

EDUCATION

Harvard University PhD, Health Policy (Decision Sciences)	Cambridge, MA Expected May 2026
Dissertation Title: <i>"Insights into the Fragmented U.S. Health System through Simulation Modeling: Childhood Insurance, Care Utilization, and Outcomes"</i>	
Affiliations:	
1. Interfaculty Initiative in Health Policy, Harvard University	
2. Center for Health Decision Science, Harvard T.H. Chan School of Public Health	
3. Department of Population Medicine, Harvard Medical School & Harvard Pilgrim Health Care Institute	
Johns Hopkins Bloomberg School of Public Health	Baltimore, MD
MSPH, International Health (Human Nutrition) + Certificate in Public Health Economics	May 2016
Tufts University	Medford, MA
BA, International Relations (Global Health, Nutrition, and Environment)	May 2014

AREAS OF EXPERTISE

Methods: Simulation modeling (microsimulation); Decision analytic and economic evaluation methods (cost-effectiveness, cost-consequence, costing); Longitudinal and survival data analyses; Experimental and quasi-experimental causal inference

Domains: Health policy (insurance coverage and gaps); Health services and care delivery (primary care, dental care, pediatrics); Child and adolescent health; Health disparities; Nutrition and food security

WORK AUTHORIZATION

Permanent Resident of United States

REFERENCES

Nicolas A. Menzies, PhD (Dissertation Committee Chair) nmenzies@hsppharvard.edu	Benjamin D. Sommers, MD, PhD bsommers@hsppharvard.edu	Ankur Pandya, PhD anpandya@hsppharvard.edu	Laura A. Hatfield, PhD hatfield-laura@norc.org
			Catherine Hayes, DMD, SM, DMSc catherine_hayes@hsdm.harvard.edu

PEER-REVIEWED PUBLICATIONS

1. **Shen Y**, Beccia AL, Menzies NA, Gao C, Austin SB, Raffoul A. Development of disordered weight control behaviors and its progression to eating disorders in Canada: A nationally representative microsimulation. *International Journal of Eating Disorders*. Published online 10 Dec 2025. doi: [10.1002/eat.70012](https://doi.org/10.1002/eat.70012)
2. [Job Market Paper] **Shen Y**, Sommers BD, Hatfield LA, Hayes C, Pandya A, Menzies NA. Insurance dynamics during childhood in the fragmented U.S. health system. *JAMA*. 2025;334(17):1533. doi: [10.1001/jama.2025.15488](https://doi.org/10.1001/jama.2025.15488)
3. Choi SE, **Shen Y**, Wright DR. Cost-effectiveness of dental workforce expansion through the National Health Service Corps and its association with oral health outcomes among US children. *JAMA Health Forum*. 2023; 4(3), e230128. doi: [10.1001/jamahealthforum.2023.0128](https://doi.org/10.1001/jamahealthforum.2023.0128)
4. Kenney EL, Walkinshaw LP, **Shen Y**, Fleischhacker SE, Jones-Smith J, Bleich SN, Krieger JW. Costs, reach, and benefits of COVID-19 pandemic electronic benefit transfer and grab-and-go school meals for ensuring

