

Evaluation of the Medicare Advantage Value-Based Insurance Design Model: 2020–2024

Dmitry Khodyakov, Christine Eibner, Erin A. Taylor, Julia Bandini, Marika Booth, Christine Buttorff, Stephanie Dellva, Michael Dworsky, Alice Y. Kim, Julie Lai, Monique Martineau, Nabeel Qureshi, Afshin Rastegar, Max Rubinstein, Daniel Schwam, Shiyuan Zhang

RAND Health

PR-A4406-1

March 2026

Prepared for the Centers for Medicare & Medicaid Services

Center for Medicare and Medicaid Innovation

Under Research, Measurement, Assessment, Design, and Analysis Contract Number 75FCMC19D0093, Order Number 75FCMC20F0001

The statements contained in this report are solely those of the authors and do not necessarily reflect the views or policies of the Centers for Medicare & Medicaid Services. RAND assumes responsibility for the accuracy and completeness of the information contained in this report. **RAND**® is a registered trademark.



About This Project Report

This report presents RAND researchers' findings from the evaluation of the Medicare Advantage (MA) Value-Based Insurance Design (VBID) Model test for 2020 through 2024, initiated by the Center for Medicare and Medicaid Innovation (Innovation Center). The VBID Model allows participating MA parent organizations to target certain benefits, including reduced cost sharing for Part C and Part D benefits, VBID-enabled supplemental benefits, and Rewards and Incentives programs, to beneficiaries based on socioeconomic status or certain chronic conditions. All model participants are required to offer Wellness and Health Care Planning to all enrollees in their VBID-participating plans. VBID also allowed participating plans to offer hospice benefits (the Medicare Hospice Benefit, Palliative Care, Transitional Concurrent Care, and Hospice Supplemental Benefits).

In this report, which focuses only on nonhospice VBID benefits, we describe model participants, their interventions, implementation experiences, and the association between VBID and a variety of health care quality and cost outcomes. A separate appendix volume provides additional information on statistical approach, primary data collection and analysis, and other material. The results will be useful to policymakers, health plans, and researchers interested in MA benefit design.

Because many elements of the model and our evaluation approach have stayed consistent over time, some sections of this report might closely resemble those in previous evaluation reports (Eibner et al., 2025; Eibner et al., 2023; Khodyakov et al., 2022). Our next and final report, which is planned for 2028, will include an evaluation of all model components, including the Hospice Benefit component.

This research was funded by the Innovation Center under Research, Measurement, Assessment, Design, and Analysis for Contract Number 75FCMC19D0093 and Order Number 75FCMC20F0001, for which Julia Driessen is the contracting officer's representative. It was carried out within the Financing and Organization Program in RAND Health.

For more information, see www.rand.org/health, or contact Health@rand.org.

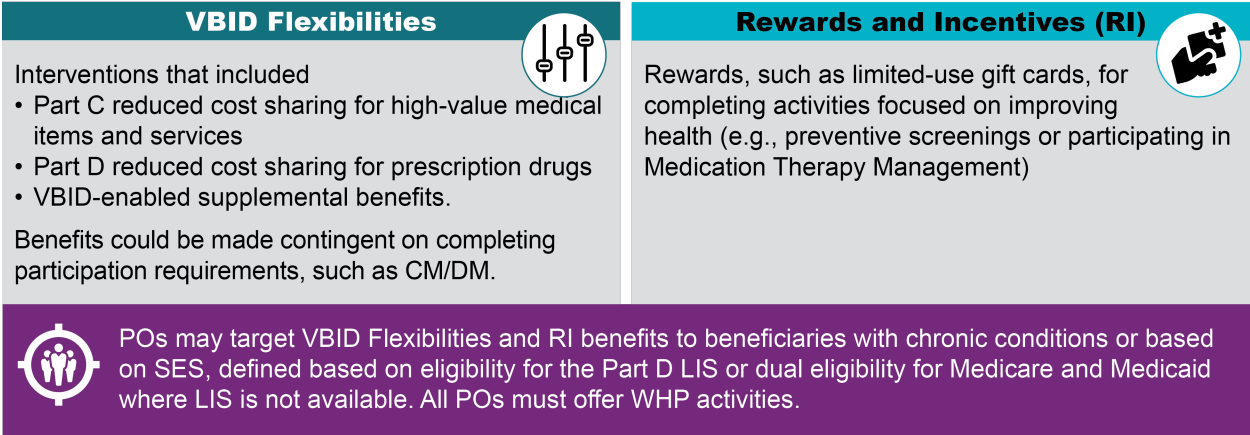
Acknowledgments

We thank Julia Driessen at the Centers for Medicare & Medicaid Services (CMS) for her guidance and support as we developed this report. We also thank the CMS Office of the Actuary, the CMS VBID Model team, and Acumen for providing critical data. We are indebted to our reviewers and expert advisers, including Betsy Q. Cliff, Beth Ann Griffin, Paul Koegel, Carrie M. Farmer, and Peter S. Hussey. We are grateful to Leslie Canterbury for excellent administrative assistance.

Summary

In 2020, the Center for Medicare and Medicaid Innovation (Innovation Center), part of the Centers for Medicare & Medicaid Services (CMS), introduced Phase II of the Medicare Advantage (MA) Value-Based Insurance Design (VBID) Model test.¹ Designed to improve care quality and reduce costs in MA plans, this voluntary model provided participating insurers, known as *parent organizations* (POs), a path to offering expanded benefits, such as reduced cost sharing or supplemental benefits, to enrollees targeted based on socioeconomic status (SES) or one or more chronic conditions. VBID was designed to encourage beneficiaries to use high-value care, engage in healthy behaviors, and take proactive steps to support their health. In 2024, the model had two main components: VBID General and the Hospice Benefit component. In this report, we present findings related to the VBID General component of the model (Figure S.1), hereafter referred to as *VBID*. This evaluation builds on previously published evaluations (Eibner et al., 2025; Eibner et al., 2023; Khodyakov et al., 2022) by adding new, more-recent data on evaluation outcomes and using PO surveys and interviews conducted in 2024 to contextualize the findings.

Figure S.1. 2024 VBID Interventions Evaluated in This Report



NOTE: CM/DM = care management or disease management; LIS = low-income subsidy. WHP = Wellness and Health Care Planning.

In 2024, VBID included VBID Flexibilities, such as VBID-enabled supplemental benefits and Part C and Part D reduced cost sharing, and Rewards and Incentives (RI) programs. Model

¹ Phase I of the MA VBID Model test, which was available in a subset of states and for a limited set of chronic conditions, ran from 2017 to 2019 and is not assessed in this report.

participants could make the receipt of VBID Flexibilities benefits conditional on a beneficiary meeting participation requirements, such as participating in care management or disease management (CM/DM) or seeing a high-value provider that the plan identified as delivering safe, timely, efficient, effective, and patient-centered care. In 2021 and 2022, the model also allowed POs to share MA rebates directly with beneficiaries in the form of cash.

All model participants were required to offer Wellness and Health Care Planning (WHP) activities, which focused on improving awareness and the availability of advance care planning, to all enrollees in their VBID-participating plans.

RAND researchers are conducting a multiyear, mixed-methods evaluation of the VBID Model. In late 2024, CMS announced that the model would conclude at the end of 2025, in part because prior evaluation results indicated that VBID resulted in unexpectedly high costs for CMS (CMS, 2024c). Despite the model’s cancellation, the RAND evaluation continues to provide a full assessment of model performance through the end of 2025. In this report, we describe the results for 2020 through 2024.

VBID Model Participants and Their Interventions

In 2024, 1,400 plans participated in VBID. Participating plans differed from eligible nonparticipating plans on several characteristics (Table S.1). Notably, VBID participants were substantially more likely to be Dual Eligible Special Needs Plans (DSNPs), had a higher proportion of enrollees eligible for the Part D low-income subsidy (LIS), and had higher average enrollment, premiums, and out-of-pocket (OOP) maximums than comparators did. POs offering VBID plans were more likely than nonparticipating POs to offer plans in nine or more states (12.5% versus 1.1%) and to be located in areas with higher MA penetration rates (57.7% versus 52.8%) (PO data are not shown in the table).

Table S.1. Characteristics of 2024 VBID Plans and Eligible Nonparticipating Plans

Characteristic	VBID Plans (N = 1,400)	Eligible Nonparticipating Plans (N = 3,100)
DSNP (%)	53.9 (40.8)	2.6 (22.9)
LIS-eligible enrollees (%)	66.5 (38.8)	23.8 (24.8)
Enrollment	7,243 (12,857)	4,796 (10,390)
PMPM premium (\$)	26.0 (22.6)	18.5 (37.5)
OOP maximum (\$)	6,446 (2,434)	5,067 (2,000)

SOURCE: Authors’ analysis of VBID Model test intervention and application data.

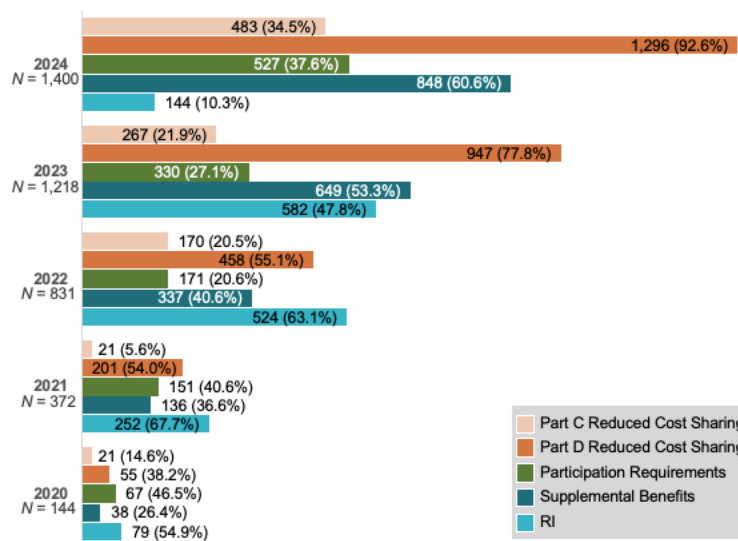
NOTE: PMPM = per member, per month. The numbers shown in parentheses are standard errors. All differences are statistically significant with $p < 0.001$. PO data are not shown in the table.

The numbers of participants, their characteristics, and approaches to benefit targeting changed over the course of the model test:

- **VBID participation increased almost tenfold between 2020 and 2024**, with 144 plans offering VBID benefits in 2020 and 1,400 doing so in 2024.
- **The share of VBID participants that were DSNPs rose sharply**, from 27.8% in 2020 to 53.9% in 2024. By 2024, 90.5% of all DSNPs were participating in the model.
- **POs’ strategies for targeting VBID benefits also shifted over time.** Reliance on chronic condition targeting, which POs used to improve management of selected conditions, declined from 93.1% of plans in 2020 to 41.6% in 2024. In contrast, SES-based targeting grew steadily from 35 plans (24.3% of all participants) in 2020 to 882 (63.0%) in 2024, driven by the ease of identifying eligible beneficiaries, especially in DSNPs, in which LIS eligibility automatically qualifies beneficiaries for VBID benefits and therefore reduces plans’ administrative burden.
- **Most 2024 participants implementing VBID in DSNPs (95.3%) targeted beneficiaries based on SES**, while most participants implementing VBID in non-DSNPs (81.5%) targeted beneficiaries based on chronic conditions.

Figure S.2 shows how VBID interventions have evolved over time; key takeaways are summarized below.

Figure S.2. Number of Plans Offering VBID, by Intervention Type, 2020–2024



SOURCE: Authors’ analysis of VBID Model test intervention and application data.

NOTE: The left-hand side of the chart shows the number of plans that offered VBID interventions, and the bars show intervention types. Plans frequently offer more than one type of intervention, so the number of intervention types offered exceeds the number of participating plans. In 2021–2022, plans could offer Cash or Monetary Rebates to enrollees; plans that offered this benefit only under the VBID Model are excluded from this figure. We also excluded plans that had zero enrollment.

- **Part D reduced cost-sharing interventions were the most offered VBID benefit in 2023 and 2024.** The number of plans offering this benefit increased from 55 (38.2% of all participants) in 2020 to 1,296 (92.6%) in 2024.

- **VBID-enabled supplemental benefits became the second most-offered benefit in 2023 and 2024.** The number of plans offering this benefit grew steadily over time, rising from 38 (26.4% of all participants) in 2020 to 848 (60.6%) in 2024.
- **The number of plans offering Part C reduced cost sharing was stable in the first two years, then grew each year thereafter, but its share never exceeded 35%.** This intervention has never ranked among the three most-common VBID interventions.
- **Between 2020 and 2024, the number of plans with participation requirements grew nearly eightfold, from 67 to 527.** Although the number of plans with participation requirements rose each year, their share of all plans fell to a low of 20.6% (171 plans) in 2022 before climbing to 27.1% (330 plans) in 2023 and to 37.6% (527 plans) in 2024. Although most plans targeted beneficiaries with chronic conditions throughout all years, 2024 was the first year in which 39 plans applied participation requirements to beneficiaries with chronic conditions and low SES.
- **RI interventions were the most common VBID benefit in the first three years of the model, with more than half of model participants offering RI programs, but other interventions gained traction starting in 2023.** The number of plans offering RI fell from 582 (47.8% of all participants) in 2023 to 144 (10.3%) in 2024, largely because one large PO discontinued its VBID RI programs.




Implementation Experiences

As in prior reports, representatives of participating POs in 2024 continued to report that VBID implementation was not too challenging, especially for POs that implemented the model in DSNPs, used SES-based targeting, or offered Part D interventions. Some participants, however, still indicated that model-specific data reporting, working with vendors, and providing WHP services to all plan members were challenging aspects of implementation. POs offering VBID-enabled, card-delivered supplemental benefits encountered operational disruptions, fraud issues, and transaction inaccuracies. To address these issues, POs increased vendor accountability for operational mistakes related to benefit administration.

Associations with Key Outcomes

We used entropy-balanced difference-in-differences (DD) models to estimate the association between VBID and a variety of outcomes. Table S.2 shows our quantitative findings. The current report updates prior findings by adding newly available years of data and, in some cases, additional outcomes; these new results are indicated with shading. We ran all models with the latest available data and, in some cases, made minor methodological changes from methods used for prior reports; these changes are discussed in detail in the body of this report. Although we analyzed data through 2024 where possible, some data sources were available only through 2022 or 2023 at the time of this writing. We describe the results in more detail after the table.

Table S.2. Associations Between VBIID General and Key Outcomes, 2020–2024

Unit	Outcome	2020	2021	2022	2023	2024
 Contract	Overall Star Rating ^a (care quality)	Not assessed	↑ 0.25 point (0.09, 0.41)	↑ 0.14 point (0.03, 0.27)	–0.02 point (–0.16, 0.10)	Not yet assessed
 Beneficiary	Adherence to cholesterol medication	↑ +1.3 ppt (0.5, 2.1)	↑ +0.4 ppt (0.0, 0.9)	↑ +1.1 ppt (0.4, 1.8)	Not yet assessed	Not yet assessed
	Adherence to diabetes medication	↑ +1.1 ppt (0.4, 1.9)	↑ +0.5 ppt (0.1, 1.0)	+0.5 (–0.5, 1.5)	Not yet assessed	Not yet assessed
	Adherence to breast cancer screening	↑ +2.8 ppt (0.3, 5.2)	+1.7 ppt (–0.2, 3.6)	–0.5 ppt (–3.5, 2.6)	Not yet assessed	Not yet assessed
	Part D annual OOP costs	\$1 (–\$9, \$10)	↓ –\$25 (–\$34, –\$16)	↓ –\$36 (–\$42, –\$30)	Not yet assessed	Not yet assessed
	Targeted beneficiaries' risk scores ^b	↑ 0.05 point (0.03, 0.08)	↑ 0.07 point (0.05, 0.10)	↑ 0.09 point (0.05, 0.12)	Not yet assessed	Not yet assessed
	Inpatient stays	↑ +15.5% (11.1%, 19.9%)	↑ +8.1% (4.2%, 11.9%)	+3.7% (–1.9%, 9.3%)	Not yet assessed	Not yet assessed
 Plan	Total costs to CMS ^c	\$5 (–\$15, \$26)	↑ \$23 (\$6, \$41)	↑ \$32 (\$10, \$55)	↑ \$36 (\$1, \$66)	Not yet assessed
	MA rebates ^c	\$4 (–\$2, \$11)	↑ \$19 (\$13, \$24)	↑ \$15 (\$9, \$20)	↑ \$23 (\$15, \$31)	Not yet assessed
	Plan risk scores ^b	0.01 point (–0.01, 0.03)	↑ 0.01 point (0.00, 0.03)	↑ 0.02 point (0.01, 0.04)	0.00 point (–0.03, 0.02)	Not yet assessed
	Reinsurance ^c	\$1 (–\$7, \$9)	\$4 (–\$3, \$12)	\$3 (–\$12, \$18)	↑ \$17 (\$5, \$29)	Not yet assessed
	LIS ^c	–\$2 (–\$6, \$2)	↑ \$3 (–\$1, \$7)	↑ \$6 (\$1, \$10)	↑ \$18 (\$13, \$23)	Not yet assessed
	Standardized MAPD bid ^c	–\$4 (–\$12, \$3)	–\$4 (–\$9, \$2)	↓ –\$6 (–\$11, \$0)	↓ –\$14 (–\$20, –\$7)	↓ –\$9 (–\$16, –\$2)
	MAPD premiums ^c	\$0 (–\$2, \$2)	↑ \$1 (\$0, \$4)	\$1 (–\$1, \$2)	\$0 (–\$1, \$2)	↑ \$3 (\$1, \$4)
	Number of MSBs offered	↓ –0.4 (–0.9, 0.0)	↓ –1.6 (–2.0, –1.3)	↓ –1.0 (–1.3, –0.7)	↓ –0.9 (–1.3, –0.6)	↓ –1.0 (–1.4, –0.6)
	Enrollment (% change)	7% (–8%, 23%)	9% (–4%, 24%)	4% (–9%, 18%)	6% (–8%, 22%)	5% (–10%, 20%)

SOURCE: Authors' analysis of CMS data.

NOTE: MAPD = MA Prescription Drug; MSB = mandatory supplemental benefit; ppt = percentage point. The **dark blue** arrows indicate $p < 0.05$. The **light blue** arrows indicate $p < 0.10$. The 95% confidence intervals (CIs) are shown in parentheses. The shaded cells indicate outcomes that were analyzed for the first time in this report. *Not yet assessed* means that the outcome was not analyzed in that year but will be assessed in the future. The results for each year and outcome are derived from separate regressions. Because of methodological changes, the results might vary from those in prior reports. A contract is a group of plans offered by the same PO subject to the same agreement with CMS.

^a Star Rating data are for measurement years 2021, 2022, and 2023 and correspond with published (display-year) data for 2023, 2024, and 2025, respectively.

^b Beneficiary-level risk scores reflect measurement years, and plan-level risk scores reflect payment-year risk scores (diagnoses measured in year t are used for payment in year $t + 1$).

^c Plan-level financial outcome results shown are PMPM.

Contract-Level Quality Measures

In 2023, we found no relationship between VBID and Star Ratings (a measure of care quality) among contracts containing VBID-participating plans. This finding was a departure from results in prior years, in which there was a positive and statistically significant association between VBID and Star Ratings.

The changing results might reflect the substantial shift in the number and type of participating plans between 2022 and 2023. The total number of participating plans increased by nearly 42% between these years, from 859 in 2022 to 1,218 in 2023. Moreover, as shown in Figure S.2, the types of interventions that plans offered changed substantially over time, with an increase in the share of plans offering Part D interventions and a decline in the share of plans offering RI.

Beneficiary-Level Outcomes

VBID was associated with a 1.1 percentage point increase in adherence to cholesterol medication among targeted beneficiaries in 2022 (95% confidence interval [CI]: 0.04 to 1.8) and a \$36 decline in annual Part D OOP drug costs (95% CI: -\$42 to -\$30). These findings are consistent with the possibility that VBID's Part D interventions, which often eliminated cost sharing for some or all Part D drugs, encouraged greater adherence. In previous years, we found that VBID was also associated with greater adherence to diabetes medication and breast cancer screening recommendations; however, these associations were not statistically significant in 2023.

As in prior years, VBID was associated with increases in targeted beneficiaries' risk scores in 2022. The 2022 increase of 0.09 risk score points (95% CI: 0.05 to 0.12) represents a 5.4% increase relative to what would have been expected without the model. VBID might have encouraged beneficiaries to visit providers more frequently, leading to more diagnoses, which, in turn, might have increased risk scores.

We found no association between VBID and non–coronavirus disease 2019 (COVID-19) hospital stays in 2022; this is in contrast with our findings for 2020 and 2021. The reduced association over time could indicate that VBID uncovered unmet need for hospital care, which has now been addressed. Alternatively, although we considered only non–COVID-19–related hospital stays and controlled for COVID-19 case rates and deaths, it is possible that differential effects of the pandemic for VBID and non-VBID beneficiaries have contributed to the positive associations found in 2020 and 2021.

Plan-Level Outcomes

As in the 2021 and 2022 results, the model was associated with a \$36 per-member, per-month (PMPM) increase in costs to CMS (95% CI: \$1 to \$66) in 2023, an increase of 2.1% relative to what would have been expected without the model. Unlike in prior years, however,

the 2023 cost increases were driven by Part D cost components—notably, a \$17 PMPM increase in reinsurance payments (95% CI: \$5 to \$29) and an \$18 PMPM increase in LIS payments (95% CI: \$13 to \$23). Although we continued to find an increase in MA rebates in 2022 (\$23 increase, 95% CI: \$15 to \$31), we found no association with plan-level MA risk scores in 2023. VBID was associated with a decline in total MA Prescription Drug (MAPD) bids in 2022, 2023, and 2024.

In 2024, VBID was associated with a \$3 increase in beneficiary premiums (95% CI: \$1, \$4), an increase of 10.8% relative to what would have been expected without VBID. However, because the model targeted beneficiaries who were eligible for LIS, which subsidizes Part D premiums, CMS likely shouldered much of the premium increase. Like it was in prior years, VBID was associated with a decrease in the number of mandatory supplemental benefits (MSBs), such as vision and hearing benefits, that plans offered. MSBs, which are available to all plan enrollees, are distinct from VBID-enabled supplemental benefits, which can be targeted to beneficiaries based on SES or chronic conditions. It is possible that plans reduced the number of MSBs offered to make room for VBID-enabled supplemental benefits.

Although we found no statistically significant association between VBID and plan enrollment in any year, most PO representatives indicated that VBID increased enrollment. The enrollment estimates shown in Table S.1 have wide CIs and do not rule out large enrollment increases.

Evaluation Limitations and Strengths

Our analysis has several limitations that should be considered when interpreting the results (see Table S.3).

Table S.3. Summary of Limitations and Strengths of the Evaluation

Evaluation Limitations	Evaluation Strengths
<ul style="list-style-type: none"> • Evaluated a voluntary model that gave participants wide latitude to design their interventions • Could not fully rule out unmodeled differences between VBID and comparison groups, including unobserved differences between VBID and comparison groups that trended differently over time • Model implementation coincided with the COVID-19 pandemic • Lacked clinical data, such as lab results, that could help clarify results • Most DSNPs joined the model test, limiting available comparators for these plans • Evaluated the model as a whole and did not look at subpopulations 	<ul style="list-style-type: none"> • Combined quantitative and qualitative data to understand model impacts • Analyzed many outcomes to gain a comprehensive assessment of VBID’s effects • Addressed observable differences in characteristics between VBID and comparison groups using entropy balancing • Addressed unobservable differences between VBID and comparison groups that were either stable over time or had similar trends by <ul style="list-style-type: none"> – controlling for time trends common to VBID participants and comparison groups – using rigorous statistical methods (entropy balancing and DD) to estimate effects

First, VBID participation was voluntary, and POs and plans that entered the model were different from those that chose not to participate. Although we addressed this issue with entropy balancing and DD models, we cannot be sure that we eliminated all differences, which could have affected the results. Furthermore, our estimates reflect average associations between VBID and key outcomes among all participating plans in each year. Because participation grew substantially over time, the majority of participants in most years were new entrants that might still have been fine-tuning their interventions. This issue might have caused us to underestimate the impact of VBID relative to what might be expected over a longer time horizon, especially if it takes several years for interventions to achieve their full effects.

Regardless of these limitations, our evaluation relied on a rigorous mixed-methods approach that combined quantitative and qualitative methods to estimate how the VBID Model affected key outcomes related to health care costs, utilization, and quality. Our state-of-the-art statistical methods addressed not only observed differences between VBID and comparison groups but also unobserved differences that were either stable over time or trended in a similar way for both groups. In addition, we contextualized our findings based on PO surveys and interviews to explain why the model was associated with certain outcomes.

