Can the Opioid Crisis Explain Changes in Labor Supply and Disability Application Rates?

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Focal Area: Opioids

Recent work has suggested that the opioid crisis can explain a significant proportion of the reduction in labor force participation. Empirical tests of the causal relationship between opioid prescribing and labor supply are difficult. The economics literature has assumed that geographic variation in the growth in prescription opioid supply is exogenous or assumed that existence of an overprescribing physician in an area is random. In this project, we will jointly study the effects of prescription opioids and illicit opioids, an important distinction given the recent transition of the opioid crisis to illicit heroin and fentanyl. Our analysis will rely on the observation that there is substantial geographic variation in the prescribing of oxycodone versus hydrocodone. Some places have historically had much stronger preferences for oxycodone relative to hydrocodone. This variation is important because areas with stronger preferences for oxycodone experienced much sharper growth in prescription opioid supply over time. These areas were also more affected by the reformulation of OxyContin and experienced more dramatic rises in illicit opioid supply in recent years.

We will study these two crises given the importance of understanding these related epidemics simultaneously. We will leverage several data sets to characterize the opioid environment in different areas, including the Automation of Reports and Consolidated Order System (ARCOS) data and IQVIA data on opioid prescriptions. We will study labor supply outcomes as well as applications and participation in disability programs as the main outcomes. The primary goal is to test whether the opioid crisis has impacted disability application rates and, if so, which components of the opioid crisis have had economically meaningful effects.