## Economics 233 Public Economics of Health Care

Spring 2021

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Objective: The objective of this course is to provide an understanding of the role of government in the health sector. Key applications include insurance markets, physician and hospital objective functions, payment models, health system design, and medical innovation. All topics are considered from both a theoretical and an empirical perspective. The emphasis will be on learning techniques that can be applied to produce original research and to critically analyze existing research in the field.

Class Meetings: Lectures will meet Tuesdays and Thursdays from 3:30pm-4:50pm via Zoom.

Office Hours: Office hours are by appointment in ECON 306.

Requirements: There are four sets of requirements for this course:

- 1. <u>Readings</u>: Required readings will be distributed via email. Participation on the basis of the readings will account for 20% of your grade.
- 2. <u>Paper presentations</u>: Over the course of the quarter, each of you will present a paper during one of our regular class periods. The papers will be primarily empirical. The goals are for you to: i) place the issue addressed in the paper within the context of the course themes; ii) explain the empirical strategy used in the paper; and iii) provide a brief critique of the paper. The presentations are worth 15% of your grade.
- 3. <u>Project Proposal</u>: On April 20<sup>th</sup> (the 4<sup>th</sup> week of class), you will submit a 3-5 page project proposal. The proposal should describe a research question you would like to answer, the data you intend to analyze, and the methods you propose to use. Proposals will be worth 25% of your grade. (Extensions of proposals written for field courses are acceptable, subject to discussion of what will constitute satisfactory progress. Extensions of proposals from prior quarters should in most cases result in a completed paper draft by the end of the quarter. No single proposal can be used in more than 2 field classes.)
- 4. <u>Final Project</u>: Your final project will involve a write-up of the analysis from your project proposals. The final project will be due on Friday, June 7<sup>th</sup> and is worth 40% of your grade.

<u>Seminars</u>: I encourage you to attend the applied microeconomics seminar (which meets on Mondays from 2:00 to 3:30 in Econ 200). Attending seminars is among the best ways to facilitate the transition from coursework to research.

### **Course Outline**

A. Introduction to key social insurance concepts with an emphasis on health care applications ("optimal" social insurance; market failure due to asymmetric information)

R. Chetty. 2006. A general formula for the optimal level of social insurance. Journal of Public Economics 90(10-11):1879-1901.

M. Rothschild and J. Stiglitz. 1976. Equilibrium in competitive insurance markets: an essay on the economics of imperfect information. The Quarterly Journal of Economics 90(4):629-649.

Einav, Liran, and Amy Finkelstein. "Selection in insurance markets: Theory and empirics in pictures." The Journal of Economic Perspectives 25.1 (2011): 115-138.

D. Cutler. 2002. Health Care and the Public Sector. NBER WP 8802.

# **B.** Program evaluation methods with applications to adverse selection under community-rated insurance markets

Econometric work on adverse selection in markets with community rating rules:

Buchmueller, Thomas, and John DiNardo. "Did community rating induce an adverse selection death spiral? Evidence from New York, Pennsylvania, and Connecticut." The American Economic Review 92.1 (2002): 280-294.

Clemens, Jeffrey. "Regulatory redistribution in the market for health insurance." American Economic Journal: Applied Economics 7.2 (2015): 109-134.

Cutler, David M., and Sarah J. Reber. "Paying for health insurance: the trade-off between competition and adverse selection." The Quarterly Journal of Economics 113, no. 2 (1998): 433-466.

Detailed case studies of markets operating under community rating insurance regulations:

Monheit, Alan C., et al. "Community rating and sustainable individual health insurance markets in New Jersey." Health affairs 23.4 (2004): 167-175.

Hall, Mark A. "An evaluation of New York's reform law." Journal of Health Politics, Policy and Law 25.1 (2000): 71-99.

