

## CURRICULUM VITAE

Montika Bush, PhD  
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### EDUCATION

<b>Doctor of Philosophy, Epidemiology</b> Dissertation Topic: Secondary Prevention Methods after Acute Myocardial Infarction	<b>University of North Carolina</b>	<b>2010 – 2017</b>
<b>Master of Statistics</b> Concentration: Biomedical Statistics	<b>North Carolina State University</b>	<b>2003 – 2005</b>
<b>Bachelor of Electrical Engineering</b> Minor: Computer Science	<b>University of Dayton</b>	<b>1990 – 1994</b>

### PROFESSIONAL EXPERIENCE

<b>Assistant Professor</b> University of North Carolina at Chapel Hill School of Medicine Department of Emergency Medicine	<b>2018 – Present</b>
<b>Research Instructor</b> University of North Carolina at Chapel Hill School of Medicine Department of Emergency Medicine	<b>2016 – 2018</b>
<b>Graduate Research Assistant</b> University of North Carolina at Chapel Hill School of Medicine Department of Emergency Medicine Faculty Advisor: Multiple	<b>2015 – 2016</b>
<b>Instructor</b> Art of Problem Solving Academy Morrisville, North Carolina	<b>2015 – 2016</b>
<b>Graduate Teaching Assistant</b> University of North Carolina at Chapel Hill School of Medicine Course: Clinical Epidemiology (MEDI 220)	<b>2014 – 2016</b>
<b>Graduate Teaching Assistant</b> University of North Carolina at Chapel Hill Gillings School of Global Public Health Department of Epidemiology Course: Special Topics in Epidemiologic Research Using Healthcare Databases (EPID 690)	<b>Spring 2013</b>

**Graduate Research Assistant**

2010 – 2013

University of North Carolina at Chapel Hill  
 School of Medicine  
 Department of Emergency Medicine  
 Faculty Advisor: Seth Glickman, MD, MBA

**Graduate Research Assistant**

2012 – 2012

University of North Carolina at Chapel Hill  
 Gillings School of Global Public Health  
 Department of Epidemiology  
 Faculty Advisor: Anna Kucharska-Newton, PhD

**Biostatistician**

2005 – 2010

Kendle International  
 Durham, North Carolina

**Senior Consultant, Account Manager**

1995 – 2002

Keane Inc.  
 Cincinnati, Ohio

## HONORS/AWARDS

UNC Simmons Scholars Program	2018 – 2023
Cecil G. Sheps Pre-doctoral Fellowship in Health Services Research	2013 – 2015
Susanne Moulton and Thomas Wong Endowed Scholarship	2010
James Imhotep Irving Public Service Scholarship	2010

## BIBLIOGRAPHY

## Refereed Articles

PubMed: <https://www.ncbi.nlm.nih.gov/myncbi/montika.bush.1/bibliography/public/>

ORCID: <https://orcid.org/0000-0002-7257-9512>

**Bush M**, Evenson KR, Aylward A, Cyr JM and Kucharska-Newton A (2023) Psychosocial services provided by licensed cardiac rehabilitation programs. *Front. Rehabil. Sci.* 4:1093086. doi: 10.3389/fresc.2023.1093086

Hurka-Richardson K, Platts-Mills TF, McLean SA, Weinberger M, Stearns SC, **Bush M**, Quackenbush E, Chari S, Aylward A, Kroenke K, Kerns RD, Weaver MA, Keefe FJ, Berkoff D, Meyer ML. Brief Educational Video plus Telecare to Enhance Recovery for Older Emergency Department Patients with Acute Musculoskeletal Pain: an update to the study protocol for a randomized controlled trial. *Trials.* 2022 May 12;23(1):400. doi: 10.1186/s13063-022-06310-z. PMID: 35550175; PMCID: PMC9096747.

D. Brathwaite, AE Waller, B. Gaynes, TM Deselm, JJ Bischof, J. Tintinalli, JH Brice, **M. Bush**, Age and sex trends among mental health-related emergency department visits in North Carolina, *Healthcare Analytics* (2022), doi:<https://doi.org/10.1016/j.health.2022.100056>

Aylward A, Evenson KR, Kucharska-Newton A, **Bush M**. Outpatient Cardiac Rehabilitation Services, Participants and Workforce in North Carolina: Results of a 2019 Survey of Cardiac Rehabilitation Program Directors. *N C Med J.* 2022 Mar-Apr;83(2):134-141. doi: 10.18043/nmc.83.2.134. PMID: 35256477.

