

ECON 472: Economics of Health Care
University of Southern California
Spring 2017

Syllabus

Professor: Maria J. Prados
Office: VPD 314C
Office Hours: Wed 10-11am
Contact: prados@usc.edu
Class Time: Mon/Wed 4:00-5:50pm WPH B28

Course Information

This course is an introduction to the field of health economics. Health economics is an active field of microeconomics with a large and growing literature. In the past three decades, some of the most controversial policies considered by state and federal governments have involved issues that have been analyzed by health economists. In this course we will study topics like lack of health insurance and the Affordable Care Act (ACA), ad measurement and determinants of health, health disparities and unhealthy behaviors. The goal of this course is twofold. One is to better understand the economic theory of health and healthcare. We will study several economic models in detail, including models of health, addiction, demand for healthcare and demand for insurance. The emphasis will be on key economic concepts that health economists use to analyze health and healthcare markets. The second goal of the class is to learn to evaluate and interpret empirical findings in health economics. We will read some of the papers in detail to understand the findings reported in those papers.

Textbook and Readings

Main textbook: *Health Economics* by Bhattacharya, Hyde and Tu (2014).
Secondary textbook (optional): *The Economics of Health and Health Care*, by Folland, Goodman and Stano (2016)

Besides the main textbook (which I encourage you to buy or rent) we will read some academic papers. Required readings are listed under each topic. These readings will be available on Blackboard or online. In addition to the required readings, optional readings are also listed. These can be found online.

Adequately citing optional readings in the exams, problem sets or class discussion will result in extra credit. For both the required and optional papers you should focus on the motivation behind the analysis and the main findings, as well as how they complement what we discuss in class. Skimming or skipping the more technical parts of these readings is fine.

The secondary textbook is an additional source of information, which can be useful to complement the main textbook (at will) if necessary.

Class Presentation

The students are expected to prepare a presentation on one academic paper of their choosing. Suggested papers are marked in the reading list with (*), but other papers can also be considered (to be discussed with professor). This is an opportunity to learn about a topic that the student finds particularly interesting. It is also a way to understand how research is conducted, the challenges faced and the limitations of research results. The presentation will take place at a date to be agreed upon. It should include a discussion about the paper's main result, why it is relevant/interesting, how it fits within the corresponding chapter of the class, a description of the method used, and the main aspects the analysis in the paper has left out.

Class Participation

Class discussion is important for both individual and collective learning. The quality of a student's participation is at least as important as the quantity, and the following points characterize effective participation:

- Do comments draw on the text and materials from this and other courses?
- Do they show evidence of analysis?
- Does the student distinguish between opinion and well-supported analysis? Normative and positive issues?
- Are the points made substantive? Do they advance or deepen the discussion/analysis?
- Do comments clarify and highlight the important aspects of earlier comments and lead to a clearer statement of the concepts being considered? Is there an attempt to synthesize the discussion?

Course Grading

Midterm Exam: 25%

Final Exam: 40%

Problem Sets: 15%

Presentation in class: 15%

Class Participation: 5%

Important Dates

Deadline to choose paper for class presentation: **February 26th**

Review sessions: February 27th, April 26th

In class Midterm Exam: **March 1st**

Final Exam: **May 3rd**

Regrade Policy

The material covered on the examinations will come from the lecture notes, problem sets and required reading. If a student requests that some question on an examination be regraded, the professor will review the entire examination. Makeup exams will be offered only under extenuating circumstances (e.g. serious injuries, family deaths), so please **plan ahead**.

Academic Conduct

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in the University Student Conduct Code SCampus, Section 11, Behavior Violating University Standards <https://policy.usc.edu/scampus-part-b/>. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct/>.

Pre-requisite: Intermediate Microeconomics

If your recollection of intermediate microeconomics is rusty, I strongly recommend you read the chapters on consumer demand theory in any good intermediate microeconomics textbook (such as Hal Varian’s Intermediate Microeconomics: A Modern Approach)

Contents

1. Introduction to Health Economics

1.1. The economic way of thinking about health

BHT, Ch. 1

Fuchs, Victor R. "What is Health?" In *The Future of Health Policy*. Boston: Harvard University Press, pp. 27-40.

