healthcare System</td>
<td>Lucy Savitz, PhD, MBA</td>
<td>Intermountain HealthCare, University of Utah College of Internal Medicine</td>
</tr>
<tr>
<td>Drug Use, Health, and Service Utilization Among High-Risk Rural Women</td>
<td>Michele Staton, PhD, MSW</td>
<td>UK College of Medicine</td>
</tr>
<tr>
<td>Cultural Tailoring Evidence-Based Interventions</td>
<td>Nancy E. Schoenberg, PhD</td>
<td>UK College of Public Health</td>
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</table>
**Work in Progress (WIP) Sessions**

CHSR created the Work In Progress (WIP) sessions to provide a forum for junior faculty to present their research and publication ideas, and receive feedback and mentorship from senior, research-active faculty. A variety of WIP sessions have been hosted to date, including faculty from UK’s Colleges of Medicine, Public Health, Communication and Information, Nursing, Design, and Arts & Sciences.

<table>
<thead>
<tr>
<th>Presentation Title</th>
<th>Speaker/Panel</th>
<th>College/Department</th>
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<tbody>
<tr>
<td>Klotho in Acute Kidney Injury: a UK Translational Endeavor</td>
<td>Javier A. Neyra, MD, MSCS</td>
<td>UK College of Medicine</td>
</tr>
<tr>
<td>Behavioral and Enhanced Perinatal Intervention for Cessation (B-EPIC) of Tobacco Use in an Established Community MAT Clinic: Feasibility and Health Care Utilization Study</td>
<td>Kristin Ashford, PhD, APRN, WHNP-BC, FAAN</td>
<td>UK College of Nursing</td>
</tr>
<tr>
<td>Developing Culturally and Linguistically Relevant Interventions to Promote Health Insurance Literacy and Healthcare Decision-making in Underserved Rural Populations</td>
<td>Jean Edward, PhD, RN</td>
<td>UK CHSR, College of Medicine, College of Nursing</td>
</tr>
<tr>
<td>Pediatric Health Services Research at the University of Louisville</td>
<td>Child and Adolescent Health Research Design and Support Unit (CAHRDS)</td>
<td>University of Louisville</td>
</tr>
<tr>
<td>Acute Kidney Injury in Patients Receiving Combination Antimicrobial Therapy</td>
<td>Cliff Rutter, PharmD, MS</td>
<td>UK College of Pharmacy, Infectious Disease</td>
</tr>
<tr>
<td>Doxycycline Inhibition of MMPs Enhances Hernia Repair Outcomes</td>
<td>John Scott Roth, MD, FACS</td>
<td>UK Department of Surgery</td>
</tr>
<tr>
<td>College Students and Intimate Partner Violence: Developing Standardized Screening Procedures, Risk Assessments, and a Tailored Health Communication Intervention for University Health Services Employees</td>
<td>Jennifer Scarduzio, PhD</td>
<td>UK College of Communication &amp; Information</td>
</tr>
<tr>
<td>Examining the Relationship of Social Networks and Social Support on T2DM Self-Care in Rural Older Adults</td>
<td>Brittany Smalls, PhD, MHSA</td>
<td>UK CHSR, College of Medicine</td>
</tr>
<tr>
<td>Postnatal Health Outcomes of Infants with Neonatal Abstinence Syndrome and their Mothers</td>
<td>Kathi Harp, PhD</td>
<td>UK College of Public Health</td>
</tr>
</tbody>
</table>
Noteworthy Accomplishments

Collaboration with Norton/Leatherman Spine Center

As part of our continuing effort to partner with Norton Healthcare in health services and outcome research, the CHSR developed a research project with the Norton Leatherman Spine Center focused on health literacy (HL). Collaboratively we conducted a systematic review of the literature on assessing the impact of health literacy in low back pain (LBP) management and patient outcomes. This revealed significant gaps in the literature and shed light on future research focused on examining HL and LBP. We currently are conducting a pilot study at the Leatherman Center to assess patients’ levels of health literacy using two validated instruments. The research team aims to understand baseline and potential differences of HL among patients who have back pain and/or spinal conditions, determine the best option for a HL assessment tool in a high-volume practice, and develop targeted patient and provider interventions/programs addressing low HL. Continued collaboration between the two Centers will potentially result in submission of funding proposals in HL-related topics such as patient-centered outcomes, patient and provider engagement, or shared decision making, to fill the knowledge gap and knowing-doing gap regarding this very important area in health services research.

Dr. Smalls Selected as a 2017-2018 PRIDE-AHD Scholar

Congratulations to Brittany Smalls, PhD, MHSA for being selected as a Scholar in the 2017-2018 PRIDE Advanced Health Disparities Research Training program. The Programs to Increase Diversity among Individuals Engaged in Health-Related Research (PRIDE) were established to provide junior faculty, from backgrounds underrepresented in biomedical research, with opportunities to gain the knowledge and tools they need to carry out independent and meaningful research and advance their careers.

This initiative is sponsored by the National Heart, Lung, and Blood Institute (NHLBI). The NHLBI provides global leadership for research, training, and education programs to promote the prevention and treatment of heart, lung, and blood diseases and enhance the health of all individuals so that they can live longer and more fulfilling lives.

As a scholar for this program, Dr. Smalls will receive advanced training in an interprofessional environment that facilitates successful team science career development and that contributes to decreases in health disparities through impactful research. This year-long mentoring experience will also offer training that will include experiential skill development in grantsmanship, scientific writing strategies, epidemiological/biostatistical methods, and more.

