

ECON5530 Health Economics
(The Chinese University of Hong Kong, Semester 2, 2020-2021)

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Time Table

Lecture	Day	Start	End	Venue
ECON5530	Tuesday	11:30 am	2:15pm	Zoom
Examination: Final examination (20-Apr-21: 11:30 am – 2:15 pm)				
Consultation: Tuesday 2:30-3:30pm				

1. Description

This is a postgraduate level course in health economics. The course is a synthesis of theoretical modelling, empirical testing, and policy analysis. It covers core topics in the field of health economics: demand for health and health care, supply of health care, information economics on health care, equilibrium analyses in the healthcare market, economics of health innovation, health policy, public health economics, and behavioral health economics.

This course will also introduce the application of healthcare big data in economics analyses, and cover topics on the economics of artificial intelligence with the application in health and healthcare.

2. Grading

- 2 Review report (20% for each one; total 40%), which will be based on any papers listed in the reference list provided.

A good report should summarize the main approach and contribution of the paper, and then provide a critical assessment of the work. Referee reports should be less than 2 pages, single-spaced.

- Final examination (60%)

3. Textbook

Bhattacharya, J., Hyde, T., & Tu, P. (2013). *Health Economics*. Palgrave Macmillan.

4. Tentative Lecture Schedule

Week 1	January 12	Lecture 1	Ch. 1, 2
Week 2	January 19	Lecture 2	Ch. 3
Week 3	January 26	Lecture 3	Ch. 4
Submission of the first referee report, deadline, 12 pm, 31 January			
Week 4	February 2	Lecture 4	Ch. 5
Week 5	February 9	Lecture 5	Ch. 6
Week 6	February 16	N.A.	Public holiday
Submission of the second referee report, deadline, 12 pm, 21 February			
Week 7	February 23	Lecture 6	Ch. 7,8
Week 8	March 2	Lecture 7	
Week 9	March 9	Lecture 8	Ch. 9, 10
Week 10	March 16	Lecture 9	Ch. 11
Week 11	March 23	Lecture 10	Ch. 12, 13
Week 12	March 30	Lecture 11	Ch. 15
Week 12	April 6	N.A.	Public holiday
Week 13	April 13	Lecture 12	Ch. 22, 23
Week 14	April 21	Lecture 13	Final examination

Literature Reading List

I. Papers

Seminal works

Arrow, K. J. (1963). Uncertainty and the welfare economics of medical care. *The American Economic Review*.

Grossman, M. (2017). *Demand for health: A theoretical and empirical investigation*. Columbia University Press (first edition, 1972).

Research articles: By topics

A. Demand for healthcare (and the consequences of health insurance):

1. Pauly, M. V. (1968). The economics of moral hazard: comment. *The American Economic Review*, 531-537.
2. Manning, Willard G., et al. "Health insurance and the demand for medical care: evidence from a randomized experiment." *The American Economic Review* (1987): 251-277.
3. Gruber, J. (1994). The incidence of mandated maternity benefits. *The American economic review*, 622-641.
4. Currie, J., & Gruber, J. (1996). Health insurance eligibility, utilization of medical care, and child health. *The Quarterly Journal of Economics*, 111(2), 431-466.
5. Currie, J., & Gruber, J. (1996). Saving babies: the efficacy and cost of recent changes in the Medicaid eligibility of pregnant women. *Journal of political Economy*, 104(6), 1263-1296.
6. Hanratty, M. J. (1996). Canadian national health insurance and infant health. *The American Economic Review*, 86(1), 276-284.
7. Gruber, J., & Yelowitz, A. (1999). Public health insurance and private savings. *Journal of Political Economy*, 107(6), 1249-1274.
8. Currie, J., & Gruber, J. (2001). Public health insurance and medical treatment: the equalizing impact of the Medicaid expansions. *Journal of Public Economics*, 82(1), 63-89.
9. Card, D., & Shore-Sheppard, L. D. (2004). Using discontinuous eligibility rules to identify the effects of the federal medicaid expansions on low-income children. *The Review of Economics and Statistics*, 86(3), 752-766.
10. Chaudhuri, S., Goldberg, P. K., & Gia, P. (2006). Estimating the effects of global patent protection in pharmaceuticals: a case study of quinolones in India. *American Economic Review*, 96(5), 1477-1514.
11. Hall, R. E., & Jones, C. I. (2007). The value of life and the rise in health spending. *The Quarterly Journal of Economics*, 122(1), 39-72.
12. Finkelstein, A. (2007). The aggregate effects of health insurance: Evidence from the introduction of Medicare. *The quarterly journal of economics*, 122(1), 1-37.
13. David Card Carlos Dobkin & Maestas, N. The Impact of Nearly Universal Insurance Coverage on Health Care Utilization: Evidence from Medicare, *American Economic Review*, **2008**, 98, 2242-2258

