INTERNATIONAL SOCIETY FOR PHARMACOECONOMICS AND OUTCOMES RESEARCH

ISPOR 20TH ANNUAL INTERNATIONAL MEETING

May 16-20, 2015
Philadelphia Marriott Downtown
Philadelphia, PA, USA

PROGRAM

Early Registration Deadline: April 14, 2015

Integrating Big Data, Patient Data, and Cost-Effectiveness into Clinical Practice: Promise and Prospects

First Plenary Session: Taking Stock of the Learning Health Care System: What Have We Achieved and Why Does It Matter?

Second Plenary Session: Cost-Effectiveness and Clinical Practice Guidelines: Have We Reached a Tipping Point?

Third Plenary Session: Big Data, Big Systems, and Better Evidence: What Progress?

MEETING PROGRAM COMMITTEE

PROGRAM COMMITTEE CO-CHAIRS

Lou Garrison, PhD, Professor, Pharmaceutical Outcomes Research and Policy Program, Department of Pharmacy, University of Washington, Seattle, WA, USA

Penny Mohr, MA, Senior Program Officer, Improving Healthcare Systems, Patient-Centered Outcomes Research Institute (PCORI), Washington, DC, USA

RESEARCH REVIEW COMMITTEE CO-CHAIRS

Carl V. Asche, MBA, MSc, PhD, Research Professor of Medicine & Director, Center for Outcomes Research, University of Illinois College of Medicine at Peoria, Peoria, IL, USA

James D. Chambers, PhD, MPharm, MSc, Assistant Professor, The Center for the Evaluation of Value and Risk in Health, Institute for Clinical Research and Health Policy Studies, Tufts Medical Center, Boston, MA, USA

Jean Lachaine, PhD, Professor, University of Montreal and President, PeriPharm, Inc., Montreal, QC, Canada

Patrick W. Sullivan, PhD, Professor, Regis University School of Pharmacy, Denver, CO, USA

WORKSHOP REVIEW COMMITTEE CO-CHAIRS

Tanisha Carino, PhD, Executive Vice President, Avalere Health, Washington, DC, USA

Shelby D. Reed, PhD, RPh, Professor, Department of Medicine, Center for Clinical and Genetic Economics, Duke Clinical Research Institute and Member, Duke Cancer Institute, Durham, NC, USA

ISSUE PANEL REVIEW COMMITTEE CO-CHAIRS

Chris Leibman, MS, PharmD, Vice President, HEOR – Global Market Access, Biogen, Cambridge, MA, USA

Brian Rittenhouse, PhD, Associate Professor of Social and Administrative Sciences, Massachusetts College of Pharmacy and Health Sciences (MCPHS) University, Boston, MA, USA

Meeting information available at: www.ispor.org

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SHORT COURSES

SATURDAY, MAY 16

ALL DAY COURSES 8:00AM-5:00PM

INTRODUCTION TO PHARMACOECONOMICS

Lorne Basskin, PharmD, Brown University

Incorporate pharmacoeconomics into study design and data analysis; collect and calculate costs of different alternatives; determine the economic impact of clinical outcomes; identify, track, and assign costs to health care resources.

BAYESIAN ANALYSIS – OVERVIEW AND APPLICATIONS

Christopher Hollenbeak, PhD, Penn State College of Medicine; **David J. Vanness, PhD**, University of Wisconsin

Review the Bayesian approach and its applications to HEOR. Discuss basic elements of Bayesian statistics, classical statistics, and available statistical packages.

MORNING COURSES 8:00AM-12:00PM

INTRODUCTION TO DATABASE ANALYSIS OF OBSERVATIONAL STUDIES OF TREATMENT EFFECTS

Bradley Martin, PharmD, RPh, PhD, University of Arkansas for Medical Sciences

Understand measurement of exposure and outcome, causal graphs, the use of stratification analysis before multivariable modeling, multivariable regression, propensity scoring, instrumental variable, and structural modeling techniques.

INTRODUCTION TO MODELING METHODS

Mark Roberts, MD, MPP, University of Pittsburgh

Discuss principles and practice of decision analysis; construct decision trees; understand mechanics of tree evaluation; acquire skills in interpreting published decision analyses.

INTRODUCTION TO PATIENT-REPORTED OUTCOMES

Andreas Pleil, PhD and **Charles Petrie, PhD**, Pfizer Inc.

Learn methods for measuring quality of life, health status, and other types of health outcomes. Evaluate theoretical frameworks, reliability, validity, responsiveness, administration methods, respondent/administrative burdens, and issues of analysis and interpretation.

INTRODUCTION TO CONJOINT ANALYSIS

A. Brett Hauber, PhD, RTI Health Solutions; **Deborah Marshall, PhD, MHSA**, University of Calgary

Discuss the conceptual basis for quantifying decision-maker preferences for medical interventions. Review design and analytical issues to obtain valid empirical preference estimates.

ELEMENTS OF PHARMACEUTICAL/BIOTECH PRICING I – INTRODUCTION

Jack Mycka and **Renato Dellamano, PhD**, MME LLC

Learn key pricing terminology and issues. Know the tools to build and document product value, the role of pharmacoeconomics, and differences in payment systems.

AFTERNOON COURSES 1:00PM-5:00PM

META-ANALYSIS AND SYSTEMATIC REVIEWS IN COMPARATIVE EFFECTIVENESS RESEARCH

Joseph Cappelleri, PhD, MPH, Pfizer Inc.; **Jeroen Jansen, PhD**, Redwood Outcomes

Analyze components of comparative effectiveness research, basic steps to quantitative systematic reviews, statistical methods of combining data, reporting results, and their usage.

UTILITY MEASURES

John Brazier, PhD, University of Sheffield; **Brendan Mulhern**, University of Technology Sydney

Explore methods used to capture utilities. Discuss instruments to measure quality of life.

MODELING: DESIGN AND STRUCTURE OF A MODEL

Shelby Corman, PharmD, MS, BCPS, Pharmerit International; **Mark S. Roberts, MD, MPP**, University of Pittsburgh; **Andrew Munzer**, TreeAge Software, Inc.

Review Markov and other modeling techniques. Learn practical steps in developing and using these models.

CASE STUDIES IN PHARMACEUTICAL/BIOTECH PRICING II – ADVANCED

Jack M. Mycka and **Renato Dellamano, PhD**, MME LLC

Explore new product pricing. Evaluate the business environment while integrating pricing, reimbursement, and pharmacoeconomic strategies with clinical development and marketing strategies.

COST-EFFECTIVENESS ANALYSIS ALONGSIDE CLINICAL TRIALS

Scott Ramsey, MD, PhD, Fred Hutchinson Cancer Research Center; **Sean Sullivan, PhD, RPh, MS**, University of Washington; **Richard Willke, PhD**, Pfizer, Inc.

Review design, conduct, and reporting of cost-effectiveness analyses alongside clinical trials.

ADVANCED PATIENT-REPORTED OUTCOMES

Karon F. Cook, PhD and **Michael A. Kallen, PhD, MPH**, Northwestern University Feinberg School of Medicine

Gain a working knowledge of the methods that are used to validate and refine PRO measures (including ePROs) and the analytic methods that are used to model PRO data over time in clinical trials.

