Health Economics from Theory to Practice:
Informing Related Decisions of Reimbursement, Research & Regulation

A Three-Day Workshop
Conducted by Prof Simon Eckermann & Prof Andrew Willan

14 - 16 March 2012
Sydney Business School, Sydney, Australia
# HEALTH ECONOMICS FROM THEORY TO PRACTICE: Optimally Informing Related Decisions of Reimbursement, Research and Regulation

## Day 1 Evidence-based Reimbursement: Decision Making under Uncertainty

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>8.15-9.00</td>
<td>Arrival tea and coffee</td>
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<tr>
<td>9.00-9.15</td>
<td>Course Introductions</td>
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<tr>
<td>9.15-10.15</td>
<td>Principles and practice of economic evaluation in health technology assessment: Thinking outside the box</td>
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<tr>
<td>10.15-10.30</td>
<td>Morning Coffee</td>
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<tr>
<td>10.30-11.45</td>
<td>Statistical analysis of cost-effectiveness data from clinical trials</td>
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<tr>
<td>11.45-12.15</td>
<td>Tutorial: Modelling Uncertainty</td>
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<tr>
<td>12.15-1.00</td>
<td>Lunch</td>
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<tr>
<td>1.00-2.00</td>
<td>Frankenstein’s Monster or Vampire of trials: coverage, comparability and avoiding inferential fallacies</td>
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<tr>
<td>2.00-2.45</td>
<td>Decision Analysis and Decision Tree Methods</td>
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<td>3.45-3.30</td>
<td>Tutorial: Probabilistic Sensitivity Analysis (PSA) – from parameter uncertainty to decision uncertainty</td>
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<tr>
<td>3.30-3.45</td>
<td>Afternoon Coffee</td>
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<tr>
<td>3.45-4.30</td>
<td>Best informing societal decisions when comparing two or more strategies: The cost-disutility plane and expected net loss curves and frontiers</td>
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<tr>
<td>4.30-5.00</td>
<td>Tutorial: ENL curves and frontiers</td>
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## Day 2 Research and Reimbursement: Optimal trial design within and across jurisdictions

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>9.15-9.00</td>
<td>Breakfast</td>
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<tr>
<td>9.00-10.15</td>
<td>The value of information (VoI) to decision makers &amp; principles for efficient trial design</td>
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<tr>
<td>10.15-10.30</td>
<td>Morning Coffee</td>
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<tr>
<td>10.30-11.00</td>
<td>Tutorial: VoI</td>
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<tr>
<td>11.00-12.15</td>
<td>Relaxing the Assumptions: VoI gets real</td>
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<tr>
<td>12.15-1.00</td>
<td>Lunch</td>
</tr>
<tr>
<td>1.00-1.30</td>
<td>Tutorial: EVSI within Jurisdiction</td>
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<td>1.30-2.15</td>
<td>Joint research and reimbursement decisions</td>
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<tr>
<td>2.15-3.00</td>
<td>Optimal global trial design</td>
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<tr>
<td>3.00-3.30</td>
<td>Afternoon Coffee</td>
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<tr>
<td>3.30-4.30</td>
<td>Bayes theorem and the value of diagnostic tests</td>
</tr>
<tr>
<td>4.30-5.00</td>
<td>Tutorial: VOI with diagnostic tests</td>
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Day 3 Research, Reimbursement and Regulation: Translating theory to practice

8.15-9.00 Breakfast

9.00-10.15 Industry trials, VoI and pricing for approval

10.15-10.45 Morning Coffee

10.45-12.15 Creating incentives for evidence based medicine in practice: measuring efficiency consistent with maximising net benefit

12.15-1.00 Lunch

1.00-2.00 Tutorial: Comparing providers in practice

2.00-2.30 Afternoon Coffee

2.30-3.30 An economically meaningful threshold value

3.30-4.00 Panel Summary and question session
Registration Form

This document is an Australia Tax Invoice for GST purpose on completion and payment: University of Wollongong
BSB 082-886 Account number 038110002

Name ...................................................................................................................................................
Organisation ...........................................................................................................................................
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E-mail ....................................................................................................................................................... 
I wish to register for the Three Day Health Economics from Theory to Practice: Informing Related Decision of Reimbursement, Research & Regulation work shop (Please Cross X)

Three Day Workshop Fees Include all seminar and tutorial teaching materials*, lunch each day;

Early Bird Fee till 21 December 2011  Fee from 22 December 2011

☐ Academic / Public Sector: $990/-                     ☐ Academic / Public Sector: $1140/-

☐ Private / Commercial Sector: $1990/-                    ☐ Private / Commercial Sector: $2140/-

☐ I wish to purchase a copy of the recommended text ($115/-)


I wish to pay by,

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Signature of card holder: .......................................... Credit card amount: AUD$ ...........................

Any special dietary requirements? (Please Circle)
Vegetarian / Gluten Free / Lactose Free / Halal / Other (Please provide details)

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Please complete this application form and return it with payment of course fees to:
Megan Edgar
Sydney Business School
Innovation Campus, Building 232
Squires Way
North Wollongong 2500
NSW, Australia.
t: 024221 8138
e: megane@uow.edu.au

Cancellation Policy
A refund will be returned less AUD$ 100 administration fee for a cancellation up to 1 March 2012.
THERE WILL BE NO REFUNDS given after 1 March 2012.
Workshop size strictly limited to 25 delegates.
HEALTH ECONOMICS FROM THEORY TO PRACTICE: Optimally Informing Related Decisions of Reimbursement, Research and Regulation

Course Details

Suitable For

Health analysts, policy and decision makers, health technology assessors, health economists, pharmaco-economists and researchers undertaking economic studies in clinical trials and practice.

