ECO 725-001: HEALTH ECONOMICS

Syllabus and Reading List, Spring 2015 University of Kentucky MW, 2:00-3:15 PM, Whitehall Classroom Bldg., Room 347

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Course Goals: This course examines the organization, financing, and management of the U.S. health care system and programs, and emphasizes contemporary health policy concerns. By the end of the semester, students should have the institutional knowledge and analytic tools needed to contribute to current public policy debates about health and medical care.

Specifically,

- Be familiar with basic facts about the U.S. health care system
- Be familiar with the major economic issues in health care policy
- Have experience using economic policy analysis to evaluate public policy issues in health care

In addition, one of the main goals that I have an instructor is to encourage students to explore dissertations that involve the health care system. My philosophy with graduate teaching is that the main goal is to move you toward writing a dissertation.

Readings: Some articles come from the Handbook of Health Economics (HHE), as well as the AER, QJE, JPE, and J. Health Economics. In addition, several health-related journals (Health Affairs, Health Services Research, and Inquiry) are also relevant.

Cancelled classes: It is possible that, due to other obligations, several MW class sessions may need to be cancelled. If so, I plan on having a make-up lecture at a time that works for all students.

Grading: In order to encourage students to conduct original research in health economics and move along on their dissertations, the grading will consist of the following:

In-class presentation (20%) – The field of health economics is vast and the goal of the in-class presentation is to teach the entire class about an unexplored aspect of health economics. The presentations will be around 20 minutes each (with 5 minutes for questions), and probably take the final three class sessions (*April 22, 27 and 29, 2015*). You must have the topic approved by me. The topics should focus on timely issues in health economics, such as the Massachusetts health reform, the Affordable Care Act's "young adult" provisions or establishment of health insurance marketplaces, the Oregon Health Insurance Experiment, Medicare Part D reforms, or Average Wholesale Pricing issues in pharmaceuticals. Presentation proposals will be due by *April*

6, 2015.

- 2. Short Paper #1 (40%) All students will use publicly available data of their choosing (i.e., BRFSS, NHIS, NIS, CPS, ACS, SIPP, PSID, NLSY, GSS, NSAF, HRS, AHEAD, Vital Statistics, Census PUMS, Google Trends, etc.) to ask and answer a research question related to health economics. Students will provide data, programs, log files and write-up in electronic form. All programming must be done in Stata and write-up must be in Word. Although we will expand on this later, the write-up must not exceed 2000 words (approximately 12 manuscript pages), including diagrams, figures, tables and references. The word count will be strictly enforced, and the overall goal is to have a paper that exactly conforms to the guidelines from *Economics Letters*. See http://www.elsevier.com/journals/economics-letters/0165-1765/guide-for-authors. Your proposal for Paper #1 will be due by *February 4, 2015*. I will give you feedback by Feburary 11, 2015. Paper #1 (and programs, log files, data) will be due on *March 23, 2015*, and I will give you a grade by March 30, 2015.
- Short Paper #2 (40%) All the students will use a health care data set called "HCUP" (Health Cost and Utilization Project, see http://www.hcup-us.ahrq.gov/) which is a nationwide inpatient sample. The Nationwide Inpatient Sample ("NIS") contains data from approximately 7 million hospital stays for 995 hospitals in 35 states. You will pose a focused, health-related question with this data. In order to do this project, you must have access to the HCUP data. I have obtained the 1988-2010 data, which I am allowed to share with you, if you are my research team. I can share this data with research team members who complete the "HCUP Data Use Agreement Training" - see <u>http://www.hcup-us.ahrq.gov/tech_assist/dua.jsp</u>. The training emphasizes the importance of data protection, shows you how to reduce the risk of inadvertent violations, and describes your individual responsibility when using HCUP data. After completing the training course, you will receive an HCUP DUA Training Course certification code. Please save this code, print your certificate, and forward it to me. You are strongly encouraged to examine the "HCUP Statistical Briefs" at http://www.hcup-us.ahrq.gov/reports/statbriefs/statbriefs.jsp to get an understanding on the kinds of topics (and medical coding conventions) that are used in the HCUP. Students will provide data, programs, log files and write-up in electronic form. All programming must be done in Stata and write-up must be in Word. Although we will expand on this later, the write-up must not exceed 2000 words (approximately 12 manuscript pages), including diagrams, figures, tables and references. The word count will be strictly enforced, and the overall goal is to have a paper that exactly conforms to the guidelines from Economics Letters. See

