Chase S. Eck
1130 East Helen Street
McClelland Hall 401
P.O. Box 210108
Tucson, Arizona 85721-0108
Email: eckcs1@email.arizona.edu
Phone: (417) 872-7227

October 10, 2019

Professors Handel, Ho, and Kolstad,

My name is Chase Eck and I am a 4th year graduate student in Economics at The University of Arizona. I am excited to submit my application to attend the NBER Health Economics Research Boot Camp. I have attached my C.V. and an essay on my rationale for attending the boot camp. Professor Gautam Gowrisankaran will be submitting a letter of recommendation on my behalf.

Thank you for your consideration,

Chase S. Eck, M.A.
Doctoral Candidate in Economics
The University of Arizona

Chase S. Eck

Department of Economics
The University of Arizona
Email: eckcs1@email.arizona.edu
Phone: (417) 872-7227

EDUCATION

The University of Arizona — Tucson, AZ
Ph.D. in Economics — *Expected: June 2021*
M.A. in Economics — January 2018

Northwestern University — Evanston, IL
B.A. in Economics and Mathematical Methods in the Social Sciences — June 2014
B.S. in Mathematics
Certificate in Managerial Analytics, Kellogg School of Management

RESEARCH

Published Papers

"Misclassification error when identifying job stayers in the Current Population Survey." Economics Bulletin 38, no. 2 (2018): 1077-1082.

> I evaluate the degree of misclassification error when identifying job stayers in the Current Population Survey using the method proposed by Card and Hyslop (1997). I find that even though their method misclassifies approximately onethird of hourly workers, these errors do not substantially impact estimates of downward nominal wage rigidity, a common application. However, I find that misclassification error influences the results in studies that require estimating the share of the population that are job stayers and changers and their wage changes, such as studies of wage adjustment, and develop a correction for it.

Research Papers

"Who wins when hospitals become more cost-efficient? Evidence from APRN scope of practice laws"

> The high cost of healthcare delivery is a major driver of high medical spending in the United States. Recognizing this issue, policymakers have tried to provide incentives for medical providers to reduce their costs and operate more efficiently. While these efforts may increase the efficiency of healthcare delivery, providers may not pass on these benefits to consumers if they have sufficient market power. I use plausibly exogenous variation in the strictness of Scope-of-Practice laws for Advanced Practice Registered Nurses (APRNs) to shed light on how changes in costs are passed on to consumers. SOP laws restrict the ability of APRNs to practice independently. I estimate the effect of granting CNMs full independence on hospital facility costs at the department-level, using administrative data from the Centers for Medicare and Medicaid Services (CMS). I find that removing barriers to CNM practice substantially reduces hospital facility costs for the labor and delivery room. Additionally, cost declines are larger for rural hospitals, hospitals in less competitive markets, and hospitals that do not have a neonatal intensive care unit (NICU). On average, CNM independence reduces the price per patient-day at the same rate as cost per patient day. This suggests that most of the cost-savings are passed through via price declines. However, rural hospitals, those in less competitive markets, and hospitals without NICUs only partially pass on cost savings via lower prices.

"The Effect of Electronic Benefit Transfer Cards on the Food Consumption of SNAP Recipient", *under review.*

> The Supplemental Nutrition Assistance Program (SNAP) provides food assistance to nearly 44 million Americans each year. I document a substantial increase in the programs ability to stimulate food consumption from 1990 to 2010, as measured by the marginal propensity to consume food (MPCf) out of SNAP. I provide the first evidence for a mechanism driving this increase: the transition from paper coupons to Electronic Benefit Transfer (EBT) cards. Using plausibly exogenous variation over states and time I estimate that the introduction of EBT doubles the MPCf out of SNAP and accounts for 25 percent of its observed increase.

