

**Economics 307**  
Economics of Medical Care  
Spring 2023

**Instructor**

Frank Limbrock

KGH 3495

847 491 8678

f-limbrock@kellogg.northwestern.edu

*Lectures:* Mon, Wed 12:30 pm – 2:00 pm, TECH LR 4

*Office hours:* Fri 2:00-2:50 pm or by appointment

**Teaching Assistant**

Chase Williamson

[charleswilliamson2027@u.northwestern.edu](mailto:charleswilliamson2027@u.northwestern.edu)

*TA sections:* Fri 12:30 pm – 1:50 pm, TECH LR 4

*Office hours:* TBA

**Course Description**

This class will help students understand the key economic forces that have shaped the US health care and health insurance industry. What role do the particularities of health care and health insurance as economic goods play in explaining the size and growth rate of the health care sector? What's the effect of private incentives, adverse selection, moral hazard, and regulation? What's the effect of different organizational structures of health care provision? What can we learn from comparing the US health care / health insurance system to other countries' systems? Students will learn how a better understanding of these issues can inform the current public policy discussion.

**Prerequisites**

Economics 281, 310-1

**Mode of Instruction**

We will make every effort to have instruction in-person, to the extent possible under the evolving circumstances. Please help by following the University's policies:

**COVID-19 Classroom Expectations Statement**

Students, faculty, and staff must comply with University expectations regarding appropriate classroom behavior, including those outlined below and in the [COVID-19 Expectations for Students](#). With respect to classroom procedures, this includes:

- Policies regarding masking and social distancing evolve as the public health situation changes. Students are responsible for understanding and complying with current University, state and city requirements.
- In some classes, masking and/or social distancing may be required as a result of an Americans with Disabilities Act (ADA) accommodation for the instructor or a student in the class even when not generally required on campus. In such cases, the instructor will notify the class.

If a student fails to comply with the [COVID-19 Expectations for Students](#) or other University expectations related to COVID-19, the instructor may ask the student to leave the class. The instructor is asked to report the incident to the Office of Community Standards for additional follow-up.

**Exceptions to Class Modality**

Class sessions for this course will occur in person. Individual students will not be granted permission to attend remotely except as the result of an Americans with Disabilities Act (ADA) accommodation as determined by AccessibleNU.

Maintaining the health of the community remains our priority. If you are experiencing any symptoms of COVID do not attend class and update your Symptom Tracker application right away to connect with Northwestern's Case Management Team for guidance on next steps. Also contact the instructor as soon as possible to arrange to complete coursework.

Students who experience a personal emergency should contact the instructor as soon as possible to arrange to complete coursework.

Should public health recommendations prevent in person class from being held on a given day, the instructor or the university will notify students.

#### **Guidance on Class Recordings**

This class or portions of this class will be recorded by the instructor for educational purposes. Your instructor will communicate how members of the class can access the recordings. Portions of the course that contain images, questions or commentary/discussion by students will be edited out of any recordings that are saved beyond the current term.

#### **Prohibition of Recording Classes by Students**

Unauthorized student recording of classroom or other academic activities (including advising sessions or office hours) is prohibited. Unauthorized recording is unethical and may also be a violation of University policy and state law. Students requesting the use of assistive technology as an accommodation should contact [AccessibleNU](#). Unauthorized use of classroom recordings – including distributing or posting them – is also prohibited. Under the University's [Copyright Policy](#), faculty own the copyright to instructional materials – including those resources created specifically for the purposes of instruction, such as syllabi, lectures and lecture notes, and presentations. Students cannot copy, reproduce, display, or distribute these materials. Students who engage in unauthorized recording, unauthorized use of a recording, or unauthorized distribution of instructional materials will be referred to the appropriate University office for follow-up.

