

ALYSSA BILINSKI

Brown School of Public Health

alyssa_bilinski@brown.edu

APPOINTMENTS

Brown University School of Public Health

July 2021-

Peterson Family Foundation Assistant Professor of Health Policy

Department of Health Services, Policy, and Practice & Department of Biostatistics (Secondary)

EDUCATION

Harvard University

Aug. 2015 - May 2021

PhD in Health Policy (Evaluative Science and Statistics)

AM in Statistics

London School of Hygiene and Tropical Medicine

Sept. 2014 - Nov. 2015

MS in Medical Statistics

With Distinction

Yale University

Aug. 2009 - May 2013

BA in Political Science (Health Policy Concentration)

Summa Cum Laude

Distinction in Major & Phi Beta Kappa

GRANTS

2022 Brown Catalyst (Principal investigator, \$47,000)

2023 Council of State and Territorial Epidemiologists (CDC) (Principal investigator, \$250,000)

2022 One Day Sooner (Principal investigator, \$50,000)

2022 Council of State and Territorial Epidemiologists (CDC) (Co-investigator, \$400,000)

2020 Council of State and Territorial Epidemiologists (CDC) (Co-investigator, \$467,217)

2020 Facebook (Unrestricted gift, \$50,000)

2020 GSAS Professional Development Award (\$2011)

2017-19 National Institute of Allergy and Infectious Diseases (NIH) T32 Pre-Doctoral Fellowship

2015-17 Agency for Healthcare Research and Quality T32 Pre-Doctoral Fellowship

PUBLICATIONS

Peer-reviewed papers

27. Kumar S, Kunte M, Salomon JA, and **Bilinski A**. "Projected COVID-19 Mortality Reduction from Test-to-Treat: A model-based analysis." Forthcoming in JAMA Health Forum.
26. Roth J, Sant'Anna P, **Bilinski A**, and Poe J. "What's Trending in Difference-in-Differences? A Synthesis of the Recent Econometrics Literature." Forthcoming in Journal of Econometrics. Available at <https://arxiv.org/pdf/2201.01194.pdf>.
25. Chitwood, M, Kwon, J, Savinkina A, Walker J, **Bilinski A**, Gonsavles G. "Estimated Testing, Tracing, and Vaccination Targets for Containment of the US Mpox Outbreak." JAMA Network Open, 2023, <https://doi.org/10.1001/jamanetworkopen.2022.50984>.

