

Christopher M. Whaley

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Professional Experience

- 2023-Present Associate Professor, Department of Health Services, Policy and Practice, *Brown University School of Public Health*
- 2023-Present Associate Director, *Brown University Center For Advancing Health Policy through Research*
- 2019-Present Economist, *RAND Corporation*
- 2019-2023 Professor, *RAND Pardee Graduate School*
- 2021-2023 Core Member, *RAND Center for Causal Inference*
- 2016-2019 Associate Policy Researcher, *RAND Corporation*
- 2015-2016 Research Economist, *Berkeley Center for Health Technology*

External Service and Professional Activities

- 2022-Present Editorial Board, *Medical Care Research and Review*
- 2021-Present Editorial Board, *Health Services Research*
- 2022-Present Advisory Board, Texas Employers for Affordable Healthcare
- 2022 Member, Expert Panel on the No Surprises Act and Health Care Consolidation, Assistant Secretary for Planning and Evaluation
- 2021-2022 Mentor, California Public Employees' Retirement System Health Care Training Academy

Education

- 2011-2015 University of California, Berkeley, Ph.D., Health Policy (Economics Track)
- 2004-2008 University of Chicago, B.A., Economics

Awards and Honors

- 2022 *National Association of Health Data Organizations*, Innovation in Data Dissemination Award
- 2021 *American Journal of Managed Care*, Seema S. Sonnad Emerging Leader in Managed Care Research Award
- 2019, 2021 *Health Services Research*, Outstanding Reviewer (Top 5% of reviewers)
- 2020 Conference on Health IT and Analytics, Young Scholar Award
- 2020 RAND Gold Medal
- 2019 RAND Bronze Medal
- 2018 RAND Health Associate Peer Mentor Award
- 2015 AHRQ Research Conference Director's Award
- 2015 Finalist, NIHCM Foundation Annual Health Care Research Award

Teaching

- 2021-2023 Instructor, Health Economics (*RAND PhD students*)
- 2015-2019 Instructor, Microeconomics of Health Care Policy (*Health economics for UC Berkeley MBA, MPH, and PhD students*)

Invited Testimony

U.S. House Education and Workforce Committee, Subcommittee on Health, Employment, Labor, and Pensions. January 2024. *Lowering Costs and Increasing Access to Health Care with Employer-Driven Innovation*.

Statement: Whaley, Christopher M. 2024. “*Reducing Costs and Improving Access to Care: Employer-Driven Health Benefit Design Innovations*.”

<https://www.rand.org/pubs/testimonies/CTA3159-1.html>.

U.S. Senate Committee on Health, Education, Labor, and Pensions. May 2023. *Price Transparency Roundtable*.

U.S. House Ways and Means Committee. May 2023. *Full Committee Hearing on Health Care Price Transparency: A Patient’s Right to Know*.

Statement: Whaley, Christopher M. 2023. “*Health Care Price Transparency: Opportunities to Improve Affordability and Data Effectiveness*,” May.

<https://www.rand.org/pubs/testimonies/CTA2767-1.html>.

Texas House of Representatives Select Committee on Health Care Reform. August 2022.

Statement: Whaley, Christopher M. 2022. “*Health Care Affordability: State Policy Options to Control Costs*.” RAND Corporation. <https://www.rand.org/pubs/testimonies/CTA2157-1.html>.

California State Assembly Committee on Health. October 2020. “*Health Care Affordability: How to Control Costs in California?*”

Publications

Peer Reviewed Publications (Economics)

1. Agrawal, Virat, Jonathan Cantor, Neeraj Sood, and **Christopher Whaley**. 2023 “The Impact of COVID-19 Shelter-in-Place Policy Responses on Excess Mortality.” *Health Economics*. <https://doi.org/10.1002/hec.4737>.
2. Lin, Haizhen, Elizabeth L. Munnich, Michael R. Richards, **Christopher M. Whaley**, and Xiaoxi Zhao. 2023. “Private Equity and Healthcare Firm Behavior: Evidence from Ambulatory Surgery Centers.” *Journal of Health Economics*, August, 102801. <https://doi.org/10.1016/j.jhealeco.2023.102801>.
3. Cantor, Jonathan, Neeraj Sood, Dena M. Bravata, Megan Pera, and **Christopher Whaley**. 2022. “The Impact of the COVID-19 Pandemic and Policy Response on Health Care Utilization: Evidence from County-Level Medical Claims and Cellphone Data.” *Journal of Health Economics*, January, 102581. <https://doi.org/10.1016/j.jhealeco.2022.102581>.
4. Richards, Michael R., Jonathan Seward, and **Christopher Whaley**. 2021. “Treatment Consolidation after Vertical Integration: Evidence from Outpatient Procedure Markets.” *Journal of Health Economics*, November, 102569. <https://doi.org/10.1016/j.jhealeco.2021.102569>.
5. Chen, Alice J., Michael R. Richards, **Christopher M. Whaley**, and Xiaoxi Zhao. 2022. “The Extent of Externalities from Medicare Payment Policy.” *American Journal of Health Economics* 8 (2): 181–215. <https://doi.org/10.1086/718769>.
6. Aouad, Marion, Timothy T. Brown, and **Christopher M. Whaley**. 2021. “Understanding the Distributional Impacts of Health Insurance Reform: Evidence from a Consumer Cost-Sharing Program.” *Health Economics* 30 (11): 2780–93. <https://doi.org/10.1002/hec.4410>.

