

Chad Stecher

College of Health Solutions
Arizona State University
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Professional Positions

Assistant Professor, Arizona State University
College of Health Solutions, August 2019 – present

Assistant Professor, Rensselaer Polytechnic Institute
Department of Economics, August 2017 – July 2019

Education

Ph.D. in Economics, University of California, Los Angeles, 2017

M.A. Economics, University of California, Los Angeles, 2012

B.A. in Economics and Mathematics, Colby College, 2008

Publications

1. **Stecher, C.**, Linnemayr, S., Cloonan, S., Reaven, P. & Huckfeldt, P. 2024. “Healthcare Cost Savings from an mHealth Tool for Improving Medication Adherence across Chronic Conditions.” *American Journal of Managed Care* (*forthcoming*)
2. Berardi, V., Phillips, C., McEntee, M., **Stecher, C.**, Todd, M. & Adams, M. 2024. “Does Delay Discounting Moderate or Mediate the Effects of Immediate Financial Incentives for Increasing Adults’ Physical Activity in a Year-Long Intervention?” *Annals of Behavioral Medicine* (*forthcoming*)
3. Linnemayr, S., Wagner, Z., Saya, U., **Stecher, C.**, Lunkuse, L., Wabukala, P., Odiit, M. & Mukasa, B. 2024. “Behavioral Economic Incentives to Support ART Adherence, Clinic Attendance, and Viral Suppression: Results from a Randomized Controlled Trial in Uganda” *JAIDS* (*forthcoming*)
4. **Stecher, C.**, Chen, C., Codella, J. & Hendler, J. 2024. “Promoting Contextually Cued Physical Activity Habits: A Pilot Study Using Cue-Contingent Financial Incentives for Daily Walking” *Journal of Behavioral Medicine* (*forthcoming*)
5. **Stecher, C.**, Cloonan, S. & Domino, M. 2024. “The Economics of Treatment for Depression.” *Annual Review of Public Health* (*forthcoming*)
6. Ofori, E., Vaillancourt, D., Greig-Custo, M., Barker, W., Hanson, K., DeKosky, S., Garnva, C., Adjoudi, M., Golde, T., Loewenstein, D., **Stecher, C.**, Fowers, R. & Duara, R. 2023. “Free-water Imaging Reveals Unique Microstructure in Hispanic Individuals with Dementia.” *Brain Imaging and Behavior* (*forthcoming*)

7. Hustedt, J., Chartrand, N., Merrell, D., Reichenbach, R., Pinkston, E. & **Stecher, C.** 2023. “The moderating effect age on patient reported benefits from operative management of intra-articular distal radius fractures: A meta-regression analysis.” *Journal of Hand Surgery (forthcoming)*
8. **Stecher, C.**, Pagni, B., Cloonan, S., Vink, S., Hill, E., Ogbeama, D., Delaney, S. & Braden, B. 2023. “App-Based Meditation Habits Maintain Reductions in Depression Symptoms Among Autistic Adults.” *Autism (forthcoming)*
9. Cloonan, S., Fowers, R., Huberty, J. & **Stecher, C.** 2023. “Meditation App Habits and Mental Health: A Longitudinal Study of Meditation App Users During the COVID-19 Pandemic.” *Mindfulness (forthcoming)*
10. Chartrand, N., **Stecher, C.**, Rajendra, S., Rosenkrantz, A., Duszak, R. & Hughes, D. 2023. “An Examination of Racial and Ethnic Disparities in the Use of Prostate Biopsy and Magnetic Resonance Imaging in Prostate Cancer Screening: A Retrospective Cohort Study.” *Urology Practice*; 10 (6): pp. 612 – 619.
11. **Stecher, C.**, Cloonan, S., Linnemayr, S. & Huberty, J. 2023. “Combining Behavioral Economics-Based Incentives with the Anchoring Strategy: Protocol for a Randomized Controlled Trial.” *JMIR Research Protocols (forthcoming)*
12. Sullivan, M., Huberty, J., Chung, Y. & **Stecher, C.** 2023. “Mindfulness Meditation App Abandonment During the COVID-19 Pandemic: An Observational Study.” *Mindfulness (forthcoming)*
13. Twesten, J., **Stecher, C.**, Arinaitwe, J. & Parascandola, M. 2023. “Tobacco-Related Health and Policy Research on the African Continent: A 22-Year Literature Review and Network Analysis.” *Tobacco Control (forthcoming)*
14. **Stecher, C.**, Pfisterer, B., Harden, S., Epstein, D., Hirschmann, J., Wunsch, K. & Buman, M. 2023. “Assessing the Pragmatic Nature of mHealth Interventions Promoting Physical Activity: A Systematic Review and Meta-Analysis.” *JMIR mHealth and uHealth (forthcoming)*
15. Berardi, V., Fowers, R., Rubin, G. & **Stecher, C.** 2023. “Do Time of Day Preferences and Daily Temporal Consistency Predict the Sustained Use of a Commercial Meditation App?: Longitudinal Observational Study.” *JMIR: Journal of Medical Internet Research (forthcoming)*
16. **Stecher, C.**, Palimaru, A., Odiit, M., Lunkuse, L., Walukaga, S. & Linnemayr, S. 2023. “Barriers and Facilitators of Antiretroviral Therapy (ART) Adherence Habit Formation in Sub-Saharan Africa: Evidence From a Qualitative Study in Kampala, Uganda” *Social Science & Medicine*; 317: 115567.
17. **Stecher, C.** & Ketcham, J. 2023. “Learning to work together: Productivity gains from shared experience among cardiology teams.” *American Journal of Health Economics (forthcoming)*
18. McCullough, M. & **Stecher, C.** 2023. “Associations Between Provider Financial Models and Use of Health Information Exchange (HIE): Are Alternative Payment Models Associated With Increased Uptake of HIE?” *American Journal of Managed Care (forthcoming)*
19. Hui, C., Kisana, H., Martin, J., **Stecher, C.**, Carter, T., Lederman, E. & Hustedt, J. 2023. “Physician Professional Fees Are Declining and Inpatient and Outpatient Facility Fees Are Increasing for