14. Currie, J., Decker, S., & Lin, W. (2008). Has public health insurance for older children reduced disparities in access to care and health outcomes?. *Journal of health Economics*, 27(6), 1567-1581.
15. David Card Carlos Dobkin & Maestas, N. Does Medicare Save Lives, *Quarterly Journal of Economics*, **2009**, 124.
16. Acemoglu, D., Finkelstein, A., & Notowidigdo, M. J. (2013). Income and health spending: Evidence from oil price shocks. *Review of Economics and Statistics*, 95(4), 1079-1095.
17. Krueger, A. B., & Kuziemko, I. (2013). The demand for health insurance among uninsured Americans: Results of a survey experiment and implications for policy. *Journal of health economics*, 32(5), 780-793.
18. Maestas, N., Mullen, K. J., & Strand, A. (2013). Does disability insurance receipt discourage work? Using examiner assignment to estimate causal effects of SSDI receipt. *The American Economic Review*, 103(5), 1797-1829.
19. Shigeoka, H. (2014). The effect of patient cost sharing on utilization, health, and risk protection. *The American Economic Review*, 104(7), 2152-2184.
20. Craig Garthwaite Tal Gross, M. J. N. Public health insurance, labor supply, and employment lock, *Quarterly Journal of Economics*, **2014**, 129
21. French, E., & Song, J. (2014). The effect of disability insurance receipt on labor supply. *American Economic Journal: Economic Policy*, 6(2), 291-337.
22. Bronchetti, E. T. (2014). Public insurance expansions and the health of immigrant and native children. *Journal of Public Economics*, 120, 205-219.
23. Goodman-Bacon, A. (2016). *The Long-Run Effects of Childhood Insurance Coverage: Medicaid Implementation, Adult Health, and Labor Market Outcomes* (No. w22899). National Bureau of Economic Research.
24. Cohodes, S. R., Grossman, D. S., Kleiner, S. A., & Lovenheim, M. F. (2016). The effect of child health insurance access on schooling: Evidence from public insurance expansions. *Journal of Human Resources*, 51(3), 727-759.
25. Einav, L., Finkelstein, A., & Williams, H. (2016). Paying on the margin for medical care: Evidence from breast cancer treatments. *American Economic Journal: Economic Policy*, 8(1), 52-79.
26. Curto, V., Einav, L., Finkelstein, A., Levin, J. D., & Bhattacharya, J. (2017). *Healthcare Spending and Utilization in Public and Private Medicare* (No. w23090). National Bureau of Economic Research.
27. Goodman-Bacon, A. (2017). Public insurance and mortality: evidence from Medicaid implementation. *Journal of Political Economy* (forthcoming)
28. Brot-Goldberg, Z. C., Chandra, A., Handel, B. R., & Kolstad, J. T. (2017). What does a deductible do? The impact of cost-sharing on health care prices, quantities, and spending dynamics. *The Quarterly Journal of Economics*, 132(3), 1261-1318.
29. Finkelstein, A., Hendren, N., & Shepard, M. (2017). *Subsidizing Health Insurance for Low-Income Adults: Evidence from Massachusetts*. (No. w23668). National Bureau of Economic Research.
30. Sommers, B. D., Gawande, A. A., & Baicker, K. (2017). Health Insurance Coverage and Health-What the Recent Evidence Tells Us. *The New England Journal of Medicine*, 377(6), 586.

