

Arrianna Marie Planey, Ph.D

amplaney@email.unc.edu

Department of Health Policy and Management
UNC Gillings School of Global Public Health
McGavran-Greenberg, CB #1105C
Chapel Hill, NC 27599-7411

Cecil G. Sheps Center for Health Services Research
University of North Carolina
725 Martin Luther King Boulevard, CB #7590
Chapel Hill, NC 27599-7590

PERSONAL

Research Interests

- Healthcare Access
- GIS & Spatial Analysis
- Social Epidemiology
- Health and Healthcare Equity
- Social Determinants of Health
- Patient-Centered Outcomes Research
- Medicare and Medicaid
- Rural Health

Teaching Interests

- Health and Medical Geography
- Geographic Information Science (GIS)
- Spatial Analysis
- Social Epidemiology
- Health Workforce
- Health Care Access
- Environments and Health
- Racism & Health Disparities

EDUCATION

- 2020 Ph.D, **University of Illinois, Urbana-Champaign**
Geography & Geographic Information Science
Dissertation Title: Hearing Health Care In The United States:
A Multi-Scale Spatial & Political Economic Analysis Of Health Care Policy and Access to Audiology Services
- 2013 M.A., **University of Chicago**
Social Sciences (Concentration: Political Science)
- 2009 B.A., **University of California, Berkeley**
History

ACADEMIC EXPERIENCE

- July 2020- Present **Assistant Professor**
Department of Health Policy and Management, Gillings School of Global Public Health,
University of North Carolina at Chapel Hill
- 2023 – Present **Member**
UNC Lineberger Comprehensive Cancer Center
- 2023 – 2026 **Faculty Fellow**
Carolina Population Center, University of North Carolina at Chapel Hill
- 2020 – 2025 **Research Fellow**
Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill
- 2017 – 2020 **Pre-Doctoral Fellow**
Health Policy Research Scholars, Robert Wood Johnson Foundation

Arrianna Marie Planey, Ph.D

amplaney@email.unc.edu

2019 – 2020

Graduate Instructor

University of Illinois at Urbana Champaign, College of Liberal Arts and Sciences
Department of Geography and Geographic Information Science

2016 – 2020

Graduate Research Assistant

University of Illinois at Urbana Champaign, College of Agricultural, Consumer, &
Environmental Sciences
Department of Human Development and Family Studies

ACADEMIC HONORS AND AWARDS

- 2023 Faculty Award for Excellence in Health Equity Research. *Gillings School of Global Public Health*
- 2020 Conference Travel Award, Health Policy Research Scholars, *Robert Wood Johnson Foundation*
- 2019 Peter Gould Student Paper Award, *AAG Health and Medical Geography Specialty Group*
- 2018 AAG-IGU Travel Grant (NSF-funded), International Geographical Union (IGU)- Canadian Association of Geographers (CAG) Joint Meeting, \$1,400
- 2017 Second Place, Graduate Student Poster, School of Earth, Society, & Environment (SESE) Research Review. University of Illinois at Urbana-Champaign
- 2016 Third Place, PhD Student Research Paper Presentation, *Annual Meeting of the West Lakes Division of the AAG*
- 2012 Tuition Scholarship, *University of Chicago*, \$25,000

BIBLIOGRAPHY

Refereed Articles

**indicates publications co-authored with students/mentees

1. **Planey A.M.**, Thomas S.R.**, Friedman H.**, Hecht H.K**, Kent E, Holmes G.M. Rural Hospital Closures from the 1990s to 2020: A Scoping Review. Accepted at the *Journal of Health Care for the Poor and Underserved*
2. **Waters A.R., Petermann V.M., **Planey A.M.**, Manning M., Spencer J.C., Spees L.P., Rosenstein D.L., Gellin M., Padilla N., Reeder-Hayes K., & Wheeler S.B. Financial Burden among Metastatic Breast Cancer Patients and Caregivers: A Qualitative Inquiry of Costs, Financial Assistance, Health Insurance, and Financial Coping Behaviors. Forthcoming at *Cancer Causes & Control*
3. **Bozkurt B., **Planey A.M.**, Aijaz, M., Cilenti, D., Shea C., Khairat S. Rural-Urban Differences in Maternal Visits and Care Content, 2016-2018: Opportunities for Telehealth. Forthcoming at *The Permanente Journal*
4. Mohottige D, Davenport CA, Bhavsar N, Schappe T, Lyn MJ, Maxson P, Johnson F, **Planey AM**, McElroy LM, Wang V, Cabacungan AN, Ephraim P, Lantos P, Peskoe S, Lunyera J, Bentley-Edwards K, Diamantidis CJ, Reich B, Boulware LE. Residential structural racism and prevalence of chronic health conditions. *JAMA Netw Open*. 2023;6(12):e2348914. doi:10.1001/jamanetworkopen.2023.48914
5. **Packard SE, Verzani Z, Finsaas MC, Levy N, Shefner R, **Planey AM**, Boehme AK, Prins S. Maintaining disorder: Estimating the association between policing and psychiatric hospitalization among youth in New York City by neighborhood racial composition, 2006 – 2014. R&R accepted at *Social Psychiatry and Psychiatric Epidemiology*.
6. ****Planey AM**, Thomas SR, Lewis JA, Maaita M. The colocation of primary care physicians and audiologists in the Chicago metro region reinforces racial, ethnic, and class inequities in spatial access to care. *World Med Health Policy*. Published online January 9, 2024. doi:10.1002/wmh3.598