To find more information about PRIDE and NHLBI, please visit the following links:

www.biostat.wustl.edu/pridecc
www.nhlbi.nih.gov

Edward Selected as a Commonwealth Institute of Kentucky (CIK) Scholar

Jean Edward, PhD, RN, a CHSR faculty member and Assistant Professor for the UK College of Medicine, was selected as a Commonwealth Scholar for her research focus on health insurance literacy and access to care for Hispanic populations; the influence of social determinants on disparities in health care access and health outcomes among underserved immigrant and minority populations; Medicaid Gap populations; and nursing research design.

CHSR Proposed UK Institute of Health Literacy

In January 2017, the Office of the Vice President for Research announced the request for applications for the creation of new multidisciplinary institutes or centers. The goal of this initiative was to align with areas of emerging or existing research strength that address challenges in the Commonwealth. In response to this request and given the magnitude of complex health literacy issues and their profound harmful impact, the CHSR proposed the UK Institute for Health Literacy (IHL). Through collaboration with the Center for Interprofessional Health Education (CIHE) and integration with Health Literacy Kentucky (HLK), the proposed
IHL represented an opportunity to leverage transdisciplinary teamwork to become a national leader while improving the health of Kentucky and health literacy of its citizens. This proposal received commitment from all the respective Deans of the six health colleges and collaborative support from the Colleges of Education and Communication & Information to leverage all their diverse talents and knowledge.

**Mark Williams Speaks at First International Conference of Hospital Medicine in Taiwan**

During a trip to Taiwan, Mark V. Williams, MD, MHM, director of the Center for Health Services Research (CHSR), had the opportunity to share his expertise as a hospitalist and researcher with colleagues in Taiwan.

Williams was invited by Ming-Chin Yang, DrPH, who serves as National Taiwan University's associate dean of the College of Public Health, and Nin-Chieh Hsu, MD, a practicing hospitalist in Taiwan, to speak at the January 7, 2017 first International Conference of Hospital Medicine. Williams focused his presentation on the evolution of hospital medicine and the roles hospitalists play now and the role they will play in the future.

With the overall goal of inspiring the planning and implementation of hospital medicine in Taiwan, this conference focused on the challenges, opportunities and future of the field. "I appreciated the warm reception and eagerness to learn from UK's internationally recognized experience in the specialty of hospital medicine, which includes over 50,000 physicians in the United States," Williams said.

“This invitation to the first ever International Conference of Hospital Medicine in Taiwan exemplified an opportunity to share UK's expertise with physicians and policy makers from countries across southeast Asia.”

**Traugott Reflects on Being Elected for Staff Senate**

It is a privilege to be elected Staff Senator from July 1, 2017, through June 30, 2020. The Staff Senate represents the interests of staff in order to strengthen relationships at the University of Kentucky and foster a climate that promotes and empowers all university employees and students to participate in the decision making process. The vision of the senate is to be the nation's premier model of university staff leadership in shared governance. In order to reach these goals the staff senate holds open discussions on issues concerning salaries, benefits, work environment, and ongoing committee updates. We follow the principles of shared governance and use a democratically elected representation and use inclusive decision-making.

I began work at the University in 2009 and have seen many positive changes for staff as a result of the efforts of the Staff Senate. In my time with the university I gained an understanding of its operations and sense of community. I am a member of the Institutional Finances and Resource Allocation Committee as a staff senator. We meet monthly to inform the University Senate Council and the Staff Senate on the present status of the prospective changes in the finances and other resources available to the University. The Committee analyzes public budget documents, published reports about financial and other trends and shall consult appropriate officials in fulfilling this function. It shall also examine budgetary data concerning the allocation of available financial resources resulting from budget reductions. However, the Committee’s concerns here shall not be focused on departmental, college or other particular interests, but on general concerns and procedures taken from the perspective of the entire University; and generate recommendations to the Staff Senate for action on such issues.

**Edward Received Junior Investigator Award**

Jean Edward, PhD, RN received the Junior Investigator Award from the American Public Health Association, Public Health Nursing Section in October 2016. This award was based on her paper entitled, "Examining the Impact of Health Literacy and Health Insurance Literacy on Healthcare Access for Hispanics" at APHA's Annual Meeting and Expo in Denver Colorado in 2016. This is an annual award that recognizes junior faculty who have contributed to important research in public health.
Project ACHIEVE

Project ACHIEVE (Achieving Patient-Centered Care and Optimized Health In Care Transitions by Evaluating the Value of Evidence) is a national study funded by the Patient Centered Outcomes Research Institute (PCORI) that focuses on transitional care—or the coordination of care when patients are discharged from the hospital to their homes or other health care settings.

Evaluating Patient-Centered Transitional Care Strategies

Project ACHIEVE aims to identify the transitional care strategies that matter most to patients and their family caregivers and to determine which of these strategies most effectively yields desired patient and family caregiver outcomes.

With a total award of $15.5 million, Project ACHIEVE is comprised of two phases. Phase I consisted of focus groups and key informant interviews with patients, family caregivers, and providers; survey development; and pilot testing a protocol for visiting hospital sites to garner in-depth information about their transitional care efforts. The Center successfully completed the first phase in 2015.

Phase II activities are chiefly comprised of administering surveys to up to 9,000 patients, 5,000 family caregivers, and 1,000 providers associated with nearly 50 hospital sites nationwide. It also consists of site visits to each participating hospital in order to obtain an in-depth understanding of the transitional care strategies employed at each site. These activities will help the project accomplish its goal of evaluating the comparative effectiveness of multi-component care transitions programs occurring across the U.S.

Survey Pilot Testing

In 2016-2017, the research team pilot tested the patient, family caregiver and provider surveys at five hospital sites. Overall, 132 patients, 57 family caregivers, and 48 providers completed surveys in the pilot and its findings were used to refine survey content and methodology.

