

**Harvard Medical School  
Curriculum Vitae**

**Date Prepared:** May 5, 2017  
**Name:** Timothy J. Layton  
**Office Address:** 180 Longwood Avenue, Boston, MA 02115  
**Work Phone:** 617-432-4465  
**Work Email:** [layton@hcp.med.harvard.edu](mailto:layton@hcp.med.harvard.edu)

**Education**

2014	PhD	Economics	Boston University
2009	BA	Economics, Political Science	Brigham Young University

**Postdoctoral Training**

2014-2016	NIMH Postdoctoral Research Fellow	Department of Health Care Policy	Harvard Medical School
-----------	-----------------------------------	----------------------------------	------------------------

**Faculty Academic Appointments**

June 2016-	Assistant Professor Health Care Policy	Department of Health Care Policy	Harvard Medical School
------------	--	----------------------------------	------------------------

**Other Professional Positions**

2017-	Faculty Research Fellow	NBER
2012-2014	Research Assistant	Harvard Medical School
2012-2014	Research Assistant	Boston University
2010	Research Assistant	Boston University
2009-2010	Research Assistant	Boston University
2009	Research Assistant	Brigham Young University
2009	Teaching Assistant, Development Economics	Brigham Young University

**Committee Service**

**Local**

2017	Essentials of the Profession Curriculum Development Brd	Harvard Medical School
2017	Junior Faculty Search Committee—Statistics	Harvard Medical School

**National**

2016	Scientific Review Committee, Annual Research Meeting	AcademyHealth
------	--	---------------

## Professional Societies

2017- American Economic Association  
2017- American Society of Health Economists  
2017- Econometric Society  
2017- Risk Adjustment Network  
2014- American Economic Association  
2014- American Society of Health Economists

## Other Editorial Roles

2017- Reviewer American Economic Journal, Economic Policy  
2017- Reviewer JAMA  
2016- Referee Journal of Public Economics  
2016- Referee Health Policy  
2016- Referee American Journal of Managed Care  
2015- Referee Journal of Health Economics  
2014- Referee Health Services Research  
2014- Referee Inquiry

## Honors and Prizes

2014, 2017 Mark A. Satterthwaite Kellogg School of Management  
Award for Outstanding  
Research in Healthcare  
Markets  
2013 Special Research Boston University  
Fellowship  
2011, 2012 Teaching Fellowship Boston University

## Report of Funded and Unfunded Projects

### Funding Information

#### *Past*

2013 PI (\$5,000)

Summer Research Grant/Boston University

Risk Adjustment and Consumer Sorting in Health Insurance Exchanges

To develop a framework for determining the effect of risk adjustment on consumer sorting across health insurance plans and apply that framework to estimate the welfare consequences of risk adjustment in Health Insurance Marketplaces.

#### *Current*

R01MH094290 (McGuire)

NIH/NIMH

07/01/11-4/30/16

2.40 calendar

\$266,357

Mental Health Coverage and Payment in Private Health Plans

This project proposes to conduct fundamental economic research on the patterns of health care use by persons with mental illness in order to establish the evidence base for sound choices about structuring health insurance markets in the Exchanges. We plan to assess the magnitude of the selection problem among likely Exchange participants, and based on this, identify and evaluate options for correcting incentives to health plans to provide efficient and fair coverage for person with mental illness.

(Chernew) 10/01/14-9/30/17 1.20 Calendar  
 Laura and John Arnold Foundation \$3,882,386

Health Care Markets and Regulation Lab

Overall objectives: (1) Initiate specific, innovative, high impact projects that have the potential to meaningfully support the transformation of the American Health Care system. Research areas include: quality measurement, payment and delivery system reform, consumer behavior, risk adjustment and exchanges. (2) Develop core resources to support the aforementioned projects, move forward on existing work and enhance the visibility and impact of lab activities.

(Layton) 11/1/2016-12/31/2017 1.74 Calendar  
 Anthem, Inc. \$146,000

Adverse Selection and Risk Adjustment in the Colorado Health Insurance Marketplace This project is to study the extent of adverse selection in the Colorado Health Insurance Marketplace and how well the HHS-HCC risk adjustment system addresses selection. It will determine incentives for group-level and service-level selection in Marketplace plans under the HHS-HCC risk adjustment system and the extent of adverse selection across issuers in the Marketplace by exploiting differences in plan prices across rating areas.

