

**Mortality Measurement Meeting
Participant Bios**

Cosponsored by the Agency for Healthcare Research and Quality and
Institute for Healthcare Improvement

November 3, 2008 Cambridge, Massachusetts

Amy Rosen, PhD

Dr. Amy Rosen is Professor of Health Policy and Management at Boston University School of Public Health and a researcher at the Center for Health Quality, Outcomes and Economic Research. She has conducted health services research projects involving the development and use of risk-adjustment models used to compare quality of care delivery in different settings: hospital, long-term care, and ambulatory care. Among her studies, she has evaluated the quality of care delivered to Medicare beneficiaries who received surgical procedures, for which a measure called “adverse events” became an important way to screen for potential instances of poor quality in this population. In long-term care, she developed a risk-adjustment model to predict decline in functional status among long-term care residents in VA settings. In the ambulatory setting, she evaluated case-mix models currently used for provider profiling, setting capitation rates, and quality assessment. These include the Adjusted Clinical Groups, the Diagnostic Cost Groups, and the Chronic Illness and Disability Payment System. She was a principal investigator of a project developing a psychiatric case-mix measure for the VA used to compare the care that facilities provide to patients with mental health disorders. More recently, Dr. Rosen has worked in the area of patient safety. She has examined the prevalence and incidence of Patient Safety Indicators, developed by AHRQ, in the VA, and is currently evaluating their criterion validity. She is working closely with AHRQ to improve the indicators. She is also working on a study examining the patient safety culture of VA hospitals, as well as the changes in the quality and safety of care resulting from the resident work duty reform legislation. Dr. Rosen received her PhD from the University of Maryland in sociology.

Barry M. Straube, MD

Barry M. Straube, MD is currently the Acting Director of the Office of Clinical Standards and Quality (OCSQ) and Acting Chief Medical Officer (CMO) at the Centers for Medicare & Medicaid Services (CMS). In his OCSQ role, Dr. Straube oversees several major elements of the CMS quality and clinical policy portfolio, including the development of national coverage policies and quality standards for Medicare and Medicaid providers; quality measurement and public reporting initiatives; and manages the Quality Improvement Organization (QIO) program. As Acting Chief Medical Officer, Dr. Straube serves as a senior advisor to the Administrator on clinical and scientific policy. He also cochairs the CMS Council on Technology and Innovation, and serves as Executive Director for the CMS Quality Council, two internal CMS bodies that coordinate policy development on technology and quality, respectively. In addition, Dr. Straube serves as the CMS liaison to the Joint Commission on Accreditation of Healthcare Organizations, the National Quality Forum, the Institute of Medicine, the Secretary's Advisory Committee on Genetics, Health and Society, and several other public and private sector national councils and committees. As the only nephrologist at CMS he also cochairs the End Stage Renal Disease and Clinical Laboratory Open Door Forum and acts as a senior advisor on ESRD and transplantation issues to the agency.

Brent C. James, MD, MStat

Brent C. James, MD, MStat, Vice President, Medical Research and Continuing Medical Education, Intermountain Health Care (IHC), is also Executive Director of IHC Institute for Health Care Delivery Research. He holds faculty appointments at the University of Utah, School of Medicine, Harvard School of Public Health, Tulane University School of Public Health and Tropical Medicine, and the University of Sydney, School of Public Health in Australia. Through the Intermountain Advanced Training Program in Clinical Practice Improvement, Dr. James has trained almost 2,000 senior physician, nursing, and administrative executives in clinical management methods. Before joining IHC, he was an Assistant Professor in the Department of Biostatistics at the Harvard School of Public Health.

Professor Sir Brian Jarman, OBE, FRCP, FRCGP

Professor Sir Brian Jarman, OBE, FRCP, FRCGP, Senior Fellow at IHI, was Head of the of Primary Care and Populations Health Sciences Division in the Faculty of Medicine at Imperial College London and now heads Dr Foster Unit at Imperial College, which calculates a wide range of international indices of health care, including the Hospital Standardised Mortality Ratio (HSMR) for hospitals in several countries (including United States, United Kingdom, Sweden, Netherlands, and Canada). He read Natural Sciences at Cambridge and did a PhD in Geophysics at Imperial College and then worked for some years as an exploration geophysicist in the Sahara (Libya) and elsewhere. After changing to medicine he did his MBBS at St Mary's Hospital Medical School, London (now part of Imperial College), and an exchange at Harvard Medical School. His hospital posts included St Mary's Hospital and the Beth Israel Hospital, Boston, as a medical resident. He has worked on the development of socioeconomic indicators of health status (the Under Privileged Area score), on the provision of beds in London and on hospital mortality rates. He was a panel member of the Bristol Royal Infirmary Inquiry. He was President of the British Medical Association (2003-2004) and has worked with IHI since 2001.

Bruce N. Davidson, PhD, MPH, MPI

Bruce Davidson is Director of the Resource and Outcomes Management Department for the Cedars-Sinai Health System, a position he has held since 1996. Currently, he is also an Adjunct Assistant Professor in the Health Services Department at the UCLA School of Public Health, where he teaches Quality Improvement and Informatics for the Executive Master's Program. Dr. Davidson has 30 years of experience in health services delivery and evaluation, with hands-on experience in leading, supporting, and evaluating patient care process improvement initiatives, as well as the delivery of patient care services in both inpatient and outpatient settings.

In his present position, he is responsible for leading a department of 24 in support of the development and implementation of initiatives designed to promote cost-effective, high quality medical care, with a focus on measurement and statistical methodology. He has published articles in the areas of medical treatment effectiveness, decisionmaking in health care, and measurement for quality improvement, with a recent focus on information management. He serves on the Board of Directors for the annual MIT International Conference on Information Quality, and is also the Chair of the Committee on Health Services Research in the Medical Care Section of the American Public Health Association.

Dr. Davidson holds a PhD in Health Services Research from the UCLA School of Public Health and was a Pew Health Policy Fellow at the RAND/UCLA Center for Health Policy Study. He also holds a master's degree in Public Health from UCLA with an emphasis in Population and Family Health, and a master's degree in Urban Planning from USC with an emphasis in Social Policy and Planning Methodology. He received his BS from the Massachusetts Institute of Technology.

Carolyn M. Clancy, MD

Carolyn M. Clancy, MD, was appointed Director of the Agency for Healthcare Research and Quality (AHRQ) on February 5, 2003. Prior to her appointment, Dr. Clancy had served as AHRQ's Acting Director since March 2002 and previously was Director of the Agency's Center for Outcomes and Effectiveness Research (COER).

Dr. Clancy, who is a general internist and health services researcher, is a graduate of Boston College and the University of Massachusetts Medical School. Following clinical training in internal medicine, Dr. Clancy was a Henry J. Kaiser Family Foundation Fellow at the University of Pennsylvania. She was also an assistant professor in the Department of Internal Medicine at the Medical College of Virginia in Richmond before joining AHRQ in 1990.

