Health Economics and Public Policy

Spring 2023

David Meltzer

This course analyzes the economics of health care in the United States with particular attention to the role of government. The first part of the course examines the demand for health care and the structure and consequences of public and private health insurance. The second part of the course examines the supply of health care, including professional training, licensure, specialization and compensation, hospital competition and finance and the determinants and consequences of technical change in medicine. The course concludes with an examination of recent health care reform in the United States.

Required readings are in bold. The text is Phelps, <u>Health Economics</u>, 6th Ed. The Phelps text can be purchased at the Campus Bookstore, the Seminary Coop Bookstore or on line, including as an e-book. The 5th edition is available at much lower cost and is acceptable. Required journal articles on the reading list are available online via Web of Science.

<u>Course Requirements:</u> The course will require 2 problem sets (20% each), a critique of either a health economics workshop presentation or a health economics news article (15%) and a final examination (45%).

The critique assignment is to be 1-4 pages long (double spaced) and can be EITHER of the following:

- 1. A summary/critique of a presentation in the health economics workshop which summarizes the presentation and describes the connections of the concepts in the presentation to the concepts discussed in class. It must describe the underlying health economics models presented and their connection to those discussed in class.
- 2. A summary/critique of a news article on the topic of health care from a major news source, connecting the concepts and topics in the article to concepts discussed in class. It must describe the underlying health economics models presented and their connection to those discussed in class.

Because the answers to the problem sets will be discussed in the Answer Review sessions, problem set answers will be accepted only up to class time on their due date. In order to avoid lost papers, problem sets must only be turned in directly to the instructor or TAs, and not left in mailboxes.

The TAs for this course will be Yalun Su (<u>yalunsu@uchicago.edu</u>) and Afia Khan (<u>Afia.Khan@uchicagomedicine.org</u>). Praveen Kumar (<u>praveenkumar@uchicago.edu</u>) will serve as a grader. An additional TA may be added if available.

- Please send direct emails to Afia and Yalun, instead of using the messaging function in Canvas. When you email us, make sure to include "PPHA 38300" in the subject.
- For regrade requests, please submit your request in gradescope along with your additional comments. Please do not email the course TA or grader.

Critical Dates

Problem set 1: Distribution Date: Tuesday 4/4, Due Date: Tuesday 4/18. Keller 0001

Problem set 2: Distribution Date: Tuesday 5/2, Due Date: Tuesday 5/16.

Critique assignment: Due Date: Tuesday 5/16.

Final Exam: Tuesday 5/23, 2-4 pm

Health Economics Workshop Dates (Thursdays, 3:30-5): 4/6, 4/13, 4/20, 5/4, 5/11, 5/18, and 5/25.

Details at https://chess.uchicago.edu/events/health-economics-workshop/

TA Office Hours

- Fridays 11 12 pm, via <u>Zoom</u>.
- Additional office hours via Zoom
 - 4/7 (Friday), 12 1pm
 - 4/14 (Friday), 12 1pm
 - o 5/5 (Friday), 12 1pm
 - o 5/12 (Friday), 12 1pm
 - Additional office hours for the final exam:
 - 5/19 (Friday), 12 1pm
 - additional office hours may be offered before final

1. Introduction (Tuesday, 3/21)

Phelps, Chapter 1

Fuchs, Victor. The Health Sector's Share of the Gross National Product. Science 1990; 247: 534-538.

Cutler, David and Mark McCllellan, Are Medical Prices Declining? Evidence from Heart Attack Treatments. Quarterly Journal of Economics 1996. 113:991--1024.

Baumol, William. Health Care, Education and the Cost Disease: A Looming Crisis for Public Choice. Public Choice 1993; 77, 17-28.

Mendelsohn, Daniel and William Schwartz. The Effects of Aging and Population Growth on Health Care Costs. Health Affairs 1993; 12(1):119-25.

Levit, Katherine, et al. Health Care Spending in 1994: Slowest in Decades Health Affairs Summer 1996; 15(2): 130-44.

Heffler, Stephen, et al. Health Spending Growth Up in 1999; Faster Growth Expected in Future, Health Affairs 20(2)(2001): 193-203.

