



30<sup>th</sup> Annual Meeting

**COMPARATIVE  
EFFECTIVENESS  
RESEARCH:**

*Practice and Policy;  
Challenges and Opportunities*

**October 18 - 22, 2008**

**Hyatt Regency Penns Landing**

*Funded in Part by:*

- Agency for Healthcare Research and Quality
- Foundation for Informed Medical Decision Making
- National Science Foundation



**Philadelphia**



## ANNUAL MEETING OVERVIEW

### **COMPARATIVE EFFECTIVENESS RESEARCH: *Practice and Policy; Challenges and Opportunities***

This year's 30th SMDM Annual Meeting will provide a highly interactive forum for discussion of **novel research based on decision and behavior theory and analytical models applied to health related decisions**. Research presentations, keynote talks, special symposia and short courses will offer attendees the opportunity to explore diverse topics in medical decision making. Scattered throughout the meeting will be highlights commemorating major events and scientific contributions from SMDM's first 30 years.

SMDM's 30th Annual Meeting will be held October 18-22, 2008, with short courses held on October 19th and 22nd, at the Hyatt Regency Penn's Landing on the Philadelphia, PA waterfront. The meeting's theme is ***Comparative Effectiveness Research: Practice and Policy; Challenges and Opportunities***.

The Scientific Program will consist of more than **300 oral and poster presentations** of new, original health services research addressing a wide range of theory, analytical methodologies and health care applications that highlight the value of and methods for rigorously assessing, interpreting and integrating the incremental value – benefits, risks and costs – of alternative medical interventions, and effectively integrate and implement this knowledge into decision making, practice and policy interventions that improve patient access and outcomes.

Research at the annual meeting will span diverse clinical and methodological areas, including risk stratification, clinical guidelines, outcomes research, decision psychology, risk communication, quality of life, shared decision making, patient and provider education, pharmacoeconomics, health economics, technology assessment, medical informatics, medical ethics and health policy.

Consistent with the theme of this year's meeting, research related to **comparative effectiveness, risk communication, psychology and decision making and Bayesian and other non-experimental methods to assess clinical effectiveness** will be highlighted.

**Special concurrent sessions and a featured top ranked poster session** will be held the morning of Wednesday October 22.

To increase active engagement of and interaction among meeting participants, **clustered discussant abstract sessions** will be held in which each 10 minute research presentation will be followed by five minutes of questions, after which an expert will place the clinical and methodological contributions of the abstracts – individually and collectively – within the context of the field, followed by 15 additional minutes of open discussion by attendees. A similar approach will be applied to **clustered poster abstracts**.

The theme of **Comparative Effectiveness Research** will be integrated throughout the program, including the keynote talk, three breakout discussion sections, three symposia on multidisciplinary aspects of comparative effectiveness research, special discussant abstract sessions and several short courses and special interest sessions, the details of which are provided on the following pages.

We look forward to seeing you at this year's dynamic and exciting meeting!

– Sandy Schwartz, MD and Seema Sonnad PhD, Program Chairs

**October 18 - 22, 2008**

**Philadelphia**

## KEYNOTE ADDRESS AND BREAKOUT SESSIONS

The keynote address *Comparative Effectiveness Research: Challenges and Opportunities* will be given by J. Michael McGinnis, MD; Senior Scholar at the Institute of Medicine (IOM) and Executive Director of the IOM Roundtable on Evidence-Based Medicine. Dr. McGinnis will provide an overview of the findings of the IOM's Evidence Based Medicine Roundtable series of meetings, symposiums, workshops and papers. He then will identify key challenges and opportunities that must be addressed by the research community in order to implement and effectively incorporate comparative effectiveness research into policy and practice.

Following the keynote address, national leaders will chair concurrent breakout sessions that will expand and discuss *Methodological Challenges, Policy Challenges, and Key Principles for Conduct of Comparative Effectiveness Research* raised by the keynote speaker.

## MODERATED PANEL SYMPOSIA AND SPECIAL SESSIONS

### PRE-MEETING DINNER SYMPOSIUM

*Health Care Reform and Comparative Effectiveness Research: The New Political Agenda*

Saturday, October 18th, 6:30 PM – 9:00 PM  
\$45 per Registrant, Guest or Spouse

Senior health policy aides to U.S. Presidential candidates Barack Obama and John McCain will discuss their candidates' proposals for health care reform, including the role of comparative effectiveness and medical decision making research and support, followed by an interactive discussion by a panel of leading U.S. policymakers and group questions

### MEETING SYMPOSIA

*Comparative Effectiveness Symposium:*

*Risk Communication and Behavior: A Research Agenda*

This panel discussion will address key issues and research needs for effectively communicating comparative effectiveness research findings to clinicians, patients, payers and policymakers including *Physician-Patient Communication About Comparative Effectiveness, Message Design, and Comparative Effectiveness Information Processing and Decision Making*.

*Decision Making and Medical Education: What Needs to be Taught and Why Aren't We Doing It?*

This session will begin a dialogue with U.S. specialty national medical education organizations about educational needs to effectively interpret and apply information assessing the impact of medical and health interventions.

### *Comparative Effectiveness Symposium: Non-Experimental Methods*

This session will focus on the importance of novel non-experimental methods for evaluation of medical interventions, including *Evaluation of Diagnostic Tests and Decision Analysis, Registries and Large Data Bases, and Quantifying Uncertainty in Observational Research*.

### *Collaborative Abstract Sessions:*

The 2008 SMDM Annual Meeting will establish a new collaboration with the **Society for Judgment and Decision Making (SJDM)**, the leading research group for PhD cognitive and behavioral psychologists. A special featured abstract session, funded by the National Science Foundation, will bring to SMDM the cutting edge of decision psychology. We will build upon our collaborative effort with the **American Medical Informatics Association (AMIA)** hosting a special abstract session addressing development and evaluation of information technology, EMR-based clinician and patient decision aids.

## SHORT COURSES

The first day of the annual meeting will be devoted to five full-day and 14 half-day pre-meeting short courses (two-thirds of which are newly developed for the 2008 annual meeting) that cover a broad spectrum of research and career topics relevant for junior and senior investigators in decision making related health services research. This year we will offer **three short courses the afternoon of October 22, immediately following the conclusion of the scientific meeting**. Short courses are more fully described beginning on page 8.

## SOCIAL EVENT

### SMDM SOCIAL EVENT AND 30TH MEETING CELEBRATION

Philadelphia Academy of Natural Sciences

1900 Benjamin Franklin Parkway

Philadelphia PA 19103

Monday, October 20, 2008, 7:00 PM – 10:00 PM

\$45 per Registrant Guest or Spouse

Join us for a buffet dinner and celebration at the Philadelphia Academy of Natural Sciences. Open access to the Academy, restricted to SMDM meeting attendees and guests, provides many opportunities for informal social interaction and fun. On the way to the Social Event, weather permitting, enjoy a free 2.3 mile professionally guided walking tour of historic colonial Philadelphia, the neighborhood adjacent to the meeting hotel and between the meeting and the Museum. Shuttle transportation will also be provided.

The Academy of Natural Sciences, Philadelphia's Natural History Museum, is the oldest natural science research institution and museum in the Americas. Located on the Benjamin Franklin Parkway near Philadelphia's other major museums, it is acclaimed for its permanent exhibits, live butterflies, some of the world's best dinosaur specimens, dioramas of wildlife and their habitats in Asia, Africa and North America, and live animal program demonstrations.

# ANNUAL MEETING SCHEDULE

Check [www.smdm.org](http://www.smdm.org) regularly for updates to the schedule, for recognition of the many people who helped to plan the 2008 meeting and scientific program and for ideas about fun things to do in Philadelphia.

## SATURDAY, OCTOBER 18

- 9:00 AM – 4:00 PM SMDM Board Meeting
- 6:30 PM – 9:00 PM Dinner Symposium: “**Health Care Reform and Comparative Effectiveness Research: The New Political Agenda,**” featuring senior health policy advisors to presidential candidates Barack Obama and John McCain and a panel of leading U.S. policymakers.  
(pre-registration required)

- **Policy Challenges**  
Chair, Carolyn M. Clancy, MD, Director, Agency for Healthcare Research and Quality
- **Key Principles for Conduct of Comparative Effectiveness Research**  
Co-Chairs, Michael Drummond, PhD, Centre for Health Economics, University of York, United Kingdom and Uwe Siebert, MD, MPH, MSc, University for Health Sciences, Medical Informatics and Technology, Austria

## SUNDAY, OCTOBER 19

- 9:00 AM – 5:30 PM Short Courses  
(half day and full day courses offered)  
See course descriptions on pages 8-16 and at [www.smdm.org](http://www.smdm.org)
- 12:00 PM – 1:00 PM Trainee Box Lunch
- 5:30 PM – 6:30 PM New Member Reception
- 6:00 PM – 8:00 PM Welcome Reception and Poster Session I
- 8:00 PM – 10:00 PM Dinner and Discussion with Experts in Medical Decision Making- Dutch Treat  
(Sign-up at the Registration Desk)
- Committee, Policy and/or Interest Group Meetings  
(Details at [www.smdm.org](http://www.smdm.org))
- 8:00 PM – 12:00 AM Open Hospitality Suite

12:00 PM – 1:30 PM Lunch and Special Interest Sessions

- **How to Write a Scientific Publication** Chair, Sankey V. Williams, MD, MBA; Panelists: Harold Sox, MD, Editor, *Annals of Internal Medicine*; Mark Helfand, MD, Editor, *Medical Decision Making*; Rob Golub, MD, Associate Editor, *Journal of the American Medical Association*
- Meet the Expert Lunch Groups (Sign-up at the Registration Desk)
- Committee, Policy and/or Interest Group Meetings  
(Details at [www.smdm.org](http://www.smdm.org))

1:30 PM – 3:00 PM Concurrent Abstract Sessions

- Generating Utilities from Health Status Instruments – with discussants
- Health Service Research and Policy
- Preferences and Perceptions in Decision Making

## MONDAY, OCTOBER 20

- 7:00 AM – 8:00 AM Committee, Policy and/or Interest Group Meetings  
(Details at [www.smdm.org](http://www.smdm.org))
- 7:30 AM – 9:00 AM Poster Session II with Continental Breakfast
- 9:00 AM – 10:15 AM Welcome and Opening Plenary Abstract Session
- 10:15 AM – 10:45 AM Keynote Address: “**Comparative Effectiveness: Challenges and Opportunities**” J. Michael McGinnis, MD, Senior Scholar at the Institute of Medicine (IOM) and Executive Director of the IOM Roundtable on Evidence-Based Medicine
- 10:45 AM – 11:00 AM Break
- 11:00 AM – 12:00 PM Comparative Effectiveness Research Agenda Break-out Sessions:

3:00 PM – 3:15 PM Break

3:15 PM – 5:45 PM SMDM Leadership Awards and Business Meeting (Everyone is encouraged to attend. See page 6 for list of Awardees.)

