

ECON 880: Selected Topics in Economic Theory: Health Economics

Professor David Slusky (david.slusky@ku.edu)

Office hours: T 9-11, R 2:20-4:20 in Snow 415C

Department of Economics, University of Kansas

Student Goals

- Master the mathematical and graphical representations used in health economics
- Build a broad and deep fluency with the classic and current health economics literatures
- Develop a research proposal that can lead to a dissertation chapter

Prerequisite: Econ 870: Applied Microeconomics or permission of instructor

Optional Textbooks:

Health Economics, Bhattacharya, Hyde, and Tu. (BHT). 2014.

Health Economics. Sloan and Hsieh (SH). 2nd Edition. 2016.

Health Econometrics Using Stata. Deb, Norton, and Manning. 2017.

Plan

Classes in **bold** have assigned readings. Classes in underline have other assignments due. Some classes have both.

1 Introduction (8/27)

2 Overview and Fundamental Theory (8/29)

3 Measurement of Health (Height, Infant Mortality, Life Expectancy) (9/3)

4 Health Insurance (Optimal) (9/5)

5 Go over analytical exercise (9/10)

6 Selection (9/12)

7 Medicare & Medicaid (9/17)

8 Geographic Variation (9/19)

9 Health Insurance (Applied) (9/24)

10 Household Finances (9/26)

11 The Affordable Care Act (10/1 - need to reschedule)

12 Productivity of Spending & International Comparisons (10/3)

13 Health over the business cycle (10/8)

14 Hospitals & Competition (10/10)

Fall Break (10/15)

15 Physicians & Nurses (10/17)

16 Health Behaviors (Alcohol & Smoking) (10/22 – guest lecturer)

17 Health Behaviors (Obesity & Wellness) (10/27)

18 HIV/AIDS (10/29)

19 Pollution (10/31)

20 Go over theoretical problem set (11/5)

21 Malpractice (11/7 - need to reschedule)

22 Reproductive & Child Health (11/9)

23 Pharma (11/14)

24 Opioids (11/19)

25 Go over referee assignment (11/21)

26 Machine Learning (11/26)

Thanksgiving (11/28)

27: Practice final exam (12/3)

28-30: Research proposal presentations (12/5, 12/10, 12/12)

Grading: The course is graded on a standard A-F +/- scale (e.g., A=93%+), though I reserve the right to curve the grade distribution in your favor (e.g., A=91%+). For credit/no credit, any grade less than a C is considered as no credit.

Grade percentages:

Attendance:	20%
Homework:	30%
Presentation:	20%
Final exam:	30%

Attendance: Class attendance is required. If you cannot attend a class (for any reason), you can receive credit by emailing a 1000 word summary (in your own words) of the papers covered in that class by 24 hours after the class time of the class.

Assignments (in addition to readings), due at class:

Class 5: Analytical replication exercise: Please send me a single Stata .do file and as many dictionary (.dct) files as you'd like (but no separate data (.dta) files) that downloads and processes the data, defines the variables, and then reproduces the coefficient 0.0135* (0.0075) from Table 3 in Evans and Garthwaite (AEJ: Economic Policy 2014). You may use any resource availability on the internet, including the code on the AEA website provided by the authors. Please get as close as you can to the coefficient and use as few lines of code as possible.

Class 9: Written list of five original research questions that would like to study.

Class 13: Annotated bibliography for your chosen question. Must contain at least 10 papers, which can include those from the reading list. For each paper, please write a short paragraph (~100 words) about why the paper is relevant to your topic and research plan.

Class 17: Written draft of research proposal, in the style of an academic paper. At least 3000 words.

Class 20: Theoretical problem set, building especially on classes 2 (fundamental theory), 3 (measurement), 4 (optimal health insurance), 6 (selection), 15 (physicians & nurses), and 16 (health behaviors)

Class 25: Referee Report. I will provide you with a manuscript draft. Please write an 800 word referee report, which includes a 100 word original summary of the paper, and then at least 5

major and 5 minor suggestions for the paper, in each in descending order of importance. I will provide examples. I will go through in class my process for writing these. Here is another perspective: <https://blog.academicsequitur.com/2019/06/30/how-to-write-a-good-referee-report/>

Classes 28-30 A presentation, with slides, of your research proposal. Time limit TBD, based on class size. (E.g., with 12 students, each one gets 14 minutes to present and 3 minutes for questions/suggestions.)

Final Exam: Exam will be in-person during the prescheduled time in finals week (Friday, December 20, 1:30-4 PM), closed book, no electronic devices (including calculators). If you believe I have made an error in grading your exam send me a detailed email within 48 hours of me returning the exam and then come to my office hours to discuss. I will re-grade your entire exam -- your score may increase or decrease. It will consist of mathematical questions and literature review questions—given an abstract, 1) cite 5 papers from the class that are relevant 2) put this one in context, 3) make 3 suggestions for next steps. We will practice this in class 27.

Make-up exam: Make-up exam for religious holidays will be provided with documentation from a religious official. Please speak to me by class 9. Last minute make-up exam will only be provided in extreme situations, such as incapacitating illness or a death in the family. Please come speak to me and bring official documentation.

Disability Requirements: If you have a disability and require accommodations, please contact the Disabilities Resources Office at the University of Kansas (<http://disability.ku.edu>)

Academic Integrity: The rules of academic integrity will be strictly enforced (please refer to the University of Kansas's guidelines). Breaches will not be tolerated under any circumstances. Please see <https://studentaffairs.ku.edu/academic-integrity> for more information.

Concealed carry: Individuals who choose to carry concealed handguns are solely responsible to do so in a safe and secure manner in strict conformity with [state and federal laws](#) and [KU weapons policy](#). Safety measures outlined in the KU weapons policy specify that a concealed handgun:

- Must be under the constant control of the carrier.
- Must be out of view, concealed either on the body of the carrier, or backpack, purse, or bag that remains under the carrier's custody and control.
- Must be in a holster that covers the trigger area and secures any external hammer in an un-cocked position
- Must have the safety on, and have no round in the chamber

Children in the classroom:

- All babies (bottle-feeding, nursing, ...) are welcome in class as often as is necessary;
- For older children, I understand that unforeseen disruptions in childcare often place parents in the positions of having to miss class to stay home. You are welcome to bring

your child to class in order to cover gaps in care. This is not meant to be a long-term solution.

- I ask that all students work with me to create a welcoming environment that is respectful of all forms of diversity, including diversity in parenting status;
- In all cases when your children come to class, please sit in the front, close to the door. This will allow you to step outside in case your child needs special attention.
- I maintain the same standards and expectations for all students. However, please contact me if you are having difficulty with school-parenting balance.

Disclaimer: I reserve the right to modify this syllabus in the event of an unforeseen situation.

Papers to read BEFORE each class.

Note that papers in *italics* are optional and will not be cover them directly in class.

Relevant sections of optional textbooks which can be read for background material are below each class title.

Class 2. Overview and Fundamental Theory

BHT Chapters 2, 3. 13. 14

SH Chapter 2

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

Fuchs, Victor R. "Time Preference and Health: An Exploratory Study." *Economic Aspects of Health*, edited by Victor R. Fuchs, pp. 93-120. Chicago: University of Chicago Press, 1982.

Hall, Robert E. and Charles I. Jones, "The Value of Life and the Rise in Health Spending," *Quarterly Journal of Economics*, 2007, 122 (1), 39-72.

Chandra, Amitabh and Jonathan Skinner, "Technology Growth and Expenditure Growth in Health Care," *Journal of Economic Literature*, 2012, 50(3), 645-80.

