Health Economics

Spring 2012

Instructor

Hsienming Lien Room 251658 General Purpose Building ${$\operatorname{hmlien@nccu.edu.tw}$}$ 29393091-51658 ${\operatorname{www3.nccu.edu.tw}/^{\sim}}{\operatorname{hmlien}}$

Time

Tuesday: 9:00-12:00 (NTU) Thursday: 9:00-12:00 (NCCU)

Place

Classroom 6 (NTU) General Purpose Building, Room 270935 (NCCU)

Office Hours

By appointment.

Overview

This is a health economics course for the Master and Ph.D. level. The purpose of this course is to teach students to analyze the health market using the economic tools. The class will begin with some backgrounds on U.S. and Taiwan institutions, then move to the topics such as moral hazard and adverse selection in the insurance market, physician-patient interaction, and payment systems for providers. Each topic covers several selected papers, including both theoretical and empirical ones.

Prerequisite

Students are assumed to be familiar with Master level Microeconomics Theory and Econometrics. In addition, students in this course are likely to be heavily involved with NHI data. Background in Industrial Organization and basic knowledge of statistical software (e.g. SAS, STATA) will be helpful though not required.

Readings

Reading plays an essential part of this course. Students are expected to read all listed articles, though only articles with (*) will be discussed in class. Articles with a (Θ) are more difficult. You should concentrate on the main ideas. All readings will be posted on the course web page, except chapters in the books.

Textbooks

There is no textbook for this course; however, the following three books are helpful for understanding the backgrounds of health systems of the United States and Taiwan.

The Economics of Health and Health Care, by Sherman Folland, Allen C and Goodman, and Miron Stano (United States, hereafter FGM)

Health Economics, by Charles E. Phelps (United States)

Health Economics, by Chee-Ruey Hsieh, and Rachel Ru (Taiwan, hereafter HR)

Grading

There will be a weekly class presentation; each student takes turns to give a 45-mins presentation of an assigned paper. There will also be assignments; students are expected to work independently. There will be either an final exam or a report which students are expected to work in groups; the details will be decided in the first class. Grading will be as follows:

Presentation 40% Report 60%.

Course Outline

- Introduction to Health Economics
 - *Newhouse, J. P. (1992) "Medicare Care Cost: How Much Welfare Loss?", Journal of Economic Perspectives, 6 (3): 13-29.
 - *Victor R. Fuchs (1996) "Economics, Values, and Health Care Reform", American Economic Review, 86 (1): 1-24
 - *Summer, Lawrence H. (2004) Fourth Annual Marshall J. Seidman Lecture on Health Policy
 - Chapter 1 and 2, HR
 - Chapter 1, 13, and 14 FGM
- Benefits of Medical Care
 - *David, Cutler.(2004) "Are the Benefits of Medicine Worth What We Pay for it?", Fifth Annual Herbert Lourie Memorical Lecture on Health Policy
 - *David M. Cutler, Allison B. Rosen, and Sandeep Vijan, (2006) "The Value of Medical Spending in the United States, 1960–2000" N Engl J Med 355:920-927
- Optiaml Health Insurance
 - *Culter, D. M and Zeckhauser, R. (2000) "The Anatomy of Health Insurance," Chapter 11 of *Handbook of Health Economics*, A.J. Culyer and J. P. Newhouse (ed) North Holland.
 - (Θ)Kenneth. J. Arrow. (1963) "The Welfare Economics of Medical Care," American Economic Review, 53, 941-973

- Pauly, M.V. (1968) "The Economics of Moral Hazard," American Economic Review, 49: 531-537.
- Rothschild, M. and Joseph E. S. (1976) "Equilibrium in Competitive Insurance Markets:
 An Essay on the Economics of Imperfect Information", Quarterly Journal of Economics,
 90: 629-650.
- Feldstein, Martin, "The Welfare Loss of Excess Health Insurance," *Journal of Political Economy*, 81(2), part I, March-April 1973, 251-280.
- *Manning, W.G. et al. (1987) "Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment," American Economic Review, 77: 251-277.
- *Finkelstein, Amy, 2007, "The Aggregate Effects of Health Insurance: Evidence from the Introduction of Medicare," Quarterly Journal of Economics, 122(1), 1-37.
- *Card, David, Carlos Dobkin, Nicole Maestas (2009) "Does Medicare Save Lives?" Quarterly Journal of Economics, 124(2), 597–636..
- *Currie, Janet, and Jonathan Gruber (1996), "Saving Babies: The Efficacy and Cost of Recent Expansions of Medicaid Eligibility for Pregnant Women," Journal of Political Economy, 104(6), 1263-1296.
- Han, Hsing-Wen and Hsien-Ming Lien (2008) "Do Children Use More Health Care When Free: Evidence from Children Subsidy Program in Taipei," *Taiwan Economic Review*, 36-4: 589-623
- Levy, Helen and David Meltzer (2008) "The Impact of Health Insurance on Health," Annual Review of Public Health, 29, 399-409.
- *Piper, Joyce, et al.(1990) "Effects of Medicaid Eligibility Expansion on Prenatal Care and Pregnancy Outcomes in Tennessee," JAMA, 264(17), 2219-2223.
- Chapter 11, FGM
- Chapter 10, Phelps