http://www.elsevier.com/journals/economics-letters/0165-1765/guide-for-authors . The "research team" questionnaire is due by *January 16, 2015.* Your proposal for Paper #2 will be due by *March 9, 2015*. I will give you feedback by March 23, 2015 (after Spring Break). Paper #2 (and programs, log files, data) will be due on *April 29, 2015*, and I will give you feedback by the end of the grading period.

Class Timeline

Note: Readings will be made available to students in electronic form when possible.

WEEK 1: Wed. Jan. 14 Lecture - Overview of syllabus and papers and goals of course. Lay out expectations with respect to turning in papers (i.e. Word) and statistical programs (i.e. Stata, log files, do files). Objectives of having two 2000-word papers and with no shirking or procrastination; no midterm/final. HCUP research team training.

WEEKS 2/3: Wed/Mon/WED. Jan 21/26/28 - Yelowitz video on online data sources. Objective: be fast and correct with data sources, and in very short order, figure out whether there is sufficient potential with a dataset to move forward of a topic. Gentzkow & Shapiro handout on documenting data, Edelman (JEP) on internet data, Schwabish (JEP) on data presentation. Examples of data sources: (a) Publicly available, pros/cons, (b) Data scraping (i.e. Diamonds), (c) Non-public, expensive data (i.e., Nielsen data, College of Pharmacy), (d) "Free" data with severe hoops (i.e. Census RDC, IRB approval, process of getting findings approved), (e) "Free" data with "buy-in" -- I.e. data from employer. Difference-in-differences handout, Gruber Chapter 3, Standard error corrections – Bertrand, Duflo, Mullainathan (QJE), Cameron Gelbach Miller (JBES, "cgmreg").

• PAPER 1 PROPOSAL GUIDANCE: Must pose empirical question and answer it with public data. No pure replications and extensions, unless there's an obvious empirical flaw and improvement.

WEEK 4: Mon/Wed., Feb. 2/4: Overview of health care system (Gruber, Ch. 15, 16) and health and economic conditions (Ruhm QJE; Miller, et al. AEA POP).

• PAPER 1 PROPOSAL DUE; feedback by FEB. 11

WEEK 5: Mon/Wed., Feb. 9/11: RAND Health insurance experiment (Manning, et al., AER, Aron-Dine et al. JEP)

WEEK 6: Mon/Wed., Feb. 16/18: Instrumental variables, weak instruments, credible instruments - McClellan et al. (JAMA), Angrist & Pischke, (JEP).

WEEK 7: Mon/Wed., Feb. 23/25: Medical malpractice, Kessler & McClellan (QJE), Currie & MacCleod (QJE).

WEEK 8: Mon./Wed., Mar. 2/4: Medicaid managed care - Marton, Yelowitz, Talbert (JHE); Marton & Yelowitz (SEJ). Show referee reports/responses.

• PAPER 2 HCUP PROPOSAL GUIDANCE. Use HCUP statistical briefs, find economics papers using HCUP (on NBER, SSRN, Google Scholar)

WEEK 9: Mon/Wed., Mar 9/11: Hospital behavior – Duggan (QJE); Ho and Hamilton (RAND).

• PAPER 2 HCUP PROPOSAL DUE; feedback by MAR 23.

WEEK 10: SPRING BREAK

WEEK 11: Mon/Wed., Mar. 23/25: The Medicare Program (Finkelstein, QJE; Card et al. AER, Newhouse, JEP)

• MARCH 23 - PAPER 1 DUE; feedback/grade by MARCH 30.

