



The author(s) shown below used Federal funding provided by the U.S. Department of Justice to prepare the following resource:

Document Title: Non-Medical use of Prescription Drugs: Policy Change, Law Enforcement Activity, and Diversion Tactics

Author(s): Jacinta M. Gau, Ph.D., William D. Moreto, Ph.D., Roberto Hugh Potter, Ph.D., Erika J. Brooke, Ph.D.

Document Number: 250603

Date Received: February 2017

Award Number: 2012-R2-CX-0006

This resource has not been published by the U.S. Department of Justice. This resource is being made publically available through the Office of Justice Programs' National Criminal Justice Reference Service.

Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Summary Overview

Non-Medical use of Prescription Drugs: Policy Change, Law Enforcement Activity, and Diversion Tactics

Principal Investigator: Jacinta M. Gau, Ph.D.
Associate Professor
Jacinta.Gau@ucf.edu

Co-PI: William D. Moreto, Ph.D.
Assistant Professor
William.Moreto@ucf.edu

Co-PI: Roberto Hugh Potter, Ph.D.
Professor and Director of Research Partnerships
rhpotter@ucf.edu

Research Associate: Erika J. Brooke, Ph.D.
Adjunct Instructor

Department of Criminal Justice
University of Central Florida
12805 Pegasus Drive
Orlando, FL 32816-1600

Prepared February 7, 2017

Report Prepared by Jacinta M. Gau, Ph.D., and William D. Moreto, Ph.D.

Data Analysis by Jacinta M. Gau, Ph.D., and William D. Moreto, Ph.D.

This project was supported by Award No. 2012-R2-CX-0006, awarded by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. The opinions, findings, and conclusions or recommendations expressed in this publication/program/exhibition are those of the author(s) and do not necessarily reflect those of the Department of Justice.

I. Introduction

The crisis in prescription-opioid addiction began long before it was finally brought out into the open (Inciardi et al., 2009). Southern states experienced the most notable rates of addiction and overdose. This finding was attributed to this group's high level of involvement in manual-labor occupations and tendency to be uninsured and live in areas with few or no medical resources (Young, Havens, & Leukefeld, 2012). Many people's opioid addiction begins when they are prescribed these pills for legitimate pain.

The State of Florida emerged as the epicenter of the national opioid epidemic. In 2010, the Florida Medical Examiners Commission's (FMEC) annual report revealed startling rates of deaths due to or related to oxycodone, hydrocodone, and other prescription opioids; in fact, more people died from opioids than from cocaine. The report found that, excluding alcohol, prescription drugs were 81% of all drug-related or drug-caused deaths (FMEC, 2011). In 2011, this rose to 83% (FMEC, 2012).

The Florida legislature's first contribution to the fight against prescription pill abuse was the authorization of the creation of a prescription drug monitoring program (PDMP) in 2009 (also known as E-FORSE; FS 893.055). The PDMP became operational in 2011. Law enforcement officers may become certified to access the PDMP directly; those who are not certified can gain access only via a certified officer or the Florida Department of Health (FDOH).

The second major step occurred in 2010 with the official creation of the term "pain management clinic" (PMC) and requirement that certain medical establishments register with the FDOH as pain clinics under the law (FS 458.3265 [applicable to medical practices] and FS 459.0137 [applicable to osteopathic practice]). There are two triggers which would require a medical office to register as a pain clinic: (a) if the clinic advertises in any medium that it offers pain management services; or (b) if in any month a majority of the clinic's patients are prescribed opioids, benzodiazepines, barbiturates, or carisoprodol for the treatment of chronic, nonmalignant pain.

The third meaningful piece of legislation was House Bill (HB) 7095. Dubbed the "pill mill law," HB 7095 was signed into law on June 3, 2011 (and went into effect on July 1, 2011) and established several new regulations pertaining to the physical facilities of pain clinics and the acceptable minimum extent of medical examinations and follow-ups physicians must perform on patients before and after prescribing them opioids for the treatment of chronic, nonmalignant pain. HB 7095 was intended to compel physicians and clinics currently operating in a subpar manner to either improve or go out of business, while at the same time adding no burden to physicians already delivering high-quality, ethical care. This law also contained a dispensing ban, which prohibits PMCs from operating on-site pharmacies. Now, patients

receiving prescriptions from PMCs must fill those prescriptions at independently operated community pharmacies (CPs).

The present project is an overview of trends in PMCs occurring in the three years following the important changes to Florida law and policy that occurred primarily in 2011 (though changes began in 2009). Quantitative and qualitative data were collected. The first source of quantitative data is the FDOH, which is charged with receiving and approving applications, inspecting facilities, handling disciplinary allegations and hearings, and forcibly closing clinics found to be in persistent violation of regulatory standards. Second are three police departments serving large cities across the state, from which geocoded crime-incident data were obtained. Finally, qualitative data from in-depth interviews with law-enforcement officers around the state allow for a detailed look into the challenges law enforcement face in attempting to hold pain-management clinic physicians criminally liable.

Three primary research questions were posed in this project, each using one or more of the three data sources. First, we sought to investigate whether HB 7095 and related laws appeared to reduce PMCs in Florida. These laws were not designed with reduction as an explicit goal, but they tightened regulation and oversight in a manner that would predictably result in low-quality pain clinics closing or never opening to begin with. The question of whether a reduction occurred is answered with data from the FDOH. Second, we enquired as to the spatial overlap between pain clinic locations and crime incidents. Previous research has suggested that certain types of establishments (e.g., fringe-banking locations) are situated close to crime hot spots, either as crime attractors or crime generators (Edwards, 2010; Ford & Beveridge, 2004; Kubrin et al., 2011; Nielsen et al., 2010). We investigate spatial overlap using FDOH data and crime-incident data from three police agencies. Third, we endeavored to construct an understanding of the processes used to bring criminal charges against pill-mill physicians and owners. We used the in-depth interviews with law-enforcement officers to gain this knowledge. The following sections detail the analyses, results, and conclusions regarding the three research questions.

II. Trends in Pain Management Clinics and Community Pharmacies, 2011 – 2014

In this section, data are presented showing trends over time in the total number of PMCs registered to operate in the state of Florida, the number of applications filed with FDOH for new PMC registrations to be issued, and the number of applications for new registrations that are approved. We use July 2011 to distinguish between “pre” and “post” PMC and CP trends. It is not possible to isolate the impact of HB 7095 from the other important changes to Florida law and policy that occurred in the same timeframe, so changes over time are interpreted as a function of the sum total of all significant laws and policies in effect between 2009 and 2011. The results presented in this section are descriptive, and potential causal mechanisms

