



Questionable Billing and Geographic Hotspots Point to Potential Fraud and Abuse in Medicare Part D

Key Takeaways:

- ✓ *Since 2006, Medicare spending for commonly abused opioids has grown faster than spending for all Part D drugs*
- ✓ *Pharmacies with questionable billing raise concerns about pharmacy-related fraud schemes*
- ✓ *Geographic hotspots for certain noncontrolled drugs point to possible fraud and abuse*
- ✓ *These patterns demonstrate that more needs to be done to address fraud and abuse in Part D*

Prescription drug abuse is a growing problem in this country. In 2011, the Centers for Disease Control and Prevention (CDC) declared prescription drug abuse an epidemic.¹ That year alone, over 1.4 million emergency department visits were caused by improper use of pharmaceuticals.² In 2012, over 700,000 inpatient hospital stays were related to the overuse of opioids.³ Opioids have a potential for abuse and are controlled substances.⁴

Drug diversion—the redirection of prescription drugs for an illegal purpose—is another serious problem. Examples of drug diversion include the use of drugs for recreational purposes or the illegal resale of drugs. Although the diversion of controlled substances is of particular concern, the diversion of noncontrolled substances is becoming more common and fraud related to these drugs can present a significant financial loss to Medicare.⁵ Examples of noncontrolled substances include respiratory and antipsychotic medications.

Medicare Part D is the optional prescription drug benefit for Medicare beneficiaries. In 2013, over 39 million beneficiaries were enrolled in the program.⁶ Private companies, known as plan sponsors, contract with the Centers for Medicare & Medicaid Services (CMS) to provide this benefit to beneficiaries who choose to enroll. CMS relies on these plan sponsors to be the first line of defense against fraud, waste, and abuse in Part D. Among other things, plan sponsors are responsible for monitoring pharmacies. CMS also uses a contractor—the Medicare Drug Integrity Contractor (MEDIC)—to detect and prevent fraud, waste, and abuse in Part D.

Since the Part D program went into effect in 2006, the Office of Inspector General (OIG) has had ongoing concerns about abuse and diversion of Part D drugs. OIG reviews have revealed questionable billing associated with pharmacies, prescribers, and beneficiaries involving both controlled and noncontrolled substances.⁷ These reviews have also raised concerns about oversight of Part D and made a variety of recommendations to better safeguard the program and protect beneficiaries. A portfolio is being issued in tandem with this data brief, providing a summary of OIG's body of work as well as an update on CMS's efforts to address the weaknesses in Part D program integrity that OIG has identified.

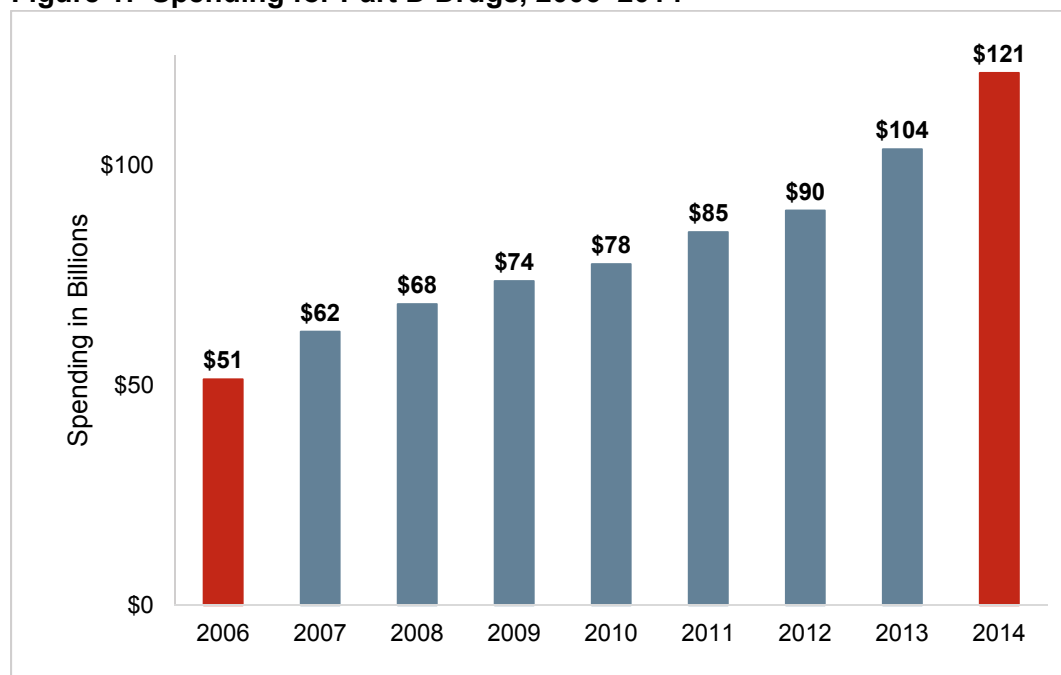
This data brief highlights issues related to fraud and abuse that continue to exist in Part D. It describes trends in spending for Part D drugs from 2006 to 2014 and looks in more depth at 2014 data to identify pharmacies with questionable billing. It also identifies geographic hotspots for specific drugs that are vulnerable to fraud and abuse. CMS has made progress in its program integrity effort; however, the findings presented in this data brief demonstrate that more needs to be done to address fraud and abuse in Part D.

