

Spring 2014  
Frank A. Sloan

## **Health Economics: Economics 334 and Public Policy 331**

### **Course Description**

This course provides a comprehensive overview of topics related to workings of health care markets and determinants of health in high-income countries, particularly the U.S. Health economics is a field in applied microeconomics. It draws on basic microeconomic concepts, which I assume that students have had. It also assumes some knowledge of statistics, even though I will provide some help with this in class. There are much larger fields of health services research, public health, and clinical medicine. We will draw on these latter fields, but the thrust of this course is economic.

The course has several objectives. The first is to sharpen your skills in microeconomics and in empirical analysis. Second, the course will improve your understanding about how economic analysis is used to help in analysis of important public policy issues. The analysis contained in the course has many public policy implications. You will see the range of important public policy issues that health economics encompasses. Many of these issues are well publicized by the media, especially in this election season, but often without the analytic tools that economics provides (not that economics can explain everything). Hopefully, the material will encourage at least some of you to pursue related work in economics and an honors thesis. Third, for students planning on entering careers in medicine, public health, and law or business related to health care, this course offers practical analysis that you will be able to use in your careers. Fourth, the course aims to improve students' skills in speaking and writing. You will be giving presentations on some assigned journal articles. Students who elect to write papers will write 2 term papers. Those who elect to write the term papers will not take the final exam. I will meet with students who are considering the paper option soon. The papers are about 17-18 manuscript pages each. I do not expect students to conduct original empirical research for these papers, but I do expect analysis.

There are two types of required readings. The first is *Health Economics* by Sloan and Hsieh (abbreviated SH on the reading list). We will cover much of the book. SH was 1,400 pages in manuscript form and covers much of the health economists literature through 2008-9. The second type of reading consists of articles from economics journals. You will notice that the economics journal articles were mostly published very recently.

Many classes will start with a short test (10 minutes in length). The main purpose of testing is to be sure that you have done the reading before class and have an understanding of the fundamentals. We are here to discuss material, not to recite fundamentals that you can gain on your own. Some of the articles will be presented by students in the class. An important function of the student presentations is to allow students to describe the issues rather than hear everything according to the professor's interpretation. Furthermore, learning is a two-way street, and I want to hear your perspectives as well.

## Tests and Grading

There will be one mid-term on March 6, 2014 and a final examination for students who do not write term papers from 2-5 pm on April 29<sup>th</sup>. All students are required to take the mid-term examination. The final will focus on material covered since the mid term and on issues not covered by the mid-term exam. You will be responsible for more material for the tests than I can possibly ask you about in the time allotted for the test. The questions will be essay questions. I do not give multiple-choice tests. I have a policy of grading all tests and try to get the results to you by the next class. Grading the tests myself has the advantage of becoming aware in a timely fashion of what you are learning or not learning.

The weights given to the above in determining the final grade are:

Mid-term	18%
Final exam/papers	35
Short tests	30
Class participation	<u>17</u>
	100%

The grade on class participation is based on student presentations and participation in class more generally. I will drop your lowest grade on the short tests in computing your final grade. This may be a missed test. I do not give excuses for missing class but make this allowance. The grading on short tests is 3=more than mastered the fundamentals; 2=mastered the fundamentals; 1-has vague idea of the article; 0=missed the test or has no idea what the article is about. There are pluses and minuses around these grades. The mid-term and final exams are graded 0-100. Having taught many students over the years, I do not grade on a curve.

## Class Schedule

- I. Valuing the benefit and cost of health care services (January 9<sup>th</sup> -16<sup>th</sup>)
  - A. Cost effectiveness analysis (SH\* (pp. 627-56); Kim and Goldie, 2009; Kim and Goldie, 2008)
  - B. Cost benefit analysis (SH (pp. 657-91); Almond et al., 2010; Sloan et al., 1998)
  - C. Comparative effectiveness analysis (Sheets et al., 2012)
- II. Health and its determinants (January 21<sup>st</sup> – 23<sup>rd</sup>)
  - A. Environmental effects on health (Currie et al., 2010)
  - C. Effects of health policies on health (Fertig and Reingold, 2007)
  - D. Racial disparities in health (Lawler et al., 2012)
- III. Demand for Health Services (January 28<sup>th</sup> – February 6<sup>th</sup>)  
(SH (pp. 83-126); Anderson et al., 2012; Chandra et al., 2010; Finkelstein et al., 2012; Trivedi et al., 2008)
- IV. Demand and Supply of Health Insurance (February 11<sup>th</sup> – 20<sup>th</sup>)
  - A. Demand for health insurance SH (pp. 127-68)