31. Blavin, F., Karpman, M., Kenney, G. M., & Sommers, B. D. (2018). Medicaid Versus Marketplace Coverage For Near-Poor Adults: Effects On Out-Of-Pocket Spending And Coverage. *Health Affairs*, 10-1377.
32. Costa-Font, J., Jimenez-Martin, S., & Vilaplana, C. (2018). Does long-term care subsidization reduce hospital admissions and utilization?. *Journal of Health Economics*.
33. Chatterjee, C., Joshi, R., Sood, N., & Boregowda, P. (2018). Government health insurance and spatial peer effects: New evidence from India. *Social Science & Medicine*, 196, 131-141.
34. Cole, H. L., Kim, S., & Krueger, D. (2018). Analysing the Effects of Insuring Health Risks: On the Trade-off between Short-Run Insurance Benefits versus Long-Run Incentive Costs. *The Review of Economic Studies*, 86(3), 1123-1169.
35. Duggan, M., Gupta, A., & Jackson, E. (2019). *The Impact of the Affordable Care Act: Evidence from California's Hospital Sector* (No. w25488). National Bureau of Economic Research.
36. Armour, P., & O'Hanlon, C. (2019). *How Does Supplemental Medicare Coverage Affect the Disabled Under-65 Population?: An Exploratory Analysis of the Health Effects of States' Medigap Policies for SSDI Beneficiaries* (No. w25564). National Bureau of Economic Research.
37. Black, B., Hollingsworth, A., Nunes, L., & Simon, K. (2019). *The effect of health insurance on mortality: power analysis and what we can learn from the Affordable Care Act coverage expansions* (No. w25568). National Bureau of Economic Research.
38. Tebaldi, P., Torgovitsky, A., & Yang, H. (2019). *Nonparametric estimates of demand in the California health insurance exchange* (No. w25827). National Bureau of Economic Research.
39. Maclean, J. C., Tello-Trillo, S., & Webber, D. (2019). *Losing Insurance and Behavioral Health Hospitalizations: Evidence from a Large-Scale Medicaid Disenrollment* (No. w25936). National Bureau of Economic Research.
40. Halliday, T. J., Akee, R. Q., Sentell, T., Inada, M., & Miyamura, J. (2019). *The Impact of Medicaid on Medical Utilization in a Vulnerable Population: Evidence from COFA Migrants* (No. w26030). National Bureau of Economic Research.
41. Layton, T. J., Maestas, N., Prinz, D., & Vabson, B. (2019). *Private vs. Public Provision of Social Insurance: Evidence from Medicaid* (No. w26042). National Bureau of Economic Research.
42. Acton, R. K., Imberman, S. A., & Lovenheim, M. F. (2019). *Do Health Insurance Mandates Spillover to Education? Evidence from Michigan's Autism Insurance Mandate* (No. w26079). National Bureau of Economic Research.
43. Miller, S., Altekruze, S., Johnson, N., & Wherry, L. R. (2019). *Medicaid and mortality: new evidence from linked survey and administrative data* (No. w26081). National Bureau of Economic Research.
44. Courtemanche, C. J., Marton, J., & Yelowitz, A. (2019). *Medicaid Coverage across the Income Distribution under the Affordable Care Act* (No. w26145). National Bureau of Economic Research.
45. Courtemanche, C. J., Fazlul, I., Marton, J., Ukert, B. D., Yelowitz, A., & Zapata, D. (2019). *The Impact of the ACA on Insurance Coverage Disparities After Four Years* (No. w26157). National Bureau of Economic Research.
46. Garthwaite, C., Graves, J. A., Gross, T., Karaca, Z., Marone, V. R., & Notowidigdo, M. J. (2019). *All Medicaid Expansions Are Not Created Equal: The Geography and Targeting of the Affordable Care Act* (No. w26289). National Bureau of Economic Research.

