Center for Health Policy at BROOKINGS

Risk Evaluation and Mitigation Strategies (REMS): Building a Framework for Effective Patient Counseling on Medication Risks and Benefits

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Biographies

Gary J. Appio is the Head of US Safety Risk Management at Novartis Pharmaceuticals Corporation. He is responsible for strategic and tactical support of Novartis' risk management activities related to FDA required Risk Evaluation and Mitigation Strategies (REMS) and Global Risk Management Plan commitments. He provides expert opinion on risk management support for products in early development to assist in shaping risk management and risk communication strategies for patients and healthcare professionals. Before this role, Dr. Appio created the Medical Information and Communication contact center at Novartis, which provides medical information support to healthcare professionals on Novartis products across all therapeutic areas. Prior to Novartis, he worked 11 years at St. Francis Medical Center in Trenton, NJ in several clinical staff and leadership positions including Hospital Pharmacy Director. Dr. Appio earned his BS in Pharmacy from Rutgers University, PharmD from the University of Florida, and holds an MBA from the University of Massachusetts, Amherst.

Geri Lynn Baumblatt is the Executive Director of Patient Engagement at Emmi Solutions. For the past 12 years she worked with a team of writers, medical animators, decision scientists, behavior change experts, patients, and clinicians to create a large library of multimedia and interactive voice response patient engagement, shared decision making, and behavior change programs and calls that connect with patients, reduce anxiety, augment informed consent, and help patients and families understand complex risk information, tradeoffs, and engage in their care. She regularly participates in shared decision making, health literacy, patient experience, and population health conferences and panels for organizations like the Beryl Institute, Stanford Medicine X, the Institute for Healthcare Advancement, the Society for Medical Decision Making, the Health Sector Advisory Council and the Collaborative on Healthcare for Aging Populations and Advanced Illness at Duke, the Population Health Colloquium, and the Center for Plain Language. Geri is on the board of the *Journal of Patient Experience*, a contributor to the Association for Patient Experience and an active member of the Society for Participatory Medicine. She also serves on expert panels, such as for AHRQ's Patient Education Materials Assessment Tool (PEMAT).

Sue Blalock is a professor in the Division of Pharmaceutical Outcomes and Policy in the Eshelman School of Pharmacy at the University of North Carolina at Chapel Hill. She is a behavioral scientist with expertise in the area of patient and public health education. Dr. Blalock's current research is designed to increase understanding of how health care providers communicate information about medication risks and benefits to patients, how patients process the information provided, and how this information influences patient judgments and decisions regarding medication use. Her research focuses primarily on the prevention and treatment of rheumatoid arthritis, osteoarthritis, and osteoporosis. Other areas of expertise include: health

outcomes assessment, psychosocial aspects of chronic illness, and adherence to therapeutic regimens.

Nananda Col is a general internist and decision scientist whose primary interest is developing new approaches to help patients and health care providers make decisions that reflect their personal circumstances, characteristics, goals, and preferences. Her work developing evidence-based, patient-centered shared decision making applications bridges the divide between decision sciences, risk communication, evidence-based medicine, and medical informatics. With over 20 years experience as a primary care internist and funded health services researcher, her scholarly work addresses a broad range of issues relevant to clinical decision making, shared decision making, and consumer health informatics. She serves on the Steering Committee for the *International Patient Decision Aid Standards* collaboration and the Cochrane Collaboration's *Review of Patient Decision Aids.* She served on the FDA's *Risk Communication Advisory Committee,* several consensus panels, and numerous study sections, including the NIH (*Healthcare Delivery and Methodologies)* and Patient Centered Outcomes Research Institute.

Gregory Daniel is a fellow in Economic Studies and Managing Director for Evidence Development and Innovation in the Engelberg Center for Health Care Reform at the Brookings Institution. In this position, Dr. Daniel leads the Engelberg Center's pharmaceutical and medical device policy portfolio that includes developing strategies for better post-market safety surveillance and comparative effectiveness research, improving regulatory science, fostering practical steps for implementing expedited drug development and review tools, improving biomedical innovation, and supporting payment reform. Dr. Daniel is also a senior advisor to the Reagan-Udall Foundation for the FDA. Prior to joining Brookings, Dr. Daniel was the Vice President of Government and Academic Research at HealthCore, Inc., a research subsidiary of WellPoint, Inc. At HealthCore, he led a division responsible for providing research services in the areas of pharmacoepidemiology, drug, vaccine, and biologic safety evaluations, comparative effectiveness research, and health economics and outcomes research. His research has utilized electronic health insurance claims data integrated with clinical data including laboratory results, electronic hospital data, paper-based and electronic medical record data, and registries. Dr. Daniel is a registered pharmacist and holds a PhD in Pharmaceutical Economics, Policy, and Outcomes with a minor in Epidemiology from the University of Arizona, an MPH specializing in biostatistics, an MS in Pharmaceutical Administration, and a BS in Pharmacy, all from The Ohio State University.