Optional Readings:

* Baker, M., Stabile, M., and Deri, C. "What Do Self-Reported Objective Measures of Health Measure?" *Journal of Human Resources*, 39(4), pp.1067-1093

De Lew, Nancy; Greenberg, George; and Kinchen, Kraig. 1992. "A Layman's Guide to the U.S. Health Care System," *Health Care Financing Review* 14(1, Fall): 151-169.

Fuchs (1996) "Economics, Values, and Health Care Reform," *American Economic Review* 86(1):1-24

1.2. Health care spending – some facts

Fuchs, Victor R. "Health Care Is Different—That's Why Expenditures Matter." *JAMA* 303.18 (2010): 1859-1860.

Aaron, H. and P. Ginsburg. 2009. "Is Health Spending Excessive? If So, What Can We Do About it?" *Health Affairs*, 28(5): 1260-1275.

Optional Readings:

NIHCM Data Brief, July 2012. *The Concentration of Health Care Spending*.

Kaiser Family Foundation, May 2012. *Health Care Costs: A Primer*.

1.3. Health determinants and long run trends

Cutler, David, Angus Deaton and Adriana Lleras-Muney, "The Determinants of Mortality," *Journal of Economic Perspectives*, Vol 20, Number 3, 2006.

Angus Deaton. 2013. *The Great Escape*, Princeton University Press. Chapter 1.

2. Economic Models of Health

BHT, Ch. 2 & 3

Optional Readings:

Becker, Gary S., Tomas J. Philipson, and Rodrigo R. Soares. 2005. The Quantity and Quality of Life and the Evolution of World Inequality. *American Economic Review*. 95(1): 277-91.

Heckman, James J. 2007. The economics, technology, and neuroscience of human capability formation. *Proceedings of the National Academy of Sciences, USA*. 104(33):13250-5. Epub 2007 Aug 8. (for a summary, see also <https://www.aft.org//sites/default/files/periodicals/Heckman.pdf>)

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

3. Health and SES

BHT, Ch. 4

Smith, James P. 1999. "Healthy Bodies and Thick Wallets: The Dual Relation Between Health and Economic Status." *Journal of Economic Perspectives*. 13(2):145-167.

Optional Readings:

*Case, Anne, Darren Lubotsky, and Christina Paxson. 2002. "Economic Status and Health in Childhood: The Origins of the Gradient." *American Economic Review*. 92(5): 1308-34.

Chetty, Raj; Michael Stepner, Sarah Abraham, Shelby Lin, Benjamin Scuderi, Nicholas Turner, Augustin Bergeron and David Cutler "The Association Between Income and Life Expectancy in the United States, 2001-2014." *JAMA*, 2016

Deaton, Angus and Darren Lubotsky "Mortality, inequality and race in American cities and states." *Social Science & Medicine* 56 (2003) 1139–1153

*Strauss, John. "Does better nutrition raise farm productivity?" *The Journal of Political Economy* (1986): 297-320.

*Lleras-Muney, Adriana. 2005. "The Relationship between Education and Adult Mortality in the United States," *Review of Economic Studies*, 72(1): 189-221.

*Clark, Damon, and Heather Royer. "The effect of education on adult mortality and health: Evidence from Britain." *The American Economic Review* 103.6 (2013): 2087-2120.

4. Supply of Healthcare

BHT, Ch. 5 & 6

Optional Readings:

McClellan and Kessler (2000) "Medical Liability, Managed Care, and Defensive Medicine," National Bureau of Economic Research Working Paper #7537

Bhattacharya (2005) "Specialty Selection and Lifetime Returns to Specialization within Medicine" *Journal of Human Resources* 40(1):115-43.

5. Pharmaceuticals and Technological Innovation

BHT, Ch. 12 - 14

Cutler and McClellan (2001) "Is Technological Change in Medicine Worth It?" *Health Affairs*, 20(5):11-29.

