ECONOMICS 140: ECONOMICS OF HEALTH PRODUCERS

Spring 2015, Warren Lecture Hall 2113, Tu/Th 2-3:20pm

 Professor:
 Jeffrey Clemens
 Office:
 Econ 306
 e-mail:
 j1clemens@ucsd.edu

 Office Hours:
 Mondays from 11am-noon
Tuesdays from 3:30-4:30pm
 Mondays from 11am-noon
 Mondays from 11am-noon

Also available by appointment.

Teaching Assistant

(1) Jamie Mullins

Office: Sequoyah Hall 226 e-mail: jmullins@ucsd.edu

Regular Office Hour: Thursday 12:30-1:30pm

Prerequisites: Econ 2 OR 100B

Course Objectives: This course applies microeconomic theory to the health care market with a particular focus on the providers in the health care sector (physicians, nurses, hospitals, pharmaceutical firms, and health insurers). We will examine where markets work efficiently and where it may be possible for government intervention to improve efficiency. We will use microeconomic models to predict how proposals to reform the market for health care will affect the incentives of health care providers and outcomes in health care markets. Where possible, we will examine the empirical research that tests the predictions from economic models.

Note: Econ 141 focuses on the consumer side of the health market: the demand for health and medical care, the demand for health insurance, proposals to address the uninsured, employer provision of health insurance and the effects on worker wages and decision to work, and international comparisons of health systems.

After passing this class you will be able to:

1. Apply microeconomics to the study of the suppliers in healthcare markets.

2. Analyze current policy issues in the U.S. healthcare system from an economic perspective. Our focus will be on policy issues associated with how Medicare, Medicaid, and private insurance plans pay healthcare providers, although we will also discuss health policy issues related to redistribution and social insurance.

Assessment: Your course grade will be based on three exams, each worth 33% of your grade. This includes two in-class midterm, scheduled for **Tuesday, April 28** and **Thursday, May 21**, and a cumulative final exam. **The final exam is Tuesday, June 9 from 3-6pm.**

Exam Schedule:

Midterm 1: April 28 (in class; 33% of course grade) Midterm 2: May 21 (in class; 33% of course grade) Comprehensive Final Exam: June 12 (3-6pm, location TBD, 33% of course grade)

Course Materials:

- *Required Textbook*: Sherman Folland, Allen C. Goodman, and Miron Stano. "The Economics of Health and Health Care" Publisher: Pearson Education, Inc. 2013.
- *TED:* This is where you access the syllabus, additional required articles, problems sets, your grades, a discussion board, announcements regarding review sessions and supplemental office hours, etc.
- Practice Problem Sets: Posted on Friday and solutions available on TED the following Friday.
- *Additional Review Materials:* Practice midterms and any additional practice exam questions will be posted on TED prior to the weekend preceding each exam.

Administrative Issues:

- (1) Exams are closed book: you may not use any notes, electronic devices, books or consult other classmates. If you believe an exam has not been graded properly, you may ask for a regrade. I will re-grade your entire exam. The re-graded score will be your grade for the exam. You may not ask for another re-grade or go back to your first grade. To help maintain the integrity of the midterms and finals, we will require you to show your student ID when turning in your exam.
- (2) Any student found responsible for violating academic integrity will earn a failing grade for the course. In addition to the academic sanction that I impose, the Council of Deans of Student Affairs will impose a disciplinary penalty. For a review of UCSD policy, please see http://www.senate.ucsd.edu/manual/appendices/app2.htm.
- (3) If you have a documented disability, please bring your documentation and come to talk to me as soon as possible so that I can make suitable accommodations for you. If you believe that you may have a disability and will desire accommodation, please register with the Office for Students with Disabilities, Building 202 University Center

Concise Course Overview:

- Week 1: Introduction: Why Study Markets for Health Care Services; What Makes Health Service Markets Unique?
- Week 2: The Allocation Question; How Do Physicians Respond to Incentives and How Should We Pay Them? (Note: No class on 4/9)
- Week 3: Continuation of How Should We Pay Physicians (Note: No class on 4/16)
- Week 4: Assessing the Target Income and Cost-Shifting Hypotheses; Medical Malpractice
- Week 5: Midterm on 4/28; Policy Issues Associated with the Affordable Care Act
- Week 6: Hospitals: Health Care Providers with Market Power; Economics of Non-Profit Firms
- Week 7: Hospitals: Financing Hospital Care for the Uninsured; Competition on Price vs. Competition on Quality; Introduction to Health Care Innovation
- **Week 8:** Midterm on 5/21; Pharmaceutical Companies and Innovation in Medical Equipment and Devices
- Week 9: Continuation of Medical Innovation
- Week 10: Further Discussion of Issues in Health Policy and Final Review

Final Exam: Tuesday June 9 from 3-6pm

Week 1 (3/31 and 4/2):

Introduction: Why Study Markets for Health Care Services; What Makes Health Service Markets Unique?

