

OVERPAYING FOR PRESCRIPTION DRUGS: THE COPAY CLAWBACK PHENOMENON



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ABSTRACT

Prescription drug overpayments (also known as “clawbacks”) occur when commercially insured patients’ copayments exceed the total cost of the drug to their insurer or pharmacy benefit manager. While the practice has been acknowledged and discussed in the media, it has never been quantified in large samples. We use pharmacy claims data from a large commercial insurer, combined with data on national average drug reimbursements, to identify claims that likely involved overpayments. In 2013, almost one quarter of filled pharmacy prescriptions (23%) involved a patient copayment that exceeded the average reimbursement paid by the insurer by more than \$2.00. Among these overpayment claims, the average overpayment is \$7.69. Overpayments are more likely on claims for generic versus brand drugs (28% vs. 6%), but the average size of the overpayment on generic claims is smaller (\$7.32 vs. \$13.46). In 2013, total overpayments amounted to \$135 million in our sample, or \$10.51 per covered life. With over 200 million Americans commercially insured in 2013, these findings suggest the practice of overpayments may account for a non-negligible share of overall drug spending and patient out-of-pocket costs.

INTRODUCTION

Recent increases in prescription drug prices and patients’ ability to afford them have received much attention from policymakers and the media, with particular focus on patients’ out-of-pocket (OOP) expenditures for drugs. For insured patients, an important element of OOP spend is the copayment, a fixed dollar amount paid per prescription by the patient. The term “copayment” suggests that the patient and insurer are sharing the total cost of the drug — the patient pays the copayment, and the insurer pays the remaining cost. But recent investigations have shown that on some prescription claims, the total cost of the drug is less than the patient’s copayment, and the insurer or pharmacy benefit manager (PBM) keeps the difference in what is known as a “clawback.”¹⁻⁹ Some pharmacists have expressed frustration that they are bound by “gag clauses” in their contracts with insurers and PBMs not to disclose to patients when they could save money by not using their insurance because of such practices.^{10,11}

Numerous lawsuits have been filed against insurers¹²⁻²¹ and pharmacies^{22,23} for this practice, and several states have taken legislative steps to prevent it, including Maryland in 2007, Arkansas in 2015, Louisiana in 2016, and North Dakota,

Georgia, Connecticut, Maine and Texas in 2017;²⁴⁻³¹ similar legislation is currently pending in North Carolina and New York.^{32,33} For the most part, these investigations and lawsuits have relied on anecdotes and examples to demonstrate the phenomenon — we know of no analysis that uses large-scale data to quantify how frequently it occurs, or the dollar values involved. This is primarily due to the unavailability of reliable data on the prices actually paid by commercial insurers for prescription drugs.

In this paper, we analyze commercial pharmacy claims data combined with a short-lived national survey of pharmacies concerning the drug prices paid by commercial insurers, the National Average Retail Price, or NARP. Although NARP data provide a national average of transaction prices rather than the transaction prices themselves, comparing transaction-level copayments from pharmacy claims to the national average transaction price paid by commercial insurers provides a sense of how frequently these overpayments may be happening, and their general magnitude. We can also identify the types of drugs that are more likely to be subject to overpayments.

Table 1: Frequency and Average Size of Overpayments, 2013

	Number of Claims	Number of Claims with Overpayment	Percentage of Claims Involving Overpayment (95% CI)	Mean Overpayment (SD)
All Drugs	9,539,846	2,188,578	22.94% (22.91, 22.97)	\$7.69 (8.59)
Generic	7,295,525	2,055,024	28.17% (28.14, 28.20)	\$7.32 (7.43)
Brand	2,244,321	133,554	5.95% (5.92, 5.98)	\$13.46 (18.01)

Source: Optum Clinformatics™ Data Mart pharmacy claims, January–June 2013, and CMS NARP reimbursements from the same period. Confidence intervals are binomial.

METHODS

Pharmacies collect patients' copayments and pass them to PBMs, who then reimburse the pharmacy a negotiated rate to cover drug costs, dispensing fees, and any markup. Overpayments occur when the copayment exceeds the reimbursement negotiated between the PBM and the pharmacy. To assess the frequency of these overpayments, we compared copayments with the national average reimbursement received by pharmacies for commercially insured patients for the same prescription.