7. **Whaley, Christopher M.** 2019. "Provider Responses to Online Price Transparency." *Journal of Health Economics* 66 (June): 241–59.
8. **Whaley, Christopher**, Timothy Brown, and James Robinson. "Consumer responses to price transparency alone versus price transparency combined with reference pricing." *American Journal of Health Economics* 5, no. 2 (2019): 227-249.
9. Aouad, Marion, Timothy T. Brown, and **Christopher M. Whaley**. 2019. "Reference Pricing: The Case of Screening Colonoscopies." *Journal of Health Economics* 65 (May): 246–59.
10. **Whaley, Christopher M.**, and Timothy T. Brown. 2018. "Firm Responses to Targeted Consumer Incentives: Evidence from Reference Pricing for Surgical Services." *Journal of Health Economics* 61 (September): 111–33.
11. **Whaley, Christopher**, Chaoran Guo, and Timothy T. Brown. 2017. "The Moral Hazard Effects of Consumer Responses to Targeted Cost-Sharing." *Journal of Health Economics* 56:201–21.
12. Frech, H.E., III., **Christopher Whaley**, Benjamin R. Handel, Liora Bowers, Carol J. Simon, and Richard M. Scheffler. 2015. "Market Power, Transactions Costs, and the Entry of Accountable Care Organizations in Health Care." *Review of Industrial Organization*, vol. 47, 167-193.

Working Papers (Economics)

1. Munnich, Elizabeth L., Michael R. Richards, Christopher M. Whaley, and Xiaoxi Zhao. 2020. "Raising the Stakes: Physician Facility Investments and Provider Agency." <https://doi.org/10.7249/WRA621-4>, *Revise and Resubmit, American Economic Review*
2. Christopher Whaley and Xiaoxi Zhao. 2022. "The Effects of Physician Vertical Integration on Referral Patterns, Patient Welfare, and Market Dynamics" *Revise and Resubmit, Journal of Public Economics*
3. Rabideau, Brendan, Michael R. Richards, and Christopher M. Whaley. 2022. "Training Labor and Treatment Behavior: Evidence from Physician Residency Programs." *Revise and Resubmit, Health Economics*
4. Arnold, Daniel and Christopher Whaley, Who Pays for Health Care Costs? The Effects of Health Care Prices on Wages. Santa Monica, CA: RAND Corporation, 2020. https://www.rand.org/pubs/working_papers/WRA621-2.html, *Revise and Resubmit, Journal of Public Economics*
5. Lin, Haizhen, Ian M. McCarthy, Michael R. Richards, and Christopher Whaley. 2021. "Owning the Agent: Hospital Influence on Physician Behaviors." Working Paper. National Bureau of Economic Research. <https://doi.org/10.3386/w28859>, *Revise and Resubmit, Journal of Human Resources*
6. Richards, Michael R., and Christopher M. Whaley. 2023. "Hospital Behavior Over the Private Equity Life Cycle." RAND Corporation. https://www.rand.org/pubs/working_papers/WRA2844-1.html.
7. Bravata, Dena, Jonathan H. Cantor, Neeraj Sood, and Christopher M. Whaley. 2021. "Back to School: The Effect of School Visits During COVID-19 on COVID-19 Transmission." w28645.

National Bureau of Economic Research. <https://doi.org/10.3386/w28645>.

8. Brownstein, John, Jonathan H. Cantor, Benjamin Rader, Kosali I. Simon, and Christopher M. Whaley. 2022. “If You Build It, Will They Vaccinate? The Impact of COVID-19 Vaccine Sites on Vaccination Rates and Outcomes.” w30429. National Bureau of Economic Research. <https://doi.org/10.3386/w30429>.
9. Agrawal, Virat, Neeraj Sood, and Christopher M. Whaley. 2022. “The Ex-Ante Moral Hazard Effects of COVID-19 Vaccines” w30602. National Bureau of Economic Research. <https://doi.org/10.3386/w30602>.
10. Agrawal, Virat, Jonathan H. Cantor, Neeraj Sood, and Christopher M. Whaley. 2021. “The Impact of the COVID-19 Vaccine Distribution on Mental Health Outcomes.” Working Paper 29593. Working Paper Series. National Bureau of Economic Research. <https://doi.org/10.3386/w29593>.
Media coverage: [MarketWatch](#), [The Economist](#)

Peer Reviewed Publications (Health Policy and Health Services Research)

13. Robinson, James, **Christopher Whaley**, and Sanket Dhruva. 2024. “Hospital Prices for Physician-Administered Drugs Charged to Patients with Private Insurance.” *New England Journal of Medicine*, *In Press*.
14. McDonald, Tim, Arindam Debbarma, **Christopher Whaley**, Rachel Reid, and Bryan Dowd. 2023. “Barriers Primary Care Clinic Leaders Face to Improving Value in a Consumer Choice Health Plan Design.” *Health Affairs Scholar* 1 (6). <https://doi.org/10.1093/haschl/qxad065>.
15. Nguyen, Thuy, **Christopher Whaley**, Kosali I. Simon, and Jonathan Cantor. 2023. “Changes in Employment in the US Health Care Workforce, 2016-2022.” *JAMA*, November. <https://doi.org/10.1001/jama.2023.18932>.
16. Kerber, Rose, Erin L. Duffy, and **Christopher Whaley**. 2023. “Commercial Payments for COVID-19–Associated Inpatient Stays in 2020.” *JAMA Health Forum* 4 (11): e233711. <https://doi.org/10.1001/jamahealthforum.2023.3711>.
17. Chartock, Benjamin L., Kosali Simon, and **Christopher M. Whaley**. 2023. “Transparency in Coverage Data and Variation in Prices for Common Health Care Services.” *JAMA Health Forum* 4 (10): e233663. <https://doi.org/10.1001/jamahealthforum.2023.3663>.
18. Kalmin, Mariah M., Jonathan H. Cantor, Dena M. Bravata, Pen-Che Ho, **Christopher Whaley**, and Ryan K. McBain. 2023. “Utilization and Spending on Mental Health Services Among Children and Youths With Commercial Insurance.” *JAMA Network Open* 6 (10): e2336979. <https://doi.org/10.1001/jamanetworkopen.2023.36979>.
19. Cantor, Jonathan H., Ryan K. McBain, Pen-Che Ho, Dena M. Bravata, and **Christopher Whaley**. 2023. “Telehealth and In-Person Mental Health Service Utilization and Spending, 2019 to 2022.” *JAMA Health Forum* 4 (8): e232645. <https://doi.org/10.1001/jamahealthforum.2023.2645>.
Media Coverage: [Forbes](#), [New York Times](#), [Time](#), [Washington Post](#)
20. McBain, Ryan K., Jonathan Cantor, Megan F. Pera, Joshua Breslau, Dena M. Bravata, and **Christopher M. Whaley**. 2023. “Mental Health Service Utilization Rates Among Commercially

