

MAX RUBINSTEIN

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EDUCATION

Carnegie Mellon University
Ph.D. Statistics and Public Policy

2017-2022
Pittsburgh, PA

Georgetown University
Master of Public Policy

2013-2015
Washington, DC

University of Chicago
A.B. History

2006-2010
Chicago, IL

RESEARCH INTERESTS

Causal Inference, Machine Learning, Panel Data, Health Care Policy, Public Health

WORKING PAPERS AND WORKS IN PROGRESS

Stable Balancing Weights for Group-Level Data

We modify the Stable Balancing Weights objective function proposed by Zubizarreta (2015) to account for group-level panel-data. In particular, we propose modifications that return the minimum bias and minimum mean-square-error when the covariates and outcome are measured with sampling variability. We also propose a modification that allows for dependence between regions when treatment assignment is at a higher level than the units. We then show how we can tune this algorithm using pre-treatment outcomes. This paper also relates to the synthetic controls literature, but restricts attention to the case where we can exactly balance the covariates and where we have multiple treated and control units.

The Effect of Medicaid Expansion on Non-Elderly Adult Uninsurance Rates Among States that did not Expand Medicaid

We seek to better understand the foregone coverage gains of Medicaid expansion by estimating the effect of Medicaid expansion among states that did not expand Medicaid in 2014. This effect is important in its own right, but also because increasing insurance coverage mediates interesting downstream effects. Moreover, the existing literature suggests that Medicaid take-up rates differ by a state's political partisan composition; as a result, we may reasonably believe that take-up rates would have been lower in states that did not expand Medicaid. Using data from the American Communities Survey (ACS), we estimate this effect using stable balancing weights (Zubizarreta (2015)) to reweight longitudinal covariates from expansion regions to match the covariate distribution from non-expansion regions. We estimate that the effect is -2.21 percentage points (-1.31,-3.06). These results are closer to zero than existing estimates of the treatment effect on expansion states. We then show evidence that factors associated with Republican governance appears to largely drive this differential.

EXPERIENCE

Mathematica Policy Research
Research Analyst

June 2015 - May 2017
Washington, DC

- Helped to develop quarterly reports to Center for Medicare and Medicaid Innovation (CMMI) to monitor the Comprehensive Care for Joint Replacement (CJR) model, a bundled payment initiative aimed to improve quality and reduce costs of care for hip and knee replacements

- Lead validity, reliability, and feasibility testing of a new electronic clinical quality measure of inpatient influenza immunization rates
- Designed prototype of interactive web application providing descriptive analyses at the national, state, and hospital levels for 21 outcome and efficiency measures associated with the Hospital Compare program
- Wrote multiple sections of final report of the Medicaid Emergency Psychiatric Demonstration (MEPD), a Center for Medicare and Medicaid Services (CMS) demonstration.

Office of Vaccine Litigation, Department of Justice
Paralegal Specialist

December 2010 - May 2013
Washington, DC

- Assisted writing pleadings, motions, and briefs for cases filed alleging vaccine-related injuries

PRESENTATIONS

Poster at ASHEcon (2019). The Effect of Medicaid Expansion on Non-Elderly Adult Insurance Rates: Estimating the Treatment Effect on Non-Expansion States.

PUBLICATIONS

Honeycutt, Todd C., Priyanka Anand, Max Rubinstein, and Steven N. Stern. "Public Provision of Postsecondary Education for Transition-age Youth With Mental Health Conditions." *Psychiatric rehabilitation journal* (2017).

Blyler, Crystal, Melissa Azur, Bonnie O'Day, Priyanka Anand, Allison Barrett, Kavita Choudhry, Kara Contreary, Sarah Croake, Molly Crofton, Noelle Denny-Brown, Brian Johnston, Jasmine Little, Jennifer Lyons, Brenda Natzke, Stephanie Peterson, Max Rubinstein, Allison Siegwarth, James Woerheide, Kara Zivin. *Medicaid Emergency Psychiatric Demonstration: Final Report*, August 18, 2016.

PHD COURSEWORK

Intermediate Statistics
 Advanced Statistics I
 Regression Analysis
 Microeconomics
 Econometrics I/II
 Statistical Machine Learning
 Convex Optimization
 Foundations of Causal Inference/Modern Causal Inference
 Statistical Methods for Reproducibility

TEACHING ASSISTANT EXPERIENCE

Statistics with R	<i>2018, 2019, 2020</i>
Statistics for IT Managers	<i>2018, 2019</i>
Economic Analysis	<i>2019, 2020</i>
Machine Learning for Problem Solving	<i>2020</i>

COMPUTER SKILLS

R, Python, L^AT_EX