

4. Syllabus

Week 1: Introduction

Overview of modern health policy in the U.S. and internationally
Brief history of open data
Introduction to data-driven journalism and policy analysis

Workshop: Dartmouth Health Atlas, discovering disparities

Source: <http://www.dartmouthatlas.org/>

Readings:

Rosenthal, Elisabeth. "The \$2.7 Trillion Medical Bill." The New York Times. The New York Times, 01 June 2013. Web. 07 Mar. 2014.

Rosenthal, Elisabeth. "American Way of Birth, Costliest in the World." The New York Times. The New York Times, 30 June 2013. Web. 07 Mar. 2014.

Atul Gawande, "The Cost Conundrum – What a Texas town can teach us about health care." The New Yorker: June 1, 2009

Nolte, E, and C. Martin McKee. "Avoidable Through Health Care – Progress in the US Lags that of Three European Countries," Health Affairs August 2012.

Groves, Peter, et al. "The 'big data' revolution in healthcare." McKinsey Quarterly (2013).

Week 2: Health Policy, where are we now and where can we get the data?

Discussion of the Affordable Care Act
Discussion of Medicare, Medicaid and employer based insurance
Walkthrough of healthdata.gov
Brief introduction to Application Programming Interfaces (APIs, how to easily download data)
Infographic assigned

Workshop: Downloading data from healthdata.gov using the API

Readings:

Jost, Timothy Stoltzfus. "Beyond Repeal—A Republican Proposal for Health Care Reform." New England Journal of Medicine (2014).

Kaiser Family Foundation Summary of the Affordable Care Act

Lukensmeyer, Carolyn J., Joseph P. Goldman, and David Stern. "Assessing public participation in an open government era." IBM Center for the Business of Government (2011).

Baicker K, Chandra A. "Myths and misconceptions about U.S. health insurance." Health Aff (Millwood). 2008 Nov-Dec;27(6):w533-43.

Silva, Liz PLOS' New Data Policy: Public Access to Data, February 24 2014

"Quantifying Memory.": Web-Scraping: The Basics. N.p., n.d. Web. 07 Mar. 2014.

Owens, Simon. "Can Todd Park Revolutionize the Health Care Industry?" The Atlantic. Atlantic Media Company, 02 June 2011. Web. 07 Mar. 2014.

Week 3: Introduction to Analysis

Special guest lecturer Dr. Jacqueline Milton professor of biostatistics at Boston University

Brief discussion of descriptive statistics

Overview of excel functionality and how it can link to .csv files acquired from APIs

Introduction to R statistical analysis programming

Health Policy Case Study using PGP data

Workshop: To be provided by Dr. Jacqueline Milton

Readings: To be provided by Dr. Jacqueline Milton

Week 4: Medicare Overview & Quality Measures

Discussion of Medicare, its history, its role in modern society, and its future.

Deep dive into Medicare quality ratings from 'Hospital Compare'

Overview of other Medicare datasets available for analysis.

Infographic due

Workshop: Hospital Compare, where are America's best hospitals?

Source: <http://www.medicare.gov/hospitalcompare>

Readings:

Kaiser Family Foundation. Medicare A Primer, January 2010

Kaiser Family Foundation. Policy Options to Sustain Medicare for the Future, January 2013

Epstein, AM. Public release of public performance data: A progress report from the front. JAMA 2000; 283(14):1884-1886

Week 5: Medicare Policy: Costs & Payments

Overview of the great 'cost' debate in American health care policy with a special focus on fee for service vs. value based purchasing

Discuss data on Accountable Care Organizations and Patient Centered Medical Homes

Deep dive into cost data

Workshop: Communicating Medicare Cost Data, Who's the Cheapest?

Source: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Provider-Charge-Data/index.html>

Readings:

Werner RM, Dudley RA. "Medicare's New Hospital Value-Based Purchasing Program Is Likely To Have Only A Small Impact On Hospital Payments." *Health Affairs* September 2012 31:1932-1940.

Young, Jeffrey. "Hospital Prices No Longer Secret As New Data Reveals Bewildering System, Staggering Cost Differences." *The Huffington Post*. TheHuffingtonPost.com, 08 May 2013. Web. 07 Mar. 2014.

Data Visualization: http://glimmer.rstudio.com/muschellij2/Shiny_Health_Data/

Beck, Melinda. "How to Bring the Price of Health Care Into the Open." *The Wall Street Journal*. Dow Jones & Company, 23 Feb. 2014. Web. 07 Mar. 2014.

Rosenthal, Elisabeth. "In Need of a New Hip, but Priced Out of the U.S." *The New York Times*. The New York Times, 03 Aug. 2013. Web. 06 Mar. 2014.

Rosenthal, Elisabeth. "The Soaring Cost of a Simple Breath." *The New York Times*. The New York Times, 12 Oct. 2013. Web. 07 Mar. 2014.

Rosenthal, Elisabeth. "As Hospital Prices Soar, a Stitch Tops \$500." *The New York Times*. The New York Times, 02 Dec. 2013. Web. 07 Mar. 2014.

Rosenthal, Elisabeth. "Patients' Costs Skyrocket; Specialists' Incomes Soar." *The New York Times*. The New York Times, 18 Jan. 2014. Web. 07 Mar. 2014.