Insured Adults in the US During the First Year of the COVID-19 Pandemic.” *JAMA Health Forum* 4 (1): e224936. <https://doi.org/10.1001/jamahealthforum.2022.4936>.

Media Coverage: *STAT*, *Washington Times*, *Fierce Health*, *Washington Post*

21. Gidwani, Risha, Lori Uscher-Pines, Aaron Kofner, and **Christopher M. Whaley**. 2023. “Differences in Telehealth during COVID-19 between Commercial and Medicaid Enrollees.” *The American Journal of Managed Care* 29 (1): 19–26. <https://doi.org/10.37765/ajmc.2023.89300>.
22. **Whaley, Christopher**, and Austin Frakt. 2022. “If Patients Don’t Use Available Health Service Pricing Information, Is Transparency Still Important?” *AMA Journal of Ethics* 24 (11): 1056–62. <https://doi.org/10.1001/amajethics.2022.1056>.
23. Levin, Jonathan S., Swad Komanduri, and **Christopher Whaley**. 2022. “Association between Hospital-Physician Vertical Integration and Medication Adherence Rates.” *Health Services Research*. <https://doi.org/10.1111/1475-6773.14090>.
24. **Whaley, Christopher M.**, Yuki Ito, Jonathan T. Kolstad, David W. Cowling, and Benjamin Handel. 2022. “The Health Plan Environment In California Contributed To Differential Use Of Telehealth During The COVID-19 Pandemic.” *Health Affairs* 41 (12): 1812–20. <https://doi.org/10.1377/hlthaff.2022.00464>.
25. Rader, Benjamin, Christina M. Astley, Kara Sewalk, Paul L. Delamater, Kathryn Cordiano, Laura Wronski, Jessica Malaty Rivera, et al. 2022. “Spatial Modeling of Vaccine Deserts as Barriers to Controlling SARS-CoV-2.” *Communications Medicine* 2 (1): 1–11. <https://doi.org/10.1038/s43856-022-00183-8>.
26. Cantor, Jonathan H., **Christopher M. Whaley**, Bradley D. Stein, and David Powell. 2022. “Analysis of Substance Use Disorder Treatment Admissions in the US by Sex and Race and Ethnicity Before and During the COVID-19 Pandemic.” *JAMA Network Open* 5 (9): e2232795. <https://doi.org/10.1001/jamanetworkopen.2022.32795>.
Media coverage: *Axios*
27. Crespin, Daniel J., and **Christopher Whaley**. 2022. “The Effect of Hospital Discharge Price Increases on Publicly Reported Measures of Quality.” *Health Services Research*. <https://doi.org/10.1111/1475-6773.14040>.
28. Wright, John R., Divya K. Madhusudhan, David C. Lawrence, Sharon A. Watts, Daniel J. Lord, **Christopher Whaley**, and Dena M. Bravata. 2022. “Costs of Specialist Referrals From Employer-Sponsored Integrated Health Care Clinics Are Lower Than Those From Community Providers.” *Journal of General Internal Medicine*, July. <https://doi.org/10.1007/s11606-022-07724-w>.
29. Levinson, Zachary, Jonathan Cantor, Malcolm V. Williams, and **Christopher Whaley**. 2022. “The Association of Strained ICU Capacity with Hospital Patient Racial and Ethnic Composition and Federal Relief during the COVID-19 Pandemic.” *Health Services Research*. <https://doi.org/10.1111/1475-6773.14028>.
30. Kranz, Ashley M., Grace Gahlon, Andrew W. Dick, Sarah L. Goff, **Christopher Whaley**, and Kimberley H. Geissler. 2022. “Variation in Prices for an Evidence-Based Pediatric Preventive

