

**THE WHARTON SCHOOL**  
**University of Pennsylvania**

**The Economics of Health Care and Policy**  
**HCMG 903-001**  
**Fall 2009**

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Lectures: Tues. 3-6 pm  
Colonial Penn Center Auditorium  
Office Hours: Wed. 1:30-2:30

**Course Overview:** This course provides an introduction to the economic analysis of the health care market. Topics covered include the economics of health insurance, Grossman's health capital model, models of hospital incentives and competition and physician agency. This course is a graduate level economics course and will draw on models of behavior under asymmetric information, imperfect competition, agency and optimization under uncertainty. Students will also be introduced to the existing empirical evidence on the function of the health care markets with a particular focus on the demand for medical care, the efficiency of competition in hospital markets, physician incentives and the market for pharmaceuticals.

**Readings:** All readings are required for each class unless otherwise specified. "Recommended" readings are generally important background on the topic. Frequently they are chapters from the *Handbook of Health Economics*. All students should have a copy and have read the recommended readings by the end of the course.

**Prerequisites:** Graduate level microeconomics and statistics/econometrics.

**Referee Reports:** You will be asked to complete two referee reports over the course of the semester. I will provide papers to be refereed to each student. A referee report should accomplish three goals: 1) it should briefly summarize the paper for the editor (roughly 1 paragraph), 2) it should give a critical review of the paper with helpful comments for the author and the editor and 3) it should give the editor your opinion of whether the papers should be rejected, resubmitted with major revisions, resubmitted with minor revisions or accepted.

**Student Presentations:** Each student will be asked to select 3 papers from the starred papers on the syllabus (depending on the number of students enrolled this may change). You will be responsible for presenting a brief summary of the paper (roughly 10-15 minutes) to the class. You will then answer questions from the group and give your assessment of its value to the health economics literature, key policies where the ideas can be brought to bear and improvements and/or future work that you would recommend.

**Research Paper/Proposal and Presentation:** Over the course of the semester each student will work to develop a research proposal and/or paper. This proposal/paper should be on a topic that has potential as a dissertation topic. If a student has a well-defined topic and available data they should write a first draft of a publishable paper. If the student has an earlier stage project or no access to data, they should develop a 20-25 page proposal that reviews the literature on the topic,

develops a simple model with testable implications and outlines the contribution of the work to the literature in health economics. Each student will present their work during the last session of the class.

### Grading

CLASS PARTICIPATION	20 %
REFeree REPORTS	30 %
FINAL PRESENTATION	10 %
FINAL PAPER	40 %

### Introduction

9/15: Lecture 1

#### Course Overview and Introduction to Health Economics

Arrow, Kenneth J., "Uncertainty and the Welfare Economics of Medical Care," *American Economic Review*, December 1963, 53(5): 941-973.

Reprinted in *Journal of Health Politics, Policy, and Law*, October 2001, 27(5): 851-883.

Newhouse, J.P. *Pricing the Priceless: A Health Care Conundrum*. Cambridge, The MIT Press: 2002, chapters 1 and 2.

### Health Insurance

9/22: Lecture 2

#### Optimal Insurance and Adverse Selection

Arrow, K. "Uncertainty and the Welfare Economics of Medical Care," *American Economic Review* 53(5): 941-973. On optimal insurance, see pages 959-964; Appendix, Proposition 1.

\*Rothschild, Michael and Joseph E. Stiglitz (1976) "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information," *Quarterly Journal of Economics* (4):630-649.

Newhouse, Joseph P. (1996) "Reimbursing Health Plans and Providers: Efficiency in Production Versus Selection." *Journal of Economic Literature*, 34(3): 1236-63.

Recommended:

Cutler, D. and R. Zeckhauser, "The Anatomy of Health Insurance," Chapter 11 in *Handbook of Health Economics*, Eds. A.J. Culyer and J.P. Newhouse, North-Holland, 2000.

Cutler, David and Sarah Reber. (1998) "Paying for Health Insurance: The Trade-off Between Competition and Adverse Selection," *Quarterly Journal of Economics*, 113(2): pp.433-466.

Chiappori, Pierre-Andre. "Econometric Models of Insurance under Asymmetric Information." In Georges Dionne, ed. *Handbook of Insurance Economics*. London: Kluwer, 2000.

Chiappori, Pierre-Andre and Bernard Salanie. (2000). "Testing for Asymmetric Information in Insurance Markets." *Journal of Political Economy*, 108 (1), pp. 56-78.

Finkelstein, Amy and Kathleen McGarry. (2006). "Multiple Dimensions of Private Information: Evidence from the Long-Term Care Insurance Market." *American Economic Review*, September, 938 – 958.