Cathy Schoen

Cathy Schoen is senior vice president at The Commonwealth Fund. She is a member of the Fund's executive management team and research director of the Fund's Commission on a High Performance Health System. Her work includes strategic oversight and management of surveys, research and policy initiatives to track health system performance. From 1998 through 2005, she directed the Fund's Task Force on the Future of Health Insurance. Prior to joining the Fund in 1995, Ms. Schoen taught health economics at the University of Massachusetts School of Public Health and directed special projects at the UMASS Labor Relations and Research Center. During the 1980s, she directed the Service Employees International Union's research and policy department. In the late 1970s, she was on the staff of President Carter's national health insurance task force, where she oversaw analysis and policy development. Prior to Federal service, she was a research fellow at the Brookings Institution in Washington, DC. She has authored numerous publications on health policy issues, insurance, and national/international health system performance and coauthored the book *Health and the War on Poverty*. She holds an undergraduate degree in economics from Smith College and a graduate degree in economics from Boston College.

Christine Vogeli, PhD

Dr. Vogeli is a health services researcher whose principal interests include analyzing data to gain a better understanding of patterns of care, quality of care, and health care costs. She is an expert in large administrative databases and looks at ways to maximize their utility to further health care quality assessment and improvement, especially for racial and ethnic minorities and individuals with multiple chronic conditions. Dr. Vogeli has also investigated the validity of physician and hospital performance metrics.

Dr. Vogeli has played a leading role in quality assessment projects within the Massachusetts General Hospital and the Partners Healthcare System and has developed and played a key role in

the Partners Quality Report, first launched in Fall 2000. She is developing new measures of heart failure performance based on combined administrative and clinical data for all Partners hospitals and has developed an outcomes reporting system for Partners Psychiatry and Mental Health. Dr. Vogeli has collaborated on research grants funded by The Commonwealth Fund, The Robert Wood Johnson Foundation, the Agency for Healthcare Research and Quality, and others. This work has led to publications, as lead or coauthor, in a medical and health policy journals, including the *New England Journal of Medicine*, *Journal of General Internal Medicine*, and *Health Affairs*.

Clarion E. Johnson, MD

Dr. Johnson is currently the Global Medical Director, Medicine and Occupational Health Department for Exxon Mobil Corporation. The department delivers services to over 80,000 ExxonMobil and affiliate employees worldwide. In addition to traditional work-related health services, this department delivers travel medicine to the many ExxonMobil employees who are engaged in exploration and production in a number of challenging environments worldwide. The department includes industrial hygiene, drug testing and health promotion services.

Dr. Johnson is board certified in internal medicine, cardiology and occupational medicine. He did his undergraduate work at Sarah Lawrence College where he was student body president. He studied medicine at Yale University School of Medicine. In addition to a cardiology fellowship, Dr. Johnson did a military/basic science fellowship at Walter Reed Army Institute of Research followed by 2 years as a postdoctoral student in the field of microwave research. He has published a variety of articles in various fields.

Dr. Johnson is a Board Member to the Milbank Memorial Fund and National Business Group on Health. He serves as an advisor and lecturer for the “Global Medical Clinic Course” sponsored by Harvard Medical School. He also is on the IOM NIOSH HSE Review Committee. He is a member of the Urban League’s advisory board BEEP (Black Executive Exchange Program) and the Joint Commission Advisory Board Globalization of Health Services. He is the past Chairman of the Virginia Health Care Foundation.

David A. Foster, PhD, MPH, MT (ASCP)

David A. Foster, PhD, MPH, MT (ASCP), is Chief Scientist, Center for Healthcare Improvement at Thomson Reuters. Over the past two decades, Dr. Foster has held research and teaching positions at the University of Michigan, and has worked as an epidemiologist at the Federal Centers for Disease Control and Prevention (CDC) and for the World Health Organization on projects around the globe, including Alaska, Africa, and the former Soviet Union. Foster has served on the National Quality Forum’s (NQF) Ad Hoc Advisory Committee on Performance Measure Criteria, and has published in numerous peer-reviewed journals. Since coming to Thomson in 1992, Foster has played a lead role in the development of data sources, study designs, and methodologies that facilitate the delivery of high-quality health care information to providers, payers, employers, and suppliers. Foster received his PhD in Epidemiologic Science from the University of Michigan.

David Harrison, PhD

Dr. David Harrison is Statistician at the Intensive Care National Audit & Research Centre (ICNARC). ICNARC coordinates the national comparative audit of adult, general critical care units in England, Wales, and Northern Ireland—the Case Mix Programme. This voluntary quality improvement program is active in over 80 percent of units. David’s main interests are risk prediction modeling, performance monitoring and reporting, health technology assessment, and evaluation of service delivery and organization in critical care. David graduated from the University of Cambridge with a BA in mathematics and a PhD in mathematical modeling of disease progression. He has worked for ICNARC since 2002. David is a Fellow of the Royal Statistical Society and an Honorary Senior Lecturer in the Medical Statistics Unit of the London School of Hygiene & Tropical Medicine.

David M. Shahian, MD

Dr. Shahian is a cardiothoracic surgeon and former CT Department Chair (Lahey Clinic) whose nonclinical activities have focused on health care quality measurement and public reporting. He was a leader in the development of the Massachusetts system for analyzing and reporting CABG surgery and PCI results, and he continues to serve as the senior surgical advisor for this program. He also serves as a consultant to the MA Executive Office of Health and Human Services Expert Panel, which is responsible for evaluating potential hospitalwide mortality measures.

Nationally, Dr. Shahian is Chair of the Society of Thoracic Surgeons (STS) Adult Cardiac Surgery Database and the STS Quality Measurement Task Force, and he has particular expertise in risk model development and composite quality measures. He was a member of the NQF Cardiac Surgery Project Technical Advisory Panel, and he currently serves on the NQF Composite Measure Steering Committee. He is also a member of the ACC/AHA Performance Measurement Task Force, the ACC/AHA Composite Measure Writing Group, the American College of Surgeons NSQIP Measurement and Evaluation Committee, and the AMA Physician Consortium for Performance Improvement (PCPI).

Dr. Shahian is on the faculty of Harvard Medical School and has dual appointments in the Center for Quality and Safety and the Department of Surgery at the Massachusetts General Hospital.

Donald M. Berwick, MD, MPP, FRCP

Donald M. Berwick, MD, MPP, FRCP, President and CEO, Institute for Healthcare Improvement (IHI), is one of the Nation's leading authorities on health care quality and improvement issues. He is also clinical professor of pediatrics and health care policy at the Harvard Medical School. Dr. Berwick has served as vice chair of the U.S. Preventive Services Task Force, the first “Independent Member” of the Board of Trustees of the American Hospital Association, and as chair on the National Advisory Council of the Agency for Healthcare Research and Quality. An elected member of the Institute of Medicine (IOM) and a former member of the IOM’s governing Council, Dr. Berwick now serves on the IOM’s Board of Global Health. He served on President Clinton’s Advisory Commission on Consumer Protection and Quality in the Healthcare Industry. Cochaired by the secretaries of health and human services and labor, the Commission was charged with developing a broader understanding of issues facing the rapidly evolving health care delivery system and building consensus on ways to assure and improve the quality of health care.

