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Rebates for Brand-Name Drugs in Part D Substantially Reduced the Growth in Spending from 2011 to 2015

In response to a Congressional request, OIG examined the 1,510 brand-name drugs with Part D reimbursement and rebates in every year from 2011 to 2015. Specifically, we analyzed: (1) how total Part D reimbursement compared to rebate-adjusted reimbursement from 2011 to 2015; (2) how the size of the rebates changed over the 5 years; and (3) whether rebates grew in tandem with reimbursement across the 5 years (i.e., did rebates increase or decrease at the same level as reimbursement).

Focusing solely on brand-name drugs with rebates in every year from 2011 to 2015, per the request, resulted in the exclusion of 45 percent of brand-name drugs with Part D reimbursement across all 5 years. In other words, 45 percent of brand-name drugs did not have rebates in every year from 2011 to 2015. We provide information about these brand-name drugs without rebates across all 5 years in Appendix A.

We provide the details of our methodology in Appendix B.

Questions and Responses

Question 1. How did total Part D reimbursement compare to total rebate-adjusted reimbursement?

Total reimbursement grew much more than rebate-adjusted reimbursement for brand-name drugs reviewed from 2011 to 2015

Specifically, total Part D reimbursement for brand-name drugs increased by 19 percent from 2011 to 2015, versus a 4-percent increase in rebate-adjusted reimbursement for these drugs over the 5 years reviewed.¹

Rebate-adjusted reimbursement for brand-name drugs still increased by \$2 billion from 2011 to 2015

Although total rebate-adjusted reimbursement grew less than total reimbursement for brand-name drugs in Part D, Medicare still spent \$2 billion more for brand-name drugs with rebates in 2015 than in 2011. Total Part D rebate-adjusted reimbursement increased from \$46 billion to \$48 billion. This increase occurred despite a 33-percent decrease in the total number of prescriptions for brand-name drugs reviewed from 2011 to 2015. At the same time, total Part D reimbursement, not adjusted by rebates, increased from \$55 billion to \$65 billion over the same 5 years.

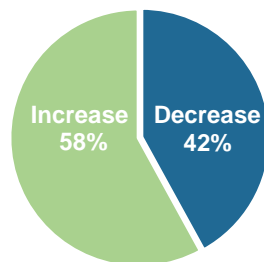
¹ Part D plan sponsors may receive rebates as a form of price concession from pharmaceutical manufacturers. We used direct and indirect remuneration data, which is reported annually by Part D plan sponsors to the Centers for Medicare & Medicaid Services (CMS), to calculate rebates for brand-name drugs in Part D.

Question 2. How did the size of the rebate change over the 5 years?

Although total rebates for brand-name drugs in Part D nearly doubled from 2011 to 2015, 42 percent of brand-name drugs had decreases in unit rebates

From 2011 to 2015, total rebates for brand-name drugs reviewed in Part D grew from \$9 billion to \$17 billion. While total rebates for brand-name drugs almost doubled, 42 percent of brand-name drugs reviewed had decreases in unit rebates between 2011 and 2015, as shown in Exhibit 1.

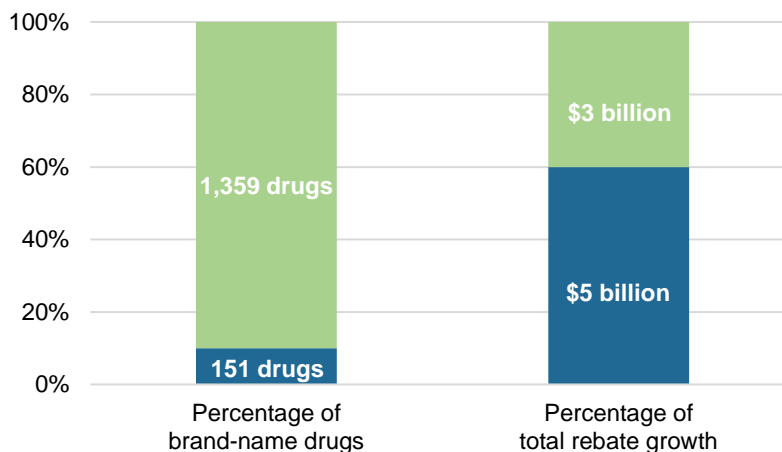
Exhibit 1: Unit rebates decreased for 42 percent of brand-name drugs in Part D from 2011 to 2015



Source: OIG analysis of Medicare Part D data, 2011 to 2015.