Our reimbursement data come from a survey by the Centers for Medicare & Medicaid Services which was published for six months beginning in January 2013, the National Average Retail Price. The survey was authorized in the Deficit Reduction Act of 2005, which sought to reduce spending on mandatory programs such as Medicaid. The Act provided for a monthly national survey of retail prices for Medicaid-covered outpatient drugs; these benchmarks could then be used by state Medicaid pharmacy programs to evaluate their reimbursement methods. NARP data are based on 50 million retail pharmacy transactions from independent and chain pharmacies nationwide. They measure per-unit mean reimbursement to retail pharmacies for commercially insured patients for over 4,000 common outpatient drugs, listed by 11-digit national drug code (NDC), and represent the total cost to the PBM, including dispensing fees and pharmacy markup.³⁴

Our copayment data come from a 25 percent random sample of Optum Clinformatics™ Data Mart pharmacy claims from commercially insured patients in the first half of 2013. These data represent 9.5 million prescriptions filled by 1.6 million subscribers during that period. Each claim contains the name of the drug and its NDC, the quantity filled and the copayment paid by the beneficiary. Data from First Databank is used to characterize whether each NDC corresponds to a brand or generic drug.³⁵

To identify overpayments, we compare the copayment on each claim to the NARP reimbursement on the same NDC for customers with commercial third-party insurance in the quarter when the claim was filled. Since NARP represents a national average, actual reimbursements will vary around that average; the fact that a copayment on one transaction exceeds the NARP reimbursement does not necessarily mean that the copayment exceeded the reimbursement on that specific transaction. Therefore, we conservatively identified overpayments only on claims in which the copayment exceeded the NARP by more than \$2.00 for reimbursements below \$20 or 10 percent of the NARP for reimbursements above \$20. We do not count overpayments on claims that had positive deductibles (0.2% of all claims).

RESULTS

Table 1 presents the frequency of overpayments and the average overpayment size overall and by generic status among the 2013 pharmacy claims data. Twenty-three percent of all claims involved an overpayment. The overpayment rate for generic drug claims was significantly larger than for brand drug claims (28.17% vs. 5.95%; $P < 0.001$). Among claims with an overpayment, the mean overpayment size was \$7.69; the average overpayment was significantly larger for brand drug claims than for generics (\$13.46 vs. \$7.32; $P < 0.001$).

Table 2 lists the 20 most commonly prescribed drugs in the claims data, the frequency with which each involved an overpayment, and the average size of the overpayment when it existed. Among the 20 most popular prescription drugs in 2013, nine involved overpayments more than 40 percent of the time. Claims for the most commonly prescribed drug, the narcotic hydrocodone-acetaminophen, involved an overpayment 36 percent of the time.

Table 2: Frequency and Average Magnitude of Overpayments Among Claims with Overpayment for the 20 Most Frequently Prescribed Drugs, 2013

Rank by Number of Claims	Drug Name	Number of Claims	Number of Claims with Overpayment	Percentage of Claims Involving Overpayment (95% CI)	Average Overpayment Among Claims with Overpayment (SD)	Average NARP per Prescription
1	hydrocodone-acetaminophen	330,812	119,587	36.15% (35.99,36.31)	\$6.94 (4.27)	\$12.67
2	levothyroxine sodium	258,936	108,910	42.06% (41.87, 42.25)	\$6.12 (4.82)	\$7.98
3	azithromycin	218,416	38,600	17.67% (17.51, 17.83)	\$8.53 (7.12)	\$12.24
4	lisinopril	212,553	103,612	48.75% (48.53,48.96)	\$7.17 (6.08)	\$6.57
5	fluticasone propionate	163,891	3,427	2.09% (2.02, 2.16)	\$17.55% (5.10)	\$22.44
6	simvastatin	162,241	84,324	51.97% (51.73, 52.22)	\$6.33 (7.85)	\$8.16
7	atorvastatin calcium	161,998	12,199	7.53% (7.40, 7.66)	\$8.82 (11.20)	\$24.52
8	omeprazole	157,964	17,858	11.31% (11.15,11.46)	\$10.34 (11.05)	\$16.38
9	amoxicillin	153,293	54,770	35.73% (35.49, 35.97)	\$6.21 (4.70)	\$7.28
10	amlodipine besylate	150,060	89,688	59.77% (59.52, 60.02)	\$6.98 (7.99)	\$7.34
11	sertraline hydrochloride	128,829	60,328	46.83% (46.56,47.10)	\$5.94 (6.90)	\$9.22
12	amoxicillin trihydrate/potassium clavulanate	113,724	3,636	3.20% (3.10,3.30)	\$12.07 (7.73)	\$22.93
13	zolpidem tartrate	111,616	67,516	60.49% (60.20, 60.78)	\$6.48 (6.99)	\$7.42
14	Ventolin HFA (albuterol sulfate)**	105,818	198	0.19% (0.16, 0.22)	\$19.95 (15.00)	\$44.61
15	Crestor (rosuvastatin calcium)**	102,596	105	0.10% (0.08, 0.12)	\$14.56 (20.09)	\$205.10
16	metformin hydrochloride	97,015	32,548	33.55% (33.25, 33.85)	\$6.72 (6.79)	\$8.11
17	hydrochlorothiazide	95,837	45,905	47.90% (47.58, 48.22)	\$6.86 (4.13)	\$4.97
18	metoprolol succinate	91,904	19,995	21.76% (21.49, 22.02)	\$13.21 (13.97)	\$30.85
19	citalopram hydrobromide	89,521	42,916	47.94% (47.61, 48.27)	\$7.08 (7.49)	\$6.55
20	prednisone	88,675	44,508	50.19% (49.86, 50.52)	\$6.79 (3.72)	\$4.42

