

Health Economics
HPAM-GP 4830-001
Professor Sherry Glied
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Office Hours: As posted on Wagner Website ♦ Office Location: Puck, Room 2100

Class will meet 4:55pm to 6:35pm on seven Mondays:
January 23, January 30, February 6, February 13, February 27, March 6, March 20

Syllabus

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.

Academic Integrity: Students are reminded that they have signed an Academic Oath at NYUWagner and they are bound by this oath and the principles of the academic code of the school. More details can be found here: <http://wagner.nyu.edu/current/policies/>

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.

Students with disabilities: Any students requiring accommodations should contact me to make proper arrangements. Please be prepared to share your documentation from the NYU disabilities office regarding appropriate accommodations.

Prerequisites:

- Microeconomics, Statistics I
- Proficiency in Excel expected.

Requirements:

- Please do all required readings before class and be prepared to discuss the policy reading assigned each week.
- Please do preparatory problems before each class (T/F) on NYU Classes course site
- Weekly preparatory problems – 5% of grade (graded as complete/incomplete)
- Assignments (65% of grade – 35%, 20%, 10%)
- Final exam – (30% of grade) – online – week of March 20

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 *before the start of class* on their due date. (*Be sure your name is part of the document file name.*)

Competencies and Grades:

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 evaluates New York City's paid 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 Assignments 1 and 2. In assignments 1 and 2, students will use statistical, financial, and economic tools to address problems. They will be required to apply cost-effectiveness analysis tools on the final exam.]

- 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 Assignments 1 and 2, 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 1 and 2, 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.

Grading:

Assignments 1 and 2 will ask you to examine a policy/management issue and to use data to support your answer. Each paper will be graded out of 50. In your response, you should:

- (1) Compose a clear, coherent, concise argument [20 points]
- (2) Apply theories learned in class [10 points]
- (3) Relate your analysis to at least one idea mentioned in the readings [5 points]
- (4) Analyze data accurately [5 points]
- (5) Use data to support your argument [10 points]

Session 1: January 23, 2017
Demand for Health, Health Production

Objectives:

- Understand how economic models can be used to structure thinking around health policy 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

To do: Weekly Preparatory Problems

Readings:

Text Chapters 1, 3, 4

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

<http://www.nytimes.com/2014/03/16/business/income-gap-meet-the-longevity-gap.html>

Deaton, A. Health in an Age of Globalization. *Brookings Trade Forum, Globalization, Poverty, and Inequality* (2004), p. 83-110. <http://www.jstor.org/stable/25063191>

Assignment 1: Use Grossman's model of the production of health to evaluate how NYC's new sick leave law is likely to affect emergency room use. Use the articles and data on the NYU Classes course site to provide evidence in support of your hypothesis. Due January 30 before class.

Tips:

- (a) Be concise! Don't throw in extra information
- (b) There are (at least) three ways that sick leave could affect the use of emergency rooms. Be sure to explain all of them and note and explain why one of these is likely more important than the others. The 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 (which?). Remember that not all prevention requires doctors and that not all illness can be prevented. Consider all the cases in your thinking.
- (c) Do not use graphs or letters to describe the Grossman model. Do all the work in your own words and in terms sensible for a layperson. Imagine that you are writing to the mayor or to the chair of an emergency department. Use Grossman's model to inform your own thinking - but your audience won't want to see the algebra.
- (d) In doing the data analysis, be sure to use the right denominator.

Session 2: January 30, 2017
Infectious disease, Externalities
Assignment 1 due before class

Objectives:

- Become familiar with the problems of externalities in health
- Understand basic models of infectious disease transmission
- Learn to apply the Coase theorem

To do: Weekly Preparatory Problems

Readings:

Text Chapters 20-21

Laxminarayan, R. & Malani, A. (2011). Economics of Infectious Diseases in S.Glied & P.C. Smith, *Oxford Handbook of Health Economics* (189-196 only). USA: Oxford University Press.

Philipson, T. (1996) "Private Vaccination and Public Health: an Empirical Examination for US Measles, *Journal of Human Resources*, 31(3); 611-630

Policy Issue: Measles epidemic

<http://www.vox.com/2015/1/22/7871975/measles-outbreak>

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Session 3: February 6, 2017

Distribution of health spending/ Demand for insurance/adverse selection

Objectives:

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

To do: Weekly Preparatory Problems

Readings:

Text Chapters 7, 8, 9, 10

Cutler, D. & Zeckhauser, R. (1998). Adverse Selection in Health Insurance. *Frontiers in Health Policy Research*, 1, 11-22.

Glied, S. & Remler, D. (2002). What Every Public Finance Economist Needs to Know about Health Economics. *National Tax Journal*, 55(4), 779-782.

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.

Kruk, M., Goldmann, E., & Galea, S. (2009). Borrowing and Selling to Pay for Health Care in Low- and Middle-Income Countries. *Health Affairs*. July/August, 28(4) 1056-1066.

Assignment 1b: To be handed out and due February 13 before class.

Session 4: February 13, 2017

Adverse selection continued/moral hazard (Assignment 1b due before class)

Objectives:

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

To do: Weekly Preparatory Problems

Readings:

Glied, S. & Remler, D. (2002). What Every Public Finance Economist Needs to Know about Health Economics. *National Tax Journal*, 55(4), 771-777.