Primary Topics:

Overview of the Health Care Landscape Review of Consumer Demand Being Comfortable with Cost-Benefit Analysis Why We Buy Health Care through Insurance Review of Supply by Competitive Firms (Physicians?) The Decision to Become a Physician Choice of Specialty and Where to Practice

Relevant Textbook Chapters:

Chapter 1 (Overview) Chapter 2 (Microeconomics Review)

Additional Readings:

- Victor R. Fuchs, "Health Care Is Different—That's Why Expenditures Matter," *JAMA*. 2010;303(18):1859-1860. (Available on pages 21-23 at http://siepr.stanford.edu/?q=/system/files/shared/pubs/papers/pdf/More_Healthcare.pdf)
- Baicker, Katherine, and Amitabh Chandra. "Myths and misconceptions about US health insurance." *Health Affairs* 27.6 (2008): w533-w543. (Available here: http://content.healthaffairs.org/content/27/6/w533.full.pdf+html)
- DeZee KJ, Maurer D, Colt R, Shimeall W, Mallory R, Powers J, Durning SJ. "Effect of financial remuneration on specialty choice of fourth-year U.S. medical students." Acad Med. 2011 Feb; 86(2):187-93. (Available here: <u>http://www.ncbi.nlm.nih.gov/pubmed/21169785</u>)

Week 2 (4/7; No class on 4/9):

The Allocation Question; How Do Physicians Respond to Incentives and How Should We Pay Them?

Primary Topics:

Issues of Allocation: Organ markets, Markets for predictable services Markets for uncertain services The Physicians' Utility Function A Model of Optimal Payment Policy: Salary vs. Fee-For-Service Complications for Payment Policy How Does Medicare Stack Up? Paying for Capital and Technology Intensive Services

Relevant Textbook Chapters: Chapter 16 (pp. 325-329; 339-341)

Additional Readings:

- * Becker, Gary and Julio Elias, "Introducing Incentives in the Market for Live and Cadaveric Organs," *Journal of Economic Perspectives*, Vol 21. No. 3, Summer 2007, p. 3-24. (Available here: http://www.aeaweb.org/articles.php?doi=10.1257/jep.21.3.3&title=)
- Mark Hogland. "How Does Your Doctor Get Paid?" (Available here: http://www.pbs.org/wgbh/pages/frontline/shows/doctor/care/capitation.html)
- * Jeffrey Clemens. "Implications of Physician Ethics, Billing Norms, and Service Cost Structures for Medicare's Fee Schedule." (Available here: <u>http://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=706192</u>)
- Center for Medicare and Medicaid Services. "Evaluation and Management Services Billing Guide." April 2013. (Available here: <u>https://www.medicarenhic.com/providers/pubs/REF-EDO-0056%20EvaluationManagementServicesBillingGuide.pdf</u>)
 - Note: Do not read this document in its entirety! This document is worth perusing if you want a taste for the complexity of Medicare's billing guidelines.

Week 3 (4/14; No class on 4/16)

Continuation of The Allocation Question; How Do Physicians Respond to Incentives and How Should We Pay Them?

Primary Topics:

Issues of Allocation: Organ markets, Markets for predictable services Markets for uncertain services The Physicians' Utility Function A Model of Optimal Payment Policy: Salary vs. Fee-For-Service Complications for Payment Policy How Does Medicare Stack Up? Paying for Capital and Technology Intensive Services

Relevant Textbook Chapters: Chapter 16 (pp. 325-329; 339-341)

Additional Readings:

- * Becker, Gary and Julio Elias, "Introducing Incentives in the Market for Live and Cadaveric Organs," *Journal of Economic Perspectives*, Vol 21. No. 3, Summer 2007, p. 3-24. (Available here: http://www.aeaweb.org/articles.php?doi=10.1257/jep.21.3.3&title=)
- Mark Hogland. "How Does Your Doctor Get Paid?" (Available here: http://www.pbs.org/wgbh/pages/frontline/shows/doctor/care/capitation.html)
- * Jeffrey Clemens. "Implications of Physician Ethics, Billing Norms, and Service Cost Structures for Medicare's Fee Schedule." (Available here: <u>http://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=706192</u>)
- Center for Medicare and Medicaid Services. "Evaluation and Management Services Billing Guide." April 2013. (Available here: <u>https://www.medicarenhic.com/providers/pubs/REF-EDO-0056%20EvaluationManagementServicesBillingGuide.pdf</u>)
 - Note: Do not read this document in its entirety! This document is worth perusing if you want a taste for the complexity of Medicare's billing guidelines.

