

ECON 307: Economics of Medical Care

Winter 2025

Professor: Molly Schnell, schnell@northwestern.edu

Lecture: Tuesdays and Thursdays, University Hall 102, 9:30-10:50am

Office hours: Mondays, Kellogg Global Hub 3437, 1:30-3:30pm

Teaching Assistant: Max Pienkny, mpienkny@u.northwestern.edu

TA Session: Fridays, Tech Institute Lecture Room 4, 9-10am

Office hours: Fridays, Kellogg Global Hub 3496, 10am-12pm

Course description: This course applies the theoretical and empirical tools of microeconomics to the study of health care markets. Topics include the production and measurement of health, the provision and design of health insurance, the causes and consequences of provider behavior, and competition in health care markets. Special attention will be given to recent health policy debates in the United States and the impacts of government regulations on health care.

Prerequisites: Students must have completed Microeconomics (310-1, 310-2) and Econometrics (281) prior to enrolling in the course. Students are expected to be familiar with empirical tools for applied microeconomics research, although these tools will be reviewed in lectures and discussed in TA sessions as needed.

Course expectations:

- *Readings:* Students are required to complete the assigned readings prior to each class. For empirical research papers, special attention should be given to the introduction and empirical strategy sections.
- *Lectures:* Students are expected to attend all lectures. Lectures will cover material not included in the readings, and all content—both from readings and lecture notes—may be included on exams.
- *TA sessions:* Attendance at TA sessions is encouraged but not mandatory. Max will use these sessions to review topics and empirical methods discussed in class, as well as to answer questions about previous problem sets.
- *Devices:* The use of laptops and phones is prohibited during lectures. Printed copies of the lecture notes will be provided at the beginning of each class. Tablets may also be used to take notes on lecture slides.

Grading:

- *Problem sets (25%):* There will be four problem sets with both conceptual and empirical components. Problem sets are due by 5pm CT via Crowdmark on the following dates:
 - PS1: Due Friday, January 24
 - PS2: Due Friday, February 7
 - PS3: Due Sunday, February 23
 - PS4: Due Sunday, March 9

Each student is given one 48-hour extension for a problem set. Students should email Max before a given problem set is due to request an extension. Late requests will not be granted.

You are allowed and encouraged to work with your classmates on the problem sets. However, you must hand in your own set of answers with explanations in your own words. If a problem

requires calculations or coding, you must show your own work. Identical copies of joint work will not be accepted.

- *Exams:* There will two closed book, in-person exams.
 - Midterm (30%): Tuesday, February 11, 9:30-10:50am (in class)
 - Final (45%): Tuesday, March 18, 12-2pm

In the spirit of continuous learning, if you get a higher score on the final than on the midterm, the final exam will be worth 55% and the midterm will be worth 20%.

Course materials: Readings for each lecture will be provided on Canvas. Textbook chapters are drawn from the following books:

Bhattacharya, J., T. Hyde, and P. Tu. 2014. "Health Economics." New York NY: Palgrave Macmillan.

Gross, T. and M. Notowidigdo. 2024. "Better Health Economics." Chicago IL: The University of Chicago Press.

For additional coverage of topics in health economics, students can consult the following handbooks:

Culyer, A. and J. Newhouse (editors). 2000. Handbook of Health Economics, Volumes 1A and 1B. New York NY: Elsevier.

Pauly, M., T. McGuire, and P. Barros (editors). 2011. Handbook of Health Economics, Volume 2. New York NY: Elsevier.

Northwestern University Syllabus Standards

This course follows the [Northwestern University Syllabus Standards](#). Students are responsible for familiarizing themselves with this information.

WEEK 1

JANUARY 7: INTRODUCTION AND U.S. HEALTH CARE PRIMER

JANUARY 9: PRODUCTIVITY OF HEALTH CARE SPENDING

Garber, A. and J. Skinner. 2008. "Is American Health Care Uniquely Inefficient?" *Journal of Economic Perspectives*, 22(4): 27-50.

Doyle, 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.

WEEK 2

JANUARY 14: DEMAND FOR HEALTH

Bhattacharya, Hyde, and Tu. Chapter 3: "Demand for Health: The Grossman Model"

JANUARY 16: FETAL ORIGINS

Almond, D. and J. Currie. 2011. "Killing Me Softly: The Fetal Origins Hypothesis." *Journal of Economic Perspectives*, 25(3): 153-172.

Almond, D. 2006. "Is the 1918 Influenza Pandemic Over? Long-Term Effects of In Utero Influenza Exposure in the Post-1940 U.S. Population." *Journal of Political Economy*, 114(4): 672-712.

WEEK 3

JANUARY 21: SOCIOECONOMIC DISPARITIES IN HEALTH

Gross and Notowidigdo. 2024. Chapter 14: "Health Gradients"

Clark, D. and H. Royer. 2013. "The Effect of Education on Adult Mortality and Health: Evidence from Britain." *American Economic Review*, 103(6): 2087-2120.

