

**Health Policy Statistics Section: JSM 2009 Program**  
*August 2-6, 2009, Washington DC*

The Section on Health Policy Statistics is pleased to announce its program for the Joint Statistical Meetings (JSM). We have a packed program that displays the range of topics associated with health policy research and applications. This year HPSS is the primary sponsor for three invited sessions, four topic-contributed sessions and two contributed sessions, in addition to roundtables with coffee and lunch and a speaker luncheon. These can be identified on the online JSM program by selecting "Section on Health Policy Statistics" as the sponsor.

The HPSS Student Awards Session will be held on Monday, August 3 at 10:30 am. The Section business meeting and mixer is also Monday, 5:30 – 8:30 pm at RFD (a short stroll from the Convention Center). HPSS members, organizers, speakers, discussants and friends are invited.

**Invited Sessions**

- **Advancing Health Outcomes Measurement: The NIH Patient-Reported Outcomes Measurement Information System (PROMIS)** (organizer: Bryce Reeve, NCI) will be held Monday at 8:30 am: Advancing Health Outcomes Measurement: The NIH Patient-Reported Outcomes Measurement Information System (PROMIS) (Bryce Reeve, NCI); Challenges and Advantages for PROMIS Instruments for Clinical Studies (Dennis Revicki, United BioSource Corporation); Psychometric Evaluation of PROMIS: IRT Calibration, DIF, Scaling and Validity (Wen-Huang Chen, United BioSource Corporation). The Discussant is Steven Clauser (NCI).
- **Profiling Health Care Providers: Emerging Issues, Statistical Methods, and Policy Implications** (organizer: Yulei He, Harvard Medical School) will be Tuesday at 2:00 pm: Hospital Report Card – Towards Optimal Statistical Decisions (Peter Austin, Institute of Clinical Evaluation Sciences); Evaluating Composite Quality Measures (Mary Beth Landrum, Harvard Medical School), Performance of Confidence Intervals for the Ratio of Observed to Expected Numbers of an Event (Sean O'Brien, Duke University). The Discussant is Shaheen Halim, Centers for Medicare and Medicaid Services.
- **Using National Center for Health Statistics Data to Study Access to Health Care** (organizer: Jane Gentleman, NCHS) is Thursday at 10:30 am: Using the National Health Interview Survey to Monitor Health Insurance and Access to Care (Robin Cohen, NCHS); Access to Care and Objective Measures of Health: Results from the National Health and Nutrition Examination Survey (Vicki Burt, NCHS); Using National Center for Health Statistics Data to Study Access to Health Care (Rosa Avila, NCHS). Using the National Health Care Surveys to Monitor Use and Access to Health Care (Nancy Sonnenfeld, NCHS).

## Topic-Contributed Sessions

- **The annual Student Paper Award session** (Monday 10:30 am) is a terrific opportunity to learn about new work by young researchers entering our field. Topics of this year's winners include: a Bayesian approach for learning from near misses in medication errors (Jessica Myers, Johns Hopkins University), sensitivity analyses for omitted variable bias (Carrie Hosman, University of Michigan), surrogate screening models for low physical activity (Sandrah Eckel, Johns Hopkins University), nonparametric inference for percentiles of the random effects distribution in meta analysis (Rui Wang, Harvard University) and identification of ovarian cancer symptoms in health insurance claims data (Sean Devlin, University of Washington).
- **Data Confidentiality: Do We Really Want to Disturb a Sleeping Bear** (Sunday 2:00 pm) organized by Ofer Harel, University of Connecticut, includes talks on: Bayesian Multiscale Multiple Imputation with Implications to Data Confidentiality (Scott Holan, University of Missouri-Columbia); Summary of Methods and Preliminary Assessment of the SIPP Synthetic Beta, version 5.0 (Gary Benedetto, U.S. Census Bureau); Responsible Data Releases (Sanguthevar Rajasekaran, University of Connecticut); Examining the Robustness of Fully Synthetic Data Techniques for Data with Binary Variables (Gregory Matthews, University of Connecticut). Rob Aseltine, University of Connecticut Health Center will be the discussant.
- **Assessing Effects of Interventions in Longitudinal Naturalistic Data** (Tuesday 8:30 am) organized by Douglas Faries, Eli Lilly, includes talks on: Assessing Causal Treatment Effects in Longitudinal Naturalistic Data (Douglas Faries, Eli Lilly); Considerations in Applying Marginal Structural Models to Analyze Longitudinal Naturalistic Data (Ouhong Wang, Amgen); Maximum Likelihood Estimation of the Structural Nested Mean Model (Daniel Almirall, Duke University); Estimating volume-outcome associations from longitudinal naturalistic data (Benjamin French, The University of Pennsylvania); Data Mining Techniques for Longitudinal Naturalistic Data (Anthony Zagar, Eli Lilly).
- **Innovative Methods and Findings from Healthcare Assessment Surveys** (Wednesday 10:30 am) organized by Alan Zaslavsky, Harvard Medical School, includes talks on: Using the Census Bureau's Surname List to Improve Estimates of Race/Ethnicity and Associated Disparities (Marc N. Elliott, RAND); Methodological Issues in the Analysis of Responses to CAHPS Questions in the MEPS (Paul Gorrell, Social & Scientific Systems, Inc.); Optimal Survey Design when Nonrespondents are Subsampled for Followup in a Comparative Study (A. James O'Malley, Harvard Medical School); A Simulation Study of Design Effect approximations for Propensity-Score Weighted Data with Application to the MCAHPS Survey (Amelia M. Haviland, RAND); Random coefficients models for subgroup differences in surveys of healthcare quality (Alan Zaslavsky, Harvard Medical School).