RESULTS

Spending for Part D drugs has more than doubled since 2006

Spending for Part D drugs represents the amount that the Government, beneficiaries, and plan sponsors paid to pharmacies for drugs. From 2006 to 2014, spending for Part D drugs increased by 136 percent, from \$51.3 billion to \$121.1 billion.⁸ (See Figure 1.)

Figure 1: Spending for Part D Drugs, 2006–2014



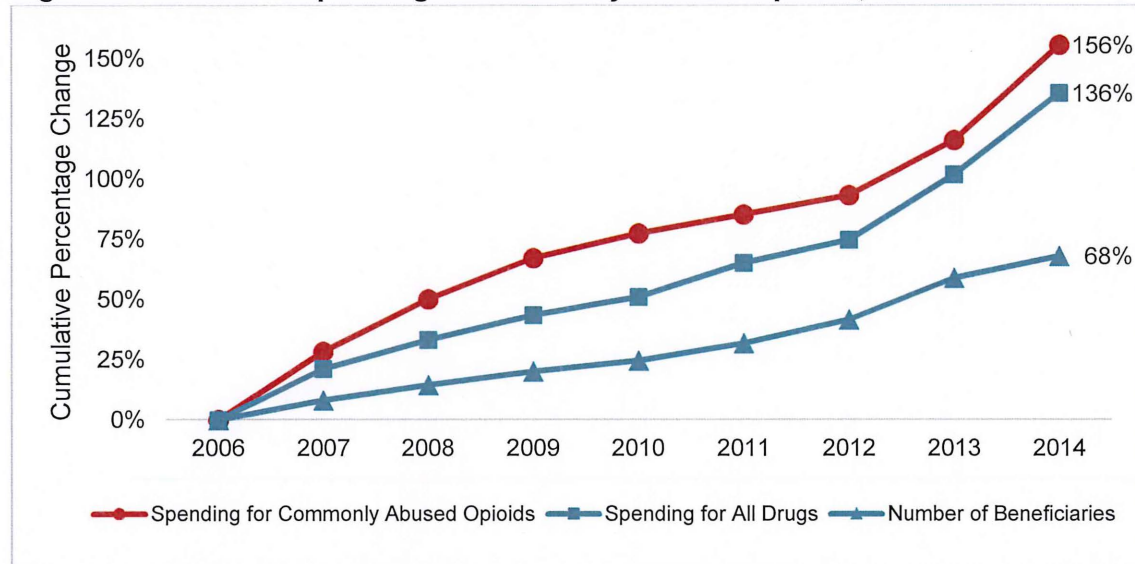
Source: OIG analysis of Medicare Part D data, 2015.

In 2014, \$7.8 billion—or 6 percent of all Part D spending—was for controlled substances. Controlled substances of particular concern are Schedule II and III opioids, hereafter referred to as “commonly abused opioids.”⁹ They are narcotics intended to manage pain from surgery, injury, and illness. They can create a euphoric effect, which makes them very vulnerable to abuse. In 2014, Part D spending for these opioids was highest for OxyContin (the brand-name version of oxycodone), hydrocodone-acetaminophen, fentanyl, and morphine sulfate.

Spending for commonly abused opioids grew at a faster rate than spending for all drugs

Between 2006 and 2014, spending for commonly abused opioids grew from \$1.5 billion to \$3.9 billion, an increase of 156 percent. (See Figure 2.) Growth in spending for these opioids outpaced both the growth in spending for all Part D drugs (which grew 136 percent) and the growth in the number of beneficiaries receiving Part D drugs (which grew 68 percent).