#### **Accessibility Statement**

Northwestern University is committed to providing the most accessible learning environment as possible for students with disabilities. Should you anticipate or experience disability-related barriers in the academic setting, please contact AccessibleNU to move forward with the university's established accommodation process (e: [accessiblenu@northwestern.edu](mailto:accessiblenu@northwestern.edu); p: 847-467-5530). If you already have established accommodations with AccessibleNU, please let me know as soon as possible, preferably within the first two weeks of the term, so we can work together to implement your disability accommodations. Disability information, including academic accommodations, is confidential under the Family Educational Rights and Privacy Act.

#### **Academic Integrity Statement**

Students in this course are required to comply with the policies found in the booklet, "Academic Integrity at Northwestern University: A Basic Guide". All papers submitted for credit in this course must be submitted electronically unless otherwise instructed by the professor. Your written work may be tested for plagiarized content. For details regarding academic integrity at Northwestern or to download the guide, visit:

<https://www.northwestern.edu/provost/policies/academic-integrity/index.html>

#### **Support for Wellness and Mental Health**

Northwestern University is committed to supporting the wellness of our students. Student Affairs has multiple resources to support student wellness and mental health. If you are feeling distressed or overwhelmed, please reach out for help. Students can access confidential resources through the Counseling and Psychological Services (CAPS), Religious and Spiritual Life (RSL) and the Center for Awareness, Response and Education (CARE). Additional information on all of the resources mentioned above can be found here:

<https://www.northwestern.edu/counseling/>

<https://www.northwestern.edu/religious-life/>

<https://www.northwestern.edu/care/>

## Grading

Grading is based on Exam 1 (40 %), Exam 2 (40 %), and class participation (20 %), which includes 5 problem sets (due dates see below).

Exam 1 (60 minutes) is on **Friday, April 28** during the regular section time. Exam 2 (60 minutes) will be on **Friday, May 26**, during the regular section time.

The problem sets will be due **at 11:00 am** on the following dates:

- April 7
- April 21
- May 5
- May 12
- May 19

## Readings and Textbook

This course will feature readings from these textbooks:

- Bhattacharya, Hyde and Tu: “Health Economics”, 2013 (“**BHT**”)
- Deaton, A, “The Great Escape: Health, Wealth and the Origins of Inequality”, 2015
- Folland, Goodman, and Stano, “The Economics of Health and Health Care”, 6<sup>th</sup> ed (2012) (“**FGS**”)
- Gruber, J, “Public Finance and Public Policy”, 4<sup>th</sup> ed (2012)
- Henderson, J, “Health Economics and Policy”, 6<sup>th</sup> ed (2014)
- Santerre and Neun, “Health Economics”, 6<sup>th</sup> ed (2012) (“**SN**”)

All the readings from the above textbooks are available under the “Course Reserves” tab on Canvas. Since the topic of health care reform is a subject of ongoing debate, I will also post supplemental articles of interest on Canvas. Other readings are available online. For some articles, such as those hosted by scholarly journals or on JSTOR, you will need to access the papers (through the links below) while on campus or via using Northwestern VPN. Northwestern University covers the subscription fees to access these resources.

## Course Outline

### 1. March 28: Introduction

- FGS, pp. 1-17; Gruber, pp. 419-431
- Sanger-Katz, Margot, “[In the U.S., an Angioplasty Costs \\$32,000. Elsewhere? Maybe \\$6,400](#)”, *The New York Times*, Dec 27, 2019

### 2. March 29: Cost-Benefit analysis, Valuing Health

- Henderson, pp. 110-121; SN, pp. 83-100
- Viscusi, W. K., 2008, “[The Value of Life](#)” Vanderbilt University Law School Working Paper
- Phillips, Ceri, 2009, “[What is a QALY?](#)”
- [Pricing Human Life](#) blog post by Uwe Reinhardt
- Henriques, Diana, 2001, “[In Death’s Shadow, Valuing Each Life](#)”, *The New York Times*, Dec 30, 2001
- McGinty, Jo Craven, “[Why the Government Puts a Dollar Value on Life](#)”, *The Wall Street Journal*, March 25, 2016