- Orthopedic Procedures in the United States.” *Arthroscopy: The Journal of Arthroscopy and Related Surgery*; 39(2): pp. 384 – 389.
20. Boronowsky, R., Zhang, A., **Stecher, C.**, Presley, K., Mathur, M., Cleveland, D., Garnett, E., Wharton, C., Brown, D., Meier, A., Wang, M., Braverman, I. & Jay, J. 2023. “Plant-based default nudges effectively increase the sustainability of catered meals on college campuses: Three randomized controlled trials.” *Frontiers in Sustainable Food Systems (forthcoming)*
 21. **Stecher, C.**, Ghai, I., Lunkuse, L., Wabukala, P., Odiit, M., Nakanwagi, A. & Linnemayr, S. 2022. “INcentives and ReMINDers to Improve Long-term Medication Adherence (INMIND): Protocol for a Pilot Randomized Controlled Trial in Uganda” *JMIR Research Protocols*; 11(10): e42216
 22. Fowers, R., Berardi, V., Huberty, J. & **Stecher, C.** 2022. “Using Mobile Meditation App Data to Predict Future App Engagement: An Observational Study.” *JAMIA: Journal of the American Medical Informatics Association*; 29(12): pp. 2057 – 2065.
 23. Koskan, A., **Stecher, C.** & Helitzer, D. 2022. “Influences on Male College Students’ Patient-Provider Communications and Uptake Behaviors Related to the Human Papillomavirus Vaccine.” *Journal of American College Health*; 1 – 7.
 24. Zhang, A., Boronowsky, R., Braverman, I., **Stecher, C.**, Cleveland, D., Garnett, E., Wang, M. and Jay, J. 2022. “Using the Default Nudge to Increase Plant-based Meal Consumption on College Campuses.” *Current Developments in Nutrition*; 6(1): pp. 84.
 25. Kisana, H., Hui, C., Martin, J., **Stecher, C.** & Hustedt, J. 2021. “Development of a Risk Stratification Scoring System to Predict General Surgical Complications in Foot and Ankle Surgery Patients.” *Orthopedics*; 45(3): pp. 139-144.
 26. Abashidze, N., **Stecher, C.**, Rosenkrantz, A., Duszak, R. & Hughes, D. 2021. “Racial and Ethnic Disparities in the Use of Prostate MRI Following an Elevated Prostate-Specific Antigen Test.” *JAMA Network Open*; 4(11): pp. e2132388.
 27. **Stecher, C.**, Sullivan, M. & Huberty, J. 2021. “Using Personalized Anchors to Establish Routine Meditation Practice with a Mobile App: Randomized Controlled Trial.” *JMIR mHealth and uHealth*; 9(12): pp. e32794.
 28. **Stecher, C.**, Everhart, A., Smith, L., Jena, A., Ross, J., Desai, N., Shah, N. & Karaca-Mandic, P. 2021. “Physician Network Connections Associated with Faster De-Adoption of Dronedarone for Permanent Atrial Fibrillation.” *Circulation: Cardiovascular Quality and Outcomes*; 14(10): pp. e008040.
 29. Adams, M., Todd, M., Angadi, S., Hurley, J., **Stecher, C.**, Berardi, V., Phillips, C., McEntee, M., Hovell, M. & Hooker, S. 2021. “Adaptive Goals and Reinforcement Timing to Increase Physical Activity in Adults: A Factorial Randomized Trial” *American Journal of Preventive Medicine*; 62(2): pp. e57 – e68.
 30. Wagner, Z., **Stecher, C.**, Saya, U. & Linnemayr, S. 2021. “The Impact of the COVID-19 Pandemic on Use of HIV Care, Antiretroviral Therapy Adherence, and Viral Suppression: An Observational

