Anna Zink

Principal Researcher
Center for Applied AI at Chicago Booth
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EDUCATION

Harvard University — Cambridge, MA
Doctor of Philosophy, Health Policy — 2022
Secondary Field, Computational Science and Engineering

Carleton College — Northfield, MN
Bachelor of Arts, Mathematics — 2011

Oxford University — Oxford, England
Independent Study, Chaotic Dynamics and Discrete Mathematics — Fall 2009

WORK EXPERIENCE

Chicago Booth Center for Applied AI — Chicago, IL
Principal Researcher — 2022 – present

Risk Segmentation, Stratification and Tiering Working Group, State of CA DHCS — Sacramento, CA
Working Group Member — 2022 – present

athenahealth — Watertown, MA
Senior Data Engineer — 2015 – 2017

Center for Biostatistics and AIDS Research — Boston, MA
SAS Programmer II — 2013 – 2015

Acumen LLC — Burlingame, CA
Research and Policy Analyst — 2011 – 2013

AWARDS & HONORS

Google Research Scholar Award (with Irene Chen) — 2024

NSF Graduate Research Fellowship Program — 2019 – 2022

WORK IN PROGRESS

Evaluating and Improving Clinical Risk Prediction Models for Patients with Lower Access to Care (with Irene Chen)

The Effect of AI-Enabled Clinical Software on Health Care Spending and Health Outcomes (with Hannah Neprash and Michael Chernew)

Learning About Decision-Making During Triage with Machine Learning (with Claire Boone, Ziad Obermeyer, Ari Robicsek, and Bill Wright)

WORKING PAPERS

Zink A, Obermeyer Z, Pierson E. Race Correction in Clinical Algorithms Can Correct for Racial Disparities in Data Quality.

Zink A, Wherly D, et al. The Effect of Real-Time Prescription Benefit Tools on Prescription Use and Spending.

PUBLICATIONS

Zink A, Chernew M, Neprash HT. (2024). How Should Medicare Pay for Artificial Intelligence? *JAMA Internal Medicine* May.

Zink A, Boone C, Maddox KJ, Chernew M, Neprash H. (2024). Artificial Intelligence in Medicare: Utilization, Spending, and Access to Medicare-Covered AI-Enabled Clinical Software. *The American Journal of Managed Care* 30.

Cary MP Jr, **Zink A**, et al. (2023). Mitigating Racial and Ethnic Bias and Advancing Health Equity in Clinical Algorithms: A Scoping Review. *Health Affairs* 42(10).

Neprash HT, **Zink A**, Sheridan B, Hempstead K (2021). The Effect of Medicaid Expansion on Medicaid Participation, Payer Mix, and Labor Supply in Primary Care. *Journal of Health Economics* 80: 102541.

Zink A and Rose S (2021). Identifying Undercompensated Groups Defined by Multiple Attributes in Risk Adjustment. *BMJ Health & Care Informatics* 28(1).

McGuire T, **Zink A**, Rose S (2021). Improving the Performance of Risk Adjustment Systems: Constrained Regressions, Reinsurance, and Variable Selection. Forthcoming in *American Journal of Health Economics*.

Zink A and Rose S (2020). Fair Regression for Health Care Spending. *Biometrics* 76(3): 973-982.

Neprash HT, **Zink A**, Gray J, Hempstead K (2018). Physicians' Participation in Medicaid Increased Only Slightly Following Expansion. *Health Affairs* 37:1087-91.

Barnett ML, Gray J, **Zink A** and Jena AB (2017). Coupling Policymaking with Evaluation — The Case of the Opioid Crisis. *New England Journal of Medicine* 377: 2306-2309.

Hempstead K, Gray J, **Zink A** (2017). Reframing the Unaffordability Debate: Patient Responsibility for Physician Care. *American Journal of Managed Care* 23(11).

Santillana M, Nguyen AT, Louie T, **Zink A**, Gray J, Sung I (2016). Cloud-based Electronic Health Records for Real-time, Region-specific Influenza Surveillance. *Scientific Reports* 6, 25732.

WHITE PAPERS, POLICY BRIEFS, ETC.

Zink A, Morriss S, Gangopadhyaya A, Obermeyer Z (2023). Building Equitable Artificial Intelligence in Health Care, *Urban Institute*.

Zink A, McGuire T, Rose S (2022). Balancing fairness and efficiency in health plan payments, *Stanford HAI Policy Briefs*.

Gray J, **Zink A**, Dreyfus T. Effects of the Affordable Care Act through 2015 (2016). *Robert Wood Johnson Foundation and athenahealth*.

GRANTS AND FUNDING

Title: Closing the Gap: Evaluating and Improving Clinical Risk Prediction Models for Patients with Lower Access to Care
Sponsor: Google
Project period: 1/2024 – 1/2025
Role: Co-Principal Investigator (with Irene Chen)

Title: The Effect of AI-Enabled Clinical Software on Health Care Spending and Health Outcomes
Sponsor: National Institute for Health Care Management
Project period: 1/2024 – 1/2025

Role: Co-Principal Investigator (with Hannah Neprash)

Title: Predictive Clinical Model Audits in Health Care: A Multi-Centered Pragmatic Implementation to Inform Practice
Sponsor: Gordan and Betty Moore Foundation
Project period: 8/2023 – 4/2025
Role: Co-Investigator (PI: Brett Beaulieu-Jones)

PRESENTATIONS

Advancing Clinical Decision-Making During Triage with Machine Learning 2024
HP/CHIBE Work-in-Progress Research Seminar, UPenn

Effect of Real Time Prescription Benefit Check Tool on Use and Cost of Prescription Drugs 2023
ASHEcon

Machine Learning Methods to Evaluate and Improve U.S. Health Policy 2023
Guest Lecture for the Machine Learning for Public Policy Class, University of Chicago

AI in Medicare 2023
Healthcare Initiative Brownbag Session, University of Chicago

No Longer Asking Permission: Medicaid Prior Authorization Policy & Physician Prescribing Behavior 2022
ASHEcon

New Advances for Fairness in Plan Payment Risk Adjustment 2021
Joint Statistical Meeting (JSM)

What Does a Formulary Do? Evidence from Drug Plan Assignment in Medicare Part D 2021
ASHEcon

Identifying Undercompensated Groups Defined by Multiple Attributes in Risk Adjustment 2020
International Risk Adjustment Network Meeting

Identifying Undercompensated Groups Defined by Multiple Attributes in Risk Adjustment 2020
Joint Statistical Meeting (JSM)

Fair Regression for Health Care Spending 2019
International Risk Adjustment Network Meeting

Fair Regression for Health Care Spending 2019
INFORMS Healthcare Conference

Fair Regression for Health Care Spending 2019
ASHEcon

TEACHING EXPERIENCE

Teaching Assistant, Econometric Methods in Impact Evaluation, Harvard School of Public Health 2021

Teaching Assistant, The Quality of the U.S. Health Care System, Harvard College 2019 - 2020

Lecturer, Math Camp for incoming Health Policy PhD students 2019 - 2021

Tutor, Statistical Sleuthing through Linear Models, Harvard College 2019

PROFESSIONAL SERVICE

Ad Hoc Referee: AJMC, Health Affairs, Health Services Research, Journal of Health Economics, JAMA Health Forum

Conference Abstract Reviewer: Conference on Health, Inference, and Learning (2023), ACM Conference on Fairness, Accountability, and Transparency (2022-2023), NeurIPS (2022)

Professional Memberships: American Society of Health Economists, American Statistical Association