IRA Reforms to Medicare Part D Reinsurance Are Associated with Plan Exits and Higher Premiums

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Abstract: *The 2022 Inflation Reduction Act (IRA) altered the financing of prescription drug purchases for more than 55 million Medicare beneficiaries. Prior to 2025, the Federal government contributed 80% of expenditure after a beneficiary hit a threshold, but beginning in 2025 this share is reduced to 20%. We study the effect of the reinsurance reforms on free-standing Part D plans, leveraging variation in plans' pre-IRA reliance on Federal reinsurance; we reason that plans with higher pre-IRA reinsurance payments faced a larger change to plan liabilities in 2024 and 2025. First, we find plans with higher pre-IRA reinsurance were more likely to exit in 2024 and 2025. Next, we consider the Premium Stabilization Demonstration implemented in 2025, finding that plans with higher pre-IRA reinsurance were more likely to receive a targeted subsidy under the Demonstration. However, we show that plans with higher pre-IRA reinsurance increased premiums substantially in 2024 and 2025, even after the Demonstration subsidies. Together, our findings highlight the role of the reinsurance reform in recent Part D market volatility and provide a first look at the Premium Stabilization Demonstration.*

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Introduction

Medicare Part D uses a public-private partnership to provide prescription drug coverage to older adults and individuals with disabilities. Private plan sponsors administer drug coverage, receiving subsidies from the federal government and premiums from beneficiaries. At the point of sale in a pharmacy, prescription drug costs are shared between Medicare beneficiaries and plan sponsors.

The original Part D benefit included a federal reinsurance program through which the government mitigated plan sponsors' financial risk for high-cost enrollees. Once an enrollee's out-of-pocket spending exceeded a defined ("catastrophic") threshold, plan sponsors paid only 15% of remaining drug costs, while the federal government covered 80%, and beneficiary cost-sharing covered 5%.

While reinsurance only made up less than 20% of total Part D spending in its early years (e.g., 17% in 2008), rising drug list prices, combined with the structure of the Part D benefit design, led to a rapidly expanding role for federal reinsurance in covering overall drug spending (1–3). Since 2020, reinsurance has accounted for nearly 50% of total Part D spending, shrinking the liability share of plan sponsors (4).

As the liability share of plan sponsors shrank, their incentive to negotiate lower drug prices may have weakened. Under Part D, plans or their pharmacy benefit managers determine the formulary design - that is, which drugs are covered and at what cost to enrollees. This formulary design is shaped by negotiations with drug manufacturers, where favorable formulary placement is traded for price concessions, often called "rebates". However, as plans' share of liability for total drug spending fell, plans retained a smaller portion of any savings achieved through lower drug prices or decreased utilization. This dynamic has raised concerns that the program's design may inadvertently contribute to higher overall drug prices (5), leading to an increasingly large share of spending incurred beyond the catastrophic threshold (6,7).

Partly in response to these concerns, the 2022 Inflation Reduction Act (IRA) significantly restructured the Part D benefit. The law altered beneficiary cost-sharing and shifted financial liability from the federal government and the beneficiaries to plan sponsors. In 2024, the IRA eliminated the beneficiary's 5% coinsurance and raised plan liability to 20%, capping out-of-pocket costs at the catastrophic threshold. In 2025, the benefit was fully redesigned: plan sponsors now cover 60% of costs above the threshold, while the rest is covered by manufacturers and the government reinsurance. The law also lowered the threshold for catastrophic coverage to a $2,000 annual out-of-pocket cap, making it more likely that beneficiaries reach it (8). Collectively, these reforms substantially increased plan sponsors' financial liability while strengthening beneficiary protection against high drug costs.

In light of these significant changes, Centers for Medicare and Medicaid Services (CMS) introduced the Premium Stabilization Demonstration for stand-alone prescription drug plans (PDPs) beginning in 2025. The Demonstration introduced two additional subsidies to mitigate the impact of plan liability changes on enrollee premiums. The first was a universal increase in the direct subsidy by up to $15, provided the premium remained non-negative. The second was a targeted subsidy for plans proposing premium increases exceeding $35 that capped premium increases at $35 (9).

These reforms have coincided with noticeable changes in insurer behavior. Recent evidence points to a substantial number of plan exits following the IRA's implementation in 2024 (10), as well as shifts in formulary design and cost-sharing structures (11–15). In this paper, we examine how insurers responded to the increased liability resulting from the IRA's changes to the federal reinsurance structure. We leverage plan-level variation in pre-IRA reinsurance exposure to determine how the reduction in reinsurance affected plans' exit decisions, premiums, and reliance on the Premium Stabilization Demonstration.

Study Data and Methods

Data

We use the publicly-available Q1 Quarterly Prescription Drug Plan Formulary, and Pricing Information files and Part C & D Plan Crosswalk files published by CMS to measure Part D plan

participation, premium, and formulary outcomes for 2020-25. We use the Part D Payment files to measure plan-level reinsurance payments and direct subsidy per-member-month (PMPM) for 2020-23. We focus on PDPs, excluding Medicare Advantage Part D plans and employer group waiver plans.

Exposure

Our analysis examines differences in post-IRA outcomes among plans with different exposure to the reinsurance reforms. We proxy exposure to the reinsurance reforms using each plan's 2023 PMPM reinsurance payment. This measure captures a plan's reliance on federal reinsurance before the IRA reforms. It serves as a useful proxy for two reasons.