5:45 PM – 7:00 PM Break

7:00 PM – 10:00 PM Social Event: Philadelphia Academy of Natural Sciences (Optional walking tours on the way to the event)  
(pre-registration required)

9:00 PM – 12:00 AM Open Hospitality Suite

## TUESDAY, OCTOBER 21

7:00 AM – 8:00 AM Committee, Policy and/or Interest Group Meetings  
(Details at [www.smdm.org](http://www.smdm.org))

8:00 AM – 9:30 AM Poster Session III with Continental Breakfast

9:30 AM – 10:00 AM Presidential Address, Gillian Sanders, PhD

<p>10:00 AM – 11:15 AM</p>	<p>Comparative Effectiveness Symposium: <b>“Risk Communication and Behavior: A Research Agenda”</b> Chair, <i>Dominick Frosch, PhD, UCLA</i></p> <ul style="list-style-type: none"> <li>• <b>Physician–Patient Communication About Comparative Effectiveness</b> <i>Richard L. Street Jr., PhD, Texas A&amp;M University, College Station, Texas</i></li> <li>• <b>Message Design</b> <i>Peter A. Ubel, MD, University of Michigan, Ann Arbor, Michigan</i></li> <li>• <b>Comparative Effectiveness Information Processing and Regulation</b> <i>Ellen M. Peters, PhD, Decision Research, Eugene, Oregon</i></li> </ul>	<ul style="list-style-type: none"> <li>• Decision Making by Modeling v. by Preferences</li> </ul>
<p>11:15 AM – 11:30 AM</p>	<p>Break</p>	<p>9:30 AM – 10:00 AM</p>
<p>11:30 AM – 1:00 PM</p>	<p><b>Concurrent Abstract Sessions</b></p> <ul style="list-style-type: none"> <li>• Joint Session with Society for Judgment &amp; Decision Making With Discussant</li> <li>• CEA Applications</li> <li>• Methodological Advances</li> </ul>	<p>SMDM Early Career Awards</p> <ul style="list-style-type: none"> <li>• Outstanding Paper by a Young Investigator <i>Jennifer L. Bailit, MD, MPH</i></li> <li>• Lee B. Lusted Student Prize Awards (chosen during meeting)</li> </ul>
<p>1:00 PM – 2:30 PM</p>	<p>Lunch and Special Interest Sessions</p> <ul style="list-style-type: none"> <li>• <b>Medical Education Symposium: “Decision Making and Medical Education: What needs to be taught and why aren't we doing it?”</b></li> <li>• MDM Editorial Board meeting</li> <li>• Institutional Member Brown Bag Lunch</li> <li>• Committee, Policy and/or Interest Group Meetings <i>(Details at <a href="http://www.smdm.org">www.smdm.org</a>)</i></li> </ul>	<p>10:00 AM – 11:30 AM</p> <p>Comparative Effectiveness Symposium: <b>“Non-Experimental Methods”</b> Chair <i>Alvin Mushlin, MD, ScMChair Department of Public Health, Weill Cornell Medical College</i></p> <ul style="list-style-type: none"> <li>• <b>Evaluation of diagnostic tests and decision analysis</b> <i>Maria G.M (Myriam) Hunink, MD, PhD Erasmus Medical Center, Rotterdam and Harvard School of Public Health, Boston</i></li> <li>• <b>Registries and Large Data Bases</b> <i>Speaker invited; Confirmation Pending</i></li> <li>• <b>Quantifying Uncertainty in Observational Research</b> <i>Steven Goodman, MD, MHS, PhD Johns Hopkins Bloomberg School of Public Health</i></li> </ul>
<p>2:30 PM – 4:00 PM</p>	<p><b>Concurrent Abstract Sessions</b></p> <ul style="list-style-type: none"> <li>• Children's Health</li> <li>• Decision Making Quality and Satisfaction - with discussants</li> <li>• Use of Screening Tests - with discussants</li> </ul>	<p>11:30 AM – 1:00 PM</p> <p>Featured Research Poster Session V (lunch provided)</p>
<p>4:00 PM – 4:15 PM</p>	<p>Break</p>	<p>1:00 PM</p> <p>ADJOURN/Airport Transportation</p>
<p>4:15 PM – 5:45 PM</p>	<p>Poster Session IV</p>	<p>1:30 PM – 5:00 PM</p> <p>Post-Meeting Short Courses</p> <p>#1: Issues in Comparative Effectiveness Research: Seeking Efficiency Exploring Bayesian Adaptive Trial Methods</p> <p>#2: Economic Assessment in Clinical Trials</p> <p>#3: How to Successfully Obtain a Career Development or RO-1 Award</p> <p>(See course descriptions on pages 15-16 and at <a href="http://www.smdm.org">www.smdm.org</a>)</p>
<p>6:30 PM – 9:00 PM</p>	<p>Dinner and Discussion with Experts in Medical Decision Making- Dutch Treat (Sign-up at the Registration Desk)</p>	
<p>9:00 PM – 12:00 AM</p>	<p>Open Hospitality Suite</p>	

**WEDNESDAY, OCTOBER 22**

<p>7:00 AM – 8:00 AM</p>	<p>SMDM Board Meeting</p>
<p>8:00 AM – 9:30 AM</p>	<p><b>Concurrent Abstract Sessions</b></p> <ul style="list-style-type: none"> <li>• Comparative Effectiveness -with discussants</li> </ul>

**ACCREDITATION/CME CREDIT**

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the University of Alabama School of Medicine and The Society of Medical Decision Making. The University of Alabama School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The University of Alabama School of Medicine designates this educational activity for a maximum of 23.25 *AMA PRA Category 1 credit(s)*<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity. The University of Alabama School of Medicine is an equal opportunity/affirmative action institution.

# LEADERSHIP AND EARLY CAREER AWARDS

SMDM would like to congratulate the following 2008 Award Winners:

## CAREER ACHIEVEMENT AWARD\*

**Barbara J. McNeil, MD, PhD**

Ridley Watts Professor and Head,  
Department of Healthcare Policy, Harvard Medical School  
Professor of Radiology, Brigham and Women's Hospital

## EUGENE SAENGER DISTINGUISHED SERVICE AWARD\*

**Michael Kattan, PhD, MBA**

Department of Quantitative Health Sciences, Cleveland Clinic

## JOHN M. EISENBERG PRACTICAL APPLICATION OF MEDICAL DECISION MAKING RESEARCH AWARD\*

**Foundation for Informed Decision Making**

## OUTSTANDING PAPER BY A YOUNG INVESTIGATOR AWARD\*\*

**Jennifer L. Bailit**, for Bailit JL, Votruba ME.

*Medical cost savings associated with 17 alpha hydroxyprogesterone caproate.* Am J Obstet Gynecol 2007;196:219.e1-219.e7.

## LEE B. LUSTED STUDENT PRIZE AWARD\*\*

Recipients will be chosen during the conference.

### About the John M. Eisenberg Award Fund

An award is presented annually to an SMDM member who has "demonstrated sustained leadership in translating medical decision making research into practice, and who has taken exceptional steps to communicate the principles and/or substantive findings of medical decision making research to policy makers, to clinical decision makers, and to the general public."

### About the Lee B. Lusted Student Prize Fund

Each year the Lee B. Lusted Prize Student Fund recognizes students' original research in medical decision making. The prize provides a cash award to a winner and three runners up in order to attract the best and brightest young minds to SMDM.

\* Awards Presentation, Monday, October 20, 3:15 PM

\*\* Awards Presentation, Wednesday, October 22, 9:30 AM

# SUPPORT SMDM AWARDS

The Society for Medical Decision Making relies on contributions from its members to support the John M. Eisenberg Practical Application of Medical Decision Making Research Award and the Lee B. Lusted Student Prize Award. We are asking every member to consider making a tax deductible contribution of \$20 to one or both of these award programs along with their registration. If every conference attendee contributes a small amount, we will ensure that the John M. Eisenberg Practical Application of Medical Decision Making Research Award and the Lee B. Lusted Student Prize Award continue to support and strengthen the field of medical decision making!

SMDM is a 501(c)3 not-for-profit organization; Federal Tax ID #31-0992960.

# INTEREST GROUPS

Interest Groups will meet at various times throughout the meeting. Visit [http://www.smdm.org/interest\\_groups.shtml](http://www.smdm.org/interest_groups.shtml) for more information about each Interest Group and how to sign up to attend an Interest Group Meeting.

