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Beyond Pain Relief: Assessing OxyContin's Impact on Foster Care New Entries

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"Evaluación del impacto de OxyContin en las Nuevas Admisiones a Hogares de Acogida"

Resumen

En este estudio examino el impacto causal de las etapas iniciales de la crisis de los opiáceos en los nuevos ingresos a hogares de acogida, centrándome específicamente en la introducción de OxyContin en 1996 y en el papel de los Programas de Prescripción de medicamentos por Triplicado (TPP) en los Estados Unidos. Mis análisis revelan un efecto composición: en los estados sin TPP activo en 1996, donde OxyContin tuvo una mayor penetración en el mercado, los niños que ingresan al sistema de cuidado de crianza son más propensos a provenir de hogares donde los padres abusan de las drogas. Estos hallazgos destacan la compleja interacción entre las políticas de salud pública y los resultados en el bienestar infantil, enfatizando la necesidad de desarrollar estrategias integradas que consideren las amplias implicaciones de las políticas sobre drogas en las poblaciones vulnerables.

Palabras clave: hogares de acogida, crisis de los opiáceos, OxyContin, programas de prescripción de medicamentos por triplicado.

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Abstract

In this study, I assess the causal impact of the early stages of the opioid crisis on new entries into foster care, focusing on the introduction of OxyContin in 1996 and the influence of Triplicate Prescription Programs (TPP) in the United States. My findings indicate a composition effect: in states without TPP, where OxyContin had greater market penetration, children entering foster care are more likely to come from households where parents abuse drugs. These results underscore the complex interplay between public health policies and child welfare outcomes, highlighting the need for integrated strategies addressing the broader implications of drug policy on vulnerable populations.

Keywords: foster care, opioid crisis, OxyContin, triplicate prescription programs.

Códigos JEL: J13, I12, I18.

1 Introduction

The opioid crisis is a well-documented public health emergency in the United States. According to the National Center for Health Statistics, over 75% of drug overdose deaths in 2021 involved opioids. The Centers for Disease Control and Prevention (CDC) identifies three phases in the opioid overdose epidemic: the first beginning in the late 1990s with prescription opioids, the second in 2010 with heroin, and the third in 2013 with fentanyl. CDC data indicates that since 1999, over one million people have died from drug overdose.

The literature on the causes of the opioid crisis is extensive. Maclean et al. (2020) reviewed more than 100 economic studies on the origin and consequences of the opioid crisis, highlighting both demand and supply side factors. They note that the crisis affects the labor market and partly originates from it. The authors report declines in labor force participation and increases in mental illness, disabilities, and chronic pain. The declines in local manufacturing employment reduce wages and job opportunities, leading to higher opioid overdose deaths (Charles et al., 2019). Other studies emphasize that worsening economic conditions and rising discomfort have resulted in more suicides, alcohol consumption, drug abuse, and overdose (Hollingsworth et al., 2017; Ruhm, 2019; Pierce and Schott, 2020). On the supply side, Maclean et al. (2020) points up the role of healthcare providers and the pharma industry with their aggressive marketing campaign to increase prescribing by physicians (Nguyen et al., 2019; Alpert et al., 2022). Also, how changes in physician attitudes and practices lead to an increase in opioid prescription and accessibility (Khan et al., 2019). However, none of these tackle individual factors or focus on the initial years of the epidemic. Alpert et al. (2022) addresses this gap by focusing on the introduction of the widely adopted opioid, OxyContin, as one of the leading causes of the epidemic.

This paper expands the literature by trying to understand the repercussions on the family. In particular, I want to study the effect of OxyContin launch on foster care entries. The proportion of foster care cases due to parental drug abuse has grown by a factor of 2.5 since 2000 (Buckles et al., 2023; Barnett et al., 2021; Dallman, 2020).

Previous studies have demonstrated a significant relationship between drug misuse and foster care entries, mainly using the 2010 reformulation of OxyContin as an exogenous shock (Dallman, 2020; M. F. Evans et al., 2022). The reformulation consisted of a shift to an anti-deterrent version of the pill. These studies found that regions with higher rates of OxyContin misuse saw an increase in foster care admissions due to parental drug issues.

Similarly, M. F. Evans et al. (2022) studied the effect of the Oxy reformulation in 2010 on child abuse and neglect outcomes, leveraging the differences in prescription opioids across counties. They found that counties with initially higher rates of prescription opioid usage led to more significant increases

in child abuse and neglect. This study also assessed the introduction of Prescription Drug Monitoring Programs (PDMPs), finding similar impacts[1].