JANUARY 23: DEMAND FOR HEALTH INSURANCE

Bhattacharya, Hyde, and Tu. Chapter 7: "Demand for insurance"

Dobkin, C., A. Finkelstein, R. Kluender, and M. Notowidigdo. 2018. "The Economic Consequences of Hospital Admissions." *American Economic Review*, 108(2): 308-352.

WEEK 4

JANUARY 28: DEMAND FOR HEALTH CARE UNDER INSURANCE

Bhattacharya, Hyde, and Tu. Chapter 2: "Demand for health care"

Bhattacharya, Hyde, and Tu. Chapter 11: "Moral hazard"

JANUARY 30: ADVERSE SELECTION

Gross and Notowidigdo. 2024. Chapter 2: "Health Insurance versus Broccoli"

Einav, L. and A. Finkelstein. 2011. "Selection in Insurance Markets: Theory and Empirics in Pictures." *Journal of Economic Perspectives*, 25(1): 115-138.

WEEK 5

FEBRUARY 4: HEALTH EFFECTS OF HEALTH INSURANCE

Baicker, K. et al. 2013. "The Oregon Experiment – Effects of Medicaid on Clinical Outcomes." *New England Journal of Medicine*, 368(1): 1713-1722.

Goldin, J., I. Zurie, and J. McCubbin. 2021. "Health Insurance and Mortality: Experimental Evidence from Taxpayer Outreach." *Quarterly Journal of Economics*, 136(1): 1-49.

FEBRUARY 6: FRICTIONS IN INSURANCE DEMAND

Gross and Notowidigdo. 2024. Chapter 5: "Behavioral Economics"

~~Handel, B. 2013. "Adverse Selection and Inertia in Health Insurance Markets: When Nudging Hurts." *American Economic Review*, 103(7): 2643-2682.~~

WEEK 6

FEBRUARY 11: MIDTERM

FEBRUARY 13: PHYSICIAN LABOR MARKETS

Bhattacharya, Hyde, and Tu. Chapter 5: "The Labor Market for Physicians"

Gottlieb, J., M. Polyakova, K. Rinz, H. Shiplett, and V. Udalova. "Who Values Human Capitalists' Human Capital? The Earnings and Labor Supply of U.S. Physicians." *Quarterly Journal of Economics*, forthcoming.

WEEK 7

FEBRUARY 18: FINANCIAL INCENTIVES AND PAYMENT REFORMS

Gross and Notowidigdo. 2024. Chapter 7: "Doctors and Hospitals Respond to Financial Incentives (Just Like Everybody Else)"

Gross and Notowidigdo. 2024. Chapter 8: "Payment Reform"

FEBRUARY 20: PHYSICIAN DECISION MAKING

Currie, J., B. MacLeod, and K. Musen. 2024. "First Do No Harm? Doctor Decision Making and Patient Outcomes." NBER Working Paper No. 32788.

Goh et al. 2024. "Large Language Model Influence on Diagnostic Reasoning: A Randomized Clinical Trial." *JAMA Network Open*, 7(10): e2440969.

WEEK 8

FEBRUARY 25: HOSPITAL MARKETS

Bhattacharya, Hyde, and Tu. Chapter 6: "The Hospital Industry"

Garthwaite, C., T. Gross, and M. Notowidigdo. 2018. "Hospitals as Insurers of Last Resort." *American Economic Journal: Applied Economics*, 10(1): 1-39.

FEBRUARY 27: COMPETITION IN HEALTH CARE MARKETS

Gross and Notowidigdo. 2024. Chapter 9: "Horizontal Mergers"

Dafny, L., M. Duggan, and S. Ramanarayanan. 2012. "Paying a Premium on Your Premium? Consolidation in the U.S. Health Insurance Industry." *American Economic Review*, 102(2):1161-1185.

WEEK 9

MARCH 4: PHARMACEUTICAL MARKETS

Bhattacharya, Hyde, and Tu. Chapter 12: "Pharmaceuticals and the Economics of Innovation"

Budish, E., B. Roin, and H. Williams. 2015. "Do Firms Underinvest in Long-Term Research? Evidence from Cancer Clinical Trials." *American Economic Review*, 105(7): 2044-2085.

MARCH 6: THE OPIOID EPIDEMIC

Currie, J. and H. Schwandt. 2021. "The Opioid Epidemic Was Not Caused by Economic Distress but by Factors That Could Be More Rapidly Addressed." *The ANNALS of the American Academy of Political and Social Science*, 695(1): 276-291.

~~Alpert, A., W. Evans, E. Lieber, and D. Powell. 2022. "Origins of the Opioid Crisis and its Enduring Impacts." *Quarterly Journal of Economics*, 137(2): 1139-1179.~~

READING WEEK

MARCH 11: Optional Q&A session

FINALS WEEK

MARCH 18: FINAL