# Satya Surbhi, PhD

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#### **EDUCATION**

2012 – 2016	<b>Doctor of Philosophy</b> in Health Outcomes and Policy Research, UTHSC, Memphis, TN Dissertation Title: <i>Medication Nonadherence, Health Care Utilization, and SafeMed Care Transitions Model Impact in Super-utilizers</i> .
2008 – 2011	<b>Master of Science</b> in Pharmacy Administration, St. John's University, Queens, NY Thesis Title: <i>Hypertension Diagnosis, Treatment, and Control in Diabetic Patients</i> .
2003 – 2007	Bachelor of Pharmacy, Manipal Academy of Higher Education, Karnataka, India
AWARDS	
<b>AWARDS</b> 2015–2016	2015 PhRMA Foundation Pre-Doctoral Fellowship Award in adherence improvement, \$25,000
	2015 PhRMA Foundation Pre-Doctoral Fellowship Award in adherence improvement, \$25,000 UTHSC College of Graduate Health Sciences Travel Award, \$500

## PROFESSIONAL MEMBERSHIPS

2018 – Present	American Medical Informatics Association (AMIA)
2010 – Present	International Society for Pharmacoeconomics and Outcomes Research (ISPOR)
2014 – Present	Academy Health
2018	Society of General Internal Medicine

# **UNIVERSITY APPOINTMENTS**

- 2017 Present **Assistant Professor**, Center for Health System Improvement, College of Medicine, University of Tennessee Health Science Center (UTHSC), Memphis, TN
- 2016 2017 **Postdoctoral Fellow**, Center for Health System Improvement, UTHSC, Memphis, TN <u>Project</u>: Improving Self-Care Decisions of Medically Underserved African-Americans with Uncontrolled Diabetes: Effectiveness of Patient-Driven Text Messaging versus Health Coaching.

PI: James E. Bailey, MD, MPH Funding Source: PCORI

- Responsibilities included data analysis, presentation of the study results, and developing research manuscripts and publication
- Managing the Diabetes Wellness and Prevention Coalition Registry, a specialized source of

- diabetes and chronic disease data in the Mid-south region
- Supervised doctoral candidate graduate students, Mr. Ankur A. Dashputre, MS and Mr. Sohul Ahmed Shuvo, MS, MBA

## 2013 – 2015 **Data Manager/Graduate Research Assistant, UTHSC**, Memphis

**Project**: SafeMed Program

PI: James E. Bailey, MD, MPH Funding Source: CMS/CMMI

- Responsibilities included analyzing and interpreting SafeMed database and hospital
  utilization data, preparing monthly run charts and quarterly CMS reports, SafeMed staff
  training in data entry procedures, and developing abstracts and manuscripts
- Analysis of Medicare and Tennessee Medicaid claims data as part of doctoral dissertation, to examine the impact of SafeMed Program on medication adherence, hospitalizations, and costs

## 2012 – 2013 Graduate Research Assistant, UTHSC, Memphis, TN

Project: Health Implications of MTM Eligibility Criteria

<u>PI</u>: Junling Wang, PhD <u>Funding Source</u>: NIH/NIA

Responsibilities included reviewing literature, data analysis, data interpretation, and writing
abstracts and manuscripts using data from the National Ambulatory Medical Care Survey
(NAMCS), National Hospital Ambulatory Medical Care Survey (NHAMCS) and Medical
Expenditure Panel Survey (MEPS)

#### NON-ACADEMIC EMPLOYMENT

Summer 2015 **Graduate Intern**-Enterprise Research and Analytic Development, **CVS Health**, Northbrook, IL Project: Value of adherence interventions using Markov cohort simulation model

• Used cost benefit models to examine the value of adherence improvement interventions at different points on the medication adherence trajectory

#### 2008 Business Development Manager, Boehringer Ingelheim, India Pvt. Ltd.

• Worked in the marketing and sales department and promoted medications including Actilyse® (alteplase), Metalyse® (tenecteplase), and Aggrenox® (aspirin/extended-release dipyridamole) for the treatment of ischemic stroke and myocardial infarction

# 2007 Territory Manager, Cipla Ltd, India

• Worked in the marketing and sales department and promoted generic HIV medications to the physicians