First, 2023 reinsurance payments are a strong predictor of what reinsurance payments would have been in 2024-2025 absent the IRA, i.e., *counterfactual 2024-25 reinsurance payments*. In the 2020-23 Part D Payment files, reinsurance amounts are highly correlated within a plan across time, with plan fixed effects accounting for 88% of the variation in yearly reinsurance payments to plans. This high correlation is driven by the fact that consumers exhibit inertia in plan choice, so a high-cost individual is likely to continue to incur reinsurance payments for the same plan year after year (16,17).

Second, the IRA reform to plan liability is proportional to *counterfactual reinsurance payments* in 2025. Specifically, in 2023, spending in the catastrophic zone (where reinsurance applied) was equal to the reinsurance payment divided by 0.8. Plan liabilities in the catastrophic zone increase under the IRA from 15% of spending to 60% in 2025. Thus, we can write the change in plan liability induced by the IRA reinsurance reforms as:

$$\begin{aligned} \Delta Plan\ liability^{IRA\ reins} &= (0.6 - 0.15) * \quad catastrophic\ zone\ spending^{25} \\ &= (0.6 - 0.15) * \frac{counterfactual\ reinsurance\ payments^{25}}{0.8} \\ &\approx (0.6 - 0.15) * \frac{reinsurance\ payments^{23}}{0.8} \end{aligned}$$

In the second line, we substitute catastrophic zone spending in 2025 with its equivalent under the pre-IRA benefit design (i.e., reinsurance payments would have been 80% of catastrophic zone spending). The final approximation holds because, as we argued above, reinsurance payments in

2023 are a strong predictor of 2025 reinsurance payments in a counterfactual without the IRA. We capture only the changes to plan liability induced by the reinsurance reforms; plan liability also changed because of the OOP maximum and the elimination of the coverage gap.

Outcomes

We report five measures describing PDP market characteristics between 2020 and 2025. First, we report the total number of plans offered across all PDP markets and the total number of plans exiting each year (i.e., not continuing to the next year). We also report three statistics averaged across PDP markets: the number of plans being offered, the number of distinct plan sponsors, and the Herfindahl-Hirschman Index (HHI) as a measure of market concentration.

We consider five measures of plan financial characteristics. The first is the average monthly premium (for beneficiaries not receiving the low-income subsidy). Starting in 2025, monthly premiums are reported net of additional subsidies from the Demonstration. To contextualize the Demonstration's targeted subsidy, we count the number of plans with year-over-year premium increases of $35. The next measures are the average PMPM direct subsidy and the average PMPM reinsurance payment. Premiums, a direct subsidy subject to risk adjustment, and reinsurance sum to total payments to plans and, equivalently, total plan liabilities.

We further examine four measures of benefit design. *Mean Coverage* represents the share of drugs covered (on-formulary) from the set of drugs covered by any Part D plan in that year. *Mean OOP* represents enrollees' average point-of-sale cost-sharing for the same set of drugs when being dispensed prior to the initial coverage limit (2020-24) or the out-of-pocket maximum (2025). OOP is set to the average negotiated price for the drug in cases where the plan does not cover the drug (see measurement detail in the Appendix). *Mean price* reports the average price for the same fixed set of drugs; again, price is set to the average negotiated price in cases where the plan does not cover the drug. The publicly-available price variable does not reflect direct and indirect remuneration specific to this plan-drug that may further reduce these prices. Our fourth outcome is the share of covered drugs in the plan requiring prior authorization.

Sample

Our analysis uses three main panels of PDP plans. The "universe" panel includes all PDPs available from 2020–2025, which we use to describe aggregate market statistics. The "2023 plans" panel consists of 813 PDPs that were active in 2023 with non-missing plan-level average reinsurance data that year, as well as their parent plans in 2020-22 and child plans in 2024-25. We use this panel to analyze plan exits in 2024–2025. Lastly, the "2025 plans" panel includes 473 PDPs that existed in 2025 and could be linked to non-missing 2023 plan-level average reinsurance data, as well as their parent plans in all preceding years. We use this panel to examine the share of plans hitting the premium cap in 2025 and to conduct event-study analyses of premiums and benefit design outcomes on a fixed set of plans each year. To link 2023 reinsurance payment data to other years, we use the CMS plan crosswalk files to map 2023 plan IDs to parent plans in prior years and child plans in subsequent years. When plans were consolidated after 2023 (or had split prior to 2023), we assign the average reinsurance payment across the relevant 2023 plans to maintain consistent links across years.

We define the years 2020-23 as prior to the IRA, measure our exposure in the last pre-IRA year of 2023, and look for effects in 2024 and 2025. The IRA was signed in August 2022, after Part D contracts had been finalized for 2023 (18). Thus, we measure the IRA impact beginning in 2024, when plans faced a small increase in reinsurance liability and had their first opportunity to position themselves for the larger 2025 reforms.

Methods

We first measure the association between 2023 reinsurance payments and plan exit in 2024 or 2025. Specifically, we plot a binned histogram of 2023 reinsurance payments, and report the share of plans exiting from each bin. This analysis uses the 2023 plans panel.