- Cohort Study from Uganda.” *JAIDS: Journal of Acquired Immune Deficiency Syndromes*; 88(5): pp. 448.
31. **Stecher, C.**, Fowers, R., Christ, J., Berardi, V., Chung, Y. & Huberty, J. 2021. “Identifying App-Based Meditation Habits and the Associated Mental Health Benefits: Longitudinal Observational Study.” *JMIR: Journal of Medical Internet Research*; 23(11): pp. e27282.
 32. Keister, L., **Stecher, C.**, Aronson, B., McConnell, W., Hustedt, J. & Moody, M. 2021. “Provider Bias in Prescribing Opioid Analgesics: A Study of Electronic Medical Records at a Hospital Emergency Department.” *BMC Public Health*; 21(1): pp. 1 – 9.
 33. **Stecher, C.**, Mukasa, B. & Linnemayr, S. 2021. “Uncovering a Behavioral Strategy for Establishing New Habits: Evidence from Incentives for Medication Adherence in Uganda.” *Journal of Health Economics*; 77: pp. 102443.
 34. **Stecher, C.** 2021. “Physician Network Connections to Specialists and HIV Quality of Care” *Health Services Research*; 56(5): pp. 908 – 918.
 35. **Stecher, C.** & Linnemayr, S. 2021. “Promoting Antiretroviral Therapy Adherence Habits: A Novel Approach Based on a Synthesis of Economic and Psychological Theories of Habit Formation..” *AIDS*; 35(5): pp. 711–716.
 36. Bhuiyan, N., Puzia, M., **Stecher, C.** & Huberty, J. 2021. “Associations Between Rural-Urban Status, Health Outcomes and Behaviors, and COVID-19 Perceptions Among Meditation App Users: A Longitudinal Survey.” *JMIR mHealth and uHealth*; 9(5): pp. e26037.
 37. Huberty, J., Puzia, M., Green, J. & **Stecher, C.** 2021. “Mental health and meditation practices of pregnant women during COVID-19.” *Obstetrics and Gynecology Research*; 4: 1-6.
 38. Koskan, A., Klasko-Foster, L., **Stecher, C.**, Rodriguez, S., Helitzer, D. & Yoo W. 2021. “Human Papillomavirus (HPV) Vaccine Guideline Adherence Among Arizona’s Medicaid Beneficiaries.” *Vaccine*; 39(4): pp. 682–686.
 39. Huberty, J., Green, J., Puzia, M. & **Stecher, C.** 2021. “Evaluation of Mood Check-in Feature for Participation in Meditation Mobile App Users: Retrospective Longitudinal Analysis.” *JMIR mHealth and uHealth*; 9(4): pp. e27106.
 40. Green, J., Huberty, J., Puzia, M. & **Stecher, C.** 2021. “The Effect of Meditation and Physical Activity on the Mental Health Impact of COVID-19–Related Stress and Attention to News Among Mobile App Users in the United States: Cross-sectional Survey.” *JMIR Mental Health*, 8(4): pp. e28479.
 41. Linnemayr S., **Stecher C.**, Saya U.,MacCarthy, S., Wagner, Z., Jennings, L. & Mukasa, B. 2020. “Behavioral Economics Incentives to Support HIV Treatment Adherence (BEST): Protocol for a randomized controlled trial in Uganda.” *Trials*; 21(1): pp. 1–13.
 42. Koskan, A., **Stecher, C.** & Helitzer, D. 2020. “College Males’ Behaviors, Intentions, and Influencing Factors Related to Vaccinating Against HPV.” *Human Vaccines and Immunotherapeutics*; 17(4): pp. 1044–1051.