7. **Petermann VP, Biddell CB, **Planey AM**, Spees LP, Rosenstein DL, Manning M, Gellin M, Padilla N, Samuel-Ryals CA, Birken SA, Reeder-Hayes K, Deal AM, Cabarrus K, Bell RA, Strom C, Young TH, King S, Leutner B, Vestal D, Wheeler SB (2023) Assessing the pre-implementation context for financial navigation in rural and non-rural oncology clinics. *Frontiers in Health Services*, doi: 10.3389/frhs.2023.1148887
8. **Biddell CB, Waters AR, Angove RSM, Gallagher KD, Rosenstein DL, Spees LP, Kent EE, **Planey AM**, Wheeler SB. Facing financial barriers to healthcare: patient-informed adaptation of a conceptual framework for adults with a history of cancer. *Front Psychol*. 2023;14. doi:10.3389/fpsyg.2023.1178517
9. Lee M, Sumibcay JRC, Cory H, Duarte C, **Planey AM**. Extending critical race, racialization, and racism literatures to the adoption, implementation, and sustainability of data equity policies and data (dis)aggregation practices in health research. *Health Services Research*. Published online May 18, 2023. doi:10.1111/1475-6773.14167
10. **Planey AM**, Planey DA, Wong S, McLafferty SL, Ko MJ. Structural factors and racial/ethnic inequities in travel times to acute care hospitals in the rural US south, 2007–2018. *Milbank Q*. Published online May 15, 2023. doi:10.1111/1468-0009.12655
11. **Planey AM**, Bozkurt B**, Aijaz M**, Weinstein J**, Khairat S, Shea CM. Telehealth Use by Pregnancy Stage Among Commercially Insured Patients in the United States, 2016-2019. *Telemed J E Health*. Published online June 15, 2023. doi:10.1089/tmj.2022.0516
12. Carroll C, **Planey AM**, Kozhimannil KB. Reimagining and reinvesting in rural hospital markets. *Health Serv Res*. 2022;57(5):1001-1005. doi:10.1111/1475-6773.14047
13. Cartus AR, Goedel WC, Hallowell BD, Allen B, Pratty C, **Planey AM**, Ahern J, Cerdá M, Marshall BDL. Divergence Between Individual- and Neighborhood-Level Fatal Overdose Burden: A Population-Based Statewide Study. *R I Med J* (2023). 2022;105(6):45-50. Published 2022 Aug 1.
14. ****Planey, A.M.**, Grady. S. Fetaw, R., & McLafferty, S.L., Spaces of Segregation and Health: Complex Associations for Black Immigrant Mothers in New York City. Forthcoming at *Journal of Urban Health*. DOI: 10.1007/s11524-022-00634-6. PMID: 35486284 PMCID: PMC9187803
15. **Planey A.M.**, Wong S., Planey D.A., and Ko M.J. (Applied) Geography, Policy, & Time: Whither health and medical geography?. Forthcoming at *Space and Polity*. DOI: 10.1080/13562576.2022.2098649.
16. **Malone T.L., **Planey A.M.**, Bozovich L.B.**., Holmes G.M. The Economic Effects of Rural Hospital Closures. *Health Services Research*. Published online March 21, 2022. <https://onlinelibrary.wiley.com/doi/10.1111/1475-6773.13965> PMID: 35312187 PMCID: PMC9108064
17. Bigman CA, **Planey AM**, Williamson LD, Smith MA, McNeil Smith S. ‘There will be screen caps’: the role of digital documentation and platform collapse in propagation and visibility of racial discourses. *Information, Communication & Society*. Published online March 1, 2022:1-18. doi:10.1080/1369118X.2022.2041698
18. Raynor E, Holmes C, Crowson M, Peskoe S, **Planey A.M.**, Lantos PM. Loss to follow up of failed hearing screen and missed opportunities to detect congenital cytomegalovirus are better identified with the implementation of a new electronic health record system protocol. *Int J Pediatr Otorhinolaryngol*. 2021 Sep;148:110818. doi: 10.1016/j.ijporl.2021.110818. Epub 2021 Jun 25. PMID: 34198229.
19. Ray K.N., Yahner K.**; Bey J., Martin K., **Planey A.M.**, Culyba A.J., Miller E. (2021). Understanding variation in non-urgent pediatric emergency department use in communities with concentrated disadvantage. *Health Affairs*. 40(1). DOI: 10.1377/hlthaff.2020.00675
20. Turner N.A., Pan W., Martinez-Bianchi, V.S., Maradiaga G.M., **Planey A.M.**, Woods C.W., Lantos P.M. (2021). Racial, Ethnic, and Geographic Disparities in Novel Coronavirus (Severe Acute Respiratory Syndrome Coronavirus 2) Test Positivity in North Carolina, *Open Forum Infectious Diseases*, 8(1), January 2021, ofaa413, <https://doi.org/10.1093/ofid/ofaa413>
21. Niles M, Asiodu I.V., Perry J.C., Julian Z, Lyndon A., McLemore M.R., **Planey A.M.**, Scott K.A., Vedam S. (2020). Reflecting on Equity in Perinatal Care During a Pandemic. *Health Equity*. 4(1). Jul 2020.330-333. <http://doi.org/10.1089/heq.2020.0022>
22. Wong, S., Preston, V, **Planey, A.M.**, and McLafferty, S.L. (2020). Disability, Wages, and Commuting in New York. *Journal of Transport Geography*. 87. <https://doi.org/10.1016/j.jtrangeo.2020.102818>

Arrianna Marie Planey, Ph.D

amplaney@email.unc.edu

23. **Planey AM.** (2019). Audiology Service Accessibility & the Health Policy Landscape. *The Hearing Journal*. 72(4). Pp 11,13. DOI: 10.1097/01.HJ.0000557744.28152.45
24. Bigman C.A., Smith M., Williamson L.D., **Planey A.M.**, & McNeil Smith S. (2019). Selective sharing on social media: Examining the effects of race-related disparate impact frames on intentions to retransmit news stories among U.S. college students. *New Media and Society*. 21(11–12), 2691–2709. <https://doi.org/10.1177/1461444819856574>
25. **Planey A.M.**, McNeil Smith S., Moore S., & Walker T. (2019). Barriers and Facilitators to Mental Health Help-Seeking among African American Youth and their Families: A Systematic Review Study. *Children and Youth Services Review*. 101, 190-200. DOI: <https://doi.org/10.1016/j.childyouth.2019.04.001>
26. **Planey A.M.** (2019). Audiologist Availability and Supply in the United States: A Multi-Scale Spatial and Political Economic Analysis. *Social Science and Medicine*. 222, 216-224. DOI: <https://doi.org/10.1016/j.socscimed.2019.01.015>