#### **EDITORIAL APPOINTMENTS**

#### **Grant Reviewer**

- Reviewer, Maryland Industrial Partnership Program (MIPS), University of Maryland, MA, June 2018
- Co-Reviewer, Health Research Board (HRB), Republic of Ireland, March 2017

#### **Editorial Board**

• Academic Editor, PLOS ONE

• Editorial Board Member, Journal of Pharmaceutical Health Services Research (JPHSR)

#### Ad Hoc Reviewer

#### **2018 – Present**

- Medical Care
- International Journal of Pharmacy Practice (IJPP)
- INQUIRY
- Journal of American Pharmacists Association (JAPhA)
- ClinicoEconomics and Outcomes Research

#### **2017 – Present**

- Value in Health
- Pharmacy Practice
- Journal of Pharmaceutical Health Services Research (JPHSR)
- Expert Review of Pharmacoeconomics & Outcomes Research
- Journal of Medical Economics

## **2016 – Present**

- Journal of Managed Care & Specialty Pharmacy (JMCP)
- Research in Social and Administrative Pharmacy
- PLOS ONE

#### **Abstract Reviewer**

- International Society for Pharmacoeconomics and Outcomes Research (ISPOR) Europe, 2018
- Academy of Managed Care Pharmacy (AMCP), 2017

#### GRADUATE STUDENT MENTORING

2018-Present	PhD Committee Member, Sohul Ahmed Shuvo, Health Outcomes and Policy Research, UTHSC
Summer 2019	Primary Mentor, Sierra Gaffney, NIH Summer Research Scholars Program, UTHSC
Summer 2018	Primary Mentor, Rosita Nnenna Ekem, NIH Summer Research Scholars Program, UTHSC
Summer 2018	Co-Mentor, Emily Morgan Mylhousen, NIH Summer Research Scholars Program, UTHSC

#### RESEARCH FUNDING

# **Ongoing**

PhRMA Foundation Surbhi (PI)

10/01/2019-10/30/2020

Improving Adherence through Full Subsidy and Direct Delivery of Essential Medications for Medicaid Super-Utilizers. The goal of this pilot randomized controlled trial is to demonstrate the feasibility of an intervention involving full medication subsidy and/or bedside and home delivery of medications to improve medication adherence and quality of life while reducing preventable inpatient and ED use and costs among

Medicaid super-utilizers. Role: Principal Investigator

Budget: \$100,000

UTHSC CORNET Disparities Grant Bailey (PI)

01/01/2019-12/31/2019

Geographic, income, and racial disparities in continuity of care and their effect on health care utilization for obesity-associated chronic conditions. The goal of this study assess whether continuity of care protects patients living with obesity associated chronic conditions from potentially preventable emergency department and hospital utilization.

Role: Co-Investigator Budget: \$75,000

PCORI Bailey (PI)

01/1/2016-08/31/2020

Improving Self-Care Decisions of Medically Underserved African-Americans with Uncontrolled Diabetes: Effectiveness of Patient-Driven Text Messaging versus Health Coaching. The goal of this study is to compare how well Motivational Messages, Diabetes Wellness Coaches, and usual care with diabetes education materials provided at the doctor's office work to help African-American adults with uncontrolled diabetes improve diabetes self-care decisions.

Role: Data Manager Budget: \$5,200,000

# Completed

PhRMA Foundation

Pre-Doctoral Fellowship in Adherence Improvement Surbhi (PI)

08/1/2015-07/31/2016

Medication Nonadherence, Health Care Utilization, and SafeMed Care Transitions Model Impact in Superutilizers. This grant provided one year of support for completing PhD dissertation work.

