

Andrew O. Johnson, PhD - Scientific Activities

Manuscripts in Refereed Journals

1. (submitted for review) Hanna JJ, Dennis CR, **Johnson AO**, Cooper LN, Evans CS, Lehmann CU, Medford RJ. Modular Monitoring of Clinical Predictive Models: A Real-World Implementation Using Automated Data Pipelines in an End-to-End Analytics Platform. Submitted to Journal of the American Medical Informatics Association
2. Haredasht FN, Amrollahi F, Maddali N, Marshall N, Ma S, Cooper L, **Johnson AO**, Wei Z, Medford R, Kanjilal S, Banaei N, Deresinski S, Goldstein M, Asch S, Chang A, and Chen J. [Antibiotic Resistance Microbiology Dataset \(ARMD\): A Resource for Antimicrobial Resistance from EHRs](#), Sci Data 12, 1299 (2025).
3. Hanna J, Wakene A, **Johnson AO**, Lehmann C, Medford R. [Assessing Racial and Ethnic Bias in Text Generation by Large Language Models for Health Care-Related Tasks: Cross-Sectional Study](#), J Med Internet Res 2025; 27:e57257.
4. Wagner D, Hooper V, Bankieris K, **Johnson AO**. [The Relationship of Postoperative Delirium and Unplanned Perioperative Hypothermia in Surgical Patients](#), Journal of PeriAnesthesia Nursing. 36(1), 2020.
5. Bennett K, McElroy JA, **Johnson AO**, Munk N, Everett KD. [A Persistent Disparity: Smoking in Rural Sexual and Gender Minorities](#). LGBT Health. 2(1): 62-70, March 2015.
6. Riddell MC, Sandford KG, **Johnson AO**, Steltenkamp C, Pearce KA. [Achieving Meaningful Use of Electronic Health Records \(EHRs\) in Primary Care: Proposed Critical Processes from the Kentucky Ambulatory Network \(KAN\)](#). Journal of the American Board of Family Medicine. Nov-Dec, 27(6):772-9, 2014.
7. Hahn E, Begley K, Gokun Y, **Johnson AO**, Mundy M, Rayens MK. [Electronic Cigarette Retail Outlets and Proximity to Schools](#). American Journal of Health Promotion. June 26, 2014.
8. Okoli CTC, **Johnson AO**, Pederson A, Adkins S, Rice W. [Changes in Smoking Behaviours Following a Smokefree Legislation in Parks and on Beaches: An Observational Study](#). BMJOpen, 3:2013.
9. Soares N, **Johnson AO**, Patidar N. [Geomapping Telehealth Access to Developmental-Behavioral Pediatrics](#). Telemedicine and e-Health, 19:8, 2013.
10. Fallin A, **Johnson AO**, Cohen E, Rayens MK, Hahn E. [An Intervention to Increase Compliance with a Tobacco-free University Policy](#). American Journal for Health Promotion, 27:3, 2013.
11. Fallin A, Murrey M, **Johnson AO**, Riker C, Hahn, E. [Measuring Compliance with Tobacco-free University Policy](#). American Journal of College Health, 60:7, 2012.
12. Saman DM, **Johnson AO**, Arevalo O, Odoi, A. [Geospatially Illustrating Regional-based Oral Health Disparities in Kentucky](#). Public Health Reports, 126:5, 2011.
13. Saman DM, Arevalo O, **Johnson AO**. [The Dental Workforce in Kentucky: Current Status and Future Needs](#). Journal of Public Health Dentistry, 70:3, 2010.
14. Anderson DM, Whitler ET, **Johnson AO**, Elam CL, Wilson EA, Asher LM. [Increasing the Medical School Applicant Pool: A Key to Training More Rural Physicians](#). Journal of the Kentucky Medical Association, 107:9, 2009
15. Katz ML, Reiter PL, Kluhsman BS, Kennedy S, Dwyer S, Schoenberg N, **Johnson AO**, Ely G, Roberto KA, Lengerich EJ, Brown P, Paskett ED, Dignan M. [Human Papillomavirus \(HPV\) Vaccine Availability, Recommendations, Cost, and Policies Among Health Departments in Seven Appalachian States](#). Vaccine, 27:24, 2009.
16. **Johnson AO**, Harun N, Mink MD, Moore CG, Martin AB, Bennett KJ. [Violence and Drug Use in Rural Teens: National Prevalence Estimates from the 2003 Youth Risk Behavior Survey](#). Journal of School Health, 78:10, 2008.
17. Torres ME, Parra-Medina D, Bellinger JD, **Johnson AO**, Probst JC. [Rural Hospitals and Spanish Speaking Patients with Limited English Proficiency](#). Journal of Healthcare Management, 53:2, 2008.