Donald A. Goldmann, MD

Donald A. Goldmann, MD, Senior Vice President, Institute for Healthcare Improvement (IHI), is responsible for fellowship training, faculty relations, the innovation pipeline, and publications/knowledge management. He is also the principal IHI liaison to a number of strategic allies, including the Joint Commission, CMS, AMA, CDC, and AHRQ. Dr. Goldmann's career in clinical infectious diseases and epidemiology (with a focus on hospital-acquired infections) spans more than three decades. He remains on the infectious diseases clinical staff at Children's Hospital Boston, and he is Professor of Pediatrics at Harvard Medical School and Professor of Immunology and Infectious Diseases at the Harvard School of Public Health.

Elizabeth E. Drye, MD, SM

Dr. Drye is Director of Quality Measurement Projects, the Yale New Haven Hospital (YNHH) Center for Outcomes Research and Evaluation (CORE), and an Associate Research Scientist at Yale University School of Medicine. Before becoming a physician she worked for 8 years in senior governmental public health policy positions in Washington, DC, where she helped lead and manage regulatory, legislative, and governmentwide health initiatives. Her prior policy positions include Chief of Staff and Associate Director for Consumer and Public Health Policy at the White House Domestic Policy Council (1996-1997), Legislative Assistant to U.S. Senator Joe Lieberman (1993-1996), and senior policy analyst at the Environmental Protection Agency (1989-1992). At Yale she currently directs CORE's work on quality measures for the Center for Medicare and Medicaid Services. Dr. Drye received her MD from Harvard Medical School and her SM in health policy and management from the Harvard School of Public Health. She completed her residency training in pediatrics at YNHH.

Elizabeth A. McGlynn, PhD

Elizabeth A. McGlynn, PhD is an Associate Director for RAND Health and Director of the Center for Research on Quality in Health Care. She holds the RAND Corporate Chair in Health Care Quality. Dr. McGlynn is an internationally known expert on methods for assessing and reporting on quality of health care delivery at different levels within the health care system. She has led the development of QA Tools, a comprehensive system for assessing the technical quality of medical care for children and adults. The system has been used to evaluate the quality of care delivered by individual physicians, medical groups, managed care plans, and communities. Dr. McGlynn is currently leading a project to examine the methodological and policy issues associated with implementing measures of efficiency and effectiveness of care at the individual physician level. She is participating in a project sponsored by General Electric to design new methods of reimbursement for health care services.

Dr. McGlynn is currently a member of the National Committee for Quality Assurance's Committee on Performance Measurement and she chairs the Technical Advisory Group to this committee. She is a member of the Advisory Committee for the National Board of Medical Examiners' Center for Innovation. She serves on the American Board of Internal Medicine Foundation's Assessment/Quality Improvement Working Group. She is on the Board of Little Company of Mary Hospital in Southern California. Dr. McGlynn serves on the editorial boards for Health Services Research and The Milbank Memorial Fund Quarterly and is a reviewer for many leading journals. Dr. McGlynn received her Ph.D. in public policy analysis in 1988 from the RAND Graduate School.

Eugene A. Kroch, PhD

Eugene A. Kroch, PhD, is Vice President and Chief Scientist at Premier, Inc. Prior to its acquisition by Premier in April, 2007, and since 2000 he has been Vice President and Director of Research at CareScience, an organization founded by the Wharton School faculty to disseminate health purchasing and management tools based on research conducted at the University of Pennsylvania. Dr. Kroch is also a lecturer at the Wharton School at the University of Pennsylvania, where he teaches health economics and econometrics. He is a Senior Fellow at the Leonard Davis Institute of Health Economics at the University of Pennsylvania, where he conducts research in the fields of econometrics, public policy, and health economics. He has served as a policy advisor for the U.S. Department of Health and Human Services, helping both the Office of the Coordinator for Health Information Technology and the Centers for Medicare & Medicaid Services.

Dr. Kroch holds a BS degree in Economics from the Massachusetts Institute of Technology and AM and PhD degrees in Economics from Harvard University, where he was a National Science Foundation Fellow. Upon completion of his PhD, Dr. Kroch was appointed Assistant Professor of Business Economics and Public Policy at the Graduate School of Business of Columbia University. Four years later he accepted a position on the faculty of the University of Pennsylvania jointly in the Department of Economics and at the School of Public and Urban Policy. While at Penn, Dr. Kroch joined the research team assembled at the Leonard Davis Institute to investigate a range of health care issues, including hospital evaluation and the efficiency of health services delivery. He also worked on projects at the Huntsman Center for Global Competition on the effect of the U.S. health care system on the competitiveness of U.S. manufacturing in world markets. In 1990 Dr. Kroch left Penn to take a position as Senior Economist at the Federal Reserve Bank of New York, where he directed research on the U.S. domestic service sector and concentrated his own efforts on measurement methodologies. A year and a half later, Dr. Kroch returned to Penn's Leonard Davis Institute and took a tenured position as Associate Professor of Economics at Villanova University, where he taught for 13 years before returning to Penn in 2004.

Eugene C. Nelson, DSc, MPH

Dr. Eugene Nelson is Director of Quality Administration for the Dartmouth-Hitchcock Medical Center and Professor, Healthcare Improvement Leadership Development within The Dartmouth Institute for Health Policy and Clinical Practice, Dartmouth Medical School. He is a national leader in health care improvement and the development and application of measures of system performance, health outcomes, and customer satisfaction. In the early 1990s, Dr. Nelson and his colleagues at Dartmouth College began developing clinical microsystem thinking. Dr. Nelson's success in developing the "clinical value compass" and "instrument panels" to measure health care system performance have made him one of the premier quality and value measurement experts in the country. He is the recipient of the Joint Commission's Ernest A. Codman award for his work on outcomes measurement in health care. Dr. Nelson has been a pioneer in bringing modern quality improvement thinking into the mainstream of health care. He helped launch the Institute for Healthcare Improvement and served as a founding board member. He has authored more than 100 books, articles, and monographs. Two new books summarize recent work—*Quality by Design: A Clinical Microsystems Approach* (Jossey-Bass, 2007) and *Practice-Based Learning and Improvement: A Clinical Improvement Action Guide* (Joint Commission Resources, 2007).

Dr. Nelson received his AB degree in 1970 from Dartmouth College, his MPH degree in 1973 from Yale School of Public Health, and his DSc degree in 1977 from Harvard School of Public Health.

Evan M. Benjamin, MD

Evan M. Benjamin, MD is Associate Professor of Medicine at Tufts University School of Medicine and Chief Quality Officer for Baystate Health in Springfield, Massachusetts.

Dr. Benjamin attended Case Western Reserve University School of Medicine in Cleveland, Ohio, and received his postgraduate education in Internal Medicine at Yale-New Haven Hospital, Yale University School of Medicine. He received training in clinical epidemiology while working for the U.S. Public Health Service in New Mexico.

Dr. Benjamin directs the Division of Healthcare Quality at Baystate Medical Center where he oversees the operations and research goals of the division. His research interests are in safety and quality improvement with a particular interest in studying quality using large data sets. His division has won a number of national awards for advancing health care quality and patient safety. Dr. Benjamin speaks nationally regarding the impact of our health care delivery system on the quality of health care. He serves on a number of advisory panels, journal editorial boards and national committees and is published in both peer reviewed and non-peer reviewed publications. He is on the board of Catholic Healthcare Partners, a 35 hospital non profit system based in Ohio where he chairs the board quality committee. His recent work appearing in the *New England Journal of Medicine* has helped to frame policy questions for improving our health care system.