These findings suggest that well-intentioned policies aimed at curtailing opioid misuse and reducing unnecessary prescriptions can inadvertently lead to adverse outcomes in other life domains.

Much of the literature has focused on the 2010 OxyContin reformulation as a source of exogenous variation in drug misuse, mainly as it prompted a shift from prescription opioids to heroin (W. N. Evans et al., 2019). However, as I expressed before, the problem began years before that. In 1995, only 2.7% of new entries were flagged as the parent did drug abuse and it increased substantially from 1996 on, reaching 14% by the end of the 20th century. By 2005, 10 years later, 22.9% of the new entries on foster care recorded parents abusing drugs[2].

This study seeks to determine the causal effect of drug addiction on foster care entries, a complex analysis due to potential endogeneity issues. Drug addicts may have particular observable and/or unobservable characteristics that may affect the outcome of interest independent of their addiction. Examples of these are all over the place: drug addiction positively correlates with emotional or psychiatric problems, low socioeconomic status, low commitment to education, and delinquency, among others (Spooner, 1999). To address this concern, I follow the identification strategy in Alpert et al. (2022) and exploit a plausible exogenous variation in the number of drug-addicted people. This variation is given by the interaction between the launch of OxyContin in 1996 and the presence of monitored prescription policies in some states, examining how this interaction affects foster care entries.

The results show compelling evidence for a composition effect. Specifically, children entering foster care for the first time in states without monitored prescription policies are more likely to come from households where parents abuse drugs. However, it remains inconclusive whether the total number of children entering foster care for the first time is higher in states without monitored prescription policies compared to those with such policies.

These results highlight the importance of designing effective interventions and the role of policymakers. Policymakers must understand the backgrounds of these children, including their exposure and environments, to provide appropriate support that can improve their outcomes in life. The primary objective of the child welfare system is to safeguard children from abuse or neglect by their parents.

[1] To address the non-random introduction of PDMPs, the authors followed the decomposition method by Goodman-Bacon (2021)

[2] In contrast, the statistics for parents abusing alcohol have remained relatively flat. In 1995, the share was 1.2%, rising to 6.9% by the end of the 1990s and hovering around that level, with 6.3% in 2005.

However, children in foster care are still at a higher risk of adverse outcomes in multiple life domains (Gypen et al., 2017). They are more likely to commit crimes, drop out of school, experience substance abuse problems, or enter the homeless population (Doyle Jr, 2007). Given that children experiencing foster care are a particular subgroup with diverse experiences occurring before, during, and after (Font et al., 2021), the causal effect of foster care on diverse outcomes is not trivial and is beyond the scope of this study.

The remainder of this paper is structured as follows: I first discuss OxyContin's History and significant aspects. Next, I present the data and descriptive statistics. I then outline the empirical strategy and discuss the main findings. The paper concludes by discussing the results and implications for future research.

2 Source of exogeneity: OxyContin History

In January 1996, the pharmaceutical company Purdue Pharma launched the medicine OxyContin across the U.S. OxyContin was a controlled-release oral formulation of oxycodone hydrochloride indicated for the management of pain. Due to its harshness, the drug was originally intended for use in severe pain medical patients. However, anecdotal evidence suggests that it reached a much broader group (Quinones, 2015):

> "In 1996, one who went to visit him (Dr. Procter) was a man named Randy, a guard at the state prison in Lucasville, ten miles north of Portsmouth. Randy suffered deep bruises to his back in a fight with an inmate. He was given a list of approved doctors to see. One was David Procter.
>
> Procter took him off work for six months and, sure enough, handled all the paperwork, charging him two hundred dollars cash. He also prescribed a drug called OxyContin—40 mg, twice a day, for thirty days. The drug was a new painkiller, he said, and they were having good results with it." (Quinones, 2015 - p.36).

Intentionally or not, by prescribing him OxyContin, Procter introduced Randy to an addiction. As it is widely known now, opioids cause chemical dependence (Kosten and George, 2002).

> "Thirty days later, Randy figured he was better and did not return to Procter for a refill. Soon, he was gripped by what he thought was the worst flu of his life. He ached, could not get out of bed, had diarrhea, and was throwing up. He talked to some friends. One suggested he might be going through withdrawal.

> Then it hit him: You have got to go back. Procter prescribed him more of the same. Randy returned every month, paying two hundred dollars cash for a three-minute visit with Procter and an Oxy prescription." (Quinones, 2015 - p.36).

