

## SESSION TITLE:

Economic Evaluation of Drugs, Devices and other Medical Interventions

## WORKSHOP OVERVIEW

This half-day workshop will provide an overview of economic assessment methods for drugs and other medical interventions. Participants will learn how to collect and calculate the costs and outcomes for different treatment alternatives, and how to assess the value of medical interventions. Different pharmacoeconomic models and techniques will be demonstrated in lecture and case studies. These include cost-minimization, cost-of-illness, cost effectiveness, cost-benefit, and cost-utility analysis. Decision analysis, sensitivity analysis, and discounting will also be demonstrated. This course provides a brief introduction to Markov modeling techniques and their practical application in economic modeling of alternative therapies. We present analytic approaches including discrete event simulation and Monte Carlo simulation and we give some technical advice for modelers. We will provide a case study of economic assessment of new expensive biotechnology cancer drugs, using both Markov modeling and discrete event simulation modeling. We discuss the concepts of variability, uncertainty, probabilistic sensitivity analysis (PSA), and cost-effectiveness acceptability curves (CEAC). We review the ISPOR Principles of Good Practice for Decision Analytic Modeling in Health Care Evaluations and explore, when and how modeling should be used in economic evaluation.

## WORKSHOP FACULTY

Joel Hay, Ph.D.

Dr. Hay is founding Chair in the Department of Pharmaceutical Economics and Policy in the School of Pharmacy, with a joint appointment in the Department of Economics at the University of Southern California. He also serves as the USC Project Coordinator for the Rand Evidence-Based Medicine Practice Centers of Southern California, and Co-Investigator at the USC Alzheimer Research Center. He is a Health Economics Research Scholar at the UCLA Center for Vaccine Research. He is a Director of the American Society for Health Economics, and a founding Director of the International Society for Pharmacoeconomics and Outcomes Research (ISPOR). He is founding Editor-in-Chief of *Value in Health*, the official journal of ISPOR.

## Expected Audience

- Academics interested in economic evaluation and outcomes research methods.
- Pharmaceutical, medical device and other health care executives interested in demonstrative product value for money.
- Policy makers interested in economic comparisons of alternative therapies and interventions.

- Health economists at health plans or other provider organizations interested in cost effectiveness of alternative treatments.