SUNDAY, MAY 17

MORNING COURSES 8:00AM-12:00PM

DISCRETE EVENT SIMULATION FOR ECONOMIC ANALYSES – CONCEPTS

J. Jaime Caro, MDCM, FRCPC, FACP and **Jörgen Möller, MSc Mech Eng**, Evidera

Gain a basic understanding of the key concepts of discrete event simulation.

STATISTICAL METHODS IN ECONOMIC EVALUATIONS

Shelby Reed, PhD, RPh and **Brad Hammill, MS**, Duke Clinical Research Institute

Discuss effect of distributional assumptions, univariate and multivariable analysis data, sample size and power calculations, and sampling uncertainty.

RISK-SHARING/PERFORMANCE-BASED ARRANGEMENTS FOR DRUGS AND OTHER MEDICAL PRODUCTS

Adrian Towse, MA, MPhil, Office of Health Economics; **Lou Garrison, PhD** and **Josh Carlson, PhD**, University of Washington

Analyze theory and practice of these arrangements using examples from Europe, US, and Australia.

NEW! DEVELOPMENT OF CONCEPTUAL MODELS

Neil Hawkins, PhD, CStat, London School of Hygiene and Tropical Medicine; **Elisabeth Fenwick, PhD, MSc**, ICON Plc.; **Beth Woods, MSc** and **Mark Sculpher, PhD, MSc**, University of York

Review important practical aspects of the development of conceptual models and gain an understanding of useful graphic tools for illustrating these concepts.

APPLICATIONS IN USING LARGE DATABASES

Diana Brixner, PhD, RPh and **Joanne LaFleur, PharmD, MSPH**, University of Utah; **John Parkinson, PhD**, CPRD; **Michael Eaddy, PhD, PharmD**, Xcenda, LLC

Discuss various databases including how to access information and how researchers utilize the information.

PATIENT-REPORTED OUTCOMES – ITEM RESPONSE THEORY

Bryce Reeve, PhD, University of North Carolina at Chapel Hill

Review the basics of IRT models and their applications to improve health outcomes measurement.

USE OF INSTRUMENTAL VARIABLES IN OBSERVATIONAL STUDIES OF TREATMENT EFFECTS

Benjamin Craig, PhD, Moffitt Cancer Center; **Bradley Martin, PharmD, RPh, PhD**, University of Arkansas for Medical Sciences; **Antoine El Khoury, PhD, MS**, Johnson & Johnson

Analyze sample selection models and their applications (two-stage least squares, intuition, RCTs). Engage in interactive exercises using STATA.

INTRODUCTION TO BUDGET IMPACT ANALYSIS: A 6-STEP APPROACH

C. Daniel Mullins, PhD, University of Maryland; **Josephine Mauskopf, PhD** and **Stephanie Earnshaw, PhD**, RTI Health Solutions

Learn methods to determine cost-of-illness of a health condition and how to estimate the impact of new health care technologies.

AFTERNOON COURSES 1:00PM-5:00PM

NEW! INTRODUCTION TO BIG DATA ANALYSIS: GRAPH ANALYTICS

David R. Holmes III, PhD, Mayo Clinic College of Medicine

Learn how graph analytics are used to deal with issues of data quality and completeness, the implications for the conclusions drawn, and where the challenges still lie.

BUDGET IMPACT ANALYSIS: APPLICATIONS & DESIGN ISSUES

Stephanie Earnshaw, PhD, MS, Anita Brogan, PhD, and **Sorrel Wolowacz, PhD**, RTI Health Solutions

Engage in experimental learning opportunities focusing on key decision issues related to accuracy of budget impact estimation as well as applicability to decision makers.

DISCRETE EVENT SIMULATION FOR ECONOMIC ANALYSES – APPLICATIONS

J. Jaime Caro, MDCM, FRCPC, FACP and **Jörgen Möller, MSc Mech Eng**, Evidera

This course explores practical, hands-on discrete event simulation exercises using specific software.

NETWORK META-ANALYSIS

Joseph Cappelleri, PhD, MPH, Pfizer Inc.; **Jeroen Jansen, PhD**, Redwood Outcomes

Understand fundamentals/concepts of network meta-analysis using WinBUGS case studies.

USE OF PROPENSITY SCORES IN OBSERVATIONAL STUDIES OF TREATMENT EFFECTS

John Seeger, PharmD, DrPH, Harvard Medical School/Brigham and Women's Hospital; **Jeremy Rassen, ScD**, Aetion, Inc.

Learn bias and methods for causal inference in observational studies and how propensity scores can reduce bias. Understand risk adjustment models, confounding, pros/cons of standard adjustment, and propensity scoring methodology.

ADVANCED DECISION MODELING FOR HEALTH ECONOMIC EVALUATIONS

Andrew Briggs, DPhil, MSc, University of Glasgow; **Mark Sculpher, PhD, MSc**, University of York

Discuss decision modeling, making models probabilistic to capture parameter uncertainty, how to analyze and present results, and how to interpret and apply results.

NEW! USING MULTI-CRITERIA DECISION ANALYSIS IN HEALTH CARE DECISION MAKING: APPROACHES & APPLICATIONS

Maarten J. Ijzerman, PhD, University of Twente; **Kevin Marsh, PhD**, Evidera; **Nancy Devlin, PhD**, Office of Health Economics; **Praveen Thokala, PhD**, University of Sheffield

Review the current MCDA landscape, outline the best practices for conducting MCDA, and discuss the steps involved in conducting MCDA.

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MEETING PROGRAM

SATURDAY, MAY 16

8:00AM-5:00PM **PRE-MEETING SHORT COURSES**

SUNDAY, MAY 17

8:00AM-5:00PM **PRE-MEETING SHORT COURSES**

5:15PM-6:15PM **EDUCATIONAL SYMPOSIA**

Biosimilars on the Red Carpet: The Pharmacoeconomics of Their American Debut

This symposium will feature a multifaceted discussion of biosimilar drugs as they enter the U.S. marketplace in 2015. Speakers will address the U.S. regulatory environment, clinical and economic drivers of biosimilar uptake, pricing strategies, and other influential factors in payer decision making. *(Sponsored by ProCE)*

6:30PM-7:30PM **EDUCATIONAL SYMPOSIA**

Pricing Innovation for New Therapies in Advanced Cancers: Addressing Affordability & the Practical Application of Innovative Pricing Methods

This symposium will discuss the relative affordability of new therapies for advanced cancers, current pricing models and their drawbacks, methods for innovation in pricing from new medicines in advanced cancers, and practical application of innovative pricing models. *(Sponsored by GalbraithWight)*

6:30PM-8:30PM **ISPOR STUDENT RESEARCH COMPETITION**

8:30PM-9:30PM **ISPOR STUDENT & FACULTY ADVISOR RECEPTION**

MONDAY, MAY 18

7:15AM-8:15AM **EDUCATIONAL SYMPOSIA**

Does Real World Evidence, in the Guise of Patient Registries, Add Any Value to the Decision-Making Process?