OxyContin became one of the highest-prescribed drugs in the U.S. In 1996, nearly 300k prescriptions were recorded. By 2001, the number increased exponentially to more than 7 million prescriptions, making a total of 1,536 USD million in sales. In 2001, OxyContin was ranked 15th on a list of the nation's top 50 prescription drugs by retail store (GAO, 2003).

Why was OxyContin prescribed so extensively? In the late '80s and early '90s, there was a shift in medical opinion about pain management. The World Health Organization addressed the under-treatment of post-operative and cancer pain in 1986 with their Cancer Pain Monograph. In 1995, the American Pain Society launched its influential "pain as the fifth vital sign" campaign to encourage proper, standardized evaluation and treatment of pain symptoms (Jones et al., 2018). Notably, Purdue Pharma and other opioid manufacturers were funders of the American Pain Society, which promoted this campaign (Maclean et al., 2020).

In this context, Purdue Pharma introduced OxyContin with an aggressive marketing campaign. Furthermore, in 2001, the Joint Commission implemented a pain scale and required healthcare providers to treat pain symptoms medically, including the prescription of opioids. These policies led to a lax culture of opioid prescription that characterized the first decade of the 2000s (Maclean et al., 2020). Ultimately, there was an increase in opioid access driven by changing physician attitudes and practice patterns (Alpert et al., 2022).

From a causal inference perspective, the nationwide launch of OxyContin in January 1996 presented significant challenges due to the presence of confounders that are difficult to isolate. However, new evidence on Purdue Pharma's internal documents can be helpful to exploit geographical variations in the exposure/penetration of OxyContin across the U.S. These documents outline a marketing strategy that prioritized certain states based on expected returns, which were influenced by the presence of Triplicate Prescription Programs (TPP), established several years before OxyContin's launch. As the name suggests, TPP required three copies of the prescription to be done. The doctor kept one, the pharmacy kept the second one, and the third one would be sent to a state agency for monitoring purposes. Purdue Pharma's research found that these programs had a chilling effect on the prescribing of opioids such as oxycodone (Alpert et al., 2022). They expressed that for doctors "writing triplicate prescriptions was more trouble than others" and they "did not want to give the Government an excuse to monitor their activities" (Plus, 1995; Alpert et al., 2022). They concluded that states with this policy were less likely to adopt the product, and so "the product should only be positioned to physicians in

non-triplicate states" (Plus, 1995).

The internal assessments revealed that doctors in TPP states were less likely to prescribe OxyContin, leading Purdue to focus their marketing efforts on states without such programs. Unfortunately, specific data on Purdue Pharma's initial marketing expenditures by state is not available, which would provide direct evidence of targeted marketing strategies. Nonetheless, Alpert et al. (2022) provides compelling evidence showing that OxyContin distribution in states with TPP was approximately 50% lower than in states without such policies. They also found that drug overdose mortality rates diverged between these groups, with TPP states experiencing lower growth rates in overdose deaths. This disparity underscores the potential impact of prescription monitoring programs on mitigating the opioid crisis.

3 Data

Foster Care

Foster Care Reports are provided by the U.S. Department of Health and Human Services in the National Data Archive on Child Abuse and Neglect (NDACAN). The Adoption and Foster Care Analysis and Reporting System (AFCARS) files are available from 1995. They provide information on every child registered in foster care for each period. For this analysis, I input *new* entrances to foster care. To do so, I worked with the date of the first entry and constructed a state-year panel for the period 1995-2005.

Triplicates Prescription Programs (TPP)

The TPP was a drug monitoring program aimed at reducing the misuse of some substances. It was a state policy implemented several years before OxyContin's launch. By the end of the 20th century, most switched to an electronic system or did not continue with the program. The following states once had an active triplicate prescription program in 1996 (Alpert et al., 2022):

- California: 1939-2004
- Idaho: 1967-1997
- Illinois: 1961-2000
- New York: 1972-2001

- Texas: 1982-1999

In what follows, I refer to Triplicates states as those with an active TPP in 1996 (i.e., California, Idaho, Illinois, New York, and Texas).

Appendix Table A1 presents the mean differences in socioeconomic variables between triplicate and non-triplicate states in 1995. On average, non-triplicate states are less populated and more rural than triplicate states. However, the two groups have no significant differences in income or poverty rates. Additionally, prior to the launch of OxyContin, there were no significant differences in the number of new entries into foster care between these groups.

Treatment Episode Data Set: Admissions (TEDS-A)

I collected information regarding admissions to substance abuse treatment from the U.S. Department of Health and Human Services. The TEDS-A files are available on an annual basis since 1992. Each file provides individual-level data where the observational unit is "admissions"[3]. I only consider individuals admitted for the first time in rehab since I am concerned about the *new* drug-addicted people.

