

SARA R. MACHADO

<https://www.saramachado.org/>
sara_machado@brown.edu

CURRENT APPOINTMENT

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| Brown University School of Public Health Department of Health Services, Policy & Practice Senior Research Associate | Providence, RI, USA April 2023 - Present |
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PREVIOUS APPOINTMENTS

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|---|---|
| London School of Economics Research Officer, LSE Health LSE Fellow, Department of Health Policy | London, UK 2019-2022 2016-2019 |
| Imperial College London School of Public Health, Faculty of Medicine Postdoctoral Researcher Associate | London, UK September 2016 |

HONORARY APPOINTMENTS

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|---|--------------------------------|
| Brigham and Women's Hospital Harvey Chair Scholar | Boston, MA 2018-2022 |
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EDUCATION

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|--|---|
| Boston University PhD, Economics <i>Dissertation: Essays on the Economics of Blood Donation</i> | Boston, MA 2010-2016 |
| Nova School of Business and Economics ResMS, Economics MS, Economics BS, Economics | Lisbon, Portugal 2009 2007 2007 |

FIELDS AND RESEARCH INTERESTS

Primary Fields: Health Economics
Secondary Fields: Health Policy, Health Services Research
Research Interests: Health disparities; Wealth and health; health system design and performance assessment; organ donation and transplantation; health outcomes; cardiovascular health outcomes and healthcare

SCHOLARSHIPS AND AWARDS

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|---|------------------|
| Best Presentation on Ageing Award, Portuguese Health Economics Association | 2023 |
| Excellence in Education Award, London School of Economics and Political Science | 2016-2017 |
| Best Oral Presentation Award, Portuguese Health Economics Association | 2009, 2015 |
| Best Oral Presentation Award, Spanish Health Economics Association | 2015 |
| Seed Grant, Industry Studies Program, Boston University | 2012 |
| Young Researcher Traveling Award, Portuguese Health Economics Association | 2011, 2013, 2015 |
| Graduate Studies Scholarship, Portuguese Foundation for Science and Technology | 2007-09, 2011-12 |
| Research Scholarship, Portuguese Foundation for Science and Technology | 2006-2007 |

TEACHING EXPERIENCE

GUEST LECTURES –*Health economics and health systems*

AESE Business School (since 2018), Lisbon, Portugal; Department of Economics, Boston University (since 2023); School of Health Sciences of the Portuguese Red Cross (ESSCVP) (since 2024)

TEACHING FELLOW - *includes lectures and seminars*

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|---|--|
| London School of Economics – Department of Health Policy Health Economics: SA408, HP420 (MSc), SA4G2, HP4A4E (Executive MSc) Measuring Health Systems Performance: SA4E2, HP4B4E (Executive MSc) Cost Effectiveness in Health Care: HP4E4E (Executive MSc) Behavioural Science for Health: PB452E (Executive MSc) Advanced Health Econometrics: SA4L5 (MSc) Economics of Health and Wellbeing: SA4N7 (Executive MSc) | 2016-2022 2016-2022 2019-2020 2018-2019 2016-2017 2016-2017 |
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Sara R. Machado

INSTRUCTOR

Boston University

Health Economics: EC387 (BA)

Economics Statistics: EC305 (BA)

Empirical Economics: EC305 (BA)

Spring 2014

Spring 2014

Fall 2015

TEACHING ASSISTANT

Boston University

Health Economics: EC581 (MSc)

Health Economics: EC387 (BA)

Public Finance: EC355 (BA)

Economics Development of Latin America: EC369 (BA)

Spring 2015

Fall 2013-2015

Spring 2014-2015

Fall 2014

Imperial College Business School

Health Economics (MSc)

Fall 2016

PUBLICATIONS

PEER REVIEWED

Machado SR, Perez BP, Papanicolas IN (2024) "The Role of Race and Ethnicity in Healthcare Crowdfunding: an exploratory analysis", *Health Affairs Scholar*, 2024; qxae027, doi.org/10.1093/haschl/qxae027

Machado SR, Ostrominski JW, Mossialos E, Mehra MR, Vaduganathan M. (2023) "Donor Diabetes Mellitus Status and Contemporary Outcomes After Cardiac Transplantation." *JACC: Heart Failure*. 2023;11(4):483-486. [doi:10.1016/j.jchf.2023.01.020](https://doi.org/10.1016/j.jchf.2023.01.020) [Co-first author]