Optional Readings:

Weisbrod, Burton A. 1991. "The Health Care Quadrilemma: An Essay on Technological Change, Insurance, Quality of Care, and Cost Containment." *Journal of Economic Literature*, 29 (1991): 523-552.

Fisher, Elliot, Jonathan Skinner and Douglas Staiger, "Is Technological Change in Medicine Always Worth It? The Case of Acute Myocardial Infarction," *Health Affairs*, Web Exclusive, February 7, 2006.

Kremer, Michael, "Pharmaceuticals and the Developing World," *Journal of Economic Perspectives*, 16(4): 67-90, 2002.

6. Health Insurance**6.1. Introduction and Moral Hazard**

BHT, Ch. 7 & 11

Optional Readings:

*Manning, Willard; Newhouse, Joseph; Naihua, Duan; Keeler, Emmett; and Leibowitz, Arleen. "Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment." *American Economic Review*, 77 (June, 1987): 251-277.

*Aron-Dine, Aviva, Liran Einav, and Amy Finkelstein. "The RAND Health Insurance Experiment, Three Decades Later." *The Journal of Economic Perspectives* 27.1 (2013): 197-222.

Cutler and Zeckhauser (1999) "The Anatomy of Health Insurance" NBER Working Paper #7176

6.2. Adverse Selection in Health Insurance

BHT, Ch. 8, 9 & 10

Krugman, Paul, "Health Economics 101," New York Times, November 14, 2005.

Gruber, Jonathan, "Why We Need the Individual Mandate," Center for American Progress Report, April 8, 2010.

Optional Readings:

*Cutler, D. and Reber, S. "Paying for Health Insurance: The Trade-Off Between Competition and Adverse Selection," *Quarterly Journal of Economics*, May 1998:434-466.

Cochrane (1995) "Time-Consistent Health Insurance," *Journal of Political Economy*, 103(3):445-473.

Akerlof, George. "The Market for Lemons," *The Quarterly Journal of Economics*, 84, August 1970: 488-500.

Pauly, Mark. "Overinsurance and Public Provision of Insurance: The Roles of Moral Hazard and Adverse Selection." *The Quarterly Journal of Economics*, 88, Feb., 1974: 44-62

Michael Rothschild and Joseph Stiglitz, "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information," *Quarterly Journal of Economics*, 90 (4), November 1976, pp. 630-649.

6.3. Public Insurance: Medicaid and Medicare

BHT, Ch. 17 & 18

*Finkelstein, Amy, Sarah Taubman, Bill Wright, Mira Bernstein, Jonathan Gruber, Joseph P. Newhouse, Heidi Allen, Katherine Baicker, and the Oregon Health Study Group. 2012. "The Oregon Health Insurance Experiment: Evidence from the First Year." *Quarterly Journal of Economics*. 127(3): 1057-1106.

Optional Readings:

*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(7): 1644-1668.

*Barcellos, Silvia Helena and Mireille Jacobson. 2015. "The Effects of Medicare on Medical Expenditure Risk and Financial Strain." *American Economic Journal: Economic Policy*.

Iglehart (1999) "The American Health Care System: Medicaid," *New England Journal of Medicine* 340(5): 403-8

*Currie, Janet and Gruber, Jonathan. "Saving Babies: The Efficacy and Cost of Recent Changes in the Medicaid Eligibility of Pregnant Women," *Journal of Political Economy*, 104, (6), December 1996.

*Finkelstein, Amy, "The Aggregate Effects of Health Insurance: Evidence from the Introduction of Medicare," *Quarterly Journal of Economics*. February 2007.

* Wherry, Laura, Sarah Miller, Robert Kaestner, and Bruce Meyer "Childhood Medicaid Coverage and Later Life Health Care Utilization." 2015, NBER Working Paper No. 20929

7. The uninsured and the Affordable Care Act

BHT, Ch. 18

Kaiser Family Foundation, April 2013. "Summary of the Affordable Care Act"

Optional Readings:

Baicker, Katherine and Chandra, Amitabh, 2008. "Myths and Misconceptions about U.S. Health Insurance," *Health Affairs*, Web Exclusive: w533-w543.