Refereed Other Products of Scholarship

1. Knocke K.**, Malone T.**, Thomas S, Friedman H.R.**, **Planey AM.** (2021). COVID -19 disproportionately impacts more vulnerable rural hospitals and communities. *Health Serv Res*. 2021;56(S2):84-84. doi:10.1111/1475-6773.13840

Published Reports/White Papers/Research Briefs

1. **Planey A.M.**, Perry J.R., Kent E.E., Thomas S.R.**, Friedman H.**, Randolph R.K., Homes G.M. Since 1990, Rural Hospital Closures Have Increasingly Occurred in Counties that Are More Urbanized, Diverse and Economically Unequal. Findings Brief. NC Rural Health Research Program, UNC Sheps Center. February 2022.
2. Crouch E., Davis R., Eberth J.M., Huang Q., McNatt M.K., Oyesede O., Perry C., **Planey A.M.**, Probst J.C., Sercy E., Torres M., Toussaint E.A., Zahnd W. 2021 Rural Border Health Chartbook September 2021. <https://www.ruralhealthinfo.org/resources/18606>

Book Chapters

1. **Planey A.M.**, & Nguemini Tiako M.J. (2022) "Sick and Tired of Being Sick and Tired": The History, Present, and Future of Healthcare Policy and Provision in U.S. Black Communities. Chapter 7 in ed. Berger Z. (2022) Health for Everyone; A Guide to Politically and Socially Progressive Healthcare. *Rowman & Littlefield*. Lanham, Maryland, USA

Book Reviews

1. **Planey, A.M.** Chandra L. Ford, Derek M. Griffith, Marino A. Bruce, and Keon L. Gilbert (eds.). 2019. Racism: Science & Tools for the Public Health Professional. Washington, D.C.: American Public Health Association Press, 2019. \$75.00. Paperback. pp. 583. ISBN: 978-0-87553-303-2. *World Medical & Health Policy*. DOI: 10.1002/wmh3.379

Refereed Unpublished Oral Presentations

++ indicates senior author status; *** indicates pandemic-related cancellation

1. **Planey, A.M.**, Spatial Epidemiologic Methods for Health(care) Disparities Research. Society for Epidemiologic Research (SER) Conference. Portland, OR. June 2023.
2. **Planey, A.M.**, Planey, D.A., Wong, S., Winata, F. & Ko, M. Longer Travel Times to Acute Hospitals Are Associated with Lower Likelihood of Preventive Care and Cancer Screening Receipt Among Rural-

Arrianna Marie Planey, Ph.D

amplaney@email.unc.edu

Dwelling Adults in the U.S. South. Annual Meeting of the American Association of Geographers. Denver, CO. March 2023.

3. **++Planey, A.M.**, Grady, S. Fetaw, R.**, & McLafferty, S.L., Spaces of Segregation and Health: Complex Associations for Black Immigrant Mothers in New York City. GEOMED Conference. University of California, Irvine. October 2022.
4. Knocke K.**, Malone T.**, Thomas S.R.**, Friedman H.**, **Planey A.M.**++ COVID-19 Disproportionately Impacts More Vulnerable Rural Hospitals and Communities. AcademyHealth Annual Research Meeting (Virtual), July 2021
5. **Planey, A.M.** *Bridging the Divide: Access Barriers Faced by Patients with Communication Disorders & How Clinicians Can Address Them.* Kennedy Krieger Institute, Room to Grow Conference. September 2021.
6. **Planey, A.M.** Intersectionality: Measurement within Health Services Research. American Association of Geographers, Annual Meeting (Virtual). April 2021
7. ****Planey, A.M.**, Planey, D.A., Wong, S., McLafferty, S.L., and Ko, M. Rural Hospital Closures in the US South: Implications for Spatial Access to Acute Care. American Association of Geographers, Annual Meeting (Virtual). April 2020
8. **Planey, A.M.** Mapping and Analyzing Health Care Provider Interdependencies & Resulting Access Disparities By Race and Class: The Case of Primary Care Physicians and Audiologists in Chicagoland. International Medical Geography Symposium (Queenstown, New Zealand), July 2019
9. **Planey, A.M.** Audiologist Availability and Access in the United States: A Multi-Scale Spatial and Political Economic Analysis. American Association of Geographers, Annual Meeting (Washington, D.C.), April 2019
 - *Winner - Peter Gould Student Paper Award*
10. **Planey, A.M.** Mapping and Analyzing Health Care Provider Interdependencies: The Case of Primary Care Physicians and Audiologists in Chicagoland. American Association of Geographers (AAG) Annual Meeting of the West Lakes Division (LaCrosse, WI), November 2018
11. **Planey A.M.** Mapping and Analyzing Health Care Provider Interdependencies: The Case of Primary Care Physicians and Audiologists in Chicagoland. Canadian Association of Geographers Meeting. (Quebec City, Quebec, Canada), August 2018
12. **Planey, A.M.** "Audiologist Availability and Access in the United States: A Multi-Scale Spatial and Political Economic Analysis." American Association of Geographers, Annual Meeting (New Orleans, LA), April 2018
13. **Planey, A.M.** "Structuring Access to Audiological Services: A Political Economic Analysis of the Healthcare Industry in the U.S." American Association of Geographers (AAG) Annual Meeting of the West and East Lakes Division (Marquette, MI), October 2016
 - *3rd place winner in the PhD Paper Presentation Contest*
14. McNeil Smith, S., Moore, S., Planey, A.M. & Walker, T. "Exploring the Role of Faith and Spirituality in Mental Health Help-Seeking Attitudes and Behaviors Among African American College Students." Paper presented at the Dennis H. May Conference on Diversity Issues and the Role of Counseling Centers (Urbana, IL), September 2016

Poster Presentations

1. Biddell C.**, Waters A.R.**, Angove R.S.M., Gallagher K.D., **Planey A.M.**, Kent E.E., Spees L.P., Rosenstein D.L., & Wheeler S.B. „Understanding the long-term impacts of financial barriers to care: Patient-informed adaptation of a conceptual framework for adult cancer survivors“. Patient Insight Congress. Washington, D.C., November 2022.
2. **Planey, A.M.**, Planey, D.A., Wong, S., Winata, F. & Ko, M. „Longer Travel Times to Acute Hospitals Are Associated with Lower Likelihood of Preventive Care and Cancer Screening Receipt Among Rural-Dwelling Adults in the U.S. South“. AcademyHealth ARM. Washington, D.C., June 2022.