Machado SR, Perez BP, Andrews JT, Kourtellis N, (2022) "I call BS: Fraud Detection in Crowdfunding Campaigns" *In 14th ACM Web Science Conference 2022 (WebSci '22)*. Association for Computing Machinery, New York, NY, USA, 1–11. [doi:10.1145/3501247.3531541](https://doi.org/10.1145/3501247.3531541) [equal authorship]

Machado SR, Sumarsono A, Vaduganathan M. (2021) "Midlife Wealth Mobility and Long-term Cardiovascular Health". *JAMA Cardiology*. 2021;6(10):1152. doi:10.1001/jamacardio.2021.2056 [First author]
Selected media coverage: [Yahoo!news](https://www.yahoo.com/news), [tctMD](https://www.tctmd.com), [Eat this not that](https://www.eatthisnotthat.com), [FAZ](https://www.fox.com), [The Straits Times](https://www.straitstimes.com)

Machado SR, Jayawardana S, Mossialos E, Vaduganathan M (2021). "Physician density by specialty type in urban and rural counties in the US, 2010 to 2017", *JAMA network open*, 2021;4(1), e2033994-e2033994. [doi:10.1001/jamanetworkopen.2020.33994](https://doi.org/10.1001/jamanetworkopen.2020.33994) [First author]

Machado SR, Costa-Font, J, (2021). "How Can Policy Interventions Encourage Pro-Social Behaviours in the Health System?", *LSE Public Policy Review*. 2021; 1(3): 6, pp. 1–10. [doi:10.31389/lseprr.17](https://doi.org/10.31389/lseprr.17) [equal authorship]

Buckley LF, Vaduganathan M, Lauffenburger JC, **Machado SR**, Fanikos J (2020) "Unintended Impact of US Food and Drug Administration Recalls on the Use of Contaminated and Non-Contaminated Angiotensin Receptor Blockers Among Medicaid Beneficiaries." *Ann Pharmacother*. 2020;54(6):615-616. [doi:10.1177/1060028019897388](https://doi.org/10.1177/1060028019897388)

Aslam S, Grossi P, Schlendorf KH, et al. (2020) "Utilization of hepatitis C virus-infected organ donors in cardiothoracic transplantation: An ISHLT expert consensus statement." *The Journal of Heart and Lung Transplantation*. 2020;39(5):418-432.2020 [working group member] [doi:10.1016/j.healun.2020.03.004](https://doi.org/10.1016/j.healun.2020.03.004)

Vasey B, Shankar AH, Herrera BB, Becerra A, Xhaja K, Echenagucia M, **Machado, SR** et al. (2020) "Multivariate time-series analysis of biomarkers from a dengue cohort offers new approaches for diagnosis and prognosis." *PLoS Negl Trop Dis* 14(6): e0008199. [doi:10.1371/journal.pntd.0008199](https://doi.org/10.1371/journal.pntd.0008199)

Sumarsono A, Buckley LF, **Machado SR**, Vaduganathan M, et al. (2020) "Medicaid Expansion and Utilization of Antihyperglycemic Therapies". *Diabetes Care*. [doi:10.2337/dc20-0735](https://doi.org/10.2337/dc20-0735)

Machado SR, Sinnenberg L, Ostrominski JW, Stehlik J, Mehra MR, Vaduganathan M. Citizenship Status and Cardiothoracic Organ Transplantation in the United States. *Circulation: Heart Failure*. 2020;13(12). doi:10.1161/circheartfailure.120.007788

Machado SR, Vaduganathan M, Mehra MR (2019) "Adoption of hepatitis C virus-infected donor hearts: A "middle child" no more." *The Journal of Heart and Lung Transplantation*, 38(9), 918-919. DOI: 10.1016/j.healun.2019.07.005 [First author]

Machado SR, Vaduganathan M, DeFilippis EM, Bajaj N, Stehlik J, Mossialos E, Jarcho JA, Mehra MR (2019) "Organ Donation and Drug Intoxication-Related Deaths in the United States", *New England Journal of Medicine*.