Barcellos, Silvia Helena, et al. "Preparedness of Americans for the Affordable Care Act." *Proceedings of the National Academy of Sciences* 111.15 (2014): 5497-5502.

Gruber, Jonathan, 2008. "Covering the Uninsured in the United States," *Journal of Economic Literature*, 46(3): 571-606.

Fredric Blavin, Stephen Zuckerman, and Michael Karpman, 2014. "Who Has Been Looking for Information in the ACA Marketplaces? Why? And How?" Urban Institute Health Reform Monitoring Survey Brief.

Aaron, Henry J. and Kevin W. Lucia, 2013. "Only the Beginning — What's Next at the Health Insurance Exchanges?" *New England Journal of Medicine* 369:1185-1187

*Jonathan Gruber (1994) "The Incidence of Mandated Maternity Benefits," *American Economics Review* 84(3):622-41.

David Cutler (2010) "How Health Care Reform Must Bend the Cost Curve" *Health Affairs* 29(6): 1131-35.

Douglas Holtz-Eakin and Michael J. Ramlet (2010) "Health Care Reform is Likely to Widen Federal Budget Deficits, Not Reduce Them" *Health Affairs* 29(6):1136-41.

8. Health Policy

BHT, Ch. 15 & 16

Optional Readings:

Ashenfelter, Orley and Michael Greenstone, "Using Mandated Speed Limits to Measure The Value of a Statistical Life," *Journal of Political Economy*, vol 112, no. S1, February 2004.

Sen, Amartya "The Discipline of Cost-Benefit Analysis," *The Journal of Legal Studies*, Vol 29, No.2 June 2000, pp. 931-952.

9. Health and Economic Development

*Acemoglu, Daron and Simon Johnson. 2007. "Disease and Development: The Effect of Life Expectancy on Economic Growth." *Journal of Political Economy*. 115(6): 925-85.

Bleakley, C. Hoyt. 2010a. "Health, Human Capital, and Development." *Annual Review of Economics*, 2:283-310.

Thomas, Duncan et al. (2006). "Causal Effect of Health on Labor Market Outcomes: Experimental Evidence," mimeo, UCLA.

Optional Readings:

Dupas, Pascaline. "Getting essential health products to their end users: Subsidize, but how much?" *Science (New York, NY)* 345.6202 (2014): 1279.

Alwyn Young. "The Gift of the Dying: The Tragedy of AIDS and the Welfare of Future African Generations." *Quarterly Journal of Economics*, 120(2):423-466, May 2005.

*Bleakley, C. Hoyt. 2007. "Disease and development: Evidence from hookworm eradication in the American South." *Quarterly Journal of Economics* 122(1): 73-117.

*Bleakley, C. Hoyt. 2010b. "Malaria in the Americas: A Retrospective Analysis of Childhood Exposure." *American Economic Journal: Applied*, 2(2):1-45, April.

10. Population Aging

BHT, Ch. 19.

Optional Readings:

Vaupel, James W. 2010. Biodemography of human ageing. *Nature*. 464: 537-541.

John F. Cogan and Olivia S. Mitchell. 2003. "Perspectives from the President's Commission on Social Security Reform." *Journal of Economic Perspectives*. 17(2): 149-172

Madrian, Brigitte C; Shea, Dennis F. 2001. "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behavior." *Quarterly Journal of Economics*. 16(4): 1149-1187. plus Erratum

11. Externalities and Public Health

BHT, Ch. 20

*Chay, Kenneth and Greenstone, Michael. "The Impact of Air Pollution on Infant Mortality: Evidence from Geographic Variation in Pollution Shocks Induced by a Recession," August 2003, *Quarterly Journal of Economics*, 118(3)

Currie, Janet, Michael Greenstone and Enrico Moretti "Superfund Cleanups and Infant Health." *The American Economic Review: Papers and Proceedings*, 101, May 2011: 435-441

*Miguel, Edward, and Michael Kremer (2004). "Worms: Identifying Impacts on Education and Health the Presence of Treatment Externalities", *Econometrica*, 72(1), 159-217.

