



The Economics of Health Care and Policy
HCMG 903-001
Spring 2017

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Lectures: Tuesday 3-6 pm
Room:
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 health care markets with a particular focus on the demand for medical care, the efficiency of competition in hospital markets, and provider incentives.

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 1 paper from the recommended papers on the syllabus (depending on the number of students enrolled, this may change). Choices are subject to approval. You will be responsible for presenting a brief summary of the paper (roughly 45 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.

Final: There will be a 1.5hr final. There will be 2 or 3 "preliminary exam"-like questions taken from the readings and lectures.

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 two sessions of the class.

Grading:

PAPER PRESENTATION	10%
REFEREE REPORTS	20%
FINAL	25%
FINAL PRESENTATION	10%
FINAL PAPER	35%

Course Schedule

1/17: Lecture 1 – Course Overview and Introduction to Health Economics

Required:

Arrow, Kenneth J. (2001). Uncertainty and the welfare economics of medical care. *Journal of Health Politics, Policy, and Law*, 27(5), 851-883. (Reprinted from *American Economic Review*, December 1963, 53(5), 941-973.)

Newhouse, J.P. (2002). *Pricing the priceless: A health care conundrum*. Cambridge: The MIT Press. Chapters 1 and 2.

1/24: Lecture 2 – The Productivity of Medical Care

Required:

Cutler, D., McClellan, M., Newhouse, J. & Remler, D. (1998). Are medical prices declining? Evidence from heart attack treatments. *Quarterly Journal of Economics*, 113, 991-1024.

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

Williams, H. (2013). Intellectual property rights and innovation: Evidence from the human genome. *Journal of Political Economy*, 121(1), 1-27.

Recommended:

Almond, D., Doyle, J., Kowalski, A., & Williams, H. (2010). Estimating marginal returns to medical care: Evidence from care for at-risk newborns. *Quarterly Journal of Economics*, 125(2), 591-634.

Clemons, J. (2013). The effects of US health insurance expansions on medical innovation (NBER Working Paper #19761).

Costa, D.L. (2015). Health and the economy in the United States, from 1750 to the present. *Journal of Economic Literature*, 53(3), 503-570.

- Cutler, David M. (2004). *Your Money or Your Life*. Oxford, UK: Oxford University Press. Chapters 2-5.
- Lee, J., McCullough, J.S., & Town, R.J. (2013). The impact of health information technology on hospital productivity. *RAND Journal of Economics*, 44(3), 545-568.
- Murphy, Kevin M. & Topel, R. H. (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.
- Weisbrod, B. (1991). The health care quadrilemma: An essay on technological change, insurance, quality of care, and cost containment. *Journal of Economic Literature*, 29(2), 523-552.

1/31: Lecture 3 – Demand for Health Care and Moral Hazard

Required:

- Baicker, K., Mullainathan, S., & Schwartzstein, J. (2012). Behavioral hazard in health insurance (NBER Working Paper 18468).
- Manning W., Newhouse, J., Duan, N., Keeler, E., Leibowitz, A. & Marquis, M. (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, & McKnight, Robin. (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.
- Newhouse, J.P., & the Insurance Experiment Group. (1993). *Free for all? Lessons from the RAND Health Insurance Experiment*. Cambridge, MA & London, UK: Harvard University Press.

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.

2/7: Lecture 4 – Adverse Selection

Required:

Akerlof, G. (1970). The market for lemons: Quality uncertainty and the market mechanism. *Quarterly Journal of Economics*, 84(3), 588-600.

Arrow, K. (1963). 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.]

Einav, L., Finkelstein, A., & Cullen, M. (2010). Estimating welfare in insurance markets using variation in prices. *Quarterly Journal of Economics*, 125(3), 877-921. [Read first part, skim empirical application for next class.]

Rothschild, Michael, & Stiglitz, J. E. (1976). Equilibrium in competitive insurance markets: An essay on the economics of imperfect information. *Quarterly Journal of Economics*, 90(4), 629-649.

