

Insurers' Perspectives on MA Value-Based Insurance Design Model

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Increasing cost sharing (eg, deductibles, co-payments, coinsurance) can reduce utilization of healthcare services.^{1,2} However, some services, such as chronic disease medications and preventive monitoring and screening tests, are both clinically beneficial and of high value. Value-based insurance design (VBID) reduces cost sharing for high-value services to increase their use and ultimately improve patient health and reduce healthcare spending; cost-sharing reductions, however, are offered only to the patients most likely to benefit—such as those with chronic diseases.³⁻⁵

VBID initiatives have most recently been implemented in employer-based populations⁶⁻¹⁵ where they have increased service utilization but shown limited impact on spending or patient health.¹⁶⁻¹⁸ VBID has not been tested in the Medicare population; it is not known how older beneficiaries would react to reduced cost sharing for targeted services.

In 2015, CMS introduced a voluntary VBID model test for Medicare Advantage (MA) insurers. MA VBID waived a uniformity requirement that precluded insurers from offering different benefits and cost sharing to enrollees in the same plan.¹⁹ Starting in 2017, participating insurers in eligible states (Figure²⁰) could offer reduced cost sharing for high-value services or providers and/or offer supplemental benefits to beneficiaries with specific chronic conditions. Insurers could require that beneficiaries participate in care management activities before becoming eligible for VBID benefits. CMS did not provide extra financial incentives to participating insurers.²¹ (eAppendix A [eAppendices available at ajmc.com] describes the MA VBID model test.)

In parallel to the model test, CMS recently reinterpreted the uniformity requirement, giving MA insurers more flexibility to tailor benefits based on beneficiaries' clinical needs.²² The change allows all MA insurers to adopt VBID approaches for Part C benefits beginning in 2019. Moreover, the Bipartisan Budget Act of 2018 expands the MA VBID model test to all 50 states in 2020.²³

Despite the dramatic increases in MA insurers' ability to design more tailored benefits, VBID model uptake has been lower than expected: Only 10 (<30%) eligible MA insurers participated in the first 2 years of the VBID model test. In this study, we explored

ABSTRACT

OBJECTIVES: Value-based insurance design (VBID) lowers cost sharing for high-value healthcare services that are clinically beneficial to patients with certain conditions. In 2017, the Center for Medicare and Medicaid Innovation began a voluntary VBID model test in Medicare Advantage (MA). This article describes insurers' perspectives on the MA VBID model, explores perceived barriers to joining this model, and describes ways to address participation barriers.

STUDY DESIGN: A descriptive, qualitative study.

METHODS: In spring/summer 2017, we conducted semistructured interviews with 24 representatives of 10 nonparticipating MA insurers to learn why they did not join the model test. We interviewed 73 representatives of 8 VBID-participating insurers about their participation decisions and implementation experiences. All interview data were analyzed thematically.

RESULTS: Fewer than 30% of eligible insurers participated in the first 2 years of the model test. The main barriers to entry were a perceived lack of information on VBID in MA, an expectation of low return on investment, concerns over administrative and information technology (IT) hurdles, and model design parameters. Most VBID participants encountered administrative and IT hurdles but overcame them. CMS made changes to the model parameters to increase the uptake.

CONCLUSIONS: The model uptake was low, and implementation challenges and concerns over VBID effectiveness in the Medicare population were important factors in participation decisions. To increase uptake, CMS could consider providing in-kind implementation assistance to model participants. Nonparticipants may want to incorporate lessons learned from current participants, and insurers should engage their IT departments/vendors early on.

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insurers' perspectives on MA VBID, identified perceived barriers to joining the model test, and described ways to overcome them. Our findings suggest that implementation barriers and reservations about VBID in the Medicare population may hamper insurers' enthusiasm about this type of flexible benefit design in the short term. Our findings may be useful for both CMS and MA insurers to facilitate the adoption of VBID as its use expands via both the model test and, more broadly, the uniformity requirement reinterpretation.

TAKEAWAY POINTS

- ▶ This is the first empirical study of value-based insurance design (VBID) in the Medicare population.
- ▶ Fewer than 30% of eligible insurers participated in the Medicare Advantage (MA) VBID model test.
- ▶ Nonparticipating insurers cited a lack of information about VBID performance in MA, an expectation of low return on investment, potential implementation challenges, and model design parameters as barriers to participation.
- ▶ Participants highlighted the appeal of the VBID test as an opportunity to innovate and explained how they overcame implementation challenges.
- ▶ CMS and insurers could use study insights to facilitate adoption of VBID as its use expands.