Site Visits

Twenty-four hospital site visits have been conducted in Phase II to better understand the context of implementing transitional care strategies at hospital sites. The hospital hosting the site visit organizes five to six group interviews with key stakeholders focusing on the hospital’s transitional care efforts. Each session is audio recorded and the content is being analyzed to document and contextualize the hospital’s transitional care efforts.

Retrospective Analysis

During June 2015 through March 2016, nearly 400 hospitals completed a survey aimed at capturing their adoption of key strategies in transitional care. In 2016-2017, data garnered from survey results were compared with Medicare claims data in order to understand which transitional care strategies correlate with hospital readmissions and emergency department (ED) visits. This analysis will continue in the coming year.

Publications and Presentations

Over the past year, the ACHIEVE team published two peer-reviewed publications with another under review. Additionally, two national conference presentations and one conference poster were given by the ACHIEVE team about the study.

Stakeholder Engagement

Project ACHIEVE is guided by a Scientific Advisory Council (SAC) comprised of scientific leaders in the field, and a Stakeholder Advisory Group (SAG) representing the organizations, patients, and caregivers who experience the effects of care transitions daily. The SAC ensures that the methodology of the study is sound and appropriate while the SAG ensures that the study remains rooted in its purpose of improving care and quality of life of patients and family caregivers.

Future Plans

The past year’s work has set the stage for the main data collection in the upcoming year. At the end of the 2016-2017 reporting year, recruitment of patients, family caregivers, and hospital providers commenced across nearly 50 hospital sites. This data will be combined with Medicare claims data from enrolled patients to evaluate which transitional care strategies most effectively yield desired patient and caregiver outcomes. Findings will form the basis for policy and practice recommendations.
Participating Hospitals Across the US

Anderson Regional Medical Center (MC)
Aspirus Langlade Hospital
Banner University MC
Dickinson County Healthcare Systems
Geisinger MC
Geisinger Wyoming Valley MC
Geisinger-Community Medical Center
Griffin Hospital
Havasu Regional MC
Honor Health Scottsdale Osborn MC
John T. Mather Memorial Hospital
Lakeland Regional Health
Las Palmas MC
Medical University of S. Carolina
MetroHealth MC
MetroSouth MC
Midland Memorial Hospital

Mount Desert Island Hospital
Nassau University MC
Norton Audubon Hospital
Norton Hospital
Parkland Health and Hospital System
Potomac Valley Hospital
Presence Saint Joseph
Roane General Hospital
Rockdale MC
Rush University MC
St. Mary MC
Schneck MC
Mayo Clinic
Trinitas Regional Medical Center
University of Kentucky
University of Utah Health Care
Watertown Regional MC

Yale-New Haven Health System
Kaiser Foundation Hospital
Baldwin Park
Downey
Fontana
Los Angeles
Moreno Valley
Ontario
Panorama City
Riverside
San Diego
South Bay
West LA
Woodland Hills MC
Zion
MARQUIS-2

MARQUIS-2 (Multi-Center Medication Reconciliation Quality Improvement Study) aims to widely disseminate, implement and evaluate sustainable medication reconciliation interventions that improve patient safety during care transitions at 18 diverse hospitals using a mentored implementation model.

Implementation of a Medication Reconciliation Protocol

Aim 1
To implement the refined MARQUIS evidence-based medication reconciliation toolkit at 18 diverse hospitals, using a mentored quality improvement implementation model.

Aim 2
To rigorously evaluate the effect of the MARQUIS program on unintentional medication discrepancies.

Hypothesis 2A:
A widespread mentored medication reconciliation quality improvement intervention will decrease unintentional medication discrepancies at hospital admission and discharge.

Hypothesis 2B:
The impact of this intervention on reduction in medication discrepancies will be greater than that seen in MARQUIS-1.

Aim 3
To inform future spread of medication reconciliation interventions by performing an evaluation of program implementation using the RE-AIM framework.

Implementation
This study is being conducted at 18 hospitals, including UK’s Chandler Hospital. The study is essentially a quality improvement study at each site, while Brigham & Women’s Hospital in Boston will serve as the central coordinating site and will analyze deidentified data on the primary outcomes. The research team uses time-series methodology to analyze the effects of the intervention over time, adjusting for baseline temporal trends. Anticipated enrollment is 8100 patients study-wide. The interventions themselves are aimed at providers involved in the medication reconciliation process at each hospital, including physicians, pharmacists, pharmacy technicians, and nurses. The patients for whom medication reconciliation processes will be improved are adult patients admitted to non-critical care medical and surgical units at each hospital. All subjects will be age 18 or older. Men and women of all racial and ethnic groups are potentially eligible. Vulnerable populations, including pregnant women, prisoners, and institutionalized individuals, will be excluded from the study. By definition, fetuses, neonates, and children under the age of 18 will be excluded as well. The primary outcome (unintentional medication discrepancies) involves the collection of medication safety data on 25 patients per month for 18 months per site. These patients will be a random sample of all eligible patients.
Collaboration with Mayo Clinic Study

University of Kentucky Center for Health Services Research strives for interdisciplinary collaborations locally and nationally, and has established relationships with institutes such as Mayo Clinic and Kentucky Primary Care Association (KPCA).

UK CHSR & KPCA Address Multiple Chronic Conditions

Multiple Chronic Conditions (MCC), affects one in four Americans overall and about three in four Americans age 65 and older. While health care aims to relieve suffering and alleviate burden, it sometimes makes burdensome demands of patients. Patients must invest capacity — time, emotion, and attention — to do the work of being a patient, which competes with other important tasks in their lives.

For patients with MCC, a shift in practice is required: one that focuses on each patient’s health situation and on the limited capacity patients have to advance their health situation, while still pursuing joyful lives.