Next, we measure the association between 2023 reinsurance payments and receipt of the targeted subsidy under the Premium Stabilization Demonstration. The Demonstration offered a targeted subsidy to any plan whose premium increase, after the universal $15 direct subsidy increase, would have exceeded $35. Thus, plans with a $35 premium increase between 2024 and 2025 can be inferred to have received the targeted subsidy that reduced their premium increase to that cap. We again measure this association using a binned histogram that reports the share of plans

receiving the targeted subsidy against 2023 reinsurance payments. This analysis uses the 2025 plans panel, since it relies on an observation of 2023 reinsurance payments as well as premium changes between 2024 and 2025.

Finally, we evaluate whether plans with greater pre-IRA reinsurance exposure systematically altered premiums or benefit design after the IRA. For these panel outcomes, we estimate an event-study model that interacts 2023 reinsurance payments with year indicators. The event-study model also controls for year and plan fixed effects. The coefficients represent the difference in the outcome in that year for each dollar in 2023 reinsurance payments. The analysis uses the 2025 plans panel.

Results

We begin by presenting our outcome measures over the years 2020-25 to show the evolution of market and plan measures. Exhibit 1 shows that since the IRA took effect in 2024, there have been widespread plan and insurer exits from stand-alone PDP markets, confirming recent results (19). Prior to 2024, each market averaged over 20 plans offered by about 8 sponsors. By 2025, this declined to 12.2 plans and 5.2 sponsors per market, raising market concentration from an average HHI of 2,830 to nearly 3,500.

Exhibit 1 also describes plan characteristics over time. Premiums averaged $45 in the years 2020-23, and increased by 40% in 2025, even after the Premium Stabilization Demonstration's additional subsidies. Approximately a quarter of 2025 plans have a $35 premium increase (which was observed only once over the years 2020-24), implying that about a quarter of plans qualified for the targeted subsidy within the Premium Stabilization Demonstration. (See Appendix Exhibit 1 for the distribution of premium increases in 2025.) With regards to benefit design outcomes, average drug coverage is approximately stable, as is use of prior authorization. Growth in average OOP costs and drug prices accelerated from approximately 8% per year in 2020-23 to 33% and 26%, respectively, in the IRA post-period (11).

Exhibit 1 also shows the dominant role of reinsurance in plan finances prior to the IRA reforms. In 2023, a plan received an average of $158 in total payments PMPM to cover their share of prescription drug purchases, with more than two-thirds of those payments received under the pre-IRA reinsurance.

Exhibit 2 reports the distribution of our exposure measure, 2023 reinsurance payments. There was wide variation around the mean of $108 PMPM, with an interquartile range of $93 PMPM.

Exhibit 2 also depicts the share of plans exiting for each decile level of 2023 reinsurance payments. A positive association is apparent; the least-squares line suggests that each $100 in 2023 reinsurance (approximately the interquartile range) was associated with a 13 percentage point increase in the probability of plan exit in the years 2024–25. The positive correlation is robust to controlling for market fixed effects and other plan characteristics (see Appendix Exhibit 2).

Next in Exhibit 3, we consider the role of the Premium Stabilization Demonstration. We interpret a $35 premium increase in 2025 as evidence of receipt of the targeted subsidy component of the Demonstration. In Exhibit 3, we depict the positive association of targeted subsidy receipt and 2023 reinsurance levels, reporting the share of plans in 2025 that are hitting the $35 premium increase cap for each decile of 2023 reinsurance payments. The least-squares line suggests each $100 in 2023 reinsurance payment was associated with a 8.6 percentage point increase in receipt of the Demonstration's targeted subsidy. The positive correlation is robust to controlling for market and plan fixed effects and other plan characteristics (see Appendix Exhibit 2).

Finally in Exhibit 4, we report an event study interacting standardized 2023 reinsurance payments with year indicators for plan premiums. We find that plans with higher levels of 2023 reinsurance had similar premium trends to plans with lower levels of 2023 reinsurance in the years 2020–22. However, plans with higher reinsurance disproportionately raised premiums in the years 2024–25. The event study coefficients imply that a plan with $100 higher 2023 reinsurance payments had monthly premiums that were $9 ($11) higher in 2024 (2025).

Event studies for benefit design outcomes are reported in Appendix Exhibit 3. The event study coefficients report the impact of a $100 difference in 2023 reinsurance payments, and the y-axis is scaled to represent approximately a 5% positive or negative change in the outcome relative to its sample mean. We find no strong evidence that higher reinsurance plans disproportionately changed coverage, OOP, price, or prior authorization in 2024–25 relative to lower reinsurance plans.

Discussion

We examine how the IRA's reduction in reinsurance, and corresponding increase in plan liabilities, affects plan characteristics in Medicare Part D. Since plan reinsurance is highly serially correlated, we posit that plans with high 2023 reinsurance had greater exposure to the IRA reinsurance reforms. We find that plans with higher 2023 reinsurance were more likely to exit Part D in 2024–25. We also find that plans with higher 2023 reinsurance were more likely to receive a targeted subsidy under the Premium Stabilization Demonstration. In an event study, we find that premiums for plans with higher reinsurance were on parallel pre-trends to plans with lower reinsurance in the years 2020–22, but diverge in 2024–25. Plans with $100 more in 2023 reinsurance raised premiums by $9-$11 more than plans with mean reinsurance payments in 2023, or 18-22% relative to 2023 mean premiums. However, plans with higher reinsurance levels did not differentially alter benefit design outcomes in 2024–25.