### 3. April 3: The ‘Production’ of Health I

- FGS, pp. 85-102; Deaton, pp. 59-73, 81-100;
- Cutler, D, Deaton, A, and Lleras-Muney, A, 2006, [“The Determinants of Mortality”](#), Journal of Economic Perspectives, 20(3), 97-120
- Preston, Sam, 1996, [“American Longevity: Past, Present, and Future”](#), Syracuse University Policy Brief No. 7/1996.
- Buxbaum, Jason D, et al, [“Contributions Of Public Health, Pharmaceuticals, And Other Medical Care To US Life Expectancy Changes, 1990-2015”](#), *Health Affairs*, 39(9), 1546-1556

### 4. April 5: The ‘Production’ of Health II

- Almond, Douglas, et al. 2010, [“Estimating Marginal Returns to Medical Care: Evidence from At-risk Newborns”](#), QJE 125(2), 591-634
- Chetty, Raj, et al. 2016, [“The Association Between Income and Life Expectancy in the United States, 2001-2014”](#), JAMA 315(16), pp. 1750-1766

### 5. April 10: The Production, Cost and Technology of Health Care

- FGS, pp. 105-113
- Card, David, Dobkin, Carlos, and Nicole Maestas: [“Does Medicare Save Lives?”](#), NBER WP No. 13668
- Gawande, A., 2010, [“The Cost Conundrum”](#), *The New Yorker*, June 1 2009
- Cutler, D, and McClellan, M, 2001 [“Is Technological Change in Medicine Worth It?”](#), *Health Affairs* 20(5), 11-29

### 6. April 12: Consumer choice Theory and Demand for Health Care, I

- BHT, pp. 8-23; FGS, pp. 173-180
- Gawande, A., 2011, [“The Hot Spotters”](#), *The New Yorker*, January 24 2011
- Robinson, J and Ginsburg, P., 2009 ,[“Consumer-Driven health Care: Promise and Performance”](#), *Health Affairs* 28(2), w272-w281

### 7. April 17: Consumer choice Theory and Demand for Health Care, II

- Manning, Willard, et al., 1987 [“Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment”](#), *American Economic Review* 77(3), 251-277
- Gruber, J. 2006, [“The Role of Consumer Copayments for Health Care: Lessons from the RAND Health Insurance Experiment and Beyond”](#), Kaiser Family Foundation

### 8. April 19: Health Insurance I

- BHT, pp. 126-137
- Buchmueller, T. 2006, [“Consumer Demand for Health Insurance”](#) NBER Research Summary
- Goodell and Swartz, 2010, [“Cost-sharing: Effects on Spending and Outcomes.”](#) Robert Wood Johnson Foundation Synthesis Project Policy Brief No. 20
- Carroll, Aaron E., [“Even a Modest Co-Payment Can Cause People to Skip Drug Doses”](#), *The New York Times*, Nov 11, 2019

### 9. April 24 Health Insurance II: Asymmetric Information

- BHT, pp. 141-155
- Cutler, D, and Zeckhauser, R, 1997, [“Adverse Selection in Health Insurance”](#), NBER Working Paper 6107

#### 10. April 26: Health Insurance III, Managed Care

- FGS, pp. 236-245; Henderson, pp. 210-222
- Miller, R. and H. Luft, 2002, "[HMO Plan Performance Update: An Analysis of the Literature, 1997-2001](#)" *Health Affairs*, 21(4): 63-86
- Frakt, Austin, "[Accountable Care Organizations: Like H.M.O.s, but Different](#)", NYT

#### April 28: Exam 1

#### 11. May 1: Health Insurance IV, Health insurance and the labor market,

- Summers, L, 1989, "[Some Simple Economics of Mandated Benefits](#)", *AER* 79(2), 177-183
- Blumberg, L. 1999, "[Perspective: Who Pays For Employer-Sponsored Health Insurance?](#)" *Health Affairs*, 18(6), 58-61
- Madrian, B., 2006, "[The U.S. Health Care System and Labor Markets](#)" NBER Working Paper No. 11980
- Garthwaite, C, et al., 2014, "[Public Health Insurance, Labor Supply, and Employment Lock](#)", *Quarterly Journal of Economics*, 129(2)