Real world evidence, such as large scale patient registries, have often been proposed as potential sources of clinical, economic, patient reported, and safety outcomes evidence that can aid decision making in health care. The impact on payer reimbursement decisions will be discussed. *(Sponsored by ICON)*

8:30AM-2:15PM **POSTERS - I**

8:30AM-10:30AM **WELCOME & FIRST PLENARY SESSION**

Taking Stock of the Learning Health Care System: What Have We Achieved and Why Does It Matter?

Nearly a decade ago, leaders envisioned a pathway to a learning health care system, where research is closely integrated and rapidly translated into practice by making use of electronic data that can track patients across health care providers and time. Since then, there has been substantial public and private investment to make this vision a reality. This session critically examines how far we have come and what the implications are for comparative effectiveness researchers, payers, patients, and the life sciences industry.

Moderator: Penny Mohr, MA, Senior Program Officer, Improving Healthcare Systems, Patient-Centered Outcomes Research Institute (PCORI), Washington, DC, USA
Speakers: Sarah Greene, MPH, Associate Director, CER Methods and Infrastructure, Patient-Centered Outcomes Research Institute (PCORI), Washington, DC, USA; **Sachin H. Jain, MD, MBA**, Chief Medical Officer, CareMore/Anthem and Lecturer in Health Care Policy, Harvard Medical School, Cerritos, CA, USA; **Lewis G. Sandy, MD, FACP**, Senior Vice President, Clinical Advancement, UnitedHealth Group, Minneapolis, MN, USA

10:30AM-11:00AM **BREAK, EXHIBITS & POSTERS - I**

11:00AM-12:00PM **ISSUE PANELS - I**

IP1: Should the Name of the Game be More "Skin in the Game"? The Scope and Consequences of Rx Cost-Shifting from Payers to Patients *(Invited Issue Panel)*

Moderator: Gerry Oster, PhD, Policy Analysis, Inc. and MINERVA Health Economics Network, Brookline, MA, USA
Panelists: Elizabeth Hargrave, MPA, University of Chicago, Chicago, IL, USA; **Elise Gould, PhD**, Economic Policy Institute, Washington, DC, USA; **A. Mark Fendrick, MD**, University of Michigan, Ann Arbor, MI, USA

IP2: Can We Afford Medical Breakthroughs for Large Prevalence Diseases? Lessons from Hepatitis C

Moderator: Dana P. Goldman, PhD, University of Southern California, Los Angeles, CA, USA
Panelists: Ross Maclean, MD, Precision Health Economics, Los Angeles, CA, USA; **Tomas J. Philipson, PhD**, University of Chicago, Chicago, IL, USA; **Adrian Towse, MA, MPhil**, Office of Health Economics (OHE), London, UK

IP3: Are We Comfortable Applying Existing Quality-Driven Adherence Measurement Methodologies to Specialty Pharmaceutical Products and What Are the Risks, Especially If Using Administrative Claims Databases?

Moderator: Craig Schilling, Pharm.D, Optum, Eden Prairie, MN, USA
Panelists: Richard Faris, PhD, MSc, RPh, UCB, Inc., Smyrna, GA, USA; **Michael Ingham, MSc**, Janssen Scientific Affairs, LLC, Horsham, PA, USA; **Stephen M Lund, RPh**, Senderra Rx Specialty Pharmacy, Richardson, TX, USA

IP4: What Is the Value of Big Data in Comparative Effectiveness Research and Clinical Decision Making?

Moderator: William H. Crown, PhD, Optum Labs, Cambridge, MA, USA
Panelists: Miguel Hernan, MD, DrPH, Harvard T. H. Chan School of Public Health, Boston, MA, USA; **Sarah Greene, MPH**, Patient-Centered Outcomes Research Institute (PCORI), Washington, DC, USA; **Milton C Weinstein, PhD**, Harvard T. H. Chan School of Public Health, Boston, MA, USA

IP5: PROs and Beyond: Are They Fit for Purpose to Improve Health Care Policy and Practice?

Moderator: Corinna Sorenson, MPH, MHSA, PhD, Avalere Health, Washington, DC, USA
Panelists: Kristi Mitchell, MPH, Avalere Health, Washington, DC, USA; **Mark McClellan, MD, PhD**, Brookings Institution, Washington, DC, USA; **Sachin Kamal-Bahl, PhD**, Pfizer, Philadelphia, PA, USA

12:00PM-2:15PM **LUNCH, EXHIBITS & POSTERS - I**

12:15PM-1:15PM **EDUCATIONAL SYMPOSIA**

EQ-5D-5L: Development of the First National Tariffs

This symposium will discuss developments in EQ-5D-5L value sets programs and their use in supporting outcome-based studies. A value set approach and new value set for England will also be presented. A user perspective will be presented, together with an outline for future research. *(Sponsored by EuroQol Research Foundation)*

12:15PM-1:15PM **ISPOR STUDENT RESEARCH SHOWCASE**

1:15PM-2:15PM **POSTER AUTHOR DISCUSSION HOUR - I**

2:15PM-3:15PM **RESEARCH PODIUMS - I**

CARDIOVASCULAR DISEASE RESEARCH STUDIES

CV1: Lifetime Health Care Costs of Obesity-Related Comorbidities in the United States, 2007-2010

CV2: The Association between Adherence to Cardiovascular Medications and Health Care Utilization

CV3: Prevalence and Direct Medical Costs Associated With Angina and Chest Pain Following Percutaneous Coronary Intervention in the United States

CV4: Outcomes and Health Resource Utilization among Patients with Heart Failure with Reduced Ejection Fraction (HFREF) at an Academic Medical Center (AMC) in the United States

RESEARCH ON DATABASE METHODS STUDIES

DB1: Critical Problems of Coding Data in Health Care: Obesity, Smoking, and Alcohol Use by Method of Measurement

DB2: A New Method for Counting Hemophilia-Related Bleeding Events in Claims Data

DB3: The Implications of Using a 30-, 60-, Or 90-Day Gap in Treatment to Specify Lines of Care in Gastric Cancer Treatment

DB4: Development and Validation of Algorithms to Identify Statin Intolerance in a US Administrative Database

HEALTH CARE MANAGEMENT STUDIES

HM1: Utilization of Antidiabetics after FDA Safety Announcements

HM2: Differences in Mastectomy Rates Based on Hormone Receptor Status in Early Stage Tumors: A SEER Database Analysis

HM3: A Review of the Literature Regarding Biosimilars: What Is the Evidence for Equivalence?

HM4: How Much Evidence Do We Need before Implementing Pharmacogenomic Testing in the Clinic?