Figure 2: Growth in Spending of Commonly Abused Opioids, 2006–2014



Source: OIG analysis of Medicare Part D data, 2015.

The increase in spending for commonly abused opioids appears to have been driven by an increase both in the number of beneficiaries receiving these opioids and in the average number of prescriptions per beneficiary. Both of these numbers have increased faster for commonly abused opioids than for all drugs. The total number of beneficiaries receiving these opioids grew by 92 percent, compared to 68 percent for all drugs, while the average number of prescriptions for commonly abused opioids per beneficiary grew by 20 percent, compared to 3 percent for all drugs.

Part D spending per beneficiary for commonly abused opioids was highest in Alaska, Oklahoma, and Tennessee. Nationally, Part D spending averaged \$105 per beneficiary for commonly abused opioids in 2014. However, the average in Alaska was 77 percent higher, at \$187 per beneficiary. In Oklahoma and Tennessee, the average was more than \$165 per beneficiary. Spending was also high in other States; in North Carolina, Alabama, and Utah, the average was at least \$140 per beneficiary.

Several of the States with high per-beneficiary Part D spending also had high proportions of beneficiaries receiving commonly abused opioids. Alabama had the highest proportion, with 43 percent of its beneficiaries receiving a commonly abused opioid in 2014. Tennessee and Oklahoma each had 41 percent, while Alaska had 40 percent. Nationwide, 32 percent of beneficiaries received at least one prescription for a commonly abused opioid in 2014.

Pharmacies with questionable billing raise concerns about fraud and abuse in Part D

As spending increases in Part D, so do concerns about program integrity, fraud, and abuse. OIG investigations have identified pharmacy-related fraud schemes in Part D. These schemes include drug diversion, billing for drugs that are not dispensed, and kickbacks.¹⁰ Pharmacy-related fraud schemes often involve commonly abused opioids but can also involve noncontrolled drugs. Such schemes could result in harm to beneficiaries.

One way to identify pharmacies that may be involved in schemes is to evaluate their billing patterns using measures that could indicate potentially fraudulent activity. Previous OIG work developed several such measures. These measures remain important and relevant and are now used by CMS and its contractors in their fraud prevention efforts. This data brief builds on the previous OIG work by developing additional measures and identifying pharmacies that, on the basis of these measures, have questionable billing.¹¹ The measures aim to identify pharmacies that warrant further scrutiny; they do not confirm that a particular pharmacy is engaging in fraudulent or abusive practices.¹²

More than 1,400 pharmacies had questionable billing for Part D drugs in 2014

A total of 1,432 retail pharmacies billed extremely high amounts for at least one of the five measures we reviewed. (See Table 1.) A total of 292 pharmacies billed extremely high amounts for multiple measures. Specifically, 283 pharmacies did so for 2 measures, and 9 did so for 3 measures.

The measures we reviewed involve the number and types of prescriptions billed, as well as the number of prescribers associated with each beneficiary. Although some of this billing may be legitimate, all pharmacies that bill extremely high amounts warrant further scrutiny.

Table 1: Number of Pharmacies with Questionable Billing by Measure, 2014

Measure	National Average	Median	Threshold for Extremely High Amounts	Number of Pharmacies That Billed Extremely High Amounts*
Average number of prescriptions per beneficiary	23	21	62	403
Percentage of prescriptions that were for commonly abused opioids	6%	5%	17%	468
Average number of prescribers for commonly abused opioids per beneficiary who received opioids	2	2	4	216
Average number of types of drugs per beneficiary	6	6	12	314
Percentage of beneficiaries with an excessive supply of a drug	0.5%	0.4%	1.9%	332

*The number of pharmacies with questionable billing—1,432 pharmacies—does not equal the sum of this column, because some pharmacies billed extremely high amounts for more than one measure.

Source: OIG analysis of Medicare Part D data, 2015.

The 1,432 pharmacies represent 2 percent of retail pharmacies nationwide. Together, they billed \$2.3 billion to Part D in 2014. These pharmacies were more likely to be independently owned and to be located in the New York, Miami, Los Angeles, and Detroit areas.¹³ The latter three cities and the Brooklyn area of New York have all been targeted by the Medicare Fraud Strike Force, a partnership in which OIG, other Federal agencies, and State and local agencies work together to fight Medicare fraud.¹⁴

➤ **More than 400 pharmacies billed for extremely high numbers of prescriptions per beneficiary**

A total of 403 pharmacies billed for an extremely high number of prescriptions per beneficiary. Each of these pharmacies averaged at least 62 prescriptions per beneficiary, which is almost 3 times the national average of 23.