- Service.” *Health Services Research* 57 (5): 1175–81. <https://doi.org/10.1111/1475-6773.13995>.
31. Kranz, Ashley M., Sarah L. Goff, Andrew W. Dick, **Christopher Whaley**, and Kimberley H. Geissler. 2022. “Delivery of Fluoride Varnish during Pediatric Medical Visits by Rurality.” *Journal of Public Health Dentistry* 82 (3): 271–79. <https://doi.org/10.1111/jphd.12518>.
32. Levinson, Zachary, Nabeel Qureshi, Jodi L. Liu, and **Christopher M. Whaley**. 2022. “Trends In Hospital Prices Paid By Private Health Plans Varied Substantially Across The US.” *Health Affairs* 41 (4): 516–22. <https://doi.org/10.1377/hlthaff.2021.01476>.
33. Rader, Benjamin, **Christopher M Whaley**, Wesley S Rogers, John S Brownstein, and Jonathan Cantor. 2022. “Assessment of Geographic Access to Monoclonal Antibodies in the United States.” *Journal of Travel Medicine*, March. <https://doi.org/10.1093/jtm/taac018>.
34. Cantor, Jonathan, **Christopher Whaley**, Kosali Simon, and Thuy Nguyen. 2022. “US Health Care Workforce Changes During the First and Second Years of the COVID-19 Pandemic.” *JAMA Health Forum* 3 (2): e215217. <https://doi.org/10.1001/jamahealthforum.2021.5217>.
35. **Whaley, Christopher M.**, Daniel R. Arnold, Nate Gross, and Anupam B. Jena. 2021. “Physician Compensation In Physician-Owned And Hospital-Owned Practices.” *Health Affairs* 40 (12): 1865–74. <https://doi.org/10.1377/hlthaff.2021.01007>.
36. **Whaley, Christopher M.**, Tina Koo, Vineet M. Arora, Ishani Ganguli, Nate Gross, and Anupam B. Jena. 2021. “Female Physicians Earn An Estimated \$2 Million Less Than Male Physicians Over A Simulated 40-Year Career.” *Health Affairs* 40 (12): 1856–64. <https://doi.org/10.1377/hlthaff.2021.00461>.
Media coverage: [New York Times](#)
37. Geissler, Kimberley H., Andrew W. Dick, Sarah L. Goff, **Christopher Whaley**, and Ashley M. Kranz. 2021. “Dental Fluoride Varnish Application During Medical Visits Among Children Who Are Privately Insured.” *JAMA Network Open* 4 (8): e2122953. <https://doi.org/10.1001/jamanetworkopen.2021.22953>.
38. Cantor, Jonathan, Nabeel Qureshi, Brian Briscoombe, Justin Chapman, and **Christopher M. Whaley**. 2021. “Association Between COVID-19 Relief Funds and Hospital Characteristics in the US.” *JAMA Health Forum* 2 (10): e213325. <https://doi.org/10.1001/jamahealthforum.2021.3325>.
Media coverage: [New York Times](#)
39. Gupta, Sumedha, Jonathan Cantor, Kosali I. Simon, Ana I. Bento, Coady Wing, and **Christopher M. Whaley**. 2021. “Vaccinations Against COVID-19 May Have Averted Up To 140,000 Deaths In The United States.” *Health Affairs*, August, <https://doi.org/10.1377/hlthaff.2021.00619>.
Most-read Health Affairs article of 2021
40. **Whaley, Christopher M.**, Jonathan Cantor, Megan Pera, and Anupam B. Jena. 2021. “Assessing the Association Between Social Gatherings and COVID-19 Risk Using Birthdays.” *JAMA Internal Medicine*, June. <https://doi.org/10.1001/jamainternmed.2021.2915>.
Op-Ed: [We studied COVID-19 cases after birthdays. Family gatherings can still be dangerous.](#)
Media coverage: [New York Times](#), [Scientific American](#), [Newsweek](#), [Guardian](#), [CNN](#), [Der Spiegel](#)

3rd highest Altmetric score JAMA IM article of 2021

41. **Whaley, Christopher**, Neeraj Sood, Michael Chernew, Leanne Metcalfe, and Ateev Mehrotra. 2021. “Paying Patients to Use Lower-Priced Providers.” *Health Services Research*. <https://doi.org/10.1111/1475-6773.13711>.
42. Robinson, James C., **Christopher M. Whaley**, and Timothy T. Brown. 2021. “Price Differences To Insurers For Infused Cancer Drugs In Hospital Outpatient Departments And Physician Offices.” *Health Affairs* 40 (9): 1395–1401. <https://doi.org/10.1377/hlthaff.2021.00211>.
43. **Whaley, Christopher M.**, Xiaoxi Zhao, Michael Richards, and Cheryl L. Damberg. 2021. “Higher Medicare Spending on Imaging And Lab Services After Primary Care Physician Group Vertical Integration.” *Health Affairs* 40 (5)n: 702–9. <https://doi.org/10.1377/hlthaff.2020.01006>.
44. Cantor, Jonathan, David Kravitz, Mark Sorbero, Barbara Andraka-Christou, **Christopher Whaley**, Kathryn Bouskill, and Bradley D. Stein. 2021. “Trends in Visits to Substance Use Disorder Treatment Facilities in 2020.” *Journal of Substance Abuse Treatment* 127 (August): 108462. <https://doi.org/10.1016/j.jsat.2021.108462>.
45. Cantor, Jonathan, Andrew W. Dick, Rebecca Haffajee, Megan F. Pera, Dena M. Bravata, Bradley D. Stein, and **Christopher M. Whaley**. 2021. “Use of Buprenorphine for Those with Employer-Sponsored Insurance during the Initial Phase of the COVID-19 Pandemic.” *Journal of Substance Abuse Treatment* 129 (October): 108384.
46. **Whaley, Christopher M.**, Jonathan Cantor, Megan F. Pera, and Dena M. Bravata. 2021. “Industry Variation in Risk of Delaying Care During COVID-19.” *Journal of General Internal Medicine*, March. <https://doi.org/10.1007/s11606-021-06694-9>.
47. McBain, Ryan K., Jonathan H. Cantor, Anupam B. Jena, Megan F. Pera, Dena M. Bravata, and **Christopher M. Whaley**. 2021. “Decline and Rebound in Routine Cancer Screening Rates During the COVID-19 Pandemic.” *Journal of General Internal Medicine* 36 (6): 1829–31. <https://doi.org/10.1007/s11606-021-06660-5>.
48. McDonald, Tim, Katie M. White, Tsan-Yao Huang, **Christopher M. Whaley**, and Bryan Dowd. 2021. “Clinic Price Reductions in a Tiered Total Cost Benefit Design.” *The American Journal of Managed Care* 27 (8): e316–21. <https://doi.org/10.37765/ajmc.2021.88744>.
49. Cantor, Jonathan, Ryan K. McBain, Megan F. Pera, Dena M. Bravata, and **Christopher Whaley**. 2021. “Who Is (and Isn’t) Receiving Telemedicine Care During the COVID-19 Pandemic.” *American Journal of Preventive Medicine*, March. <https://doi.org/10.1016/j.amepre.2021.01.030>.
50. **Whaley, Christopher M.**, Daniel J. Crespín, and Tisamarie B. Sherry. 2021. “Smartphone Application Allowing Physicians to Call Patients Associated with Increased Physician Productivity.” *Journal of General Internal Medicine*, March. <https://doi.org/10.1007/s11606-021-06663-2>.
51. **Whaley, Christopher M.**, Christoph Dankert, Michael Richards, and Dena Bravata. 2021. “An Employer-Provider Direct Payment Program Is Associated With Lower Episode Costs.” *Health Affairs* 40 (3): 445–52. <https://doi.org/10.1377/hlthaff.2020.01488>.