*Clinical Research Integrity, Coordinator, Roy Poses*

*Decision Psychology, Coordinator, Julie Goldberg*

*Disaster Simulation Modeling, Coordinator, Nathaniel Hubert*

*Ethics Research, Coordinator, Kevin Weinfurt*

*Infectious Disease Modeling, Coordinator, Beate Sander*

*Medical Informatics, Coordinator, Holly Jimison*

*Pharmacoeconomics, Coordinator, Kevin Frick*

*Shared Decision Making, Coordinators, Jim Dolan and Deb Feldman-Stewart*

*Teaching MDM, Coordinator, Alan Schwartz*

# MENTORING AND CAREER DEVELOPMENT

*This year's meeting will provide a variety of exciting opportunities for students, pre- and post-doctoral fellows, junior faculty and others new to the discipline and junior investigators to interact with established investigators, and obtain **research advice and consultation** to expand networks of colleagues through discussion of presented research.*

## ONE-TO-ONE MENTORING

Attendees will have multiple opportunities to meet with and obtain research and career advice from senior SMDM members during the meeting, including pre-arranged one-to-one and small group mentoring sessions to discuss research interests and obtain career guidance.

## SIGN-UP FOR MENTORING!

Check the SMDM website at [www.smdm.org](http://www.smdm.org) for information about registration and to view a list of the SMDM mentors who have volunteered for the One-to-One sessions.

## MEANDERING MEETING MENTORS

For this informal mentoring option, a group of junior and established members of the Society will serve as "Meandering Meeting Mentors". They will be available throughout the conference to provide informal mentoring, facilitate networking and provide additional friendly faces especially for new meeting attendees. Meandering Mentors will have special meeting badges. No signup is required so feel free to approach them. We look forward to your participation in these programs.

## INFORMAL LUNCH AND DINNER GATHERINGS

A special trainee lunch on Sunday, between morning and afternoon short courses, and a new member reception immediately following Sunday's short courses, will provide opportunities for students, trainees, and new members to meet each other and to meet SMDM leaders. New this year, attendees can sign up at the meeting for Meet-the-Expert tables at lunch, as well as Dinner and Discussion with Experts in Medical Decision Making Sunday and Tuesday evenings at a wide range of nearby restaurants. Every evening, an open hospitality suite will facilitate networking and informal discussions, offer tips for navigating the Annual Meeting and exploring ways to become more actively involved in the Society. Space also will be available throughout the meeting for attendees to get together for mentoring and exploration of shared interests and potential collaborations. We look forward to your participation in these programs.

For more information about any of the mentoring and career development opportunities please contact Natasha Stout, Ph.D. (617.509.9914 or [natasha\\_stout@hms.harvard.edu](mailto:natasha_stout@hms.harvard.edu)), Elisabeth Fenwick, Ph.D. ([E.Fenwick@clinmed.gla.ac.uk](mailto:E.Fenwick@clinmed.gla.ac.uk)) or Yu-Ning Wong, MD ([Y\\_Wong@fccc.edu](mailto:Y_Wong@fccc.edu)). We welcome questions and suggestions.

## CAREER DEVELOPMENT OPPORTUNITIES

### *How to Write a Scientific Publication*

At a special brown bag luncheon Monday October 20, the editors of *JAMA*, *Annals of Internal Medicine* and *Medical Decision Making* will provide advice on journal submission, review process and criteria, and preparing research findings for peer-review and publication.

### *How to Plan and Write a Career Development Award Application*

A special short course led by senior SMDM investigators and mentors and senior AHRQ and NIH staff will provide advice and guidance on development of career development award applications, including review and critiques of successful and unsuccessful CDA applications.

### *CV and Job Announcement Books*

This year SMDM will be providing two career development services: a CV book and a Job Announcement book. For those on the job market or those looking to hire, a CV/Job book will be available at the registration desk. Interested parties are encouraged to schedule informational and formal interview sessions during the conference.

### **CV SUBMISSIONS:**

Please submit the following information:

- Your name
- Whether you are 1) a student/trainee; 2) currently employed; 3) other
- A brief statement describing the position sought (PDF or Word document)
- Your CV (PDF or Word document)

### **JOB ANNOUNCEMENT SUBMISSIONS:**

Please submit the following information:

- Your institution and contact information
- Is the position you advertise 1) full time; 2) part time; 3) intern/traineeship
- The job announcement (one-sided, 8 1/2 x 11 page; PDF or Word document)

*All submissions must be emailed to [smdm-office@lists.smdm.org](mailto:smdm-office@lists.smdm.org) by September 29, 2008.  
All attachments should be PDF or Word document.*

# SHORT COURSE DESCRIPTIONS

## SC #1 COST-EFFECTIVENESS ANALYSIS FOR DECISION MAKING: NICE APPRAISAL METHODS

**Sunday, October 19, 9:00 AM – 5:30 PM**  
**Level: Intermediate**

**Faculty:** Jonathan Michaels MB Chir, MChir, MA, University of Sheffield; Vice Chair NICE Appraisals Committee; Mark Sculpher, PhD, Centre for Health Economics, University of York; Ken Stein, MB Chir, MSc, Peninsula Medical School; Vice Chair NICE Appraisals Committee; Stephen Palmer, MSc, Centre for Health Economics, University of York; Louise Longworth, PhD, Senior Research Fellow, School of Health and Related Research, University of Sheffield

Faculty are clinician, modeler and health economist members of the NICE Appraisal Committee, the independent Assessment Groups and also the NICE Decision Support Unit, who participated in development and/or provided advice for the Technology Appraisal Reports and updated methods guide.

**Background:** This course focuses on issues in technology appraisal addressed in the recent technical guidance review issued by the UK National Institute for Health and Clinical Excellence (NICE). NICE conducts rigorous appraisal of new technologies proposed for introduction into the UK National Health Service (NHS). The new (2008) version of the technical guidance standardizing methods for conducting appraisals was developed by a broad spectrum of working parties and specialist workshops that examined issues characterized by recent developments or controversy.

**Objectives and Course Description:** This course will provide participants with an understanding of the challenges and techniques of rigorous technology appraisal, focusing on rapidly developing or controversial areas and discussion of the reasoning and rationale underlying new components of the methods guidance, including:

- Evidence synthesis, in direct or mixed treatment comparisons.
- Heterogeneity and the practical and ethical considerations of identifying sub-groups.
- Cost measurement, perspective and value based pricing
- Outcomes, particularly methods for determining utility based upon generic or disease specific measures of health related quality of life.
- Decision making uncertainty, including characterization and methods for handling and use of uncertainty in decision making.
- Cost-effectiveness thresholds, including how much to pay for each additional QALY.

**Format, Requirements, Target Audience:** Interactive presentations and group discussions of pre-meeting readings abstracted from working papers and the revised NICE methods guidance review.

## SC #2 REGRESSION MODELING STRATEGIES

**Sunday, October 19, 9:00 AM – 5:30 PM**  
**Level: Advanced**

**Faculty:** Frank E Harrell Jr., PhD, Dept. of Biostatistics, Vanderbilt University

Background: Regression models frequently are used to: (1) develop diagnostic, prognostic and health resource utilization models in clinical, health services, outcomes, pharmacoeconomic, and epidemiologic research; (2) adjust for patient heterogeneity in randomized clinical trials; and (3) develop tests that are more powerful and valid than unadjusted comparisons. Models must be flexible enough to fit nonlinear and non-additive relationships, but unless sample size is enormous, common problems include data mining or dredging that result in over-fitting and predictive model failure and failure to validate new subjects. The methods covered in this course will apply to almost any regression model, including ordinary least squares, logistic regression models, and survival models. The course will be of interest to statisticians and persons from other quantitative disciplines interested in multivariable regression analysis of univariate responses and in developing, validating and graphically describing multivariable predictive models.

### Objectives:

- Become familiar with modern methods for fitting multivariable regression models.
- Be able to fit multivariable models accurately, in a way the sample size will allow without over-fitting
  - Uncovering complex non-linear or non-additive relationships
  - Testing for and quantifying the association between one or more predictors and response, with possible adjustment for potential confounding factors
- Validate models for predictive accuracy and to detect over-fitting.
- Interpret fitted models using both parameter estimates and graphics.
- Critique the literature to detect models likely to be unreliable.

**Course Description:** The first part of the course will examine elements of multivariable predictive modeling for a single response variable, including using regression splines to relax linearity assumptions; perils of variable selection and overfitting; where to spend degrees of freedom; shrinkage; imputation of missing data; data reduction; and interaction surfaces. This will be followed by description of a default overall modeling strategy and methods for graphically understanding models (e.g., using nomograms) and using re-sampling to estimate a model's likely performance on new data. A case study in binary logistic regression will be presented.

**Format, Requirements, Target Audience:** Interactive didactic lecture, discussion of actual problems and clinical research examples and a case study presentation. This course is oriented toward statisticians and persons from other quantitative disciplines who are interested in multivariable regression analysis of univariate responses, in developing, validating, and graphically describing multivariable predictive models.

### SC #3 WHY AREN'T PHYSICIANS' PRACTICES EVIDENCE-BASED? COGNITIVE AND ENVIRONMENTAL CHALLENGES TO EVIDENCE-BASED PRACTICE

**Sunday, October 19, 9:00 AM – 5:30 PM**

**Level: Beginner**

**Faculty:** *Wally R. Smith, MD, Virginia Commonwealth University; Roy M. Poses, MD, Brown University*

**Background:** Evidence-based medicine (EBM) integrates the best scientific evidence with clinical expertise and patient values. However, physicians often fail to practice in accord with EBM principles and many attempts to change physician behavior to make it more evidence based have failed.

**Objectives:**

- Understand principles and impact of human cognitive behavior used to cope with cognitive limitations at each stage of the clinical decision making process.
- Understand organizational challenges to EBM practice.
- Understand environmental and social/cultural threats to increasing EBM practice.
- Understand promising approaches for facilitating physician EBM practice.

**Course Description:** This course will examine reasons physician practice at times fails to adhere with EBM principles and explore promising interventions to improve EBM-based practice. The impact of human thinking strategies designed to cope with inherent cognitive limitations that may lead to judgments and decisions that fail to conform with normative ideals (with emphasis on judgment and decision biases and heuristics) will be discussed for each stage of the evidence-based decision making process: identifying options and their outcomes; assessing probability of outcomes; assessing value of options; and combining information to make a decision.