#### 12. May 3: Hospitals, Pay-for-performance, Nonprofits

- BHT pp. 100-119, SN pp. 397-428
- Reinhardt, U., 2006, "[The Pricing of U. S. Hospital Services: Chaos Behind A Veil of Secrecy](#)", *Health Affairs*, 25(1), 57-69
- Cutler, D, and Scott Morton, F, 2013, "[Hospitals, Market Share, and Consolidation](#)", *JAMA* 310(18), 1964-1970
- Cooper, Zack, et al., "[The Price Ain't Right? Hospital Prices and Health Spending on the Privately Insured](#)", NBER WP 21815

#### 13. May 8: Physicians

- SN pp. 364-375
- Baicker, K, Fisher, E, Chandra, A., 2007, "[Malpractice Liability Costs and the Practice of Medicine in the Medicare Program](#)", *Health Affairs*, 26(3): 841-852
- Gruber, J, Owings, M, 1996, "[Physician Financial Incentives and Cesarean Section Delivery](#)", *RAND Journal of Economics* 27(1), 99-123

#### 14. May 10: The pharmaceutical industry

- BHT pp. 230-236; FGS pp. 354-364; Henderson pp. 288-308
- Aitken, M, et al., 2016, "[Has The Era Of Slow Growth For Prescription Drug Spending Ended?](#)", *Health Affairs*
- (Optional): Scott Morton, F, and Lysle Boller (2017), "[Enabling Competition in Pharmaceutical Markets](#)", Hutchins Center Working Paper #30, Brookings Inst.

#### 15. May 15: Health Care and Technological Change

- Weisbrod, B., 1991, "[The Health Care Quadrilemma: An Essay on Technological Change, Insurance, Quality of Care, and Cost Containment](#)" *Journal of Economic Literature*, 29: 523-552
- Congressional Budget Office, 2008, "[Technological Change and the Growth of Health Care Spending](#)"

**16. May 17: Government Intervention in Health Care Markets: Medicare/Medicaid**

- BHT pp. 384-393, FGS pp. 440-451, Gruber pp. 453-476
- Brown, David, Kowalski, Amanda, Lurie, Ithai, "[Medicaid as an Investment in Children: What is the Long-Term Impact on Tax Receipts?](#)", NBER WP 20835
- Wherry, LR; Miller, S; Kaestner, R; Meyer, Bruce D (2018): "[Childhood Medicaid Coverage and later life health care utilization](#)", The Review of Economics and Statistics 100(2)
- Sommers, B, et al., 2017 "[Health Insurance Coverage and Health – What the Recent Evidence Tells Us](#)", NEJM 377(6), 586-593

**17. May 22: Comparative Health Care Systems and Health Care Reform, Part II**

- Anderson, G, et al., 2003, "[It's The Prices, Stupid: Why The United States Is So Different From Other Countries](#)", *Health Affairs*, 22(3), 89-105
- Papanicolas, I, et al, 2018, "[Health Care Spending in the United States and Other High-Income Countries](#)", JAMA 319(10), pp. 1024-1039
- Cutler, D, and Ly, D, 2011, "[The \(Paper\)Work of Medicine: Understanding International Medical Costs](#)", Journal of Economic Perspectives 25(2), 3-25

**18. May 24: Comparative Health Care Systems and Health Care Reform, Part II**

- Goldin, J, et al., 2019, "[Health Insurance and Mortality: Experimental Evidence from Taxpayer Outreach](#)", NBER WP 26533
- Kaiser Family Foundation, 2010, "[Explaining Healthcare Reform: What are Health Insurance Exchanges?](#)"
- Sommers, B, et al., 2017 "[Health Insurance Coverage and Health – What the Recent Evidence Tells Us](#)", NEJM 377(6), 586-593
- Readings available on *Canvas* prior to class

**May 26: Exam 2**