Recommended:

Cutler, D. & Zeckhauser, R. (2000). The anatomy of health insurance. In A.J. Culyer & J.P. Newhouse (Eds.), *Handbook of Health Economics* (561-644). Amsterdam: Elsevier.

Cutler, David & Zeckhauser, R. (1998). Adverse selection in health insurance. *Forum for Health Economics and Policy*, volume 1, article 2.

Hackmann, M., Kolstad, J., & Kowalski, A. (2012). Health reform, health insurance, and selection: Estimating selection into health insurance using the Massachusetts health reform. *American Economic Review*, 102(3), 498-501.

Hendren, Nathaniel. (2014). Unraveling versus unraveling: A memo on competitive equilibriums and trade in insurance markets. *Geneva Risk and Insurance Review*, 39(2), 176-183.

Newhouse, J. P. (1996). Reimbursing health plans and providers: Efficiency in production versus selection. *Journal of Economic Literature*, 34(3), 1236-63.

2/14: Lecture 5 – Adverse Selection and Moral Hazard: Empirical Evidence

Required:

Chiappori, P.A. & Salanie, B. (2000). Testing for asymmetric information in insurance markets. *Journal of Political Economy*, 108(1), 56-78.

Cutler, D. & Reber, S. (1998). Paying for health insurance: The trade-off between competition and adverse selection. *Quarterly Journal of Economics*, 133(2), 433-466.

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

Finkelstein, A. *et al.* (2012). The Oregon health insurance experiment: Evidence from the first year. *Quarterly Journal of Economics*, 127(3), 1057-1106.

Recommended:

Abbring, J. H., Chiappori, P., Heckman, J., & Pinquet, J. (2003). Adverse selection and moral hazard in insurance: Can dynamic data help to distinguish? http://public.econ.duke.edu/~hf14/teaching/socialinsurance/readings/abbring_chiappori_heckman_pinquet03.pdf

Buchmueller, T. & 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), 280-294.

Cabral, M., & Mahoney, N. (2014). Externalities and taxation of supplemental insurance: A study of Medicare and Medigap (Working Paper, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2372163).

Cardon, J., & Hendel, I. (2001). Asymmetric information in health insurance: Evidence from the National Medical Expenditure Survey. *RAND Journal of Economics*, 32(3), 408-427.

Carlin C. & Town, R. (2009). Adverse selection, welfare and the optimal pricing of employer-sponsored health plans. Available at <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.343.6284&rep=rep1&type=pdf>.

Cawley, J., & Philipson, T. (1999). An empirical examination of information barriers to trade in insurance. *American Economic Review*, 89(4), 827-846.

- Chandra, A., Gruber, J., & McKnight, R. (2010). Patient cost-sharing and hospitalization offsets in the elderly. *American Economic Review*, 100(1), 193-213.
- Chiappori, Pierre-Andre, Bruno, J., Salanie, B., & Salanie, F. (2006). Asymmetric information in insurance: General testable implications. *RAND Journal of Economics*, 37(4), 783-798.
- Chiappori, P.A. (2001). Econometric models of insurance under asymmetric information. In G. Dionne (ed.), *Handbook of Insurance* (365-393). Netherlands: Springer.
- Chiappori, P.A., Durand, F., & 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.
- Cutler, D., Lincoln, B., & Zeckhauser, R. (2009). Selection stories: Understanding movement across health plans (NBER Working Paper 15174).
- Cutler, D., & Zeckhauser, R. (2001). Anatomy of health insurance. *Handbook of Health Economics*, Vol 1A.
- Doyle, J. (2005). Health insurance, treatment and outcomes: Using automobile accidents as health shocks. *Review of Economics and Statistics*, 87(2), 256-270.
- Feldman, R., & Dowd, B. (1991). A new estimate of the welfare loss from excess health insurance. *American Economic Review*, 81(10), 291-301.
- Finkelstein, A. & McGarry, K. (2006). Multiple dimensions of private information: Evidence for the long-term care insurance market. *American Economic Review*, 96(4), 938-958.
- Handel, Benjamin R. (2013). Adverse selection and switching costs in health insurance markets: When nudging hurts. *American Economic Review*, 103(7), 2643-2682.
- Oster, E., Shoulson, I., Quaid, K., & Dorsey, E. (2009). Genetic adverse selection: Evidence from long-term care insurance and Huntington disease (NBER Working Paper 15326).
- Strombom, B.A., Buchmueller, T.C., & Feldstein, P.J. (2002). Switching costs, price sensitivity, and health plan choice. *Journal of Health Economics*, 21, 89-116.
- Thomasson, M. A. (2003). The importance of group coverage: How tax policy shaped U.S. health insurance. *American Economic Review*, 93(4), 1373-1384.

