



NYU

**ROBERT F. WAGNER GRADUATE
SCHOOL OF PUBLIC SERVICE**

HPAM – GP 4830.001 Health Economics: Principles Spring 2021

Instructor Information

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- Office Hours: Virtually, by appointment. Times are posted on the [Wagner website](#)

Course Information

- Class Meeting Times: Mondays, 2/1 – 3/15, 4:55 pm – 6:35 pm EXCEPT as noted below
- Class Location: online via Zoom. Links to sessions are posted on NYU Classes site
PLEASE NOTE: You must log in to nyu.zoom.us **prior** to your Zoom session. You are expected to keep your camera on throughout the session.

Course Prerequisites

- Microeconomics, Statistics I
- Proficiency in Excel expected.

Course Description

The purpose of this course is to extend students' understanding of economic theory and empirical research in key areas of health economics and enable students to leverage that knowledge and apply it to timely issues in health policy and management.

Competencies

This course will address the following CAHME competencies:

- The ability to understand how policy and delivery processes work, and to consider the demographic, cultural, political and regulatory factors involved in and influencing health policy and management decision-making.

[This competency will be assessed through Assignment 1, which examines social determinants of health and Assignment 2, which examines NYC’s sick leave law.]

- The ability to synthesize evidence, and apply statistical financial, economic and cost-effectiveness tools/techniques in organizational analysis.

[This competency will be assessed through Assignment 5, in which students will be required to apply cost-effectiveness analysis tools.]

- The ability to present convincingly to individuals and groups the evidence to support a point of view, position or recommendation.

[This competency will be assessed through Assignment 3, in which students will be required to support a policy or management position.]

- The ability to communicate and interact productively (via listening, speaking and writing) on matters of healthcare with a diverse and changing industry, work force and citizenry.

[This competency will be assessed through Assignments 2 and 4, in which students will be required to write policy and management memos.]

Assignments, exams, and class participation in the course will assess progress against these competencies, and no student will receive a B or higher without demonstration of satisfactory progress towards mastery of each competency.

Course and Learning Objectives

Learning Assessment Table

Program Competency	Corresponding Course Learning Objective	Corresponding Assignment Title (Memo, Team Paper, Exam, etc.)	Denote Level of Competency Expected to Achieve via the Assignment (basic = 1, intermediate = 2, advanced = 3)
The ability to understand how policy and delivery processes work, and to consider the demographic, cultural, political and regulatory factors involved in and influencing health policy and management decision-making.	Be able to apply economic theories to understanding the social determinants of health and the impact of policy.	Assignment #1, #2	2
The ability to synthesize evidence, and apply statistical financial, economic and cost-effectiveness tools/techniques in organizational analysis	Be able to conduct a basic cost-effectiveness analysis of a health program.	Assignment #5	1

Program Competency	Corresponding Course Learning Objective	Corresponding Assignment Title (Memo, Team Paper, Exam, etc.)	Denote Level of Competency Expected to Achieve via the Assignment (basic = 1, intermediate = 2, advanced = 3)
The ability to present convincingly to individuals and groups the evidence to support a point of view, position or recommendation.	Be able to use evidence to make policy recommendations.	Assignment #4 (TEAM), #6	2
The ability to communicate and interact productively (via listening, speaking and writing) on matters of healthcare with a diverse and changing industry, work force and citizenry.	The ability to communicate and interact with a team to develop a policy memo.	Assignment #2, #4	2

Late Assignment Policy

Extensions will be granted only in case of emergency, out of respect to those who abide by deadlines despite equally hectic schedules. Late submissions without extensions will be penalized 10% per 24-hour period.

Requirements

- Please read the “flipped” lectures before classes (these begin with Lecture 2).
- Please do all required readings before class and be prepared to discuss the policy reading assigned each week. To reinforce these readings, you are expected to answer the weekly preparatory True/False questions on NYU Classes.
- Assignments (65% of grade – 10%, 15%, 15%, 15%, 10%)
- Final exam – (30% of grade) – online – March 18-21
- Weekly preparatory problems – 5% of grade (graded as complete/incomplete)

Required Text

- Title: Health Economics
- Authors: Jay Bhattacharya, Peter Tu, Timothy Hyde
- Publisher: Palgrave Macmillan, 2013
- ISBN: 113702996X, 9781137029966

Assignments

All papers are to be submitted via the NYU Classes course site as WORD documents at least 1 hour before the start of class on their due date (3:55 pm). Be sure your name is part of the document file name.

Grading

- Preparatory T/F questions for each lecture are graded as completed/not completed.
- Instructions for specific assignments are listed below. Please follow word count and format instructions for each assignment.