The University of Kentucky Center for Health Services Research strives for interdisciplinary collaborations locally and nationally, and has established relationships with institutes such as the Mayo Clinic and Kentucky Primary Care Association (KPCA). In collaboration with KPCA, Kentucky is one of four sites in the nation that will assess and characterize the ways in which the Instrument for Patient Capacity Assessment (ICAN) can “help patients and health professionals discuss areas of the patient’s life and issues in treatment for context-centered care.” That project will evaluate how ICAN-supported primary care is feasible and improves patient and health care teams’ experience of care and communication, while reducing patients’ burden of treatment.

The ICAN Discussion Aid, developed by the research team at Mayo Clinic’s Knowledge and Evaluation Research Unit, is an intervention to support this different practice. ICAN helps to explicitly consider the relationship between the patient’s life circumstances, health care goals, the work patients are asked to do and their capacity to enact it. Informed with evidence about the patient’s life, health care teams are better able to co-create treatment plans that are considerate of each patient.

This innovative intervention is an application of Minimally Disruptive Medicine, declared by the British Medical Journal as one of the most important new ideas in medicine in the last 20 years. The My Life, My Healthcare study is funded by the Gordon & Betty Moore Foundation, and will use a mixed methods, cluster-randomized trial design to test ICAN’s feasibility and efficacy on a much larger scale.
Center for Clinical & Translational Science

In September 2016, CHSR was selected to lead the Tracking & Evaluation Core of UK's Center for Clinical and Translational Science (CCTS). Directed by Dr. Phil Kern, the UK CCTS champions innovation across the spectrum of clinical and translational research, promotes team science, and educates the translational workforce of the future.

Tracking & Evaluation of UK’s CCTS

Currently, more than 50 medical research institutions nationwide receive Clinical and Translational Science Awards (CTSA) Program funding. The CTSA Consortium, led by the National Center for Advancing Translational Sciences (NCATS), is charged with accelerating and improving clinical and translational research.

CHSR’s evaluation effort is driven by two primary goals that align with the mission of the UK CCTS: 1) metric data collection and analysis designed to track performance, milestones, and efficient utilization of resources; and, 2) process data collection and analysis to inform our understanding of how and why study outcomes are achieved, providing an evidence base to support strategic planning and decision-making.

Our approach is framed by the Centers for Disease Control and Prevention’s Framework for Program Evaluation in Public Health, which utilizes a systematic, step-wise model to structure the goals and activities of research evaluation.

In Project Year 1, T&E engaged with CCTS Core Directors and leadership to develop component-specific evaluation plans and timelines, and to select key metrics and qualitative process measures to examine progress and impact. This process involved dozens of face-to-face meetings with CCTS Cores, functions, leadership, and other stakeholders to define hub specific objectives, to identify gaps and challenges in current metric collection, and to identify appropriate new metrics and processes for the evaluation effort.

Common Metrics Implementation

In 2016, NCATS implemented the Common Metrics Initiative, which employs a set of standardized metrics across CTSA hubs for use in collaborative management based on the principles of the Results-Based Accountability (RBA) framework. The UK CCTS participated in Implementation Group 3 of the Common Metrics Initiative. Working closely with the Tufts University Coordinating Center, we identified a core Common Metric implementation team, including: Project Leader, Dr. Hilary Surratt, Director of Evaluation; Project Champion, Dr. Phil Kern, Principal Investigator; and, Metric Data Collector, Robert Kegebein, MA, who have successfully led the implementation efforts at our hub for the three initial Common Metrics: Pilot Publications, IRB Duration, and Careers in Clinical and Translational Research. This effort involved the engagement of appropriate Metric Topic Experts across the CCTS and UK, who generously participated in the collaborative processes of data gathering, training, and strategic action planning to push forward with implementation of the new metrics initiative.
Robust implementation of a metrics-based evaluation allows the examination of key identified short-term impacts of the CCTS, including: increased numbers of investigators and research personnel trained in clinical translational research; increased numbers of scholarly publications related to clinical translational research; establishment of policies, agreements, and partnerships that accelerate translational research and promote community participation; increased numbers of studies using novel methodologies; and increased efficiency of clinical and translational research.

CCTS Tracking & Evaluation (T&E) initiatives in Year 1 also included:

- Facilitating the CCTS Strategic Planning process
- Providing Continuous Quality Improvement (CQI) training to the CCTS Leadership community.
- Initiating a project to centralize utilization data across Cores and develop utilization dashboards in Tableau to demonstrate the extent to which CCTS supports and benefits the University community.
- Compiling and assessing background information and gaps in current metrics, reporting systems, and tracking from prior T&E efforts.
- Scoping core-specific data sources and finalizing specific metric documents for each Core.
- Completing several data capture projects to improve efficiency of current metric data collection, extraction, and reporting for CCTS Cores.
- Scoping and researching scholarship tracking systems for adoption, as publication, grant and collaborative network activity are priorities for evaluative outputs that cut across several Cores.
- Guiding an initiative to compile relevant sponsored programs’ institutional data sources to facilitate CCTS evaluation efforts.
- Planning for hub level impact metrics for health and translational science.
Social and community-level needs are key drivers of pervasive health inequalities, contributing to elevated disease burden and health care utilization costs among vulnerable populations of Medicaid and Medicare beneficiaries. Funded by the Center for Medicare and Medicaid Services, the CHSR is partnering with the Kentucky Primary Care Association (KPCA), Appalachian Regional Healthcare, Norton Health Care, and Kentucky Homeplace to form the Kentucky Consortium for Accountable Health Communities (KC-AHC). The KC-AHC will address the health-related social needs of vulnerable patients across the Commonwealth over the next five years. This collaboration will work across 27 counties in Appalachia and the Louisville Metro area. KC-AHC will implement and test an Alignment model, which seeks to determine whether providing a combination of tailored community service referrals and patient navigation services assistance, as well as clinical and community partner alignment, will yield improvement in patient outcomes, health care utilization and costs. The core social needs being addressed include housing, transportation, food insecurity, utilities, and safety.
With Communities, KC-AHC will:

- Increase understanding within the community about its social needs, why they exist, and why it is important to address them.
- Enhance community engagement through the opportunity of communicating with different parts of the community to identify their specific needs, and assets; share how the needs impact the quality of life for the larger community; collaborate with community partners to determine their current response.
- Increase awareness of how community members can contribute to their community’s assets and assess their service delivery priorities.
- Create a comprehensive Community Resource Inventory of available community services and community service providers to address each of the core needs
- Improve operations through the use of shared data on decision-making, strategic planning, priority setting, program outcomes, and program improvements.

With patients, KC-AHC will:

- Offer screening for health-related social needs at the time of clinical care, and provide a tailored community referral summary for those patients with identified needs.
- For high risk patients, provide specialized AHC navigation services during the clinical visit, including an in-depth assessment of needs and service barriers, action planning, and follow-up.
- Offer Alignment Coordination, which conducts navigation services within an environment of aligned clinical and community partners to improve service coordination and access.
Health Care Transformation

The Office for Value and Innovation in Healthcare Delivery (OVIHD) is UK HealthCare's internal department of experts in quality improvement and process engineering. OVIHD serves to build UK HealthCare's operation as a Lean health care organization through coaching and training leaders and frontline staff on the application of quality and process improvement tools and methodologies, as well as the practice of problem solving and change management principles.

Leading through Teamwork

The Interprofessional Teamwork Innovation Model® (ITIM) was first piloted on the 7th floor of Good Samaritan Hospital, where interventions from BOOST project (Better Outcomes by Optimizing Safe Transitions) were first implemented in 2015. ITIM Rounding is a model including the Physician, Bedside Nurse, Pharmacist, and Case Manager or Social Worker at the bedside, and includes the patient, and their family caregivers if available, in the discussion of health status of the patient, medical, and patient centered goals for progressing toward safely transitioning from the hospital to care after discharge. In 2016, ITIM was implemented on other inpatient units at GSH as well as the 9th and 10th floors of Chandler Pavilion A and 10th floors. High focus has been placed on ensuring patients have follow-up appointments made prior to discharge. Both the 9th and 10th floor medical units received recognition for their dramatic increase in patient satisfaction scores after implementing the ITIM model.

A Pedi-BOOST team in the Kentucky Children’s Hospital (KCH) lead by Dr. Erich Maul, Pediatric Hospitalist, implemented ITIM in 2016 with significant improvement in patient satisfaction in post implementation analysis for patients discharged from Pediatric Hospitalist teams. Pediatric ITIM teams communicate the plan of care and goals to patients and other team members via white boards in patient rooms. Pediatric patients and their parents are invited to add questions or concerns to the white board, to be addressed by the interprofessional team. Another intervention to ensure families are well positioned to care for their child at home is making follow-up phone calls within 72 hours of discharge.
Reader Frequency Identification (RFID) Program

In 2017, OVIHD’s team of engineers worked to develop a plan for an RFID Pilot program as a way to track patient and work flow.

RFID stands for “radio frequency identification.” A “reader” sends out a signal which prompts any ‘tags’ (i.e. on the front of a brochure) to send a signal back letting the reader know its “name”. The reader then remembers the tag’s id and the date and time it “heard” from the tag. Using these RFID readers and tags, the OVIHD team collects data from patient and employee flow to then determine the best possible way to improve care and flow within each individual clinic.

Prior to starting the study, the OVIHD team will meet with the selected clinic to discuss the current work process and possible solutions to existing problems. The engineers will then draft a plan for the placement of each individual RFID reader to effectively collect clinic flow data. The data that will be collected during the process includes stops within the clinic, patient wait time, and length of specific procedures.

First Pilot Program

OVIHD’s first pilot RFID Program is scheduled to be completed at the UK Cardiovascular Pediatrics clinic. Using eight different RFID readers throughout the clinic, the engineers plan to monitor approximately 500 patients during a two to three week time period.
Faculty Development

The Center aims to develop and nurture our diverse faculty as leaders in health services research. We focus on enriching a culture of inclusion, respect, and engagement. This fundamental element in pursuing the CHSR mission of applying research to optimize care attracts and retains our talented faculty. The Center’s faculty development provides a strong platform for mentoring and collaboration that connects, catalyzes, and creates innovative research.
Mark Williams
MD, FACP, MHM

Mark V. Williams, MD, FACP, MHM serves as Director of the Center for Health Services Research, as well as Professor & Vice Chair of the Department of Internal Medicine. He also leads the Division of Hospital Medicine as its Chief. As a nationally recognized leader in quality improvement, care transitions, health literacy, and hospital medicine, his expertise includes health services research methodology, clinical operations, teamwork, and leadership.

In 2015, he became the principal investigator on Project ACHIEVE (Achieving Patient-Centered Care and Optimized Health In Care Transitions by Evaluating the Value of Evidence), funded with a $15.5 million contract from the Patient Centered Outcomes Research Institute (PCORI). This past year, he received a $4.5 million award from CMS as Principal Investigator for the Kentucky Consortium for Accountable Health Communities (KC-AHC). This initiative will screen 75,000 Medicare and Medicaid beneficiaries in Appalachia and Louisville per year for social needs and connect them to community resources.