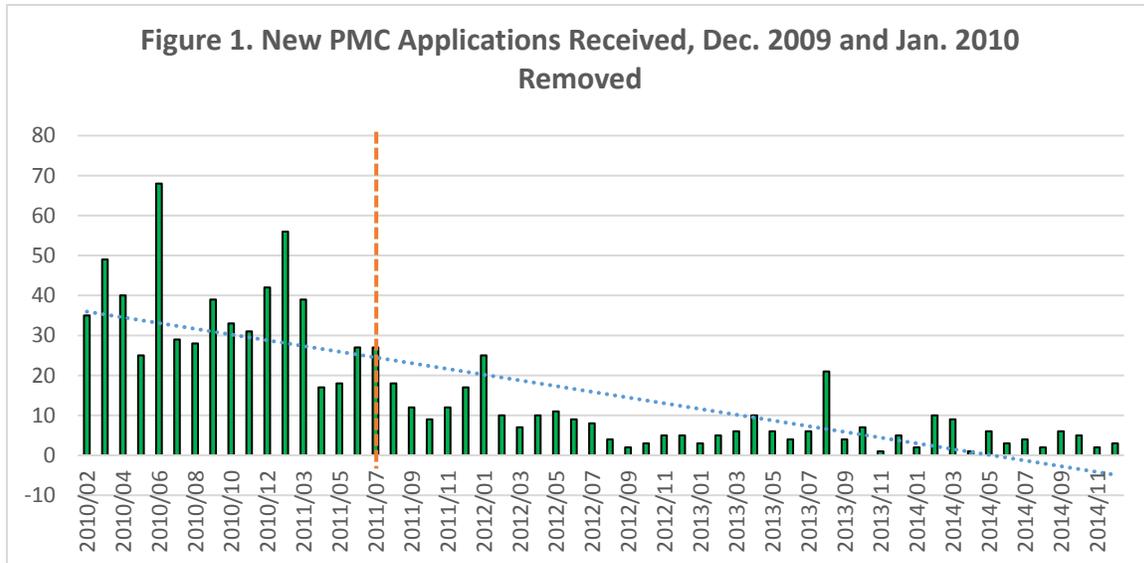
explaining the changes over time will be offered in the analysis of the qualitative data (Section IV).

Table 1 shows the number of registered PMCs annually in Florida during the study period. Data only go back as far as 2009 because the term “pain management clinic” did not exist in Florida law until 2010. (The data in Table 1 are reported as per FDOH’s fiscal year, which end each June 30 and begin each July 1.) A decline in the total number of operational PMCs is evident. The percentage-change column shows that the sharpest decline was in fiscal year 2011 – 2012, the year that HB 7095 was enacted and the PDMP went online. The reduction evident in Table 1 is statistically significant in a comparison of pre-HB 7095 and post-HB 7095 means (pre-mean = 872.00, post-mean = 398.67; $t = 10.32$, $p < .01$).

Table 1. Number of PMCs in Florida

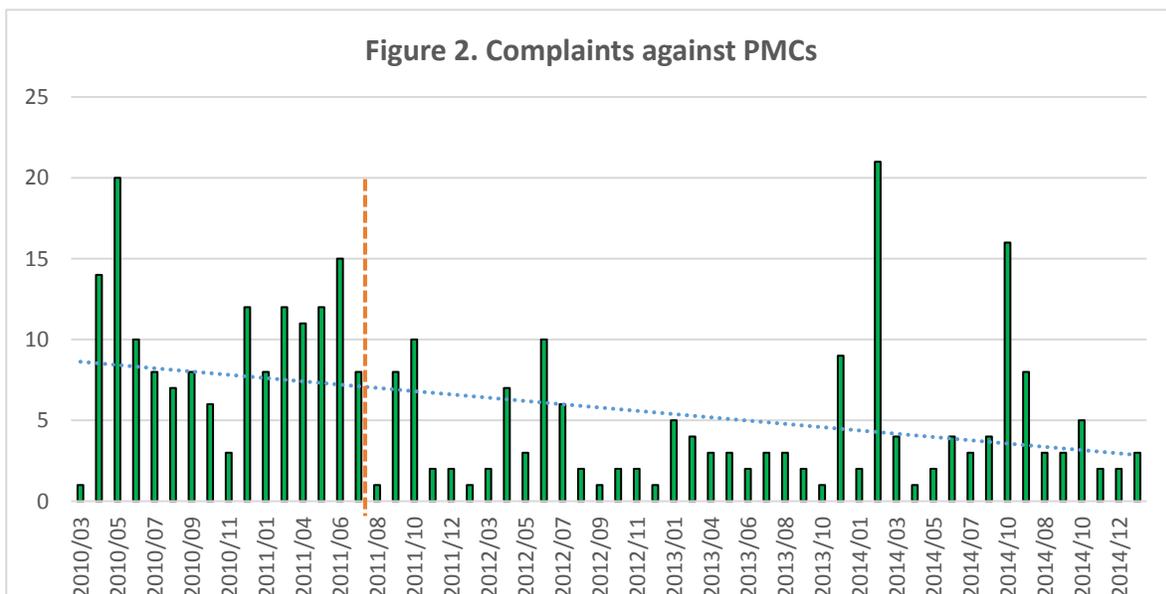
<i>Year</i>	<i>PMCs</i>	<i>Percentage Change</i>
2009 – 2010	921	--
2010 – 2011	823	-11
2011 – 2012	441	-46
2012 – 2013	384	-13
2013 – 2014	371	-3

Another marker analyzed is the number of new PMC applications received by the FDOH (see Figure 1). There were a lot of new applications in December 2009 (325 applications) and January 2010 (558 applications) which includes both new establishments and applications submitted by clinics already in operation. After this initial spike, the monthly numbers dropped to between 20 and 40 in any given month; however, 2011 marked a downward slide in new applications that persisted through the end of 2014, by which time applications reached an average of 4.4 per month. This decline is statistically significant in a pre-2011 and post-2011 comparison (pre-mean = 81.06, post-mean = 7.74; $t = 2.26$, $p < .05$). Figure 1 contains the data with the first two months omitted, as these are outliers not representative of the general trend.



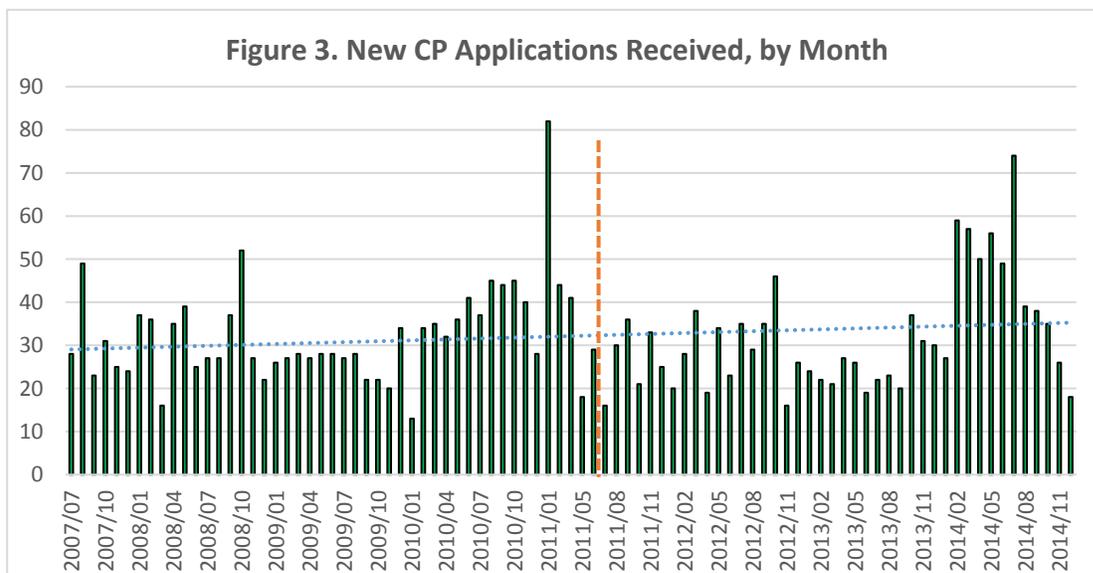
The FDOH approves nearly all applications received, so a separate graph showing new registrations issued is not generated. The pre-post mean difference in registrations issued is substantively large and statistically significant (pre-mean = 73.00, post-mean = 7.22; $t = 2.77$, $p < .05$).

