



## Best Practices for Developing and Testing Risk Adjustment Models Technical Expert Panel

---

### Technical Expert Panel Co-chairs

#### **Philip Alberti, PhD**

Senior Director, Health Equity Research and Quality, Association of American Medical Colleges  
Washington, District of Columbia

As the AAMC Senior Director, Health Equity Research and Policy, Philip M. Alberti, Ph.D., supports efforts of academic medical centers to build an evidence-base for effective programs, policies, practices and partnerships aimed at eliminating inequities in health and healthcare. Prior to joining AAMC, Dr. Alberti led research, evaluation, and planning efforts for a Bureau within the NYC Department of Health and Mental Hygiene that works to promote health equity between NYC neighborhoods. Dr. Alberti holds a Ph.D. in Sociomedical Sciences from Columbia University's Mailman School of Public Health and was a National Institute of Mental Health Psychiatric Epidemiology Training Fellow.

#### **Karen Joynt Maddox, MD, MPH**

Assistant Professor, Washington University School of Medicine  
St. Louis, Missouri

Karen E. Joynt Maddox, MD, MPH is a cardiologist at Barnes-Jewish Hospital and an Assistant Professor at Washington University School of Medicine, and co-director of the Center for Health Economics and Policy at Washington University's Institute for Public Health. She previously served as Senior Advisor in the Office of Health Policy, United States Department of Health and Human Services. She is the Associate Editor for health policy at the Journal of the American Medical Association and serves on committees related to quality measurement and payment reform with the National Quality Forum, American College of Cardiology, and American Heart Association.

## Technical Expert Panel Members

### **Arlene Ash, PhD**

Professor and Division Chief, Biostatistics and Health Services Research, Department of Population and Quantitative Health Sciences, University of Massachusetts Medical School  
Boston, Massachusetts

Arlene Ash, PhD, is Professor and Division Chief, Biostatistics and Health Services Research, Department of Population and Quantitative Health Sciences, University of Massachusetts Medical School. A methods expert on risk adjustment in health services research, Ash pioneered tools for using administrative data to monitor and manage health care delivery systems, including those used by Medicare. In 1996, she co-founded DxCG, Inc. (now Cotiviti) to promote “fair and efficient health care” via predictive software. Her over 200 publications reflect interests in women’s health; gender, age and racial equity; quality, equity and efficiency in health care financing and delivery; and electoral integrity.

### **Patrick Campbell, PhD, PharmD, RPh**

Senior Director, Measurement Outcomes Research, Pharmacy Quality Alliance  
Alexandria, Virginia

Patrick J. Campbell, PharmD, PhD, is Senior Director of Research at the Pharmacy Quality Alliance (PQA) where he leads the research team and curates and manages PQA’s research portfolio to advance the quality of medication use. Patrick is a measurement science expert with advanced training in clinical outcomes assessment. He has over a decade of experience working for Walmart, where he supported safety and quality improvement initiatives and served as a community pharmacist. Dr. Campbell received his Doctor of Pharmacy and Doctor of Philosophy in Pharmaceutical Economics, Policy, and Outcomes from the University of Arizona, College of Pharmacy.

### **Elizabeth Drye, MD, SM**

Senior Director, Quality Measurement Programs, Yale-New Haven Hospital, Center for Outcomes Research and Evaluation (CORE)  
New Haven, Connecticut

Dr. Drye is Senior Director of Quality Measurement at Yale’s Center for Outcomes Research and Evaluation (CORE), and Research Scientist at Yale School of Medicine. She is dedicated to advancing quality measurement nationally in multi-stakeholder environments through collaboration and research. An expert on risk-adjusted outcome measures, she has led the development and NQF review of many nationally reported measures for CMS and advised NQF and other public and private organizations on outcomes measurement. Before becoming a pediatrician, Dr. Drye served for 8 years in Washington DC senior public health policy positions in the White House, US Senate and executive branch.