Broken Down by Work and Sex: How Our Health Declines Anne Case, Angus S. Deaton
Chapter in *NBER book Analyses in the Economics of Aging (2005)*, David A. Wise, editor (p. 185 - 212) 2005 University of Chicago Press

Oxford Economic Papers 59 (2007), 379–410 379 *Health as human capital: synthesis and extensions* By Gary S. Becker

Class 3. Measurement of Health (Height, Infant Mortality, Life Expectancy, BMI)

BHT Chapter 19

SH Chapter 16

Cutler, David, Angus Deaton and Adriana Lleras-Muney, 2006, "The determinants of mortality," *Journal of Economic Perspectives*, 20(3), 97–120.

Bozzoli, Carlos, Angus Deaton, and Climent Quintana-Domeque, 2009, "Adult height and childhood disease," *Demography*, 46(4), 647–69.

The trend of mean BMI values of US adults, birth cohorts 1882–1986 indicates that the obesity epidemic began earlier than hitherto thought John Komlos Marek Brabec *American Journal of Human Biology* Volume 22, Issue 5 September/October 2010 Pages 631-638 (also NBER WP #15862)

Case, Anne and Christina Paxson. 2008. "Stature and Status: Height, Ability and Labor Market Outcomes." *Journal of Political Economy* 116(3): 499-532.

Becker, Gary, Thomas Philipson, and Ricardo Soares, 2005, "The quantity and quality of life and the evolution of world inequality," American Economic Review, 95(1), 277–91.

Johnston, David, Carol Propper and Michael Shields. "Comparing Subjective and Objective Measures of Health: Evidence from Hypertension for the Income-Health Gradient," Journal of Health Economics, May 2009, 540-552.

Jayachandran, Seema and Adriana Lleras-Muney. 2009. "Life Expectancy and Human Capital Investments: Evidence from Maternal Mortality Declines." Quarterly Journal of Economics (Feb): 349-397.

Weil, David N., 2007, "Accounting for the effects of health on economic growth," Quarterly Journal of Economics, 122(3), 1265–1306

Gørgens, T, X Meng, and R Vaithianathan. (2012). Stunting and selection effects of famine: A case study of the Great Chinese Famine. Journal of Development Economics, 97(1): 99-111.

Demography February 2005, Volume 42, Issue 1, pp 1–22 The role of public health improvements in health advances: The twentieth-century United States David Cutler Grant Miller

Public Health Efforts and the Decline in Urban Mortality D. Mark Anderson, Kerwin Kofi Charles, Daniel I. Rees NBER Working Paper No. 25027 2018

Class 4. Health Insurance (Optimal)

BHT Chapters 7, 11, 15, 16, 17, 18

SH Chapters 3, 10

Arrow, Kenneth, "Uncertainty and the Welfare Economics of Medical Care," *American Economic Review*, 1963, 53(5), 941-973.

Manning, Willard et al., "Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment," *American Economic Review*, 1987, 77(3), 251-177.

Summers, Larry. (1989) "Some Simple Economics of Mandated Benefits," *American Economic Review* 79 (May), 177-83.

Brot-Goldberg, Zarek C., Amitabh Chandra, Benjamin R. Handel, and Jonathan T. Kolstad, "What does a Deductible Do? The Impact of Cost-Sharing on Health Care Prices, Quantities, and Spending Dynamics," *Quarterly Journal of Economics*, 2017, 132(3), 1261–1318.

Are Health Care Services Shoppable? Evidence from the Consumption of Lower-Limb MRI Scans Michael Chernew, Zack Cooper, Eugene Larsen-Hallock, Fiona Scott Morton
NBER Working Paper No. 24869 2018

Gruber, Jonathan. "The Efficiency of a Group-Specific Mandated Benefit: Evidence from Health Insurance Benefits for Maternity," *American Economic Review*, June 1994

Chandra, Amitabh, Jonathan Gruber, and Robin McKnight, "Patient Cost-Sharing and Hospitalization Offsets in the Elderly," *American Economic Review*, 2010, 100(1), 1-24.

The RAND Health Insurance Experiment, Three Decades Later Aviva Aron-Dine
Liran Einav Amy Finkelstein *Journal of Economic Perspectives* Vol. 27, No. 1, Winter 2013 (pp. 197-222)

Cutler, David and Richard Zeckhauser, "The Anatomy of Health Insurance," in Anthony J. Culyer and Joseph P. Newhouse, eds., *Handbook of Health Economics*, Amsterdam: North-Holland, 2000,

How Do Low-Income Enrollees in the Affordable Care Act Exchanges Respond to Cost-Sharing?
Kurt Lavetti Thomas DeLeire Nicolas R. Ziebarth <https://sph.tamhsc.edu/hpm/ahec/deleire-paper.pdf>

Adverse Selection in Health Insurance David M. Cutler, Richard J. Zeckhauser Chapter in
NBER book Frontiers in Health Policy Research, Volume 1 (1998), Alan M. Garber, editor (p. 1 - 32) Published in January 1998 by MIT Press in *NBER Book Series Frontiers in Health Policy Research*

Class 6. Selection
BHT Chapters 8, 9
SH Chapter 4

Akerlof, George A., "The Market for "Lemons": Quality Uncertainty and the Market Mechanism," *Quarterly Journal of Economics*, 1970, 84(3), 488-500. (ch 8)

Rothschild, Michael and Joseph E. Stiglitz, "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information", *Quarterly Journal of Economics*, 1976, 90(4), 629-650. (ch 9)

Cutler, David, and Sarah Reber, "Paying for Health Insurance: The Tradeoff Between Competition and Adverse Selection," *Quarterly Journal of Economics*, 1998, 113(2), 433-466.

Hendren, Nathaniel, "Private Information and Insurance Rejections," *Econometrica*, 2013, 81(5): 1713-1762.

Hanming Fang & Michael P. Keane & Dan Silverman, 2008. "Sources of Advantageous Selection: Evidence from the Medigap Insurance Market," Journal of Political Economy 116(2): 303-350.

Einav, Liran, and Amy Finkelstein, Selection in Insurance Markets: Theory and Empirics in Pictures, Journal of Economics Perspectives, 2011, 25(1), 115-138.

Adverse Selection in ACA Exchange Markets: Evidence from Colorado Matthew Panhans American Economic Journal: Applied Economics 2019, 11(2): 1-36*

Class 7. Medicare & Medicaid SH Chapter 12

Currie, Janet and Jon Gruber. (1996). "Saving Babies: The Efficacy and Cost of Recent Changes in the Medicaid Eligibility of Pregnant Women," *Journal of Political Economy*.

Currie, Janet and Jon Gruber. (1996). "Health Insurance Eligibility, Utilization of Medical Care, and Child Health," *Quarterly Journal of Economics*.

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

Card, David, Carlos Dobkin, Nicole Maestas, "Does Medicare Save Lives?" *Quarterly Journal of Economics*, 2009, 124(2), 597-636.

Finkelstein, Amy, Sarah Taubman, Bill Wright, Mira Bernstein, Jonathan Gruber, Joseph P. Newhouse, Heidi Allen, and Katherine Baicker, "The Oregon Health Insurance Experiment: Evidence from the First Year," *Quarterly Journal of Economics*, 2012, 127(3), 1057-1106.

In the Shadow of a Giant: Medicare's Influence on Private Physician Payments Clemens, Jeffrey; Gottlieb, Joshua D. Journal of Political Economy, February 2017, v. 125, iss. 1, pp. 1-39

David Chan Industry Input in Policymaking: Evidence from Medicare David C. Chan, Jr, Michael J. Dickstein NBER Working Paper No. 24354. 2018

Public Insurance and Mortality: Evidence from Medicaid Implementation Goodman-Bacon, Andrew *Journal of Political Economy*, 2018, v. 126, iss. 1, pp. 216-62

Does Managed Care Widen Infant Health Disparities? Evidence from Texas Medicaid Ilyana Kuziemko Katherine Meckel Maya Rossin-Slater *American Economic Journal: Economic Policy* (Forthcoming)

Impacts of performance pay for hospitals: The Readmissions Reduction Program. Atul Gupta. 2017. https://www.dropbox.com/s/rfwok9en2c5812j/Gupta_HRRP.pdf?dl=0

Christopher Ody, Lucy Msall, Leemore S. Dafny, David C. Grabowski, and David M. Cutler *Decreases In Readmissions Credited To Medicare's Program To Reduce Hospital Readmissions Have Been Overstated.* *Health Affairs* January 2019 38(1): 36-43

Externalities and Taxation of Supplemental Insurance: A Study of Medicare and Medigap† Marika Cabral and Neale Mahoney *American Economic Journal: Applied Economics* 2019, 11(2): 37–73

Health Care Spending and Utilization in Public and Private Medicare By Vilsa Curto, Liran Einav, Amy Finkelstein, Jonathan Levin, and Jay Bhattacharya. *American Economic Journal: Applied Economics* 2019, 11(2): 302–332

Class 8. Geographic Variation

Doyle, Joseph J. 2011. "Returns to Local-Area Health Care Spending: Evidence from Health Shocks to Patients Far from Home." *American Economic Journal: Applied Economics*, 3(3): 221–43.