MEDICATION ADHERENCE STUDIES

MA1: Impact of a Pharmacist Medication Adherence Consultation Program on Health Care Costs and Risk of Hospitalization

MA2: Cost of Non-Adherence to Medication in a Post-MI Population

MA3: The Effect of Cost-Related Medication Nonadherence on the Decision of Taking Up Medicare Part D among Elderly Medicare Beneficiaries

MA4: Comprehensive Assessment of Patient Adherence to Drug Therapy: An Example Utilizing Real World Data for an Oral Multiple Sclerosis Treatment

MEDICAL DEVICE & DIAGNOSTIC RESEARCH STUDIES

MD1: Economic Evaluation of BST-CarGel as an Adjunct to Microfracture Versus Microfracture Alone in Knee Cartilage Surgery

MD2: Coverage Limits on Blood Glucose Test Strip Reimbursement for Diabetics in Canada: Utilization Impact for Diabetic Patients in the Ontario Public Drug Program (OPDP)

MD3: Economic Impact of Changes in NICU Ventilation Strategies with the Advent of New Noninvasive Ventilation Techniques: A Review and Proposed Assessment Framework for High Flow Therapy (HFT) As a Routine Respiratory Support Paradigm

MD4: Economic Value of Improved Accuracy for Self-Monitoring of Blood Glucose Devices for Type 1 Diabetes

RESEARCH ON MODELING METHODS STUDIES

MO1: Reducing and Quantifying Over-Fitting in Regression Models

MO2: A Comparison of State Transition and Discrete Event Modeling Approaches for Antiplatelet Use in the Secondary Prevention of Thrombotic Events after Myocardial Infarction (MI)

MO3: Does the Use of Efficacy or Effectiveness Evidence in Cost-Effectiveness Analyses Matter?

MO4: Extrapolating All-Cause Mortality Estimates in Economic Evaluations: A Simulation Analysis

3:15PM-3:45PM **BREAK & EXHIBITS**

3:45PM-4:45PM **RESEARCH PODIUMS - II**

CANCER OUTCOMES RESEARCH STUDIES

CN1: The Impact of Chronic Conditions on the Economic Burden of Cancer Survivorship in the United States

CN2: A Comparative Cost Utility Analysis for First Line Treatment of Metastatic Non-Small Cell Lung Cancer (NSCLC) Patients with EGFR Exon 19 Deletions or Exon 21 (L858R) Substitution Mutations

CN3: Synthesis of Multiple Types of Survival Data within a Weibull Proportional Hazards Meta-Analysis: Treatment Outcomes in Patients with Double Hit Lymphoma (DHL)

CN4: Reimbursement Decision Landscape for Metastatic Breast Cancer Therapies: A Comparison of Factors Leading to Favorable and Unfavorable Recommendations Across Leading HTA Agencies

CONCEPTUAL PAPERS

CP1: Methods to Assess the Association of Patient-Reported Outcomes and Clinical Endpoints

CP2: Interventions for Ultra-Rare Disorders (URDs) and the Logic of Cost Effectiveness

CP3: Life at a Premium: Considering an End-of-Life Premium in Value-Based Reimbursement

CP4: Guidance for the Conduct and Reporting of Modeling and Simulation in the Context of Health Technology Assessment

RESEARCH ON COST STUDIES METHODS

CS1: US Based Drug Cost Parameter Estimates Using National Average Drug Acquisition Cost

CS2: Economic Modelling in Randomized Controlled Trial (RCT)-Based Economic Evaluations: Empirical Examples of Its Effect on the Precision of Economic and Decision Outcomes

CS3: Cure Models: Accounting for Cured Patients in Economic Evaluations

CS4: A Review and Update to the Guidance Document for the Costing Process in the Canadian Health Care Setting

HEALTH CARE EXPENDITURE STUDIES

HE1: Health Care Resource Utilization among Medicare Beneficiaries with COPD: Comparison of High and Low Utilizers

HE2: Explaining the Excess Home Health Care Use and Expenditures among Elderly Medicare Beneficiaries with Parkinson's Disease

HE3: Long-Term Health Care Costs Among Adults with Type 2 Diabetes Initiating DPP-4 Inhibitors

HE4: Optimizing Cancer Clinical Trials Research Investment Decisions in the United States: A Proof of Concept Portfolio Management Evaluation

HEALTH TECHNOLOGY ASSESSMENT STUDIES

HT1: Systematic Review of Cost Effectiveness of Ultra-Orphan Therapies: Lesson Learned from Published HTAs and Studies

HT2: Application of Cost-Effectiveness Logic to US Managed Care Drug Formularies: Long Term Outcomes of a Value-Based Formulary

HT3: Analysis of NICE Drug Technology Appraisals (2001-September 2014)

HT4: IQWiG Early Benefit Assessments of Type 2 Diabetes Therapies

PATIENT PREFERENCE STUDIES

PP1: Patients' and Physicians' Time Trade-Off Preferences for Adverse Outcomes Associated With Metastatic Colorectal Cancer Treatments

PP2: Patient Preferences for First-Line Maintenance Treatments for Ovarian Cancer

PP3: Patient Versus General Population Preferences in Anticoagulant Therapy

PP4: Measuring Treatment Preferences of Patients Diagnosed with Idiopathic Pulmonary Fibrosis Using Best-Worst Scaling

3:45PM-7:45PM **POSTERS - II**

5:00PM-6:00PM **WORKSHOPS - I**

W1: Patient-Centered Benefit-Risk Analysis: Regulatory Developments and Prospects

Discussion Leaders: F. Reed Johnson, PhD, Duke University, Durham, NC, USA; **John F.P. Bridges, PhD**, John Hopkins Bloomberg School of Public Health, Baltimore, MD, USA; **Lou Garrison, PhD**, University of Washington, Seattle, WA, USA; **Bennett Levitan, MD, PhD**, Janssen Research & Development, LLC, Titusville, NJ, USA

W2: Making Better Use of Company Pharmacoeconomic Models

Discussion Leaders: Michael Drummond, DPhil, University of York, Heslington, York, UK; **Laurie Fazio, BS**, Dymaxium, Inc., Toronto, ON, Canada; **John Watkins, PharmD, MPH, BCPS**, Premera Blue Cross, Mountlake Terrace, WA, USA; **H. Keri Yang, PhD, MPH, MS**, Merck & Co., Inc., West Point, PA, USA

W3: Selection Bias and Cost Allocation in Patients with Polychronic Disease

Discussion Leaders: Kathy L. Schulman, MS, Outcomes Research Solutions, Inc., Bolton, MA, USA; **Lei Liu, PhD**, Northwestern University, Chicago, MA, USA; **Robin Turpin, PhD**, Takeda Pharmaceuticals USA, Deerfield, IL, USA

W4: Identifying Patients with Rare Disorders Using Administrative Data

Discussion Leaders: Daniel C. Malone, PhD, RPh, MS, University of Arizona, Tucson, AZ, USA; **Wei-Shi Yeh, PhD**, Biogen Idec, Cambridge, MA, USA; **Edward P. Armstrong, PharmD**, Strategic Therapeutics, LLC, Oro Valley, AZ, USA; **Eric J. Bell, BS**, One Tall Tree, LLC, Seattle, WA, USA

W5: Indirect Comparisons for Single-Arm Trials or Trials Without Common Comparator Arms: What Methods Are Available, How Have They Been Used, and How Can We Evaluate Results?