Moreover, the TEDS-A files indicate the substances of abuse. I construct a state-panel database for the period 1992-2005 for new admission to drug abuse treatment for each of the following drugs separately: opioids, cocaine, marijuana, heroin, and alcohol.

4 Identification strategy

I am interested in estimating the causal effect of OxyContin launch on foster care new entries (FC):

$$FC_{it} = \beta_0 + \beta_1 \ 1996on_t \times NonTriplicate_i + \gamma_i + \mu_t + \epsilon_{it} \quad (1)$$

Where $NonTriplicate_i = 1$ if the state i did not have a TPP on effect by the launch of OxyContin, and $1996on_t = 1$ for periods 1996 on. I also included state and year fixed effects (γ_i and μ_t, respectively).

Moreover, to provide evidence that the amount of drug-addicted people may have increased, I also estimate:

[3] Note that a person can be admitted more than once a year.

$$NewRehab_{it} = \beta_0 + \beta_1 \ 1996on_t \times NonTriplicate_i + \gamma_i + \mu_t + \epsilon_{it} \quad (2)$$

Where $NewRehab_{it}$ accounts for the total amount of people entering the rehab program in state i at year t. I consider five drug-admissions separately: opioids, heroin, cocaine, marijuana, and alcohol.

5 Results

Table 1 presents the OLS estimates from equation 1. States lacking TPP policies experienced an average increase of approximately 426 new foster care placements per million inhabitants yearly, compared to states with TPP. This effect represents a 51% increase in new placements (Column 1).

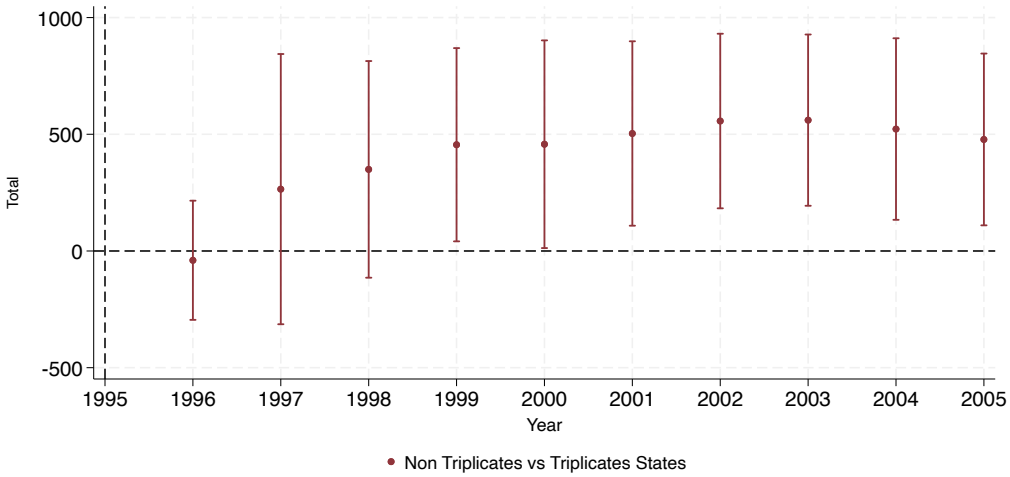
Analysis of the AFCARS data reveals the incidence of drug abuse among parents of newly placed foster children. These findings are displayed in columns 2 and 3 of Table 1. In states without TPP, the rate of first-time foster care placements due to parental drug abuse rose by 90 children per million, a 70% increase compared to TPP states. Additionally, the proportion of all new placements associated with parental drug abuse was 7.4 percentage points higher in non-TPP states.

Table 1 also reports wild-bootstrapped p-values for each coefficient. According to this method, statistically significant differences persist and are consistent only for outcomes related to parental drug abuse, indicating a specific composition effect. These results confirm an increase in foster placements directly attributable to parental drug abuse in non-TPP states. However, it is inconclusive whether the total number of new foster care entries is higher in non-TPP than TPP states. Figure 1 presents the event study for the three outcomes considering as baseline the year 1995.