Sources of Geographic Variation in Health Care: Evidence From Patient Migration Amy Finkelstein Matthew Gentzkow Heidi Williams *Quarterly Journal of Economics*, Volume 131, Issue 4, 1 2016, Pages 1681–1726

The Evolution of Physician Practice Styles: Evidence from Cardiologist Migration David Molitor *American Economic Journal: Economic Policy* Vol. 10, No. 1, 2018

Physician Beliefs and Patient Preferences: A New Look at Regional Variation in Health Care Spending David Cutler Jonathan Skinner Ariel Dora Stern David Wennberg *American Economic Journal: Economic Policy* 2019 11(1): 192-221

Does When You Die Depend on Where You Live? Evidence from Hurricane Katrina Tatyana Deryugina, David Molitor NBER Working Paper No. 24822 2018

A Test of Supply-side Explanations of Geographic Variation in Health Care Use Kevin Callison, Robert Kaestner, Jason Ward NBER Working Paper No. 25037 2018

Place-Based Drivers of Mortality: Evidence from Migration Amy Finkelstein, Matthew Gentzkow, Heidi L. Williams NBER Working Paper No. 25975 2019

Class 9. Health Insurance (Applied)

Kolstad, Jonathan T. & Kowalski, Amanda E., 2012. "The impact of health care reform on hospital and preventive care: Evidence from Massachusetts," *Journal of Public Economics*, Elsevier, vol. 96(11), pages 909-92

Gruber, Jonathan and Robin McKnight. "Controlling Health Care Costs through Limited Network Insurance Plans: Evidence from Massachusetts State Employees," *American Economic Journal: Economic Policy*, 2016, 8(2), 219-250.

Cooper, Zack, Fiona Scott Morton, and Nathan Shekita, "Surprise! Out-of-Network Billing for Emergency Care in the United States," NBER WP, 23623, 2019.

Choose to Lose: Health Plan Choices from a Menu with Dominated Option Saurabh Bhargava George Loewenstein Justin Sydnor *The Quarterly Journal of Economics*, Volume 132, Issue 3, 1 August 2017, Pages 1319–1372,

Ho, Kate, "Insurer-Provider Networks in the Medical Care Market," *American Economic Review*, 2009, 99(1): 393-430.

Choice Inconsistencies among the Elderly: Evidence from Plan Choice in the Medicare Part D Program Jason Abaluck Jonathan Gruber *American Economic Review*. 101, NO. 4, JUNE 2011 (pp. 1180-1210)

Gruber, Jonathan "The Impacts of the Affordable Care Act: How Reasonable Are the Projections?," *National Tax Journal* , 64, September 2011, 893 - 908.

Behavioral Hazard in Health Insurance. Baicker, Katherine; Mullainathan, Sendhil; Schwartzstein, Joshua *Quarterly Journal of Economics*, November 2015, v. 130, iss. 4, pp. 1623-67

Medicare Part D and Portfolio Choice Padmaja Ayyagari Daifeng He *American Economic Review*. 106, NO. 5, MAY 2016 (pp. 339-42)

Journal of Health Economics Volume 50, December 2016, Pages 86-98 *The effect of narrow provider networks on health care use* Alicia Atwood Anthony T. Lo Sasso

Health Affairs. 36, NO. 1: *One In Five Inpatient Emergency Department Cases May Lead To Surprise Bills* Christopher Garmon and Benjamin Chartock 2017 : 177–181

Do Larger Health Insurance Subsidies Benefit Patients or Producers? Evidence from Medicare Advantage Marika Cabral Michael Geruso Neale Mahoney *American Economic Review* (Forthcoming)

The Consequences of Health Care Privatization: Evidence from Medicare Advantage Exits
Mark Duggan Jonathan Gruber Boris Vabson *AMERICAN ECONOMIC JOURNAL:*
ECONOMIC POLICY VOL. 10, NO. 1, FEBRUARY 2018

Class 10. Household Finances
SH Chapter 11

Health Aff 2005 W5-63-W5-73. Illness and injury as contributors to bankruptcy. Himmelstein DU, Warren E, Thorne D, Woolhandler S.

Medical Bankruptcy: Myth Versus Fact *Health Affairs* 25(2) (2006): w74–w83 by David Dranove and Michael L. Millenson

Bankruptcy as Implicit Health Insurance Neale Mahoney *American Economic Review* Vol. 105, No. 2, February 2015 (pp. 710-46)

The Economic Consequences of Hospital Admissions Carlos Dobkin Amy Finkelstein Raymond Kluender Matthew J. Notowidigdo *American Economic Review* Vol. 108, No. 2, February 2018 (Pp. 308-52)

Health and (Other) Asset Holdings Hugonnier, Julien; Pelgrin, Florian; St-Amour, Pascal
Review of Economic Studies, April 2013, v. 80, iss. 2, pp. 663-710

Discounting The Debtors Will Not Make Medical Bankruptcy Disappear, by David U. Himmelstein, Elizabeth Warren, Deborah Thorne, and Steffie Woolhandler, [*Health Affairs* 25(2) (2006): w84-w88

Myth and Measurement — The Case of Medical Bankruptcies, Carlos Dobkin, Ph.D., Amy Finkelstein, Ph.D., Raymond Kluender, B.S., and Matthew J. Notowidigdo, Ph.D. March 22, 2018 *N Engl J Med* 2018; 378:1076-1078

Myth and Measurement — The Case of Medical Bankruptcies David U. Himmelstein, M.D. Steffie Woolhandler, Elizabeth Warren, *N Engl J Med* 2018; 378:2245-2247

Gross, T., Notowidigdo, M. (2011). "Health insurance and the consumer bankruptcy decision: Evidence from expansions of Medicaid", *Journal of Public Economics*, 95 (7–8), 767–778

The Effects of Health Insurance on Home Payment Delinquency: Evidence from the ACA Marketplace Subsidies with Radhakrishnan Gopalan & Michal Grinstein-Weiss, *Journal of Public Economics*, Volume 172, April 2019, Pages 67-83

Class 11. The Affordable Care

Yaa Akosa Antwi & Asako S. Moriya & Kosali Simon, 2013. "Effects of Federal Policy to Insure Young Adults: Evidence from the 2010 Affordable Care Act's Dependent-Coverage

Mandate," American Economic Journal: Economic Policy, American Economic Association, vol. 5(4), pages 1-28

Medicaid and Mortality: New Evidence from Linked Survey and Administrative Data Sarah Miller, Sean Altekruise, Norman Johnson, Laura R. Wherry NBER Working Paper No. 26081 2019

Does the individual mandate affect insurance coverage? Evidence from the population of tax returns Bradley Heim & Ithai Z. Lurie & Daniel W. Sacks
http://papers.nber.org/conf_papers/f120008.pdf

Journal of Public Economics Volume 172, April 2019, Pages 67-83 Journal of Public Economics
The effect of health insurance on home payment delinquency: Evidence from ACA Marketplace subsidies Emily A. Gallagher, Radhakrishnan Gopalan, Michal Grinstein-Weiss

Obama B. United States Health Care Reform Progress to Date and Next Steps. JAMA. 2016;316(5):525–532.