Gabriel J. Escobar, MD

Gabriel J. Escobar, MD, is a nationally recognized health services researcher and clinical epidemiologist at Kaiser Permanente's Division of Research in Oakland, where he has been working since 1991. He directs the Perinatal Research Unit and the Systems Research Initiative at the Division of Research in Oakland. He received his MD degree in 1982 from the Yale University School of Medicine, completed his pediatrics residency at the University of California, San Francisco in 1985, and was a Robert Wood Johnson Clinical Scholar at Stanford University from 1986 through 1989. His current research includes severity of illness measurement and risk adjustment in newborns and adults, prediction and quantification of hospital outcomes (particularly catastrophic ones) among newborns and adults, and the development of electronic scanning techniques to support outcomes research, quality improvement, and patient safety. Dr. Escobar also practices hospital-based pediatrics at the Kaiser Permanente Medical Centers in Walnut Creek, Antioch, and Oakland.

Gareth Parry, PhD

Gareth joined NICHQ in 2008. He is currently working as an Improvement Advisor on the Improving the System of Care Collaborative. Previously, he was Director of Quality Measurement & Analysis in the Department of Medicine, Children's Hospital Boston and a Commonwealth Fund Harkness Fellow in Health Care Policy at Harvard School of Public Health. In the UK, he was a Reader in Health Services Research at the University of Sheffield (UK), where he worked on the development, assessment, and application of risk-adjustment

methods in neonatal, pediatric and adult intensive care and was a founding Director of the Pediatric Intensive Care Audit Network (PICANet).

Gerald T. O'Connor, PhD, ScD

Gerald T. O'Connor, PhD, ScD received his undergraduate degree from Columbia University. He did his graduate training in epidemiology at Boston University School of Public Health and completed postdoctoral studies in cardiovascular epidemiology at Harvard Medical School. He is also a graduate of the Kennedy School of Government. He has been a member of the Dartmouth Medical School faculty since 1987 and is currently Professor of Medicine and of Community and Family Medicine and Associate Dean for Health Policy and Clinical Practice. He has authored over 150 scientific papers and book chapters. He has been Research Director of the Northern New England Cardiovascular Disease Study Group and he been very active both regionally and nationally in the improvement of clinical care in cystic fibrosis.

Harlan Krumholz, MD, SM

Dr. Krumholz is the Harold H. Hines, Jr. Professor of Medicine and Epidemiology and Public Health at Yale University School of Medicine, where he is Director of the Robert Wood Johnson Clinical Scholars Program. He is also the Director of the Yale-New Haven Hospital Center for Outcomes Research and Evaluation (CORE). Dr. Krumholz received his MD from Harvard Medical School and an SM in Health Policy and Management at the Harvard School of Public Health. He trained in internal medicine at the University of California, San Francisco and in cardiology at Beth Israel in Boston.

Dr. Krumholz's research is focused on determining optimal clinical strategies and identifying opportunities for improvement in the prevention, treatment and outcome of patients with or at risk for cardiovascular disease. He leads initiatives through the Centers for Medicare & Medicaid Services to develop national mortality measures for public reporting of hospital performance. He also initiated and chairs the steering committee of D2B: An Alliance for Quality, an international campaign launched by the American College of Cardiology to implement key evidence-based strategies to achieve guideline recommended door-to-balloon times. He serves as Principal Investigator on two multicenter projects sponsored by the National Heart, Lung, and Blood Institute: the VIRGO study, an investigation of issues surrounding the care and outcomes of young women with acute myocardial infarction; and a study examining the effect of a telemonitoring strategy on the outcomes of patients with heart failure.

Harold Kilburn, Jr.

Harold Kilburn, Jr. is the Director of the Bureau of Biometrics and Health Statistics at the New York State Department of Health. Mr. Kilburn has served with the Department for the past 20 years, including 18 years in the area of health care provider quality assessment. He was a senior member of the research team responsible for the New York State Cardiac Surgery Reporting System developed in the early 1990s. He is coauthor of numerous publications on health care quality measurement and is currently involved in the development of the NYS State Hospital Performance reporting system. Mr. Kilburn holds a master's degree in Organizational Sociology from the University at Albany.

Helen Burstin, MD, MPH

Helen Burstin, MD, MPH is the Senior Vice President for Performance Measures of The National Quality Forum, a private, not-for-profit membership organization established in 1999 to develop and implement a national strategy for health care quality measurement and reporting. Dr. Burstin joined NQF in January 2007 and is responsible for the NQF consensus development process and projects related to performance measures and practices.

Prior to joining NQF, Dr. Burstin was the Director of the Center for Primary Care, Prevention, and Clinical Partnerships at the Agency for Healthcare Research and Quality (AHRQ). In her role, she oversaw the development of the Health Information Technology (IT) portfolio which invested over \$166 million on research at the intersection of health IT and quality of care. Her center also supported the U.S. Preventive Services Task Force and an extensive body of research on primary care and prevention. Prior to joining AHRQ in 2000, Dr. Burstin was an Assistant Professor at Harvard Medical School and the Director of Quality Measurement at Brigham and Women's Hospital. In her role, she developed a hospitalwide electronic Quality Measurement Reporting System. She also served as the Chair of the Medical Staff Executive Committee on Quality Assurance and Risk Management.

Howard H. Hiatt, MD

Dr. Howard Hiatt is Professor of Medicine at Harvard Medical School and Senior Physician at the Brigham and Women's Hospital. From 1963-1972, he was Physician-in-Chief at Beth Israel Hospital, Boston and from 1972-1984, Dean of the Harvard School of Public Health. He directed a team of colleagues from the Harvard Faculties of Medicine, Public Health, Law, and Arts and Sciences in a multiyear study of medical injury, medical malpractice, and the tort litigation system. This work was described in a series of articles and a book, *A Measure of Malpractice*, published by Harvard University Press in 1993 and has been the basis for proposals for system reform in several States and the Nation. He began and helped develop the fellowship program in Research Training in Clinical Effectiveness at Brigham and Women's Hospital and the Harvard School of Public Health, which trains physicians to carry out clinical research, including issues of quality and costs of medical care. His present research concerns social aspects of health. He is currently greatly involved in broadening the Brigham and Women's Hospital's programs that address health disparities in the Nation and around the world. He works closely with Drs. Paul Farmer and Jim Kim in Partners in Health and with Dr. Donald Berwick in the Institute for Health Care Improvement. He is now Cochair of the Brigham's Division of Global Health Equity, which is headed by Dr. Jim Kim.

Dr. Hiatt's research articles have appeared in such publications as the *Journal of Molecular Biology*, *Journal of Biological Chemistry*, the *New England Journal of Medicine*, and the *Journal of the American Medical Association*. He has written for the lay press in areas of disease prevention, health services, and the health implications of the nuclear arms race. His book, *Medical Lifeboat: Will There Be Room for You in the Health Care System?* Harper & Row, 1989, describes ways to deal with some major problems of our health care system.