Detailed Course Overview

Session 1: February 1, 2021

Demand for Health, Health Production

Objectives:

- Understand how economic models can be used to structure thinking around health policy and management issues
- Be able to use Grossman's model of the production of health to analyze issues
- Become familiar with the literature on the relationship between income and health
- Learn approaches to addressing causal inference

Readings:

- WATCH all the videos <https://mru.org/courses/principles-economics-microeconomics/consumer-choice-optimization-marginal-utility> (Introduction, Budget Constraints, Indifference Curves, Consumer Optimization) [you can watch them at double speed if you are already familiar with this material]
- Review Microeconomics lectures Weeks 5 and 8
- Textbook, Chapters 1, 3, 4 (plus the T/F questions)
- Jack, W. (2011) [The Promise of Health: Evidence of the Impact of Health on Income and Well-Being](#) in S. Glied & P.C. Smith, Oxford Handbook of Health Economics. USA: Oxford University Press.
- Cutler, D. et al. (2006) "[The Determinants of Mortality](#)," The Journal of Economic Perspectives, 20(3): 97-120.

Policy Issue: Income and life expectancy:

- Lowrey, Annie, 2014, "[Two Counties, Separated by Fortune](#)," *New York Times*, March 15, 2014.
- LaVeist, T., Pollack, K., Thorpe Jr, R., Fesahazion, R. and Gaskin, D., 2011. [Place, not race: disparities dissipate in southwest Baltimore when blacks and whites live under similar conditions](#). *Health affairs*, 30(10), pp.1880-1887.

Homework Assignment 1 (10% of final grade; maximum 150 words, due before class on February 8, Bullet point style is fine.):

Lowrey’s article suggests that socioeconomic differences between Fairfax County, Virginia and McDowell County, West Virginia are a source of the mortality differences between the two areas. Tying your analysis as closely as possible to the Grossman model and to the situation described in the story, provide **two** specific mechanisms through which socioeconomic differences between these counties could be an explanation of the mortality difference and explain that link using the Grossman model’s structure.

RUBRIC	1	2	3	4
	Restates article	Relates to Grossman model	Explains how article connects to model	Ties argument together
First mechanism	Identifies a proximate cause	Describes cause as an input into the production of health	Explains how this input affects the choice of how to produce health or how much health to produce	Careful analysis that draws in both social determinants and proximate causes
Second mechanism	SAME			
Overall	Uses Grossman’s terms and mentions social determinants	Uses Grossman’s model but rephrases in lay terms		

Session 2: February 8, 2021

Demand for Health – Demand for Immunizations -- Infectious disease, Externalities

Deliverables:

- Assignment 1 due before start of class!

Objectives:

- Become familiar with the problems of externalities in health
- Understand basic models of infectious disease transmission

Readings:

- Read Lecture 2 Flipped
- Review Microeconomics Lecture 13
- Textbook, Chapters 20 and 21 (plus the T/F questions)
- Laxminarayan, R., and A. Malani, 2011, "[Economics of Infectious Diseases](#)," in Oxford Handbook of Health Economics, edited by S. Glied and P.C. Smith (New York: Oxford University Press). ONLY pages 189-196.

Optional:

- Gupta, Sumedha, Kosali Ilayperuma Simon, and Coady Wing. "Mandated and Voluntary Social Distancing During The COVID-19 Epidemic: A Review." *NBER Working Paper* w28139 (2020).
https://www.nber.org/system/files/working_papers/w28139/w28139.pdf

Homework Assignment 2 – Individual (15% of final grade; maximum 500 words, due before class on February 18)

Use Grossman's model of the production of health to develop a plausible hypothesis how NYC's new sick leave law is likely to affect emergency room use. Use the articles on the NYU Classes site to provide evidence in support of your hypothesis.

Tips:

- Be concise! Don't throw in extra information.
- There are (at least) three ways that sick leave could affect the use of emergency rooms. Be sure to explain all of channels and note why one of them is probably more important than the others. When applying the Grossman model itself, do not use graphs or technical notation. Use your own words and write in terms sensible for a layperson. Imagine that you are writing to the mayor or to the chair of an emergency department.
- The new NYC policy will change the cost of time spent sick, the cost of certain preventive care (delivered by a doctor), and the cost of certain kinds of care received when you are sick. (Remember that not all prevention requires doctors and that not all illness can be prevented.)