The course will examine the impact of organizations and culture on medical decision making and practice, which increasingly is provided from within large organizations whose leadership, structures, processes, incentives and environments (e.g., time and economic pressure; conflicts-of-interest) may undermine EBM-based care. The growing presence and impact of stealth marketing, special politically correct pleadings, suppression and manipulation of research, perverse bureaucratic and financial incentives, and intimidation and coercion that may challenge and undermine elements of an EBM approach will be identified, described and discussed.

The course will conclude with review and exploration of promising approaches based on findings in the cognitive psychology to address physicians' human cognitive limitations that may help physicians practice more in accord with EBM, as well as general approaches to defend evidence-based decision practice from health care environment threats.

**Format and Requirements:** Didactic review of the cognitive psychology and organizational theory literature and interactive critical review and discussion of case studies and interventions to improve EBM.

### SC #4 META-ANALYSIS: STATISTICAL METHODS FOR COMBINING RESULTS OF INDEPENDENT STUDIES

**Sunday, October 19, 9:00 AM – 5:30 PM**

**Level: Beginner**

**Faculty:** *Ingram Olkin, PhD, Stanford University; Thomas Trikalines, MD, PhD, Tufts Medical Center*

**Background:** Meta-analysis is a formal, systematic method to synthesize the results of independent studies, considering and integrating the combined weight of evidence to determine the effect of an intervention or the strength of an intervention. Meta-analysis is being used increasingly in the medical and health sciences to augment traditional methods of narrative research to inform and guide practice and policy, in areas as disparate as estimating the effectiveness of mammography in detection of breast cancer and the consistency of gene-disease association studies. A Google Scholar search on meta-analysis identified 229,000 hits in medicine, 84,000 in health policy, and 27,000 in genetics. The information explosion in almost every field coupled with the movement towards evidence-based decision making and cost-effective analysis has catalyzed development of more rigorous procedures to synthesize the results of independent studies.

**Objectives:**

- Understand the potential value of and theory underlying the conduct of meta-analysis of independent studies.
- Understand conditions under which meta-analyses can be performed and common factors that limit or confound the meta-analysis conduct and interpretation.
- Learn and understand a range of statistical methods for analyzing and interpreting meta-analysis studies.

**Course Description:** This workshop will provide an historical perspective of meta-analysis, and discuss methodological issues such as various types of bias and heterogeneity on the conduct and interpretation of meta-analyses. There will be extensive discussion of the appropriateness and use of statistical methods for combining data across studies, including nonparametric and parametric models; effect sizes for proportions, fixed versus random effects, regression and ANOVA models; multivariate models for proportions and standardized mean differences, treatment of zero cells, models with missing data, and special methods and issues in genetic applications.

**Format and Requirements:** Didactic lectures and interactive discussion of theory, potential confounders and limitations, and statistical methods, using case study examples from published medical literature.

## SC #5 INTRODUCTION TO MEDICAL DECISION ANALYSIS

**Sunday, October 19, 9:00 AM – 5:30 PM**

**Faculty:** *David Hickam, MD, Portland VAMC, Mark Helfand, MD, MPH, Portland VAMC*

**Course Description:** This is a hands-on course that uses in class exercises to teach the building blocks of decision analysis. These blocks are Bayes' rule, interpreting the results of diagnostic tests, formulating a medical decision problem, measuring utilities and risk attitude, calculating expected utility, and performing sensitivity analysis, as well as (at an elementary level) cost-effectiveness analysis.

**Format and Target Audience:** This course is intended for individuals new to decision analysis who wish to learn the basic principles of formulating and analyzing clinical decisions. Participants are invited to send in their own decision problems, a selection of which will be used in the second part of the course, that aims to interactively demonstrate the strengths and limitations of clinical decision analysis.

## SC #6 BUILDING BAYESIAN DECISION SUPPORT SYSTEMS

**Sunday, October 19, 9:00 AM – 12:30 PM**

**Level: Beginner**

**Faculty:** *Peter Haug, MD, University of Utah; Dominik Aronsky MD, PhD, Vanderbilt University*

**Background:** As medical information systems become more common and more comprehensive, opportunities to supply system users with computerized medical decision support and the availability of tools for developing decision support applications has increased. The existence of increasingly comprehensive electronic medical records (EMR) creates an opportunity for constructing decision support systems whose knowledge is derived from clinical data. Bayesian systems (in all their forms) in effect "learn" the knowledge that drives their decision-making behavior and can be trained using clinical data from an EMR. As probabilistic systems, they possess characteristics that make them unusually valuable in the realm of medical decision support where varying degrees of uncertainty is the norm.

### Objectives:

- Introduce the underlying concepts and terminology used in Bayesian systems.
- Provide insight into the characteristics of three different Bayesian modeling paradigms.
- Introduce the Bayesian Network formalism.
- Describe clinical research using Bayesian Networks.
- Introduce extensions to the Bayesian Network paradigm such as Influence Diagrams.

**Course Description:** This interactive tutorial will offer an overview of Bayesian systems and tools in medicine. Participants will learn basic concepts and characteristics of Bayesian systems and be introduced to several common modeling approaches. A series of examples of Bayesian modeling applied to clinical decision making will be presented and discussed, including review of the unique contributions

and insights provided by the Bayesian approach. Participants then will be provided a hands-on opportunity to develop and test a Bayesian Network, along with introduction to common Bayesian software. Extensions to the classic Bayesian Network paradigm (e.g., 'Influence Diagrams') will be introduced and discussed.

**Format and Requirements:** Didactic lectures, interactive discussion using case study examples from published medical literature and hands-on experience with simple Bayesian Network models and software.

## SC #7 HOW TO DISCUSS EVIDENCE-BASED DIAGNOSIS WITH EXPERIENCED CLINICIANS (AND AVOID GIVING EBM A BAD NAME)

**Sunday, October 19, 9:00 AM – 12:30 PM**

**Level: Intermediate**

**Faculty:** *Michael A. Kohn, MD, University of California San Francisco; Thomas B. Newman, MD, MPH, University of California San Francisco*

**Background:** "Evidence-based" recommendations about diagnostic testing often are based on simplification of the diagnostic problem and reduction of the information content of diagnostic tests. This can undermine the face validity of evidence-based recommendations among experienced clinicians who recognize the complexity of clinical decision making. One common cause of this problem is miscalculation or misapplication of likelihood ratios, often by making a continuous test dichotomous or failing to consider the full range of possible test results. Another cause is the assumption that only one diagnosis is under consideration, when multiple possible diagnoses can cause a patient's illness.

### Objectives:

- Understand principles of diagnostic test assessment, including estimation of information content, the calculation of interval likelihood ratios and the relationship between these likelihood ratios and the ROC curve
- Understand and identify common flaws, biases and limitations in studies of diagnostic tests
- Improve skills in diagnostic test review and assessment of evidence-based reviews
- Learn how to minimize or resolve limitations and best present this information to experienced clinicians.

**Course Description:** The workshop will present and discuss a series of "evidence-based" recommendations including the limitations described above. Examples will be drawn from JAMA's "Rational Clinical Examination" series, New England Journal of Medicine articles, and other prominent peer-reviewed medical journals. Participants will read and discuss additional examples of flawed recommendations, identifying the flaws, and considering ways to resolve or minimize the problems with the goal of presenting these recommendations to experienced clinicians without alienating them to EBM in general.

**Format and Requirements:** Didactic sessions and interactive large and small group break out discussion sessions.

## SC #8 MICRO-SIMULATION MODELING FOR TECHNOLOGY ASSESSMENT/DECISION SUPPORT

**Sunday, October 19, 9:00 AM – 12:30 PM**

**Level: Beginner/Intermediate**

**Faculty:** *Rob Boer, PhD, Pfizer, Inc.*

**Background:** Micro-simulation, a type of modeling that explicitly simulates individual life histories, is being used increasingly in decision support. This course will discuss applications of micro-simulation in modeling disease, drawing examples from infectious diseases and particularly cancer surveillance and control.

**Objectives:**

- Explain principles of micro-simulation and related issues.
- Discuss advantages and disadvantages of micro-simulation compared to other types of modeling used in decision support.
- Understand when and when not to apply micro-simulation.
- Discuss examples of application of micro-simulation to support real world decision making.

**Course Description:** This course will begin with an overview of the challenges of critically assessing medical technology and practice, followed by discussion of the principles of various alternative types of modeling for decision support, with emphasis on the advantages and disadvantages of micro-simulation compared with other quantitative modeling approaches. This introductory section will conclude with discussion of conditions under which micro-simulation is likely to be useful and appropriate. The course then will review key issues related to simulation modeling for decision support, including stochastic model results, continuous time and correlations between probabilities of events and between sojourn times in disease states. The workshop will conclude with review and discussion of recent examples of application of micro-simulation from the peer-reviewed medical literature to support real world decision making.

**Format, Requirements, Target Audience:** Didactic lecture, group discussions and interactive case review. Participants need to have some basic understanding of modeling for decision support.

## SC #9 USING THE NET BENEFIT REGRESSION FRAMEWORK TO ANALYZE PERSON-LEVEL COST-EFFECTIVENESS DATA

**Sunday, October 19, 9:00 AM – 12:30 PM**

**Level: Beginner**

**Faculty:** *Jeffrey S. Hoch, PhD, University of Toronto; Ahmed Bayoumi, MD, MSc, University of Toronto*

**Background:** Analyzing person-level data (e.g., from a clinical trial) is a popular way to assess evidence of cost-effectiveness. Net benefit regression simplifies this process and is included in textbooks on economic evaluation (e.g., the 3rd edition of Drummond et al.'s "blue" book).

**Objectives:**

- Understand economic meaning of regression and interpretation of regression results.