Terry C. Davis is a Professor of Medicine, Pediatrics and the Feist Weiller Cancer Center at Louisiana State University Health Sciences Center in Shreveport (LSUHSC-S). For the past 30 years, she has led an interdisciplinary team investigating the impact of patient literacy on health and healthcare. Seminal achievements include development of the Rapid Estimate of Adult Literacy in Medicine (REALM) and developing and testing numerous literacy and culturally appropriate patient and provider materials that are used nationally.

Dr. Davis has more than one hundred and forty publications related to health communication. She has served on Health Literacy Advisory Boards for both the American Medical Association, the American College of Physicians as well as the FDAs Center for Drug Evaluation and Research, Drug Safety and Risk Management Panel. Currently she is a member of the IOM Health Literacy Roundtable and Healthy People 2020 Health Literacy/Health Communication Section and continues to serve as a health literacy advisor for the FDA.

Dr. Davis has a productive record of federally funded research exploring low literacy interventions to improve comprehension and health outcomes of vulnerable populations. Research includes interventions to improve cancer screening in rural Federally Qualified Health Centers and strategies to improve self- management of diabetes in safety net settings. Currently she is the Health Literacy Principal Investigator for the Louisiana Clinical and Translational Science Center, a collaborative among eight academic institutions in LA. Pertinent to this meeting she conducted research in pediatric vaccine risk communication which included a national survey of health providers and development and testing of an evidenced based Childhood Vaccine Risk/Benefit Communication Package which was selected by the World Health Organization as an Innovative Practice to increase uptake of immunization in Europe. Currently she is collaborating with researchers at Northwestern and Emory investigating English and Spanish speaking patients' understanding and use of prescription drug labels and handouts.

Amy Ebel is a Director within the Global Regulatory Affairs Labeling organization of GlaxoSmithKline. She has led the development and revision of prescriber and patient labeling for US and global markets across multiple therapeutic areas including cardiovascular, diabetes, oncology, and vaccines for over 10 years. She held previous positions within Medical Information at GSK and has published papers on both regulatory and medical information topics, including most recently, a review of compliance with the Physicians Labeling Rule (new prescribing information format and content regulations). Prior to joining GSK, she worked in retail, ambulatory care, and inpatient pharmacy settings, and currently utilizes these varied pharmacy experiences to advance improvements in clear and simple labeling communications for healthcare prescribers and patients. Amy obtained her B.S. in Pharmacy at Oregon State University, her Pharm.D. at University of Utah, and completed a specialized residency in Drug Information at Oregon Health Sciences University. She has been a member of the Patient Medication Information initiative for over 2 years.

Paul Han is a health services researcher and board-certified general internist and palliative medicine physician, and Director of the Center for Outcomes Research and Evaluation at Maine Medical Center. He received an M.D at the New York University School of Medicine, an M.A. in Bioethics and an M.P.H at the University of Pittsburgh, and completed Internal Medicine residency training at UCLA and a fellowship in cancer prevention and control at the National Cancer Institute (NCI). Dr. Han's general research interests are in risk communication and shared medical decision making, and his specific interest is in the communication and management of uncertainty in health care. His current projects include the development of decision support tools and medical education programs to help clinicians, patients, and laypersons effectively communicate, understand, and use risk information in medical decisions.

Gary L. Kreps is a University Distinguished Professor and Director of the Center for Health and Risk Communication at George Mason University. His research examines health communication/promotion, health informatics, multicultural relations, and research methods, with a major focus on reducing health disparities. He publishes widely (more than 420 articles, books, and monographs) about applying communication knowledge to address important health issues. His research has been funded by the NIH, NSF, CDC, AHRQ, HRSA, USDE, DOD, and several major health service foundations and corporations.