Another metric by which HB 7095’s impact may be assessed is the prevalence of complaints against PMCs. Complaint data are displayed in Figure 2. As can be seen, complaints against PMCs declined – if unevenly – throughout the study period, particularly in the months and years following the passage of HB 7095 (pre-mean = 9.80, post-mean = 4.44; $t = 3.89$, $p < .001$). The decline could be attributed to the increasing effort during the 2011 – 2013 time period to hold rogue PMCs criminally liable or to the downward trend in the number of new pain clinics opening during this time (or both).



Analyses were also conducted to test whether HB 7095's dispensing ban caused an unintended increase in community pharmacies occurring as the result of corrupt PMC owners colluding with pharmacists to circumvent the ban by setting up CPs that were physically separate from the PMCs but were, in a *de facto* sense, operating as arms to those PMCs. Figure 3 contains the number of applications for new community pharmacies received by the FDOH.

The data are inconclusive about whether or not HB 7095 may have resulted in an increase in CPs due to physician-pharmacist collusion. There was a slight increase in the number of monthly applications, but this trend seems to have begun several years prior to HB 7095 and was not statistically significant (pre-mean = 32.02, post-mean = 32.29; $t = -.105$, $p = .917$). It would be unwise to conclude that there is evidence of illegal or unethical behavior, even though an increase in and of itself is consistent with predictions. The upward shift may have been purely market driven and unrelated to HB 7095.



Overall, the findings from this section point to the conclusion that the laws passed by the Florida legislature from 2009 to 2011 collectively reduced pain clinics. The total number of PMCs in operation shrank markedly, as did the number of new clinics opening. This trend was accompanied by a small uptick in applications for new CPs, but the increase was slight and so it does not appear that there was an effort to subvert HB 7095's dispensing ban. These data do not allow for a determination of whether the PMC reduction occurred most heavily among pill mills or was evenly distributed among PMCs of all types of legitimacy/legality. However, the nature of the new laws (increasing registration and operation standards) is consistent with the prediction that the reduction was largely attributable to a decline in pill mills.

III. Geographic Distribution of Pain Clinics and Pharmacies

In addition to trends over time, the impact of HB 7095 and related legislation can be examined spatially. Overlaying crime, PMC, and CP data provided pictures of geographic concentrations. Research suggests that crime is not universally dispersed and tends to concentrate in time and space (Weisburd, Bushway, Lum, & Yang, 2004), highlighting the importance of environmental and situational factors. We used geographic information systems (GIS) mapping to explore the possible overlap between crime incidents, PMC locations, and CPs. GIS uses latitudinal and longitudinal data to position locations (e.g., addresses) on a map. Multiple data can be combined in each analysis to gain an understanding of how different types of establishments or events may cluster together spatially. Here, our goal was to examine whether there seemed to be a clustering of crime incidents, pain clinics, and CPs.

The crime data displayed are from 2010. Since the FDOH data are from 2010 onward, using 2010 crime data adds a temporal component that, while not proving causation, allows for stronger conclusions because crime hot spots were already established before the PMC and CP activity occurred. (As a check on the robustness of the results, the analyses were conducted for each year through 2014. The spatial patterns remained constant.) Part 1 crimes are used to operationalize area levels of criminal activity. Part 1 crimes are defined by the FBI's Uniform Crime Reports as homicide, rape, robbery, aggravated assault, burglary, larceny theft, motor-vehicle theft, and arson. Miami-Dade County and the cities of Orlando and St. Petersburg were selected for this analysis because they are large cities that all experienced some form of pill-mill problem. Their police departments also collect and distribute geocoded crime-incident data.

Figures 4 through 6 display the locations of Part 1 crimes and newly approved PMC facilities in Miami-Dade, Orlando, St. Petersburg, respectively. In the maps, blue areas are those with low crime incidence, and red represents high-incident areas.