WEEK 12: Mon/Wed., Mar 30/Apr. 1: The Medicaid Program (Cutler & Gruber QJE; Gruber & Yelowitz JPE, Yelowitz QJE)

WEEK 13: Mon/Wed., Apr. 4/6: Expanding coverage, Health insurance and labor supply, Behavioral economics and inertia

• WED. APR. 6 - PRESENTATION PROPOSAL DUE.

WEEK 14: Mon/Wed., Apr. 13/15: Behavioral economics, continued.

WEEK 15: Mon., Apr. 20: OPEN TOPIC - birth weight, environmental (class input needed)

WEEK 15/16: Wed/Mon/Wed., Apr. 22/27/29 - Presentations (20 min + 5 for questions, random assignment)

• WED. APR. 29 - PAPER 2 DUE

A. Data Methods, Collection, Documentation, and Presentation in Health Economics

A.1 – Data Sources & Collection, Documentation, Exact Replication and Presentation

* Yelowitz Powerpoint/video on using data – "Data Sources for Economics Students"

* Gentzkow and Shapiro, 2014. "Code and Data for the Social Sciences: A Practitioner's Guide." University of Chicago mimeo.

* Edelman, 2012. "Using Internet Data for Economic Research." Journal of Economic Perspectives, 26(2): 189-206.

* Schwabish, 2014. "An Economist's Guide to Visualizing Data." Journal of Economic Perspectives, 28(1): 209-34.

Varian, 2013. "Tools for Google Data," Mimeo.

Varian, 2014. "Big Data: New Tricks for Econometrics." Journal of Economic Perspectives, 28(2): 3-28.

Mason and Suri, 2012. "Conducting Behavioral Research on Amazon's Mechanical Turk," Behavioral Research Methods, 44(1): 1-23.

A.2 – Empirical Methods

* Yelowitz difference-in-differences handout & examples

* Gruber, Public Finance and Public Policy, "Empirical Tools of Public Finance," 2005, Chapter 3.

* Bertrand, Duflo, and Mullainathan, 2004. "How Much Should We Trust Differences-in-Differences Estimates?" Quarterly Journal of Economics, 119(1): 249-275.

* Cameron, Gelbach, Miller, 2011. "Robust Inference With Multiway Clustering," Journal of Business & Economics Statistics, 29(2): 238-249.

Cameron, Gelbach, Miller, 2008. "Bootstrap-Based Improvements for Inference With Clustered Errors," Review of Economics and Statistics, 90(3): 414-427.

Donald and Lang, 2007. "Inference with Difference-in-Differences and Other Panel Data," Review of Economics and Statistics, 89(2): 221-233.

B. Overview of Health Economics and Health Insurance

* Gruber, Public Finance and Public Policy, "Health Insurance I: Health Economics and Private Health Insurance," 2005, Chapter 15.

* Gruber, Public Finance and Public Policy, "Health Insurance II: Medicare, Medicaid, and Health Care Reform," 2005, Chapter 16.

Garber and Skinner, 2008. "Is American Health Care Uniquely Inefficient?" Journal of Economic Perspectives, 22(4): 27-50.

C. Health Status

* Ruhm, 2000. "Are Recessions Good For Your Health?" Quarterly Journal of Economics, 115(2): 617-650.

Miller, Page, Huff Stevens and Filipski, 2009. "Why Are Recessions Good for Your Health?" American Economic Review, 99(2), May 2009, p. 122-27.

D. The Demand for Medical Care

* Manning, et al., "Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment," American Economic Review, 77(3), June 1987, 251-277.

* Aron-Dine, Einav and Finkelstein, 2013. "The RAND Health Insurance Experiment, Three Decades Later." Journal of Economic Perspectives, 27(1): 197-222.

* McClellan, McNeil, and Newhouse, 1994. "Does More Intensive Treatment of Acute Myocardial Infarction in the Elderly Reduce Mortality?" Journal of the American Medical Association, 272(11): 859-866.