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Feb 2019, 380(6): 597-599; DOI: 10.1056/NEJMc1810758. [co-first author]

Selected Media Coverage: [Drugs.com](#), [MedicalXpress](#), [Medscape](#), [Medscape Podcast](#), [US News](#)

DeFillippis EM, Vaduganathan M, **Machado SR**, Stehlik J, Mehra MR (2018) "Emerging Trends in Financing of Adult Heart Transplantation in the United States", *JACC: Heart Failure*. Dec 2018, 969; DOI: 10.1016/j.jchf.2018.10.001

Media Coverage: [Cardiovascular Business](#)

Machado SR, Barros PP (2010) "Money for Nothing: The Net Costs of Medical Training", *Health Care Management Science*, 13(3): 234-255. <https://doi.org/10.1007/s10729-010-9126-7> [equal authorship]

BOOKS/REPORTS

Barros, PP, **Machado, SR**, Simões, JA, (2011) "Portugal: Health System Review" *Health Systems in Transition*, 13(4): 1-156. (available [here](#))

Goncalves, J, **Machado, SR**, Gomes, JP, Lazarus, J (2017) "Eliminating Hepatitis C in Portugal", *Imprensa Nacional Casa da Moeda*, Lisboa.

PREPRINT AND SUBMITTED ARTICLES

Kyriopoulos I, **Machado SR**, Papanicolas IN, (2024) "Wealth related health inequalities in the US and 14 high-income countries" – *submitted to HSR*

In this cross-sectional study, we use the Health and Retirement Survey and the Survey on Health and Ageing in Europe to quantify the evolution of wealth-related health inequality across time and countries. The magnitude of health inequalities with respect to wealth remained unchanged over the study period across all countries. Our findings also suggest that wealth-related health inequalities differ at different stages of workforce engagement, especially in the United States. This could be explained either by potential redistributive effects of retirement or by uneven survivor effect.

Machado SR, Vargas-Lopes F (2024) "Medicaid Expansion and the Mechanics of Increased Access to Organ Transplantation" [First author] - *In preparation for submission to Journal of Health Economics*

Using the universe of US-based organ transplant candidates and recipients, we analyze the mechanics of the causal effect of Medicaid expansion on transplantation. We quantify the impact on a range of outcomes that relate to how expanding Medicaid coverage affects access to care and other payers, in a setting where patient ex ante and ex post moral hazard are minimized.

Santos C, Costa E, **Machado SR** (2024) "Uncovering Competitive Forces in Prescription Drug Markets - Evidence from Statins" [Equal authorship] – *In preparation for submission to Health Economics Letters*

We analyze the relationship between price caps and pharmaceutical companies' market power. We define distance to price cap as companies' strategic variable. We then use fixed effects models to estimate the relationship between this variable, multimarket interaction, and ownership structure. We further investigate the effect of generic entry in a separate but related market, using synthetic control methods.

Costa, GC, Pereira, NS, **Machado SR** (2024) "Association between physician continuity of care and hypoglycaemic medication prescription" [Senior author] – *In preparation of submission to SSM Population Health*

Using the universe of all-payer prescriptions of diabetes mellitus (DM) medication in Portugal, we focus on the relationship between the continuity of care and prescription patterns of DM medication. Our findings indicate there are important differences in prescription decisions when there is continued interaction between a patient and their physician, across both primary care physicians and specialists, which sheds light on the mechanism of the link behind fragmentation of care and worse health outcomes.

Marsaudon, A, **Machado SR**, Galizzi MM (2024) "Do Health-Related Events Affect Risk Tolerance?" - [Equal authorship] *In preparation for submission to Social Science and Medicine*

We test whether risk tolerance is affected by various health-related events using a representative panel of individuals living in United Kingdom. Risk tolerance is measured using both incentive-compatible experimental lottery tasks with real monetary payments and self-reported questions on willingness to take risks. Maximum likelihood estimates for individual-specific constant relative risk aversion are obtained from the experimental tests. Our findings suggest that risk tolerance is not significantly affected by health-related events. Such a result is consistent across experimental and self-reported questions and across all health-related events.

