

# Scientific Methods Panel

# METHODS PANEL CHAIRS

# David Cella, PhD

Professor, Northwestern University Chicago, IL

David Cella is the Ralph Seal Paffenbarger Professor and Chair of the Department of Medical Social Sciences at the Northwestern University Feinberg School of Medicine. He studies questions regarding quality of life measurement in clinical practice and research. He has published more than 700 peer-reviewed articles, most of which focus on the unique contribution that the patient perspective has upon the evaluation of health and healthcare. Dr. Cella has studied quality of life as a scientific enterprise, bringing the voice of the patient into consideration of value and opportunities for improvement. Dr. Cella developed and is continually refining the Functional Assessment of Chronic Illness Therapy (FACIT) Measurement System for outcome evaluation in patients with chronic medical conditions. He was steering committee chair and principal investigator of the statistical coordinating center for the NIH Roadmap Initiative to build a Patient-Reported Outcome Measurement Information System (PROMIS). Dr. Cella is a recipient of the International Society for Quality of Life Research President's Award (2008), the Health Assessment Laboratory/Medical Outcomes Trust John Ware and Alvin Tarlov Career Achievement Award (2014), and the National Academy of Medicine (Institute of Medicine) Gustav O. Lienhard Award (2016).

# David Nerenz, PhD

Director, Center for Health Policy and Health Services Research, Henry Ford Health System Detroit, MI

David R. Nerenz, PhD, is Director of the Center for Health Policy and Health Services Research at Henry Ford Health System. He is also Director of Outcomes Research for the Neuroscience Institute, and Vice-Chair for Research of the Department of Neurosurgery at Henry Ford Hospital. He recently served as the Chair of the Institute of Medicine Committee on Leading Health Indicators for Healthy People 2020, Chair of the IOM Subcommittee on Standardized Collection of Race/Ethnicity Data for Healthcare Quality Improvement, and Co-chair of the National Quality Forum's SES Risk Adjustment Expert Panel.

#### J. Matt Austin, PhD

Assistant Professor, Armstrong Institute for Patient Safety and Quality at Johns Hopkins Medicine Baltimore, MD

Dr. Matt Austin is an Assistant Professor at the Armstrong Institute for Patient Safety and Quality at Johns Hopkins Medicine. His research focuses on performance measures in healthcare and their use for improvement. In his role, he provides strategic guidance to The Leapfrog Group on performance measures for their Hospital Survey and Hospital Safety Grade. Within Johns Hopkins Medicine, Dr. Austin guides the development of safety and quality dashboards and co-leads efforts to identify possible disparities in the equity of care delivered to patients. Dr. Austin earned his PhD in Industrial and Systems Engineering from the University of Wisconsin–Madison.

#### Bijan Borah, MSc, PhD

Associate Professor, Mayo Clinic Rochester, MN

Bijan J Borah, MSc, PhD is a health economist and health services researcher at Mayo Clinic with research focus in comparative effectiveness research. He is an expert in observational data methods. He helped develop Mayo Clinic Cost Data Warehouse that converts internal costs into standardized costs, enabling researchers to conduct cost analysis for Mayo cohorts. His recent research includes measuring medication adherence in patients with multiple chronic conditions, and identifying patients for interventions aimed at improving medication adherence. He serves on advisory committees on medication adherence measurement panel at International Society for Pharmacoeconomics and Outcomes Research and AcademyHealth Health Economics Interest Group.

#### John Bott, MBA, MSSW

Manager, Healthcare Ratings, *Consumer Reports* Yonkers, NY

John Bott, MBA, MSSW, works with *Consumer Reports* in the Health Ratings Center. His responsibilities are managing and executing the development of healthcare service ratings. Prior to *Consumer Reports*, John worked in the public and nonprofit private sectors. Public sector work includes AHRQ, where he led maintaining and improving the AHRQ QIs and examined enhancements to measures using additional clinical data.

In the nonprofit sector, he worked with IPRO, New York, examining and improving innovative methodologies to measure performance of an array of providers. John also worked at The Alliance, Wisconsin, managing quality and cost measurement projects for accountability.

