

A special Works-In-Progress will be held on
October 24, 2012, from 4pm-5pm, in the UW Health Science Building, room H670.
To attend virtually, see Adobe Connect information below.

We are pleased to welcome **Andrew Willan, PhD**, as the featured speaker. Dr. Willan is an academic biostatistician and clinical trial methodologist, and currently holds the positions of Senior Scientist at SickKids Research Institute, Professor of Biostatistics in the Dalla Lana School of Public Health at the University of Toronto, and Professor Emeritus in the Department of Clinical Epidemiology and Biostatistics at McMaster University.

This session is co-sponsored by the CHASE Alliance and PHEnOM Seminar Series.

Value and Uncertainty in the Pricing New Health Care Interventions

Andrew R. Willan, PhD, SickKids Research Institute and the University of Toronto

Purpose: To use value of information methods to identify optimal decision making from societal and company perspectives in the pricing of new health interventions.

Method: Previous application of value of information methods to optimal clinical trial design have predominantly taken a societal decision making perspective, implicitly assuming that health care costs are covered through public expenditure and trial research is funded by government or donation-based philanthropic agencies. We consider the interaction between interrelated perspectives of a societal decision maker (*e.g.* NICE in the UK) charged with the responsibility for approving new health interventions for reimbursement, and the company that holds the patent for a new intervention. We establish optimal decision making from societal and company perspectives, given tradeoffs between the value and cost of research and the price of the new intervention.

Result: Given the current level of evidence (value and uncertainty), there exists a maximum (threshold) price acceptable to the decision maker. Submission for approval with prices above this threshold will be refused and additional evidence (*e.g.* another trial) requested because the value of the additional evidence to the decision-maker will exceed the cost of delaying the decision. Given the current level of evidence and the decision maker's threshold price as a function of additional evidence, there exists a minimum (threshold) price acceptable to the company. When facing prices below this threshold, the value of additional evidence to the company will exceed company costs. If the decision maker's threshold price exceeds the company's then current evidence is sufficient since any price between the thresholds is acceptable to both. On the other hand, if the decision maker's threshold price is less than the company's then no price is acceptable to both and the company's optimal strategy is to commission another trial. The methods are illustrated using a recent example from the literature.

Conclusion: Value of information methods can be used to identify optimal decision making from societal and company perspectives. Further they allow the value and uncertainty regarding the evidence of a new health intervention to determine optimal pricing.

Adobe Connect instructions:

Go to <http://confer.uw.edu/deptpharm> .
Login as a guest. Type your name into the field and click Enter Room.
Click the Request Entry button.

To join the call, dial **1-800-379-6841**
Participant Code: 394654