18. Probst JC, Laditka SB, Wang J-Y, **Johnson AO**. [Effects of Residence and Race on Burden of Travel for Care: Cross Sectional Analysis of the 2001 US National Household Travel Survey](#). BMC Health Services Research, 7:40, 2007.
19. Rhoades DR, McFarland KF, Finch WH, **Johnson AO**. [Speaking and Interruptions During Primary Care Office Visits](#). Family Medicine 33(7), 528-32, 2001.

Technical Reports

1. Martin AB, Wang J-Y, Probst JC, Hale N, **Johnson AO**. [Dental Health and Access to Care among Rural Children: A National and State Portrait](#). (2008) Submitted to the Federal Office of Rural Health Policy, Health Resources and Services Administration, under Grant No. 1 U1CRH03711-01.
2. Torres ME, Bellinger JD, Probst JC, Harun N, **Johnson AO**. [Use of Preventive Services Among Hispanic Sub-Groups: Does One Size Fit All?](#) (2007) Submitted to the Federal Office of Rural Health Policy, Health Resources and Services Administration, under Grant No. 1 U1CRH03711-01.
3. Probst JC, Laditka SB, Wang J-Y, **Johnson AO**. [Mode of Travel and Actual Distance Traveled For Medical or Dental Care By Rural and Urban Residents](#). (2006) Submitted to the Federal Office of Rural Health Policy, Health Resources and Services Administration, under Grant No. 1 U1CRH03711-01.
4. Torres ME, Parra-Medina D, Martin AB, **Johnson AO**, Bellinger JD, Probst, JC. [Rural Hospitals and Spanish Speaking Patients with Limited English Proficiency](#). (2005) Submitted to the Federal Office of Rural Health Policy, Health Resources and Services Administration, under Grant No. 1 U1CRH03711-01.
5. Mink MD, Moore CG, **Johnson AO**, Probst JC. [Violence and Rural Teens: A National Study of Exposure to Violence, Mental Health Services, and Violence Prevention Programs](#). (2005) Submitted to the Federal Office of Rural Health Policy, Health Resources and Services Administration, under Grant No. 6 U1CRH00045-01.
6. Moore CG, Mink MD, Probst JC, **Johnson AO**, Hughley, S. [Mental Health Risk Factors, Unmet Needs and Provider Availability for Rural Children](#). (2005) Submitted to the Federal Office of Rural Health Policy, Health Resources and Services Administration, under Grant No. 6 U1CRH00045-01.

Publicly Available Datasets

1. Jones JA, Lamberth C, Riddell M, Sellers K, Leep C, Fenton G, **Johnson AO** (as lead technical designer). [Integrated Public Health Surveys, 2010-2011](#). ICPSR33822-v1. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2013-02-26.

Conference Sessions and Contributed Papers

1. Wagner D, Hooper V, **Johnson AO**, Bankieris KR. "An Exploration of Postoperative Delirium and Unplanned Perioperative Hypothermia in Surgical Patients." 2019 Southern Nursing Research Society, Orlando, FL.
2. Hooper V, Wagner D, Bankieris KR, **Johnson AO**. An Exploration of Postoperative Delirium and Unplanned Perioperative Hypothermia in Surgical Patients. 2019 ASPAN National Conference. Nashville, TN.
3. **Johnson AO**, Lundy ME. Congratulations, it's a Model! Now What? Technical debt involved in sustaining a production prediction model. 2018 Health Analytics Summit, Salt Lake City, UT.
4. **Johnson AO**, DeRienzo C. Supercharge Your Improvement Efforts with Predictive Analytics. 2017 Health Analytics Summit, Salt Lake City, UT.
5. Sugarman RP, Kellen VJ, Rudick CS, Starkey MK, Recktenwald AJ, Lindstrom AF, **Johnson AO**. Visualizations of Bottleneck Courses: High-Demand Classes that Create Problems for Students' Timely Academic Progress. 2014 Kentucky Association for Institutional Research Annual Conference, Bowling Green, KY.
6. Bennett K, McElroy J, Munk N, **Johnson AO**. Sexual and Gender Minorities and Tobacco: Urban Vs. Non-Urban Patterns in Use and Perspectives on Public Health Policies. 2013 Annual Meeting of the North American Primary Care Research Group, Ottawa, Canada.