- youths' access to food during school closures. *JAMA Network Open*. 2022; 5(8), 2229514. doi:[10.1001/jamanetworkopen.2022.29514](https://doi.org/10.1001/jamanetworkopen.2022.29514)
5. Kenney EL, Dunn CG, Mozaffarian RS, Dai J, Wilson K, West J, **Shen Y**, Fleischhacker S, Bleich SN. Feeding children and maintaining food service operations during COVID-19: a mixed methods investigation of implementation and financial challenges. *Nutrients*. 2021; 13, 2691. doi:[10.3390/nu13082691](https://doi.org/10.3390/nu13082691)
 6. Griswold SP, Langlois BK, **Shen Y**, Cliffer IR, Suri DJ, Walton S, Chui K, Rosenberg IH, Koroma AS, Wegner D, Hassan A, Manary MJ, Vosti SA, Webb P, Rogers BL. Effectiveness and cost-effectiveness of 4 supplementary foods for treating moderate acute malnutrition: Results from a cluster-randomized intervention trial in Sierra Leone. *American Journal of Clinical Nutrition*. 2021; 114(3), 973–985. doi:[10.1093/ajcn/nqab140](https://doi.org/10.1093/ajcn/nqab140)
 7. Singh A, Potani I, Griswold SP, Suri DJ, Langlois BK, **Shen Y**, Walton S, Chui K, Manary MJ, Webb P, Rogers BL, Rosenberg IH. Host fecal mRNAs predicted environmental enteric dysfunction among children with moderate acute malnutrition in Sierra Leone. *The American Journal of Tropical Medicine and Hygiene*. 2021; 105(5), 1376–1382. doi:[10.4269/ajtmh.21-0348](https://doi.org/10.4269/ajtmh.21-0348)
 8. Suri DJ, Potani I, Singh A, Griswold S, Wong WW, Langlois B, **Shen Y**, Chui K, Rosenberg IH, Webb P, Rogers BL. Body composition changes in children during treatment for moderate acute malnutrition: findings from a 4-arm cluster-randomized trial in Sierra Leone. *The Journal of Nutrition*. 2021; 151(7), 2043–2050. doi:[10.1093/jn/nxab080](https://doi.org/10.1093/jn/nxab080)
 9. **Shen Y**, Cliffer IR, Suri DJ, Langlois BK, Vosti SA, Webb P, Rogers BL. Impact of stakeholder perspectives on cost-effectiveness estimates of four specialized nutritious foods for preventing stunting and wasting in children 6–23 months in Burkina Faso. *Nutrition Journal*. 2020; 19(1), 20. doi:[10.1186/s12937-020-00535-x](https://doi.org/10.1186/s12937-020-00535-x)
 10. Langlois BK, Cliffer IR, Nikiema L, Suri DJ, Garanet F, **Shen Y**, Zeba AN, Walton S, Lanou HB, Webb P, Rogers BL. Factors that may influence the effectiveness of 4 specialized nutritious foods in the prevention of stunting and wasting in children aged 6–23 months in Burkina Faso. *Current Developments in Nutrition*. 2020; 4(2), nzaa002. doi:[10.1093/cdn/nzaa002](https://doi.org/10.1093/cdn/nzaa002)
 11. Cliffer IR, Nikiema L, Langlois BK, Zeba AN, **Shen Y**, Lanou HB, Suri DJ, Garanet F, Chui K, Vosti SA, Walton S, Rosenberg IH, Webb P, Rogers BL. Cost-effectiveness of 4 specialized nutritious foods in the prevention of stunting and wasting in children aged 6–23 months in Burkina Faso: a geographically randomized trial. *Current Developments in Nutrition*. 2020; 4(2), nzaa006. doi:[10.1093/cdn/nzaa006](https://doi.org/10.1093/cdn/nzaa006)
 12. Chodur GM*, **Shen Y***, Kodish S, Oddo VM, Antiporda DA, Jock B, Jones-Smith J. Food environments around American Indian reservations: a mixed methods study. *PLOS One*. 2016; 11(8), e0161132. doi:[10.1371/journal.pone.0161132](https://doi.org/10.1371/journal.pone.0161132)
- *Contributed equally as first author to this work

MANUSCRIPTS UNDER REVIEW AFTER REVISION

1. **Shen Y**, Simon L, Yu H. Effects of the National Health Service Corps expansion on dental utilization in underserved areas.

FUNDED FELLOWSHIPS, GRANTS, AND AWARDS

Dissertation Completion Fellowship, Harvard University	Fall 2025- Spring 2026
Social Equity and Health Equity Dissertation Grant/Award, Harvard Kennedy School Malcolm Wiener Center	March 2025
Dissertation Grant, Harvard School of Dental Medicine Initiative to Integrate Oral Health & Medicine	Spring 2025
Merit Term-Time Dissertation Fellowship, Harvard Graduate School of Arts and Sciences	Fall 2024

Fellowship in Health Policy and Insurance Research, Harvard Medical School	Fall 2023- Spring 2024
Summer Predissertation Fellowship, Harvard Graduate Society	Summer 2022
Delta Omega Honor Society, Alpha Chapter, Johns Hopkins Bloomberg School of Public Health	May 2016
International Relations Summer Scholar, Tufts University	Summer 2013

SELECTED PRESENTATIONS

Invited Talks

1. Cumulative Childhood Insurance Experience in the Fragmented US Health System. Harvard Medical School Department of Population Medicine Health Policy and Insurance Research Seminar Series. March 2025.
2. The Insurance Odyssey in Fragmented US Health Systems: Cumulative Experience of Health & Dental Coverage over Childhood. Decision Sciences for Child Health Collaborative (SMDM DSSCo) Show & Tell, Society of Medical Decision Making. Virtual. Nov 2024.
3. Supporting SNF Product Decisions via Food Assistance Cost- Effectiveness Tool (FACET), Next Generation of Specialized Nutritious Food Products for the Management of Acute Malnutrition Meeting, USAID, Washington D.C.. March 2019.
4. Past Assessments of the Code violations in 11 Countries, Second Meeting of NetCode at World Health Organization, Virtual. June 2016.

Presentations

1. Coverage Hopscotch: Modeling Childhood Insurance Dynamics in the United States. AcademyHealth Child Health Services Research Interest Group (CHSRIIG) Community of Practice. Virtual. Dec 2025. (Oral)
2. Childhood Insurance Dynamics in the United States with State-level Heterogeneity. Society of Medical Decision Making (SMDM) 47th Annual Meeting, Ann Arbor, MI. June 2025. (Poster)
3. The Insurance Odyssey in Fragmented US Health Systems: Cumulative Experience of Health & Dental Coverage over Childhood. International Conference on Health Policy Statistics, San Diego, CA. Jan 2025. (Oral)
4. Projecting Childhood Health & Dental Insurance Trajectories in the United States. Society of Medical Decision Making (SMDM) 46th Annual Meeting, Boston, MA. Oct 2024. (Poster)
5. Food Assistance Cost-Effectiveness Tool for Specialized Nutritious Foods (FACET4SNF), Evidence for Nutrition Summit 2.0, Virtual. Oct 2020. (Oral)
6. A Decision Support Tool Integrating Evidence into More Cost- Effective Humanitarian & Development Food Assistance, Global Evidence and Implementation Summit (GEIS), Melbourne, Australia. Oct 2018. (Oral)
7. FAQR Decision Support Tool: Supporting Evidence-based Decision-making for More Cost-Effective Specialized Nutritious Food Aid Programming, CORE Group Global Health Practitioner Conference, Bethesda, MD. June 2018. (Oral)