Effects of ACA Medicaid Expansions on Health Insurance Coverage and Labor Supply Robert Kaestner Bowen Garrett Jiajia Chen Anuj Gangopadhyaya Caitlyn Fleming Volume 36, Issue 3 Summer 2017 Pages 608-642. JPAM

The ACA Medicaid Expansion in Michigan and Financial Health Sarah Miller, Luojia Hu, Robert Kaestner, Bhashkar Mazumder, Ashley Wong NBER Working Paper No. 25053 2018

The effect of the affordable care act Medicaid expansions on financial wellbeing. Authors Luojia Hu, Robert Kaestner, Bhashkar Mazumder, Sarah Miller, Ashley Wong Publication date 2018/5/7 Journal of Public Economics

The Effects of Medicaid Expansion under the ACA: Updated Findings from a Literature Review Larisa Antonisse, Rachel Garfield, Robin Rudowitz Kaiser Family Foundation.
<https://www.kff.org/medicaid/issue-brief/the-effects-of-medicaid-expansion-under-the-aca-updated-findings-from-a-literature-review-march-2018/>

The Impact of the Affordable Care Act: Evidence from California's Hospital Sector Mark Duggan, Atul Gupta, and Emilie Jackson NBER Working Paper No. 25488 January 2019

The Effect of Health Insurance on Mortality: Power Analysis and What We Can Learn from the Affordable Care Act Coverage Expansions Bernard Black, Alex Hollingsworth, Leticia Nunes, Kosali Simon NBER Working Paper No. 25568 2019

N Engl J Med. 2019 Jun 19. Medicaid Work Requirements - Results from the First Year in Arkansas.. Sommers BD, Goldman AL, Blendon RJ, Orav EJ, Epstein AM

Regulating Markups in U.S. Health Insurance. Steve Cicala Ethan M. J. Lieber Victoria Marone American Economic Journal: Applied Economics (Forthcoming).

Appointment Availability after Increases in Medicaid Payments for Primary Care Daniel Polsky, Ph.D., Michael Richards, M.D., Ph.D., Simon Basseyn, B.A., Douglas Wissoker, Ph.D., Genevieve M. Kenney, Ph.D., Stephen Zuckerman, Ph.D., and Karin V. Rhodes, M.D. February 5, 2015 N Engl J Med 2015; 372:537-545

Declining Medicaid Fees and Primary Care Appointment Availability for New Medicaid Patients Molly Candon, PhD; Stephen Zuckerman, PhD; Douglas Wissoker, PhD; Brendan Saloner, PhD; Genevieve M. Kenney, PhD; Karin Rhodes, MD; Daniel Polsky, PhD JAMA Intern Med. 2018;178(1):145-14

Journal of Health Economics Volume 56, December 2017, Pages 71-86 Do individuals respond to cost-sharing subsidies in their selections of marketplace health insurance plans? Thomas DeLeire Andre Chappel Kenneth Finegold EmilyGee

The Impacts of Physician Payments on Patient Access, Use, and Health Diane Alexander, Molly Schnell NBER Working Paper No. 26095. 2019

The Affordable Care Act's Effects On Patients, Providers, And The Economy: What We've Learned So Far Jonathan Gruber Benjamin D. Sommers 2019 Journal of Policy Analysis and Management

Class 12. Productivity of Spending & International Comparisons SH Chapters 13, 14, 15

Health Affairs VOL. 22, NO. 3 It's The Prices, Stupid: Why The United States Is So Different From Other Countries Gerard F. Anderson, Uwe E. Reinhardt, Peter S. Hussey, and Varduhi Petrosyan 89-105 2003

Douglas Almond & Joseph J. Doyle, Jr. & Amanda E. Kowalski & Heidi Williams, 2010. "Estimating Marginal Returns to Medical Care: Evidence from At-Risk Newborns," Quarterly Journal of Economics, 125(2): 591-634.

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

Capacity and Utilization in Health Care: The Effect of Empty Beds on Neonatal Intensive Care Admission Seth Freedman American Economic Journal: Economic Policy Vol. 8, No. 2, May 2016 (pp. 154-85)

Buchmueller, Thomas C. & Jacobson, Mireille & Wold, Cheryl, 2006. "How far to the hospital?: The effect of hospital closures on access to care," Journal of Health Economics, Elsevier, vol. 25(4), pages 740-761

Productivity Spillovers in Health Care: Evidence from the Treatment of Heart Attacks Chandra, Amitabh; Staiger, Douglas O. *Journal of Political Economy*, February 2007, v. 115, iss. 1, pp. 103-40

Where are the Health Care Entrepreneurs? The Failure of Organizational Innovation in Health Care, David M. Cutler. in *Innovation Policy and the Economy, Volume 11*, Lerner and Stern. 2010

The (Paper)Work of Medicine: Understanding International Medical Costs David M. Cutler Dan P. Ly *Journal Of Economic Perspectives* Vol. 25, No. 2, 2011 (pp. 3-25)

After Midnight: A Regression Discontinuity Design in Length of Postpartum Hospital Stays Douglas Almond Joseph J. Doyle *American Economic Journal: Economic Policy* Vol. 3, No. 3, August 2011 (pp. 1-34)

Alan Barreca, Melanie Guldi, Jason M. Lindo and Glen R. Waddell. 2011. "Saving Babies? Revisiting the Effect of Very Low Birth Weight Classification." *Forthcoming, Quarterly Journal of Economics*. November 2011. Vol. 126, No. 4.

Douglas Almond & Joseph J. Doyle, Jr. & Amanda E. Kowalski & Heidi Williams. 2011. "The Role of Hospital Heterogeneity in Measuring Marginal Returns to Medical Care: A Reply to Barreca, Guldi, Lindo, and Waddell." *Forthcoming, Quarterly Journal of Economics*. November 2011. Vol. 126, No. 4.

Measuring Returns to Hospital Care: Evidence from Ambulance Referral Patterns Doyle, Joseph J., Jr.; Graves, John A.; Gruber, Jonathan; Kleiner, Samuel A. *Journal of Political Economy*, February 2015, v. 123, iss. 1, pp. 170-214

Productivity and Quality in Health Care: Evidence from the Dialysis Industry Grieco, Paul L. E.; McDevitt, Ryan C. *Review of Economic Studies*, 2017, v. 84, iss. 3, pp. 1071-1105

Kyle, Margaret and Heidi Williams, "Is American Health Care Uniquely Inefficient? Evidence from Prescription Drugs," *American Economic Review*, 2017, 107(5), 486-490.

Gerard F. Anderson, Peter Hussey, and Varduhi Petrosyan. *It's Still The Prices, Stupid: Why The US Spends So Much On Health Care, And A Tribute To Uwe Reinhardt* *HEALTH AFFAIRS* 38, NO. 1 (2019): 87-95

Mark McClellan & Douglas Staiger, 2000. "Comparing the Quality of Health Care Providers," *NBER Chapters*, in: *Frontiers in Health Policy Research, Volume 3*, pages 113-136 National Bureau of Economic Research, Inc. <https://www.nber.org/chapters/c9832.pdf>

Class 13. Health Over the Business Cycle

Ruhm, Christopher. "Are Recessions Good for your Health?" *Quarterly Journal of Economics*, 2000, 115:2, 617-50.

Dehejia, R., & Lleras-Muney, A. (2004). Booms, Busts, and Babies' Health," *Quarterly Journal of Economics*, 119(3), 1091-1130.

Daniel Sullivan and Till von Wachter. (2009). "Job Displacement and Mortality: An Analysis Using Administrative Data," *Quarterly Journal of Economics* 124 (3): 1265-1306.

