



The Economics of Health Care and Policy
HCMG 903-001
Spring 2013

Professor Robert Town
305 Colonial Penn Center
e-mail: rtown@wharton.upenn.edu

Lectures: Monday 3-6 pm
Auditorium, Colonial Penn Center
Office Hours: By Appointment

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: The required readings for each class session are listed and you are expected to have read them before the class. The recommended readings are other papers that are important and it is probably in your interest to read them (or at least skim them) sometime in the next year or two.

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 2 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 20-30 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 15-20 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 %

Course Schedule¹

1/14: Lecture 1 – Course Overview and Introduction to Health Economics

Required:

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.

1/21: No Class: Martin Luther King Day

1/28: Lecture 2 -- Demand for Health Care and Moral Hazard

Required:

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.

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

Pauly, M. (1974) “Over-insurance and public provision of insurance: the roles of moral hazard and adverse selection,” *Quarterly Journal of Economics*, 88 (1), 44-62.

Recommended:

Newhouse, J.P. and the Health Insurance Group, “Free for All?” 1993. Harvard University Press: Cambridge, MA and London, UK.

Finkelstein, Amy and Robin McKnight. (2008). “What Did Medicare Do? The Initial Impact of Medicare on Mortality and Out of Pocket Medical Spending” *Journal of Public Economics*, 92, 1644-1669.

¹ * Denotes paper that may be presented in class.

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

2/4: Lecture 3 – Adverse Selection

Required:

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.

*Akerlof, G. (1970) "The Market for Lemons: Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*, 84(3): 588-600.

Einav, L., A. Finkelstein and M. Cohen, "Estimating Welfare in Insurance Markets Using Variation in Prices" *Quarterly Journal of Economics*, [Read first part, skim empirical application for next week].

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.

Newhouse, J. P. (1996) "Reimbursing Health Plans and Providers: Efficiency in Production Versus Selection," *Journal of Economic Literature*, 34(3): 1236-63. pp.1236-1241.

Cutler, David and Richard Zeckhauser (1998) "Adverse Selection in Health Insurance." *Forum for Health Economics and Policy*. BE Press.

Hackman, Martin, Jonathan Kolstad and Amanda Kowalski. (2012). "Health Reform, Health Insurance, and Selection: Estimating Selection into Health Insurance Using the Massachusetts Health Reform" *American Economic Review (Papers and Proceedings)*.

2/11: Lecture 4 – Adverse Selection and Moral Hazard – Empirical Evidence

Required:

Cutler, D. and Reber, S. (1998) "Paying for Health Insurance the Trade-off between Competition and Adverse Selection," *Quarterly Journal of Economics*, 113: 433-466.

Chiappori, P.A. and Salanie, B. (2000) "Testing for Asymmetric Information in Insurance Markets," *Journal of Political Economy*, 108(1): 56-78.

*Finkelstein, A. *et al.* (2012) "The Oregon Health Insurance Experiment: Evidence from the First Year," *Quarterly Journal of Economics*, 127(3): 1057-1106.

Recommended:

Oster, E., I. Shoulson, K. Quaid, and E. Dorsey, (2009) Genetic Adverse Selection: Evidence from Long-Term Care Insurance and Huntington Disease," NBER Working Paper 15326.

Cutler, D. B. Lincoln, and R. Zeckhauser (2009) "Selection Stories: Understanding Movement Across Health Plans," NBER Working Paper 15174.

*Fang, H., M. Keane, and D. Silverman (2008) "Sources of Advantageous Selection: Evidence from the Medigap Insurance Market," *Journal of Political Economy*, 116(2):303-350.

*Finkelstein, A. and McGarry, K. (2006) "Multiple dimensions of private information: evidence for the long-term care insurance market," *American Economic Review*, 96(4) 938-958.

Carlin C. and Town, R. (2007) "Adverse selection, welfare and the optimal pricing of employer-sponsored health plans," Mimeograph.