Figure 4. Part 1 Crimes and New PMCs in Miami-Dade County, FL

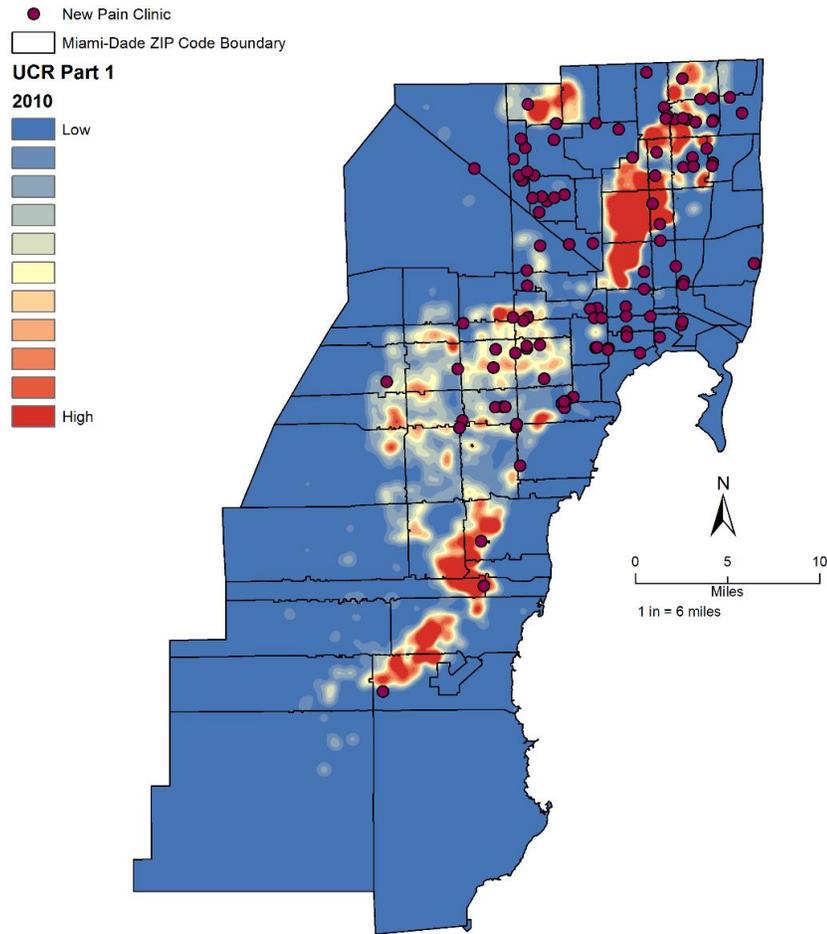


Figure 5. Part 1 Crimes and New PMCs in Orlando, FL

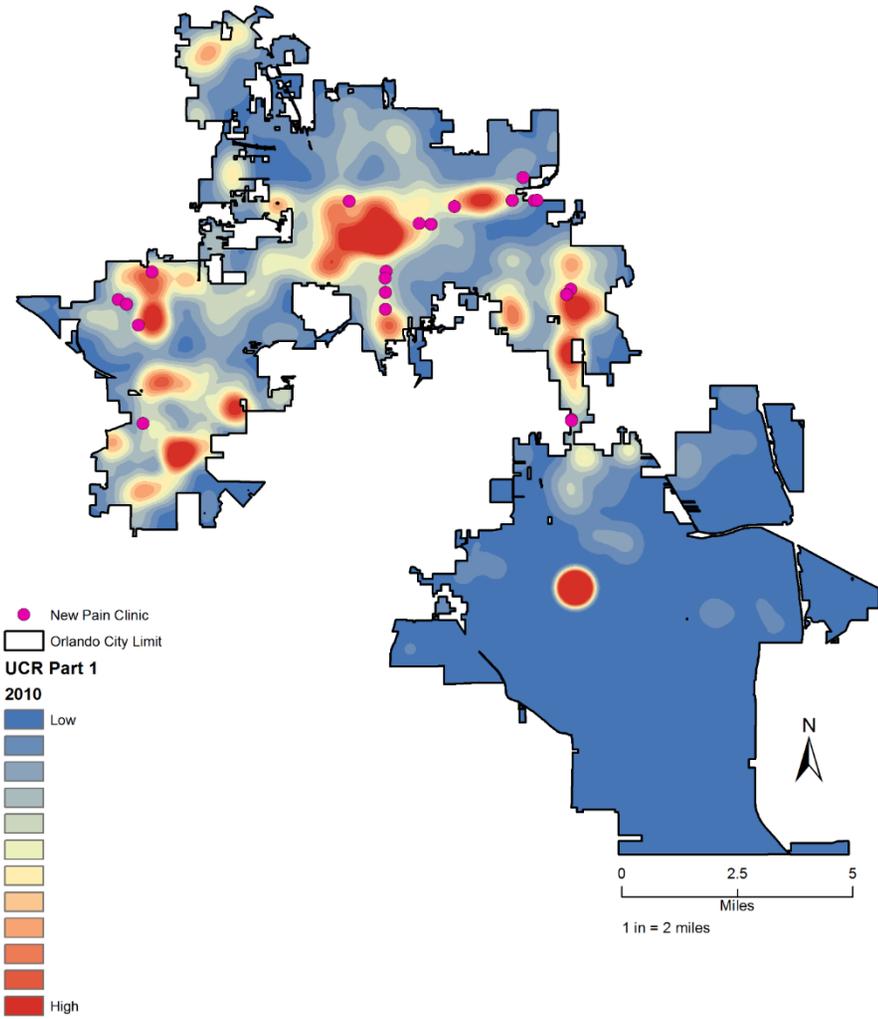
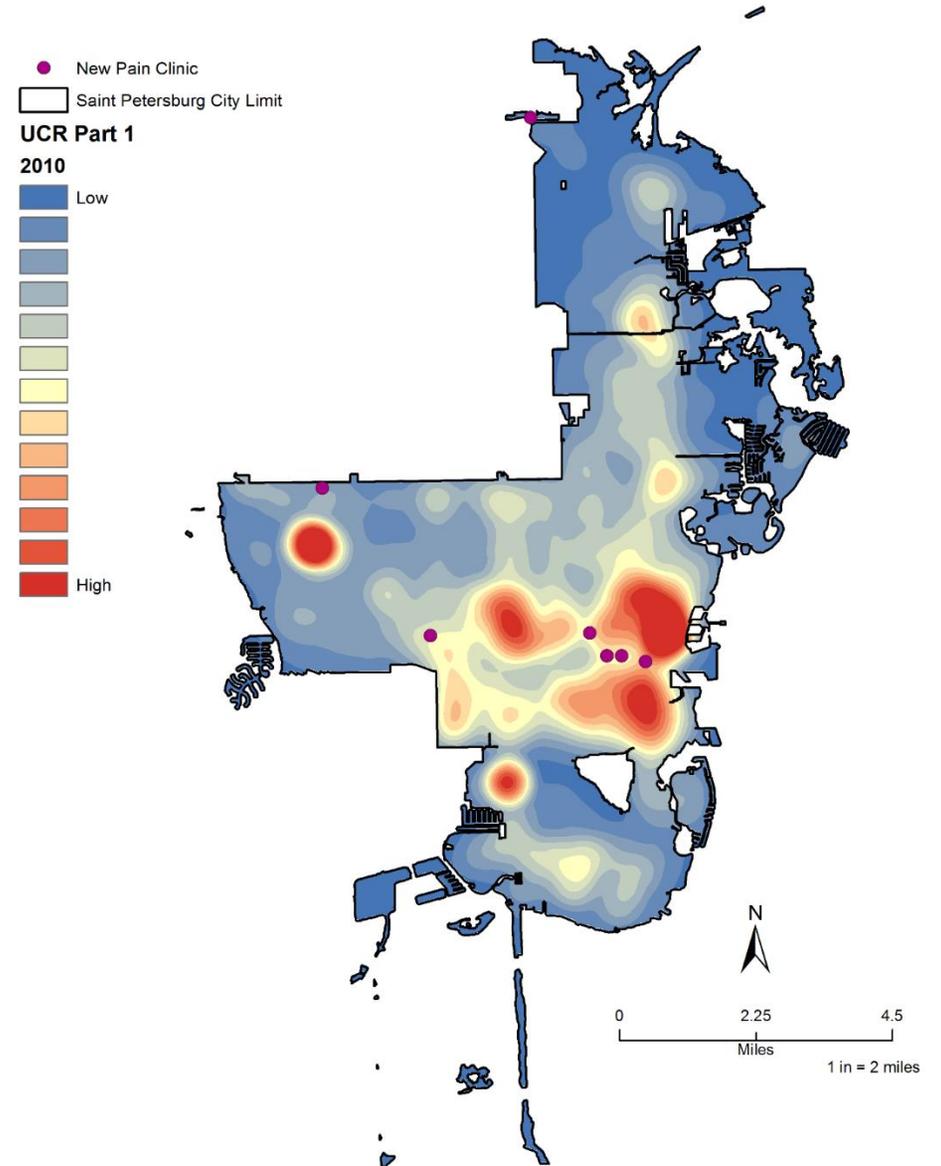


Figure 6. Part 1 Crimes and New PMCs in St. Petersburg, FL



A noteworthy clustering pattern is evident in Figures 5 and 6 with new pain clinics consistently proximate to crime hot spots, while Figure 4 shows new pain clinics being more widely dispersed in Miami-Dade County. It is important, however, to recognize the variability in terms of the unit of analysis with Figures 5 and 6 focused at a city-level, while Figure 4 is at the county-level. This analysis cannot rule out alternative explanations for the overlap, but the results are consistent with the hypothesis that either PMC operators are attracted to high-crime areas, or PMCs are themselves crime generators.

Next, administratively closed PMCs and CPs were mapped against crime hot spots (administrative closures can be for non-violation matters, such as a facility going out of business). Figures 7 – 9 demonstrate that closed PMCs and CPs also tend to geographically concentrate around high-crime areas in Orlando and St. Petersburg and are more dispersed throughout Miami-Dade County. For both Orlando and St. Petersburg, it may be that facilities near crime hot spots do not generate enough business to stay afloat, or that they are more likely to be forcibly shut down by FDOH for administrative violations.