43. Linnemayr, S. & **Stecher, C.** 2017. “Behavioral Economic Incentives to Improve Adherence to Antiretroviral (ARV) Medication: Early Evidence from a Randomized Controlled Trial in Uganda.” *AIDS*; 31(5): pp. 719 – 726.
44. Linnemayr, S. & **Stecher, C.** 2015. “Behavioral Economics Matters for HIV Research: The Impact of Behavioral Biases on Adherence to Antiretrovirals (ARVs).” *AIDS and Behavior*; 19(11): pp. 2069 – 2075.
45. Datar, A., Liu, J., Linnemayr, S. & **Stecher, C.** 2013. “The Impact of Natural Disasters on Child Health and Investments in Rural India.” *Social Science & Medicine*; 76(1): pp. 83 – 91.

Currently under review

1. Hustedt, J., **Stecher, C.**, Hui, C., Kisana, H., Martin, J., Ruan, E. Roache, W., Robaina, J, Shah, A, Lederman, E & McKee, M. “A comparison of responsiveness and minimally clinically important differences of patient reported outcomes in the orthopedic literature.” (*R & R*)
2. Khalid, H., Firdous, U., Jadoon, A., **Stecher, C.**, Akram, A., & Fox, A. “Can high-profile endorsements improve COVID-19 vaccine uptake and reduce hesitancy in Pakistan?” (*R & R*)
3. Kisana, H., Hui, C., Martin, J., Deeyor, S., **Stecher, C.** & Hustedt, J. 2022. “Complications Associated with Anesthetic Choice for Elective Foot and Ankle Surgery.” (*R & R*)
4. Wagner, Z., Wang, Z., **Stecher, C.**, Haberer, J. & Linnemayr, S. “The Association Between Adherence to Antiretroviral Therapy and Viral Suppression Under New Treatment Regimens: An Observational Cohort Study From Uganda” (*R & R*)
5. Linnemayr, S., Odiit, M., Mukasa, B., Ghai, I. and **Stecher, C.** “Incentives and Reminders to Improve Long-Term Medication Adherence (INMIND): Impact of a Pilot Randomized Controlled Trial in a Large HIV Clinic in Uganda.” (*R & R*)
6. Sullivan, M., Cloonan, S., Huberty, J. & **Stecher, C.** “What Predicts App Engagement? The Association Between Motivation Measures and Meditation App Use Among New Subscribers.”
7. Zhang, A., Wharton, C., Cloonan, S., Boronowsky, R., Magesh, V., Braverman, I., Marquez, A., Leidy, H., Wang, M., Cleveland, D., Jay, J. & **Stecher, C.** “Changing the default meal option at university events to reduce harmful environmental impacts: six randomized controlled trials” (*R & R*)
8. Fowers, R., Chung, Y., Ghasemzadeh, H. & **Stecher, C.** “IAssociation Between Consistent Time of Day of Pill-Taking and Long-term Medication Adherence.”
9. Tsega, Y., Endawkie, A., Tsega, G., Mekonen1, A., Dawed, Y., & Stecher, C. “Trends and Socioeconomic Inequality in Recommended Antenatal Care (ANC) Service Utilization in Ethiopia: A Decomposition Analysis Using Ethiopian Nationwide Demographic Health Survey Data from 2011-2019”

Sponsored Research

1. PI with Co-Is Drs. Deborah Helitzer and Sebastian Linnemayr. 2024 – *present*
mobile Cued Adherence Therapy (mCAT): a scalable habit formation intervention to improve blood pressure medication adherence based on a widely used smartphone app;
NHLBI: R01 HL171706
2. mPI with Dr. Sebastian Linnemayr. 2024 – *present*
R01: INcentives and ReMINDers to Improve Long-term Medication Adherence (INMIND);
NIMH: R01 MH135751
3. PI with Co-Is Dr. Matthew Buman, Sarah Keadle, and Dorothy Sears. 2023 – *present*
StandUPTV Habits: Feasibility trial for maintaining reductions in sedentary screen time;
NIDDK: R01 DK135488
4. Co-I with PI Dr. Sebastian Linnemayr and Co-Is Drs. Mukasa & MacCarthy. 2020 – 2023
INcentives and ReMINDers to Improve Long-term Medication Adherence (INMIND);
NIMH: R34 MH122331
5. Co-I with Dr. Christopher Wharton. 2022 – 2023
Towards a KAITEKI Future: Global Health and Food Systems Sustainability in the era of Global Disruption; Kaiteki Foundation
6. Co-I with PI Dr. J. Mac McCullough. 2020 – 2021
Physicians' Use, Exchange, and Evaluation of Electronic Medical Records; Arizona Health Care Cost Containment System (AHCCCS)
7. Co-I with PI Dr. Edward Ofori. 2023 – 2024
Racial and Ethnic Disparities in Sepsis-Related Outcomes and the Impact of the SEP-1 Bundled Payment on Long-Term Outcomes in Arizona; CHS Center for Health Information and Research (CHiR) Pilot Grant (ASU)
8. Co-PI with Dr. Jennifer Huberty. 2020 – 2021
Mindfulness Takes Practice: Optimizing mHealth Tools for Building Persistent Mindfulness Meditation Habits; CHS COVID Jumpstart Grant (ASU)
9. PI with Co-Is Drs. Jim Hendler and Mohammed Zaki, RPI, 2018 – 2019
Targeting Habit Formation Through a Smartphone Application; FY2018 KIP Award #141535 1092 (RPI)