Billing for a high number of prescriptions per beneficiary may indicate that a pharmacy is billing for drugs that were not medically necessary or were never provided to the beneficiary.

➤ **Almost 500 pharmacies billed for commonly abused opioids in an extremely high percentage of their prescriptions**

A total of 468 pharmacies billed for commonly abused opioids in an extremely high percentage of their prescriptions. Nationwide, commonly abused opioids accounted for 6 percent of each pharmacy’s prescriptions, on average. However, each of these 468 pharmacies billed for commonly abused opioids in at least 17 percent of its Part D prescriptions—nearly three times the national average. Thirty of these pharmacies billed for commonly abused opioids in over half of their prescriptions. For example, one Detroit-area

pharmacy billed for commonly abused opioids for 93 percent of its beneficiaries, which amounted to 58 percent of all its Part D prescriptions.

Billing for commonly abused opioids in a high percentage of prescriptions may indicate that a pharmacy is billing for medically unnecessary drugs that may be used inappropriately or diverted and resold for a profit. Misuse of these drugs has serious human and financial costs.

➤ **About 200 pharmacies billed for beneficiaries who had an unusually high average number of prescribers for commonly abused opioids**

A total of 216 pharmacies billed for beneficiaries who, on average, had at least 4 prescribers for commonly abused opioids. In comparison, the national average was two prescribers per beneficiary for these drugs.

When beneficiaries have a high number of prescribers for commonly abused opioids it may indicate that they are “doctor shopping,” which is when a beneficiary consults a number of doctors for the purpose of inappropriately obtaining prescriptions.

As noted earlier, these drugs have a very high risk of abuse. If a pharmacy billed for commonly abused opioids for beneficiaries who have high numbers of prescribers, it raises concern that the pharmacy is dispensing drugs that may be medically unnecessary. The drugs may be abused by beneficiaries or resold illegally.

➤ **More than 300 pharmacies billed for a high number of different types of drugs for each beneficiary**

A total of 314 pharmacies billed for a high number of different types of drugs per beneficiary. Each of these pharmacies billed, on average, for more than 12 different types of drugs for each beneficiary in 2014. This was double the national average of six different types of drugs. In one example, a Miami-area pharmacy billed for an average of 23 different drugs for each of its beneficiaries. In total, it billed Medicare Part D almost \$2 million for drugs for just 143 beneficiaries.

Billing for many different kinds of drugs for each beneficiary may indicate that a pharmacy is billing for drugs that were never provided or providing drugs that were medically unnecessary.

➤ **For more than 300 pharmacies, an unusually high proportion of their beneficiaries received an excessive supply of a Part D drug**

A total of 332 pharmacies billed for high proportions of beneficiaries who received excessive supplies of at least one Part D drug in a single year. That is, the beneficiaries each received in a 365-day period enough of a prescription drug to last 500 days or more. Although Medicare allows for beneficiaries to receive extended supplies, such as 90-day supplies, and some early refills, a 500-day supply in a 1-year period is excessive. Some of these drugs were likely medically unnecessary or never provided.

For each of these pharmacies, almost 2 percent of their beneficiaries received an excessive supply of drugs. This is four times the national average. For example, at one

Los Angeles-area pharmacy, 20 percent of the beneficiaries received an excessive supply of one or more drugs. In total, this pharmacy billed Part D \$4.4 million for drugs for just 375 beneficiaries.

