

Syllabus

Spring 2025

Course description

In this course, we will apply the tools of economic analysis to study how medical care is produced and financed, in both the private and public sectors. Our emphasis will be on the United States, with a brief treatment of health systems in other developed and less developed countries.

The course includes three modules. In the first module, we will use economics to evaluate why the health care market is different from conventional markets. We will examine consumer demand for health and health care, discuss why health insurance exists, and learn how economists and insurers evaluate the costs and benefits of new medical technologies. In the second module, we will apply these economic tools to analyze key health care market players, including insurers, hospitals, physician organizations, pharmaceutical manufacturers, and government agencies. We will identify the important challenges each player faces through discussion of case studies and empirical research in health economics. Finally, in the third module, we will discuss contemporary issues in health care policy, including US health care reform.

Prerequisites

You are expected to be comfortable with basic algebra and statistics. We will also draw on economics concepts from the Firms and Markets core economics course (or equivalent economics preparation). For that reason, students must have completed Firms and Markets or must show equivalent economics preparation to enroll.

Lectures

Mondays and Wednesdays, 9am-10:20am
Location: KMC 2-80

Teaching Fellow

Katie Darcy, k.darcy@nyu.edu

Course materials

- *Readings.* There is one recommended text: *Health Economics*, by Bhattacharya, Hyde, and Tu, Palgrave Macmillan, 2014. (BHT). There is also a course packet of case studies available through the NYU bookstore platform. All other required readings will be posted on Brightspace.
- *Lecture Notes.* I will post the annotated lecture slides on Brightspace after each class, but keep in mind that the slides are not a complete record of all that is discussed in class. I recommend that you take notes during the class as a supplement to the slides.

- *Additional materials.* I will occasionally post additional materials on Brightspace. This will include some useful materials for the group presentations, and potentially other newspaper articles or research papers that might be interesting and/or relevant.

Deliverables and grades

The various “deliverables” in the course are designed to develop different skills:

- *Class participation.* It is important to integrate what you learn and be able to express it effectively. Moreover, there is a great deal of collective insight and experience in the class and we all benefit from sharing it. But the *quality* of your contributions is more important than the *quantity*. Your consistent attendance, punctuality, and overall citizenship in class are all also relevant dimensions of your participation performance.
- *Case write-ups.* We will discuss four cases over the course of the semester. In weeks in which we discuss a case, you will be asked to submit a written response to a set of discussion questions. The discussion questions may require calculation—for example, in Module 1 we’ll quantitatively assess the value of a new medical innovation. Your responses should be short—two pages at maximum--and are due electronically before the start of class.
- *Midterm.* There will be one in-class, open-book midterm exam at the end of Module 1.
- *Group project.* There will be one group project. The goal of this exercise is to use the concepts discussed in this course to think critically about how to improve healthcare delivery and to produce a tangible, final product that can be used to demonstrate to future employers how you approach real-world healthcare problems.

We will discuss the format of the group project in more detail in class. Broadly, the project will involve developing a specific proposal for making healthcare delivery more efficient. Past proposals have included: product/process innovations, a new pharmaceutical pricing policy, specific mergers between hospitals and physician group practices, and new incentive schemes to motivate physicians in a large group practice.

Every group will be asked to make a presentation to the class on the topic of the group project. The goal is to apply economic analysis to real-world situations and to hone your communication skills.

Your grade for the course will be based on your contributions to these deliverables, weighted as follows:

Class participation	20%
Case write-ups	25%
Midterm exam	25%
Group project/presentation	30%

Exams and re-grading

You are responsible for checking the exam date to avoid any conflict with other commitments. Exams will not be re-administered on other dates. During an in-class exam, you are allowed to

consult class notes, books, or any other material. Questions about grading must be made in writing and no more than a week after the exams are returned.

Getting help

I would like each of you to learn and gain as much as you can from this course. If you have any difficulty with the material, please visit my office hours or send me an email (michael.dickstein@nyu.edu); I will try my best to respond promptly. My regular office hours are from 1:30pm-3:00pm every Monday and by appointment. Our teaching fellow is also available by email and by appointment.

