

MITCHELL TANG

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Academic Appointments

Columbia University, Mailman School of Public Health

Assistant Professor, Health Policy and Management, 2025-

Education

Harvard University

Ph.D. Health Policy (Management Track), 2020 to 2025

Committee members: Robert S. Huckman (chair), Ateev Mehrotra, Ariel D. Stern, Antonio Moreno

University of Pennsylvania

Roy and Diana Vagelos Program in Life Sciences and Management

B.S. Economics (concentrations in Statistics and Finance), 2012 to 2016

B.A. Biology (concentration in Computational Biology), 2012 to 2016

Research Interests

Digital health care delivery, health information technology, health care operations management, provider productivity, payment policy

Research in Progress

From Exam Rooms to Zooms: The Hidden Costs of Hybrid Work in Primary Care

With A Jay Holmgren, Robert S. Huckman, J. Michael McWilliams, and Maximillian J. Pany

Today, many workers have hybrid work schedules with a mix of in-person and virtual meetings. Though virtual meetings have clear benefits, they can introduce new frictions when integrated into predominantly in-person schedules. We examine these frictions in the context of hybrid primary care practices, which offer both in-person and telemedicine visits. Using data for 35 practices at a large academic health system, we find that transitions between visit types can burden providers and negatively impact patient experiences. Telemedicine visits following an in-person visit often see delayed starts; patients are 75% more likely to abandon the visit before being seen, and the visits that do occur are 25% less likely to begin on time. These disruptions also result in less comprehensive visits and a higher likelihood of after-hours work. Dedicated telemedicine-only blocks in provider schedules help avoid these costly transitions but can also lead to reduced capacity utilization when there is insufficient demand for telemedicine visits in that time window. Indeed, we find that telemedicine-only slots see a 10% lower booking rate relative to similar slots without such restrictions. Telemedicine visits are often framed as a useful tool for improving patient care access. However, we show that, depending on how they are incorporated into hybrid schedules, they can lead to negative care experiences, chaotic clinic days, and ironically even reductions in patient access. Our findings also demonstrate the tradeoffs of dedicated telemedicine blocks and highlight potential changes to managerial practices and clinical workflows to improve performance of hybrid practices.

Practice-level Effects of Remote Physiologic Monitoring Adoption

With Ariel D. Stern, Felipe Marcondes, and Ateev Mehrotra

Use of remote physiologic monitoring (RPM), the remote transmission of patient physiologic measures (e.g., blood pressure) to care teams, has grown rapidly. For practices, establishing an RPM program can increase revenue and improve patient care, but may also require substantial reorganization within the practice. No prior work has quantified the impact of RPM on practices. Using national Medicare claims, we identified 754 primary care practices that began billing for RPM from 2019-2021. After these practices adopted RPM, Medicare revenue increased by 20.1% relative to similar matched non-adopting practices. This was driven by RPM billing as well as more outpatient visits and care management. While adopting practices had a 3.0% increase in their number of billing providers, the increase in revenue was predominantly driven by increased activity per provider. Adoption of RPM and resulting increases in visits for patients receiving RPM did not seem to come at the expense of other patients.

The Doctor Won't See You Now: Examining Drivers of Care Team Response to Patient Portal Messages

With Lisa Rotenstein, Ariel D. Stern, Rebecca G. Mishuris, and Michael L. Barnett

Patient portal messages have become an important channel for patient-provider communication. However, there are well documented disparities in rates of portal use. Additionally, prior work has shown that even when minority and Medicaid patients send portal messages, they are less likely to receive responses from attending physicians, seemingly driven by lower prioritization in message triage. Using natural language processing, we analyze the text of patient portal messages from a large academic health system to understand what drives these differences, enabling us to separate three potential mechanisms: differences in the underlying request of the message (e.g., medication question, referral request), differences in the way the messages are written, and non-clinical bias. We find that, while the category of message request is a significant predictor of care team response, it cannot explain observed differences across demographic groups. On the other hand, the way the message is written – including message characteristics such as length and formality – accounts for nearly half of the observed differences in care team response. Our findings identify a clear mechanism underlying disparities in care team response, highlighting avenues for mitigating them and deepening our understanding of care disparities broadly.

Peer-Reviewed Publications

Hailu, R., Sousa, J., **Tang, M.**, Mehrotra, A., & Uscher-Pines, L. (2024). Challenges and Facilitators in Implementing Remote Patient Monitoring Programs in Primary Care. *Journal of General Internal Medicine*. <https://doi.org/10.1007/s11606-023-08557-x>

Tang, M., Mishuris, R. G., Payvandi, L., & Stern, A. D. (2024). Differences in Care Team Response to Patient Portal Messages by Patient Race and Ethnicity. *JAMA Network Open*, 7(3), e242618. <https://doi.org/10.1001/jamanetworkopen.2024.2618>