Teaching Experience

Instructor, Arizona State University

Optimizing Health & Performance (Undergraduate): 1 semester

Evidence-Based Practice (Undergraduate): 1 semester

Economics for Health Majors (Undergraduate): 1 semester

Health Economics (Masters): 7 semesters

Instructor, Rensselaer Polytechnic Institute

Behavioral Economics (Undergraduate/Graduate): 4 semesters

Econometric Methods for Big Data (Undergraduate/Graduate): 2 semesters

Teaching Assistant, University of California, Los Angeles

Econometrics (Undergraduate): 1 quarter

Intermediate Microeconomics Theory (Undergraduate): 1 quarter

Principles of Microeconomics (Undergraduate): 1 quarter

Presentations

- 2023 Society of Behavioral Medicine 44th Annual Meeting & Scientific Sessions
- 2022 American Society of Health Economics, 11th Annual Conference
- 2022 The Center for Health Information and Research (CHiR) Seminar Series
- 2021 Western Economic Association International, 96th Annual Conference
- 2021 American Society of Health Economics, 10th Annual Conference
- 2021 Society of Behavioral Medicine 42nd Annual Meeting & Scientific Sessions
- 2020 Triangle Health Economics Workshop, UNC - Chapel Hill
- 2020 American Society of Health Economics, 9th Annual Conference
- 2019 Southern Economic Association, 89th Annual Meeting
- 2018 6th Workshop in Behavioral and Experimental Health Economics, University of Oslo
- 2018 Department of Economics, SUNY-Albany
- 2018 Department of Economics, SUNY-Buffalo
- 2017 Institute for Healthcare Delivery Science Seminar Series, Ichan School of Medicine at Mount Sinai
- 2017 Rockefeller Institute of Government, SUNY-Albany
- 2017 Cancer Research Group (CARGO), RPI
- 2017 RPI-IBM Center for Health Empowerment by Analytics, Learning, and Semantics (HEALS), RPI

Service

College of Health Solutions

Academic Standards and Grievances Committee; Member, 2024 – present

Science of Health Care Delivery, Strategic Initiatives Committee; Member, 2020 – present

Science of Health Care Delivery, Master's Curriculum Committee Member, 2021 – present

CHS Ph.D. Programs, 2020 – present

Biomedical Informatics Program: Chair (1) Ph.D. Dissertation Committee

Exercise and Nutrition Sciences Program: Char (2) Ph.D. Dissertation Committee

Research and Scholarship Learning Group; Member, 2019 – present

Science of Health Care Delivery Faculty Adviser (below): 2019 – present

Graduate student theses (capstone): 7

Barrett Honors Program theses: Chair 6; Member 7

ARCS Fellowship Review Committee Member, 2020 – present

CHS Faculty Mentorship Program, Mentee, 2020 – present

Building Industry Partnerships Committee Member; Member, 2019 – 2021

COVID Translational Team; Lead of Behavioral Health sub-committee, 2020 – 2021

BMI/CHiR Director Faculty Search Committee; Member, 2020 – 2021

CHS COVID Jumpstart Grant Review Committee; Member, 2020

CHS Health Talk; Presenter - Nov. 2020

CHS Research Day; Presenter - Jan. 2020

Community

Kooth Digital Health, Scientific Advisory Board Member, 2024 – present

Greener by Default, Scientific Advisory Board Member, 2021 – present

University of Arizona Medical School, Scholarly Projects; Faculty Advisor, 2020 – present

Phoenix: Fast Track Cities Ad Hoc Committee; Member, 2020 – present

Calm, Inc.: Scientific Advisory Board Member, 2021 – 2022