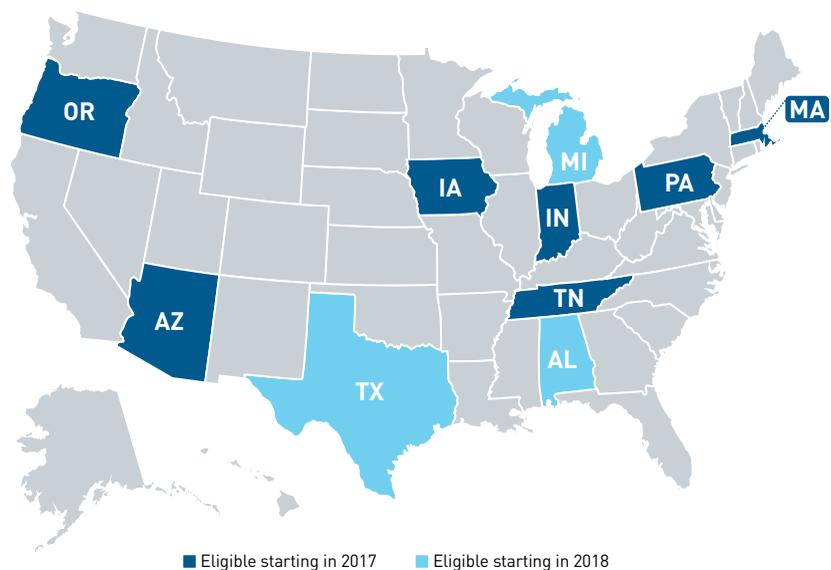
METHODS

Data Collection

Nonparticipating insurers. We identified MA insurers eligible to participate in VBID in 2017 and 2018 by applying model eligibility criteria to publicly available MA insurer and enrollment data available as of December 2016. We also included 5 insurers interested in VBID but not meeting model eligibility criteria that contacted CMS during the first VBID application period. From this group, we contacted the largest 29 nonparticipating insurers, starting with national insurers, then reached out to larger regional or state-based insurers, aiming to speak with organizations from all eligible states. Of the 29 insurers contacted, 10 agreed to be interviewed, 14 did not respond to our invitation, and 5 declined to be interviewed. There were no significant differences in for-profit status or Blue Cross and/or Blue Shield (BCBS) affiliation between those nonparticipants who we interviewed and those we did not. However, the sample of nonparticipants we interviewed had more regional than national insurers, and there were more national than regional insurers among those we did not interview. The proportion of state-level insurers did not vary across the 2 groups.

Between February and March 2017, 2 researchers conducted 45-minute telephone interviews with each of the 10 nonparticipating insurers who agreed to be interviewed. We interviewed 24 representatives of 2 large national and 8 small regional insurers, including chief compliance officers, vice presidents for Medicare products, and medical directors for government programs, among others. We used a semistructured protocol to learn about the main reasons for not participating in VBID, barriers to participation, and VBID model changes that might make it more attractive. We also analyzed written comments that nonparticipating insurers had sent to CMS.

FIGURE. States Eligible for the VBID Model Test by Year^{20,a}



VBID indicates value-based insurance design.

^aFor 2017, CMS allowed Medicare Advantage plans in the following 7 states to apply to the model: Arizona, Indiana, Iowa, Massachusetts, Oregon, Pennsylvania, and Tennessee. For 2018, CMS allowed Medicare Advantage plans in the following 10 states to apply to the model: Alabama, Arizona, Indiana, Iowa, Massachusetts, Michigan, Oregon, Pennsylvania, Tennessee, and Texas.²⁰

Participating insurers. Between June and September 2017, 2 researchers conducted individual or small-group interviews with 73 representatives from 8 of the 9 VBID-participating MA insurers. One participating insurer declined to be interviewed, stating a delay in its implementation. Each interview lasted 60 to 90 minutes. We interviewed representatives of 4 MA insurers during in-person site visits; the other 4 interviews were by telephone. Interviews followed a semistructured format covering topics such as the decision to participate, early implementation experiences, implementation barriers and facilitators, and feedback to CMS. We supplemented these semistructured interviews by reviewing the insurers' VBID application materials.

Interviewees held a variety of positions in their organizations, including Medicare product specialists, Medicare compliance officers, actuarial directors, directors of regulatory affairs, care management directors and staff, informatics specialists, and/or medical directors of government programs.

All interviews were audio-recorded and transcribed. The RAND Institutional Review Board exempted the study from review.

Data Analysis

Four experienced qualitative researchers used MaxQDA (VERBI Software; Berlin, Germany) to code each transcript and identify key themes, using a code book with codes derived deductively from the interview guides (eg, reasons for [not] joining the model test) and generated inductively based on unanticipated themes emerging from interviews (eg, information technology [IT] challenges).²⁴ The coding team blindly double-coded 2 interviews with VBID nonparticipants and 4 interviews with VBID participants and discussed and resolved any discrepancies. All other interviews were coded by one person and reviewed by another. A few coding discrepancies, primarily related to the nuances of VBID model implementation, were resolved during team meetings.

We identified the most frequently mentioned reasons for either not joining or joining the model test and described strategies that participants used to overcome perceived barriers to joining MA VBID. [eAppendix B](#) provides additional quotations illustrating the main themes we present in the following Results section. To protect the confidentiality of our study participants, we deidentified insurer names (we use “NPInsurer” for VBID nonparticipants and “PInsurer” for participants) and refrained from providing individual-level characteristics of our study participants.

RESULTS

Differences Between Participants and Nonparticipants

Only 10 insurers (<30%) participated in VBID during the first 2 years of the model test. Five participants were from Pennsylvania, 3 from Massachusetts, and 1 each from Indiana and Michigan. Nine participants were state-based insurers; 1 was a national insurer. Four were BCBS affiliates. Participants chose to enter plans primarily in their health maintenance organization contracts. (Of 12 contracts, only 3 were preferred provider organization contracts.) Compared with participants, nonparticipants were less likely to be not-for-profit and state-level (as opposed to regional or national) insurers. Participants were no more likely to be BCBS affiliates than were nonparticipants.