Discussion Leaders: Elyse Swallow, MA, MPP, Analysis Group, Inc., Boston, MA, USA; **James Signorovitch, PhD**, Analysis Group, Inc., Boston, MA, USA; **Anupama Kalsekar, MS**, Bristol-Myers Squibb, Princeton, NJ, USA; **Yong Yuan, PhD**, Bristol-Myers Squibb Pharmaceuticals Ltd., Princeton, NJ, USA

W6: Applying Dynamic Simulation Modeling Methods in Health Care Delivery Research – The Simulate Checklist and Emerging Good Practices: Reports of the ISPOR Simulation Modeling Emerging Good Practices Task Force

Discussion Leaders: Deborah A. Marshall, PhD, Alberta Bone and Joint Health Institute, Calgary, AB, Canada; **Mitchell Higashi, PhD**, GE Healthcare, Barrington, IL, USA; **Peter Wong, PhD, MS, MBA, RPh**, HSHS, Belleville, IL, USA; **Kalyan S. Pasupathy, PhD**, Mayo Clinic, Rochester, MN, USA

W7: Assessing Performance Outcome Measures for Regulatory Review: Conceptual and Methodological Challenges with Real World Examples
Discussion Leaders: Rachel Simone Ballinger, PhD, ICON, Oxford, UK; **Elizabeth Nicki Bush, MHS**, Eli Lilly, Indianapolis, IN, USA; **Ashley Slagle, PhD**, U.S. Food and Drug Administration, Silver Spring, MD, USA; **Diana Rofail, PhD**, Roche Products Limited, Welwyn Garden City, UK

6:00PM-7:45PM **EXHIBITORS' OPEN HOUSE RECEPTION & POSTERS - II**

6:15PM-7:15PM **ISPOR FORUMS - I**

F1: Measurement of Health State Utility Values for Economic Models in Clinical Studies – Findings of the Good Practices Task Force
Presented by the ISPOR Measurement of Health State Utility Values for Economic Models in Clinical Studies - Good Practices Task Force

F2: Clinical Outcome Assessments (COAs): A Conceptual Foundation and Developing and Evaluating Clinician-Reported Outcome (ClinRO) Instruments to Assess Treatment Benefit: Good Measurement Principles
Presented by the ISPOR Clinical Outcomes Assessment – Emerging Good Practices Task Force

F3: Patient Engagement in Health Economic and Outcomes Research: Current and Future ISPOR Initiatives
Presented by the ISPOR Patient-Centered Special Interest Group, European Patient Representative Roundtable, and ISPOR North American Patient Representative Roundtable

F4: From Cost-Effectiveness to Equity: Challenges Facing the Health Care System in Four Countries in Latin America
Presented by the ISPOR Latin America Consortium

F5: Integrating Big Data into Real World Practice
Presented by the ISPOR Student Council

F6: Syncing Information Chains with Health Systems Development for Better Outcomes
Presented by the ISPOR BRICS

F7: Budget Impact Analysis of Epidemic Diseases across Africa
Presented by the ISPOR Africa Network

6:45PM-7:45PM **POSTER AUTHOR DISCUSSION HOUR - II**

7:15PM-8:45PM **ISPOR LATIN AMERICA CONSORTIUM RECEPTION**

7:15PM-8:45PM **ISPOR ASIA CONSORTIUM RECEPTION**

7:15PM-8:45PM **ISPOR ARABIC NETWORK AND AFRICA NETWORK JOINT RECEPTION**

TUESDAY, MAY 19

7:15AM-8:15AM **EDUCATIONAL SYMPOSIA**

Leveraging Electronic Medical Records and Online Data for HEOR Research: Opportunities and Cautions
This session will discuss recent advances in Electronic Medical Records (EMR) systems, analytical techniques, and software to mine new data sources for health economics and outcomes research (HEOR). Examples where nontraditional data sources have been utilized will be studied and potential issues of over-interpretation and over-reliance of data with suboptimal quality will be presented. *(Sponsored by Analysis Group)*

8:30AM-2:15PM **POSTERS - III**

8:30AM-10:30AM **WELCOME & SECOND PLENARY SESSION**

Cost-Effectiveness and Clinical Practice Guidelines: Have We Reached a Tipping Point?
In recent years, both oncology and cardiology professional organizations have embraced the explicit consideration of cost-effectiveness and the value of treatments in developing and updating clinical practice guidelines and clinical pathways. This is a new development in the U.S. health care system, and one which is complicated by the pluralistic nature of the system. The impact that it could ultimately have on medical practice is not clear neither in terms of access to care and providers nor in terms of incentives for innovation. This session will explore the implications of this change for the range of stakeholders involved, including U.S. private insurers, clinicians, patients, and federal government programs.
Moderator: Lou Garrison, PhD, Professor, Pharmaceutical Outcomes Research and Policy Program, Department of Pharmacy, University of Washington, Seattle, WA, USA
Speakers: Mark A. Hlatky, MD, Professor of Health Research and Policy & Professor of Medicine (Cardiovascular Medicine), Stanford University School of Medicine, Stanford, CA, USA; **Peter P. Yu, MD, FACP, FASCO**, Director of Cancer Research, Palo Alto Medical Foundation, Sunnyvale, CA and President, American Society of Clinical Oncology (ASCO), Alexandria, VA, USA; **Michael Drummond, PhD**, Professor of Health Economics, Centre for Health Economics, University of York, Heslington, York, UK

10:30AM-11:00AM **BREAK, EXHIBITS & POSTERS - III**

11:00AM-12:00PM **ISSUE PANELS - II**

IP6: How Should the FDA Regulate the Communication of Health Economic Data by Pharmaceutical Companies to Payers?
Moderator: Peter J. Neumann, ScD, Center for the Evaluation of Value and Risk in Health, Institute for Clinical Research and Health Policy Studies, Tufts Medical Center, Boston, MA, USA
Panelists: Laurie Burke, MPH, RPh, LORA Group, Royal Oak, MD, USA; **Joseph Jackson, PhD**, Health Outcomes Insights LLC, Lavallette, NJ, USA; **Alan Bennett, JD**, Ropes & Gray, Washington, DC, USA

IP7: New Models of Cancer Reimbursement: Are There Consequences for Spending and Patient Health?
Moderator: Amitabh Chandra, PhD, Harvard University, Cambridge, MA, USA
Panelists: Andrew Briggs, DPhil, University of Glasgow, Glasgow, UK; **Darius N. Lakdawalla, PhD**, University of Southern California, Los Angeles, CA, USA; **Jennifer Malin, MD, PhD**, Anthem, Woodland Hills, CA, USA

IP8: Challenges and Opportunities for Pragmatic Clinical Trials – Should Europe and the United States Approach Them Differently?
Moderator: Rafael Alfonso-Cristancho, MD, PhD, MSc, GlaxoSmithKline (GSK), King of Prussia, PA, USA
Panelists: Bryan R Luce, PhD, Patient-Centered Outcomes Research Institute (PCORI), Washington, DC, USA; **Tjeerd Van Staa, MD, PhD, MSc**, University of Manchester, Manchester, UK

IP9: Continuous Patient Engagement: How Do We Partner with Patients Throughout the Research Life Cycle?
Moderator: C. Daniel Mullins, PhD, University of Maryland School of Pharmacy, Baltimore, MD, USA
Panelists: Emil Chiauzzi, PhD, PatientsLikeMe, Cambridge, MA, USA; **Daniel Frye, JD**, NJ Commission for the Blind and Visually Impaired, Newark, NJ, USA; **Marvin Mack**, Center for Mind & Esteem Development, Baltimore, MD, USA