Role: Principal Investigator

Budget: \$25,000

## PEER-REVIEWED PUBLICATIONS

#### **Published**

- Bailey JE, **Surbhi S**, Wan JY, et al. Effect of Intensive Interdisciplinary Transitional Care for High-Need, High-Cost Patients on Quality, Outcomes, and Costs: a Quasi-Experimental Study. J Gen Intern Med. 2019.
- **Surbhi S**, Graetz I, Wan JY, Gatwood J, Bailey JE. The Effect of Opioid Use and Mental Illness on Chronic Disease Medication Adherence in Superutilizers. *J Manag Care Spec Pharm*. 2018 Mar;24(3):198-207.
- Nault Connors JD, Binkley BL, Graff JC, **Surbhi S**, Bailey JE. How patient experience informed the SafeMed Program: Lessons learned during a Health Care Innovation Award to improve care for superutilizers. *Healthc (Amst)*. 2018.
- **Surbhi S**, Munshi KD, Bell PC, Bailey JE. Drug therapy problems and medication discrepancies during care transitions in super-utilizers. *J Am Pharm Assoc* (2003). 2016;56(6):633-642 e631.
- Bailey JE, **Surbhi S**, Bell PC, Jones AM, Rashed S, & Ugwueke MO. SafeMed: Using pharmacy technicians in a novel role as community health workers to improve transitions of care. *J Am Pharm Assoc* (2003). 2016;56(1):73-81.

- Jamison JJ, Wang J, **Surbhi S**, et al. Impact of Medicare Part D on Racial and Ethnic Minorities. *Divers Equal Health Care*. 2016;13(5):326-333.
- Wang J, **Surbhi S**, Zhang Z, Spivey CA, Burns MC. Historical trend of racial and ethnic disparities in meeting Medicare medication therapy management eligibility in non-Medicare population. *Res Social Adm Pharm.* 2014;10(6):904-917.
- Wang J, Surbhi S, Kuhle JW. Receipt of Angiotensin-Converting Enzyme Inhibitors or Angiotensin II Receptor Blockers among Medicare Beneficiaries with Diabetes and Hypertension. *J Pharm Health Serv Res.* 2014;5(1):67-74.

# **Submitted or Ongoing**

- **Surbhi S**, Graetz I, Wan JY, Gatwood J, Bailey JE. Medication Nonadherence, Mental Illness, and Opioid Use and Inpatient and Emergency Department Use in Super-Utilizers. Manuscript resubmitted to *American Journal of Managed Care*.
- Harris LJ, Surbhi S, Box A, Bailey JE. Opioid Prescribing Behavior and Healthcare Utilization among Medically-Complex Super-Utilizers. Manuscript submitted to the *Journal of Emergency Medicine*, May 2019.
- Dashputre AA, **Surbhi S**, Podilla P, Shuvo SA, Bailey JE. Effects of access to primary care on hospital and emergency department utilization in medically underserved patients with obesity-associated chronic conditions. Manuscript in preparation to be submitted to *American Journal of Managed Care*.
- **Surbhi S**, Brooks IM, Shuvo SA, Riordan CJ, Smith PA, Bailey JE. The Diabetes, Wellness, and Prevention Coalition Registry: Design and Methods of a Chronic Disease Registry in the Mid-South. Manuscript in preparation to be submitted to the *Journal of Health Care for the Poor and Underserved*.
- Bailey JE, Surbhi S, Gatwood J, Butterworth S, Coday M, Shuvo SA, Dashputre A, Brooks I, Binkley B, Riordan CJ, Jackson B, Steinberg H, Gutierrez ML, Haley L, Smith P, Tolley B. The Management Of Diabetes in Everyday Life (MODEL) Study: A PCORI-funded Pragmatic Randomized Controlled Trial Comparing Effectiveness of Text Messaging and Health Coaching to Improve Self-care for African Americans with Uncontrolled Diabetes. Manuscript in preparation to be submitted to Contemporary Clinical Trials.

#### **PRESENTATIONS**

#### **Podium Presentations**

- Ekem RN, **Surbhi S**, Harris LJ, Bailey JE. Patient Preferences for Using Emergency and Primary Care for Non-Urgent Conditions in Medically Underserved Areas. Abstract accepted for podium presentation at the Society of General Internal Medicine 2019 Southern Regional Meeting at Houston, TX.
- Mylhousen EM, Tolley EA, Surbhi S, Smith PA, Riordan CJ, Bailey JE. Effectiveness of a Brief Intervention to Increase Rapid Primary Care Follow-up among African American Patients with Uncontrolled Diabetes. Abstract accepted for podium presentation at the Society of General Internal Medicine 2019 Southern Regional Meeting at Houston, TX.
- Shuvo SA, **Surbhi S**, Dashputre A, Bailey JE. Association of Access to Primary Care with Healthcare Utilization Among Medically Underserved Patients with Diabetes. Podium presentation at Academy Health 2018 annual research meeting, Seattle, WA.

