Maine's Opioid Epidemic: 
Analyzing Diversion Alert and Understanding Prescription Non-Controlled Arrests

Harriet Fisher, 2017

This summer, I worked with professor Piper in Bowdoin’s Psychology and Neuroscience Departments to conduct statistical and geospatial analysis of drug arrests in Maine. I cherished the opportunity to work at the intersection of medicine and policy, further solidifying my interest in public health.

The data came from a Maine non-profit organization called Diversion Alert (DA). DA is a statewide resource for medical professionals which provides monthly drug arrest reports to registered participants; maintains an online, password protected drug arrest database; and provides educational resources to assist in responding to patients charged with prescription or illegal drug related crimes. Most states have databases that encourage medical professionals to share information about the prescriptions with abuse-potential they provide other professionals—in an effort to prevent “doctor shopping.” Maine is the only state that has an organization that also provides information about drug arrests. Professor Piper is interested in the impact of this organization and the information it provides.

I spent the first weeks of my work heavily grooming the data—from it’s founding in 2013 through the first quarter of 2016—that DA provided us with. The data arrive with inconsistencies and discrepancies because of the varied police force members who report to it—so I streamlined drug names, classified drugs by schedule and characteristics, and added information about the county of residence of arrestees. With this information, I created maps and data tables to support a paper Piper and I co-authored with researchers from Husson University entitled “A New Tool to Tackle the Opioid Epidemic: Description, Utility and Results from the Maine Diversion Alert Program,” which is in review with the Journal of Substance Abuse.

After this analysis, I spent time delving more deeply into a particular area of the data that struck me as fascinating and inexplicable: the significant number of arrests for prescription, non-controlled drugs. That is, drugs not scheduled (classified) by the Controlled Substance Act as having abuse potential. The two maps below are illustrations of this subset of the data. The graph shows a regression line between county population and number of arrests; counties that fall above the line have a higher ratio of arrests for population than average—Cumberland and Androscoggin being the two farthest above the line of best-fit. The heat map represents the number arrest controlled for population; darker red counties have a higher number of arrests when controlling for population.

This research and analysis left me with two key questions about the implications of drug arrests for prescription non-controlled (or scheduled) drugs. First, what does it mean for someone to be arrested for possession of drugs that the US Government has not articulated have potential for abuse or physical or psychological harm—and in what ways might this allow for subjectivity in police response? Second, if we criminalize possession of these drugs in specific instances, do we have the necessary public health resources that seek to respond to this behavior?

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