Chiappori, Pierre-Andre, Bruno J, Salanie, B. and Salanie, F. (2006) "Asymmetric Information in Insurance: General Testable Implications." *RAND Journal of Economics*. 37 (4)

Cawley, J. and Philipson. T. (1999) "An empirical examination of information barriers to trade in insurance." *American Economic Review*, Vol 89, no 4 pp.827-846.

- Abbring, J.H., Chiappori, P., Heckman, J., and Pinquet, J. (2000) "Adverse Selection and Moral Hazard in Insurance: Can Dynamic Data Help to Distinguish," Mimeo. <http://home.uchicago.edu/~pchiappo/wp/japacjhjp.pdf>
- Buchmueller, T. and DiNardo, J. (2002) "Did Community Rating Induce an Adverse Selection Death Spiral? Evidence from New York, New Jersey, and Pennsylvania," *American Economic Review*, 92:1 pp. 280-294
- Cutler, D. and Zeckhauser, R. (2001) "Anatomy of health insurance," *Handbook of Health Economics*, Vol 1A.
- Cardon, J. and Hendel, I. (2001) "Asymmetric Information in Health Insurance: Evidence from the National Medical Expenditure Survey," *RAND Journal of Economics*, 32: 408-427.
- Chiappori, P.A., Durand, F. and Geoffard, P.Y. (1998) "Moral Hazard and the Demand for Physician Services: First Lessons from a French Natural Experiment," *European Economic Review*, 42: 499-511.
- *Feldman, R. and Dowd, B. (1991) "A new estimate of the welfare loss from excess health insurance," *AER*, 81(10), 291-301.
- Chiappori, P.A. (2001) "Econometric Models of Insurance under Asymmetric Information," *Handbook of Insurance*. (available on the web at: <http://home.uchicago.edu/~pchiappo/wp/surveyc.PDF>).
- Handel, Benjamin R., 2011, "Adverse Selection and Switching Costs in Health Insurance Markets: When Nudging Hurts" *NBER WP #17459*.
- Strombom, B.A., Buchmueller, T.C. and Feldstein, P.J. (2002) "Switching Costs, Price Sensitivity, and Health Plan Choice, *Journal of Health Economics*, 21:89-116.
- *Thomasson, M. A., "The Importance of Group Coverage: How Tax Policy Shaped U.S. Health Insurance," *American Economic Review*, 93:4 (September 2003), pp. 1373-1384.
- *Doyle, J. (2005) "Health Insurance, Treatment and Outcomes: Using Automobile Accidents as Health Shocks," *Review of Economics and Statistics*, 87 (2): 256-270.

2/18: Lecture 5 -- Health Capital and the Value of Health and Health Care and “How to write a referee report”

Required:

Grossman, Michael. (1972). “On the Concept of Health Capital and the Demand for Health.” *Journal of Political Economy*. 80(2): 223-255.

Murphy, Kevin M. and Robert H. Topel. (2006). “The Value of Health and Longevity.” *Journal of Political Economy* 114(5): 871-903.

Newhouse, J. P. (1992). “Medical Care Costs: How Much Welfare Loss?” *Journal of Economic Perspectives*. 6(3), 13-29.

Recommended:

*Becker, G., Philipson, T. and Soares, R. (2005) “The Quantity and Quality of Life and the Evolution of World Inequality,” *American Economic Review*, 95, 277-291.

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

*Bhattacharya J. and Sood N. (2011) “Who Pays for Obesity?” *Journal of Economic Perspectives* 25(1):139-58

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.

*Chay, K. and Greenstone, M. (2003) “The Impact of Air Pollution on Infant Mortality: Evidence from Geographic Variation in Pollution Shocks Induced by a Recession,” *Quarterly Journal of Economics*, 118(3):1121-1167.

