

Revised 3/24/08

UNIVERSITY OF HAWAII AT MĀNOA
Department of Economics

HEALTH ECONOMICS
Econ 434 (701)
Summer 2008

COURSE SYLLABUS

J. Andrew Lee
Health Care Systems
The Wharton School
Email: juho@hawaii.edu
Tel: TBA
Office: TBA

Lectures: MTWRF 10:30-11:45
Location: Kuykendall Hall 307
Office Hours: TR 1:30-2:30
Or by appointment

COURSE OBJECTIVE

The purpose of this course is to use economic frameworks to analyze the health care market and health policies. It examines health care issues from both a macro-level systems perspective as well as issues pertaining to the major parties within the health care system (i.e. patients, payers, providers, pharma/biotech and government). Emphasis will be on the US (because that is where most research has been done), but we will examine health economic research in other countries, especially in developing countries and in the international market for pharmaceuticals.

By examining the prior health economics research literature, students will be trained to think and analyze health care problems from an economic perspective. Students should also gain an appreciation for both the strengths and limitations of applying economic principles to the many complex health care issues. Finally, students should feel comfortable applying many of the lessons learned from health economics to other sectors and topics including: non-profit firms, decision-making under uncertainty and public finance.

COURSE DESCRIPTION

The health care sector in the United States is a complex system comprised of multiple parties including: patients, providers, payers, government and the pharmaceutical/biotech industries. This course will survey the basic economic issues surrounding the health care sector and act as an introduction to the field of health economics. The focus will be on the application of economic principles of scarcity and choice to the use and provision of medical care. Society must decide how much medical care to produce, what kind to produce, and for whom to produce. This course will examine efficiency and equity in the allocation of resources.

Economic analysis is important to our discussion of medical care because it can provide valuable insight into the problem of optimal social choice. Economic analysis also provides insight into the behavior of consumers, health care providers and health insurers, and their interactions in the overall health care system. Traditional economic theory will be applied as well as analyses peculiar to health economics. As such, the course starts with an overview of the U.S. health care system before diving into the issues and models surrounding the major groups (i.e. patients, payers/government, providers and pharmaceutical/biotech industries). We will then examine health care systems outside the U.S. before concluding with a discussion on specific topics within the health care sector

including: (i) the economics of HIV/AIDS, (ii) the economics of lifestyle issues such as obesity and smoking, (iii) the value of life, (iv) health insurance reforms and (v) medical malpractice.

The materials covered in the course will review some of the important prior research within health economics as well as highlight some of the current health care issues and problems. We will draw from textbook chapters, research articles and current media reports to guide the classroom discussions. Through (i) in-class lectures with student participation and discussion, (ii) individual student-faculty meetings and (iii) student presentations, students will learn to critically examine and analyze current health care policy and business issues from an economic perspective.

PREREQUISITES

ECON 301: Intermediate Microeconomics

READINGS

The primary text is Folland, Goodman, and Stano (FGS), *The Economics of Health and Health Care* (5th ed., 2006). This text provides a clear description of the fundamental questions and theoretical frameworks covered in health economics. In addition, the secondary text for the course is Cutler's *Your Money or Your Life: Strong Medicine for America's Healthcare System* (2005). This text offers a nice discourse on some of the current U.S. health care system issues and balances the discussion from what one often hears in the media. Finally, there are journal articles assigned as part of the readings. All readings listed below each lecture are required readings.

GRADING POLICY

There will be two exams for this course. First, the mid-term exam will be in-class and take place on Monday, July 21st. Second, the final exam will also be in-class and take place on Thursday, August 14th. There will be **no make-up or alternative time/dates** scheduled for these exams. Exams will be based on lecture and reading materials and will consist of both multiple-choice and short essay-type questions.

In addition, students will be expected to research a current health care issue and examine how the application of health economics might be used to explain and/or resolve the issue. Students should plan on consulting with and receiving instructor approval for their topics prior to the mid-term exam date, July 21st. During the last week of classes, students will prepare a brief (5-10 minutes) in-class presentation and submit a 4-5 page double-space typed report on the date of their presentation.

Finally, there will be 4 weekly quizzes on Fridays reviewing topics covered that week. Quizzes will be graded using a 3-point scale where

- Perfect score = 3 points
- Completing the quiz = 1 point
- Not completing the quiz = 0 point

There will be no make-up time/dates scheduled for these quizzes. While the quizzes and participation evaluation do not make up a large portion of the evaluation, they can carry greater weight for borderline cases (e.g. A- or B+). It is therefore expected that students will prepare for, attend and participate during the lectures. Comments and questions in class are strongly encouraged. Things that seem confusing or controversial are usually that way for many students; everyone will benefit if you ask questions. And because the class will often deal with policy

issues, there is a lot of room for honest and good spirited disagreement. No one knows the complete answer, or even the right answer, to many of these questions.

The table below outlines the evaluation components, total number of points possible and percentage for each component.