Is There a Link between Foreclosure and Health? Janet Currie, Erdal Tekin *American Economic Journal: Economic Policy* Vol. 7, No. 1, February 2015 (pp. 63-94)

Lindeboom, Maarten, France Portrait and Gerard van der Berg. "Individual Mortality and Macro-Economic Conditions from Birth to Death," American Economic Review, 96(1), 290-02, 2006.

Published: Ann H. Stevens & Douglas L. Miller & Marianne E. Page & Mateusz Filipinski, 2015. "The Best of Times, the Worst of Times: Understanding Pro-cyclical Mortality," American Economic Journal: Economic Policy, American Economic Association, vol. 7(4), pages 279-311

Class 14. Hospitals & Competition

BHT Chapter 6

SH Chapters 6, 8, 17

Kessler, Daniel and Mark McClellan, "Is Hospital Competition Socially Wasteful?" the *Quarterly Journal of Economics*, 2000, 115(2), 577-615.

Dafny, Leemore, Mark Duggan and Subramaniam Ramanarayanan, "Paying a Premium on Your Premium? Consolidation in the U.S. Health Insurance Industry," *American Economic Review*, 2012, 102(2), 1161-1185.

Journal of Health Economics Volume 65, May 2019, Pages 48-62 Reproductive health care in Catholic-owned hospitals Elaine L.Hill David J.G.Slusky Donna K.Ginther

The Price Ain't Right? Hospital Prices and Health Spending on the Privately Insured*
Zack Cooper Stuart V Craig Martin Gaynor John Van Reenen. *The Quarterly Journal of Economics*, Volume 134, Issue 1, 1 February 2019, Pages 51–107

Dafny, Leemore S.. 2010. "Are Health Insurance Markets Competitive?" American Economic Review, 100(4): 1399–1431.

Ho, Kate and Robin S. Lee, "Insurer Competition in Health Care Markets," Econometrica, 2017, 85(2), 379-417.

Mergers When Prices Are Negotiated: Evidence from the Hospital Industry. Gautam Gowrisankaran, Aviv Nevo and Robert Town. American Economic Review, Vol. 105, No. 1 (JANUARY 2015), pp. 172-203

The Impact of Competition on Management Quality: Evidence from Public Hospitals Bloom, Nicholas; Propper, Carol; Seiler, Stephan; Van Reenen, John Review of Economic Studies, April 2015, v. 82, iss. 2, pp. 457-89

Chandra, Amitabh, Amy Finkelstein, Adam Sacarny, and Chad Syverson. 2016. "Health Care Exceptionalism? Performance and Allocation in the US Health Care Sector." American Economic Review, 106 (8): 2110-44.

Class 15. Physicians & Nurses

BHT Chapter 5

SH Chapter 5

Dranove, David, Daniel Kessler, Mark McClellan, Mark Satterthwaite, "Is More Information Better? The Effects of Report Cards on Health Care Providers," *Journal of Political Economy*, 2003, 111 #3, 555-588.

Currie, Janet, Wanchuan Lin, and Wei Zhang, "Patient Knowledge and Antibiotic Abuse: Evidence from an Audit Study in China," *Journal of Health Economics*, 2011, 30(5), 933-949

Mortality and Treatment Patterns Among Patients Hospitalized With Acute Cardiovascular Conditions During Dates of National Cardiology Meetings Anupam B. Jena, MD, PhD^{1,2,3}; Vinay Prasad, MD⁴; Dana P. Goldman, PhD^{3,5,6}; et al John Romley, PhD^{5,6} *JAMA Intern Med.* 2015;175(2):237-244.

Carroll, Caitlin, Michael Chernew, A. Mark Fendrick, Joe Thompson, and Sherri Rose, "Effects of Episode-Based Payment on Health Care Spending and Utilization: Evidence from Perinatal Care in Arkansas," *Journal of Health Economics* Volume 61, September 2018, Pages 47-62

Handbook of Health Economics. Volume 1, Part A, 2000, Pages 461-536
Chapter 9 - Physician Agency Thomas G. McGuire Sections 3-5.

Cutler, David, Robert Huckman and Mary Landrum. "The Role of Information in Medical Markets: An Analysis of Publicly Reported Outcomes in Cardiac Surgery," *American Economic Review*, V94, May 2004.

The Efficiency of Slacking Off: Evidence from the Emergency Department p. 997-1030 David C. Chan ECONOMETRICA: MAY 2018, VOLUME 86, ISSUE 3

David Chan Teamwork and Moral Hazard: Evidence from the Emergency Department. Journal of Political Economy 2016 June; 124(3): 734-770

How do Doctors Respond to Incentives? Unintended Consequences of Paying Doctors to Reduce Costs Diane Alexander Working Federal Reserve Bank of Chicago Working Paper, No. 2017-09, 2017

Do Report Cards Predict Future Quality? The Case of Skilled Nursing Facilities Portia Y. Cornell, David C. Grabowski, Edward C. Norton, Momotazur Rahman NBER Working Paper No. 25940. 2019

Class 16. Health Behaviors (Theory, Alcohol & Smoking)
BHT Chapters 20, 21, 23, 24

Becker, Gary and Kevin Murphy. "A Theory of Rational Addiction," *Journal of Political Economy*, 1988.

The Effect of Alcohol Consumption on Mortality: Regression Discontinuity Evidence from the Minimum Drinking Age Christopher Carpenter Carlos Dobkin *American Economic Journal: Applied Economics* Vol. 1, No. 1, January 2009 (pp. 164-82)

Fertig, Angela R. and Tara Watson. 2009. "Minimum Drinking Age Laws and Infant Health Outcomes." *Journal of Health Economics*, 28(3): 737-747.

Bhattacharya, Jay, Christina Gathmann, and Grant Miller, 2011, "The Gorbachev anti-alcohol campaign and Russia's mortality crisis," *American Economic Journal: Applied Economics* Vol. 5, No. 2 (April 2013), pp. 232-2

Gruber, Jonathan and Botond Koszegi. "Is Addiction Rational: Theory and Evidence?" Quarterly Journal of Economics, 2001.

Laibson, David, "Golden Eggs and Hyperbolic Discounting," Quarterly Journal of Economics, 1997, 112(2), 443-477.

Smoking, Expectations, and Health: A Dynamic Stochastic Model of Lifetime Smoking Behavior Darden, Michael *Journal of Political Economy*, October 2017, v. 125, iss. 5, pp. 1465-1522

The Effects of Traditional Cigarette and E-Cigarette Taxes on Adult Tobacco Product Use Michael F. Pesko, Charles J. Courtemanche, Johanna Catherine Maclean NBER Working Paper No. 26017. 2019

The Effect of E-Cigarette Taxes on Pre-Pregnancy and Prenatal Smoking, and Birth Outcomes Rahi Abouk, Scott Adams, Bo Feng, Johanna Catherine Maclean, Michael F. Pesko NBER Working Paper No. 26126. 2019

Class 17. Health Behaviors (Obesity & Wellness)
BHT Chapter 22

The Impact of Obesity on Wages John Cawley *The Journal of Human Resources* Vol. 39, No. 2 (Spring, 2004), pp. 451-474

Currie, Janet, Stephano Della Vigna, Enrico Moretti, Vikram Pathania. “The Effect of Fast Food Restaurants on Obesity and Weight Gain,” *American Economic Journals: Economic Policy*, August 2010, v2 #3.

What Do Workplace Wellness Programs Do? Evidence from the Illinois Workplace Wellness Study Damon Jones, David Molitor, Julian Reif NBER Working Paper No. 24229. 2018.

Volume 153, September 2018, Pages 58-76 *Journal of Economic Behavior & Organization*
Broadband internet, digital temptations, and sleep Francesco C. Billari Osea Giuntella Luca Stella

Cutler, David, Edward Glaeser, and Jesse Shapiro. “Why Have Americans Become More Obese?” Journal of Economic Perspectives, 17 #3, 2003: 93-118.