Abbreviations

ACP	advance care planning
CAHPS	Consumer Assessment of Healthcare Providers and Systems
CI	confidence interval
CM	care management
CMR	comprehensive medication review
CMS	Centers for Medicare & Medicaid Services
COPD	chronic obstructive pulmonary disease
COVID-19	coronavirus disease 2019
DD	difference in differences
DM	disease management
DOAC	direct oral anticoagulant
DSNP	Dual Eligible Special Needs Plan
LIS	low-income subsidy
MA	Medicare Advantage
MAPD	Medicare Advantage Prescription Drug
MSB	mandatory supplemental benefit
MTM	Medication Therapy Management
NPHR	non-primarily health related
OOP	out of pocket
OTC	over the counter
PHR	primarily health related
PMPM	per member, per month
PO	parent organization
PPO	preferred provider organization
RI	Rewards and Incentives
SES	socioeconomic status
SNP	special needs plan
VBID	Value-Based Insurance Design
WHP	Wellness and Health Care Planning

Contents

- About This Project Report iii
- Summary iv
- Abbreviations xii
- Figures and Tables xv
- Chapter 1. Introduction 1
 - Overview of the Model Test 2
 - Participants 3
 - Methods 4
 - Report Structure 9
- Chapter 2. VBID Participants and Their Interventions 11
 - Participating PO and Plan Characteristics 11
 - Targeted Groups 13
 - VBID Benefits Offered 14
 - Summary 22
- Chapter 3. Implementation Experiences 23
 - Overall Assessment of Implementation 23
 - Implementation Challenges 24
 - Summary 29
- Chapter 4. Plan-Level Enrollment and Financial Outcomes 30
 - Enrollment 31
 - Plan Bids 33
 - Costs to CMS 35
 - Beneficiary Premiums 39
 - MSB Offerings 41
 - Comparison with Findings in the 2025 Evaluation Report 42
 - Summary 42
- Chapter 5. Beneficiary-Level Health, Utilization, and Cost Outcomes 44
 - Medication Adherence 45
 - Adherence to Breast Cancer Screening Recommendations 47
 - Inpatient Stays 48
 - Part D OOP Costs 50
 - Beneficiary Risk Scores 50
 - Differences from the 2025 Evaluation Report 52
 - Summary 53
- Chapter 6. Contract-Level Quality-of-Care and Patient Experience Outcomes 55
 - Overall Star Rating 56
 - Domain-Level Star Ratings 57

Differences from the 2025 Evaluation Report	61
Summary	61
Chapter 7. Conclusions	64
References.....	66

Figures and Tables

Figures

Figure S.1. 2024 VBID Interventions Evaluated in This Report.....	iv
Figure S.2. Number of Plans Offering VBID, by Intervention Type, 2020–2024	vi
Figure 1.1. 2024 VBID Model Test Components.....	1
Figure 1.2. Number of Plans Offering VBID, by VBID Category, 2020–2024	4
Figure 2.1. Plans with At Least One Intervention Targeting SES or Chronic Conditions, by Year and Plan Type.....	14
Figure 2.2. Number of Plans Offering VBID Benefits, by Year	15
Figure 2.3. Number of Plans with At Least One Part C Reduced Cost-Sharing Intervention, by Year.....	16
Figure 2.4. Number of Plans Offering Part D Reduced Cost-Sharing Interventions, by Year	17
Figure 2.5. Number of Plans Offering PHR and/or NPHR Supplemental Benefit Interventions, by Year.....	18
Figure 2.6. Number of Plans Offering PHR or NPHR Supplemental Benefit Interventions, by DSNP Status and Year	19
Figure 2.7. Number of Plans with At Least One Intervention with a VBID Flexibilities Participation Requirement, 2020–2024	20
Figure 2.8. Number of Plans with At Least One Intervention with RI, 2022–2024.....	21
Figure 4.1. Estimated Association Between VBID Interventions and Plan Enrollment	31
Figure 4.2. Estimated Association Between VBID Interventions and MAPD Bids.....	33
Figure 4.3. Estimated Association Between VBID Interventions and Total (MA + Part D) PMPM Costs to CMS	35
Figure 4.4. Estimated Association Between VBID Interventions and MA and Part D Costs to CMS.....	36
Figure 4.5. Estimated Association Between VBID Interventions and MA Rebates	37
Figure 4.6. Estimated Association Between VBID Interventions and Plan-Level MA Risk Score	38
Figure 4.7. Estimated Association Between VBID Interventions and PMPM LIS Payments	39
Figure 4.8. Estimated Association Between VBID Interventions and PMPM Reinsurance Payments.....	39
Figure 4.9. Estimated Association Between VBID Interventions and Total (MA + Part D) Premiums	40
Figure 4.10. Estimated Association Between VBID Interventions and Number of MSBs Offered	41

Figure 5.1. Estimated Association Between VBID Interventions and the Probability That Targeted Beneficiaries Were Adherent to Noninsulin Diabetes Medication.....	45
Figure 5.2. Estimated Association Between VBID Interventions and the Probability That Targeted Beneficiaries Were Adherent to Hypertension Medication.....	46
Figure 5.3. Estimated Association Between VBID Interventions and the Probability That Targeted Beneficiaries Were Adherent to Cholesterol Medication.....	46
Figure 5.4. Estimated Association Between VBID Interventions and the Probability That Targeted Beneficiaries Would Be Adherent to Breast Cancer Screening Recommendations.....	48
Figure 5.5. Estimated Association Between VBID Interventions and the Number of Inpatient Stays by Targeted Beneficiaries	49
Figure 5.6. Estimated Association Between VBID Interventions and Targeted Beneficiaries’ Part D OOP Costs	50
Figure 5.7. Estimated Association Between VBID Interventions and Targeted Beneficiaries’ Risk Scores.....	51
Figure 6.1. Estimated Association Between VBID Interventions and Overall Star Rating, Measurement Years 2021–2023	57
Figure 6.2. Estimated Association Between VBID Interventions and Part C Star Rating Domains, Measurement Years 2021–2023	58
Figure 6.3. Estimated Association Between VBID Interventions and the Part D Star Rating Domain Drug Safety and Accuracy of Drug Pricing (Drug Adherence Measures), Measurement Years 2021–2023	59
Figure 6.4. Estimated Association Between VBID Interventions and the Part D Star Rating Domain Member Experience with the Drug Plan, Measurement Years 2021–2023.....	61





Tables

Table S.1. Characteristics of 2024 VBID Plans and Eligible Nonparticipating Plans	v
Table S.2. Associations Between VBID General and Key Outcomes, 2020–2024.....	viii
Table S.3. Summary of Limitations and Strengths of the Evaluation	x
Table 1.1. Outcomes Addressed in This Report, by Chapter and Years Included	5
Table 2.1. VBID General Participating and Comparison PO and Plan Characteristics, 2020–2024.....	12
Table 3.1. Survey Ratings of VBID General Implementation Challenges, 2024.....	24
Table 6.1. Summary of Star Rating Domains Analyzed.....	56

Chapter 1. Introduction

Between 2020 and 2025, the Centers for Medicare & Medicaid Services (CMS) conducted the Medicare Advantage (MA) Value-Based Insurance Design (VBID) Model to boost beneficiaries’ engagement in their own care, promote the utilization of high-value services, and support healthy behaviors. As part of this voluntary model, CMS allowed participating MA insurers—referred to as *parent organizations* (POs)—to offer innovative benefits in a targeted manner. Plans that participating POs entered into the model were allowed to offer certain benefits, such as providing lower cost sharing or additional supplemental benefits, to only some of their enrollees based on certain chronic health conditions or low socioeconomic status (SES). Ultimately, the model’s goals were to enhance care quality, improve beneficiary health outcomes, and lower overall health care expenditures. Figure 1.1 illustrates two key components of the VBID Model that were available in 2024: VBID General and the Hospice Benefit component.

Figure 1.1. 2024 VBID Model Test Components

VBID General Component		Hospice Benefit Component
VBID Flexibilities	Rewards and Incentives (RI)	
 <p>Interventions can include</p> <ul style="list-style-type: none"> • reduced cost sharing for high-value medical items, services, or Part D prescription drugs • additional supplemental benefits (primarily and non-primarily health-related benefits, new and existing technologies). <p>POs can make these benefits contingent on using certain providers or participating in CM/DM.</p>	 <p>Rewards, such as limited use debit or gift cards, can be offered for completing activities focused on improving health (for example, preventive screenings or CM/DM).</p>	 <p>POs electing the Hospice Benefit component can offer the full Medicare Hospice Benefit as part of their MA benefit package. Participating POs must offer palliative care and provide Transitional Concurrent Care through in-network providers. POs may also include additional hospice supplemental benefits.</p>
 <p>POs may target VBID Flexibilities, RI benefits, and Hospice Supplemental Benefits to beneficiaries with chronic conditions or based on SES, defined based on eligibility for the Part D LIS or dual eligibility for Medicare and Medicaid where LIS is not available. All POs must offer WHP activities.</p>		

NOTE: CM/DM = care management or disease management; LIS = low-income subsidy; WHP = Wellness and Health Care Planning. From 2021 to 2022, POs were also permitted to offer Cash or Monetary Rebates to pass a portion of their MA rebates directly to their enrollees. Few POs used this option, and CMS discontinued it for 2023.

In March 2024, CMS announced the termination of the Hospice Benefit component of the VBID Model at the end of 2024, citing implementation and operational challenges and decreased participation among plans (CMS, 2025). Moreover, in December 2024, CMS announced the termination of VBID General—the last remaining component of the model—at the end of 2025, citing excess costs to the Medicare Trust Funds (CMS, 2024c). Consequently, the MA VBID Model ended on December 31, 2025.

RAND researchers have been using a mixed-methods approach to conduct separate evaluations of VBID General and the Hospice Benefit component outcomes since the model's inception. This report presents the results from the fourth annual evaluation of Phase II of the model and focuses solely on VBID General outcomes for 2020 to 2024.² The next and final report, which is planned for 2028, will include evaluations of both model components. Our evaluation combines outcomes of entropy-balanced difference-in-differences (DD) regressions that model the relationship between VBID implementation and care quality, costs, use of high-intensity services, and beneficiary health outcomes with descriptive analyses of PO surveys and thematic analyses of PO interviews conducted in summer 2024. Because many aspects of the model and the evaluation have not changed since 2020, some text in this report might closely echo passages from our prior reports (Eibner et al., 2025; Eibner et al., 2023; Khodyakov et al., 2022).

Overview of the Model Test

As part of the VBID Model, POs were allowed to offer two main categories of VBID General benefits: VBID Flexibilities and Rewards and Incentives (RI).

- VBID Flexibilities included reduced cost sharing for Part C services, such as primary care and specialist visits, reduced cost sharing for Part D prescription drugs, and VBID-enabled supplemental benefits, such as healthy food benefits. POs were allowed to target these benefits to beneficiaries based on specific chronic health conditions or SES and/or require beneficiaries to meet certain participation criteria, such as utilizing designated high-value providers or completing a care management (CM) program, to receive these benefits.
- RI interventions offered financial rewards, such as grocery cards, to beneficiaries who completed certain activities, such as a Medication Therapy Management (MTM) program. POs were also allowed to target RI benefits based on beneficiaries' chronic conditions or SES.

The model granted participants considerable latitude in structuring their VBID offerings. For example, POs were allowed to pick the number of VBID benefits to offer in each participating plan, determine which chronic conditions to focus on, select the Part C services or Part D

² Phase I of the MA VBID Model test, which was available in a subset of states and for a limited set of chronic conditions, ran from 2017 to 2019 and is not assessed in this report.

medications for reduced cost sharing, choose the types of supplemental benefits to offer, and decide whether to make benefits contingent on completion of specific CM activities. POs were able to implement VBID in any or all of their eligible MA plans, provided that those plans met criteria related to size, duration, and performance, and were allowed to offer multiple interventions in the same plan and vary interventions across their model-participating plans. Despite this broad design flexibility, each participating plan had to provide a Wellness and Health Care Planning (WHP) benefit, which focused on advance care planning (ACP), to every enrollee in its VBID-participating plans.

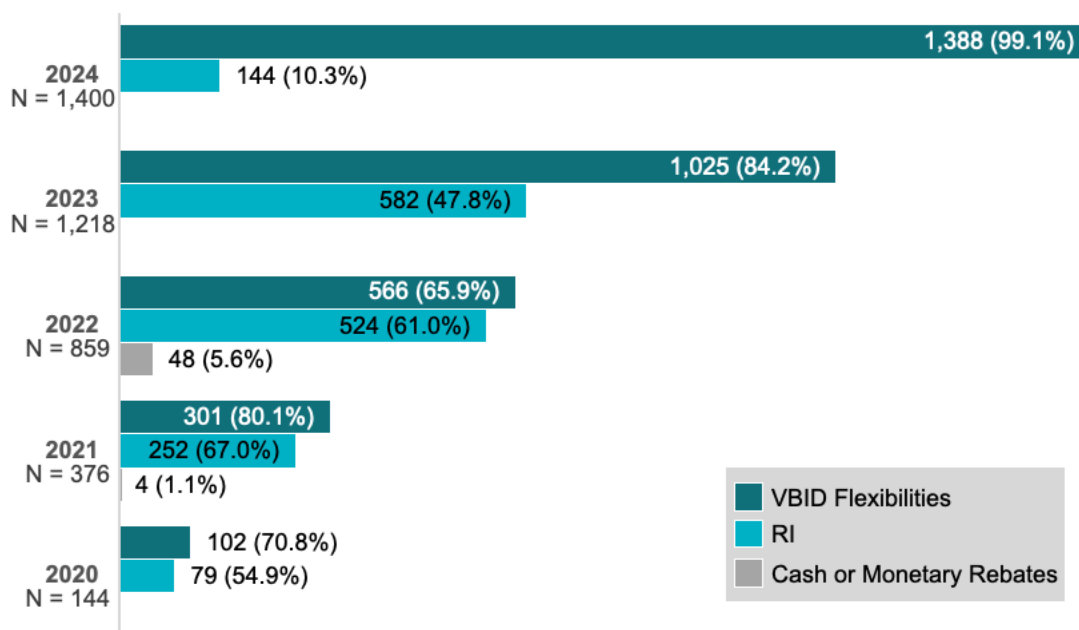
In 2021 and 2022, the VBID General component also included a Cash Rebate option, allowing participating plans to share MA rebates more directly with beneficiaries through cash payments or monetary transfers. Unlike other VBID General benefits, Cash Rebates could not be targeted based on chronic conditions or SES. CMS discontinued the Cash or Monetary Rebates in 2023.

Participants

Model participation grew steadily over time: The number of plans participating in VBID General³ increased nearly tenfold, rising from 144 in 2020 to 1,400 in 2024. Figure 1.2, which presents the number of participating plans offering each category of VBID benefits over time, shows that the number of plans offering VBID Flexibilities continued to grow the fastest, roughly doubling each year and increasing from 102 (70.8% of all participants) in 2020 to 1,388 (99.1%) in 2024. The number of plans offering RI rose from 79 in 2020 to 582 in 2023 and then dropped to 144 in 2024. Similarly, the proportion of plans offering RI programs increased from 54.9% in 2020 to 67.0% in 2021 and then started declining in 2022, dropping to 10.3% in 2024. This dramatic decline was driven by one large PO that stopped offering its RI program. Of the 1,388 model participants offering VBID Flexibilities in 2024, more plans offered Part D reduced cost sharing ($N = 1,296$, 93.4%) than Part C reduced cost sharing ($N = 483$, 34.8%) or VBID-enabled supplemental benefits ($N = 848$, 61.1%) (data not shown).

³ Because this report focuses exclusively on VBID General, from this point forward, we use the term *VBID* to refer to this model component throughout the report, unless otherwise specified.

Figure 1.2. Number of Plans Offering VBID, by VBID Category, 2020–2024



SOURCE: Authors' analysis of VBID Model test intervention and application data.

NOTE: A PO could implement more than VBID category in a plan, so the sum of plans participating in each category exceeds the total number of plans participating in a given year. Between 2021 and 2022, participating plans were allowed to offer Cash Rebates to pass a portion of their MA rebates directly to their enrollees. Plans that offered only Cash or Monetary Rebates were included in this figure. VBID plans with no enrollment were removed from analyses.

Methods

We used a mixed-methods approach to assess the effects of VBID on key care cost, quality, and health outcomes. For the quantitative component, we utilized entropy-balanced DD regressions to estimate the impact of the model. We complemented the quantitative assessments of the impact with qualitative analyses of primary data collected from participating POs to explore the reasons behind observed effects and the mechanisms through which the model might have influenced key outcomes and to capture POs' implementation experiences in their own words. The quantitative analysis offered empirical evidence of the model's effects by comparing outcomes for model participants and nonparticipants while controlling for observable characteristics, fixed differences between these two groups, and time trends. Qualitative analyses added depth and context to the quantitative findings by delving into participants' experiences and perspectives, often revealing subtleties and complexities that quantitative data alone might have overlooked and helping identify contextual factors that might have shaped the way plans implemented their interventions and the results the model was able to achieve. By integrating quantitative and qualitative methods, the mixed-methods approach provided a more robust and comprehensive evaluation—an approach particularly well suited for examining complex

interventions with multiple components and evolving designs (Farquhar, Ewing, and Booth, 2011; Skivington et al., 2021).

Outcomes Considered

In addition to describing model test participation and exploring POs’ implementation experiences, we analyzed VBID’s associations with plan enrollment and financial outcomes, costs to CMS, beneficiaries’ health and utilization outcomes, and care quality. Although our analysis focused on outcomes achieved between 2020 and 2024, we did not assess each outcome with data from all five years. For example, we analyzed POs’ implementation experiences using the data we collected in 2024 (see our prior evaluation reports, which describe PO implementation experiences in earlier years of the model [Eibner et al., 2025; Eibner et al., 2023; Khodyakov et al., 2022]). For certain outcomes, such as inpatient utilization, relevant data sources have long run-out periods, so final data for a given year might not be available until up to two years later. In these instances, we analyzed the data that were available at the time of our data analysis in the first half of 2025. Table 1.1 lists the years considered for each outcome. We did not evaluate quality-related outcomes for 2020 because there had been changes in quality reporting during the coronavirus disease 2019 (COVID-19) pandemic.

Table 1.1. Outcomes Addressed in This Report, by Chapter and Years Included

Outcome	Chapter	2020	2021	2022	2023	2024
PO participation	2	✓	✓	✓	✓	✓
PO implementation experiences	3	—	—	—	—	✓
Plan enrollment, bid outcomes, premiums, and MSB offerings	4	✓	✓	✓	✓	✓
Cost to CMS	4	✓	✓	✓	✓	—
Beneficiary health and utilization outcomes	5	✓	✓	✓	—	—
Beneficiary Part D OOP costs	5	✓	✓	✓	—	—
Contract-level quality	6	—	✓	✓	✓	—

NOTE: MSB = mandatory supplemental benefit; OOP = out of pocket. A dash (—) indicates that the outcome was not analyzed for that year for this report. A contract is a group of plans offered by the same PO subject to the same agreement with CMS.

Quantitative Analysis of Secondary Data

To estimate the associations between VBID and outcomes, we compared VBID participants with entropy-balanced comparison groups using DD regression models. DD models compare trends in outcomes between these two groups to assess whether the trends diverged after model implementation. For example, if bids among VBID plans declined after model implementation but bids among comparison plans held steady, we would have evidence that VBID was associated with a reduction in plan bids.

A key assumption of the DD methodology is that, in the absence of VBID, outcome trends for the VBID and comparison groups would have evolved in parallel. This assumption cannot be tested because we cannot observe outcome data for the VBID group in a world in which VBID never occurred. To increase the plausibility of the assumption, we used entropy balancing to ensure that pre-VBID outcome trends for VBID and comparison groups were similar. To model outcome trends, we used data from three years prior to model implementation (or exposure to the model, in the case of beneficiaries). In addition to balancing on pre-VBID outcome trends, we used entropy balancing to ensure that VBID and comparison groups were simultaneously balanced on other characteristics, such as plan type, beneficiary age, and pre-VBID Star Rating levels. In cases in which data were missing, we imputed the missing values using the generalized efficient regression-based imputation with latent processes procedure (Robbins, 2024).

We considered a variety of outcomes that were defined at the plan level (such as bids), the beneficiary level (such as inpatient utilization), and the contract level (such as Star Ratings). The set of characteristics that were included in the entropy-balancing algorithm varied for each outcome, both because the units of analysis varied and because different outcomes required different covariates. We avoided balancing on pre-VBID levels for the outcome in question because this approach could introduce bias caused by reversion to the mean (Daw and Hatfield, 2018), but we did balance on preintervention outcome trends, as noted above.

VBID plans implemented the model in different years, and some plans stopped participating over the course of the model. To address this variation in the timing and duration of participation, we stratified the data and ran separate regressions for each possible participation pattern (for example, 2020 only, 2020 and 2021 only, or 2020 to 2024) and combined the results using a weighted average. For each level of analysis, the weights used to combine results across participation patterns are derived from the number of VBID-participating units (contracts, plans, or targeted beneficiaries) in each outcome year. This approach is similar to the methods proposed by Callaway and Sant’Anna (2021) to address staggered adoption in DD analysis.

For beneficiary-level models, we implemented additional stratification to account for differences in whether beneficiaries’ pre-VBID data came from fee-for-service Medicare or MA. Our beneficiary-level analysis focused on the effects for VBID-targeted beneficiaries (that is, beneficiaries who were eligible for their plans’ VBID intervention), as opposed to all beneficiaries in participating plans. Further discussion of our quantitative methods can be found in Appendix A in the separately available appendix volume.

Under the parallel-trend assumption described above, the VBID-associated changes in plan-level and contract-level outcomes estimated using our approach can be interpreted as the average changes in outcomes among the set of plans that implemented VBID in a given year (compared to counterfactual outcomes for those plans in the absence of VBID). Analysis that accounts for nuances, such as heterogeneity in the interventions chosen or fidelity of implementation, was beyond the scope of this evaluation report. Beneficiary-level estimates also reflect average changes in outcomes associated with VBID, with the key difference that changes in outcomes are

estimated for targeted beneficiaries only (whereas plan- and contract-level outcome measures reflect changes in the average outcome for all beneficiaries in a plan or contract). Appendix A in the separately available appendix volume provides additional details about these estimates.

We report results for up to five years since the start of Phase II of the model (2020 through 2024). However, the number of participating plans increased substantially in each year, the composition of plans shifted to include more Dual Eligible Special Needs Plans (DSNPs)—a type of MA plans that offer coverage specifically to beneficiaries who are eligible for both Medicare and Medicaid (often referred to as *dual eligibles*)—and the types of interventions that plans offered changed. We estimated separate regression models for each year to reflect the changing composition of plans and interventions over time. As a result, our findings show associations between VBID and key outcomes given the mix of participants and interventions that existed in each year. Because plans entered and exited the model each year, and some made substantial changes to their interventions, we did not analyze a fixed group of plans offering a stable set of interventions over time. In fact, with participation increasing substantially over the years, results for most years were driven largely by plans newly joining the model in that year. This dynamic could bias the size of our estimates downward, especially if VBID interventions take several years to achieve their full effects.

We report many associations, with corresponding *p*-values and confidence intervals (CIs). We interpreted each *p*-value and CI in isolation, using the conventional threshold of $p < 0.05$ to determine statistical significance, without correction for multiple testing (associations with $p > 0.05$ but < 0.10 are designated as marginally significant). We did not use a multiple-testing correction because we were not making a single determination about VBID. For example, if the primary goal of this report were to determine whether the model worked, and we could conclude this if any of the tests were significant in the desired direction, correcting for multiple testing would be appropriate. In the absence of this single determination that would combine all tests, we evaluated the tests separately. However, we provide *p*-values so that interested readers can make any post hoc corrections they would like.

Primary Data Collection and Qualitative Analyses

Between June and August 2024, we surveyed and interviewed the representatives of POs that participated in the VBID Model that year. Of all 69 2024 VBID-participating POs, 65 completed the online survey. Of the 27 POs we invited to participate in a semistructured virtual interview, 25 did so. In total, we interviewed 153 PO representatives. This report, however, is based on the survey data from 60 POs and interviews with the representatives of 21 POs that participated in the VBID General component of the model. The main purpose of our primary data collection was to explore how POs implemented the model, what implementation challenges they encountered, and what outcomes of their VBID interventions they had already observed. During the interviews, we used each PO's survey responses to guide the discussion.

We conducted a descriptive analysis of the PO survey data to highlight the most-frequently reported responses, as well as the variety of perspectives represented. Our approach to analyzing interview data was consistent with methods used in previous years of VBID evaluation and involved several coding steps, followed by thematic analysis. The coding process began with the creation of a codebook, developed from an initial review of interview transcripts and informed by codebooks from prior reports. We systematically applied this codebook to all interview transcripts. Using thematic analysis techniques, we examined the coded data to identify and compare emerging themes, assess differences in implementation experiences across model components and participants, identify key reasons that participants achieved particular outcomes of interest, and answer our primary research questions (Guest, MacQueen, and Namey, 2012). After completing the analysis, we compared our findings with those from earlier reports to assess whether and how stakeholders' views of the model have evolved over time. To ensure participant confidentiality, we anonymized all data presented in this report using deidentified PO labels, such as *PO A* or *PO B*. We have also maintained the same labeling conventions for POs as in previous VBID evaluation reports to ensure continuity. Appendix B, in a separately available appendix volume, provides a more comprehensive description of our primary data collection and analysis procedures.

Limitations

Our evaluation has limitations. The VBID Model is voluntary, so POs can choose whether to participate and which plans to enter. If specific types of plans and/or POs could selectively enter the model, our results could be biased. We have attempted to address this threat of bias through entropy balancing and DD analysis. However, it is possible that these approaches have not fully addressed all possible sources of bias. Most importantly, our methods cannot address the impact of time-varying, unobserved covariates that are correlated with outcomes and might differ for VBID and non-VBID plans and beneficiaries. For example, if VBID-participating plans adopted new utilization management practices (unrelated to VBID) alongside their VBID interventions, and non-VBID plans did not make similar changes, our approach could attribute the effects of these new practices to VBID. Similarly, if beneficiaries who intended to improve their health purposefully enrolled in VBID plans, we might erroneously attribute these improvements to the model. By balancing on observable characteristics, we reduce the likelihood that VBID plans and beneficiaries would have behaved differently from comparators. However, we cannot rule out the possibility that time-varying, unobserved differences might have affected our results.

Self-selection into the model presented particular challenges for DSNPs. By 2023, the majority of eligible DSNPs had joined the model test, leaving a smaller and possibly selected sample of nonparticipating DSNPs to serve as comparators. Because of the potential selection issues, we describe our findings using associational rather than causal language throughout this report.