**Marc Elliott, PhD, MA**

Senior Principal Researcher, The RAND Corporation  
Santa Monica, California

Dr. Marc N. Elliott, RAND Distinguished Chair in Statistics and Senior Principal Researcher, is a Fellow of the American Statistical Association and an internationally recognized expert in risk adjustment, quality measurement, and health disparities. He has published >390 peer-reviewed articles and is among the 1% most-cited scientists (Reuters). He served on the National Academies of Science and Medicine Accounting for Social Risk Factors committee. He has developed methods for CMS MA Star ratings, for case-mix adjustment for many CMS measures, and for imputing race and ethnicity. Since 2006, he has led the CMS Medicare CAHPS® Analysis project.

**Rachel Harrington, PhD**

Research Scientist, National Committee for Quality Assurance  
Washington, District of Columbia

Rachel Harrington, PhD, is a Research Scientist at NCQA, where she leads measure development and testing in the area of healthcare resource utilization and serves as the scientific and project lead on multiple federally funded NCQA measurement projects. This includes HEDIS® risk-adjusted utilization measures, appropriate medication use in the elderly, and strategies for evolving approaches to social determinants of health in quality measurement. Her research interests include novel methods for identifying and evaluating care for high needs populations. Dr. Harrington has over 10 years of experience in observational safety and health services research.

**Bellinda King-Kallimanis, PhD, MSc.**

Director of Patient-Focused Research, LUNgevity  
Bethesda, Maryland

Dr. King-Kallimanis has worked in patient-focused research for the past 17 years. Before joining LUNgevity as Director of Patient-Focused Research, she worked at the US Food and Drug Administration Oncology Center of Excellence on the Patient-Focused Drug Development team. There, Bellinda worked on the development and launch of Project Patient Voice, a resource for patients and caregivers along with their healthcare providers to look at patient-reported symptom data collected from cancer clinical trials. Bellinda also has experience in industry and academia and has published over 60 peer-reviewed papers that cover disease areas like lung cancer, depression, cognitive impairment and multiple sclerosis. She received her bachelor of applied science and her master of science in applied statistics from Swinburne University of Technology in Melbourne, Australia, and her Ph.D. in psychometrics from the Academic Medical Center in Amsterdam, Netherlands.

**Vincent Liu MD, MS**

Research Scientist, Kaiser Permanente Division of Research  
Oakland, California

Dr. Liu is a physician-scientist and health system leader in Kaiser Permanente whose program uses comprehensive electronic health record data and statistical/machine learning techniques to improve real-world care delivery. He has authored >100 peer-reviewed publications and leads several large research grants that use granular risk adjustment to identify opportunities to improve patient-centered outcomes. He also oversees the implementation of real-time predictive models across a health system that includes 4.5 million members and 21 hospitals. These experiences give him unique insight into the scientific, clinical, and operational impact of risk adjustment on value-based purchasing and patient-centered outcomes.

**Danielle Lloyd, MPH**

SVP Private Market Innovations & Quality Initiatives, America's Health Insurance Plans  
Washington, District of Columbia

Danielle Lloyd is the SVP of private market innovations and quality initiatives for America's Health Insurance Plans. Danielle is responsible for assessing insurance market trends and developing policy in the areas of emerging payment models, quality measurement, patient privacy, and healthcare interoperability. She is steering committee chair for the Core Quality Measure Collaborative that seeks to align quality measures across public and private payers. Previously, Danielle also worked on an array of healthcare issues for hospital associations, Ways and Means and CMS. She has a BA from the University of Pennsylvania and an MPH from the University of California, Berkeley.

**John Martin, PhD, MPH**

Vice President, Data Science, Premier Healthcare Alliance  
Charlotte, North Carolina

Dr. Martin provides data science leadership, strategy and program development for Premier, leading a team that uses machine learning/AI and complex statistical methods to holistically evaluate healthcare and outcomes. He has more than 20 years' experience in conducting research on measure development, risk adjustment, quality improvement, clinical trials, and health economics and outcomes research. He's served on technical expert panels for AHRQ, CMS, PCORI, Avalere and ISPOR. Previously he held leadership and research roles at CareScience™, Pharmetrics, the Cancer Institute of NJ, and Thomson Health Economics Research. He has an MPH from the University of Kansas, and PhD from Rutgers.