Hartman, Micah, et al. National Health Spending In 2007: Slower Drug Spending Contributes To Lowest Rate of Overall Growth Since 1998. Health Affairs 2009; 28(1): 246-261.

Sisko, Andrea M, et al. National Health Expenditure Projections, 2013-23: Faster Growth Expected with Expanded Coverage and Improving Economy, Health Affairs 2014; 33(10):1841-50

Martin AB, et al. National Health Spending: Faster Growth In 2015 As Coverage Expands And Utilization Increases, Health Affairs Jan 2017;36(1):166-176.

Keehan SB, et al. National Health Expenditure Projections, 2016-25: Price Increases, Aging Push Sector To 20 Percent Of Economy, Health Affairs, Feb 2017; 36(3): 553-563.

Cuckler GA, et al. National Health Expenditures, 2018-2026: Despite Uncertainty, Fundamentals Primarily Drive Spending Growth. Health Affairs, March 2018; 37(3): 482-92.

Papanicolos I, Woskie L, Jha AK. Health Care Spending in the United States and Other High Income Countries. JAMA 2018:319(10):1024-39.

Sisko, Andrea M, et al. National Health Expenditures, 2018-2027: Economic and Demographic Trends Drive Spending Growth. Health Affairs, March 2019; 38(3): 491-501.

Martin, Anne, ... and The National Health Expenditure Accounts Team. National Health Care Spending In 2019: Steady Growth For The Fourth Consecutive Year Health Affairs 40(1)(2021):14–24.

2. The Demand for Health and Medical Care (Thursday, 3/23)

Phelps, Chapters 2, 3, 4

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

Barsky, Arthur. The Paradox of Health, NEJM 1988; 318(7): 414-418.

Easterlin, Richard. Explaining Happiness. PNAS September 16, 2003; 100(19): 11176-11183.

3. The Value of Saving a Life (Tuesday, 3/28)

Thaler, Richard and Sherwin Rosen. The Value of Saving a Life: Evidence from the Labor Market, in Household Production and Consumption ed. Nestor E. Terleckyj NBER 1976 pp. 265-298.

Viscusi, Kip, Wesley Magat and Joel Huber An Investigation of the Rationality of Consumer Valuations of Multiple Health Risks, RAND Journal of Economics 1987; 18(4): 465-479.

Volpp KG, John LK, Troxel AB, Norton L, Fassbender J, Loewenstein G. Financial Incentive-Based Approaches for Weight Loss: A Randomized Trial. *JAMA*. 2008;300(22):2631-2637. doi:10.1001/jama.2008.804.

4. <u>Insurance and the Demand for Health Care</u> (Thursday, 3/30, Tuesday 4/4)

Phelps, Chapter 5

Phelps, Charles and Joseph Newhouse. Effects of Coinsurance: A Multivariate Analysis, Social Security Bulletin 1972; 35:20-29.

Manning, Willard, Joseph Newhouse, Naihua Duan, et al., Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment, American Economic Review 1987; 77(3): 521-277.

Brook, Robert, et al. Does Free Care Improve Adults' Health? Results from a Randomized Controlled Trial, New England Journal of Medicine 1983; 309(24): 1426-1434.

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

Pauly, Mark The Economics of Moral Hazard: Comment American Economic Review 1968; 58(3):531-537.

Arrow, Kenneth. The Economics of Moral Hazard: Further Comment American Economic Review 1968; 58(3):537-9.

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5. The Demand for Insurance and the Structure of Private Insurance Markets (Thursday, 4/6 (2:30 PM), Tuesday 4/11)

Phelps, Chapters 10 and 11

Rothschild, Michael and Joseph Stiglitz. Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information, Quarterly Journal of Economics 1976; 90:629-650.

Pauly, Mark. Taxation, Health Insurance and Market Failure in the Medical Economy, Journal of Economic Literature 1986; 24:629-675.

Woolhandler, Steffie and David Himmelstein et al. The Deteriorating Administrative Efficiency of the U.S. Health Care System, New England Journal of Medicine 1989; 320(2):102-108.