Another limitation is that VBID encompassed a large variety of benefit-design options that plans and POs could tailor in many ways. As a result, each VBID intervention is different, and the mix of these interventions has changed substantially over time. Because we evaluated VBID as a whole, our approach might miss effects that are limited to specific intervention types. Furthermore, some plans might have implemented similar interventions prior to joining VBID through other, related CMS initiatives, such as Special Supplemental Benefits for the Chronically Ill. In these cases, our statistical analyses are designed to pick up the incremental effects of joining the model test rather than the overall effect of the intervention that was continued from another initiative.

Because VBID participation increased substantially over time, the majority of VBID plans in most years are first-year implementers. As a result, our results might not fully capture VBID's long-term effects on outcomes. Relatedly, we did not have direct input from beneficiaries on their experiences with VBID benefits because we did not conduct interviews with beneficiaries for this report.

Finally, we used insights from our qualitative findings—derived from PO surveys and interviews—to help interpret and provide context for the quantitative results. In most cases, the quantitative and qualitative findings were aligned. However, there were instances in which POs' own assessments of their outcomes diverged from our data modeling results. For example, most POs did not report that VBID was associated with changes in risk scores; however, we found a positive relationship between VBID and targeted beneficiaries' risk scores in all years that we analyzed (2020 through 2022). Several factors could explain these discrepancies. First, our quantitative approach relied on regression-based models and had a comparison group, whereas POs typically evaluated their outcomes using before-and-after comparisons or by comparing their VBID-participating plans with a limited set of their own nonparticipating plans. Second, our regression analyses were designed to estimate average effects across all VBID-participating POs; individual organizations, however, might have experienced results that differed from those in the overall average findings. Third, our qualitative outcome assessments were based on self-reported information, which can be influenced by social desirability bias (Gower et al., 2022). Participating POs might have overstated favorable results, such as improvements in care quality, and downplayed less desirable outcomes, such as increases in risk scores, to portray their organizations more positively. In addition, self-reported survey data could be inaccurate if PO representatives did not review the underlying data prior to responding to our questions.

Report Structure

Our report has seven chapters. We describe model participants and their interventions in Chapter 2; POs' implementation experiences in Chapter 3; plan-level enrollment and financial outcomes in Chapter 4; beneficiary-level health, utilization, and cost outcomes in Chapter 5; and contract-level care quality findings in Chapter 6. Chapter 7 summarizes our findings. A separate

appendix volume provides additional information describing our statistical approach, primary data collection and analysis, descriptive information on participating plans, VBID interventions offered by each PO, and other relevant material.

Chapter 2. VBID Participants and Their Interventions

Key Findings

- Participation in VBID grew steadily over time, with the number of plans offering VBID interventions increasing from 144 in 2020 to 1,400 in 2024.
 - VBID participants in 2024 were substantially more likely to be DSNPs than to be comparison plans (53.9% versus 2.6%; $p < 0.001$). Among VBID-participating plans, the percentage offering zero-dollar premiums declined from 45.1% in 2020 to 29.3% in 2024 ($p < 0.001$).
 - DSNPs more commonly targeted beneficiaries with low SES, while non-DSNPs more commonly targeted those with chronic conditions.
 - Part D reduced cost sharing and VBID-enabled supplemental benefit interventions dominated VBID offerings in 2024. The majority of plans offering at least one VBID-enabled supplemental benefit intervention included both primarily and non–primarily health-related (NPHR) supplemental benefits. Grocery allowances, typically loaded on flex cards, were the most offered NPHR supplemental benefit.
 - The number of plans with participation requirements increased ninefold between 2020 and 2024, with most using chronic condition targeting. For the first time in 2024, there were 39 plans with participation requirements that relied on both chronic condition and SES-based targeting.
 - The number of plans offering RI interventions decreased in 2024. These interventions nearly always targeted beneficiaries with chronic conditions and focused on encouraging preventive health behaviors in all model test years.
 - One PO drove many of the changes in VBID benefits offered between 2023 and 2024 because it substantially modified its VBID benefits in more than 600 model-participating plans, which accounted for 50.6% of all participating plans in 2023 and 43.1% in 2024.
-

In this chapter, we use **PO and plan characteristic** data to describe 2024 VBID participants, focusing specifically on the differences between participants and eligible nonparticipants. Using model application materials, information from the model implementation and monitoring contractor, and data from PO surveys and interviews, we also describe the **change in VBID interventions and targeted beneficiary groups** between 2020 and 2024. (Appendix B provides details on the PO survey and interviews; Appendix C offers additional details about participating PO and plan characteristics and summarizes VBID participants’ interventions in a tabular format. Both appendices are in the separately available appendix volume.)

Participating PO and Plan Characteristics

The number of VBID-participating POs increased from 14 in 2020 and 2021 to 64 in 2024 (Table 2.1). In 2024, most participating POs (68.8%) offered plans in one or two states, 18.8% offered plans in three to eight states, and 12.5% offered plans in nine or more states. Compared to nonparticipating POs, participating POs were located in areas of higher average MA penetration (57.7% versus 51.8%) and had higher average enrollment (352,779 versus 27,130 enrollees).

Table 2.1. VBID General Participating and Comparison PO and Plan Characteristics, 2020–2024

Characteristic	2020 Participants	2021 Participants	2022 Participants	2023 Participants	2024 Participants	2024 Eligible Nonparticipants
Number of POs	14	14	27	46	64	92
PO geographic reach (%)						
1–2 states	71.4	71.4	77.8	67.4	68.8	78.3
3–8 states	0.0	7.1	3.7	19.6*	18.8	20.7
9 or more states	28.6	21.4	18.5	13.0	12.5	1.1*
PO MA penetration rate (%)	52.1 (14.1)	54.5 (13.3)	54.1 (9.4)	55.5 (7.8)	57.7 (8.0)	51.8*** (10.2)
PO enrollment	515,246 (1,000,256)	737,014 (1,426,506)	562,715 (1,355,630)	443,603 (1,296,502)	352,779 (1,172,290)	27,130* (38,842)
Number of plans	144	376	859	1,218	1,400	3,100
PPO (%)	17.4	33.2***	29.5	30.5	30.8	40.0***
Offers Part D (%)	97.9	99.2	99.7	99.4	99.6	89.0***
DSNP (%)	27.8	38.0*	43.5	49.7**	53.9*	2.6***
Chronic condition SNP (%)	0.7	1.1	2.8*	4.9*	4.6	5.1
ISNP (%)	0.0	0.0	0.4	0.4	0.0*	4.6***
Dually eligible enrollees (%)	36.9 (39.1)	46.8* (42.0)	52.1* (42.7)	57.0* (42.7)	58.5 (40.8)	15.4*** (22.9)
LIS-eligible enrollees (%)	39.6 (35.8)	50.6** (39.1)	54.7 (40.1)	60.8** (40.0)	66.5*** (38.8)	23.8*** (24.8)
Offer zero-dollar premium (%)	45.1	33.8*	33.1	34.7	29.3**	66.8***
Total premium (\$ PMPM)	23.5 (39.3)	25.9 (32.9)	24.3 (26.0)	22.3 (23.1)	26.0*** (22.6)	18.5 (37.5)***
Maximum OOP limit (\$)	5,288 (1,515)	5,603* (1,749)	5,333* (1,973)	5,932*** (2,271)	6,446*** (2,434)	5,067*** (2,000)
Enrollee age, in years	69.5 (4.6)	68.5* (4.7)	68.4 (4.5)	67.9* (4.6)	67.8 (4.6)	71.9 (3.6)***
Plan enrollment	8,265 (10,692)	9,877 (14,691)	7,690* (12,773)	7,331 (12,919)	7,243 (12,857)	4,796*** (10,390)

SOURCE: Authors' analysis of multiple sources of PO and plan characteristic data.

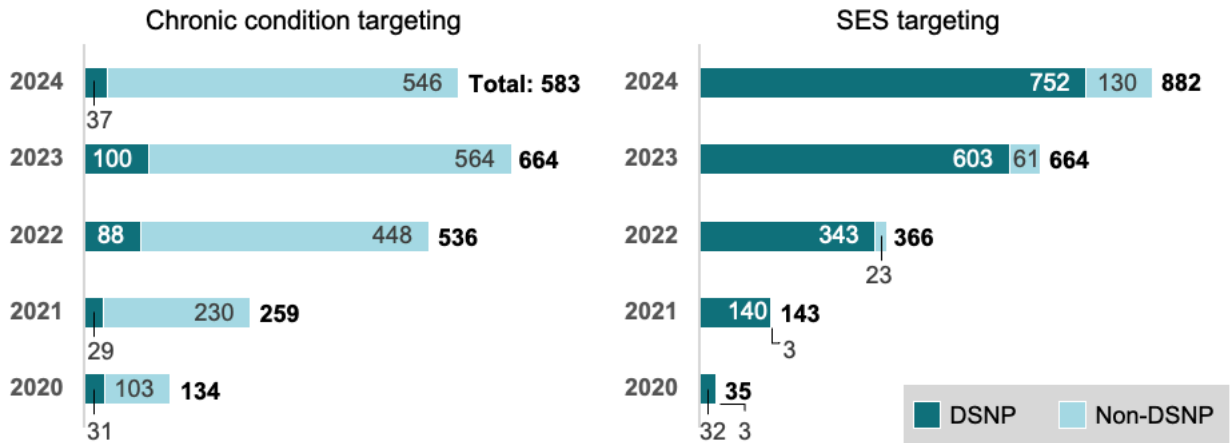
NOTE: ISNP = institutional special needs plan (SNP); PMPM = per member, per month; PPO = preferred provider organization. The mean values are shown with the standard deviation in parentheses, unless noted otherwise. Plan participation numbers include plans that only offered Cash or Monetary Rebates in 2021 and 2022 but exclude a small subset of plans in each year (one to seven plans in each year) with no enrollment. Nonparticipants are those plans that were eligible but did not participate in either VBID General or the Hospice Benefit component in any year from 2020 through 2024. Statistical significance is shown for the eligible comparison plans in 2024 compared with participating plans in 2024. Statistical significance for the participating plans is shown compared with the year prior. For example, the 2024 statistical significance for participating plans is compared with 2023 participating plans. ***, **, and * = statistical significance assessed using the unequal variances *t*-test at the 0.1%, 1%, and 5% levels, respectively.

The 64 participating POs entered 1,400 plans into the VBID Model in 2024—a nearly tenfold increase from 144 plans in 2020. A smaller share of 2024 VBID-participating plans were preferred provider organizations (PPOs) (30.8%) than the share of nonparticipating plans that were PPOs (40.0%). Relative to eligible nonparticipating plans, participating plans were more likely to offer Part D benefits (99.6% versus 89.0%), substantially more likely to be DSNPs (53.9% versus 2.6%) and less likely to be institutional special needs plans (ISNPs) (0.0% versus 4.6%). Likely thanks to increased DSNP participation, the proportion of dually eligible enrollees rose from 36.9% in 2020 to 58.5% in 2024 and the proportion of low-income subsidy (LIS)–eligible enrollees increased from 39.6% to 66.5%. Among VBID-participating plans, the percentage offering zero-dollar premiums declined from 45.1% in 2020 to 29.3% in 2024. Over the same period, the average total premiums rose from \$24 to \$26 per member per month (PMPM) and the maximum out-of-pocket (OOP) limit increased from \$5,288 to \$6,446 for participating plans. On average, participating plans served a younger population (67.8 years versus 71.9 years) and had higher plan enrollment (7,243 versus 4,796 enrollees) than eligible nonparticipating plans did.

Targeted Groups

POs could target their VBID interventions to beneficiaries with one or more chronic conditions or low SES (defined based on their eligibility for Part D LIS or for both Medicare and Medicaid). The number of plans with at least one VBID intervention that relied on chronic condition targeting grew steadily from 134 in 2020 to 664 in 2023 but decreased to 583 plans in 2024 (Figure 2.1), but the share of plans using chronic condition targeting declined from 93.1% in 2020 to 41.6% in 2024. POs using this benefit-targeting strategy continued doing so mainly to improve management of specific chronic conditions, a finding similar to that in our previous report (more-detailed rationales for this approach can be found in Eibner et al., 2025).

Figure 2.1. Plans with At Least One Intervention Targeting SES or Chronic Conditions, by Year and Plan Type



SOURCE: Authors' analysis of VBID Model test intervention and application data.

NOTE: A participant could implement more than one intervention for more than one targeted group in a plan, so the number of plans does not equal the total number of plans participating in the given year. VBID plans with no enrollment and those that offered only Cash or Monetary Rebates in 2021 and 2022 were excluded from analyses.

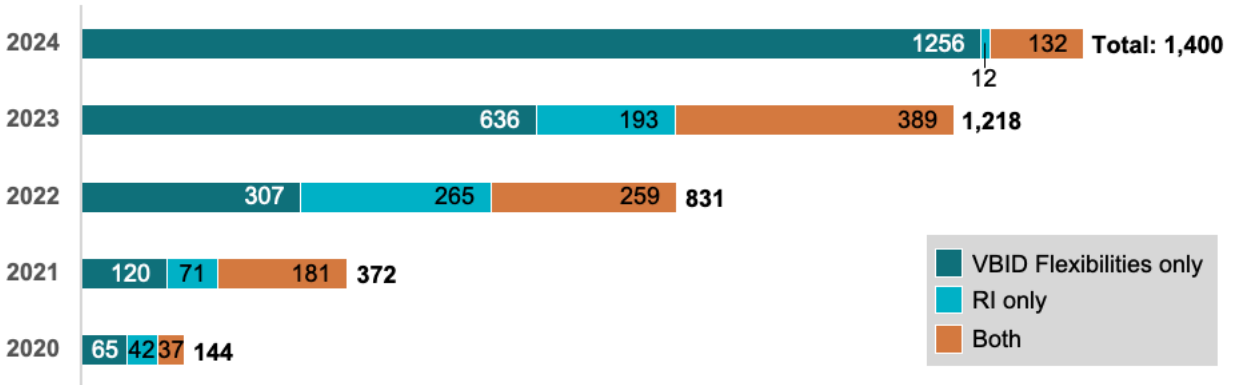
Both the number and share of plans using SES-based targeting have continued to increase over the course of the model, rising from 35 plans (24.3% of all participating plans) in 2020 to 882 plans (63.0%) in 2024 (Figure 2.1). Like they did in previous years, many POs cited the ease of administration as their primary motivation for using SES-based targeting. Most plans using SES-based targeting were DSNPs. In these plans, all beneficiaries qualify for SES-targeted VBID benefits through their eligibility for the LIS, removing the need for plans to implement administrative processes to identify eligible beneficiaries.

VBID Benefits Offered

POs could offer VBID Flexibilities and/or RI interventions as part of the model.⁴ In 2024, 1,400 offered at least one VBID intervention, up from 144 in 2020 (Figure 2.2).

⁴ Plans were allowed to offer Cash or Monetary Rebates in 2021 and 2022 as part of VBID General.

Figure 2.2. Number of Plans Offering VBID Benefits, by Year



SOURCE: Authors' analysis of VBID Model test intervention and application data.

NOTE: VBID plans with no enrollment and those that offered only Cash or Monetary Rebates in 2021 and 2022 were excluded from analyses.

Between 2020 and 2023, the number of plans offering VBID Flexibilities roughly doubled in each year. However, the growth rate slowed down substantially in 2024, when the number of plans offering VBID Flexibilities increased by only 35.4%, from 1,025 in 2023 to 1,388 in 2024. At the same time, the number of plans offering RI programs increased more than sevenfold—from 79 in 2020 to 582 in 2023—but then fell to 144 in 2024, a 75% drop.

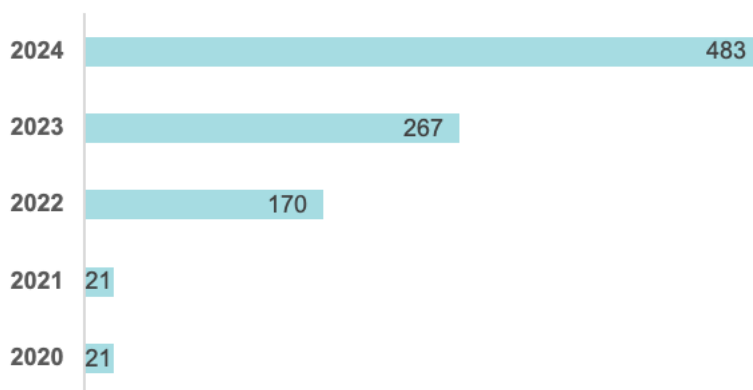
VBID Flexibilities

VBID Flexibilities interventions allowed participants to lower cost sharing for Part C and Part D benefits, provide VBID-enabled supplemental benefits, and make the receipt of these benefits conditional on beneficiary participation in CM or seeing high-value providers. In this section, we provide additional information about VBID Flexibilities and why plans offered these interventions under the model.

Part C Reduced Cost Sharing

The number of plans offering Part C reduced cost sharing was stable in 2020 and 2021, then jumped from 21 in 2021 to 170 in 2022 (Figure 2.3). Growth continued, to 267 plans in 2023 and 483 in 2024. Nonetheless, the share of plans offering this intervention fell from 14.6% in 2020 to 5.6% in 2021, and then increased each year, reaching 20.5% in 2022 and 34.5% in 2024 (Figure 2.3). No DSNPs offered reduced cost sharing for Part C benefits: Most of these plans already have no or low copayments for provider visits. However, some non-DSNPs provided reduced cost sharing for Part C services to low-income beneficiaries as part of the model (two plans in 2024; data not shown).

Figure 2.3. Number of Plans with At Least One Part C Reduced Cost-Sharing Intervention, by Year



SOURCE: Authors' analysis of VBID Model test intervention and application data.

NOTE: VBID plans with no enrollment were excluded from analyses. No DSNPs offered this intervention component.

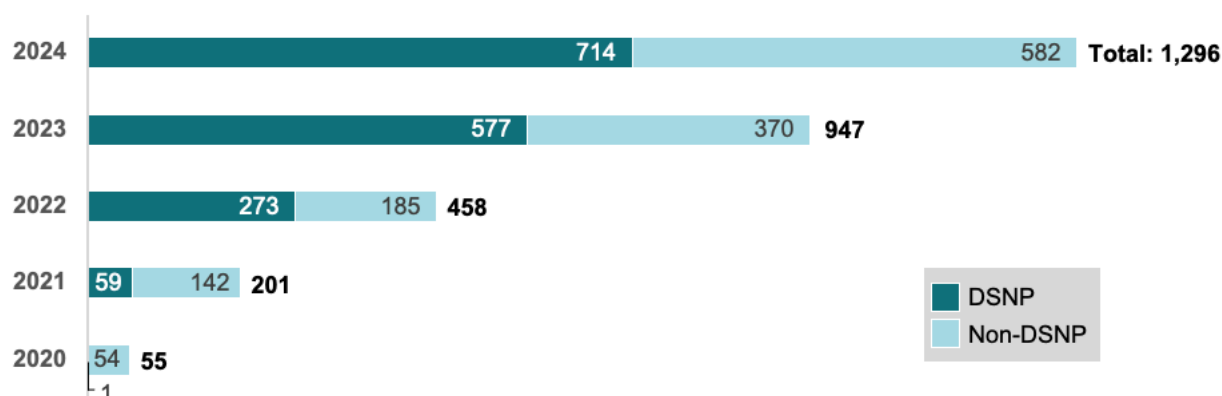
PO P, which provided Part C cost-sharing reductions in 473 plans (98% of all plans offering this intervention) in 2024, was the primary driver of the substantial increase in Part C cost-sharing interventions between 2023 and 2024. It offered zero-dollar inhaler spacers to beneficiaries participating in a chronic obstructive pulmonary disease (COPD) disease management program (inhaler spacers are covered under the durable medical equipment benefits of Part C) and lower cost sharing for inhalers themselves, which is a Part D benefit. PO P representatives said that their intervention was very successful:

Going to '24, we expanded the COPD program to nearly all eligible plans. And the reason for that is the extremely positive impact that we saw for the program on medication adherence and the evidence-based relationship between medication adherence, clinical health outcomes, and medical cost savings.

Part D Reduced Cost Sharing

Part D–focused interventions have been the most offered VBID Flexibilities intervention since 2021 and the most offered VBID benefit since 2023. The number of plans offering Part D reduced cost-sharing interventions in the model rose steadily over time (Figure 2.4). In 2024, 1,296 plans (92.6% of all participants) offered Part D reduced cost sharing, up from 947 (77.8%) in 2023. Starting in 2022, more than half of the plans offering this benefit were DSNPs.

Figure 2.4. Number of Plans Offering Part D Reduced Cost-Sharing Interventions, by Year



SOURCE: Authors’ analysis of VBID Model test intervention and application data.
 NOTE: VBID plans with no enrollment were excluded from analyses.

Offering zero-dollar Part D cost sharing for low-income beneficiaries was the most implemented VBID intervention in 2024. The majority of participating DSNPs and some non-DSNPs offered it. Reasons for implementing this intervention were similar to those given last year and included a desire to improve medication adherence for low-income beneficiaries and to maintain competitive benefit structures in markets with high VBID participation (Eibner et al., 2025). “We were the only ones not [offering zero-dollar Part D cost sharing for low-income beneficiaries],” said a representative of PO BV, “and members were telling us: ‘You’re still making me pay a copay, so I’m not choosing you.’” Additionally, several PO representatives said that offering this benefit in DSNPs maintains continuity of cost sharing for Medicaid enrollees newly eligible for Medicare. Here is how PO M representatives explained this process:

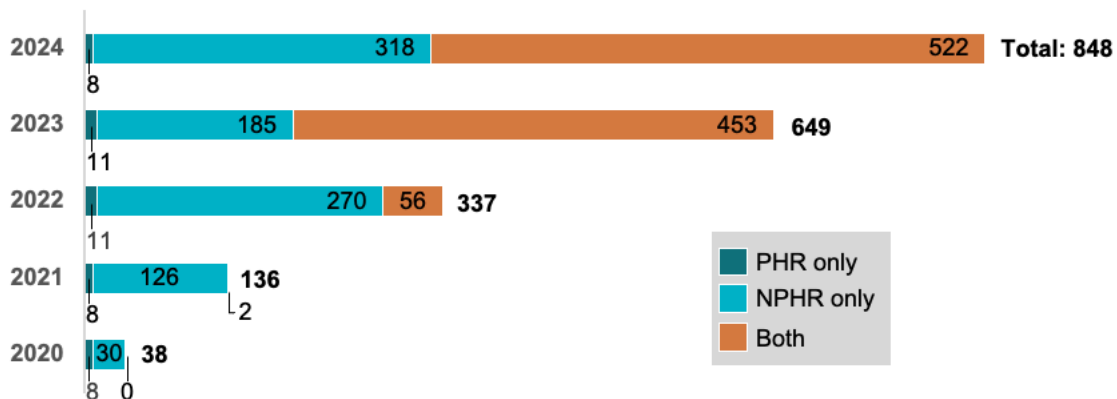
We have the privilege of being able to do default enrollment for our Medicaid members who are aging into Medicare to enter the DSNP. Their experience under Medicaid is that they were getting drugs under the Medicaid formulary at zero copay. When they switch to be dual eligible and their drug coverage gets taken over by Medicare Part D, they get the LIS paired with their Part D. [At that point,] they have a [Part D] copay. So, they actually have a negative experience when they enroll in the dual eligible plan. It was very important for us to try and equalize that.

Plans could target this benefit not just to low-income beneficiaries but also to those with certain chronic conditions. In 2024, PO P offered 98% of the 485 plans that included the Part D reduced cost-sharing interventions for beneficiaries with chronic conditions. Their interventions included lower cost sharing for inhalers used to treat COPD and for specific drugs used to treat cardiovascular disease (direct oral anticoagulants [DOACs]).

VBID-Enabled Supplemental Benefits

The number of plans offering VBID-enabled primarily health-related (PHR) or NPHR supplemental benefits also increased steadily over time, rising from 649 (53.3% of all participating plans) in 2023 to 848 (60.6%) in 2024 (Figure 2.5).

Figure 2.5. Number of Plans Offering PHR and/or NPHR Supplemental Benefit Interventions, by Year

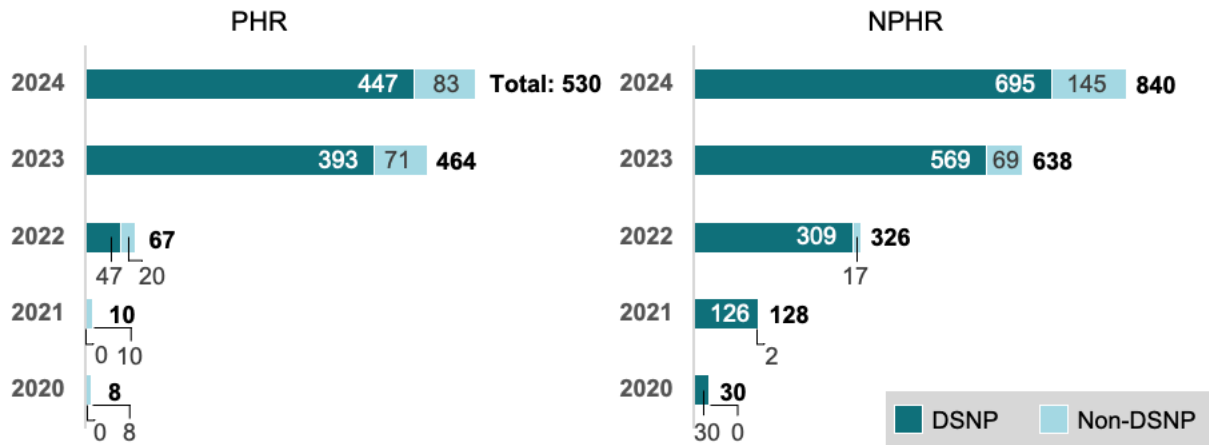


SOURCE: Authors' analysis of VBID Model test intervention and application data.
NOTE: VBID plans with no enrollment were excluded from this analysis.

