



# ASPE ISSUE BRIEF

HHS OFFICE OF THE ASSISTANT SECRETARY FOR PLANNING AND EVALUATION  
OFFICE OF BEHAVIORAL HEALTH, DISABILITY, AND AGING POLICY

## **POSTPARTUM OPIOID PRESCRIPTION FILLS, OPIOID USE DISORDER, AND UTILIZATION OF MEDICATION-ASSISTED TREATMENT AMONG WOMEN WITH MEDICAID AND PRIVATE HEALTH INSURANCE COVERAGE**

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### **Policy Issue**

An estimated one-quarter of women who gave birth between 2003 and 2015 were prescribed opioids post-delivery (Prabhu et al., 2018). Opioid prescriptions, especially those administered at high doses or more frequently, are often associated with the development of an opioid use disorder (OUD) (Ali et al., 2019). However, not much is known about the rate of opioid prescribing and its association with the development of OUD among women after childbirth. The rate of utilization of medication-assisted treatment (MAT) among those women who develop OUD after giving birth is also unknown. Knowledge of the risk of OUD among postpartum women with opioid prescription can help federal and state authorities when designing substance use disorder treatment programs. The health and financial burden of the opioid epidemic has been disproportionately hard on reproductive-aged women (Kozhimannil et al., 2017), and has led to a five-fold increase in Neonatal Abstinence Syndrome among infants (Patrick et al., 2015). Understanding of the utilization of MAT among this population and how it varies based on demographic and socioeconomic factors can help policymakers plan treatment programs that target more effectively this population.

### **Study**

This report aims to analyze Medicaid and private health insurance claims data to estimate: (i) postpartum opioid prescribing rate among women who gave birth; (ii) rate of OUD development among those with postpartum opioid prescriptions; and (iii) utilization of MAT among those who develop OUD after childbirth. (See Appendix A for methodological details.)

### **Findings**

- Among the Medicaid and privately insured patients who gave birth in the United States in 2012-2014 with no opioid use prior to or during pregnancy, over 50% had an opioid prescription filled within a week of giving birth. Medicaid patients

(72%) were more likely to fill an opioid prescription postpartum, compared to patients on private insurance (55%).

- Women on Medicaid with cesarean deliveries had a higher likelihood of having a postpartum opioid prescription fill (93%), compared to women with vaginal delivery (65%). For women on private insurance, the rate of postpartum opioid fill was 82% among those with a cesarean delivery and 44% among those with a vaginal delivery.
- Less than 5% of those with a filled postpartum opioid prescription developed an OUD within a year and a half of their first opioid fill.<sup>1</sup>
- Patients who developed OUD were more likely to have higher average days of opioids prescribed (eight for Medicaid and nine for private insurance) and higher average number of prescriptions filled (seven for both Medicaid and private insurance).
- Among patients who developed OUD, approximately one-third received any MAT (37% in Medicaid and 32% in private insurance). Patients on Medicaid received MAT sooner after OUD diagnosis (median 29 days) compared to patients on private insurance (median 56 days).
- A significant portion of the patients with OUD had a mental health diagnosis in the postpartum period (56% of Medicaid and 48% of private insurance).

## Discussion

Ensuring that patients' postpartum pain is well managed is important; however, it carries risk for developing an OUD. Guidelines recommend that prescription opioids should be reserved for "breakthrough pain" in the postpartum period, after other analgesia was not effective, and that clinicians should carefully weigh the benefits of initiating opioid therapy during pregnancy versus the risks (CDC, 2016; ACOG, 2018). The literature has documented that non-opioid pain management practices are effective in reducing post-delivery pain and maintaining patient comfort (Smith et al., 2019). The fact that a significant proportion of patients who develop OUD after childbirth does not receive any MAT underscores the importance of policy efforts to increase the availability and utilization of MAT. Continued efforts are needed to educate providers on screening pregnant and postpartum women for OUD, on providing MAT services, and on opioid prescribing after childbirth. Patients covered under Medicaid developed OUD at a higher rate than their private health insurance counterparts, and the rate of MAT utilization was higher among Medicaid beneficiaries, which is indicative of the importance of the health care delivery framework in tackling the opioid crisis. Consistent with the previous literature, this study also found a high rate of postpartum mental health conditions among those who developed OUD (Sanmartin et al., 2019a). The literature has found mental health treatment to be associated with reduced risk of developing OUD among parenting women who misuse prescription opioids (Sanmartin et al., 2019a) and further highlights the importance of mental health service in the postpartum period to reduce

incidence of opioid misuse and use disorder. Finally, pain management in the postpartum period and access to evidence-based care for OUD are not only issues that affect mothers but families are impacted as well--especially children, as shown by the increasing rates of Neonatal Abstinence Syndrome (Winkelman et al., 2018) and child welfare caseloads (Sanmartin et al., 2019b; Radel et al., 2018; Patrick et al., 2019).