Week 4 (4/21 and 4/23) How Should We Pay Physicians: Assessing the Target Income and Cost-Shifting Hypotheses; Medical Malpractice

Primary Topics:

Review of Optimal Payment Policy Supplier-Induced-Demand The Target Income Hypothesis Labor Supply Interpretation Short Run vs. Long Run Billing Norms Interpretation The Cost-Shifting Hypothesis Bargaining Over Physicians' Time Medicare's Influence on Private Payment Systems Empirical Evidence

Relevant Textbook Chapters: Chapter 15 (Physicians Practices)

Additional Readings:

 McGuire, Thomas G., and Mark V. Pauly. "Physician response to fee changes with multiple payers." *Journal of health economics* 10.4 (1991): 385-410. (Available here: <u>http://www.sciencedirect.com/science/article/pii/016762969190022F</u>)

- Focus on the Introduction and Section 4. The remaining sections are quite technical.
- Clemens, Jeffrey, and Joshua Gottlieb. "Do Physicians' Financial Incentives Affect Medical Treatment and Patient Health?." (2014). (Available here: <u>http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2101251</u>).
 - Focus on the Introduction and Section 1. The introduction describes the paper's findings. Section 1 provides some detail regarding how Medicare pays physicians.

Week 5 (4/28 and 4/30): Midterm on 4/28; Discussion of Health Policy Issues

Week 6 (5/5 and 5/7):

Hospitals and the Economics of Non-Profit Firms

Primary Topics:

Overview of Hospital Sector What Motivates Hospitals? Kindly Non-Profits? Standard Monopolists? The Hold-Up Problem Costs in the U.S. and Abroad Prices and Quantities Administrative Overhead How We Pay Hospitals

Relevant Textbook Chapters:

Chapter 13 (Economics of Non-Profit Firms) Chapter 14 (pp. 283-293, Hospital Overview)

Additional Readings:

- * Brill, Steven. "Bitter pill: why medical bills are killing us." Special report TIME magazine,(Mar. 04, 2013) (2013). (Available here: https://www.nesri.org/sites/default/files/Bitter_Pill-Time_Magazine.pdf)
 - \circ Read through at least 2 of the anecdotes to get a flavor for the article.
- Duggan, Mark. "Hospital ownership and public medical spending." *Quarterly Journal of Economics*. 15(4): 1343-1373.
- Dafny, Leemore S. *How do hospitals respond to price changes?*. *American Economic* Review. 95(5):1525-1547. 2005. (Available here:

http://www.ingentaconnect.com/content/aea/aer/2005/00000095/00000005/art000 09)

Cutler, David M., and Dan P. Ly. "The (paper) work of medicine: understanding international medical costs." *The Journal of Economic Perspectives* 25.2 (2011): 3-25. (Available here: <u>http://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.25.2.3</u>)

Week 7 (5/12 and 5/14):

Hospitals Continued: Financing Hospital Care for the Uninsured; Demand for Nurses When Employers Have Monopsony Power; Introduction to Health Care Innovation

Primary Topics:

Financing Hospital Care for the Uninsured Competition on Price vs. Competition on Quality The Advance of Health Care Innovation Health Gains Rising Costs Pharmaceutical Innovation The Decision to Invest in R&D Patent Law and Monopoly Pricing Drugs for Developing Countries

Relevant Textbook Chapters: Chapter 17 (Pharmaceuticals Overview)

Additional Readings:

- Kremer, Michael. "Pharmaceuticals and the developing world." *The Journal of Economic Perspectives* 16.4 (2002): 67-90. (Available here: http://www.jstor.org/stable/3216915)
- Cutler, David M., Allison B. Rosen, and Sandeep Vijan. "The value of medical spending in the United States, 1960–2000." *New England Journal of Medicine*355.9 (2006): 920-927. (Available here: http://www.nejm.org/doi/full/10.1056/NEJMsa054744)

Week 8 (5/19 and 5/21):

Innovation Continued; Midterm on 5/21

Primary Topics:

The Difficulty of Evaluating Technology Policy

Innovation in Medical Equipment and Devices Empirical Evidence on Innovation Pharmaceutical Sector Medical Equipment Payment Policy and the Nature of Innovation Implications of the ACA for Innovation

Relevant Textbook Chapters: Chapter 6 (pp. 121-126, Medical Technology Overview)

Additional Readings:

- Roberts, EDWARD B. "Technological innovation and medical devices." *New medical devices: invention, development, and use* (1988): 35-51.
 - This article appears as a chapter in a book. The relevant pages (35-51) can be accessed via google books by searching for the article title from the "Google Scholar" home page. The chapter provides an excellent discussion of what medical device innovation looks like and how it differs from pharmaceutical innovation.
- Jeffrey Clemens and Stan Veuger. "Innovation and Uncertainty in the Medical Industry: Evidence form the Case of Myriad Genetics, Inc." Available here: <u>http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2576481</u>

Week 9 (5/26 and 5/28): Medical Innovation Continued

Week 10 (6/2 and 6/4):

Discussion of Issues in Health Policy and Final Review

Final Exam: Tuesday, June 9, 3:00-6:00pm