47. Lavetti, K. J., DeLeire, T., & Ziebarth, N. R. (2019). *How Do Low-Income Enrollees in the Affordable Care Act Marketplaces Respond to Cost-Sharing?* (No. w26430). National Bureau of Economic Research.
48. Grafova, I. B., Monheit, A. C., & Kumar, R. (2019). *How Do Economic Shocks Affect Family Health Care Spending Burdens?* (No. w26443). National Bureau of Economic Research.
49. Schmidt, L., Shore-Sheppard, L., & Watson, T. (2019). *The Impact of Expanding Public Health Insurance on Safety Net Program Participation: Evidence from the ACA Medicaid Expansion* (No. w26504). National Bureau of Economic Research.
50. Goldin, J., Lurie, I. Z., & McCubbin, J. (2019). *Health Insurance and Mortality: Experimental Evidence from Taxpayer Outreach* (No. w26533). National Bureau of Economic Research.
51. Buchmueller, T. C., Levy, H. G., & Valletta, R. G. (2019). *Medicaid Expansion and the Unemployed* (No. w26553). National Bureau of Economic Research.
52. Ahmed, H., & Cowan, B. W. (2019). *Mobile money and healthcare use: evidence from East Africa* (No. w25669). National Bureau of Economic Research.
53. Chang, H. H., & Meyerhoefer, C. (2020). *Do Elections Make You Sick?* (No. w26697). National Bureau of Economic Research.
54. Chatterji, P., Decker, S., & Huh, J. U. (2020). *Medicaid Physician Fees and Access to Care among Children with Special Health Care Needs* (No. w26769). National Bureau of Economic Research.

Mini series on Oregon Experiment:

55. Baicker, K., & Finkelstein, A. (2011). The effects of Medicaid coverage—learning from the Oregon experiment. *New England Journal of Medicine*, 365(8), 683-685.
56. Finkelstein, Amy, et al.. (2012). the Oregon health insurance experiment: evidence from the first year. *Quarterly Journal of Economics*, 127(3).
57. Baicker, K., Taubman, S. L., Allen, H. L., Bernstein, M., Gruber, J. H., Newhouse, J. P., ... & Finkelstein, A. N. (2013). The Oregon experiment—effects of Medicaid on clinical outcomes. *New England Journal of Medicine*, 368(18), 1713-1722.
58. Taubman, S.L., Allen, H.L., Wright, B.J., Baicker, K. and Finkelstein, A.N., 2014. Medicaid increases emergency-department use: evidence from Oregon's Health Insurance Experiment. *Science*, 343(6168), pp.263-268.
59. Finkelstein, A., Hendren, N., & Luttmer, E. F. (2015). *The value of medicaid: Interpreting results from the oregon health insurance experiment* (No. w21308). National Bureau of Economic Research.
60. Finkelstein, Amy N., Sarah L. Taubman, Heidi L. Allen, Bill J. Wright, and Katherine Baicker. "Effect of Medicaid coverage on ED use—further evidence from Oregon's experiment." *New England Journal of Medicine* 375, no. 16 (2016): 1505-1507.
61. Kowalski, Amanda E., (2018). Extrapolation using Selection and Moral Hazard Heterogeneity from within the Oregon Health Insurance Experiment (No. 24647). National Bureau of Economic Research.