Gary advises many federal agencies (including the NIH, NCI, CDC, FDA, and VA), research firms, corporations, foreign governments, and NGOs. He helped develop the Health Resources Services Administration's award winning "Effective Communication Tools for Healthcare Professionals" national online training program promoting sensitivity to cultural diversity, health literacy, and language proficiency. He coordinates the Fairfax County Health Literacy Initiative community collaborative that develops culturally-sensitive communication programs for at-risk populations, and co-directs the Global Advocacy Leadership Academy (GALA) for promoting effective consumer health advocacy around the world.

Gary was the founding Chief of the Health Communication and Informatics Research Branch at the National Cancer Institute (1999-2004), where he planned major national research programs for promoting cancer prevention and control. He served as the founding Dean of the School of Communication at Hofstra University, Executive Director of the Greenspun School of Communication at UNLV, and a professor at Northern Illinois, Rutgers, Indiana, and Purdue Universities.

Gary has received many honors including the 2015 Research Laureate Award from the American Academy for Health Behavior, where he is also a Fellow. He received the 2014 Dale Brashers Mentorship Award from the National Communication Association (NCA), the 2014 Gary Gumpert Urban Communication Research Award from the Urban Communication Foundation, the 2014 Endeavour Executive Fellowship from the Australian Department of Education, the 2014 FIRST Scholar Award from the University of Colorado, the 2012-2013 Graduate Faculty Advisor Award from the GMU Communication Graduate Student Assn., the 2010 Distinguished Communicator Award from the Virginia Academy of Communication Arts & Sciences, the 2010 NCA Distinguished Administrator Award, the 2009 ECA Health Communication Centennial Scholar Award, the 2005 Pfizer Professorship in Clear Health Communication, the 2004 Lewis Donahue Outstanding Health Communication Scholar Award from the University of Kentucky, the 2002 Future of Health Technology Award, the 2002 Distinguished Achievement Award in Consumer Health Informatics and Online Health, the 2000 NCA/ICA Outstanding

Health Communication Scholar Award, and the 1998 NCA Gerald M. Phillips Distinguished Applied Communication Scholar Award.

Celeste Castillo Lee is the Program Manager for Patient and Family Centered Care at the University of Michigan Health System where she provides leadership, strategy and implementation of Patient and Family Centered Care philosophies, practice and change. oThis includes administrative and operational oversight for PFCC Program, Adult Services including peer mentor strategic coordination, quality, program development, education, performance improvement, research collaborations with stakeholders, and care models. She is committed to helping UMHS partner with patients and families to re-envision the future of healthcare. In 2010, when she was the chief of staff to the President & CEO of Duke University Health System part of her responsibility was to collaborate on Patient and Family Centered Care initiatives. She is convinced of the transformative power of collaborations between patients, families, staff, faculty and community stakeholders to drive research forward.

Celeste is also a faculty for the Institue for Patient and Family-Centered Care, and most importantly, Celeste is a patient advisor in non-profit health organizations, governmental agendcies, research project, peer mentor and advocate nationally, and internationally. Including Board Member for the Kidney Health Initiative, a public/private partnership with the FDA and the American Society of Nephrology, a member of the National Patient Advisory Council for PCORnet, and a member of the steering committee for the Vasculitis Patient-Powered Research Network (V-PPRN).

Charles Lee is founder and president of Polyglot Systems, Inc. (Morrisville, NC). Dr. Lee founded Polyglot in 2001 with a mission to develop practical, affordable multi-language technology solutions to improve healthcare access and reduce disparities for underserved and limited English proficient patient populations. He is an internal medicine physician and past NLM fellow in medical informatics at UNC Chapel Hill/Duke University. He has extensive experience in patient-centered healthcare communication, language barriers, health literacy, healthcare software user interface, and instructional design. Dr. Lee is a past recipient of the Tibbetts Award from the U.S. Small Business Administration for his work in healthcare and technology and the Health Care Heroes award from the Triangle Business Journal. He is currently also adjunct assistant professor at the UNC Eshelman School of Pharmacy and a member of the FDA's Risk Communication Advisory Committee.

Claudia Manzo serves as the Acting Director of the Office of Medication Error Prevention and Risk Management, Office of Surveillance and Epidemiology (OSE), FDA. Dr. Manzo has over 15 years of drug safety experience and in her current role she directs review staffs that advise and review Risk Evaluation and Mitigation Strategies (REMS), Proprietary Names, Human Factors Studies, and Medication Errors for drugs and biologic products regulated by CDER. She received her Doctor of Pharmacy degree from the University of Tennessee, after which she completed a residency in clinical pharmacy practice at the Regional Medical Center in Memphis and a fellowship in Nutrition Support at the Philadelphia College of Pharmacy and Science. Prior to joining FDA she was a clinical pharmacist at Walter Reed Army Medical Center and a pharmacy officer in the US Army.