**Shalini Prakash, MS**

Data Scientist, Washington Healthcare Authority  
Olympia, Washington

Shalini is a Data Scientist at the Washington Healthcare Authority, responsible for analytics, data modeling and reporting for several agency initiatives. She leads a team of analysts responsible for guiding initiatives and policy decisions using data and analytics, including quality measurement, financial outcomes, social factor analyses, evaluations & rapid-cycle assessments using Medicaid, Medicare and other big data. Prior to HCA, she was with CVS Health for 10+ years, conducting program evaluation, outcomes research and analytics. She has presented her original research at Academy of Managed Care Pharmacy (AMCP), International Society of Pharmacoeconomics and Outcomes Research (ISPOR) and other national forums.

**Sandra Richardson**

Research Scientist; Director, Bureau of Quality Measurement of Special Populations  
Albany, New York

Sandra Richardson has worked for the New York State Department of Health since 2009 and is currently the Director of the Bureau of Quality Measurement of Special Populations in the Office of Quality and Patient Safety. She has conducted or overseen risk-adjustment of Managed Long-Term Care (MLTC) measures since 2013. These risk-adjusted measures are used in MLTC quality measurement, the MLTC Quality Incentive, and the MLTC Consumer Guides. Sandra has been a Registered Nurse since 1982 and earned a master's degree in Epidemiology in 2009. Her clinical, public health, and statistical background provides a broad perspective for health data risk-adjustment.

**David Shahian, MD**

Vice President, Center for Quality and Safety, Massachusetts General Hospital  
Boston, Massachusetts

Dr. Shahian is Professor of Surgery at Harvard Medical School and Vice President for Quality and Safety at Massachusetts General Hospital. He served two terms on the NQF Board of Directors and Executive Committee. As Chair of the STS Workforce on Quality and its Quality Measurement Task Force, and past Chair of the STS National Database Workforce, he has been a national leader in clinical registries, risk model and performance measure development, and public reporting. Dr. Shahian supervised development of risk models used in 34 NQF endorsed performance measures, and he is the author of more than 300 peer-reviewed publications.

**Cristie Upshaw Travis, MSHHA**

Chief Executive Officer, Memphis Business Group on Health (MBGH)  
Memphis, Tennessee

Christie Upshaw Travis has been the CEO of MBGH, a 501(c)(3) not-for-profit business coalition with over 350,000 covered lives in Memphis and Tennessee, since 1994. MBGH brings employers together to share solutions and provides them tools to manage the cost and quality of health benefits. She serves on the Board of Directors of The Leapfrog Group (Vice Chair) and the National Quality Forum (Vice Chair); key committees for National Quality Forum, Core Quality Measure Collaborative, and NCQA and is the immediate past chair of the National Alliance of Healthcare Purchaser Coalitions. Her work with MBGH, NQF, National Alliance, and NCQA include equity, and social risk.

**Janice Tufte**

Hassanah Consulting  
Seattle, Washington

Janice Tufte has fifteen years of experience as a Patient Advisor. Her first involvement was Group Health GHC - now Kaiser Permanente WA Medical Center Council, Advisory Group Assembly and now KP Senior Caucus. Currently serving on University of Washington's CERTAIN Learning Health System Patient Advisory Network, WA Health Care Authority TITLEXIX Medicaid Advisory Committee, NQF Patient Advisory Council, KP PFCC National Advisory, Consumer Advancing Patient Safety Advisory, National Consumer Scholar at Center for Complex Care and Social Needs. Janice has been actively engaged with Academy Health and American College of Physicians and National Academy of Medicine.

**Katherine Vickery, MD, MSc.**

Clinician-Investigator, Hennepin Healthcare  
Minneapolis, Minnesota

Dr. Vickery is a primary care doctor and researcher at Hennepin Healthcare and co-director of the Health, Homelessness, and Criminal Justice Lab. Dr. Vickery researches integrated care models to improve the health of people experiencing homelessness and chronic diseases, specifically diabetes. She conducted one of the first evaluations of a Medicaid accountable care organization offering integrated care for physical and behavioral health needs. She clinically cares for patients at Hennepin County Health Care for the Homeless. Dr. Vickery serves as chair of the research committee and a board member of the National Health Care for the Homeless Council.