Academic Integrity

We take pride in our well-rounded education and approach our academics with honesty and integrity. Indeed, integrity is critical to all that we do here at NYU Stern. As members of our community, all students agree to abide by the NYU Academic Integrity Policies as well as the NYU Stern Student Code of Conduct, which includes a commitment to:

- Exercise integrity in all aspects of one's academic work including, but not limited to, the preparation and completion of exams, papers and all other course requirements by not engaging in any method or means that provides an unfair advantage.
- Clearly acknowledge the work and efforts of others when submitting written work as one's own. Ideas, data, direct quotations (which should be designated with quotation marks), paraphrasing, creative expression, or any other incorporation of the work of others should be fully referenced.
- Refrain from behaving in ways that knowingly support, assist, or in any way attempt to enable another person to engage in any violation of the Code of Conduct. Our support also includes reporting any observed violations of this Code of Conduct or other School and University policies that are deemed to adversely affect the NYU Stern community.

Stern Code of Conduct

The Stern Code of Conduct and Judiciary Process applies to all students enrolled in Stern courses. Information can be found here: <https://www.stern.nyu.edu/portal-partners/student-engagement/student-life/life-stern/code-conduct>

To help ensure the integrity of our learning community, prose assignments you submit to NYU Brightspace will be submitted to Turnitin. Turnitin will compare your submission to a database of prior submissions to Turnitin, current and archived Web pages, periodicals, journals, and publications. Additionally, your document will become part of the Turnitin database.

General Conduct and Behavior

Students are also expected to maintain and abide by the highest standards of professional conduct and behavior. Please familiarize yourself with Stern's Policy with regard to In-Class Behavior & Expectations (<http://www.stern.nyu.edu/portal-partners/current-students/undergraduate/resources-policies/academic-policies/index.htm>) and the NYU Student Conduct Policy (<https://www.nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/university-student-conduct-policy.html>).

Laptops, Cell Phones, and Other Devices

The use of electronic devices (e.g., tablets or laptops), for the purpose of note-taking only, is permitted. However, students should make every effort to avoid distracting their classmates or disrupting the class, including arriving early and choosing a seat that is less distracting for peers.

Student Accessibility

If you will require academic accommodation of any kind during this course, you must notify me at the beginning of the course and provide a letter from the Moses Center for Student Accessibility (212-998-4980, mosescsa@nyu.edu) verifying your registration and outlining the accommodations they recommend. If you will need to take an exam at the Moses Center for Student Accessibility, you must submit a completed Exam Accommodations Form to them at least one week prior to the scheduled exam time to be guaranteed accommodation. For more information, visit the CSA website: <https://www.nyu.edu/students/communities-andgroups/student-accessibility.html>

Student Wellness

Our aim is for students to be as successful academically as they can, and to help them overcome any impediments to that. Any student who may be struggling and believes this may affect their performance in this course is urged to contact the Moses Center for Student Accessibility (see also the Student Accessibility section of this syllabus) at 212-998-4980 to discuss academic accommodations. If mental health assistance is needed, call the NYU's 24/7 Wellness Exchange hotline 212-443-9999. Furthermore, please approach me if you feel comfortable doing so. This will enable me to provide relevant resources or referrals. There are also drop-in hours and appointments. Find out more at <http://www.nyu.edu/students/health-and-wellness/counseling-services.html> You can also reach out to the Academic Advising team at academicaffairs@stern.nyu.edu to receive more information or further support.

Name Pronunciation and Pronouns

NYU Stern students now can include their pronouns and name pronunciation in Albert. I encourage you to share your name pronunciation and pronouns this way. Please use this link for additional information: [Pronouns & Name Pronunciation](#)

Religious Observances and Other Absences

NYU's [Calendar Policy on Religious Holidays](#) states that members of any religious group may, without penalty, miss class when required in compliance with their religious obligations. You must notify me in advance of religious holidays or observances that might coincide with exams, assignments, or class times to schedule mutually acceptable alternatives. Students may also contact religiousaccommodations@nyu.edu for assistance.