*Pending*

1DP2OD024082-01 (Rose) 09/30/17-06/30/22 4.20 calendar  
 NIH \$300,000

Machine Learning for Health Outcomes and Quality of Care in Low-Income Populations

The goal of this proposal is to examine the role of insurance coverage on health outcomes in low-income populations with rigorous new tools in partially randomized data. Work on these topics is critical as health outcomes and quality of care in low-income populations lag behind other groups, and the impact of health insurance on these disparities among low-income individuals is currently unknown. This will be achieved by developing a novel machine learning framework for the generalizability of experimental and quasi-experimental studies, providing population health scientists with robust methodology to assess the effects of health interventions and exposures.

(Alegria) 07/1/17-06/30/20 2.40 Calendar  
 NIH/MGH \$134,103

The Effect of Medicaid Plans on Access to and Quality of SUD Treatment

The goal of this proposal is to examine the role of Medicaid Managed Care plans in providing SUD treatment and affecting health outcomes among individuals with SUDs. The project focuses on Massachusetts and New York and exploits random plan assignment to assess differences across public and private Medicaid plans and across different types of Medicaid plans in access to and quality of SUD treatment as well as outcomes.

(Layton) 1/1/2016-12/31/2017 1.80 Calendar  
 NIA \$50,000

Intended and Unintended Effects of Risk Adjustment Payments for Individuals with Chronic Conditions on Diagnosis and Treatment in Medicare Advantage

The goal of this pilot study is to take first steps toward using previously unavailable data to understand how risk adjustment payments to Medicare Advantage (MA) plans for individuals with selected chronic diseases affect the diagnosis and treatment of those diseases in order to understand the implications of the dramatic expansion of the MA program for quality of care among Medicare beneficiaries.

**Report of Local Teaching and Training**

**Teaching of Students in Courses:**

2017	Health Policy Core Graduate Students	Harvard Medical School Lectures over 1 semester
2017	Essentials of the Profession First-year medical and dental students	Harvard Medical School 12 2-hour sessions
2012	Introduction to Econometrics Undergraduate Students	Boston University 4 3-hour lectures/week for 6 weeks
2011	Economic Statistics Undergraduate Students	Boston University 4 3-hour lectures/week for 6 weeks

**Formally Supervised Trainees and Faculty:**

2017	Ellen Montz, Health Care Policy PhD Candidate (Economics Track), Harvard Medical School
2017	Savannah Bergquist, Health Care Policy PhD Candidate (ESS Track), Harvard Medical School

**Report of Regional, National and International Invited Teaching and Presentations**

**Invited Presentations and Courses**

**Local Invited Presentations**

No presentations below were sponsored by outside entities.

2016	Medicaid Managed Care Department of Health Care Policy, Harvard Medical School, Boston, MA
2016	Productivity in Health Care: The Role of Payers Harvard Institute for Learning in Retirement, Cambridge, MA
2016	Screening in Contract Design: Evidence from the ACA Health Insurance Exchange Department of Health Care Policy, Harvard Medical School, Boston, MA
2016	Medicaid Managed Care Harvard Medical School
2015	Upcoding or Selection? Evidence from Medicare on Squishy Risk Adjustment BU/Harvard/MIT Health Economics Seminar, Boston, MA
2015	Upcoding or Selection? Evidence from Medicare on Squishy Risk Adjustment Department of Health Care Policy, Harvard Medical School, Boston, MA

**No presentations below were sponsored by outside entities**

**Regional**

- 2014 Upcoding or Selection? Evidence from Medicare on Squishy Risk Adjustment  
Research Triangle Institute, Waltham, MA
- 2013 Upcoding or Selection? Evidence from Medicare on Squishy Risk Adjustment  
Southeastern Health Economics Study Group, Baltimore, MD