Cutler, David and Sarah Reber. Paying for Health Insurance: The Tradeoff between Competition and Adverse Selection, The Quarterly Journal of Economics (1998) 113 (2): 433-466.

Pauly, Mark and John Goodman. Tax Credits for Health Insurance and Medical Savings Accounts, Health Affairs 1995: 14 (1): 126-139.

6. Agency Issues and the Supply of Physician Services (Thursday 4/13)

Phelps, Chapters 6, 7 and 13

Fuchs, Victor. The Supply of Surgeons and the Demand for Operations, Journal of Human Resources 1978; 8(Supplement): 35-56.

Hickson, Gerald et al. Physician Reimbursement by Salary or Fee-for Service: Effect on Physician Practice Behavior in a Randomized Prospective Study, Pediatrics Sept. 1987; 80 (3): 344-50.

Clemens, Jeff and Joshua Gottlieb. Do Physicians' Fiancial Incentives Affect Treatment Patterns and Patient Health? Americian Economic Review 2014;104(4):1320-49.

Benham, Lee. The Effect of Advertising on the Price of Eyeglasses Journal Law and Economics 1972; 15(2):337-52.

7. Supply of Physicians (Tuesday 4/18)

Bhattacharya, Jay. Specialty Selection and Lifetime Returns to Specialization Within Medicine. Journal of Human Resources. 2005 40(1):115-143.

Fuchs, Victor and James Hahn. How Does Canada do it? New England Journal of Medicine 1990; 323(13):884-890.

8. <u>Physician Payment Reform: The Resource-Based Relative Value</u> Scale (Tuesday, 4/18)

Hsaio, William et al. Results and Policy Implications of the Resource-based Relative Value Scale, New England Journal of Medicine 1988; 319(13): 881-888.

9. Physician Workforce Reform: The Push for Generalists and Opportunites for Delivery Redesign (Thursday, 4/20)

Becker, Gary and Kevin Murphy. The Division of Labor, Coordination Costs, and Knowledge Quarterly Journal of Economics 1992; 107(4): 1137-60.

Colwill, Jack. Where have all the Primary Care Applicants Gone? New England Journal of Medicine 1992; 326(6):387-393.

Kravits, Richard et al. Differences in the Mix of Patients Among Specialties and Systems of Care: Results from the Medical Outcomes Study, Journal of the American Medical Association 1992; 267(12):1617-1623.

Greenfield, Sheldon et al. Variations in Resource Utilization Among Medical Specialties and Systems of Care: Results from the Medical Outcomes Study, Journal of the American Medical Association 1992; 267(12): 1624-1630.

Weiner, Jonathan. Forecasting the Effects of Health Reform on US Physician Workforce Requirements: Evidence from HMO Staffing Patterns. JAMA July 29, 1994: 272 (3): 222-230.

Ayanian, John et al. Knowledge and Practices of Generalist and Specialist Physicians Regarding Drug Therapy for Acute Myocardial Infarction. NEJM Oct. 27, 1994; 331 (17): 1136-1142.

Meltzer David, Jeanette Chung. Coordination, Switching Costs and the Division of Labor in General Medicine: An Economic Explanation for the Emergence of Hospitalists in the United States. The National Bureau of Economic Research Working Paper Series. #16040 May 2010.

Meltzer DO, Ruhnke G. Redesigning Care for Patients at Increased Hospitalization Risk: The Comprehensive Care Physician Model." Health Affairs. 33(5):770-77. May 2014.

10. Hospital Organization and Economic Behavior (Tuesday, 4/25)

Phelps, Chapters 8 and 9

Harris, Jeffrey. The Internal Organization of Hospitals: Some Economic Implications, Bell Journal of Economics 1977; 8:467-482.

Jacobs, Philip. A Survey of Economic Models of Hospitals, Inquiry 1974; 11(2):83-97.

Sloan, Frank. Not-for-Profit Ownership and Hospital Behavior Chapter 21 in Handbook of Health Economics, A. Culyer and J. Newhouse editors, Elsevier Science Press, 2000.

