Pre-Conference Course 1

Streamlining Guideline Development:
Creating an Efficient Systematic Process to Meet Time and Resource Constraints

Course Aims and Objectives
In an era of raised standards for guidelines and systematic reviews, limited resources can pose a challenge to clinical practice guideline development. This course aims to teach guideline developers and systematic reviewers about methods to increase efficiency in developing and maintaining a systematic process under constrained time and resources. Specific objectives include learning more efficient methods for scoping and key question development, systematic methods of rapid review, methods for adaptation of existing guidelines, and methods for crafting recommendations suitable for use in clinical decision support (CDS) tools for personalizing recommendations.

Relationship to G-I-N's Overall Purpose and Conference Theme
This course will contribute to G-I-N's overall purpose by teaching methods to efficiently develop high quality guidelines that foster evidence-based safe and effective patient care. The topics covered address both the overall theme of the conference as well as several of the individual sub-themes, including novel guideline development, guideline implementation and integration, population health and individualized guidelines. These methods may be particularly applicable in resource-challenged settings. We will provide examples during the sessions described below.

Target Audience
Guideline developers who are interested in methods to create efficiencies in their development process.

Detailed Program and Timetable

10:00 AM – 10:10 AM	Introduction
10:10 AM – 10:55 AM	Methods for Scoping and Key Question Development
10:55 AM – 11:50 AM	Methods for Systematic Rapid Review
11:50 AM – 12:50 PM	Lunch
12:50 PM – 1:45 PM	Methods for Adaptation of Existing Guidelines
1:45 PM – 2:40 PM	Methods for Crafting Recommendations and Translation into Clinical Decision Support

Workshop Facilitators

Kristin E. D'Anci, PhD joined ECRI Institute in September of 2013 in the position of Senior Research Analyst. In this role she performs systematic reviews and writes reports on a variety of topics including medical treatments and procedures and behavioral health. Since joining ECRI, she has worked on evidence-based reviews for several ongoing Department of Veterans Affairs and Department of Defense (VA/DoD) clinical practice guidelines, including those for chronic multi-symptom illness, substance use disorder, traumatic brain injury, and chronic obstructive pulmonary disease. Prior to her work at ECRI Institute, Dr. D'Anci was an Assistant Professor of Biopsychology at Salem State University in Salem, MA and a biobehavioral researcher at Tufts University in Medford, MA. She completed two post-doctoral programs, one in Clinical Nutrition at Tufts University and one in Behavioral Pharmacology at Harvard University, and earned her doctorate in Experimental Psychology from Tufts University. Overall, she has over 20 years of experience in conducting and reporting scientific research in the fields of psychology, including drug abuse and depression, and clinical nutrition.

Eileen G. Erinoff, **M.S.L.I.S.** joined ECRI Institute in 1991, initially working on ECRI's Health Devices Alerts, a database focused on medical device-related problems and hazards. Since 1996, Ms. Erinoff has directed and managed the ECRI Health Technology Assessment/Evidence-based Practice Center Information Center and was also the Information Team Leader for ECRI's contract with the Agency for Healthcare Research and Quality (AHRQ) to produce the Healthcare Horizon Scanning System. Her responsibilities include supervising the staff, processes, and systems used for controlled vocabulary development, indexing, information retrieval and bibliographic management. She is also responsible for the staff that indexes summaries in the National Guideline Clearinghouse and National Quality Measures Clearinghouse as well as the Healthcare Horizon Scanning System with vocabularies from the National Library of Medicine's Unified Medical Language System (UMLS), including ECRI's Universal Medical Device nomenclature system (UMDNS). Specific functions within Ms. Erinoff's department include identifying and searching relevant clinical literature and other information sources; importing citation records into electronic citation management systems; tracking the ordering and receipt of articles; producing the bibliographies for the evidence reports and technology assessments; indexing materials for ECRI and National Library of Medicine Databases; and producing rapid responses on health technology topics. Ms. Erinoff also hires, trains and mentors new information specialists as well as orients new ECRI Evidence-based Practice Center (EPC) senior staff to the Information Center resources and procedures.

Ms. Erinoff is responsible for the team that develops and maintains the ECRI Universal Medical Device Nomenclature System (UMDNS). She is an expert in medical device and other taxonomies, and oversees ECRI's work to develop mappings to and from UMDNS to other vocabularies such as GMDN, ICD, HCPCS, and MeSH.

Ms. Erinoff has been the lead information specialist and informatics expert for ECRI's Evidence-based Practice Center task orders, the Healthcare Horizon Scanning System, and various other ECRI projects for the U.S. Department of Defense, the Veteran's Administration and other federal and state agencies, as well as for ECRI's health technology assessment reports. Ms. Erinoff has also provided research for and drafted portions of special projects, prepared and presented workshops on searching processes and techniques, and authored AHRQ-funded white papers. Ms. Erinoff also leads a project gauging the impact of AHRQ's Effective Healthcare Program via citation analysis.