IP10: Early Access to Medicines: What Is in It for Payers?
Moderator: Adam Heathfield, PhD, Pfizer, Surrey, UK
Panelists: Adrian Towse, MA, MPhil, Office of Health Economics, London, UK; **Mark Trusheim, MS**, Massachusetts Institute of Technology, Cambridge, MA, USA; **Dan Ollendorf, PhD**, Institute for Clinical and Economic Review, Boston, MA, USA

12:00PM-2:15PM **LUNCH, EXHIBITS & POSTERS – III**

12:15PM-1:15PM **EDUCATIONAL SYMPOSIA**

Dissemination of Health Economic Evidence to US Payers under FDAMA Section 114 – Lessons from the Past and New Guidance Expected
Trends in sharing health economic information under Section 114 will be discussed. Perspectives of how pharmaceutical companies are handling the dissemination of health economic information as well as receipt of information by managed care will be shared and discussed in detail. *(Sponsored by Xcenda)*

1:15PM-2:15PM **ISPOR ANNUAL BUSINESS MEETING**

1:15PM-2:15PM **POSTER AUTHOR DISCUSSION HOUR - III**

2:15PM-3:15PM **ISSUE PANELS - III**

IP11: The $2.6 Billion Question: Why Are Drug Development Costs Rising and Can We Afford It? ***(Invited Issue Panel)***
Moderator: Lou Garrison, PhD, University of Washington, Seattle, WA, USA
Panelists: Joseph A. DiMasi, PhD, Tufts Center for the Study of Drug Development, Tufts University, Boston, MA, USA; **Patricia M. Danzon, PhD**, The Wharton School, University of Pennsylvania, Philadelphia, PA, USA; **Adrian Towse, MA, MPhil**, Office of Health Economics, London, UK

IP12: Patient-Focused Drug Development: Are Policy Makers Listening?
Moderator: John F P Bridges, PhD, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA
Panelists: Mark Walderhaug, AB, PhD, U.S. Food & Drug Administration, Silver Spring, MD, USA; **Holly Peay, PhD**, Parent Project Muscular Dystrophy, Hackensack, NJ, USA; **Frank W Rockhold, PhD**, GlaxoSmithKline, Cary, NC, USA

IP13: Can the EUnetHTA HTA Core Model© Help to Ensure an Aligned Concept of Value between HTA, Decision Makers/Payers, and Pharma Industry?
Moderator: Finn Boerlum Kristensen, PhD, Danish Health and Medicines Authority, Copenhagen, Denmark
Panelists: Melvin Olson, PhD, Novartis Pharma, Basel, Switzerland; **David Shum, PhD**, F Hoffmann La Roche, Mississauga, ON, Canada; **Chander Sehgal, MD, MBA**, Canadian Agency for Drugs and Technologies in Health (CADTH), Ottawa, ON, Canada

IP14: Distinguishing Biosimilarity – How Can We Generate Real-World Evidence to Support Decision Making?
Moderator: Nancy A. Dreyer, PhD, MPH, Quintiles, Cambridge, MA, USA
Panelists: Sarah Garner, PhD, National Institute for Health and Care Excellence (NICE), London, UK; **Robert W Dubois, MD, PhD**, National Pharmaceutical Council, Washington, DC, USA; **Jaclyn L Bosco, PhD, MPH**, Quintiles, Cambridge, MA, USA

IP15: The Controversial Role of Cost-Effectiveness Analyses (CEA) and Incremental Cost-Effectiveness Ratio (ICER) Thresholds in Value-Based Assessments (VBA) of Health Technologies: What Are the Future Challenges?
Moderator: Zeba M. Khan, RPh, PhD, Celgene Corporation, Summit, NJ, USA
Panelists: Michael Schlander, MD, PhD, MBA, University of Heidelberg, Wiesbaden, Germany; **Ron Akehurst, BSc (Econ) (London), Hon MFPHM**, University of Sheffield, Sheffield, UK; **John Proach, MBA**, Market Access Solutions LLC, Raritan, NJ, USA

3:15PM-3:45PM **BREAK & EXHIBITS**

3:45PM-4:45PM **WORKSHOPS - II**

W8: Design of Bundled Payment in the Ambulatory Setting of Care
Discussion Leaders: Mike Ciarametaro, MBA, National Pharmaceutical Council, Washington, DC, USA; **Joshua T. Cohen, PhD**, Center for the Evaluation of Value and Risk in Health, Tufts Medical Center, Boston, MA, USA; **Lili Brillstein, MPH**, Horizon Healthcare Innovations, Newark, NJ, USA; **Michael del Aguila, PhD**, Bristol-Myers Squibb, New York, NY, USA

W9: Methodological Choices for Analyzing Cluster-Correlated Data in Large Patient Databases
Discussion Leaders: Steve Sherman, MPH, Creativ-Ceutical, Chicago, IL, USA; **Katia Thokagevistk, PhD**, Creativ-Ceutical, Chicago, IL, USA; **Firas Dabbous, MS**, University of Illinois at Chicago, Chicago, IL, USA; **Samuel Aballéa, MSc**, Creativ-Ceutical, Paris, France

W10: Rare Diseases in the Era of Big Data: Selection Bias in Small Samples
Discussion Leaders: Nicole M. Engel-Nitz, PhD, Optum, Eden Prairie, MN, USA; **Zhimei Liu, PhD**, Novartis Pharmaceuticals Corporation, East Hanover, NJ, USA; **Cori Blauer-Peterson, MPH**, Optum, Eden Prairie, MN, USA; **Jonathan C. Johnson, MS**, Optum, Eden Prairie, MN, USA

W11: Can We Make Comparative Effectiveness Useful for Clinicians and Patients or Is It Just for Health Technology Assessments?
Discussion Leaders: Edward J Mills, PhD, MSc, Stanford University, Stanford, CA, USA; **Christopher O'Regan, MSc**, Merck Sharp & Dohme Limited, Hertfordshire, UK; **Sonal Singh, MD, MPH**, Johns Hopkins University, Baltimore, MD, USA

W12: Issues to Consider When Estimating Health Care Costs with Generalized Linear Models (GLMS): To Gamma/Log or Not to Gamma/Log? That Is the New Question
Discussion Leaders: Jalpa A. Doshi, PhD, University of Pennsylvania, Philadelphia, PA, USA; **Henry Glick, PhD**, University of Pennsylvania, Philadelphia, PA, USA; **Andrew Briggs, DPhil**, University of Glasgow, Glasgow, UK

W13: Patient- And Observer-Reported Outcomes (PROs & ObsROs) Measurement in Rare Disease Clinical Trials - Emerging Good Practices
Discussion Leaders: Katy Benjamin, PhD, MS, ICON, Bethesda, MD, USA; **Eleanor Perfetto, PhD, MS**, University of Maryland, Baltimore, MD, USA; **Laurie Burke, MPH, RPh**, LORA Group, Royal Oak, MD, USA; **Donald L. Patrick, PhD, MSPH**, University of Washington, Seattle, WA, USA

W14: Charting a Path for the Elicitation of Preferences: Perspectives on the Effective Use of Preference-Elicitation Methods
Discussion Leaders: Josephine A. Mauskopf, PhD, RTI Health Solutions, Research Triangle Park, NC, USA; **Maarten J. IJzerman, PhD**, University of Twente and MIRA Institute for Biomedical Technology & Technical Medicine, Enschede, The Netherlands; **Juan Marcos Gonzalez, PhD**, RTI Health Solutions, Research Triangle Park, NC, USA

