What Drives Prescription Opioid Abuse? Evidence from Migration

AMY FINKELSTEIN, MATTHEW GENTZKOW, HEIDI WILLIAMS

Key Findings and Policy Implications

This paper analyzes the relative influence of individual and geographic factors in the opioid epidemic. Examples of person-specific factors include mental health status, prior substance abuse, and economic circumstances. Place-specific factors include the propensity of local physicians to prescribe opioids, the presence of unscrupulous providers and “pill mill” pain clinics, and policies to limit abuse. The study uses Medicare claims data for individuals whose Medicare eligibility is based on SSDI enrollment. It finds that:

- Opioid abuse rates change significantly among individuals who move between higher-abuse and lower-abuse areas. Moving to a county with a 20 percent higher rate of opioid abuse (equivalent to a move from a 25th to 75th percentile county) increases rates of opioid abuse among movers by 4.5 percent, suggesting that roughly 20 percent of the gap between these areas is due to place-specific influences.
- Place-specific influences are particularly pronounced for movers who are prior opioid users. Prior users moving to higher-abuse areas experience an increase in opioid abuse nearly 1.5 times larger than the increase for those who are not prior users.
- Demographic, health, and economic characteristics of the county are much less correlated with the estimated place-effects than with the overall opioid abuse rate in the county. Areas with more physicians per capita, with no laws regulating pain management clinics, with lower Medicare spending per capita, and with higher scores on a healthcare quality index all tend to have higher county-specific place-effects for opioid abuse.

The finding of sharp changes in opioid abuse rates when individuals move across areas suggests that supply-side policies restricting opioid availability could potentially reduce opioid abuse. If the study had instead found little or no change in opioid behavior among movers, that would suggest such policies could be less effective, and policies that focus on health and economic prospects might be more fruitful.

AMY FINKELSTEIN is a Professor of Economics at MIT and an NBER Research Associate.
MATTHEW GENTZKOW is a Professor of Economics at Stanford University and an NBER Research Associate.
HEIDI WILLIAMS is a Professor of Economics at Stanford University and an NBER Research Associate.

This research was supported by the U.S. Social Security Administration through grant # RDR18000003-01 to the National Bureau of Economic Research as part of the SSA Retirement and Disability Research Consortium. The findings and conclusions expressed are solely those of the author(s) and do not represent the views of SSA, any agency of the Federal Government, or the NBER.