Supplemental benefits were the second most-common VBID Flexibilities intervention after reduced cost sharing for Part D drugs. Most plans with VBID-enabled supplemental benefits in 2024 offered NPHR benefits or combined them with PHR supplemental benefits. Card-delivered supplemental benefits, which often combined grocery allowances (NPHR supplemental benefits) with over-the-counter (OTC) funds (PHR supplemental benefits) loaded onto flex cards, were the most common VBID-enabled supplemental benefit offered. Some POs allowed beneficiaries to use their flex cards to pay for utilities, such as electricity and gas.

The flex cards and other supplemental benefits were frequently, but not exclusively, targeted to low-income beneficiaries. Figure 2.6 shows that most plans offering VBID-enabled supplemental benefits were DSNPs. Of the 840 plans offering at least one NPHR supplemental benefit in 2024, 82.7% were DSNPs. Similarly, 84.3% of the 530 plans offering PHR interventions in 2024 were DSNPs.

Figure 2.6. Number of Plans Offering PHR or NPHR Supplemental Benefit Interventions, by DSNP Status and Year



SOURCE: Authors’ analysis of VBID Model test intervention and application data.
 NOTE: VBID plans with no enrollment were excluded from this analysis. A plan could offer both PHR and NPHR supplemental benefits, so a single plan can count toward the total in both panels.

POs typically offered VBID-enabled supplemental benefits because they wanted to help beneficiaries address unmet health-related social needs:

There are a lot of food deserts in the different service areas. Having . . . members go to our retail locations and make healthy choices about the food that they’re selecting is very important. Also, in terms of the rent and utilities, providing an opportunity and means for them to be able to maintain their home . . . is very important. (PO H)

In previous years, POs frequently had different “purses” or pots of money on their benefit cards for specific purposes—for example, giving beneficiaries \$100 to spend on utilities and \$100 on healthy food in a given time period. With time, many POs moved to allow beneficiaries to use their monthly or quarterly allowances to pay for different types of expenses without imposing restrictions on the proportion of funds that could be used for each covered benefit. Using a combined purse not only gives beneficiaries greater spending flexibility but also increases the amount of money they spend, according to interviewees. “Before we started implementing [our healthy] food [benefit using the flex card], members didn’t always spend their OTC [allocations]. I mean, how much OTC stuff does somebody really need?” said a PO L representative. PO B representatives, however, noted some drawbacks with a combined purse and opted to keep transportation benefits separate:

Think about a[n] Uber or a Lyft trip. It is about \$30 per one-way trip. So, when you embed that into [the flex card] benefit, if members aren’t aware of how expensive those costs can be, they would move through those allowance dollars very quickly [by using Uber to go to a medical appointment and would have little left to pay for food or other benefits]. (PO B)

PO perspectives on benefit accrual and rollover have also changed over time. In our previous report (Eibner et al., 2025), some POs noted that longer benefit accrual periods and benefit rollovers give beneficiaries more time to spend their allowances and thus increase benefit use. However, in 2024, some POs explained that it was their perception that dually eligible and LIS-eligible beneficiaries switched plans more often. Because these beneficiaries will soon be allowed to switch plans every month under certain circumstances (CMS, 2024a), it is better to administer benefits that expire at the end of the month:

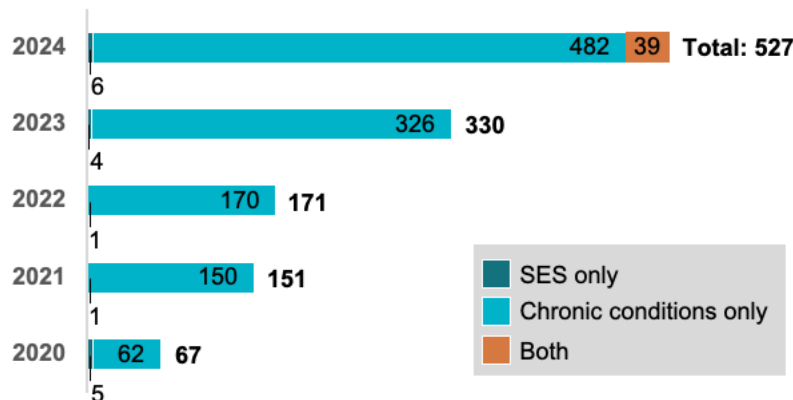
We were advised by many, many consultant groups, including our vendor actuary groups, that we really should consider that when we design benefits, because if members are switching plans more frequently, a monthly benefit for some of these things makes the most sense. (PO CA)

Others noted that moving to a monthly benefit accrual with no rollovers reduces plan expenses: “Rollover can be very costly, especially if there’s someone who hasn’t used [the benefit] for quite some time and then they decide to go use it all at once,” said a PO B representative.

Participation Requirements

VBID plans could ask beneficiaries to fulfill certain requirements, such as participating in CM/DM programs, to receive reduced cost sharing or supplemental benefits as part of their VBID Flexibilities interventions. As shown in Figure 2.7, although the number of plans with participation requirements increased ninefold—from 67 in 2020 to 527 in 2024—their share of all participating plans decreased from 46.5% in 2020 to 37.6% in 2024 (Figure S.2). Most plans with these requirements targeted their VBID interventions based on chronic conditions in all years.

Figure 2.7. Number of Plans with At Least One Intervention with a VBID Flexibilities Participation Requirement, 2020–2024



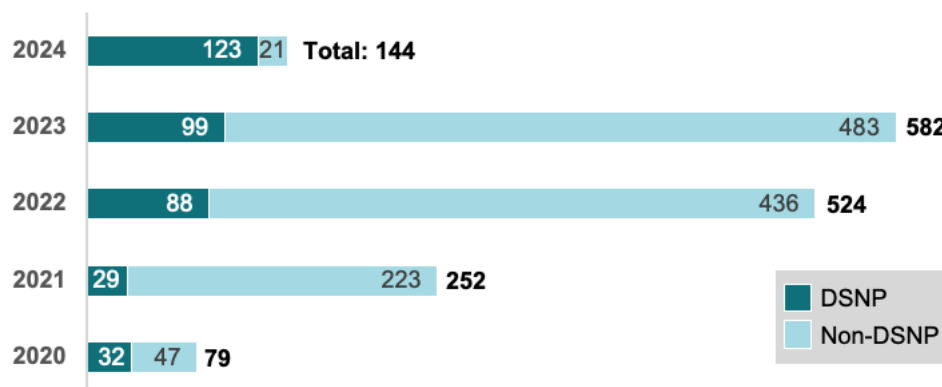
SOURCE: Authors’ analysis of VBID Model test intervention and application data.
NOTE: VBID plans with no enrollment were excluded from this analysis.

The expansion of PO P’s COPD program and the addition of the disease management requirement for its DOAC intervention led to an increase in the number of plans with participation requirements for beneficiaries with chronic conditions in 2024. There was also a sharp increase in the number of plans with participation requirements that targeted their interventions based on SES between 2023 ($N = 4$) and 2024 ($N = 45$). Moreover, for the first time in 2024, there were plans that used both SES-based and chronic condition targeting ($N = 39$). Although most plans that combined participation requirements with chronic condition targeting required beneficiaries to participate in CM/DM programs to receive benefits, plans that combined participation requirements with SES targeting usually required beneficiaries to engage with high-value providers.

Rewards and Incentives

After rising steadily from 79 in 2020 to 582 in 2023, the number of VBID-participating plans offering an RI intervention dropped to 144 in 2024 (Figure 2.8). However, examining the share of plans offering RI interventions shows that the decline began in 2022 and then accelerated, dropping from 63.1% in 2022 to 10.3% in 2024. Although the total number of plans with this intervention decreased in 2024, the number increased among DSNPs, rising from 99 in 2023 to 123 in 2024. The overall decline in 2024 was driven by PO P, which stopped offering a \$45 reward to any eligible beneficiary who completed a comprehensive medication review (CMR).

Figure 2.8. Number of Plans with At Least One Intervention with RI, 2022–2024



SOURCE: Authors’ analysis of VBID Model test intervention and application data.
 NOTE: VBID plans with no enrollment were excluded from this analysis.

Like they did in previous years, nearly all RI interventions in 2024 targeted beneficiaries with chronic diseases to improve their disease management. In 2024, many POs offered incentives to encourage beneficiaries to complete MTM consultations, which CMS requires plans to offer for qualifying beneficiaries (usually a combination of drug spending above a threshold, having multiple chronic conditions, and taking multiple medications). “Being that

MTM is mandated, there's always the challenge of engagement," said a representative of PO BW, which offered a \$25 incentive to complete a CMR.

Summary

In this chapter, we analyzed changes in VBID participation between 2020 and 2024 and used PO interview data to describe why model participants offered different types of model benefits. Our findings show that VBID participation expanded substantially between 2020 and 2024, with the number of participating POs increasing from 14 to 64 and the number of plans rising nearly tenfold, from 144 to 1,400. Most participating POs operated in one or two states and were located in areas with higher MA penetration and larger average enrollment than nonparticipating POs were. VBID-participating plans were more likely than nonparticipating plans to offer Part D benefits and to be DSNPs, resulting in a higher proportion of dually eligible and LIS-eligible enrollees over time. The share of plans offering zero-dollar premiums declined between 2020 and 2024, while average premiums and maximum OOP limits increased. Participating plans tended to serve a younger population and had higher average enrollment than eligible nonparticipants did.

Beneficiary targeting strategies evolved, with SES-based targeting increasing from 35 plans (24.3% of all participants) in 2020 to 882 (63.0%) in 2024, primarily in DSNPs. Targeting for chronic conditions peaked in 2023 before declining slightly in 2024. The number of plans offering VBID Flexibilities grew rapidly, with some interventions, such as zero-dollar Part D cost sharing for low-income beneficiaries, becoming widespread. In 2024, reduced Part D cost sharing remained the most offered VBID intervention, followed by VBID-enabled supplemental benefits. NPHR supplemental benefits were more commonly offered than PHR supplemental benefits. Flex cards for groceries and OTC items became more common over time and were frequently offered by DSNPs. Between 2020 and 2024, the number of plans with participation requirements increased ninefold, with most of them employing chronic condition targeting. In 2024, 39 plans incorporated both chronic condition and SES-based targeting, marking the first use of both targeting strategies within the same plan. Finally, the share of plans offering RI fell sharply over the course of the model, decreasing from a peak of 67.7% in 2021 to 10.3% in 2024. Because PO P had the largest number of VBID-participating plans in 2024 (just over 600), its benefit-design changes largely drove the shifts in overall intervention offerings between 2023 and 2024.

Chapter 3. Implementation Experiences

Key Findings

- As in previous years, the POs we interviewed reported that VBID implementation was a relatively small lift.
 - Survey results, however, showed that model-specific data reporting, working with vendors, and providing WHP services to all beneficiaries in a plan still posed moderate or slight challenges to VBID participants.
 - Implementation of card-delivered, VBID-enabled supplemental benefits remained particularly challenging, prompting POs to address technical issues; hold vendors more accountable for operational disruptions, fraud issues, and transaction inaccuracies; and enhance member education.
-

In this chapter, we use data from participating PO survey and interviews to describe model participants' **VBID implementation experiences** in 2024. On the survey, we asked representatives of all participating POs to rate the level of challenge their organization experienced with certain aspects of model implementation. During the interviews conducted with representatives from 21 POs, we explored their implementation experiences and asked follow-up questions about the aspects of model implementation they considered challenging in the survey.

Overall Assessment of Implementation

Like they have in the previous evaluation periods (Eibner et al., 2025; Eibner et al., 2023; Khodyakov et al., 2022), POs reported that VBID implementation in 2024 was a relatively small lift. Of the 19 POs whose representatives completed our interview and answered the question about perceived implementation lift, 84% ($N = 16$) reported that it was a relatively small lift to implement VBID benefits. All 16 POs offered VBID interventions in at least one DSNP, and nine offered VBID exclusively in DSNPs. All but one of these 16 POs used SES-based targeting and offered both reduced Part D cost sharing and at least one VBID-enabled supplemental benefit. One-half of these POs ($N = 8$) were continuing model participants.

The three POs that considered VBID implementation to be either a large or a medium lift were new model test participants that offered VBID-enabled supplemental benefits in DSNPs. Here is how PO CD representatives described why their implementation experiences were not a small lift:

I will say that it's a medium lift. It's not small, in the sense that we had to make some changes to the files we share with our vendors in order to allow them to switch from the original benefit structure to this VBID. . . . Some of the documentation requirements have also been a lift. We have to create documents, change the existing documents to better describe these benefits. . . . The bigger [lift], I will say, is the reporting part. . . . We have to create these utilization reports. I think there are like three different files that we have to submit to CMS.

Implementation Challenges

Although VBID implementation was a relatively small lift from the perspectives of POs whose representatives participated in our interviews, our survey of 60 POs showed that three aspects of model participation continued to pose moderate or slight challenges (Table 3.1).

Table 3.1. Survey Ratings of VBID General Implementation Challenges, 2024

Implementation Challenge	Not at				A Great Deal	Not Applicable	Median
	All	Slightly	Moderately	Considerably			
Reporting data as part of model participation activities (N = 60)	12	16	20	7	4	1	Moderately
Working with vendors or subcontractors that help implement your VBID intervention(s) (N = 60)	21	16	14	6	1	2	Slightly
Implementing annual wellness and healthcare planning services to all beneficiaries in a PBP (N = 60)	26	19	12	3	0	0	Slightly
Communicating VBID benefit information to beneficiaries (N = 60)	38	18	4	0	0	0	Not at all
Administering multiple sets of benefits within one PBP (N = 59)	33	6	4	0	0	16	Not at all
CMS reviews of marketing materials (N = 60)	43	11	5	1	0	0	Not at all
Tracking beneficiary VBID eligibility over time (N = 60)	41	15	1	0	0	3	Not at all
Administering multiple supplemental benefits offered to VBID-eligible beneficiaries (N = 60)	26	12	7	0	0	15	Not at all
Identifying VBID-eligible beneficiaries (N = 60)	48	9	0	0	0	3	Not at all
Communicating VBID benefits information to providers (N = 60)	33	13	7	1	0	6	Not at all

SOURCE: Authors' analysis of 2023 MA VBID PO questionnaire data.

NOTE: PBP = plan benefit package. Not every PO answered each question.

Model-specific data reporting to CMS received a median rating of being moderately challenging, whereas working with vendors or subcontractors and offering WHP services to all plan members received a median rating of being slightly challenging. Although POs described communicating information about VBID benefits to beneficiaries and administering multiple sets of benefits within a plan as slightly challenging in 2023 (Eibner et al., 2025), these issues were

no longer mentioned as challenges in 2024. Conversely, administering WHP was not rated as challenging in 2023 but was rated as slightly or moderately challenging by most POs in 2024. POs described all remaining aspects of implementation shown in Table 3.1 as not at all challenging in both 2024 and 2023.

As we describe in more detail in the rest of this section, all three top implementation challenges were related to data reporting to at least some degree. In 2024, VBID participants were required to report not only the number of beneficiaries completing WHP activities but also the number of eligible beneficiaries who received or used various VBID Flexibilities benefits, including VBID-enabled supplemental benefits that addressed the following three priority areas: food and nutritional insecurity, transportation barriers, and access to general supports for living (such as housing and utility support) (Center for Medicare and Medicaid Innovation [Innovation Center], 2021). According to POs, this expanded mandatory data reporting required active engagement with the vendors that played a key role in the provision of supplemental benefits. POs also relied on provider-submitted claim and encounter data to generate WHP data reports; for some, dependence on encounter data posed challenges.

PO representatives also noted ambiguity in instructions and the number of different data sources and types and the amounts that they had to process to generate CMS-required data reports. PO BM representatives said that, “even with the most recent submissions, the instructions were a bit difficult to follow.” Representatives of PO BZ agreed and said that it took them time to “wrap [their] heads around everything that was required and trying to stand that up in a timely fashion.” Representatives of some POs, such as PO BO and PO CE, said that they had to rely on different teams and streams of data to be able to produce some reports. WHP data reporting was challenging to them because they had to develop new logic and procedures for processing claim and encounter data needed to generate model-specific reports, and meeting these new needs increased their administrative costs. These POs relied on a capitated network of prospectively paid delegated providers and had to wait for providers to submit their encounter data. Here is how a PO CE representative described it:

[We had] to work with our IT [information technology] departments and claims department to be able to go back and identify [WHP-related] services because most of the information will come back to us in the form of a claim. Once members actually get seen by their doctors and have those conversations, providers have to use certain codes to bill for that service. [We had] to ensure that that’s all captured. And there’s a bit of a development that tends to happen anytime there’s any sort of new reporting requirements. It’s a lot of working with IT, developing those business requirements, testing, validating, and then ultimately getting the data back. . . . [It is] continuous process improvement to make sure that we’re capturing all of the right data, not just from claims data. . . . A lot of the work is being done by capitated delegated provider groups that submit encounter data to us. So, it’s just going back to evaluating the encounter data and making sure that it’s accurate, complete, and we receive missing information.

The new data-reporting requirement related to supplemental benefit utilization was particularly challenging to POs. Here is how a PO L representative described this challenge:

If you take the food, OTC, bath safety, utilities—it’s like four separate things, [but] it’s all rolled together [into] one “bank account” basically that members are spending the money out of. But we have to track it four separate ways and break down the data differently. . . . I would say [that it is] just hard sometimes to make sure we’re keeping everything straight and not accidentally intermixing some of the data on the back end.

PO G representatives noted that the supplemental benefit use reporting was challenging because the due date for the annual report was too close to the VBID application deadline and because the PO had to obtain the data for up to four prior years from vendors, “QA it, and resolve any issues we’re seeing in time for the end of February.” A PO CA representative said that a lot of work happens after vendors send their data because “the way that they presented it to us just has not been the easiest to digest.” A PO CD representative agreed that the need to work with vendors complicated the process of data submission to CMS:

We found that our vendors send us reports already about how members are using those benefits, but none of those reports had all of the elements that we needed to be able to create the kind of report that CMS required. That took a lot of work between us and our vendors to create a custom report. And even that custom report still needed to be merged with other data internally. So, it’s creating those reports that I think have been a bit of the lift.

Although about half of all reported vendor challenges were related to data reporting, PO representatives also identified other aspects of working with vendors that posed some challenges, including operational and security challenges and improving beneficiary communication. POs and vendors said that they had encountered card-related operational challenges and disruptions, including system outages, processing errors, and card setup problems, and had to work together to resolve them. For example, PO BI representatives noted that they worked with their card vendor to expand the network of stores that accepted their cards, focusing specifically on smaller mom-and-pop stores and stores in rural areas to ensure that their members can use flex cards throughout their service area.

Vendors invested in accurate categorization of eligible items under merchant codes and stock keeping unit (SKU) lists, which turned out to be challenging:

There can be mismatches between [the information] our vendor has and then what the retailer has. An item that should be approved, like a can of chicken soup, [should be on] both lists on both sides with the retailer and with the vendor. If they don’t get updated, approved items can get denied. And so those are the types of things that we have really pushed on. (PO B)

POs had to work with vendors to ensure the accuracy of every transaction. Here is how a representative of PO CA described their experiences with flex cards that their members could use to pay for utilities:

We had a couple of issues right out of the gate with . . . denied transactions. I'm going to use the utilities as an example. . . . We tried to do our very best to make sure that any sort of a utility vendor was loaded into the system prior to going live. But there are likely going to be misses there . . . like member abrasion with some of that. If a member were to go and use their card and it was declined, we had [to make sure that] the retailer was loaded into the system so that wouldn't happen again and then asking the member to try to reprocess that. That was a little bit of an initial learning curve.⁵

Besides addressing issues related to transaction accuracy, such as whether a particular item was scanned correctly at a point of sale or a particular SKU was coded as an eligible item, some POs had to deal with fraud issues and cyberattacks. A PO B representative said that their vendor

had a DDoS [distributed denial-of-service] attack, and that caused their system to be down. So that was the biggest problem we had. It took us like a day or so to get that system back up and working because of that attack. And that also caused some of the fraud issues . . . [with] a bot that was creating credit card numbers that happened to be ones of our members. . . . [Fraudsters] were able to use the member's card. And that was handled quickly by our vendor. They were able to put extra security in place. They also reissued all new cards and reimburse the member for anything that was locked.

POs worked closely with their vendors to try to address these card-related challenges that often made their beneficiaries file grievances or complain to customer service representatives:

We meet with [our vendor] weekly right now. The nice part with having that very consistent communication is that what we are hearing [from] . . . a grievance report or . . . from customer service reports or if a member is saying, "I tried to use my card at this grocery store and it declined, saying this wasn't healthy food and produce," we're able to very quickly get that over to the vendor to review to see what is going on, if there's like a system setup issue or really just what the root cause is of that problem. (PO CA)

Some POs, however, started making vendors more accountable for mistakes—a new theme that emerged during our 2024 interviews. A PO P representative said that, when their vendor experienced

some operational and execution issues that required a lot of attention and manpower to try to work with them to correct those issues, . . . [we started] trying to hold them more accountable from a financial perspective to really right the ship there to make sure that they're administering the benefit as accurately as they can.

This suggests that POs have shifted toward a more proactive, stricter approach, emphasizing accountability and collaboration to ensure that vendors address operational issues effectively and administer benefits accurately.

⁵ Member abrasion is a situation in which a health plan frustrates or exhausts a member to the point that they disengage from their care or switch plans.

Moreover, POs continued working with vendors to educate beneficiaries on benefit eligibility, card usage rules, and functionality to reduce confusion and improve their satisfaction. “Educating members on how to use the card, where they could swipe, where they could purchase something, and what products were eligible” was an important activity on which representatives of PO BI reported focusing at the beginning of the year. Some of the benefits offered were more confusing than others, including shared allowance for food and OTC items loaded on the same flex card. Although several POs transitioned to one card and shared allowances to streamline beneficiary experiences, a PO BV representative said that they did not anticipate the amount of feedback about

having a shared allowance for OTC and food, [which] was confusing to our members. We’ve had some member issues, and we’re working on how we communicate that to members because just this shared allowance is actually hard for them to understand as a concept.

A PO BZ representative said that there was “some learning in terms of helping members to understand what the card could be used for,” and a PO BV representative said that they had to explain to their members that “shampoo, soap, and personal care items do not qualify as OTC items, and that was causing a lot of abrasion.”

However, beneficiaries’ comprehension of their benefits improved over time, and the need to address member abrasion diminished because POs worked with vendors to resolve many prior implementation challenges and invested in improving their communication materials. Here is how PO BW representatives described the actions of their vendor to improve beneficiary experiences using flex cards to pay their utility bills:

In 2023, we certainly did struggle a bit with our vendor to make sure that the member experience was consistent and met expectations. . . . They really did make a best faith effort not only to provide an interim solution to assist members, which basically was leveraging their own call center to help make payments directly on the member’s behalf . . . but they [are now issuing Visa cards and added] an option of going into their payment portal and finding an established utility [company] and then entering the payment information and sending the payment that way, or they can go into a Walmart store and make a payment over the counter.

PO G also reported investing in improving beneficiary communication related to card-delivered benefits:

For 2024, when members got their card, they got a guidebook [that] told them where they could spend their money. . . . They have [several] spending categories. . . . They’ve got food, personal care, pet care, OTC, utilities, transportation. They can pick how to spend their money. So, they don’t have to tell us either. . . . We provide examples. For utilities, you can pay for your electric bill. . . . For your personal care, you can buy shampoo and toilet paper. For food, you’ve got healthy food items. The member guidebook was a really great way for us to elaborate what members can use their money for. We’ve not really had many questions about where members can spend their money.

Summary

In this chapter, we used PO survey and interview data to describe POs' experiences with model test implementation. In 2024, POs continued to view VBID implementation as a relatively small lift, particularly if they implemented the model in DSNPs, used SES-based targeting, or offered Part D interventions. Certain aspects of implementation, however, still posed challenges, including model-specific data reporting, working with vendors, and providing WHP services to all plan members. These challenges required significant coordination, staff effort, and infrastructure to address because POs relied on data submitted by providers and vendors to generate CMS-required reports.

POs encountered operational disruptions, fraud issues, and transaction inaccuracies related to card-delivered benefits, such as food, utilities, and OTC items. They reported working with vendors to address these issues and improve member comprehension of flex card usage rules and benefit eligibility. Although some POs continued describing card-related challenges as causing friction with members, they also noted that beneficiary experiences improved over time as vendors streamlined processes, expanded retail networks, and implemented technology solutions.

In a notable shift during 2024, POs increased vendor accountability for operational mistakes to ensure accurate benefit administration. These efforts contributed to smoother implementation and improved member satisfaction, demonstrating the importance of proactive vendor management and beneficiary education for successful model implementation.