# C. Impacts of health insurance on health care consumption and health (optimal insurance from the demand side)

Finkelstein, Amy, Sarah Taubman, Bill Wright, Mira Bernstein, Jonathan Gruber, Joseph P. Newhouse, Heidi Allen, Katherine Baicker, and Oregon Health Study Group. "The Oregon health insurance experiment: evidence from the first year." The Quarterly journal of economics 127, no. 3 (2012): 1057-1106.

Currie, Janet, and Jonathan Gruber. "Health insurance eligibility, utilization of medical care, and child health." The Quarterly Journal of Economics 111.2 (1996): 431-466.

Finkelstein, Amy, and Robin McKnight. "What did Medicare do? The initial impact of Medicare on mortality and out of pocket medical spending." Journal of public economics 92.7 (2008): 1644-1668.

Lohr, Kathleen N., Robert H. Brook, Caren J. Kamberg, George A. Goldberg, Arleen Leibowitz, Joan Keesey, David Reboussin, and Joseph P. Newhouse. "Use of medical care in the RAND Health Insurance Experiment: diagnosis-and service-specific analyses in a randomized controlled trial." Medical care 24, no. 9 (1986): S1-S87.

Baicker, Katherine, Sendhil Mullainathan, and Joshua Schwartzstein. "Behavioral hazard in health insurance." The Quarterly Journal of Economics 130.4 (2015): 1623-1667.

# D. Basics of payment systems and the supply of health care services (optimal insurance from the supply side)

Ellis, Randall P., and Thomas G. McGuire. "Provider behavior under prospective reimbursement: Cost sharing and supply." Journal of health economics 5.2 (1986): 129-151.

McGuire, Thomas G., and Mark V. Pauly. "Physician response to fee changes with multiple payers." Journal of health economics 10.4 (1991): 385-410.

Clemens, Jeffrey, and Joshua D. Gottlieb. "Do physicians' financial incentives affect medical treatment and patient health?." American Economic Review 104.4 (2014): 1320-49.

Cutler, David M. "The Incidence of Adverse Medical Outcomes Under Prospective Payment." Econometrica 63.1 (1995): 29-50.

Cabral, Marika, Colleen Carey, and Sarah Miller. "The Impact of Provider Payments on Health Care Utilization: Evidence from Medicare and Medicaid." No. w29471. National Bureau of Economic Research, 2021.

#### E. Nuances of payment systems and the supply of health care services

Dafny, Leemore S. "How do hospitals respond to price changes?" American Economic Review 95.5 (2005): 1525-1547.

Gupta, Atul. "Impacts of Performance Pay for Hospitals: The Readmissions Reduction Program." American Economic Review, Forthcoming.

Starc, Amanda, and Robert J. Town. "Externalities and benefit design in health insurance." The Review of Economic Studies 87.6 (2020): 2827-2858.

Cabral, Marika, Michael Geruso, and Neale Mahoney. "Do larger health insurance subsidies benefit patients or producers? Evidence from Medicare Advantage." American Economic Review 108.8 (2018): 2048-87.

Clemens, Jeffrey, Joshua D. Gottlieb, and Jeffrey Hicks. "How Would Medicare for All Affect Health System Capacity? Evidence from Medicare for Some." *Tax Policy and the Economy* 35, no. 1 (2021): 225-262.

Dunn, Abe, Joshua D. Gottlieb, Adam Shapiro, Daniel J. Sonnenstuhl, and Pietro Tebaldi. "A Denial a Day Keeps the Doctor Away." No. w29010. National Bureau of Economic Research, 2021.

## F. Coverage determination and the statistical value of life

Viscusi, W. Kip, and Joseph E. Aldy. "The value of a statistical life: a critical review of market estimates throughout the world." Journal of risk and uncertainty 27.1 (2003): 5-76.

Firth, Brian Garriock, Liesl M. Cooper, and Steve Fearn. "The appropriate role of cost-effectiveness in determining device coverage: a case study of drug-eluting stents." Health Affairs 27.6 (2008): 1577-1586.

### **G.** Regional Variations

Chandra, Amitabh, and Douglas O. Staiger. "Productivity spillovers in health care: evidence from the treatment of heart attacks." Journal of political Economy 115.1 (2007): 103-140.

