

Health Economics
ECON 236

Prof. Juan Pablo Atal
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Spring 2022
Tu,Th10:15-
11:45am

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Economics 236 is an advanced undergraduate course on the economics of health care provision and payment. In this course we will use the tools of microeconomics to analyze the functioning of different pieces of the health care system. We will draw from the sub-disciplines of information economics, industrial organization, labor economics, public economics, and behavioral economics. The primary goal is to use these tools to develop a critical analysis of the functioning of the health care system as well as of the policies aimed at improving it. We will discuss how economists think about the relationship between health and the economy, and the lessons derived for policies surrounding the covid-19 pandemic. We will also learn about U.S specific institutional details and policies, and we will compare them to other important international experiences.

Prerequisites: ECON 101, MATH 104 and MATH 114 or 115. Wharton students can satisfy the ECON 101 prerequisite with BEPP 250 HONORS. The regular BEPP 250 course does not count as a substitute for ECON 101.

Grading:

The grade of the course will be based on:

- Two midterms (2, 25% each; closed book)
 - MT1: **February 22**
 - MT2: **April 26**

Midterms will be held during lecture time.

- Quizzes (weekly, with exceptions). Administered through canvas
- Homework (3, 30%), due: **February 10, March 29, and April 14**. Notes:
 1. You may work on the homework in groups of 3 or 4 (strongly encouraged but not mandatory).

2. Homework 3 consists on a small research project
- Additional credit may be given based on class attendance and participation, and contributions to Piazza.

No extra credit assignments will be given.

Office Hours:

- Prof. Atal: Mondays 10-11am and Fridays 3.30-4.30pm (location TBA)
- Kathleen: Tuesdays 9-10am and Thursdays 8-9am (location TBA)

Course Material: Canvas is the official channel I will use to make announcements, post slides, homework, readings, etc. You must check Canvas regularly. Documents (including problem sets, practice exams, exams and their solutions), regardless of whether they are physically distributed during this course or are posted on Canvas site, are only for students enrolled in this course. Any re-posting online (or on any course material sharing website) is prohibited.

Piazza: Rather than emailing questions, I encourage you to post your questions on Piazza. Find our class signup link at:

https://piazza.com/upenn/spring2022/srs_econ2360012022a

Extra credit will be given to students with high Piazza participation.

Required Textbook: Health Economics, by Jay Bhattacharya, Timothy Hyde, and Peter Tu (BHT), Palgrave Macmillan, 2013

Other online resources Health Care Triage (Youtube Channel):

<https://www.youtube.com/user/thehealthcatriage>; Health Care Dive:

<http://www.healthcaredive.com/>; Kaiser health news: <http://khn.org/about-us/>

Course Policies

The Department of Economics maintains a common set of policies that apply to all classes. By taking this class you agree to abide by these policies. Please read these policies carefully, which can be found here:

<https://economics.sas.upenn.edu/?q=undergraduate-program/course-information/guidelines/policies>

Attendance Policy: It is mandatory to attend the midterms. Please make sure that you

schedule your travels, including job interviews, to avoid the exam dates. I will follow the Department's policies regarding exam attendance. The policy is copied below:

"In cases where attendance at a midterm or a final exam is mandatory, there are only a few valid excuses for missing an exam. They are:

- Three exams scheduled within one calendar day (for final exams ONLY!) This policy of 3 exams does not count for midterm exams given during class time.
- An exam is given outside of the regular class schedule and the timing conflicts with another class in which the student is enrolled.
- Observance of a university-recognized religious holiday.
- UPENN Business that takes you away from campus. Absence from campus on UPENN business includes, for example, athletic events in which you are actively participating. In such cases, you need to make arrangements with your professor ahead of the exam date to take the exam at another time (preferably earlier than the schedule date).
- An illness/health emergency.
- A death in your family.
- Documented disabilities that allow you to take the exam under other circumstances.

Examples of reasons that are not valid for missing an exam are:

- job internships;
- beginning fall or spring break early or returning after a scheduled exam;
- end of semester early flights; take home exams.
- any other reason you would prefer not to take the exam when scheduled.

Students are responsible for making sure, at the beginning of the term, that they can attend the exams. Registering for a course means that you certify that you will be present for the exam (unless one of the explicitly stated exceptions above arises.)