24. **Bilinski A**, Thompson K, and Emanuel E. “COVID-19 and Excess All-Cause Mortality in the US and 18 Comparison Countries by Vaccination Rate, March 2020-March 2022.” *JAMA*, 2022, <https://doi.org/10.1001/jama.2022.21795>.
23. Savinkina A, **Bilinski A**, Fitzpatrick M, Paltiel D, Rizvi Z, Salomon, JA, Thornhill T and Gon-salves, G. “Estimating deaths averted and cost per life saved by scaling up mRNA COVID-19 vaccination in low-income and lower-middle-income countries in the COVID-19 Omicron variant era: a modelling study.” *BMJ Open*, 2022, <https://doi.org/10.1136/bmjopen-2022-061752>.
22. Salomon JA and **Bilinski A**. “State-level mortality associated with indicators of high COVID-19 community levels defined by the Centers for Disease Control and Prevention.” *Annals of Internal Medicine*, 2022, <https://doi.org/10.7326/M22-0803>.
21. **Bilinski A**, Ciaranello A, and Fitzpatrick MC, Giardina J, Shah M, Salomon JA, and Kendall E. “SARS-CoV-2 Testing Strategies to Contain School-Associated Transmission: Model-based analysis of impact and cost of diagnostic testing, screening, and surveillance.” *JAMA Pediatrics*, 2022, <https://jama.amanetwork.com/journals/jamapediatrics/fullarticle/2791525>.
20. **Bilinski A**, MacKay E, Salomon JA, and Pandya A. “Affordability and Value in Decision Rules for Cost-Effectiveness: A survey of health economists.” *Value in Health*, 2022, <https://10.1016/j.jval.2021.11.1375>.
19. Giardina J, **Bilinski A**, Fitzpatrick M, Kendall E, Linas B, Salomon JA, and Ciaranello A. “When do Elementary Students Need Masks in School? Model-estimated risk of in-school SARS-CoV-2 transmission and related infections among household members before and after student vaccination.” *JAMA Network Open*, 2022, <https://10.1001/jamanetworkopen.2021.47827>.
18. Haber N, et. al. (including **Bilinski A**). “Problems with Evidence Assessment in COVID-19 Health Policy Impact Evaluation (PEACHPIE): A systematic review of evidence strength.” *BMJ Open*, 2022, <https://doi.org/10.1136/bmjopen-2021-053820>.
17. Salomon JA, Reinhart A, **Bilinski A**, et. al. “COVID Trends and Impact Survey in the United States, 2020-2021: Continuous real-time measurement of COVID-19 symptoms, risks, protective behaviors, testing and vaccination.” *PNAS*, 2021, <https://doi.org/10.1073/pnas.2111454118>.
16. **Bilinski A**, Salomon JA, Giardina J, Ciaranello A, and Fitzpatrick MC. “Passing the Test: A model-based analysis of safe school-reopening strategies.” *Annals of Internal Medicine*, 2021, <https://doi.org/10.7326/M21-0600>.
15. **Bilinski A**, Emanuel E, Salomon JA, and Venkataramani A. “Better Late than Never: Trends in COVID-19 infection rates, risk perceptions, and behavioral responses in the USA.” *Journal of General Internal Medicine*, 2021, <https://doi.org/10.1007/s11606-021-06633-8>.
14. **Bilinski A**, and Emanuel E. “COVID-19 and Excess All-Cause Mortality in the US and 18 Comparison Countries.” *JAMA*, 2020, <https://doi.org/10.1001/jama.2020.20717>.
13. **Bilinski A**, Mostashari F, and Salomon JA. “Contact Tracing Strategies for COVID-19 Contain-ment with Attenuated Physical Distancing.” *JAMA Network Open*, 2020, <https://doi.org/10.1001/jamanetworkopen.2020.19217>.
12. Khazanchi R, Beiter E, Gondi S, Beckman A, **Bilinski A**, and Ganguli I. “County-Level Associ-ation of Social Vulnerability with COVID-19 Cases and Deaths in the USA.” *Journal of General Internal Medicine*, 2020, <https://doi.org/10.1007/s11606-020-05882-3>.
11. Kreuter F, Barkay N, **Bilinski A**, et. al. “Partnering with Facebook on a University-Based Rapid Turn-Around Global Survey.” *Survey Research Methods*, 2020, <https://doi.org/10.18148/srm/2020.v14i2.7761>.