Figure 7. Part 1 Crimes and Closed PMCs and CPs in Miami-Dade County, FL

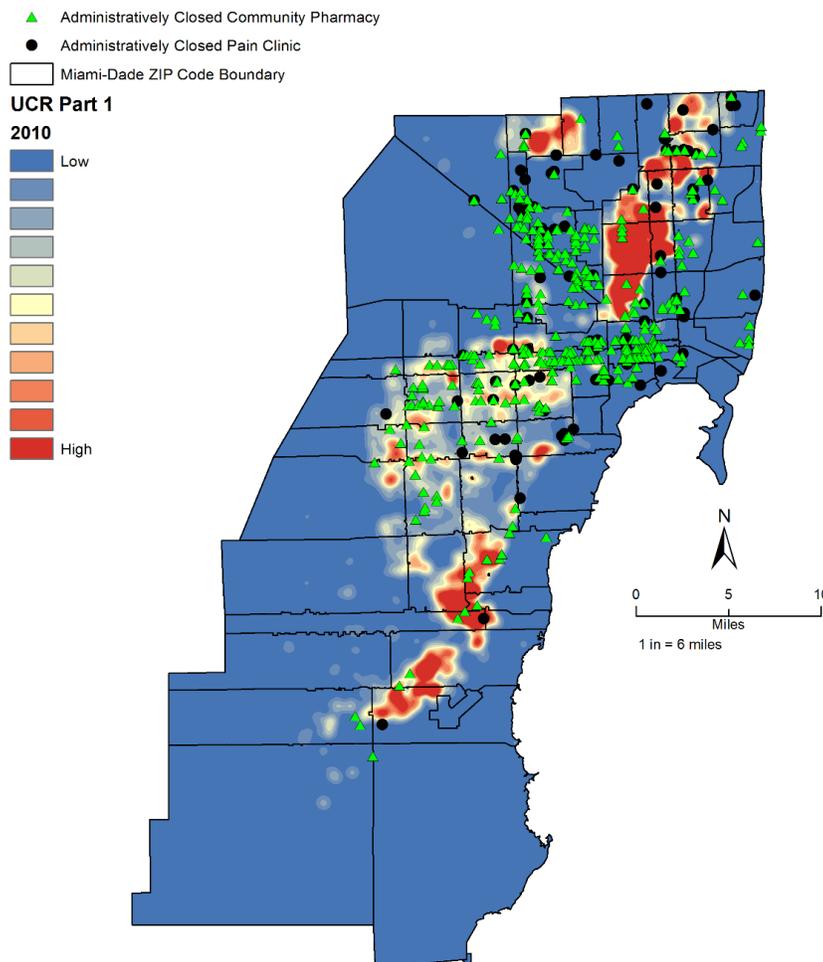


Figure 8. Part 1 Crimes and Closed PMCs and CPs in Orland, FL

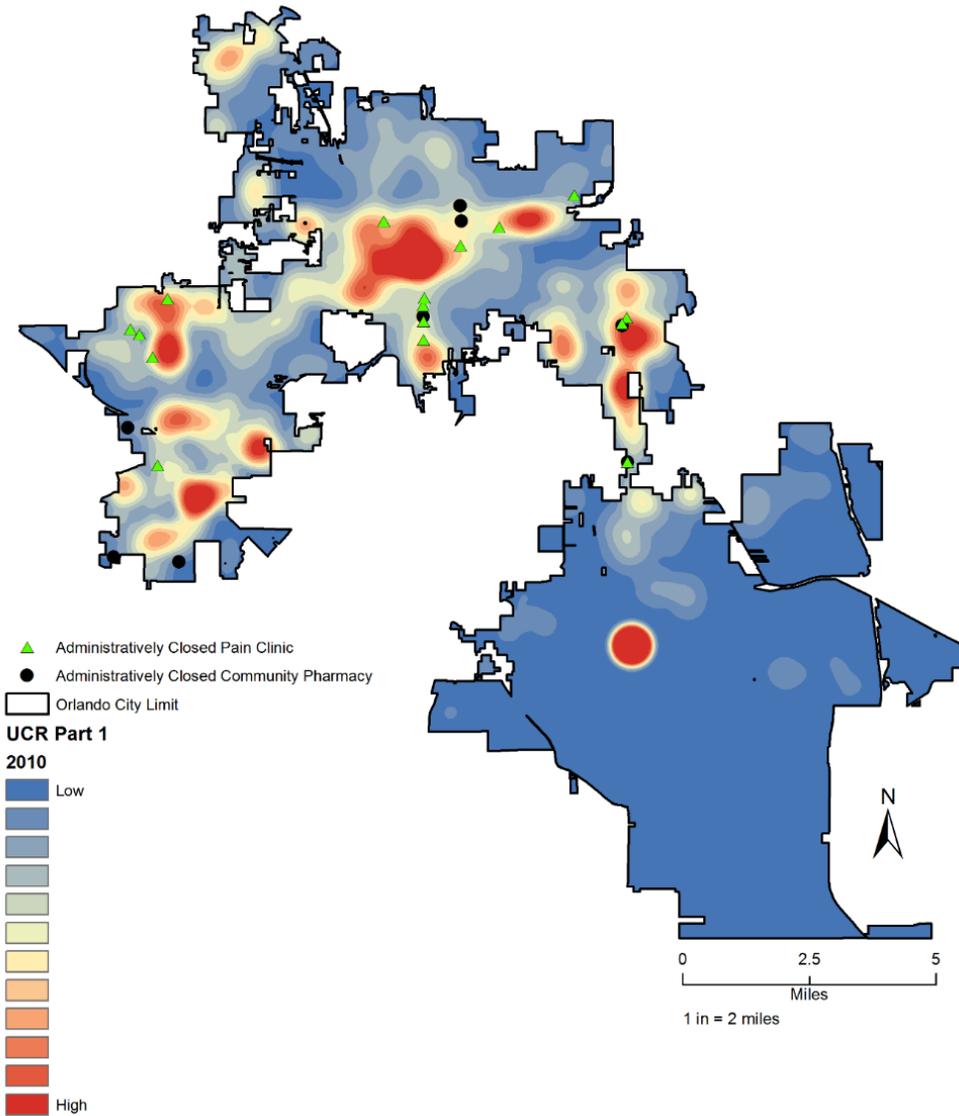
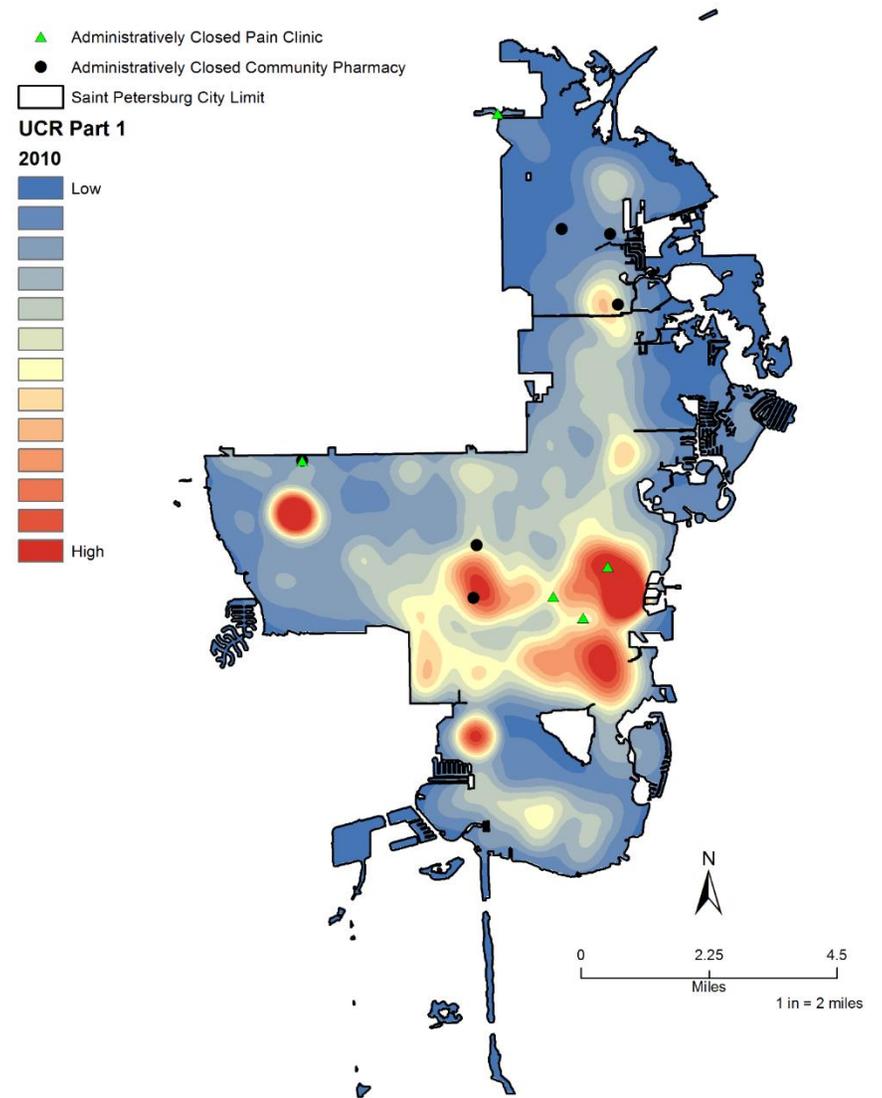


