

**The Faculty of Medicine of Harvard University
Curriculum Vitae**

Date Prepared: April 3, 2023
Name: Ashley L. O'Donoghue
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Education:

2015	BA	Economics, Mathematics	Assumption College
2017	MA	Economics	Clark University
2020	PhD	Economics (Advisor: Wayne Gray)	Clark University

Postdoctoral Training:

2021 - 2022	Research Fellow in Medicine	Department of Medicine	Beth Israel Deaconess Medical Center
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Faculty Academic Appointments:

2022 -	Instructor in Medicine	Department of Medicine	Beth Israel Deaconess Medical Center
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Appointments at Hospitals/Affiliated Institutions:

2018 - 2020	Pre-Doctoral Research Fellow	Center for Healthcare Delivery Science	Beth Israel Deaconess Medical Center
2020 -	Economist	Center for Healthcare Delivery Science	Beth Israel Deaconess Medical Center

Other Professional Positions:

2014 - 2015	Research Intern	Worcester Regional Research Bureau	
2015 - 2019	Teaching Assistant	Clark University	
2016 - 2018	Summer Research Assistant	Clark University	
2018 - 2019	Instructor	Clark University	

Major Administrative Leadership Positions:

Local

2020 - Lead, Data Science Team
Center for Healthcare Delivery Science,
Beth Israel Deaconess Medical Center

Professional Societies:

2019 - Southern Economic Association Member

2019 - American Society of Health Economists
2019 - Member
2020 - Scientific Review Committee

2020 - AcademyHealth Member

2020 - American Economic Association Member

2020 - International Health Economics Association
2020 - Member
2020 - Early Career Researchers
Special Interest Group
2020 - COVID-19 Research Group
2023 Scientific Committee Review
Panel

Grant Review Activities:

2023 Machine Learning Innovation Grant Study Section Ad hoc reviewer
Center for Healthcare Delivery Science
Beth Israel Deaconess Medical Center

Editorial Activities:

Ad hoc Reviewer

JAMA

JAMA Health Forum

JAMA Psychiatry

JAMA Network Open

Journal of General Internal Medicine

Health Services Research

BMC Medical Education

BMC Medical Informatics and Decision Making

BMC Pregnancy and Childbirth

Journal of Clinical Outcomes Management

npj Digital Medicine

Scientific Reports

Honors and Prizes:

2011	Presidential scholarship	Assumption College	Merit-based
2011 - 2014	Dean's List	Assumption College	
2014	Kappa Mu Epsilon	Assumption College	Mathematics honors society
2014	Omicron Delta Epsilon	Assumption College	Economics honors society
2014	Conference Travel Award	Assumption College	
2015	Full tuition remission	Clark University	Merit-based
2017	Best Teaching Assistant in Economics	Department of Economics, Clark University	Departmental award
2018	Best Teaching Assistant in Economics	Department of Economics, Clark University	Departmental award
2019	Outstanding Teaching Assistant of the Year	Clark University	University award
2020	First Place	Massachusetts Institute of Technology Covid-19 Challenge Datathon	Lead of winning team

Report of Funded and Unfunded Projects

Past

2018 - 2022 A new approach to patient safety: identifying risky clinical states to reduce preventable harms for hospitalized patients
Doris Duke Charitable Foundation
Co-Investigator (PI: Jennifer Stevens)
Despite ambitious efforts to improve the safety of hospitalized patients, the rate of preventable harms remains unchanged. Our proposal will develop and refine a tool to quantify the level of risk of preventable patient harms of intensive care units, prospectively validate this tool, and spread this tool to a new clinical environment.

