

# Evaluation of the Medicare Advantage Value-Based Insurance Design Model: Executive Summary

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RAND Health

PR-A4406-3

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

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## About This Executive Summary

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This is the executive summary of *Evaluation of the Medicare Advantage Value-Based Insurance Design Model: 2020–2024*. It presents an overview of the 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.<sup>1</sup> Our next and final report, which is planned for 2028, will include an evaluation of all model components, including the Hospice Benefit component.

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<sup>1</sup> Christine Eibner, 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; Christine Eibner, 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; Dmitry Khodyakov, 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.

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.

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## 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.

## Executive Summary

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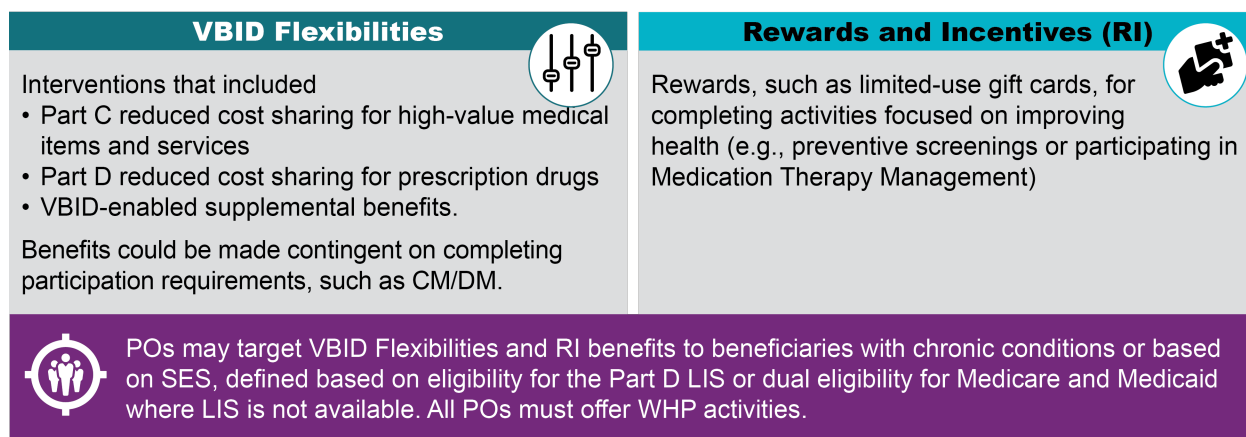
In 2020, the Center for Medicare and Medicaid Innovation (Innovation Center), part of the Centers for Medicare & Medicaid Services (CMS), introduced Phase II of the Medicare Advantage (MA) Value-Based Insurance Design (VBID) Model test.<sup>2</sup> Designed to improve care quality and reduce costs in 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<sup>3</sup> by adding new, more-recent data on evaluation outcomes and using PO surveys and interviews conducted in 2024 to contextualize the findings.

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<sup>2</sup> 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.

<sup>3</sup> Christine Eibner, 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; Christine Eibner, 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; Dmitry Khodyakov, 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.

**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 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.<sup>4</sup> 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

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<sup>4</sup> CMS, “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, 2024.

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.

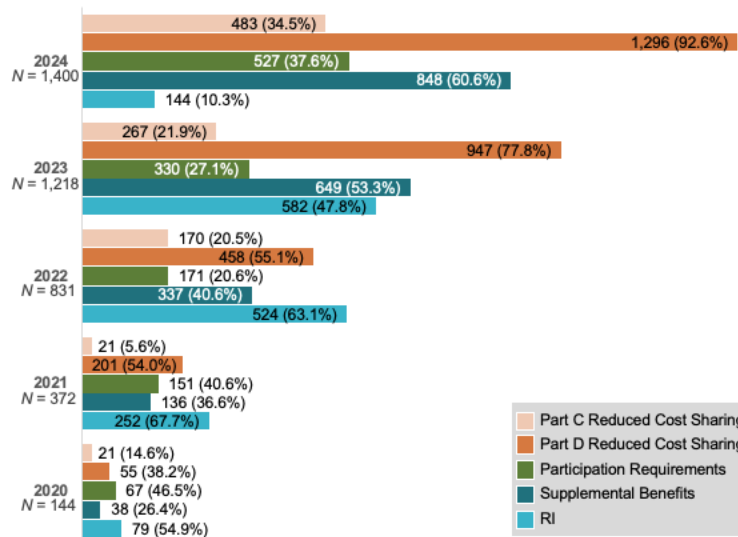
NOTE: PMPM = per member, per month. The numbers shown in parentheses are standard errors. All differences are statistically significant with  $p < 0.001$ . PO data are not shown in the table.

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
 <b>Contract</b>	Overall Star Rating <sup>a</sup> (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
 <b>Beneficiary</b>	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 <sup>b</sup>	↑ 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
 <b>Plan</b>	Total costs to CMS <sup>c</sup>	\$5 (–\$15, \$26)	↑ \$23 (\$6, \$41)	↑ \$32 (\$10, \$55)	↑ \$36 (\$1, \$66)	Not yet assessed
	MA rebates <sup>c</sup>	\$4 (–\$2, \$11)	↑ \$19 (\$13, \$24)	↑ \$15 (\$9, \$20)	↑ \$23 (\$15, \$31)	Not yet assessed
	Plan risk scores <sup>b</sup>	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 <sup>c</sup>	\$1 (–\$7, \$9)	\$4 (–\$3, \$12)	\$3 (–\$12, \$18)	↑ \$17 (\$5, \$29)	Not yet assessed
	LIS <sup>c</sup>	–\$2 (–\$6, \$2)	↑ \$3 (–\$1, \$7)	↑ \$6 (\$1, \$10)	↑ \$18 (\$13, \$23)	Not yet assessed
	Standardized MAPD bid <sup>c</sup>	–\$4 (–\$12, \$3)	–\$4 (–\$9, \$2)	↓ –\$6 (–\$11, \$0)	↓ –\$14 (–\$20, –\$7)	↓ –\$9 (–\$16, –\$2)
	MAPD premiums <sup>c</sup>	\$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.

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

<sup>b</sup> 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  $t + 1$ ).

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

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

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CI	confidence interval
CM	care management
CMS	Centers for Medicare & Medicaid Services
COVID-19	coronavirus disease 2019
DD	difference in differences
DM	disease management
DSNP	Dual Eligible Special Needs Plan
LIS	low-income subsidy
MA	Medicare Advantage
MAPD	Medicare Advantage Prescription Drug
MSB	mandatory supplemental benefit
OOP	out of pocket
PMPM	per member, per month
PO	parent organization
RI	Rewards and Incentives
SES	socioeconomic status
VBID	Value-Based Insurance Design
WHP	Wellness and Health Care Planning