## **Regular Contributed Sessions**

Applications in Clustered Data, Risk Assessment and Health Surveys (Sunday 4:00 pm)

Advances in Causal Inference and Health Economic Evaluations (Wednesday, 8:30 am)

## **Posters**

Invited Poster Session: “*Statistics in Policy*” on Monday, August 3 at 2 pm. We also have many poster presentations in the sessions on Tuesday at 8:30 am.

## **HPSS Luncheon Speaker - Wednesday, August 5, 12:30 pm – 1:50 pm**

This year we are excited to have Dr. Meredith Rosenthal, Associate Professor of Health Economics at the Harvard School of Public Health, as our speaker. Dr. Rosenthal, a leading expert in provider payment and pay for performance, will speak on, “**Aligning Provider Incentives: Pay for Performance and Beyond**”

At the beginning of the decade, the Institute of Medicine shone an unfavorable spotlight on the health care reimbursement system in the U.S., highlighting its perverse reinforcement of patterns of care that result in high costs and patient harm. Since that time, there has been a surge in the adoption of performance-based incentives by a variety of payers. Experimentation with and debate about pay for performance has had an important side effect: renewed interest in broader payment reforms. In this presentation, Dr. Rosenthal will describe the experience with pay for performance and survey the landscape of subsequent provider payment innovations in the U.S. (or renovations, perhaps). She will conclude with a discussion of the strengths, weaknesses, and prospects for genuine reform along the lines of current proposals and pilot efforts.

## **Roundtables**

A large part of our program takes place over food! Our speaker luncheon is the social high point for HPSS (you can check out the menu in the registration book; vegetarian options are available.) Roundtable luncheons are a great way to learn about new topics while meeting other section members with similar interests. Please be sure to register before the meeting or soon after arrival – tickets must be purchased at least 24 hours before the event and luncheons do sell out.

## **Roundtable with Coffee, Monday, August 3, 7:00 – 8:15 am**

**Challenges in Applying Regression Methods to Preference Scored Indexes of HRQoL –**  
Mari Palta, University of Wisconsin-Madison

In health services research, preference scored indexes of health related quality of life (HRQoL) are used to calculate QALYs (Quality Adjusted Life Years), in cost effectiveness analysis, and simply as measures of subjective health. Scores are constructed so that 0 is equivalent to death and 1 to full health. The statistical analysis of these indexes presents challenges due to their limited range, and as many people score close to 1 in general population studies. We will discuss the appropriateness of regression methods often used in the analysis of these indexes, and the interpretation of their results. In particular, we will consider the interpretation of regression coefficients obtained by methods that incorporate censoring or two part distributions

to deal with the limited range. We will also discuss the application of psychometric latent variable methods to preference measures.

**Roundtable with Lunch, Monday, August 3, 12:30 pm – 1:50 pm**

**Predicting Health Care Costs of Individual Patients** – Xiao-Hua (Andrew) Zhou, University of Washington

Accurate prediction of health care costs of patients is important for risk-adjusted physician payments and disease management of high cost patients. However, building a good prediction model is hindered by some special distributional features of health care costs, including a highly skewed distribution, excess zero values, and heteroscedasticity. Much research has been done to develop new statistical methods for addressing these special distributional features in predicting health care costs of patients. In this roundtable, I will discuss some of newly developed predictive models for health care costs of patients and the computer programs for implementing them in practice. I will also illustrate their applications in some real examples.

**Roundtable with Coffee, Tuesday, August 4, 7:00 am – 8:15 am**

**Predictive Modeling of Health-Care Outcomes for Underwriting and Disease Management – Industry's Lessons, Trends, Comparative Studies** – Ognian Asparouhov, MEDAI, Inc.

Predictive Modeling (PM) has been used for more than 10 years in health insurance industry for disease management and underwriting purposes. In this roundtable, we will consider different applications of PM for prediction of: different components of the cost (total, acute, Rx, etc.); inpatient admission, emergency room visits; specific diseases' future complications as a main reason for high future cost; impactable members; employer group's cost (small group renewal underwriting); ROI (acute and chronic components). The results of a few comparative studies with large real data sets (with hundred of thousands or more than a million of members) will be presented. We will discuss as well the clients' experience about how is PM being used in health insurance (underwriting and disease management) today? We will briefly discuss some industry trends: recently developed and future models.

**Roundtable with Lunch, Tuesday, August 4, 12:30 pm – 1:50 pm**

**Drawing Evidence using Multiple Studies for Public Health Questions** – Chia-Wen Ko, National Institutes of Health

Many public health questions cannot be answered based on a single study because: 1) the study size is insufficient, 2) the study does not contain all essential information, or 3) the question requires comparison of multiple estimates from individual studies. Statisticians need to overcome issues such as study selection and variance estimation while performing analyses based on multiple studies. This roundtable is for experience sharing and discussions on the use of multiple study analyses for public health.

Thank you to all session organizers, speakers, chairs and discussants. We look forward to seeing you at our Mixer on Monday, August 3 from 5:30-8:30 pm, at RFD in Washington D.C!