The MA market is dynamic and, in many geographic areas, very competitive. Because participants did not know who would apply and be accepted for VBID, it is difficult to know whether competitive pressures affected their decisions. Nonetheless, none of our study participants believed that the level of market competition or their market share had an impact on their decisions. Model test participants, however, stated that Pennsylvania and Massachusetts,

the states where most participants were from, are “in [fore]front of healthcare [reform] in general” (PInsurer03) and are full of “forward-thinking” insurers (PInsurer07).

Reasons for Not Joining VBID

The nonparticipants we interviewed identified 4 main reasons for not joining the model test. First, 8 nonparticipating insurers felt that they did not have enough information to structure their VBID offerings. As part of the application process, insurers had to demonstrate that their designs would achieve savings over a 5-year period. To estimate savings, insurers needed better actuarial information on the likely changes in utilization that could be expected in the Medicare population. Many insurers did not feel comfortable estimating these impacts using data from the employed population younger than 65 years. Insurers wanted more information to develop realistic assumptions, particularly about changes in utilization and savings. VBID nonparticipants wanted to see how VBID participants “structure their VBID benefit” (NPInsurer10), “how the intervention works” (NPInsurer04), and what outcomes it would achieve (see [eAppendix B](#) for additional quotations describing all thematic findings reported here).

Second, 7 VBID nonparticipants cited potential lack of return on investment (ROI): “We just could not come to a positive ROI to where the program would at least cover its own costs in year 1,” said one representative (NPInsurer01). They felt that the implementation and administrative costs of VBID were too high, and they viewed potential returns as relatively low, because many stated that they were already offering high-quality care.

Third, representatives of 7 nonparticipating insurers worried about administering 2 sets of benefits to beneficiaries within the same plan based on the presence of an eligible health condition. In MA, all beneficiaries in a plan, which they select during the annual open enrollment period, get the same benefits regardless of their medical conditions. Under VBID, beneficiaries in the same plan may get different benefits, depending on their diagnoses. Being diagnosed with an eligible condition midyear could trigger a change in benefits. Nonparticipants worried about their IT capabilities and the ability of internal systems to identify, track, and administer VBID benefits. As NPInsurer08 put it, “How do you identify those [VBID-eligible] members and be able to administer those benefits to them specifically and not to the general population or vice versa? [How do you] make sure that we are able to track the claims? [How do we] make sure [the benefits] are administered exactly the way that we submitted in the bid, no more, no less?”

Finally, nonparticipating insurers raised concerns about the model test parameters. For example, some wanted to implement VBID in Chronic Care Special Needs Plans (C-SNPs). Others wanted to offer VBID to beneficiaries with conditions not allowed by the model test or to target a subset of beneficiaries, such as those with early- or late-stage diabetes. Five nonparticipants also worried that VBID marketing restrictions would not allow them to mention their participation in the model or specific VBID benefits in their

pre-enrollment materials and outreach activities. As PInsurer04 explained, "VBID almost looks like something you have to keep a secret for a while and...you can't really use that to try to attract new members." Some would have preferred to advertise their participation in VBID to further distinguish themselves from competitors.

Reasons for Joining VBID and Ways to Address Participation Barriers

Participating insurers tended to be willing to take risk and implement interventions that have not been tried before in MA. Five participants considered themselves innovators, willing to experiment with benefit design. Four participants stated that they joined the model test because VBID's goals were consistent with their own organizational priorities of reducing spending and improving care quality. Finally, 3 participants commented on VBID's potential to improve beneficiary outcomes by addressing structural barriers to care and increasing beneficiary engagement.

Participants did encounter the barriers described by nonparticipants. Their greater appetite for risk affected the way participants addressed these barriers. To illustrate, VBID participants handled the lack of evidence by reviewing literature on VBID in commercial plans and relying on their best clinical judgment. Many participants wanted to innovate: "We're very innovative in a lot of the things we do. We try things. Anytime something new comes up, we tend to get involved in those things just because it's an opportunity one way or another" (PInsurer03). Others considered VBID a useful benefit design experiment: "We're certainly willing to go down the road of a demonstration to figure out if our hypothesis that by sending members to their specialists more we can reduce their inpatient hospitalization and their high-cost care is true or not" (PInsurer05).

Most VBID participants agreed that VBID cost savings would be minimal and focused on maximizing long-term outcomes, such as decreased hospitalizations and emergency department use, while reducing implementation costs. According to PInsurer03, VBID would yield benefits "if you can really do something that is going to help the population longer term, [such as] better quality of life [or] lower long-term costs, those are all good things." To increase the chance of a positive ROI, several participants noted that they had designed their interventions to minimize implementation costs: "We needed to come up with something that would not add additional resources and cost to the actual program that we have now" (PInsurer03). Participants relied on existing programs and processes when possible, which helped them design interventions that were easier and less costly to implement.

VBID participants agreed that managing 2 sets of benefits within a plan, or what they called "a plan within a plan" (PInsurer06), was a serious implementation challenge. Managing VBID-eligible beneficiaries required substantial IT investments and extensive coordination across departments because multiple systems, such as claims processing or care management tracking systems, had to interact with each other. A representative of PInsurer07 noted that it had to modify about 15 applications before VBID rollout.