If you are unexpectedly ill at the time of the exam and unable to reach the instructor ahead of time, then you can give notification of your illness as soon as you are able. Do not take an exam if you are ill and then expect to have an opportunity to retake the exam because you were ill the first time and did poorly.

Students who arrive late to an exam will generally be required to hand in their exam at the same time as other students."

Make-up exams: There will be no make-up written exams. However, if you have one of the valid excuses listed in the Department's policy for missing a midterm exam - and appropriately reported in the CAR system – the following exams will be re-weighted accordingly to maintain the 100% total, as follows: If you miss the first midterm, midterm 2 will be worth 50% of the grade. A make-up exam for students who miss the second exam will be offered strictly following the Department's rules.

Email policy: I encourage to send your questions via Piazza so that others can benefit. You may expect me to respond to emails between 9 and 5 Monday through Friday, and within 48 hours of receiving it. I am happy to use email to respond to simple queries. Please see me in office hours for more involved discussions.

Re-grading: All re-grade requests for exams must be submitted in writing, with a full explanation of why you think the work was incorrectly graded. The deadline to submit the request will be announced when exams are returned. We will not accept for re-grading any work written in pencil or that appears to have been altered. Except in cases where the grader has added numbers incorrectly, we will only re-grade entire exams. As a consequence, once you submit your work for re-grading, the grade can go either up or down.

Students with disabilities: In compliance with Penn policy and equal access laws, I am available to discuss appropriate academic accommodations that you may require as a student with a disability. Requests for academic accommodations need to be made during the first two weeks of the semester, except under unusual circumstances, to arrange reasonable accommodations. Students must register with Student Disabilities Services (SDS) for disability verification and for determination of reasonable academic accommodations.

Academic integrity: It is your responsibility to be familiar with the University's Code of Academic Integrity. Instances of academic dishonesty will be referred to the Office of Student Conduct for adjudication.

Course Outline

I. Demand for Health and Health Care: Model health and health care decisions. Empirical evidence on how economic factors affect these decisions.

II. Demand for Insurance: Expected-utility theory, risk aversion.

III. Adverse Selection: How information asymmetries affect the functioning of health insurance markets. Empirical evidence. Choice complexity and departures from full optimization.

IV. Moral Hazard: The downside of insurance. Limiting Moral Hazard.

V. Delivery of Health Care: Physicians and the Hospital Industry: The role of physicians, The hospital industry.

VI. Technology Assessment: The role of technology and innovation on growing costs. Cost-effectiveness and cost-benefit analysis.

VII. Pharmaceutical Markets and Innovation: The workings of the pharmaceutical industry, innovation and the role regulation.

VIII. Public Health Economics (time permitting) Externalities and epidemiology.

IX. The American Model and the Affordable Care Act: Overview of the US health care system. The main goals of the Affordable Care Act, early assessment of its functioning, current debate.

X. International Health Care Systems and Alternative Designs: Contrast the U.S. model with typical health system designs of other countries. The Bismarck model. The Beveridge Model.

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Preliminary Reading list (subject to change)

Book Chapters and articles marked with a (*) are required readings. The list of required readings may vary during the semester. Any changes will be announced during the semester.

Lecture 2: Demand for Health Care

BHT Chapters 1-2.

(*)Einav, L. and A. Finkelstein. 2017 Moral Hazard in Health Insurance: What We Know and How We Know It, Alfred Marshall Lectures

Aron-Dine, A, L. Einav, and A. Finkelstein, 2013 “The RAND Health Insurance Experiment, 30 years later” Journal of Economic Perspectives.

Card, D., C. Dobkin, and N. Maestas, 2009: “Does Medicare Save Lives?” Quarterly Journal of Economics.

Lecture 3: The Grossman Model

BHT, Chapter 3

Lecture 4: Uncertainty and Demand for Insurance

BHT, Chapter 7

Lecture 5: Adverse Selection I

BHT, Chapter 8

Lecture 6: Adverse Selection II

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

BHT, Chapter 9.11

Lecture 7: Adverse Selection III

BHT, Chapter 10

(*)Cutler, D. and Reber, S. 1998. "Paying for Health Insurance: The Trade-Off between Competition and Adverse Selection," Quarterly Journal of Economics. *Pages 433-444 and conclusion only.*

(*)Einav, L. and A. Finkelstein and M. Cullen. 2010. Estimating Welfare in Insurance Markets Using Variation in Prices, Quarterly Journal of Economics

Lecture 8: Adverse Selection IV

Lecture 9: Choice Complexities

(*)Abaluck, J. and J. Gruber (2011) "Choice Inconsistencies among the Elderly: Evidence from Plan Choice in the Medicare Part D Program" American Economic Review

Bhargava, S., Loewenstein, G. and Sydnor, J. Do Individuals Make Sensible Health Insurance Decisions? Evidence from a Menu of Dominated Options. *Read Introduction and Conclusion.*

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

Handel, B. and Kolstad, J. (2015) "Getting the Most From Marketplaces: Smart Policies on Health Insurance Choice," Brookings Institute Hamilton Project Discussion Paper 2015 - 08.

