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# The Use of Methadone for Pain by Medicaid Patients

An examination of prescribing patterns and drug use policies

## **Contents**

- 1 Overview
- 3 Methodology
- 4 National trends in prescribing of methadone for pain
  - Prescribing rates as a component of long-acting and extended-release opioids, by payer 4
  - Medicaid FFS versus Medicaid managed care 5
- 7 Prescribing of methadone for pain in Medicaid FFS
  - Preferred drug lists 7
  - PDL status and prescribing trends in Medicaid FFS programs 8
- 13 Conclusion
- 14 Appendix A: Medicaid FFS Prescriptions for Methadone for the Treatment of Pain
- 15 Endnotes

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**The Pew Charitable Trusts** is driven by the power of knowledge to solve today's most challenging problems. Pew applies a rigorous, analytical approach to improve public policy, inform the public, and invigorate civic life.

## Overview

Methadone for the treatment of pain accounts for just 1 percent of all short- and long-acting opioid prescriptions in the United States. Yet approximately 23 percent of all opioid-related overdose deaths in the U.S. related to prescription drugs in 2014 (the most recent year for which this calculation has been published) were associated with this long-acting drug.<sup>1</sup> The high mortality rate may be a result of the drug's pharmacologic properties.<sup>2</sup> Pain relief from methadone lasts four to eight hours, but its effects on other organs, such as the lungs and heart, can continue for hours longer.<sup>3</sup> As a result, patients may put themselves at risk for respiratory depression and cardiac arrhythmia by taking additional doses of methadone to achieve pain relief before the original dose has been fully metabolized.<sup>4</sup>

Nationally, a strong correlation exists between the rate of methadone prescribing for pain and the rate of methadone overdose deaths.<sup>5</sup> Public health officials have been alerting clinicians to the harms associated with prescribing methadone to treat pain since 2006, when the Food and Drug Administration (FDA) released a public health advisory about risks associated with the use of the drug for pain. FDA, Centers for Disease Control and Prevention (CDC), associations representing clinicians, and health research and policy organizations have called for reducing the use of methadone to treat pain and support using alternative long-acting and extended-release opioids.<sup>6</sup> Since the start of these efforts, dispensing of methadone for the treatment of pain has declined, on average, 3.2 percent per year.<sup>7</sup> Further, methadone-related deaths declined by 39 percent between 2007 and 2014, with an additional 9 percent decrease between 2014 and 2015.<sup>8</sup>

However, earlier research has shown high rates of methadone use to treat pain among Medicaid beneficiaries and found that the drug is disproportionately responsible for overdose deaths among individuals in this population.<sup>9</sup> This may be due, in part, to factors at both the patient and population level that can affect the prescribing rates of a specific opioid. For example, patients who are first given alternative therapies, and fail to respond to them, may be more likely to be prescribed methadone for pain. Population factors that influence prescribing rates can include a higher percentage of patients with co-occurring conditions or pain that is hard to manage. Given that clinical guidelines and FDA-approved product labeling recommend against using methadone as a first-line pain therapy, one would expect that the rate of methadone prescribing would be no higher than that of alternative first-line therapies such as fentanyl and extended-release or long-acting formulations of morphine and oxycodone. However, this research found that in some states the use of methadone as a component of long-acting and extended-release opioids is higher than that of alternative pain therapies.

In response, CDC and the Centers for Medicare & Medicaid Services (CMS) urged states to, where applicable, remove methadone for the treatment of pain from their respective Medicaid preferred drug lists (PDL). Preferred status is a designation by which states encourage the use of a drug for a specific disease or condition.<sup>10</sup> Prior to these removal efforts, many Medicaid programs had designated methadone as a first-line therapy for the treatment of pain, likely due to the drug's effectiveness and availability as a low-cost generic product. Recently, however, **many Medicaid fee for service (FFS) programs have taken actions**, such as removing methadone from the PDL, to address safety concerns.<sup>11</sup> (The strategies Medicaid programs use to reduce the risk of harm associated with the use of methadone and other opioids are described in "Understanding Prescribing Rates," Page 3.)

This report seeks to examine whether prescribing rates for methadone for the treatment of pain have changed between 2013 and 2016 across public and private payers and between Medicaid FFS programs with different PDL designations. The report examines data from IQVIA PayerTrak, which aggregates dispensing information from retail pharmacies, to probe the following questions:

- How does the use of methadone for the treatment of pain compare across payers—including commercial, Medicare, and Medicaid—and how has this use changed between 2013 and 2016?
- Does the use of methadone for the treatment of pain differ as a proportion of long-acting or extended-release opioids between Medicaid FFS and managed care programs?
- To what extent is there variation among state Medicaid FFS programs in the use of methadone for pain?
- What was the status of methadone for pain on Medicaid FFS PDLs as of December 2016, and are there differences in prescribing based on changes in status between 2013 and 2016?

