

HS 249T: Special Topics in Cost-Effectiveness Analysis

Spring 2008
Mondays and Wednesdays, 9-11 AM
Room 41-268 CHS

Instructors:

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Required Textbooks and Software:

The following books are available in UCLA Health Sciences Store:

Myriam Hunink and Paul Glasziou, *Decision making in Health and Medicine*, New York: Cambridge University Press, 2001.
Marthe Gold et al. (eds.), *Cost-Effectiveness in Health and Medicine*, Oxford University Press, 1996.
Peter Muennig, *Designing and Conducting Cost-Effectiveness Analyses in Medicine and Health Care*, San Francisco: Jossey-Bass, 2002.
TreeAge Pro User's Manual [pdf file]

In addition, students are encouraged to purchase the following software:

TreeAge Pro Suite Limited Functionality Student 1-year License for \$45:
<http://server.treeage.com/treeagepro/purchase/stu.asp>

TreeAge is also available for students to use on selected computers in the Biomedical Library computer lab.

Prerequisite:

HS 249G Techniques in Medical Technology Assessment: Decision Analysis and Cost-Effectiveness Analysis

Learning Objectives and Competencies:

Students should leave this class with specific competencies in: (1) conducting uncertainty analyses; (2) understanding the methods used to construct QALYs; (3) conducting Markov analyses; (4) critically analyzing large-scale published cost-effectiveness analyses (CEAs); (5) effectively presenting the strengths and limitations of published CEAs to their peers; and (6) using advanced features of TreeAge software to construct and analyze CEA models, including Markov models.

Evaluation Criteria:

Final grades will be calculated as follows:

Problem set 1:	20%	(due May 7)
Problem set 2:	20%	(due June 4)
Final presentation:	50%	
Classroom participation:	10%	

The final presentation will include a brief in-class presentation (5-10 minutes) of the strengths and weaknesses of a CEA study selected from the literature by the student, as well as a written analysis (5-8 double-spaced pages) of the strengths and weaknesses of that same study.

Class Web Site:

<http://kominski.bol.ucla.edu/HS249T.htm>

Schedule of Classes

Session	Date	Instructor	Topic
1	3/31	Kominski	Class Overview Role of CEA in Technology Assessment
2	4/2	Kominski	Measuring Costs: How to Incorporate Indirect (Non-Medical) Costs Discounting: Is a Constant Rate Always Appropriate? Reading: Muennig, Chapter 4
3	4/7	Keeler	Value of Information: Whether or Not to Test? Reading: Hunink, Chapter 6
4	4/9	Keeler	Diagnosis with Continuous Predictors; Multiple Tests; Receiver Operator Curves (ROCs). Reading: Hunink, Chapter 7
5	4/14	Keeler	Gates Project on Diagnosis in the Developing World Reading: Nature supplement
6	4/16	Keeler	CEA vs. CBA; Contingent Valuation for Value of Statistical Lives (VSL); Willingness-to-Pay. Reading: Cutler Paper, Hammitt Paper
7	4/21	Keeler	Deale, Life Tables including Additive Hazards Reading: New Deales, Malin Breast Cancer paper
8	4/23	Spiegel	Meta-Analysis; Fixed vs. Random Effects Models
9	4/28	Kominski	Uncertainty in CEA: Acceptability Curves and Confidence Intervals; Monte Carlo Analysis Reading: TreeAge Pro Manual, Chapters 16 & 33
10	4/30	Kominski	LAB: Uncertainty
11	5/5	Kominski	Markov Models: Overview; Markov Node; Markov States and Initial probabilities; Transition Probabilities
12	5/7	Spiegel	Markov Models: Time-dependent Transition Probabilities; Discounting; Half-Cycle Correction; Temporary States and Tunnel States
	5/12		No class
13	5/14	Spiegel	LAB: Markov Models
14	5/19	Kaplan	QALYs: Multi-Attribute Utility Theory
15	5/21	Kaplan	QALYs: Quality of Well Being – Theory & Criticisms
	5/26		No class: Memorial Day
16	5/28	Kaplan	QALYs: Quality of Well Being – Applications
17	6/2	Kominski	Student Presentations
18	6/4	Kominski	Student Presentations