#### **Daniel Deutscher, PT, PhD**

National Director of Research and Development, Maccabi Healthcare Services Tel-Aviv, Israel

Daniel Deutscher, PT, PhD, is the physical therapy department national director of research & development, and the director of the Patient-Reported Outcome Measures (PROMs) initiative for the Maccabitech research institute, both at Maccabi Healthcare Services, Israel. He is also the

vice-chair of the International MDT Research Foundation, and serves on the Focus On Therapeutic Outcomes (FOTO) Research Advisory Board. Daniel also serves as a research consultant for FOTO and Net Health. His main research interests are the foundation of clinical databases to promote practice-based evidence (PBE) studies using integrated electronic medical record and electronic outcomes data, to identify best practice in rehabilitation. Additionally, Daniel has been involved in numerous studies on the development and clinical implementation of PROMs.

#### Lacy Fabian, PhD

Lead Healthcare Evaluation Specialist, The MITRE Corporation McLean, VA

Lacy Fabian, PhD is a research psychologist focused on performance measurement and evaluation for healthcare quality improvement at The MITRE Corporation. She specializes in methods and identifying opportunities for process improvement in quality reporting programs. For over 10 years, she has supported federal programs using quality measures within the Agency for Healthcare Research and Quality and the Centers for Medicare and Medicaid Services. Her experience includes development of measures, implementation and maintenance of a core measure set of 65+ measures, and strategic support during annual preparations for the Measures Under Consideration list and Measure Applications Partnership within the National Quality Forum.

# Marybeth Farquhar, PhD, MSN, RN

Executive Vice President of Research, Quality and Scientific Affairs, American Urological Association Washington, DC

Marybeth Farquhar is the Vice President of Quality, Research & Measurement at URAC. She is responsible for URAC's quality, measurement, and research agenda. Dr. Farquhar has over 30 years' experience in nursing, research, and quality measurement, and she led the development of standards on measures and measure reporting for URAC's Accreditation programs. She serves as an expert on measure development and analysis on several technical expert panels. Dr. Farquhar was Vice President of Performance Measurement at NQF and responsible for strategic oversight of the CDP. She also led key projects of the CAHPS team and the AHRQ's Quality Indicators Initiative.

# Jeffrey Geppert, EdM, JD

Senior Research Leader, Battelle Memorial Institute Columbus, OH

Jeffrey J. Geppert is a Senior Research Leader at Battelle Memorial Institute. Mr. Geppert has 24 years of experience in performance measurement in the fields of healthcare and education, supporting federal, state, and commercial organizations in the development, validation, and effective use of data on quality. Currently he leads Battelle solutions in healthcare quality improvement. Mr. Geppert served for 10 years as the Project Director of the Support for Quality Indicators contract with Agency for Healthcare Research and Quality, and for 11 years as an analyst with the Healthcare Economics program at the National Bureau of Economic Research.

## Laurent Glance, MD

Professor and Vice-Chair for Research, University of Rochester School of Medicine and Dentistry Rochester, NY

Dr. Laurent Glance is a professor with tenure and Vice-Chair for Research in the Department of Anesthesiology at the University Of Rochester School Of Medicine. Dr. Glance has an adjunct appointment as a Senior Scientist at RAND Health. He obtained his MD at Cornell and undergraduate degree at Dartmouth. Dr. Glance is a cardiac anesthesiologist, trained at New York-Presbyterian Hospital (Cornell) for residency and Memorial Sloan-Kettering for critical care medicine. His research has been funded by AHRQ and has focused on quality measurement and risk adjustment.

## Joseph Hyder, MD

Associate Professor, Mayo Clinic Rochestor, MN

Dr. Hyder is an anesthesiologist and critical care physician at Mayo Clinic in Rochester, MN. He completed clinical training with stops at Brigham and Women's Hospital, Mayo Clinic, and Massachusetts General Hospital. He holds a PhD in epidemiology and his research has focused on the measurement of surgical complications and surgical case-mix adjustment. Dr Hyder has served in leadership roles in the Mayo Clinic Rochester Hospital Practice Executive Operations Team, including serving as Quality Chair. He additionally has served terms for the American Society of Anesthesiologists, Committee on Performance and Outcome Measures and Core Measures Development Group.