Dr. Williams also collaborated on establishing the Graduate Certificate in Improving Healthcare Value. This 15-hour certificate program, which can be applied to UK MBA/MHA degree programs, evolved from a collaboration of the College of Public Health, the Gatton College of Business & Economics, and the College of Engineering. The program is intended for UK HealthCare (UKHC) faculty and staff to enhance their skillset in improving health care services. He has been the course director of Leading Change with Healthcare Teams for three consecutive years.

Efforts outside of UK this past year include serving as a funded Co-Investigator on MARQUIS-2 (Multi-center, Medication Reconciliation Quality Improvement Study) and PACT (Preferences Aligned Communication and Treatment). These projects extend into more than 30 hospitals across the United States.

With a history of more than $34 million in grants and contracts as principal or co-principal investigator and 140+ peer-reviewed publications (nineteen in 2016-17) including in journals such as JAMA, New England Journal of Medicine, and Annals of Internal Medicine, Dr. Williams continues to focus his research on care transitions, teamwork, health literacy, and, increasingly, implementation science.
Jing Li
MD, MS

Dr. Li is Associate Director of the Center for Health Services Research and Assistant Professor in the Department of Internal Medicine. Dr. Li’s expertise includes research methodologies, learning health systems, quality improvement, and program implementation and evaluation. Her work has focused on community coalition development, team-based care, care coordination, health delivery models, and in-setting and cross-setting teamwork, as well as system and culture change, and processes optimization.

Her current projects include Project ACHIEVE (Achieving Patient-Centered Care and Optimized Health In Care Transitions by Evaluating the Value of Evidence), the My Life, My Healthcare Study (tailoring interventions based on patients’ capacity in a primary care setting), UK Center for Clinical and Translational Science (CCTS) Tracking & Evaluation Core, Inter-professional Teamwork Innovation Model (ITIM), and the Kentucky Consortium for Accountable Health Communities (KC-AHC).

In addition to her administrator role at the Center, Dr. Li has co-authored 6 peer-reviewed manuscripts and 7 conference abstracts in the past year. Collaborating with colleagues from the Colleges of Medicine, Nursing, Public Health, Communication & Information, Arts & Sciences, and Pharmacy, she has also submitted four external funding proposals (over $7.9 million) as a Principal Investigator or Co-Investigator to the National Institutes of Health (NIH), the Department of Defense (DoD), and the Patient-Centered Outcomes Research Institute (PCORI).

Dr. Li currently serves on the UK CECentral Advisory Board and Health Literacy Kentucky Steering Committee. She chaired the College of Medicine Value of Innovation to Implementation Program (VI2P) panel and developed implementation science training sessions. Dr. Li is also an active peer reviewer for the NIH Healthcare Delivery and Methodologies (HDM) IRG and several highly ranked medical journals including JAMA.
Dr. Jean Edward is an Assistant Professor at the CHSR, holding a primary appointment in the College of Medicine and a joint appointment in the College of Nursing. Her program of research focuses on promoting equity in access to health care for underserved communities by examining the influence of social determinants, such as health literacy, on disparities in health care access and health outcomes. Her current research focuses on developing culturally and linguistically tailored interventions promoting health insurance literacy, health system literacy, and health care decision-making in underserved communities across Kentucky.

Over the last year, Dr. Edward has submitted seven external and internal funding proposals as a Principal Investigator or Co-Investigator. In June 2017, she submitted a Mentored Research Scientist Career Development Grant (K01) to the Agency for Healthcare Research and Quality and also submitted a Diversity Supplement grant to the University of Kentucky’s Center for Clinical and Translational Science’s (CCTS) UL1 parent grant through NIH’s National Center for Advancing Translational Sciences. Through her partnership with the Kentucky Voices for Health, the Commonwealth Institute of Kentucky (CIK), and the Kentucky Cancer Consortium, she submitted three external funding proposals to the Robert Wood Johnson Foundation, Humana Foundation, and Prevent Cancer Foundation.

Dr. Edward has co-authored peer-reviewed manuscripts and presented at national, regional, and local conferences. She received the Junior Investigator Award for her paper presented at the American Public Health Association’s annual conference. She was invited to present the keynote at the Kentucky Primary Care Association’s spring conference and to serve as a panel speaker at the Kentucky Voices for Health conference. Dr. Edward has guest lectured at several courses in the Colleges of Nursing and Public Health on social determinants of health, health disparities, and health policy.
Brittany Smalls  
PhD, MHSA

Dr. Brittany Smalls joined the CHSR in September 2016 as an Assistant Professor. Dr. Smalls’ research interests include social determinants of health focusing on how the social environment, such as social support, social networks, community resources, and the built environment impact health behaviors and self-management practices for those living with chronic disease. Dr. Smalls’ current research specifically assesses the role of social support and social networks in diabetes self-management in rural dwelling older adults.

Over the last year, Dr. Smalls has submitted both internal and external grant applications as a Principal Investigator or Co-Investigator. Of note, Dr. Smalls submitted a Mentored Research Scientist Career Development Grant (K01) to the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) as well as a grant to the Merck Foundation’s Bridging the Gap: Reducing Disparities in Diabetes Care. She has also submitted 4 grants through the UK Center for Clinical and Translational Science (CCTS) in collaboration with the College of Public Health, College of Business, and College of Nursing; and submitted an additional grant application through the UK Children’s Hospital Fund-Children’s Miracle Network in collaboration with the UK Division of Pediatric Gastroenterology. Moreover, Dr. Smalls was included as a Co-Investigator on the National Institute of Nursing Research (NINR) funded R01 “Rural Intervention for Caregivers’ Heart Health” (RICCH) through the UK College of Nursing.

Dr. Smalls has also had 4 abstracts presented at national conferences and 1 abstract presented at a regional conference and has presented at 2 division grand rounds within the UK College of Medicine. Her productivity this year is rounded off by her publication record of 6 peer-reviewed publications.

