

A Consensus Conference

Sponsored by **Academic Emergency Medicine**
The Official Journal of the Society for Academic Emergency Medicine

May 15th, 2007
Chicago Sheraton, Illinois, USA

Academic Emergency Medicine

Knowledge Translation in Emergency Medicine: Establishing a Research Agenda and Guide Map for Evidence Uptake

Conference Co-chairs
Barnet Eskin, Peter Wyer, Eddy Lang

Organizational Support
Emergency Department
Sir Mortimer B. Davis
Jewish General Hospital
A McGill University
Teaching Hospital

Consensus conference
website available through:
saem.org

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aemj.org



Background

An important component of the "Quality Chasm" identified by the Institute of Medicine (IOM) relates to the failure of health care environments, including Emergency Departments, to consistently deliver evidence-based diagnostic strategies and therapies to all of their patients. Knowledge translation (KT) refers to the exchange, synthesis and ethically-sound application of research evidence into clinical care. Such application occurs within a complex system of relationships among researchers and knowledge-users i.e. health care providers, patients and administrators. KT defines an area of research that has arisen out of this gap between evidence and practice. It has yet to be developed within Emergency Medicine in a systematic way but is vitally relevant to emergency care in the 21st Century. Thus, **Academic Emergency Medicine** (AEM) has decided to convene a consensus conference on the topic to address these important issues.

Mission

The mission of the AEM Consensus Conference on Knowledge Translation is to stimulate the development of a research agenda and a coordinated initiative within Emergency Medicine (EM) aimed at finding optimal routes into clinical practice for consistent and reliable implementation of evidence-based interventions.

Consensus Conference Goals

- Raise awareness and examine the barriers regarding the research to practice gap.
- Review the rationale for studying methods for enhancing evidence uptake
- Identify research initiatives within EM that constitute 'sentinel' examples of KT research
- Identify effective evidence implementation strategies in EM and determine which aspects of these initiatives facilitated success
- Examine specific KT domains:
 - Integrated evidence awareness systems
 - Changing physician behavior
 - Decision support technology
 - Clinical pathways
 - Inter-departmental protocol development with audit and feedback
- Review specific design and methodology issues involved in KT research
 - Special challenges of randomized trials
 - Role of observational studies
- Identify funding sources for KT research.

Specific Consensus Conference Objectives

1. Develop a framework for building an Emergency Medicine KT Consortium that will initiate multi-center projects and foster collaboration and synergy in KT initiatives and KT research.
2. Develop a consensus statement that will establish priorities and highlight opportunities in Emergency Medicine KT research.
3. Develop recommendations directed at multiple stakeholders within health care organizations and regulatory agencies that will advance the Emergency Medicine agenda of consistent evidence uptake through KT.

International Expert Advisory Panel

- Jim Adams (AEM Board liaison)
- Marc Afilalo (McGill University)
- V. Anantharaman (Singapore/IFEM)
- Michelle Biros (AEM Editor in Chief)
- Michael Brown (Michigan State University)
- Matthew Cooke (Warwick Medical School)
- David Davis (University of Toronto/KT Institute)
- Gary Gaddis (University of Missouri)
- Paul Glasziou (University of Oxford)
- Ian D. Graham (CIHR)
- Jeremy Grimshaw (University of Ottawa)
- Jonathon Handler (Northwestern University)
- Kevork Hopayian (University of East Anglia, Norfolk)
- Sue Huckson (National Institute of Clinical Studies)
- Terry Klassen (University of Alberta)
- Anne McKibbin (McMaster University)
- Sumit Majumdar (University of Alberta)
- Dan Mayer (Albany Medical College)
- Richard Sinert (AEM theme issue editor)
- Jean Slutsky (AHRQ)
- Ian Stiell (University of Ottawa)
- Sharon Straus (CIHR Research Chair in KT)

Dissemination Plan

The Consensus Conference proceedings (research agenda and recommendations) will appear in a dedicated themed issue of **Academic Emergency Medicine** and will be available online in full free text for November of 2007. The themed issue will also contain concept and primary scientific papers related to Knowledge Translation.

AEM issue editor: Dr. Richard Sinert

Call for papers: <http://www.saem.org/news/tr/2006/july-aug/aem.pdf>

Session Length: Full Day (8 hours)

Enrollment: Advance paid registration required
(approximately 200 participants at \$100/person)

REGISTRATION FORM

Name

Title

Affiliation

(Hospital, University, Agency, Corporation)

Address

Telephone no.

e-mail address

Please send this coupon with an accompanying check for \$100 USD (includes lunch) made out to the **Society for Academic Emergency Medicine** to secure registration.

Mail to:
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Knowledge Translation Consensus Conference Conceptual Framework and Leaders

Theme I: Evidence Implementation

Global question

Leader and e-mail contact

- Ia.** Guideline implementation and clinical pathways
How can emergency medicine optimize evidence implementation and uptake through the use of CPG implantation strategies and critical pathways?
- Ib.** Evidence syntheses and other promising KT methods.
What are the most effective pre-appraised and synthesized evidence formats available in Emergency Medicine and what supplemental techniques (e.g., academic detailing, audit and feedback, reminders) will enhance this KT?