Shenvi, CL, Wang, Y, Revankar, R, Phillips J, **Bush M**, Biese K, Aylward A, D'Onofrio G, Platts-Mills T. Use of a Brief Negotiation Interview in the emergency department to reduce high-risk alcohol use among older adults: A randomized trial. *JACEP Open.* 2022; 3:e12651. <https://doi.org/10.1002/emp2.12651>

Brathwaite D, Waller AE, Gaynes BN, Stemerman R, Deselm TM, Bischof JJ, Tintinalli J, Brice JH, **Bush M** A 7 Year Summary of Emergency Department Visits by Patients With Mental Health Disorders. *Frontiers in Psychiatry* (2022) <https://www.frontiersin.org/article/10.3389/fpsy.2022.831843>  
doi:10.3389/fpsy.2022.831843

Bischof, J.J., **Bush, M.**, Shams, R.B. *et al.* A hybrid model of acute unscheduled cancer care provided by a hospital-based acute care clinic and the emergency department: a descriptive study. *Support Care Cancer* (2021). <https://doi.org/10.1007/s00520-021-06327-1>

Aylward AF, Engelberg Anderson J, Morris A, **Bush M**, Schmitthenner B, Bin Shams R, Omofoye F, Bodepudi S, Roche H, Cimpian J, Wardlow L, Platts-Mills TF Using malnutrition and food insecurity screening to identify broader health-related social needs amongst older adults receiving emergency department care in the Southeastern United States: A cross-sectional study. *Health Soc Care Community*. 2021; 00: 1–11. <https://doi.org/10.1111/hsc.13367>

Platts-Mills TF, McLean SA, Weinberger M, Stearns SC, **Bush M**, Teresi BB, Hurka-Richardson K, Kroenke K, Kerns RD, Weaver MA, Keefe FJ. Brief educational video plus telecare to enhance recovery for older emergency department patients with acute musculoskeletal pain: study protocol for the BETTER randomized controlled trial. *Trials*. 2020;21(1):615. Published 2020 Jul 6. doi:10.1186/s13063-020-04552-3

**Bush M**, Kucharska-Newton A, Simpson RJ Jr, Fang G, Stürmer T, Brookhart MA. [Effect of Initiating Cardiac Rehabilitation after Myocardial Infarction on Subsequent Hospitalization in Older Adults.](#) *J Cardiopulmonary Rehabilitation Prev*. 2020 Mar; 40(2):87-93. doi: 10.1097/HCR.0000000000000452. PubMed PMID: 31592930.

**Bush M**, Gaynes BN, Smith SC Jr. Additional Considerations for Screening and Treatment of Depression in Patients with Acute Coronary Syndrome. *JAMA Intern Med*. 2020 Mar 1;180(3):473. doi: 10.1001/jamainternmed.2019.7116. PubMed PMID: 32119049.

Dayaa JA, **Bush M**, Richmond NL, Nelson LS, Platts-Mills TF. Patient health literacy and the receipt of opioids in the emergency department. *J Opioid Management*. 2019 Jul/Aug;15(4):267-271. doi: 10.5055/jom.2019.0511. PubMed PMID: 31637678.

**Bush, M.**, Stürmer, T., Stearns, S., Simpson Jr., R. J., Brookhart, M. A., Rosamond, W., & Kucharska-Newton, A. Position Matters: Validation of Medicare Hospital Claims Against Medical Record Review in the Atherosclerosis Risk in Communities Study. *Pharmacoepidemiology and Drug Safety* 2018; 1–7. <https://doi.org/10.1002/pds.4396>

**Bush M.**, Simpson RJ Jr, Kucharska-Newton A, Fang G, Stürmer T, Brookhart MA. Approaches to Address Premature Death of Patients When Assessing Patterns of Use of Health Care Services After an Index Event. *Medical Care*. 2018 Jun 5; PubMed PMID: [29877956](#).

Platts-Mills T.F., Hollowell A.G., Burke G.F., Zimmerman S., Dayaa J.A., Quigley B.R., **Bush M.**, Weinberger M., Weaver M.A. Randomized controlled pilot study of an educational video plus telecare for the early outpatient management of musculoskeletal pain among older emergency department patients. *Trials* 2018;19 (1):10.

**Bush, M.**, Glickman, L. T., Fernandez, A. R., Garvey, J. L., & Glickman, S. W. Variation in the Use of 12-Lead Electrocardiography for Patients with Chest Pain by Emergency Medical Services in North Carolina. *Journal of the American Heart Association* 2, no. 4 (August 23, 2013): e000289. doi:10.1161/JAHA.113.000289.