Mini series on Medicare Part D:

62. Duggan, M., & Scott Morton, F. (2010). The effect of Medicare Part D on pharmaceutical prices and utilization. *American Economic Review*, 100(1), 590-607.
63. Marzilli Ericson, K. M. (2014). Consumer inertia and firm pricing in the Medicare Part D prescription drug insurance exchange. *American Economic Journal: Economic Policy*, 6(1), 38-64.
64. Einav, L., Finkelstein, A., & Schrimpf, P. (2015). The response of drug expenditure to nonlinear contract design: evidence from medicare part D. *The quarterly journal of economics*, 130(2), 841-899.
65. Aron-Dine, A., Einav, L., Finkelstein, A., & Cullen, M. (2015). Moral hazard in health insurance: Do dynamic incentives matter?. *Review of Economics and Statistics*, 97(4), 725-741.
66. Dalton, C. M., Gowrisankaran, G., & Town, R. (2020). Saliency, myopia, and complex dynamic incentives: Evidence from Medicare Part D. *The Review of Economic Studies*, 87(2), 822-869.
67. Einav, L., Finkelstein, A., & Polyakova, M. (2016). *Private provision of social insurance: drug-specific price elasticities and cost sharing in Medicare Part D* (No. w22277). National Bureau of Economic Research.
68. Polyakova, M. (2016). Regulation of insurance with adverse selection and switching costs: Evidence from Medicare Part D. *American Economic Journal: Applied Economics*, 8(3), 165-95.
69. Einav, L., Finkelstein, A., & Schrimpf, P. (2017). Bunching at the kink: implications for spending responses to health insurance contracts. *Journal of public economics*, 146, 27-40.
70. Abaluck, J., Gruber, J., & Swanson, A. (2018). Prescription drug use under Medicare Part D: A linear model of nonlinear budget sets. *Journal of Public Economics*, 164, 106-138.

Mini series on geographic variations in costs

71. Chandra, A., & Staiger, D. O. (2007). Productivity spillovers in health care: evidence from the treatment of heart attacks. *Journal of Political Economy*, 115(1), 103-140.
72. Doyle, J. J. (2011). Returns to Local-Area Healthcare Spending: Evidence from Health Shocks to Patients Far From Home. *American Economic Journal: Applied Economics*, 3(3), 221-243.
73. Finkelstein, A., Gentzkow, M., & Williams, H. (2016). Sources of geographic variation in health care: Evidence from patient migration. *The quarterly journal of economics*, 131(4), 1681-1726.
74. Finkelstein, A., Gentzkow, M., Hull, P., & Williams, H. (2017). Adjusting Risk Adjustment—Accounting for Variation in Diagnostic Intensity. *The New England journal of medicine*, 376(7), 608.
75. Chandra, A., & Staiger, D. O. (2017). *Identifying Sources of Inefficiency in Health Care* (No. w24035). National Bureau of Economic Research.

B. Demand for health and socioeconomic disparities in health

1. Currie, J., & Cole, N. (1993). Welfare and child health: The link between AFDC participation and birth weight. *The American Economic Review*, 83(4), 971-985.
2. Cook, P. J., & Moore, M. J. (1993). Drinking and schooling. *Journal of Health Economics*, 12(4), 411-429.
3. Case, A., Lubotsky, D., & Paxson, C. (2002). Economic status and health in childhood: The origins of the gradient. *American Economic Review*, 92(5), 1308-1334.