Key findings show that between 2013 and 2016:

- Nationally, across all payers, there was a 26 percent reduction in the total number of methadone pain prescriptions.
- Such prescriptions accounted for an average of 35 percent of long-acting and extended-release opioid prescriptions in Medicaid—including both managed care and FFS programs—14 and 12 percentage points higher than the average for commercial plans and Medicare, respectively.
- The use of methadone for pain as a percent of long-acting and extended-release opioids has decreased more rapidly in Medicaid FFS than in Medicaid managed care. Methadone as a percent of long-acting and extended-release opioids was, on average, 13 percentage points higher in Medicaid managed care than in FFS. In 2016 alone, methadone accounted for 21 percent of extended-release and long-acting opioids in Medicaid FFS, compared with 36 percent among managed care.
- The use of methadone for the treatment of pain—as a percent of long-acting and extended-release opioids—declined by 11 percentage points in Medicaid FFS programs. Medicaid managed care, Medicare, and commercial payers saw 7, 2, and 1.5 percentage point reductions in prescribing, respectively.
- Medicaid FFS programs that changed the PDL status of methadone to non-preferred for the treatment of pain had an 18.7 percentage point decrease in the prescribing of methadone for pain as a component of all long-acting and extended-release opioids during the study period, compared with a roughly 7 percentage point decrease in the group of states that listed methadone as preferred, had no PDL, or did not address the drug's status on the PDL.

## Understanding Prescribing Rates

The focus of this report is to describe prescribing rates of methadone as a component of alternative long-acting and extended-release opioids used to treat pain in clinical settings across different payer groups. Prescribing rates include prescriptions dispensed in retail pharmacy settings and do not include the use of methadone in outpatient facilities for the treatment of substance use disorders. Rates are reported as a percentage of long-acting and extended-release therapies; therefore, a high percentage does not necessarily mean that a state has a high volume of methadone pain prescriptions. Raw prescribing rates are included in Appendix A.

The long-acting and extended-release prescription opioids included in this analysis are methadone and recommended alternative therapies: fentanyl and extended-release or long-acting formulations of morphine and oxycodone. Solution, lozenge, buccal, or other formulations of these drugs used primarily for cancer-related pain or hospice treatment have been excluded from this analysis. This analysis provides an overview of methadone for pain prescribing across payer groups at the national and state level. However, where the report examines PDL status, the information is only for prescriptions paid for by Medicaid FFS programs.

## Methodology

Data on prescribing rates from January 2013 through December 2016 were obtained from the IQVIA PayerTrak data set—a resource commonly used to analyze the prescribing of medications. The data are based on information from a sample of approximately 50,000 pharmacies, which dispense almost 90 percent of the retail prescriptions in the United States. Prescriptions reported in the PayerTrak data set are captured at the pharmacy point-of-sale terminal for national chain pharmacies, grocery stores with pharmacies, and regional and independent pharmacies. IQVIA calculates projections for the remaining 10 percent of pharmacies utilizing a patented methodology. Owing to this use of projections, the prescribing rates reported in PayerTrak's data set may be higher or lower than those obtained by other methods of calculating the number of prescriptions of methadone for the treatment of pain. For example, using Medicaid claims data would also capture prescriptions dispensed by federally qualified health centers and other non-retail pharmacy settings that are not reported in the PayerTrak data set. Medicaid claims data may also include prescriptions for methadone used for the treatment of substance use disorders. The use of PayerTrak data facilitates cross-payer comparisons, allowing national analysis of prescribing.

This report does not examine the use of methadone for the treatment of pain as a percentage of all opioid prescriptions. Instead, opioid prescriptions in this analysis include only methadone and comparable alternatives for the treatment of pain, such as fentanyl and extended-release or long-acting formulations of morphine and oxycodone.<sup>12</sup> To ensure that only comparable drugs were included, solution, lozenge, buccal, or other formulations of all drugs used primarily for cancer-related pain or hospice treatment have been excluded from this analysis. The data do not include mail order or long-term care prescriptions. Lastly, the data set does not allow for the analysis of information on indications, dose, or duration. These criteria should be considered in future analyses to increase knowledge about the clinical use of methadone for pain.

The data set includes prescriptions paid for by commercial insurance, Medicaid, Medicare, or out-of-pocket payment. While this study compares the use of methadone for the treatment of pain across payers, there may be underlying factors that differ across payers, such as population demographics and characteristics, which also affect the use of this drug. The data set does not provide information to control for these confounding factors. In addition, data are reported as the number of prescriptions dispensed and do not include information on the dose, number of units included in each prescription, or duration of therapy for individual patients. This is a limitation of this study. To guide implementation of pharmacy benefit management strategies, states should examine their methadone prescribing rates as a proportion of comparable long-acting and extended-release opioids in the context of the characteristics of their Medicaid FFS and managed care populations and with additional information on the dose and duration of prescriptions.

The status of methadone on Medicaid FFS PDLs as of December 2016 was determined by accessing Medicaid PDLs online. In addition, Pew contacted each Medicaid agency via email to confirm the status of methadone for pain on its PDL at that point in time. Forty-seven of 51 Medicaid programs responded; the authors assumed the PDL status designation was correct for the four Medicaid programs that did not respond to the initial and two follow-up requests.

Medicaid FFS programs that removed methadone's preferred designation for the treatment of pain did so at different times. Consequently, the timing of any changes in prescribing resulting from the PDL change vary by state. In the absence of an established relationship between PDL change and prescribing, or an anticipated timeline for such effect, this analysis includes states in the "change" group if they removed methadone's preferred designation for the treatment of pain between Jan. 1, 2014, and Jan. 1, 2016. Programs that removed the preferred designation after Jan. 1, 2016, are categorized as "preferred" for this analysis, given the expected delay in effects, if any, that may be associated with that change. Table 1 notes the PDL status for each state, date of last change, and whether the state was classified as preferred for the purposes of this analysis.