Increases in rebate dollars were overwhelmingly allocated to a minority of drugs. Specifically, 10 percent of all brand-name drugs reviewed accounted for 60 percent (\$5 billion of \$8 billion) of rebate growth from 2011 to 2015, as shown in Exhibit 2. In contrast, the remaining 90 percent of drugs accounted for only 40 percent of total rebate growth over the 5 years reviewed.

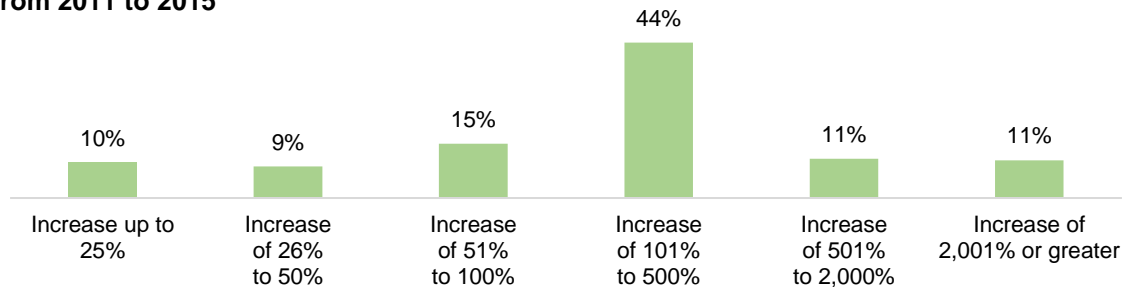
Exhibit 2: Ten percent of brand-name drugs with rebates accounted for 60 percent of total rebate growth from 2011 to 2015



Source: OIG analysis of Medicare Part D data, 2011 to 2015.

For the 58 percent of brand-name drugs reviewed with rebate increases from 2011 to 2015, nearly two-thirds had unit rebates more than double, as shown in Exhibit 3. The percentage change for all drugs with rebate increases ranged from less than 1 percent (from \$1.96029 to \$1.96085 per unit) to 3 million percent (from \$0.0009 to \$29.53 per unit).

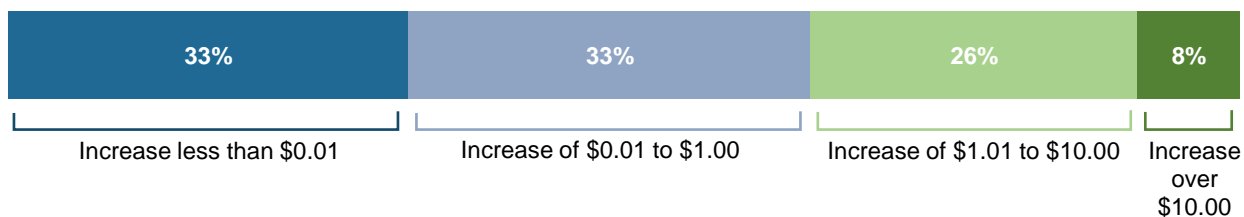
Exhibit 3: Nearly two-thirds of drugs with rebate increases had rebates more than double from 2011 to 2015



Source: OIG analysis of Medicare Part D data, 2011 to 2015.

Despite the large percentage increases, unit rebates increased by less than a penny for one-third of the brand-name drugs with increases in rebates, as shown in Exhibit 4. This penny increase represented anywhere from a 0.03 percent to a 19,717 percent increase, depending on the drug. In contrast, unit rebates increased more than \$10 for only 8 percent of brand-name drugs with rebate increases. For the drugs with rebate increases, unit rebates increased by \$5.86 on average but increased by only \$0.25 at the median.