He is a member of the Association of American Physicians, the Institute of Medicine of the National Academy of Sciences, the American Academy of Arts and Sciences, the American Society for Clinical Investigation, the American Society for Biochemistry and Molecular Biology,

the American Public Health Association, as well as several other organizations. He is or has been on the boards of Physicians for Human Rights, the Institute for Health Care Improvement, Partners in Health, and the Gateway for Pre-College Education Program.

Jack Jordan

Jack Jordan is an Administrator, Quality Initiatives at Henry Ford Health System, Detroit, Michigan. For the past 10 years, he has had a key role in the System's organizationwide quality improvement strategy. His responsibilities include education and training, and internal consultation on improvement and measurement with senior leaders, managers, and frontline teams. He has served as the project manager for improvement projects on mortality reduction, surgical site infection reduction, tight glycemic control, ICU improvement, implementing rapid response teams as well as the 5 Million Lives Campaign. He also developed the system wide quarterly report on quality for the board and senior leadership.

Prior to working at Henry Ford Health System Mr. Jordan worked at General Motors Powertrain product engineering. His role at GM involved developing a quality program in the technology development stage of engineering and supporting the organizational efforts to apply the ideas of W. Edwards Deming.

Mr. Jordan holds a master's degree in Mathematics from Michigan State University and a master's degree in Applied Statistics from Oakland University and a bachelor's degree in Mathematics from the University of Iowa.

Janet Corrigan, PhD, MBA

Dr. Corrigan is President and CEO of The National Quality Forum, a private, not-for-profit membership organization established in 1999 to develop and implement a national strategy for health care quality measurement and reporting. The NQF mission includes: setting national priorities and goals for performance improvement; endorsing national consensus standards for measuring and publicly reporting on performance; and promoting the attainment of national goals through education and outreach activities. Dr. Corrigan was instrumental in organizing the merger between NQF and the National Committee for Quality Health Care (NCQHC), where she served as President and CEO from June 2005 to March 2006.

From 1998 to 2005, Dr. Corrigan was Senior Board Director at the Institute of Medicine (IOM), where she was responsible for the IOM Health Care Services portfolio of initiatives on quality and safety, health services organization and financing, and health insurance issues. She provided leadership for IOM's Quality Chasm Series which produced 10 reports during her tenure, including: *To Err is Human: Building a Safer Health System* and *Crossing the Quality Chasm: A New Health System for the 21st Century*. Prior to joining IOM, Dr. Corrigan was Executive Director of the President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry. She serves on numerous boards and committees, including: Quality Alliance Steering Committee; the Hospital Quality Alliance; the National Center for Healthcare Leadership, the Council for Accountable Physician Practices Advisory Council, and the Robert Wood Johnson Foundation Regional Market Project Advisory Council.

Jerod M. Loeb, PhD

Jerod M. Loeb, PhD is Executive Vice President for Quality Measurement and Research at The Joint Commission in Oakbrook Terrace, Illinois. As a member of the senior management team, he has administrative responsibility for the Joint Commission Departments of Quality Measurement and Health Services Research, including the Centers for Performance Measurement; Measurement System Operations; Data Management and Analysis; and Quality, Patient Safety and Innovation Research. During his almost 15 years at the Joint Commission, Dr. Loeb has played a leadership role in identifying, evaluating, and implementing performance measures across the wide variety of Joint Commission accreditation and certification programs. He is involved in a variety of national and international initiatives associated with performance measurement and patient safety, including those of the National Quality Forum, the Centers for Medicare & Medicaid Services, the International Society for Quality in Health Care and the World Health Organization.

Before assuming his current position, he served as Vice President for Research and Performance Measurement and as Director of the Department of Research and Evaluation at the Joint Commission. Prior to coming to the Joint Commission in 1994, he was Assistant Vice President for Science, Technology and Public Health at the American Medical Association (AMA) in Chicago where he also served as Secretary of the AMA's Council on Scientific Affairs. After completing his graduate education at the State University of New York-Downstate Medical Center, he held fellowship positions at Harvard Medical School-Peter Bent Brigham Hospital and Loyola University Stritch School of Medicine. Dr. Loeb has been on the faculty at Northwestern University Medical School since 1979 in both full-and part-time capacities, received tenure in 1987, and is currently Adjunct Professor of Physiology. He is also an Adjunct Associate of the Center for Health Policy and Center for Primary Care and Outcomes Research at Stanford University School of Medicine.

Jim Conway

Jim Conway is Senior Vice President at the Institute for Healthcare Improvement (IHI) after having served as senior fellow from 2005-2006. From 1995-2005, he was Executive Vice President and Chief Operating Officer of DFCI. Prior to joining Dana-Farber, he had a 27-year career at Children's Hospital, Boston in Radiology Administration, Finance, and as Assistant Hospital Director for Patient Care Services. His areas of expertise and interest include governance and executive leadership, patient safety, change management, and patient-/ family-centered care.

He holds a Master of Science degree from Lesley College, Cambridge, Massachusetts, and has received their Community Service Award. An Adjunct Faculty member at the Harvard School of Public Health, Jim is the 2001 winner of the first Individual Leadership Award in Patient Safety by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and the National Committee for Quality Assurance (NCQA). A Diplomat of the American College of Healthcare Executives, he received their 1999 Massachusetts Regents Award as Healthcare Executive of the Year. He is a member of the IOM Committee on Identifying and Preventing Medication Errors, is an Officer for the Massachusetts Coalition for the Prevention of Medical Errors, a member of the Clinical Issues Advisory Council of the Massachusetts Hospital Association, a Distinguished Advisor to the National Patient Safety Foundation, and a past

member of the Joint Commission Sentinel Event Alert Advisory Group. Board commitments include: board chair, The Partnership for Healthcare Excellence; board member, Medically Induced Trauma Support Services (MITSS); board member, Health Research and Education Trust (HRET); board member NICHQ and Board of Advisors, American Cancer Society, New England Region. In government service, he is a member of the Commonwealth of Massachusetts Quality and Cost Council.

John (Jack) S. Hughes, MD

Dr. Hughes is Professor of Medicine at Yale School of Medicine, where he has received several awards from medical students and medical residents for excellence in teaching. He was involved in the development of the original Diagnosis-Related Groups (DRGs) that were introduced by U.S. Medicare for hospital reimbursement in 1983. He has consulted with 3M Health Information Systems for several years and more recently participated in the development of Clinical Risk Groups (CRGs), a patient classification method for capitation-based payment systems, and Potentially Preventable Complications (PPCs), a method to screen for in-hospital complications. His academic interests include the evaluation and comparisons of risk-adjustment mechanisms, health care finance, and cost containment strategies.

John Santa, MD, MPH

John Santa is the Director of the Consumer Reports Health Ratings Center. He has been interested in explicit approaches evaluating health services, products, and practitioners throughout his career and been involved in many successful efforts to do so.

Dr. Santa was the administrator of the Office of Oregon Health Policy and Research from 2000 to 2003 during the administration of Governor John Kitzhaber, MD. During that time Oregon implemented an evidence-based approach to prescription drug purchasing that eventually came to be known as the Drug Effectiveness Review Project. Dr. Santa provided administrative and medical direction to the Project. During this same period Dr. Santa served on the board of the Public Employees Benefit Board, Oregon's largest private health benefits purchaser serving as the chair of the Benefit Design Committee and chair of the Board. He previously worked in leadership positions for hospitals, physician groups and health insurers.