10. Cudahy P, Andrews J, **Bilinski A**, Dowdy D, Mathema B, Mezies N, Salomon JA, Shrestha S, and Cohen T. “Spatially Targeted Screening to Reduce Tuberculosis Transmission in High-Incidence Settings.” *Lancet Infectious Diseases*, 2018, [https://doi.org/10.1016/S1473-3099\(18\)30443-2](https://doi.org/10.1016/S1473-3099(18)30443-2).
9. Marx F, Yaesoubi R, Menzies N, Salomon JA, **Bilinski A**, Beyers N, Cohen T. “Tuberculosis Control Interventions Targeted to Previously Treated People in a High-Incidence Setting: A modelling study.” *Lancet Global Health*, 2018, [https://doi.org/10.1016/S2214-109X\(18\)30022-6](https://doi.org/10.1016/S2214-109X(18)30022-6).
8. Golden J, Mills K, **Bilinski A**, Beckman A, McDaniel K, Harding A, France A, Napa Tobar H, Vecitis C. “Bacterial Contamination of Reusable Bottled Drinking Water in Ecuador.” *Journal of Water, Sanitation and Hygiene for Development*, 2017, <https://doi.org/10.2166/washdev.2017.064>.
7. **Bilinski A**, Birru E, Peckarsky M, Kachimanga C, Bronson G, McBain R, and Keck J. “Distance to Care, Enrollment and Retention of HIV Patients during Decentralization of Antiretroviral Therapy in Neno District, Malawi.” *PLoS One*, 2017, <https://doi.org/10.1371/journal.pone.0185699>.
6. **Bilinski A**, Neumann P, Cohen J, Thorat T, McDaniel K, Salomon JA. “Integrating Cost Effectiveness and Affordability in the Design of Universal Health Coverage.” *PLoS Medicine*, 2017, <https://doi.org/10.1371/journal.pmed.1002397>.
5. Fitzpatrick MC, Shah H, Pandey A, **Bilinski A**, Kakkar M, Clark A, Townsend J, Abbas S, Galvani A. “One Health Approach to Cost-Effective Rabies Control in India.” *PNAS*, 2016, <https://doi.org/10.1073/pnas.1604975113>.
4. **Bilinski A**, Fitzpatrick MC, Rupprecht C, Paltiel, A, and Galvani A. “Optimal Frequency of Rabies Vaccination Campaigns in Sub-Saharan Africa.” *Proceedings of the Royal Society B*, 2016, <https://doi.org/10.1098/rspb.2016.1211>.
3. Beckman A, **Bilinski A**, Boyko R, Camp G, Wall AT, Lim J, Wang E, Bruce D, Gonsalves G. “New Hepatitis C Drugs are Very Costly and Unavailable to Many State Prisoners.” *Health Affairs*, 2016, <https://doi.org/10.1377/hlthaff.2016.0296>.
2. Niccolai, L, Julian P, **Bilinski A**, Mehta N, Meek J, Zelterman D, Hadler J, Sosa L. “Geographic Poverty and Racial/Ethnic Disparities in Cervical Cancer Precursor Rates in Connecticut, 2008–2009.” *American Journal of Public Health*, 2012, <https://doi.org/10.2105/AJPH.2011.300447>.
1. Mehta, N, Julian P, Meek J, Sosa L, **Bilinski A**, Hariri S, Markowitz L, Hadler J, Niccolai L. “Human Papillomavirus Vaccination History Among Women With Precancerous Cervical Lesions: Disparities and barriers.” *Obstetrics and Gynecology*, 2012, <https://doi.org/10.1097/AOG.0b013e3182460d9f>.

Commentaries and Correspondence

3. **Bilinski A** and Ciaranello A. “Modeling Cost and Outcomes of SARS-CoV-2 School Testing Programs—Reply.” *JAMA Pediatrics*, 2023, <https://doi.org/10.1001/jamapediatrics.2022.2979>
2. **Bilinski A**. Determining the Optimal Length of Quarantine—Transmission, Social, and Economic Considerations. *JAMA Network Open*, 2022, [10.1001/jamanetworkopen.2022.0096](https://doi.org/10.1001/jamanetworkopen.2022.0096).
1. **Bilinski A** and Hatfield L. “Potential Unintended Effects of Medicare’s Bundled Payments for Care Improvement Program – Comment.” *JAMA*, 2019, <https://doi.org/10.1001/jama.2018.18162>.

Other Writing

3. Hogan J, **Bilinski A**, Stuart E, and Salomon JA. “Surveillance, Screening, and Self-testing Can Help Us Manage COVID-19 in the Long Term.” Boston Globe, 2022, <https://www.bostonglobe.com/2022/01/10/opinion/surveillance-screening-self-testing-can-help-us-manage-covid-19-in-the-long-term/>
2. **Bilinski A** and Salomon JA. “Data from Routine Covid Testing Can Help Schools Stay Open this Year.” Stat News, 2021, <https://www.statnews.com/2021/09/21/covid-testing-data-help-schools-stay-open/>.
1. **Bilinski A** and Salomon JA. “Pandemic Models Can Be More Useful: Here’s how.” Health Affairs Blog, 2021, 10.1377/hblog20210831.560758.