Chapter 4. Plan-Level Enrollment and Financial Outcomes

Key Findings

- In 2023, VBID was associated with an increase in costs to CMS of \$36 PMPM ($p = 0.04$, 95% CI [\$1 to \$66]). This is consistent with results from earlier years: VBID was associated with a \$32 PMPM increase in costs to CMS in 2022 ($p < 0.01$, 95% CI [\$10 to \$55]) and a \$23 increase in costs to CMS in 2021 ($p = 0.01$, 95% CI [\$6 to \$41]).
 - Unlike earlier years, when cost increases were driven by MA costs, cost increases in 2023 were driven by Part D costs (\$37 increase, $p < 0.01$, 95% CI [\$21 to \$53]). Part D cost increases reflected VBID-associated increases in payments for both reinsurance (\$17 PMPM increase, $p = 0.01$, 95% CI [\$5 to \$29]) and the LIS (\$18 PMPM increase, $p < 0.01$, 95% CI [\$13 to \$23]).
 - Although the data we needed to fully estimate costs to CMS were not fully available for 2024 at the time of this writing, VBID was associated with an \$8.98 ($p < 0.01$, 95% CI [-\$16 to -\$2]) reduction in MA Prescription Drug (MAPD) bids in 2024. We found similar associations with reduced bids in 2022 and 2023.
 - In 2024, VBID was associated with a reduction of about one mandatory supplemental benefit (MSB) per plan ($p < 0.01$, 95% CI [-1.4 to -0.6]). Nevertheless, VBID was also associated with a \$26 increase ($p < 0.01$, 95% CI [\$18 to \$33]) in MSB costs because some VBID benefits were priced as MSBs in the bids.
 - In 2024, VBID was associated with a \$2.56 increase ($p < 0.01$, 95% CI [\$1.01 to \$4.27]) in monthly premiums for MA and Part D coverage. This increase was driven mostly by a \$2.12 increase ($p < 0.01$, 95% CI [\$0.99 to \$3.35]) in Part D premiums.
 - Changes in the nature of VBID-associated costs to CMS and premium changes are consistent with the evolution of the model test toward Part D cost-sharing interventions and increased participation among DSNPs.
-

In this chapter, we examine associations between VBID and plan-level outcomes, including **total plan enrollment, MA plan bids, Part D plan bids, costs to CMS, beneficiary premiums, and the number of MSBs**. This chapter also describes some secondary outcomes, including components of costs to CMS, to provide additional insight into mechanisms underlying the main results. As with the previous evaluation report (Eibner et al., 2025), we used entropy-balanced DD regression models to compare the trends in outcomes for VBID-participating plans with those for eligible nonparticipating plans. The estimates reported here reflect average effects for all plans participating in VBID in a given calendar year, and tables reporting all estimates discussed in this chapter are provided in Appendix D in the separately available appendix volume. Throughout the chapter, we also report findings from our PO surveys and interviews to provide context for our quantitative results. These results reflect POs' stated beliefs about VBID's impact on enrollment and financial outcomes, as well as the mechanisms that might explain these effects.

We quantitatively analyzed MA and Part D plan bid, enrollment, and plan benefit package data to identify whether there was an association between VBID participation and the outcomes mentioned above. For instance, total plan enrollment might be affected because beneficiaries may switch into or out of VBID-participating plans in response to changes in benefits and premiums. Participating plans might also project reductions in utilization of high-intensity health care services as a result of VBID, thereby reducing the MA plan bids (which reflect the projected costs of providing coverage). However, Part D plan bids might increase because reduced cost

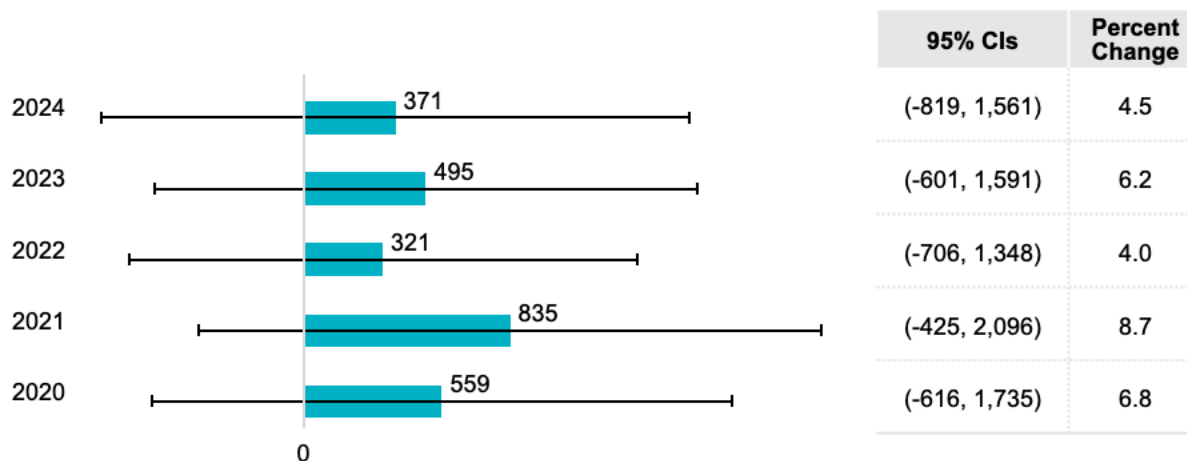
sharing for beneficiaries enrolled in VBID plans could increase use of and adherence to prescription drugs. Changes to plan bids and other cost components might, in turn, affect the costs to CMS, which include the cost of providing MA and Part D coverage to enrollees, as well as beneficiary premiums. In addition, plans might reduce the number of MSBs offered to all enrollees in a plan to compensate for the costs associated with the newly offered VBID benefits.

We report quantitative results in figures in this chapter that show the estimated association between VBID and the outcomes above for each year from 2020 through 2024, with the exception of costs to CMS. (Because of the time needed to finalize payments to plans, data on costs to CMS were available only through 2023.) To provide context for these estimates, the figures also report the percentage change relative to the level of the outcome that would have been expected in the absence of VBID.

Enrollment

Figure 4.1 shows the estimated association between VBID and plan enrollment. The blue bars indicate the enrollment changes (measured in number of enrollees) that were associated with participation in the model. Although these estimates are positive for all years, they are not statistically significant for any year.

Figure 4.1. Estimated Association Between VBID Interventions and Plan Enrollment



SOURCE: Authors' analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the plan-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted eligible nonparticipating plans. Error bars (black horizontal lines) indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

Although we did not find statistically significant evidence that VBID was associated with increased plan enrollment, our 2024 PO survey and interview results suggest that POs believed

that VBID helped participating plans increase their enrollment numbers. Of the 60 POs that answered a survey question about the impact of VBID on plan enrollment and retention, 70% ($N = 42$) reported an increase, 28% ($N = 17$) reported no impact, and one reported a decrease in beneficiary enrollment and retention.

Like they did last year, PO representatives noted that VBID-enabled supplemental benefits, such as flex cards and healthy food, as well as reductions in Part D cost sharing for LIS-eligible beneficiaries, were the main drivers of member enrollment and retention. PO L representatives described the importance of offering comprehensive supplemental benefits by saying that

members tell us all the time how much they value and rely on [the healthy food] benefit and how important it is to them. So, that is definitely something that members think about and look at when they're deciding what plan they're going to enroll in.

PO BX representatives said that offering flex cards in a highly competitive DSNP market was a key driver in enrollment, but PO CD representatives emphasized the importance of VBID-enabled supplemental benefits for retaining beneficiaries: “[We have to] retain our existing members in our plans because our competitors . . . are offering other things that could attract these members away from us.”

Besides offering VBID-enabled supplemental benefits, some POs reported the need to eliminate Part D cost sharing to remain competitive:

[We track] enrollment and retention because our members do have choices in this market and because we have competitors offering the same experience of zero-cost Part D drugs at point of sale even for these DSNP members. Eliminating that LIS cost share . . . is really important. (PO M)

PO CE and CF representatives suggested that offering zero-dollar Part D cost sharing was a good strategic decision because it was less confusing for members than charging them several dollars for prescription drugs:

[E]ven though many customers qualified through low-income subsidy for decreased cost shares on their Part D drugs, that's kind of a confusing process for customers to always understand. We believe that we've encountered increases in new enrollment as well as retention of current customers through that simplicity of understanding that Part D cost sharing. (PO CF)

A PO C representative added that VBID helped improve that PO's benefit offerings by allowing that PO “to bring zero cost share for their Part D, [which helped] . . . contribute to the member retention as well.”

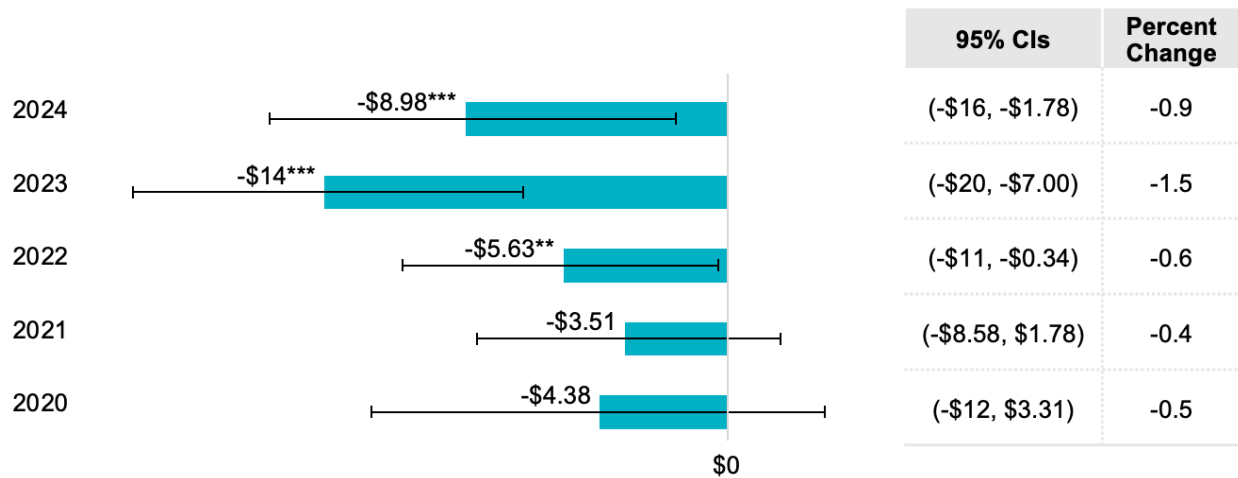
Nonetheless, PO BI representatives raised concerns about the financial viability of offering VBID benefits in highly competitive markets with limited growth opportunities, stressing the fact that model participation is unlikely to yield meaningful return on investment. A PO BI representative said,

Our enrollment has not increased substantially because of the benefits. We have not seen a flood of new enrollees because of these benefits. . . . It has been a challenge because the competition has increased in the past two to three years.

Plan Bids

In 2024, VBID was associated with a statistically significant \$8.98 reduction in standardized plan bids for combined MA and Part D coverage ($p < 0.01$) (Figure 4.2). (The standardized plan bid is adjusted for the plan’s projected risk factor and reflects the projected cost of providing MA and Part D coverage to an enrollee with a risk score of 1.0.) VBID was also associated with a \$14 reduction in bids in 2023 ($p < 0.01$) and a \$5.63 reduction in 2022 ($p = 0.04$). Although the association between VBID and bids was negative in 2021 and 2020, these results were not statistically significant. Taken together, these results imply that VBID was associated with reductions in bids in some years, and the associations became stronger in later years of the model test.

Figure 4.2. Estimated Association Between VBID Interventions and MAPD Bids



SOURCE: Authors’ analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the plan-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted eligible nonparticipating plans. Error bars indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled “95% CIs.” The column labeled “Percent Change” indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

Decreases in the total bid amounts were driven by decreases in the standardized MA bid (see Appendix D in the separately available appendix volume), which declined by \$23 in 2024 relative to comparison plans ($p < 0.01$, 95% CI [–\$30 to –\$15]). Lower MA bids were partially offset by higher Part D bids. In 2024, VBID was associated with a \$14 increase ($p < 0.01$, 95%

CI [\$12 to \$16]) in the standardized Part D bid. The finding that VBID was associated with lower MA bids and higher Part D bids is similar to results from earlier years of the model test.

PO survey and interview results partially supported the quantitative finding that VBID reduced MA bids while increasing Part D bids. Although most POs (43%) completing our survey reported that VBID had no impact on their MA bids, 40% reported that the model was associated with a decrease in their MA bids. The remaining 17% reported increased bids.

During the interviews, PO representatives provided three main reasons for decreased MA bids. First, some said that “as part of the application process, [they] needed to show savings” (PO M) and cited “bid math” (PO L) as the reason for the decrease in bids. Second, some reported strategic reductions in profit margins to finance VBID benefits. PO BE representatives reported reducing their PO’s MA bids “to generate more savings [to be able to] apply [rebate dollars] to higher supplemental benefits.” Here is how PO BV representatives described the interplay between bids, profit, supplemental benefits, and medical costs:

[In our VBID-participating DSNPs], we have to lower our gain margin in the bid to [generate more rebate dollars to] pay for those [healthy food] benefits, and it’s more than a one-for-one trade-off because we can’t charge this population a premium as you could in a typical MA plan. . . . [An average] MA plan wouldn’t be able to afford it and still earn a positive margin in general. . . . So, doing this on a decent population requires you to be really good in the other medical management areas. You have to [keep] your costs low enough to generate enough rebates to be able to pay for these benefits. So that takes time to build that up and have an efficient network or efficient cost structures.

Third, some PO representatives cited their expectations of reduced number of inpatient hospital stays as a result of their VBID interventions as the reason for lower MA bids:

We assumed that as a result of these VBID programs on the Part C side . . . [and because] members being able to get drugs at a zero-dollar copay and then the impact of the rent and utilities program [and] food program, we were expecting modest reductions in inpatient utilization, skilled nursing facility utilization, and ER [emergency room] utilization. (PO H)

Those reporting increased MA bids, however, typically cited increased administrative costs associated with model participation. Like they had previously (Eibner et al., 2025), POs cited the cost of offering RI program rewards that have to be filed as administrative costs and the cost of participating in the model, including the submission of model-specific data reports, provision of WHP activities to all plan enrollees, and development of model-required health equity plans, as the main reasons for bid increases. PO BO representatives said,

We have extra work to do regarding developing a health equity plan and ACP and AWV [annual wellness visit] outreach. There’s additional costs and work for us in those areas. And then because the bid is more complicated if it’s a VBID [plan], there’s additional costs associated with that too.

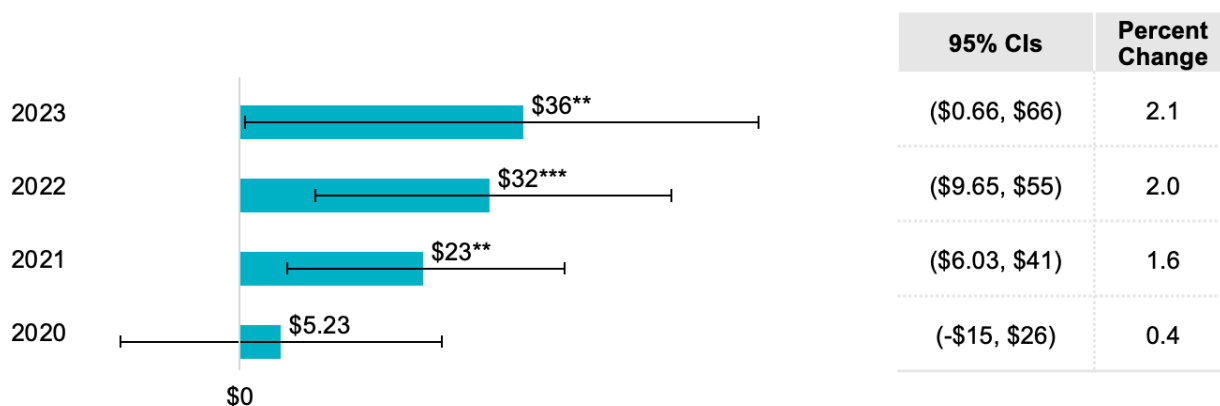
Most POs completing our survey (52%) also reported increased Part D bids as a result of VBID participation—an increase of 9 percentage points since 2023. This is consistent with our

data modeling results. More than two-fifths of POs (43%), however, reported no impact on their Part D bids; the remaining 5% reported decreases in their Part D bids. As in previous years, those reporting increased Part D bids cited reduced beneficiary cost sharing for Part D medications as the driver of bid increases.

Costs to CMS

In 2023, VBID was associated with a statistically significant \$36 PMPM increase in total costs to CMS ($p = 0.04$) (Figure 4.3). The estimated positive association with costs to CMS for 2023 resembles findings of cost increases in 2021 and 2022.

Figure 4.3. Estimated Association Between VBID Interventions and Total (MA + Part D) PMPM Costs to CMS

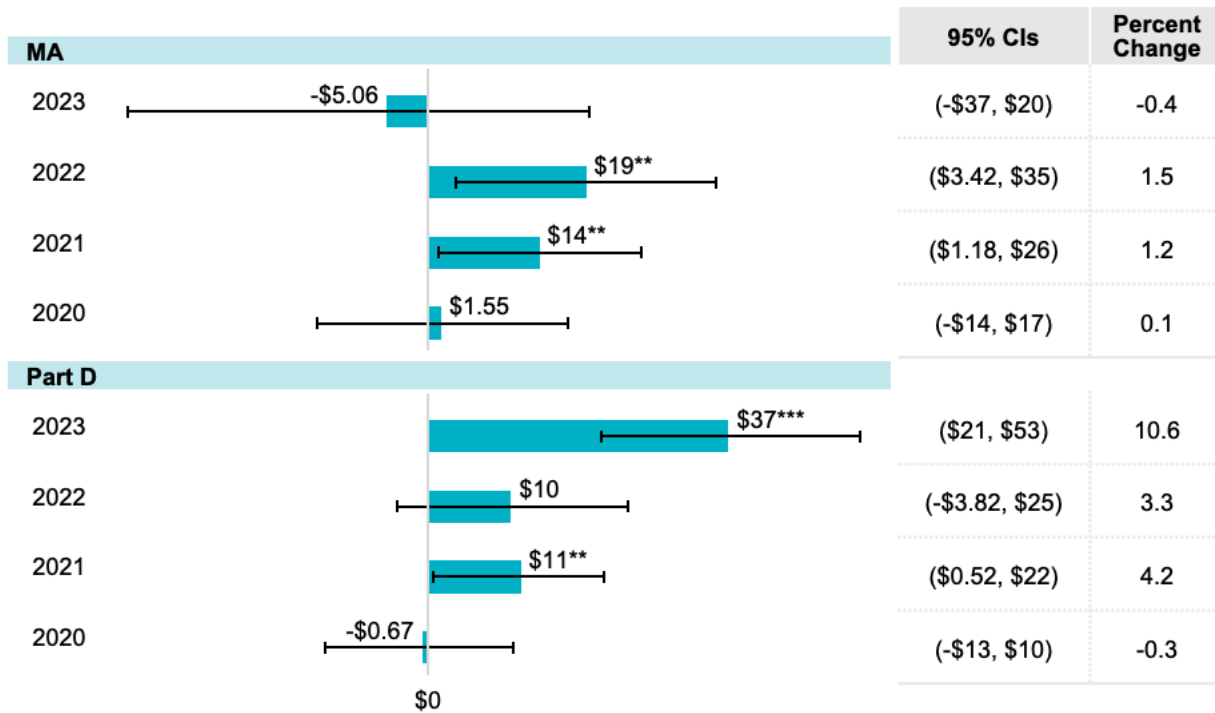


SOURCE: Authors' analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the plan-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted eligible nonparticipating plans. Error bars indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

The increase in costs to CMS in 2023 was driven by increases in Part D costs (Figure 4.4): We estimated that VBID was associated with a \$37 PMPM increase in Part D costs in 2023 ($p < 0.001$). This increase was offset by an estimated (but statistically insignificant) \$5.06 PMPM reduction in MA costs ($p = 0.79$). These results contrast somewhat with findings from earlier years of the model, in which changes in total costs to CMS were driven by higher MA costs and VBID was not associated with substantial changes in Part D costs to CMS.

Figure 4.4. Estimated Association Between VBID Interventions and MA and Part D Costs to CMS



SOURCE: Authors' analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the plan-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted eligible nonparticipating plans. Error bars indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

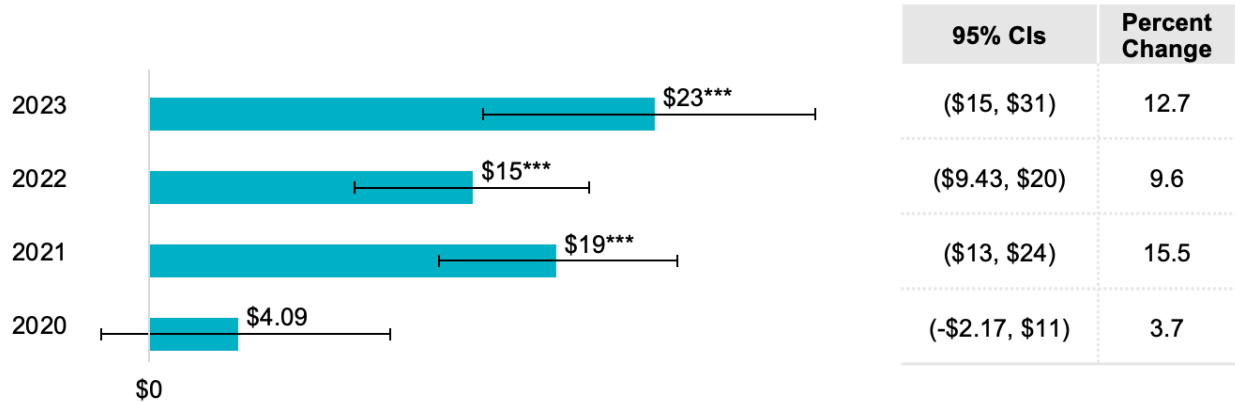
To understand the mechanisms driving these changes in MA and Part D costs, we analyzed several key components of MA and Part D costs as additional outcome variables.

MA Cost Components

CMS payments to plans for MA coverage are determined based on a comparison of the plan's MA bid to a spending benchmark derived from Original Medicare spending in the plan's service area. Plans bidding below the benchmark receive a capitation payment equal to the plan's standardized bid adjusted for enrollees' MA risk scores. A portion of the difference between the benchmark and the bid is also paid to plans so they can provide additional benefits to enrollees, a payment known as the *MA rebate*. A plan bidding above the benchmark does not receive an MA rebate and has reimbursement capped by the benchmark adjusted for enrollees' MA risk scores. Most plans bid below the benchmark, however, and thus receive MA rebates in addition to their risk-adjusted MA bids.

Figure 4.5 shows the association between VBID participation and plans' MA rebates. As in 2021 and 2022, VBID was associated with increased MA rebates (an estimated \$23 increase in 2023, $p < 0.01$).

Figure 4.5. Estimated Association Between VBID Interventions and MA Rebates

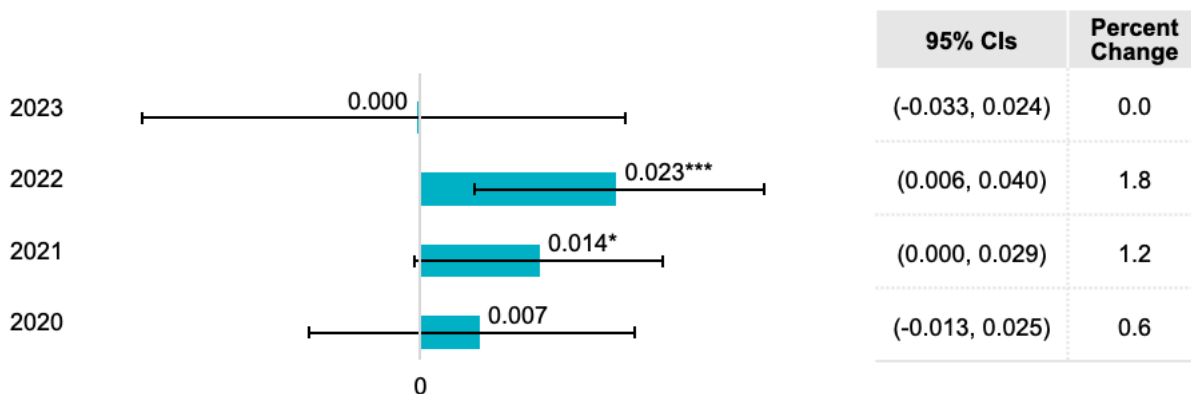


SOURCE: Authors' analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the plan-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted eligible nonparticipating plans. Error bars indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

Figure 4.6 shows the association between VBID participation and the average final MA risk score for beneficiaries enrolled in a plan (which we call the *plan-level MA risk score*). Unlike in previous years, when we found that VBID was associated with increases in plans' MA risk scores, we did not find a statistically significant association between VBID and MA risk scores in 2023. We note that the outcome variable we analyze here is the plan-level MA risk score used in payment for the outcome year (because this analysis is focused on costs to CMS) and reflects diagnoses recorded in the year prior to the outcome year. In Chapter 5, we analyze beneficiary-level risk scores and use risk scores based on the years of diagnoses.

Figure 4.6. Estimated Association Between VBID Interventions and Plan-Level MA Risk Score



SOURCE: Authors' analysis of CMS data.