* Angrist and Pischke, 2010. "The Credibility Revolution in Empirical Economics: How Better Research Design Is Taking the Con out of Econometrics," Journal of Economic Perspectives, 24(2): 3-30.

Feldstein, 1973. "The Welfare Loss of Excess Health Insurance," Journal of Political Economy, 81(2): 251-280.

Grossman, 2000. "The Human Capital Model," in Handbook of Health Economics, Volume 1B, Amsterdam, North Holland.

Grossman, 1972. "On the Concept of Health Capital and the Demand for Health," Journal of Political Economy, 80(2): 223-255.

E. Malpractice Law

* Kessler and McClellan, 1996. "Do Doctors Practice Defensive Medicine?, Quarterly Journal of Economics.

* Currie and MacLeod, 2008. "First Do No Harm? Tort Reform and Birth Outcomes", Quarterly Journal of Economics, 123(2): 795–830.

F. Market Innovation - Supply Side Policies

Glied, "Managed Care," in Handbook of Health Economics, Volume 1A, Amsterdam, North Holland: 2000, Chapter 13.

L. Baker, "The Effect of HMOs on Fee-For-Service Health Care Expenditures – Evidence from Medicare" Journal of Health Economics, 16(4), Aug 1997.

Cutler, "The Incidence of Adverse Medical Outcomes Under Prospective Payment," Econometrica, 63(1), January 1995, 29-50.

* Marton, Yelowitz, and Talbert, 2014. "A Tale of Two Cities? The Heterogeneous Impact of Medicaid Managed Care," Journal of Health Economics.

* Marton, J., and A. Yelowitz. 2014. "Health Insurance Generosity and Conditional Coverage: Evidence from Medicaid Managed Care in Kentucky." Southern Economic Journal, forthcoming.

Aizer, Currie, and Moretti, E., 2007. "Does Managed Care Hurt Health? Evidence from Medicaid Mothers," Rev. Econ. Stat. 89 (3): 385–399.

Barham, Gertler, and Raube, 2013. "Managed Care Mandates and Birth Outcomes: Who Benefits and Does the Model Matter," Mimeo, U. Colorado.

Duggan, and Hayford. 2013. "Has the Shift to Managed Care Reduced Medicaid Expenditures? Evidence from State and Local-Level Mandates." Journal of Policy Analysis and Management 32 (3): 505-535.

Harman, Hall, Lemak, and Duncan. 2014. "Do Provider Service Networks Result in Lower Expenditures Compared with HMOs or Primary Care Case Management in Florida's Medicaid Program?" Health Services Research 49 (3): 858-877.

Harman, Lemak, Al-Amin, Hall, and Duncan. 2011. "Changes in Per Member Per Month Expenditures after Implementation of Florida's Medicaid Reform Demonstration." Health Services Research 46 (3): 787-804.

Hu, Chou, and Deily, 2014. "Pregnancy Outcomes for Medicaid Patients in Mandatory Managed Care: The Pennsylvania HealthChoices Program." Working Paper.

G. Organizational Form and Performance

* Duggan, 2000. "Hospital Ownership and Public Medical Spending," Quarterly Journal of Economics.

* Ho and Hamilton, 2000. "Hospital Mergers and Acquistions: Does Market Consolidation Harm Patients?" Journal of Health Economics, 19: 767-791.

H. Public Health Insurance and Expanding Coverage

* Finkelstein, 2007. "The Aggregate Effects of Health Insurance: Evidence from the Introduction of Medicare," Quarterly Journal of Economics, 122(1), February, 1–37.

* Newhouse, 1992. "Medical Care Costs: How Much Welfare Loss?", Journal of Economic Perspectives, 6(3): 3-21.

* Card, Dobkin and Maestas, 2008. "The Impact of Nearly Universal Insurance Coverage on Health Care Utilization: Evidence from Medicare," American Economic Review, 98(5): 2242-58.

Currie and Gruber, 1996. "Saving Babies: The Efficacy and Cost of Recent Expansions of Medicaid Eligibility for Pregnant Women," Journal of Political Economy, 1263-1296.