The course is based on internationally recognised methods as published by Professors Willan and Eckermann for optimal decision making in research design, health technology assessment (HTA) and practice and the book “Statistical Analysis of Cost-Effectiveness Data” by Professors Willan and Briggs.

At the conclusion of the course, participants will have learnt the principles and practical methods to:

1) Apply health economic methods to undertake robust health technology assessment and evidence synthesis and translation (Willan and Briggs, 2006; Eckermann, Briggs and Willan, 2008; Eckermann, Coory and Willan 2008, 2009, 2011);

2) Apply value of information methods in optimally informing joint research and reimbursement decision and research design allowing for real decision contexts including time, option value and opportunity costs of delay, costs of reversal, implementation and global trial design (Willan and Pinto, 2005; Eckermann and Willan, 2007, 2008a, 2008b, 2009, 2010; Willan, 2007, 2008; Willan and Kowgier, 2008; Willan and Eckermann 2010, 2011);

3) Undertake efficiency measurement in practice consistent with the maximising of net benefit underlying evidence based medicine (Eckermann, 2004; Eckermann, Briggs and Willan, 2008; Eckermann and Coelli, 2008; Eckermann and Willan 2011).

4) Identify efficient pricing in practice using a robust framework allowing for quality of care consistent with evidence based medicine while preventing cost shifting and cream skimming incentives for providers (Eckermann 2004, 2009; Eckermann and Coelli 2011) and in HTA allowing for decision uncertainty (Willan and Eckermann 2011).

Course materials provided include a comprehensive manual with tutorials and electronic templates in Microsoft® Excel to enable application of the methods in practice.

The workshop format is seminar and tutorial based presenting from first principles methods for optimal decision making, demonstrating the importance of considering each of the above points and their interaction.

Since 2005, more than 260 participants from policy, epidemiological, clinical, statistics and health economic backgrounds have successfully undertaken the course, including health analysts, researchers and policy makers from the UK, Canada, USA, Japan, Korea, China, Germany, France, Eastern Europe and the Pharmaceutical Benefits Advisory Committee (PBAC), Medical Services Advisory Committee (MSAC), Negotiation Oversight Committee and Prostheses List Advisory Committee (PLAC) in Australia and PBAC economic sub-committee as well as industry analysts and decision makers.

Further details on the course presenters, background, aims, content and references as well as the venue are available at http://www.uow.edu.au/content/groups/public/@web/@gsb/documents/doc/uow090821.pdf
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Course Material

Teaching material and references include the following recently published articles:

HEALTH ECONOMICS FROM THEORY TO PRACTICE: Optimally Informing Related Decisions of Reimbursement, Research and Regulation

Professor Andrew Willan
SickKids Research Institute/University of Toronto

Dr Willan is an academic biostatistician and clinical trial methodologist. He is Senior Scientist and Scientific Director of Quantitative Methods 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. His contributions to statistical methodology include publications in the areas of cost-effectiveness analysis, value of information methods, management trials, crossover trials, non-nested regression analysis and bivariate response models. He has been particularly instrumental in devising robust methods for modelling uncertainty in economic evaluation and interpreting such evidence for decision making in health technology assessment through the use of value of information methods. Previously held positions include the Head of Biometry of the Clinical Trials Program at the National Cancer Institute of Canada and the Head of Clinical Trials and Epidemiology for the Cancer Program at Sunnybrook Medical Centre in Toronto.

www.andywillan.com

Professor Simon Eckermann
Sydney Business School

Simon Eckermann is Professor of Health Economics at the University of Wollongong and adjunct Professor at Flinders University, and was previously Senior Health Economist at the NHMRC Clinical Trial Centre, Sydney University. He has extensive experience in undertaking original and applied research with health economic methods in Health Technology Assessment (HTA) and practice. His original research includes:

(i) Value of information methods for optimally informing joint reimbursement and research decisions by society decision makers and industry locally and globally with Professor Willan (http://www.andywillan.com)
(ii) Methods for consistently estimating absolute risk differences to overcome inferential fallacies identified with use of relative risk in indirect comparisons and translating evidence;
(iii) The expected net loss frontier and comparison on the cost-disutility plane to best inform risk neutral or risk averse decision makers when comparing more than two strategies in HTA;
(iv) a correspondence method allowing efficiency measures of health care providers or health systems in practice consistent with the maximisation of net benefit underlying evidence-based care.

More generally, this research has demonstrated links between optimal decision making in research, reimbursement and regulation. Associated methods have been taught by Professor Eckermann as part of the internationally acclaimed 3–day short course “Health Economic Method from Theory to Practice: informing related decisions of research, reimbursement and regulation” with Professor Willan since 2005. Prof. Eckermann also actively sits on and undertakes guideline revision and health economics educational activities for National decision bodies including the PBAC Economic Sub-Committee (2005-2010), Palliative Care Trials Scientific Committee (2006-current), Prostheses List Advisory Committee (2010-current), Medical Services Advisory Committee (2011-current), and is a CI on competitive research grants totalling more than A$16 million.