Insurers developed different approaches to tracking eligibility, participation status, and the correct payment amounts for beneficiaries eligible for reduced cost sharing. Some VBID participants "separated" beneficiaries or created different internal groups in their IT systems to flag VBID participants. As PInsurer06 explained, "We duplicated the existing structure of our benefits and made a separate benefit structure...a dedicated line for these members." PInsurer07 created flags within internal IT systems to identify VBID-eligible and VBID-enrolled beneficiaries.

VBID-participating insurers also considered VBID marketing restrictions to be problematic, citing potential confusion among beneficiaries, many of whom were not notified about their VBID benefits until January 2017, months after receiving Annual Notice of Change and Evidence of Coverage documents that detailed all benefit changes. To address beneficiaries' confusion, some MA insurers called eligible enrollees in addition to sending them letters describing new VBID benefits in January.

Although VBID participants understood CMS' rationale for restricting advertising, they still noted that these restrictions may negatively affect beneficiaries' awareness of and participation in VBID: "I understand the CMS' concern around selection or cherry-picking...but [if we could market VBID,] we probably would have had more people say, 'Hey, let me see if I'm eligible' as opposed for us having to wait for things to hit the system" (PInsurer04).

DISCUSSION

VBID nonparticipants cited a perceived lack of information on VBID in MA, expectations of low ROI, potential administrative and IT hurdles, and concerns about the test's design as the main reasons for not joining the MA VBID model. By contrast, participating insurers were interested in experimenting with benefit design, even if the ROI was uncertain; implementing interventions consistent with their organizational priorities; and improving beneficiary outcomes by addressing structural barriers to care and increasing beneficiary engagement. Risk tolerance among upper management and an entrepreneurial organizational culture that encourages innovation seem to differentiate VBID participants and nonparticipants. During the initial implementation period in 2017, most VBID participants encountered the administrative and IT hurdles feared by the nonparticipating insurers but overcame them. They also agreed that certain model test characteristics, such as marketing restrictions, may have limited their abilities to design their preferred interventions or made the implementation challenging.

Based on the feedback from both groups, CMS changed the model parameters for 2018 and 2019^{25,26} and relaxed some of the marketing restrictions.²⁷ In particular, CMS added rheumatoid arthritis and dementia to the list of eligible conditions, allowed insurers to propose their own methods for identifying eligible beneficiaries, and made C-SNPs eligible to participate.

The VBID model test is occurring in a rapidly changing policy environment in which CMS is allowing more flexibility in benefit

design through changes to the uniformity rule and the nationwide VBID model expansion. Our results point to 4 important considerations that may affect insurers' willingness to adopt VBID in or outside the model test:

- 1. Evidence is important.** Many insurers cited uncertainty about ROI as a key reason for nonparticipation. Generating evidence on VBID's effects in the MA population may help insurers estimate the impact to their bottom lines and make an informed decision about MA VBID.
- 2. Insurers' philosophy, rather than market characteristics, may influence participation.** Our study participants did not believe that market characteristics affected their decisions to join VBID. Instead, VBID participants welcomed the opportunity to experiment with benefit design to improve beneficiary health outcomes and care quality and viewed ROI as a secondary concern. Willingness to innovate with benefit design and be considered a leader in the MA space were more important for model participants than potential concerns about ROI. Nonparticipants, however, took a "wait-and-see" approach and wanted to avoid the unknown outcomes of VBID in the MA population. In some cases, they felt that they were already providing high-quality care and were reluctant to experiment given uncertainties.
- 3. Technological barriers can be significant.** Many participants had to invest in IT systems to enroll beneficiaries in VBID, track their benefits, and pay the correct amounts to providers. Participants, especially those requiring beneficiaries to engage in care management, also needed to coordinate multiple internal departments that did not previously communicate or work together. Although such issues are not insurmountable, they may deter some insurers from offering VBID benefits until appropriate changes to their IT systems are implemented and tested.
- 4. Model test parameters matter.** Nonparticipants indicated that they would be more likely to join the model test if they had even more flexibility to design and target benefits, and both participants and nonparticipants cited CMS' marketing restrictions as an impediment to participation. CMS has already lowered participation barriers by allowing insurers to target additional conditions, extending eligibility to C-SNPs, and relaxing marketing restrictions. Additional flexibility will be permitted in 2020.²⁸

Limitations

Our qualitative study has 3 limitations. First, insurers not responding to our interview requests may have had different perspectives on VBID than those who responded. This may be a particular concern for nonparticipants, given that only about one-third of nonparticipating insurers responded. To address this issue, we analyzed written comments from MA insurers who responded to CMS' request for comments on the model test, but we did not see major differences in perspectives with those we interviewed. Second, we conducted interviews 6 to 8 months after the start of the model test, when MA insurers were still working toward finding

solutions to some implementation challenges. Subsequent data collection may reveal additional implementation challenges and facilitators. Third, our study relied on self-reported data collected from model participants either by phone or in person and from model nonparticipants only by phone. Some participants may not have disclosed all implementation challenges they might have experienced, and, although unlikely, the mode of data collection might have affected responses.