**National**

- 2017 Hunter College, "Are All Managed Care Plans Created Equal? Evidence from Random Plan Assignment in Medicaid"
- 2017 University of Texas - Austin, "Are All Managed Care Plans Created Equal? Evidence from Random Plan Assignment in Medicaid"
- 2017 NBER Insurance Working Group, "Screening in Contract Design: Evidence from the ACA Exchanges"
- 2017 University of Arizona, "Screening in Contract Design: Evidence from the ACA Exchanges"
- 2017 Are All Managed Care Plans Created Equal? Evidence from Random Plan Assignment in Medicaid  
American Economic Association Annual Meetings, Chicago, IL
- 2016 The Effect of the Medicare Advantage Quality Based Payment Demonstration on Quality in Medicare Advantage  
American Society of Health Economist Biennial Meeting, Philadelphia, PA
- 2016 Are All Managed Care Plans Created Equal? Evidence from Random Plan Assignment in Medicaid  
American Society of Health Economist Biennial Meeting, Philadelphia, PA
- 2016 Upcoding or Selection? Evidence from Medicare on Squishy Risk Adjustment  
NBER Health Care Meeting, Cambridge, MA
- 2016 Upcoding or Selection? Evidence from Medicare on Squishy Risk Adjustment  
RAND Corporation, Santa Monica, CA
- 2016 Upcoding or Selection? Evidence from Medicare on Squishy Risk Adjustment  
Yale School of Public Health, New Haven, CT
- 2016 Upcoding or Selection? Evidence from Medicare on Squishy Risk Adjustment  
University of Virginia, Batten School for Leadership and Public Policy, Charlottesville, VA
- 2015 Upcoding or Selection? Evidence from Medicare on Squishy Risk Adjustment  
Department of Health and Human Services – Office of the Assistant Secretary for Planning and Evaluation, Washington, DC
- 2015 Upcoding or Selection? Evidence from Medicare on Squishy Risk Adjustment  
Department of the Treasury – Office of Tax Analysis, Washington, DC
- 2015 Upcoding or Selection? Evidence from Medicare on Squishy Risk Adjustment  
Congressional Budget Office, Washington, DC
- 2015 Upcoding or Selection? Evidence from Medicare on Squishy Risk Adjustment  
National Tax Association Annual Meeting, Boston, MA
- 2014 Upcoding or Selection? Evidence from Medicare on Squishy Risk Adjustment  
Annual Health Economics Conference, Houston, TX

- 2014 Imperfect Risk Adjustment, Risk Preferences, and Sorting in Competitive Health Insurance Markets  
American Society of Health Economist Biennial Meeting, Los Angeles, CA
- 2014 The Effect of Medicare Advantage Quality-Based Payment on Quality of Care in Medicare  
American Society of Health Economists Biennial Meeting, Los Angeles, CA
- 2014 Imperfect Risk Adjustment, Risk Preferences, and Sorting in Competitive Health Insurance Markets  
Kellogg School of Management Conference on Healthcare Markets, Evanston, IL

### **International**

- 2016 Deriving Risk Adjustment Payment Weights to Maximize Efficiency of Health Insurance Markets  
Risk Adjustment Network Annual Meeting, Berlin, Germany
- 2014 Imperfect Risk Adjustment, Risk Preferences, and Sorting in Competitive Health Insurance Markets  
Risk Adjustment Network Annual Meeting, Delft, Netherlands
- 2013 The Power of Reinsurance in Health Insurance Exchanges to Improve the Fit of the Payment System and Reduce Incentives for Adverse Selection  
Risk Adjustment Network Annual Meeting, Tel Aviv, Israel

### **Report of Education of Patients and Service to the Community**

#### **Recognition**

- 2016 Wall Street Journal
- 2016 New York Times
- 2016 Washington Post
- 2015 Forbes
- 2015 Bloomberg Business
- 2015 Modern Healthcare
- 2015 NPR

### **Report of Scholarship**

#### **Peer reviewed publications in print or other media**

#### **Research Investigations**

1. **Layton TJ**, McGuire TG, Sinaiko AD. Risk Corridors and Reinsurance in Health Insurance Exchanges: Insurance for Insurers. *American Journal of Health Economics* 2016. 2(1): 66-95.
2. **Layton TJ**, Ryan A. The Effect of Medicare Advantage Quality-Based Payment on Quality Care in Medicare. *Health Services Research* 2015. 50(6): 1810-1828.
3. Zhu J, **Layton TJ**, Sinaiko AD, McGuire TG. The Power of Reinsurance in Health Insurance Exchanges to Improve the Fit of the Payment System and Reduce Incentives for Adverse Selection. *Inquiry* 2013. 50(4): 255-274.
4. Montz E, **Layton TJ**, Busch AB, Ellis RP, Rose S, McGuire TG. 6/1/2016. Risk-Adjustment Simulation: Plans May Have Incentives To Distort Mental Health And Substance Use Coverage.

- Health Affairs, 6, 35: 1022-8.
5. Ericson K, Kingsdale J , **Layton TJ**, Sacarny A. Using 'Nudges' to Enhance Competition and Save Consumers Money on Health Insurance Exchanges/Marketplaces: Evidence from a Field Experiment. *Health Affairs*, 2, 36: 311-319.
  6. **Layton TJ**, McGuire TG. Marketplace Plan Payment Options for Dealing with High-Cost Enrollees. *American Journal of Health Economics*, vol. 3(2): 140-164.
  7. Rose S, Bergquist S, **Layton TL**. 2017. Computational health economics for identification of unprofitable health care enrollees. *Biostatistics*. Forthcoming.
  8. **Layton TJ**. 2017. Imperfect Risk Adjustment, Risk Preferences, and Sorting in Competitive Health Insurance Markets. *Journal of Health Economics*. Forthcoming.
  9. **Layton TJ**, Ellis RP, McGuire TG, and van Kleef R. Assessing Incentives for Adverse Selection in Health Plan Payment Systems. *Journal of Health Economics*. Forthcoming.
  10. Sinaiko AD, **Layton TJ**, Rose S, McGuire TG. Family Risk Pooling in Individual Health Insurance Markets. *Health Services and Outcomes Research Methodology*. Forthcoming.