2/21: Lecture 6 – Health Insurance and Labor Market Outcomes

Guest Lecturer: Mark Pauly

(1 student presentation)

Required:

Cutler, D., & Madrian, B. (1998). Labor market responses to rising health insurance costs: Evidence on hours worked. *RAND Journal of Economics*, 29(3), 509-530.

Gruber, J., & Madrian, B.C. (1995). Health insurance availability and the retirement decision. *The American Economic Review*, 85(4), 938-948.

Summers, L.H. (1989). Some simple economics of mandated benefits. *American Economic Review*, 79(2), 177-183.

Pauly, Mark. (1986). Taxation, health insurance, and market failure in medical care. *Journal of Economic Literature*, 24(2), 629-675.

Recommended:

Fang, H. & Gavazza, A. (2011). Dynamic inefficiencies in employment-based health insurance systems: Theory and evidence. *American Economic Review*, 101(7), 3047-3077.

Feldman, R. (1993). Who pays for mandated health insurance benefits. *Journal of Health Economics*, 12(3), 341-348.

Gruber, Jonathan. (2000). Health insurance and the labor market. In A.J. Culyer & J.P. Newhouse (Eds.), *Handbook of Health Economics* (645-706). Amsterdam: Elsevier.

Gruber, Jonathan & Krueger, A. (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 & Poterba, J. (1994). The elasticity of demand for health insurance: Evidence from the self-employed. *Quarterly Journal of Economics*, 109(3), 701-734.

Rust, J., & Phelan, C. (1997). How Social Security and Medicare affect retirement behavior in a world of incomplete markets. *Econometrica*, 65(4), 781-831.

2/28: Lecture 7 – The Assessment of Health Policy Interventions

Guest Lecturer: Abby Alpert

(Referee Reports DUE)

Required:

Card, D., Dobkin, C., & Maestas, N. (2008). The impact of nearly universal insurance coverage on health care utilization. *American Economic Review*, 98(5), 2242-2258.

Cutler, D.M., & 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.

Hackmann, M., Kolstad, J., Kowalski, A. (2015). Adverse selection and the individual mandate: When theory meets practice. *American Economic Review*, 105(3), 1030-1066.

Recommended:

Currie, J., & 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(6), 1263-1296.

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

Gruber, J., & Simon, K. (2008). Crowd-out ten years later: Have recent public insurance expansions crowded out private health insurance? *Journal of Health Economics*, 27(2), 201-217.

Ketcham, J., & Simon, K. (2008). Medicare Part D's effects on elderly drug costs and utilization. *American Journal of Managed Care*, 14(11 Suppl), SP14-22.

3/7 – NO CLASS — Spring Break

3/14: Lecture 8 – Health Capital and the Value of Health and Health Care (1 student presentation)

Required:

Becker, G., & Murphy, K. (1988). A theory of rational addiction. *Journal of Political Economy*, 96(4), 675-700.