- Understand common techniques to characterize uncertainty.
- Learn how to interpret common methods to graphically represent regression results.
- Understand common data and methodological challenges to regression techniques.
- Understand when net benefit regression is likely to be helpful and how to interpret and apply results for clinical and policy decision making.

**Course Description:** This short course will take learners step-by-step through the process of using net benefit regression to analyze person-level cost-effectiveness data. The course will begin with an overview of the economic meaning of the regression results and introduce techniques to characterize uncertainty, perform sensitivity analysis and present graphical representation of results (cost-effectiveness plane; cost-effectiveness acceptability curve; graphing incremental net benefit as a function of willingness to pay). Discussion and case examples will be used to illustrate how net benefit regression facilitates using regression methods to handle challenges (e.g., skewed costs, observational data, patient heterogeneity, etc.). Participants may wish to revisit these advanced topics in greater depth at a later date.

**Format, Requirements, Target Audience:** Although this course will be taught at a Beginner level, learners will be expected to know how to "run a regression". Brief "theory bursts" will be followed by "hands on" exercises to reinforce how to do and interpret net benefit regression. Participants will be provided data and examples from published studies and with computer programs to facilitate the demonstrated analysis. Supported software will include Excel, SAS and Stata.

## SC #10 COMPUTER TUTORS FOR DIAGNOSIS: PROMOTION OF PATTERN RECOGNITION AND RATIONAL QUERIES

**Sunday, October 19, 9:00 AM – 12:30 PM**

**Level: Beginner**

**Faculty:** *Robert M. Hamm, PhD, University of Oklahoma; Frank J. Papa, DO, PhD, Texas College of Osteopathic Medicine; Jef Van den Ende MD, PhD Institute of Tropical Medicine, Antwerp Belgium*

**Background:** Teaching diagnostic skill is a central task of medical education. Computer programs that provide experience with artificial cases offer an effective, inexpensive and harmless way to learn to diagnose. In this course, the authors of two computerized diagnosis tutors will demonstrate their programs (KBIT and Kabisa) and explain the theories of diagnosis and psychology upon which they are based.

KBIT supports user acquisition of diagnostic categories by demonstrating prototypical symptoms of the set of diseases pertinent to each presentation and provides practice diagnosing cases. During a lesson, cases of decreasing typicality are encountered, with feedback customized to the individual learner's errors. Kabisa improves diagnostic skill by helping the user recognize disease patterns in sets of presenting symptoms, rank these diseases in likelihood, and decide when to stop investigating and start treatment. KBIT aims to train categorization or pattern recognition skill, treating relevant diagnoses as having identical

prior probabilities. Kabisa addresses both pattern recognition and Bayesian use of the diagnostic information and considers disease prevalence in initial hypothesis generation, and computation of specificities, utilities, costs of diagnostic errors and false treatments as a probability threshold.

**Objectives:**

- Understand underlying principles of diagnostic logic;
- Understand psychological assumptions and principles of student interaction and responses to corrective feedback;
- Obtain 'hands on' experience with two diagnostic decision making computer tutors; and
- Review evidence of effectiveness and limitations of current diagnostic tutoring programs

**Course Description:** The course will include brief demonstrations of each computer tutor, including demonstrating how each handles a particular case presentation. The authors will describe the underlying diagnostic logic, principles of student interaction and corrective feedback provided, weaknesses and pitfalls, and the extent of the current and past use in medical education for each program. Faculty will examine underlying psychological assumptions and review research assessing the validity of these assumptions and the educational effectiveness of the programs, and summarize ongoing development efforts.

**Format, Requirements, Target Audience:** Clinicians, educators and psychologists will find the course of interest. Attendees are encouraged to bring laptops and to download Kabisa IV from [www.kabisa.be](http://www.kabisa.be) and to explore the KBIT demo at [www.acdet.com](http://www.acdet.com), prior to the session. Copies of Kabisa will be distributed at the session.

**SC #11 USING THE TOYOTA PRODUCTION SYSTEM TO CHANGE HEALTHCARE AND IMPROVE OUTCOMES**

**Sunday, October 19, 9:00 AM – 12:30 PM**  
**Level: Beginner**

**Faculty:** *Barbara Jennion MEd, Pittsburgh Regional Health Initiative; Fran Sheedy Bost, MEd, Pittsburgh Regional Health Initiative*

**Background:** The medical care system is complex and plagued by avoidable errors and unacceptable inefficiencies. Systems approaches are required to improving medical care quality and access while constraining costs. Principles and tools from manufacturing production systems offer significant value for enhancing the quality and efficiency of health care.

**Objectives:**

- Introduce the concepts of Perfecting Patient Care<sup>SM</sup> principles and tools (based on the Toyota Production System).
- Provide introduction to system application to healthcare.
- Practice using the principles and tools to solve problems.
- Critically review the strengths, limitations, barriers and facilitators to system implementation in various health care settings.

**Course Description:** Using videos and subsequent discussion, participants will be introduced to Perfecting Patient Care<sup>SM</sup> providing a new way of identifying and approaching problems and learning the core principles how the '4 Rules of Work Design' problem solving can be applied to work, facilitate efficiency and

provide better outcomes for patients and principles for improving work and building a learning organization. Participants will review and discuss the 4 categories and 14 principles used by Jeffery Liker in his book, *The Toyota Way*, and participate in a hands-on simulation (ALCOA Lego Simulation) to learn TPS tools and principles, the tools of process improvement and how to begin applying them to healthcare.

**Format and Requirements:** The course will use a diverse set of interactive learning formats, including simulation (learn by doing), didactic lectures, videos, group work and problem solving, and discussion of real world examples and applications.

**SC #12 MARKOV DECISION PROCESS – ANALYTIC METHODS FOR SEQUENTIAL DECISIONS**

**Sunday, October 19, 9:00 AM – 12:30 PM**  
**Level: Intermediate**

**Faculty:** *Andrew Schaefer, PhD, University of Pittsburgh; Mark Roberts, MD, MPP University of Pittsburgh; Lisa Maillart, PhD, University of Pittsburgh*

**Background:** Markov decision processes (MDPs) are mathematical techniques used to solve sequential decisions under uncertainty. While their use is quite common in operations research, there have been relatively few successful medical applications, even though many medical problems appear well-suited to this technique (e.g., intervention timing problems are essentially sequential decisions).

**Objectives:**

- Understand the structure of Markov decision processes and its advantages and disadvantages.
- Recognize characteristics of problems amenable to Markov decision processes.
- Understand core MDP components.
- Be familiar with techniques for solving MDPs.

**Course Description:** The course will provide a general description of Markov decision processes (MDPs), how they differ from other common modeling techniques (e.g., simulation and Markov models) and MDPs relative advantages and disadvantages. For example, a MDP is a perfect structure to model a problem that requires embedded decision nodes that typically are 'forbidden' in standard analysis structures. Types of MDP models will be described, along with discussion of the conditions and problems for which MDPs might (and might not) be appropriate and preferred. Emphasis will be devoted to MDP's five core components and the use of MDPs to model sequential decisions under uncertainty. Techniques for solving MDPs, as well as potential difficulties in implementation, will be discussed. Application of and insight into these principles will be reinforced using case studies of previous successful applications of MDPs to medical decision making.

**Format, Requirements and Target Audience:** Participants should have a basic understanding of standard Markov decision models. This course, which will use a combination of didactic lecture, class discussion and examples and case studies, will be useful to those applying quantitative modeling techniques to medical problems, including decision analysis, Markov simulation and discrete event simulation.

## SC #13 BECOMING A STRONG CLINICIAN-INVESTIGATOR MENTOR

**Sunday, October 19, 2:00 PM – 5:30 PM**

**Level: Beginner**

**Faculty:** *Joel Tsevat, MD, MPH, University of Cincinnati School of Medicine; Marshall H. Chin, MD, University of Chicago*

**Background:** Mentoring trainees and junior colleagues is a common, difficult, demanding and time consuming faculty responsibility. Yet most faculty do not receive any formal training in mentoring tasks.

**Objectives:**

- Understand the basic elements of mentoring and mentoring relationships.
- Specify mentor and mentee expectations and needs.
- Understand the pros and cons of co-mentoring and long distance mentoring.
- Discuss problematic mentor-mentee relationships.

**Course Description:** This workshop will examine: mentorship basics; benefits (and hazards) of being mentored; expectations of mentors; characteristics of great mentors; expectations of mentees; funding, promotion, and tenure considerations for mentors; number of people one can mentor at a time; co-mentorship; long-distance mentorship; formal mentorship programs; special issues involving sex, race, and age; professional and personal relationships between mentor and trainee; and mentorship skill-building. Real-life case studies of problematic mentoring relationships will be presented and discussed.

**Format, Requirements and Target Audience:** This interactive workshop consisting of presentations by faculty followed by audience discussion is geared towards clinician-investigators who are planning or starting to mentor trainees and junior faculty. No mentorship experience is required.

## SC #14 MEDICAL DECISION MAKING WITH BAYESIAN NETWORKS AND INFLUENCE DIAGRAMS

**Sunday, October 19, 2:00 PM – 5:30 PM**

**Level: Beginner**

**Faculty:** *Oguzhan Alagoz, PhD, University of Wisconsin; Elizabeth Burnside MD, MPH, MS, University of Wisconsin; Jagpreet Chhatwal, MS, University of Wisconsin*

**Background:** Bayesian Networks (BN) is a probabilistic graphical model used for data classification, identification of causal relationships and output prediction. BN allow a domain expert to model uncertain relationships between a variable of interest with unknown values (e.g., modeling uncertain relationships to predict risk of a disease) and clinical findings/observations (known variables) and are particularly useful for medical diagnosis (e.g., estimating breast cancer risk using mammography findings). Attractive features of BN include encoding dependencies among all variables, thereby addressing problems with incomplete data; informing causal relationships, thereby increasing understanding about a problem domain and predicting consequences of treatment;

combining prior knowledge (which often comes in causal form) and available data; and user friendliness of graphical representations.