Journal of Health Economics Volume 31, Issue 1, January 2012, Pages 219-230
The medical care costs of obesity: An instrumental variables approach. John Cawley
Chad Meyerhoefer.

Are Restaurants Really Supersizing America? Michael L. Anderson David A. Matsa
American Economic Journal: Applied Economics Vol. 3, No. 1, January 2011 (pp. 152-88)

The Effects of Banning Advertising in Junk Food Markets Dubois, Pierre; Griffith, Rachel;
O’Connell, Martin Review of Economic Studies, January 2018, v. 85, iss. 1, pp. 396-436

The Impact of the Philadelphia Beverage Tax on Purchases and Consumption by Adults and Children John Cawley, David Frisvold, Anna Hill, David Jones NBER Working Paper No. 25052 2018

The Pass-Through of the Largest Tax on Sugar-Sweetened Beverages: The Case of Boulder, Colorado John Cawley, Chelsea Crain, David Frisvold, David Jones NBER Working Paper No. 25050 2018

The Effects of Physical Education on Student Fitness, Achievement, and Behavior Analisa Packham
Brittany Street 2018 <https://drive.google.com/file/d/17ficAXW-C8PoHRLlpbRy50ptnM04gOV4/view>

Class 18: HIV/AIDS

Morris, Martina, Helen Epstein and Maria Wawer. 2010. “Timing is everything: International variations in historical sexual partnership concurrency and HIV prevalence.” *PLoS ONE* 5(11): e14092.

Fortson, Jane G. 2011. “Mortality Risk and Human Capital Investment: The Impact of HIV/AIDS in Sub-Saharan Africa.” *Review of Economics and Statistics* 93(1): 1-15.

Esther Duflo, Pascaline Dupas, and Michael Kremer. 2015. Education, HIV, and Early Fertility: Experimental Evidence from Kenya. *American Economic Review* 105(9): 2757–2797

Neeraj Sood, Yanyu Wu 2013 The Impact of Insurance and HIV Treatment Technology on HIV Testing NBER Working Paper No. 19397

Anderson, Siwan. 2018. "Legal Origins and Female HIV." *American Economic Review*, 108 (6): 1407-39.

James Levinsohn & Zoë M. McLaren & Olive Shisana & Khangelani Zuma, 2013. "HIV Status and Labor Market Participation in South Africa," Review of Economics and Statistics, vol 95(1), pages 98-108.

Schooling, Wealth, Risky Sexual Behavior, and HIV/AIDS in Sub-Saharan Africa Adrienne M. Lucas, Nicholas L. Wilson The Journal of Development Studies 2018

Case, Anne and Christina Paxson. 2011. "The impact of the AIDS Pandemic on Health Services and Outcomes in Africa: Evidence from Demographic and Health Surveys." Demography. 48(2): 675-97.

Fortson, Jane. 2009. "HIV/AIDS and Fertility" American Economic Journal: Applied Economics 1(3): 170-94.

Tanser, Frank, Till Barnighausen, Lauren Hund, Geoffrey P. Garnett, Nuala McGrath, and Marie-Louise Newell. 2011. "Effect of concurrent sexual partnerships on rate of new HIV infections in a high-prevalence, rural South African population: a cohort study," The Lancet 2011; 378: 247-55.

Class 19. Pollution

Chay, Kenneth Y. and Michael Greenstone. August 2003. "The Impact of Air Pollution on Infant Mortality: Evidence from Geographic Variation in Pollution Shocks Induced by a Recession," *the Quarterly Journal of Economics*, 118(3): 1121-1167.

Currie, Janet and Matthew Neidell. "Air Pollution and Infant Health: What Can We Learn From Californias Recent Experience?" *Quarterly Journal of Economics*, August 2005.

Almond, Douglas, Lena Edlund, and Marten Palme. 2009. "Chernobyl's Subclinical Legacy: Prenatal Exposure to Radioactive Fallout and School Outcomes in Sweden," *the Quarterly Journal of Economics*, 124(4): 1729-1772

Every Breath You Take--Every Dollar You'll Make: The Long-Term Consequences of the Clean Air Act of 1970 Isen, Adam; Rossin-Slater, Maya; Walker, W. Reed *Journal of Political Economy*, June 2017, v. 125, iss. 3, pp. 848-902

Traffic Congestion and Infant Health: Evidence from E-ZPass Janet Currie Reed Walker American Economic Journal: Applied Economics Vol. 3, No. 1, January 2011

Sanders, Nicholas J. & Stoecker, Charles, 2015. "Where have all the young men gone? Using sex ratios to measure fetal death rates," Journal of Health Economics, Elsevier, vol. 41(C), pages 30-45

Shale Gas Development and Infant Health: Evidence from Pennsylvania. Elaine Hill, forthcoming, Journal of Health Economics

Airports, Air Pollution, and Contemporaneous Health Schlenker, Wolfram; Walker, W. Reed Review of Economic Studies, April 2016, v. 83, iss. 2, pp. 768-809

The impact of car pollution on infant and child health: Evidence from emissions cheating 2019 19-014 Diane Alexander, Hannes Schwandt

Class 21. Malpractice SH Chapter 7

Kessler, Daniel and Mark McClellan. "Do Doctors Practice Defensive Medicine?" Quarterly Journal of Economics, 1996, 111(2), 353-390.

Currie, Janet and W. Bentley MacLeod, "First Do No Harm? Tort Reform and Birth Outcomes," Quarterly Journal of Economics, 2008, 123(2), 795-830.

Does medical malpractice law improve health care quality? Michael Frakes Anupam B.Jena
Journal of Public Economics Volume 143, November 2016, Pages 142-158

Defensive Medicine: Evidence from Military Immunity Michael D. Frakes, Jonathan Gruber
American Economic Journal: Economic Policy 2019, 11(3): 197–231

The impact of malpractice fears on cesarean section rates Lisa Dubay, Robert Kaestner, Timothy Waidmann 1999/8/1 Journal of health economics 18 4 491-522

Class 22. Reproductive and Child Health

The Impact of Women's Health Clinic Closures on Preventive Care Yao Lu David J. G. Slusky
American Economic Journal: Applied Economics Vol. 8, No. 3, July 2016 (pp. 100-124)

Cristina Borra, Libertad González, Almudena Sevilla; The Impact of Scheduling Birth Early on Infant Health, *Journal of the European Economic Association*, forthcoming

Black, Sandra E., Paul J. Devereux, and Kjell G. Salvanes. 2007. "From the Cradle to the Labor Market? The Effect of Birth Weight on Adult Outcomes," Quarterly Journal of Economics, 122(1): 409-439.

Out of Africa: Human Capital Consequences of In Utero Conditions Victor Lavy, Analia Schlosser, Adi Shany NBER Working Paper No. 21894. 2016

Trivers, R. L.; Willard, D. E. (1973). "Natural selection of parental ability to vary the sex ratio of offspring". *Science*. 179 (4068): 90–92.

Barker DJP, Osmond C. Infant mortality, childhood nutrition, and ischaemic heart disease in England and Wales. *Lancet* 1986;i:1077-81.