# Sherrie Kaplan, PhD, MPH

Professor of Medicine, Vice Chancellor for Healthcare Measurement and Evaluation, UC Irvine School of Medicine Irvine, CA

Dr. Sherrie Kaplan is well known for her work in the development of measures of the quality of technical and interpersonal care, health status and quality of life, and heterogeneity of treatment effects, particularly for vulnerable populations. Her current research includes the use of animated "cartoon" images to obtain health-related functional status information from children. Her work on the application of psychometric techniques to the assessment of performance of varying levels of the healthcare system, from healthcare organizations to individual physicians, is widely cited. She currently heads the clinical research training program at UCI School of Medicine.

# Joseph Kunisch, PhD, RN-BC, CPHQ

Enterprise Director of Clinical Quality Informatics, Memorial Hermann Health System Houston, TX

Dr. Kunisch is a graduate of the University of Colorado Denver and holds a master's degree in clinical informatics and a PhD in health information technology. Dr Kunisch also serves as an adjunct assistant professor at the University of Texas School of Biomedical Informatics. He has over 10 years of experience in the field of clinical informatics. Currently, Dr. Kunisch serves in the role of Enterprise Director for Clinical Quality Informatics for Regulatory Performance. In this role, he leads the department responsible for all quality-related regulatory reporting including the electronic clinical quality measures for 14 hospitals.

# Paul Kurlansky, MD

Associate Professor of Surgery / Associate Director, Center for Innovation and Outcomes Research / Director of Research, Recruitment and CQI, Columbia University, College of Physicians and Surgeons / Columbia HeartSource New York, NY

Paul A. Kurlansky, MD received his baccalaureate degree (cum laude) from Harvard University and received his medical degree from Tufts University Medical School. He completed his postgraduate training at New York-Presbyterian/Columbia University Medical Center in New York. Dr. Kurlansky is boarded in Surgery, Thoracic surgery, and with the American Board of Quality Assurance and Utilization Review.

Dr. Kurlansky is the former Director of Research at the Florida Heart Research Institute in Miami, Florida. In 2003, he joined the Columbia HeartSource team as the Director of Research, Recruitment and Continuous Quality Improvement. An Associate Professor of Surgery at Columbia, Dr. Kurlansky is the Associate Director for the Center of Innovation and Outcomes Research. He serves on the Quality Measurement Task Force of the Society of Thoracic Surgeons as well as on the editorial board of several peer reviewed journals, and he has published extensively on cardiac surgery and quality outcomes.

## Zhenqiu Lin, PhD

Director of Data Management and Analytics, Yale-New Haven Hospital New Haven, CT

Zhenqiu Lin, PhD is the director of Data Management & Analytics at Yale New Haven Hospital Center for Outcomes Research and Evaluation, where he leads a team of 20 data scientists. He received his PhD degree in experimental psychology from Stony Brook University. He has expertise in quantitative methods and psychometrics. He has 20 years of experience in applying statistical methods to clinical and health service research through cross-disciplinary collaborations. He has been focusing on developing outcomes measures in the past 10 years and has led the development of many outcomes measures that NQF has endorsed.

#### Jack Needleman, PhD

Professor, University of California Los Angeles Los Angeles, CA

Jack Needleman, PhD, Professor of Health Policy and Management, UCLA School of Public Health. A health economist, he has conducted research examining the efficiency of nonprofit and forprofit hospitals and designed or evaluated hospital, physician, and nursing home payment systems. Measures he helped develop have been adopted by NQF, AHRQ, and Medicare. Dr. Needleman has served on two NQF steering committees for resource use measures and TAC for the NQF Hospital Nursing Performance Measure Committee. He has PhD in public policy from Harvard University. He is an elected member of the National Academy of Medicine.

# **Eugene Nuccio, PhD**

Assistant Professor, University of Colorado, Anschutz Medical Campus Aurora, CO

Eugene J. Nuccio, PhD (education psychology) is expert in program/system evaluation, statistical

analysis, and quality measurement. Dr. Nuccio has designed and conducted of the Home Health Pay-for-Performance Demonstration Evaluation that utilized both quantitative (analysis of quality measures and agency survey responses) and qualitative (on-site focus groups) components. His experience includes measurement, instrument design, and risk adjustment of outcomes using high-level multivariate (OLS and logistic regression) methods. Dr. Nuccio's work includes empirical and theoretical contributions in the development of new risk adjustment approaches including aggregation of episodic information by agency, model development methodology, and representation of ordinal data in models.

