

Standards for Developing Trustworthy Clinical Practice Guidelines

Committee

Sheldon Greenfield

Chair

Sheldon Greenfield, MD, an internationally recognized leader in quality of care and health services research, is the Donald Bren Professor of Medicine and Executive Director of the Health Policy Research Institute, University of California at Irvine. Dr. Greenfield's research has focused on primary care outcomes, quality of chronic disease care, patient participation in care, and assessment of comorbidity. He was the 1995 recipient of the PEW Health Professions Commission Award for lifetime achievement in Primary Care Research. Dr. Greenfield is a recipient of the Glaser Award of the Society of General Internal Medicine and the 1999 Novartis Global Outcomes Leadership Award. Dr. Greenfield is the 2006 recipient of the Founders Award by the American College of Medical Quality (ACMQ). Dr. Greenfield was elected to the Institute of Medicine in 1996. He chaired the IOM Committee on Guidance for Designing a National Health Care Disparities Report, and was Chair of the IOM Cancer Survivorship Report. He was the Chair of the National Diabetes Quality Improvement Alliance. He was Co-Chair of the IOM Committee on Initial National Priorities for Comparative Effectiveness Research. His current research focus is on performance assessment at the individual physician level, heterogeneity of treatment effects, and quality of chronic disease care for ethnic and racial minorities. He received his undergraduate degree from Harvard College and his medical degree from the University Of Cincinnati College Of Medicine.

Earl P. Steinberg

Vice Chair

Dr. Earl P. Steinberg is the President and CEO of Resolution Health, Inc., a wholly owned subsidiary of WellPoint Inc., and a nationally-recognized expert in medical practice evaluation, quality assessment and quality improvement. He has had considerable experience in development of evidence-based clinical practice guidelines and of performance measures based on them, as well as with interventions to increase compliance with them. Dr. Steinberg received his AB degree from Harvard College, his medical degree from Harvard Medical School and a Master of Public Policy degree from the Kennedy School of Government at Harvard. He performed his residency training in internal medicine at the Massachusetts General Hospital. At the Institute of Medicine (IOM), Dr. Steinberg served on the Committee on Medicare Payment Methodology for Clinical Laboratory Services and the Evaluation Panel of the Council on Health Care Technology. Prior to joining Resolution Health, Inc., Dr. Steinberg was Vice President of Covance Health Economics and Outcomes Services, Inc., where he was also Co-Director of the Outcomes Studies Group and Director of the Quality Assessment and Improvement Systems Division. Dr. Steinberg spent 12 years as a full-time faculty member at Johns Hopkins University, where he was Professor of Medicine, Professor of Health Policy and Management, and the founder and director of the Johns Hopkins Program for Medical Technology and Practice Assessment. Dr. Steinberg has spent many years and currently serves on the Blue Cross Blue Shield Association's National Medical Advisory Panel.

Andrew D. Auerbach

Member

Dr. Andrew Auerbach is Associate Professor of Medicine in Residence at the University of California, San Francisco (UCSF) and a clinician-researcher in the Division of Hospital Medicine. He did his medical residency training at Yale New Haven Hospital, and a fellowship in General Internal Medicine at Harvard and Beth Israel Deaconess Medical Center. He joined the faculty at UCSF as the nation's first hospitalist clinician-researcher in 1998. Dr. Auerbach retains an active clinical practice as a hospitalist - both as a ward attending, and attending on the medical consultation service. Between 1996 and 2008 he was Director of the Surgical Care Improvement Project at UCSF, and in 2008 he became co-director of the Medication Safety Initiative at UCSF. His research at UCSF has primarily focused on assessments of patient outcomes in different systems of care, with a special interest in the hospitalist model. Additionally he has concentrated on novel approaches to clinical practice translation. Most recently, he has been developing research programs in perioperative medicine, with a special focus on the sociologic factors involved in gaps in quality, and how these factors can be employed to develop targeted educational and incentive-based programs to compel care improvements.

