# Ashley L. O'Donoghue, PhD

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#### **EDUCATION**

2020	Ph.D.	Economics	Clark University
2017	M.A.	Economics	Clark University
2015	B.A.	Economics and Mathematics magna cum laude	Assumption College

## POSITIONS AT ACADEMIC MEDICAL CENTERS

2020 – **Economist**, Center for Healthcare Delivery Science

Beth Israel Deaconess Medical Center

2018 – 2020 Research Fellow, Center for Healthcare Delivery Science

Beth Israel Deaconess Medical Center

#### **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.

## PEER-REVIEWED PUBLICATIONS

 O'Donoghue A, Biswas N, Dechen T, Anderson T, Talmor N, Punnamaraju A, Stevens J. "Trends in filled naloxone prescriptions before and during the COVID-19 pandemic in the United States," JAMA Health Forum, 2021.

- 2. 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.
- 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. 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.
- 5. 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.

### **NON-PEER-REVIEWED PUBLICATIONS**

- 6. Chawla K, Oriol N, **O'Donoghue A**. "Addressing racial health inequities includes addressing the minimum wage," *The Hill*. April 18, 2021.
- 7. **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.
- 8. 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.
- 9. 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 (University Award)	Clark University
2018	Outstanding Teaching Assistant of the Year (Department Award)	Clark University
2017	Outstanding Teaching Assistant of the Year (Department Award)	Clark University
2014	Conference Travel Award	<b>Assumption College</b>
2014	Omicron Delta Epsilon Economics Honor Society	<b>Assumption College</b>
2014	Kappa Mu Epsilon Mathematics Honor Society	<b>Assumption College</b>

## PROFESSIONAL SERVICE

#### **AD-HOC REVIEWER**

JAMA Network Open npj Digital Medicine Scientific Reports

## **CONFERENCES**

2021	American Society of Health Economists Annual Conference	Scientific Review Committee
2020	American Society of Health Economists Annual Conference	Scientific Review Committee

## **INVITED PRESENTATIONS AND POSTERS** (including scheduled)

No presentations below were sponsored by 3<sup>rd</sup> parties/outside entities.

#### LOCAL

2020 Center for Healthcare Delivery Science Grand Rounds (BIDMC)

Center for Healthcare Delivery Science Seminar (BIDMC)
Department of Healthcare Quality Seminar (BIDMC)

Artificial Intelligence/Machine Learning Symposium (BIDMC)

#### REGIONAL

2020 Massachusetts Health Data Consortium Seminar (virtual)
 2019 Economics Research Seminar (Fitchburg State University)

17<sup>th</sup> Multidisciplinary Conference (Clark University)

#### NATIONAL

2021 American Society of Health Economists' Annual Conference (virtual)

AcademyHealth Annual Research Meeting (virtual)

2020 Southern Economic Association Annual Meeting (New Orleans, LA)

AcademyHealth Annual Research Meeting (virtual)

American Society of Health Economists' Annual Conference (St. Louis, MO)\*

Eastern Economic Association Annual Meeting (Boston, MA)

2019 Southern Economic Association Annual Meeting (Fort Lauderdale, FL)

IUSSP Population, Poverty and Inequality Research Conference (Ann Arbor, MI)

#### **TEACHING EXPERIENCE**

	Instructor, Department of Economics, Clark University	
Fall 2019	Economics & the World Economy	4.9/5.0
Fall 2018	Economics & the World Economy	4.8/5.0
	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

<sup>\*</sup> scheduled to present, but conference cancelled due to COVID-19 pandemic

## **PROFESSIONAL SOCIETIES**

2020 -	American Economic Association	Member
2020 -	AcademyHealth	Member
2020 -	International Health Economics Association (iHEA)	Member
2019 -	American Society of Health Economists	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	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

#### SELECTED MEDIA

MIT Quest for Intelligence "What is the covid-19 data tsunami telling policymakers?"

Al in Healthcare, "4 takeaways from a Harvard hospital's homegrown COVID forecasting."

Becker's Hospital Review, "How Beth Israel Deaconess Medical Center predicted COVID-19 surges 5 days before national models."

Becker's Hospital Review, "Beth Israel Deaconess researchers create tool to assess safety of reopening businesses."

VTDigger, "Study: High-risk behavior dropped more in Vermont than in nearby states."

Becker's Hospital Review, "The predictive analytics tools hospitals are using to forecast COVID-19 case surges."

The Future Car: A Siemens Podcast "Modeling, economists and predicting the new normal."