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Theme II: The EM Practitioner and KT

- Ila.** CME/CPD and self improvement
What self improvement strategies and continuing professional development initiatives are most conducive to the incorporation of evidence based interventions into the individual emergency physician's practice?
- Ilb.** Cognitive, social and behavioral
How can cognitive, social, and behavioural issues inform the study of knowledge translation in emergency medicine?

Barbara Killian
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Theme III: The Emergency Department and Clinical Teaching Unit

- Illa.** Undergraduate, Postgraduate and Continuing Medical Education
How can medical education strategies both at the undergraduate, postgraduate and continuing medical education level promote evidence implementation in graduating and future emergency physicians?
- IIlb.** Informatics and KT
What are the characteristics of an ED-based informatics and decision support system that can most effectively facilitate knowledge translation?

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Theme IV: Macro view: Issues and perspectives at the broader level

- IVa.** Health Policy and KT
What are the characteristics of health policy programs (local, regional and national) that promote the incorporation of research evidence into the clinical practice of emergency medicine?
- IVb.** Medicolegal and ethical considerations in KT
At the macro level, what are the contributions that Bioethics can make toward closing the evidence to practice gap?

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Theme V: Contextually specific challenges to KT

- Va.** International EM
What are the most promising avenues to pursue in approximating the gap between knowledge and practice in the delivery of emergency medical care within the context of developing nations?
- Vb.** Emergency Medical Services
What are the most promising avenues to pursue in approximating the gap between knowledge and practice in the delivery of emergency medical care in the pre-hospital setting?
- Vc.** Public Health
What are the unique contextual elements that need to be addressed in order to bring proven preventative and other public health initiatives into the ED setting?

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Theme VI: The science of evidence implementation/dissemination of innovation

- Vla.** Research principles and methodology of KT research
What research directions and methodologies should be employed to identify the most effective strategies for approximating the research to practice gap in emergency medicine?
- Vlb.** Capacity development and research networks
What approaches should be emphasized in order to develop capacity and multi-center consortiums that will promote knowledge translation research in emergency medicine?

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The following stakeholder organizations have issued endorsements and have agreed to be considered among the Consensus Conference supporting agencies so far.

- Agency for Healthcare Research and Quality (AHRQ)
- American College of Emergency Physicians (ACEP)
- Alberta Research Centre for Child Health Evidence (ARCHE)
- American Academy of Emergency Medicine (AAEM)
- Cochrane Prehospital and Emergency Health Field (CPEHF)
- Canadian Agency for Drugs and Technology in Health (CADTH)
- Canadian Association of Emergency Physicians (CAEP)
- American Academy of Emergency Physicians Research Consortium (CAEP RC)
- Canadian Institutes for Health Research (CIHR)
- Emergency Multidisciplinary Research Unit (EMRU)
- Emergency Medicine Residents Association (EMRA)
- Evidence Based Emergency Medicine Interest Group, New York Academy of Medicine
- Knowledge Translation Program at the University of Toronto
- National Institute for Clinical Studies (NICS)
- Ottawa Health Research Institute (OHRI)
- Pediatric Emergency Care Applied Research Network (PECARN)
- Pediatric Emergency Research Canada (PERC)
- Society for Academic Emergency Medicine (SAEM)

Speakers

Carolyn Clancy MD Dr. Carolyn Clancy has been the Director of the Agency for Healthcare Research and Quality (AHRQ) since 2003. Prior to becoming AHRQ Director, she led the Agency's Center for Outcomes and Effectiveness Research. A general internist and health services researcher, she has published widely in the peer reviewed literature on a variety of topics, ranging from quality improvement to primary care. She is a member of the Institute of Medicine and a Master of the American College of Physicians.

W. Brian Gibler MD Dr. Gibler is Professor and Chairman of the Department of Emergency Medicine at the University of Cincinnati College of Medicine. He is currently co-chairman of the CRUSADE (Can Rapid Risk Stratification of Unstable Angina Patients Suppress ADverse Outcomes with Early Implementation of the ACC/AHA Guidelines) National Quality Improvement Initiative in which over 400 United States hospitals participate. This initiative constitutes an ambitious effort in bringing evidence pertaining to patients with Acute Coronary Syndromes into practice.

Ian D Graham PhD Dr. Graham is the Vice President of Knowledge Translation at the Canadian Institutes of Health Research. He is also an Associate Professor of Medicine, Epidemiology and Community Medicine; University of Ottawa and Senior Social Scientist and Associate Director, Clinical Epidemiology Program, Ottawa Health Research Institute. He has been an investigator in a number of KT-related ED studies and has published widely on the theoretical basis for KT.

Jeremy Grimshaw, MBChB, PhD, FRCGP Dr Jeremy Grimshaw is the Director of the Clinical Epidemiology Programme of the Ottawa Health Research Institute and Director of the Center for Best Practice, Institute of Population Health, University of Ottawa. He is also the Co-ordinating Editor of the Cochrane Effective Practice and Organisation of Care group and holds a Tier 1 Canadian Research Chair in Health Knowledge Transfer and Uptake.