SELECTED MEDIA COVERAGE

1. *South Florida Sun Sentinel*. "[Medicaid cuts aren't just numbers, they're life-changing to Florida families.](#)" Nov 28, 2025.
2. *Newsweek*. "[Most American Children Rely on Medicaid, CHIP—They Could Soon Be at Risk.](#)" Oct 3, 2025.
3. *U.S. News & World Report*. "[Most American Kids Rely On Medicaid, CHIP Insurance.](#)" Sept 29, 2025.
4. *Medscape*. "[US Children Face Gaps in Health Insurance Coverage](#)". Sept 26, 2025.

TEACHING EXPERIENCE

Harvard T.H. Chan School of Public Health	Boston, MA
Decision Analysis for Health and Medical Practices (Professor: Ankur Pandya) <i>Head Teaching Fellow (2023), Teaching Fellow (2022)</i>	Fall 2022-2023
Methods for Decision Making in Medicine (Professor: Myriam Hunink) <i>Teaching Fellow</i>	Summer 2023
Decision Analysis Methods in Public Health and Medicine (Professor: Nicolas Menzies) <i>Teaching Fellow</i>	Spring 2023
Decision Analysis in Clinical Research (Professor: Uwe Siebert) <i>Teaching Fellow</i>	Summer 2022

SELECTED PROFESSIONAL EXPERIENCE

Harvard Medical School & Harvard Pilgrim Health Care Institute	Boston, MA
<i>Research Fellow, Department of Population Medicine</i>	2023 - present
<ul style="list-style-type: none">Led an empirical evaluation of the National Health Service Corp dental workforce expansion on dental utilization using difference-in-differences, a quasi-experimental causal inference designCompleted data request proposal, obtained NHANES restricted access, and assessed data suitability at Boston Research Data Center	
Boston Children's Hospital	Boston, MA
<i>Graduate Research Assistant, Division of Adolescent and Young Adult Medicine</i>	2022 - 2023
<ul style="list-style-type: none">Led the development and calibration (approximate Bayesian computation) of a state-transition microsimulation model to estimate the disease dynamics of disordered weight control behaviors and eating disorders	
Tufts Friedman School of Nutrition Science and Policy	
<i>Data Analyst/ Cost Specialist (Cost-effectiveness Work Stream Lead), Food Aid Quality Review (FAQR) Project</i>	2016 - 2021
<ul style="list-style-type: none">Supervised 3 research assistantsContributed to 2 malnutrition treatment and prevention trials in Sierra Leone and Burkina Faso: study design, instrument development, field data collection, data management and analysis, and research disseminationLed the development and roll-out of an interactive cost-effectiveness decision aid for USAID and its partners: conceptual framework development, interface and back-end programming (R Shiny), evidence synthesis, user manual development, stakeholder/user engagement, and trainings	
World Health Organization (WHO)	Geneva, Switzerland
<i>Intern (MSPH Practicum), Department of Nutrition and Food Safety</i>	2015
<ul style="list-style-type: none">Developed country-wide monitoring and assessment protocols for the Network for Global Monitoring and Support for Implementation of the International Code of Marketing of Breast-milk Substitutes and Subsequent Relevant World Health Assembly Resolutions (NetCode) projectReviewed past assessments and presented findings at a WHO all-stakeholder meeting	

SERVICE

Ad-hoc reviewer for: <i>BMC Public Health, Health Affairs Scholar, Medical Decision Making Policy & Practice, PLOS One, Advances in Nutrition, Nutrition Journal</i>	2021- present
Peer Mentor in the Harvard Health Policy PhD Peer Mentorship program, Cambridge MA	2022 - present
Invited panelist, Pursuing the PhD: Myths & Realities, Mignone Center for Career Success, Harvard Faculty of Arts and Sciences, Cambridge MA	Oct 2025
Organizer of the Decision Science Journal Club and Research in Progress Seminar, Center for Health Decision Science, Havard T.H. Chan School of Public Health, Boston MA	2024
Invited member of the Technical Review Panel, Cost-Efficiency and Cost-Effectiveness in Humanitarian Assistance (CE2HA), United States Agency for International Development (USAID) and the International Rescue Committee (IRC), virtual	2019
Organizer of the Food Assistance for Nutrition Evidence Summit, Washington D.C.	2018

SKILLS AND CERTIFICATIONS

Programming & Computing: R (statistical analyses, simulation modeling, cost-effectiveness analyses, parallel computing, Shiny), High Performance Computing, Stata, Julia (beginner), Python (beginner)

Application: TreeAge, Amua, ArcGIS

Data Access: Special Sworn Status (SSS) by the U.S. Census Bureau