**Objectives:**

- Understand the theory underlying Bayesian Networks (BNs).
- Understand similarities and differences between BNs and other modeling and analytic techniques.
- Application of BNs to medical decision making problems.
- Understand BNs limitations and potential extensions.

**Course Description:** The course will begin with a general description of BN theory and statistics and influence diagrams for decision making, demonstrating how BNs differ from decision trees, causal diagrams, and other statistical and data mining techniques such as logistic regression and artificial neural networks. Use of NETICA software for BN construction and its application to various medical decision-making problems will be demonstrated, focusing on breast cancer risk prediction using mammography observations and patient demographic factors. The session will conclude with discussion of limitations and extensions of BNs.

**Format, Requirements and Target Audience:** This is both a conceptual and a hands-on course. Although a beginner-level course, participants should be comfortable with basic notions of probability. Additional theory such as conditional probability and Bayes' Theorem will be introduced during the course. Participants should bring a Windows/Macintosh-based PC for computational tutorials. A guest license for NETICA and the tutorial examples will be provided to course participants.

## SC #15 BENEFIT-RISK PREFERENCES FOR REGULATORY DECISION MAKING

**Sunday, October 19, 2:00 PM – 5:30 PM**

**Level: Beginner**

**Faculty:** *A. Brett Hauber, PhD, Research Triangle Institute; F. Reed Johnson, PhD, Research Triangle Institute*

**Background:** Regulators, clinicians and patients routinely make decisions requiring evaluation of tradeoffs between intervention safety and clinical benefits in the absence of directly comparable metrics. In 2007, the U.S. Food and Drug Administration expanded assessment of recently developed, alternative methods for systematically quantifying risks and benefits of new or existing medical interventions to assess their potential value to inform regulatory and clinical decision making.

**Objectives:**

- Understand state of the science and regulatory interest in benefit-risk analysis.
- Know advantages and disadvantages of several alternative approaches to benefit-risk analysis.
- Evaluate how stated-preference (SP) methods can be used to quantify benefit-risk tradeoffs to help inform regulatory decision-making.

**Course Description:** The instructors will summarize the advantages, disadvantages and potential use of alternative methods for benefit-risk evaluation, including comparing unweighted risk and benefit incidence rates without considering decision makers' willingness to trade off risks and benefits; weighted risk and benefit incidence rates, where each outcome is assigned a relative importance or preference weight; and actual risk exposures with

maximum acceptable risks using stakeholders' stated willingness to accept risk to achieve specified therapeutic benefits. A training session will provide a detailed tutorial on choice-format conjoint methods (i.e., discrete-choice experiments) to directly elicit and quantify patient and physician benefit-risk tradeoffs. Participants will complete an actual survey and participate in a debriefing on decision-making heuristics subjects may employ in trade-off tasks involving probabilistic outcomes.

The session will discuss relevant, realistic treatment attributes to describe tradeoff task alternatives; approaches to overcoming innumeracy and cognitive problems related to probability; internal validity tests to assure successful subject probabilistic tradeoffs; balancing statistical error and measurement error resulting from cognitive limitations; appropriate statistical analysis of cross-section/time-series choice data; and deriving and interpreting maximum acceptable risk estimates, including comparing conjoint measures and standard-gamble measures of risk tolerance.

**Format and Requirements:** Recent empirical studies will be used to illustrate key elements of benefit-risk tradeoff methods. Instructors will lead a group discussion on the relevance and acceptability of these methods and specific results for regulatory and clinical decision making.

## SC #16 INTRODUCTION TO DISCRETE-EVENT SIMULATION FOR HEALTHCARE

**Sunday, October 19, 2:00 PM – 5:30 PM**

**Level: Beginner**

**Faculty:** James Stahl, MD, MPH, Harvard University

**Background:** Discrete-event simulation (DES) is a well-established method for modeling systems. In DES, simulation models having approximately the same cause and effect relationships replace real, proposed or conceptual systems. Experimentation is carried out through "what-if" experiments, varying model structure and input values for key variables (i.e., sensitivity analysis, with target system conclusions are inferred by studying model behavior under normal and abnormal conditions). DES is most useful when analyzing problems that involve resource constraints or competition for resources, involve closely interdependent events, understanding emergent behavior and to illustrate processes. DES enhances understanding of emergent behavior, allowing exploration of different system scenarios before committing resources. DES also can inform why a sequence of events occurs, diagnose system level problems, identify constraints, specify requirements for new resources and communicate ideas and build consensus among stakeholders.

**Objectives:**

- Understand basic queuing theory;
- Learn basic modeling techniques; and
- Learn basic simulation statistics.

**Course Description:** This course will examine basic DES concepts, including entities, events, attributes, resources, queues and delays. Basic statistical concepts discussed will include the difference between observational (e.g., waiting times, flow times, counts) and time-persistent statistics (e.g., status of resource, number of entities in system, queue length). The class will describe where DES is best applied and demonstrate modeling Markov models within the DES framework. Participants also will learn the basics of queuing theory and how to compare different simulation scenarios.

**Format and Requirements:** This is an interactive, hands-on course that will balance theory with practice and will use in-class exercises to teach the building blocks of discrete-event simulation. Participants will require an Intel-based computer running Windows 95 or higher. Participants may share laptops. Discrete-event simulation models will be constructed using Arena.™ (Demonstration versions will be made available before and during the course). No previous knowledge is necessary, although the textbooks "Simulation with Arena" by Kelton and Sadowski and "Simulation Modeling and Analysis" by Law and Kelton provide useful background and are recommended.

## SC #17 CAUSAL INFERENCE AND CAUSAL DIAGRAMS IN MEDICAL DECISION MAKING

**Sunday, October 19, 2:00 PM – 5:30 PM**

**Level: All Levels**

**Faculty:** Uwe Siebert, MD, MPH, MSc, ScD

**Background:** One of the most important tasks of decision makers is to derive causal interpretations using both statistical analyses of original datasets and decision analysis. Often an intervention, action or risk factor is modeled to have a "causal effect" on one or more model parameters (e.g., probability, rate, or mean of outcome). Therefore, both the biostatistician and the decision analyst need tools to check: (1) when effect estimates have a causal interpretation and when they do not; and (2) the appropriate methods to derive causal effects instead of merely statistical associations.

**Objectives:**

- Define causal interventions and actions, draw and interpret causal diagrams, and apply the rules of causal diagrams to distinguish causal from non-causal statistical associations.
- Decide which biostatistical/epidemiological methods must be used in different situations to derive causal effect parameters.
- Use causal diagrams to estimate the direction of bias in "non-causal" models.

**Course Description:** This course will provide an introduction to the principles of causation and causal diagrams, with focus on Directed Acyclic Graphs (DAG) and a brief introduction to methods for causal inference including g-formula, marginal structural models (inverse probability of treatment weighting), and structural nested models (lecture - exercises - discussion)

Published cardiovascular, HIV, nutrition and obstetrics examples will be used to:

- Adjust for compliance in randomized clinical trials, where both "intention to treat" and "per protocol" analyses can fail to yield the true causal intervention effect;
- Assess the "fallibility of estimating direct effects" (i.e., adjusting for intermediate steps);
- Adjust for time-independent confounders in observational studies (i.e., confounder affects both risk factor and disease), where standard stratification or regression analysis yield valid causal effects if all confounders are measured, and
- Adjust for time-dependent confounding in observational studies (i.e., the confounder simultaneously acts as an intermediate step in the causal chain between risk factor and disease), where standard regression analysis fails and "causal methods" such as marginal structural models or g-estimation must be used.

**Format, Requirements and Target Audience:** The course will consist of lectures, exercises drawn from the published literature and interactive discussion. The intended audience includes researchers from all substance matter fields, statisticians, epidemiologists, and decision analysts interested either in methods of causal analysis or causal interpretation of results based on the underlying method.

### SC #18 INTEGER PROGRAMMING: OPTIMIZATION WITH DISCRETE DECISIONS

**Sunday, October 19, 2:00 PM – 5:30 PM**  
**Level: Intermediate**

**Faculty:** Andrew Schaefer, PhD, University of Pittsburgh;  
Oleg Prokopyev, PhD, University of Pittsburgh

**Background:** An integer program is a decision model that seeks to optimize a linear objective subject to linear constraints, when the decision variables may only take on a finite number of possibilities. Many practical problems in health care may be modeled as integer programs.

**Objectives:**

- Understand the theory underlying integer programming.
- Identify characteristics of common medical and health care problems for which integer programming may be useful.
- Obtain introductory experience with integer programming.
- Understand the potential contribution of integer programming to more complex health care problems.

**Course Description:** The course will describe integer programming, present its fundamental theoretical underpinning, identify characteristics of integer programming problems and explain how to model common integer problems, including location problems (e.g., ambulance location), scheduling problems (operating room, emergency department personal scheduling), vaccine design and cancer treatment planning. In the 'hands-on' phase of the course, participants are encouraged to and assisted with formulating and solving a variety of integer programming problems using commonly available software. The session will conclude with discussion of how to formulate and solve larger integer problems

**Format, Requirements, Target Audience:** This course is oriented to decision modelers who deal with linear optimization problems and have a basic understanding of modeling and statistics. Participants should bring PC-compatible laptops running Windows. Required software will be provided.

### SC #19 COST-EFFECTIVENESS ANALYSIS FOR NON-HEALTH ECONOMISTS: HOW TO BUILD AND INTERPRET CONFIDENCE ELLIPSES AND ACCEPTABILITY CURVES

**Sunday, October 19, 2:00 PM – 5:30 PM**  
**Level: Beginner**

**Faculty:** Katia Noyes, PhD, MPH, University of Rochester;  
Elisabeth Fenwick, PhD, MSC, University of Glasgow

**Background:** All models (indeed, all data) are subject to variability and uncertainty. Interpreting this uncertainty is fundamental to understanding and appropriately modeling results. Probabilistic

sensitivity analysis (PSA) and confidence ellipses are commonly used to assess uncertainty of model results and increasingly required by policy making groups that use CE information. While the theory and methodology behind PSA is well described, guidance on how to interpret and present the results of such analyses is limited.