WORKING PAPERS

1. **Bilinski A**, Emanuel E, and Ciaranello A. “Sins of Omission: Quantifying the health costs of excluding pregnant people from clinical trials.”
2. **Bilinski A**, Salomon JA, and Hatfield L. “Adaptive Metrics for an Evolving Pandemic: A dynamic approach to area-level COVID-19 risk designations.”
3. **Bilinski A**, Giardina J, Massa L, Ciaranello A, Fitzpatrick M. “What Goes In Must Come Out: Best functional testing practices for complex simulation models.”
4. **Bilinski A** and Hatfield L. “Goldilocks and the Pre-Intervention Time Series: How long is just right?”
5. **Bilinski A** and Hatfield L. “No Free Lunch: A non-inferiority approach to model assumption tests.”
6. **Bilinski A**, Menzies N, and Salomon JA. “Metamodelling, Sensitivity Analysis, and Causal Reasoning for Complex Simulation Models: An HIV case study.”
7. Norris A, Venkataramani A, Wang T, and **Bilinski A**. “Many State Medicaid Dental Plans Have Significant Coverage Gaps, Resulting in High Out-of-Pocket Costs for Beneficiaries.”
8. Fortnam T, Chambers L, **Bilinski A**, DeVito R, Hogan J. “Assessing the impact of vaccine rollout that prioritizes high-risk communities.”
9. Fortnam T, Chambers L, **Bilinski A**, Hogan J. “A Novel Approach to Rapid Vaccine Effectiveness Estimation with Application to the BA.1 and BA.2 sub-lineages of the Omicron Variant.”
10. O’Neill S, Gulseren B, **Bilinski A**, Dimick J, Ryan A. “Differences-in-differences 2.0: Strategies to address variation in the timing of staggered policy implementation.”

INVITED TALKS (SELECTED)

- 2023 “Difference-in-Differences.” California Center for Population Research. Forthcoming.
- 2023 “Adaptive metrics for an evolving pandemic: A dynamic approach to area-level COVID-19 risk designations.” University of Colorado Biostatistics and Informatics Seminar. Forthcoming.
- 2023 “Adaptive metrics for an evolving pandemic: A dynamic approach to area-level COVID-19 risk designations.” International Conference for Health Policy Statistics.
- 2022 “Using Modeling to Make Decisions.” K-12 COVID-19 Response Symposium, University of Illinois–Urbana Champaign.
- 2022 “Sins of Omission: Quantifying the Health Costs of Excluding Pregnant People from Clinical Trials.” Society for Medical Decision Making 43rd Annual Meeting, Oral Presentation (N. Emanuel).
- 2022 “Is the Time Now? A novel approach to early detection of COVID-19 surges.” Public Health Modeling Unit Seminar, Yale School of Public Health.

- 2021 “When Models are Wrong and Harmful: Unpacking forecast failures of the COVID-19 Pandemic.” UT COVID-19 Modeling Consortium.
- 2021 “SARS-CoV-2 Testing Strategies to Contain School-Associated Transmission.” Society for Medical Decision Making 42nd Annual Meeting, Oral Presentation.
- 2021 “SARS-CoV-2 Testing Strategies to Contain School-Associated Transmission.” University of California/California Department of Public Health Modeling Consortium.
- 2021 “Impact of the Delta Variant on Children.” Expert Panelist, CanCOVID-PHAC SITE Exchange.
- 2021 “Lessons from Pandemic School Modeling.” Biostatistics Department Seminar, Brown School of Public Health.
- 2021 “Goldilocks and the Pre-Intervention Time Series: How long is just right?” McGill Epidemiology Seminar, McGill Dept of Epidemiology, Biostatistics, and Occupational Health.
- 2020 “Strategies for Preventing SARS-CoV-2 Transmission in Schools: A model-based analysis of safe reopening strategies.” American Academy of Pediatrics, Public Health Agency of Canada, various state departments of public health.
- 2020 “COVID-19 Statistics, Policy modeling & Epidemiology Collective.” COVID-19 Rapid Response Economics Webinar, Association of Environmental and Resource Economists.
- 2020 “Goldilocks and the Pre-Intervention Time Series: How long is just right?” Applied Quantitative Methods Seminar, Boston University School of Public Health.
- 2019 “Nothing to See Here? A non-inferiority approach to parallel trends.” Population Health Science Workshop sponsored by UPenn Health Economics (CHIBE/LDI). Selected for 1/9 presentations out of 100 submissions.
- 2019 “When Cost-Effective Interventions are Unaffordable: understanding why and moving forward.” Hepatitis C Medicaid Affinity Group.
- 2018 “When Cost-Effective Interventions are Unaffordable: understanding why and moving forward.” VA Health Economics Research Cyberseminar.
- 2018 “Proper use of P-values and Other Alternatives.” Panelist at Western North American Region of the International Biometric Society Meeting.
- 2016 “The Hepatitis C Crisis in American Prisons.” Panel discussion at Harvard Law School with Robert Greenwald and Joel Thompson.