Ms. Erinoff is a graduate of Temple University and earned a Master's degree in Library and Information Science with an emphasis on Management of Digital Information at Drexel University in Philadelphia, PA.

J. Jane S. Jue, MD, MSc joined ECRI Institute in August 2011 after completing training in health services research and health policy at the University of Pennsylvania. Dr. Jue has expertise in clinical practice guideline assessment and dissemination. As the Medical Director of the National Guideline Clearinghouse (NGC) and National Quality Measures Clearinghouse (NQMC), under ECRI's contract with the Agency for Healthcare Research and Quality, she leads and oversees the ongoing effort to incorporate the IOM standards for trustworthy guidelines into the NGC infrastructure. In addition she has done extensive work in guideline appraisal, including developing and testing an instrument to assess clinical practice guidelines according to the IOM standards for trustworthiness.

Dr. Jue also has expertise in systematic review. She works on comparative effectiveness reviews for the ECRI-Penn EPC as well as projects for the VA/DoD under ECRI's contracts. She has also done work in evaluating and translating guideline recommendations for use in clinical decision support.

Dr. Jue practices internal medicine, caring for patients at a federally-qualified community health center (FQHC) in a high-need community in North Philadelphia.

Dr. Jue received her undergraduate degree from Princeton University, her medical degree and internal medicine training from Mount Sinai School of Medicine, her fellowship and master's degree through the Robert Wood Johnson Clinical Scholars Program at the University of Pennsylvania. Dr. Jue also holds an academic appointment as Assistant Professor of Medicine at the University of Pennsylvania.

Jeremy Michel, MD, MHS is a pediatrician and board certified clinical informaticist who divides his time between research and patient care. For the past two years he has actively contributed to ongoing research within the Department of Biomedical and Health Informatics (DBHi) at The Children's Hospital of Philadelphia and provides patient care at the Karabots Care Center in West Philadelphia. He studied biology at Cornell University and went on to receive his medical degree from the Drexel University College of Medicine. His residency in pediatrics was completed at A.I. duPont Children's Hospital. After residency, he continued his training in informatics at Yale University by simultaneously completing a Master of Health Sciences (focus in Clinical Informatics) and NLM-sponsored Medical Informatics Postdoctoral Fellowship. His thesis project was aligning guidelines recommendations and quality measures using the Guideline Elements Model and the Quality Data Model.

His current research focus is the transparent and reproducible adaptation of evidence-based guideline recommendations into Clinical Decision Support (CDS) and Quality Measures. He has used this approach to support care practices for multiple clinical conditions including childhood obesity, safe opioid prescribing, breast cancer screening and management, and ADHD. In addition to his research and clinical activities, Dr. Michel serves a Senior Clinical Informatics Advisor at ECRI Institute by supporting ongoing projects at this organization (including the National Guideline Clearinghouse/National Quality Measure Clearinghouse and the Partnership for Health IT Patient Safety).

James T. Reston, PhD, MPH joined ECRI Institute in June 1999. He has over 16 years of experience in writing and reviewing technology assessment reports for ECRI's Health Technology Assessment Group and Evidence-based Practice Center. He has written evidence reports for a diverse range of clients including the Agency for Healthcare Research and Quality (AHRQ), TRICARE, the Department of Transportation's Federal Motor Carrier Safety Administration (FMCSA), the National Kidney Foundation (NKF), and the American Urological Association (AUA). Most recently, he has been developing evidence reports for the Veteran's Administration/ Department of Defense (VA/DoD) as

part of ECRI Institute's subcontract with the Lewin Group. In the course of this work, he has utilized a number of meta-analytic techniques ranging from simple meta-analysis of treatment effectiveness data to more complicated meta-analytical techniques such as meta-regression.

The projects Dr. Reston has led or contributed to for the NKF, AUA, and VA/DoD have been evidence reports to support clinical guideline development. In addition to preparing evidence reports for AUA, he also assisted the guideline panels in developing actionable recommendations for guidelines on adult urodynamics and urotrauma. Dr. Reston has also worked with medical expert panels in the context of ECRI Institute's work for the FMCSA under contract to MANILA Consulting Group, Inc. This work evaluated the impact of various diseases and disorders on crash risk for commercial motor vehicle (CMV) drivers, and was used to update FMCSA regulations concerning CMV licensure. He has also contributed to GLIDES (Guidelines into Decision Support), an AHRQ-funded project led by Yale University to develop methods for translating guideline recommendations and other pertinent information into a form compatible with electronic databases that support clinical decision-making.

Dr. Reston received his PhD and MPH from the University at Albany School of Public Health.