Dr. Santa has taught in multiple environments, including medical school, residency training, and graduate courses in Public Health. Dr. Santa received his bachelor's degree from Stanford University in 1972, his MD from Tufts University in 1976 and MPH from Portland State University in 2005. He has practiced primary care internal medicine in solo, group and institutional settings, most recently at the Portland VA.

Jonathan Teague

Jonathan Teague is Manager of the Healthcare Information Resource Center within the California Office of Statewide Healthcare Planning and Development, in the State's Health and Human Services Agency. He has a bachelor's degree in Liberal Arts from St. John's College in Santa Fe, New Mexico, and a master's degree in Community and Regional Planning from the University of New Mexico. Prior to working at OSHPD, he was an energy regulatory policy analyst for the California Department of General Services. As a section manager at OSHPD, located in Sacramento, California, he oversees the dissemination, in print and electronic form, of

data from health care facilities licensed by the State of California, the development of OSHPD data products and the handling of researchers' requests for confidential data.

Kate Nordahl

Kate Nordahl currently serves as Assistant Commissioner for the Massachusetts Division of Health Care Finance and Policy. In this role, Kate is responsible for overseeing the development, implementation and dissemination of the Division's policy research agenda, including evaluating the impact of the State's health reform law and monitoring health care cost trends.

Prior to her role at the Division, Kate was Director of Policy and Research at the Blue Cross Blue Shield of Massachusetts (BCBSMA) Foundation. In this role, Kate worked closely with the Foundation's president and the board of directors to develop a policy, research and evaluation agenda to advance the mission of the Foundation.

Prior to her work with the BCBSMA Foundation, Kate worked for the Massachusetts Medicaid Program as Director of the Managed Care Organization Program. In this role she managed a \$1.3 billion budget in her oversight of Medicaid contracts with four Managed Care Organizations that served approximately 340,000 MassHealth members. Also, while with the Massachusetts Medicaid program, Kate served as Director of Program Development and played a critical role in the development and Federal and State approvals of the Senior Care Options Program, which serves to integrate Medicare and Medicaid funding and services for persons over 65.

Larry Gage

Larry Gage is a partner in Ropes & Gray's Health Care Group and has carved out a unique role in both public sector and nonprofit health law and policy. An industry expert, Larry has been interviewed by a wide range of media and has been asked to testify over a dozen times before Congressional committees. Larry is a prolific writer and lectures on topics, including hospital governance and legal structure, health care for the uninsured, Medicaid policy, medical school affiliation agreements, managed care and international health. He has conducted numerous corporate and strategic planning studies, as well as operational assessments and restructuring analyses.

In 1981, Larry founded the National Association of Public Hospitals and Health Systems (NAPH) and he has served as President of that organization for over 25 years. During that period, he developed and achieved enactment of Medicare and Medicaid reimbursement reforms that are the economic lifeblood of hospitals serving a disproportionate number of elderly and low income patients. Larry also served as Deputy Assistant Secretary for Health Legislation in the Federal Department of Health and Human Services and as staff counsel to the U.S. Senate Labor and Human Resources Committee.

Lindsay Martin, MSPH

Lindsay Martin, MSPH, Senior Research Associate, Institute for Healthcare Improvement (IHI), has been with IHI since August 2004, focusing on innovation and systemwide measurement. Presently she serves as the Improvement Advisor for The Scottish Patient Safety Programme, which seeks to improve the quality and safety of care for all Scottish citizens. In addition, she is

a Content Lead for IHI's 90-day Research and Development team, working to find new solutions to difficult problems and bring them into prototype testing.

Lloyd P. Provost, MS

Lloyd P. Provost, MS, Statistician, Associates in Process Improvement, helps organizations improve and foster continuous learning. He coauthored the books *Quality Improvement Through Planned Experimentation* and *The Improvement Guide*. For the past 10 years, Mr. Provost has worked as a Senior Fellow for the Institute for Healthcare Improvement (IHI). He serves on the faculty for the IHI the Improvement Advisor Development Program, supports the leadership curriculum for IMPACT, and is involved in IHI developing countries programs.

Mark R. Chassin, MD, MPP, MPH

Mark R. Chassin, MD, MPP, MPH, President of The Joint Commission, oversees the activities of the nation's predominant standards-setting and accrediting body in health care. Previously, Dr. Chassin was the Edmond A. Guggenheim Professor of Health Policy and founding Chairman of the Department of Health Policy at the Mount Sinai School of Medicine, New York, and Executive Vice President for Excellence in Patient Care at The Mount Sinai Medical Center. Before coming to Mount Sinai, Dr. Chassin served as Commissioner of the New York State Department of Health. He is a board-certified internist and practiced emergency medicine for 12 years. His background also includes service in the Federal Government and many years of health services and health policy research.

While at Mount Sinai Medical Center, Dr. Chassin built a nationally recognized quality improvement program. The focus of the program was on achieving substantial gains in all aspects of quality of care, encompassing safety, clinical outcomes, the experiences of patients and families, and the working environment of caregivers. Dr. Chassin's research during his 12 years at Mount Sinai focused on developing health care quality measures; using those measures in quality improvement; understanding the relationship of quality measurement and improvement to health policy. Dr. Chassin is a member of the Institute of Medicine of the National Academy of Sciences and was selected in the first group of honorees as a lifetime member of the National Associates of the National Academies, a new program which recognizes career contributions. In addition, he was a member of the IOM committee that authored *To Err is Human* and *Crossing the Quality Chasm*. He is a recipient of the Founders' Award of the American College of Medical Quality and the Ellwood Individual Award of the Foundation for Accountability.

Mark A. Keroack, MD, MPH

Mark Keroack, Vice President and Director, Clinical Practice Advancement Center, oversees UHC's Clinical Practice Advancement Center, whose services include data-driven offerings in clinical quality improvement, faculty group practice management and patient safety. The center provides customized assistance to UHC members seeking to improve quality, safety and practice management and publishes regular offerings in the areas of technology assessment and new drug evaluations. It also provides meetings and other networking opportunities for chief medical officers, directors of quality and safety and faculty practice professionals. The center has produced over 50 articles in peer review journals in the last 10 years.

Mark is a graduate of Amherst College and Harvard Medical School and received his MPH from Boston University. He trained in Internal Medicine and Infectious Diseases at Brigham and Women's Hospital in Boston. Before coming to UHC, he was on the faculty of the University of Massachusetts for 12 years, during which time he won 5 teaching awards from medical students and residents. Beginning in 1995, Mark took on a more administrative role, serving as UMass Memorial's Vice President for Medical Management and later as Executive Director of the 700-physician UMass Memorial Medical Group. He joined UHC in 2000.