Source: Optum Clinformatics™ Data Mart pharmacy claims, January-June 2013, and CMS NARP reimbursements from the same period. Confidence intervals are binomial.

**Branded therapy.

For the drugs on this list, the average dollar value of the overpayment, when one existed, ranged from \$5.94 on sertraline hydrochloride (an antidepressant), to \$19.95 on Ventolin HFA (an inhaled bronchodilator). For sixteen of these 20 most commonly prescribed drugs, the size of the average overpayment was more than 50 percent of the NARP reimbursement for the drug.

Table 3: Top 20 Drugs with Highest Frequency of Overpayments, 2013

Rank by Frequency of Overpayment	Drug Name	Number of Claims	Number of Claims with Overpayment	Percentage of Claims Involving Overpayment (95% CI)	Average Overpayment Among Claims with Overpayment (SD)	Average NARP per Prescription
1	zolpidem tartrate	111,616	67,516	60.49% (60.20, 60.78)	\$6.48 (6.99)	\$7.42
2	amlodipine besylate	150,060	89,688	59.77% (59.52, 60.02)	\$6.98 (7.99)	\$7.34
3	flurazepam hydrochloride	464	273	58.84% (54.21, 63.35)	\$4.58 (2.85)	\$7.76
4	Cheratussin AC (guaifenesin/codeine phosphate)**	27,712	16,088	58.05% (57.47, 58.64)	\$6.20 (3.58)	\$5.19
5	temazepam	18,292	10,391	56.81% (56.08, 57.53)	\$5.54 (4.51)	\$8.20
6	Guaifenesin AC (guaifenesin/codeine phosphate)**	1,095	622	56.80% (53.81,59.76)	\$7.67 (5.44)	\$6.12
7	benztropine mesylate	2,392	1,333	55.73% (53.71, 57.73)	\$5.73 (3.45)	\$6.64
8	meloxicam	59,711	33,002	55.27% (54.87, 55.67)	\$7.52 (5.64)	\$5.88
9	Bromfed DM (brompheniramine/pseudoephed/dm)**	7,535	4,155	55.14% (54.01, 56.27)	\$15.46 (14.59)	\$26.63
10	Nitrostat (nitroglycerin)**	5,365	2,802	52.23% (50.88, 53.57)	\$7.21 (5.05)	\$14.00
11	misoprostol	1,745	910	52.15% (49.77, 54.52)	\$6.82 (2.90)	\$17.45
12	Armour thyroid (thyroid, pork)**	20,671	10,765	52.08% (51.39, 52.76)	\$7.43 (5.40)	\$10.00
13	simvastatin	162,241	84,324	51.97% (51.73, 52.22)	\$6.33 (7.85)	\$8.16
14	lidocaine hydrochloride viscous	5,610	2,911	51.89% (50.57, 53.20)	\$9.75 (8.41)	\$9.57
15	prednisone	88,675	44,508	50.19% (49.86, 50.52)	\$6.79 (3.72)	\$4.42
16	guaifenesin-codeine	265	133	50.19% (44.01, 56.37)	\$5.23 (2.89)	\$5.63
17	metoprolol tartrate	54,768	27,386	50.00% (49.58, 50.42)	\$6.73 (5.53)	\$6.02
18	atenolol-chlorthalidone	7,310	3,648	49.90% (48.75, 51.06)	\$7.33 (8.88)	\$7.84
19	acetaminophen-codeine	27,543	13,713	49.79% (49.20, 50.38)	\$6.00 (3.42)	\$7.77
20	prednisolone	5,313	2,620	49.31% (47.96, 50.67)	\$6.92 (5.44)	\$7.80

Source: Optum Clinformatics™ Data Mart pharmacy claims, January-June 2013, and CMS NARP reimbursements from the same period.