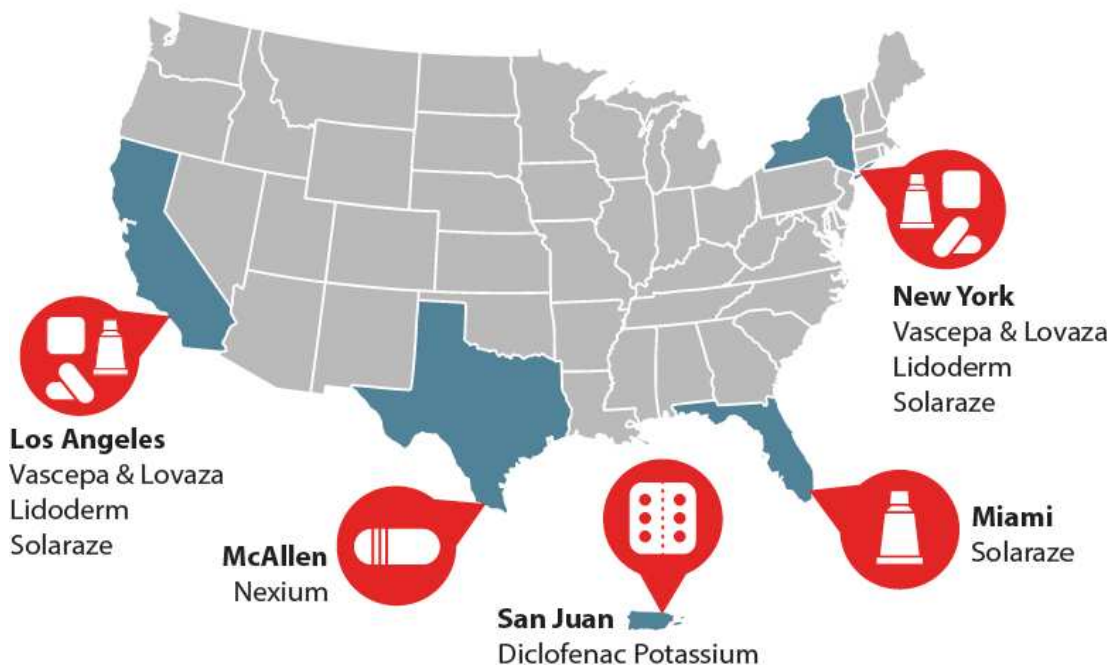
Geographic hotspots for specific drugs point to possible fraud and abuse

Another way to identify potential fraud and abuse in Part D—in addition to looking for individual pharmacies with questionable billing—is to look for geographic hotspots. We define hotspots as metropolitan areas where average Medicare payments per beneficiary for certain drugs are significantly higher than the average payments nationwide. This analysis focused on selected noncontrolled substances that are vulnerable to fraud and abuse. As noted earlier, diversion of noncontrolled substances is growing and fraud related to these types of drugs can result in significant financial losses to Medicare.

The billing patterns in hotspots raise questions about whether these drugs were medically necessary or were actually provided to beneficiaries. Also, because some of these drugs are available as generics or over the counter, there are questions about whether pharmacies are billing for the higher priced brand-name drug but providing a less expensive drug.

Although medical need and prescriber practices may vary across different areas of the country, the patterns in these hotspots warrant further scrutiny, as they may indicate fraud and abuse. Examples of hotspots for certain drugs are shown below.

Figure 3: Examples of Geographic Hotspots for Certain Noncontrolled Drugs



Source: OIG analysis of Medicare Part D data, 2015.

➤ **Diclofenac Potassium in San Juan, Puerto Rico**

The San Juan area in Puerto Rico is a hotspot for diclofenac potassium, a generic anti-inflammatory used for conditions such as rheumatoid arthritis and osteoarthritis. Average Medicare payments per beneficiary for this drug in the San Juan area were 31 times higher than the national average.

A much higher proportion of beneficiaries in San Juan than in the Nation received diclofenac potassium. Eighteen percent of beneficiaries in San Juan (or 1 out of 6 beneficiaries) received this drug in 2014, compared to less than one half of 1 percent of beneficiaries (or 1 out of 250 beneficiaries) nationwide. San Juan accounted for almost one-third, or \$2.4 million, of all Medicare payments for diclofenac potassium in 2014.

➤ **Solaraze in New York, Miami, and Los Angeles**

The New York, Miami, and Los Angeles areas are hotspots for Solaraze, which is a brand-name topical ointment used to treat a skin condition in which lesions form as a result of sun damage. A generic version of this drug is available.

In New York, the average Medicare payment per beneficiary for Solaraze was almost 9 times higher than the national average. In Los Angeles and Miami, the average payments were more than 4 times higher. Together, these three areas accounted for \$11.2 million in Medicare payments for Solaraze, which is three-quarters of all Medicare payments for the drug in 2014. New York alone accounted for half all the payments for Solaraze nationwide.

➤ **Vascepa and Lovaza in Los Angeles and New York**

The Los Angeles and New York areas are hotspots for Vascepa and Lovaza, which are omega-3 fatty acids that are used to help reduce high triglyceride levels. Over-the-counter supplements of omega-3 are available.

For Vascepa, the average Medicare payment per beneficiary was more than 7 times the national average in Los Angeles and almost triple the national average in New York. Medicare paid \$9 million for Vascepa in these two areas, which amounted to 43 percent of all Medicare payments for this drug in 2014.