1. Employer mandates for private health insurance (Buchmueller et al., 2011)
  2. Long-term care insurance (Finkelstein and McGarry, 2006)
  - B. Supply of private health insurance (SH (pp. 417-65); Dafny, 2010; Dafny et al., 2012)
  - C. Public health insurance
    1. Medicare
      - i. Overview SH (pp. 516-27)
      - ii. Utilization (Dafny and Dranove, 2008; Engelhardt and Gruber, 2011)
      - iii. Effects of Medicare implementation on health sector size (Finkelstein, 2007)
    2. Medicaid
      - SH (pp. 528-34)
    3. “RomneyCare” and “ObamaCare”
      - i. Health insurance exchanges (Ericson and Starc, 2012)
      - ii. Impact of expanded coverage on premiums (Graves and Gruber, 2012; Hackmann et al., 2012)
      - iii. Effect of expanded coverage on disparities (Long et al., 2011)
      - iv. Effect of expanded coverage on productivity (Bitler and Schmidt, 2012; Thompson et al., 2012)
      - v. (Hackmann, Kolstad and Kowalski, 2012; Kolstad and Kowalski, 2012; Kowalski et al., 2008)
- V. Hospitals (February 25<sup>th</sup> – March 4<sup>th</sup>)  
SH (pp. 219-73)
- A. Hospital ownership and performance (Sloan et al., 2001)
  - B. Paying the hospital
  - C. Public regulation and competition among hospitals (Kessler and McClellan, 2000)
- VI. Physicians (March 18<sup>th</sup> – 25<sup>th</sup>)  
SH (pp. 171-218)
- A. Is the market for physicians’ services unique and if so, why?
  - B. Paying physicians (McGuire (SK); Golden and Sloan (SK); Eijkenaar, 2012; Scott et al., 2011)
- VII. Health Care Quality and Medical Malpractice (March 27<sup>th</sup> – April 1<sup>st</sup>)  
SH (pp. 275-317)
- A. How to measure quality of care?
  - B. Does provision of information on provider quality enhance social welfare? (Dafny and Dranove, 2008; Dranove et al., 2003; Jin and Leslie, 2009; Lu, 2012)
  - C. Medical malpractice and medical malpractice insurance: what impacts do they have on cost and quality of care? (Currie and MacLeod, 2008; Ho and Liu, 2011; Paik et al., 2012)
- VIII. Pharmaceuticals, Vaccines, and Medical Devices (April 3<sup>rd</sup> – 10<sup>th</sup>)  
SH (pp. 367-415)

- A. Technological change and determinants of investment in R&D  
(Finkelstein, 2004; Jayachandran et al., 2010)
  - B. Special characteristics of vaccines and vaccine market (Jeuland et al., 2009)
- IX. The Future (April 22<sup>nd</sup>)  
SH (pp. 693-735)
- A. Are we spending too much on personal health care services?
  - B. The public economics of entitlements
  - C. Alternative financing and delivery models for the U.S.

\*SH: *Health Economics*; SK: *Incentives and Choice in Health Care*.