### **Manuscripts Submitted to Peer Reviewed Journals**

11. Geurso M, **Layton TJ**. Upcoding or Selection? Evidence from Medicare on Squishy Risk Adjustment. NBER Working Paper 21222. Revisions Requested at the *Journal of Political Economy*.
12. Geruso M, **Layton TJ**, Prinz D. Screening in Contract Design: Evidence from the ACA Health Insurance Exchange. NBER Working Paper 22832. Revisions Requested at the *American Economic Journal: Economic Policy*
13. **Layton TJ**, Geruso M. Selection in Insurance Markets: Policy through the Lenses of Fixed and Endogenous Contracts. Requested by the *Journal of Economic Perspectives*.
14. **Layton TJ**, McGuire TG, van Kleef R. Deriving Risk Adjustment Payment Weights to Maximize Efficiency of Health Insurance Markets. Submitted at the *Journal of Public Economics*.

### **Working Papers**

1. **Layton TJ**, Geruso M, Wallace J. Are All Managed Care Plans Created Equal? Evidence from Random Plan Assignment in New York Medicaid Managed Care. In Preparation.

### **Book Chapters**

1. Ellis RP, **Layton TJ**. Risk Adjustment and Risk Selection. *Encyclopedia of Health Economics* 2014. Elsevier Press.
2. Layton TJ, Montz E, Shepard M. "Health Plan Payment in U.S. Marketplaces: Regulated Competition with a Weak Mandate." *Risk Adjustment, Risk Sharing, and Premium Regulation in Health Insurance Markets: Theory and Practice*. Ed. Thomas G. McGuire and Richard van Kleef. Elsevier Press.
3. Layton TJ, Ndikumana A, Shepard M. "Health Plan Payment in Medicaid Managed Care: A Hybrid Model of Regulated Competition." *Risk Adjustment, Risk Sharing, and Premium Regulation in Health Insurance Markets: Theory and Practice*. Ed. Thomas G. McGuire and Richard van Kleef. Elsevier Press.

## **Thesis**

1. **Layton TJ.** Risk Selection and Risk Adjustment in Competitive Health Insurance Markets. Boston University. Department of Economics. 2014.

## **Narrative Report**

Prior to my current position, I was a National Institute of Mental Health Postdoctoral Research Fellow in the Department of Health Care Policy at Harvard. I completed my PhD in economics at Boston University in 2014.

My research focuses on the behavior of consumers and insurers in private regulated health insurance markets such as the Medicare Advantage program, the state and federal Health Insurance Marketplaces created by the Affordable Care Act, and state Medicaid Managed Care markets. Enrollment of individuals in private regulated health insurance markets has increased dramatically over the last decade and continues to follow a positive trend, making it critical that we understand the incentives faced by insurers and consumers in these markets and how these actors respond to those incentives.

In one line of research, I study adverse selection in health insurance markets and how regulations such as risk adjustment and reinsurance can be used to combat selection problems. One important contribution of my research is to estimate the extent to which Medicare Advantage insurers engage in “upcoding,” or the practice of making enrollees appear sicker in order to increase their revenues, finding that this type of behavior costs the government over \$10 billion each year if uncorrected. In other work related to risk adjustment, I’ve found that risk adjustment is highly effective at ameliorating adverse selection problems, resulting in potential welfare gains of over \$700 per person per year. I’ve also studied health insurance plan payment systems conceptually, developing new methods for (1) evaluating the performance of different payment system alternatives and (2) finding optimal payment systems that minimize selection-related inefficiencies.

In another line of research, I study insurer behavior in Medicaid Managed Care markets, with a focus on insurer productivity in general, and the role of provider networks in particular. In this research, we exploit the random assignment of Medicaid beneficiaries to managed care plans to find large productivity differences with the lowest productivity plan spending over 20% more than the highest productivity plan to provide the same Medicaid benefits.

My final line of research focuses on consumer behavior in state Health Insurance Marketplaces. In an ongoing randomized trial, we are studying the effect of personalized information on health plan premiums and provider networks on consumer inertia in one state marketplace. As a part of this project, we are also studying which methods of describing provider network information are most effective for influencing consumer choices.