RUBRIC	1	2	3
Overall coherence of argument	Restates Grossman model	References readings	Clear and compelling argument using readings
Each of three mechanisms	Notes mechanism	Explains how mechanism operates within model and changes health	Explains how mechanism relates to ER use
Data	Analyzes data partially	Analyzes data correctly	Integrates data into answer

Session 3: February 18, 2021 *Note: Monday classes meet on the Thursday of this week.

Demand for health – demand for medical care – demand for health insurance -- adverse selection

Deliverables:

Assignment 2 due before start of class.

Objectives:

- Understand the sources of demand for health insurance
- Be able to apply the idea of utility maximization to potential states of the world

Readings:

- Read Lecture 3 Flipped
- Review Microeconomics Week 12
- Textbook, Chapters 7, 8, 9, 10 (plus the T/F questions)
- Play the adverse selection game (available on the Classes website)

Policy Issue: Voluntary Insurance

- Chandra, A., Gruber, J., & McKnight, R. (2011). [The Importance of the Individual Mandate — Evidence from Massachusetts](#). *New England Journal of Medicine*, 364(4), 293-295.
- Geruso, Michael, and Timothy J. Layton. "Selection in Health Insurance Markets and Its Policy Remedies." *Journal of Economic Perspectives* 31, no. 4 (2017): 23-32, 45-47.

Homework assignment 3

(draft due February 22 – ungraded – must be handed in before class or assignment 4 grade will be docked 5 points)

There have been recent regulatory and administrative changes that might affect the Affordable Care Act (ACA) market for non-group insurance. These changes have included:

- Allowing the sale of renewable, experience-rated short-term health insurance plans which need not cover the full complement of essential health benefits
- Eliminating the penalty associated with the individual mandate

You are assigned to a group, and as a group you should prepare to explain—using the Rothschild-Stiglitz model—how the assigned change would likely affect the insurance market and who would gain or lose from this change. The Geruso-Layton article will be helpful. Groups should prepare for their discussion ahead of the next session. By the end of next session, your group should prepare and submit a 300- to 500-word memo summarizing the findings for a group grade.

Session 4: February 22, 2021

Adverse selection

Deliverables: Hand in draft.

Objectives:

- Understand strategies for addressing adverse selection
- Be familiar with the model of efficient moral hazard

Readings:

- Read Lecture 4 Flipped
- Glied, S. & Remler, D. (2002). [What Every Public Finance Economist Needs to Know about Health Economics](#). National Tax Journal, 55(4), 771-777, 779-782.

Policy Issue: Responding to Adverse Selection

- [Ian Duncan: Applications of risk adjustment in health care](#) [home page and first 5 minutes]
- [Health Care Benefits in India](#)

Homework assignment 4 – (Group paper due March 1 – 15% of grade- maximum 500 words, due before class). Assignment 3 question.

Rubric	1	2	3	Total points possible
Description of the change examined	Description present and clear			2 points
Consumers who would benefit from this change are described in detail	Points to a group	More precisely delineates the characteristics of this group	More detail	3 points
R-S Model is applied	Cursory model application	Discussion of the model is integrated into the paper		2 points
G-L is discussed	Cursory application	Integrated into the paper		2 points
Discussion of how this will affect the insurance market	Cursory discussion	Explanation of how market will change in more detail	More detail	3 points
Discussion of the winners and losers	Identification of winners and losers	Detailed discussion of who will win AND WHY	Discussion considers both short run and long run	3 points

Session 5: March 1, 2021

Cost-effectiveness Analysis Economic Evaluation of Health Interventions

Objectives:

- Understand the basic methods of economic evaluation of health interventions
- Recognize the difference between cost-saving and cost-effective
- Be able to discuss the problems of cost-effectiveness analysis

Readings:

- Read Lecture 5 flipped
- Textbook, Chapter 14 – 14.1-14.4 (plus the T/F questions)
- Weinberger, Eric (2014), “[The Governor is Very Interested.](#)” Teaching Case from the Strategic Training Initiative for the Prevention of Eating Disorders.
- [Guide to Analyzing the Cost-Effectiveness of Community Public Health Prevention Approaches](#) (2006), Chapters 1-2 (pp. 1.1-1.3, 2.1-2.9), Chapters 4-5 (pp. 4.1-4.7,5.1-5.11).

Homework paper assignment 5 – (Group assignment, 15% of grade -- Cost-effectiveness analysis available on NYU Classes. Due by start of class on March 8).

