Ashley L. O'Donoghue, PhD

Center for Healthcare Delivery Science Beth Israel Deaconess Medical Center 330 Brookline Ave Boston, MA 02215 aodonogh@bidmc.harvard.edu

EDUCATION

| 2020 | Ph.D. | Economics Field: Applied Econometrics | Clark University |
|------|-------|--|--------------------|
| 2017 | M.A. | Economics | Clark University |
| 2015 | B.A. | Economics and Mathematics <i>magna cum laude</i> | Assumption College |

RESEARCH EXPERIENCE

| 2020 - Present | Economist , Center for Healthcare Delivery Science Beth Israel Deaconess Medical Center |
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| 2018 – 2020 | Pre-Doctoral Research Fellow , Center for Healthcare Delivery Science Beth Israel Deaconess Medical Center |
| 2016 – 2018 | Summer Research Assistant, Department of Economics Clark University |
| 2014 – 2015 | Research Intern Worcester Regional Research Bureau |

PEER-REVIEWED PUBLICATIONS

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-after study," *Canadian Journal of Anesthesia*. 2020.

Horng S, Joseph J, Calder S, Stevens J, **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.

FUNDING

2020 – 2022 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.

2018 – 2021 A new approach to patient safety: identifying risky clinical states to reduce preventable harms for hospitalized patients

Doris Duke Charitable Foundation Collaborator (PI: Jennifer Stevens)

Our proposal developed and refined a tool to quantify the level of risk of preventable patient harms in intensive care units, prospectively validated this tool, and spread this tool to a new clinical environment.

NON-PEER-REVIEWED PUBLICATIONS

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*. October 23, 2020.

Stevens J, Horng S, **O'Donoghue A**, Moravick S, Weiss A. "How one Boston hospital built a covid-19 forecasting system," *Harvard Business Review*. June 29, 2020.

HONORS AND AWARDS

| 2020 | Lead, first place team, MIT COVID-19 Challenge Datathon | MIT |
|-------------|--|--------------------|
| 2019 | Outstanding Teaching Assistant of the Year Award | Clark University |
| 2018 | Department of Economics' departmental teaching assistant recognition | Clark University |
| 2017 | Department of Economics' departmental teaching assistant recognition | Clark University |
| 2015 | Ph.D. Full Tuition Scholarship | Clark University |
| 2014 | Conference Travel Award | Assumption College |
| 2014 | Omicron Delta Epsilon Economics Honor Society | Assumption College |
| 2014 | Kappa Mu Epsilon Mathematics Honor Society | Assumption College |
| 2011 | Undergraduate Partial Tuition Scholarship | Assumption College |
| 2011 - 2014 | Dean's List | Assumption College |

PROFESSIONAL SERVICE

| 2020 | JAMA Network Open | Ad-hoc Reviewer |
|------|---|-----------------------------------|
| 2020 | npj Digital Medicine | Ad-hoc Reviewer |
| 2020 | American Society of Health Economists Annual Conference | Scientific Review Committee |
| 2020 | Southern Economic Association Annual Meeting | Session Organizer & Session Chair |
| 2020 | Southern Economic Association Annual Meeting | Discussant |
| 2020 | Eastern Economic Association Annual Meeting | Discussant |
| 2019 | Southern Economic Association Annual Meeting | Discussant |

INVITED TEACHING, PRESENTATIONS, AND POSTERS (including scheduled) LOCAL

2020 "The effect of the Medicaid expansion on opioid prescribing rates and drug-related foster care