11. Competition and Managed Care (Thursday, 4/27)

Phelps, Chapter 11

Robinson, James and Harold Luft. The Impact of Hospital Market Structure on Patient Volume, Average Length of Stay, and the Cost of Care, Journal of Health Economics 1985; 4:333-356.

Manning, Willard et al. A Controlled Trial of the Effect of Prepaid Group Practice on Use of Services, New England Journal of Medicine 1984; 310(23):1505-10.

Sloss, Elizabeth et al. Effect of a Health Maintenance Organization on Physiologic Health: Results from a Randomized Trial, Annals of Internal Medicine 1987; 106:130-8.

12. Prospective Payment (Tuesday, 5/2)

Phelps, Chapters 12 and 16

Ellis, Randall and Thomas McGuire Provider Behavior Under Prospective Reimbursement, Journal of Health Economics 1986; 5:129-151.

Kosecoff, Jacqueline, et al. Prospective Payment System and Impairment at Discharge: The 'Sicker and Quicker' Story Revisited, Journal of the American Medical Association 1990; 264(15): 1980-1983.

Rodgers, William et al. Quality of Care Before and After Implementation of the DRG-based Prospective Payment System: A Summary of Effects, Journal of the American Medical Association 1990; 264(15): 1989-1994.

Cutler, David. The Incidence of Adverse Medical Outcomes Under Prospective Payment, Econometrica January 1995; 63(1): 29-50.

13. Regulation and the Supply of New Drugs (Thursday, 5/4)

Phelps, Chapter 15

Joseph A. DiMasi, Henry G. Grabowski, Ronald W. Hansen. Innovation in the pharmaceutical industry: New estimates of R&D costs. Journal of Health Economics 2016; 47:20–33.

Michael Kremer, 1998. "Patent Buyouts: A Mechanism for Encouraging InnovationLinks to an external site.," The Quarterly Journal of EconomicsLinks to an external site., Oxford University Press, vol. 113(4), pages 1137-1167.

Casey Mulligan, The Value of Pharmaceutical Benefit Management. Becker Friedman Institute Working Paper, July 2022. https://bfi.uchicago.edu/wp-content/uploads/2022/07/BFI_WP_2022-93.pdf

14. Diffusion of Medical Innovations (Thursday, 5/4)

Warner, Kenneth. A 'Desperation-Reaction' Model of Medical Diffusion, Health Services Research 1975; 10:369-383.

Weisbrod, Burton. The Health Care Quadrilemma: An Essay on Technological Change, Insurance, Quality of Care, and Cost Containment, Journal of Economic Literature June 1991; 21: 523-552.

15. Small Area Variations Studies (Tuesday, 5/9)

Phelps, Chapter 3 (pp. 78-101) and 4 (pp. 165-173)

Wennberg, John et al. Are Hospital Services Rationed in New Haven or Over-utilized in Boston? Lancet May 23, 1987: 1185-1188.

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16. <u>Decision Analysis and the Assessment of Medical Effectiveness</u> (Thursday, 5/11, HEW 3:30-5, Tuesday, 5/16)

Pauker, Stephen and Jerome Kassierer. Decision Analysis, New England Journal of Medicine 1987; 316(5):250-258.

Detsky, Allan and Naglie, Gary. A Clinician's Guide to Cost-Effectiveness Analysis. Annals of Internal Medicine 15 July 1990; 113 (2): 147-154.

Torrence, George. Measurement of Health State Utilities for Economic Appraisal, Journal of Health Economics 1986; 5: 1-30.

Meltzer, David. Accounting for Future Costs in Medical Cost-Effectiveness Analysis. Journal of Health Economics 1997; 16(1): 33-64.

Neumann PJ, Sanders GD, Russell LB, Siegel JE, Ganiats TG, eds. Cost-Effectiveness in Health and Medicine. 2nd ed. New York, NY: Oxford University Press; 2016.

Eddy, David. The Economics of Cancer Prevention and Detection: Getting More for Less, Cancer 1981; 47:1200-1209.