Supplemental Podcast: <https://www.healthaffairs.org/doi/10.1377/hp20210303.505338/full/>

52. Richards, Michael R., Jonathan A. Seward, and **Christopher M. Whaley**. 2021. "Removing Medicare's Outpatient Ban and Medicare and Private Surgical Trends." *The American Journal of Managed Care* 27 (3): 104–8. <https://doi.org/10.37765/ajmc.2021.88598>.
53. Uscher-Pines, Lori, Jessica Sousa, Maggie Jones, **Christopher Whaley**, Christopher Perrone, Colleen McCullough, and Allison J. Ober. 2021. "Telehealth Use Among Safety-Net Organizations in California During the COVID-19 Pandemic." *JAMA*, February. <https://doi.org/10.1001/jama.2021.0282>.
54. **Whaley, Christopher M.**, Megan F. Pera, Jonathan Cantor, Jennie Chang, Julia Velasco, Heather K. Hagg, Neeraj Sood, and Dena M. Bravata. 2020. "Changes in Health Services Use Among Commercially Insured US Populations During the COVID-19 Pandemic." *JAMA Network Open* 3 (11): e2024984–e2024984.
Media coverage in [Forbes](#), [Salon](#), and [US News](#)
55. **Whaley Christopher M**, Arnold Daniel R, Gross Nate, Jena Anupam B. Practice composition and sex differences in physician income: observational study. *BMJ* 2020; 370:m2588
*Op-ed: "[Women make less when men dominate their workplaces. Gender diversity could close the gap.](#)" *USA Today**
56. Muench, Ulrike, **Christopher Whaley**, Janet Coffman, and Joanne Spetz. 2021. "Scope-of-Practice for Nurse Practitioners and Adherence to Medications for Chronic Illness in Primary Care." *Journal of General Internal Medicine* 36 (2): 478–86. <https://doi.org/10.1007/s11606-020-05963-3>.
57. Robinson JC, **Whaley C**, Brown TT, Dhruva SS. "Physician and Patient Adjustment to Reference Pricing for Drugs." *JAMA Network Open*. 2020;3(2):e1920544.
58. Berkemeier, Fabian, **Christopher Whaley**, and James C. Robinson. 2019. "Increasing Divergence in Drug Prices Between the United States and Germany After Implementation of Comparative Effectiveness Analysis and Collective Price Negotiations." *Journal of Managed Care & Specialty Pharmacy* 25 (12): 1310–17.
59. O'Hanlon, Claire E., **Christopher M. Whaley**, and Deborah Freund. "Medical Practice Consolidation and Physician Shared Patient Network Size, Strength, and Stability." *Medical Care* (2019).
60. **Whaley, Christopher M.**, Jennifer B. Bollyky, Wei Lu, Stefanie Painter, Jennifer Schneider, Zhenxiang Zhao, Xuanyao He, Jennal Johnson, and Eric S. Meadows. "Reduced medical spending associated with increased use of a remote diabetes management program and lower mean blood glucose values." *Journal of Medical Economics* (2019): 1-9.
61. **Whaley, Christopher M.**, Lan Vu, Neeraj Sood, Michael E. Chernen, Leanne Metcalfe, and Ateev Mehrotra. 2019. "Paying Patients To Switch: Impact Of A Rewards Program On Choice Of Providers, Prices, And Utilization." *Health Affairs* 38 (3): 440–47.
62. Brown, Timothy T., Chaoran Guo, and **Christopher Whaley**. 2018. "Reference-Based Benefits for Colonoscopy and Arthroscopy: Large Differences in Patient Payments Across Procedures but

Similar Behavioral Responses.” *Medical Care Research and Review*.