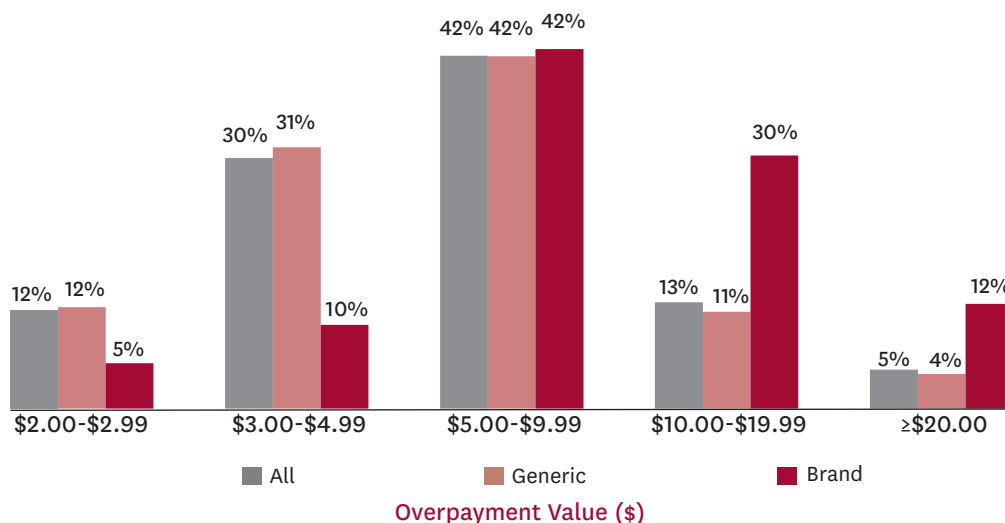
Confidence intervals are binomial.

Drugs with fewer than 100 claims with overpayments are excluded.

**Branded therapy.

Table 3 presents the 20 drugs most likely to involve an overpayment. The top drug, zolpidem tartrate (a popular insomnia treatment), involved an overpayment 60.5 percent of the time, followed by amlodipine besylate (a calcium channel blocker; 60%), flurazepam hydrochloride (another insomnia medication; 59%), and Cheratussin AC (a narcotic cough suppressant/expectorant; 58%). The list includes medications for a wide range of common conditions, including insomnia, high cholesterol, hypertension, pain, cough, and inflammation.

Figure 1: Distribution of Overpayments by Overpayment Value, 2013



Source: Optum Clinformatics™ Data Mart pharmacy claims, January-June 2013, and CMS NARP reimbursements from the same period.

Figure 1 shows the distribution of average overpayments among claims with overpayment. While 12 percent of all overpayments were worth less than \$3, sixty percent were worth \$5 or more. Eighteen percent of all overpayments were worth \$10 or more per claim. Among claims for brand drugs with overpayments, 42 percent involve overpayments worth \$10 or more.

OVERPAYMENTS IN MEDICARE PART D

To explore the validity of our overpayment measurement method, we applied the same method described above to Medicare Part D claims of a 20 percent random sample of Medicare beneficiaries in 2013. This analysis was restricted to non-subsidized beneficiaries filing claims in the non-deductible phase of their coverage. We would expect to find very few overpayments among Medicare claims, since Medicare outlaws the practice of overpayments. Specifically,

the Prescription Drug Benefit Manual states that “Part D sponsors must ensure that their payment systems are set up to charge beneficiaries the lesser of a drug’s negotiated price or applicable copayment amount in all phases of the benefit.”³⁶ Despite this requirement, some overpayments do apparently occur on Medicare claims — the National Community Pharmacists Association surveyed their members about overpayments in 2016; 59 percent of survey respondents reported that overpayments were indeed taking place on Medicare Part D claims in their practices.³⁷ Nevertheless, we would expect to find fewer overpayments taking place in Medicare claims compared to commercial claims.

In fact, when we compare the copayments on Medicare Part D claims to NARP reimbursements, we find only 3.3 percent of Medicare claims involving an overpayment as defined by our methods. These results are summarized in Table 4.

Table 4: Frequency and Average Size of Overpayments in Medicare Part D, 2013

	Number of Claims	Number of Claims with Overpayment	Percentage of Claims Involving Overpayment (95% CI)	Mean Overpayment (SD)
All Drugs	40,634,384	1,332,475	3.28% (3.27,3.28)	\$4.98 (5.51)
Generic	34,634,299	1,298,940	3.75% (3.74,3.76)	\$4.96 (5.30)
Brand	6,000,085	33,535	0.56% (0.55, 0.56)	\$5.89 (10.84)

Source: Medicare Part D Pharmacy claims for non-deductible non-low-income-subsidy beneficiaries, January-June 2013, and CMS NARP reimbursements from the same period. Confidence intervals are binomial.