Figure 9. Part 1 Crimes and Closed PMCs and CPs in St. Petersburg, FL



The maps presented in this section show distinctive tendencies for PMCs and CPs to cluster near crime hot spots. Additionally, we tested for spatial clustering among these establishments themselves using the nearest-neighbor ratio (NNR), which calculates the level of clustering or, conversely, dispersion in the data. NNR values below 1.0 suggest clustering, while those greater than 1.0 indicate dispersion. We found a spatial clustering pattern for new pain clinics (NNR = 0.14; $p < .001$), administratively closed pain clinics (NNR = 0.16; $p < .001$), and administratively closed community pharmacies (NNR = 0.19; $p < .001$). In part, clustering makes sense – PMCs issue prescriptions and CPs fill them, so geographic proximity may be smart for businesses and helpful to patients. However, those PMCs and CPs that gravitate toward high-crime areas may be engaged in a collaborative effort to take advantage of distressed, vulnerable neighborhoods.

Overall, the answer to the second research question is that geographic clustering does appear to be occurring. The maps and NNR calculations are descriptive (not predictive or causal) and so alternative explanations (e.g., that crime and PMCs and CPs all cluster near high population concentrations, so their proximity to one another is purely coincidental) cannot be ruled out. However, previous studies have uncovered similar spatial relationships between drug markets and ill-reputed business establishments (Ford & Beveridge, 2004) and some have demonstrated convincingly that the existence of these establishments does not merely correlate with elevated crime rates but, indeed, contributes to crime-rate increases (Kubrin et al., 2011). Fringe businesses have also been found to be more prevalent in low-socioeconomic status, socially disorganized neighborhoods (Edwards, 2010; Nielsen et al., 2010), which suffer disproportionately high crime rates. Our findings, then, fit within the literature and lend further credence to the prediction that predatory and quasi-legal businesses are, along with crime, fixtures of the urban ecology of troubled neighborhoods.

IV. Qualitative Analyses: Interviews with Law-Enforcement Officers

In 2011, the Florida Department of Law Enforcement (FDLE), in collaboration with the State Attorney General, launched the Statewide Drug Strike Force, a multiagency effort to unify and intensify the effort to shut down unscrupulous clinics and criminally prosecute physicians, clinic owners, patients, and pharmacists engaged in prescription drug abuse or diversion. The Strike Force consisted of seven regional units (one per FDLE district) and blended state, federal, and local funds and personnel. Local agencies lent experienced drug officers to the Strike Force. Additionally, there were multiple local task forces.

Given the integral role law-enforcement officers played in the statewide, multiagency effort against pill mills, the research team believed it wise to collect data from them as part of this project. The overarching goal was to supplement the quantitative data (described in the preceding sections) with more detailed, nuanced qualitative data that could elucidate complexities unreachable by city-level and state-level numbers.

Sampling began in early 2014 by reaching out to the major law-enforcement organizations in Florida to obtain names of law-enforcement officers (LEOs) known to be part of the task forces. We contacted those individuals, who in turn supplied additional names. Through this snowball sampling, we obtained names and contact information for multiple potential participants. We screened each one to ensure s/he met the inclusion criterion of having had personal experience with pill-mill investigations. In total, we conducted one-on-one interviews (sometimes with two researchers and one respondent) with 28 law-enforcement officers across the state throughout 2014. Respondent LEOs were from a variety of state, municipal, and county agencies. Interviews were audio recorded with respondents' consent. The coding scheme used in the analysis centered on the problems and challenges participants faced in anti-pill mill efforts due to these establishments' prima facie legality. Four primary themes emerged: the general state of pill mills today (in 2014); unique challenges to law enforcement in these investigations; the most important laws and policies; and the role of interagency cooperation. Each theme is elaborated upon below. Respondents' identities were protected with generic placeholders (a letter and number).

General State of Pill Mills Today Compared to the Recent Past

Respondents unanimously agreed that pill mills had dramatically declined in the previous 5 or 6 years. All were confident that pain clinics were fewer in number and that the blatantly illegal operations had been shut down. One respondent described the situation in his jurisdiction:

At the height we had, I think, 49 pain management clinics. Right now, I think the last count was, I think, 23 or 24... A majority of the pain clinics in [this city] are now legitimate. [D2]

As a whole, pill mills are almost nonexistent today to where they were five years ago. It's a drastic change, day and night... it's hard to find one now. Remember, we had 22 pain clinics at one time, and we're only 28 square miles. [H1]

Nonetheless, respondents did not think pill mills had been eradicated; in fact, some believed that they had simply been driven underground (i.e., were using more advanced evasive maneuvers to escape law-enforcement detection) or that the burden of dealing with prescription fraud had been put onto pharmacists. As one noted:

Right now, I'm not saying that they're completely legitimate, but they're running a legitimate business on the face... It's possible we have a handful that are doing either business in a grey area or they're operating [illegally] but they've also become very educated in how to mask it now, so it's kind of hard for us to investigate them and implicate them like we did a year ago. [D2]

Unique Challenges to Law Enforcement

Respondents described several obstacles they faced investigating and collecting evidence against physicians in pain clinics. As two respondents described it,

How do I say that this individual doesn't deserve 300 Xanax pills? I'm not a doctor. I'm a detective... I can't get on the stand and say, "I don't think this person should get 300 Xanax" ... I don't have a medical degree. [D1]