Arrianna Marie Planey, Ph.D

amplaney@email.unc.edu

3. Malone T.L**, **Planey A.M.**, Bozovich L.B**, Holmes G.M. „The Economic Effects of Rural Hospital Closures. National Rural Health Association (NRHA) Annual Conference“. Albuquerque, NM. May 2022.
4. **Planey, A.M.** & Okoye S.M. „Exploring Spatial Variation in the Association between Medicare Expenditures on Hearing Disorders and Fall Mortality Among Older Adults.“ AcademyHealth Annual Research Meeting (Virtual), June 2021
5. **Planey, A.M.**, Planey, D.A., Wong, S., McLafferty, S.L., and Ko, M. „Rural Hospital Closures in the US South: Implications for Spatial Access to Acute Care“. AcademyHealth Annual Research Meeting (Virtual), July 2020
6. **Planey, A.M.** „Mapping and Analyzing Health Care Provider Interdependencies & Resulting Access Disparities By Race and Class: The Case of Primary Care Physicians and Audiologists in Chicagoland“. AcademyHealth Annual Research Meeting (Washington, D.C), June 2019
7. **Planey, A.M.** “The Spatial Distribution of Hearing Healthcare Providers in the U.S.” American Association of Geographers, Annual Meeting (Boston, MA), April 2017.
8. **Planey, A.M.** “Hearing Healthcare Access in the United States: A Spatial and Political Economic Analysis.” School of Earth, Society, & Environment (SESE) Research Review. University of Illinois at Urbana-Champaign. February 2017.

Invited Talks, Panels, & Seminars

Invited Talks & Seminars

1. **A.M. Planey.** “Minding the Intersection of Time Scarcity & Financial Toxicity: Studying Cancer Outcomes with Attention to Time as a SDoH.“ Grand Rounds at UCSF Institute for Health Policy Studies. November 2023.
2. **A.M. Planey.** Access to Reproductive & Gender-Affirming Healthcare in the Southeast. State Innovation Exchange (SiX) and The Center for Reproductive Health Research in the Southeast (RISE) Southeastern Legislators Convening. Atlanta, GA. October 2023.
3. **A.M. Planey.** Understanding Place-based Structural Racism for Equitable Birth Outcomes in North Carolina. Places, Environments, and Health Symposium. University of North Carolina at Chapel Hill (Co-sponsored by the Lineberger Comprehensive Cancer Center & the Gillings School of Global Public Health. September 2023.
4. **A.M. Planey.** „Conceptualizing Time as a SDoH in Cancer (Outcomes) Research: 2 Case Studies at the Intersection of Rurality x Access to Care“. University of California, Davis, Center for Health Policy and Research Seminar Series. May 2023
5. **A.M. Planey.** „Conceptualizing Time as a SDoH in Cancer (Outcomes) Research: 2 Case Studies at the Intersection of Rurality x Access to Care“. Princeton School of Public and International Affairs, Global Health Program. April 2023
6. **A.M. Planey.** „Perinatal Exposures, Access to Care, & Birth Outcomes: Reflecting on the Importance of Enabling Resources“. Tufts University, Department of Community Health. March 2023.
7. **A.M. Planey.** Conceptualizing Time as a SDoH in Cancer (Outcomes) Research: 2 Case Studies at the Intersection of Rurality x Access to Care. Carolina Population Center (CPC). February 2023.
8. **A.M. Planey & J. Downs.** „Racial Histories of Epidemiology - Racism in Public Health Series“. Bloomberg School of Public Health, Johns Hopkins University. September 2022.
 - Link to recording: <https://www.youtube.com/watch?v=04Rmf4mYr3A>
9. **A.M. Planey.** „Rural Hospital Closures, Access to Care, & Care Utilization among Rural-Dwelling Adults“. Ogburn-Stouffer Center at the National Opinion Research Center (NORC), University of Chicago. August 2022.
10. **Planey, A.M.** „Intersectionality & Time: Thinking Spatially & Relationally About Health Inequities“. Ohio State University, Department of Geography. Geography Colloquium Series. November 2021.
 - Link to recording: <https://www.youtube.com/watch?v=7oXUOQAD0Qk>

Arrianna Marie Planey, Ph.D

amplaney@email.unc.edu

11. **Planey, A.M.** „Intersectionality & Time: Thinking Spatially & Relationally About Health Inequities”. University of North Carolina Chapel Hill, Geography Colloquium Series. October 2021.
12. **Planey, A.M.** „Intersectionality: Measurement within Health Services Research“. Intersectionality and Public Health Symposium. University of Chicago (virtual). May 2021.
13. **Planey, A.M.** „Using Social Media for Good: RWJF Agents of Change in Environmental Justice. Guest Talk. March 2021. Virtual.
 - Link to recording: <https://www.youtube.com/watch?v=649ZW7gE4sY>
14. **Planey, A.M.** „Healthcare Disparities, Disability, & COVID-19”. Fordham University, Fordham Disability Studies Program and the Global Healthcare Innovation Management Center Guest Lecture (virtual). February 2021.
15. **Planey, A.M.** „The Importance of Place & Scale in Health Services Research”. Boston University School of Public Health (BUSPH) Health Law, Policy & Management Visiting Professor Seminar (virtual).. December 2020.
16. **Planey, A.M.** :GIS & Spatial Thinking for Public Health: Potential, Pitfalls, & Considerations”. Indiana University Bloomington, GIS Day Keynote (virtual). November 2020.
17. Immergluck D., Mellander C, Miller H., Nathan M., Parnell S., **Planey A.M.**, Williams S. „Post-Pandemic City Futures“. Newcastle University, Spatial Analytics + Data Seminar Series. October 2020.
18. **Planey, A.M.**, “Matching Spatial Methods and Theory in Public Health Research.” Seminar Talk. Columbia University, Department of Epidemiology, Social and Spatial Epidemiology Unit Weekly Seminar. September 2020.
19. **Planey, A.M.** „Spaces of Segregation & Health: Complex Associations for Black Immigrant Mothers in New York City,” Lecture. UNC Chapel Hill, OB/GYN IDEA Lecture Series. August 2020.
 - Link to recording: <https://www.youtube.com/watch?app=desktop&v=2uVevkQMYWE>
20. **Planey, A.M.** „ Changing Patterns of Spatial Accessibility of Hospital-Based Care in the Rural South, 2007-2018,” Paper Presentation. Chicago Public Health GIS, monthly meeting. July 2020