DISCUSSION

Despite growing legal and regulatory concerns regarding prescription drug overpayments, large-scale empirical analyses of the phenomenon have been lacking. To our knowledge, this is the first example of such an analysis. Using data from the first half of 2013 — the only period for which survey data on actual reimbursements were available — we find that overpayments occurred on 28 percent of commercial pharmacy claims for generic drugs and 6 percent for brand drugs. While these figures may seem surprisingly high, one analyst has commented that overpayments are “far from outliers,” occurring on 10 percent of pharmacy transactions.⁹ Another anecdotal estimate by an independent pharmacist puts the figure at 20 to 25 percent of claims in 2016.¹ Our results are consistent with these anecdotal estimates, and suggest that the practice is not rare.

Overpayments appeared on a wide variety of frequently-prescribed drugs, including anti-inflammatories, statins, antibiotics, diuretics, cough and cold, sleeping aids and anti-hypertensive medications. While average overpayments were relatively small on a per-claim basis (\$7.69 on average), the popularity of the drugs with overpayments means that the total dollar amount associated with the practice was significant. In our dataset alone, we estimated that total overpayments were worth over \$135 million in 2013, or \$10.51 per member per year. By comparison, one large PBM reported its clients spent \$10.67 per member on metformin in 2016.³⁸ With over 200 million Americans covered by commercial insurance in 2013,³⁹ such overpayments could account for significant total costs.

Policy Implications

While our data do not speak directly to the question of who benefits from overpayments, pharmacists report that insurers and pharmacy benefit managers keep the overpayments as profit.^{1,2} As such, overpayments directly increase patient OOP expenditures. Previous research has shown that cost-related medication non-adherence is common and associated with increased use of medical services and negative health outcomes.⁴⁰ By raising patient costs at the point of sale, overpayments are likely to exacerbate these effects, and measures that discourage or prohibit the practice should be considered as opportunities to reduce patients’ OOP expenditures.

Some states, including Maryland, Arkansas, Louisiana, North Dakota, and Georgia have already banned the practice of overpayments. Recent legislation passed in Minnesota, Louisiana, Georgia, North Dakota, Connecticut, Maine, and Nevada specifically bans gag clauses that prevent pharmacists from disclosing actual prices of drugs to customers.^{25-29, 41-42} As the purpose of such gag clauses is to keep patients in the dark when they are overpaying, eliminating these clauses will

enable patients to better protect themselves from the practice. The now-discontinued NARP survey allowed us to examine the frequency and size of overpayments. Reinstating that survey or a variation of it, such as that recently mandated in Florida⁴³ for the 300 most commonly prescribed drugs, would enable ongoing monitoring of the practice.

Limitations

A key limitation of our analysis is the lack of transaction-level data on the insurer- or PBM-negotiated reimbursement paid on each prescription. Instead we used NARP data, which capture average transaction prices paid by commercial insurers, including dispensing fees. While NARP is considered an accurate measure of average transaction prices, transaction-level variation by geography, payer, or pharmacy will be subsumed into the average. We therefore calculated overpayments conservatively, as the difference between actual copay and national average reimbursement, minus a buffer equal to the greater of \$2 or 10 percent of the average reimbursement. As an estimate of the actual overpayments that could be measured if the reimbursement on each transaction were available, our overpayment measure may be too high or too low. Data on transaction-level reimbursements would be needed to solve this issue definitively.

Additionally, NARP reimbursement data are available only for the first half of 2013, and our pharmacy claims data come from a single large insurer, which may not be representative of the commercially insured population in the US. The current prevalence of overpayments nationwide, and their magnitude, could be higher or lower.

CONCLUSION

Many US patients struggle to afford their out-of-pocket healthcare expenses, and cost-related medication non-adherence is common, leading to higher medical expenditures and poorer health outcomes. At the same time, the US healthcare system is grappling with issues of how to afford innovative therapies such as hepatitis C cures and cancer immunotherapies that meaningfully improve patient outcomes, medical expenditures and overall social welfare. Game-changing therapies for high-prevalence diseases like diabetes and Alzheimer’s may soon be on the horizon, adding to the affordability challenge. In such an environment, every opportunity should be taken to create room in existing healthcare budgets to afford such innovations. While eliminating overpayments cannot generate enough savings to solve this problem completely, it would be a step in the right direction.

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