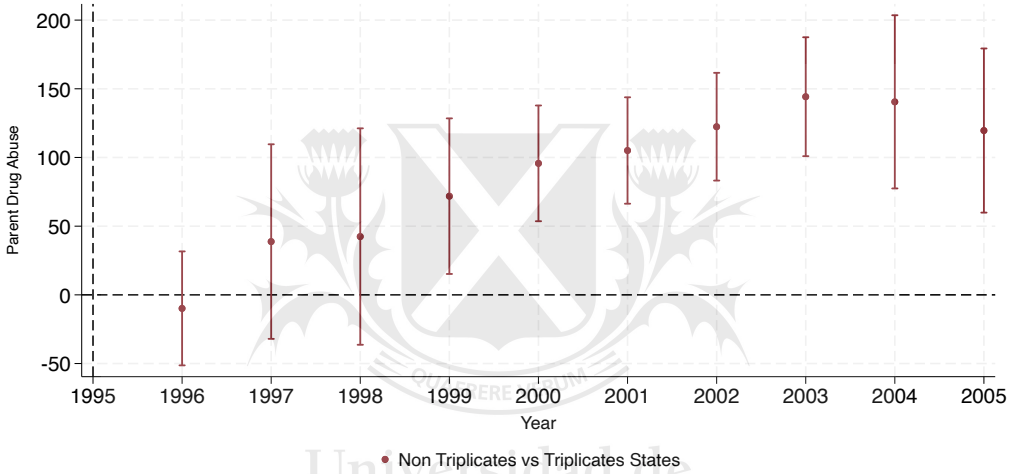
Table 1: New Entries to Foster Care

	New Entries	Parent Drug Abuse	
	Total	Total	Share
1996on × Non Triplicate	426.362	90.460**	0.074**
	(190.06)	(17.82)	(0.02)
	{0.029}	{0.000}	{0.001}
	[0.130]	[0.037]	[0.044]
Mean Dep. Var	828.8	129.4	0.2
Observations	483	483	483
Clusters	51	51	51

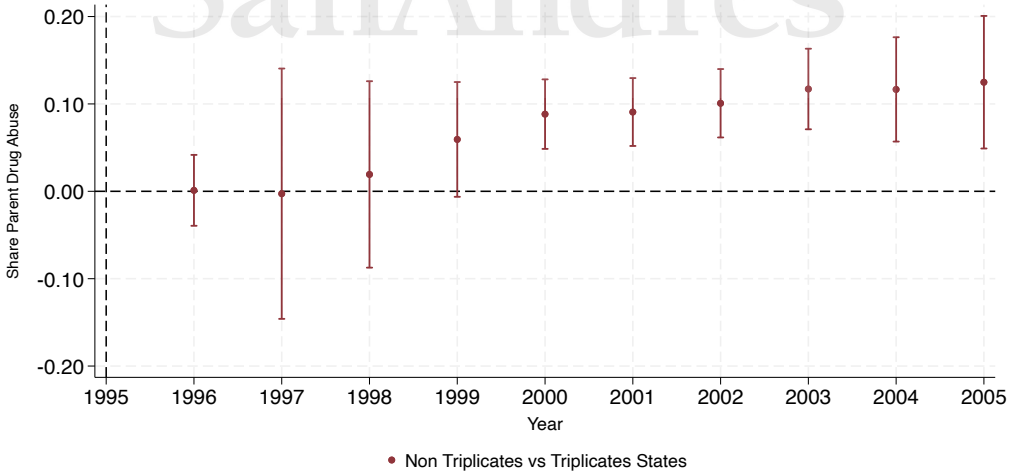
New entries are expressed over 1,000,000 habitants. All regressions include state and year fixed effect. Clustered standard errors in parenthesis, clustered p-value in braces, wild-bootstrapped p-values in brackets. *Significant at 10%; **significant at 5%; ***significant at 1% according to wild-bootstrapped p-values.



(a) Total



(b) Parent Drug Abuse



(c) Share Parent Drug Abuse

Figure 1: New Entries to Foster Care over 1 million habitants

One limitation is that AFCARS does not provide further information on the substance of abuse. I

analyzed the TEDS-A files using the same methodology to overcome this concern. In particular, I tested the hypothesis that new people entering rehab after OxyContin was more significant in states without TPP.

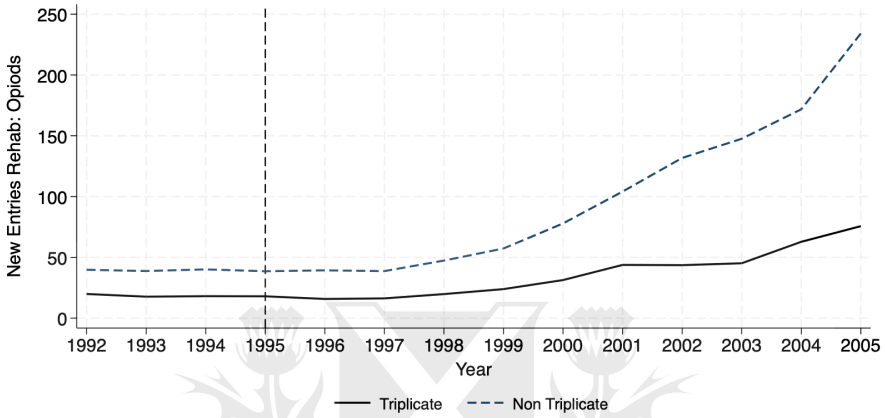
Table 2 presents the OLS estimates for Equation 2 for diverse drugs. The result is conclusive: differences in new admissions to rehabilitation programs between triplicates and non triplicates states are only statistically different when considering opioids-related new admissions, whereas no differences are found for other drugs.