Lecture 10: Moral Hazard

BHT, Chapter 11

High Deductible Insurance VOX article: <http://www.vox.com/2015/10/14/9528441/high-deductible-insurance-kolstad>

Lecture 11: Physician's agency

BHT, Chapter 5.3. 5.4

Dickstein, M. (2015) "Physician v.s Patient Incentives in Prescription Drug Choice"

Lecture 12: Hospitals, Technology, and the Price of Healthcare

BHT, Chapter 6.

Eliason, Grieco, McDevitt, Roberts (2018): “Strategic Patient Discharge: The Case of Long-Term Care Hospitals”, American Economic Review

Chandra, A. and Skinner, J. (2011) “Technology Growth and Expenditure Growth in Health Care,” NBER Working paper no. 16953, April 2011. *Read introduction only*

BHT, Chapter 13.1 – 13.2

Lecture 13: Health Technology Assessment I

BHT, Chapter 13.3-13.5

Cutler, D. and M. McClellan. 2011. “Is Technological Change Worth It?” Health Affairs Sept/Oct. 2011. *Read introduction only*

Gawande, A. 2009 “The Cost Conundrum” The New Yorker, June 2009. Available at <http://www.newyorker.com/magazine/2009/06/01/the-cost-conundrum>

Lecture 14: Health Technology Assessment II

BHT, Chapter 14

Lecture 15: Health Technology Assessment III

Leon, G, and T. Miguel (2016) “Risky Transportation and the Value of a Statistical Life”

Hall, Jones, and Klenow (2021) “Trading Off Consumption and COVID-19 Deaths”

Lecture 17: Pharmaceutical Markets and Innovation I

Acemoglu and Linn (2004) Market Size and Innovation, QJE

BHT, Chapter 12.1-12.4

(*)Lakdawalla, D. “Economics of the Pharmaceutical Industry”, Journal of Economic Literature (2018)

Lakdawalla, D. et al. "U.S. Pharmaceutical Policy in a Global Marketplace," Health Affairs, 2009.

Budish, E., B. Roin and H. Williams (2016): Patents and Research Investments: Assessing the Empirical Evidence, AER P&P.

Lecture 18: Pharmaceutical Markets and Innovation II

BHT, Chapter 12.5-12.6

Lecture 19: The American Model

BHT, Chapter 18

(*)Ghartwaite, Gross and Notowidigdo (2014) "Public Health Insurance, Labor Supply, and Employment Lock"

Lecture 20: The Affordable Care Act I

(*)Gruber, J. 2008. "Covering the Uninsured in the United States," Journal of Economic Perspectives.

(*)Kaiser Family Foundation: Summary of the Affordable Care Act

Chapters 1-12: Gruber, J. Health Care Reform: What It Is, Why It's Necessary, How It Works. 2012.

Blumenthal, D., Abrams, M. and Nuzum, R. 2015, "The Affordable Care Act at Five Years," The New England Journal of Medicine

Lecture 21: The Affordable Care Act II

(*)Dugan, Goda and Jackson 2017. The Effect of the Affordable Care Act on Health Insurance Coverage and Labor Market Outcomes. SIEPR WP.

(*)Van Parys, J. 2018. ACA Marketplace Premiums Grew More Rapidly in Areas With Monopoly Insurers Than In Areas With More Competition

(*)Goldman, A. S. Woolhandler, D. Himmelstein. D. Bor, D. McCormick, 2018. Out-of-Pocket Spending and Premium Contributions After Implementation of the Affordable

Care Act. *JAMA Internal Medicine*

Lecture 22: International Health Care Systems and Alternative Designs I

BHT, Chapter 16

Lecture 23: International Health Care Systems and Alternative Designs II

BHT, Chapter 17