4. Currie, J., & Stabile, M. (2003). Socioeconomic status and child health: Why is the relationship stronger for older children?. *American Economic Review*, 93(5), 1813-1823.
5. Chay, K. Y., & Greenstone, M. (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.
6. Aizer, A., Lleras-Muney, A., & Stabile, M. (2004). *Access to Care, Provider Choice and Racial Disparities* (No. w10445). National Bureau of Economic Research.
7. Dehejia, R., & Lleras-Muney, A. (2004). Booms, busts, and babies' health. *The Quarterly Journal of Economics*, 119(3), 1091-1130.
8. Miguel, E., & Kremer, M. (2004). Worms: identifying impacts on education and health in the presence of treatment externalities. *Econometrica*, 72(1), 159-217.
9. Almond, D., Chay, K. Y., & Lee, D. S. (2005). The costs of low birth weight. *The Quarterly Journal of Economics*, 120(3), 1031-1083.
10. Lleras-Muney, A. (2005). The relationship between education and adult mortality in the United States. *The Review of Economic Studies*, 72(1), 189-221.
11. Becker, G. S., Philipson, T. J., & Soares, R. R. (2005). The quantity and quality of life and the evolution of world inequality. *American Economic Review*, 95(1), 277-291.
12. Murphy, K. M., & Topel, R. H. (2006). The value of health and longevity. *Journal of political Economy*, 114(5), 871-904.
13. Almond, D., Chay, K. Y., & Greenstone, M. (2006). Civil rights, the war on poverty, and black-white convergence in infant mortality in the rural South and Mississippi.
14. Almond, D. (2006). Is the 1918 influenza pandemic over? Long-term effects of in utero influenza exposure in the post-1940 US population. *Journal of political Economy*, 114(4), 672-712.
15. Ludwig, J., & Miller, D. L. (2007). Does Head Start improve children's life chances? Evidence from a regression discontinuity design. *The Quarterly journal of economics*, 122(1), 159-208.
16. Bleakley, H. (2007). Disease and development: evidence from hookworm eradication in the American South. *The Quarterly Journal of Economics*, 122(1), 73-117.
17. Currie, J., & Moretti, E. (2007). Biology as destiny? Short-and long-run determinants of intergenerational transmission of birth weight. *Journal of Labor economics*, 25(2), 231-264.
18. Black, S. E., Devereux, P. J., & Salvanes, K. G. (2007). From the cradle to the labor market? The effect of birth weight on adult outcomes. *The Quarterly Journal of Economics*, 122(1), 409-439.
19. Leonard, J., & Mas, A. (2008). Welfare reform, time limits, and infant health. *Journal of health economics*, 27(6), 1551-1566.
20. Condliffe, S., & Link, C. R. (2008). The relationship between economic status and child health: evidence from the United States. *American Economic Review*, 98(4), 1605-18.
21. Oreopoulos, P., Stabile, M., Walld, R., & Roos, L. L. (2008). Short-, medium-, and long-term consequences of poor infant health an analysis using siblings and twins. *Journal of human Resources*, 43(1), 88-138.
22. Royer, H. (2009). Separated at girth: US twin estimates of the effects of birth weight. *American*

Economic Journal: Applied Economics, 1(1), 49-85.

23. Almond, D., Edlund, L., & Palme, M. (2009). Chernobyl's subclinical legacy: prenatal exposure to radioactive fallout and school outcomes in Sweden. *The Quarterly journal of economics*, 124(4), 1729-1772.
24. Aizer, A., Stroud, L., & Buka, S. (2009). Maternal stress and child well-being: Evidence from siblings. *Unpublished manuscript, Brown University, Providence, RI*.
25. Aizer, A., & Stroud, L. (2010). *Education, knowledge and the evolution of disparities in health* (No. w15840). National Bureau of Economic Research.
26. Almond, D., Doyle Jr, J. J., Kowalski, A. E., & Williams, H. (2010). Estimating marginal returns to medical care: Evidence from at-risk newborns. *The quarterly journal of economics*, 125(2), 591-634.
27. Brown, R., & Thomas, D. (2011). On the long term effects of the 1918 US influenza pandemic. *Unpublished Manuscript. Duke University. https://sites.duke.edu/ryanbrown/files/2013/09/1918Flu_Brown_Thomas_20131.pdf*.
28. Currie, J. (2011). Inequality at birth: Some causes and consequences. *American Economic Review*, 101(3), 1-22.
29. Almond, D., Hoynes, H. W., & Schanzenbach, D. W. (2011). Inside the war on poverty: The impact of food stamps on birth outcomes. *The Review of Economics and Statistics*, 93(2), 387-403.
30. Almond, D., & Doyle, J. J. (2011). After midnight: A regression discontinuity design in length of postpartum hospital stays. *American Economic Journal: Economic Policy*, 3(3), 1-34.
31. Brown, R. (2012). *The Intergenerational Impact of Terror: Does the 9/11 Tragedy Reverberate into the Outcomes of the Next Generation?*. Duke University, mimeo.
32. Clark, D., & Royer, H. (2013). The effect of education on adult mortality and health: Evidence from Britain. *American Economic Review*, 103(6), 2087-2120.
33. Finkelstein, A., Luttmer, E. F., & Notowidigdo, M. J. (2013). What good is wealth without health? The effect of health on the marginal utility of consumption. *Journal of the European Economic Association*, 11(suppl_1), 221-258.
34. Black, S. E., Bütikofer, A., Devereux, P. J., & Salvanes, K. G. (2013). *This is only a test? long-run impacts of prenatal exposure to radioactive fallout* (No. w18987). National Bureau of Economic Research.
35. Currie, J., & Schwandt, H. (2013). Within-mother analysis of seasonal patterns in health at birth. *Proceedings of the National Academy of Sciences*, 110(30), 12265-12270.
36. Currie, J., & Rossin-Slater, M. (2013). Weathering the storm: Hurricanes and birth outcomes. *Journal of health economics*, 32(3), 487-503.
37. Buckles, K. S., & Hungerman, D. M. (2013). Season of birth and later outcomes: Old questions, new answers. *Review of Economics and Statistics*, 95(3), 711-724.
38. Bharadwaj, P., Løken, K. V., & Neilson, C. (2013). Early life health interventions and academic achievement. *The American Economic Review*, 103(5), 1862-1891.
39. Aizer, A., & Currie, J. (2014). The intergenerational transmission of inequality: Maternal disadvantage and health at birth. *Science*, 344(6186), 856-861.
40. Currie, J., Stabile, M., & Jones, L. (2014). Do stimulant medications improve educational and