## Reading List

- Almond, Douglas; Joseph J Doyle; Amanda E Kowalski and Heidi Williams.** 2010. "Estimating Marginal Returns to Medical Care: Evidence from at-Risk Newborns." *The Quarterly Journal of Economics*, 125(2), 591-634.
- Anderson, Michael; Carlos Dobkin and Tal Gross.** 2012. "The Effect of Health Insurance Coverage on the Use of Medical Services." *American Economic Journal: Economic Policy*, 4(1), 1-27.
- Bitler, Marianne and Lucie Schmidt.** 2012. "Utilization of Infertility Treatments: The Effects of Insurance Mandates." *Demography*, 49(1), 125-49.
- Buchmueller, Thomas C.; John DiNardo and Robert G. Valletta.** 2011. "The Effect of an Employer Health Insurance Mandate on Health Insurance Coverage and the Demand for Labor: Evidence from Hawaii." *American Economic Journal-Economic Policy*, 3(4), 25-51.
- Chandra, Amitabh; Jonathan Gruber and Robin McKnight.** 2010. "Patient Cost-Sharing and Hospitalization Offsets in the Elderly." *American Economic Review*, 100(1), 193-213.
- Currie, Janet; Stefano DellaVigna; Enrico Moretti and Vikram Pathania.** 2010. "The Effect of Fast Food Restaurants on Obesity and Weight Gain." *American Economic Journal-Economic Policy*, 2(3), 32-63.
- Currie, Janet and W. Bentley MacLeod.** 2008. "First Do No Harm? Tort Reform and Birth Outcomes." *The Quarterly Journal of Economics*, 123(2), 795-830.
- Dafny, Leemore and David Dranove.** 2008. "Do Report Cards Tell Consumers Anything They Don't Already Know? The Case of Medicare Hmos." *The RAND Journal of Economics*, 39(3), 790-821.
- Dafny, Leemore S.** 2010. "Are Health Insurance Markets Competitive?" *American Economic Review*, 100(4), 1399-431.
- Dafny, Leemore S.; Mark Duggan and Subramaniam Ramanarayanan.** 2012. "Paying a Premium on Your Premium? Consolidation in the Us Health and Insurance Industry." *American Economic Review*, 102(2), 1161-85.
- Dranove, David; Daniel 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.
- Eijkenaar, Frank.** 2012. "Pay for Performance in Health Care: An International Overview of Initiatives." *Medical Care Research and Review*, 69(3), 251-76.
- Engelhardt, Gary V. and Jonathan Gruber.** 2011. "Medicare Part D and the Financial Protection of the Elderly." *American Economic Journal-Economic Policy*, 3(4), 77-102.
- Ericson, Keith Marzilli and Amanda Starc.** 2012. "Heuristics and Heterogeneity in Health Insurance Exchanges: Evidence from the Massachusetts Connector." *American Economic Review*, 102(3), 493-97.
- Fertig, Angela R. and David A. Reingold.** 2007. "Public Housing, Health, and Health Behaviors: Is There a Connection?" *Journal of Policy Analysis and Management*, 26(4), 831-59.
- Finkelstein, Amy.** 2007. "The Aggregate Effects of Health Insurance: Evidence from the Introduction of Medicare." *Quarterly Journal of Economics*, 122(1), 1-37.