Our results indicate that the reduction in reinsurance played a key role in the volatility in Part D since 2024. More than 28% of 2023 PDPs chose to exit in the next two years, suggesting that post-IRA Part D is likely to be a more concentrated market. Our findings suggest that exiting plans were disproportionately those with high levels of reinsurance payments in 2023. We note that the Demonstration was announced in July 2024, which was too late to deter exits in 2024 or 2025.

Our finding that exits are linked to reinsurance payments has implications for the near-term stability of the PDP market. Estimates suggest that 4-11% of PDP enrollees experienced plan exit in 2024 and 2025 (10). We show that these individuals were disproportionately from plans

with high reinsurance payments, suggesting they are disproportionately high-cost individuals. The new plans chosen by these individuals may find them unprofitable under the new benefit design and may need to raise bids (and therefore premiums) to account for their expense. Therefore, we may continue to see unusual levels of plan exit or other adjustments in the short-term.

In a first look at the Premium Stabilization Demonstration, our results suggest that the program was not sufficiently targeted to prevent premium increases among plans most exposed to the reinsurance reforms. Our inference combines two facts. First, we find that plans with high levels of reinsurance were more likely to hit the premium increase cap, suggesting that they benefited from the Demonstration's targeted subsidy. However, we also show that plans with high levels of reinsurance disproportionately raised premiums in 2024 and 2025, even including the Demonstration subsidies in 2025.

We do not find any evidence that plans with higher reinsurance exposure responded to reinsurance reforms by differentially altering benefit design outcomes (coverage, OOP costs, price, or prior authorization) relative to plans with lower exposure. We conclude that benefit design is more tightly constrained by CMS regulations (e.g., coverage breadth and actuarial value requirements). However, our results do not indicate how the utilization of high-cost drugs is likely to change now that plans bear a greater liability share; when available, the Part D Event microdata can reveal changes in utilization and the effects of harder-to-observe formulary design elements like the stringency of prior authorization.

Finally, the IRA reinsurance reform aimed to strengthen incentives for plans in their negotiation of drug prices and their design of formularies. Our analysis is limited to publicly-available pricing data prior to rebates that may reduce prices by as much as 30% (20). Therefore, we cannot assess how the reinsurance reforms may have performed on this goal.

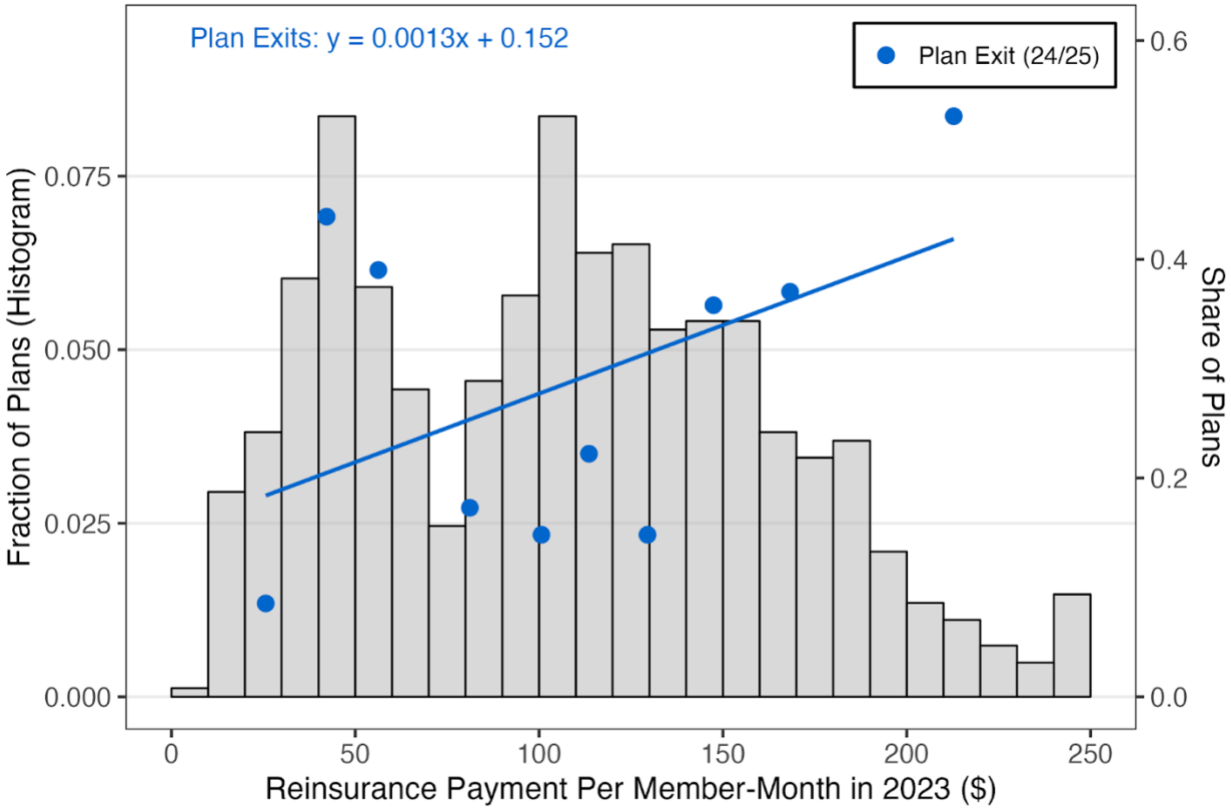
Listing of Exhibits

Exhibit 1: PDP Market Statistics and Plan Characteristics, 2020-2025.