Current

2020 - 2023 Quantifying secondary health impacts of Covid-19
Google.org
Co-Investigator (PI: Jennifer Stevens)
The goal of this project is to quantify the impact of Covid-19 on non-Covid-associated healthcare. A fundamental hypothesis is that preventive care and routine care will be delayed and deferred, leading to subsequent increased healthcare utilization

Report of Local Teaching and Training

Teaching of Students in Courses:

2015 - 2016	Teaching Assistant, Economics and the World Economy 50 undergraduate students Student evaluations: 4.5/5.0 and 4.6/5.0	Clark University 17.5 hours per week
2016 - 2017	Teaching Assistant, Introduction to Statistics 40 undergraduate students Student evaluations: 4.9/5.0 and 4.8/5.0	Clark University 17.5 hours per week
2017	Teaching Assistant, Economics and the World Economy 50 undergraduate students Student evaluations: 4.8/5.0	Clark University 17.5 hours per week
2018	Teaching Assistant, Introduction to Statistics 40 undergraduate students Student evaluations: 4.8/5.0	Clark University 17.5 hours per week
2018	Instructor, Economics and the World Economy 30 undergraduate students Student evaluations: 4.8/5.0	Clark University 17.5 hours per week
2019	Teaching Assistant, Economics and the World Economy 50 undergraduate students Student evaluations: 4.9/5.0	Clark University 17.5 hours per week
2019	Instructor, Economics and the World Economy 30 undergraduate students Student evaluations: 4.9/5.0	Clark University 17.5 hours per week
2023	AISC 622: Health System Science Quasi-experimental designs 15 medical students	Harvard Medical School 1.5 hours

Local Invited Presentations:

No presentations below were sponsored by 3rd parties/outside entities

2020	Prospective cohort study of a proof-of-concept method to monitor nursing stress in the emergency department before and after an operational change Artificial Intelligence/Machine Learning Symposium, Beth Israel Deaconess Medical Center
2020	Real-time machine-learning driven Covid-19 forecasting Invited research lecture Center for Healthcare Delivery Science Work-in-Progress Seminar, Beth Israel Deaconess Medical Center
2020	Real-time machine-learning driven Covid-19 forecasting Invited research lecture Department of Healthcare Quality Seminar, Beth Israel Deaconess Medical Center

- 2020 Reopening businesses and risk of Covid-19 transmission
Invited research lecture
Center for Healthcare Delivery Science Work-in-Progress Seminar, Beth Israel Deaconess Medical Center
- 2020 The effect of the Medicaid expansion on opioid prescribing rates and drug-related foster care removals
Invited healthcare delivery science grand rounds
Beth Israel Deaconess Medical Center
- 2022 Making sense of messy, real-world data with econometrics and machine learning: Forecasting COVID, allocating scarce resources, and estimating consequences of policy measures
Invited research lecture
General Medicine Research Division Conference
Beth Israel Deaconess Medical Center

Report of Regional, National and International Invited Teaching and Presentations

No presentations below were sponsored by 3rd parties/outside entities

Regional

- 2019 The effect of naloxone access on opioid-related mortality
Selected oral abstract
17th Multidisciplinary Conference, Clark University, Worcester, MA
- 2019 The effect of naloxone access on opioid-related mortality
Invited research lecture
Economics Seminar Series, Fitchburg State University, Fitchburg, MA
- 2020 Real-time machine-learning driven Covid-19 forecasting
Invited research lecture
Massachusetts Health Data Consortium, Virtual Webinar
- 2022 Academic Positions in Medical Schools
Invited panel member
Economics Career Panel, Clark University, Worcester, MA
- 2023 How can economists improve healthcare equity? Making sense of messy, real-world data with econometrics and machine learning
Invited research lecture
Economics of Race and Gender Speaker Series, Bentley University, Waltham, MA

National

- 2019 The effect of a large-scale workfare program on child marriage in India
Selected oral abstract
International Union for the Scientific Study of Population Research Meeting, Ann Arbor, MI
- 2019 The effect of a large-scale workfare program on child marriage in India
Selected oral abstract
Southern Economic Association Annual Meeting, Fort Lauderdale, FL