Week 6: Data Visualization

Discuss data visualization techniques relevant to policy analysis & policy related data driven journalism
Brief overview of interactive visualizations
Journalism piece assigned

Workshop: Creating A Graphic of the Access America's Low Income Population has to Healthcare

Source: <http://datacenter.commonwealthfund.org/-ind=600/sc=47>

Readings:

Nessa, Shazna. "Visual Literacy in an Age of Data - Learning - Source: An OpenNews Project." Visual Literacy in an Age of Data - Learning - Source: An OpenNews Project. Source Open News, Jan. 2013. Web. 07 Mar. 2014.

Reichenstein, Oliver. "Learning to See." Information Architects. N.p., 19 Mar. 2013. Web. 07 Mar. 2014.

Dubakov, Michael. "Visual Encoding." Target Process. N.p., Sept. 2012. Web. 07 Mar. 2014.

Week 7: Medicaid Overview & Long Term Care Discussion

Discuss the modern role of Medicaid and how it predominantly pays for long term care

Workshop: Nursing Home Compare: What does a bad nursing home look like?

Source: <http://www.medicare.gov/nursinghomecompare/>

Readings:

Kaiser Commission on Medicaid and the Uninsured, Medicaid: A Primer, March 2013

Kaiser Commission on Medicaid and the Uninsured, Medicaid's Role for Dual Eligible Beneficiaries, April 2012

Kaye HS, Harrington C, LaPlante MP. Long-term care: who gets it, who provides it, who pays, and how much? Health Aff (Millwood). 2010 Jan-Feb;29(1):11-21.

Week 8: Medicaid Expansion & the Children's Health Insurance Program (CHIP)

Focus on the effects that the Affordable Care Act is having on Medicaid, and state level push back.

Discuss the CHIP program and it's relevance to modern health care policy.

Journalism piece due

Workshop: Medicaid Expansion: How are the expanding states different from those that are not?

Source: <http://healthdata.gov/data/dataset/medicaid-statistical-information-system-msis>

Readings:

Sommers, B. Baicker, K. Epstein, A. Mortality and Access to Care among Adults after State Medicaid Expansions. *New England Journal of Medicine*, 2012.

Kaiser Family Foundation, Getting into Gear for 2014: Findings From a 50-State Survey of Eligibility, Enrollment, Renewal and Cost-Sharing Policies in Medicaid and CHIP, 2012-2013, January 2013

Kaiser Family Foundation, CHIP Enrollment: June 2013 Data Snapshot, January 2014

Week 9: State level policy focus on all payer claims databases

- Overview of recent developments in state level policy

- Breakdown All Payer Claims Databases

- Discuss the roles of the Health Policy Commission and Center for Health Information and Analysis (new Massachusetts policy organizations) in the context of state health policy reform.

Workshop: Data SF, looking at a city's health and retirement benefits

Source: <http://opengovdata.pbworks.com/w/page/32816182/DataSF+-+Open+San+Francisco+Data+Sets>

Readings:

Jon Kingsdale and John Bertko: "Insurance Exchanges Under Health Reform: Six Design Issues For The States" in *Health Affairs* 29, No. 6 (2010): 1158–1163.

Weil A, Scheppach R. "New roles for states in health reform implementation." *Health Aff (Millwood)*. 2010 Jun;29(6):1178-82

Center for Health Information and Analysis. Overview of the Massachusetts All Payer Claims Database. March, 2014.

Health Policy Commission. 2013 Cost Trends Report. January, 2014.

Week 10: Policy Evaluation in-depth

- Discuss the role of policy evaluation in shaping new policy

- Overview of randomized controlled trials versus non-experimental evaluations

- Workshop designing a 'hypothetical' policy evaluation

Readings:

Baicker et al. "The Oregon Experiment Effects of Medicaid on Clinical Outcomes" NEJM 368(18), 2013:1713-1722.

McCall, Nancy, and Jerry Cromwell. "Results of the Medicare Health Support disease-management pilot program." NEJM 365.18 (2011): 1704-1712.

Smith, Jeffrey and Arthur Sweetman. 2010. "Putting the Evidence in Evidence-Based Policy" in Productivity Commission (ed.), Strengthening Evidence Based Policy in the Australian Federation, Volume 1: Proceedings. Canberra: Productivity Commission, 59-102.

Workshop: Hypothetical Policy Evaluation Brainstorm

Week 11: Student Presentations Week 1

In this week approximately half of the students will present their class projects and discuss their findings with the class

Readings:

The readings for this week are to read and help edit a rough draft of each presenting student's report.

Week 12: Student Presentations Week 2

In this week students will continue presenting their in class projects and discussing their findings with the class.

Readings:

The readings for this week are to read and help edit a rough draft of each presenting student's report.

Week 13: Conclusion

Wrap up the course with a discussion of the role that open data, data driven journalism, and policy evaluation could play in shaping the healthcare policy of tomorrow.

Workshop: Discuss next steps!

Readings:

Murdoch, Travis B., and Allan S. Detsky. "The inevitable application of big data to health care." JAMA 309.13 (2013): 1351-1352.

"Obamacare Spurring A New Generation Of Startups." TechCrunch. N.p., n.d. Web. 07 Mar. 2014.

Read about Health and Human Services Entrepreneurs Program:
<http://www.hhs.gov/idealab/pathways/hhs-entrepreneurs/>