• Provider Payment and Incentives

- *McGuire, T. G. (2000) "Physician Agency," in Anthony J. Culyer and Joseph P. Newhouse, eds., Chapter 9 of Handbook of Health Economics, North Holland.
- *Newhouse, J. P. (1996) "Reimbursing Health Plans and Health Providers: Efficiency in Production versus Selection?", Journal of Economic Literature.
- *Ellis, R. and McGuire, T.G. (1993) "Supply-Side and Demand-Side Cost Sharing in Health Care," *Journal of Economic Perspectives*, 7: 135-151.
- *Gaynor, Martin and Paul Gertler, "Moral Hazard and Risk Spreading in Partnerships," Rand Journal of Economics, 1995, 26(4), 591-614.
- Frank, Richard and Richard Zeckhauser, "Custom-made vs. Ready to Wear Treatments: Behavioral Propensities in Physicians' Choices," *Journal of Health Economics*, 2007, 26(6), 1101-1127.
- Epstein, Arnold, et al., "The Use of Ambulatory Testing in Prepaid and Fee-for-Service Group Practices: Relation to Perceived Profitability," New England Journal of Medicine, 1986, 314(17), 1089-1093.

- *Gruber, J. and Owings, M. (1996) "Physician Financial Incentives and Cesarean Section Delivery," RAND Journal of Economics, 27: 99-123.
- Yip, W. (1998), "Physician Responses to Medical Fee Reductions: Changes in the Volume and Intensity of Supply of Coronary, Artery Bypass Graft (CABG) Surgeries in the Medicare and Private Sectors," Journal of Health Economics, 17 (6): 675-699.
- Han, Hsing-Wen and Hsien-Ming Lien (2010) "Can Raising the Payment of Natural Delivery Lower the Cesarean Rate?" Taiwan Journal of Public Health, 29 (3), 218-227
- *Meredith B. Rosenthal, PhD; Richard G. Frank, PhD; Zhonghe Li, MA; Arnold M. Epstein, MD, MA (2005). "Early Experience With Pay-for-Performance: From Concept to Practice". JAMA 294 (14): 1788–1793
- M.B. Rosenthal and R. G. Frank (2006). "What Is the Empirical Basis for Paying for Quality in Health Care?". Medical Care Research and Review 63 (2): 135–57
- Ma, C.A. (1994) "Health Care Payment Systems: Cost and Quality Incentives," *Journal of Economics & Management Strategy*, 3(1):93-112.
- Ma, C.A. and McGuire, T.G. (1997) "Optimal Health Insurance and Provider Payment,"
 American Economic Review, 87(4):685-704.
- Ellis, Randall. and McGuire, T.G.. (1986), "Provider Behavior Under Prospective Reimbursement: Cost Sharing and Supply", Journal of Health Economics, 5 (2): 129-152.
- Chapter 8 and 9, Phelps.
- Chapter 8, 17, and 18, FGM.

• Early Life Health, Schooling, and Productivity

- *Douglas Almond, Joseph Doyle, Amanda Kowalski, and Heidi Williams (2010) "Estimating Marginal Returns to Medical Care: Evidence from At-risk Newborns" The Quarterly Journal of Economics
- *Douglas Almond, "Is the 1918 Influenza Pandemic Over? Long-Term Effects of In Utero Exposure in the Post-1940 US Population," *Journal of Political Economy*, 2006, 114(4), 672-712.
- Douglas Almond and Janet Currie (2011) "Killing Me Softly: The Fetal Origins Hypothesis". Journal of Economic Perspectives, 25 pp 153-172
- Douglas Almond, Kenneth Chay and David Lee (2005) "The Costs of Low Birth Weight"
 Quarterly Journal of Economics, 120, 1031-1084.
- *Almond, Doug, Lena Edlund, and Marten Palme, "Chernobyl's Subclinical Legacy: Prenatal Exposure to Radioactive Fallout and School Outcomes in Sweden," Quarterly Journal of Economics, 2009, 124(4), 1729-1772.
- Almond, Doug and Kenneth Chay, "The Long Run and Intergenerational of Poor Infant Health: Evidence from Cohorts Born during the Civil Rights Era," mimeo, 2006.
- *Maccini, Sharon and Dean Yang (2009) "Under the Weather: Health, Schooling and Socioeconomic Consequences of Early Life Rainfall," American Economic Review, 99(3), 1006-1026.