Mark McClellan is a senior fellow and director of the Initiatives on Value and Innovation in Health Care at the Brookings Institution. Within Brookings, his work focuses on promoting quality and value in patient centered health care. A doctor and economist by training, he also has a highly distinguished record in public service and in academic research. Dr. McClellan is a former administrator of the Centers for Medicare & Medicaid Services (CMS) and former commissioner of the U.S. Food and Drug Administration (FDA), where he developed and implemented major reforms in health policy. These include the Medicare prescription drug benefit, the FDA's Critical Path Initiative, and public-private initiatives to develop better information on the quality and cost of care. Dr. McClellan is the founding chair and a current board member of the Reagan-Udall Foundation for the FDA, is co-chair of the Quality Alliance Steering Committee, chairs the National Quality Forum's partnership for applying clinician quality measures, is a member of the Institute of Medicine, and is a research associate at the National Bureau of Economic Research. He previously served as a member of the President's Council of Economic Advisers and senior director for health care policy at the White House, and was an associate professor of economics and medicine at Stanford University.

Reema Mehta is a licensed pharmacist with a Doctor of Pharmacy from Rutgers University and a Master of Public Health degree from Johns Hopkins University. Reema started her career as a community pharmacist and has worked for both chain and independent pharmacies. Prior to joining the FDA, Reema was a Director in Medical Pharmacovigilance at Johnson and Johnson. In addition to her work experience, Reema also completed Green Belt Certification for Design Excellence (Process Excellence) by leading the initial development of the risk management implementation process for Johnson & Johnson. Reema has also lectured at various universities in product labeling, biostatistics, and epidemiology. Additionally, she has served as adjunct faculty at the University of Florida and at Rutgers University. Currently, Reema is the Acting Deputy Division Director in the Office of Surveillance and Epidemiology, Division of Risk Management at the United States Food and Drug Administration where she provides expertise on regulatory requirements related to the risk evaluation and mitigation strategies (REMS) for pre-marketed and post marketed drug products and recommends appropriate risk mitigation measures/options for drug related safety issues.

Ruth Parker is Professor of Medicine, Pediatrics and Public Health at Emory University in Atlanta, Georgia. She is recognized for her research, educational, and advocacy efforts to advance health literacy. She was co-investigator on the Robert Wood Johnson Foundation "Literacy and Health Care" project, and helped develop the Test of Functional Health Literacy in Adults (TOFHLA). She co- authored the definition of health literacy used by *Healthy People 2010*, the IOM, the NIH, and the Affordable Care Act and has authored many scholarly pieces on health literacy. She is a National Associate of the National Research Council of the National Academy of Sciences, is Chair of the FDA's Non-Prescription Drug Advisory Committee, and serves on a PCORI Advisory. Dr. Parker served in leadership roles as a health literacy advocate for professional societies including the AMA, the ACP Foundation, and consulted with many federal and state agencies regarding their health literacy efforts. She was a member of the IOM Health Literacy Committee, a member and now Consultant to the IOM Health Literacy Roundtable. Dr. Parker has received national awards in recognition of her work, including the Silver Achievement Award from the AAMC, the Richard and Hinda Rosenthal Award from the ACP, the Walter C. Alvarez Award from the American Medical Writers Association, the Cecilia and Lenard National Health Literacy Award, and U.S. FDA Advisory Committee Service Award.

Theo Raynor practiced as a hospital pharmacist for 20 years before becoming inaugural Professor of Pharmacy Practice at the University of Leeds in 2000. His 35 years of research has focused on the need to improve the information people get about their medicines. Theo's research has critically examined the impact of European legislation on mandatory patient leaflets, and how they are tested with the public – so called 'user testing'. This led to the formation of a spin-out company Luto Research www.luto.co.uk which has become a leading and influential provider of user testing services in Europe.

The synergies between the University and Luto have been the foundation of his recent internationally influential work, notably how best to present benefit and harm information to patients about medicines. Theo believes an understanding of both is a pre-requisite for patients being truly 'informed' about their medicines. In a BMJ editorial, he controversially promoted his view that an informed patient should be a goal in itself – if they then decide that a medicine is not right for them, this is an appropriate and acceptable outcome; '*an informed patient is not necessarily an obedient patient*'.