Furthermore, since joining the team, Dr. Smalls has been involved in networking and collaborating on research nationally and locally. On a national level, she has been selected to serve on the AcademyHealth Health Disparities Advisory Committee. Locally, she serves on UK’s College of Medicine International Committee, and the Department of Surgery’s Investigator Initiated Research Committee.
Hilary Surratt
PhD

Dr. Hilary Surratt joined CHSR’s faculty team in September 2016 as Associate Professor in the College of Medicine, Department of Internal Medicine. Dr. Surratt is a PhD Psychologist who brings broad research expertise in substance abuse, health disparities, community engagement and behavioral health interventions to CHSR. Her work has focused on the development and evaluation of behavioral HIV and HCV interventions for vulnerable substance-using populations, as well as epidemiologic studies of prescription drug diversion, including opioid analgesics and antiretroviral medications.

In 2016-2017 Dr. Surratt submitted several external funding proposals as a Principal Investigator or Co-Investigator to the National Institutes of Health (NIH) and the Patient-Centered Outcomes Research Institute (PCORI), with a focus on the development and implementation of evidence-based interventions and policy approaches to ameliorate the health harms of opioid abuse among vulnerable populations. These included a comparative effectiveness trial of provider and patient-level interventions to reduce unsafe opioid prescribing among underserved Appalachian pain patients, as well as a mixed methods study to examine social, contextual, and environmental factors that impact syringe exchange uptake among rural persons who inject drugs.

Dr. Surratt co-authored numerous peer-reviewed manuscripts in the past year related to prescription drug misuse and diversion, substance dependence, and related physical and mental health co-morbidities. Her active research portfolio includes serving as Co-Investigator and Co-Director of Tracking & Evaluation on the Kentucky Center for Clinical and Translational Science, as well as her role as Co-Investigator on the recently-funded CMS Accountable Health Communities project. She currently serves as a mentor for the Community Leadership Institute of Kentucky, and is very active as an intramural grant reviewer at UK, and a peer reviewer for several highly ranked substance use and medical journals.
## CHSR Led Proposals

### 2016

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<thead>
<tr>
<th>Month</th>
<th>Title</th>
<th>Funding Agency</th>
<th>Status</th>
<th>Amount</th>
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<tbody>
<tr>
<td>August</td>
<td>Employing the Interprofessional Teamwork Innovation Model (ITIM) to Facilitate Inter-Professional Team-Based Learning</td>
<td>Department of Defense</td>
<td>Not funded</td>
<td>$1.2 million</td>
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<td>September</td>
<td>Examining Social Influences on Syringe Exchange Uptake among Rural PWID at Risk for HIV</td>
<td>NIH</td>
<td>Resubmitted May 2017</td>
<td>$409,718</td>
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<td>December</td>
<td>Reducing Unsafe Opioid Prescribing in Appalachia</td>
<td>PCORI</td>
<td>In Revision</td>
<td>$4 million</td>
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### 2017

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<th>Month</th>
<th>Title</th>
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<th>Status</th>
<th>Amount</th>
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<tr>
<td>May</td>
<td>Kentucky Consortium for Accountable Health Communities</td>
<td>CMS</td>
<td>Funded</td>
<td>$4.48 million</td>
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<tr>
<td>Month</td>
<td>Project Description</td>
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<td>May</td>
<td>Examining Social Influences on Syringe Exchange Uptake among Rural PWID at Risk for HIV</td>
<td>NIH</td>
<td>Pending</td>
<td>$409,718</td>
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<td>June</td>
<td>Developing the Health Insurance Literacy Education, Engagement, and Empowerment Training</td>
<td>NIH, NCATS</td>
<td>In Review</td>
<td>$615,757</td>
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<td>June</td>
<td>Developing and Testing the Feasibility of Implementing the Health Insurance Literacy Education, Engagement, and Empowerment Training in Rural, Appalachian Communities</td>
<td>NIH, AHRQ</td>
<td>Not funded</td>
<td>$791,242</td>
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<td>June</td>
<td>Social Network Analysis and Social Support Intervention for Rural Dwelling Older Adults with T2DM</td>
<td>NIH, NIDDK</td>
<td>Pending</td>
<td>$621,523</td>
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Collaborative Proposals

August 2016

Kentucky Center for Clinical and Translational Science
Funding Agency: NIH
Status: Funded
Amount: $14.5 million
Principal Investigator:
Philip Kern, UK Internal Medicine

Evaluating ICAN-supported Primary Care: A Novel Way to Care for Patients with Chronic Conditions
Funding Agency: Gordon & Betty Moore Foundation
Status: Funded
Amount: $45,000
Principal Investigator:
Victor Motori, Mayo Clinic

August 2017

PreP Interventions for High Risk Female Sex Workers
Funding Agency: NIH
Status: Not Funded
Amount: $675,000
Principal Investigator:
Oni Blackstock, Albert Einstein College of Medicine

May 2017

Social Media HIV Prevention Intervention for Rural Women Drug Users
Funding Agency: NIH
Status: Resubmitted
Amount: $675,000
Principal Investigator:
Michele Staton, Behavioral Science
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<tr>
<th>Month</th>
<th>Project Title</th>
<th>Funding Agency</th>
<th>Status</th>
<th>Amount</th>
<th>Principal Investigator(s)</th>
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<tr>
<td>May</td>
<td>Center for Health Equity Transformation</td>
<td>NIH</td>
<td>Pending</td>
<td>$4.7 million</td>
<td>Nancy Schoenberg, UK Behavioral Science &amp; Jenna Hatcher, UK College of Nursing</td>
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<td>June</td>
<td>Tobacco use in Pregnancy Intervention for Cessation (ToPIC)</td>
<td>NIH</td>
<td>In Review</td>
<td>$2.23 million</td>
<td>Kristin Ashford, UK College of Nursing</td>
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<td>June</td>
<td>Lung Cancer Prevention and Early Detection in Rural Kentucky Worksites</td>
<td>Prevent Cancer Foundation</td>
<td>In Review</td>
<td>$100,000</td>
<td>Jennifer Redmond Knight, UK College of Public Health</td>
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<td>June</td>
<td>Activating Kentuckians for Health System Transformation</td>
<td>RWJF</td>
<td>Not funded</td>
<td>$250,000</td>
<td>Emily Beauregard, Kentucky Voices for Health</td>
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</table>
Appendices