Tang, M., Nakamoto, C. H., Stern, A. D., Zubizarreta, J. R., Marcondes, F. O., Uscher-Pines, L., Schwamm, L. H., & Mehrotra, A. (2023). Effects of Remote Patient Monitoring Use on Care Outcomes Among Medicare Patients With Hypertension. *Annals of Internal Medicine*, 176(11), 1465–1475. <https://doi.org/10.7326/M23-1182>

Tang, M., Sharma, Y., Goldsack, J. C., & Stern, A. D. (2023). Building the Business Case for an Inclusive Approach to Digital Health Measurement With a Web App (Market Opportunity Calculator): Instrument Development Study. *JMIR Formative Research*, 7(1), e45713. <https://doi.org/10.2196/45713>

Tang, M., Holmgren, A. J., McElrath, E. E., Bhatt, A. S., Varshney, A. S., Lee, S. G., Vaduganathan, M., Adler, D. S., & Huckman, R. S. (2022). Investigating the Association Between Telemedicine Use and Timely Follow-Up Care After Acute Cardiovascular Hospital Encounters. *JACC: Advances*, 1(5), 100156. <https://doi.org/10.1016/j.jacadv.2022.100156>

Tang, M., Chernew, M. E., & Mehrotra, A. (2022). How Emerging Telehealth Models Challenge Policymaking. *The Milbank Quarterly*, 100(3), 650–672. <https://doi.org/10.1111/1468-0009.12584>

Tang, M., Mehrotra, A., & Stern, A. D. (2022). Rapid Growth Of Remote Patient Monitoring Is Driven By A Small Number Of Primary Care Providers. *Health Affairs*, 41(9), 1248–1254. <https://doi.org/10.1377/hlthaff.2021.02026>

Tang, M., Nakamoto, C. H., Stern, A. D., & Mehrotra, A. (2022). Trends in Remote Patient Monitoring Use in Traditional Medicare. *JAMA Internal Medicine*, 182(9), 1005–1006. <https://doi.org/10.1001/jamainternmed.2022.3043>

Holmgren, A. J., Downing, N. L., **Tang, M.**, Sharp, C., Longhurst, C., & Huckman, R. S. (2022). Assessing the impact of the COVID-19 pandemic on clinician ambulatory electronic health record use. *Journal of the American Medical Informatics Association*, 29(3), 453–460. <https://doi.org/10.1093/jamia/ocab268>

Other Publications	Tang, M., Wilson K., Mehrotra A. (2024) Paying for AI In Healthcare: Setting The Right Precedent Amidst Growing Use. Health Affairs Forefront.
	Tang, M., Short, L., June, R., Dowling, M., and Mehrotra, A. (2023) How to Tap the Full Potential of Telemedicine. Harvard Business Review (website).
Conference and Invited Presentations	2025: Brown University School of Public Health
	2024: ASHEcon Annual Conference, Annual Meeting of the Academy of Management, INFORMS Annual Meeting, UCSF Department of Medicine National Research Network, USC Schaeffer Center for Health Policy & Economics, Columbia University Mailman School of Public Health, UC Berkeley School of Public Health, Emory University Rollins School of Public Health, Tufts University
	2023: ASHEcon Annual Conference, Academy Health Annual Research Meeting, INFORMS Healthcare Conference, Charles River Associates Research Seminar
	2022: Academy Health Annual Research Meeting, Health Affairs Journal Club, Harvard Medical School CMS Presentation
Research Grants 2023-2024	Quantifying Potential Spillovers from Remote Patient Monitoring Commonwealth Fund Co-Investigator [PI: Ateev Mehrotra] \$49,826
Teaching	Transforming Health Care Delivery, Harvard Business School Teaching Fellow for Professor Ariel Stern, Spring 2023 and 2024
	HPOL 2000B: Core Course in Health Policy, Harvard Graduate School of Arts and Sciences Guest Lecturer on Digital Health, Spring 2024
	GHHP 99: Research in Global Health and Health Policy, Harvard College Teaching Fellow for Professor David Cutler, Spring 2023
	Essentials of the Profession I, Harvard Medical School Substitute Section Leader, Spring 2023
	Program for Research in Markets & Organizations, Harvard Business School Doctoral Student Mentor, Summer 2022 and 2023
Work Experience	The Boston Consulting Group Associate, 2016 to 2018 Consultant, 2018 to 2020 Project Leader, 2020
Academic Service	Ad-hoc referee: Health Affairs, JAMA Internal Medicine, American Journal of Managed Care, JMIR, npj Digital Medicine, Applied Clinical Informatics, INQUIRY
	Conference referee: Academy of Management Annual Meeting
Awards & Honors 2025	Joan P. Curhan Citizenship Award, Harvard University <i>Awarded to a PhD student in Health Policy who has “contributed in a significant way to the collegiality and team spirit among students and faculty in the program”</i>

Languages	English (Native); Chinese (Intermediate)
Software Skills	R, Python, SQL, Linux/Unix Systems, SAS, Java
Personal Information	Hobbies and interests: tennis, Magic: The Gathering (trading card game), trivia, swimming Fun facts: four-time winner of the HBS Doctoral Program's Annual Gingerbread Competition