## Sean O'Brien, PhD

Associate Professor of Biostatistics and Bioinformatics, Duke University Medical Center Durham, NC

Sean O'Brien, PhD, is an Associate Professor in the Department of Biostatistics and Bioinformatics at Duke University Medical Center. Since 2005, he has served as statistical director of the Society of Thoracic Surgeons (STS) Data Warehouse and Analysis Center and as co-investigator of several grants and contracts using large registries to study comparative effectiveness and healthcare quality. Dr. O'Brien also works on the development and evaluation of quantitative methods for healthcare provider performance assessment. His research interests include risk-adjustment methodology, composite measures, and Bayesian modeling.

## Jennifer Perloff, PhD

Scientist and Deputy Director at the Institute of Healthcare Systems, Brandeis University Waltham, MA

Jennifer Perloff, PhD is a Scientist and Deputy Director at the Institute for Healthcare Systems at Brandeis University. Dr. Perloff has over 15 years of experience in evaluation and health services research. Recent work includes a CMMI funded project to develop an episode grouper for Medicare (EGM), with special emphasis on attribution, risk adjustment and provider profiling. Dr. Perloff also works in bundled payment, helping hospitals and insurance companies understand the risk and reliability of individual condition and treatment bundles. Finally, Dr. Perloff works on the cost, quality, and efficiency of nurse practitioner delivered primary care, including an ongoing project on multiple sclerosis.

#### Patrick Romano, MD, MPH

Professor, University of California Davis Davis, CA

Dr. Patrick Romano is Professor of Medicine and Pediatrics at UC Davis and co-Editor in Chief of HSR, an official journal of AcademyHealth. He is a graduate of Princeton University, Georgetown University School of Medicine, and UC Berkeley School of Public Health. He trained in internal medicine/pediatrics at University Hospitals of Cleveland, and in health services research at UCSF. His research interests include developing and validating healthcare quality measures and using outcomes data to improve the effectiveness of healthcare. He has served on many expert committees and has led or co-led measure development efforts for numerous public agencies.

# Sam Simon, PhD

Senior Researcher, Mathematica Policy Research Cambridge, MA

Sam Simon, PhD, is a senior researcher at Mathematica Policy Research. Dr. Simon has nearly 20 years of experience conducting and leading quality measure psychometric work, with a recent emphasis on eCQMs.

Dr. Simon is currently Principal Investigator for a CMS-funded project to develop, specify, test, and maintain eCQMs for clinicians participating in CMS's Quality Payment Program. Under this project, Dr. Simon led the evaluation of feasibility, reliability, and validity for over 20 new eCQMs, including PRO-PMs and a composite eCQM. His evaluation work has been published in *The Gerontologist, Journal of the American Medical Directors Association*, and *Military Medicine*.

## Alex Sox-Harris, PhD, MS

Associate Professor of Research, Department of Surgery, Stanford University Menlo Park, CA

Alex Sox-Harris, PhD, MS, is an Associate Professor in the Stanford Department of Surgery, and a Research Career Scientist at the Center for Innovation to Implementation (Ci2i) at VA Palo Alto. He is a health services researcher with programs of research focused on healthcare quality measurement, substance use disorder treatment, and treatment decisions for conditions in which surgery is a major treatment option. He has published over 195 scientific papers, has had continuous federal research funding for over 15 years, and is committed to conducting research that directly informs healthcare policy, delivery, and outcomes.

# **Michael Stoto, PhD**

Professor of Health Systems Administration and Population Health, Georgetown University Washington, DC

Michael Stoto is a Professor of Health Systems Administration and Population Health at Georgetown University as well as an Adjunct Professor of Biostatistics at Harvard T.H. Chan School of Public Health. A statistician, epidemiologist, and health services researcher, Dr. Stoto's research includes methodological topics in epidemiology and statistics including research synthesis/meta-analysis and other analytical methods for comparative effectiveness research, population health assessment, evaluation methods, and performance measurement. Dr. Stoto has worked extensively with AcademyHealth on methods for analyzing existing electronic health data for comparative effectiveness research and quality improvement, and he is a senior researcher with the MedStar Health Research Institute.