Theo Raynor has advised the UK Commission on Human Medicines, the European Medicines Agency, the European Parliament, and the US Food and Drugs Administration. He was appointed a Fellow of the Royal Pharmaceutical Society in 2012 and has delivered invited plenaries across the world, including the Centennial World Pharmacy Congress. He appears frequently in the press, radio and television, speaking about the need for better consumer medicines information. He was the recipient in 2014 of the Lifetime Achievement Award from the Royal Pharmaceutical Society.

Nilay Shah is health services researcher in the division of Health Care Policy and Research at Mayo Clinic. He is also an Associate Professor of Health Services Research in the Mayo Clinic College of Medicine. He is currently the co-director of the Translating Comparative Effectiveness Research (TRACER) Unit, a part of the Mayo Center for Translational Science Activities (CTSA). He is also the Scientific Director for the Optum Labs Initiative in the Centers for Science of Health Care Delivery at Mayo Clinic. Optum Labs is a Big Data initiative to generate knowledge to improve patient care.

Nilay's research focus is on improving chronic care delivery, especially for patients with multiple chronic conditions. His work incorporates a range of methodological tools including mathematical models, observational designs, and prospective trials. In addition, he is involved in numerous studies to test the role of decision support tools for patient-centered knowledge translation and for translating comparative effectiveness research into routine clinical practice. Nilay is also involved in a number of studies testing different models of care delivery in both the primary care and specialty care settings. He received his Bachelor's and Master's degree in Pharmacy from the School of Pharmacy at the University of Wisconsin-Madison. He received his doctoral degree in Population Health Sciences from the Medical School at the University of Wisconsin-Madison.

Gary Slatko is Associate Director within the Office of Medication Error Prevention and Risk Management (OMEPRM) at FDA, which is responsible for the review and approval of all Risk Evaluation and Mitigation Strategy (REMS) programs, as well as the review and approval of proposed proprietary product names and package labeling in order to mitigate medication errors. OMEPRM resides within the Office of Surveillance and Epidemiology (OSE), the Super Office at FDA responsible for post-marketing drug safety, epidemiology, pharmacovigilance and risk management activities within the Center for Drug Evaluation and Research at FDA. Prior to joining FDA in 2012, Dr. Slatko was Chief Medical Officer and principal consultant at a pharmaceutical drug safety consulting firm supporting the design, development, implementation and assessment of drug safety and risk management programs. During his 11-year tenure there, he consulted with many pharmaceutical manufacturers about their risk management plans, mitigation strategies and regulatory submissions. A thought leader in the field of evidence-based risk evaluation and mitigation, he co-authored two textbooks on pharmaceutical risk management. Prior experiences included over 15 years in the pharmaceutical industry in executive leadership roles in drug safety, medical affairs, new product planning and care management at Squibb Corporation, DuPont Merck Pharmaceuticals, AstraZeneca and GlaxoSmithKline. Dr. Slatko holds both a MD degree from University of Miami School of Medicine and a MBA degree from West Chester University. He is Board certified in Internal Medicine, is licensed to practice and currently resides in New York.

Betsy Sleath is George H Cocolas Distinguished Professor and Chair of the Division of Pharmaceutical Outcomes and Policy at the UNC Eshelman School of Pharmacy. She is Adjunct Professor of Epidemiology and Health Policy and Management at the UNC Gillings School of Public Health. She is co-director of research services for the community engagement and dissemination cores of the North Carolina Clinical and Translational Sciences Institute. In addition, she is a senior research fellow and director of the program of child and adolescent health at the Cecil G. Sheps Center for Health Services Research. She has published over 120 peer-reviewed articles and book chapters on provider-patient communication and consumer medication information. Her research has been funded by NIH Institutes, the Agency for Health Care Research and Quality, the Patient Centered Outcomes Research Institute, and the Bayer Institute for Health Communication. She was an original member of the Food and Drug Administration's (FDA) risk communication expert advisory committee and continues to serve as a guest member on the committee at different points in time. She was a panel member for the 2012 FDA-sponsored public workshop titled "Social Science Methodologies to Assess Risk Evaluation and Mitigation Strategies". She is on the editorial boards of Patient Education and Counseling and the International Journal of Pharmacy Practice. She received a B.S. in pharmacy and a B.A. in sociology from the University of Connecticut and she received a M.S. in pharmacy in and a Ph.D. in sociology and pharmacy from the University of Wisconsin.