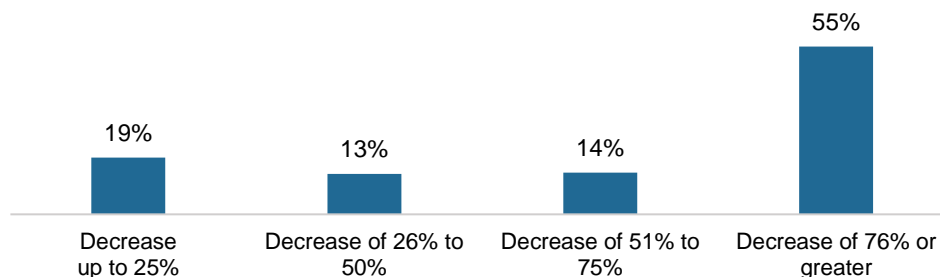
Exhibit 4: Unit rebates increased by less than a penny for one-third of the brand-name drugs with increases in rebates from 2011 to 2015



Source: OIG analysis of Medicare Part D data, 2011 to 2015.

Of the 42 percent of brand-name drugs with decreases in rebates from 2011 to 2015, the percentage change ranged from a less than 1 percent to a 99.99 percent decrease. Unit rebates for more than half of these brand-name drugs decreased by over 75 percent, as shown in Exhibit 5.

Exhibit 5: Over half of brand-name drugs with rebate decreases had rebates drop by over 75 percent from 2011 to 2015*

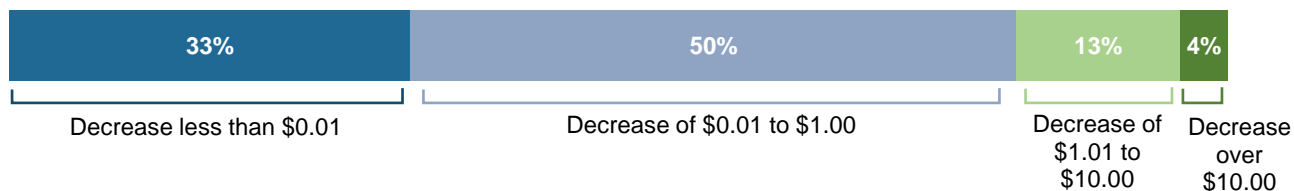


Source: OIG analysis of Medicare Part D data, 2011 to 2015.

*Percentages do not sum to 100 because of rounding.

However, not all of these decreases were large in absolute dollars. In fact, one-third of brand-name drugs with decreases in rebates had unit rebates decline by less than one penny. In contrast, 4 percent of drugs had rebates decrease by over \$10, as shown in Exhibit 6. For drugs with rebate decreases, unit rebates decreased by \$4.29 on average and by \$0.07 at the median.

Exhibit 6: One-third of brand-name drugs with rebate decreases had unit rebates decrease by less than a penny from 2011 to 2015



Source: OIG analysis of Medicare Part D data, 2011 to 2015.

Question 3. Did rebates grow in tandem with reimbursement?

Rebates did not always increase when unit reimbursement increased for brand-name drugs reviewed from 2011 to 2015

From 2011 to 2015, 96 percent of brand-name drugs reviewed experienced increases in unit reimbursement. Although unit reimbursement increased for nearly all drugs, rebates declined as unit reimbursement grew for 39 percent of drugs reviewed, as shown in Exhibit 7. For example, one drug's unit reimbursement increased 52 percent from 2011 to 2015, but the unit rebate for this drug decreased 68 percent during that time. In addition, we found that of the 171 brand-name drugs where unit reimbursement more than doubled, 40 drugs had decreases in unit rebates.

Even when brand-name drugs had increases in both unit reimbursement and unit rebates, the increase in rebates was not always the same magnitude as the increase in reimbursement. For nearly a quarter of these drugs, the percentage increase in unit reimbursement was larger than the percentage increase in unit rebates. In addition, in virtually every case (99 percent) where a drug's unit reimbursement and unit rebate increased over time, the increase in absolute dollars for its rebate was less than the increase in absolute dollars for its reimbursement.

Exhibit 7: Unit reimbursement increased for most brand-name drugs regardless of whether unit rebates increased or decreased from 2011 to 2015

95.6% of brand-name drugs had reimbursement increases



Source: OIG analysis of Medicare Part D data, 2011 to 2015.