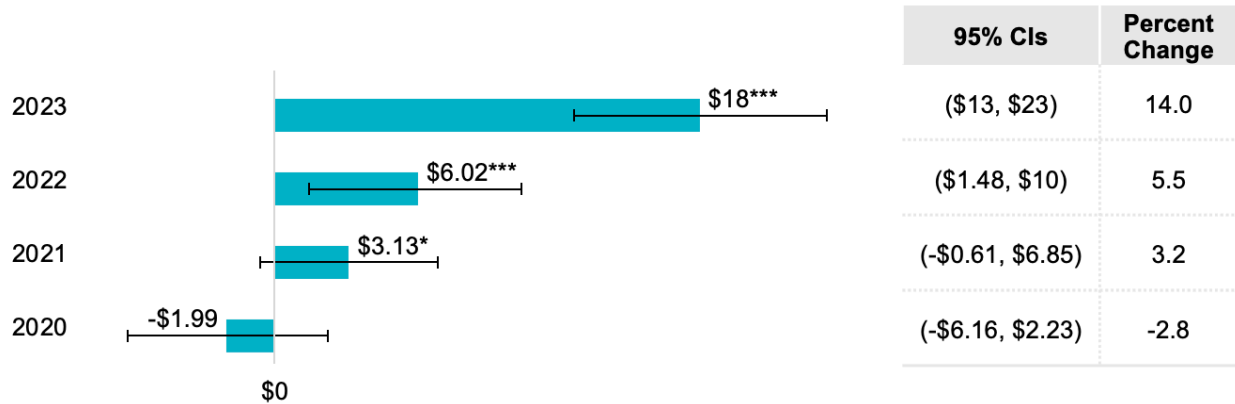
NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. We define the plan-level MA risk score as the average final MA risk score for beneficiaries enrolled in a plan. This figure shows average effects of VBID implementation from the plan-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted eligible nonparticipating plans. Error bars indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

Part D Cost Components

Our measure of Part D costs to CMS includes three major components of CMS payments to plans: the direct subsidy, the LIS, and reinsurance. The direct subsidy—a monthly capitation payment to the plan—is determined largely by the nationwide average bid and is, therefore, not closely linked to any individual plan's Part D bid. The LIS, which includes the low-income cost-sharing subsidy and the low-income premium subsidy, represents the PMPM amount paid by CMS to subsidize the costs of coverage and prescription drug utilization for LIS-eligible beneficiaries. Reinsurance reflects the PMPM amount CMS paid to plans to cover 80% of the cost of prescription drugs filled in the catastrophic phase of the Part D benefit. We note that Part D costs to CMS also reflect adjustments for manufacturer rebates and other direct and indirect remuneration received by POs, but data on Part D costs after plan payment reconciliation were not available for this evaluation.

We analyzed LIS and reinsurance payments as secondary outcomes to identify components of Part D costs that accounted for the increase observed in 2023. We found that the association between VBID and Part D costs reflected increases in both LIS (Figure 4.7) and reinsurance payments (Figure 4.8). In 2023, VBID interventions were associated with an \$18 increase in PMPM LIS payments ($p < 0.01$) and a \$17 increase in PMPM reinsurance payments ($p = 0.01$). VBID was also associated with increases in LIS payments in 2022 and 2021, although these associations were smaller than the association found in 2023. There was no association between VBID and reinsurance payments prior to 2023. VBID was not associated with changes in the direct subsidy in 2023 (see Appendix D in the separately available appendix volume).

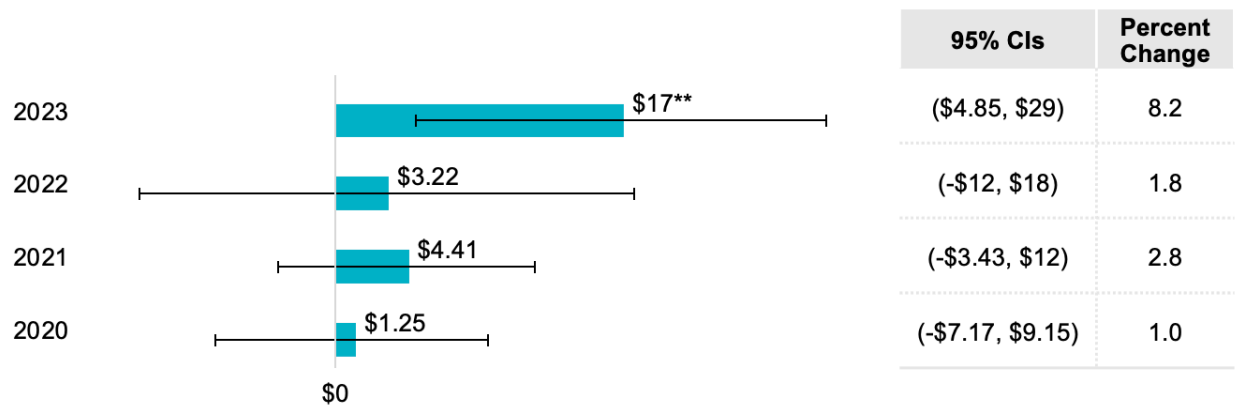
Figure 4.7. Estimated Association Between VBID Interventions and PMPM LIS Payments



SOURCE: Authors' analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the plan-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted eligible nonparticipating plans. Error bars indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

Figure 4.8. Estimated Association Between VBID Interventions and PMPM Reinsurance Payments



SOURCE: Authors' analysis of CMS data.

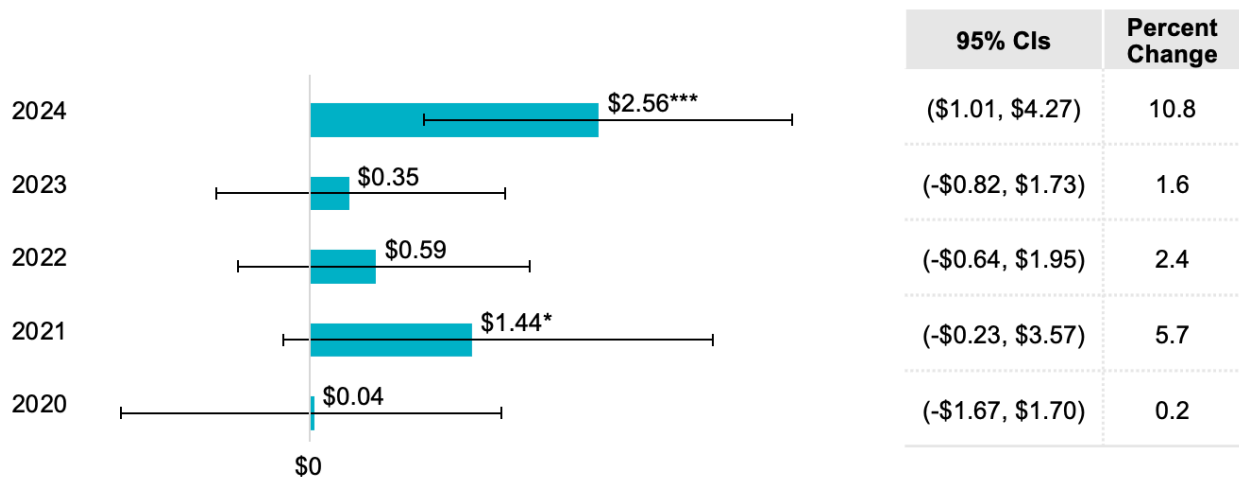
NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the plan-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted eligible nonparticipating plans. Error bars indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

Beneficiary Premiums

In 2024, VBID was associated with a \$2.56 average increase in monthly beneficiary premiums ($p < 0.01$) (Figure 4.9). VBID was not associated with premiums in most earlier years. The 2024 increase was driven primarily by Part D premiums (see Appendix D in the separately

available appendix volume). In 2024, VBID was associated with a \$2.12 increase ($p < 0.01$, 95% CI [\$0.99 to \$3.35]) in Part D premiums; however, we did not find a statistically significant association between VBID and MA premiums ($p = 0.57$).

Figure 4.9. Estimated Association Between VBID Interventions and Total (MA + Part D) Premiums



SOURCE: Authors' analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the plan-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted eligible nonparticipating plans. Error bars indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

Although we found that VBID was associated with higher premiums, the majority of POs responding to our survey questions reported no impact on their MA or Part D premiums (97% and 82%, respectively), typically citing the fact that they had entered zero-dollar premium plans into VBID or that they "bought down" the costs of VBID-enabled supplemental benefits with rebate dollars to increase the competitiveness of their plans in the local markets that were dominated by zero-premium plans:

For Part C and D premiums, we don't have any, or they're very minimal in [our market]. The "no impact" [response to the survey question] is really just a function of the fact that [non-zero-dollar premium plans] don't really exist in our book of business. (PO R)

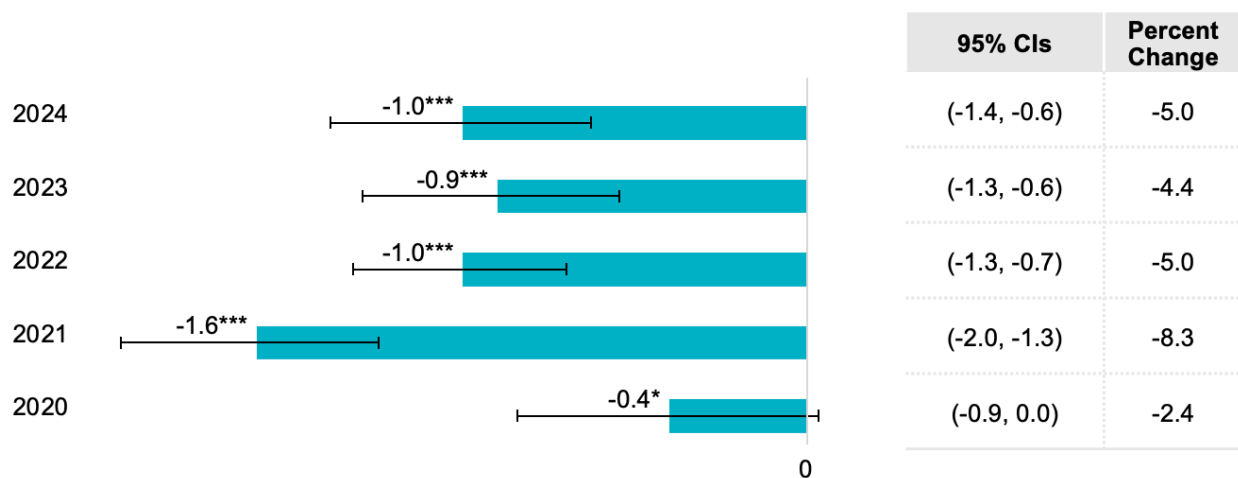
In addition, DSNPs that offered Part D interventions continued reporting setting up their Part D premiums at levels that would be covered by the government's contributions to the LIS to ensure that their members do not pay any plan premiums.

Nonetheless, 17% of respondents said that their Part D premiums increased because their Part D bids went up. Our quantitative finding that VBID was associated with both increased Part D bids and increased Part D premiums is consistent with this observation.

MSB Offerings

In 2024, VBID was associated with a reduction of one MSB ($p < 0.01$) (Figure 4.10). This result is similar to findings from earlier years of the model test, when we also found statistically significant reductions in the number of MSBs offered.

Figure 4.10. Estimated Association Between VBID Interventions and Number of MSBs Offered



SOURCE: Authors' analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the plan-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted eligible nonparticipating plans. Error bars indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

As in earlier years of the model test, we estimated that VBID was associated with an increase in the cost of MSBs. In 2024, VBID was associated with a \$26 increase ($p < 0.01$, 95% CI [\$18 to \$33]) in the cost of MSBs (see Appendix D in the separately available appendix volume). We note that this cost measure includes the cost of VBID Flexibilities interventions (Innovation Center, 2021), while the count of MSB offerings analyzed in Figure 4.10 includes only supplemental benefits offered to all enrollees in the plan and therefore excludes VBID-enabled supplemental benefits.

Our findings related to the cost of MSBs are corroborated by qualitative evidence. Most POs (66%) completing our survey reported that the costs of providing supplemental benefits increased as a result of VBID participation, citing increased utilization of VBID-enabled supplemental benefits, such as flex cards. All remaining POs (34%) reported no impact. Some POs considered the trade-offs of using different approaches to structuring their supplemental benefit offerings by carefully allocating funding between MSBs (such as transportation to medical destinations, which have a strong potential to save plans money) and VBID-enabled

supplemental benefits (such as flex cards or utility benefits, that might or might not affect health outcomes). Here is how PO B representatives explained this:

Health plans that offer the transportation [benefit can view it as a potential] cost saving and keep it separate [from their VBID flex cards like we did] . . . because we know what will happen with this population. . . . It's a play on your utilization to figure out what is the right utilization level and what is the right level of risk that you can accept as a health plan. That will then help you set those numbers [for card-delivered benefits]. What we have been traditionally trying to do is try to bucket things that make sense and then seeing how that essentially washes out in the end.

PO CA representatives agreed that it is important to ensure that plans do not sacrifice the generosity of their medical benefits by offering VBID-enabled supplemental benefits. As a PO that entered a DSNP in the model, they were able to leverage Medicaid-covered benefits to increase the generosity of their flex card benefits:

I think we've been really great at . . . not sacrificing our medical benefits to give those flashy flex cards. We really try to be strategic in where we're giving the money to and not just putting the money into something to get more members and make it look flashy. . . . There were definitely cuts in some of the [dental] services . . . we made . . . to cover [the cost of flex cards]. But being a DSNP, we looked more towards our Medicaid and [identified] what [beneficiaries can] still receive under the Medicaid benefit.

Comparison with Findings in the 2025 Evaluation Report

For our 2025 evaluation report, we also analyzed the outcomes up to 2023. (Costs to CMS, which have a longer data lag than other plan-level outcomes, were previously analyzed through 2022 only.) For the current report, we revised the methodology used for 2023 and 2024 outcomes to reduce the number of preintervention years included in the analysis (Appendix A, in the separately available appendix volume, discusses this change in greater detail). This change had implications for our enrollment findings: Although we previously reported a large, statistically significant association between VBID and plan enrollment in 2023, this effect is now smaller and not statistically significant.

In addition to the change in the number of preimplementation years included in the analysis, results in earlier years might have changed because we refreshed our data to incorporate improvements in the deduplication process applied to Part D event data. Changes stemming from this methodological improvement were minimal and did not affect our conclusions.

Summary

In this chapter, we analyzed associations between VBID and plan-level outcomes, extending prior analyses to 2023 for costs to CMS and to 2024 for all other outcomes. Some of the findings reflect continuity with associations found in earlier years of the model test. For example, VBID

interventions in 2024 continued to be associated with lower standardized MAPD bids. As in earlier reports, we also found that VBID was associated with fewer MSB offerings and greater MSB costs. However, it is worth noting that our measure of the number of MSBs offered includes benefits available to all plan members; it does not include VBID-enabled supplemental benefits. The increase in MSB costs likely stems from the requirement that plans price VBID Flexibilities as MSBs when submitting their bids (Innovation Center, 2021).

Despite these similarities with prior reports, our findings on premiums (for 2024) and costs to CMS (for 2023) suggest that the impacts of VBID changed over time, perhaps because of plans' increased use of Part D interventions in recent years. For 2024, we estimated a \$2.56 increase in the beneficiary total premium, driven mostly by the Part D premium. Premium changes in prior years were smaller and—with the exception of 2021—were not statistically significant. In interpreting impact of the 2024 premium increase, it is important to note that increased VBID participation among DSNPs—in which all enrollees are eligible for the low-income premium subsidy—means that the Part D premium increases reported here might be borne primarily by CMS rather than by beneficiaries.

VBID was associated with higher costs to CMS in 2021, 2022, and 2023, but the key drivers of increased costs changed over time. In 2021 and 2022, increases were driven primarily by MA costs, reflecting higher risk scores and larger MA rebates. Estimated Part D cost increases were smaller than the changes in MA costs in 2021 and 2022 and not statistically significant in 2022. In contrast, the increase in costs to CMS was driven by Part D costs, consistent with the growth of Part D–focused VBID interventions.

Part D cost increases in 2023 reflected similar-size increases in LIS and reinsurance payments. LIS includes both premium subsidies and cost-sharing subsidies, but because Part D premiums did not increase in 2023, we infer that increases in LIS spending were likely driven by cost sharing. We did not further analyze the reason for the increase in LIS and reinsurance spending, but it could reflect greater prescription drug utilization or shifts to more-expensive drugs. With more prescription drug use, CMS' payments for the cost-sharing portion of the LIS could increase. This increase might have become more pronounced after 2021, when the 2022 VBID request for applications (Innovation Center, 2021) changed a policy that required VBID plans targeting LIS-eligible beneficiaries to cover both the subsidy portion and the beneficiary's Part D cost sharing, even though CMS would have covered much of the cost sharing for LIS-eligible beneficiaries without VBID. The policy change might have increased the chance that POs would offer Part D reduced cost sharing as part of the model test. It also increased the costs to CMS for VBID plans that continued to offer LIS-targeted reduced Part D cost sharing. Increases in drug spending would also increase the likelihood that a beneficiary would enter the catastrophic phase of the Part D benefit, when reinsurance payments are made.

Chapter 5. Beneficiary-Level Health, Utilization, and Cost Outcomes

Key Findings

- VBID was associated with a 0.5 percentage point increase in targeted beneficiaries' adherence to noninsulin diabetes medication in 2021 ($p = 0.02$, 95% CI [0.1 to 1.0]) and a 1.3 percentage point increase in 2020 ($p < 0.01$, 95% CI [0.4 to 1.9]). There was no statistically significant association in 2022.
 - VBID was associated with a 1.1 percentage point increase in targeted beneficiaries' adherence to cholesterol medication in 2022 ($p < 0.01$, 95% CI [0.4 to 1.8]), a 0.4 percentage point increase in 2021 ($p = 0.07$, 95% CI [0.0 to 0.9]), and a 1.3 percentage point increase in 2020 ($p < 0.01$, 95% CI [0.5 to 2.1]).
 - Although VBID was associated with increased breast cancer screening rates in 2020, this effect diminished in size and became marginally statistically significant in 2021 and was no longer statistically significant in 2022.
 - In 2022, VBID was not significantly associated with targeted beneficiaries' inpatient stays, whereas earlier years showed a positive, statistically significant association. This shift might suggest that prior findings reflected unmet need for hospital-based care that has since been addressed.
 - VBID was associated with a \$36 reduction in beneficiaries' annual OOP spending on Part D drugs ($p < 0.01$, 95% CI [−\$42 to −\$30]) in 2022. The negative association between VBID and OOP spending became larger in absolute value over time.
 - VBID was associated with a 0.086-point increase in targeted beneficiaries' risk scores in 2022 ($p < 0.01$, 95% CI [0.054 to 0.118]), a 5% increase from what would have been expected without VBID. The model was also associated with increased risk scores in 2020 and 2021.
-

In this chapter, we analyze associations between VBID and several beneficiary-level outcomes related to **adherence** (to medication for cholesterol and hypertension, noninsulin diabetes drugs, and breast cancer screening recommendations), **use of high-intensity services** (inpatient stays), **spending** (Part D OOP costs), and **health status** (beneficiary risk scores) in 2020, 2021, and 2022. We supplement our quantitative results with the findings from our PO surveys and interviews.

Our quantitative analyses focused on beneficiaries who were targeted by their plans' VBID intervention based on chronic condition or SES. We identify targeted beneficiaries based on data reported by POs to CMS indicating which beneficiaries in their plans were eligible for the model. We excluded beneficiaries who were in model-participating plans but ineligible for VBID interventions. The comparison group consisted of beneficiaries in non-VBID plans weighted to match the VBID-targeted group. A table reporting all estimates discussed in this chapter is provided in Appendix E in the separately available appendix volume.

VBID might influence beneficiaries' health and spending outcomes by encouraging use of preventive care and high-value treatments, such as chronic disease medications and visits to high-value providers, that are subject to lower cost sharing under the model. In turn, the model might improve beneficiaries' health and reduce spending on high-intensity services, such as hospitalizations, to the extent that these services can be avoided with better preventive care and chronic disease management.

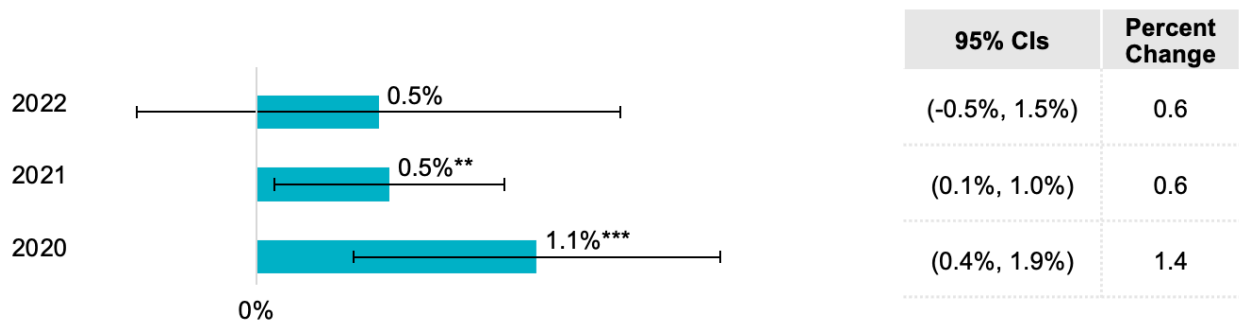
In theory, one would expect VBID to increase adherence to medication and breast cancer screening recommendations and to decrease inpatient stays and OOP spending on Part D drugs

(many VBID interventions reduced or eliminated drug copays). However, the expectation of the effect of VBID on beneficiaries’ risk scores—diagnosis-based measures that correlate with expected health care spending—is ambiguous. On the one hand, VBID’s focus on prevention and CM might reduce a beneficiary’s probability of receiving a new diagnosis, which could reduce risk score growth relative to that of the comparison group. On the other hand, VBID could increase the number of interactions a beneficiary has with the health care system, which could lead to more conditions being diagnosed and coded, ultimately increasing risk scores.

Medication Adherence

Our medication adherence measures reflect the share of beneficiaries who filled prescriptions at least 80% of the time. In 2022, we found no statistically significant associations between VBID and adherence to noninsulin diabetes medication (Figure 5.1). However, VBID was associated with a statistically significant 0.5 percentage point increase in the probability that a beneficiary would be adherent to noninsulin diabetes medication in 2021 ($p = 0.02$) and a 1.1 percentage point increase in the probability of being adherent in 2020 ($p < 0.01$).

Figure 5.1. Estimated Association Between VBID Interventions and the Probability That Targeted Beneficiaries Were Adherent to Noninsulin Diabetes Medication

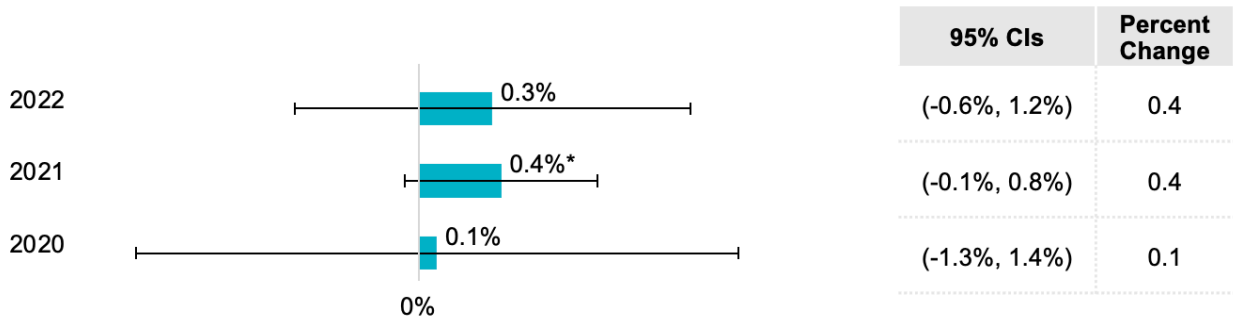


SOURCE: Authors’ analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the beneficiary-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted beneficiaries enrolled in eligible nonparticipating plans. Error bars indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled “95% CIs.” The column labeled “Percent Change” indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

VBID was associated with a marginally statistically significant increase in adherence to hypertension medication in 2021 ($p = 0.09$). However, we found no statistically significant associations in either 2020 or 2023 (Figure 5.2).

Figure 5.2. Estimated Association Between VBID Interventions and the Probability That Targeted Beneficiaries Were Adherent to Hypertension Medication

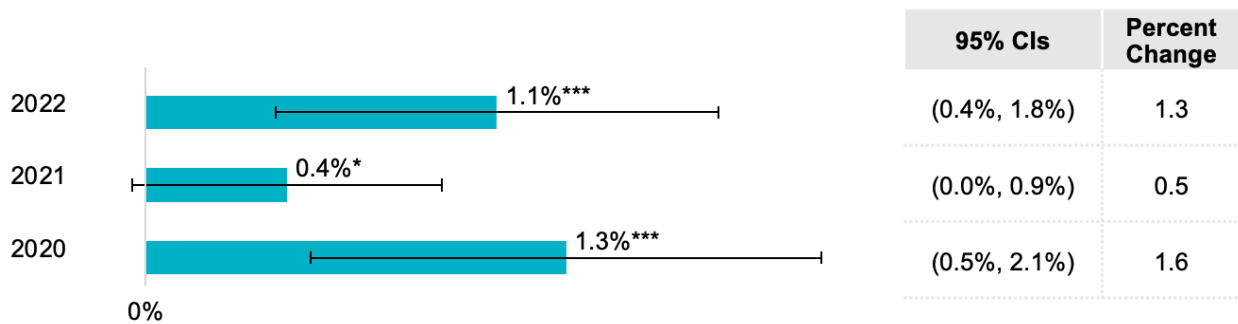


SOURCE: Authors' analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the beneficiary-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted beneficiaries enrolled in eligible nonparticipating plans. Error bars indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

Figure 5.3 shows that VBID was associated with a statistically significant 1.1 percentage point increase in adherence to cholesterol medication in 2022 ($p < 0.01$) and a statistically significant 1.3 percentage point increase in adherence in 2020 ($p < 0.01$). Although the estimated association between VBID and cholesterol medication adherence in 2021 was also positive, it was smaller than in the other years and only marginally statistically significant ($p = 0.07$).