"Adverse Life Events and Intergenerational Transfers," with Jessamyn Schaller

> While there has been broad interest in the direct effects of major life events on older households that experience them, little attention has been paid to the intergenerational transmission of those effects—how negative shocks in parents' households affect the outcomes of their adult children—or to the role that grown children play in helping their parents to recover from adverse events. We use regression and event study approaches to examine within-family changes in monetary transfers and informal care following wealth loss, involuntary job displacement, spousal death, and health shocks in retirement-aged households. We find that giving to adult children is responsive to changes in parents' wealth and earned income. We document large reductions in the likelihood of making financial transfers to children following wealth loss and job displacement, particularly in households with low accumulated wealth. We also find that parents increase their transfers following spousal death and reduce them with the onset of disability or poor health. We find that upstream transfers are also responsive to life events—children, particularly those with low-wealth parents, increase their financial transfers and in-kind assistance following adverse shocks in their parents' households.

"Negotiator Cognition and Strategy in Dyadic versus Multiparty Negotiations" with Molly Kern, Laurie Weingart, and Jeanne Brett, *under review.*

> Mixed-motive negotiations are strategically, cognitively, motivationally, and interpersonally complex. Theorists argue that multiparty negotiations exacerbate these complexities. We develop and test a model contrasting processes and outcomes in dyadic and multiparty, mixed-motive negotiations. We also provide behavioral and psychological explanations for these differences. Results showed that dyadic and multiparty negotiators used strategy and strategic sequences differently, which explained how they were able to reach Pareto efficient agreements. Dyadic negotiators relied more on value claiming strategies than multiparty negotiators, which had the effect of reducing the Pareto efficiency of their outcomes. Multiparty negotiators relied more on the exchange of integrative information than dyadic negotiators, which boosted the Pareto efficiency of their outcomes. Dyadic negotiators used reciprocal sequences of strategy, whereas multiparty negotiators used dynamic complementary and structural sequences. Across two studies, multiparty negotiators reported significantly weaker fixed pie biases than dyadic negotiators, which accounted for their differential use of distributive information.

Work in Progress

"Why does SNAP improve infant health? Evidence from the EBT rollout"

"Evaluating care coordination initiatives in an outpatient setting"

Presentations

ASHEcon 2019; The University of Arizona Labor Brownbag

Research Assistant

Jessamyn Schaller, Ph.D., University of Arizona	Summer 2018 & 2019
Diane Schanzenbach, Ph.D., Northwestern University	Summer 2013
Jeanne Brett, Ph.D., Northwestern University	Fall 2011 - Spring 2014

TEACHING EXPERIENCE

Sole Instructor of Record

Econ 481: Economics of Wage Determination	Fall 2019
Econ 300: Microeconomic Analysis for Business Decisions (Online)	Winter 2018 & Summer 2019
Econ 300: Microeconomic Analysis for Business Decisions (In-Person)	Summer 2018
Econ 200: Basic Economic Issues (Online)	Winter 2017 & Spring2018

Teaching Assistant

Econ 325: Historical Development of Financial and Economic Institutions	Spring 2019
Econ 460: Industrial Organization	Fall 2018 & Spring 2019
Econ 323: Economics of Sports	Fall 2018
Econ 300: Microeconomic Analysis for Business Decisions	Fall 2017
Econ 200: Basic Economic Issues	Spring 2017
Econ 150: An Economics Perspective	Fall 2016 & Fall 2017

PROFESSIONAL AND INSTITUTIONAL SERVICE

Institute Director for UA Graduate and Professional Student Council	2017-2018
Chair of The Undergraduate Budget Priorities Committee	2011-2014
Member of the search committee for Northwesterns CFO	2014
Member of the executive committee of the Norris Student Center Renovation study	2014
Fellow - Northwestern Chapter of the Roosevelt Institute	2011-2013

FELLOWSHIPS AND AWARDS

Ed Zajac Prize for the best third year paper (departmental award)	2019
Steve Manos Prize for best second year paper (departmental award)	2018
Thomas R. Brown Fellowship	2016
Highest Order of Excellence at Northwestern University	2014

WORK EXPERIENCE

Associate at TGG Group 9/2014 - 8/2016

- Worked under the direction of Daniel Kahneman to design and build a behaviorally-informed evaluation and compensation system for a Fortune 50 company
- Worked under the direction of Daniel Kahneman and Steve Levitt to redesign and build an insurance sales website for a large insurer, focusing on improved choice architecture
- Developed materials for a world-wide, research-based negotiation training for a Fortune 50 company