Refereed unpublished oral presentations and/or abstracts

**Bush, M.**, Kucharska-Newton, A., Fang, G., Simpson Jr., R. J., Stürmer, T., & Brookhart, M. A. Gender Differences in the Predictors of Utilization of Cardiac Rehabilitation Services After Acute Myocardial Infarction Among Medicare Beneficiaries; *Agency for Healthcare Research and Quality 21st Annual NRSA Research Trainees Conference*, Minneapolis, MN June 2015

### Refereed unpublished poster presentations

**Bush, M.**, Peacock-Hinton S, Simpson Jr RJ, Fang G. Post-Myocardial Infarction Guideline-Recommended Therapy Utilization Sankey Diagrams. *38<sup>th</sup> International Conference on Pharmacoepidemiology* Copenhagen, Denmark Aug 2022.

**Bush, M.**, Kucharska-Newton, A., Fang, G., Simpson Jr., R. J., Stürmer, T., & Brookhart, M. A. Use of Cardiac Rehabilitation Services After Acute Myocardial Infarction. *Academy Health's Annual Research Meeting* San Diego, CA Jun 2014.

**Bush, M.**, Stearns, S., Chang, P., Sueta, C., Wruck, L., Carey, T., & Kucharska-Newton, A. Socioeconomic status and patterns of follow-up care after myocardial infarction the Atherosclerosis Risk in Communities (ARIC) study. *American Heart Association Councils on Epidemiology & Prevention (EPI) and Nutrition, Physical Activity & Metabolism (NPAM) 2013 Scientific Sessions* New Orleans, Louisiana Mar 2013.

Kucharska-Newton, A., **Bush, M.**, Stearns, S., Sueta, C., Chang, P., Carey, T., Wruck, L., Outpatient Care Following Myocardial Infarction - The Atherosclerosis Risk in Communities (ARIC) Study. *American Heart Association Councils on Epidemiology & Prevention (EPI) and Nutrition, Physical Activity & Metabolism (NPAM) 2013 Scientific Sessions* New Orleans, Louisiana Mar 2013.

## TEACHING ACTIVITIES

### Lectures

- Pediatric Emergency Medicine Fellowship (2019, 2021, 2023): Provide interactive epidemiology overview lecture on a variety of topics relevant to fellows' board exams. Lecture includes mini journal club to identify key concepts of study design and potential bias in recent articles. Fellowship program has 3 trainee positions.
- Medical Student Training ISTEM / MSTAR / T35 (Summers 2019, 2020, 2021): Provided interactive lecture on creating data analysis plan and writing methods section for scholarly publication. The department trains 4-10 medical students each summer who have been awarded grants to complete summer research projects. This lecture provides structure on how to plan for and create any potential outputs for poster/manuscript that can also be used as a communication tool with their project Advisor and Biostatistician.
- DPOP870: Pharmaceutical Outcomes Research (Spring 2019): Guest lecturer to 5-7 students on topic of applying competing risks approaches to assessing patterns of healthcare service utilization after an index event. This is a graduate level course designed to provide training in intermediate-to-advanced-level applied and contemporary research methods in evaluating pharmaceutical treatment utilization and outcomes.
- MEDI 220: Clinical Epidemiology (Fall 2014, Fall 2015, Spring 2016): Served as co-instructor where I facilitated weekly lectures, group activities, and graded critical review paper for 30-35 medical students. Course is taught to first and second year medical students in preparation for certification board exam.
- EPID 690: Special Topics in Epidemiologic Research Using Healthcare Databases (Spring 2013): Assisted primary instructor by leading several lectures on connecting to the server and SAS SQL Introduction, assisting students with coding issues, grading homework assignments and attending weekly lectures. Course allowed 20-25 graduate students to use a large private insurance claims database to perform an epidemiologic project.

## Other Supervision: Mentorship

- As a member of Pediatric EM Fellowship Scholarship Oversight Committee, I review the research and scholarship activities of the Fellows and provide constructive feedback and technical expertise (2018 – Present).
- Mentor Danielle Brathwaite, Health Policy & Management MD/PhD Candidate 2024, to describe trends in mental health related Emergency Department visits (2018 – Present). Danielle, successfully created a summary table using SAS, gave oral presentations on our research at the annual APHA and SAEM conferences, and first authored 2 published manuscripts.
- Mentor Simrat Arora, UNC School of Medicine Candidate 2024, to complete summary of screening for food insecurity literature summary (summer 2021)
- UNC Federal work-study supervisor mentoring an undergraduate student who completed 2 literature review summaries (2019-2020)
- Discuss career paths for Epidemiologists as panelist for epidemiology graduate students (2019, 2020)
- Mentor EM staff member on SAS programming techniques (2017)