2/25: Lecture 6 -- Health Insurance and Labor Market Outcomes

Required:

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

*Gruber, J. and Madrian, B.C (1995) "Health Insurance Availability and the Retirement Decision," *The American Economic Review*, Vol. 85, No. 4. (Sep., 1995), pp. 938-948.

Cutler, D. and Madrian, B. (1998) "Labor Market Responses to Rising Health Insurance Costs: Evidence on Hours Worked," *RAND Journal of Economics*, vol. 29(3), p. 509-530.

Recommended:

*Fang, H. and A. Gavazza, (2011) "Dynamic Inefficiencies in an Employment-Based Health Insurance System: Theory and Evidence," *American Economic Review*, Vol 101, No. 7, 3047-3077.

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.

Feldman, R. (1993) "Who Pays for Mandated Health Insurance Benefits." *Journal of Health Economics*, 11, 341-348.

*Rust, J., and Phelan, C. (1997) "How Social Security and Medicare Affect Retirement Behavior In a World of Incomplete Markets," *Econometrica*, Vol. 65, No. 4. pp. 781-831.

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

Gruber, Jonathan and Alan Krueger. (1991). "The Incidence of Mandated Employer-Provided Insurance: Lessons from Workers' Compensation Insurance" in *Tax Policy and the Economy*. Vol. 5 111-143.

*Gruber, Jonathan and James Poterba. (1994) "The Elasticity of Demand for Health Insurance: Evidence from the Self-Employed" *Quarterly Journal of Economics*, 109(3), 701-734.

3/4 – NO CLASS — Spring Break

3/11: Lecture 7 – The Assessment of Health Policy Interventions

Required:

Cutler, D.M and Gruber, J. (1996) “Does Public Insurance Crowd Out Private Insurance,” *The Quarterly Journal of Economics*, 111(2): 391-430.

Finkelstein, A. (2007) “The aggregate effects of health insurance: evidence from the introduction of Medicare,” *Quarterly Journal of Economics*, 122(1): 1-37.

Recommended:

Gruber, J. and Simon, K. “Crowd-Out Ten Years Later: Have Recent Public Insurance Expansions Crowded Out Private Health Insurance,” NBER Working Paper 12858.

*Currie, J. and Gruber, J. (1996) “Saving Babies: The Efficacy and Cost of Recent Changes in the Medicaid Eligibility of Pregnant Women,” *The Journal of Political Economy*, 104, No. 6. 1263-1296.

*Card, D., Dobkin, C. and Maestas, N. (2008) “The Impact of Nearly Universal Insurance Coverage on Health Care Utilization” *American Economic Review*, 98(5):2242-2258.

*Cutler, D. (1995) “The incidence of adverse medical outcomes under prospective payment,” 63(1): *Econometrica*, 29-50.

Ketcham, J. and K. Simon (2008) “Medicare Part D's Effects on Elderly Drug Costs and Utilization” NBER Working Paper 14326.

3/18: Lecture 8 – Objectives and Behavior of Not-for-Profit Providers (Guest Lecture: Prof. Guy David)

Required:

Malani, Anup, Tomas Philipson, and Guy David, “Theories of Firm Behavior in the Non-Profit Sector: A Synthesis and Empirical Evaluation” in The Governance of Not-for-Profit Firms, Edward L. Glaeser, Editor, NBER 2003, pp 181–216.

Recommended:

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

Pauly, Mark and Michael Redisch. (1973) "The Not-for-profit Hospital as a Physicians' Cooperative." *American Economic Review*. 63(1): 87-99.

Lakdawala, Darius and Thomas Philipson. (2006). "The Nonprofit Sector and Industry Performance." *Journal of Public Economics*. 90: 1681-1698.

Nicholson, Sean, Mark Pauly, Lawton Burns, Agnieszka Baumritter, and David Asch. "Measuring Community Benefits Provided By For-profit And Nonprofit Hospitals." *Health Affairs*, Vol 19 (6) 2000.