Panel Talks

21. **A.M. Planey.** „Conceptualizing, Measuring, & Operationalizing Access to Audiology Services“. Population Hearing Healthcare Conference, American Auditory Society. March 2023.
 - Honored as Emerging Scholar in hearing healthcare research
22. Brindis, C. **Planey, A.M.**, Baker, K. Coffman, J. & Shaikh A. „Measuring the Impact of Policy Strategies“. AcademyHealth ARM. Washington, D.C., June 2022.
23. Barlow, J., Fashaw-Walters, S., Lewis, M., & **Planey, A.M.** „Culturally Responsive Research Methods“. AcademyHealth ARM. Washington, D.C., June 2022.
24. Amlani A.M., Davis K., James, J.F., **Planey, A.M.**, Rogers E. „Addressing Challenges in Patient Access to Hearing Health Care“. Academy of Doctors of Audiology Annual Conference. October 2021.
25. Feldman, J., **Planey, A.M.**, Ramiah K. „Reckoning with Structural Racism: How do We Take Action Personally and Organizationally?“. Panel. Robert Wood Johnson Foundation, Equity Learning Lab Convening (virtual). April 2021.
26. **Planey, A.M.** „Nursing Homes Amid the COVID-19 pandemic”. Eminence Public Health Conference (virtual). November 2020
27. Carpiano, R., and **Planey, A.M.** „Effective social media use and online platforms for interdisciplinary scholars.“ Interdisciplinary Association for Population Health Science (IAPHS) Annual Meeting. October 2020.
28. **Keil R., **Planey, A.M.**, Ren X., and Kaup B., "Cities and Infectious Disease: Urban Affairs in the Age of Outbreak." Panel. Urban Affairs Association 50th Anniversary Conference. (Washington, DC), April 2020
29. Hamraie, A, England, M., Donovan, C., and **Planey, A.M.** "Critical Approaches to Disability." Panel. American Association of Geographers, Annual Meeting (Washington, DC), April 2019

Arrianna Marie Planey, Ph.D

amplaney@email.unc.edu

30. **Planey, A.M.**, and Irfan, A. "Environments and Health: Gaps and Opportunities in Public Health Policy Research and Practice." Roundtable Talk at the Robert Wood Johnson Foundation Annual Leadership Institute, Indianapolis, IN. January 2019
31. Kosanic, S., Chouinard, V., **Planey, A.M.**, Hansen, N., and Wadhwa, V. "Researchers with Disabilities, and the Obstacles They Face in Academia." Panel. American Association of Geographers, Annual Meeting (New Orleans, LA), April 2018

TEACHING EXPERIENCE

UNIVERSITY TEACHING

Gillings School of Global Public Health, University of North Carolina, Chapel Hill Department of Health Policy and Management (HPM)

HPM 756 - Conceptualizing & Measuring Access to Care

- Taught annually in the Spring Semester
- Course for MHA, MSPH, PhD, and DrPH students
- Emphasizes conceptual frameworks and approaches to measuring access to healthcare, including Geographic Information Systems and spatial analysis

HPM 696 – Health Politics, Policy, & Maternal Health in the United States

- Seminar course addressing a range of topics, including measuring maternal health outcomes (informatics), place effects on maternal health (spatial epidemiology and medical geography), healthcare policies and implications for care access and outcomes (health services research), health workforce issues, and system-level interventions to improve maternal health outcomes and reduce inequitable outcomes (implementation science)
- Course for PhD students

University of Illinois at Urbana Champaign

Department of Geography and Geographic Information Science (GGIS)

GEOG 438: Geography of Health Care

- Spring 2020
- 25 students enrolled
- Selected for *List of Teachers Rated Excellent by their Students*

PROFESSIONAL / CONTINUED EDUCATION

American Speech-Language Hearing Association (ASHA)

- Beyond the Clinic: Health Care Policies & Access to Audiology Services (SIG 8) (On Demand Webinar). Continued Educational Unit. URL:
[https://apps.asha.org/eweb/OLSDynamicPage.aspx?Webcode=olsdetails&title=Beyond+the+Clinic%3A+Health+Care+Policies+%26+Access+to+Audiology+Services+\(SIG+8\)+\(On+Demand+Webinar\)](https://apps.asha.org/eweb/OLSDynamicPage.aspx?Webcode=olsdetails&title=Beyond+the+Clinic%3A+Health+Care+Policies+%26+Access+to+Audiology+Services+(SIG+8)+(On+Demand+Webinar))
(accessed 29 August 2022)

GRANTS & CONTRACTS, & FELLOWSHIPS

Grants and Contracts (Current)

2024-2026 5U01TR003629 (PIs: Steube, Gurcan, & Page)

Arrianna Marie Planey, Ph.D

amplaney@email.unc.edu

Title: Analytics & Machine-learning for Maternal-health Interventions (AMMI): A Cross-CTSA Collaboration

Source: National Center for Advancing Translational Sciences (NCATS)

Role: Co-I (10% effort)