- 2020 The effect of the Medicaid expansion on opioid prescribing rates and drug-related foster care removals
Selected oral abstract
Eastern Economic Association Annual Meeting, Boston, MA
- 2020 The effect of the Medicaid expansion on opioid prescribing rates and drug-related foster care removals
Selected oral abstract
American Society of Health Economists Annual Meeting, St. Louis, MO
This presentation was scheduled, but then cancelled because of a Covid-19 travel/meeting ban.
- 2020 The effect of the Medicaid expansion on opioid prescribing rates and drug-related foster care removals
Selected oral abstract
Southern Economic Association Annual Meeting, New Orleans, LA
- 2021 Analysis of filled naloxone prescriptions before and during the COVID-19 pandemic in the United States
Selected oral abstract
AcademyHealth Annual Research Meeting, Virtual
- 2021 Access to buprenorphine: evidence from telehealth waivers during the COVID-19 pandemic
Selected oral abstract
American Society of Health Economists Annual Meeting, Virtual
- 2021 Analysis of filled naloxone prescriptions before and during the COVID-19 pandemic in the United States
Invited Research Lecture
Opioid x COVID RDB Grand Rounds, COVID-19 Research Database, Virtual
- 2022 Access to Buprenorphine/Naloxone for Postpartum Women with Opioid Use Disorder during the COVID-19 Pandemic
Selected oral abstract
American Society of Health Economists Annual Meeting, Austin, TX
- 2022 Access to Buprenorphine/Naloxone for Postpartum Women with Opioid Use Disorder during the COVID-19 Pandemic
Selected oral abstract
Southern Economic Association Annual Meeting, Fort Lauderdale, FL
- 2023 Do Hospital Networks Impact Timely Post-Hospital Primary Care Follow Up?
Selected oral abstract
AcademyHealth Annual Research Meeting, Seattle, WA

International

- 2021 Real-time machine learning-driven Covid-19 forecasting
Invited Keynote Speaker
Business & Economics Society International Conference, Virtual

Report of Education of Patients and Service to the Community

No presentations below were sponsored by 3rd parties/outside entities

Recognition:

2021	Publicity on <i>npj Digital Medicine</i> manuscript on business risk index	MIT Quest for Intelligence, Siemens Podcast
2021	Publicity on JAMA Health Forum manuscript on naloxone access	NPR, Forbes, US News & World Report, Kaiser Health News, KFF Policy Watch
2021	Publicity on JGIM manuscript on monoclonal antibodies	Vox
2021	Publicity on JAMA Network Open manuscript on COVID-19 at colleges	National Geographic, Freakonomics Radio, WBUR, Inside Higher Ed, US News & World Report
2022	Publicity on JAMA Network Open manuscript on FDA deauthorization of monoclonal antibodies	USA Today, US News & World Report

Report of Scholarship

Peer-Reviewed Scholarship in print or other media:

Research Investigations

Note: **underline** denotes first or last author or methodologist

1. Horng S, Joseph J, Calder S, **O'Donoghue A**, Safran C, Nathanson L, Leventhal E. Assessment of unintentional duplicate orders by emergency department clinicians before and after implementation of visual aid in the electronic health record ordering system. *JAMA Network Open*. 2019;2(12):e1916499.
2. Mitra A, Griesdale D, Haljan G, **O'Donoghue A**, Stevens J. How the high acuity unit changes mortality in the intensive care unit: a retrospective before-and-after study. *Canadian Journal of Anesthesia*. 2020.
3. **O'Donoghue A**, Dechen T, Pavlova W, Boals M, Moussa G, Madan M, Thakkar A, DeFalco F, Stevens J. Reopening businesses and risk of COVID-19 transmission. *npj Digital Medicine*. 2021.
4. **O'Donoghue A**, Biswas N, Dechen T, Anderson T, Talmor N, Punnamaraju A, Stevens J. Analysis of filled naloxone prescriptions before and during the COVID-19 pandemic in the United States. *JAMA Health Forum*. 2021.
5. Stevens J, Mechanic O, Markson L, **O'Donoghue A**, Kimball A. Telehealth use by age and race at a single academic medical center during COVID-19. *Journal of Medical Internet Research*. 2021.
6. Tsaneva M, **O'Donoghue A**. The effect of a large-scale workfare program on child marriage in India. *Oxford Development Studies*. 2021.
7. Horng S, **O'Donoghue A**, Dechen T, Rabesa M, Shammout A, Markson L, Jegadeesan, Tandon M, Stevens J. Secondary use of COVID-19 symptoms incidence among hospital employees as an example of syndromic surveillance of hospital admissions within 7 days. *JAMA Network Open*. 2021. (co-first author)