63. Gudiksen, Katherine L., Timothy T. Brown, **Christopher M. Whaley**, and Jaime S. King. 2018. “California’s Drug Transparency Law: Navigating The Boundaries Of State Authority On Drug Pricing.” *Health Affairs* 37 (9): 1503–8.
64. Scheffler, Richard M., Daniel R. Arnold, and **Christopher M. Whaley**. 2018. “Consolidation Trends In California’s Health Care System: Impacts On ACA Premiums And Outpatient Visit Prices.” *Health Affairs* 37 (9): 1409–16.
65. **Whaley, Christopher**. 2018. “The Association Between Provider Price and Complication Rates for Outpatient Surgical Services.” *Journal of General Internal Medicine* 33 (8): 1352–58.
66. Robinson, James C., **Christopher Whaley**, and Timothy T. Brown. 2017. “Association of Reference Pricing with Drug Selection and Spending in the United States. *New England Journal of Medicine* 377:658-665.
67. Robinson, James C., Timothy T. Brown, and **Christopher Whaley**. 2017. “Reference Pricing Changes The ‘Choice Architecture’ Of Health Care For Consumers.” *Health Affairs* 36 (3): 524–30.
68. Robinson, James C., **Christopher Whaley**, and Timothy T. Brown. 2016. “Reference Pricing, Consumer Cost-Sharing, and Insurer Spending for Advanced Imaging Tests.” *Medical Care* 54 (12): 1050–55.
69. Robinson James C., **Christopher Whaley**, and Timothy T. Brown. 2016. “Association of Reference Pricing for Diagnostic Laboratory Testing with Changes in Patient Choices, Prices, and Total Spending for Diagnostic Tests.” *JAMA Internal Medicine*, July.
Media coverage in [Reuters](#)
70. Robinson, James C., Timothy T. Brown, **Christopher Whaley**, and Emily Finlayson. 2015. “Association of Reference Payment for Colonoscopy with Consumer Choices, Insurer Spending, and Procedural Complications.” *JAMA Internal Medicine*, September, 1–7.
AHRQ Research Conference Director’s Award.
71. Robinson, James C., Timothy Brown, and **Christopher Whaley**. 2015. “Reference-Based Benefit Design Changes Consumers’ Choices And Employers’ Payments For Ambulatory Surgery.” *Health Affairs*, 34 (3): 415–22.
72. **Whaley, Christopher**, H. E. Frech, and Richard M. Scheffler. 2015. “Accountable Care Organizations in California: Market Forces at Work?” *Journal of Health Politics, Policy and Law*, vol. 40(4).
73. **Whaley, Christopher**, Mary Reed, John Hsu, and Vicki Fung. 2015. “Functional Limitations, Home Support, and Responses to Drug Costs Among Medicare Beneficiaries.” *PLOS ONE* 10 (12).
74. Robinson, James C., Timothy T. Brown, **Christopher Whaley**, and Kevin J. Bozic. 2015. “Consumer Choice Between Hospital-Based and Freestanding Facilities for Arthroscopy.” *Journal of Bone and Joint Surgery*, 97 (18): 1473–81.

75. **Whaley, Christopher**, Jennifer Schneider Chafen, Sophie Pinkard, Gabriella Kellerman, Dena Bravata, Bob Kocher, and Neeraj Sood. 2014. "Association Between Availability of Health Service Prices and Payments for These Services." *JAMA: The Journal of the American Medical Association*, 312 (16): 1670–76.
Media coverage in [Bloomberg](#), [Bloomberg View](#), [Forbes](#), [Reuters](#), and the [Washington Post](#)
One of five finalists for the [National Institute for Health Care Management's Annual Research Award](#)

Peer Reviewed RAND Reports

1. **Whaley, Christopher M.**, Brian Briscoombe, Rose Kerber, Brenna O'Neill, and Aaron Kofner. 2022. "Prices Paid to Hospitals by Private Health Plans: Findings from Round 4 of an Employer-Led Transparency Initiative." Santa Monica, CA: RAND Corporation.
https://www.rand.org/pubs/research_reports/RR1144-1.html.
2. Uscher-Pines, Lori, Natasha Arora, Maggie Jones, Abbie Lee, Jessica L. Sousa, Colleen M. McCullough, Sarita D. Lee, et al. 2022. "Experiences of Health Centers in Implementing Telehealth Visits for Underserved Patients During the COVID-19 Pandemic: Results from the Connected Care Accelerator Initiative." RAND Corporation. https://www.rand.org/pubs/research_reports/RR1840-1.html.
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7. **Whaley, Christopher M.**, Brian Briscoombe, Rose Kerber, Brenna O'Neill, and Aaron Kofner. 2020. "Nationwide Evaluation of Health Care Prices Paid by Private Health Plans: Findings from Round 3 of an Employer-Led Transparency Initiative," September. https://www.rand.org/pubs/research_reports/RR4394.html.
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8. Duffy, Erin L., **Christopher Whaley**, and Chapin White. "The Price and Spending Impacts of Limits on Payments to Hospitals for Out-of-Network Care." 2020.

9. White, Chapin and **Christopher Whaley**. “Prices Paid to Hospitals by Private Health Plans Are High Relative to Medicare and Vary Widely: Findings from an Employer-Led Transparency Initiative.” Santa Monica, CA: RAND Corporation, 2019.
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12. Kapinos, Kandice A., Brian Briscoombe, Tadeja Gracner, Aaron Strong, **Christopher Whaley**, Emily Hoch, Jakub P. Hlavka, Spencer R. Case and Peggy G. Chen. Public Cord Blood Banks: Worthy of National Investment. Santa Monica, CA: RAND Corporation, 2017.
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13. Kapinos, Kandice A., Brian Briscoombe, Tadeja Gracner, Aaron Strong, **Christopher Whaley**, Emily Hoch, Jakub P. Hlavka, Spencer R. Case and Peggy G. Chen. Challenges to the Sustainability of the U.S. Public Cord Blood System. Santa Monica, CA: RAND Corporation, 2017.
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Non-Peer Reviewed Research and Reports

1. **Whaley, Christopher M**, Gloria Sachdev, Marilyn Bartlett, and Ge Bai. 2022. “It’s Time For Employers To Bring Health Care Decisions In-House.” *Health Affairs Forefront*. September 22, 2022. <https://www.healthaffairs.org/content/forefront/s-time-employers-bring-health-care-decisions-in-house>.
2. **Whaley, Christopher M**. 2021. “Sources Of Health Care Price Variation Create Barriers To Measuring Health Care Costs.” *Health Affairs Forefront*, December 13, 2021.
<https://doi.org/10.1377/forefront.20211212.305573>.
3. Sood, Neeraj and **Christopher Whaley**. “Reverse Reference Pricing: Rewarding Patients For Reducing Medicare Costs.” *Health Affairs Blog*, June 7, 2019.
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4. Scheffler, Richard M., Daniel R. Arnold, and **Christopher M. Whaley**. 2018. “Consolidation Trends: The Authors Reply.” *Health Affairs* 37 (11): 1908–1908.
<https://doi.org/10.1377/hlthaff.2018.1215>.
5. **Whaley, Christopher**, Joel Davis, and Jim Rivas. 2017. “OB-GYN Workload & Potential Shortages: The Coming U.S. Women’s Health Crisis.”