Mandelblatt, Jeanne and Marianne Fahs. The Cost-effectiveness of Cervical Cancer Screening for Low-Income Elderly Women, Journal of the American Medical Association 1988; 259(16): 2409-2413.

Sanders et al. Recommendations for Conduct, Methodological Practices, and Reporting of Cost-effectiveness Analyses: Second Panel on Cost-Effectiveness in Health and Medicine. JAMA Sept. 13, 2016;316(10):1093-1103.

17. Access to Health Care (Tuesday, 5/16, Thursday, 5/18)

Phelps, Chapter 12

Ronald M. Andersen. Revisiting the Behavioral Model and Access to Medical Care: Does it Matter?

Journal of Health and Social Behavior, Mar. 1995; 36(1):1-10.

Kaiser Family Foudnation. Key Facts about the Uninsuresd. Access at: https://www.kff.org/uninsured/fact-sheet/key-facts-about-the-uninsured-population/Links to an external site.

Levy, Helen and David Meltzer. What do We Really Know About Whether Health Insurance Affects Health? Health Policy on the Uninsued. Catherine McLaughlin (ed.), Urban Institute Press. 2001.

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

Baicker, Kate et al. The Oregon Experiment - Effects of Medicaid on Clinical Outcomes New England Journal of Medicine May 2, 2013; 368(18): 1713-22.

Kowalski, Amanda; Reconciling Seemingly Contradictory Results from the Oregon Health Insurance Experiment and the Massachusetts Health Reform. *The Review of Economics and Statistics* 2021; https://doi.org/10.1162/rest_a_01069Links to an external site.

Sommers, Benjamin D. State Medicaid Expansions and Mortality, Revisited: A Cost-Benefit Analysis. American Journal of Health Economics Summer 2017; 3(3):392-421. NEW ENGLAND JOURNAL OF MEDICINEImpact Factor

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18. <u>Public Policies for Health Care Reform: Historical and Current</u> Perspectives (Thursday, 5/18)

Phelps, Chapter 16

Cutler, David and Jonathan Gruber. Does Public Insurance Crowd Out Private Insurance? Quarterly Journal of Economics May 1996; 111(2): 391-430.

Enthoven, Alain. Consumer Choice Health Plan, New England Journal Medicine 1978; 298(12):650-8, 298(13):709-20.

Enthoven, Alain. The History and Principles of Managed Competition, Health Affairs 1993; 12 (Supplement): 24-48.

Newhouse, Joseph. An Iconoclastic View of Health Cost Containment, Health Affairs 1993; 12 (Supplement): 152-171.

Kreuger, Alan, Uwe Reinhardt. The Economics of Employer vs Individual Mandates. Health Affairs 1994: 13(2): 34-53.

Shortell, Stephen, Casalino, Lawrence. Health Care Reform Requires Accountable Care Systems. JAMA 2008:300(1): 95-7.

McClellan, Mark, Aaron N. McKethan, Julie L. Lewis, Joachim Roski, and Elliott S. Fisher. A National Strategy To Put Accountable Care Into Practice. Health Affairs 2010; 29(5):982-990.

Orzag, Peter, Ezekiel Emmanuel. <u>Health Care Reform and Cost ControlLinks to an external site.</u>. New England J Med. Aug. 12, 2010;363:601-3. Kaiser Family Foundation health reform web page: http://kff.org/health-reform/Links to an external site.

Congressional Budget Office Cost Estimate on the American Health Care Act. March 13, 2017.

https://www.cbo.gov/system/files/115th-congress-2017-2018/costestimate/americanhealthcareact.pdfLinks to an external site.

Congressional Budget Office letter to Senator Paul Ryan on Revisions to American Health Care Act, March 23, 2017.

https://www.cbo.gov/system/files/115th-congress-2017-2018/costestimate/hr1628.pdfLinks to an external site.

Shrank, William, Nancy-Ann DeParle, Scott Gottlieb, Sachin Jain, Peter Orzag, Brian Powers, Gail Wilensky. Health Care Costs and Financing: Challenges and Strategies for a New Administration. Health Affiars 40(2)(2021): 235-242.