Amount: \$3,471,549

Research Objectives: The Analytics and Machine-learning for Maternal-health Interventions (AMMI) initiative, a collaborative effort from researchers at UNC- Chapel Hill, Duke, and Wake Forest, aims to address these gaps by developing a machine learning- enhanced health technology framework to reduce downstream risk of maternal mortality in African- American women. By integrating data across the three institutions that includes both clinical and SDoH factors, and by building machine learning applications grounded in this data, AMMI's goals are to: 1) clarify and track contributions of biological, clinical, and SDoH factors toward specific maternal morbidities associated with eventual mortality, 2) conduct efficient and accurate risk predictions to determine whether patients fall into defined target risk groups, and 3) translate these risk predictions into interventions appropriate for providers, patients, and community support organizations. A key focus of the initiative is to create an advanced technology infrastructure supporting connectivity and communication among these three types of stakeholders, with the goal of building trust and awareness based on automatically curated decision support aids and ultimately mitigating patient risk. To this end, Aim 1, focused on establishing system requirements, begins with the formation of a stakeholder group that brings together patient, provider, and community support organization representatives to engage in design and evaluation with AMMI researchers throughout the project. Aim 2 focuses on systems development, including the creation of 1) a custom-built clinical and SDoH data mart, 2) clinical decision support software using machine learning algorithms, and 3) three user-facing apps aimed at providers, patients and community support personnel, and AMMI researchers. Aim 3 focuses on pilot-level deployment of the system, integrating the AMMI apps through Epic to provide informational interventions to providers, patients, and community support personnel. Aim 4 engages stakeholders in formative and summative evaluation during and after the deployment phase (Aim 3), including both testing of the software function and measurement of the impact of AMMI interventions on end users.

2024-2029

None Given Yet (PIs: Steube & Stewart)

Title: Thriving Hearts: Healing-Centered, Integrated, Community Maternity Care

Source: Patient-Centered Outcomes Research Institute (PCORI)

Role: Co-I (2-5% effort)

Amount: \$20,999,997.17

Research Objectives: The Thriving Hearts study uses a hybrid type 1 effectiveness-implementation design. To quantify effectiveness, we will conduct a pragmatic, stepped-wedge, cluster randomized trial, implementing our intervention through local health departments (LHDs). Participating LHDs will begin in a usual care phase, and they will transition to Thriving Hearts in pairs in a randomly assigned sequence, at 9-month intervals. We will systematically document usual care in each county. This project has four (4) aims: 1) Quantify the extent to which Thriving Hearts reduces incidence of hypertensive disorders of pregnancy (HDP) and associated complications and increases uptake of support resources among birthing people in the ten Thriving Hearts counties, using PCORnet, Carolina Cost and Quality Initiative Claims, Birth Certificate, and State Hospital Discharge data. 2) Quantify the extent to which Thriving Hearts improves patient-reported experiences and outcomes, measured through cross-sectional surveys of a subset of postpartum people in each county. 3) Quantify the extent to which healing-centered, trauma-informed care improves health team effectiveness and well-being, measured using longitudinal surveys of professional quality of life and wellbeing. 4) Identify factors that affect implementation of the Thriving Hearts program at health

Arrianna Marie Planey, Ph.D

amplaney@email.unc.edu

department- and community-levels using the Consolidated Framework for Implementation Research 2.0. To inform future scale-up and dissemination, we will conduct a mixed methods implementation evaluation.

2023-2025

None Given Yet (PI: Reeder-Hayes)

Title: Geographic Small Area Estimation of Cancer Screening Rates: Precision Approaches to Inform Screening Equity, Outreach, and Interventions

Source: American Cancer Society (ACS)

Role: MPI (20%)

Amount: \$1,200,000

Research Objectives: (1) To develop a small area estimation approach to measure breast, lung and colon cancer screening utilization, and to examine disparities in screening by area racial composition and their association with disparities in late stage cancer diagnosis, using Cancer Health Information and Population Health Resource (CIPHR) multi-payer health insurance claims and statewide cancer registry data. (2) To compare small area estimates of cancer screening from CIPHR data, overall and stratified by racial composition, to meaningful benchmarks and estimates from alternative data sources. (3) To create and test data visualizations of community-level screen utilization and community-level models simulating the potential impact of targeted screening interventions, with iterative input from key community members.

2023-2028

Grant #: 1R01MD018031-01 (PI: Patel)

Title: Regionalization of Acute Stroke Care for Rural Populations: A Systems Modeling Approach

Source: National Institute on Minority Health and Health Disparities (NIMHD)

Role: Co-I (20%)

Amount: \$2,955,860 (\$1,942,185 in direct costs)

Research Objectives: Our objective is to develop a decision-analytic systems model that allows stroke system planners to compare potential effects of regionalized EMS triage and transport strategies on rural stroke outcomes and health care resource utilization. Decision-analytic modeling is a rigorous and flexible approach for integrating information sources to conduct in silico testing of system-level strategies under varying contexts. This comparative evidence provides valuable and timely information to decision makers to tailor interventions for real-world implementation and evaluation. Using existing real-world data sources, published evidence, and key stakeholder input, we will build a computer simulation model of regionalized stroke care for 70 rural counties in North Carolina. Our specific aims are to: (1) determine EMS stroke triage and transport strategies that optimize functional outcomes in rural stroke patients; (2) estimate the potential system-wide effects of rural EMS triage and transport on health care resource utilization; and (3) understand the influence of rural population and health care system characteristics on optimizing EMS stroke triage and transport strategies.