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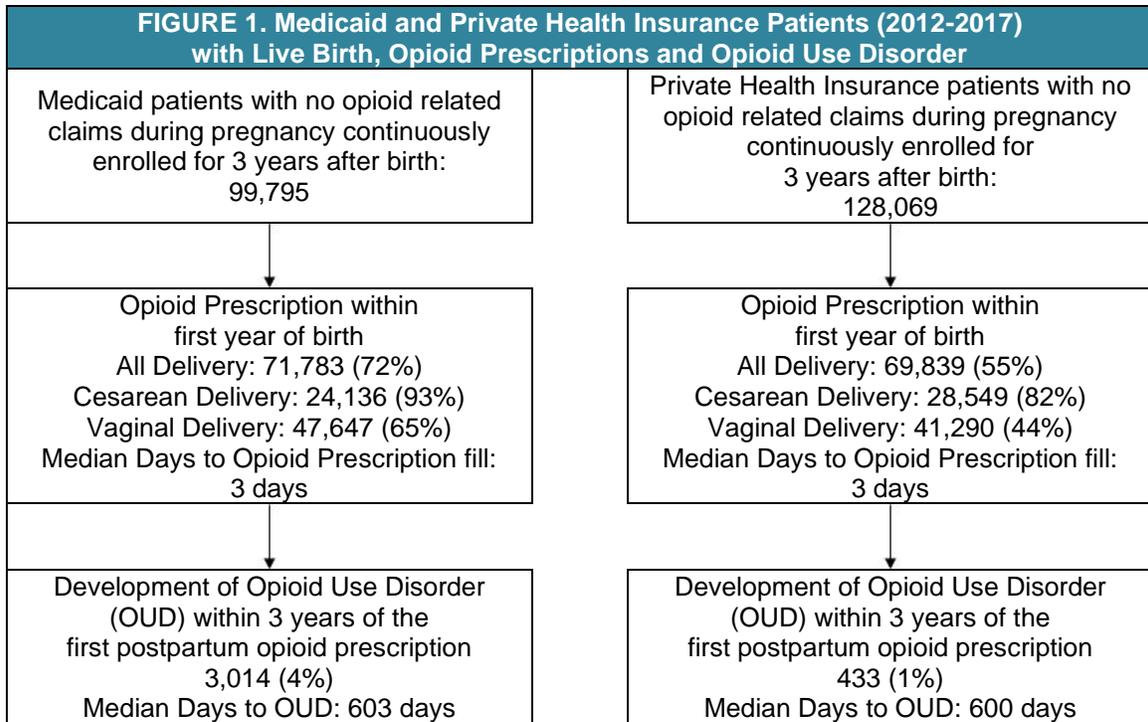
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## Endnotes

1. This cohort of patients were continuously enrolled in the MarketScan database from 280 days before live birth to three years after the birth (as far forward as 2017). Therefore, women who develop OUD later or women who are not continuously enrolled are excluded from analysis. Given such conservative criteria, the findings presented here could be underestimates. Medicaid participants may be disproportionately excluded from analysis since many are only eligible for Medicaid due to their pregnancy status and thus do not fit the criteria used in this study.



**TABLE 1. Opioid and Mental Health Related Characteristics of Medicaid and Private Health Insurance Patients with a Live Birth and Postpartum Opioid Prescription**

	Medicaid Patients		Private Health Insurance Patients	
	OUD	No OUD	OUD	No OUD
Average Days' Supply	8	5	9	5
Average Number of Opioid Prescription Fills	7	3	7	2
Mental Health Diagnosis	56%	24%	48%	12%
Percentage with MAT	37%	---	32%	---
Median Days to MAT	29	---	56	---

## Appendix A: Data and Variable of Interest

The study used IBM Watson Health MarketScan Multi-State Medicaid database and the Commercial Claims and Encounter database (2012-2017) to estimate the incidence and timing of postpartum opioid prescription and subsequent development of OUD along with utilization of MAT. The following inclusion and exclusion criteria were established: First, all women with a record of live birth (including single and multiple live births) between 2012 and 2014 were identified. Next, women with continuous enrollment in the insurance database during the pregnancy period (280 days before live birth) and three years after the birth (as far forward as 2017) were identified. Finally, only women without any opioid-related claims (i.e., no opioid prescriptions, OUD, or MAT) during the pregnancy period were included. These criteria resulted in the inclusion of 99,795 women covered under Medicaid (mean age 24; 48% White, 41% Black, 3% Hispanic, and 8% other) and 128,069 covered under private insurance (mean age 30; race/ethnicity not available in the commercial database).

Postpartum opioid prescription fill was measured by whether the individual had any opioid prescription recorded on their claims within 12 months after a live birth (full list of opioids National Drug Code [NDC] codes available from the authors upon request). Average day supply of opioid prescription, the number of opioid prescription filled and mental health diagnosis during the postpartum period was also calculated. OUD was measured by whether the individual had any opioid dependence related claims recorded within three years of being prescribed an opioid after live birth (full list of OUD related ICD-9 and ICD-10 codes available from the authors upon request). MAT utilization was defined by whether the individual has received any of the Food and Drug Administration approved medications for the treatment of OUD--naltrexone, buprenorphine, and methadone (full list of MAT NDC codes available from the authors upon request).

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