Marta Render, MD

Marta Render is an intensivist who moved to Cincinnati after completing her internal medicine training at Hennepin County Medical Center in Minneapolis in 1983 and her pulmonary critical care training at Boston University in 1986. She has played significant administrative roles at the Cincinnati VAMC-directing the Cincinnati VAMC Medical and Cardiac intensive care unit for over 10 years and acting as Assistant Chief of Medicine. Dr. Render led one of four VA Centers of Inquiry in Patient Safety, the VA GAPS Center, which used human factors theory and methods to understand risk of injury to patients-examining the implementation of bar coded medication administration and use of reminders among other projects. Dr. Render directed a 10 hospital project in the private sector in Cincinnati that implemented evidenced based practices and reduced both central line infections and surgical site infections by more than 50 percent in 2003-2005. This project won the Joint Commission of Accreditation of Healthcare Organizations Ernst J. Codman award. With experts from the Ann Arbor Health Services Research and Development Center, she developed and validated a method to account for difference in ICU patient characteristics. The performance of this risk model is similar to the gold standard-the APACHE (Acute Physiologic and Chronic Health Evaluation System) but it uses only elements available in the VA computer database. This method is the backbone for measurement reported by the VA Inpatient Evaluation Center.

Dr. Render presently directs the VA Inpatient Evaluation Center (IPEC) whose mission is to measure and report important evidenced based processes and risk adjusted mortality and length of stay for patients in all 191 ICU and hospitalized for acute care in 152 hospitals in order to drive innovation and improvement. The reports issued quarterly depict in narrative, graphic and tabular formats performance benchmarked by type of facility.

Matt Stiefel, MPA

Matt Stiefel, MPA, is a Senior Director in Kaiser Permanente's Department of Care and Service Quality. He has been with Kaiser Permanente (KP) for the past 26 years, joining in 1981 as a Medical Economist in KP's Program Offices. He joined the Care Management Institute as the Director of Measurement in 1998 and became the Associate Director in 2000. Previously he held various management positions in KP Northwest, directing planning, marketing, and medical economics. Prior to joining KP, Matt served as a policy analyst on the Carter Administration Domestic Policy Staff and in the U.S. Department of Health, Education and Welfare, and as a local health planner in the Bay Area. His academic background includes coursework in the Systems Science PhD Program at Portland State University, a master's degree in Public Administration from Wharton, and a bachelor's degree from Stanford.

Maureen Bisognano

Maureen Bisognano, is the Executive Vice President and Chief Operating Officer of the Institute for Healthcare Improvement (IHI); responsible for day-to-day management of the Institute's many programs designed to improve the delivery of health care. Ms. Bisognano oversees all operations, program development, and strategic planning for the Institute-in doing so, she advises health care leaders around the world. She is an unrelenting advocate for the needs of patients and a passionate crusader for change. Prior to joining IHI, Ms. Bisognano was Senior Vice President of the Juran Institute, where she consulted with senior management on the implementation of total quality management in health care settings. Before that, she served as Chief Executive Officer of the Massachusetts Respiratory Hospital in Braintree, Massachusetts where, as part of the National Demonstration Project, she introduced Total Quality Management. She organized and monitored Quality Improvement teams within the hospital to make process improvements.

Nancy Foster

Nancy Foster is the Vice President for Quality and Patient Safety Policy at the American Hospital Association. In this role, she is the AHA's point person for the Hospital Quality Alliance, which is a public-private effort to provide information to consumers on the quality of care in American hospitals. Nancy is the AHA's representative to the National Quality Forum, serves as a member of the National Heart Attack Coordinating Council and the Healthcare Infection Control and Prevention Advisory Committee of HHS. She provides advice to hospitals and public policy makers on opportunities to improve patient safety and quality.

Prior to joining the AHA, Nancy was the Coordinator for Quality Activities at the Agency for Healthcare Research and Quality (AHRQ). In this role, she was the principal staff person for the Quality Interagency Coordination Task Force, which brought Federal agencies with health care responsibilities together to jointly engage in projects to improve quality and safety. She also led the development of patient safety research agenda for AHRQ and managed a portfolio of quality and safety research grants in excess of \$10 million.

Patricia W. Stone, PhD, RN

Dr. Stone earned her doctorate at the University of Rochester, School of Nursing in 1997. She then completed 2-years of postdoctoral training at Harvard University, where she studied quantitative methods. Currently, Dr. Stone is a tenured Associate Professor of Nursing at Columbia University.

Dr. Stone is internationally known as a leading interdisciplinary health services researcher who examines the impact of organizational factors on clinical patient outcomes such as health care-associated infections, employee outcomes such as occupational injury, and system outcomes such as costs and efficiency. She has conducted many multisite studies examining these relationships and published over 75 peer reviewed articles. She is currently the principal or co-investigator on several federally funded and foundation-supported grants in these areas, including a large National Institute of Health funded study entitled, "Prevention of Nosocomial Infections a Cost-effectiveness Analysis."

Paul F. Conlon, PharmD, JD

Paul Conlon is currently Senior Vice President for Clinical Quality and Patient Safety at Trinity Health and a member of the Trinity Health Senior Leadership Council. Paul is also a Clinical Assistant Professor of Pharmacy at the University of Michigan. Paul is responsible for improving, measuring, monitoring, and reporting on clinical quality and patient safety for Trinity Health. Trinity Health is an integrated health services provider that owns and/or operates over 40 acute care hospitals, associated ambulatory care facilities, services for aging, home health care, hospice care and managed care programs from Silver Spring, Maryland, to Fresno, California. He interacts with many parties interested in clinical quality, including: employers groups, providers, trade associations, and insurers. He is currently, the chairperson of the Michigan Patient Safety Organization, a member of the MHA-BCBSM Serious Adverse Event committee and Pay for Performance Committee, and a member of the Michigan Health and Hospital Association's Patient Safety Committee.

Prior to joining the corporate office Paul has held a variety of positions within Mercy Health Services which merged with the Holy Cross Health Care System in 2000 to become Trinity Health. He has been a clinical pharmacist in critical care and infectious disease, led an inpatient pharmacy department, has been the Director of Pharmacy for a large HMO, and was the Director for Clinical Quality Support for a large teaching hospital. Paul also has been a clinical pharmacist for the University of Michigan renal transplant team and continues as a College of Pharmacy faculty member. Paul serves on numerous community, State, and national clinical quality improvement groups and has been a health care consultant to the General Motors Corporation. Dr. Conlon has authored articles on a wide range of topics from clinical pharmacokinetics to health care administration.

Richard Bankowitz, MD, MBA, FACP

Dr. Bankowitz currently serves as vice president and medical director for Premier Healthcare Informatics. A board-certified internist and a medical informaticist, Dr. Bankowitz has devoted his career to improving health care quality at the national level by promoting rigorous, data-driven approaches to quality improvement and by engaging senior clinicians and health care leaders. He began his career at the University of Pittsburgh, School of Medicine as an assistant professor of medicine and medical informatics.

Prior to joining Premier, Dr. Bankowitz was medical director at CareScience, where he was responsible for strategy, product delivery, consulting, sales, and advocacy efforts. He also has previously served as the corporate information architect of the University HealthSystem Consortium (UHC), where he was responsible for the strategic direction of the organization's executive reporting tools and comparative data. In his 12-year tenure with UHC, Dr. Bankowitz also held positions as senior director of clinical informatics, director of clinical information management and director of clinical evaluative sciences.