[I]n some of the court cases... you had a detective up on the [witness] stand and... the defense attorney's like, "Whoa. What med school did you go to?" He didn't go to med school. "Well, how can you say that this doctor overprescribed or [was a] dangerous man or was really trafficking?" [PD1]

Respondents knew they had to collect much more evidence against suspects than would be necessary in most ordinary criminal cases, as the prosecutor would need to be able to prove in court that the accused physician's prescribing behavior deviated so markedly from acceptable standards of care that it was impossible to call it mere professional judgment. Because of this, pain-clinic investigations were laborious, time-intensive processes. One respondent said,

[Y]ou have to realize these investigations take an enormous amount of time... you're starting to talk about a year and a half, two-year investigation. [There are] holdovers from when there were a ton of pill clinics out there [and many] are still operating that still have [active] investigations out there to this day. [D1]

A few respondents expressed gratitude at their local (city or county) government's helpful response that supplemented law enforcement and made the police job easier. For example:

A lot of [the clinics] we shut down without doing law investigations; it was just a matter of going in and saying "hey I'm not going to deal with the building in [this city]" ... They weren't properly licensed anyway because [this city] incorporated city ordinances where you not only had to do state license, but you had to do city license also... So a lot of these places were operating because they didn't know, so we would go in there and we would say "listen, you're obviously running a pill mill" ... and we would go in and tell them that they needed to shut down and they did... We just never heard from them again. [D2]

[O]ne of the other things that helped was the local ordinances that the municipalities started putting into place as far as how they [pain clinics] can operate hours-wise, people waiting outside, where they could be located, the way they were able to advertise. I know [this city] was pretty aggressive enacting some of those ordinances to try and put limitations on them. [O1]

You can still do something. Not necessarily put them in jail, but you can still put them out of business like we did with that one clinic in [the county]. It took half a day's work with Code Enforcement to shut them down. [O2]

The Most Important Laws or Policies

When asked to name the law or policy they believed had been most instrumental in reducing pill mills, respondents nearly unanimously praised the prescription drug monitoring program. For instance:

The PDMP, I think, made probably the biggest difference because that's not only us making some arrests and closing some clinics, but when you had that tool to quickly look up what doctors were prescribing what, it just made a huge difference. You could see people doctor shopping. That PDMP... had the biggest impact, probably more than any of the other laws. [O1]

[Doctors] know there's now a prescription monitoring program that's up and operational in the state, so they know that if they basically start prescribing over a certain amount, they may be flagged. [L1]

The PDMP was not seen as foolproof, however. Several agents/officers cited limitations of the program or ways determined doctor shoppers could get around it. For instance, one respondent described how drug seekers from out of state could dodge the PDMP's requirement that all persons prescribed opioids be Florida residents:

[N]ow [out-of-state] patients are required to basically get an in-state ID. That's another way to just kind of circumvent the system by saying, "Okay, you have to have a Florida identification card or some type of a Florida ID showing residency here in the state," even though their cell phone number or whatever it may be may come back to an out-of-area location. A lot of times on the applications themselves, the patients will put an out-of-state residency or a contact out of state... [L1]

A few officers/agents credited asset-forfeiture and asset-freeze laws with assisting law enforcement in ensuring punishment for the physicians they helped prosecute. Most pill mills dealt solely in cash – they only accepted cash payments from patients and they paid staff in cash. For physicians, pill mill jobs were highly lucrative, often paying several thousand dollars per day. Pill mill owners, likewise, saw an enormous income. Many kept cash stashed away in their houses and also purchased expensive cars or multiple properties as a way of hiding their money. This led to some extraordinary asset seizures:

The most important [laws] were the ones with regard to seizures. Being able to confiscate their houses, their money, the assets of what they were bringing in all the time. In one house, for instance, in [this city], we found over a million dollars cash in the attic and in that case there were over 30 million dollars cash found in all the properties we hit, it's just mind boggling. [H1]

Several respondents complained that accused physicians' and owners' wealth allowed them to hire superb attorneys capable of muddying the case so badly that it was extra difficult to

prosecute them. Respondents believed that being able to freeze suspects'/defendants' assets blocked them from accessing top-notch defense attorneys.

Interagency Cooperation

Cooperation between law-enforcement agencies, as well as between law enforcement and the FDOH, was critical to the success of the anti-pill mill effort. Many county and city agencies lacked the personnel, training and experience, and resources to effectively combat rogue clinics. Respondents explained that investigations required money to purchase and operate surveillance equipment; overtime for each undercover officer and his or her handler; cash to pay informants; and cash to pay for undercovers' and informants' office visits and prescription fills. Additionally, officers involved in investigations are laden with paperwork – they have to apply for warrants, fill out numerous forms, and so on. As two respondents put it:

[Our taskforce is] federally funded. We still work for the sheriff's office up here, but we're federally funded so we have a lot of stuff at our disposal to help us. A lot of it is so much doing the paperwork and there is a lot of stuff that's so time consuming. We have a support center [and] without them, this would've been so much harder. I feel for local police departments and sheriff's offices that don't have that. [J1]

As a local, municipal agency, these types of investigations, it would've been impossible to run them on the local level, just [for] monetary reasons. When you're looking to fund sources [informants] to go into clinics and when you're looking for undercovers to go into clinics, it would get very expensive very quickly because each visit would be in the hundreds of dollars. Then your medication could be upwards of one thousand dollars, and that would be for one doctor's visit... [It] would help tremendously to partner with the feds or the federal government because they had more grant money. [L1]

One respondent described his extensive background working with multiple agencies at the regional, state, and federal level, including attorneys. Embedded throughout his explanation is an illustration of how complex and multifaceted pill-mill investigations could be:

[W]hen we initially started, I was assigned to work with DEA agents, so they were working on multiple wire investigations, and that involved South Florida, it involved other states, so we did multiple wires, to go and intercept. We did a lot of pharmacies, a few doctors, so probably four or five with DEA. Then at FDLE, specifically, I investigated two doctors, two pain clinics, both of those pain clinics were closed. One doctor, in particular, he was found guilty, he plead guilty, and they took his medical license. The other doctor is still ongoing... We did a suspension order, immediate suspension order from the attorney general, on both of those pain clinics. So they were shut down. [M1]

A critical element to successful investigations was the involvement of a prosecutor. Many respondents felt that an absence of prosecutorial interest or expertise contributed significantly

to the lackluster law-enforcement response that permitted pill mills to gain a foothold in the state. Not until the start of the various taskforces did they begin to see prosecutors with the ability and willingness to take on these complicated, time-consuming cases that were almost always of uncertain outcome due to the murky legal questions involved:

The [State] Attorney General's Office was supportive in trying to get the laws changed that they could. Plus, the Office of Statewide Prosecution... was very aggressive with prosecuting these cases that, you know, local state [county-based judicial circuit] attorneys may not have [had], not necessarily the experience, but just the ability to work something so big and long term. [O1]

[T]he good thing about working long-term, multi-circuit investigations is that pretty much from the very beginning you have a statewide prosecutor that's working there with you. It's not your typical case where I work it, I make the arrest, I type it up and it goes to a [local] attorney and that attorney says, "Well okay, you know, you're missing this. You're missing that." You don't have that with the statewide prosecutor. He or she's there from the very beginning and they're not steering the investigation in any way, but they're constantly giving you legal advice. "Okay, this is what we need to prove. This is what we need for a successful prosecution." That works very well. [O2]