Jerome L. Avorn

Member

Dr. Jerry Avorn is a Professor of Medicine at Harvard Medical School and Chief of the Division of Pharmacoepidemiology and Pharmacoeconomics at Brigham and Women's Hospital. He attended Columbia College and Harvard Medical School, and completed a residency in internal medicine at the Beth Israel Hospital in Boston. Previously, Dr. Avorn was a member of the Institute of Medicine (IOM) Committee on Health Promotion and Disability Prevention for the "Second Fifty." An internist, geriatrician, and pharmaco-epidemiologist, his research centers on medication use, with particular reference to elderly patients and chronic disease. Topics of particular interest include: drug approval; transparency; scientific, policy, and social determinants of physician prescribing practices; efficacy and effectiveness of specific medications; compliance by patients with prescribed regimens; methods to improve the appropriateness of drug prescribing and drug taking; quantification of risks and benefits of drugs; and pharmaceutical cost-effectiveness analysis. The research unit Dr. Avorn founded comprises faculty representing the disciplines of epidemiology, internal medicine, health services research and policy, social science, and biostatistics. Dr. Avorn has served on several national and international panels as an expert on the determinants and outcomes of medication use, and is a past President of the International Society for Pharmaco-Epidemiology. He is author or co-author of over 250 papers in the medical literature on medication use and its outcomes and of the book, "Powerful Medicines: The Benefits, Risks, and Costs of Prescription Drugs" (Knopf, 2004), now in its 11th printing.

Robert S. Galvin

Member

Dr. Robert Galvin is the Executive Director of Health Services and Chief Medical Officer for General Electric (GE). He is in charge of the design and performance of GE's health programs, totaling over \$3 billion annually, and oversees the 1 million patient encounters that take place in GE's 220 medical clinics in more than 20 countries. He is also in charge of health policy for the company. Dr. Galvin is on the Institute of Medicine (IOM) Board on Health Care Services has served on numerous IOM committees. Drawing on his clinical expertise and training in Six Sigma, Dr. Galvin has been an advocate and leader in extending the benefits of this methodology to healthcare. Dr. Galvin has focused on issues of market-based health policy and financing, with a special interest in quality improvement, payment reform, and the assessment of medical innovations. He was recently appointed to the National Advisory Council for Healthcare Research and Quality, which provides advice, and recommendations to the Director, Agency for Healthcare Research and Quality (AHRQ), and to the Secretary, Department of Health and Human Services, on priorities for a national health services research agenda. He is also on the Defense Health Board. He is a cofounder of the Leapfrog Group and the founder of Bridges to Excellence, one of the first pay-for-performance initiatives. He recently founded the Center for Payment reform, a non-profit organization representing consumers and payers that focuses solely on issues around payment. Dr. Galvin has expertise in the areas of performance-based payment, quality measurement, and new technologies. He is widely published on issues affecting the purchaser side of health care, and is Professor Adjunct of Medicine and Health Policy at Yale University, where he directs the seminar series on the private sector for the Robert Wood Johnson Clinical Scholars fellowship. He is a fellow of the American College of Physicians.

Raymond J. Gibbons

Member

Dr. Raymond Gibbons is the Arthur M. and Gladys D. Gray Professor of Medicine at the Mayo Clinic in Minnesota. After graduate work in mathematics at Oxford and biomedical engineering at the Johns Hopkins University, he completed his M.D. at Harvard Medical School, where he was a member of the Harvard-M.I.T. Program in Health Sciences and Technology. He then completed a residency in internal medicine at Massachusetts General Hospital and a cardiology fellowship at Duke University Medical Center. Dr. Gibbons' research interests include coronary disease, myocardial infarct quantitation, and cardiac imaging. He was President of the American Heart Association (AHA) from 2006 to 2007. He served previously as Chair of the ACC-AHA Task Force on Practice Guidelines, Chair of two ACC-AHA guideline writing committees (stable angina and exercise testing), and Chair of the Committee on Scientific Sessions of the AHA.

Joseph Lau

Member

Dr. Joseph Lau is Professor of Medicine, Professor Clinical Research (Sackler School for Graduate Biomedical Sciences), and Adjunct Professor (Friedman School for Nutrition Sciences and Policy) at Tufts University. He directs the Tufts EPC; one of 14 AHRQ designated evidence-based practice centers. Dr. Lau had also directed the Boston Branch of the US Cochrane Center (1996-2007) and the evidence review team of the National Kidney Foundation's clinical practice guidelines program (2000-2009). Dr. Lau received his M.D. from the Tufts University School of Medicine. He has published over 200 journal articles and book chapters on applications and methodologies of systematic review and meta-analysis, along with over 50 evidence reports and technology assessments. He has served on FDA advisory panel, IOM committee (Framework for Evaluating the Safety of Dietary Supplements) and as a drafting expert on an FAO/WHO workgroup. He is on the editorial board of the European Journal of Clinical Investigation and is an advisor on medical research methodology to Biomed Central. He is a member of the Association of American Physicians.