In states with no TPP active by OxyContin launch, there was an increase of almost 40 people over 1 million. This effect may seem small, but if it is considered that the mean for the period was about 81 people over 1 million, the effect was an increase of 49%. Considering the results for the other drugs, there are two important things to note. The first one is that, as stated before, none of these show statistical differences from zero, but what is more important is that the magnitudes are considerably lower than in opioids. For cocaine, the effect would be around 20%, for marijuana by -1.5%, and for alcohol -10%. For heroin, the effect would be around 40%, similar to opioids, which supports the statement about OxyContin and heroin as closer substitutes. Using wild-bootstrap standard errors does not change the conclusions. Figure 2 and 3 present the event study analysis for each outcome.

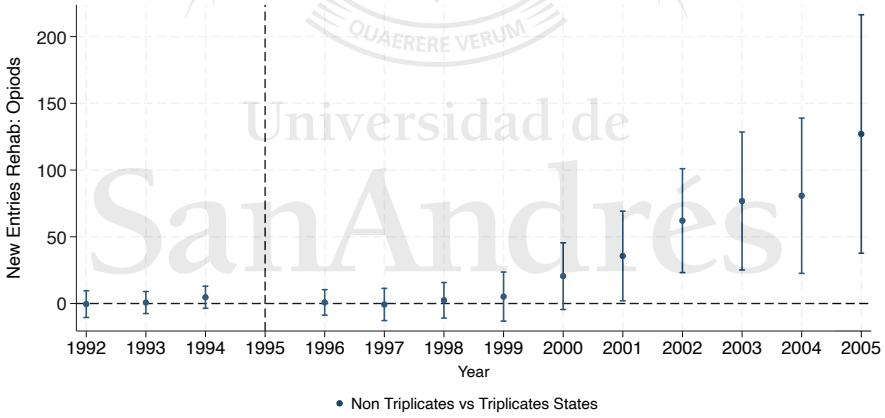
Table 2: New Entries to Rehabilition

	Opiodes	Heroin	Cocaine	Marihuana	Alcohol
1996on × Non Triplicate	39.811**	74.397	117.031	-13.328	-201.533
	(15.41)	(54.63)	(119.81)	(149.72)	(247.47)
	{0.013}	{0.180}	{0.334}	{0.929}	{0.420}
	[0.033]	[0.262]	[0.470]	[0.921]	[0.459]
Mean Dep. Var	81.2	177.2	536.3	1098.6	2147.8
Observations	619	619	619	619	619
Clusters	48	48	48	48	48

New entries are expressed over 1,000,000 habitants. All regressions include state and year fixed effect. Clustered standard errors in parenthesis, clustered p-value in braces, wild-bootstrapped p-values in brackets. *Significant at 10%; **significant at 5%; ***significant at 1% according to wild-bootstrapped p-values.