Finkelstein, Amy, Matthew Gentzkow, and Heidi Williams. "Sources of geographic variation in health care: Evidence from patient migration." The quarterly journal of economics 131.4 (2016): 1681-1726.

Cutler, David, et al. "Physician beliefs and patient preferences: A new look at regional variation in health care spending." American Economic Journal: Economic Policy 11.1 (2019): 192-221.

Cooper, Zack, et al. "The price ain't right? Hospital prices and health spending on the privately insured." The Quarterly Journal of Economics 134.1 (2018): 51-107.

Skinner, Jonathan. "Causes and consequences of regional variations in health care." Handbook of health economics. Vol. 2. Elsevier, 2011. 45-93.

Cutler, David M., and Dan P. Ly. "The (paper) work of medicine: understanding international medical costs." Journal of Economic Perspectives 25.2 (2011): 3-25.

## H. Health insurance and the labor market (wage incidence; benefit mandates; incidence of compensation regulation)

Summers, Lawrence H. "Some simple economics of mandated benefits." The American Economic Review 79.2 (1989): 177-183.

Gruber, Jonathan. "The incidence of mandated maternity benefits." The American economic review (1994): 622-641.

Duggan, Mark, Gopi Shah Goda, and Emilie Jackson. The effects of the Affordable Care Act on health insurance coverage and labor market outcomes. No. w23607. National Bureau of Economic Research, 2017.

Garthwaite, Craig, Tal Gross, and Matthew J. Notowidigdo. "Public health insurance, labor supply, and employment lock." *The Quarterly Journal of Economics* 129.2 (2014): 653-696.

Yelowitz, Aaron S. "The Medicaid notch, labor supply, and welfare participation: Evidence from eligibility expansions." The Quarterly Journal of Economics 110.4 (1995): 909-939.

Currie, Janet, and Brigitte C. Madrian. "Health, health insurance and the labor market." Handbook of labor economics 3 (1999): 3309-3416.

### I. System-wide effects of public insurance programs

Cutler, David M., and Jonathan Gruber. "Does public insurance crowd out private insurance?." *The Quarterly Journal of Economics* 111.2 (1996): 391-430.

Finkelstein, Amy. "The aggregate effects of health insurance: Evidence from the introduction of Medicare." *The quarterly journal of economics* 122.1 (2007): 1-37.

Freedman, Seth, Haizhen Lin, and Kosali Simon. "Public health insurance expansions and hospital technology adoption." *Journal of Public Economics* 121 (2015): 117-131.

Clemens, Jeffrey, and Joshua D. Gottlieb. "In the shadow of a giant: Medicare's influence on private physician payments." Journal of Political Economy 125.1 (2017): 1-39.

Clemens, Jeffrey, Joshua D. Gottlieb, and Tímea Laura Molnár. "Do health insurers innovate? Evidence from the anatomy of physician payments." Journal of health economics 55 (2017): 153-167.

### J. Medical innovation

Finkelstein, Amy. "Static and dynamic effects of health policy: Evidence from the vaccine industry." The Quarterly Journal of Economics 119.2 (2004): 527-564.

Acemoglu, Daron, and Joshua Linn. "Market size in innovation: theory and evidence from the pharmaceutical industry." The Quarterly Journal of Economics 119.3 (2004): 1049-1090.

Budish, Eric, Benjamin N. Roin, and Heidi Williams. "Do firms underinvest in long-term research? Evidence from cancer clinical trials." American Economic Review 105.7 (2015): 2044-85.

Clemens, Jeffrey, and Parker Rogers. Demand shocks, procurement policies, and the nature of medical innovation: Evidence from wartime prosthetic device patents. No. w26679. National Bureau of Economic Research, 2020.

Blume-Kohout, Margaret E., and Neeraj Sood. "Market size and innovation: Effects of Medicare Part D on pharmaceutical research and development." Journal of public economics 97 (2013): 327-336.