David Samson, MS joined ECRI Institute in mid-2015. Previously, he spent 26 years with the Blue Cross and Blue Shield Association Technology Evaluation Center (TEC). Rising to Director of Comparative Effectiveness Research, he produced over 100 technology assessment reports for his prior employer. David is proficient in the following areas: systematic evidence-based reviews of health care practices, research methodology, statistics including meta-analysis, health care economic evaluation, critical appraisal of studies and evidence synthesis. A particular specialty area is evaluation of diagnostic tests. Beginning in 1997, David spent the bulk of his efforts on projects for the Agency for Healthcare Research and Quality (AHRQ). Across a total of 17 AHRQ projects, he directed 5, supervised 3, served as associate director on 3 and collaborated or consulted on 6. He fulfilled a role as one of several associate editors for AHRQ, reviewing reports produced by several notable academic institutions. He served on practice guideline development panels for the American College of Chest Physicians (ACCP) and the American Society of Clinical Oncology (ASCO). David was a committee member for several Medicare Evidence Development and Coverage Advisory Committees (MEDCAC). He has published articles in *Cancer*, *Annals of Internal Medicine*, *Journal of Clinical Oncology*, *Academic Radiology*, *Journal of Nuclear Medicine*, *Journal of General Internal Medicine* and others. He is a seasoned trainer/lecturer, experienced in government, insurer/industry and academic settings. Mr. Samson earned a Master of Science degree in epidemiology from the University at Albany School of Public Health. He continues study there in epidemiology and is currently in the final stages of doctoral dissertation research, a cost-effectiveness analysis of alternative practice guidelines on blood pressure management.

Karen Schoelles, MD, SM, FACP joined ECRI Institute in July 2005. She is responsible for ECRI Institute's Evidence-based Practice Center (EPC) projects and our Health Technology Assessment (HTA) Consulting Group's work products. She also served as Project Director for the AHRQ Healthcare Horizon Scanning System from 2010 to 2015 and served as Associate Editor for the AHRQ EPC Program for four years. Dr. Schoelles was the recipient of ECRI Institute's Patient Centeredness Award for 2013.

Dr. Schoelles has over 20 years of clinical experience in internal medicine, with particular expertise in geriatrics. A Clinical Instructor at Harvard Medical School for nine years, Dr. Schoelles has lectured to diverse audiences on geriatric assessment, preventive health measures in the elderly, and primary care of the older patient. She participated in the development of a geriatric assessment tool for use by primary care physicians at Harvard Pilgrim Health Care and developed a clinical program within which a model of

geriatric care was developed and evaluated at Hebrew Rehabilitation Center for Aged in Boston (HRCA, now Hebrew SeniorLife).

Dr. Schoelles has held professional and clinical positions at numerous hospitals and health care organizations in the Boston area, beginning with an internship in Internal Medicine at Boston City Hospital. For seven years she was both the Associate Director of the Internal Medicine Residency Program and the Director of the Ambulatory Care Clinic at Salem Hospital. She subsequently entered private practice as a solo practitioner, caring for over 1400 Medicare patients in their homes, in the office, in an acute care hospital, and in long-term care facilities. Dr. Schoelles later joined Harvard Community Health Plan as an internist at the Wellesley Center, served as an Attending Physician at the Brigham and Women's Hospital, later helping to form the Extended Care Facilities program for Harvard Pilgrim Health Care and Harvard Vanguard Medical Associates. She was a member of the BIDMC Division of Gerontology while she worked as Chief of Community Geriatrics Division at HRCA, with oversight of outpatient geriatric consultative and primary care clinics, the medical practice for a continuing care retirement community and a geriatric home visit program. While pursuing a Master of Science degree in health policy at Harvard School of Public Health, Dr. Schoelles led systematic review projects at MetaWorks, Inc., in Medford, Massachusetts. She has been a faculty member of the Clinical Policies and Guidelines Group TEACH Workshop at the New York Academy of Medicine since 2012. More recently, she coordinated a workshop on Horizon Scanning at the 20th Annual International Meeting of the International Society for Pharmacoeconomics and Outcomes Research (ISPOR).

Jonathan R. Treadwell, PhD is an Associate Director of the Evidence-based Practice Center and Health Technology Assessment Group at ECRI Institute. He holds a Ph.D. in cognitive psychology and medical decision making from the University of Washington, with postdoctoral training at Standard University Medical Center. His expertise is statistics and the methodology of systematic reviews and meta-analyses. Since joining ECRI Institute in 2000, he has performed numerous systematic reviews that have varied widely in the clinical topics (diabetes, obesity, cancer, epilepsy, chronic pain), in the methods employed (simple narrative summaries, to semi-quantitative reviews of a mix of study designs, to dozens of meta-analyses), in the team size (anywhere from one to 12 collaborators), and in the timeframe for completion (from as little as one day to as much as 18 months). His evidence reports have served a diverse range of clients including (among others) the Agency for Healthcare Research and Quality, TRICARE, The Centers for Disease Control and Prevention, the National Kidney Foundation, and the American Urological Association. The latter three clients used his reports specifically to support clinical guideline development. Amidst this variety, Dr. Treadwell has consistently strived to improve the scientific quality and clinical usefulness of evidence reviews.