For Lovaza, the average Medicare payment per beneficiary in both Los Angeles and New York was three times the national average. These two areas accounted for \$96 million in Medicare payments for Lovaza, which is close to one-third of all Medicare payments for the drug in 2014.

➤ **Nexium in McAllen, Texas**

The McAllen area in Texas area is a hotspot for the prescription drug Nexium, which is a proton pump inhibitor used to treat conditions such as gastroesophageal reflux disease. It is also available in an over-the-counter version.

The average Medicare payment per beneficiary for prescription Nexium was four times higher in McAllen than in the Nation as a whole. In addition, 17 percent of beneficiaries in McAllen received prescription Nexium, compared to just 4 percent nationwide. In total, Medicare paid \$20 million for Nexium for beneficiaries in McAllen in 2014.

➤ **Lidoderm in Los Angeles and New York**

The Los Angeles and New York areas are hotspots for Lidoderm, an anesthetic patch that is used to relieve pain caused by shingles.

Average Medicare payments per beneficiary for Lidoderm were four times higher than the national average in Los Angeles and almost three times higher in New York. One-third of Medicare payments for Lidoderm were for beneficiaries in New York and Los Angeles. These two areas accounted for \$113 million in Medicare payments, which is one-third of all Medicare payments for Lidoderm.

CONCLUSION

This data brief shows substantial growth in spending for Part D drugs, especially commonly abused opioids. It also identifies questionable billing by pharmacies that may indicate fraudulent activity. More than 1,400 pharmacies had questionable billing in 2014. These pharmacies each billed for extremely high amounts for one or more of our measures. Although some of this billing may be legitimate, all of these pharmacies warrant further scrutiny. To followup on these pharmacies, OIG will conduct investigations and audits. As appropriate, we will also refer pharmacies to other law enforcement agencies and to CMS.

This data brief also identifies geographic hotspots for certain noncontrolled drugs—i.e., areas where average Medicare payments per beneficiary for these drugs are higher than the average payments nationwide. Although medical necessity and prescribing patterns may vary across different areas of the country, these patterns raise questions about whether these drugs were medically necessary or were provided to beneficiaries. The diversion of noncontrolled substances is becoming more common, and fraud related to these drugs can present a significant financial loss to Medicare.

CMS has made progress in its Part D program integrity efforts. However, the findings in this data brief and previous OIG work demonstrate that more needs to be done to address fraud and abuse. A program as expansive as Part D requires CMS to remain vigilant and to continually develop and refine methods to uncover, address, and prevent fraudulent activity.

OIG is issuing this data brief in tandem with a portfolio—*Ensuring the Integrity of Medicare Part D* (OEI-03-15-00180)—that summarizes OIG’s body of work and provides an update on CMS’s efforts to address the weaknesses in Part D program integrity that OIG has identified. OIG is committed to continuing to conduct investigations of pharmacies with questionable billing when warranted and to monitor pharmacy billing. At the same time, CMS must also use all of the tools at its disposal to more effectively identify and fight fraud, waste, and abuse in Part D. This requires CMS to take action and fully implement OIG’s previous recommendations.

METHODOLOGY

We based this data brief on an analysis of prescription drug event (PDE) records for Part D drugs in 2006 to 2014. Plan sponsors submit a PDE record to CMS for each time a drug is dispensed to a beneficiary enrolled in their plans. Each record contains information about the drug and beneficiary, as well as the identification numbers for the pharmacy and the prescriber.

We matched these records to data from First Databank, Medi-Span, and the National Council of Prescription Drug Programs (NCPDP) to obtain descriptive information about the drugs and pharmacies. First DataBank contains information about each drug, such as the drug name and strength of the drug and the therapeutic class (e.g., an opioid). First DataBank and Medi-Span also indicate whether a drug is a controlled substance and, if so, which schedule the drug is on (i.e., Schedule II or III). The NCPDP contains descriptive information about each pharmacy, including its address and type of pharmacy (e.g., retail).

For the purposes of this study, we use the term “prescription” to mean one PDE record.

Trend Analysis

We identified all PDE records for Part D drugs with dates of service from January 1, 2006, to December 31, 2014. For each year, we calculated the number of beneficiaries who received Part D drugs and the Part D spending for all drugs and for Schedule II and III opioids. To determine total spending we summed four fields on the PDE records that represent the total gross drug costs: ingredient cost, dispensing fee, vaccine administration fees, and sales tax. We also calculated total spending per beneficiary by State, using the beneficiary’s ZIP Code.