Monica Morrow

Member

Dr. Monica Morrow is Chief of the Breast Service in the Department of Surgery and the Anne Burnett Windfohr Chair of Clinical Oncology at Memorial Sloan-Kettering Cancer Center and a Professor of Surgery at Weill Medical College of Cornell University. She received her medical degree from Jefferson Medical College in Philadelphia, PA. At the IOM, she was a member of the Committee on Cancer Survivorship: Improving Care and Quality of Life After Treatment, the National Cancer Policy Board, and the Committee to Conduct a Workshop on the Development of a Research Agenda Concerning Medical Diagnosis and Treatment of Breast Cancer. Her current research interest is focused on how treatment choices for breast cancer surgery are made. She is the surgical editor of the textbook Diseases of the Breast and a co-author of Breast Cancer for Dummies. Dr. Morrow co-chaired the joint committee of the American College of Surgeons, American College of Radiology, and College of American Pathologists on Standards for Breast Conserving Therapy for Invasive Breast Cancer and for Ductal Carcinoma In Situ (DCIS) in 2002 and 2007. She is currently serving as the Secretary of the Society for Surgical Oncology, the professional organization for surgeons who specialize in cancer treatment.

Cynthia D. Mulrow

Member

Cynthia Mulrow is Clinical Professor of Medicine at the University of Texas Health Science Center at San Antonio and the Deputy Editor of the *Annals of Internal Medicine*. She was previously Director of the San Antonio VA Cochrane Center, Program Director of the Robert Wood Johnson Foundation's Generalists Physician Scholars Program and Director of the San Antonio Evidence-based Practice Center of the Agency for Health Care Research and Quality. Dr. Mulrow's editorial board memberships and positions have included the editorial board of the *British Medical Journal*, the *American Journal of Medicine*, the *ACP Journal Club*, and the *Clinical Advisory and Editorial Board* (electronic and print *Evidence-based Therapeutics Compendium*). She is a member of the Institute of Medicine (IOM) and currently serves on the IOM Board on Health Care Services. She was a member of the IOM Subcommittee on the Health Outcomes of the Uninsured. She was a member of the U.S. Preventive Services Task Force. Dr. Mulrow's expertise in clinical methodology, information synthesis, systematic reviews, clinical guidelines, and measurement also has resulted in invitations to serve on many national and international committees and task forces. She has served on several guideline development panels for RAND, AHRQ, and USPSTF.

Arnold J. Rosoff

Member

Mr. Arnold J. Rosoff is a Professor of Legal Studies and Business Ethics and a Professor of Health Care Management at the Wharton School of the University of Pennsylvania (Penn) as well as a Senior Fellow at Penn's Leonard Davis Institute of Health Economics. Professor Rosoff has an undergraduate degree in Economics from Penn and a law degree from Columbia University. His research and writing have covered a diverse range of subjects in health law and policy, including: legal, regulatory and business aspects of health care; legal implications of evidence-based medicine (i.e., the law's recognition and treatment of Clinical Practice Guidelines, or CPGs); ethical issues in public health practice; legal and regulatory controls on health care cost and quality; patients' rights, especially "informed consent" issues; pharmacy benefits management; private and governmental financing of health care, including HMOs; antitrust issues in health care; and comparative health care systems. His recent research has focused on U.S. attempts to achieve universal health care (UHC); analysis of GINA, the Genetic Information Non-Discrimination Act of 2008; implications of consumer-driven healthcare, and applications of information technology to healthcare delivery and financing. He is currently writing up a comparative study of the path five nations - Argentina, France, Italy, Japan and Singapore - took to reach their national commitment to UHC, analyzing how their experiences may be useful to U.S. efforts to achieve UHC. Professor Rosoff's most direct connection with this committee's subject matter is the research and writing he has done on the promotion of evidence-based medicine and its implementation through CPGs and computerized clinical decision support systems (CDSSs).

John Santa

Member

Dr. John Santa is the Director of the Consumer Reports Health Ratings Center. The Center provides unbiased analyses and ratings to help consumers make informed health-care decisions. Objective up-to-date comparisons of health services, drugs, devices and consumer experiences from credible internal and external testing sources are used. 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 focusing on evidence based approaches to treatments and prescription drugs. He previously worked in medical leadership positions for hospitals, physician groups and health insurers focusing in each position on clinical guidelines, quality improvement and performance. Dr. Santa has taught in multiple environments including medical school, residency training and graduate courses, most recently serving (2007-2008) as an associate professor at Oregon Health & Science University and Portland State University. He has practiced primary care internal medicine in solo, group and institutional settings, most recently at the Portland VA.