9/29: Lecture 3

Moral Hazard and Demand for Health Care

**PROPOSED TOPICS FOR FINAL PAPER DUE**

\*Manning W., J. Newhouse, N. Duan, E. Keeler, A. Leibowitz and M. Marquis, (1987) "Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment." *American Economic Review*, 77:251-277.

Pauly, Mark (1968) "The Economics of Moral Hazard: Comment," *American Economic Review* 58: 531-537.

Zeckhauser, Richard. 1970, "Medical Insurance: A Case Study of the Tradeoff Between Risk Spreading and Appropriate Incentives," *Journal of Economic Theory*, 2, 10-26.

Recommended:

Finkelstein, Amy, 2007, "The Aggregate Effects of Health Insurance: Evidence from the Introduction of Medicare," *Quarterly Journal of Economics*, 122(1):1-37.

10/6: Lecture 4

Health Insurance Provision and the Labor Market

\*Lawrence H. Summers, "Some Simple Economics of Mandated Benefits," *American Economic Review*, 79(2): 177-183, May 1989.

Pauly, Mark, "Taxation, Health Insurance, and Market Failure in Medical Care," *Journal of Economic Literature*, 24(2), June 1986, 629-675.

Recommended:

Gruber, Jonathan. "Health Insurance and the Labor Market" Chapter 12 in *Handbook of Health Economics*, Eds. A.J. Culyer and J.P. Newhouse, North-Holland, 2000.

**Health Capital and the Value of Health Care**

10/13: Lecture 5

Health Capital and the Value of Health and Health Care and "How to write a referee report"

\*Grossman, Michael. "On the Concept of Health Capital and the Demand for Health." *Journal of Political Economy*

Murphy, Kevin M. and Robert H. Topel. (2006). "The Value of Health and

Longevity.” *Journal of Political Economy* 114(5): 871-903

Cutler, David M. Chapters 2-5. Your Money or Your Life,  
Recommended: Oxford University Press: Oxford, UK. 2004.

Recommended:

Grossman, Michael. “The Human Capital Model” Chapter 7 in *Handbook of Health Economics*, Eds. A.J. Culyer and J.P. Newhouse, North-Holland, 2000.

Nordhaus, William D., “The Health of Nations: The Contribution of Improved Health to Living Standards” in *Measuring the Gains from Medical Research: An Economic Approach*, Kevin M. Murphy and Robert Topel, eds. Chicago: University of Chicago Press, 2003.

Hall, Robert and Chad Jones. (2005). “The Value of Life and the Rise in Health Spending.” *Quarterly Journal of Economics*, 122(1): 39-72.

### **Hospital Competition and Regulation**

10/20: Lecture 6     Not-for-profit and Diversified Hospitals

\*Newhouse, Joseph (1970). “Towards and Theory of Non Profit Institutions: An Economics Model of a Hospital.” *American Economic Review*, 60(1): 64-74.

Dranove, David. (1988). "Pricing by Non-Profit Institutions: The Case of Hospital Cost-Shifting" *Journal of Health Economics* 7(1): 47-57.

\*Barro, Jason, Robert Huckman, and Daniel Kessler (2005). “The Effects of Specialty Hospitals on the Cost and Quality of Medical Care,” *Journal of Health Economics*, 25:702-721.

Duggan, Mark. (2000). "Hospital Ownership and Public Medical Spending" *Quarterly Journal of Economics*, November, 1343-1374.

Recommended:

Sloan, Frank. “Non-Profit Ownership and Hospital Behavior” Chapter 21 in *Handbook of Health Economics*, Eds. A.J. Culyer and J.P. Newhouse, North-Holland, 2000.

Dafny, Leemore. “Do Hospitals Respond to Price Changes?” (2005). *American Economic Review*. 95(5):1525-1547.

Duggan, Mark. "Hospital Market Structure and the Behavior of Not-for-Profit Hospitals" *RAND Journal of Economics*, Autumn, 2002, 433-446

10/27: Lecture 7     Hospital Competition

**FIRST REFEREE REPORT DUE**

Cutler, David, Robert Huckman and Jonathan Kolstad (forthcoming). "Input Constraints and the Efficiency of Entry: Lessons from Cardiac Surgery." *American Economic Journal: Economic Policy*. (available as *NBER Working Paper* #15214)

\*Kessler, Daniel and Mark McClellan (2000). "Is Hospital Competition Socially Wasteful?" *Quarterly Journal of Economics*, pp. 577-615.

Cutler, David, Mark McClellan and Joseph Newhouse, "How Does Managed Care Do It?," *RAND Journal of Economics* 31(3), 2000: 526-548.

Ho, Katherine. (2006). "The Welfare Effects of Restricted Hospital Choice in the US Medical Care Market." *Journal of Applied Econometrics*, 21(7): 1039-1079.

\*Dafny, Leemore. 2005. "Games Hospitals Play: Entry Deterrence in Hospital Procedure Markets." *Journal of Economics and Management Strategy*. 14(3).