Figure 5.3. Estimated Association Between VBID Interventions and the Probability That Targeted Beneficiaries Were Adherent to Cholesterol Medication



SOURCE: Authors' analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the beneficiary-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted beneficiaries enrolled in eligible nonparticipating plans. Error bars indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

During the interviews, representatives of PO U attributed increases in medication adherence to PO U's RI intervention that offered a \$50 incentive for anyone who completed an MTM consultation:

We're seeing potential increases in medication adherence from MTM because we're able to talk to those members and say, "If you're adherent to your statins, if you're adherent to your diabetes meds, if you're adherent to your hypertension meds, you're getting better outcomes because you're getting less need to go to the doctor or less potential spend in those areas." So that's where we're coming from, from a clinical perspective.

Representatives of several DSNPs that offered zero-dollar cost sharing for all Part D medications as part of VBID also noted increased adherence among those with chronic conditions. For example, PO BY representatives said that they saw a roughly 1% increase in adherence to "your diabetes, your statin drugs for cholesterol, drugs for hypertension." PO P representatives agreed, noting "some directional results that show . . . an improvement in medication adherence broadly." Finally, a PO BM representative said that VBID was particularly helpful for PO BM's LIS-eligible members who took multiple drugs: "Even with LIS, there's a low copay, but a lot of members have ten drugs that they need, and they don't have \$80 for their medication. So that it really was a barrier to care for our members" that VBID helped address.

Others, however, said that rather than expecting improved adherence, the key outcome of the zero-dollar Part D cost-sharing intervention in DSNPs, in which this VBID benefit was commonly offered, would be prevention of declines in medication adherence for Medicaid beneficiaries aging into Medicare:

If [a beneficiary is] coming from Medicaid into a DSNP as a dual, we want them to at least be able to continue filling [prescriptions] at the same rate and taking their medications as they did before they aged in. We don't want the addition of LIS copay to deter them from a medication again. (PO M)

A representative of PO BO agreed, saying that, when dually eligible beneficiaries

become Medicare-eligible, it's a little bit of a shock to them to have to pay for their medication. And many times, we find that people just become nonadherent or less adherent. So [VBID] is an important component of our plan and helping our members stay healthy.

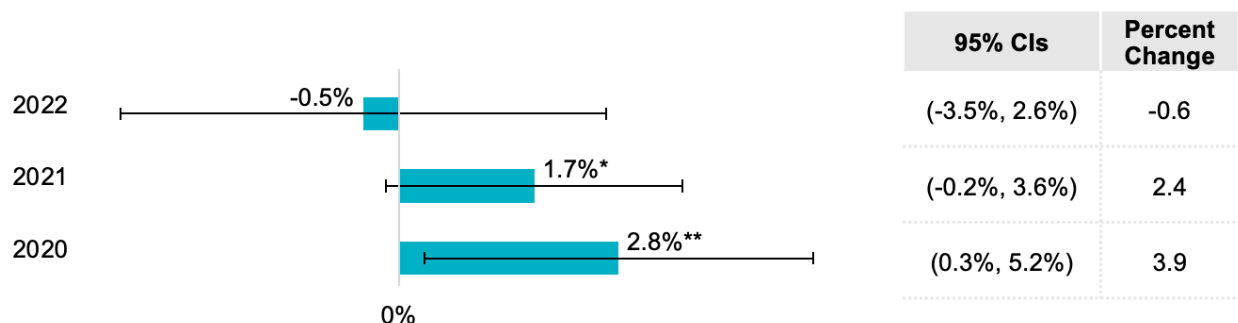
Because our DD methodology involves us comparing actual outcomes to outcomes that would have been expended in the absence of VBID, an intervention that prevented a decline in adherence would contribute to a positive association in the DD framework.

Adherence to Breast Cancer Screening Recommendations

Our measure of breast cancer screening adherence reflects the probability that a woman who is eligible for the measure had a mammogram. In 2022, we found no association between VBID and breast cancer screening (Figure 5.4). The model was associated with a statistically

significant 2.8 percentage point increase in adherence to breast cancer screening recommendations in 2020 ($p = 0.03$), but this association diminished and became marginally statistically significant in 2021 and was no longer statistically significant in 2022. Some plans that participated in the model in early years focused on encouraging preventive care, including breast cancer screening. However, over time, there was a shift toward offering Part D benefits and VBID-enabled supplemental benefits.

Figure 5.4. Estimated Association Between VBID Interventions and the Probability That Targeted Beneficiaries Would Be Adherent to Breast Cancer Screening Recommendations



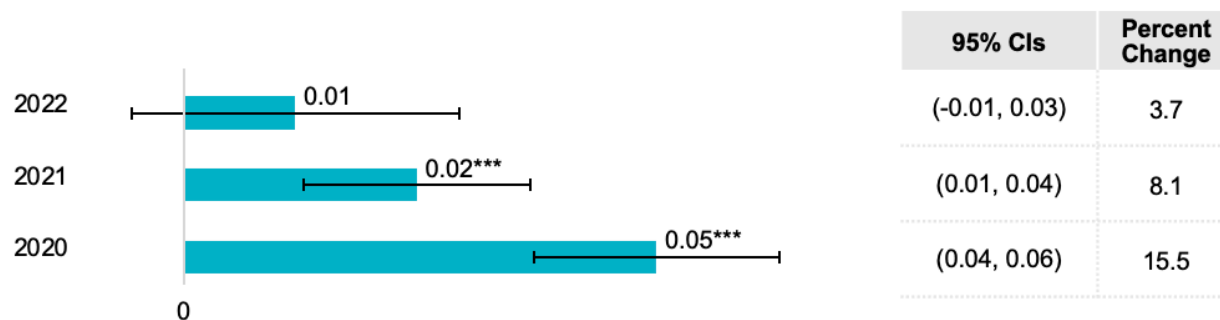
SOURCE: Authors' analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the beneficiary-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted beneficiaries enrolled in eligible nonparticipating plans. Error bars indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

Inpatient Stays

Figure 5.5 shows the association between VBID and targeted beneficiaries' non-COVID-19 inpatient stays. There was no association between VBID and non-COVID-19 inpatient stays in 2022; however, in earlier years' data, we found a positive and statistically significant association.

Figure 5.5. Estimated Association Between VBID Interventions and the Number of Inpatient Stays by Targeted Beneficiaries



SOURCE: Authors' analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the beneficiary-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted beneficiaries enrolled in eligible nonparticipating plans. Error bars indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

The majority of POs that completed our survey (69%) indicated no change in inpatient visits, generally citing a lack of causal relationships between the model and hospital stays; this result is consistent with our results for 2022. Some POs that implemented multiple VBID interventions reported that impacts on inpatient visits varied across their interventions. For example, PO G representatives said that inpatient use decreased among beneficiaries with congestive heart failure who received lower cost sharing for Part C and Part D benefits, supplemental benefits, and CM benefits but increased among their LIS-eligible beneficiaries who received such benefits as flex cards, grocery-specific allowance, fall prevention support, or zero-dollar Part D cost sharing.

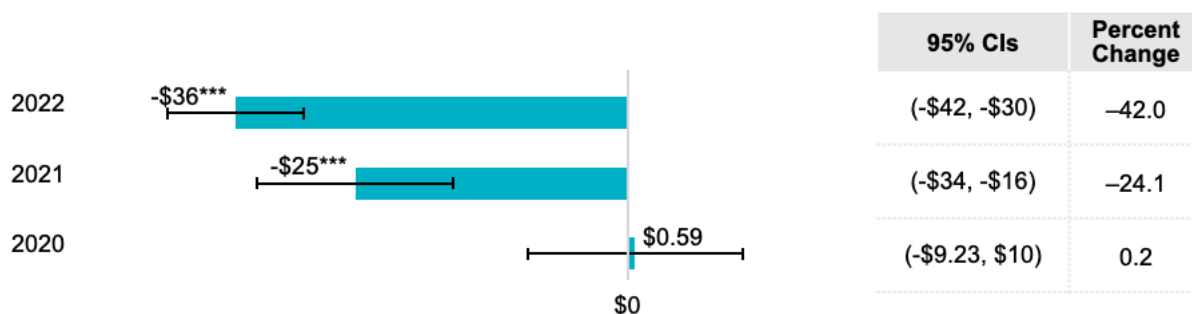
Additionally, representatives of several POs that reported declines in inpatient visits said that they were not sure whether VBID participation was the cause. For example, PO BX representatives said that, although their VBID plans experienced decreases in inpatient visits, their CM efforts outside of VBID, rather than the grocery allowance they offered through the model test, could have driven these declines:

We feel that [the flex card] certainly helps, especially when so much of our population is using it for food and produce. They're eating healthier; we got a lot of our folks using the chronic meal benefit, which is not part of the VBID, and so we feel that that's a component to what we're seeing here. . . . We put a lot of emphasis on working with our membership. There's a lot of work that goes behind the scenes with care management, working with our primary care physicians, looking at social determinants of health, working with social workers.

Part D OOP Costs

Figure 5.6 shows that VBID was associated with a statistically significant \$36 reduction in Part D OOP spending among targeted beneficiaries in 2022 ($p < 0.01$) and a \$25 reduction in 2021 ($p < 0.01$). These are large effects, representing a 42.0% decline in 2022 and a 24.1% decline in 2021. There was no statistically significant change in Part D OOP spending for targeted beneficiaries in 2020, and the estimated effect was close to zero.

Figure 5.6. Estimated Association Between VBID Interventions and Targeted Beneficiaries' Part D OOP Costs



SOURCE: Authors' analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the beneficiary-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted beneficiaries enrolled in eligible nonparticipating plans. Error bars indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

Most POs completing our survey (81%) reported decreases in Part D OOP costs as a result of participation in the model, which is consistent with what we found in our quantitative results. Because many POs' VBID interventions reduced cost sharing for all Part D drugs for LIS-eligible beneficiaries to zero dollars or reduced cost sharing for specific drug classes for beneficiaries with certain chronic conditions, decreases in Part D OOP costs were expected. Many POs reported hoping that lower OOP costs for Part D would have spillover effects into other outcome areas:

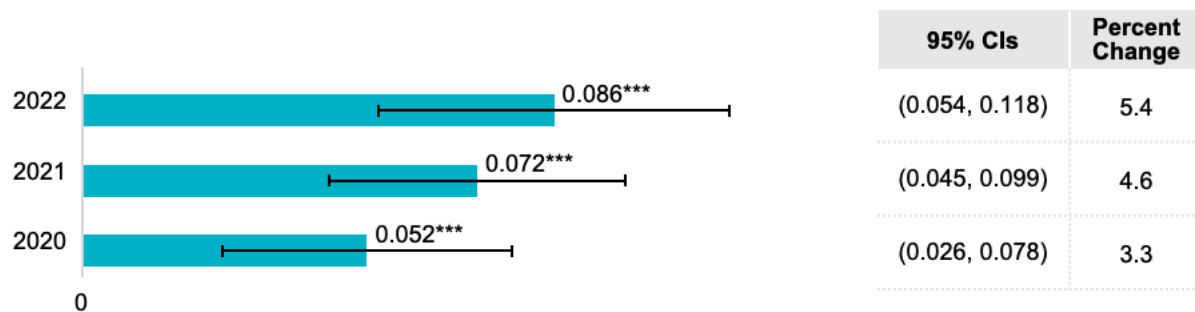
[Lower Part D OOP costs] alleviate a lot of competing priorities. . . . [This benefit] helps with prevention, and it helps [beneficiaries] with managing their overall [health] and ensuring that they're taking their medication properly.

Beneficiary Risk Scores

We found statistically significant positive associations between VBID and targeted beneficiaries' risk scores in all years. In 2022, the model was associated with a 0.086-point increase in risk scores ($p < 0.01$), which represents a 5.4% change relative to what would have

been expected without the model (Figure 5.7). The magnitude of the estimated associations increased over time, with a 0.052 estimated risk score change in 2020 ($p < 0.01$) and a 0.072 estimated risk score change in 2021 ($p < 0.01$).

Figure 5.7. Estimated Association Between VBID Interventions and Targeted Beneficiaries' Risk Scores



SOURCE: Authors' analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the beneficiary-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted beneficiaries enrolled in eligible nonparticipating plans. Error bars indicate 95% CIs based on plan-clustered standard errors, and the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

Risk scores measured in a given year are used for determining payment amounts for the following year. The analysis illustrated in Figure 5.7 focuses on targeted beneficiaries' *measure-year* risk scores for 2022, which contributed to the *payment-year* risk scores for 2023 discussed in Chapter 4. However, we found no increase in 2023 payment-year risk scores at the plan level. There are several possible reasons for the difference in findings:

- First, our beneficiary-level analyses focused only on targeted beneficiaries, whereas the plan-level analyses reflected risk scores derived from all plan enrollees, including those not eligible for the VBID Model test.
- Second, in the plan-level analysis, each plan receives the same weight, regardless of enrollment. By contrast, the beneficiary-level analysis puts a higher weight on plans with more-targeted beneficiaries because each beneficiary is counted as a separate observation.
- Finally, the plan-level analysis includes plans that participated in VBID in 2023, while the beneficiary-level analysis includes beneficiaries in plans that participated in 2022. Because plan participation grew by nearly 40% between 2022 and 2023, the set of plans included in the 2023 plan-level analysis is substantially different from the set of plans included in the 2022 beneficiary-level analysis.

It is interesting to note that most POs completing our survey (92%) reported no impact of VBID on risk scores, 7% reported decreases, and the remaining 2% reported increases. Some PO representatives said that VBID's impact on risk scores is uncertain because of ongoing changes

to the risk score model that CMS has been phasing in for both VBID-participating and nonparticipating plans.

Despite the survey results showing that POs did not report that VBID affected risk scores, some PO representatives mentioned implementing initiatives either as part of VBID or outside of the model that were intended to increase risk scores. PO CA representatives noted that they worked closely with provider groups and their CM staff to ensure that more-complex members receive more care, which translates to having more-accurate risk scores:

We try very hard to partner with providers. We have some really great partnerships just within our integrated system that has clinics set up that are targeted to taking care of these more chronically [ill and] more complex members in the senior populations that are Medicare eligible. I think that helps obviously with better risk scores. And then [efforts of] our care management team just really can be attributed to helping with those risk scores being captured.

A PO BV representative explained that PO BV encouraged all its DSNP members to complete annual exams, show up to appointments, and be involved in their care, which produces better medical documentation:

So, in the end, it is a domino effect. You actually have more of the medical documentation and the coding that substantiates [diagnoses]. These members are higher risk anyway by nature. You're able to match that risk level to what you're getting paid for them a little better than for a nonactive MA member who may see their doctor once a year if you're lucky. I think it's just the nature of this population and this product.

Differences from the 2025 Evaluation Report

In past VBID reports, we used Poisson models to estimate the inpatient results. Poisson models are useful for analyzing outcomes that are, by definition, nonnegative whole numbers, such as inpatient stays. However, in addition to being computationally more intensive than generalized linear models, Poisson models are interpreted on a log scale and require a nonstandard assumption of parallel growth (rather than parallel trends) for the DD approach to be valid. For the current report, we revised our analysis to use linear models, rather than Poisson models, for the inpatient analysis.

Because our balancing weights include pretrends for all beneficiary outcomes, the switch to linear models for the inpatient outcome affected the entropy-balancing weights for all outcomes. These changes, along with other minor model adjustments relative to previous years, led to small shifts in a few additional results. Most notably, for our 2025 report, we found that VBID was associated with a statistically significant increase in breast cancer screening rates in 2020 and 2021. In the current report, the breast cancer screening associations for 2021 are marginally statistically significant and slightly smaller than they were in the 2025 report.

Summary

In this chapter, we discussed the association between VBID and targeted beneficiaries' medication and breast cancer screening adherence, inpatient stays, risk scores, and OOP costs. We found that VBID was associated with modest increases in adherence to medication and breast cancer screening recommendations in some years, which is consistent with the goals of the model. However, there was no clear pattern in these associations over time, which might be a reflection of year-to-year changes in intervention designs. The effect on breast cancer screening was most pronounced in 2020, which could reflect that early VBID interventions tended to focus on prevention and chronic disease management, while interventions in later years shifted to focus on supplemental benefit provision and reduced cost sharing for Part D drugs. We found statistically significant associations with diabetes medication adherence only in 2020 and 2021, whereas associations with cholesterol medication were present in all three years. The association between VBID and hypertension medication was small and marginally statistically significant in 2021, but it was not statistically significant in other years. The cost findings in Chapter 4 suggest that these modest increases in adherence did not translate into savings for CMS. However, increases in adherence could lead to savings over a longer period, particularly if they reduce costly complications and emergency department visits.

We found no association between VBID and inpatient stays in 2022, despite a statistically significant 15.5% increase in 2020 and an 8.1% increase in 2021. The large increase in inpatient stays in prior years was unexpected, given VBID's goal of improving chronic disease management and in turn reducing complications that could lead to hospitalization. One possible explanation for these findings is that VBID uncovered latent need for hospital-based treatments and that, as those needs were met, the association diminished. We intentionally limited our analysis to non-COVID-19 inpatient stays to avoid the possibility that VBID-targeted individuals, who often had chronic conditions, were more seriously affected by the pandemic than comparators were and more likely to require hospitalization. In addition, our balancing approach adjusted for chronic disease status, COVID-19 case rates, and COVID-19 deaths. Nevertheless, it is possible that excess hospitalizations that were related to COVID-19 but not specifically coded with COVID-19 diagnoses contributed to the increased hospitalizations found in 2020 and 2021.

Many VBID interventions reduced Part D cost sharing for targeted beneficiaries. As we expected given this focus, VBID was associated with large, statistically significant declines in targeted beneficiaries' OOP spending on Part D drugs in both 2021 and 2022. The magnitude of the association increased over time, which is consistent with the increasing use among VBID plans of Part D interventions—notably, zero-dollar copays.

Finally, we also found that VBID was associated with increases in targeted beneficiaries' risk scores in all years, with the associations increasing in magnitude between 2020 and 2022. These findings could indicate that VBID encouraged beneficiaries to engage with providers, creating

opportunities to identify additional diagnoses that increased beneficiaries' risk scores. For example, RI programs and reduced Part C cost-sharing benefits might have encouraged beneficiaries to use primary or preventive care, the WHP requirement that focused on promoting ACP might have encouraged beneficiaries to schedule annual wellness visits, and Part D reduced cost-sharing benefits might have required interactions with providers to get a prescription.

Chapter 6. Contract-Level Quality-of-Care and Patient Experience Outcomes

Key Findings

- Although VBID was associated with increases in overall Star Ratings in 2021 and 2022, this association became smaller and not statistically significant in 2023. Most POs reported no change in their Star Ratings associated with VBID participation, which aligns with the quantitative findings for 2023.
 - In 2023, VBID was associated with declines in two individual domains that contributed to Star Ratings: the Staying Healthy domain (0.22-point decrease, $p < 0.01$, 95% CI [-0.36 to -0.07]) and the Part D domain related to drug adherence (0.20-point decrease, $p = 0.01$, 95% CI [-0.38 to -0.04]), as well as a marginally statistically significant increase in Member Experience with the Drug Plan (0.19-point increase, 95% CI [-0.02 to 0.41]).
 - Because some PO representatives noted during the interviews that they observed improvements in drug plan member experience measures, we quantitatively analyzed the association between VBID and this Part D Star Rating domain for the first time for this report. We found improvements in drug plan member experience in 2021 (0.45-point increase, $p < 0.01$, 95% CI [0.20 to 0.77]) and 2022 (0.53-point increase, $p < 0.01$, 95% CI [0.22 to 0.84]) but not in 2023. The 2021 and 2022 associations were large, representing increases of 12.3% and 15.6%, respectively.
-

In this chapter, we discuss the association between VBID and health care quality using Star Rating data (**overall Star Ratings**, all **five domain-specific ratings for MA**, and two Part D domains: **Part D Drug Safety and Accuracy of Drug Pricing** and **Member Experience with the Drug Plan**) and contextualize the quantitative findings with the data from PO questionnaires and interviews. Star Ratings are a measure of health care quality across several domains, assessed at the contract level (a *contract* is a group of plans offered by the same PO subject to the same agreement with CMS). With the scale of each rating ranging from 1 to 5, Star Ratings are intended to help beneficiaries make informed health insurance enrollment decisions. Star Ratings also affect payment because better performance can result in larger MA rebates. Table 6.1 summarizes the Star Rating domains we analyzed. Tables reporting all estimates discussed in this chapter are shown in Appendix F, in the separately available appendix volume.

Because the Star Ratings are issued at the contract level, our unit of analysis for this chapter is the contract. We count a contract as VBID participating if any plan within the contract participated in VBID.⁶ Star Ratings for a specific calendar or display year are released to the public for use in the Medicare Plan Finder (CMS, undated). Generally, the Star Ratings for a particular display year reflect data from two years prior, so the 2025 Star Rating display year reflects data collected in 2023 (the *measurement year*).⁷ For this report, we analyzed the Star

⁶ Among contracts with any VBID plans, 65% of beneficiaries were enrolled in VBID plans in 2021, 61% in 2022, and 56% in 2023.

⁷ Star Rating measures are derived from several data sources that use measurement-year data from two years prior for the current display year. The call center data and the Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey are the exceptions because they reflect the data from the prior year (so, the 2023 Star Rating display year contains CAHPS data from 2022).

Ratings for the 2021–2023 measurement years and refer to the Star Ratings based on the relevant measurement year throughout the text because those correspond to the model test years. We did not include data from measurement years 2019 or 2020 in our analyses because of a variety of methodologic adjustments CMS made to the Star Ratings during the COVID-19 pandemic.

Table 6.1. Summary of Star Rating Domains Analyzed

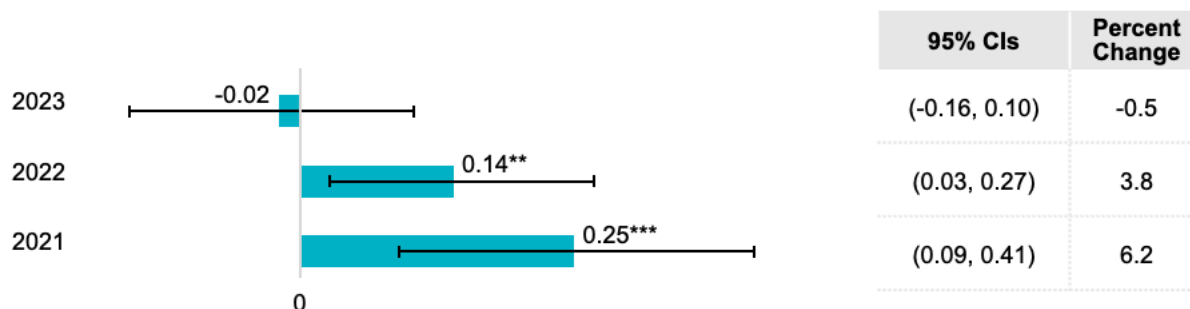
Domain Number	Domain Title	Abridged Description of Contributing Measures
Part C, Domain 1	Staying Healthy: Screenings, Tests and Vaccines	Breast and colorectal cancer screenings, flu vaccine, and monitoring physical activity
Part C, Domain 2	Managing Chronic (Long Term) Conditions	Care management activities in SNPs, diabetes care, medication reconciliation post-discharge, reducing fall risks, and statin therapy
Part C, Domain 3	Member Experience with Health Plan	Getting care, plan customer service, and overall health care and plan quality
Part C, Domain 4	Member Complaints and Changes in the Health Plan's Performance	Complaints about health plan, members choosing to leave plan (disenrollment), and quality improvement
Part C, Domain 5	Health Plan Customer Service	Appeals processes and call center foreign language and teletypewriter services
Part D, Domain 3	Member Experience with the Drug Plan	Rating of a drug plan and getting needed prescription drugs
Part D, Domain 4	Drug Safety and Accuracy of Drug Pricing	Medicare plan-finding tool accuracy, medication adherence measures, and MTM program completion

SOURCE: Domain names are from CMS, 2024b.

Overall Star Rating

The association between VBID and overall Star Rating was statistically significant and positive in 2021 and 2022 but not statistically significant in 2023 (Figure 6.1). The effect size declined in each year of the model test. As noted above, our approach classified any contract that contained a VBID-participating plan as being exposed to the model, even if many plans in the contract did not participate. We tested whether our results changed when we limited the VBID group to contracts for which a minimum share (25%, 50%, or 75%) of beneficiaries was enrolled in a VBID-participating plan and whether the result was present for contracts that contained DSNPs and those that did not include DSNPs. However, none of these sensitivity analyses was statistically significant for 2023 (see Appendix F in the separately available appendix volume).