8. Anderson T, **O'Donoghue A**, Dechen T, Herzig S, Stevens J. Trends in telehealth and in-person transitional care management visits during the COVID-19 pandemic. *Journal of the American Geriatrics Society*. 2021.
9. Anderson T, **O'Donoghue A**, Dechen T, Mechanic O, Stevens J. "Uptake of outpatient monoclonal antibody treatments for COVID-19 in the United States: a cross-sectional analysis," *Journal of General Internal Medicine*. 2021.
10. **O'Donoghue A**. "Association of university student gatherings with community COVID-19 infections before and after the NCAA March Madness Tournament," *JAMA Network Open*. 2021.
11. Haber N, Wieten S, Rohrer J, Arah O, Tennant P, Stuart E, Murray E, Pilleron S, Lam S, Riederer E, Howcutt S, Simmons A, Leyrat C, Schoenegger P, Booman A, Dufour M, **O'Donoghue A**, Baglini R, Do S, Takashima M, Evans T, Rodriguez-Molina D, Alsalti T, Dunleavy D, Meyerowitz-Katz G, Antonietti A, Calvache J, Kelson M, Salvia M, Parra C, Khalatbari-Soltani S, McLinden T, Chatton A, Seiler J, Steriu A, Alshihayb T, Twardowski S, Dabravolskaj J, Au E, Hoopsick R, Suresh S, Judd N, Peña S, Axfors C, Khan P, Aguirre A, Odo N, Schmid I, Fox M. "Causal and associational language in observational health research: a systematic evaluation," *American Journal of Epidemiology*, 2022.
12. Riviello E, Dechen T, **O'Donoghue A**, Cocchi M, Hayes M, Molina R, Moraco N, Mosenthal A, Rosenblatt M, Talmor N, Walsh D, Sontag D, Stevens J. "Assessment of a crisis standards of care scoring system for resource prioritization and estimated excess mortality by race, ethnicity, and socially vulnerable area during a regional surge in COVID-19," *JAMA Network Open*. 2022.

Featured editorial: Gershengorn H. "Inequitable resource allocation amidst a pandemic – a crisis within a crisis," *JAMA Network Open*. 2022.

13. Anderson T, **O'Donoghue A**, Mechanic O, Dechen T, Stevens J. "Administration of anti-SARS-CoV-2 monoclonal antibodies administration following Food and Drug Administration deauthorization," *JAMA Network Open*. 2022.
14. Mechanic O, Lee E, Sheehan H, Dechen T, **O'Donoghue A**, Anderson T, Annas C, Harvey L, Perkins A, Severo M, Stevens J, Kimball A. "Evaluation of Telehealth Visit Attendance After Implementation of a Patient Navigator Program," *JAMA Network Open*. 2022.
15. **O'Donoghue A**, White M, Weiss A, Stevens J, Anderson T. "Trends in Medicare Part B spending on discarded drugs, 2017-2020," *JAMA Internal Medicine*. 2022.

Featured editorial: Gross C, Dusetzina S. "Stemming Medicare spending on discarded drugs – waste not, want not?" *JAMA Internal Medicine*. 2022.

16. **O'Donoghue A**, Reichheld A, Anderson T, Zera C, Dechen T, Stevens J. "Decline in prenatal buprenorphine/naloxone fills during the COVID-19 pandemic in the United States," accepted at *Journal of Addiction Medicine*, In Press.

Non-peer reviewed scholarship in print or other media:

Reviews, chapters, monographs and editorials

1. Stevens J, Horng S, **O'Donoghue A**, Moravick S, Weiss A. How one Boston hospital built a Covid-19 forecasting system. *Harvard Business Review*. 2020.

2. Stevens J, **O'Donoghue A**, Horng S, Tandon M, Tabb K. Healthcare's earthquake: lessons from complex adaptive systems to develop COVID-19 responsive measures and models. *NEJM Catalyst*. 2020.
3. **O'Donoghue A**, Dechen T. Reopening businesses during the COVID-19 pandemic: how can we improve measures of human interaction? *npj Digital Medicine Community: Behind the Paper*. March 16, 2021.
4. Chawla K, Oriol N, **O'Donoghue A**. "Addressing racial health inequities includes addressing the minimum wage," *The Hill*. April 18, 2021.