6. Eibner, Christine and **Christopher Whaley**. 2017. “Loss of Maternity Care and Mental Health Coverage Would Burden Those in Greatest Need.” *The Commonwealth Fund*, May 18. <http://www.commonwealthfund.org/publications/blog/2017/may/maternity-care-and-mental-health-coverage-requirements>.
7. **Whaley, Christopher**, Joel Davis, and Jim Rivas. 2017. “2017 Physician Compensation in the United States.”
8. Duffy, Erin, Michael Dworsky, and **Christopher Whaley**. 2017. “Can a Continuous Coverage Requirement Produce a Healthy Insurance Market?” *The Hill*, January 4. <http://thehill.com/blogs/congress-blog/healthcare/312590-can-a-continuous-coverage-requirement-produce-a-healthy>.
9. **Whaley, Christopher**, Timothy T. Brown, James C. Robinson. 2016. Using Data to Lower Costs: California’s Reference-Based Payment Experience and Implications for Other States. *Health Care Cost Institute*.
10. **Whaley, Christopher**, Zachary Wagner, Glenwood Barbee, Cynthia Cowen, and Jim Rivas. 2016. “The Opioid Crisis in America’s Workforce.” *Castlight Health*.
11. “Pricing for the Same Medical Services Is All Over the Map (Literally).” June 2014 and October 2015. <http://www.castlighthealth.com/price-variation-map/>. [Interactive data map detailing variation in commercial prices] *Media Coverage in Wall Street Journal, The Washington Post, and Kaiser Health News*.

Grants and Contracts

Active Projects

2022-2024	Assessing the Impacts of Insurer-Provider Vertical Integration Sponsor: Commonwealth Fund Amount: \$334,000 Role: Principal Investigator
2022-2023	Health Care Price Transparency Sponsor: Patient Rights Advocate Amount: \$250,000 Role: Principal Investigator
2022-2027	Health Services Utilization During the COVID-19 Pandemic (R01 AG073286-01A1) Sponsor: National Institute on Aging Amount \$2,419,820 Role: Principal Investigator
2021-2024	Comparing Quality of Care for Pediatric Dental Procedures Conducted in Ambulatory Surgical Centers and Hospital Outpatient Departments (R01 HS027994-01A1) Sponsor: Agency for Healthcare Research and Quality Amount: \$1,199,996 Role: Co-Investigator (PI: Ashley Kranz, RAND)

- 2022-2025 Analysis of a Tiered Clinic Cost-sharing Health Insurance Benefit Design (R01HS026898)
Sponsor: Agency for Healthcare Research and Quality
Amount: \$1,179,090
Role: Co-Investigator (RAND site PI, PI: Bryan Dowd, University of Minnesota)
- 2022-2023 Telehealth Quality
Sponsor: California Public Employees' Retirement System
Amount: \$120,000
Role: Principal Investigator
- 2022 Health Care Markets
Sponsor: Arnold Ventures
Amount: \$83,000
Role: Principal Investigator
- 2022-2023 Hospital Price Transparency
Sponsor: Robert Wood Johnson Foundation
Amount: \$1,100,000
Role: Principal Investigator
- 2021-2022 Telehealth During COVID-19
Sponsor: California Health Care Foundation
Amount: \$300,000
Role: Principal Investigator
- 2019-2024 The Effects of Insurance Benefit Design Innovations on Patient Health (K01 AG061274)
Sponsor: National Institute on Aging
Role: Principal Investigator
Amount: \$650,000
- 2019-2023 Affordability Cures
Sponsor: Health Care Services Corporation
Role: Principal Investigator
Amount: \$1,000,000

Completed Projects

- 2021-2022 Hospital Price Transparency
Sponsor: Robert Wood Johnson Foundation
Amount: \$450,000
Role: Principal Investigator
- 2020-2021 Hospital Payment Policy Responses to COVID
Sponsor: Arnold Ventures
Amount: \$70,000
Role: Principal Investigator
- 2020-2021 Effect of COVID-19 on Use of Telehealth for Diabetes Patients
Sponsor: Livongo

- Amount: \$107,000
Role: Principal Investigator
- 2020-2021 Non-Emergency Medical Transportation and Rideshares
Sponsor: Lyft
Amount: \$140,000
Role: Principal Investigator
- 2020-2021 Prices Paid to Hospitals by Private Health Plans
Sponsor: Arnold Foundation
Role: Principal Investigator
Amount: \$993,000
- 2019-2021 Hospital Price Transparency Initiative
Sponsor: Robert Wood Johnson Foundation
Role: Principal Investigator
Amount: \$300,000
- 2019-2019 Evaluation of HCM Programs
Sponsor: Health Care Services Corporation
Role: Principal Investigator
Amount: \$50,000
- 2018-2019 Machine Learning to Improve Risk Adjustment
Sponsor: RAND-Initiated Research
Role: Principal Investigator
Amount: \$200,000
- 2018-2019 Providing Transparency in Hospital Prices to Improve the Ability of Self-Insured Employers to Demand Value
Sponsor: Robert Wood Johnson Foundation
Role: Principal Investigator
Amount: \$105,000
- 2018-2020 Evaluation of CalPERS Reference Pricing Program for Prescription Drugs
Sponsor: California Public Employees' Retirement System
Role: Principal Investigator
Amount: \$285,000
- 2018-2019 The Impact of Reference Pricing on Hospital-Insurer Bargaining
Sponsor: National Institute for Health Care Management Foundation
Role: Principal Investigator
Amount: \$55,000
- 2017-2019 Using Big Data to Estimate the Effects of Complex Cost-Sharing Rules on Colorectal Cancer Screening and Patient Health (R21 CA219229-01)
Sponsor: National Cancer Institute
Role: Principal Investigator
Amount: \$475,000