## National trends in prescribing of methadone for pain

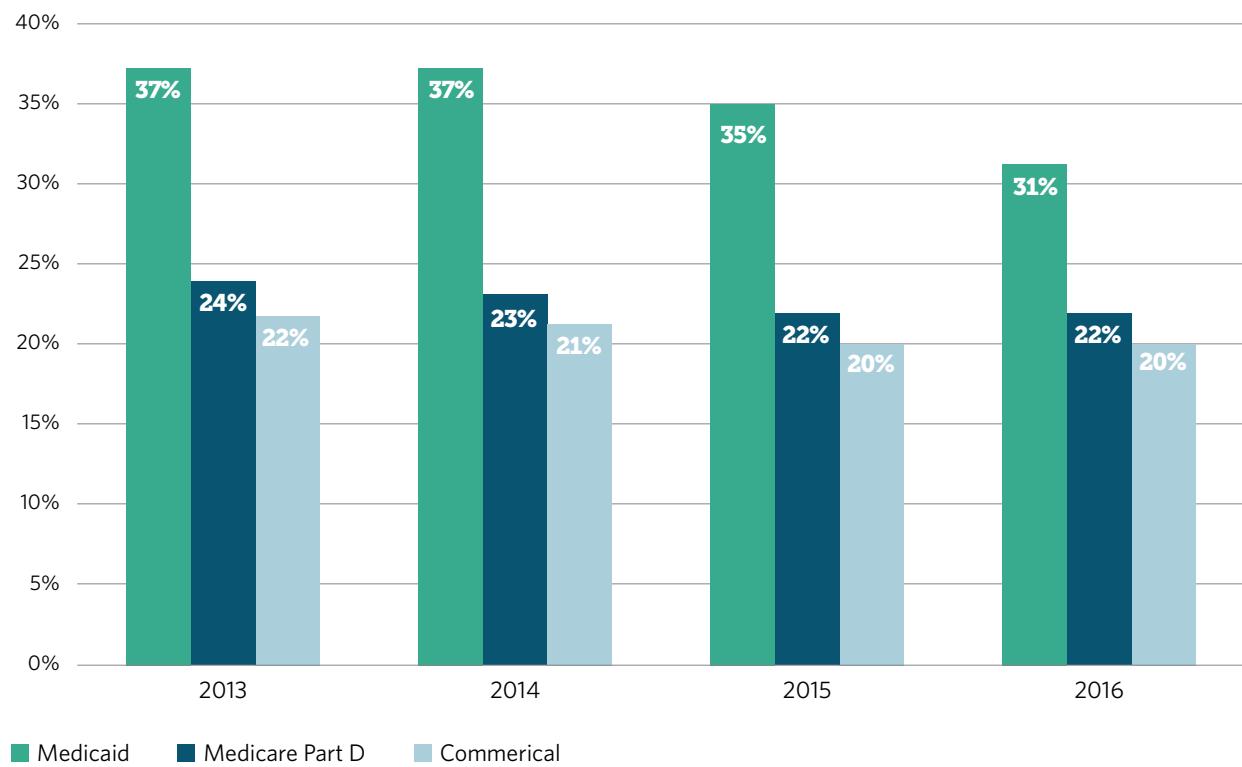
### Prescribing rates as a component of long-acting and extended-release opioids, by payer

Among all payers, there was a 26 percent reduction in the total number of methadone prescriptions for pain from 2013 to 2016. This decline was consistent with trends described in an earlier study.<sup>13</sup> Concurrently, the prescribing of opioids overall also declined over this same time period, with the total number of long-acting and extended-release opioid pain prescriptions decreasing by roughly 18 percent. As a result, there was only a 3 percentage point reduction (from 26 percent to 23 percent) in the use of methadone for the treatment of pain as a percent of long-acting and extended-release opioids for all payers during this time.

Among all payers, use of methadone for the treatment of pain as a component of long-acting and extended-release opioid prescriptions was highest in Medicaid. In 2016, methadone accounted for 31 percent of long-acting and extended-release opioid prescriptions in Medicaid, but just 22 percent and 20 percent in Medicare and commercial insurance, respectively. This represents a decrease from 2013, when methadone comprised 37 percent of all long-acting and extended-release opioid prescriptions for Medicaid beneficiaries, 24 percent of Medicare prescriptions, and 22 percent of commercial prescriptions. From 2013 to 2016, methadone pain prescriptions as a proportion of all long-acting and extended-release opioids were, on average, 12 percentage points higher in Medicaid—including both FFS and managed care—than in other payers.

Figure 1

## Prescriptions for Methadone as a Percentage of Long-Acting Opioids for Pain, National Prescribing, 2013-16\*



\* Percentages are rounded to the nearest whole number based on standard rounding rules.

Source: Analysis by The Pew Charitable Trusts of data from IQVIA PayerTrak data set

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Greater understanding of the higher rates of use of methadone for the treatment of pain in Medicaid requires an analysis of the respective rates of use in Medicaid FFS and Medicaid managed care. This breakdown is also needed to examine the potential effect that changes to Medicaid PDLs have on prescribing.

