Health Economics Research Boot Camp Application

Saumya Chatrath

Dear Professors Handel, Ho, and Kolstad,

My motivations for applying to the health economic bootcamp are two-fold. Firstly, I would like to stay current on topical research that is at the forefront of health economics. Secondly, I would really appreciate the opportunity to interact with both faculty and other students that have similar interests.

As I am working on my own research I feel that the scope of my health economics repertoire is narrowing. This would be an opportunity to contextualize my own interests, and research agenda in the broader field. Additionally, I am curious to hear more about the topics, and questions that health economists are excited by, and working on.

Embarking on a Ph.D. program is choosing to have a career marked by constant learning, and updating of your knowledge. Taking this workshop would be an opportunity to do just that.

The contact information requested is as follows. Please let me know if you require any other information.

Contact Information

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Recommenders Contact Information

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Saumya Chatrath

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Education

Harvard University University

Ph.D. Candidate, Health Policy (Economics track), Expected May 2022

Wesleyan University

B.A., Mathematics-Economics, and English, 2013

Positions

National Bureau of Economic Research

Research Assistant, 2015-2016

Analysis Group

Analyst, 2013 - 2015

Teaching

Teaching Fellow

EMR 20: Why is There No Cure for Health Care?, Harvard College, Fall 2018

HPM 545: Health Care Issues – Public vs. Market Resolutions, Harvard School of Public Health, Spring 2019

MPH 100b Health Systems, Harvard School of Public Health, Fall 2019

Awards and Fellowships

Health Policy and Insurance Fellowship, Department of Population Medicine at Harvard Medical School and the Harvard Pilgrim Health Care Institute, 2018-2020

Ph.D. Courses

Harvard University Economics Department

- Econometrics I
- Econometrics II (titled: Introduction to Applied Econometrics)
- Health Economics
- Public Economics and Fiscal Policy I
- Public Economics and Fiscal Policy II
- Economic History (titled: History and Human Capital)
- Behavioral Economics (titled: Psychology and Economics)

Harvard Kennedy School

- Microeconomic Theory I
- Microeconomic Theory II

MIT Economics Department

- Labor Economics I
- Applied Econometrics

I am applying to attend the Health Economics Bootcamp at the NBER. I'm currently a fourth year student in the Economics track of the Harvard Health Policy Ph.D. Program. As I mentioned in my cover letter, I would like to attend this workshop in order to continue to broaden my knowledge of health economics research, and to use it to guide the direction that my own research shall take. My current and future research interests are detailed below.

My research interests are broadly in the intersection of patient and provider behavior. I am currently a research fellow at the Department of Population Medicine which is a partnership between Harvard Medical School, and Harvard Pilgrim Health Health Care Institute. As a fellow, I have access to a claims dataset for a large privately insured population which includes inpatient, outpatient, prescription drug, and lab claims. I am currently using this to research a few projects.

My primary focus right is researching the value of specialist care for patients with common chronic conditions. As compared to other OECD countries, the U.S. has a higher number of specialist physicians per capita. Specialists are on average paid at much higher rates, and they tend to be more resource intensive.[1][2] I am looking into the value of the care received by specialists for patients that have chronic conditions such as diabetes, hypertension, and asthma to name a few. I leverage exogenous plan design changes in copays for visiting primary care physicians, and specialists to first test their effect on the utilization of such services, and second to test their effect on clinical outcomes such as prescription drug adherence, and lab values. The question I would like to answer is whether increased spending for specialist services translates to better outcomes for these patients. This has important implications for the design of care delivery models.

Another strand of research that I am interested in is broadly understanding the implications of increased time pressures on the behavior of physicians. As a result of the Affordable Care Act, there have been large gains insurance coverage in the U.S. I am particularly interested how this manifests in the PCP-specialist referral process. Over the past fifteen years, researchers have found that there has been an increasing rate of referrals to specialists. One

[1] https://www.theatlantic.com/business/archive/2014/07/why-do-other-rich-nations-spend-so-much-less-on-healthcare/374576/

[2] https://www.healthsystemtracker.org/chart-collection/u-s-health-care-resources-compare-countries/#item-u-s-lower-number-psychiatrists-per-100000-population-comparable-countries

study found that from 1999 to 2009, the probability of an office visit resulting in a referral doubled from roughly 4.8% to 9.3%[3]. Referrals are made in situations where the primary care physician decides that the procedure or care needed by the patient is outside of their scope of care. They then refer their patients to a specialist, transfer relevant clinical information, and are in charge of co-ordinating the care. A common situation can arise where a primary care physician has a patient with multiple comorbidities that is also seeing several specialists. This could contribute to worse quality of care for patients, or result in unnecessary or duplicate tests being ordered . In other words, increasing care fragmentation could affect the quality of care received by patients. This is the broad question that I am interested in further investigating.

In general, on the patient side I am broadly interested in researching how the growing exposure to cost sharing affects patient behavior, and what it's implications are for clinical outcomes. On the physician side, I am interested in first how different types of physicians treat similar patients differently. And second what is the value of these different care trajectories. These are just a few questions that I am currently grappling with. Through the bootcamp I hope to appropriately contextualize my work in the broader health economics research.

[3]Barnett, Michael L., Zirui Song, and Bruce E. Landon. Trends in Physician Referrals in the United States, 1999-2009. Archives of Internal Medicine 172, no. 2 (January 23, 2012): 16370.

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To Whom It May Concern:

I have two students who are applying for the NBER 'boot camp' in health economics. For ease, I thought I would collect observations about them in one letter. To summarize, I recommend both of them very highly.

Both of the students have a strong primary interest in health care. I expect them to go on the market with 'health economics' as one of their primary fields. They differ in terms of the areas of health economics they are interested in and the methodological approaches they wish to take. Both are also great people. They are bright, engaging, and well spoken. I imagine they would contribute greatly to the overall program. Some details on each.

Saumya Chatrath. Saumya is in the 4th year of the health policy Ph.D. program. Her interests are in how to manage patients with chronic illness. In particular, Saumya wants to see if specialist care is beneficial in addition to primary care, or harmful. To do this, Saumya is developing a model relating outcomes for patients with chronic disease (diabetes and mental illness, especially) to use of primary and specialty care. Of course, one needs an instrument for service use in such a model. Saumya is developing instruments based on changes in cost sharing for different types of providers within plans over time. Saumya is estimating the model using data from United Healthcare, where she can track people across plan years. Overall, the project is very interesting. Indeed, the first stage itself is of independent interest – how does cost sharing affect use of primary and specialty care services for patients with chronic disease? I think the project will be quite valuable.

Anthony Yu. Anthony is in the 3rd year of the economics Ph.D. program. He is interested in health-IO issues. Anthony is starting work on the welfare economics of ambulatory surgery centers (ASCs), trading off the lower cost that ASCs charge against the fact that they may take the most profitable patients away from general hospitals and thus reduce surplus for other patients. Anthony is starting to develop an IO model based on underlying cost and demand functions. It is too soon to know if this approach will be fruitful, but I believe it is a good path to follow.

Please contact me if you would like additional information.

Sincerely,



David M. Cutler