Furthermore, unit rebates as a percentage of unit reimbursement decreased for over half of Part D brand-name drugs reviewed. At the median, unit rebates accounted for 1.6 percent of unit reimbursement in 2011 but declined to 0.3 percent of unit reimbursement in 2015. If manufacturers increased rebates at the same rate as reimbursement increased, we would expect that unit rebates would account for the same percentage of unit reimbursement for individual drugs. However, we found that percentage declined at the median from 2011 to 2015.

Conclusion

Overall, we found that increases in rebates substantially reduced the percentage increase in reimbursement for brand-name drugs in Part D from 2011 to 2015. However, these rebate increases were not equally distributed across all brand-name drugs with Part D reimbursement. In fact, 60 percent (\$5 billion of \$8 billion) of the increase in Part D rebates from 2011 to 2015 were associated with only 10 percent of brand-name drugs reviewed.

In addition, unit reimbursement increased for nearly all brand-name drugs in Part D, regardless of whether these drugs' unit rebates increased or decreased across the 5 years reviewed. For 39 percent of brand-name drugs reviewed, unit reimbursement increased as the drugs' unit rebates decreased.

Overall, at a drug-by-drug level, unit rebates did not always increase as unit reimbursement increased for more than half of brand-name drugs reviewed. Although rebates substantially reduced the growth of total Part D spending, they did not prevent increased overall Part D spending for brand-name drugs from 2011 to 2015, as Medicare still spent \$2 billion more for brand-name drugs with rebates in 2015 than in 2011.

Appendix A: Information about Brand-Name Drugs without Rebates

Nearly half of brand-name drugs with Part D reimbursement did not receive rebates in all 5 years reviewed

There were 2,727 brand-name drugs with Part D reimbursement in every year from 2011 to 2015, but only 55 percent of these drugs (1,510 drugs) had rebates in every year reviewed. Of the remaining 1,217 brand-name drugs, 909 (33.3 percent) received rebates between 1 and 4 years reviewed, and 308 drugs (11.3 percent) did not receive rebates in any year from 2011 to 2015. Although only 55 percent of brand-name drugs in Part D had rebates in every year reviewed, these drugs accounted for the vast majority of Part D reimbursement and rebates from 2011 to 2015, as shown in Exhibit 8.

Exhibit 8: Nearly all Part D reimbursement reviewed was associated with brand-name drugs that had rebates in every year from 2011 to 2015*

	Number of drugs	Total Part D Reimbursement, 2011 to 2015	Percent of Part D Reimbursement	Total Part D Rebates, 2011 to 2015	Percent of Part D Rebates
Drugs with rebates in all 5 years	1,510	\$306,171,805,650	92.4%	\$62,558,290,352	98.3%
Drugs with rebates between 1-4 years	909	\$24,668,791,680	7.4%	\$1,073,661,001	1.7%
Drugs without rebates in any year	308	\$664,630,645	0.2%	\$0	0.0%
Total	2,727	\$331,505,227,975	100%	\$63,631,951,353	100%

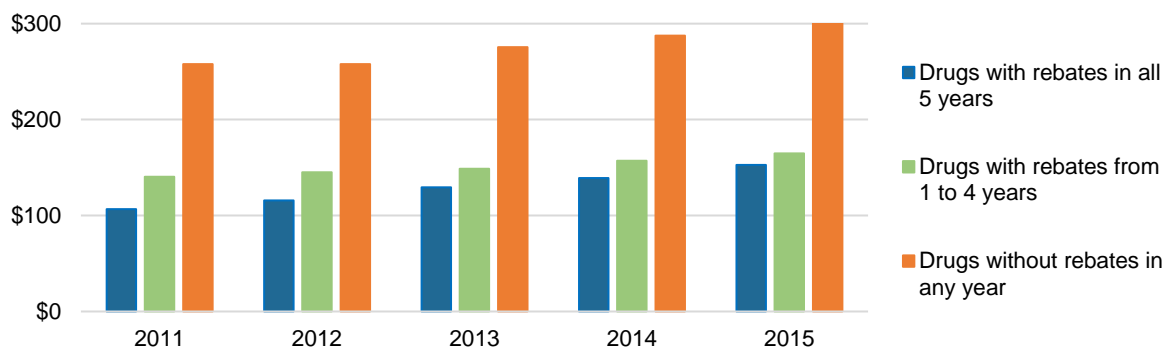
Source: OIG analysis of Medicare Part D data, 2011 to 2015.