behavioral outcomes for children with ADHD?. *Journal of health economics*, 37, 58-69.

41. Lin, M. J., & Liu, E. M. (2014). Does in utero exposure to illness matter? The 1918 influenza epidemic in Taiwan as a natural experiment. *Journal of health economics*, 37, 152-163.
42. Figlio, D., Guryan, J., Karbownik, K., & Roth, J. (2014). The effects of poor neonatal health on children's cognitive development. *American Economic Review*, 104(12), 3921-55.
43. Carneiro, P., Løken, K. V., & Salvanes, K. G. (2015). A flying start? Maternity leave benefits and long-run outcomes of children. *Journal of Political Economy*, 123(2), 365-412.
44. Bharadwaj, P., Lundborg, P., & Rooth, D. O. (2015). *Health and Unemployment during Macroeconomic Crises* (No. w21353). National Bureau of Economic Research.
45. Case, A., & Deaton, A. (2015). Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century. *Proceedings of the National Academy of Sciences*, 112(49), 15078-15083.
46. Currie, J., Duque, V., & Garfinkel, I. (2015). The Great Recession and mothers' health. *The Economic Journal*, 125(588).
47. Bailey, M. J., & Goodman-Bacon, A. (2015). The War on Poverty's experiment in public medicine: Community health centers and the mortality of older Americans. *The American economic review*, 105(3), 1067-1104.
48. Currie, J., & Tekin, E. (2015). Is there a link between foreclosure and health?. *American Economic Journal: Economic Policy*, 7(1), 63-94.
49. Black, S. E., Devereux, P. J., & Salvanes, K. G. (2016). Does grief transfer across generations? bereavements during pregnancy and child outcomes. *American Economic Journal: Applied Economics*, 8(1), 193-223.
50. Hoynes, H., Schanzenbach, D. W., & Almond, D. (2016). Long-run impacts of childhood access to the safety net. *The American Economic Review*, 106(4), 903-934.
51. Chen, A., Oster, E., & Williams, H. (2016). Why is infant mortality higher in the United States than in Europe?. *American Economic Journal: Economic Policy*, 8(2), 89-124.
52. Currie, J., & Schwandt, H. (2016). The 9/11 Dust Cloud and Pregnancy Outcomes: A Reconsideration. *Journal of Human Resources*, 51(4), 805-831.
53. Albanesi, S., & Olivetti, C. (2016). Gender roles and medical progress. *Journal of Political Economy*, 124(3), 650-695.
54. Cesarini, D., Lindqvist, E., Östling, R., & Wallace, B. (2016). Wealth, health, and child development: Evidence from administrative data on Swedish lottery players. *The Quarterly Journal of Economics*, 131(2), 687-738.
55. Chetty, Raj, Michael Stepner, Sarah Abraham, Shelby Lin, Benjamin Scuderi, Nicholas Turner, Augustin Bergeron, and David Cutler. "The association between income and life expectancy in the United States, 2001-2014." *Jama* 315, no. 16 (2016): 1750-1766.
56. Myers, C. (2017). The Power of Abortion Policy: Re-Examining the Effects of Young Women's Access to Reproductive Control. *Journal of Political Economy* (forthcoming)
57. Alexander, D., & Currie, J. (2017). Is it who you are or where you live? Residential segregation and racial gaps in childhood asthma. *Journal of health economics*, 55, 186-200.