Brian Holroyd MD Dr. Holroyd is Professor and Chair of Emergency Medicine at the University of Alberta and Chief of Emergency Medicine at the University of Alberta Hospital. He has published on innovations in evidence implementation through decision support technology and evidence-integrated electronic health records.

Terry Klassen MD Dr. Klassen is Professor and Chair in the Department of Pediatrics, University of Alberta and Clinical Leader at the Stollery Children's Hospital. In addition to an extensive profile in clinical research he is the leader on a multifaceted and multi-center team grant in KT. Constituent projects include cluster randomized trials to determine the efficacy of guideline implementation and pathways for croup and bronchiolitis as well as a decision rule for ordering cranial CTs in the setting of pediatric head trauma.

Ian Stiell MD MSc Dr. Stiell is a Professor and Chair of Emergency Medicine at the University of Ottawa. He is internationally recognized as a pioneer in the methodology of developing, validating and studying the impact of clinical decision rules. His current research pursuits include implementation trials that examine optimal strategies for uptake and implementation of these validated clinical instruments.

Jean R. Slutsky, P.A., M.S.P.H. Dr. Slutsky is Director of the AHRQ's Center for Outcomes and Evidence (COE) and the Director of the National Guideline Clearinghouse, an AHRQ initiative. The COE directs and supports research on the implementation and appropriate use of therapeutics and medical technologies, including preventing overuse, underuse and adverse effects. The COE also provides an array of tools and products to promote and facilitate evidence-based clinical practices and health care decisionmaking.

Conference Co-chairs

Barnet Eskin MD PhD Dr. Eskin is the chair of the Evidence-Based Medicine interest group within SAEM. He is a well noted educator on the topic of Evidence-Based Medicine and teaches several multi-day workshops across the country each year.

Eddy Lang MD Dr. Lang is an Assistant Professor at McGill University. He has presented internationally on the subject of KT and participated in a multi-speaker didactic session on the subject at the SAEM annual meeting in 2005.

Peter Wyer MD Dr. Wyer is an Associate Clinical Professor of Medicine at Columbia University. He edits the Evidence-Based Emergency Medicine section of the *Annals of Emergency Medicine* which features clinician-friendly evidence summaries designed for bedside application. He has written extensively on the development and use of evidence-based resources.

PROPOSED AGENDA

Plenaries

- 8-8:15 am** Welcome, Opening Remarks • *Michelle Biros*
- 8:15-9 am** Overview of the Research Practice Gap and Defining Knowledge Translation in the Emergency Medicine Context • *Eddy Lang*
- 9-9:30 am** Consensus Process Principles • *Barnet Eskin*
- 9:30-10 am** Theme leader presentations

Concurrent Breakout Presentations I

- 10:30-11:30 am** **Guideline Implementation Research** (Strategies for improving guideline-directed care in the ED setting and how to study their efficacy) • *Brian Gibler*
- Decision Support Technology** (Cutting edge innovations in technology-assisted evidence implementation: lessons from software development and informatics technology applications) • *Brian Holroyd*
- Research Methodology in KT** (Unique study design and methodological considerations in planning and conducting KT research) • *Jeremy Grimshaw*
- Theoretical Underpinnings of KT** (Conceptual frameworks for understanding the knowledge to action continuum) • *Ian Graham*

Lunchtime Keynote Address

- 11:30-1 pm** Opportunities and challenges in closing the research to practice gap: the AHRQ vision for advancing the study of evidence uptake in emergency medicine • *Carolyn Clancy*

Concurrent Breakout Presentations II

- 1-2:00 pm** **Developing Evidence Summaries for Emergency Medicine** (Review of ongoing and potentially novel initiatives to appraise and synthesize existing evidence into clinician-friendly and usable content designed for bedside application) • *Peter Wyer*
- Implementing Decision Rules in an Emergency Department** (Obstacles and facilitators to clinical decision rule uptake in an Emergency Department: studying causes and measuring impact of implementation strategies) • *Ian Stiell*
- Funding Opportunities in Knowledge Translation** (Review of the AHRQ's "Translating Research into Practice" initiatives, competing funding agencies and strategies for success) • *Jean Slutsky*
- A Model Program in Knowledge Translation Research** (Review of CIHR's multi-faceted and multi-centered program in Knowledge Translation Research in Pediatric Emergency Medicine) • *Terry Klassen*

Consensus-building Workshops

- 2:15-4:15 pm** Consensus process for establishing KT research agenda and key recommendations: Six facilitated groups of participants drawn from the discussion groups involved in the specific preparatory phase will join in this breakout session. Moderated by the designated chairs and aided by the two scribes these six groups will use brainstorming as well as validated consensus techniques to finalize a prepared, comprehensive and prioritized list of KT research opportunities and recommendations for their KT domain.
- 4:30-5:30 pm** Feedback reporting from workshop groups and large group consensus building exercise