COMPLETED AND CURRENT COURSEWORK

Course	**Instructor**	**Term**
Econometric Modelling II	Gautam Gowrisankaran	Fall 2019
Econometric Modelling I	Tiemen Woutersen	Spring 2019
Empirical Methods in Labor Economics	Jessamyn Schaller	Spring 2018
Empirical Methods in Industrial Organization	Mo Xiao	Spring 2018
Statistical Computing	Walter Piegorsch	Spring 2018
Econometrics - Non-linear modelling	Gary Solon	Fall 2017
Labor Economic Theory	Gary Solon	Fall 2017

Industrial Organization Theory	Stan Reynolds	Fall 2017
Microeconomic Theory: Game Theory	Julian Romero	Spring 2017
Dynamic Economic Analysis	Asaf Plan	Spring 2017
Applied Economic Analysis	Price Fishback	Spring 2017
Introduction to Econometrics	Tiemen Woutersen	Spring 2017
Microeconomic Theory: Equilibrium Analysis	Mark Walker	Fall 2016
Microeconomic Theory: Consumer Choice	Asaf Plan	Fall 2016
Mathematical Methods in Economics	Mark Walker	Fall 2016
Theory of Quantitative Methods in Economics	Satheesh Aradhyula	Fall 2016
Teaching Methods In Economics	John Drabicki	Fall 2016

Rationale for attending

I am very excited to submit my application to the NBER Health Economics Research Boot Camp. I became interested in graduate work in economics while working as an undergraduate research assistant at Northwestern University. While there, I learned about the complex ways that social policy and economic systems can influence individual outcomes. I attended the University of Arizona (UA) as a graduate student to learn how to pose meaningful economic questions and develop the tools needed to answer them. While working at the UA, I discovered a passion for health economics and sought to integrate it into my research agenda. Although I have received strong training in Labor Economics, Industrial Organization, and Econometrics, UA does not have a Health Economics specialization. Given UA's relative geographic isolation, this bootcamp is a unique opportunity for me to learn from and meet top researchers and graduate students.

I would greatly benefit from the opportunity to attend the boot camp and gain a foundation in health economic theory and methods. This foundation will help me translate interesting ideas into tractable, theory-driven research questions that can be answered in a rigorous way. Attending the boot camp will also allow me to hear a broad range of perspectives on where the field has been and where it is going. These presentations will teach me about current challenges in the field and help me identify novel ways to help solve them. Finally, I would like to learn how to translate economic analysis into productive policy insights. As a researcher who hopes my work can inform policy, it would be invaluable to hear from and talk with policy-focused health economists.

Impact on current and future research

I am currently examining how hospitals respond to changes in the cost of delivering health services and the effects of these changes on insurers and patients. To isolate plausibly exogenous changes in a hospital's costs, I examine changes to scope of practice (SOP) laws for Certified Nurse Midwives (CNMs). SOP laws regulate the procedures that CNMs and other advanced nurses can perform outside the supervision of a doctor. Strict SOP laws require the CNM to be under direct supervision by a physician while more liberal SOP laws allow CNMs to practice without any physician oversight. Almost all states started with strict SOP laws but over 20 states now allow CNMs to practice autonomously when treating low-risk pregnancies and births. In preliminary work, presented at ASHEcon 2019, I use cost reports submitted to the Centers for Medicare and Medicaid by the near-universe of hospitals to show that these laws reduced overall costs for cost centers related to birth: the Labor and Delivery Room, Nursery, and Neonatal Intensive Care Unit (NICU). However, charges for these cost centers did not fall by the same amount, suggesting incomplete pass-through of these savings. Additionally, rural hospitals and those without a NICU saw much larger cost declines but smaller changes in charges. This heterogeneity highlights the importance of hospital competition and market structure in moderating the effects of the laws.