7. Riddell MC, **Johnson AO**. Getting to Meaningful Use with Electronic Health Records: Update from the Kentucky Regional Extension Center. 19th Annual Preparing Health Professionals for the 21st Century Conference: 2013 New Directions in Health Professions Education & Kentucky Practice-Based Research Networks Collaborative Conference, Lexington KY.
8. Riddell MC, **Johnson AO**. Achieving Meaningful Use of Electronic Health Records in Primary Care. 8th Annual AUPHA Academic Forum, 2013 Healthcare Information and Management Systems Society Annual Conference, New Orleans, LA.
9. Samuels ME, **Johnson AO**. United States/Mexico Border Health Issues. (Contributed Paper Session) 2012 National Rural Health Association Annual Conference, Denver, CO.
10. Samuels ME, **Johnson AO**. United States/Mexico Border Health Issues. 2011 National Rural Health Association Annual Rural Multiracial and Multicultural Health Conference, Daytona Beach, FL.
11. Samuels ME, **Johnson AO**, Whitler ET. United States/Mexico Rural Border Health Issues. (Contributed Paper Session), 2011 National Rural Health Association Annual Conference, Austin, TX.
12. Samuels ME, **Johnson AO**, Whitler, ET. United States/Mexico Rural Border Health Issues. 2010 National Rural Health Association Annual Rural Multiracial and Multicultural Health Conference, Tucson, AZ.
13. **Johnson AO**. The Geographic Availability of Substance Abuse Treatment to Rural Veterans. 2009 Kentucky Rural Health Association Annual Conference, Frankfort, KY.
14. Huang B, Gal TJ, Wallace HM, **Johnson AO**. Travel Distance, Diagnosis, Treatment and Survival for Oral Cavity and Pharynx Cancer in Kentucky. 2009 North American Association of Central Cancer Registries Annual Meeting, San Diego, CA.
15. **Johnson AO**, Bellinger JD, Dignan MB. Issues in Rural Cancer Prevention and Treatment. 2009 National Rural Health Association Annual Conference, Miami Beach, FL.
16. Katz ML, Reiter PL, Kennedy S, Schoenberg N, **Johnson AO**, Ely G, Roberto KA, Lengerich E, Paskett E, Dignan M. Human Papillomavirus (HPV) Vaccine Availability, Recommendations, Cost, and Policies Among Health Departments in Seven Appalachian States. 2009 Annual Meeting of the American Society of Preventive Oncology, Tampa, FL.
17. **Johnson AO**. Minority Cancer Mortality in Rural High-Poverty Counties. 2008 National Rural Health Association Rural Minority and Multicultural Health Conference, Albuquerque, NM.
18. Torres ME, Probst JC, Bellinger JD, Harun N, **Johnson AO**. Place of Residence, Acculturation, and the Use of Preventive Services among Hispanic Subgroups. 2007 American Public Health Association Annual Meeting & Exposition, Washington, D.C.
19. **Johnson AO**. Modeling Natural Disaster Impacts on Healthcare Infrastructures using HAZUS-MH. 2007 South Carolina Rural Health Association Conference, Columbia, SC.
20. Torres ME, Parra-Medina D, **Johnson AO**, Bellinger JD, Probst JC. How Rural Hospitals Accommodate Low English Proficiency (LEP) Spanish-Speaking Patients Through Language Assistance. 2006 American Public Health Association Annual Meeting & Exposition, Boston, MA.
21. **Johnson AO**, Probst JC. A GIS-Based Approach to Estimating Hurricane Impact on Medical Facilities in South Carolina. 2006 South Carolina Hospital Association COO Disaster Preparedness Program, Columbia, SC.
22. Torres M, Parra-Medina D, **Johnson AO**, Probst JC. How Rural Hospitals Accommodate Low English Proficiency (LEP) Spanish-Speaking Patients Through Language Assistance. 2006 National Leadership Summit on Eliminating Racial and Ethnic Disparities in Health, Washington, DC.
23. Rhoades D, McFarland K, **Johnson AO**. Speaking and Interruptions During Primary Care Office Visits. 2000 University of South Carolina Bioethics Consortium Lecture Series, Columbia, SC.

Research Poster Presentations

1. Wagner D, Hooper V, **Johnson AO**, Bankieris KR. An Exploration of Postoperative Delirium and Unplanned Perioperative Hypothermia in Surgical Patients. 2019 Southern Nursing Research Society Annual Conference, Orlando, FL.