*Totals include rebate amounts greater than or equal to \$0.

Part D unit reimbursement for brand-name drugs without rebates was higher than unit reimbursement for brand-name drugs with rebates from 2011 to 2015

On average, brand-name drugs without rebates had higher unit reimbursement than brand-name drugs with rebates, as shown in Exhibit 9. Although brand-name drugs without rebates had higher unit reimbursement from 2011 to 2015, they had smaller increases in unit reimbursement than drugs with rebates across the 5 years (17 percent vs. 43 percent).

Exhibit 9: Brand-name drugs without rebates had the highest average unit reimbursement from 2011 to 2015



Source: OIG analysis of Medicare Part D data, 2011 to 2015.

Appendix B: Methodology

We used CMS's prescription drug event (PDE) and direct and indirect remuneration (DIR) data, which were collected for our June 2018 data brief.² We used PDE data as the source for Part D reimbursement amounts and DIR data as the source for Part D rebates for brand-name drugs. Using these data, we identified the 1,510 drugs that had Part D reimbursement and rebates in each year from 2011 to 2015. For the purposes of this analysis, we considered each 9-digit national drug code (NDC) to be an individual drug.

Question 1. To compare total Part D reimbursement to rebate-adjusted reimbursement, we calculated total Part D reimbursement (i.e., drug costs paid to pharmacies) from 2011 to 2015. Then we calculated total rebate-adjusted reimbursement from 2011 to 2015 by subtracting total rebates from total reimbursement. We then calculated the percent change in total Part D reimbursement, the percent change in total rebate-adjusted reimbursement, and the percent change in total rebates for brand-name drugs reviewed from 2011 to 2015 and compared these changes across the 5 years.

Question 2. To analyze how the size of the rebate changed over the 5 years reviewed, we calculated an average unit rebate (referred to as "unit rebate") per drug from 2011 to 2015. We did this by dividing the total rebates for a brand-name drug by the total quantity of units dispensed for that drug in the same year. We then determined the number and percentage of brand-name drugs with increases and decreases in average unit rebates from 2011 to 2015, as well as the size of the average unit rebate increases and decreases for each drug. We also compared changes in average and median unit rebates for brand-name drugs for 2011 to 2015.

Question 3. To determine whether rebates increased or decreased at the same magnitude as reimbursement, we compared changes in average unit rebates to changes in average unit reimbursements (referred to as "unit reimbursement") for each drug from 2011 to 2015. We then determined the number and percentage of drugs with: (1) increases in both average unit reimbursements and average unit rebates, (2) decreases in both average unit reimbursements and average unit rebates, (3) increases in average unit reimbursements but decreases in average unit rebates, and (4) decreases in average unit reimbursements but increases in average unit rebates, from 2011 to 2015.

We also determined how average unit rebates changed as a percentage of average unit reimbursements for each brand-name drug from 2011 to 2015. We calculated average unit rebates as a percentage of average unit reimbursements for each drug per year to determine whether average unit rebates accounted for a larger or smaller percentage of average unit reimbursements from 2011 to 2015.

Brand-name drugs without rebates in every year. For the 2,727 brand-name drugs with Part D reimbursement in every year from 2011 to 2015, we categorized drugs by the number of years in which they received rebates (i.e., drugs that received rebates in all 5 years, drugs that received rebates in at least 1 but less than 5 years, and drugs without rebates in any year reviewed).³ We calculated total reimbursement and total rebates for each group of drugs. We also calculated Part D reimbursement and rebates for each group of drugs as a percentage of total Part D reimbursement and total rebates for all brand-name drugs reviewed.

² OIG, [*Increases in Reimbursement for Brand-Name Drugs in Part D*](#) (OEI-03-15-00080), June 2018.

³ The 9-digit NDCs included in this review are associated with the 3,578 11-digit NDCs that had utilization in each year from 2011 to 2015 and were analyzed for the June 2018 data brief.

We then calculated average unit reimbursements for each group of brand-name drugs and compared these values from 2011 to 2015. Finally, we compared the percent change in average unit reimbursements for each group of drugs from 2011 to 2015.

Limitations

We did not independently verify the completeness or accuracy of PDE or DIR data obtained from CMS.

Standards

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