RESEARCH PAPERS IN PREPARATION

“Comparing political parties’ health policy proposals: a health systems assessment approach to political manifestos”, with Luis Sá, Ana Moura, Diogo Marques, Francisca Vargas Lopes – *manuscript in preparation for submission to WHO Bulletin*

“The Value of a Heartbeat: Cardiovascular Health, Retirement Decisions, and Consumer Finance at Later Ages”, with Filipe Correia – *manuscript in preparation*

“Antimicrobial Stewardship National Action Plans in Action: An Assessment of Country-Level Antimicrobial Stewardship Response and Governance”, with Emily O’Neill, Omar Galarraga, Jinru Wei, and Irene Papanicolas - *manuscript in preparation*

INVITED SEMINARS AND GUEST TALKS

Last 5 years

| | |
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| University of Barcelona, Economics Seminar | 2022 |
| Boston University HLP Advanced Quantitative Seminar, Boston, MA <i>[online]</i> | 2021 |
| Stanford University, Economics of Transplantation Seminar, Palo Alto, CA <i>[online]</i> | 2021 |
| Centre for Health Economics Seminar, York, UK <i>[online]</i> | 2021 |
| Forum SPC (Portuguese Society of Cardiology), closing speaker <i>[online]</i> | 2021 |
| “ <i>Creating value in an evolving health care system</i> ” | |
| LSE Event, panel speaker <i>[online]</i> | 2020 |
| “ <i>A Commitment to Welfare: the impact of Richard Titmuss on health and social policy</i> ” | |
| LSE Marshall Institute, Beveridge 2.0 Symposium on Individual and Organisational Motivations for Public Benefit, panel speaker <i>[online]</i> | 2020 |
| “ <i>Altruism in Health and Other Domains</i> ” | |
| International Donation and Transplantation Legislative Forum, guest speaker | 2020 |
| <i>cancelled due to COVID-19</i> | |
| National Students for Global Health Conference: Health Access for All, Plenary Speaker, London | 2020 |
| “ <i>The Essentials of Universal Health Care Coverage</i> ” | |
| Geary Institute of Public Policy, University College Dublin, Dublin | 2020 |
| LSESU United Nations Society, Panel Speaker, London | 2019 |
| “ <i>On The Road to Global Healthcare</i> ” | |
| London School of Hygiene and Tropical Medicine, London | 2019 |

Previous talks: Erasmus School of Economics (Rotterdam, 2016), Imperial College School of Public Health (London, 2015), HCP Harvard Medical School (Boston, 2015, 2013), LSHTM Health Economics Seminar (London, 2015), LSE Behavioural Economics Seminar (London, 2015), Imperial College Business School (London, 2012)

CONFERENCE PRESENTATIONS

Last 5 years

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| Portuguese Health Economics Association | 2019, 2023 |
| American Heart Association (AHA21), online | 2021 |
| American College of Cardiology (ACC21) | 2021 |
| Southern Economic Association | 2019, 2021 |
| ASHEcon American Society of Health Economists | 2019, 2021 |

Previous conferences: UK Health Economics Study Group (2015x2), Jornadas AES (2015), Harvard Behavioral Insights Group (BIG Ideas) Workshop (2015), Portuguese Health Economics Association (2017, 2016, 2015, 2013, 2011, 2009, 2008, 2007, 2006), ASHEcon American Health Economics Association (2016, 2015, 2012), ECHE/EuHEA European Conference on Health Economics (2017, 2016, 2012, 2008), EuHEA Student-Supervisor and Early Career Researcher Conference (2016, 2017), iHEA International Health Economics Association (2017, 2015, 2011, 2007)

PROFESSIONAL ACTIVITIES

REFEREE EXPERIENCE

JAMA Internal Medicine, JAMA Network Open, Behavioural Public Policy, Health Care Management Science, Health Economics, Health Policy, International Journal of Health Care Finance and Economics, German Economic Review, The Journal of Heart and Lung Transplantation, European Journal of Public Health, Inquiry, PNAS, Annals of Public Health

Sara R. Machado

COMMITTEES

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| Board member, Portuguese Health Economics Association | 2019-2021; 2023 - present |
| Organising Committee, 18th National Conference on Health Economics | 2023 |
| Deputy Chair, EuHEA – Early Career Committee | 2017-2020 |
| Organising Committee, EuHEA PhD Student-Supervisor Conference | 2019 |
| Management Board member, BEHnet – Behavioural Experiments in Health Network | 2015-2019 |
| Scientific Committee Chair, Portuguese Health Economics Association Workshop | 2018 |

OTHER AFFILIATIONS

European Health Economics Association (EuHEA), Health Economics Study Group (HESG), International Health Economics Association (iHEA), American Society of Health Economists (ASHEcon), American Economic Association (AEA), Heart Failure Society of America (HFSA), and Portuguese Health Economics Association (APES)

March 2024