MAX RUBINSTEIN

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EDUCATION

Carnegie Mellon University 2017-2022
Ph.D. Statistics and Public Policy *Pittsburgh, PA*

Georgetown University 2013-2015
Master of Public Policy *Washington, DC*

University of Chicago 2006-2010
A.B. History *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 Hierarchical Data

This paper proposes an extension to Stable Balancing Weights (SBW), proposed by Zubizaretta (2015) when using hierarchical data that we call Hierarchical Stable Balancing Weights (H-SBW). We show that our objective function can reduce the variance of our counterfactual estimates when our model errors have a block diagonal covariance structure. We demonstrate the performance of our estimator against SBW in simulations calibrated to aggregated American Communities Survey data and show that H-SBW has improved properties relative to SBW.

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

We estimate the effect of Medicaid expansion on the adult uninsurance rates in states that did not expand Medicaid in 2014 using a novel extension of the synthetic controls approach (Abadie et al (2010)). The existing literature primarily estimates treatment effects on states that expanded Medicaid. We hypothesize these effects differ: prior to the 2014 expansion, evidence suggested that Medicaid take-up rates are lower among conservative states (Sommers (2012)), and Republicans were more likely to govern non-expansion states. We therefore hypothesize that the treatment effect on states that did not expand Medicaid would have been closer to zero than for states that did expand Medicaid. Using data from the American Communities Survey (ACS), we estimate the effect on non-expansion states by re-weighting expansion regions to approximately balance the covariates from non-expansion regions. We contribute to the literature on balancing weights by accounting for hierarchical data and measurement error in the covariates when calculating our balancing weights. We estimate that Medicaid expansion would have changed the uninsurance rate by -2.00 percentage points (-3.59, -0.40). These results are smaller in absolute magnitude than existing estimates of the ETT (see, eg, Courtenmanche (2017)). We provide evidence that factors associated with Republican governance may drive this difference.

EXPERIENCE

Mathematica Policy Research June 2015 - May 2017
Research Analyst *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 Hospital Compare
- 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 December 2010 - May 2013
Paralegal Specialist *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 (SELECTED)

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
Statistical Computing

TEACHING ASSISTANT EXPERIENCE

Statistics with R	*2018, 2019, 2020*
Statistics for IT Managers	*2018, 2019*
Economic Analysis	*2019, 2020*
Machine Learning for Problem Solving	*2020*

COMPUTER SKILLS

R, Python, LaTeX