# **Christie Teigland, PhD**

Vice President, Advanced Analytics, Avalere Health Washington, DC

Dr. Teigland is Vice President of Advanced Analytics at Avalere Health. She leads a team of 15 research professionals in the design and implementation of studies focused on performance measure development and evaluation, including testing for feasibility, reliability, and validity. She specialized in quality measurement as Director of Research at Leading Age New York, leading large grant funded projects including a multiyear study to develop innovative solutions to advance

the use of data-driven decision making to measure, track, and improve health outcomes. She received her PhD and MA in Economics/Econometric Forecasting from the University of New York at Albany.

#### Ronald Walters, MD, MBA, MHA, MS

Associate Vice President of Medical Operations and Informatics, University of Texas MD Anderson Cancer Center

Houston, TX

Ron Walters is an associate vice president of medical operations and informatics at The University of Texas MD Anderson Cancer Center in The Texas Medical Center, applying more than 30 years of experience and knowledge at MD Anderson. Dr. Walters is a breast medical oncologist and is responsible for the professional aspects of Clinical Operations including Medical Informatics, the Tumor Registry, the Transfer Center, Managed Care Programs, Uncompensated Charity Care, Clinical Safety and Effectiveness, and the Physicians Network. He serves on multiple institutional committees striving for improvements in patient care, research, and our support systems. Dr. Walters pursued his MBA at the University of Houston. When he realized it didn't cover enough of the healthcare administration aspects, he went for a master's degree too. It was in business school where he really learned to appreciate that some hands-on experience in the profession results in a different perspective. He completed a master's program in the management of computing and information systems at Houston Baptist University. Dr. Walters considers himself a productive member of a great team with great leadership at MD Anderson Cancer Center.

# Terri Warholak, PhD, RPh, CPHQ, FAPhA

Assistant Dean of Academic Affairs and Assessment and Professor at the University of Arizona, College of Pharmacy

Tucson, AZ

Terri L. Warholak, PhD, RPh, CPHQ, FAPhA is Assistant Dean of Academic Affairs and Assessment and Professor at the University of Arizona, College of Pharmacy, Tucson. Dr. Warholak has worked with PQA to establish and disseminate quality metrics since 2007, and she has published extensively in the areas of quality measure development and psychometric instrument analysis. Dr. Warholak has edited a book on quality, published over 110 papers as well as abstracts and book chapters, and has been invited to present at the state, national, and international levels. Her career has been devoted to improving clinical quality and quality measurement.

# Eric Weinhandl, PhD, MS

Senior Director, Epidemiology and Biostatistics, Fresenius Medical Care North America Victoria, MN

Dr. Weinhandl is an expert in cardiorenal epidemiology. His research interests comprise evaluation of the quality of care rendered by institutional healthcare providers, including hospitals and dialysis facilities; design and evaluation of the Medicare program; quantitative methods for the control of confounding in comparative effectiveness research with observational data; benefits and risks of home dialytic modalities; epidemiology of end-stage kidney disease; pharmacoepidemiology of chronic kidney disease; and the role of clinical pharmacy in chronic disease management. Dr. Weinhandl has a deep understanding of Medicare Parts A, B, and D, including reimbursement rules and claims data arising from these programs.

# Susan White, PhD, RHIA, CHDA

Administrator - Analytics, The James Cancer Hospital at The Ohio State University Wexner Medical Center

Columbus, OH

Susan White, PhD, RHIA, CHDA, is the Administrator of Analytics at The James Cancer Hospital -OSUWMC and an Associate Professor in the HIMS Division at The Ohio State University. Dr. White is responsible for the design and implementation of alternative payment models for cancer as well as serving as the administrator for the Cancer Program Analytics Department. In her academic role, she teaches classes in statistics, data analytics, healthcare finance, and computer applications. Dr. White has published text books and articles covering outcomes assessment, risk adjustment, hospital benchmarking, and claims data mining. Dr. White received her PhD in statistics from The Ohio State University.