CONCLUSIONS

Currently, MA VBID uptake is low. To address perceived participation barriers, we suggest 3 potential solutions. First, CMS could provide additional in-kind assistance to model participants, including approved templates for beneficiary communication materials, to facilitate model implementation. Moreover, CMS could consider ways to disseminate findings widely and encourage participants to share their implementation experiences with other model participants through collaborative learning sessions.

Second, insurers considering joining the model test may benefit from learning about the implementation experiences of current model participants, including ways to overcome IT challenges. Reviewing the results of the first year of the model test evaluation²¹ may help alleviate some concerns that current nonparticipants may have.

Finally, once insurers decide to implement VBID, they should engage their IT departments or external IT vendors early on to ensure that they can develop a strategy for managing 2 sets of benefits within the same plan. ■

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REFERENCES

- Goldman DP, Joyce GF, Zheng Y. Prescription drug cost sharing: associations with medication and medical utilization and spending and health. *JAMA*. 2007;298(1):61-69. doi: 10.1001/jama.298.1.61.
- Manning WG, Newhouse JP, Duan N, Keeler EB, Leibowitz A, Marquis MS. Health insurance and the demand for medical care: evidence from a randomized experiment. *Am Econ Rev*. 1987;77(3):251-277.
- Chernew ME, Rosen AB, Fendrick AM. Value-based insurance design. *Health Aff (Millwood)*. 2007;26(2):w195-w203. doi: 10.1377/hlthaff.26.2.w195.
- Fendrick AM, Chernew ME. Value based insurance design: maintaining a focus on health in an era of cost containment. *Am J Manag Care*. 2009;15(6):338-343.
- Fendrick AM, Smith DG, Chernew ME, Shah SN. A benefit-based copay for prescription drugs: patient contribution based on total benefits, not drug acquisition cost. *Am J Manag Care*. 2001;7(9):861-867.
- Chernew ME, Shah MR, Weigh A, et al. Impact of decreasing copayments on medication adherence within a disease management environment. *Health Aff (Millwood)*. 2008;27(1):103-112. doi: 10.1377/hlthaff.27.1.103.
- Choudhry NK, Avorn J, Glynn RJ, et al. Post-Myocardial Infarction Free Rx Event and Economic Evaluation (MI FREE) Trial. Full coverage for preventive medications after myocardial infarction. *N Engl J Med*. 2011;365(22):2088-2097. doi: 10.1056/NEJMsa1107913.