RUBRIC	1	2
Table 1	At least 2 correct entries in columns 1 and 2; at least 1 in column 3	At least 3 correct entries in column 1; at least 2 in column 2, at least 1 in column 3
Table 2.1	Sums are correct except for minor addition errors	
Table 2.2	Sums are correct except for minor addition errors	
Table 3	Life expectancy OR QALYs correct or close	Both correct or close
Table 4 – Incremental cost to Payers	At least one calculation correct	All calculations correct
Table 4 – Incremental Social cost	At least one calculation correct	All calculations correct
Table 4 – Incremental effectiveness	At least one calculation correct	All calculations correct
Table 4 – Payer ICER	At least one calculation correct	All calculations correct
Table 4 – Societal ICER	At least one calculation correct	All calculations correct
Memo – background and goals	Defined	
Categories of costs included	Described with brief explanation	Discussion of costs of alternatives
QALY calculation	Described with brief explanation	Discussion of QALY benefits of alternatives
ICER calculation	Described with brief explanation	
Length of calculation	Described	Discussion of why effects are modified
Conclusions	Summary	At least one limitation noted

Session 6: March 8, 2021

Moral Hazard-What Services Should Health Insurance Cover?

Objectives:

- Understand the use of randomized experiments in health economics
- Recognize the welfare losses associated with moral hazard

Readings:

- Read Lecture 6 Flipped
- Textbook, Chapters 2 and 11 (plus the T/F questions)
- Manning, Willard G., and others, 1987, "[Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment](#)," American Economic Review 77(3): 251-277.
- Lagarde, Mylène, and Natasha Palmer. "[The impact of user fees on access to health services in low-and middle-income countries](#)." Cochrane Database of Systematic Reviews 4 (2011). Abstract and Plain Language Summary ONLY.

Assignment 6

(10% of final grade maximum 150 words, due before class on March 15, Bullet point style is fine.)

Is the impact of user fees in developing countries consistent with the results of the RAND experiment? Does any induced moral hazard associated with removal of user fees increase welfare or reduce it?

RUBRIC	1	2	3	4
Consistency with RAND	Basic finding	More connections to RAND	More connections to RAND	More connections to RAND
Welfare effects	Restates paper	One welfare effect	Two welfare effects	Ties to C3 framework
Overall	Coherent	Sophisticated argument		

Session 7: March 15, 2021

Agency – How Should Health Professionals Be Paid?

Deliverables:

- Assignment 6 due before class!

Objectives:

- Understand the problem of agency and its application to health care
- Recognize the different ways of compensating health care providers and the incentives these generate

Readings:

- Read Lecture 7 Flipped.
- Textbook, Chapter 5, read section 5.4; skim other sections (plus the T/F questions)
- Christianson, J.B., and D. Conrad, 2011, "[Provider Payment and Incentives](#)," in Oxford Handbook of Health Economics, edited by Sherry Glied and P.C. Smith (New York: Oxford University Press). Read ONLY pp. 624-648.
- Mitchell, Jean M., 2013, "[Urologists' Use of Intensity-Modulated Radiation Therapy for Prostate Cancer](#)," New England Journal of Medicine 369(17): 1629-1637.
- Mitchell, Jean M., Jack Hadley, and Darrell J. Gaskin. "Spillover effects of Medicare fee reductions: evidence from ophthalmology." *International journal of health care finance and economics* 2, no. 3 (2002): 171-188.
<https://link.springer.com/article/10.1023/A:1020436509217> Sections 1, section 3 (not math), section 6, section 7 only

FINAL EXAM posted online by 12:00pm on March 18 (THURSDAY)

FINAL EXAM due back by 11:00pm on March 21 (SUNDAY)

Academic Integrity

Academic integrity is a vital component of Wagner and NYU. All students enrolled in this class are required to read and abide by [Wagner's Academic Code](#). All Wagner students have already read and signed the [Wagner Academic Oath](#). Plagiarism of any form will not be tolerated and students in this class are expected to report violations to me. If any student in this class is unsure about what is expected of you and how to abide by the academic code, you should consult with me.

Henry and Lucy Moses Center for Students with Disabilities at NYU

Academic accommodations are available for students with disabilities. Please visit the [Moses Center for Students with Disabilities \(CSD\) website](#) and click on the Reasonable Accommodations and How to Register tab or call or email CSD at (212-998-4980 or mosescsd@nyu.edu) for information. Students who are requesting academic accommodations are strongly advised to reach out to the Moses Center as early as possible in the semester for assistance.

NYU's Calendar Policy on Religious Holidays

[NYU's Calendar Policy on Religious Holidays](#) states that members of any religious group may, without penalty, absent themselves from classes when required in compliance with their religious obligations. Please notify me in advance of religious holidays that might coincide with exams to schedule mutually acceptable alternatives.