I am currently modelling how hospitals respond to changes in SOP laws to better understand why SOP law lower costs and charges and how market structure influences these effects. One hypothesis generated by the model is that hospitals in markets with at least one competitor may use the additional flexibility provided by less strict SOP laws to specialize in either high or low risk births. The hospital that specializes in low-risk births does so by hiring a greater number of CNMs. This action lowers their costs since CNMs are generally paid less than physicians and it may cause more costly high-risk births to choose the other hospital in the market. This selection effect may explain why hospitals without NICUs see much larger cost declines. I plan to test this and other hypotheses generated by the model using detailed patient discharge data,

restricted-use National Vital Statistics data on the near-universe of births, and data on the universe of providers from the National Provider Identifier (NPI) system. By understanding the ways in which SOP laws influence costs we can better predict the effects of similar policies and how they are likely to vary based on market structure and hospital competition.

This project complements and relies on prior work by two previous boot camp presenters: Katherine Ho and Leemore Dafny. First, both presenters have examined how hospitals and other providers respond to financial incentives (e.g., Dafny 2005; Ho and Pakes, 2014). Second, the degree of cost pass-through relies on how prices are set by insurers and hospitals and the degree of competition in the hospital and insurance markets. Ho's work sheds light on how insurers and hospitals split profits (e.g., Ho and Lee, 2018; Ho, 2009) and both presenters have investigated the role of insurer competition on prices and quality (e.g., Dafny, 2010; Ho and Lee, 2017). This project will greatly benefit from the opportunity to learn from scholars like Professors Ho and Dafny directly.

Additionally, I am working with Prof. Jessamyn Schaller on the intergenerational effects of job loss and heath shocks among older workers. In a recent paper, Amy Finkelstein, a previous bootcamp presenter, and her co-authors find that hospitalizations can cause significant increases in medical spending and decreases in earnings (Dobkin et al, 2018). Additionally, recent structural work finds that these income losses are the largest cost associated with health shocks and that they lead to large reductions in household wealth (De Nardi et al, 2017; Poterba, Venti, and Wise, 2017). Moreover, the income loss is only partially insured by social programs, spousal income, or long-term care insurance (Dobkin et al, 2018; Ameriks et al, 2018). We build on this work by examining specific health shocks, such as strokes, heart attacks, and increases in physical disability. Further, we examine how the financial consequences of these health shocks are passed on to the next generation in the form of reduced financial support (e.g., transfers and bequests) and the lower geographic mobility associated with the need to assist an ailing parent. We also investigate the extent to which transfers of time or money from children to their parents serve to reduce the financial consequences of a health shock.

Finally, I am studying how the Supplemental Nutrition Assistance Program (SNAP) influences recipients' food consumption and infant health. In a recent paper, I found that the shift from physical to electronic benefits increased the food consumption of SNAP recipients. I am excited about the potential implications of this work for understanding the optimal design of transfer programs and am currently submitting it for publication. I am planning to build on this work by using this exogenous increase in food consumption to study the mechanisms by which SNAP affects infant health. This work has significant implications for designing policy interventions to increase infant health and the relative merits of in-kind and cash transfers. This project is related to Emily Oster's recent work on infant health and the determinants of household diets and would greatly benefit from attending presentations similar to those she presented last year at the boot camp.

The boot camp would be an invaluable opportunity to receive training in health economics and improve the quality of my current and future research. In order to reach my goal of serving as a health economist whose research is relevant to policy, I need additional training in health economic theory and methods, vision for the field, and making economic insights relevant to policy.

THE UNIVERSITY OF ARIZONA

Gautam Gowrisankaran
APS Professor of Economics
Department of Economics
Eller College of Management

McClelland Hall, Room 401HH
P.O. Box 210108
Tucson, AZ 85721-0108
Tel: (520) 621-2529
Fax: (520) 621-8450
gautam.gowrisankaran@arizona.edu

October 10, 2019

To the Health Economics Boot Camp Review Committee:

Dear Ben, Kate, and Jon,

I write to you with a recommendation letter for Chase Eck for the Health Economics Boot Camp. Chase is in his fourth year of our PhD program at the University of Arizona. Chase's primary advisor is my colleague Ashley Langer. I am also on Chase's committee and I discuss my research with him frequently. Chase's research is at the center of health economics. In what will likely become his job market paper, he considers scope of practice laws—that allow certified nurse midwives to practice—and their impact on costs. In another study that will be part of his dissertation, he is working with a federally qualified health center (FQHC) to understand the impact of initiatives to lower costs and raise quality.