Policy Issue: Responding to Adverse Selection

<http://www.nuffieldtrust.org.uk/talks/videos/wynand-van-de-ven-use-risk-adjustment-netherlands> [home page and first 5 minutes]

<https://www.towerswatson.com/en-IN/Insights/IC-Types/Survey-Research-Results/2010/04/Healthcare-Benefits-in-India>

Assignment 2: Due March 6, 2107 before class

Medicare Advantage plans are reimbursed a flat amount by Medicare that is based on the demographic and diagnostic characteristics of their enrollees. Plans must include all Medicare-covered services in their benefit packages, but can also include additional benefits (see <https://www.healthmanagement.com/wp-content/uploads/HMA-Webinar-3-9-16-Launching-a-Successful-Medicare-Advantage-Plan.pdf> for some tips on plan design). They may choose their own cost-sharing schemes, to encourage participation and steer service use.

The data set Medicare.xls (on Classes course site) includes information on 1505 Medicare enrollees randomly sampled through the 2009 and 2010 Medical Expenditure Panel Survey. The dataset includes information on their Medicare spending in 2009, their Medicare spending in 2010, their use of core services (inpatient visits, inpatient nights, outpatient hospital visits, office-based visits, physical or occupational therapy visits; the data indicate how many of these visits they had in 2009), and whether or not they used other services (any_alt-med: chiropractice/acupuncture/massage/homeopathy; dental care; glasses or contact lenses; the data are coded 1 if they had at least 1 such visit in 2009).

Using these data, and the readings and lecture materials, describe how you might design a Medicare Advantage plan that would be attractive to at least some enrollees and that would be financially successful. Hint – your goal will be to identify a policy that will be more attractive to some subscribers and not to others, so they will effectively reveal information about themselves.

Session 5: February 27, 2017

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

To do: Weekly Preparatory Problems

Readings:

Text Chapters 2, 11

Pauly, M. (1986). Taxation, Health Insurance, and Market Failure in the Medical Economy. *Journal of Economic Literature*, 24(2), 638-665.

Manning, W.G, Newhouse J.P., Duan, N., Keeler E.B. & Leibowitz, A. (1987). Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment *The American Economic Review*, 77(3), 251-277.

Policy issues: Mental Health Parity and User Fees

Melek, S. (2005). The Costs of Mental Health Parity. *Health Section News*, 49

Waiswa, WP. The impact of user fees on access to health services in low- and middle-income countries.

http://apps.who.int/rhl/effective_practice_and_organizing_care/cd009094_waiswaw_com/en/

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Session 6: March 6, 2017

Agency – How Should Health Professionals be Paid?

Assignment 2 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

To do: Weekly Preparatory Problems

Readings:

Text Chapter 5 – 5.4

Randall, E.P. & McGuire, T.G. (1993) Supply-side and Demand-side cost sharing in Health Care. *Journal of Economic Perspectives*, 7(4), 135-151.

Christianson, J.B. & Conrad, D.(2011). Provider Payment and Incentives in S.Glied & P.C. Smith, *Oxford Handbook of Health Economics* (624-648). USA: Oxford University Press.

Policy issue:

Mitchell, Jean M. "Urologists' use of intensity-modulated radiation therapy for prostate cancer." *New England Journal of Medicine* 369.17 (2013): 1629-1637.

Assignment 3: Cost-effectiveness assignment (due March 20 before class) – please do this in groups of 2-3.

Session 7: March 20, 2017
Economic Evaluation of Health Interventions
Assignment 3 due before class

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:

Text Chapter 14 – 14.1-14.4

Weinberger, Eric. (2014) “The Governor is Very Interested.” Teaching Case from the Strategic Training Initiative for the Prevention of Eating Disorders.

<https://cdn1.sph.harvard.edu/wp-content/uploads/sites/1267/2014/10/Revised-Narrative-CEA-Case-Oct-3-14.pdf>

Guide to Analyzing the Cost-Effectiveness of Community Public Health Prevention Approaches (2006) <http://aspe.hhs.gov/health/reports/06/cphpa/report.pdf>
Chapters 1-2 (pp. 1.1-1.3, 2.1-2.9), Chapters 4-5 (pp. 4.1-4.7,5.1-5.11)

Wright, Davene R., S. Bryn Austin, H. LeAnn Noh, Yushan Jiang, and Kendrin R. Sonneville. "The cost-effectiveness of school-based eating disorder screening." *American journal of public health* 104, no. 9 (2014): 1774-1782.

Stuhldreher N, Konnopka A, Wild B, Herzog W, Zipfel S, Löwe B, König HH. Cost-of-illness studies and cost-effectiveness analyses in eating disorders: A systematic review. *International Journal of Eating Disorders*. 2012;45(4):476-491.

Skim:

Austin, S. Bryn, Najat J. Ziyadeh, Sara Forman, Lisa A. Prokop, Anne Keliher, and Douglas Jacobs. "Peer reviewed: screening high school students for eating disorders: results of a national initiative." *Preventing chronic disease* 5, no. 4 (2008).

Nihiser, Allison J., Sarah M. Lee, Howell Wechsler, Mary McKenna, Erica Odom, Chris Reinold, Diane Thompson, and Larry Grummer-Strawn. "BMI measurement in schools." *Pediatrics* 124, no. Supplement 1 (2009): S89-S97.

Stuhldreher, Nina, Alexander Konnopka, Beate Wild, Wolfgang Herzog, Stephan Zipfel, Bernd Löwe, and Hans-Helmut König. "Cost-of-illness studies and cost-effectiveness analyses in eating disorders: A systematic review." *International Journal of Eating Disorders* 45, no. 4 (2012): 476-491.