### Medicaid FFS versus Medicaid managed care

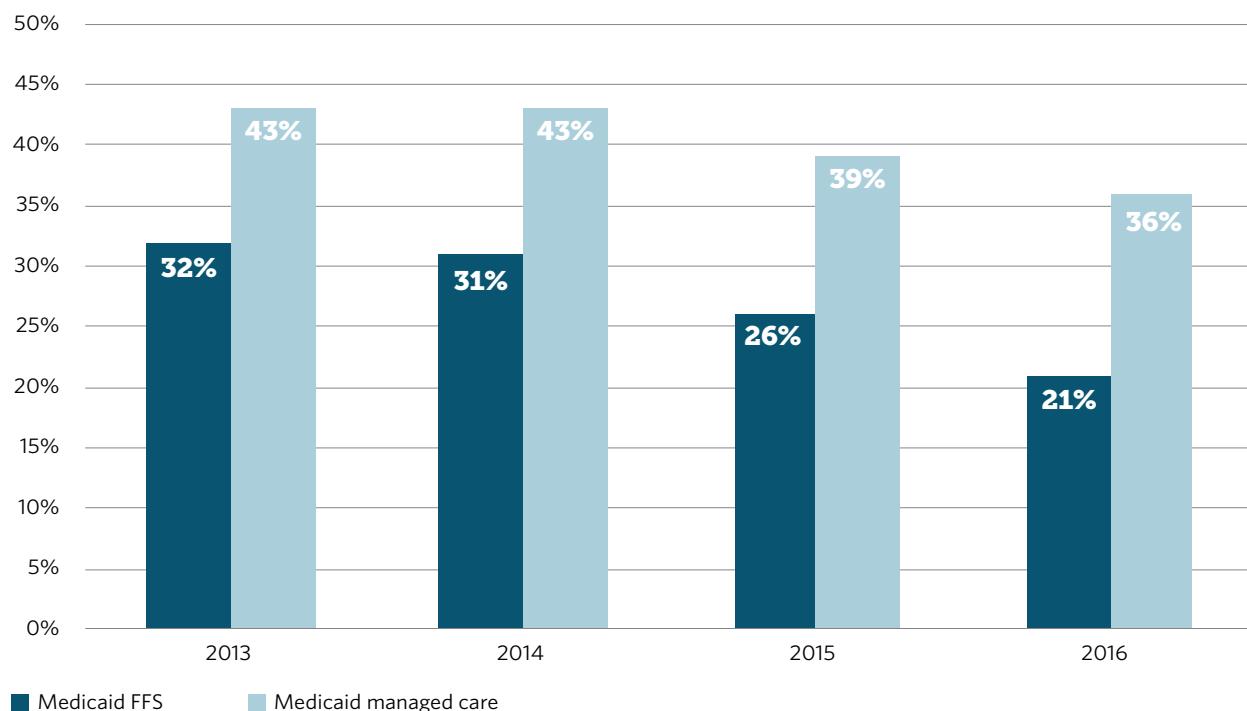
Medicaid beneficiaries may be enrolled in an FFS model or receive care provided through a managed care organization (MCO). Medicaid programs that use an FFS model are responsible for costs in the form of reimbursement to health care providers for each service performed and billed, such as office visits, diagnostic tests, procedures, and prescriptions filled. Managed care programs offer health benefits through contracted arrangements between Medicaid agencies and MCOs that receive a set payment per member per month for all contracted services. Coverage of medications in some states may be carved out and retained by the FFS program. States may have one of these programs or both, and may enroll beneficiaries into one or the other based on a number of criteria, resulting in state-to-state variation in Medicaid FFS and MCO populations.

The proportion of Medicaid beneficiaries in managed care has grown in recent years. In 2016, approximately 69 percent of the nation's 75 million Medicaid beneficiaries were enrolled in managed care, up from 49 percent in 2010.<sup>14</sup> Children and adults are more likely than the elderly and individuals with disabilities to be enrolled in managed care.<sup>15</sup> In addition, the application of pharmacy benefit management strategies—tools used to ensure safe and appropriate medication use—varies between programs.

A breakdown of methadone prescriptions for the treatment of pain by the type of Medicaid program reveals that the drug is prescribed more than long-acting and extended-release alternatives for the treatment of pain in MCO programs as compared with FFS programs. In 2016, methadone accounted for 36 percent of prescriptions for all long-acting and extended-release opioids in the Medicaid managed care population, but just 21 percent of these types of opioid prescriptions in Medicaid FFS. This gap has remained relatively steady over time. Between 2013 and 2016, methadone accounted for, on average, 13 percentage points more of all long-acting and extended-release opioid prescriptions in Medicaid managed care as compared with FFS. In addition, during this time, the proportion of methadone pain prescriptions (as a percentage of all long-acting and extended-release opioids) decreased by 11 percentage points in Medicaid FFS and 7 percentage points in Medicaid managed care. This shows that methadone prescribing compared with alternative long-acting and extended-release opioids is not only lower among Medicaid FFS than managed care, but also decreasing more rapidly.

Figure 2

### Prescriptions for Methadone as a Percentage of Long-Acting Opioids for Pain in Medicaid FFS and MCO Populations, National Prescribing, 2013-16\*



\* Percentages are rounded to the nearest whole number based on standard rounding rules.

Source: Analysis by The Pew Charitable Trusts of data from IQVIA PayerTrak data set

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## Prescribing of methadone for pain in Medicaid FFS

### Preferred drug lists

PDLs are developed by the Medicaid agency's pharmacy and therapeutics committee to aid prescribers in drug therapy selection and determine coverage and prior authorization procedures. Medicaid pharmacy and therapeutics committees recommend preferred and non-preferred statuses based on evidence of a drug's effectiveness, safety, and cost. These committees typically meet at least annually to review new drugs and update the preferred and non-preferred drug lists, with some states meeting as often as monthly.

States may also employ a formulary approach instead of a traditional PDL. A formulary format allows a prescriber to look up any drug to acquire information on its coverage status, such as whether prior authorization is needed. Inclusion of a drug on a formulary does not necessarily imply that the drug is preferred. For the purpose of this report, states that use a formulary approach were categorized by the level of prior authorization required to prescribe methadone for the treatment of pain.