Currie and Gruber, 1996. "Health Insurance Eligibility, Utilization of Medical Care, and Child Health," Quarterly Journal of Economics, 111(2): 431-466.

* Cutler and Gruber, 1996. "Does Public Insurance Crowd Out Private Insurance?", Quarterly Journal of Economics, 111(2): 391-430.

* Gruber and Yelowitz, 1999. "Public Health Insurance and Private Savings," Journal of Political Economy, 107(6): 1249-1274.

* Yelowitz, 1995. "The Medicaid Notch, Labor Supply, and Welfare Participation: Evidence From

Eligibility Expansions," Quarterly Journal of Economics, 110(4): 909-939.

Finkelstein, Taubman, Wright, Bernstein, Gruber, Newhouse, Allen, Baicker, and Oregon Health Study Group, 2012. "The Oregon Health Insurance Experiment: Evidence from the First Year," Quarterly Journal of Economics, 127(3): 1057-1106.

Gruber, 2008. "Incremental Universalism for the United States: The States Move First?" Journal of Economic Perspectives, 22(4): 51-68.

Yelowitz and Cannon, 2010. "The Massachusetts Health Plan: Much Pain, Little Gain," Cato Policy Analysis No. 657.

Hackmann, Kolstad and Kowalski, 2012. "Health Reform, Health Insurance and Selection: Estimating Selection into Health Insurance Using the Massachusetts Health Reform," American Economic Review: Papers and Proceedings, 102(3): 498-501.

Kolstad and Kowalski, 2012. "The Impact of Health Care Reform on Hospital and Preventive Care: Evidence from Massachusetts," Journal of Public Economics, 96(11-12): 909-929.

Courtemanche and Zapata, 2014. "Does Universal Coverage Improve Health? The Massachusetts Experience," Journal of Policy Management and Analysis, 33(1): 36-69.

Antwi, Moriya, and Simon, 2013. "Effects of Federal Policy to Insure Young Adults: Evidence from the 2010 Affordable Care Act Dependent Coverage Mandate," American Economic Journal: Economic Policy, 5(4): 1-28.

Slusky, D., 2014. "Measuring the ACA's Parental Mandate Using Difference-in-Differences," Mimeo, Princeton University.

Somers, Musco, Finegold, Gunja, Burke, McDowell, 2014. "Health Reform and Changes in Health Insurance Coverage in 2014," The New England Journal of Medicine.

Mulcahy, Harris, Finegold, Kellerman, Edelman, Sommers, 2013. "Insurance Coverage of Emergency Care for Young Adults under Health Reform," The New England Journal of Medicine.

Depew, B., 2015. "The effect of state dependent mandate laws on the labor supply decisions of young adults," Journal of Health Economics, 39: 123-134.

Cardella, E., Depew, B., 2014. "The effect of health insurance coverage on the reported health of young adults," Economics Letters, 124: 406-410.

Antwi, Moriya, Simon, 2015. "Access to health insurance and the use of inpatient medical care:

Evidence from the Affordable Care Act young adult mandate," Journal of Health Economics 39: 171-187.

Barbaresco, Courtemanche, Qi, Forthcoming 2015. "Impacts of the Affordable Care Act Dependent Coverage Provision on Health-Related Outcomes of Young Adults," Journal of Health Economics.

Wagner, K., Forthcoming 2015. "Medicaid Expansions for the Working Age Disabled: Revisiting the Crowd-out of Private Health Insurance," Journal of Health Economics.

Cantor, Monheit, DeLia, and Lloyd, 2012. "Early Impact of the Affordable Care Act on Health Insurance Coverage of Young Adults," Health Services Research 47(5): 1773-1790.

Depew, B. and J. Bailey, 2014. "Did the Affordable Care Act's Dependent Coverage Mandate Increase Premiums," Working Paper, LSU.

