

PROPOSAL: DRUGS, CRIME AND SPACE: THE SPATIAL DISTRIBUTION AND CONSEQUENCES OF PRESCRIBING PATTERNS ON USE AND CRIMINAL ACTIVITIES

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Misuse of prescription drugs in the US has recently become an important public health and social problem. Prescription drugs containing controlled substances is ranked second only to the use of cannabis, and more people misuse prescription drugs than the total number of people who use cocaine, heroin, hallucinogens, ecstasy, and inhalants. In 2007, about 16.3 million people in the US reported having misused prescription drugs in the previous year. Florida's Medical Examiners Commission has reported that autopsies conducted in 2007 showed prescription drugs had caused death in three times as many cases as had all illicit drugs combined. The increase in prescription painkillers is particularly noteworthy. The quantity of prescription painkillers sold to pharmacies, hospitals, and doctors' offices was 4 times larger in 2010 than in 1999. Enough prescription painkillers were prescribed in 2010 to medicate every American adult around-the-clock for one month. With this recent explosion of use and abuse, little is known about the larger societal impacts. Similarly, little is known about the determinants of the patterns of use.

This project will merge data containing roughly 70% of all prescriptions written in the US between 2005-2009 for several relevant classes of drugs with county-level data on criminal activities from the FBI Uniform Crime Reports and other similar datasets to investigate the relationships between prescribing patterns, misuse, and crime rates. We will also examine potential determinants (e.g. macroeconomic factors) that may predict the spatial and temporal distribution of prescribing patterns we see in the data.

The student will help organize the data and conduct a general background literature review in the areas of prescription drug patterns and crime, and perform statistical analyses. Knowledge of STATA is required. GIS skills or a willingness to learn them are a plus.

The student will learn how to use large, secondary datasets, learn how to collect and summarize relevant background literature, learn how to work with statistical software packages and how to apply statistical techniques, including regression analysis and quasi-experimental methods, to an economic research question.