	2020	2021	2022	2023	2024	2025
Market Statistics						
Total # of plans	959	1007	776	814	719	474
# of plan exits	0	18	18	4	62	140
Mean # of sponsors/market	8.3	8.2	7.9	8.0	7.0	5.2
Mean # of plans/market	24.6	25.8	19.9	20.9	18.4	12.2
Mean HHI/market	2824	2752	2830	2860	3149	3459
Plan Characteristics						
Mean Premium	$40.9	$41.5	$47.7	$49.3	$59.8	$64.3
# of plans with $35 premium increase	0	0	1	0	0	117
Mean Direct Subsidy	$14.8	$7.8	$2.9	$1.6	-	-
Mean Reinsurance Payment	$82.9	$88.6	$101.3	$107.5	-	-
Mean Coverage	0.53	0.52	0.52	0.52	0.51	0.54
Mean OOP (pre-ICL)	124	136	143	158	206	281
Mean Drug Price	198	217	230	249	324	396
Mean Prior Authorization	0.22	0.24	0.25	0.25	0.26	0.26
Number of Plans in Each Panel						
2023 plans	929	984	771	813	718	473
2025 plans	756	791	579	580	579	473

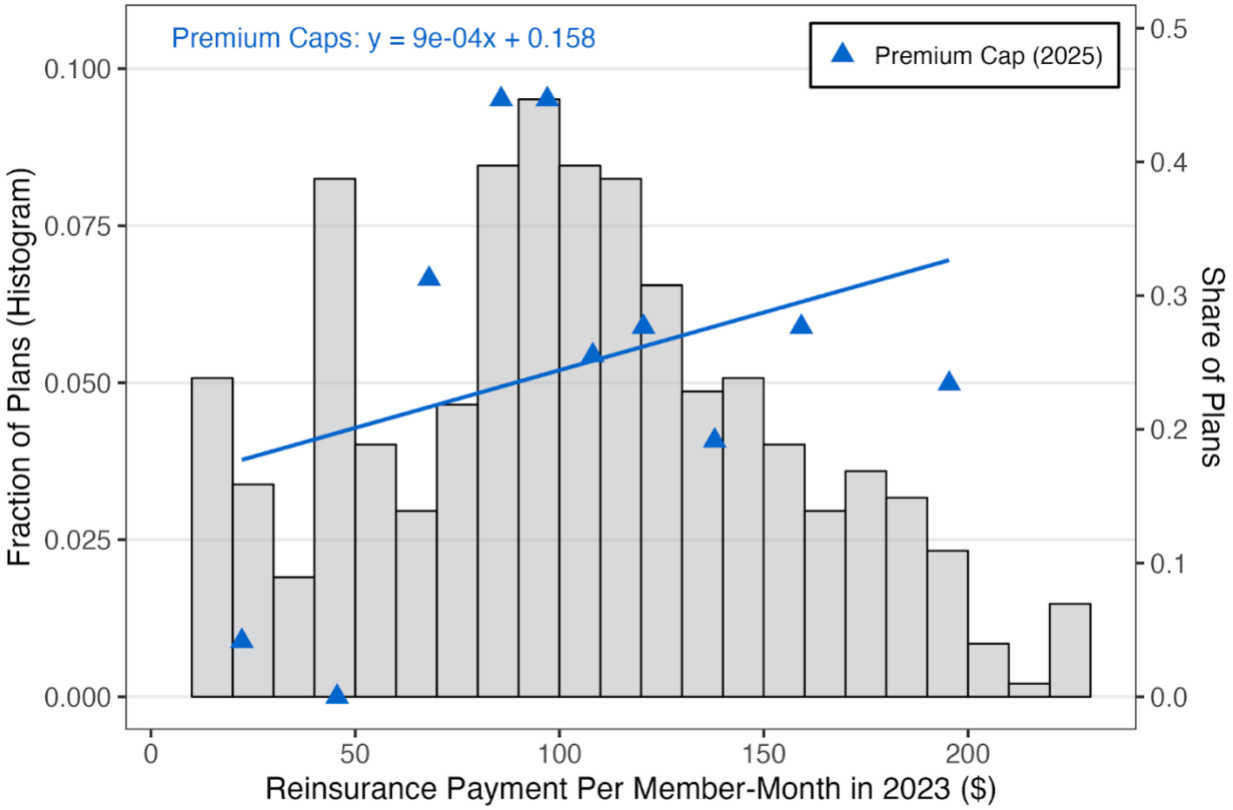
Source/Notes: SOURCE: Q1 Quarterly Prescription Drug Plan Formulary and Pricing Information Files (2020-25), Part D payment files (2020-23). NOTES: Summary statistics for the "universe" plan panel (all plans offered). Mean plan characteristics are averaged across all PDP plans. Mean market statistics are averaged across PDP regions. "-" signifies that the statistic is not yet available from the source. Premium in 2025 is net of additional subsidies in the Premium Stabilization Program.