8. Choudhry NK, Fischer MA, Avorn J, et al. At Pitney Bowes, value-based insurance design cut copayments and increased drug adherence. *Health Aff (Millwood)*. 2010;29(11):1995-2001. doi: 10.1377/hlthaff.2010.0336.
9. Gibson TB, Mahoney J, Rangelhell K, Cherney BJ, McElwee N. Value-based insurance plus disease management increased medication use and produced savings. *Health Aff (Millwood)*. 2011;30(1):100-108. doi: 10.1377/hlthaff.2010.0896.
10. Gibson TB, Wang S, Kelly E, et al. A value-based insurance design program at a large company boosted medication adherence for employees with chronic illnesses. *Health Aff (Millwood)*. 2011;30(1):109-117. doi: 10.1377/hlthaff.2010.0510.
11. Hirth RA, Cliff EQ, Gibson TB, McKellar MR, Fendrick AM. Connecticut's value-based insurance plan increased the use of targeted services and medication adherence. *Health Aff (Millwood)*. 2016;35(4):637-646. doi: 10.1377/hlthaff.2015.1371.
12. Maciejewski ML, Farley JF, Parker J, Wansink D. Copayment reductions generate greater medication adherence in targeted patients. *Health Aff (Millwood)*. 2010;29(11):2002-2008. doi: 10.1377/hlthaff.2010.0571.
13. Maciejewski ML, Wansink D, Lindquist JH, Parker JC, Farley JF. Value-based insurance design program in North Carolina increased medication adherence but was not cost neutral. *Health Aff (Millwood)*. 2014;33(2):300-308. doi: 10.1377/hlthaff.2013.0260.
14. Wang V, Liu CF, Bryson CL, Sharp ND, Maciejewski ML. Does medication adherence following a copayment increase differ by disease burden? *Health Serv Res*. 2011;46(6, pt 1):1963-1985. doi: 10.1111/j.1475-6773.2011.01286.x.
15. Yeung K, Basu A, Hansen RN, Watkins JB, Sullivan SD. Impact of a value-based formulary on medication utilization, health services utilization, and expenditures. *Med Care*. 2017;55(2):191-198. doi: 10.1097/MLR.0000000000000630.
16. Gibson TB, Mactean JR, Chernew ME, Fendrick AM, Baigel C. Value-based insurance design: benefits beyond cost and utilization. *Am J Manag Care*. 2015;21(1):32-35.
17. Lee JL, Maciejewski ML, Raju S, Shrank WH, Choudhry NK. Value-based insurance design: quality improvement but no cost savings. *Health Aff (Millwood)*. 2013;32(7):1251-1257. doi: 10.1377/hlthaff.2012.0902.
18. Tang KL, Barnieh L, Mann B, et al. A systematic review of value-based insurance design in chronic diseases. *Am J Manag Care*. 2014;20(6):e229-e241.
19. Medicare Advantage value-based insurance design model request for applications. CMS website. [innovation.cms.gov/Files/reports/VBID-RFA-10-9-15.pdf](https://www.cms.gov/Files/reports/VBID-RFA-10-9-15.pdf). Published October 9, 2015. Accessed January 5, 2016.
20. Medicare Advantage value-based insurance design model. CMS website. [innovation.cms.gov/initiatives/vbid](https://www.innovation.cms.gov/initiatives/vbid). Updated May 22, 2019. Accessed May 2, 2018.
21. Eibner C, Khodyakov D, Taylor EA, et al. *First Annual Evaluation Report of the Medicare Advantage Value-Based Insurance Design Model Test*. Santa Monica, CA: RAND Corporation; 2018. [innovation.cms.gov/Files/reports/vbid-yr1-evalrpt.pdf](https://www.innovation.cms.gov/Files/reports/vbid-yr1-evalrpt.pdf). Accessed January 3, 2019.
22. Hanley S. Announcement of Medicare Advantage value-based insurance design model test. CMS website. [innovation.cms.gov/Files/x/mavbid-announcement.pdf](https://www.innovation.cms.gov/Files/x/mavbid-announcement.pdf). Published September 1, 2015. Accessed January 5, 2016.
23. Bipartisan Budget Act of 2018, PL 115-123 (2018).
24. Khodyakov D, Uscher-Pines L, Lorick SA, Lindley MC, Shier V, Harris K. A qualitative analysis of the impact of healthcare personnel influenza vaccination requirements in California. *Vaccine*. 2014;32(25):3082-3087. doi: 10.1016/j.vaccine.2013.06.077.
25. Pham H. Medicare Advantage value-based insurance design model test – advanced notice of CY 2018 model changes. CMS website. [innovation.cms.gov/Files/x/vbid-hpmsmemo.pdf](https://www.innovation.cms.gov/Files/x/vbid-hpmsmemo.pdf). Published August 10, 2016. Accessed September 1, 2016.
26. Medicare Advantage value-based insurance design model request for applications for CY 2019. CMS website. [innovation.cms.gov/Files/x/vbid-rfa2019.pdf](https://www.innovation.cms.gov/Files/x/vbid-rfa2019.pdf). Published 2018. Accessed December 1, 2018.
27. Value-based insurance design model request for applications for CY 2020. CMS website. [innovation.cms.gov/Files/x/vbid-rfa2020.pdf](https://www.innovation.cms.gov/Files/x/vbid-rfa2020.pdf). Accessed June 27, 2019.
28. Value-based insurance design model (VBI) fact sheet CY 2020. CMS website. [cms.gov/newsroom/fact-sheets/value-based-insurance-design-model-vbid-fact-sheet-cy-2020](https://www.cms.gov/newsroom/fact-sheets/value-based-insurance-design-model-vbid-fact-sheet-cy-2020). Published January 18, 2019. Accessed January 18, 2019.

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eAppendix A. Details on Model Test

The VBID model test began in January 2017, and is ongoing. Participating MA insurers could use one or more of the following approaches: 1) reduce cost sharing for high-value services; 2) reduce cost sharing for high-value providers; 3) reduce cost sharing for services if beneficiaries participate in certain care management activities, 4) provide extra supplemental benefits.

Participants are not allowed to design benefits that increase cost sharing for services deemed low-value. In 2017, participation was limited to plans in seven states (Figure 1), and to beneficiaries with one or more of seven targeted conditions, including chronic obstructive pulmonary disorder (COPD), congestive heart failure (CHF), coronary artery disease, diabetes, hypertension, mood disorders, and past stroke.²⁹

Eligible plans initially needed to have at least 2,000 beneficiaries in the test state; CMS later relaxed this requirement to allow smaller plans within a contract to participate, if at least one plan in the contract met the requirements. MA insurers could only enter health maintenance organization (HMO), HMO-point-of-service, or local preferred provider organization plan types. Other eligibility restrictions included having sufficient numbers of enrollees in plans in the test states, having 3+ stars on the Star Ratings quality scale, and having plan benefit packages that were in operation longer than three years. Additionally, MA insurers could not be under sanction, be an outlier on the past performance reviews, or be a consistently low-performing plan. In some cases, CMS was willing to make exceptions to these eligibility criteria. Finally, participating insurers were required to offer financial projections documenting estimated savings to CMS over the five-year lifecycle of the model test. Participants were also subjected to monitoring, for example to ensure compliance with CMS definitions of target populations, and were asked to cooperate with an evaluation.