Analysis of Retail Pharmacy Billing in 2014

We identified all PDE records dispensed by retail pharmacies for Part D drugs with dates of service from January 1 to December 31, 2014. To determine which PDE records were billed by retail pharmacies, we used the National Provider Identifier (NPI) for each pharmacy and matched the PDE records to the NCPDP database.¹⁵

We developed 5 measures to describe Part D billing and identify retail pharmacies with questionable billing. We developed these measures based on the results of past OIG analysis and fraud investigations of pharmacies.

The measures are:

- 1. Average number of prescriptions per beneficiary**

For each pharmacy, we summed the total number of prescriptions for 2014 and divided it by the total number of beneficiaries who received prescriptions from the pharmacy.

- 2. Percentage of prescriptions that were for commonly abused opioids**

We defined “commonly abused opioids” as opioids that were Schedule II or III controlled substances. For each pharmacy, we divided the total number of prescriptions for commonly abused opioids by the total number of prescriptions for all drugs.

3. **Average number of prescribers for commonly abused opioids per beneficiary**
For each pharmacy, we counted the number of prescribers for Schedule II or III opioids for each beneficiary. We then determined the average number of prescribers per beneficiary. We limited this analysis to beneficiaries who received at least one Schedule II or III opioid.¹⁶
4. **Average number of different drugs per beneficiary**
For each pharmacy, we counted the number of differently named drugs per beneficiary.¹⁷ We averaged the number of drugs per beneficiary for each pharmacy. For this measure, we counted brand-name and generic drugs as separate drugs.
5. **Percentage of beneficiaries with an excessive supply of a drug**
For each pharmacy, we counted the number of beneficiaries who, in 2014, received enough of at least one Part D drug at a specific strength to last 500 days or more. We divided this number by the total number of beneficiaries.

For each measure, we used a standard technique known as the Tukey method, to identify the pharmacies that were outliers (i.e., those that were above the 75th percentile plus three times the interquartile range). We considered these pharmacies to have questionable billing.¹⁸

We then determined how many pharmacies with questionable billing were located in each metropolitan area. To do this, we used each pharmacy's address to identify its Core Based Statistical Area (CBSA). We also determined how many of these pharmacies were independent or chain pharmacies, using information from the NCPDP database.

Analysis of Geographic Hotspots for Noncontrolled Drugs

To identify hotspots, we calculated the average Medicare payment per beneficiary for each noncontrolled drug for each CBSA and for the Nation. We then identified the CBSAs and the drugs that had the highest Medicare payments per beneficiary.¹⁹ We also calculated the proportion of Medicare beneficiaries in each CBSA and the Nation who received each drug. Lastly, we calculated the total Medicare payments for each drug in each CBSA and the Nation. To select the examples of hotspots for the data brief, we consulted with OIG Office of Investigations about the types of noncontrolled substances that were vulnerable to fraud and abuse. The examples included in the report do not represent a comprehensive list of all the hotspots that we identified.

Limitations

We did not independently verify the accuracy of the PDE records or the data from the NCPDP, First DataBank, or Medi-Span. We based our analysis on the pharmacy type that each pharmacy reported in the NCPDP.

Standards

This study was conducted in accordance with the *Quality Standards for Inspection and Evaluation* issued by the Council of the Inspectors General on Integrity and Efficiency.

ACKNOWLEDGMENTS

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ENDNOTES

¹ CDC, *Prescription Painkiller Overdoses at Epidemic Levels*, November 1, 2011. Accessed at http://www.cdc.gov/media/releases/2011/p1101_flu_pain_killer_overdose.html on May 5, 2015.

² CDC, *Addressing Prescription Drug Abuse in the United States: Current Activities and Future Opportunities*, 2014, p. 9. Accessed at http://www.cdc.gov/HomeandRecreationalSafety/pdf/HHS_Prescription_Drug_Abuse_Report_09.2013.pdf on May 6, 2015.

³ Owens PL, Barrett ML, Weiss AJ, Washington RE, Kronick R. *Hospital Inpatient Utilization Related to Opioid Overuse Among Adults, 1993–2012*. Healthcare Cost and Utilization Project, Agency for Healthcare Research and Quality Statistical Brief #177. August 2014, p. 3. Accessed at <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb177-Hospitalizations-for-Opioid-Overuse.pdf> on May 6, 2015.