- \_\_\_\_\_. 2004. "Static and Dynamic Effects of Health Policy: Evidence from the Vaccine Industry." *Quarterly Journal of Economics*, 119(2), 527-64.
- Finkelstein, Amy and Kathleen McGarry.** 2006. "Multiple Dimensions of Private Information: Evidence from the Long-Term Care Insurance Market." *American Economic Review*, 96(4), 938-58.
- Finkelstein, Amy; Sarah Taubman; Bill Wright; Mira Bernstein; Jonathan Gruber; Joseph P Newhouse; Heidi Allen and Katherine Baicker.** 2012. "The Oregon Health Insurance Experiment: Evidence from the First Year." *The Quarterly Journal of Economics*, 127(3), 1057-106.
- Graves, John A. and Jonathan Gruber.** 2012. "How Did Health Care Reform in Massachusetts Impact Insurance Premiums?" *American Economic Review*, 102(3), 508-13.
- Hackmann, Martin B.; Jonathan T. Kolstad and Amanda E. Kowalski.** 2012. "Health Reform, Health Insurance, and Selection: Estimating Selection into Health Insurance Using the Massachusetts Health Reform." *American Economic Review*, 102(3), 498-501.
- Ho, Benjamin and Elaine Liu.** 2011. "Does Sorry Work? The Impact of Apology Laws on Medical Malpractice." *Journal of Risk and Uncertainty*, 43(2), 141-67.
- Jayachandran, Seema; Adriana Lleras-Muney and Kimberly V. Smith.** 2010. "Modern Medicine and the Twentieth Century Decline in Mortality: Evidence on the Impact of Sulfa Drugs." *American Economic Journal-Applied Economics*, 2(2), 118-46.
- Jeuland, Marc; Marcelino Lucas; John Clemens and Dale Whittington.** 2009. "A Cost-Benefit Analysis of Cholera Vaccination Programs in Beira, Mozambique." *The World Bank Economic Review*, 23(2), 235-67.
- Jin, Ginger Zhe and Phillip Leslie.** 2009. "Reputational Incentives for Restaurant Hygiene." *American Economic Journal-Microeconomics*, 1(1), 237-67.
- Kessler, Daniel P and Mark B McClellan.** 2000. "Is Hospital Competition Socially Wasteful?" *The Quarterly Journal of Economics*, 115(2), 577-615.
- Kim, Jane J. and Sue J. Goldie.** 2009. "Cost Effectiveness Analysis of Including Boys in a Human Papillomavirus Vaccination Programme in the United States." *British Medical Journal*, 339.
- \_\_\_\_\_. 2008. "Health and Economic Implications of Hpv Vaccination in the United States." *New England Journal of Medicine*, 359(8), 821-32.
- Kolstad, Jonathan T and Amanda E Kowalski.** 2012. "The Impact of Health Care Reform on Hospital and Preventive Care: Evidence from Massachusetts." *Journal of Public Economics*, 96(11-12), 909-29.
- Kowalski, Amanda E; William J Congdon and Mark H Showalter.** 2008. "State Health Insurance Regulations and the Price of High-Deductible Policies." *Health Care*, 11(2), 8.
- Lawler, Tyler; Frank Lawler; Jack Gibson and Rachael Murray.** 2012. "Does the African-American-White Mortality Gap Persist after Playing Professional Basketball? A 59-Year Historical Cohort Study." *Annals of Epidemiology*, 22(6), 406-12.
- Long, Sharon K.; Karen Stockley and Shanna Shulman.** 2011. "Have Gender Gaps in Insurance Coverage and Access to Care Narrowed under Health Reform? Findings from Massachusetts." *American Economic Review*, 101(3), 640-44.

**Lu, Susan Feng.** 2012. "Multitasking, Information Disclosure, and Product Quality: Evidence from Nursing Homes." *Journal of Economics & Management Strategy*, 21(3), 673-705.

**Paik, Myungho; Bernard S. Black; David A. Hyman and Charles Silver.** 2012. "Will Tort Reform Bend the Cost Curve? Evidence from Texas." *Journal of Empirical Legal Studies*, 9(2), 173-216.

**Scott, Anthony; Peter Sivey; Driss Ait Ouakrim; Lisa Willenberg; Lucio Naccarella; John Furler and Doris Young.** 2011. "The Effect of Financial Incentives on the Quality of Health Care Provided by Primary Care Physicians." *Cochrane Database of Systematic Reviews*, 9(1), 1-59.

**Sheets, Nathan C.; Gregg H. Goldin; Anne-Marie Meyer; Yang Wu; YunKyung Chang; TII Stürmer; Jordan A. Holmes; Bryce B. Reeve; Paul A. Godley; William R. Carpenter, et al.** 2012. "Intensity-Modulated Radiation Therapy, Proton Therapy, or Conformal Radiation Therapy and Morbidity and Disease Control in Localized Prostate Cancer." *JAMA: The Journal of the American Medical Association*, 307(15), 1611-20.

**Sloan, F. A.; W. K. Viscusi; H. W. Chesson; C. J. Conover and K. Whetten-Goldstein.** 1998. "Alternative Approaches to Valuing Intangible Health Losses: The Evidence for Multiple Sclerosis." *Journal of Health Economics*, 17(4), 475-97.

**Sloan, Frank A.; Gabriel A. Picone; Donald H. Taylor Jr and Shin-Yi Chou.** 2001. "Hospital Ownership and Cost and Quality of Care: Is There a Dime's Worth of Difference?" *Journal of health economics*, 20(1), 1-21.

**Thompson, Mark. A; Timothy R. Huerta and Eric W. Ford.** 2012. "Mandatory Insurance Coverage and Hospital Productivity in Massachusetts: Bending the Curve?" *Health Care Management Review*, 37(4), 294-300.

**Trivedi, Amal N.; William Rakowski and John Z. Ayanian.** 2008. "Effect of Cost Sharing on Screening Mammography in Medicare Health Plans." *New England Journal of Medicine*, 358(4), 375-83.