

# Chad Stecher

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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

**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)

Sullivan, M., Huberty, J., Chung, Y. & **Stecher, C.** 2023. “Mindfulness Meditation App Abandonment During the COVID-19 Pandemic: An Observational Study.” *Mindfulness* (forthcoming)

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)

**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)

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)

**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.

**Stecher, C.** & Ketcham, J. 2023. “Learning to work together: Productivity gains from shared experience among cardiology teams.” *American Journal of Health Economics* (forthcoming)

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)

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): 384 – 389.

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)

**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

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): 2057 – 2065.

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.

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.

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.

**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.

**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.

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.

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.

**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.

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.

**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.

**Stecher, C.** 2021. “Physician Network Connections to Specialists and HIV Quality of Care” *Health Services Research*; 56(5): pp. 908 – 918.

**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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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

**Stecher, C.**, Pagni, B., Cloonan, S., Vink, S. & Braden, B. “Using Anchoring to Establish Meditation Habits and Improve Depressive Symptoms in Autistic Adults.” *Autism (R & R)*

Kisana, H., Hui, C., Martin, J., Deeyor, S., **Stecher, C.** & Hustedt, J. 2022. “Complications Associated with Anesthetic Choice for Elective Foot and Ankle Surgery.” *JAAOS Global Research & Reviews (R & R)*

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.” *JAAOS Global Research & Reviews (R & R)*

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. “Free-water Imaging Reveals Unique Microstructure in Hispanic Individuals with Dementia.” *Alzheimer’s and Dementia (R & R)*

Cloonan, S., Fowers, R., Huberty, J. & **Stecher, C.** “Did Meditation Habits Protect Mental Health During COVID? An Observational Study.” *Mindfulness (R & R)*

Chartrand, N., **Stecher, C.**, Rajendra, S., Rosenkrantz, A., Duszak, R. & Hughes, D. “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; R & R*

Linnemayr, S., Wagner, Z., Saya, U., **Stecher, C.**, Lunkuse, L., Wabukala, P., Odiit, M. & Mukasa, B. “Behavioral economic incentives to support ART adherence, clinic attendance, and viral suppression: Results from a randomized controlled trial in Uganda” *AIDS*

**Stecher, C.**, Chen, C., Codella, J. & Hendler, J. “Promoting Contextually Cued Physical Activity Habits: A Pilot Study Using Cue-Contingent Financial Incentives for Daily Walking” *Journal of Behavioral Medicine*

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?” *Health Systems*

Leischow, S., Okamoto, J., Warner, M., Twesten, J., **Stecher, C.**, Valente, T. & Parascandola, M. “Mapping the African Tobacco Control Network.” *PLOS Global Public Health*

Sullivan, M., Cloonan, S., Huberty, J. & **Stecher, C.** “What Predicts App Engagement? The Association Between Motivation Measures and Meditation App Use Among New Subscribers.” *Journal of Health Psychology*

Hustedt, J., Chartrand, N., Merrell, D., Reichenbach, R., Pinkston, E. & **Stecher, C.** “The moderating effect age on patient reported benefits from operative management of intra-articular distal radius fractures: A meta-regression analysis.” *JAMA Network Open*

**Stecher, C.**, Linnemayr, S. & Huckfeldt, P. “Healthcare Cost Savings from mHealth Tool for Improving Medication Adherence across Chronic Conditions.” *JAMA Health Forum*

**Stecher, C.**, Cloonan, S. & Domino, M. “The Economics of Treatment for Depression.” *Annual Review of Public Health*

## Works in Progress

**Stecher, C.** & Ketcham, J. “Reducing racial disparities through experience: Evidence from medical device choice in cardiac catheterization labs.”

Fowers, R., Berardi, V., Cloonan, S., Huberty, J. & **Stecher, C.** “What Do Self-Reported Habits Mean? Comparing Self-Reported Habit Strength With Objective Meditation App Usage Data.”

Fowers, R., Coza, A., Chung, Y., Ghasemzadeh, H. & **Stecher, C.** “Detecting Patterns in Time of Day of Meditation That Predict Long-Term Maintenance.”

Berardi, V., Phillips, C., McEntee, M., **Stecher, C.**, Todd, M. & Adams, M. “Does Delay Discounting Moderate or Mediate the Effects of Immediate Financial Incentives for Increasing Adults’ Physical Activity in a Year-Long Intervention?”

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”

Linnemayr, S., Mukasa, B., Odiit, M., Ghai, I. & **Stecher, C.** “INcentives and ReMINDers to Improve Long-term Medication Adherence (INMIND): A Randomized Controlled Trial in Uganda”

## Sponsored Research

Co-I with PI Dr. Sebastian Linnemayr and Co-Is Drs. Mukasa & MacCarthy. 2020 – *present*

INcentives and ReMINDers to Improve Long-term Medication Adherence (INMIND);  
NIMH: R34 MH122331

Co-I with Dr. Christopher Wharton. 2022 – *present*

Towards a KAITEKI Future: Global Health and Food Systems Sustainability in the era of Global Disruption; Kaiteki Foundation

Co-PI with Dr. Jennifer Huberty. 2020 – 2021

Mindfulness Takes Practice: Optimizing mHealth Tools for Building Persistent Mindfulness Meditation Habits; CHS COVID Jumpstart Grant

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)

Faculty Adviser with PI Dr. Vincent Berardi. 2020 – 2022

Identifying the Formation and Functionality of Healthy Behavioral Habits Using Longitudinal mHealth Data; Chapman University Internal Research Grant

Co-I with PI Dr. Sebastian Linnemayr, RAND Corporation. 2017 – *present*

Behavioral Economics Incentives to Support HIV Treatment Adherence in Sub-Saharan Africa (BEST); NIMH: R01 MH110350

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

Graduate Research Assistant for PI Dr. Sebastian Linnemayr, RAND Corporation. 2012 – 2017

Variable Rewards Incentives for ART Adherence in Uganda; NIMH: R34 MH096609

## Teaching Experience

Instructor, Arizona State University

Economics for Health Majors (Undergraduate): 1 semester

Health Economics (Masters): 5 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

- Director of Health Systems Faculty Search Committee; Member, 2021 – 2022
- 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: Chair (1) 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 4; Member 5
- 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
- Science of Health Care Delivery, Undergraduate Curriculum Committee Member, 2019 – 2020

## **Community**

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