TEACHING

PHP2455A: Health Services Research Methods I Instructor	Fall 2022
Math 116/E-216: Real Analysis, Convexity, and Optimization Teaching Fellow, Professor Paul Bamberg	Spring 2018
RDS 280: Decision Analysis in Clinical Research Teaching Fellow, Professor Uwe Siebert	Summer 2016
Tutoring	
STAT 110: Introduction to Probability	Fall 2016-18
STAT 111: Introduction to Theoretical Statistics	Spring 2017, 2019
Students Supervised	
Rachel Slimovitch (Brown MPH student, thesis adviser)	2022
Soryan Kumar (Brown medical student project)	2022

Mihir Kunte (Brown medical student project)	2022
Shirley Dong (Brown undergraduate project)	2022
Melissa Sierra (Brown MPH student, thesis reader)	2022
Taylor Fortnam (Brown biostatistics PhD student, dissertation committee member)	2021
Susan Hayes (Brown health policy PhD student, dissertation committee member)	2022
Kathryn Thompson (Brown health policy PhD student, research project)	2021
Shuo Feng (Brown biostatistics PhD student, primary adviser)	2021
Alexandra Norris (Harvard undergraduate summer project)	2021
Evan MacKay (Harvard undergraduate project)	2018

HONORS AND AWARDS

2020	Academy Health Best Poster in Methods Research Theme
2020	American Statistical Association Student Paper Award (Health Policy Statistics Section)
2018	Society for Medical Decision-Making Lusted Lee Student Prize Finalist (Quantitative Methods)
2017	General Qualifying Exam in Health Policy High Pass
2015	London School of Hygiene and Tropical Medicine Trust Fund Award
2014	Marshall Scholarship
2014	Rhodes Scholarship Finalist
2013	Yale Calhoun (Hopper) College Fellow's Cup
2009	United States Presidential Scholar

REFEREE SERVICE

JAMA, Annals of Internal Medicine, Health Affairs, Review of Economics and Statistics, Proceedings of the National Academy of Sciences, Science Advances, Epidemiology, PLoS Computational Biology, Statistics and Public Policy, Journal of Policy Analysis and Management, American Journal of Managed Care, Statistics and Public Policy, JAMA Network Open, Value in Health, Healthcare: The Journal of Delivery Science and Innovation, PLoS One, Wellcome Open Research, Health Services and Outcomes Research Methodology

WORK EXPERIENCE

Partners In Health	July 2012-Aug. 2014
<i>Data Analyst</i>	
<ul style="list-style-type: none"> • Worked with 5 sites in Africa and Latin America • Programmed 21 interactive databases, automated reports & trained users in both French & Spanish • Led 11 group trainings of 5-20 people in both English and French on Excel, R and Access; provided mentorship & technical support to 3 staff members • Analyzed HIV medical records and prepared abstracts and manuscripts on retention and adherence 	

OTHER SKILLS AND INTERESTS

Computer	R, Python, Stata, ArcGIS, Access
Languages	English (native), Spanish (proficient), French (basic)