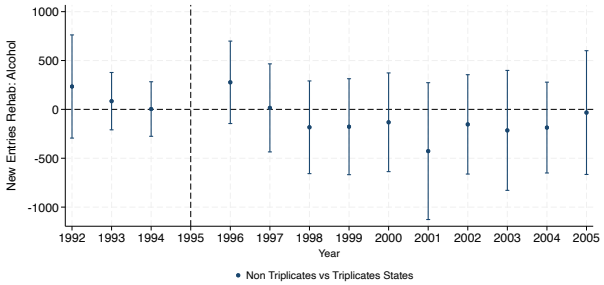


(a) Anual average by group

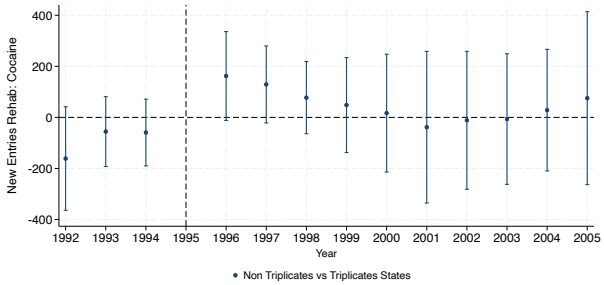


(b) Event Study

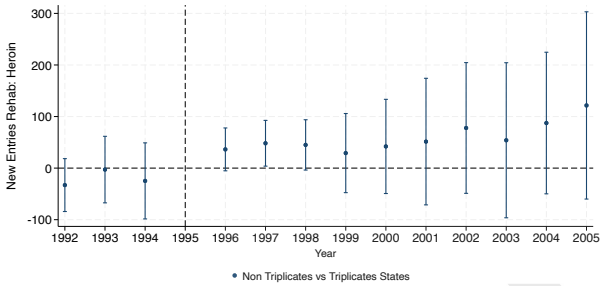
Figure 2: New Rehab Admissions over 1 million habitants - Opioids



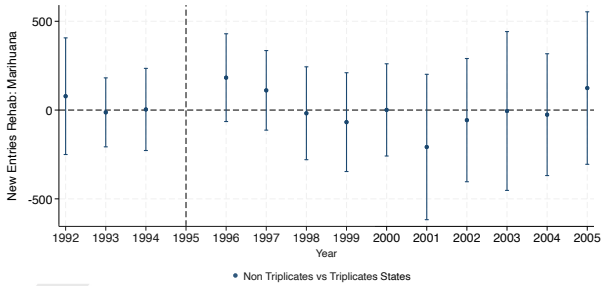
(a) Alcohol



(b) Cocaine



(c) Heroin



(d) Marijuana

Figure 3: New Rehab Admissions over 1 million habitants - Others Drugs

6 Robustness exercises and data concerns

Appendix Table A2 presents the results from a leave-one-out exercise involving the five Triplicate States. The objective is to demonstrate that no specific state drives the overall results. To achieve this, I estimate equation 1 while excluding one Triplicate State at a time. The conclusions remain consistent with Table 1 when considering clustered standard errors. However, if the wild-bootstrap inference is used, California, Idaho, and Illinois states significantly influence the results.

Another important consideration is the potential for measurement errors in the outcomes of interest. The AFCARS data, first released in 1995, were not uniformly provided by all states from the beginning, and there could be possible instances of misclassified practices.

Appendix Table A3 presents results only for states that provide information for the entire period and, excluding New York, Illinois, and Wyoming, as these states did not report any cases of parental drug or alcohol abuse during the period. Evidence for a composition effect holds under clustered standard errors inference but not when using wild-bootstrap inference.

To address the concern that the increase in reported cases of parental drug abuse might not reflect an actual increase, I analyzed the incidence of parental alcohol abuse. If there were a mechanical

adjustment in the records, changes should also appear in the share of new entries involving parental alcohol abuse. Appendix Table A4 shows an increase of nearly 35 children per million (55%) in non-TPP compared to TPP states. However, this does not translate to an increase in the proportion. Columns 3 and 4 restrict the analysis to states with complete panels and exclude New York, Illinois, and Wyoming, yielding the same results.

7 Conclusions

This study aims to estimate the causal effect of drugs in new foster care entries. This a challenging task because of the presence of selection bias. To overcome this limitation, I exploit the exogenous variation in the amount of drug-addicted people given by the interaction between OxyContin launch in 1996 and the presence of triplicate prescription programs. Internal documents from Purdue Pharma release that OxyContin would be more positioned in states without any triplicate prescription program. Moreover, anecdotal evidence suggests that many people were prescribed OxyContin when it was not needed.

Using data from AFCARS, I show that there is a higher increase in children entering foster care for the first time with parents abusing drugs in states where OxyContin had more penetration relative to TPP states.

Even though I can not account for a measure of people who drug misuse back then, I show that the number of people entering rehab for the first time with opioids-related addiction increases in states without any triplicate prescription program compared to states with triplicate programs. Moreover, what gives more strength to this hypothesis is that this is not true for other drugs such as heroin, cocaine, marijuana, or alcohol.

To conclude, I want to highlight that analyzing the indirect spillovers from the opioid epidemic across various life domains is crucial for public policymakers. Providing causal evidence of its impact on foster care can enlighten future support strategies for affected children, potentially guiding policy actions. These children often come from families exposed to drug abuse, which may necessitate unique approaches to public assistance. Understanding these nuances enables policymakers and bureaucrats to better address the specific needs of these children, which may differ from those in past situations.