| | removals" Center for Healthcare Delivery Science Grand Rounds Beth Israel Deaconess Medical Center, Boston, MA |
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| 2020 | "Reopening businesses and risk of COVID-19 transmission" Center for Healthcare Delivery Science Work-in-Progress Seminar Beth Israel Deaconess Medical Center, Boston, MA |
| 2020 | "Real-time ML-driven COVID-19 forecasting" Department of Healthcare Quality Seminar Beth Israel Deaconess Medical Center, Boston, MA |
| 2020 | "Real-time ML-driven COVID-19 forecasting" Center for Healthcare Delivery Science Work-in-Progress Seminar Beth Israel Deaconess Medical Center, Boston, MA |
| 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, Boston, MA |
| REGIONAL | |
| 2020 | "Real-time ML-drive COVID-19 forecasting" Massachusetts Health Data Consortium Webinar |
| 2019 | "The effect of naloxone access on opioid-related mortality" Economics Seminar Series Fitchburg State University, Fitchburg, MA |
| 2019 | "The effect of naloxone access on opioid-related mortality" 17 th Multidisciplinary Conference Clark University, Worcester, MA |
| 2019 | "The effect of a large-scale workfare program on child marriage in India" 17 th Multidisciplinary Conference Clark University, Worcester, MA |
| 2018 | "Effective Strategies for Teaching Assistants" University-Wide Teaching Assistant Orientation Clark University, Worcester, MA |
| 2017 | "Effective Strategies for Teaching Assistants" University-Wide Teaching Assistant Orientation Clark University, Worcester, MA |
| NATIONAL | |
| 2020 | "The effect of the Medicaid expansion on opioid prescribing rates and drug-related foster care removals" Southern Economic Association Annual Meeting, New Orleans, LA (virtual) |
| 2020 | "The effect of the Medicaid expansion on opioid prescribing rates and drug-related foster care removals" AcademyHealth Annual Research Meeting, Boston, MA (virtual) |
| 2020 | "The effect of the Medicaid expansion on opioid prescribing rates and drug-related foster care removals" |

| | American Society of Health Economists' Annual Conference, St. Louis, MO* |
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| 2020 | "The effect of the Medicaid expansion on opioid prescribing rates and drug-related foster care removals" Eastern Economic Association Annual Meeting, Boston, MA |
| 2019 | "The effect of a large-scale workfare program on child marriage in India" Southern Economic Association Annual Meeting, Fort Lauderdale, FL |
| 2019 | "The effect of a large-scale workfare program on child marriage in India" IUSSP Population, Poverty and Inequality Research Conference, Ann Arbor, MI |

INTERNATIONAL

2014 "The non-linear impact of family income on child educational outcomes"
Business and Economics Society International Annual Meeting, Florence, Italy

TEACHING EXPERIENCE

| | Instructor, Department of Economics, Clark University | |
|-------------|---|-----------|
| Fall 2019 | Economics & the World Economy | 4.92/5.00 |
| Fall 2018 | Economics & the World Economy | 4.83/5.00 |
| | Teaching Assistant, Department of Economics, Clark University | |
| Spring 2019 | Economics & the World Economy | 4.9/5.0 |
| Spring 2018 | Introduction to Statistics | 4.8/5.0 |
| Fall 2017 | Economics & the World Economy | 4.8/5.0 |
| Spring 2017 | Introduction to Statistics | 4.8/5.0 |
| Fall 2016 | Introduction to Statistics | 4.9/5.0 |
| Spring 2016 | Economics & the World Economy | 4.6/5.0 |
| Fall 2015 | Economics & the World Economy | 4.5/5.0 |

PROFESSIONAL SOCIETIES

| 2020 - | American Economic Association | Member |
|--------|--|--------|
| 2020 – | AcademyHealth | Member |
| 2019 – | American Society of Health Economists | Member |
| 2019 – | Midwest Economic Association | Member |
| 2019 – | Southern Economic Association | Member |
| 2018 – | International Union for the Scientific Study of Population | Member |

PROFESSIONAL DEVELOPMENT

| 2020 | Machine Learning: Hands-On Python in Data Science (in-progress) | Udemy |
|------|--|------------------|
| 2019 | Machine Learning Course, Stanford University | Coursera |
| 2019 | Applied Data Science in Python Specialization Certificate, IBM | Coursera |
| 2018 | Seminar in College Teaching Course | HECCMA |
| 2016 | Project TIER (Teaching Integrity in Empirical Research) Workshop | Clark University |

^{*} scheduled to present, but conference cancelled due to COVID-19 pandemic