58. Alsan, M., & Wanamaker, M. (2017). Tuskegee and the Health of Black Men. *The Quarterly Journal of Economics*, 133(1), 407-455.
59. Quintana-Domeque, C., & Ródenas-Serrano, P. (2017). The hidden costs of terrorism: The effects on health at birth. *Journal of health economics*, 56, 47-60.
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III. Major health economists

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<http://users.nber.org/~almond/>

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<http://economics.mit.edu/faculty/afink>

Raj Chetty

<http://www.rajchetty.com/>

Janet Currie

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<http://www.columbia.edu/~kh2214/papers.html>

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<http://faculty.wcas.northwestern.edu/noto/>

Leemore S. Dafny

<https://www.hbs.edu/faculty/Pages/profile.aspx?facId=220887>

Jason Abaluck

<https://som.yale.edu/faculty/jason-abaluck>

Neale Mahoney

<https://nmahoney.people.stanford.edu/>

IV. Major health economics organizations and conferences

International Health Economics Association (iHEA): Annual Health Economics Conference (AHEC)

<https://www.healtheconomics.org/about/>

<https://www.healtheconomics.org/conferences/>

Annual Health Econometrics Workshop

<http://www.healtheconometrics.org/index.html>

Caribbean Health Economics Symposium

<http://ashecon.org/2016/06/newsletter/v2016n2i4/>

American Society of Health Economists

<http://ashecon.org/>

NBER Health Economics Program

<http://www.nber.org/programs/he/he.html>

NBER Health Care Program

<http://www.nber.org/programs/hc/hc.html>

V. Informational websites

Big Data: A Game Changer in Healthcare

<http://www.forbes.com/sites/bernardmarr/2016/05/24/big-data-a-game-changer-in-healthcare/#55203ed43c75>

Why do technology companies hire economists, and what is their contribution?

<https://www.quora.com/Why-do-technology-companies-hire-economists-and-what-is-their-contribution?share=1>

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<https://healthdataalliance.com/>

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VII. Big data and machine learning

Videos

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Susan Athey, Stanford University
<https://www.aeaweb.org/webcasts/2019/aea-afa-joint-luncheon-impact-of-machine-learning>

2018 AEA Continuing Education Webcasts
Machine Learning and Econometrics (Susan Athey, Guido Imbens)
<https://www.aeaweb.org/conference/cont-ed/2018-webcasts>
Materials
https://drive.google.com/drive/folders/1SEEOMluxBcSAb_tsDYgcLFtOQaeWtkLp

2017 The Economics of Artificial Intelligence : An Agenda
<http://governance40.com/wp-content/uploads/2018/12/NBER-2017-%E2%80%94-Economics-of-AI.pdf>

2015 Athey and Imbens - NBER 2015 SI
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Survey papers

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Collections

NBER links:

- Machine Learning in Health Care
<https://conference.nber.org/conferences/2018/MLs18/summary.html>
- The Economics of Artificial Intelligence: An Agenda
<https://www.nber.org/books/agra-1>

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