2023-2024

Grant #: None Given

Title: Understanding Place-based Structural Racism for Equitable Birth Outcomes in North Carolina

Source: Gillings School of Global Public Health "Place & Health" Seed Grant

Role: MPI (Martin & Planey)

Amount: \$30,000

Research Objectives: This study will combine historical redlining maps for five metropolitan areas in North Carolina (Durham, Greensboro, Winston-Salem, Asheville, and Charlotte) with contemporary indicators of place-based structural racism across multiple domains (i.e., housing, lending, city planning and environmental racism) and North Carolina birth certificate data to assess how various

Arrianna Marie Planey, Ph.D

amplaney@email.unc.edu

manifestations of structural racism contribute to inequalities in preterm birth, low birth weight, and infant mortality. We will examine the associations by race and ethnicity to investigate how structural policies and practices disadvantaging racialized as non-white (non-Hispanic Black, Native American, and Hispanic) while advantaging those racialized as white

2023-2024

Grant #: None Given

Title: Building Infrastructure to Investigate Community Concerns about the Disparate Impacts of Extreme Weather-Related Disasters on Healthcare Access in North Carolina

Source: Gillings School of Global Public Health “Place & Health” Seed Grant

Role: Co-I (PI: Lund)

Amount: \$30,000

Research Objectives: propose to build and test the infrastructure needed to investigate high-priority, community-driven, research questions about the disparate impacts of extreme weather-related disasters on healthcare access. This infrastructure development will have two components. First, we will develop a geospatial data platform that will serve as the foundation for our analyses, including linkages of: (1) multi-payer healthcare claims data, (2) granular extreme weather-related data (e.g., flooding data), and (3) public, area-level contextual data. Second, with our partner, Hetal Patel, at MDC Rural Forward, we will establish a Community Advisory Board (CAB) and define: (1) the mission of the board, (2) composition, meeting schedule, and rotation of board members, (3) responsibilities and incentives, and (4) processes for sharing research results back with the community. Finally, we will select one of the high-priority questions generated through our ongoing research prioritization work in Robeson County to serve as a proof-of-concept study of our data platform and CAB processes to identify areas for improvement and modification. Information from this proposal will serve as preliminary data to support a large-scale NIEHS R01 grant proposal including a broad set of high-priority research questions generated by community partners aimed at addressing and equitably reducing the impacts of extreme weather-related disasters on short- and long-term healthcare access.

2023-2028

Grant #: 1R01DA058028-01 (PI: Prins)

Title: Estimating the impact of the school-to-prison pipeline on adolescent health: racialized, spatial disparities in policing, school discipline, substance use, and mental illness

Source: National Institute on Drug Abuse (NIDA)

Role: MPI (10%)

Amount: \$4,069,906 (\$2,499,989 in direct costs)

Research Objectives: We will quantify relationships among aggressive community policing, school discipline, and student substance use/mental illness in NYC, the largest school system in the US. NYC pioneered aggressive, broken windows policing^{26–28}, as well as school policing: the number of police stationed in NYC schools alone is equivalent to the 5th largest police force in the US. In collaboration with the NYC Department of Health and Mental Hygiene’s Office of School Health (OSH), we will create a unique geocoded 2000–2022 dataset linking all police stops/arrests; school- and student-level exclusionary discipline; restricted school-level Youth Risk Behavior Surveillance System (YRBSS) data (tobacco, alcohol, and other drug use); and OSH’s database of student health services records (nurse, counselor, mental health visits, referrals to mental health/substance use treatment). Our pilot analyses suggest that aggressive policing in New York City (NYC) is concentrated in zip codes with higher school discipline prevalence, and both are associated with zip-code-level adolescent inpatient and outpatient substance use and psychiatric hospital visits.

2022-2024

Grant #79801 (PI: Planey)

Arrianna Marie Planey, Ph.D

amplaney@email.unc.edu

Title: Meds & Eds: Gauging the net benefits of the expansion of academic medical centers in small and midsize U.S. cities

Source: Robert Wood Johnson Foundation (RWJF)

Role: PI (35%)

Amount: \$397,829

Research Objectives: The proposed research project would evaluate both the positive and negative impacts of “meds and eds” expansion in small and medium cities (SMCs) using a suite of methods. Our four (4) research questions are as follow: 1) Is forgone property tax revenue a developmental challenge for municipal governments that host “eds and meds” clusters? 2) Do the economic benefits of “eds and meds” expansions exceed municipalities’ foregone property tax revenue? 3) How does the development and expansion of “eds and meds” corridors impact housing affordability in the region? 4) Does “eds and meds” expansion affect racial, ethnic, and class inequities in spatial access to healthcare services in SMCs? We hypothesize that the findings will be mixed. We expect that community benefit spending will be far exceeded by the value of non-profit hospitals’ tax exemptions. Moreover, while academic medical centers’ expansion can and does create jobs, the fastest growth in healthcare employment is concentrated in low-wage (<\$15/hour), precarious work, which is disproportionately carried out by women of color. Even less is known about the effect of “eds and meds” expansions on racial and ethnic disparities in geographic access to care within their health service areas.

2023-2024 Grant # 18900 (PI: Colin Orr)

Title: To estimate the future supply of pediatric subspecialists in the United States and regions of the US from 2018-2040

Source: American Board of Pediatrics (ABP)

Role: Co-I (3%)

Amount: \$690,576

Research Objectives: This project will develop a workforce projection model that estimates the future supply of pediatric subspecialists in the United States and regions of the US from 2018-2040. The model will contain numerous “what if” scenarios that allow users to simulate the effects of changes in retirement, graduate medical education, and other factors that influence the future supply and distribution of the workforce. The model will serve as the initial step in the creation of a supply and demand analysis that will estimate the degree to which the number and distribution of pediatric subspecialists meets the clinical needs of the US pediatric population nationally and regionally.

2021-2023 3R01CA240092-03S1 (PIs: Wheeler & Rosenstein)

Lineberger Comprehensive Cancer Center

Source: National Cancer Institute (NCI)

Role: PI (75%)

Amount: \$386,848

Research Objectives: The proposed supplemental project leverages the existing survey design for Lessening the Impact of Financial Toxicity (LIFT) Study (5R01CA240092-02) to examine the effects of financial toxicity on healthcare help-seeking and care utilization among rural cancer patients. Whereas the objective of the parent grant is to evaluate the implementation and effectiveness of FN within rural oncology settings, the proposed supplemental project leverages the research infrastructure developed by the team to further map out the effects of FT on healthcare help-seeking among rural cancer survivors across five (5) intervention sites in rural North Carolina.

2020-2024 6 U3GRH40003-01-01 (PI: Ward)

Arrianna Marie Planey, Ph.D

amplaney@email.unc.edu

Rural Telehealth Research Center

Source: Federal Office of Rural Health Policy (FORHP), Health Resources and Services Administration (HRSA)

Role: Co-I (10% effort)

Research Objectives: The Rural Telehealth Health Research Center conducts research to advance evidence in the area of telehealth, especially in rural applications. The Center is comprised of three research partners: University of Iowa, University of North Carolina-Chapel Hill, and University of Southern Maine.