eAppendix B. Illustrative Quotations

Table A1: Reasons for not joining VBID model test
<i>Not having enough information to design VBID intervention (8 insurers)</i>
<p>“Because VBID is so new, at least I have not seen any sort of evidence that says, ‘hey you’ve got these members in your VBID model and because you have reduced cost and they’re utilizing the benefit you want them to use, you have a 20% higher risk score or a 50% higher risk score’ or whatever that percentage might be. And so some sort of statistics like that would probably help sway us either in the direction of offering a VBID or maybe in the direction of not offering a VBID if those types of statistics would become available.” (NPInsurer09)</p>
<p>“The environment just felt a little risky -- to step out and do this -- with such unknowns.” (NPInsurer01)</p>
<p>“Work load, resources, capacity it wasn’t there... we wanted a little bit more time to do some analytical work within our population to make sure that what we are doing will actually have the desired impact versus just kind of running down the path of something for the sake of doing it or because we think it may actually have an impact. So, I think that’s really where our challenge was that making sure that we are able to validate where we want to focus to have the biggest impact long term.” (NPInsurer05)</p>
<p>“The reason we did not participate was again, if we were to look at all the things that were on the list of things to do, it was, it did not hit top because of again, the work effort involved to configure the [claims] system to be able to administer [VBID] properly.” (NPInsurer08)</p>
<p>“As you look at which benefits become more attractive to the different types of people, you are putting yourself at risk... There’s a bit of a fear because it hasn’t, I guess, fully been proven. You kind of have to believe that this is the right thing to do... I mean increase in claims... increased risk for utilization of services at a lower cost... You’re going to end up paying much more than you would because you are eliminating the cost here, right? And then I just come buying in or believing that they’re not paid off at the end... I think it’s a long term pay off, you have to be in it for the long term, which I think is great especially for the Medicare population, but those are the kind of conversations that we will continue to have.” (NPInsurer10)</p>
<p>“So, the whole concept around a new pilot was something that we were absolutely willing to explore, but without proven results, our actuaries weren’t willing to take the leap.” (NPInsurer02)</p>
<p>“Probably right now it’s more unlikely than likely, but that was a lot of things, as I mentioned with us being kind of a smaller plan and regional in nature. We like to see other plans with experience in kind of testing and see how the intervention works before we jump in. So I think we’ll be watching closely and certainly talking to some of the other Blue plans that are participating as this gets off and running, and we can start hearing from them about what their results were and how they feel it helped them. So we missed the application period for ‘18. I think we probably wouldn’t feel like we know enough for ‘19, but we’d still keep looking and listening and investigate. But I feel we wouldn’t see anything probably at least in the next two to three years.” (NPInsurer04)</p>

“I mean I think it’s entirely possible for the plan to come up with something. It’s just it didn’t seem to us that that would really drive different behavior for our programs.” (NPInsurer07)

Administration of two sets of benefits to beneficiaries in the same plan (7 insurers)

“Knowing that a person was a member in a given plan design, but then that subset of the people within that plan would fall under the VBID category for identification of members within our system, was something that was going to be costly to enhance the system to support. So, basically we didn’t have the system capabilities to support it.” (NPInsurer02)

“How do you identify those [VBID-eligible] members specifically and be able to administer those benefits to them specifically and not to the general population or vice versa? [How do you] make sure that we are able to track the claims? [How do we] make sure [the benefits] are administered exactly the way that we submitted in the bid, no more, no less?” (NPInsurer08)

“[VBID] would require us, under one plan benefit package, to have to manage two sets of benefits for members.” (NPInsurer04)

“From an administrative perspective, there are costs associated with administering the VBID pilot for us: the requirements to provide several benefit packages, provide separate annual notices of change and evidences of coverage, separate mailings. [All of this] requires an ability to identify these folks very timely and move them into a specific benefit group in our membership systems, so they can access the benefits they need in a very timely way. All of that is challenging for us to administer and does come with a cost.” (NPInsurer06)

“By the time we figure out [that someone is eligible for VBID] and tell [eligible beneficiaries about enhanced VBID benefits], it’s too late. [To illustrate,] if we wanted to do something like a diabetic eye exam copay reduction just because it’s important for diabetic people in particular to get eye exams, by the time we figure out they’re diabetic and tell [them] about it, they could have already gotten the exam [and paid for it].” (NPInsurer07)

“[How] will [beneficiaries] notify the appropriate parties of their desire to not participate in the model. Will enrollees be required to notify CMS, the plan, or both entities of their decision to opt-out of the model? Will that individual remain enrolled in the plan participating in the model, or will they have to enroll in a non-participating plan?” (NPInsurer11)*

“We could have a husband and wife, and the wife qualified based on her chronic conditions for the transportation benefit, you know, these extra things, and then the husband doesn’t, and they are both on the same plan. So how do you explain that? That would have become a source of dissatisfaction, which could then negatively impact us across the board.” (NPInsurer01)