Except for religious observances or other absences that may be required in compliance with nondiscrimination law, this class otherwise requires attendance and participation and cannot accommodate conflicts. Please review all class dates at the start of the semester and review all course requirements to identify any foreseeable conflicts with exams, course assignments, projects, or other items required for participation and attendance. If you are aware of a potential conflict, it is strongly recommended that you do not take this class.

Inclusion Statement

This course strives to support and cultivate diversity of thought, perspectives, and experiences. The intent is to present materials and activities that will challenge your current perspectives with a goal of understanding how others might see situations differently. By participating in this course, it is the expectation that everyone commits to making this an inclusive learning environment for all.

List of Topics

Module 1: Economics of Medical Care

1. Introduction
 - a. Are health care markets unique? An economist's view.
2. Health demand and health production
 - a. Demand for health care
 - b. Technological change and the value of innovation
3. Health insurance
 - a. Health insurance provision and moral hazard
 - b. Information asymmetries and classification risk

Module 2: Health Care Delivery

4. Payers
 - a. Medicare, Medicaid, Private Insurers
 - b. International Comparison
5. Health Care Supply
 - a. Physicians and the medical work force
 - b. Accountable care organizations and group practices
 - c. Hospitals, surgery centers, urgent care
 - d. Pharmaceuticals

Module 3: Topics in Health Care Policy

6. Information and Quality in Health Care
 - a. Physician report cards and quality scores
 - b. Defensive medicine and malpractice risk
 - c. Price transparency
7. Options for reform and the Affordable Care Act (ACA)
 - a. Provisions of the ACA
 - b. Early experience of enrollees and insurers in ACA marketplaces

Schedule
(Required readings appear with an asterisk below)

Module 1: Economics of Medical Care

Week 1: Jan 27/Jan 29 – Introduction and Demand for Medical Care

Are health care markets unique? An economist's view
Demand for medical care

Discussion Questions:

- What makes health care markets distinct from other markets?
- How does the amount of medical care demanded respond to changes in the price of medical care? What factors influence pricing in healthcare markets?
- Describe the key findings of the RAND health insurance experiment. How might private insurers/public payers use this experimental evidence to forecast the costs of covering enrollees' health expenditures?

Readings:

Monday

- *Background: BHT, Ch. 1

Wednesday

- *Background: BHT, Ch. 2
- *Aron-Dine, Aviva, Liran Einav and Amy Finkelstein, "The RAND Health Insurance Experiment, Three Decades Later," *Journal of Economic Perspectives*, 2013. Read only 197 to middle of page 208.
- D. Cutler, *Your Money or Your Life*, Chapter 2: "Pricing the Priceless" [Optional book-length primer on health reform topics]
- Garber and Skinner (2008) "Is American Health Care Uniquely Inefficient?" *Journal of Economic Perspectives* 22(4): 27-50.
- Rand Experiment Summary:
http://www.rand.org/pubs/research_briefs/RB9174/index1.html

Week 2: Feb 3/Feb 5 – Health and Technological change

Valuing health
Technological change and its contribution to health and costs
Case study 1: "Medicare and Drug-eluting Stents"

Discussion Questions:

- Is too much money spent on healthcare? How do you expect health care cost growth to change in the future? Will it accelerate/decelerate/remains the same?
- How do we use cost effectiveness analysis to value the benefits against the costs of a medical treatment? Of the inputs into cost effectiveness analysis, are some easier to collect, easier to manipulate?
- What is the economic rationale for covering drug eluting stents within Medicare?

Readings:

Monday

- *Background: BHT, Ch. 14
- Gawande, Atul. "The Cost Conundrum." *The New Yorker*. Conde Nast, 1 June 2009. Web.
<http://www.newyorker.com/magazine/2009/06/01/the-cost-conundrum>.