Richard N. Shiffman

Member

Richard Shiffman, MD, MCIS is Professor of Pediatrics and Associate Director of the Center for Medical Informatics at Yale School of Medicine. He has served on several guideline development panels for national professional societies and on the American Academy of Pediatrics Steering Committee on Quality Improvement and Management. In addition, he serves on the Board of Trustees of the Guidelines International Network. Dr. Shiffman convened the Conference on Guideline Standardization in 2002 and leads the group that developed the Guideline Elements Model, a standard for electronic representation of guideline documents.

Wally R. Smith

Member

Dr. Smith is Professor of Internal Medicine and Chairman of the Division of Quality Health Care at Virginia Commonwealth University. He is also Scientific Director of the Center on Health Disparities, a general internist, a health services researcher, and Vice President of the Foundation for Integrity and Responsibility in Medicine. Dr. Smith was an inaugural Robert Wood Johnson Generalist Physician Faculty Scholar. He has been on the editorial boards of the journals Medical Decision Making and Clinical Performance and Quality Health Care. He is past North American editor of Clinical Governance, an International Journal, and past deputy editor of the Journal of General Internal Medicine. He has served on study sections or expert leadership panels for the National Institutes of Health, Agency for Healthcare Research and Quality, National Library of Medicine, and the Health Resources and Services Administration. He is past secretary of the Society of General Internal Medicine. He has authored more than 65 peer-reviewed publications and 35 externally funded grants or contracts. He is expert in disparities issues in clinical and health services, clinical epidemiology, and medical decision-making.

Walter F. Stewart

Member

Dr. Walter Stewart is Associate Chief Research Officer for the Geisinger Health System and Director of the Center for Health Research. The Center has a strong focus on health services research and the use of information technology in re-engineering care processes, as well as, other areas of emphasis that include comparative effectiveness studies, population level validation of biomarkers for clinical decision-making, and formalizing system level processes for translating research to practice. Dr. Stewart earned his Ph.D. in epidemiology from Johns Hopkins University, a master's degree in public health from the University of California, Los Angeles and a bachelor's degree in psychobiology from the University of California, Riverside. Prior to taking his position at Geisinger in 2003, Dr. Stewart started IMR, a privately held clinical trials and survey research company. The company developed novel approaches to population based clinical trials that accelerated phase III timelines. IMR was acquired in 1998 by AdvancePCS. At AdvancePCS, Dr. Stewart was vice president of Research and Development and director of the Center for Work and Health from 1998 to 2002. The latter focused on employer direct and indirect costs from illness and development of tools to measure lost productivity. Between 1983 and 1995, Dr. Stewart was a full-time faculty member of the Johns Hopkins Bloomberg School of Public Health, where he maintains an adjunct professor position. Since his tenure at Hopkins, Dr. Stewart has studied the epidemiology of common chronic episodic conditions (e.g., migraine, bladder control, GI disorders), the work impact of these conditions, and the progressive CNS disorders. He has authored more than 240 journal articles and book chapters on these and other subjects.

Ellen L. Stovall

Member

Ms. Ellen L. Stovall is the Acting President and CEO for the National Coalition for Cancer Survivorship. She is a 37-year survivor of three bouts with cancer and has been advocating for more than 30 years to improve cancer care in America. Ms. Stovall served as a member of the Institute of Medicine's (IOM) National Cancer Policy Forum, established in May 2005 to succeed the National Cancer Policy Board. This Forum is designed to allow government, industry, academic and other representatives to meet and privately discuss public policy issues that arise in the prevention, control, diagnosis and treatment of cancer. Prior to the establishment of the Forum, Stovall was Vice-Chair of the National Cancer Policy Board's (NCPB) Committee on Cancer Survivorship. As vice-chair of the survivorship committee, Stovall co-edited the Institute of Medicine's report titled, *From Cancer Patient to Cancer Survivor: Lost in Transition*, which addressed the issues adult cancer survivors face. Currently Ms. Stovall serves as Vice-Chair of The Robert Wood Johnson Foundation's National Advisory Committee for Pursuing Perfection: Raising the Bar for Health Care Performance. From 1997 - 2004, Ms. Stovall chaired The Robert Wood Johnson Foundation's National Advisory Committee to Promote Excellence in Care at the End of Life. Ms. Stovall was a member of the Board of Directors of the National Committee for Quality Assurance (NCQA) and participates on a Steering Committee of the National Quality Forum (NQF) to establish consensus around Cancer Care Quality Measures. Ms. Stovall sits on advisory panels, working groups and committees of the National Cancer Institute (NCI), American Association for Cancer Research (AACR) and the American Society of Clinical Oncology (ASCO). Ms. Stovall was Founder and President of THE MARCH...Coming Together to Conquer CancerSM. Through her leadership, this yearlong, national public awareness campaign focused both national and regional media attention on the issues of cancer research and quality cancer care for all Americans. Ms. Stovall also served for six years on the National Cancer Advisory Board (NCAB), an appointment she received in 1996 from President Clinton. Recognizing a need for the voice of cancer survivors to be heard during the national debate over health care reform, the Cancer Leadership Council (CLC) was convened in 1993 under her direction; today the CLC is comprised of thirty three patient advocacy organizations, professional societies and voluntary organizations. Staffs of the United States Congress and the Administration frequently call upon Ms. Stovall to work on a variety of cancer-related policy issues, most notably access to quality cancer care.