**Objectives:**

Workshop participants will learn how to

- Build confidence ellipses within the CE plane in Excel using patient-level data.
- Understand the relationship between the scatter plot of incremental costs and incremental effects and location of confidence ellipse in respect to the CE threshold and acceptability curves (CEAC).
- Build CEAC using Excel.
- Understand the strengths and weaknesses of alternative methods for presenting the results of cost-effectiveness analyses.

**Course Description:** Sources of uncertainty in cost-effectiveness studies will be described using patient-level vs. aggregated data and examples of studies that estimate and present various types of uncertainty will be discussed, with emphasis on confidence ellipses and CEACs. Excel spreadsheet and bootstrapped patient-level data will be used to demonstrate how to build and interpret confidence ellipses around the ICER and scatterplots on the cost-effectiveness plane and CEACs for two and more mutually exclusive interventions. Strengths, weaknesses and overall appropriateness of alternative methods for presenting cost-effectiveness results to decision makers will be discussed.

**Format, Requirements and Target Audience:** The course will include an interactive mix of didactic lecture, case examples and hands-on exercises. Participants are required to bring their own laptops to learn (using provided files with instructor assistance) how to generate CEAC and confidence ellipses in Excel. The course will be useful to health outcomes researchers in academia, industry, and government and regulatory bodies without special training in health economics.

### SC #W01 ISSUES IN COMPARATIVE EFFECTIVENESS RESEARCH: SEEKING EFFICIENCY EXPLORING BAYESIAN ADAPTIVE TRIAL METHODS

**Wednesday, October 22, 1:30 PM – 5:00 PM**  
**Level: Beginner/Intermediate**

**Faculty:** Bryan R. Luce, PhD, MBA, Leonard Davis Institute University of Pennsylvania and United BioSource Corporation;  
Anirban Basu, PhD, University of Chicago; Jason Connor, PhD, Berry Consultants; Michael Krams, MD, Wyeth Pharmaceuticals; Donald Buesching, PhD, Eli Lilly; Jaime Caro, United BioSource Corporation.

**Background:** The national debate concerning improving evidence for decision-making includes potentially investing hundreds of millions of dollars (or more) for comparative...sometimes termed "pragmatic"...trials. But traditional RCT methods are ponderous, extremely costly, time consuming and not necessarily suited to addressing real world clinical, health outcomes and economic information needs. Clinical groups, manufacturers and FDA are gaining experience in Bayesian adaptive trial methods which may provide a significant opportunity to gain efficiency and better target outcomes objectives, but to date these methods have not been employed in real world comparative settings.

**Objectives:**

- Describe Bayesian adaptive trial methodology
- Provide examples of previous applications of Bayesian adaptive trials in pharmaceutical Phase 2 studies
- Present initial ideas and engage in discussion regarding the opportunity and methodological/operational challenges to adopting Bayesian adaptive methods for pragmatic clinical trials (PCTs) in the quest to develop usable comparative effectiveness research (CER) evidence efficiently.
- Evaluate patient-level medical costs; and
- Evaluate stochastic uncertainty in cost-effectiveness analysis

**Course Description:** Given the exploratory issue being addressed and the rapid evolution of this field, this “short course” will be structured more as a highly interactive issues panel and work in progress workshop rather than a didactic three hour “this is how you do it”. The short course will focus on the opportunity and methodological/operational challenges to adopting (or “adapting”) Bayesian adaptive methods for pragmatic clinical trials (PTCs) in the quest to efficiently develop usable comparative effectiveness research (CER) evidence.

**Format, Requirements and Target Audience:** Didactic presentations and interactive discussion.

**SC #W02 ECONOMIC ASSESSMENT IN CLINICAL TRIALS**

**Wednesday, October 22, 1:30 PM – 5:00 PM**

**Level: Advanced**

**Faculty:** Henry Glick PhD, University of Pennsylvania; Jalpa Doshi, PhD, University of Pennsylvania

**Background:** Prospective economic evaluation of clinical trials is an increasingly important component of the clinical development program for new clinical therapies (e.g., treatments, behavioral interventions, and drugs). The statistical methods used for analysis of economic data from prospective studies are constantly evolving. In this course, the faculty and participants will explore issues in the design and analysis of economic assessments in trials and introduce both standard and recently proposed statistical methods for these assessments.

**Objectives:**

- Design, implement and analyze economic outcomes within the setting of RCTs;
- Evaluate patient-level medical costs; and
- Evaluate stochastic uncertainty in cost-effectiveness analysis

**Course Description:** The instructors will outline the steps in the economic evaluation and provide an understanding of the strategic issues in the design of economic assessments in clinical trials. Issues related to choice of univariate and multivariate methods (OLS, log-OLS, GLM) for evaluating and reporting the effect of treatments on costs will be described and illustrated. The large number of methods available for reporting on stochastic uncertainty related to the comparison of costs and effects will be introduced, strengths and weaknesses of each discussed and preferred methods for confidence interval estimation highlighted.

**Format, Requirements and Target Audience:** The course format is primarily didactic; its content is both theoretical and applied (with STATA 8.0 computer software documented to assist in use). The course is designed for people with some familiarity with statistics and prospective economic data collection in trials.

**SC #W03 HOW TO SUCCESSFULLY OBTAIN A CAREER DEVELOPMENT OR RO-1 AWARD**

**Wednesday, October 22, 1:30 PM – 5:00 PM**

**Level: Beginner**

**Faculty:** J. Sanford (Sandy) Schwartz, MD, University of Pennsylvania; Frances Chesley, MD, MPH, Agency for Health Care Research and Quality; Jeanne Mandelblatt, PhD, Georgetown University; Mark Roberts, MD, University of Pittsburgh; Brian Zikmund-Fisher, PhD, University of Michigan

**Background:** Course faculty include senior investigators from a variety of MDM-related disciplines who are experienced in the CDA review process and mentoring junior faculty CDA applicants and awardees. Junior investigators who have received a CDA will provide their perspectives on the process.

**Objectives:**

- To help prepare trainees and junior faculty to successfully obtain a peer-reviewed career development award (CDA) and investigator initiated RO-1 awards.
- Address strategies for developing a project and writing an application for CDAs funded by the NIH, AHRQ, Department of Veteran’s Affairs, non-profit foundations (e.g., Robert Wood Johnson Foundation; American Cancer Society) and professional societies (e.g., American Society for Clinical Oncology; American Heart Association).

**Course Description:** The course will cover essential aspects of successfully competing for a CDA, including development of a research focus; identification of a research mentor and collaborators; formulation and specification of a research question; developing preliminary findings and writing a research plan and proposal, with identification of key points and common errors, examples and discussion of each CDA proposal section; development of an educational plan and skill development.

Faculty will highlight key aspects of the CDA process, with an emphasis on writing a competitive proposal and responding to reviewer comments and suggestions. A panel of senior investigators with a range of experience will compare and contrast strategies and approaches to writing a successful CDA /RO-1 application.

Specific topics to be highlighted include: introduction and overview of goals; review of various types of CDAs; identifying appropriate awards; and developing one’s own research focus; writing a proposal – specific aims, background and significance, preliminary data and findings, research methods, education and training; finding a mentor; writing the application, and dealing with rejection and persevering.

**Format, Requirements and Target Audience:** Combination of didactic lecture, individual and panel discussion, and case studies by both experienced and junior faculty. Ample time will be provided for interaction between faculty and course participants. The course is targeted to trainees and junior faculty seeking CDA and/or initial RO-1 support.

## HOTEL ACCOMMODATIONS & TRANSPORTATION



The 2008 Annual Meeting will be held at the Hyatt Regency at Penn's Landing on the Philadelphia waterfront. The meeting will be the only program at the hotel and will take up all but a small number of rooms held for continuing guests. Thus, the Society will have the 'run of the facility', with 24-hour access to all hotel meeting rooms and facilities. All hotel facilities and meeting rooms are wheelchair accessible. Internet services will be provided at a discount. Double rooms will be available to keep costs down for students, trainees and government employees.

**Hyatt Regency Philadelphia at Penn's Landing**  
**201 South Columbus Blvd.**  
**Philadelphia, PA 19106**

**Room Rate:** \$194 S/D

Government Room Rate based on availability. Contact hotel by phone for more information.

- Conference rates available until September 25, 2008
- If the hotel is fully booked, see [www.smdm.org](http://www.smdm.org) for information about other nearby hotel options

**Reservations by Phone:**

215.928.1234 or toll free 800.233.1234

**Reservations Online:** Go to [www.smdm.org](http://www.smdm.org) and click on Hotel Reservations.

**Taxi:** It is a 15 minute drive from Philadelphia International Airport to the hotel. A taxi to the Hyatt Regency at Penn's Landing is \$28.50, flat rate, one way, plus an additional \$1.50 Airport fee and \$1.00 per passenger (\$3.00 maximum) after the first passenger.

**Shuttle from the Airport:** Lady Liberty - \$10 per person. Proceed to a phone in the baggage claim area and dial 27 for pickup in the Ground Transportation area. The van may make multiple stops and runs every 20 minutes from 5:30 a.m. to midnight. Call 215-724-8888 to make an advance reservation.

**Amtrak Train Station (30th Street Station):** The Hyatt is located 4 miles from Philadelphia's Amtrak 30th Street Station, \$15 and 10 minutes via cab or \$2 via the Market-Frankford subway to the 2nd Street stop (an easy 10-minute walk to the hotel).