Thesis:

1. **O'Donoghue A**. Three Essays in Health Economics. Doctoral Thesis, Department of Economics, Clark University. 2020.

Abstracts, Poster Presentations and Exhibits Presented at Professional Meetings:

1. Curran C, Eche I, Safrolashrafi M, Elsamadisi P, **O'Donoghue A**, Dechen T, Hayes M, Stevens J. Impact of a pharmacist-driven antibiotic adjustment protocol on vasopressor duration in patients on continuous renal replacement therapy. American Society of Health-System Pharmacists Midyear Clinical Meeting and Exhibition, virtual, December 2020.
2. Curran C, Eche I, Hayes M, **O'Donoghue A**, Sadrolashrafi M, Elsamadisi P. Impact of a pharmacist-driven antibiotic adjustment protocol on vasopressor duration in patients on continuous renal replacement therapy. American College of Clinical Pharmacy Virtual Poster Symposium, virtual, May 2021.
3. Anderson T, **O'Donoghue A**, Dechen T, Herzig S, Stevens J. Trends in the delivery of transitional care management in the COVID-19 era. AcademyHealth Annual Research Meeting, virtual, June 2021.
4. Fernandez L, Shorett P, **O'Donoghue A**, Blair J, Wright S, Markson L, Dechen T, Stevens J. Evaluation of COVID-19 vaccine administration at a large hospital network by race, ethnicity, and language. AcademyHealth Annual Research Meeting, virtual, June 2021.
5. Fernandez L, **O'Donoghue A**, Shorett P, Blair J, Markson L, Dechen T, Stevens J, Wright S. Prioritized access to COVID-19 vaccines among vulnerable communities increases vaccination rates. IDWeek, virtual, September 2021.
6. Theodore M, Dechen T, **O'Donoghue A**, Stevens J. Timing of code status discussion in patients with cancer admitted to the intensive care unit. American Thoracic Society, San Francisco, CA, May 2022.
7. Dechen T, **O'Donoghue A**, Anderson T, Talmor N, Annas C, Stevens J. Disparities in second-dose completion of COVID-19 vaccines. AcademyHealth Annual Research Meeting, Washington, DC, June 2022.
8. Reichheld A, Stevens J, **O'Donoghue A**. Heterogeneity in postpartum buprenorphine/naloxone fills following postpartum Medicaid expansion during the COVID-19 pandemic. AcademyHealth Annual Research Meeting, Washington, DC, June 2022.
9. Reichheld A, **O'Donoghue A**, Verma N, Dutton C, Stevens J, Luo E. Decline in surgical abortions during the COVID-19 pandemic in the United States. AcademyHealth Annual Research Meeting, Washington, DC, June 2022.
10. Lee E, Sheehan H, Dechen T, **O'Donoghue A**, Anderson T, Punnamaraju A, Annas C, Harvey L, Luo E, Perkins A, Severo M, Brockmeyer D, Kimball A, Stevens J, Mechanic O. Telehealth navigator program improves virtual video appointment attendance. AcademyHealth Annual Research Meeting, Washington, DC, June 2022.