Brian L. Strom

Member

Dr. Brian L. Strom is George S. Pepper Professor of Public Health and Preventive Medicine, Founding Chair and Professor of Biostatistics & Epidemiology, Professor of Medicine, Professor of Pharmacology, Founding Director of the Center for Clinical Epidemiology & Biostatistics, Founding Director of the Graduate Group in Epidemiology & Biostatistics, Vice Dean for Institutional Affairs, School of Medicine, and Senior Advisor to the Provost for Global Health Initiatives at the University of Pennsylvania. He is a member of the Institute of Medicine (IOM). He was chair of the IOM's Committee to Assess the Safety and Efficacy of the Anthrax Vaccine and the Committee on the Smallpox Vaccination Program Implementation, as well as a member of the Committee to Review the CDC (Centers for Disease Control and Prevention) Anthrax Vaccine Safety and Efficacy Research Program and the Committee to Review the NIOSH Traumatic Injury Research Program. Internationally known for multiple areas of clinical epidemiology, Dr. Strom's major career interest is pharmacoepidemiology, specifically looking at adverse drug reactions and medical errors. He is editor of the field's major text (now going into its fifth edition), was President of the International Society of Pharmacoepidemiology (ISPE), and is now Editor-in-Chief for Pharmacoepidemiology and Drug Safety, ISPE's official journal. He received his medical degree from Johns Hopkins University School of Medicine and his master's of public health from the University of California at Berkeley.

Marita G. Titler

Member

Dr. Marita G. Titler is a Professor and Associate Dean of Practice and Clinical Scholarship at the University of Michigan School of Nursing. At the Institute of Medicine, she was a member of the Forum on the Science of Health Care Quality Improvement and Implementation. Previously, she served as Director of Research, Quality, and Outcomes Management in the Department of Nursing Services and Patient Care at the University of Iowa Hospitals and Clinics, Iowa City, Iowa and was a Clinical Professor at the University of Iowa College of Nursing. During her 20 year tenure at UIHC, she also served in the role of a Clinical Nurse Specialist in Critical Care, and Senior Associate Director, Clinical Outcomes and Resource Management. She was Director of the Translation Core of the 2.34 million dollar federally funded Gerontological Nursing Interventions Research Center Grant and the Institute of Translational Practice on the 3.49 million dollar Department of Veterans Affairs Center of Excellence grant Center for Research in the Implementation of Innovative Strategies in Practice (CRIISP). She served as Principal Investigator and completed a 1.5 million dollar AHRQ Grant on Evidence-Based Practice: From Book to Bedside, competing continuation From Book to Bedside: Promoting and Sustaining EBPs in the Elders, and 1.3 million dollar NINR Grant on Nursing Interventions & Outcomes in 3 Older Populations. She is currently Co-Principal Investigator on the 2.8 million dollar National Cancer Institute Grant on Cancer Pain in Elders: Promoting EBPs in Hospices. Her current program of research focuses on translation science, including organizational and system barriers to translation; interventions to improve outcomes of adults with chronic illnesses; and dissemination of evidencebased practice guidelines for the elderly. She is currently a member of the AHRQ HCTDS study section and is a fellow in the American Academy of Nursing. She has published and spoken nationally and internationally on evidence-based practice, outcomes management, and translation science. She is a past member of the International Evidence-Based Working Group of Sigma Theta Tau International, and is currently a member of the Sigma Theta Tau International's Research & Scholarship Advisory Council, VA HCS National Evidence-Based Practice Work Group, and Stroke QUERI External Advisory Committee. She has received several national awards including the American Organization of Nurse Executive's 2008 Research Award; Elizabeth McMillian Williams Research Award from Sigma Theta Tau International (2005); and the Health Policy and Research Award from the Midwest Nursing Research Society.