Drugs with a PDL designation do not require prior authorization. In most states, prior authorization is required for drugs that are not on the PDL or that are listed as non-preferred. Prior authorization represents an additional step prescribers must take to ensure appropriate use of the medication.

In January 2016, the CMS released an informational bulletin urging states to remove methadone for the treatment of pain from their PDL, with the exception of end-of-life care.<sup>16</sup> In addition to PDL status, the CMS recommends other pharmacy benefit management strategies to reduce the risk of harm associated with the use of methadone for the treatment of pain, such as step therapy and prior authorization.<sup>17</sup>

### Other Pharmacy Benefit Management Strategies

- **Provider education** – Interventions intended to increase prescriber awareness of appropriate prescribing. For example, education or training for health care professionals and the distribution of clinical guidelines.
- **Clinical criteria** – Parameters for appropriate prescribing based on a patient's clinical characteristics. For example, requiring a specific diagnosis for a claim to be paid.
- **Step therapy** – A requirement that a patient try and fail another medication before authorizing payment for a drug.
- **Prior authorization** – An approval prescribers must obtain from the insurer prior to a prescription being authorized for payment.
- **Quantity limits** – Restrictions on the dose or duration of time for which a medication may be prescribed before the patient must be reassessed by the prescriber.

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- **Drug utilization review** – A process that insurers use to examine a patient’s prescription claims with the goal of optimizing care and reducing harm, fraud, waste, and misuse across the patient population.
- **Prescription drug monitoring programs (PDMPs)** – State-based electronic databases that contain information on controlled substance prescriptions dispensed by pharmacies and prescribers that can be used to identify and restrict controlled substance prescriptions obtained via another insurer or cash payments.
- **Patient review and restriction programs (PRRs)** – PRRs assign individuals identified as being at high risk for opioid misuse or harm to a designated pharmacy, or a designated prescriber and pharmacy, to obtain all future prescriptions for these drugs.

## PDL status and prescribing trends in Medicaid FFS programs

In order to examine the potential effect that PDL status has on methadone for pain prescribing rates, the remainder of this report will analyze only those prescriptions paid for by Medicaid FFS programs. Methadone for pain prescriptions paid for by Medicaid managed care programs are not examined here, as the drug utilization management strategies and decisions surrounding these strategies vary by MCO contract.

To compare trends in the use of methadone for pain in Medicaid FFS programs by PDL status, states are grouped as follows:

- Preferred status: Twenty programs are in this group, which includes seven Medicaid programs<sup>18</sup> that had methadone for pain as a preferred drug on their PDL between 2013 and 2016 and an additional 13 states that changed their PDL status after Jan. 1, 2016.<sup>19</sup> Those 13 states are included in this group because a change in the prescribing rate, should one exist, is unlikely to have been affected by the PDL change given the short duration of time since the change in PDL status.
- Changed to non-preferred: Nine Medicaid programs<sup>20</sup> changed the status of methadone for pain to non-preferred between Jan. 1, 2014, and Jan. 1, 2016.
- Non-preferred or not on the PDL: Nineteen Medicaid programs are included in this group.<sup>21</sup>
- No PDL: Two Medicaid programs<sup>22</sup> do not use a PDL.

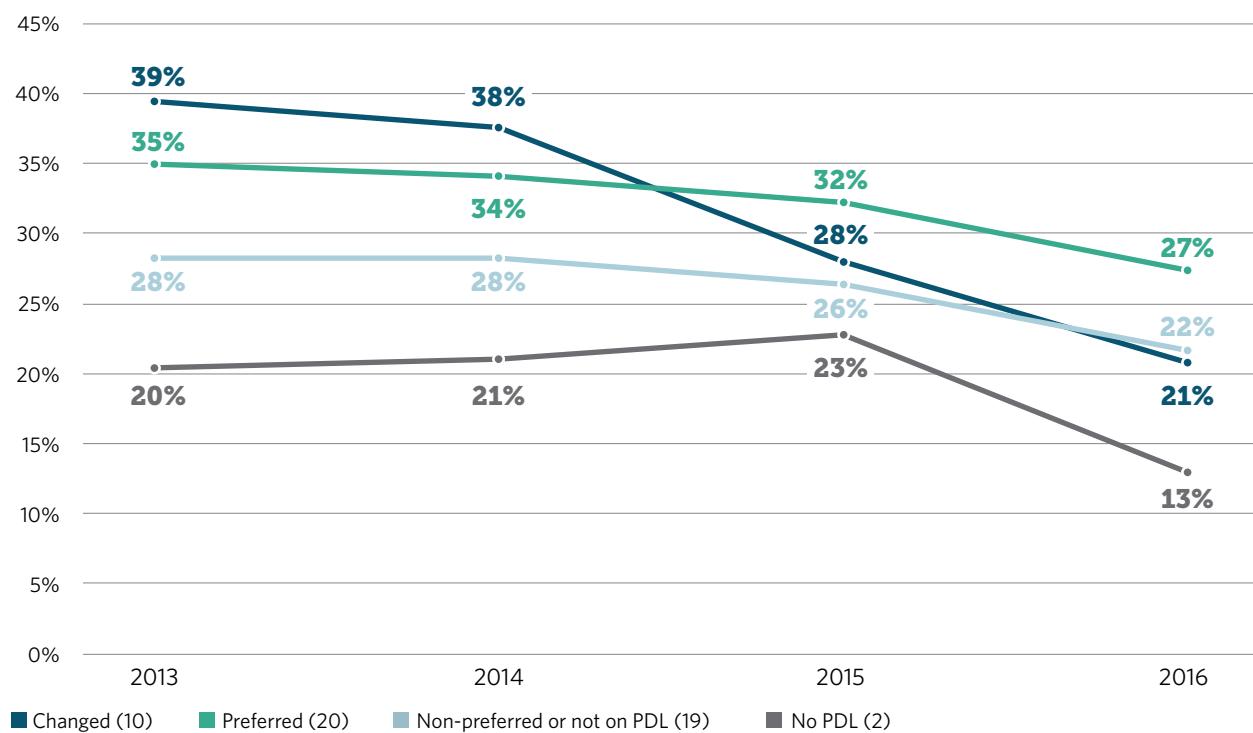
The percent of methadone for pain prescriptions as a proportion of long-acting and extended-release opioids in Medicaid FFS programs in the preferred status group is consistently higher than in programs that do not list methadone as preferred. Between 2013 and 2016, the use of methadone was approximately 6 percentage points higher for preferred status states.