Figure 6.1. Estimated Association Between VBID Interventions and Overall Star Rating, Measurement Years 2021–2023



SOURCE: Authors' analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the contract-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted contracts with no VBID-participating plans. Error bars indicate 95% CIs; the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

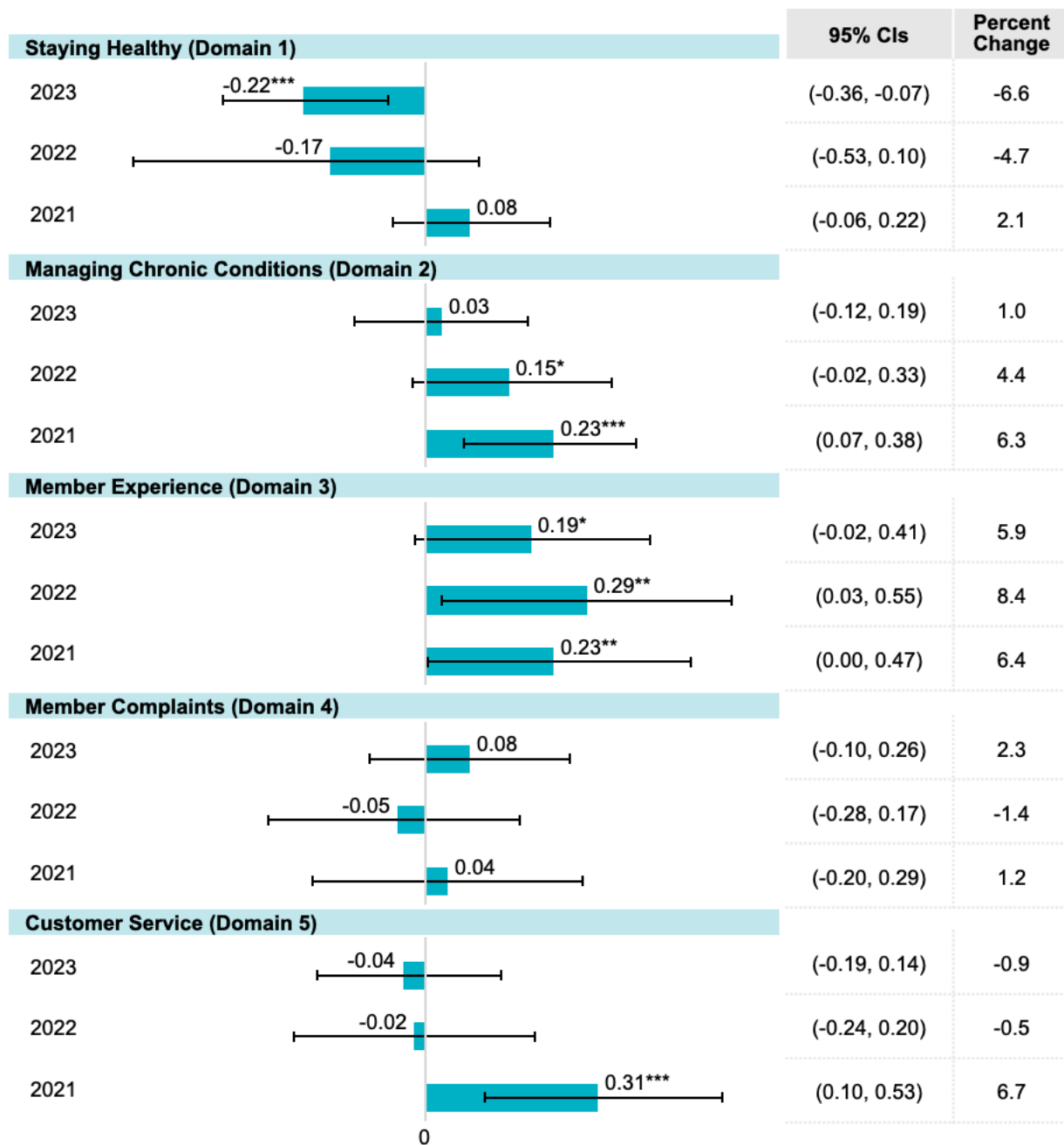
The majority of POs (80%) reported no changes in their Star Ratings as a result of their model participation, which aligns with our quantitative findings for 2023. Only 13% of POs reported an increase in Star Rating. Like in previous years, PO representatives reported that it is difficult to separate the impact of VBID from other changes and interventions the plan might have implemented at the same time. They noted that their VBID-targeted populations represented only a small proportion of beneficiaries enrolled in their contracts. "The other thing to think about is [that,] in 2024, we're [implementing VBID] in DSNPs [only]. On many of our contracts, DSNP is a relatively small percentage of the overall contract," said a PO L representative.

Domain-Level Star Ratings

Part C Domains

Figure 6.2 shows associations between VBID and the Part C Star Rating domains mentioned in Table 6.1. In 2023, VBID was associated with a statistically significant 0.22-point (6.6%) decrease in the Staying Healthy domain ($p < 0.01$), and a marginally statistically significant 0.029-point (5.9%) increase in the Member Experience with Health Plan domain ($p < 0.01$). In earlier years, VBID was associated with increases in the Managing Chronic Conditions domain, the Member Experience with Health Plan domain, and (in 2021) the Health Plan Customer Service domain. These results are broadly consistent with our PO survey findings that 66% of POs reported that VBID had no impact on individual measures that contribute to the overall Start Rating, with 29% reporting increases and 5% reporting decreases.

Figure 6.2. Estimated Association Between VBID Interventions and Part C Star Rating Domains, Measurement Years 2021–2023



SOURCE: Authors' analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. The latter three Part C domains are Member Experience with Health Plan, Member Complaints and Changes in the Health Plan's Performance, and Health Plan Customer Service. This figure shows average effects of VBID implementation from the contract-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted eligible contracts with no VBID-participating plans. Error bars indicate 95% CIs; the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

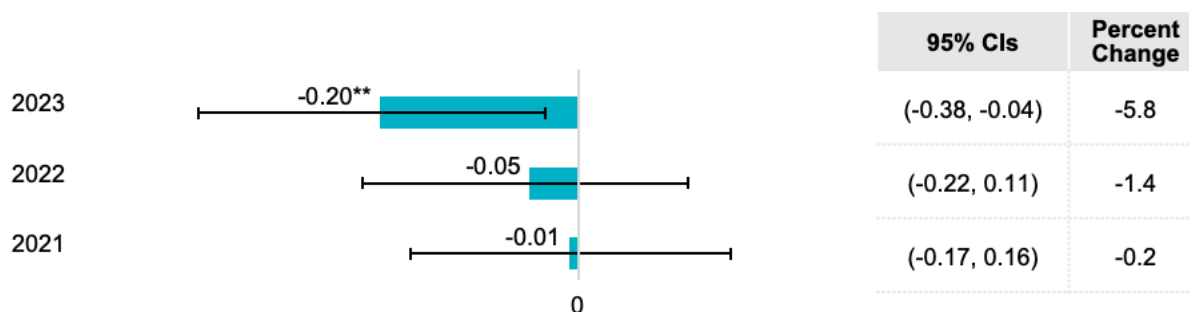
Because the negative association between VBID and the Staying Healthy domain in 2023 was unexpected, we conducted two sensitivity analyses to better understand this result (see Appendix F in the separately available appendix volume):

- First, we analyzed whether the association differed in contracts in which at least 25%, 50%, and 75% of beneficiaries were enrolled in a VBID-participating plan. The unexpected negative result was statistically significant and of a similar magnitude in all three cases.
- Second, we assessed whether the result was present for contracts that contained DSNPs and those that did not include DSNPs. The association was negative and statistically significant for contracts with DSNPs and negative and marginally significant for contracts without DSNPs. The effective sample size for the regression was low for contracts without DSNPs, which might explain why this result was only marginally significant.

Part D Domains

In 2023, VBID was associated with a decrease in Star Rating for the Part D domain that includes the drug adherence measures for diabetes, high cholesterol, and hypertension (Figure 6.3), Member Experience with the Drug Plan. The -0.20 Star Rating decline ($p < 0.01$) translates to a 5.8% decline in Star Ratings for this domain. There was no association between VBID and this Part D domain in earlier years.

Figure 6.3. Estimated Association Between VBID Interventions and the Part D Star Rating Domain Drug Safety and Accuracy of Drug Pricing (Drug Adherence Measures), Measurement Years 2021–2023



SOURCE: Authors' analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the contract-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted contracts with no VBID-participating plans. Error bars indicate 95% CIs; the corresponding numerical range is provided in the column labeled "95% CIs." The column labeled "Percent Change" indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

To better understand the negative association for 2023, we conducted the same sensitivity analyses as described earlier for the Staying Healthy domain (see Appendix F in the separately available appendix volume for details). We found that the drug adherence result remained

negative and statistically significant when we limited the VBID sample to contracts in which 25%, 50%, and 75% of beneficiaries were enrolled in a VBID-participating plan, with the absolute magnitude of the association increasing as the share of beneficiaries who were exposed to VBID increased. Moreover, the result was negative and statistically significant both for contracts with DSNPs and for contracts without DSNPs.

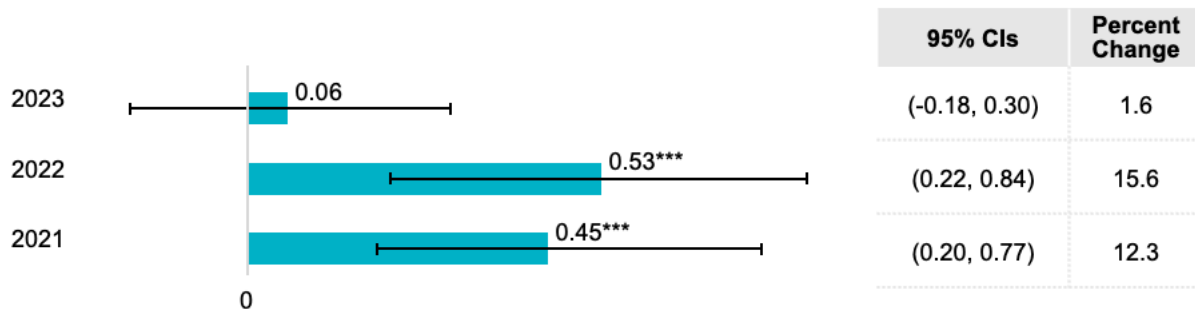
Because the PO representatives we interviewed in 2024 had not yet seen their 2025 Star Ratings, which reflect the 2023 measurement year, we do not know their perspectives on why VBID might have negatively affected the drug adherence domain Star Rating. During the interviews, however, POs indicated mixed expectations about whether reduced cost sharing for Part D drugs or RI interventions rewarding MTM completion would lead to increased adherence. (See Chapter 5 for additional information on PO perspectives on VBID’s association with beneficiary adherence.) The adherence measures contributing to this domain do not capture changes in adherence for reduced cost sharing for COPD and DOAC medications—the intervention that many PO P plans implemented as part of VBID. This domain, however, should capture the impact of zero-dollar cost sharing for Part D drugs for low-income beneficiaries—a commonly offered VBID intervention in DSNPs. Although many POs indicated that they did not expect large changes in adherence, representatives of PO CE said that they saw a “1.5 Star improvement from last year. So, we are certainly seeing better adherence rates than we did in 2023.”

During our 2024 interviews, representatives of several POs noted that their Domain 3 (Member Experience with the Drug Plan) ratings improved as a result of the VBID Model. For example, a PO BM representative said that PO BM’s VBID intervention contributed particularly to improvements in this domain because it facilitated access to prescription drugs:

We saw a significant two-star increase within our Part D measures of the CAHPS, which is your rating of the drug plan as well as your ease of getting needed medication. . . . I know a lot of plans struggled with CAHPS this year and saw a decrease, where we actually saw increase across the board in a lot of our measures that stood out compared to other plans. So, I really do believe that . . . offering of zero-dollar cost share under the VBID had a really positive experience in the member’s perception of . . . their drug aspect of the plan.

Although we had not analyzed the Member Experience with the Drug Plan (Part D Domain 3) of the Star Ratings in prior years of our evaluation, we added this outcome to the current report based on POs’ comments. Figure 6.4 shows that VBID was associated with large, statistically significant increases in this domain in 2021 (0.45 stars, $p < 0.01$) and 2022 (0.53 stars, $p < 0.01$). However, the effect was no longer significant in 2023.

Figure 6.4. Estimated Association Between VBID Interventions and the Part D Star Rating Domain Member Experience with the Drug Plan, Measurement Years 2021–2023



SOURCE: Authors’ analysis of CMS data.

NOTE: ***, **, and * represent statistical significance at the 1%, 5%, and 10% levels, respectively. This figure shows average effects of VBID implementation from the contract-level DD analysis for each year of the model. The comparison groups consisted of entropy-weighted contracts with no VBID-participating plans. Error bars indicate 95% CIs; the corresponding numerical range is provided in the column labeled “95% CIs.” The column labeled “Percent Change” indicates the percentage by which the estimated effect is lower (or higher) than what would have been expected in the absence of the model.

Differences from the 2025 Evaluation Report

For the current report, we made a slight modification to the process for mapping Star Ratings from the display year to the measurement year for contracts that merged, split, or exited the market between the measure and display years. This was due to the increase in this activity between 2023 (the measurement year for the 2023 data included in this analysis) and 2025 (the display year in which the 2023 data used in this analysis were publicly reported). As the data in CMS’ Integrated Data Repository are constantly updating, data on balancing characteristics were also updated, which affected both the imputation and subsequent balancing weights. Taken together, these methodological changes resulted in some slight changes from the last report. For example, relative to the magnitude of the finding in our last report, the magnitude of the overall Star Rating finding increased for 2021 and decreased for 2022 while remaining statistically significant in both years. Additionally, we found a statistically significant and positive effect on the Member Experience with Health Plan domain for 2022. Although we found a positive association between VBID and managing chronic conditions for 2022 in both analyses, the estimate presented in the current report is now only marginally statistically significant.

Summary

Our analysis of Star Ratings found that VBID was associated with a statistically significant and positive effect on overall Star Rating in 2021 and 2022, but this effect diminished and was not significant in 2023. The 2023 findings are consistent with our qualitative findings: Most POs reported no change in Star Ratings or care quality attributable to VBID. POs cited challenges in

isolating the effects of VBID from other concurrent interventions and noted that the VBID-targeted population represented a small share of contract enrollment.

At the Star Rating domain level, VBID was associated with some unexpected declines in 2023—specifically, in the Part C Staying Healthy and in the Part D Drug Safety (adherence) domains. Many of the outcomes measured by these domains, including cancer screenings, flu shots, and medication adherence, reflect the type of high-value care that VBID is intended to encourage. Because Star Ratings are measured at the contract level, it is possible that these negative findings reflect spillover effects on the non-VBID population. For example, programs that focus on improving medication adherence for VBID-targeted beneficiaries could divert resources from beneficiaries within the contract who were not targeted, reducing adherence for this group. To assess spillovers, it would be useful to analyze whether the association between VBID and medication adherence in 2023 differed for targeted and nontargeted beneficiaries within VBID plans. Although the beneficiary-level analysis conducted for this report went only through 2022, it will be possible to test this hypothesis for the final report.

To further investigate the unexpected 2023 quality findings, we conducted two sensitivity analyses:

- First, we analyzed whether the unexpected negative association between VBID and the Staying Healthy and Medication Adherence Star Rating domains changed depending on the share of VBID-exposed beneficiaries in the contract (see Appendix F in the appendix volume for details). For both outcomes, the results remained statistically or marginally statistically significant as the share of beneficiaries exposed to VBID increased; for the Part D adherence measure, the absolute value of the VBID effect increased as the share exposed to VBID increased.
- Second, we assessed whether results differed for contracts that contained DSNPs and contracts without DSNPs. This analysis confirmed that the unexpected, negative effects were present in both types of contracts in 2023.

Taken together, these results demonstrate that the unexpected 2023 findings were robust to sensitivity analyses. However, these analyses do not explain the 2023 findings, which remains an avenue for future research.

Nonetheless, during the interviews, some PO representatives noted improvements in member experience, particularly Part D member experience, related to zero-dollar Part D cost-sharing interventions. To address these comments, we added a new outcome to this report—Part D Star Rating Domain 3, Member Experience with the Drug Plan. Our quantitative analyses did show that VBID was associated with large, statistically significant increases in this domain in 2021 and 2022. However, the increase was smaller and not statistically significant in 2023.

In prior reports, our contract-level results showed that VBID was associated with improvements in the overall Star Ratings and with increases in Part C Star Rating domains for member experience, managing chronic conditions, and (in 2020) customer service. These findings are consistent with the intent of VBID, which is to help beneficiaries engage in their care and better manage chronic conditions. One explanation for the shift in results over time is

that the composition of plans and interventions changed substantially between 2021 and 2023. During this period, the number of plans participating in VBID grew from 372 to 1,218—an increase of more than 300%. Moreover, many DSNPs joined the model test during this time, and zero-dollar Part D cost sharing and NPHR supplemental benefits interventions became more prevalent. These changes could have affected the associations between VBID and Star Ratings across years.

Chapter 7. Conclusions

VBID, a voluntary model test administered by the CMS Innovation Center, allowed participating MA plans to offer innovative benefits, such as reduced cost sharing for Part C and Part D benefits, additional PHR and NPHR supplemental benefits, and RI programs. These benefits could be targeted to enrollees based on chronic conditions or SES. The model also required participants to offer WHP services to all beneficiaries in VBID-participating plans.

There were 1,400 VBID-participating plans in 2024, representing a nearly tenfold increase since 2020. Although the 14.9% increase in the number of participating plans between 2023 and 2024 was substantially smaller than those in previous years, the proportion of DSNPs participating in VBID continued to rise, with 90.5% of all DSNPs participating in the model in 2024. VBID-participating plans were substantially more likely to be DSNPs, more likely to offer Part D benefits, and less likely to have zero-dollar premiums than nonparticipants. Over the course of the model, VBID-participating POs were more likely than nonparticipating POs to offer plans in nine or more states and to be located in areas with high MA penetration.

Reduced cost sharing for Part D prescription drugs remained the most implemented intervention in 2024 (1,296 plans), followed by VBID-enabled supplemental benefits (848 plans), reduced cost sharing for Part C services (483 plans), and RI programs (144 plans). In 2024, RI was the least offered VBID benefit; this represents a shift from 2023, when Part C interventions were the least offered benefit. The reduction in the number of plans offering RI programs was driven by one large PO's discontinuation of incentives for CMR completion. After several years of steady growth, the number of plans relying on chronic condition targeting declined in 2024. The number of plans using SES-based targeting, however, continued to increase in 2024. Most plans that relied on SES-based targeting were DSNPs, and most plans with chronic condition targeting were non-DSNPs.

As in prior years, most POs reported that VBID implementation was a relatively small lift in 2024, especially if they implemented the model in DSNPs, used SES-based targeting, or offered Part D benefits. However, model-specific data reporting, working with vendors, and providing WHP services reportedly posed moderate or slight challenges to some participants. POs that offered card-delivered supplemental benefits—the most commonly offered VBID-enabled supplemental benefit in 2023 and 2024—continued to report implementation challenges, prompting POs to address technical issues; increase vendor accountability for operational disruptions, fraud issues, and transaction inaccuracies; and enhance member education on ways to use the flex cards.

Our findings show that VBID had mixed effects on outcomes, including inconsistent associations with care quality. Although the model continued to be associated with increases in adherence to cholesterol medication, associations with noninsulin diabetes medication

adherence, hypertension medication adherence, and adherence to breast cancer screening recommendations were not statistically significant in 2022 (the most recent year analyzed for these outcomes). Further, the previously positive association with the overall Star Rating—a contract-level measure of care quality—was smaller and not statistically significant in 2023.

Although we continued to find a positive association between VBID and costs to CMS in 2023 (the most recent available year), the 2023 cost increases were driven by Part D cost components, including increases in reinsurance payments and LIS payments. In contrast, in our prior analyses, we found that increases in costs to CMS in 2021 and 2022 were driven by MA cost components. VBID was also associated with an increase in total MA and Part D premiums in 2024, driven by increases in Part D premiums. These increases in Part D premiums and other Part D cost components might reflect the increase in the number of plans offering reduced Part D cost-sharing interventions as part of the model. We continued to find that VBID was associated with reduced Part D OOP costs for beneficiaries.

The theory behind VBID is that increases in medication adherence should reduce the use of high-intensity health care services, such as inpatient stays and emergency department visits, which, in turn, could reduce CMS spending. Although we found small increases in adherence in some years, we did not find evidence of savings. Nevertheless, it is possible that savings will materialize over a longer period of time. It is also notable that VBID was associated with declines in standardized plan bids, which reflect the health care and administrative costs of covering a population with a standard level of risk. It is possible that any cost savings associated with increases in adherence were factored into plans' bids but these savings were overshadowed by other cost drivers, such as increases in LIS spending.

We also continued to find that VBID was associated with a decline in the number of MSBs that plans offered but an increase in MSB costs. This seemingly contradictory finding likely reflects that our analysis of the number of MSBs offered focused on supplemental benefits that were available to all plan members, not just VBID-targeted beneficiaries. However, in the 2024 request for applications, CMS instructed plans to price VBID Flexibilities as MSBs for the purposes of preparing their bids (Innovation Center, 2021), putting upward pressure on MSB costs. Finally, the positive association between VBID and targeted beneficiaries' risk scores persisted and increased in magnitude in 2022, a finding that might reflect that VBID encouraged beneficiaries to engage with their care, leading to more diagnoses.

In summary, we used a mixed-methods approach to assess the relationship between VBID, care quality, and cost outcomes for 2020 through 2024. Although the model also included the Hospice Benefit component, this report focuses on the VBID General component that includes VBID Flexibilities and RI programs. With CMS terminating the Hospice Benefit component at the end of 2024 and the VBID General component at the end of 2025, our next and final evaluation report, planned for 2028, will provide a summative evaluation of both components of the VBID Model.

References

- Callaway, Brantly, and Pedro H. C. Sant’Anna, “Difference-in-Differences with Multiple Time Periods,” *Journal of Econometrics*, Vol. 225, No. 2, December 2021.
- Center for Medicare and Medicaid Innovation, Centers for Medicare & Medicaid Services, *Value-Based Insurance Design Model Request for Applications for Calendar Year 2022*, circa 2021.
- Centers for Medicare & Medicaid Services, “Explore Your Medicare Coverage Options,” webpage, undated. As of February 5, 2026:
<https://www.medicare.gov/plan-compare>
- Centers for Medicare & Medicaid Services, “Contract Year 2025 Medicare Advantage and Part D Final Rule (CMS-4205-F),” fact sheet, April 4, 2024a.
- Centers for Medicare & Medicaid Services, *Medicare 2025 Part C and D Star Ratings Technical Notes*, updated October 3, 2024b.
- Centers for Medicare & Medicaid Services, “Medicare Advantage Value-Based Insurance Design (VBID) Model to End After Calendar Year 2025: Excess Costs Associated with the Model Unable to Be Addressed by Policy Changes,” blog post, December 16, 2024c.
- Centers for Medicare & Medicaid Services, “The Future of the Hospice Benefit Component of the Value-Based Insurance Design (VBID) Model,” webpage, last modified February 26, 2025. As of July 21, 2025:
<https://www.cms.gov/priorities/innovation/innovation-models/vbid/vbid-hospice-announcement>
- CMS—*See* Centers for Medicare & Medicaid Services.
- Daw, Jamie R., and Laura A. Hatfield, “Matching and Regression to the Mean in Difference-in-Differences Analysis,” *Health Services Research*, Vol. 53, No. 6, December 2018.
- Eibner, Christine, Dmitry Khodyakov, Erin Audrey Taylor, Denis Agniel, Rebecca Anhang Price, Julia Bandini, Marika Booth, Lane F. Burgette, Christine Buttorff, Catherine C. Cohen, Stephanie Dellva, Michael Dworsky, Natalie Ernecoff, Priya Gandhi, Alice Y. Kim, Julie Lai, Monique Martineau, Nabeel Qureshi, Jessica Randazzo, Afshin Rastegar, Lucy B. Schulson, Daniel Schwam, Joan M. Teno, Anagha Alka Tolpadi, Asa Wilks, and Shiyuan Zhang, *Evaluation of Phase II of the Medicare Advantage Value-Based Insurance Design Model Test: First Three Years of Implementation (2020–2022)*, Centers for Medicare & Medicaid Services, September 2023.

- Eibner, Christine, Dmitry Khodyakov, Erin A. Taylor, Denis Agniel, Rebecca Anhang Price, Julia Bandini, Marika Booth, Lane F. Burgette, Christine Buttorff, Catherine C. Cohen, Stephanie Dellva, Michael Dworsky, Natalie C. Ernecoff, Alice Y. Kim, Julie Lai, Monique Martineau, Nabeel Qureshi, Afshin Rastegar, Max Rubinstein, Daniel Schwam, Joan M. Teno, Anagha Tolpadi, and Shiyuan Zhang, *Evaluation of the Medicare Advantage Value-Based Insurance Design Model Test: 2020 to 2023*, Centers for Medicare & Medicaid Services, March 2025.
- Farquhar, Morag C., Gail Ewing, and Sara Booth, “Using Mixed Methods to Develop and Evaluate Complex Interventions in Palliative Care Research,” *Palliative Medicine*, Vol. 25, No. 8, December 2011.
- Gower, Tricia, Julie Pham, Ernest N. Jouriles, David Rosenfield, and Holly J. Bowen, “Cognitive Biases in Perceptions of Posttraumatic Growth: A Systematic Review and Meta-Analysis,” *Clinical Psychology Review*, Vol. 94, June 2022.
- Guest, Greg, Kathleen M. MacQueen, and Emily E. Namey, *Applied Thematic Analysis*, SAGE Publications, 2012.
- Khodyakov, Dmitry, Christine Eibner, Erin Audrey Taylor, Rebecca Anhang Price, Christine Buttorff, Matthew Cefalu, Brian G. Vegetabile, Julia Bandini, Monique Martineau, Catherine C. Cohen, Michael Dworsky, Marika Booth, Alice Y. Kim, Julie Lai, Shiyuan Zhang, Afshin Rastegar, Stephanie Dellva, Nabeel Qureshi, Priya Gandhi, Courtney Armstrong, Daniel Schwam, Natalie Ernecoff, and Anagha Alka Tolpadi, *Evaluation of Phase II of the Medicare Advantage Value-Based Insurance Design Model Test: First Two Years of Implementation (2020–2021)*, Centers for Medicare & Medicaid Services, October 2022.
- Robbins, Michael W., “Joint Imputation of General Data,” *Journal of Survey Statistics and Methodology*, Vol. 12, No. 1, February 2024.
- Skivington, Kathryn, Lynsay Matthews, Sharon Anne Simpson, Peter Craig, Janis Baird, Jane M. Blazeby, Kathleen Anne Boyd, Neil Craig, David P. French, Emma McIntosh, Mark Petticrew, Jo Rycroft-Malone, Martin White, and Laurence Moore, “A New Framework for Developing and Evaluating Complex Interventions: Update of Medical Research Council Guidance,” *BMJ*, Vol. 374, No. 2061, 2021.