- Surbhi S, Graetz I, Wan JY, Harris LJ, Bailey JE. Receipt of Opioids from Multiple Providers and Associated Inpatient and Emergency Department Use among Super-Utilizers. Oral presentation at the Society of General Internal Medicine 2018 Southern Regional Meeting at New Orleans, LA.
- Bailey JE, **Surbhi S**, Bell P, Jones A, Rashed S. A Novel Expanded Role for Certified Pharmacy Technicians As Community Health Workers Improving Transitions of Care. Podium presentation at Academy Health 2015 annual research meeting, Minneapolis, MN.

## **Poster Presentations**

- Brooks IM, Riordan CJ, **Surbhi S**, Shuvo SA, Bailey JE. The Diabetes Wellness and Prevention Coalition Registry: A practice-based Research Network for Applied Health Care Research, Delta Clinical and Translational Health Disparities Conference, University of Mississippi Medical Center, Jackson MS.
- Dashputre AA, Surbhi S, Podila PSB, Bailey JE. Characteristics of Adult Patients With Obesity Associated Chronic Conditions. Poster presentation at 2018 Graduate Research Day, UTHSC, Memphis, TN.
- **Surbhi S**, Shuvo SA, Brooks IM, Dashputre A, Bailey JE. Utilizing Diabetes, Wellness, and Prevention Coalition Registry to Improve Quality of Care for Patients with Diabetes. Accepted for poster presentation at American Medical Informatics Association (AMIA) 2018 clinical informatics conference, Scottsdale, AZ.
- Surbhi S, Bailey JE, Graetz I, Wan JY. Medication Nonadherence, Mental Illness, and Opioid Use and Inpatient and Emergency Department Use in Super-Utilizers. Poster presentation at Academy Health 2017 annual research meeting, New Orleans, LA.
- **Surbhi S**, Bailey JE, Graetz I, Wan JY. Predictors of Medication Nonadherence in Super-Utilizers with Multiple Chronic Conditions and Polypharmacy. Poster presentation at Academy Health 2016 annual research meeting, Boston, MA.
- Bailey JE, Graetz I, Munshi KD, Surbhi S, Wan JY, Waters TM. Cost Savings Associated with Participation in the Safemed Program, an Innovative Care Transitions Program for Super-Utilizers with Multiple Chronic Conditions. Poster presentation at Academy Health 2015 Annual Research Meeting, Minneapolis, MN.
- **Surbhi S**, Bailey JE, Chang C. Incremental Direct Medical Expenditures Associated with COPD among the Adult Population: A Two-Part Regression Approach. Poster presentation at Academy Health 2014 annual research meeting, San Diego, CA.
- Wang J, Qiao Y, Surbhi S. Historial Trend in the Disparity Implications of Applying Medicare MTM
  Eligibility Criteria among the Non-Medicare Population. Poster presentation at Academy Health 2013
  annual research meeting, Baltimore, MD.
- Surbhi S, Wang J. Receipt of Angiotensin-Converting Enzyme Inhibitors or Angiotensin II Receptor Blockers among Medicare Beneficiaries with Diabetes. Poster presentation at Drug Information Association 2013 annual meeting, Boston, MA.
- Marler J, Howard-Thompson A, Wang J, Armstrong H, Elliott W, Surbhi S, Sterling J, Wells L, George C. Effect of diabetes education provided by student pharmacists in a community pharmacy on diabetes knowledge and glycosylated hemoglobin in patients with diabetes. Poster presentation at Tennessee Society of Health-System Pharmacists (TSHP) 4<sup>th</sup> annual meeting, TN.

- **Surbhi S**, Mackey ML. Screening, Treatment and Control of Hypertension in Diabetic Patients using Outpatient Visit Data. Poster presentation at 2011 International Society for Pharmacoeconomics and Outcomes Research (ISPOR) 16<sup>th</sup> annual international meeting, Baltimore, MD.
- **Surbhi S**, Mackey ML. The Prevalence and Use of Potentially Inappropriate Medication in the Elderly Population using National Nursing Home Survey (NNHS). Poster presentation at 2010 International Society for Pharmacoeconomics and Outcomes Research (ISPOR) 15<sup>th</sup> annual international meeting, Atlanta, GA.