Grossman, Michael. (1972). On the concept of health capital and the demand for health. *Journal of Political Economy*, 80(2), 223-255.

Lleras-Muney, A. (2005). The relationship between education and adult mortality in the United States. *Review of Economic Studies*, 72, 189-221.

Recommended:

Becker, G., Philipson, T., & Soares, R. (2005). The quantity and quality of life and the evolution of world inequality. *American Economic Review*, 95, 277-291.

Becker, G., Grossman, M., & Murphy, K. (1994). An empirical analysis of cigarette addiction. *American Economic Review*, 84(3), 396-418.

Bernheim, D., & Rangel, A. (2004). Addiction and cue-triggered decision processes. *American Economic Review*, 94(5), 1558-1590.

Bhattacharya J., & Sood N. (2011). Who pays for obesity? *Journal of Economic Perspectives*, 25(1), 139-58.

Campbell, F., et al. (2014). Early childhood investments substantially boost adult health. *Science*, 343: 1478-1485.

Chay, K., & 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.

Grossman, Michael. (2000). The human capital model. In A.J. Culyer & J.P. Newhouse (eds.) *Handbook of Health Economics* (347-408). Amsterdam: Elsevier.

Gruber, J., & Koszegi, B. (2001). Is addition ‘rational’? Theory and Evidence. *Quarterly Journal of Economics*, 116(4), 1261-1303.

Hall, Robert, & Jones, C. (2005). The value of life and the rise in health spending. *Quarterly Journal of Economics*, 122(1): 39-72.

Nordhaus, William D. (2003). The health of nations: The contribution of improved health to living standards. In Kevin M. Murphy & Robert Topel (eds.) *Measuring the Gains from Medical Research: An Economic Approach*. Chicago: University of Chicago Press.

3/21: Lecture 9 – Objectives and Behavior of Not-for-Profit Providers (2 student presentations)

Required:

Dafny, L.S. (2005). How do hospitals respond to price changes? *American Economic Review*, 95(5), 1525-1547.

Duggan, M. (2000). Hospital ownership and public medical spending. *Quarterly Journal of Economics*, 115(4), 1343-1373.

Recommended:

Capps, Cory, Carlton, D., & David, G. (2010). Antitrust treatment of nonprofits: Should hospitals receive special care? (University of Chicago George J. Stigler Center for the Study of the Economy and the State Working Paper No. 232).

David, Guy. (2009). The convergence between nonprofit and for-profit hospitals in the united states. *International Journal of Health Care Finance and Economics*, 9(4), 403-428.

Lakdawalla, Darius, & Philipson, T. (2006). The nonprofit sector and industry performance. *Journal of Public Economics*, 90, 1681-1698.

Newhouse, Joseph. (1970). Toward a theory of nonprofit institutions: An economic model of a hospital. *American Economic Review*, 60(1), 64-74.

Nicholson, Sean, Pauly, M., Burns, L., et al. (2000). Measuring community benefits provided by for-profit and nonprofit hospitals. *Health Affairs*, 19(6), 168-177.

Pauly, Mark, & Redisch, M. (1973). The not-for-profit hospital as a physicians' cooperative. *American Economic Review*, 63(1), 87-99.

3/28: Lecture 10 – Provider Behavior: Information and Competition (1 Student Presentation)

Required:

Dranove, David, Kessler, D., McClellan, M., & Satterthwaite, M. (2003). Is more information better? *Journal of Political Economy*, 111(3), 555-588.

Gaynor, M., & Town, R. (2011). Provider competition. In P. Borras, T. McGuire, & Pualy, M. (eds.) *Handbook of Health Economics*, Vol 2. Amsterdam: Elsevier.

Kessler, Daniel, & McClellan, M. (2000). Is hospital competition socially wasteful? *Quarterly Journal of Economics*, 115(2), 577-615.

Recommended:

Dafny, Leemore S., & Dranove, D. (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.

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.