Pamela Williamson joined Alexion Pharmaceuticals in April 2014 as Senior Vice President, Global Regulatory Affairs & Patient Safety. In her role, Pam is responsible for leading Alexion's global regulatory affairs and pharmacovigilance groups to advance the company's early and late stage product portfolio, providing safe and effective treatments for patients with severe and life-threatening rare diseases. Pam has extensive global regulatory affairs leadership experience, including a strong track record in rare diseases. Her background spans multiple therapeutic areas, with successful worldwide registrations including both biologics and small molecules. She also has broad expertise in the areas of quality assurance, manufacturing operations, pharmacovigilance and health authority compliance. Prior to joining Alexion, Pam was SVP, Global Head, Regulatory Affairs and Compliance at Genzyme Corporation. Prior to joining Genzyme, Pam served in various roles of increasing responsibility at Serono, including serving as VP, Regulatory Affairs and Quality Assurance. Pam holds a Master's degree in Business Administration from Northeastern University and a Bachelor's Degree in Psychology from Skidmore College. Pam is also Regulatory Affairs Certified, has the distinction of being a Regulatory Affairs Professional Society Fellow and is a member of the Albany College of Pharmacy & Health Sciences Board of Trustees.

Holly Witteman is an Assistant Professor in the Faculty of Medicine, Université Laval, Quebec City, Canada, and a scientist at the Research Centre of the CHU de Québec. Her background is in human factors engineering and her research is about the design, use, and evaluation of interactive media for health communication and decision making. She specializes in interface design for health risk communication and decision making.

Michael S. Wolf is Professor of Medicine, Associate Division Chief for General Internal Medicine & Geriatrics, Associate Chair for Research within the Department of Medicine, Feinberg School of Medicine, Northwestern University (Chicago, IL USA). He is founding director of the Health Literacy and Learning Program (HeLP), and also holds appointments in Cognitive Sciences, Communication Studies, Medical Social Sciences, Psychiatry & Behavioral Sciences, and Surgery. As a health services researcher and cognitive-behavioral scientist, Dr. Wolf has extensively studied cognitive, psychosocial, and health system determinants of health, specifically in the area of health literacy and health communications research. His work has primarily focused on understanding healthcare complexity; Dr. Wolf has led several large-scale, pragmatic trials to evaluate multifaceted interventions to promote patient engagement in health, targeting chronic disease self-management, medication safety and adherence. He was the lead author of an American College of Physicians white paper on prescription drug labeling that led to the Institute of Medicine (IOM) report *Confusing Patients Less: Standardizing Prescription Drug Labels*. Dr. Wolf also has served on numerous panels, including the FDA Risk Communication Advisory Committee (RCAC).

John B. Wong is a practicing general internist, Chief of the Division of Clinical Decision Making at Tufts Medical Center, Director of Comparative Effectiveness Research at Tufts Clinical Translational Science Institute, and Distinguished Professor of Medicine at Tufts University School of Medicine. A graduate of Haverford College, he received his MD from the University of Chicago followed by internal medicine residency and medical informatics fellowship in Clinical Decision Making at Tufts Medical Center. A past president of the Society for Medical Decision Making, he has participated in consensus conferences, guideline development and appropriateness use criteria assessment for the World Health Organization, National Institutes of Health, Centers for Disease Control and Prevention, Agency for Healthcare Research and Quality, American Association for the Study of Liver Diseases, American Heart Association, American College of Cardiology (ACC), European League Against Rheumatism and OMERACT. Besides translating guidelines into quality improvement and performance measures in the American Medical Association Physician Consortium for Performance Improvement Work Groups, he has developed award winning decision aids for shared decision making with the Informed Medical Decisions Foundation and was an invited co-author of the ACC Health Policy Statement on Patient-centered Care. Dr. Wong's research focuses on the application of decision analysis to help patients, physicians, and policy-makers choose among alternative tests, treatments, and policies, thereby promoting rational evidence-based efficient and effective patient-centered care. A co-author of *Learning Clinical Reasoning* and *Decision Making in Health and Medicine* and over 150 scientific publications, his research areas include clinical and diagnostic reasoning, decision sciences, test interpretation, Bayesian methods, quality and appropriateness of care, health economics, patient centeredness, shared decision making, and evidence-based medicine.