11. Mechanic O, Sheehan H, Harvey L, **O'Donoghue A**, Anderson T, Perkins A, Severo M, Luo E, Stevens J, Kimball A. Return on investment: the value of a telehealth navigator. AcademyHealth Annual Research Meeting, Washington, DC, June 2022.
12. Anderson T, **O'Donoghue A**, Mechanic O, Dechen T, Stevens J. Administration of anti-SARS-CoV-2 monoclonal antibodies following Food and Drug Administration deauthorization. AcademyHealth Annual Research Meeting, Washington, DC, June 2022.
13. Haber N, Wieten S, Rohrer J, Arah O, Tennant P, Stuart E, Murray E, Pilleron S, Lam S, Riederer E, Howcutt S, Simmons A, Leyrat C, Schoenegger P, Booman A, Dufour M, **O'Donoghue A**, Baglini R, Do S, Takashima M, Evans T, Rodriguez-Molina D, Alsalti T, Dunleavy D, Meyerowitz-Katz G, Antonietti A, Calvache J, Kelson M, Salvia M, Parra C, Khalatbari-Soltani S, McLinden T, Chatton A, Seiler J, Steriu A, Alshihayb T, Twardowski S, Dabravolskaj J, Au E, Hoopsick R, Suresh S, Judd N, Peña S, Axfors C, Khan P, Aguirre A, Odo N, Schmid I, Fox M. Causal and associational language in observational health research: a systematic evaluation. Society for Epidemiologic Research Meeting, Chicago, IL, June 2022.
14. Haber N, Wieten S, Rohrer J, Arah O, Tennant P, Stuart E, Murray E, Pilleron S, Lam S, Riederer E, Howcutt S, Simmons A, Leyrat C, Schoenegger P, Booman A, Dufour M, **O'Donoghue A**, Baglini R, Do S, Takashima M, Evans T, Rodriguez-Molina D, Alsalti T, Dunleavy D, Meyerowitz-Katz G, Antonietti A, Calvache J, Kelson M, Salvia M, Parra C, Khalatbari-Soltani S, McLinden T, Chatton A, Seiler J, Steriu A, Alshihayb T, Twardowski S, Dabravolskaj J, Au E, Hoopsick R, Suresh S, Judd N, Peña S, Axfors C, Khan P, Aguirre A, Odo N, Schmid I, Fox M. Causal and associational language in observational health research: a systematic evaluation. Society for Social Medicine & Population Health Annual Scientific Meeting, Exeter, UK, September 2022.
15. Haber N, Wieten S, Rohrer J, Arah O, Tennant P, Stuart E, Murray E, Pilleron S, Lam S, Riederer E, Howcutt S, Simmons A, Leyrat C, Schoenegger P, Booman A, Dufour M, **O'Donoghue A**, Baglini R, Do S, Takashima M, Evans T, Rodriguez-Molina D, Alsalti T, Dunleavy D, Meyerowitz-Katz G, Antonietti A, Calvache J, Kelson M, Salvia M, Parra C, Khalatbari-Soltani S, McLinden T, Chatton A, Seiler J, Steriu A, Alshihayb T, Twardowski S, Dabravolskaj J, Au E, Hoopsick R, Suresh S, Judd N, Peña S, Axfors C, Khan P, Aguirre A, Odo N, Schmid I, Fox M. Causal and associational language in observational health research: a systematic evaluation. Meta-Research Innovation Center at Stanford (METRICS) International Forum, virtual, May 2022.
16. Haber N, Wieten S, Rohrer J, Arah O, Tennant P, Stuart E, Murray E, Pilleron S, Lam S, Riederer E, Howcutt S, Simmons A, Leyrat C, Schoenegger P, Booman A, Dufour M, **O'Donoghue A**, Baglini R, Do S, Takashima M, Evans T, Rodriguez-Molina D, Alsalti T, Dunleavy D, Meyerowitz-Katz G, Antonietti A, Calvache J, Kelson M, Salvia M, Parra C, Khalatbari-Soltani S, McLinden T, Chatton A, Seiler J, Steriu A, Alshihayb T, Twardowski S, Dabravolskaj J, Au E, Hoopsick R, Suresh S, Judd N, Peña S, Axfors C, Khan P, Aguirre A, Odo N, Schmid I, Fox M. Causal and associational language in observational health research: a systematic evaluation. 22nd Conference of the International Society of Geriatric Oncology, Geneva, Switzerland, October 2022.
17. Curran C, Eche I, Safrolashrafi M, Elsamadisi P, **O'Donoghue A**, Dechen T, Hayes M, Stevens J. Impact of pharmacist-driven antimicrobial dosing on time to shock resolution during CRRT. Society of Critical Care Medicine 2023 Critical Care Congress, San Francisco, CA, January 2023.
18. **O'Donoghue A**, Dechen T, Adkins S, Talmor N, White M, Molina R, Zera C, Stevens J. Association of targeted restriction on abortion provider (TRAP) laws with maternal morbidity by maternal immigration status. AcademyHealth Annual Research Meeting, Seattle, WA, June 2023.