2. Lafitte L, Bollinger J, **Johnson AO**, Foy Z, Stashenko G, DeRienzo C. Improving Sepsis Outcomes through Continuous Improvement in a Community Hospital Setting. 2016 National Forum on Quality Improvement in Healthcare, Orlando, FL
3. Okoli CTC, **Johnson AO**, Fallin A, Pederson A, Long P, Chasey S, Jategaonkar N. Effects of an Outdoor Smoke-Free Law on Smoking Behaviour in Parks and Beaches: Methods to Determine Effectiveness. 2012 World Conference on Tobacco or Health, Singapore.
4. Okoli CTC, **Johnson AO**, Fallin A, Pederson A, Liwander A. Effects of a Smoke-Free Law in Parks and Beaches on Smoking Behaviour: Methods to Determine Effectiveness. 2011 National Conference on Tobacco or Health, Toronto, ON (Canada).
5. Fallin A, **Johnson AO**, Kostygina G, Cohen E, Hahn E. An Intervention to Promote Compliance with a Tobacco-Free Campus Policy. 2011 Southern Nursing Research Society Conference, Jacksonville, FL.
6. Fallin A, Murrey M, **Johnson AO**, Riker C, Hahn E. Protocol for measuring adherence to a tobacco-free university policy. 2010 American Public Health Association Annual Conference, Denver, CO.
7. Hahn E, Wells L, Fallin A, Beatty A, Darville A, Ensmann J, **Johnson AO**. Compliance with tobacco-free university policy. 2010 American Public Health Association Conference, Denver, CO.
8. Patidar N, Soares N, Kanungo S, **Johnson AO**. Using Geo-mapping to Assess Developmental-Behavioral Pediatric Telemedicine Service Utilization and Cost Effectiveness. 2010 American Telemedicine Association Mid-Year Meeting, Baltimore, MD.
9. Saman DM, Arevalo O, **Johnson AO**. Using Cartograms to Illustrate Disparities in Oral Health in Kentucky. 2009 American Public Health Association National Conference, Philadelphia, PA.
10. Laditka JN, Laditka SB, Probst JC, **Johnson AO**. New Evidence of a Gradient in Access to Primary Health Care across Levels of Rurality. 2007 National Rural Health Association Conference, Anchorage, AK.
11. **Johnson AO**, Wang J-Y, Probst JC, Laditka SB. Effects of Residence and Race on Long-Distance and Extraordinary Travel for Care. 2007 National Rural Health Association Conference, Anchorage, AK.
12. **Johnson AO**, Laditka SB, Probst JC. Substance Abuse Treatment Facilities: Rurality and Service Options. 2006 National Rural Health Association Conference, Reno, NV.
13. **Johnson AO**, Probst JC. What if Katrina Hit Here: A GIS-Based Approach to Estimating Hurricane Impact on Medical Facilities in the South Carolina Lowcountry. 2006 South Carolina Rural Health Association Conference, Columbia, SC.
14. Probst JC, Laditka SB, Wang JY, **Johnson AO**. Access to Medical and Dental Care: Does Travel Burden Differ by Race and Ethnicity? AcademyHealth 2006 Annual Research Meeting, Seattle, WA.
15. **Johnson AO**, Mink MD, Moore CG, Probst JC. Violence and Rural Teens: A National Study of School-Based Mental Health Services and Violence Prevention Policies. 2005 National Rural Health Association Conference, New Orleans, LA.
16. **Johnson AO**, Mink MD, Moore CG, Probst JC. Violence and Rural Teens: A National Study of School-Based Mental Health Services and Violence Prevention Policies. 2005 South Carolina Rural Health Association Conference, Columbia, SC.
17. **Johnson AO**. A Descriptive Analysis of Community Mental Health Center Distribution and Service Area Coverage using a Geographic Information System. 2004 National Rural Health Association Conference, San Diego, CA.
18. **Johnson AO**. A Qualitative Assessment of School-Based Violence Prevention Programs and Mental Health Services. 2004 South Carolina Rural Health Association Conference, Columbia, SC.

Grant Support

1. Investigation of Unplanned Intraoperative Hypothermia Patterns and Relationships in Surgical Patients Warmed with Forced Air [Association of Perioperative Registered Nurses] – Co-Investigator (2018)
2. An Exploration of Postoperative Delirium and Unplanned Perioperative Hypothermia in Surgical Patients [Association of Perioperative Registered Nurses] – Co-Investigator (2017-2018)

3. University of Kentucky Medical Center Health Information Technology Regional Extension Center Program [Office of the National Coordinator for Health Information Technology] – Co-Investigator (2010-2013)
4. Local Legal Infrastructure and its Association with Population Health [Robert Wood Johnson Foundation] – Co-Investigator (2010-2013)
5. Data Integration for Public Health Systems Research [Robert Wood Johnson Foundation] – Co-Investigator (2010-2012)
6. National Coordinating Center for Public Health Services and Systems Research [Robert Wood Johnson Foundation] – Co-Investigator (2012)
7. Market Research and Actuarial Services for Kentucky Health Insurance Exchange [KY Cabinet for Health and Family Services] – Co-Investigator (2012-2013)
8. Use, Perceived Risk, and Marketing of Electronic Cigarettes and Smoke-free Laws [University of Kentucky CCTS 2012 Pilot Grant] – Co-Investigator (2013)