Almond, Douglas, Kenneth Y. Chay and David S. Lee. "The Costs Of Low Birth Weight," *Quarterly Journal of Economics*, 2005, v120(3, Aug), 1031-1083

Donohue, John J., III and Steven D. Levitt. "The Impact Of Legalized Abortion On Crime," *Quarterly Journal of Economics*, 2001, v116(2, May), 379-420

Did Legalized Abortion Lower Crime? Ted Joyce 2004 *The Journal of Human Resources* 39 1 1-28

Media Influences on Social Outcomes: The Impact of MTV's 16 and Pregnant on Teen Childbearing Melissa S. Kearney Phillip B. Levine *American Economic Review* Vol. 105, No. 12, December 2015 (pp. 3597-3632)

Reexamining the Impact of Family Planning Programs on U.S. Fertility: Evidence from the War on Poverty and the Early Years of Title X Martha J. Bailey 2012 *American Economic Journal*: 4 2 62-97

The Power of Abortion Policy: Reexamining the Effects of Young Women's Access to Reproductive Control Myers, Caitlin Knowles *Journal of Political Economy*, December 2017, v. 125, iss. 6, pp. 2178-2224

A Cautionary Tale of Evaluating Identifying Assumptions: Did Reality TV Really Cause a Decline in Teenage Childbearing? David A. Jaeger, Theodore J. Joyce, Robert Kaestner NBER Working Paper No. 24856 2018

A Comment on Jaeger, Joyce, and Kaestner (2018) Did Reality TV Really Cause a Decline in Teenage Childbearing? Melissa S. Kearney and Phillip B. Levine July 16, 2018

https://www.nber.org/data-appendix/w19795/KL_Response_to_JJK-JBES-July_2018_FINAL.pdf

The Promise and Pitfalls of Differences-in-Differences: Reflections on '16 and Pregnant' and Other Applications Ariella Kahn-Lang, Kevin Lang NBER Working Paper No. 24857 2018

Tweet Sixteen and Pregnant: Missing Links in the Causal Chain from Reality TV to Fertility David A. Jaeger, Theodore J. Joyce, Robert Kaestner NBER Working Paper No. 25446. 2019

The Impact of Legalized Abortion on Crime over the Last Two Decades, John J. Donohue, Steven D. Levitt, NBER Working Paper No. 25863. 2019

Chandra, Amitab and Stacy Dickert-Conlin. 1999. *Taxes and the Timing of Births*. *Journal of Political Economy* 107(1): 161-177.

Sara LaLumia, James M. Sallee, and Nicholas Turner, *American Economic Journal: Economic Policy* 2015, 7(2): 258–293. *New Evidence on Taxes and the Timing of Birth†*

Is the 1918 Influenza Pandemic Over? Long-Term Effects of In Utero Influenza Exposure in the Post 1940 U.S. Population Douglas Almond *Journal of Political Economy* Vol. 114, No. 4 (August 2006), pp. 672-712

“On the Long Term Effects of the 1918 U.S. Influenza Pandemic” (Duncan Thomas and Ryan Brown), working paper available at <http://www.econ.ucdenver.edu/rbrown/working-papers/>

Fetal Shock or Selection? The 1918 Influenza Pandemic and Human Capital Development Brian Beach, Joseph P. Ferrie, Martin H. Saavedra NBER Working Paper No. 24725. 2018

IZA DP No. 11715 Jason M. Fletcher *New Evidence on the Impacts of Early Exposure to the 1918 Influenza Pandemic on Old-Age Mortality: A Research Note* JULY 2018

Bleakley, Hoyt. 2007. “Disease and Development: Evidence from the Hookworm Eradication in the American South,” *Quarterly Journal of Economics*, 122(1): 73-117.

Sixty Years after the Magic Carpet Ride: The Long-Run Effect of the Early Childhood Gould, Eric D.; Lavy, Victor; Paserman, M. Daniele *Review of Economic Studies*, July 2011, v. 78, iss. 3, pp. 938-73

Health Capital and the Prenatal Environment: The Effect of Ramadan Observance during Pregnancy Douglas Almond Bhashkar Mazumder *American Economic Journal: Applied Economics* Vol. 3, No. 4, October 2011 (pp. 56-85)

Oster, Emily, 2005, “Hepatitis-B and the case of missing women,” *Journal of Political Economy*, 113(6), 1163–1216.

Lin, Ming-Jen, and Ming-Ching Luoh, 2008, “Can Hepatitis-B and mothers account for the number of missing women? Evidence from three million newborns in Taiwan,” *American Economic Review*, 98(5), 2259–73.

Hepatitis B Does Not Explain Male-Biased Sex Ratios in China with Gang Chen et al *Economics Letters*, 2010.

Anderson, S. and D. Ray. 2010. “Missing Women: Age and Disease.” *Review of Economic Studies* 77, 1262–1300.

Alcohol Availability, Prenatal Conditions, and Long-Term Economic Outcomes Nilsson, J. Peter *Journal of Political Economy*, August 2017, v. 125, iss. 4, pp. 1149-1207

Childhood Circumstances and Adult Outcomes: Act II Douglas Almond, Janet Currie, Valentina Duque NBER Working Paper No. 23017. 2017

Journal of Political Economy Volume 125, Number 6 | December 2017 *The Power of Abortion Policy: Reexamining the Effects of Young Women's Access to Reproductive Control* Caitlin Knowles Myers

Class 23. Pharma
BHT Chapter 12
SH Chapter 9

Static and Dynamic Effects of Health Policy: Evidence from the Vaccine Industry Finkelstein, Amy *Quarterly Journal of Economics*, May 2004, v. 119, iss. 2, pp. 527-64

Duggan, Mark and Fiona Scott-Morton. "The Impact of Medicare Part D on Pharmaceutical Prices and Utilization," *American Economic Review*, March 2010, 590-607.

Pricing in the market for anticancer drugs DH Howard, PB Bach, ER Berndt, RM Conti *Journal of Economic Perspectives* 29 (1), 139-62

Supply-Side Drug Policy in the Presence of Substitutes: Evidence from the Introduction of Abuse-Deterrent Opioids Abby Alpert David Powell Rosalie Liccardo Pacula *American Economic Journal: Economic Policy* 2018 10(4): 1-35.

Do Firms Underinvest in Long-Term Research? Evidence from Cancer Clinical Trials Eric Budish Benjamin N. Roin Heidi Williams *American Economic Review* VOL. 105, NO. 7, JULY 2015

Class 24. Opioids

Opioid-Prescribing Patterns of Emergency Physicians and Risk of Long-Term Use Michael L. Barnett, M.D., Andrew R. Olenski, B.S., and Anupam B. Jena, M.D., Ph.D. *N Engl J Med* 2017; 376:663-673

Addressing the Opioid Epidemic: Is There a Role for Physician Education? Molly Schnell and Janet Currie. *American Journal of Health Economics* 2018 4(3): 383–410.

Schnell, Molly. Physician Behavior in the Presence of a Secondary Market: The Case of Prescription Opioids https://scholar.princeton.edu/schnell/files/schnell_jmp.pdf

April 2018 IZA DP No. 11489: The Moral Hazard of Lifesaving Innovations: Naloxone Access, Opioid Abuse, and Crime Jennifer Doleac, Anita Mukherjee

Buchmueller, Thomas and Colleen Carey. 2018. "The Effect of Prescription Drug Monitoring Programs on Opioid Utilization in Medicare." American Economic Journal: Economic Policy. 10(1).

Journal of Health Economics Volume 56, December 2017, Pages 222-233 Macroeconomic conditions and opioid abuse Alex Hollingsworth, Christopher J.Ruhm, Kosali Simon

U.S. Employment and Opioids: Is There a Connection? Janet Currie, Jonas Y. Jin, Molly Schnell NBER Working Paper No. 24440. 2019

Are Syringe Exchange Programs Helpful or Harmful? New Evidence in the Wake of the Opioid Epidemic Analisa Packham NBER Working Paper No. 26111. 2019

Class 26: Machine Learning

Prediction Policy Problems Jon Kleinberg, Jens Ludwig, Sendhil Mullainathan, and Ziad Obermeyer *American Economic Review: Papers & Proceedings* 2015, 105(5): 491–495

The Impact of Machine Learning on Economics Susan Athey in *The Economics of Artificial Intelligence: An Agenda*, Ajay K. Agrawal, Joshua Gans, and Avi Goldfarb, editors
Forthcoming from University of Chicago Press <https://www.nber.org/chapters/c14009>

Does Machine Learning Automate Moral Hazard and Error? Sendhil Mullainathan Ziad Obermeyer *American Economic Review*. 107, NO. 5, 2017 (pp. 476-80)

Are We Over-Testing? Using Machine Learning to Understand Doctors' Decisions Ziad Obermeyer, Sendhil Mullainathan 2018 http://papers.nber.org/conf_papers/fl14379/fl14379.pdf

The Mortality and Medical Costs of Air Pollution: Evidence from Changes in Wind Direction. Tatyana Deryugina Garth Heutel Nolan H. Miller David Molitor Julian Reif *American Economic Review* (Forthcoming)

Human Decisions and Machine Predictions. Jon Kleinberg, Himabindu Lakkaraju, Jure Leskovec, Jens Ludwig, and Sendhil Mullainathan. NBER Working Paper No. 23180. 2017

Job Vacancies and Immigration: Evidence from Pre- and Post-Mariel Miami. Jason Anastasopoulos, George J. Borjas, Gavin G. Cook, Michael Lachanski. NBER Working Paper No. 24580 2018

Extra topics:

Inequality and health

Smith, J.P. (1999). "Healthy bodies and thick wallets: The dual relation between health and economic status," Journal of Economic Perspectives 13: 145-166.