David, Guy "The Convergence between Nonprofit and For-Profit Hospitals in the United States." *International Journal of Health Care Finance and Economics*, Vol. 9(4), pp 403-428, December 2009.

Capps, Cory, Dennis Carlton, and Guy David, "Antitrust Treatment of Nonprofits: Should Hospitals Receive Special Care?" *working paper* 2012

3/24: Lecture 9 – Provider Behavior: Agency, Induced Demand and Target Income Hypothesis

Required:

*Gaynor, Martin, James Rebitzer and Lowell Taylor (2004). "Physician Incentives in HMOs" *Journal of Political Economy*, 112(4), 915-931.

Ellis, R. and McGuire, T. (1990) "Optimal Payment Systems for Health Services," *Journal of Health Economics*, 9:375-396.

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:

Fuchs, V. (1978), "The Supply of Surgeons and the Demand for Surgical Operations," *Journal of Human Resources*, 13(Supplement): 35-66.

McGuire, Thomas G. (2000) "Physician Agency," *Handbook of Health Economics*, Eds. A.J. Culyer and J.P. Newhouse, Amsterdam: North-Holland, 2000. 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.

Ellis, R. and McGuire, T. (1986) "Provider Behavior under Prospective Payment," *Journal of Health Economics*, 5:129-151.

Ellis, R. and McGuire, T. (1986) "Supply-side and Demand-side Cost Share in Health Care," *Journal of Economic Perspectives*, 7:135-151.

*Dafny, L. (2005) "How Do Hospitals Respond to Price Changes," *American Economic Review*,

4/1: Lecture 10 – Provider Behavior: Information and Competition

Required:

Gaynor, M. and Town, R. (2012) Provider Competition," *Handbook of Health Economics*, Vol 2.

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

*Dranove, David, Daniel Kessler, Mark McClellan, and Mark Satterthwaite, "Is More Information Better?" *Journal of Political Economy*, 111:3 (June 2003), pp. 555-588.

Recommended:

Kolstad, J. (2013) "Information and Quality when Motivation is Intrinsic: Evidence from Surgeon Report Cards." *American Economic Review*, Forthcoming.

*Jin, G., Leslie, P. (2003) "The Effect of Information on Product Quality: Evidence from Restaurant Hygiene Grade Cards," *Quarterly Journal of Economics*, 118: 409-51.

*Dafny, Leemore S. and D. Dranove (2008) "Do Report Cards Tell Consumers Anything They Don't Already Know? The Case of Medicare HMOs." *RAND Journal of Economics*. 39(3): 790-821.

4/8: Lecture 11 – The Value of Medical Technology

Required:

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

*Cutler, D., McClellan, M., Newhouse, J. and Remler, D. (1998) “Are Medical Prices Declining? Evidence from Heart Attack Treatments,” *Quarterly Journal of Economics*, 113: 991-1024.

*McClellan, M., B. McNeil, J. Newhouse (1994) “Does more intensive treatment of acute myocardial infarction in the elderly reduce mortality? Analysis using instrumental variables.” *JAMA* 272(11): 891-3.

Recommended:

Weisbrod, B. (1991) “The Health Care Quadrilemma: An Essay on Technological Change, Insurance, Quality of Care, and Cost Containment,” *Journal of Economic Literature*,

Chandra, Amitabh and Jonathan Skinner. (2011). “Technology Growth and Expenditure Growth in Health Care.” *NBER WP#16953*.

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

*Almond, D., Doyle, J., Kowalski, A., and Williams, H. (2010) “Estimating Marginal Returns to Medical Care: Evidence from Care for At-Risk Newborns *Quarterly Journal of Economics*. 125(2):591-634

McCullough, J., Parente, S. and Town (2012) “The Impact of Health Information Technology,” Mimeograph.

4/15: Lecture 12 – Final Presentations

4/22: Lecture 13 – Final Presentations