Kolstad, J.T. (2013). Information and quality when motivation is intrinsic: Evidence from surgeon report cards. *American Economic Review*, 103(7), 2875-2910.

4/4: Lecture 11 – Provider Behavior: Agency, Induced Demand and Target Income Hypothesis – Guest Lecture Prof. Juan Pablo Atal

Required:

Gruber, J., & Owings, M. (1996). Physician financial incentives and cesarean section delivery. *RAND Journal of Economics*, 27(1), 99-123.

Ma, Ching-To Albert, & McGuire, T.G. (1997). Optimal health insurance and provider payment. *American Economic Review*, 87(4), 685-704.

McGuire, T.G., & Pauly, M.V. (1991). Physician response to fee changes with multiple payers. *Journal of Health Economics*, 10(4), 385-410.

Recommended:

- Allard, M., Léger, P.T., & Rochaix, L. (2009). Provider competition in a dynamic setting. *Journal of Economics and Management Strategy*, 18(2), 457-486.
- Dafny, L.S. (2005). How do hospitals respond to price changes? *American Economic Review*, 95(5), 1525-1547.
- Dumont, E., Fortin, B., Jacqueument, N., & Shearer, B. (2008). Physician multitasking and incentives: Empirical evidence from a natural experiment. *Journal of Health Economics*, 27(6), 1436-1450.
- Ellis, R., & McGuire, T. (1986). Provider behavior under prospective payment. *Journal of Health Economics*, 5, 129-151.
- Ellis, R., & McGuire, T. (1986). Supply-side and demand-side cost share in health care. *Journal of Economic Perspectives*, 7, 135-151.
- Fuchs, V. (1978). The supply of surgeons and the demand for surgical operations. *Journal of Human Resources*, 13(Supplement): 35-66.
- Gruber, J., John, K., & Mayzlin, D. (1999). Physician fees and procedure intensity: the case of cesarean delivery. *Journal of Health Economics*, 18, 473-490.
- Johnson, Erin M. (2014). Physician induced demand. *Encyclopedia of Health Economics*, Volume 3, 77-82.
- Léger, P.T. (2008). Physician payment mechanisms. In Lu M. & E. Johnsson (eds.) *Financing Health Care: New ideas for a Changing Society* (149-176). Wiley-VCH.
- McGuire, T. (2000). Physician agency. In A.J. Culyer & J.P. Newhouse (eds.) *Handbook of Health Economics* (461-538). Amsterdam: Elsevier.
- Yip, W. (1998). Physician responses to medical fee reductions: Changes in the volume and intensity of supply of Coronary Artery Bypass Graft (CABG) surgeries in the Medicare and private sectors. *Journal of Health Economics*, 17, 775-700.

4/11: Lecture 12 – Provider Behavior and Productivity, Revisited (1 student presentation)

Required:

Chandra, Amitabh, & Staiger, D.O. (2007). Productivity spillovers in healthcare: Evidence from the treatment of heart attacks. *Journal of Political Economy*, 115(1), 103-140.

Doyle, J. J. (2011). Returns to local-area health care spending: Evidence from health shocks to patients far from home. *American Economic Journal: Applied Economics*, 3(3), 221-243.

Finkelstein, A., Gentzkow, M., & Williams, H. (2016). Sources of geographic variation in health care: Evidence from patient migration. *Quarterly Journal of Economics* 131(4), 1681-1726.

Skinner, Jonathan S. (2011). Causes and consequences of regional variations in health care. In Thomas G. McGuire, Mark V. Pauly and Pedro P. Barros (eds.) *Handbook of Health Economics*, Volume 2, (45-93). Amsterdam: Elsevier.

Recommended:

Chandra, Amitabh, & Skinner, J.S. (2012). Technology growth and expenditure growth in health care. *Journal of Economic Literature*, 50(3), 645-680.

4/18: Lecture 13 – Final Exam

4/25: Lecture 14 – Final Presentations