In my opinion, Chase is a very strong candidate for the Boot Camp. He is one of our best graduate students at the University of Arizona, in terms of his performance on classes and in the general opinion of faculty as to motivation and intellect. As evidence of his research productivity and potential, this spring, he co-won the Ed Zajac Prize for Best Third Year paper, along with another student.

As a point of reference, the other winner of the Zajac Prize this spring was Kelli Marquardt. Last year, both he and Kelli Marquardt applied for the boot camp and you chose Kelli Marquardt. Kelli benefitted from the Boot Camp tremendously. At the time, I told Ben that Kelli's work was closer to health economics but that both had equally strong potential, and suggested he choose Kelli on this basis. Chase's work has evolved to be closer to health economics, in addition to his existing work on labor economics. Thus, I think that the benefit from the Boot Camp would be as high for him as it was for Kelli.

Let me briefly summarize the two paper projects that I mentioned above. The nurse midwife project—for which he won the Zajac Prize—considers how having certified nurse midwives (CNM) deliver babies instead of OBGYNs affects the costs of healthcare. Different states have different scope-of-practice laws and these laws have evolved over time. In some states, CNMs can practice without physician supervision, while in other states, they need the supervision of a physician to practice. The presence of these laws hugely limits the numbers and roles of CNMs. The goal of Chase's paper is to understand the impact of scope of practice laws on the costs of delivering babies and the prices that hospitals charge to private payers.

Chase created a state-level panel dataset on scope of practice laws. These data are novel and important. He combined this dataset with hospital-level data from the Medicare Cost Reports, in order to analyze what occurs when CNMs can practice independently. He finds that scope-of-

practice laws that allow for CNMs to practice independently lowered hospital costs, particularly the facility charges for deliveries. The effect was more pronounced in rural areas and for hospitals that did not have a neonatal intensive care unit (NICU) and hence had a lower average severity of illness among their delivery patients.

Chase also considers the pass-through from cost reductions to hospital prices from these cost reductions. Here, he finds that the pass through was incomplete, especially in rural markets that may not have a lot of competition. Chase has been approved to use the NBER HCUP state inpatient data for this project. He plans to use these data to further evaluate the impact of CNM care on patient outcomes, including disparities by race and risk type.

Overall, understanding the determinants of costs and pricing for healthcare is challenging and Chase has made substantial progress with this project. Labor and delivery accounts for about 10% of all U.S. hospital admissions. Understanding how different policies can lower costs for delivering babies is hence hugely important. Chase's work here demonstrates several important insights: in understanding that these scope of practice laws might have a big impact on outcomes, in collecting relevant data, and in appropriately evaluating their impact. This is an impressive project that shows his potential as an applied microeconomics researcher.

In a separate project, Chase is working with a large Federally Qualified Health Center (FQHC) to understand a number of interventions that this entity has undertaken to lower costs and improve patient quality. FQHCs deal with a largely indigent population and hence understanding how to lower healthcare costs and improve quality for this population is also hugely relevant. Importantly, Chase's data here allow him to observe all the outpatient claims for patients and track patients over time. There is comparatively little high quality research using outpatient data and even less that allows researchers to track patients over time. Thus, while this research is still more preliminary than the scope-of-practice project, I believe that it will also lead to substantial insight over time.

In sum, I believe that Chase Eck is working on a number of very important areas of research in health economics. At the University of Arizona, we don't offer a PhD class on health economics. Chase has also made a relatively recent transition from labor economics to health economics (and he still has labor economics papers on which he is working). For these reasons, Chase would benefit from the Boot Camp to help round out his knowledge of health economics topics and obtain insight on his current papers, as well as from interacting with other young scholars who are working on similar issues.

Please let me know if you have any further questions about Chase Eck. I hope that you consider him strongly.

Sincerely yours,



Gautam Gowrisankaran