5:00PM-6:00PM **WORKSHOPS - III**

W15: The ISPOR MCDA Task Force: How Best to Use It in Health Care Decision Making
Discussion Leaders: Maarten J. IJzerman, PhD, University of Twente and MIRA Institute for Biomedical Technology & Technical Medicine, Enschede, The Netherlands; **Nancy Devlin, PhD**, Office of Health Economics, London, UK; **Praveen Thokala, PhD**, University of Sheffield, Sheffield, UK; **Kevin Marsh, PhD**, Evidera, London, UK

W16: Maximizing the Utility of Real World Evidence: Integration of Structured EMR Data, Unstructured EMR Data, and Billing Data for Economics and Outcomes Research in Oncology
Discussion Leaders: Mark S Walker, PhD, Vector Oncology, Memphis, TN, USA; **Kathy L. Schulman, MS**, Outcomes Research Solutions, Inc., Bolton, MA, USA; **Arliene Ravelo, MPH**, Genentech, Inc., South San Francisco, TN, USA; **Kim Saverno, PhD, RPh**, Vector Oncology, Memphis, TN, USA

W17: Informatics and Interoperability: Speaking the Same Language
Discussion Leaders: Scott D Nelson, PharmD, MS, Department of Veterans Affairs, Salt Lake City, UT, USA; **Olivier Bodenreider, MD, PhD**, U.S. National Library of Medicine, Bethesda, MD, USA; **Richard Boyce, PhD**, University of Pittsburgh, Pittsburgh, PA, USA; **Daniel C. Malone, PhD, RPh, MS**, University of Arizona, Tucson, AZ, USA

W18: Surviving the Submission: Best Practices in Overall Survival Extrapolation in Oncology
Discussion Leaders: Sanatan Shreay, PhD, Gilead Sciences, Foster City, CA, USA; **Andrew Briggs, DPhil**, University of Glasgow, Glasgow, UK; **Rachel Beckerman, PhD**, CBPartners, New York, NY, USA; **Petros Pechlivanoglu, PhD**, Toronto Health Economics and Technology Assessment Collaborative, Toronto, ON, Canada

W19: Modeling in Oncology: The Taming of the Shrews?
Discussion Leaders: Noemi Muszbek, MSc, Evidera, London, UK; **Sorrel Wolowacz, PhD**, RTI Health Solutions, Manchester, UK; **Agnes Benedict, MSc**, Evidera, Budapest, Hungary

W20: Incorporating Social Values into Cost-Effectiveness Analysis
Discussion Leaders: Christopher McCabe, MSc, PhD, University of Alberta, Edmonton, AB, Canada; **Mike Paulden, MA, MSc**, University of Alberta, Edmonton, AB, Canada; **James F. O'Mahony, PhD**, Trinity College Dublin, Dublin, Ireland

W21: Statistical Methods Used for the Assessment of Non-Redundancy among Clinical Trial Endpoints
Discussion Leaders: Elizabeth D. Bacci, PhD, Evidera, Seattle, WA, USA; **Randall H. Bender, PhD**, Evidera, Bethesda, MD, USA; **Joseph C Cappelleri, PhD, MPH, MS**, Pfizer Inc., Groton, CT, USA; **Kathleen W. Wyrwich, PhD**, Evidera, Bethesda, MD, USA

3:45PM-7:45PM **POSTERS - IV**

6:00PM-7:45PM **EXHIBITORS' WINE & CHEESE RECEPTION & POSTERS - IV**

6:15PM-7:15PM **ISPOR FORUMS - II**

F8: Mapping to Estimate Utility Values for Cost per QALY Economic Analysis – Good Practices
Presented by the ISPOR Mapping to Estimate Utility Values for Cost per QALY Economic Analysis - Good Practices Task Force

F9: High Cost Diseases in Latin America: Results of the 2015 ISPOR HTAnetLatAm Roundtable
Presented by the ISPOR Latin America Consortium – ISPOR HTAnetLatAm

F10: Managing Costs and Improving Quality of Health Care in ASEAN
Presented by the ISPOR Asia Consortium

F11: The Issues and Challenges Facing the Life Science Industry Today
Presented by the ISPOR Institutional Council

F12: Managed Entry Agreements (MEA) in Egypt, Saudi Arabia, and United Arab Emirates
Presented by the ISPOR Arabic Network

F13: Funding Health Technology Assessment in Central and Eastern European Countries: Low Public Budget Reflects Low Public Priority?
Presented by the ISPOR CEE Network

F14: The Role of HTA in the Quest Towards Universal Coverage in Mexico: A Government, Academic and Industry Perspective
Presented by the ISPOR Mexico Chapter

6:45PM-7:45PM **POSTER AUTHOR DISCUSSION HOUR - IV**

8:00PM-11:30PM **ISPOR SOCIAL EVENT** (Separate registration req'd)

An evening of live music by the ISPOR Monte Carlos at the Hard Rock Café

WEDNESDAY, MAY 20

7:15AM-8:15AM **EDUCATIONAL SYMPOSIA**

Bridging the Real-World Evidence (RWE) Divide with Payers and IDNs: Making Pharma a True Collaborator in Evidence
This symposium will share results from pieces of research done with payers, academics, and pharma on how Real-World Evidence (RWE) has informed payer and Integrated Delivery Network (IDN) decisions to date, as well as other findings and case studies. Opportunities to accelerate engagement and impact of RWE and its generation will also be explored. *(Sponsored by IMS Health)*

8:30AM-2:45PM **POSTERS - V**

8:30AM-9:30AM **ISSUE PANELS - IV**

IP16: Do State Medicaid Formularies Worsen Outcomes for Patients with Mental Illness?
Moderator: Seth A. Seabury, PhD, University of Southern California Keck School of Medicine, Los Angeles, CA, USA
Panelists: Dana P. Goldman, PhD, University of Southern California, Los Angeles, CA, USA; **Anupam B. Jena, MD, PhD**, Harvard Medical School, Boston, MA, USA; **Darius N. Lakdawalla, PhD**, University of Southern California, Los Angeles, CA, USA

IP17: Value-Based Formulary Design (VBFD): Is Premera a Voice Crying in the Wilderness?
Moderator: Kathleen E. Hughes, MBA, Avalere Health LLC, Washington, DC, USA
Panelists: Dan Danielson, MS, RPh, Premera Blue Cross, Mountlake Terrace, WA, USA; **Edmund J. Pazella, MD, MPH**, Aetna, Inc., Hartford, CT, USA; **John Graham, PharmD**, GlaxoSmithKline, King of Prussia, PA, USA

IP18: Competitive Bidding for Therapeutically-Equivalent Branded Pharmaceuticals: Promise or Threat?
Moderator: Josephine A. Mauskopf, PhD, RTI Health Solutions, Research Triangle Park, NC, USA
Panelists: David W. Miller, PhD, Biogen Idec, Maidenhead, UK; **Susan Hogue, PharmD, MPH**, RTI International, Research Triangle Park, NC, USA