2020-2027

Grant #: None Given (PI: Domino)

North Carolina Medicaid Reform Demonstration: Medicaid 1115 Waiver Evaluation

Source: North Carolina Department of Health and Human Services (NCHHS)

Role: Co-I (5% effort)

Research Objectives: The purpose of this project is to evaluate the North Carolina Medicaid 1115 waiver, including both quantitative and qualitative analyses.

Completed Grants & Contracts

2020-2021

6 U1CRH03714-16-02 (PI: Holmes)

Comparison of rural hospital closures and the communities served, 1990-2020

UNC Cecil G. Sheps Center for Health Services Research

Source: Federal Office of Rural Health Policy (FORHP), Health Resources and Services Administration (HRSA)

Role: Co-I (20% effort)

Research Objectives: To examine rural hospital closures over three periods of time: 1990-1998, 1999-2008, and 2009-2020 to profile (1) the closed rural hospital financial characteristics; (2) demographic, socioeconomic, and geographic characteristics of communities where rural hospitals have closed; and to (3) health status and healthcare services and resources available within communities where rural hospitals have closed.

2020- 2021

Grant #: None Given (PI: Radwan)

Title: North Carolina COVID-19 Mobility and Health Impacts Study, UNC Highway Safety Research Center

Source: NC Policy Collaboratory

Role: Co-I (20% effort)

Amount: \$998,000

Research objectives: To examine the effects of public health emergency declarations and shelter-in-place orders on population mobility in the state of North Carolina, in the first 9 months of the COVID-19 pandemic. Thereafter, we examined the association between trends in population mobility and COVID-19 incidence and prevalence across the rural-urban continuum. We found persistent rural-urban disparities in population mobility and COVID-19 prevalence and mortality.

2019-2020

Grant #: None Given

Title: Hearing Health Care In The United States: A Multi-Scale Spatial & Political Economic Analysis Of Health Care Policy and Access to Audiology Services

Source: Robert Wood Johnson Foundation, Health Policy Research Scholars Dissertation Award

Role: PI

Amount: \$1500

Arrianna Marie Planey, Ph.D

amplaney@email.unc.edu

Research objectives: To apply statistical and spatial analytic approaches to examine the geographic distribution of audiologists and subsequent effects on older adults' access to care. Focusing on how their scope of practice and autonomy as professionals are constrained by health policy at the federal and state levels and the broader political economy of inter-professional practice in health care, all of which hinge on the classification of audiologists as non-medical "non-physician" care providers.

Fellowships

- 2017-2020 Predoctoral Fellow, Robert Wood Johnson Foundation Health Policy Research Scholars (HPRS) Program
- Awarded stipend support (\$120,000) over 4 years
 - Leadership training, with emphasis on research translation relevant to policymaking processes.

PROFESSIONAL MEMBERSHIPS

- 2023- Present Society for Epidemiologic Research (SER)
2022- Present Association of University Programs in Health Administration (AUPHA)
2020- Present National Rural Health Association (NRHA)
2020- Present Interdisciplinary Association for Population Health Science (IAPHS)
2018- Present AcademyHealth
Member of the State Health Research and Policy and Public Health Systems Research Interest Groups
2017- Present Canadian Association of Geographers (CAG)
2016- Present American Association of Geographers (AAG)
Member of the Disability, Health and Medical, Spatial Analysis and Modeling, and Geographic Information Science and Systems Specialty groups.
2015- 2017 Acoustical Society of America (ASA)
2015- 2016 Student Academy of Audiology (SAA)

SERVICE

Departmental Service

- 2020- Present Lead, Health Policy and Management PhD Advisory Committee - Quality and Access Minor

School Service

- 2021 Member, Search Committee for the Gillings Associate Dean of Inclusive Excellence
2020 UNC Gillings School of Global Public Health, Study Section

Service to the Profession

- 2022-Present Advisory Board Member, Data Equity Center (DEC), UCLA Center for Health Policy Research (CHPR)
2020-2022 Board Member (at-large), Health and Medical Specialty Group (HMGSG), American Association of Geographers (AAG)
2019 Abstract Reviewer, AcademyHealth ARM 2020 – Disparities & Health Equity Theme
2017-2019 Director, Disability Specialty Group, American Association of Geographers (AAG)

Peer Review (Ad Hoc)

- American Journal of Public Health
- JAMA Internal Medicine
- PLOS One
- Health Expectations
- Health and Place
- Social Problems
- Spatial and Spatio-temporal Epidemiology
- Epidemiology and Infection
- BMJ Global Health
- American Journal of Epidemiology
- Health Services Research
- Social Science & Medicine
- Environment & Planning A
- Health Equity

ADVISING & MENTORSHIP

MSPH Thesis Reader (first)

- Michelle Stephanie Carreno (c/o 2023)

DrPH Dissertation Committee(s)

- Dissertation Committee Member: Melanie Gleiman Phelps (c/o 2024)

PhD Dissertation Committee(s)

- As Dissertation Chair (4)
 - Jodi A. Lewis (PhD, c/o 2026)
 - Marah Maita (PhD, c/o 2026)
 - Sharita R. Thomas (PhD, c/o 2025)
 - Monisa Aijaz (PhD, c/o 2025)
- As Dissertation Committee Member (8)
 - Hannah R. Friedman (PhD, c/o 2023)
 - Burcu Bozkurt (PhD, c/o 2023)
 - Hillary K. Hecht (PhD, c/o 2025)
 - Ishrat Z. Alam (UNC Epidemiology PhD candidate, c/o 2024)
 - Bryttani Wooten (UNC Geography PhD Student, c/o 2025)
 - Anjali Kumar (UNC Epidemiology PhD candidate, c/o 2025)
 - Nandi Taylor (UNC Epidemiology PhD candidate, c/o 2025)
 - Joseph Nwadiuko (UCLA HPM PhD Candidate, c/o 2024)

Updated 15 March 2024