Exhibit 2: Distribution of 2023 Plan Reinsurance Payments and Share of Plans Exited in 2024-2025.



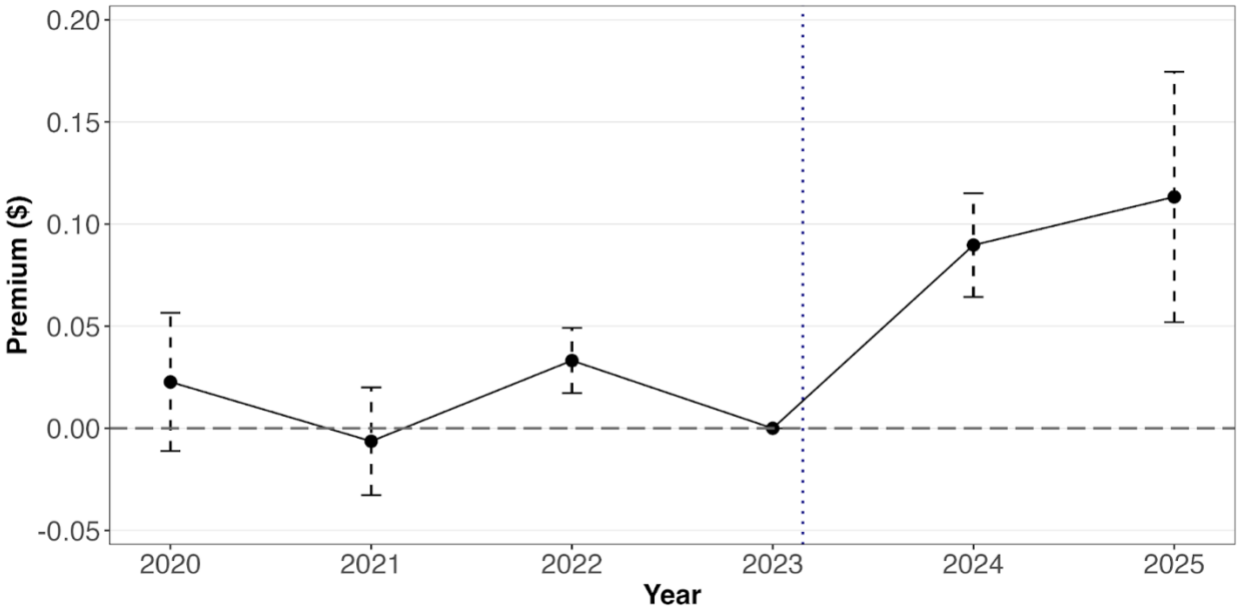
Source/Notes: SOURCE: Part D payment files (2023), Part D plan crosswalk files (2023-2025). NOTES: The distribution was plotted using 2023 plan-level per-member-month reinsurance payment, using all 2023 PDPs with non-missing reinsurance payment data. The binned scatterplot was plotted by computing the share of plans in each decile of the 2023 plan-level reinsurance payment that exited in 2024 or 2025. The line of best fit was computed using each 2023 plan as a unique observation.

Exhibit 3: Distribution of 2023 Plan Reinsurance Payments & Share of Plans Hitting Premium Cap in 2025.



Source/Notes: SOURCE: Q1 Quarterly Prescription Drug Plan Formulary and Pricing Information Files (2023-25), Part D payment files (2023), Part D plan crosswalk files (2023-2025). NOTES: The sample includes all plans in 2025 that could be linked to a 2023 parent plan with non-missing reinsurance payment. The distribution was plotted using the 2025 PDP's 2023 plan-level per-member-month reinsurance payment. The binned scatterplot was plotted by computing the share of plans in each decile of the plan-level reinsurance payment that had 2024-2025 premium change capped at $35. Plan's 2024 premium is defined as the minimum premium amongst all 2024 parent plans associated with the given 2025 plan, consistent with CMS's Premium Stabilization Demonstration definition. The line of best fit was computed using each 2025 plan as a unique observation.

Exhibit 4: Plan Premiums by Pre-IRA Reinsurance Exposure, 2020-2025.



Source/Notes: SOURCE: Q1 Quarterly Prescription Drug Plan Formulary and Pricing Information Files (2020-25), Part D payment files (2023), Part D plan crosswalk files (2020-2025). NOTES: Reinsurance exposure is defined as the plan's average per-member-month reinsurance payment in 2023. Plan and year fixed effects are included, and standard errors are clustered on the 2023 plan id.

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Appendix to "IRA Reforms to Medicare Part D Reinsurance Are Associated with Plan Exits and Higher Premiums"

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Appendix Exhibit 2: Linear probability regression (OLS) on plan exit probability, and plan hitting premium cap vs. 2023 reinsurance payment
Appendix Exhibit 3: Event Study Analysis of Benefit Design Outcomes

Measurement of Benefit Design Outcomes

Our analysis uses plan-year measures of benefit design outcomes. We obtain these outcomes by collapsing from plan X drug X year outcomes measured in the Q1 Quarterly Prescription Drug Plan Formulary and Pricing Information Files (2020-25).