While there was a decrease in the use of methadone for pain as a percentage of long-acting and extended-release opioids among all groups, the decrease was greatest among states that changed their PDL designation from preferred to non-preferred. States that changed methadone from a preferred to a non-preferred drug

between January 2014 and January 2016 saw an 18.7 percentage point decrease in prescribing as a percent of long-acting opioids between 2013 and 2016. States with a consistent designation of non-preferred or not on the PDL, preferred, or no PDL decreased by roughly 7 percentage points between 2013 and 2016.

**Figure 3**

### Average Prescribing of Methadone as a Percentage of Long-Acting Opioids, by Medicaid FFS PDL Status, 2013-16\*



\* Percentages are rounded to the nearest whole number based on standard rounding rules.

Source: Analysis by The Pew Charitable Trusts of data from IQVIA PayerTrak data set

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Table 1 shows state-specific data on methadone prescribing as a percentage of all long-acting and extended-release opioid prescriptions for pain among Medicaid FFS beneficiaries from 2013 to 2016. Data are derived from the IQVIA PayerTrak data set and are not representative of Medicaid claims data, as described earlier in this report. The status of methadone on each Medicaid FFS PDL as of December 2016 and, where relevant, the date of the most recent PDL status change is also provided.

Given that methadone is not recommended as a first-line therapy for pain, it likely should not represent the largest component of prescribing among comparable pain medications. Yet in this analysis, methadone for pain accounted for roughly a third or more of long-acting and extended-release opioid prescriptions in 12 Medicaid FFS programs in 2016. This does, however, represent an improvement from 2013, when methadone was more than one-third of the long-acting and extended-release opioid prescriptions dispensed in 21 states. While use of methadone for pain remains higher than would be expected in some states, it has improved among Medicaid FFS programs overall.

The percentages in the table below reflect the use of methadone as compared with alternative long-acting and extended-release opioids; therefore, a high percentage does not necessarily mean a state has a high volume of methadone pain prescriptions. For example, in 2016, methadone accounted for roughly 25 percent of long-acting opioid prescriptions in one Medicaid FFS program; however, that state had only 75 total methadone prescriptions for Medicaid FFS beneficiaries. Conversely, methadone accounted for roughly 16 percent of long-acting and extended-release opioid prescriptions in another Medicaid FFS program for which there were almost 8,000 methadone prescriptions for Medicaid FFS beneficiaries in 2016. In 2016, the average number of methadone pain prescriptions per Medicaid FFS program was 1,577, down from 3,518 in 2013.

**Table 1**  
**FFS Methadone PDL Status and Changes by State**

State	2013	2014	2015	2016	Coding for Analysis	PDL Status as of 12/16	Date and Type of PDL Change
<b>Alabama</b>	32.8%	28.3%	21.4%	18.9%	Preferred	Non-preferred	Changed to non-preferred on July 1, 2016
<b>Alaska</b>	27.5%	19.4%	22.8%	21.3%	Changed	Non-preferred	Changed to non-preferred on Aug. 8, 2014
<b>Arizona</b>	36.3%	30.9%	34.3%	32.5%	Preferred	Preferred	
<b>Arkansas</b>	71.6%	70.5%	70%	49.7%	Preferred	Non-preferred	Changed to non-preferred on May 9, 2016
<b>California</b>	38.2%	40.5%	39%	28%	Preferred	Non-preferred	Changed to non-preferred on June 30, 2016
<b>Colorado</b>	25.8%	27.7%	24.5%	25.1%	Preferred	Preferred	
<b>Connecticut</b>	15.6%	14.4%	13.4%	15.8%	Preferred	Preferred	
<b>Delaware</b>	16.4%	18.4%	30%	24.4%	Non-preferred or not on PDL	Not on the PDL	
<b>District of Columbia</b>	21%	23.5%	17.5%	11.8%	Non-preferred or not on PDL	Not on the PDL	
<b>Florida</b>	42.3%	39.3%	23.8%	8.2%	Non-preferred or not on PDL	Not on the PDL	
<b>Georgia</b>	39.7%	38.7%	35%	32.9%	Preferred	Preferred	
<b>Hawaii</b>	18.3%	26.2%	40.4%	45.9%	Non-preferred or not on PDL	Not on the PDL	
<b>Idaho</b>	44%	44.7%	41.7%	38.1%	Changed	Non-preferred	Changed to non-preferred in October 2015
<b>Illinois</b>	27.6%	26.4%	25.3%	18.6%	Preferred	Non-preferred	Changed to non-preferred on April 5, 2016