Even then, though, officers/agents had no guarantee that their efforts would not go to waste once they handed their evidence over to a prosecutor. One respondent expressed his frustration:

Sometimes you would have to prosecution shop, and basically say, "Okay, where is this case best fitted for? Is it best fitted for state [local], state-wide, federal prosecution? What jurisdiction?" Then sometimes prosecutors, too, would initially take a case and they would hold onto it... they would sit on these cases for years, and then not do anything. You'd ask for a declination [refusal to file charges] so we could take it to another jurisdiction. They wouldn't drop the case... [Over time], once you get the declination down the road [and could potentially take the case to a different prosecutor], either you're out of time, or it's not prosecutable anymore, the evidence is gone, your informant, everything, so the case basically just gets left unheard. [L1]

Despite some problems pertaining to different agencies' desire to take credit for high-profile arrests and some wrangling over division of forfeited assets, respondents overwhelmingly praised interagency cooperation in the pill mill effort. As one agent said,

I can't think of another [example] in my 15-year career where different levels of government, different agencies in the government really came together to attack a problem in a multi-layered fashion... I remember being back in the sheriff's office working homicides and deaths and the death investigations in the early 2000s and you started to see more and more overdoses and pills and it just got so bad... It was way out of control. Then in 3 – 4 years, when they

[taskforces] had a huge impact just because it was such a multi-layered, multi-disciplined committed effort to stop it. I thought it was pretty impressive. [O1]

VIII. Conclusion

This project set out with three overarching goals. First, we sought to determine whether HB 7095 and related legislation had reduced pain clinics in Florida. Second, we wanted to investigate whether pain clinics cluster near crime hot spots. Third, we endeavored to illuminate the challenges facing law enforcement in attempting to build criminal cases against owners and operators of *prima facie* legal businesses. The analyses presented throughout this summary overview use data from the Florida Department of Health, three police agencies in important locations throughout the state, and in-depth interviews with law-enforcement officers who have ground-level experience investigating pill mills.

The primary takeaway point from the foregoing findings is that the Florida effort against rampant pill mills was largely successful, a finding consistent with research documenting reductions in opioid-related deaths in Florida (Delcher et al., 2015; Johnson et al., 2014). The findings point toward the key role of interagency cooperation in the success – it would seem that the massive, statewide commitment to reducing this problem yielded greater results than what any individual agency could have done alone (see also Gau & Brooke, forthcoming). This exemplifies the benefits of collaboration and cooperation, and the Florida approach should be considered a model for future endeavors in this state and others.

The data used here are not without limitations, although the LEO interviews are an entirely novel data source, due to the localized nature of law enforcement (which hampers statewide data collection) and the general tendency for administrative data to be collected and stored in a manner not conducive to pulling, coding, and analyzing for research purposes. The FDOH data are fairly generic and contain no information about the quality of each registered PMC; official crime reports suffer from well-known problems pertaining to unreliability in reporting by victims/witnesses and detection by officers; and the LEOs' accounts are one sided and do not include the perceptions and knowledge of prosecutor or, even more importantly, offenders themselves. We recognize these as caveats to our conclusions and directions for us to take our research in the future.

Forthcoming articles using the data collected in this project will delve into the nuances of both the pill-mill problem and its consequences. Planned projects include:

From the quantitative data

- Further exploration of the spatial overlap between PMCs and crime hot spots, adding controls for population density and land usage to determine if the apparent relationship holds once relevant controls have been included.

- Ph.D. student dissertation in progress: Using Google Maps to visually analyze and code the characteristics of the physical environment surrounding the 22 PMCs that were administratively closed during the study time frame and a matched sample of PMCs that remain in operation. Comparisons will reveal whether closed PMCs appear to operate in disadvantaged areas relative to those that did not encounter administrative troubles.

From the qualitative data (themes that have been identified through coding; each one will be a separate paper)

- Benefits and challenges of interagency collaborations involving pill mills
- Comparison of approaches grounded in regulatory and criminal laws
- Unintended consequences of enhanced focus on prescription opioids (impacts on opioid, heroin, and synthetic street markets)
- Modus operandi of pill mills (i.e., how they worked and the dynamics between pill mill doctors and clients)
- Law-enforcement strategies and impediments
- Place-based characteristics of pill mills (in combination with spatial analysis of mapping data)
- Situational-crime prevention framework to examine physician techniques to avoid detection and arrest

These papers will allow us to contribute significantly to both the understanding of pill mills and to the strategies and tactics that are (and are not) effective in preventing or shutting down illegal pain clinics.

References

- Delcher, C., Wagenaar, A. C., Goldberger, B. A., Cook, R. L., & Maldonado-Molina, M. M. (2015). Abrupt decline in oxycodone-caused mortality after implementation of Florida's Prescription Drug Monitoring Program. *Drug and Alcohol Dependence, 150*, 63-68.
- Edwards, M. L. (2010). Gender, social disorganization theory, and the locations of sexually oriented businesses. *Deviant Behavior, 31(2)*, 135-158.
- FMEC. (2011). Drugs identified in deceased persons by Florida Medical Examiners. Tallahassee, FL: Florida Department of Law Enforcement.
- FMEC. (2012). Drugs identified in deceased persons by Florida Medical Examiners. Tallahassee, FL: Florida Department of Law Enforcement.
- Ford, J. M. & Beveridge, A. A. (2004). "Bad" neighborhoods, fast food, "sleazy" businesses, and drug dealers: Relations between the location of licit and illicit businesses in the urban environment. *Journal of Drug Issues, 34(1)*, 51-76.
- Gau, J. M. & Brooke, E. J. (forthcoming). An assessment of the impact of a multipronged approach to reducing problematic pain clinics in Florida. *Journal of Drug Issues DOI: 10.1177/0022042616681273*.
- Inciardi, J. A., Surratt, H. L., Cicero, T. J., Kurtz, S. P., Martin, S. S., & Parrino, M. W. (2009). The "black box" of prescription drug diversion. *Journal of Addictive Diseases, 28*, 332-347.
- Johnson, H., Paulozzi, L., Porucznik, C, Mack, K., Herter, B., (2014). Decline in drug overdose deaths after state policy changes - Florida, 2010-2012. *Morbidity and Mortality Weekly Report, 63(26)*, 569-574.
- Kubrin, C. E., Squires, G. G., Graves, S. M., & Ousey, G. C. (2011). Does fringe banking exacerbate neighborhood crime rates? Investigating the social ecology of payday lending. *Criminology & Public Policy, 19(2)*, 437-466.
- Nielsen, A. L., Hill, T. D., French, M. T., Hernandez, M. N. (2010). Racial/ethnic composition, social disorganization, and offsite alcohol availability in San Diego County, California. *Social Science Research, 39*, 165-175.
- Young, A. M., Havens, J. R., & Leukefeld, C. G. (2012). A comparison of rural and urban nonmedical prescription opioid users' lifetime and recent drug use. *The American*

Journal of Drug and Alcohol Abuse: Encompassing all Addictive Disorders, 38(3), 220-227.

Weisburd, D., Bushway, S., Lum, C., & Yang, S. (2004). Trajectories of crime at places: A longitudinal study of street segments in the city of Seattle. *Criminology*, 42, 283-321.