- Cutler, D. and M. McClellan. "Is Technological Change Worth It?" *Health Affairs* Sept/Oct. 2001.
- Cutler, D. and Kaushik Ghosh, Kassandra L. Messer, Trivellore E. Raghunathan, Susan T. Stewart, and Allison B. Rosen. "Explaining The Slowdown In Medical Spending Growth Among The Elderly, 1999–2012." *Health Affairs* Feb. 2019.

Wednesday

- *Case: Medicare and Drug Eluding Stents, HBS Case #905M53-PDF-ENG

Week 3: Feb 10/12 – Health Insurance

Insurance preliminaries: risk aversion and moral hazard

Health insurance provision in the US

Health plan design

Discussion Questions:

- You are an employer. You can, (a) offer your employees a single generous health plan, (b) offer your employees a choice between a more and less generous health plan, or (c) offer your employees a choice between many plans with different levels of generosity, some of which include savings accounts. Which do you do and why? Use the findings of the Oregon Health Insurance Experiment and the RAND experiment as support for your conclusions.
- Oregon Experiment: What do you think explains the results on health care usage and health outcomes under the Medicaid expansion? For example, why do you think ER visits increased? Use evidence where possible to support your arguments.
- Oregon Experiment: How did the experiment operate in Oregon? Are you more confident in the findings relative to prior studies (observational or experimental) that focused on health insurance expansions? Explain.

Readings:

Monday

- *Background: BHT, Ch. 7.1-7.4, 11.1-11.3

Wednesday

- *Expanding Health Insurance to Millions: Learning from the Oregon Health Insurance Experiment
- M. Gladwell, "The Moral Hazard Myth." *The New Yorker*, August 29, 2005.
- Finkelstein, Amy et al., "The Oregon Health Insurance Experiment: Evidence from the First Year," *Quarterly Journal of Economics*, 2012.
- Taubman, Sarah L., et al. "Medicaid increases emergency-department use: evidence from Oregon's Health Insurance Experiment." *Science* 343.6168 (2014): 263-268.

Week 4: Feb 19–Health Insurance (continued)

Adverse selection and classification risk

Discussion Questions:

- Describe the market for 'Lemons' problem. Is this a phenomenon unique to health insurance? What are some examples of markets subject to adverse selection?
- How might the presence of adverse selection and classification risk affect managers' decisions on insurance plan premiums? On the characteristics of plans they offer to consumers?

Readings:

Monday [holiday]

Wednesday

- *Background: BHT Chapter 8.1-8.3, 10.2-10.5
- Akerlof (1970) "The Market for "Lemons": Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*, 84(3): 488-500.

Week 5: Feb 24/Feb 26 –Health Insurance + Data

Experiment: Selecting a health insurance plan
Understanding the 'death spiral': theory and evidence
Primer on health insurance data

Discussion Questions:

- How might the presence of adverse selection and classification risk affect managers' decisions on insurance plan premiums? On the characteristics of plans they offer to consumers?
- What is meant by a 'death spiral' in health insurance?
- What kinds of data do health insurers and health care providers collect? What can outside analysts learn about the functioning of these markets from public data?

Readings:

Monday

- *Background: BHT Chapter 8.1-8.3, 10.2-10.5
- Akerlof (1970) "The Market for "Lemons": Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*, 84(3): 488-500.
- Cutler, David M., and Richard J. Zeckhauser. "Adverse Selection in Health Insurance." *Forum for Health Economics & Policy*. Vol. 1. No. 1. De Gruyter, 1998.

Week 6: March 3/March 5 – Midterm

Midterm review + latest news in health policy
Midterm exam (1 hour 20 min)

Module 2: Health Care Delivery

Week 7: March 10/March 12 – International Comparison

[Group project feedback]
Health insurance in the United States
Health insurance abroad: Bismarckian and Beveridgian systems

Discussion Questions:

- How do Bismarckian and Beveridgian systems compare to the US model? In what ways are each more/less successful? Evaluate the performance of alternative systems on measures including spending in the health economy, health outcomes for consumers, administrative costs/burdens, etc.

