#### **Economics 307**

Economics of Medical Care Spring 2021

#### Instructor

Frank Limbrock KGH 3495 847 491 8678 f-limbrock@kellogg.northwestern.edu *Lectures:* Mon, Wed 11:00 am – 12:20 pm, Zoom *Office hours:* Fridays 4:00-5:30 pm (Zoom) or by appointment

#### **Teaching Assistant**

Eduardo Campillo Betancourt Eduardocampillo2023@u.northwestern.edu *TA sections*: Fri 11:00 am - 12:20 pm (Zoom) *Office hours*: Thursdays 2:00-4:00 pm (Zoom) or by appointment

#### **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

All lectures and discussion sections will be exclusively taught online via zoom.

Students are strongly encouraged to attend classes live, at the times given above. However, students who cannot attend classes live (e. g. due to time zone or internet connectivity issues) will get access to video recordings:

"This class or portions of this class will be recorded by the instructor for educational purposes. These recordings will be shared only with students enrolled in the course and will be deleted at the end of the end of the Fall Quarter, 2020 course. Your instructor will communicate how you can access the recordings.

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 <u>AccessibleNU</u>. Unauthorized use of classroom recordings – including distributing or posting them – is also prohibited. Under the University's <u>Copyright Policy</u>, 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."

# Grading

Grading is based on the final take-home (45 %), midterm take-home (35 %), and class participation (20 %), which includes 5 problem sets (due dates see below).

The midterm take-home will be due on **Friday, April 30, 4:00 pm CDT**. The final take-home will be due on **Wednesday, June 9, 9:00 pm CDT**. Problem sets and take-homes will be submitted through Crowdmark.

The problem sets will be due at 10:00 am CDT on the following dates:

- April 9
- April 23
- May 7
- May 14
- May 28

# **Readings and Textbook**

This course will feature readings from these textbooks:

- Bhattacharya, Hyde and Tu: "Health Econoomics", 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.

#### Academic accommodation

Any student with a verified disability requiring special accommodations should speak to me, in office hours or via email, and to the AccessibleNU (847-467-5530) as early as possible in the quarter, ideally in the first week, to arrange appropriate accommodation. All discussions with me and with AccessibleNU will remain confidential.

### Course Outline

- 1. March 30: 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 31: 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, "<u>In Death's Shadow, Valuing Each Life</u>", The New York Times, Dec 30, 2001
- McGinty, Jo Craven, "<u>Why the Government Puts a Dollar Value on Life</u>", The Wall Street Journal, March 25, 2016

# 3. April 5: The 'Production' of Health I

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

# 4. April 7: The 'Production' of Health II

- Almond, Douglas, et al. 2010, <u>"Estimating Marginal Returns to Medical Care: Evidence from Atrisk Newborns</u>", QJE 125(2), 591-634
- Chetty, Raj, et al. 2016, <u>"The Association Between Income and Life Expectancy in the United States, 2001-2014"</u>, JAMA 315(16), pp. 1750-1766

## 5. April 12: The Production, Cost and Technology of Health Care

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

## 6. April 14: 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, "<u>Consumer-Driven health Care: Promise and Performance</u>", *Health Affairs* 28(2), w272-w281

### 7. April 19: Consumer choice Theory and Demand for Health Care, II

• Manning, Willard, et al., 1987 "<u>Health Insurance and the Demand for Medical Care: Evidence</u> from a Randomized Experiment", *American Economic Review* 77(3), 251-277

## 8. April 21: Health Insurance I

- BHT, pp. 126-137
- Buchmueller, T. 2006, "Consumer Demand for Health Insurance" NBER Research Summary
- Gruber, J. 2006, "<u>The Role of Consumer Copayments for Health Care: Lessons from the RAND</u> <u>Health Insurance Experiment and Beyond</u>", Kaiser Family Foundation
- Goodell and Swartz, 2010, "<u>Cost-sharing: Effects on Spending and Outcomes,</u>" Robert Wood Johnson Foundation Synthesis Project Policy Brief No. 20
- Carroll, Aaron E., "<u>Even a Modest Co-Payment Can Cause People to Skip Drug Doses</u>", *The New York Times*, Nov 11, 2019

# 9. April 26: Health Insurance II: Asymmetric Information

- BHT, pp. 141-155
- Cutler, D, and Zeckhauser, R, 1997, "<u>Adverse Selection in Health Insurance</u>", NBER Working Paper 6107

# 10. April 28: Health Insurance III, Managed Care

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

## 11. May 3: Health Insurance IV, Health insurance and the labor market, discrimination, rationing

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

## 12. May 5: 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, "<u>Hospitals, Market Share, and Consolidation</u>", JAMA 310(18), 1964-1970
- Cooper, Zack, et al., "<u>The Price Ain't Right? Hospital Prices and Health Spending on the Privately</u> <u>Insured</u>", NBER WP 21815

# 13. May 10: Physicians

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

## 14. May 12: The pharmaceutical industry, Health Care and Technological Change, the Health Care Quadrilemma

- BHT pp. 230-236; FGS pp. 354-364; Henderson pp. 288-308
- Aitken, M, et al., 2016, "<u>Has The Era Of Slow Growth For Prescription Drug Spending Ended?</u>", Health Affairs
- Congressional Budget Office, 2008, "<u>Technological Change and the Growth of Health Care</u> <u>Spending</u>"
- (Optional): Scott Morton, F, and Lysle Boller (2017) "<u>Enabling Competition in Pharmaceutical</u> <u>Markets</u>", Hutchins Center Working Paper #30, Brookings Inst.

# 15. May 17: Health Care and Technological Change

- Weisbrod, B., 1991, "<u>The Health Care Quadrilemma: An Essay on Technological Change,</u> <u>Insurance, Quality of Care, and Cost Containment</u>" Journal of Economic Literature, 29: 523-552
- Congressional Budget Office, 2008, "<u>Technological Change and the Growth of Health Care</u> <u>Spending</u>"

### 16. May 19: The effects of Government Intervention in Health Care Markets

- BHT pp. 384-393, FGS pp. 440-451, Gruber pp. 453-476
- Brown, David, Kowalski, Amanda, Lurie, Ithai, "<u>Medicaid as an Investment in Children: What is</u> <u>the Long-Term Impact on Tax Receipts?</u>", NBER WP 20835
- Wherry, LR: Miller, S; Kaestner, R; Meyer, Bruce D (2018): "<u>Childhood Medicaid Coverage and later life health care utilization</u>", The Review of Economics and Statistics 100(2)

## 17. May 24: Comparative Health Care Systems and Health Care Reform, Part I

- 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, "<u>Health Care Spending in the United States and Other High-Income</u> <u>Countries</u>", JAMA 319(10), pp. 1024-1039
- Cutler, D, and Ly, D, 2011, "<u>The (Paper)Work of Medicine: Understanding International Medical</u> <u>Costs</u>", Journal of Economic Perspectives 25(2), 3-25

## 18. May 26: Comparative Health Care Systems and Health Care Reform, Part II

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