• Worm and Malaria

- *Bleakley, Hoyt (2007) "Disease and Development: Evidence from Hookworm Eradication in the American South," Quarterly Journal of Economics, 122(1), 73-117.
- *Bleakley, Hoyt (2010) "Malaria Eradication in the Americas: A Retrospective Analysis of Childhood Exposure," American Economic Journal: Applied Economics, 2(2), 1-45.
- *Cutler, David Winnie Fung, Michael Kremer, Monica Singhal, and Tom Vogl (2010) " Early-life Malaria Exposure and Adult Outcomes: Evidence from Malaria Eradication in India," American Economic Journal: Applied Economics, 2(2), 72-94.
- Lucas, Adrienne (2010) "Malaria Eradication and Educational Attainment: Evidence from Paraguay and Sri Lanka," American Economic Journal: Applied Economics, 2(2), 46-71.
- Thomas, Duncan, et al., "Iron Deficiency and the Well-Being of Older Adults: Early Results from a Randomized Nutrition Intervention," mimeo, 2003.

• Ownership and Hospital Performance

- Phelps (2002) "The Origins and Purposes of Not-For-Profit Organizations," Mimeo
- Frank and Salkever (1995) "Non-profit Hospitals," Journal of Economic Perspectives.
- Horwitz, Jill (2005), "Making Profits and Providing Care: Comparing Nonprofit, For-Profit, and Government Hospitals," Health Affairs, 23(3), 790-801.
- *Sloan et. al. (2000) "Hospital Ownership and Cost and Quality of Care: Is There a
 Dime Worth of Difference," Journal of Health Economics, 20: 1-21
- *Grabowski and Hirth (2003) "Competitive Spillover across Non-profit and For-profit Nursing Home," *Journal of Health Economics*, 22: 1-22
- *M. Duggan (2003) "Hospital Market Structure and the Behavior of Non-For-Profit Hospitals," Rand Journal of Economics, 33: 433-446
- *Lien, Hsien-Ming, Shin-Yi Chou, and Jin-Tan Liu (2008) "Hospital Ownership and Performance: Evidence from Stroke and Cardiac Treatment in Taiwan," *Journal of Health Economics* 27:5, pp. 1208-1223
- F. Sloan (2002) "Non-For-Profit Ownership and Hospital Behavior," in A. J. Culyer and J. P. Newhouse, eds., Handbook of Health Economics, Elsevier. Amsterdam.

• Competition in Health Care Market

- Gaynor, Martin and William Vogt, "Antitrust and Competition in Health Care Markets," in Anthony J. Culyer and Joseph P. Newhouse, eds., Handbook of Health Economics, Amsterdam: North-Holland, 2000.
- Dranove, D. and M. Satterthwaite. (2000). "The Industrial Organization of Health Care Markets." In *Handbook of Health Economics*, edited by A. J. Culyer and J. P. Newhouse, pp. 1094-139..
- Robinson, J. C. and H. S. Luft. (1987) "Competition and the Cost of Hospital Care, 1972 to 1982." JAMA 257 (23): 3241-5.

- Dranove, D., M. Shanley, and C. Simon. (1992) "Is Hospital Competition Wasteful?"
 RAND Journal of Economics 23 (2): 247-62.
- (Θ)*Kessler, D. P. and M. B. McClellan. (2000) "Is Hospital Competition Socially Wasteful?" Quarterly Journal of Economics 115 (2): 577-615..
- *Dafny, Leemore (2008) "Are Health Insurance Markets Competitive?" NBER Working Paper 14572.
- *Dafny, Leemore (2005) "How Do Hospitals Respond to Price Changes?" American Economic Review 95: 1525-1547.
- Barro, Jason, Robert Huckman, and Daniel Kessler (2005) "The Effects of Specialty Hospitals on the Cost and Quality of Medical Care," *Journal of Health Economics*, 25(4), 702-721.
- Huckman, Robert S (2006) "Hospital Integration and Vertical Consolidation: An Analysis of Acquisitions in New York State," *Journal of Health Economics*, 25(1), 58-80.

• Hospital Behaviors (Report Cards)

- *Cutler, David, Robert S. Huckman, and Mary Beth Landrum (2004) "The Role of Information in Medical Markets: An Analysis of Publicly Reported Outcomes in Cardiac Surgery," American Economic Review, 94(2), 342-346.
- *Dranove, David, Dan Kessler, Mark McClellan, and Mark Satterthwaite (2003) "Is More Information Better? The Effects of 'Report Cards' On Health Care Providers," Journal of Political Economy, 111(3), 555-88.
- Mukamel, Dana B. and Alvin I. Mushlin, (1998) "An Analysis of Market Share and Price Changes After Publication of the New York State Cardiac Surgery Mortality Reports," Medical Care, 36(7), 945-54.
- Schneider, Eric C. and Arnold M. Epstein (1996) "Influence of Cardiac Surgery Performance Reports on Referral Practices and Access to Care," New England Journal of Medicine, 335(4), 251-256

• Others

Volume and Outcome Relationship Peer Effect among Physicians Drugs