Readings:

- *BHT, Ch. 16-18, skim
- Frank, Richard G., and Richard J. Zeckhauser, "Health Insurance Exchanges: Making the Markets Work", *New England Journal of Medicine*, 2009, 361, 1135-1137

Week 8: March 17/March 19 - Physicians

Physician training and quality

Accountable Care Organizations (ACOs) and group practices

Case study 2: “Transforming Care at Unitypoint Health—Fort Dodge”

Guest Speaker:

- Gui Woolston, Chief Analytics Officer; Aledade

Discussion Questions:

- Briefly describe the process for a trainee to become a practicing primary care physician or specialist. How might the requirements for licensure affect the supply of physicians, the quality of outcomes or the price of services?
- How would you design or re-design physician payment schemes to achieve the highest value outcomes in medicine? What are the relevant trade-offs?
- Unitypoint Health: Should UPFD drop out of the ACO program?

Readings:

Monday

- *[Focus on introduction only] Doyle, Joseph J., Steven M. Ewer, Todd H. Wagner, “Returns to Physician Human Capital: Analyzing Patients Randomized to Physician Teams” Journal of Health Economics, 2010.
- *L. Baker, “Acquisition of MRI Equipment by Doctors Drives Up Imaging Use and Spending,” Health Affairs, December 2010 29(1) 2252-2259.
- N. Agarwal, “Does the medical residency match lower salaries for residents?” Microeconomic Insights, March 2016.
- Atul Gawande, The Checklist Manifesto: How to Get Things Right.

Wednesday

- *Case: Transforming Care at Unitypoint Health – Fort Dodge: 615052-Pdf-Eng

Spring Break – March 24 -28

Week 9: March 31/April 2 – Hospitals

Hospital competition

New delivery methods: ambulatory surgery centers, specialty hospitals

Case Study 3: Dartmouth Hitchcock Medical Center

Guest Speaker:

- Karim Habibi, Senior Vice President and Chief of Managed Care; NYU Langone Health

Discussion Questions:

- How might the entry of specialty hospitals and ambulatory surgery centers affect the profitability of traditional acute care hospitals, or affect spending in the health economy?
- Consider the Spine Care program at Dartmouth Hitchcock Medical Center. How does the program create value for patients?
- Consider the Spine Care program at Dartmouth Hitchcock Medical Center. Can this model be used beyond spine care? Which clinical areas would benefit most from such a model? Should this model be extended to other areas of Dartmouth-Hitchcock?

Readings:

Monday

- *Case: Dartmouth Hitchcock Medical Center: Spine Care
- *E. Munnich and S. Parente, “Procedures Take Less Time At Ambulatory Surgery Centers,

Keeping Costs Down And Ability To Meet Demand Up,” *Health Affairs*, vol. 33, no. 5, May 2014.

- BHT, Ch 6
- J. Horwitz “Making Profits And Providing Care: Comparing Nonprofit, For-Profit, And Government Hospitals” *Health Affairs*, 24, no. 3 (2005): 790-801
- “Examination of Health Care Cost Trends and Cost Drivers,” Massachusetts Attorney Generals’ Office, March 16, 2010.

Week 10: April 7/April 9 – Pharmaceuticals

Research and development process, evidence on pricing

Drug adherence

Guest Speaker:

- Tamer Abdelgawad, Senior Director, Pricing Dynamics; Pfizer
- Aaron Graff, General Partner; Legacy Capital Partners

Discussion Questions:

- Describe the R&D process for new drug innovations. If a drug manufacturer hired you to advise on R&D investments, what types of innovations would you target? How might the current patent system and exclusivity rules affect your investment decisions?
- How are prices determined for pharmaceutical drugs? What role, if any, might the government play in regulating these prices?