Recommended:

Gaynor, Martin and William Vogt. "Antitrust and Competition in Health Care Markets" Chapter 27 in *Handbook of Health Economics*, Eds. A.J. Culyer and J.P. Newhouse, North-Holland, 2000.

**Physicians**

11/3: Lecture 8

Physician Behavior: Agency, Induced Demand and the Target Income Hypothesis

Fuchs, V. (1978), "The Supply of Surgeons and the Demand for Surgical Operations," *Journal of Human Resources*, 13(Supplement): 35-66.  
Contains ideas and evidence supporting demand inducement and target income behavior of physicians.

McGuire, Thomas G. (2000) "Physician Agency," Chapter 9 in *Handbook of Health Economics*, Eds. A.J. Culyer and J.P. Newhouse, Amsterdam: North-Holland, 2000. pp 463-468, 475-486, 503-519.

Dranove, David (1988) "Demand Inducement and the Physician/Patient Relationship" *Economic Inquiry* 26: 251-298.

\*McGuire, Thomas and Mark Pauly. (1991) "Physician Response to Fee Schedules with Multiple Payers," *Journal of Health Economics*, 385-410.  
Go through math for one-service case, read over the two-service case.

Recommended:

McGuire, T.G. (2000) "Physician Agency," Chapter 9 in *Handbook of Health*

*Economics*, Eds. A.J. Culyer and J.P. Newhouse, Amsterdam: North-Holland, pp 463-468, 475-486, 503-519.

Gruber, J and Owings, M., 1996, "Physician Financial Incentives and Cesarean Section Delivery, *RAND Journal of Economics*, 27, 99-123.

Kessel, R., (1958) "Price Discrimination in Medicine," *Journal of Law and Economics*. Read from the perspective of the social history of organized medicine as well as the hypothesis explaining presence of price discrimination.

Yip, W. (1998), "Physician Responses to Medical Fee Reductions: Changes in the Volume and Intensity of Supply of CABG Surgeries in the Medicare and Private Sectors," *Journal of Health Economics*, 3: 223-237.

11/10: Lecture 9

Information and Quality in Health Care Markets

\*Dranove David, Daniel Kessler, Mark McClellan and Mark Satterthwaite. (2003). "Is More Information Better? The Effects Of 'Report Cards' On Health Care Providers." *Journal of Political Economy*, 111(3):555-88.

Gaynor, Martin (2006). "What Do We Know About Competition and Quality in Health Care Markets?" *NBER Working Paper* #12301.

Mullen, Kathleen J., Richard Frank and Meredith Rosenthal. (2009) "Can You Get What You Pay For? Pay for Performance and the Quality of Health Care Providers?" *NBER Working Paper* #14866.

Chandra, Amitabh and Douglas Staiger. (2007) "Productivity Spillovers in Health Care: Evidence from the Treatment of Heart Attacks." *Journal of Political Economy*, 115(1)

Recommended:

Dranove, David and Mark Satterthwaite. "The Industrial Organization of Health Care Markets" Chapter 20 in *Handbook of Health Economics*, Eds. A.J. Culyer and J.P. Newhouse, North-Holland, 2000.

**Organizational Economics and Its Application in Health Care (Guest lectures by Guy David)**

11/17: Lecture 10

No Class Attend Conference on Handbook of the Pharmaceutical Industry (11/20 and 11/21)

**SECOND REFEREE REPORT DUE**

Readings TBD

**Organizational Economics and Its Application in Health Care (Guest lectures by Guy David)**

11/24: Lecture 11

Organizational Economics and Its Application in Health Care

Aghion, Philippe and Jean Tirole. "Formal and Real Authority in Organizations." *Journal of Political Economy* 1997, 105: pp. 1-29.

Baker, George, Robert Gibbons and Kevin J. Murphy. "Informal Authority in Organizations." *Journal of Law, Economics, and Organization*, 1999, 15: pp. 56-73.

Becker, Gary and Kevin M. Murphy, "The Division of Labor, Coordination Costs, and Knowledge." *Quarterly Journal of Economics*, 1992, Vol. 107, No. 4. pp. 1137-1160

Gibbons, Robert. "Taking Coase Seriously." *Administrative Science Quarterly*, 1999; 44: 145-157. Hart, Oliver and John Moore. "On the Design of Hierarchies: Coordination vs. Specialization." 1999, NBER Working Papers 7388.

Rosen, Sherwin, "Specialization and human Capital" *Journal of Labor Economics*. 1983, 1(1): 43-49.

Sah, Raj, and Joseph Stiglitz, "The Architecture of Economic Systems: Hierarchies and Polyarchies." *American Economic Review* 1986, 76: pp. 716-27.

12/1: Lecture 12  
12/8

Organizational Economics contd.  
**Final Presentations in Class**