Quizzes (12pt) & Participation (3pt)	15 points possible	5%
Mid-term Exam	90 points possible	30%
Final Exam	135 points possible	45%
In-class Presentation	30 points possible	10%
Report	30 points possible	10%
Total	300 points possible	100%

INTRODUCTION

July 7 Course Description and Overview

- FGS Chapter 1
- Arrow, K. (1963). Uncertainty and the Welfare Economics of Medical Care. *American Economic Review*, 53(5): 941-973.

July 8 Iron Triangle of Health: Cost

- Catlin, A. et al. (2007). Trends: National Health Spending in 2005: The Slowdown Continues. *Health Affairs*, 26(1): 142-153.
- Pauly, M. (January, 2003). Should We Be Worried About High Medical Spending Growth in the United States? *Health Affairs Web Exclusive*: W3-15 – W3-27.
- McClellan, M. et al. (1994). Does More Intensive Treatment of Myocardial Infarction in the Elderly Reduce Mortality? *Journal of the American Medical Association*, 272(11): 859-866.

July 9 Iron Triangle of Health: Access and Quality

- Hurley, R. et al. (December, 2005). A Widening Rift in Access and Quality: Growing Evidence of Economic Disparities. *Health Affairs Web Exclusive*: W5-566 – W5-576.
- Kawachi, I. et al. (2005). Health Disparities by Race and Class: Why Both Matter. *Health Affairs*, 24(2): 343-352.
- Newhouse, J. (2002). Why is There a Quality Chasm? *Health Affairs*, 21(4): 13-25.
- McGlynn, E. et al. (2003). The Quality of Health Care Delivered to Adults in the United States. *New England Journal of Medicine*, 348(26): 2635-2645.

PATIENTS

July 10 Demand for Health / Health Production Function

- FGS Chapters 5 and 6
- Cutler Chapter 2
- Gertler, P. and D. Waldman. (1992). Quality-Adjusted Cost Functions and Policy Evaluation in the Nursing Home Industry. *Journal of Political Economy*, 100(6): 1232-1256.

July 11 Demand for Health and Medical Care

- FGS Chapter 7
- Grossman, M. (1972). On the Concept of Health Capital and the Demand for Health. *Journal of Political Economy*, 80: 223-255.

July 14 Demand for Medical Care: Prices and Quantity

- FGS Chapter 9

- Manning, W. et al. (1987). Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment. *American Economic Review*, 77(3): 251-277.

PAYERS

July 15 Demand for Health Insurance: Moral Hazard

- FGS Chapter 8
- Cutler Chapter 7
- Pauly, M. (1968). The Economics of Moral Hazard: Comment. *American Economic Review*, 58(3): 531-537.

July 16 Private Health Insurance: Adverse Selection

- FGS Chapters 10 and 11
- Gruber, J. (1994). The Incidence of Mandated Maternity Benefits. *American Economic Review*, 84(3): 622-641.
- Rothschild, M. and J. Stiglitz. (1976). Equilibrium in Competitive Insurance markets: An Essay on the Economics of Imperfect Information. *Quarterly Journal of Economics*, 90:629-650.

July 17 Managed Care

- FGS Chapter 12
- Cutler Chapter 8
- Miller, R. and H. Luft. (2002). HMO Plan Performance Update. *Health Affairs*, 21(4): 63-86.
- Langwell, K. (1990). Structure and Performance of Health Maintenance Organizations: A Review. *Health Care Financing Review*, 12(1): 71-79.

July 18 Governmental Programs: Medicare & Medicaid

- FGS Chapter 21
- Cutler, D. and J. Gruber. (1997). Medicaid and Private Insurance: Evidence and Implications. *Health Affairs*, 16(1): 194-200.
- Dranove, D. (1987). Rate-Setting by Diagnosis Related Groups and Hospital Specialization. *RAND Journal*, 18(3): 417-427.

July 21 Midterm Exam

PROVIDERS

July 22 Hospitals: Economic Overview

- FGS Chapter 14 and 20
- Kessler, D. and M. McClellan. (2000). Is Hospital Competition Socially Wasteful? *Quarterly Journal of Economics*, 115(2): 577-615.
- Pauly, M. and M. Redisch. (1973). The Not-For-Profit Hospital as a Physicians' Cooperative. *American Economic Review*, 63: 87-100.

July 23 Hospitals: Non-Profits

- FGS Chapter 13
- Nicholson, S. et al. (2000). Measuring Community Benefits Provided by For-Profit and Nonprofit Hospitals. *Health Affairs*, 19(6): 168-177.
- Newhouse, J. (1970). Towards a Theory of Non-Profit Institutions: An Economic Model of a Hospital. *American Economic Review*, 60: 64-74.
- David, G. and L. Helmchen. (2006). An Uncertain Prescription. *Regulation*, 29(2): 14-16.

July 24 Physicians

- FGS Chapter 15
- Reinhardt, U. (1999). The Economist's Model of Physician Behavior. *New England Journal of Medicine*, 18(5): 462-464.
- Yip, W. (1998). Physician Response to Medicare Fee Reductions: Changes in the Volume of Coronary Artery Bypass Graft (CABG) Surgeries in the Medicare and Private Sectors. *Journal of Health Economics*, 17(6): 675-699.