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<b>State</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Coding for Analysis</b>	<b>PDL Status as of 12/16</b>	<b>Date and Type of PDL Change</b>
<b>Indiana</b>	49.5%	44.9%	35.9%	20.9%	Changed	Non-preferred	Changed to non-preferred on Oct. 1, 2014
<b>Iowa</b>	31.8%	38.4%	38%	33.2%	Preferred	Preferred	Changed to non-preferred on June 1, 2017
<b>Kansas</b>	13.1%	21.9%	17%	12.7%	Non-preferred or not on PDL	Not on the PDL	
<b>Kentucky</b>	62.4%	67.4%	21.8%	17%	Changed	Not on the PDL	Removed from PDL in June 2015
<b>Louisiana</b>	21.9%	23.7%	19.4%	14.6%	Non-preferred or not on PDL	Not on the PDL	
<b>Maine</b>	40.3%	44.2%	51.2%	54.1%	Preferred	Non-preferred	Changed to non-preferred on June 23, 2016
<b>Maryland</b>	36.3%	38.3%	29.9%	25%	Preferred	Non-preferred	Changed to non-preferred on July 1, 2016
<b>Massachusetts</b>	56.8%	48.8%	47.4%	39.3%	Preferred	No PDL	Prior authorization effective March 2016
<b>Michigan</b>	44.8%	49%	45.2%	17.2%	Non-preferred or not on PDL	Non-preferred	
<b>Minnesota</b>	29.1%	27.9%	24.1%	21.2%	Non-preferred or not on PDL	Non-preferred	
<b>Mississippi</b>	14.4%	14.9%	15.8%	3.4%	Changed	Non-preferred	Changed to non-preferred on Oct. 1, 2015
<b>Missouri</b>	15.9%	15.9%	13.6%	13.9%	Non-preferred or not on PDL	Not on the PDL	
<b>Montana</b>	30.9%	26%	25.3%	24.1%	Non-preferred or not on PDL	Not on the PDL	
<b>Nebraska</b>	22.2%	21.5%	20.6%	18.9%	Preferred	Non-preferred	Changed to non-preferred on Oct. 1, 2016
<b>Nevada</b>	52.8%	53.1%	50.3%	42.6%	Non-preferred or not on PDL	Non-preferred	Changed to non-preferred on Aug. 24, 2012
<b>New Hampshire</b>	40.9%	47.5%	37.9%	39.2%	Non-preferred or not on PDL	Not on the PDL	Prior authorization added on Aug. 15, 2016
<b>New Jersey</b>	10%	12.6%	10.7%	8.8%	Preferred	No PDL	
<b>New Mexico</b>	21.7%	42.1%	31.2%	20%	Preferred	No PDL	
<b>New York</b>	28.9%	27.1%	22.7%	22.8%	Non-preferred or not on PDL	Not on the PDL	
<b>North Carolina</b>	24.5%	22.2%	19.6%	16.3%	Non-preferred or not on PDL	Not on the PDL	

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<b>State</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Coding for Analysis</b>	<b>PDL Status as of 12/16</b>	<b>Date and Type of PDL Change</b>
<b>North Dakota</b>	22%	19.8%	20.1%	12.9%	No PDL	No PDL	
<b>Ohio</b>	28.4%	30.1%	27.4%	30.9%	Non-preferred or not on PDL	Not on the PDL	
<b>Oklahoma</b>	18.5%	17.4%	14.2%	10.2%	Preferred	No PDL	Prior authorization added in Jan. 2017
<b>Oregon</b>	46.9%	28.8%	35.7%	29.8%	Non-preferred or not on PDL	Not on the PDL	Removed from PDL in July 2013
<b>Pennsylvania</b>	30.8%	31.7%	20%	16.3%	Changed	Non-preferred	Changed to non-preferred on July 20, 2015
<b>Rhode Island</b>	54.5%	24.1%	30%	23.3%	Preferred	Preferred	
<b>South Carolina</b>	25.8%	21%	20.9%	17.3%	Non-preferred or not on PDL	Not on the PDL	
<b>South Dakota</b>	18.8%	22.2%	25.3%	13.1%	No PDL	No PDL	
<b>Tennessee</b>	6.6%	5.7%	3.1%	0.8%	Non-preferred or not on PDL	Non-preferred	Changed to non-preferred in 2008
<b>Texas</b>	28.5%	29%	26.4%	19%	Non-preferred or not on PDL	Not on the PDL	Changed to non-preferred in July 2017
<b>Utah</b>	43.4%	39.5%	40.6%	14.4%	Changed	Non-preferred	Changed to non-preferred on Jan. 1, 2016
<b>Vermont</b>	55.9%	50%	44.6%	47.2%	Changed	Non-preferred	Changed to non-preferred on July 8, 2014
<b>Virginia</b>	25.3%	23.7%	20.4%	18.3%	Preferred	Non-preferred	Changed to non-preferred on July 1, 2016
<b>Washington</b>	60%	63.1%	59.6%	51.4%	Preferred	Non-preferred	Changed to non-preferred on May 1, 2016
<b>West Virginia</b>	32%	19.2%	13.5%	14.1%	Changed	Non-preferred	Changed to non-preferred on Jan. 1, 2014
<b>Wisconsin</b>	32.8%	31.3%	28.6%	23.7%	Preferred	Non-preferred	Changed to non-preferred on May 1, 2016
<b>Wyoming</b>	23%	26.2%	17.9%	15.4%	Changed	Non-preferred	Changed to non-preferred on Dec. 2, 2015
<b>United States</b>	<b>31.9%</b>	<b>30.7%</b>	<b>26.3%</b>	<b>20.8%</b>			

Source: Pew analysis of IQVIA PayerTrak data set and outreach to state Medicaid programs to determine PDL status

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## **Conclusion**

By examining methadone for the treatment of pain as a percent of long-acting and extended-release opioid prescriptions, this report isolates the use of the drug compared with known alternatives among different payers between 2013 and 2016.