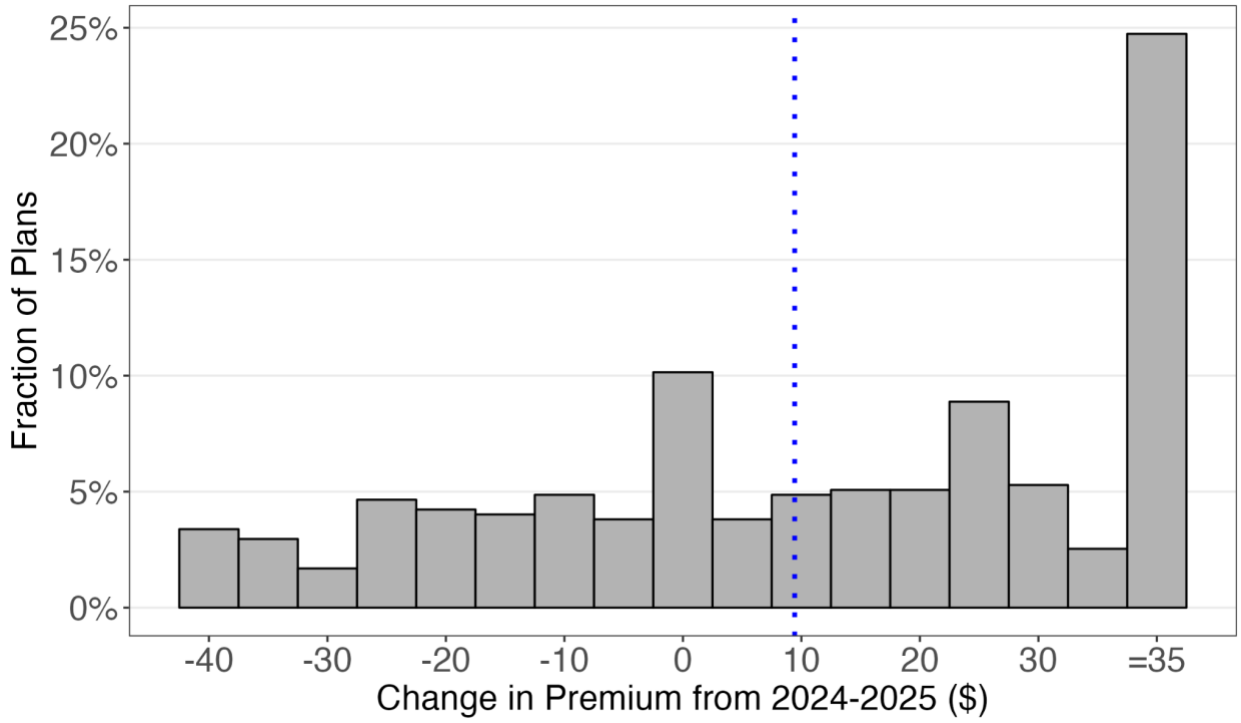
We define a drug as a unique RxCUI, a National Libraries of Medicine identifier for an ingredient(s) X strength X drug form X brand name. We begin by determining the set of covered RxCUIs for each plan X year. Next, we rectangularize within each year to determine whether each RxCUI ever covered in a year is covered by a particular plan. The set of RxCUIs covered by any plan in a year is the universe of drugs for that year.

Price is reported at the plan X drug X year level when a drug is covered by a plan. During our sample period, plans sponsors were instructed to include direct and indirect remuneration from pharmacies in this price variable, but not remuneration from manufacturers. We impute a price equal to the average covered price in that year when a drug is not covered by a particular plan.

We determine OOP costs for this RxCUI in this plan using the copay for flat copay tiers or the coinsurance rate times the plan X drug price for coinsurance tiers. When a plan does not cover a drug, its OOP is imputed to be the price (equivalently, the average price among plans that cover this drug). OOP costs are measured for the initial coverage zone in 2020-24 and the post-deductible cost-sharing zone in 2025. The OOP cost at preferred pharmacies is used when plans have a preferred pharmacy network.

Finally, we use prior authorization at the plan X drug X year level for covered drugs. In contrast to price and OOP cost, we do not impute prior authorization when a drug is not covered by a plan, so the collapsed plan-year outcomes represents the share of covered drugs with a prior authorization requirement.

Appendix Exhibit 1: Distribution of Plan Premium Changes from 2024-2025.