July 25 Labor Supply

- FGS Chapter 16
- Berliner, H. and E. Ginzberg. (2002). Why This Hospital Nursing Shortage is Different. *Journal of the American Medical Association*, 288(21): 2742-2744.
- Blumenthal, D. (2004). New Steam from an Old Cauldron: The Physician-Supply Debate. *New England Journal of Medicine*, 350(17): 1780-1787.
- Farley, P. (1986). Theories of the Price and Quantity of Physician Services: A Synthesis and Critique. *Journal of Health Economics*, 5(4): 315-333.

PHARMACEUTICAL INDUSTRY

July 28 Industry I: Overview

- FGS Chapter 17
- Reinhardt, U. (2000). Perspectives on the Pharmaceutical Industry. *Health Affairs*, 20(5): 136-149.
- Berndt, E. (2002). Pharmaceuticals in US Healthcare: Determinants of Quantity and Price. *Journal of Economic Perspectives*, 16(4): 45-66.

July 29 Industry II: Prices and Consumers

- Danzon, P. and M. Furukawa. (2003). Prices and Availability of Pharmaceuticals: Evidence from Nine Countries. *Health Affairs* Web Exclusive: W3-521 – W3-536.
- Frank, R. (2001). Prescription Drug Prices: Why Do Some Pay More than Others Do? *Health Affairs*, 20(2): 115-128.
- Berndt, E. (2005). To Inform or Persuade? Direct-to-Consumer Advertising of Prescription Drugs. *New England Journal of Medicine*, 352(4): 325-328.

July 30 Cost Effectiveness Analysis

- FGS Chapter 4
- Garber, A. and C. Phelps. (1997). Economic Foundations of Cost Effectiveness Analysis. *Journal of Health Economics*, 16(1): 1-31.
- Weinstein, M. et al. (2001). Use of Genotypic Resistance Testing To Guide HIV Therapy: Clinical Impact and Cost-Effectiveness. *Annals of Internal Medicine*, 134(6): 440-450.

HEALTH CARE SYSTEMS

July 31 International Health: Developed Countries

- FGS Chapter 22
- Gerdtham, U. et al. (1992). An Econometric Analysis of Health Care Expenditure: A Cross-Section Study of the OECD Countries. *Journal of Health Economics*, 11(1): 63-84.
- Reinhardt, U. et al. (2004). U.S. Health Care Spending in an International Context. *Health Affairs*, 23(3): 10-25.

August 1 International Health: Developing Countries

- FGS Chapter 24
- Pauly, M. (2006). Private Health Insurance in Developing Countries. *Health Affairs*, 25(2): 369-379.
- Heller, P. (1982). A Model of the Demand for Medical Care and Health Services in Peninsular Malaysia. *Social Science and Medicine*, 16: 267-284.

SPECIAL TOPICS

August 4 Economics of HIV/AIDS

- Bloom, D. and S. Glied. (1989). The Evolution of AIDS Economic Research. *Health Policy*, 11: 187-196.
- Yim, K. et al. (1995). The Use of Condoms in the Presence of HIV Risk: The Role of Economic and Epidemiological Variables. *AIDS & Public Policy Journal*, 10(2): 107-120.
- La Croix, S. and G. Russo. (1996). A Cost-Benefit Analysis of Voluntary Routine HIV-Antibody Testing for Hospital Patients. *Social Science and Medicine*, 42(9): 1259-1272.

August 5 Economics of Lifestyle: Smoking and Obesity

- FGS Chapter 23
- Cutler, D. (2003). Why Have Americans Become More Obese. *Journal of Economic Perspective*, 17(3): 93-118.
- Gruber, J. and B. Koszegi. (2001). Is Addiction 'Rational'? Theory and Evidence. *Quarterly Journal of Economics*, 116(4): 1261-1303.

August 6 Value of Life

- Viscusi, K. (1993). The Value of Risks to Life and Health. *Journal of Economic Literature*, 31: 1912-1946.
- Rosen, S. (1981). Valuing Health Risk. *American Economic Review*, 71(2): 241-245.

August 7 Health Insurance: Reforms

- Nichols, L. et al. (2004). Are Market Forces Strong Enough to Deliver Efficient Health Care Systems? Confidence is Waning. *Health Affairs*, 23(2): 25-27.
- McClellan, M. (2000). Medicare Reform: Fundamental Problems, Incremental Steps. *Journal of Economic Perspectives*, 14(2): 21-44.
- Ellis, R. and T. McGuire (1990). Optimal Payment Systems for Health Services. *Journal of Health Economics*, 9: 375-396.

August 8 Medical Malpractice

- Thorpe, K. (2004). The Medical Malpractice ‘Crisis’: Recent Trends and the Impact of State Tort Reforms. *Health Affairs* Web Exclusive: W4-W20.
- Studdert, D. et al. (2004). Medical Malpractice. *New England Journal of Medicine*, 530(3): 283-292.
- Danzon, P. et al. (1990). The Effects of Malpractice Litigation on Physicians’ Fees and Incomes. *American Economic Review*, 80(2): 122-127.

August 11, 12 Student Presentations

- Papers due on presentation date

August 13 Conclusion and Review Session

August 14 Final Exam