Readings:

Monday

- *“Follow the Pill: Understanding the U.S. Commercial Pharmaceutical Supply Chain” Kaiser Family Foundation
- J. Rockoff and E. Silverman, “Pharmaceutical Companies Buy Rivals’ Drugs, Then Jack Up the Prices: List prices soar on Valeant’s heart medications and other firm’s drugs, driving up costs,” *Wall Street Journal*, 4/26/15.
- BHT, Ch. 12

Module 3: Health Care Policy

Week 11: April 14/ April 16 - Information and quality in health care

Price transparency in health care

Alternative payment models

Guest speaker:

- Hana Dembe, Head of Marketing, AI Apps; Tempus Labs
- Sudheer Rani, Associate Director; Johnson & Johnson

Discussion Questions:

- Does offering price information impact consumer decision-making and spending in health care?
- What other strategies do payers use to encourage consumerism in health care? What do we know about how those strategies impact spending, provider choice, and health?
- How much does malpractice concern or “defensive medicine” explain the patterns of health care spending and utilization?

Readings:

Monday

- *Mehrotra, A., Chernew, M. E., & Sinaiko, A. D. (2018). The Promise and Reality of Price Transparency, *New England Journal of Medicine*, 378(14), 1348-1353.
- *Kolstad, Jonathan T. "Information and quality when motivation is intrinsic: Evidence from surgeon report cards." *American Economic Review* 103.7 (2013): 2875-2910. [Introduction only]
- *Desai, Sunita M., et al. "Effects of real-time prescription benefit recommendations on patient out-of-pocket costs: a cluster randomized clinical trial." *JAMA Internal Medicine* 182.11 (2022): 1129-1137.
- Brown, Zach Y. "An Empirical Model of Price Transparency and Markups in Health Care." Working Paper, 2019.
- Kessler, Daniel P., "Evaluating the Medical Malpractice System and Options for Reform," *Journal of Economic Perspectives*, 2011, 25(2), 93-110.
- Jena, Anupam B., Lena Schoemaker, Jay Bhattacharya, and Seth A. Seabury, "Physician spending and subsequent risk of malpractice claims: observational study" *BMJ*, 2015, 351.
- Mello, Michelle M., Amitabh Chandra, Atul A. Gawande, David M. Studdert, "National Costs of the Medical Liability System" *Health Affairs*, 2010, 29 (9) 1569-1577.

Week 12: April 21/ April 23 - The Affordable Care Act (ACA) and Health Reform

Key provisions of the ACA

Evidence: early experience of enrollees and insurers in ACA marketplaces

Case study 4: Health insurance design

Discussion Questions:

- What were the key goals of the Affordable Care Act? From the initial evidence, evaluate how well the legislation achieved its promised changes to health care access, coverage, and spending.
- What are the trade-offs in (re)designing the US health care system in 2017 and beyond? Discuss the policy considerations for public insurance and private insurance, in the individual marketplace and in employer-based coverage. How should insurers respond?

Readings:

Monday

- *L. Levitt et al., "Assessing ACA Marketplace Enrollment," Kaiser Family Foundation.
- *M. Dickstein, SIEPR policy brief on ACA participation
- Diamond, Rebecca, Michael J. Dickstein, Tim McQuade, and Petra Persson, "Insurance without Commitment: Evidence from the ACA Marketplaces", 2020, Working Paper.
- B. Herman, "Centene Profiting from ACA Plans, Medicaid Expansion," *Modern Healthcare*, Apr 26, 2016.
- C. Cox, "Analysis of UnitedHealth Group's Premiums and Participation in ACA Marketplaces," Kaiser Family Foundation
- Point/Counterpoint: "What Can Massachusetts Teach Us About National Health Insurance Reform?" *Journal of Policy Analysis and Management*, 30(1): 177-195 (2011). Jon Gruber and Doug Holtz-Eakin.

Wednesday

- *Case: Medicare reform proposal [posted on Brightspace]

Week 13: April 28/April 30– Course wrap-up

Group presentations + course wrap-up