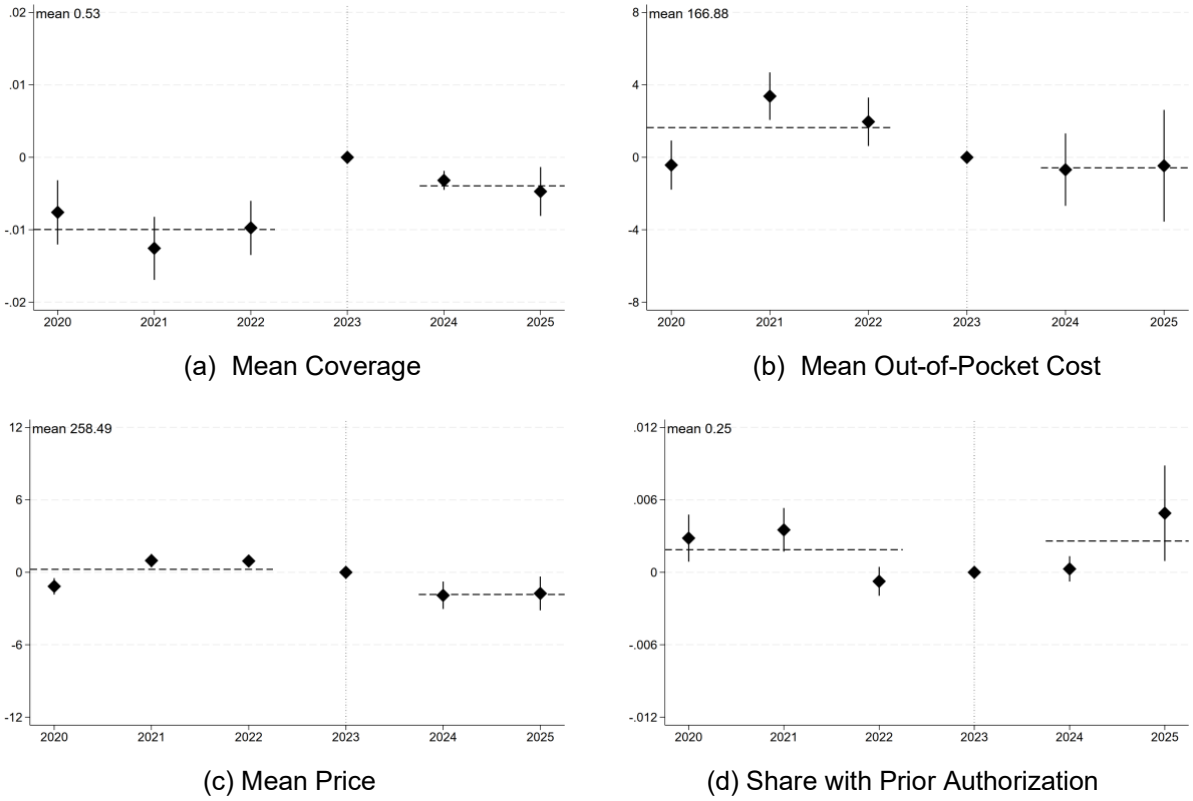
Source/Notes: SOURCE: Q1 Quarterly Prescription Drug Plan Formulary and Pricing Information Files (2023-2025), Part D payment files (2023), Part D plan crosswalk files (2023-2025). NOTES: The sample includes all 2025 PDPs that could be linked to the 2023 parent plan with non-missing reinsurance payment data. Change in premium from 2024-2025 is the plan's 2025 premium minus the plan's 2024 premium. Plan's 2024 premium is defined as the minimum premium amongst all 2024 parent plans associated with the given 2025 plan, consistent with CMS's Premium Payment Demonstration definition.

Appendix Exhibit 2: Linear probability regression (OLS) on plan exit probability, and plan hitting premium cap vs. 2023 reinsurance payment.

	Dependent Variable					
Dependent Variables	Plan Exits in 24/25			Plan Hits Premium Cap in 2025		
Reins in 2023 ($'00)	0.125*** (0.015)	0.127*** (0.025)	0.146*** (0.027)	0.086** (0.035)	0.094* (0.054)	0.218*** (0.048)
is_enhanced		0.002 (0.018)	0.014 (0.020)		0.013 (0.053)	0.264*** (0.050)
PDP Region FE	-	-	Y	-	-	Y
Parent Org FE	-	-	-	-	-	Y
Observations	813	813	813	473	473	473
R2	0.02524	0.02525	0.04439	0.01018	0.01033	0.46403

Source/Notes: SOURCE: Q1 Quarterly Prescription Drug Plan Formulary and Pricing Information Files (2023-2025), Part D payment files (2023), Part D plan crosswalk files (2023-2025). NOTES: The plan exit regression uses all 2023 PDPs with non-missing reinsurance payment data. Exit is an indicator for whether the given 2023 plan's children plans exited in 2024 or 2025. The premium cap regression uses all 2025 PDPs that could be linked to the 2023 parent plan with non-missing reinsurance payment data. The premium cap is an indicator for whether the difference in plan's 2025 premium vs. plan's 2024 premium is exactly $35. Plan's 2024 premium is defined as the minimum premium amongst all 2024 parent plans associated with the given 2025 plan, consistent with CMS's Premium Payment Demonstration definition. The standard errors are clustered at the PDP region level. Regression significance codes: '***' 0.001, '**' 0.01 , '*' 0.05.

Appendix Exhibit 3: Event Study Analysis of Benefit Design Outcomes



(a) Mean Coverage

(b) Mean Out-of-Pocket Cost

(c) Mean Price

(d) Share with Prior Authorization

Source/Notes: SOURCE: Q1 Quarterly Prescription Drug Plan Formulary and Pricing Information Files (2020-25), Part D payment files (2020-23). NOTES: Analyses use the "2025 plans" sample. Coefficients report the differential effect for $100 in reinsurance in the year 2023 using a plan-year panel of average benefit design outcomes. 95% confidence intervals are derived from standard errors clustered on the plan. The pre-period (2020-22) and post-period (2024-25) averages of the event study coefficients are depicted in dashed lines.