Case, Anne, Daron Lubotsky and Christina Paxson. "Economic Status and Health in Childhood: The Origins of the Gradient," American Economic Review V92 #5, 1308-1334, Dec. 2002.

Case, Anne and Christina Paxson. 2011. "The Long Reach of Childhood Health and Circumstance: Evidence from the Whitehall II Study," *Economic Journal* 121, F183-F204.

Currie, Janet and Mark Stabile. "Socioeconomic Status and Health: Why is the Relationship Stronger for Older Children?" *American Economic Review*, v93 #5, December 2003, 1813-1823.

Deaton, Angus. "Health, Inequality, and Economic Development," *Journal of Economic Literature*, 41 #1, 2003, 113-58.

Smith, J.P. (2007). "The impact of socioeconomic status on health over the life-course," *Journal of Human Resources* 42: 739-764.

Wealth, Health, and Child Development: Evidence from Administrative Data on Swedish Lottery Players David Cesarini Erik Lindqvist Robert Östling Björn Wallace *The Quarterly Journal of Economics*, Volume 131, Issue 2, 1 May 2016, Pages 687–738,

Case, Anne & Fertig, Angela & Paxson, Christina, 2005. "The lasting impact of childhood health and circumstance," *Journal of Health Economics*, Elsevier, vol. 24(2), pages 365-389, March.

Physician Bias and Racial Disparities in Health: Evidence from Veterans' Pensions Shari Eli, Trevon D. Logan, Boriana Miloucheva NBER Working Paper No. 25846. 2019

Education and health

Currie, Janet and Enrico Moretti. "Mother's Education and the Intergenerational Transmission of Human Capital: Evidence from College Openings," *Quarterly Journal of Economics*, VCXVIII #4, Nov. 2003, 1495-1532.

Lleras-Muney, Adriana. "The Relationship between Education and Adult Mortality in the United States," *Review of Economic Studies*, 2003.

McCrary, Justin, and Heather Royer. 2011. "The Effect of Female Education on Fertility and Infant Health: Evidence from School Entry Policies Using Exact Date of Birth." *American Economic Review*, 101(1).

'High' Achievers? Cannabis Access and Academic Performance Marie, Olivier; Zolitz, Ulf *Review of Economic Studies*, July 2017, v. 84, iss. 3, pp. 1210-37

Mental health

Currie, Janet and Mark Stabile. "Child Mental Health and Human Capital Accumulation: The Case of ADHD," *Journal of Health Economics*, 25 #6, Nov. 2006, 1094-1118.

Duggan, Mark. "Do New Prescription Drugs Pay for Themselves? The Case of Second-Generation Anti-Psychotics," *Journal of Health Economics*, 24 #1, Jan. 2005, 0-31.

Violence

Aizer, Anna "The Gender Wage Gap and Domestic Violence," forthcoming, *American Economic Review*.

David Card & Gordon B. Dahl, 2011. "Family Violence and Football: The Effect of Unexpected Emotional Cues on Violent Behavior," *The Quarterly Journal of Economics*, Oxford University Press, vol. 126(1), pages 103-143.

Jason M. Lindo & Peter Siminski & Isaac D. Swensen, 2018. "College Party Culture and Sexual Assault," *American Economic Journal: Applied Economics*, vol 10(1), pages 236-265

Decriminalizing Indoor Prostitution: Implications for Sexual Violence and Public Health
Scott Cunningham Manisha Shah *The Review of Economic Studies*, Volume 85, Issue 3, 1 July 2018, Pages 1683–1715

Public programs and health

Almond, Douglas, Hilary W. Hoynes, and Diane Whitmore Schanzenbach. "Inside the War on Poverty: The Impact of Food Stamps on Birth Outcomes." *The Review of Economics and Statistics*, forthcoming.

Bhattacharya, Jayanta, Janet Currie and Steven Haider. "Breakfast of Champions? The Effects of the School Breakfast Program on the Nutrition of Children and their Families," *Journal of Human Resources*, Volume 41, Number 3, Summer 2006.

Ludwig, Jens and Douglas Miller. "Does Head Start Improve Children's Life Chances? Evidence from a Regression Discontinuity Design," *The Quarterly Journal of Economics*, 122 #1, 2007, 159-208.

Happiness

Deaton, Angus, "Income, health, and well-being around the world: evidence from the Gallup World Poll," *Journal of Economic Perspectives*, 22(2), 53–72.

The financial crisis and the well-being of Americans: 2011 OEP Hicks Class
Angus Deaton *Oxford Economic Papers*, Volume 64, Issue 1, 1 January 2012, Pages 1–26

Easterlin (1974). "Does Economic Growth Improve the Human Lot? Some Empirical Evidence" (PDF). In Paul A. David; Melvin W. Reder. *Nations and Households in Economic Growth: Essays in Honor of Moses Abramovitz*. New York: Academic Press, Inc

Stevenson, Betsey; Wolfers, Justin. "Economic Growth and Subjective Well-Being: Reassessing the Easterlin Paradox". *Brookings Papers on Economic Activity*. 2008 (Spring): 1–87.

Easterlin, Richard A., Laura Angelescu McVey, Malgorzata Switek, Onnicha Sawangfa and Jacqueline Smith Zweig, 2010, "The happiness income paradox revisited," *PNAS*, 107(52), 22463–8.

"Income, Growth, and Subjective Well-Being." *Development Challenges in a Post-Crisis World*, World Bank, Washington D.C., 2010. With Betsey Stevenson and Justin Wolfers also NBER working paper

Kahneman, Danny and Alan Krueger, 2006, "Developments in the measurement of subjective well-being," *Journal of Economic Perspectives*, 20(1), 3–24.

Organ donation

Dynamic Kidney Exchange Unver, M. Utku Review of Economic Studies, January 2010, v. 77, iss. 1, pp. 372-414

Organ Allocation Policy and the Decision to Donate Judd B. Kessler Alvin E. Roth American Economic Review. 102, NO. 5, AUGUST 2012 (Pp. 2018-47)

Race and health

Tuskegee and the Health of Black Men. Alsan, Marcella; Wanamaker, Marianne. Quarterly Journal of Economics, February 2018, v. 133, iss. 1, pp. 407-55

Does Diversity Matter for Health? Experimental Evidence from Oakland Marcella Alsan, Owen Garrick, Grant C. Graziani NBER Working Paper No. 24787 2018

Almond, Douglas, Kenneth Y. Chay, and Michael Greenstone. "Civil Rights, the War on Poverty, and Black-White Convergence in Infant Mortality in Mississippi," *American Economic Review*, forthcoming.

Labor and health

Public Health Insurance, Labor Supply, and Employment Lock Garthwaite, Craig; Gross, Tal; Notowidigdo, Matthew J. Quarterly Journal of Economics, May 2014, v. 129, iss. 2, pp. 653-96

Employment-Based Health Insurance and Job Mobility: Is There Evidence of Job-Lock? Madrian, Brigitte C. Quarterly Journal of Economics, February 1994