Chad Stecher

College of Health Solutions Arizona State University 500 N 3rd Street Phoenix, AZ 85003 Phone: (602) 496–0957 Email: chad.stecher@asu.edu Website: chadstecher.com

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, 2017M.A. Economics, University of California, Los Angeles, 2012B.A. in Economics and Mathematics, Colby College, 2008

Publications

Stecher, C. & Ketcham, J. 2022. "Learning to work together: Productivity gains from shared experience among cardiology teams." *American Journal of Health Economics (forthcoming)*

Zhang, A., Boronowsky, R., Braverman, I., **Stecher, C.**, Cleveland, D., Garnett, E., Wang, M. & Jay, J. 2022. "Using the Default Nudge to Increase Plant-based Meal Consumption on College Campuses." *Current Developments in Nutrition*; 6 (1): 84.

Martin, J., Kisana, H., Hui, C., **Stecher, C**. & Hustedt J. 2022. "Complications Associated with Anesthetic Choice for Elective Foot and Ankle Surgery." *Foot & Ankle Orthopaedics*; 7.1: 2473011421S0034.

Hui, C., Kisana, H., Martin, J., **Stecher, C.** & Hustedt J. 2022. "Trends in Medicare Physician and Facility Fee Reimbursement in Orthopedic Foot and Ankle." *Foot & Ankle Orthopaedics*; 7.1: 2473011421S00254.

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): 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): e2132388 – 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): 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): 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): 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*; 88 (5): 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): 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): 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: 102443.

Stecher, C. 2021. "Physician Network Connections to Specialists and HIV Quality of Care" *Health Services Research*; 56 (5): 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): 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): 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): 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): 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): e28479.

Linnemayr S., **Stecher C.**, Saya U., et al. 2020. "Behavioral Economics Incentives to Support HIV Treatment Adherence (BEST): Protocol for a randomized controlled trial in Uganda." *Trials*; 21(1): 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): 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): 719 – 26.

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): 2069 – 75.

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): 83 – 91.

Currently Under review

McCullough, M. & **Stecher**, C. "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 (R & R submitted)*

Fowers, R., Berardi, V., Huberty, J. & **Stecher, C.** "Using Mobile Meditation App Data to Predict Future App Engagement: An Observational Study." *JAMIA: Journal of the American Medical Informatics Association (R & R submitted)*

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

Stecher, C., Palimaru, A., Odiit, M., Lunkuse, L., Walukaga, S. & Linnemayr, S. "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 (R & R submitted)*

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" *Annals of Behavioral Medicine*

Stecher, C., Ghai, I., Lunkuse, L., Wabukala, P., Odiit, M., Nakanwagi, A. & Linnemayr, S. "INcentives and ReMINDers to Improve Long-term Medication Adherence (INMIND): Protocol for a Pilot Randomized Controlled Trial in Uganda" *JMIR Research Protocols*

Leischow, S., Okamoto, J., Warner, M., Twesten, J., **Stecher, C.**, Valente, T. & Parascandola, M. "Mapping the African Tobacco Control Network." *Tobacco Control*

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" *Lancet HIV*

Stecher, C., Cloonan, S., Linnemayr, S. & Huberty, J. "Combining Behavioral Economics-Based Incentives with the Anchoring Strategy: Protocol for a Randomized Controlled Trial" *JMIR Research Protocols*

Stecher, C., Pfisterer, B., Harden, S., Epstein, D., Hirschmann, J., Wunsch, K. & Buman, M. "Assessing the Pragmatic Nature of mHealth Interventions Promoting Physical Activity: A Systematic Review and Meta-Analysis." *International Journal of Behavioral Nutrition and Physical Activity*

Hustedt, J., **Stecher, C.**, Hui, C., Martin, J., Ruan, E. & Kisana, H. "Constructing a Crosswalk Between the Diverse Patient-Reported Outcome Measures in Orthopaedics."

Works in Progress

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

Stecher, C., Linnemayr, S. & Huckfeldt, P. "Estimating the Healthcare Cost Savings from Improved Medication Adherence across Chronic Conditions."

Stecher, C., Pagni, B., Cloonan, S., Vink, S. & Braden, B. "Using Anchoring to Establish Meditation Habits and Improve Depressive Symptoms in Autistic Adults."

Berardi, V., Stecher, C., Fowers, R. & Rubin. G. "Time of Day Preferences and Temporal Consistency Predict Sustained Use of a Commercial Meditation App."

Fowers, R., Berardi, V., Cloonan, S., Huberty, J. & **Stecher, C.** "What Does a Self-Reported Habit Signal? Comparing Self-Reported Habit Strength With Objective Meditation App Usage Data."

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"

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?"

Rajendra, S., **Stecher, C.**, Chartrand, N., Rosenkrantz, A., Duszak, R. & Hughes, D. "Examining Racial and Ethnic Disparities in Prostate Cancer Testing Procedures"

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

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

Sponsored Research

Co-I with PI Dr. Sebastian Linnemayr and Co-I Dr. Sarah 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): 4 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

- 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
- 2019 International Health Economics Association, Basel 2019 Congress
- 2019 Western Economic Association International, 94th Annual Conference
- 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: Char (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

Better Food Foundation, 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