

Amy Eremionkhale

Research Statement

I am a PhD job market candidate in Economics at Lehigh University with research fields in health economics, applied econometrics, labor economics, and microfinance. My current research focuses on the impact of price, income, and externalities on incentives for health care providers and patient behaviors. In my dissertation I use a law regarding young adults aging out of their parent's insurance plan as a natural experiment to investigate the impact of a change in the payments received by medical care providers on their treatment decisions, and their behavior as perceived by their patients. I also apply instrumental variable methods to research topics related to regional antimicrobial use. Specifically, the impact of regional antimicrobial use on individual health outcomes; including prescription usage and medical expenditures.

My job market paper titled, "Impact of the Change in Payments on the Actual and Perceived Behaviors of Medical Care Providers", leverages a natural experiment to investigate the impact of the change in the provider's payments by source on the providers' behavior (supply-side) and on the patients' perception of the providers' behavior (demand-side) using Medical Expenditure Panel Survey data. Prior literature established the link between a person aging out of a parent's insurance coverage at age nineteen and a significant decrease in insurance coverage of those nineteen year old young adults. Using the regression discontinuity framework, this paper furthers that research by establishing that although there is a statistically significant change in the sources of the total payments received by medical care providers from patients crossing the age of nineteen threshold, total payment received by medical care providers do not change and therefore their actual treatment decisions are not modified. However, the patients pay a higher out-of-pocket expenditure and do perceive a statistically significant negative change in the behavior of their medical care providers. This change in perception is for the worse, as patients perceive that their providers are less respectful of them, spend less time with them, and do not listen to them as much as they did before the change in the providers' payments. This contribution is important because these changed perceptions may affect trust and follow up in the treatment plan.

The second chapter of my dissertation titled "The Impact of Regional Antimicrobial Use on Individual Antimicrobial Usage and Health Outcomes" uses the impact of regional antimicrobial as an instrumental variable to identify individual level antimicrobial use on

subsequent health outcomes. Antimicrobial is a general term that refers to a group of drugs that includes antibiotics, antifungals, antiprotozoals, and antivirals, that kill or inhibit the growth of microorganisms. This paper finds that there exists a statistically significant impact of regional use on individual use of antimicrobials. In addition, I find that there is a statistically significant impact of regional use of antimicrobials and regional antimicrobial resistance. My next step is to examine the relationship between regional use of antimicrobials on individual health outcomes. Identifying these relationships is important because it highlights the negative externality that occurs from living in a region with higher antimicrobial usage. This is significant as it relates to maintaining the effectiveness of antimicrobials as a public good.

The third chapter of my dissertation titled “Impact of the Price of Physician Visit on the Volume of Prescribed Medicine: A Focus on Antibiotics and the Common Cold” investigates the price elasticity of the demand for antimicrobials in the treatment of the common cold. My research finds that the individuals who use antimicrobials to treat the common cold are not sensitive to changes in the price of the office based doctor visits, and are not sensitive to changes in the price of the antimicrobials. That is to say that the individuals’ demand for antimicrobials is price inelastic. This finding is an important contribution to the literature because it highlights the need to influence the use of antimicrobials on the supply-side of the market as the demand-side is not as sensitive to the main source of influence, namely the financial cost of acquiring antimicrobials. My longer term research portfolio will address similar questions along the lines of international health policy, public health and its potential applications in developing economies.

My research in the field of microfinance is in the area of the double bottom line goal of microfinance institutions (MFIs). The objective of MFIs is often two-fold; they seek to have financial return sustainability, while also maximizing the social impact of their services on the lives of the poor individuals they serve. My paper titled “The Effect of the Global Financial Crisis on the Cost Structure and Double Bottom Line Goal of Microfinance Institutions” investigates the impact of the global financial crisis on the cost structure, and cost inefficiencies of MFIs given their double bottom line pursuits. Overall, it appeared that achieving growth in both dimensions of social impact and financial sustainability, grew more costly for the MFIs directly as a result of the global financial crisis. Moreover, given the risk-adjusted nature of the cost inefficiency measure used in the paper, the results show that maintaining a given level of risk in the loan portfolios became significantly more challenging for MFIs after the global financial crisis.