**Driving Directions:** Detailed driving directions can be downloaded from the "Maps and Directions" link on the Hyatt Regency's website:  
<http://pennslanding.hyatt.com/hyatt/hotels/index.jsp>

**Public mass transit:** Philadelphia has an extensive mixed bus, light rail and train public mass transportation system (SEPTA), which facilitates getting around the metropolitan area. From Philadelphia International Airport, one can take the R1 regional train line (which runs every 30 minutes) to 30th Street Station and then transfer to the Market-Frankford subway (\$8 per person). The hotel is an easy 5-10 minute walk from the 2nd Street stop. Public transit information can be obtained from <http://www.septa.com> or from the hotel bell stand and concierge.

## ABOUT PHILADELPHIA, PENNSYLVANIA



"America's Birthplace" and home to the Liberty Bell and Independence Hall, Philadelphia is an outstanding, fun, rewarding, and easy place to explore. The 'City of Brotherly Love' offers visitors outstanding museums, cultural venues, historical destinations, including the free Independence National Park, public parks (including both Fairmont Park, the world's largest urban park, and small pocket parks scattered throughout downtown), restaurants, colorful neighborhoods, shopping, music, art and entertainment.

The *Hyatt Regency Philadelphia at Penn's Landing* is located on the Delaware River waterfront on the eastern edge of downtown, where in 1682 William Penn's boat landed and he first set foot on the land that would soon be named after him. These days, Penn's Landing is the home of the Great Plaza, the Blue Cross River Rink, Independence Seaport Museum and a series of nightclubs and restaurants on piers. Everything is within easy access in a compact downtown area that always feels alive!

**For ideas of where to go and what to see, check out:**  
[www.philadelphiausa.travel](http://www.philadelphiausa.travel)



**COMPARATIVE EFFECTIVENESS RESEARCH:  
Practice and Policy; Challenges and Opportunities**  
October 18 - 22, 2008 • Hyatt Regency Penns Landing  
*Go to [www.smdm.org](http://www.smdm.org) to register online.*

**Mail Form to:**  
SMDM, 100 North 20th Street, 4th Floor, Philadelphia, PA 19103  
Fax: (215) 564-2175 • Phone: (215) 545-7697 • Email: [smdm-office@lists.smdm.org](mailto:smdm-office@lists.smdm.org)  
Tax ID #: 31-0992960


Name and Degree(s): \_\_\_\_\_ First Name on Badge: \_\_\_\_\_

Institution / Organization / Company: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Country: \_\_\_\_\_

Email: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

  Please note if special diet or assistance is needed: \_\_\_\_\_

### SHORT COURSE (SC) REGISTRATION FEES

(per 1/2 day session)	Thru 9/19/08	After 9/19/08
Member*	\$ 125	\$ 150
Trainee*	\$ 105	\$ 130
Emeritus*	\$ 120	\$ 145
Non-North American		
First Time Attendee*	\$ 125	\$ 150
Non-Member*	\$ 200	\$ 225
Short Course Only	\$ 235	\$ 260
Trainee Short Course Only	\$ 145	\$ 175

\*Must be registered for General Session to be eligible for these rates.

The price of a full day Short Course equals the total price of two half day Short Courses.

	IST Choice SC#	Alternate Choice SC#	Fee
Sun. Oct 19, Full Day	_____	_____	_____
Sun. Oct 19, a.m.	_____	_____	_____
Sun. Oct 19, p.m.	_____	_____	_____
Wed. Oct 22, p.m.	_____	_____	_____
<b>Sub-total</b>			<b>\$ _____</b>

### MEMBERSHIP RENEWAL

<input type="checkbox"/> Regular	\$ 225
<input type="checkbox"/> Trainee - <b>New Lower Rate!</b>	\$ 60
<input type="checkbox"/> Emeritus	\$ 125
<b>Sub-total</b>	<b>\$ _____</b>

### PAYMENT INFORMATION

All prices are in US dollars.

Please charge:  VISA  Mastercard  AMEX

Credit Card # \_\_\_\_\_

Expiration Date \_\_\_\_\_ Amount to Charge \_\_\_\_\_

Print name as it appears on credit card \_\_\_\_\_

Signature \_\_\_\_\_

Mail or fax your completed registration form to the address indicated at top of form. Credit card charges will appear on your statement as "SMDM."

If you are paying by check, make the check payable (in U.S. funds) to "SMDM." Please write registrant's name on check.

### GENERAL SESSION REGISTRATION FEES

	Thru 9/19/08	After 9/19/08
<input type="checkbox"/> Member	\$ 410	\$ 470
<input type="checkbox"/> New Member Package*	\$ 635	\$ 695
<input type="checkbox"/> Trainee	\$ 150	\$ 200
<input type="checkbox"/> New Member Package - Trainee*	\$ 210	\$ 260
<input type="checkbox"/> Emeritus	\$ 175	\$ 230
<input type="checkbox"/> Non-North American		
First Time Attendee	\$ 175	\$ 230
<input type="checkbox"/> Non-Member	\$ 560	\$ 625
<input type="checkbox"/> One Day Only	\$ 230	\$ 285
<input type="checkbox"/> One Day Only - Trainee	\$ 145	\$ 175
<b>Sub-total</b>	<b>\$ _____</b>	<b>\$ _____</b>

\*Includes one year membership and 2008 General Session. Please complete the new membership application form and submit with this form.

### SPECIAL EVENTS

Pre-meeting Dinner Symposium (Sat. Oct 18)	\$ 45 x _____
Trainee Box Lunch (Sun. Oct 19)	\$ 5 x _____
Social Event is at Academy of Natural Sciences (Mon. Oct 20)	\$ 45 x _____
<b>Sub-total</b>	<b>\$ _____</b>

### DONATIONS

SMDM General Support	_____
Lusted Prize Award Fund	_____
John M. Eisenberg Award Fund	_____
(\$20 is the recommended contribution to the fund of your choice. See descriptions of the award funds on page 6.)	
<b>Sub-total</b>	<b>\$ _____</b>

### SUMMARY OF ENCLOSED PAYMENTS

Short Courses	Sub-total	\$ _____
General Session	Sub-total	\$ _____
Membership Renewal	Sub-total	\$ _____
Special Events	Sub-total	\$ _____
Donations	Sub-total	\$ _____
<b>GRAND TOTAL</b>	<b>\$ _____</b>	

### CANCELLATION POLICY

Requests for cancellation must be made in writing via fax (215-564-2175) or email ([smdm-office@lists.smdm.org](mailto:smdm-office@lists.smdm.org)) before 10/3/08. A full refund less a \$50 administrative fee will be applied.



Full Name: \_\_\_\_\_ Degree: \_\_\_\_\_

Title: \_\_\_\_\_ Department: \_\_\_\_\_

Institution/Organization/Company: \_\_\_\_\_

Address: \_\_\_\_\_

Address: \_\_\_\_\_

City,State/Province: \_\_\_\_\_ ZIP/Postal Code: \_\_\_\_\_ Country: \_\_\_\_\_

E-mail address: \_\_\_\_\_

Telephone Number, Ext.: \_\_\_\_\_ Fax Number: \_\_\_\_\_

List me in the SMDM on-line membership directory (available only to SMDM members)  Yes  No

### Membership Categories:

Check your desired class of membership.

**Regular:** Educators, researchers, clinicians, managers, and policy makers who have an interest in medical decision making.

- 1-year: Regular \$225
- 2-year: Regular \$450
- 3-year: Regular \$675

**Trainee:** A trainee from residencies, degree programs, and fellowships in all related disciplines. A Trainee Verification Form is required with this application. The form can be found on the Become a Member page of [www.smdm.org](http://www.smdm.org)

- 1-year: Trainee \$60
- 2-year: Trainee \$120
- 3-year: Trainee \$180

**Emeritus:** Society member who reaches the age of 65, with five years of active membership. Awarded by majority vote of the Board.

- 1-year: Emeritus \$125
- 2-year: Emeritus \$250
- 3-year: Emeritus \$375

### Payment Information

- Check (payable to SMDM)
- Credit Card:  American Express  Visa  MasterCard

Account No. \_\_\_\_\_

Name of Cardholder \_\_\_\_\_

Signature \_\_\_\_\_ Exp. Date \_\_\_\_\_ / \_\_\_\_\_

Total Amount to be Charged \_\_\_\_\_ \$

If paying by credit card, you may fax your application to 215-564-2175. If paying by check, please make it payable to SMDM and mail it with this form to the administrative office at the address indicated below.

How did you learn about SMDM:

- Colleague  SMDM Website  Attended an SMDM Meeting
- Other: \_\_\_\_\_

### Areas of Interest and Expertise (check up to 3 in each):

#### Interest

- Assessment of patients' preferences, values, and utilities
- Biomedical ethics
- Biostatistics
- Cognitive aspects of decision making; judgment and decision psychology
- Decision analysis and cost-effectiveness analysis
- Development and analysis of large databases
- Development and evaluation of practice guidelines
- Expert systems and decision technologies
- Global health
- Health care technology assessment
- Health policy
- Outcome and health status assessment
- Medical and patient education
- Medical economics
- Policy impact
- Quality of care assessment and improvement
- Risk, case mix, and severity of illness

#### Expertise

### Primary Professional Setting (check one best answer):

- Academic Center/University
- Device/Pharmaceutical Manufacturer
- For Profit Research Organization
- Health Care Association
- Health Care System
- Hospital or Health Care Center
- Institute or Foundation
- State/Federal Government
- Other \_\_\_\_\_



# Philadelphia

## **IMPORTANT DATES**

Early Registration Deadline:  
**September 19, 2008**

Hotel Reservation Deadline:  
**September 25, 2008**

Meeting Dates:  
**October 18-22, 2008**

Pre-Meeting Symposium:  
**October 18, 2008**

Short Courses Held On:  
**October 19 and 22, 2008**



100 N. 20th Street  
4th Floor  
Philadelphia, PA 19103

**October 18-22, 2008**  
**Hyatt Regency Penns Landing**  
**Philadelphia, PA**

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