Peer-Reviewed Publications


Campbell JA, Walker RJ, Smalls BL, Egede LE. Use of adaptability index to explain selfcare and diabetes outcomes. BMC Endocrine Disorders, 2017 [In Press].


Kurtz SP, Buttram ME, Surratt HL. In press. ‘A Randomized Trial of Brief Assessment Interventions for Young Adults who Use Drugs in the Club Scene,’ Journal of Substance Abuse Treatment. Published online: 21 Dec 2016.


O'Leary KO, Johnson JK, Manojlovich M, Gastik GJ, Williams MV. Use of Unit-based Interventions to Improve the Quality of Care for Hospitalized Medical Patients: A National Survey. The Joint Commission Journal on Quality and Patient Safety; in press.


Manuscripts in Review


Li J, Talari P, Kelly A, Latham B, Dotson S, Manning K, Thornsberry L, Swartz C, Williams MV. Inter-professional Teamwork Innovation Model (ITIM©) to Promote Communication and Patient-Centered, Coordinated Care. (revision)

Li J, Williams MV, Page C, Cofield R, Cassis L, Kern PA, DiPaola RS. The Value of Innovation to Implementation Program (V12P): A Strategic Approach to Aligning and Leveraging Academic Research and Clinical Care Missions.

Li J, Williams MV. Hospitalist Value in an ACO World.

Appendices

Presentations


Abstracts & Posters


A Personal Note on Being Humbled

Sitting on the stage at my college graduation, I experienced waves of emotion. I felt tremendous gratitude for the recognition of being honored for my academic success. And with eagerness mixed with nervous anticipation, I looked forward to interviewing in two weeks for a full-paid scholarship to medical school. Abruptly, the excitement and joy washed away with tears as the President of the University asked the parents of each student on the stage to “stand up” and be recognized. My father, riddled with kidney cancer including metastases to his spine, had been confined to a wheelchair and not walked in months. To my amazement, he stood up and I watched him cry—something I had never seen this retired Lt. Colonel and World War II B-24 bomber pilot do. I still shed tears whenever I think back on this indelible experience.

My father’s support and inspiration guided me during my entire life. Reading his WWII flight logs (see below for an example), I realize how he recognized the importance of teamwork, especially with his co-pilot. “Jones and I acted as one brain with four hands and four feet.” His career of service in the military and then for our local government and national charities reflected his values that I absorbed as his son growing up in a small coastal town.

I’ve been remarkably fortunate in my education and career. As a high school student, I was selected to attend a prestigious summer program, Future Florida Scientists, and spent the summer between my Junior and Senior years of high school taking college coursework in anatomy, learning how to interpret electrocardiograms while participating in a research project, and receiving mentoring in preparation for a career in science. My father expressed his pride in my selection, and counseled me to take advantage of this unique opportunity, learning all I could. Next, I received a surprise at the end of my first year of college when I was selected to receive the Wentworth Freshman Honor Scholarship. These unexpected funds allowed me to participate in a student exchange program the next year. Sadly, it was interrupted with the initial news of my father’s cancer diagnosis. Immediately, I tried to return home from The Netherlands, but he refused. Again, he told me I should take advantage of this unique opportunity and learn all I could while living within another culture. Because of World War II, he missed the chance to attend Ohio State on a scholarship, but sent every one of his 5 children off to college.

My final two years of college were spent diligently studying and working weekends at our family gas station while also experiencing the state university health system, the VA hospital and the kindness of physicians who cared for my father. This culminated in my graduation experience and eventual scholarship to medical school. Sadly, my father died during the summer after my first year of medical school. I still carry his advice with me—learn all you can and use it to help others. As Director of the Center for Health Services Research, I am humbled to serve with such an amazing team and honor my father with our team’s contributions to the University for Kentucky and the citizens of the Commonwealth of Kentucky.

Mark V. Williams, MD, FACP, MHM
Professor & Vice Chair, Department of Internal Medicine
Professor of Health Policy and Management
Director, Center for Health Services Research
University of Kentucky

Mark Williams

Smoky’s Log; 14th Mission; September 11, 1944; Target: Hannover

The mention of that name sends cold chills up and down my spine. The group was attacked by 60 ME 109s on the way in. The lead squadron caught hell. That was us. They made six passes and knocked down six ships. Rudd went down on the first pass and hasn’t been heard from since.

Huba got one confirmed kill and the boys also accounted for one probable. We got through with less than ten 20 mm holes and went onto the target. The flak there was the most accurate I have ever seen and it was all 155s. The last burst that came up blew out my controls and by the time I had it set up on A-5 I had to join the group behind ours.

We came home and landed on A-0 at Woodbridge. We were lucky that Jones got us fighter support because 109’s and 190’s jumped all of the stragglers. They got two just 5 minutes behind us coming out over the Zuider Zee.

Total flak damage was—All four engines hit with holes in the rudders and stabilizers and ailerons. Holes in the Bomb bay gas tanks, waist and the control out. "Jones and I acted as one. brain with four hands and four feet."