Consistent with earlier research, methadone pain prescriptions were higher among public payers than commercial ones.<sup>23</sup> In this analysis, higher rates of use (as a component of long-acting and extended-release opioids) in Medicaid managed care was a primary driver of this trend. However, further analysis is needed to determine whether this higher rate of prescribing was due to a shift toward providing care to Medicaid beneficiaries via managed care, including whether patients with more complex pain conditions may be overrepresented in these plans.

Medicaid FFS programs made progress in reducing the use of methadone for pain. Specifically, those that removed the preferred designation for methadone experienced the greatest reduction in the use of the drug for pain compared with alternatives. This reduction is consistent with findings from an earlier study showing that efforts aimed at reducing patient risk associated with the use of methadone for pain have resulted in decreased prescribing of the drug.<sup>24</sup> In light of the association between removing the preferred designation and a decrease in the rate of methadone prescribing for pain, insurers should consider employing this and other pharmacy benefit management strategies that promote safer use of methadone for pain.

## Appendix A: Number of Medicaid FFS Prescriptions for Methadone for the Treatment of Pain, by State, 2013-16

State	2013	2014	2015	2016	State	2013	2014	2015	2016
Alabama	3,286	2,483	1,808	1,471	Montana	1,409	1,148	1,110	1,208
Alaska	1,114	692	774	888	Nebraska	1,904	1,744	1,611	1,345
Arizona	290	205	320	236	Nevada	3,161	2,845	2,755	2,109
Arkansas	2,900	3,492	3,576	2,153	New Hampshire	3,137	1,235	484	395
California	13,666	7,434	4,362	2,207	New Jersey	730	324	188	107
Colorado	5,272	7,114	6,977	5,991	New Mexico	151	181	174	81
Connecticut	4,243	4,513	4,078	3,813	New York	4,822	3,892	3,003	2,584
Delaware	2,115	2,085	101	75	North Carolina	10,813	9,004	7,892	7,914
District of Columbia	306	342	210	92	North Dakota	451	328	329	129
Florida	10,496	5,596	981	294	Ohio	3,438	2,768	1,858	1,377
Georgia	7,099	7,081	5,540	5,039	Oklahoma	2,613	2,408	2,054	1,548
Hawaii	39	54	61	67	Oregon	1,407	623	531	351
Idaho	3,386	3,363	2,908	2,125	Pennsylvania	2,560	1,538	465	306
Illinois	4,820	4,130	2,543	1,220	Rhode Island	868	204	218	84
Indiana	14,747	11,030	3,382	496	South Carolina	1,821	582	520	381
Iowa	1,963	2,549	2,876	799	South Dakota	634	689	749	357
Kansas	454	775	632	451	Tennessee	1,048	741	478	317
Kentucky	2,603	3,368	321	187	Texas	1,531	1,495	833	520
Louisiana	1,106	951	185	63	Utah	1,372	1,211	1,072	180
Maine	4,425	7,316	5,972	6,370	Vermont	4,925	4,970	3,092	3,146
Maryland	1,158	1,060	940	474	Virginia	1,224	891	373	365
Massachusetts	9,584	9,065	5,496	3,838	Washington	5,874	4,244	3,010	1,850
Michigan	3,513	3,742	2,755	589	West Virginia	2,269	1,445	851	499
Minnesota	2,344	2,132	1,334	939	Wisconsin	14,523	14,482	12,882	9,011
Mississippi	253	279	255	55	Wyoming	395	462	276	209
Missouri	5,140	4,873	4,148	4,109	United States	179,402	155,178	109,343	80,414

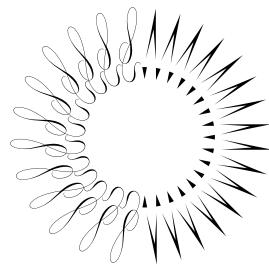
Source: Pew analysis of IQVIA PayerTrak data set

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## Endnotes

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- 18 Arizona, Colorado, Connecticut, Georgia, New Jersey (no prior authorization, but reviewed by Medical Exception Process pain management team), New Mexico (does not have a traditional PDL but does not require prior authorization for methadone for the treatment of pain), and Rhode Island.
- 19 Alabama (changed July 1, 2016), Arkansas (changed May 9, 2016), California (changed June 30, 2016), Illinois (changed April 5, 2016), Iowa (changed to non-preferred June 1, 2017), Maryland (changed July 1, 2016), Maine (changed June 23, 2016), Massachusetts (does not use a traditional PDL but added prior authorization in March 2016), Nebraska (changed Oct. 1, 2016), Oklahoma (not a true PDL, Oklahoma uses a tiered system; methadone for the treatment of pain was moved to tier 3, requiring prior authorization, in January 2017), Virginia (changed July 1, 2016), Washington (changed May 1, 2016), and Wisconsin (changed March 1, 2016).
- 20 Alaska, Idaho, Indiana, Kentucky, Mississippi, Pennsylvania, Utah, Vermont, West Virginia, and Wyoming.
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