⁴ Controlled substances are drugs regulated by the Controlled Substances Act, which established five schedules based on the medical use and the potential for abuse. See 21 U.S.C. §§ 801-971.

⁵ Gary Cantrell, Deputy Inspector General for Investigations, Office of Inspector General, U.S. Department of Health and Human Services, *Medicare Program Integrity: Screening Out Errors, Fraud, and Abuse* (Congressional testimony), June 25, 2014. Accessed at <http://docs.house.gov/meetings/IF/IF02/20140625/102412/HHRG-113-IF02-Wstate-CantrellG-20140625.pdf> on May 21, 2015.

⁶ The Boards of Trustees, Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds, *2014 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medicare Insurance Trust Funds*, p. 11. Accessed at <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/downloads/tr2014.pdf> on May 5, 2015.

⁷ OIG, *Retail Pharmacies With Questionable Part D Billing*, OEI-02-09-00600, May 2012; OIG, *Prescribers With Questionable Part D Billing*, OEI-02-09-00600, May 2012; and OIG, *Part D Beneficiaries With Questionable Utilization Patterns for HIV Drugs*, OEI-11-00170, August 2014.

⁸ This represents the negotiated price paid to the pharmacy. It is not adjusted for any rebates, coverage gap discounts, or other Direct and Indirect Remuneration paid to the sponsors. Note that these numbers and others presented in the data brief are rounded. Because our calculations are based on unrounded numbers they cannot always be recreated from the numbers presented in the data brief.

⁹ For the purposes of this data brief, we refer to Schedule II and III opioids as “commonly abused opioids.” According to the National Institute on Drug Abuse—part of the National Institutes of Health—prescription opioids are among the most commonly abused drugs. We limited our review to Schedule II and III opioids because they have the highest potential for abuse among legally available drugs, according to the Drug Enforcement Agency (DEA). For more information on commonly abused drugs, see National Institute on Drug Abuse, *Commonly Abused Drugs*, February 2015. Accessed at <http://www.drugabuse.gov/drugs-abuse/commonly-abused-drugs> on April 29, 2015. Also see DEA, *National Forensic Laboratory Information System (NFLIS) 2012 Annual Report*, September 2013. Accessed at http://www.deadiversion.usdoj.gov/nflis/2012annual_rpt.pdf on April 19, 2015.

¹⁰ Kickbacks occur when a pharmacy pays a prescriber to write or a beneficiary to submit an unnecessary prescription and bills Medicare for the drug.

¹¹ The measures used in this report reflect schemes identified in recent investigations. Because we used different measures in previous work, the results are not comparable. Any change in the number of pharmacies that we identified as having questionable billing does not necessarily represent a change in the prevalence of fraud.

¹² Some pharmacies may be billing for extremely high amounts of certain drugs for legitimate reasons—for example, if a pharmacy is located near a pain center, cancer clinic, or hospital.

¹³ These are Core Based Statistical Areas (CBSAs). A CBSA is a region around an urban center that has at least 10,000 people. CBSAs include the entire metropolitan area, not just the urban center.

¹⁴ The Medicare Fraud Strike Force is a part of the Health Care Fraud Prevention and Enforcement Action Team, a joint agency initiative known as HEAT. See U.S. Department of Health and Human Services and U.S. Department

of Justice, *HEAT Task Force Success*. Accessed at <http://www.stopmedicarefraud.gov/heattaskforce/index.html> on May 7, 2015.

¹⁵ We used the definition of “retail pharmacy” from the NCPDP. We limited our analysis to retail pharmacies that in 2014 billed Part D for at least \$100,000, had at least 100 PDE records, and had at least 50 beneficiaries. In total, we included 59,825 retail pharmacies in our analysis.

¹⁶ We also limited this analysis to retail pharmacies that dispensed opioids to at least 50 beneficiaries.

¹⁷ For this measure, we used a variable from First Databank that grouped drugs primarily based on the name that appeared on the package label.

¹⁸ When we set the Tukey threshold, we included pharmacies identified as retail pharmacies. However, once we identified the pharmacies that exceeded the Tukey threshold, we conducted additional analysis and found that 267 retail pharmacies reported providing some specialty or oncology pharmacy services or appeared to be located in hospitals. Because we could not determine whether the differences in their billing were due to their providing specialty or hospital services, we did not consider these pharmacies to have questionable billing.

¹⁹ We focused our analysis on CBSAs that had at least 50,000 Part D beneficiaries and drugs that had at least \$1 million in Part D payments in the CBSA.