Dr. Bankowitz is a fellow of the American College of Physicians and was a National Library of Medicine graduate trainee in medical informatics. He also is senior scholar with the Center for Healthcare Policy at Thomas Jefferson University. Dr. Bankowitz is a graduate of the University of Chicago Pritzker School of Medicine and the University of Chicago Graduate School of Business.

Rocco J. Perla, EdD, MA

Rocco J. Perla, EdD, MA, comes to IHI from HealthAlliance Hospital, a University of Massachusetts Medical Center affiliate hospital. For the past decade, Rocco directed the clinical and research activities of the microbiology department at HealthAlliance and also served as a hospital epidemiologist, statistician, and clinical lecturer. He has done basic research and published in the areas of infectious disease epidemiology, drug discovery, mathematical modeling, and education. He has undergraduate and graduate degrees in health science and earned his doctoral degree in education from the University of Massachusetts Lowell, where his work focused on measurement, cognition, and model development. Rocco has collaborated on training and research initiatives with numerous organizations, including the National Laboratory Training Network, the Centers for Disease Control and Prevention, the Massachusetts Department of Public Health, and university and industry partners around the world. He is currently on the faculty of the Massachusetts College of Pharmacy and Health Sciences and sits on the Eastern Educational Research Association Board of Directors. Upon return to his home institution, he will be involved in expanding the quality improvement, measurement, and assessment programs.

Ruby Hearn, PhD

Ruby Hearn, PhD, Senior Vice President Emerita, joined The Robert Wood Johnson Foundation as Program Officer in 1976, and served as Senior Vice President from 1996 to 2001. As a member of the executive management team, Dr. Hearn participated in strategic program planning with the president and executive vice president and served as a special advisor to the president and as the Foundation's liaison within the nonprofit community. Dr. Hearn had the major responsibility for oversight and program development of initiatives in maternal, infant and child health, AIDS, substance abuse, and minority medical education. Dr. Hearn received her MS and PhD degrees in biophysics from Yale University and is a graduate of Skidmore College. She was a Fellow, Yale Corporation (1992-1998) and served on the Executive Committee of the Board of Directors for the 1995 Special Olympics World Summer Games in Connecticut, the Science Board for the Food and Drug Administration, and the Advisory Committee to the Director, National Institutes of Health, the Governing Council of the Institute of Medicine (1995-1997), the National Academy of Sciences Committee on Science, Engineering and Public Policy, the National Advisory Child Health and Human Development Council, the National Institutes of Health, Institute of Medicine and its Board on Health Care Services, the President's Drug-Free Communities Act Advisory Commission, the Goucher College Board of Trustees and various Council on Foundations committees. Dr. Hearn is currently a Director and Vice-Chair of the Institute for HealthCare Improvement, a Trustee of the New York Academy of Medicine and an Independent Director of the Legg Mason Funds. She is a member of the Institute of Medicine and a Director of the Institute for Community Change in Seattle, Washington.

Sharon-Lise Normand, PhD

Sharon-Lise Normand is Professor of Health Care Policy (Biostatistics) in the Department of Health Care Policy, Harvard Medical School, and Professor in the Department of Biostatistics, Harvard School of Public Health. Her research focuses on the development of statistical methods for health services and outcomes research, primarily using Bayesian approaches, including causal inference, provider profiling, item response theory analyses, latent variables analyses,

multiple informants analyses, and evaluation of medical devices in randomized and nonrandomized settings.

Stephen Horner

Stephen Horner is responsible for establishing public reporting and pay-for-performance strategy, patient and physician satisfaction surveys, outcomes measurement, clinical analytics and reporting for HCA, Inc. He oversees the development of the Comprehensive Health Outcomes Information System (CHOIS) and the Clinical Outcome Measure Evaluation and Transmission (COMET) system, HCA's Joint Commission listed performance measurement system, and the development of HCA's Clinical Data Repository and Clinical Data Warehouse. Mr. Horner serves as HCA's representative to the National Quality Forum where he has served on several steering committees, on the Quality Committee and Board of Governors of the Federation of American Hospitals, and was instrumental in the formation of the Joint Commission/CMS Hospital Vendor Workgroup. Stephen received a BSN degree from the University of Toledo/Medical College of Ohio where he has served as a guest lecturer and his MBA from Vanderbilt University Owen Graduate School of Management. In addition to his role at HCA, Mr. Horner is also on the Faculty of Tennessee State University in the College of Health Sciences, and has served as a Senior Program Consultant to the Robert Wood Johnson Foundation. He has over 30 years of experience in the health care industry. Prior to coming to HCA he was responsible for operations improvement consulting services for a national health care-consulting firm. He has also served as the Manager of Utilization/Cost Services for Humana, and as Director of Quality Management at an 800-bed teaching hospital.

Stephen F. Jencks, MD, MPH

Stephen F. Jencks, MD, MPH, is a consultant in health care quality and safety and a Senior Fellow of the Institute for Healthcare Improvement; he studied and managed quality issues at the Centers for Medicare & Medicaid Services until August 2007. Dr. Jencks is developing initiatives to make care more patient-centered and to improve transitions from hospital to posthospital care.

Steve Meurer, MBA/MHS, PhD

Steve Meurer is University HealthSystem's Vice President for Clinical Data and Informatics, a position he has held since April of 2007. Dr. Meurer's background includes 15 years of health care administration experience, most recently as the Chief Quality Officer at the DeKalb Regional Healthcare System in Atlanta where he had system responsibility for Quality and Information Technology. Dr. Meurer has spent time in increasing roles of responsibility at a number of organizations, including the Orlando Regional Healthcare System, University Pittsburgh Healthcare System, BJC Healthcare, and St. Mary Medical Center, outside of Philadelphia. Dr. Meurer's passion is in understanding and promoting improvement, and the role of data in those efforts. He has published a number of articles and speaks regularly on this topic. In addition, Dr Meurer teaches Quality in Healthcare at Georgia Tech, and is complementary faculty at RUSH University.

After his first 10 years in health care administration, Dr. Meurer decided to fuel his passion for using data to motivate improvement by going back to school at St Louis University. He received a PhD in Health Services Research and his dissertation was entitled "Quality Improvement

Implementation in Hospitals.” Dr. Meurer also holds two master’s (an MBA and an MHS) from the University of Florida and a BA in Psychology from the College of the Holy Cross.

Thomas W. Nolan, PhD

Thomas W. Nolan is a statistician, author, and consultant. He is cofounder of Associates in Process Improvement, a group that specializes in the improvement of quality and productivity. Over the past 20 years, he has assisted organizations in many different industries in the United States, Canada, and Europe.

His health care experience includes helping integrated systems, hospitals, and medical practices to accelerate the improvement of quality and the reduction of costs in clinical and administrative services. He is a Senior Fellow and member of the executive team of the Institute for Healthcare Improvement. His primary responsibility at IHI is the oversight of the Research and Development initiatives.

Mr. Nolan holds a doctorate in statistics from George Washington University and is the author of three books on improving quality and productivity. He has published articles on quality and safety in a variety of peer-reviewed journals, including the *Journal of the American Medical Association* and the *British Medical Journal*. He was the year 2000 recipient of the Deming Medal awarded by the American Society for Quality.