O'Hara, B. and M. Brault, 2013. "The Disparate Impact of the ACA-Dependent Expansion across Population Subgroups," Health Services Research, 48(5): 1581-1592.

Dillender, M., 2014. "Do more health insurance options lead to higher wages? Evidence from states extending dependent coverage," Journal of Health Economics, 36: 84-97.

Bungdorf, J.R., 2014. "Young Adult Dependent Coverage: Were the State Reforms Effective?" Health Services Research, 49(6): 2104-2128.

Yaskewich, D., 2014. "Dependent Health Insurance Laws and College Enrollment: Is There Evidence of College Lock?" J. Fam. Econ. Iss..

Amuedo-Dorantes, C. and M. Yaya, 2013. "The Impact of the ACA's Extension of Coverage to Dependents on Young Adults' Access to Care," Working Paper.

Shane, D. and P. Ayyagari, 2015. "Spillover Effects of the Affordable Care Act? Exploring the Impact on Young Adult Dental Insurance Coverage," Health Services Research.

Scott, J.W., Sommers, B.D., et al., 2015. "Dependent Coverage Provision Led To Uneven Insurance gains and Unchanged mortality Rates In Young Adult Trauma Patients," Health Affairs, 34(1): 125-133.

Busch, Golberstein and Meara, 2014. "ACA Dependent Coverage Provision Reduced High Out-Of-Pocket Health Care Spending For Young Adults," Health Affairs, 33(8): 1361-1366.

Hulbert, J.M., 2012. "The Impact of Dependent Coverage Legislation on the Job Choices of

Young Adults," Mimeo, University of Virginia.

Carlson, D.L., Kail, B.L., Dreher, M. and Lynch, J.L. 2014. "The Affordable Care Act, Dependent Health Insurance Coverage, and Young Adults' Health," Sociological Inquiry, 84(2): 191-209.

I. Adverse Selection and Moral Hazard

Cutler and Reber, 1998. "Paying for Health Insurance: The Tradeoff Between Competition and Adverse Selection," Quarterly Journal of Economics, 433-466.

Rothschild and Stiglitz, 1976. "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information," Quarterly Journal of Economics, 90(4): 629-650.

Buchmueller and DiNardo, 2002. "Did Community Rating Induce an Adverse Selection Death Spiral? Evidence from New York, Pennsylvania, and Connecticut," American Economic Review, 92(1): 280-294.

J. Health Insurance and the Labor Market & Income

Currie and Madrian, "Health, Health Insurance and the Labor Market" in Handbook of Labor Economics, O. Ashenfelter and D. Card (eds.), Chapter 50.

Currie and Yelowitz, "Health Insurance and Less Skilled Workers," in Finding Jobs: Work and Welfare Reform, David Card and Rebecca Blank (eds.), New York: Russell Sage, 2000.

Gruber, "Health Insurance and the Labor Market," in Handbook of Health Economics, Volume 1A, Amsterdam, North Holland: 2000, Chapter 12.

* Madrian, 1994. "Employment-Based Health Insurance and Job Mobility: Is There Evidence of Job-Lock?" Quarterly Journal of Economics, 109(1): 27-54.

Gruber and Poterba, 1994. "Tax Incentives and the Decision to Purchase Health Insurance: Evidence From the Self Employed," Quarterly Journal of Economics, 109(3): 701-733.

* Summers, 1989. "Some Simple Economics of Mandated Benefits," The American Economic Review, Papers and Proceedings of the Hundred and First Annual Meeting of the American Economic Association., 79(2), May, 177-183.

Colla, Dow and Dube, 2011. "How Do Employers React to a Pay-or-Play Mandate? Early Evidence from San Francisco," Forum for Health Economics & Policy, 14(2).

Colla, Dow and Dube, "The Labor Market Impact of Employer Health Benefit Mandates: Evidence from San Francisco's Health Care Security Ordinance," NBER Working Paper 17198.

* Kolstad and Kowalski, "Mandate-Based Health Reform and the Labor Market: Evidence from the Massachusetts Reform," NBER Working Paper 17933.