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8 Appendix

Table A1: Difference between TTP and Non-TPP States - Characteristics 1995

	Triplicates	Non Triplicates	Difference
Population (millions)	16.473	3.998	12.475**
Share Male Population	0.492	0.489	0.003
Share White Population	0.841	0.841	-0.000
Share Urban Population (1990)	0.798	0.676	0.122*
Median Income Household (USD thousand)	34.428	33.545	0.883
Poverty Rate	0.149	0.130	0.019
Foster Care (FC) New Entries	930.197	603.628	326.569
FC Parent Drug Abuse	0.000	25.887	-25.887
FC Parent Alcohol Abuse	0.000	16.993	-16.993

Foster Care New entries are expressed over 1,000,000 habitants. Own production based on United States Census Bureau and AFCARS. *Significant at 10%; **significant at 5%; ***significant at 1%.

Table A2: Leave One Out Analysis

	Excluded State:				
	California	Idaho	Illinois	New York	Texas
Panel A. New Entries to Foster Care: Total					
1996on × Non Triplicate	598.690	361.106	321.313	426.281	426.431
	(127.44)	(234.58)	(212.79)	(190.16)	(190.12)
	{0.000}	{0.130}	{0.137}	{0.030}	{0.029}
	[0.172]	[0.269]	[0.276]	[0.133]	[0.120]
Mean Dep. Var	824.6	830.3	836.2	833.9	836.4
Observations	472	473	472	474	474
Clusters	50	50	50	50	50
Panel B. New Entries to foster care: Parent Drug Abuse					
1996on × Non Triplicate	100.086	91.436	80.156	90.450**	90.487**
	(17.10)	(20.69)	(16.42)	(17.83)	(17.83)
	{0.000}	{0.000}	{0.000}	{0.000}	{0.000}
	[0.116]	[0.125]	[0.137]	[0.032]	[0.042]
Mean Dep. Var	131.5	131.4	132.4	131.8	128.5
Observations	472	473	472	474	474
Clusters	50	50	50	50	50
Panel C. Share Parent Drug Abuse					
1996on × Non Triplicate	0.076	0.090	0.056	0.074**	0.074*
	(0.03)	(0.02)	(0.02)	(0.02)	(0.02)
	{0.011}	{0.000}	{0.003}	{0.002}	{0.002}
	[0.151]	[0.126]	[0.174]	[0.049]	[0.051]
Mean Dep. Var	0.2	0.2	0.2	0.2	0.2
Observations	472	473	472	474	474
Clusters	50	50	50	50	50

New entries are expressed over 1,000,000 habitants. All regressions include state and year fixed effect. Clustered standard errors in parenthesis, clustered p-value in braces, wild-bootstrapped p-values in brackets. *Significant at 10%; **significant at 5%; ***significant at 1% according to wild-bootstrapped p-values.

Table A3: New Entries to Foster Care

	New Entries	Parent Drug Abuse	
	Total	Total	Share
1996on × Non Triplicate	184.437	76.424	0.067
	(148.85)	(18.59)	(0.02)
	{0.237}	{0.001}	{0.002}
	[0.448]	[0.363]	[0.384]
Mean Dep. Var	797.6	130.3	0.2
Observations	154	154	154
Clusters	14	14	14

Regressions only consider states with information for the whole period and exclude State of New York, Illinois and Wyoming due to potencial measurement errors in the outcomes. New entries are expressed over 1,000,000 habitants. All regressions include state and year fixed effect. Clustered standard errors in parenthesis, clustered p-value in braces, wild-bootstrapped p-values in brackets. *Significant at 10%; **significant at 5%; ***significant at 1% according to wild-bootstrapped p-values.

Table A4: New Entries to Foster Care

	Parent Alcohol Abuse			
	Total	Share	Total	Share
1996on × Non Triplicate	34.908*	0.018	28.452	0.015
	(12.66)	(0.02)	(11.82)	(0.02)
	{0.008}	{0.424}	{0.032}	{0.357}
	[0.072]	[0.494]	[0.448]	[0.489]
Mean Dep. Var	63.3	0.1	54.8	0.1
Observations	483	483	154	154
Clusters	51	51	14	14

Columns 1 and 2 consider all states while columns 3 and 4 restrict the sample to states with information for the whole period and exclude State of New York, Illinois and Wyoming due to potencial measurement errors in the outcomes. New entries are expressed over 1,000,000 habitants. All regressions include state and year fixed effect. Clustered standard errors in parenthesis, clustered p-value in braces, wild-bootstrapped p-values in brackets. *Significant at 10%; **significant at 5%; ***significant at 1% according to wild-bootstrapped p-values.