IP19: Ready for Risk Sharing? Challenges and Implications for Manufacturers
Moderator: Kim White, MBA, Numerof & Associates, St. Louis, MO, USA
Panelists: Kevin Conlin, MA, Horizon Blue Cross Blue Shield, Newark, NJ, USA; **Bryan Gilpin, SM**, Boston Scientific Corporation, Marlborough, MA, USA; **Sherry Thornton**, Medtronic, Inc., Memphis, TN, USA

IP20: Application of PROMIS Tools in Pharmaceutical and Device Industry Studies: Are We Moving the Wheel Forward?
Moderator: Stacie Hudgens, MA (AbD), Clinical Outcomes Solutions, Tucson, AZ, USA
Panelists: David Cella, PhD, Northwestern University Feinberg School of Medicine, Chicago, IL, USA; **Ashley Slagle, PhD**, U.S. Food and Drug Administration, Silver Spring, MD, USA; **Rajiv Mallick, PhD**, BTG International Inc., West Conshohocken, PA, USA

9:30AM-9:45AM **BREAK, EXHIBITS & POSTERS - V**

9:45AM-11:00AM **WELCOME & THIRD PLENARY SESSION**

Big Data, Big Systems, and Better Evidence: What Progress?
What could the growing interest in big data mean for health delivery systems and patients? This session will explore the challenges for incorporating big data into health system decisions and processes. A number of related questions will be explored. Can big data be used to improve evidence and clinical decision making? Is there a need for new analytical approaches? How will these developments affect patients?
Moderator: Adrian Towse, MA, MPhil, Director, Office of Health Economics, London, UK
Speakers: Ari Caroline, Chief Analytics Officer, Memorial Sloan Kettering Cancer Center, New York, USA, NY; **Paul Wallace, MD**, Chief Medical Officer & Senior Vice President, Clinical Translation, Optum Labs and Chair, Board of Directors, AcademyHealth, Cambridge, USA, MA

11:00AM-11:30AM **ISPOR 20th INTERNATIONAL MEETING RESEARCH PRESENTATION AWARDS**

11:30AM-1:45PM **LUNCH, EXHIBITS & POSTERS - V**

11:45AM-12:15PM **EDUCATIONAL SYMPOSIA**

The Real World: How Integrated Data Is Used to Improve Patient Care
This symposium will focus on how integrated health information improves patient care. Speakers will discuss ways that access to actionable information can: 1) inform patients' decision making; 2) support physicians' treatment recommendations; and 3) achieve payers' goal of aligned behaviors. *(Sponsored by Optum)*

12:45PM-1:45PM **POSTER AUTHOR DISCUSSION HOUR - V**

1:45PM-2:45PM **WORKSHOPS - IV**

W22: How to Design an Analytic Strategy for Evidence Generation for Decision Makers
Discussion Leaders: Sean D. Sullivan, PhD, University of Washington, Seattle, WA, USA; **Omar Dabbous, MD, MPH**, GlaxoSmithKline, King of Prussia, PA, USA; **Lou P Garrison, PhD**, University of Washington, Seattle, WA, USA; **Rafael Alfonso-Cristancho, MD, PhD, MSc**, GlaxoSmithKline (GSK), King of Prussia, PA, USA

W23: Integrated Longitudinal Data: How Dynamic Data Collection Can Bias Estimators and Possible Solutions
Discussion Leaders: Henry J. Henk, PhD, Optum, Eden Prairie, MN, USA; **William H Olson, PhD**, Janssen Scientific Affairs, LLC, Titusville, NJ, USA

W24: A Practical Approach to Understand the Concepts and Methods Used to Assess Heterogeneity and Inconsistency in Network Meta-Analyses
Discussion Leaders: Varun Ektare, MPH, Pharmerit International, Bethesda, MD, USA; **Dipen Patel, PhD**, Pharmerit International, Bethesda, MD, USA; **Berhanu Alemayehu, PhD**, AstraZeneca, Gaithersburg, MD, USA; **Sonya J Snedecor, PhD**, Pharmerit International, Bethesda, MD, USA

W25: Modeling Treatments for Rare Diseases: Methodologic Considerations, Challenges & Potential Solutions
Discussion Leaders: Michele Kohli, PhD, Optum, Burlington, ON, Canada; **Debbie L. Becker, MSc**, Optum, Burlington, ON, Canada; **Milton C Weinstein, PhD**, Harvard T. H. Chan School of Public Health, Boston, MA, USA; **Pablo Lapuerta, MD**, Lexicon Pharmaceuticals, Princeton, NJ, USA

W26: Back to the Future: Learning the Lessons in Valuing EQ-5D-3L Health States
Discussion Leaders: Paul Kind, University of Leeds, Leeds, UK; **Roisin Adams, PhD**, National Centre for Pharmacoeconomics, Dublin, Ireland; **Mônica Viegas, PhD**, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil

2:45PM-3:00PM **BREAK & EXHIBITS - V**

3:00PM-4:00PM **WORKSHOPS - V**

W27: When Better Things Happen to a Good Model: A Development of the Difference in Differences (DD) Model into a Difference in Differences in Differences in Differences (DDDD) Model When Analyzing the Effect of an Intervention
Discussion Leaders: Junling Wang, PhD, The University of Tennessee College of Pharmacy, Memphis, TN, USA; **Ya-Chen Tina Shih, PhD**, University of Texas MD Anderson Cancer Center, Houston, TX, USA; **Yanru Qiao, MS**, The University of Tennessee College of Pharmacy, Memphis, TN, USA

W28: Horizon Scanning – Identifying and Estimating Future Impact of Emerging Innovations on U.S. Health Care
Discussion Leaders: Elise Berliner, PhD, Agency for Healthcare Research and Quality, Rockville, MD, USA; **Karen Schoelles, MD, SM**, ECRI Institute, Plymouth Meeting, PA, USA; **Marcus Lynch, PhD**, ECRI Institute, Plymouth Meeting, PA, USA; **Jalpa A. Doshi, PhD**, University of Pennsylvania, Philadelphia, PA, USA

W29: Strategies for Assessing the Patient-Level Economic Impact of Cancer Diagnosis
Discussion Leaders: Veena Shankaran, MD, MS, University of Washington, Seattle, WA, USA; **Amy Davidoff, PhD, MS**, Yale School of Public Health, New Haven, CT, USA; **Representative from Interagency Consortium to Promote Health Economics Research on Cancer (HEROiC)**

W30: Warranting Budget Predictability through Managed Entry Agreements and Insurance-Based Mechanisms
Discussion Leaders: Olivier Ethgen, MSc, PhD, University of Liege, Liege, Belgium; **Augustin Terlinden, MSc**, BLUE ANTIDOTE, Tervuren, Belgium

W31: Developments and Communication Since the Issuance of FDA's Guidance to Industry on Patient-Reported Outcomes: Then and Now
Discussion Leaders: Brooke Witherspoon, BA, Endpoint Outcomes, Boston, MA, USA; **Somali Misra Burgess, PhD**, Strategic Outcomes Services, Mission Viejo, CA, USA; **Kristina Fitzgerald, MPH**, Genentech Inc., South San Francisco, CA, USA; **Paivi Miskala, MSPH, PhD**, ProCon Global, LLC, Rockville, MA, USA