Optional Readings:

Cutler, David M. and Grant Miller. 2005. "The Role of Public Health Improvements in Health Advances: The Twentieth-Century United States." *Demography*. 42(1): 1-22.

Almond D, B Mazumder. 2005. "The 1918 influenza pandemic and subsequent health outcomes: An analysis of SIPP data." *American Economic Review: Papers and Proceedings*. 95: 258-262.

* Currie, Janet and Reed Walker. "Traffic Congestion and Infant Health: Evidence from E-ZPass." *American Economic Journal: Applied Economics*, 3, January 2011:65-90

12. Economic Epidemiology

BHT, Ch. 21

Optional Readings:

*Ahituv et al. (1996) "The Responsiveness of the Demand for Condoms to the Local Prevalence of AIDS," *Journal of Human Resources*, 31(4):869-897.

*Philipson, (1996) "Private Vaccination and Public Health: An Empirical Examination for U.S. Measles," *Journal of Human Resources*, 31(3): 611-630.

Philipson (1999) "Economic Epidemiology and Infectious Diseases," NBER Working Paper #7037.

* Philipson and Posner (1995) "A Theoretical and Empirical Investigation of The Effects of Public Health Subsidies for STD Testing," *Quarterly Journal of Economics*, 110(2):445-474.

*Geoffard and Philipson (1996) "Rational Epidemics and Their Public Control," *International Economic Review*, 37(3):603-624.

*Geoffard and Philipson (1997) "Disease Eradication: Private versus Public Vaccination," *American Economic Review*, 87(1): 222-230.

Dow et al. (1995) "Disease Complementarities and the Evaluation of Public Health Interventions," NBER Working Paper #5216.

Goldman, Lakdawalla, and Sood (2004) "HIV Breakthroughs and Risky Sexual Behavior," NBER Working Paper #10516

13. Unhealthy Behavior: Evidence and Policy Issues

BHT, Ch. 22

Cutler, Glaeser, and Shapiro (2003) "Why Have Americans Become More Obese?" NBER Working Paper #9446

*Lakdawalla, Philipson, and Bhattacharya (2005) "Welfare-Enhancing Technological Change and the Growth of Obesity" *American Economic Review*, 95(2):253-7.

Optional Readings:

Fenelon, Andrew and Samuel H. Preston. 2012. "Estimating Smoking-Attributable Mortality in the United States." *Demography*. 49: 797-818.

Becker, Garry S. and Murphy Kevin M., "A Theory of Rational Addiction," *Journal of Political Economy*, 1988; 96(4):675-700.

Manning W. G., E.B. Keeler, J. P. Newhouse, E. M. Sloss and J. Wasserman, "Taxes of Sin: Do smokers and Drinkers pay their way?" *Journal of the American Medical Association* 261(11), 1989

Bhattacharya J and Sood N (2010) "Who Pays for Obesity" *Journal of Economic Perspectives*

14. The Behavioral Economics of Health

BHT, Ch. 23 & 24

* Royer, Heather, Mark Stehr, and Justin Sydnor. "Incentives, Commitments and Habit Formation in Exercise: Evidence from a Field Experiment with Workers at a Fortune-500 Company." *American Economic Journal: Applied*, 2015, 7(3): 51–84

Bhargava, Saurabh, George Loewenstein, and Justin Sydnor. "Do Individuals Make Sensible Health Insurance Decisions? Evidence from a Menu with Dominated Options." No. 21160. National Bureau of Economic Research, Inc, 2015.

Optional Readings:

Gruber and Kosegi (2001) "Is Addition 'Rational'? Theory and Evidence," *Quarterly Journal of Economics* 116(4):1261-1303

Bhattacharya J, Goldman D, and Sood N, "Market Evidence of Misperceived Prices and Mistaken Mortality Risks," (2009) *Journal of Economics, Behavior, and Organization*.

* Wang, Yang "Dynamic Implications of Subjective Expectations: Evidence from Adult Smokers." *American Economic Journal: Applied Economics*, 2014, 6(1): 1–37