2017-2019 Reference Pricing as a Purchasing Strategy to Promote Cost-Effective Drug Choice
Sponsor: Laura and John Arnold Foundation
Role: Co-Investigator
Amount: \$795,000

2015-2016 The Effect of Reference Based Benefits on State Healthcare Expenditures
Sponsor: Health Care Cost Institute and Laura and John Arnold Foundation
Role: Co-Investigator
Amount: \$128,000

Presentations (+Co-author)

2024 ASSA Annual Meeting, AHRQ, Congressional Budget Office

2023 Johns Hopkins School of Public Health, Weill Cornell, National Quality Forum, NBER Health Care⁺, NBER Aging (discussant), USC, ASHE, Medtronic, Rice University Baker Institute

2022 ASSA Annual Meeting, APPAM, Academy Health, ASHE, Montana State University, Indiana University, European-American Health Economics Conference, Centers for Medicare & Medicaid Services (CMS) Innovation Center, RAND Center for Causal Inference Symposium, NIMH Conference on Mental Health Services Research, Weill Cornell, Health Enhancement Research Organization Forum, 32BJ Health Fund, Federal Trade Commission Microeconomics Conference,⁺ Bipartisan Policy Center, UCLA Health Services Research, Brown School of Public Health, Caribbean Health Economics Symposium, Verily Life Sciences

2021 Executive Office of the President, RAND Board of Trustees, Stanford Healthcare Provider Market Consolidation Workshop, UCLA Health Policy and Management, USC Price, Medicare Payment Advisory Commission, ASHE, APPAM, Electronic Health Economics Colloquium,⁺ NBER Summer Institute,⁺ RAND Causal Inference Seminar, RAND Education Brownbag, Catalyst for Payment Reform, UCSF, Numerous employers and employer organizations

2020 Federal Trade Commission Microeconomics Conference, Congressional Budget Office Health Panel of Advisors, APPAM, Penn State Health Care Policy, Conference on Health IT and Analytics, NBER Labor Studies,⁺ ASHE (Cancelled), Academy Health (Cancelled), EuHEA (Cancelled), Numerous employers and employer organizations

2019 APPAM, European-American Health Economics Conference, ASHE, International Industrial Organization Conference, Claremont Graduate University, Clemson, American-European Health Economics Study Group, Health Econometrics Workshop, Employer's Forum of Indiana, National Value-Based Payment and Pay for Performance Summit

2018 ASHE, Southern California Conference in Applied Microeconomics

- 2017 Yale School of Public Health, Indiana University SPEA, iHEA, Health Econometrics Workshop, NIHCM, RAND
- 2016 AEA Annual Meeting, RAND, Congressional Budget Office, Federal Trade Commission, University of Minnesota School of Public Health, Weill Cornell, Kellogg Health Markets Conference, University of Chicago Health Economics Workshop, UC Berkeley, ASHE, Consumers Union, International Industrial Organization Conference
- 2015 National Association for State Health Policy, Berkeley School of Public Health, Academy Health
- 2014 CEGA Conference on Behavioral Health Economics, ASHE, Academy Health, Stanford Research in Progress, CITRIS Research Exchange
- 2013 Peder Sather Workshop on Industrial Organization (discussant), Academy Health

Student Advising

Xiaoyu Nie (2019, RAND PRGS) – Analysis Group
 Xiaoxi Zhao (2021, Boston University) – RAND
 Justus Timmers (2023, University of Texas Economics) – Bates White
 Swad Komanduri (RAND PRGS)
 Priya Gandhi (RAND PRGS)

Referee for Professional Journals

Academic Emergency Medicine, AEJ: Applied, AEJ: Policy, American Economic Review, American Journal of Managed Care, American Journal of Preventive Medicine, BMC Health Services Research, BMJ Quality, Canadian Journal of Economics, Econometrics, Economic Journal, European Journal of Health Economics, Family Medicine and Community Health, Health Affairs, Health Economics, Health Services Research, Health Policy, Health Security, International Journal of Health Economics and Management, JAMA, JAMA Forum, JAMA Internal Medicine, JAMA Network Open, Journal of the American Dental Association, Journal of Comparative Effectiveness Research, Journal of Health Economics, Journal of Political Economy, Journal of Public Economics, Journal of Risk and Insurance, Management Science, Medical Care Research and Review, Management Science, Milbank Quarterly, New England Journal of Medicine, Pediatrics, Public Health, Public Health Reports, Proceedings of the National Academy of Sciences, Review of Economics and Statistics, Review of Industrial Organization, Quarterly Journal of Economics, Vaccine

2022 reviews: 45 (15 economics, 30 health policy/medical)

Scientific Review Committees

*Robert Wood Johnson Foundation
 APPAM 2021 Conference
 ASHE 2021 “Competition in Health Care Markets and Insurer and Hospital Behavior” Theme Chair*