<i>Concerns about the model test parameters (6 insurers)</i>
<i>Marketing restrictions (4 insurers)</i>
“If we were to participate, we prefer it to be able to promote it publicly. [Our VBID participation could be] a differentiator or one of several differentiators if there is more than one plan in our market.” (NPInsurer06)
“Organizations should be rewarded for their willingness to participate in the model test and should not be limited in their ability to communication [sic] VBID options to enrollees.” (NPInsurer11)*
“If ...we know that you’ve been receiving care from X provider...[and] we’re doing outreach around knowing these people potentially using the provider...[providers] can help us market this plan to people that would fit the category with the diagnosis would be helpful. We really found that using providers in this sort of way is pretty helpful, back to the point where we know that people trust their providers...It goes a little bit against the whole thing around the ability to vary cost sharing, but not being able to tell people that that’s why you’re doing it. So, it’s a little contradictory to not be able to use it in marketing.” (NPInsurer02)
“We could have a husband wife qualified based on her chronic conditions for the transportation benefit, you know, these extra things, and then the husband doesn’t, and they are both on the same plan. So how do you explain that? That would have become a source of dissatisfaction, which could then negatively impact us across the board.” (NPInsurer01) [The marketing restriction prevented plans from discussing VBID with ineligible beneficiaries.]
<i>Wanting different health conditions (3 insurers)</i>
“So I would say two different things on the conditions. One on the mood disorders. Initially when we were working on our application for year 1, we were thinking that we could target some sort of mood disorders, and it didn’t say that in the RFP, but somehow, we were thinking we could do that. And we had been talking about putting together a program specifically designed to target depression, so not necessarily the mood disorders that fall into that category. And when we talked to CMMI about that prior to filing the application for year 1, they clarified we couldn’t do that... The second one ...on rheumatoid arthritis...we had been...talking internally with all of our physicians that work here...We thought that there was some opportunity for plans to design some interesting interventions around that.” (NPInsurer07)
“Allowing organizations to suggest conditions they want to focus on, such as depression or arthritis.” (NPInsurer14)*
“Adding conditions for which publicly available CMS data show a high level of low/no-value care, including low-back pain care, ophthalmology care, and end of life care.” (NPInsurer13)*
<i>Wanting different plan types (1 insurer)</i>
“Making SNPs eligible for VBID because “they are the ones that we struggle with the most on some of the quality metrics.” (NPInsurer01)

*NPInsurer11, NPInsurer12, NPInsurer13, and NPInsurer14 did not participate in the phone interviews. These insurers provided written input to CMS

Table A2: Reasons for joining VBID model test

Willingness to innovate (5 insurers)

“[W]e regarded this offer from CMS as innovative, different, a little liberating. . . . [It gave us] some flexibility and help[ed] target a population that needed more coordinated care and that also might have more expensive claims if not well coordinated.” (PInsurer02)

“[W]e’re trying to inform the policy. . . the policy question is whether or not this should be deployed. . . across the country. In my opinion, a success of the program is basically getting to the right answer—[this does] work or this does not work.” (PInsurer04)

“I think you recognize that this could be a game-changer and that's [why] we have to really invest in it.” (PInsurer07)

“We’re certainly willing to go down the road of a demonstration to figure out if our hypothesis that by sending members to their specialists more we can reduce their inpatient hospitalization and their high-cost care is true or not.” (PInsurer05)

“We’re very innovative in a lot of the things we do. We try things. Anytime something new comes up, we tend to get involved in those things just because it’s an opportunity one way or another.” (PInsurer03)

Consistency of VBID goals with insurer’s organizational priorities (4 insurers)

“[VBID] was consistent with our values. . . . It was an opportunity to tailor a program to our members’ unique needs.” (Pinsurer06)

“Well, overall it fulfills our mission of making communities healthy. And we have a really great relationship with our Medicare population overall and I think we wanted to provide a good quality product that really met some evidence-based medicine and standards of care.” (PInsurer03)

“[W]e’re really enthusiastic about enabling patients with chronic conditions to obtain quality care at this reduced cost, which could potentially avoid more expensive care down the road. The VBID pilot gives us the opportunity to do exactly that.” (PInsurer05)

“That was another consideration that something might actually improve our quality scores...the readmission rate has been a really tough one for us and it’s a highly weighted STAR measure. So we’re going to have an impact on that quality measure [once we figure out] how to intervene to reduce the readmission rate.” (PInsurer02)

VBID's potential to improve beneficiary outcomes (3 insurers)

“I think we wanted to provide a good quality product that really met some evidence-based medicine and standards of care. And a good conduit for conversations with their primary care physician as well, because these are the things [they] should be focused on too.” (PInsurer03)

“[O]ur mission is to enhance the health and wellbeing of the people in the communities that we serve. . . . We have our eye on the triple aim, and we’re particularly interested in any way that we can identify social determinants of health that might create barriers to care. . . .” (PInsurer06)

“I think we want them to understand that what’s at the end of the rainbow is not getting your co-pays waived, it’s having better outcomes living a healthier life achieving your personal health goals” (PInsurer01)

Table A3: Potential ways to address participation barriers

Develop actuarial assumptions: Review VBID evidence from commercial plans and rely on best clinical judgement

“I think in general, this was one of those areas where there was a lot of room for reasonable, actuarial assumptions and -- so sort of for starters clinicians pull together, you know care management, medical director team pulled together -- studies that have been done, that related in some way or another to what we are doing and you know it might have been a commercial study -- most of the time they were commercial. Not necessarily with the exact same interventions obviously and nor the same population, so they did a literature review and came back and you know we sort of discussed back and forth what then -- based on that will be reasonable assumption, so you know I think it would be fair to say we relied heavily on judgment of the clinical team.” (PInsurer07)

“What we did was we assembled historic data for members that would be eligible for this program, specifically reviewing how many visits per member these members had in the past with the selected specialists that we’re talking about. And then we also ran the historical inpatient utilization down to the DRG level. And then we brought all the data to a meeting and sat down with the medical directors and went through and got their thoughts in terms of what the expectation would be for how utilization might change if we were to revise cost sharing and incent members to go to the doctor more.” (PInsurer05)

“We look at our own data, to understand our own costs. we reviewed our data and the clinical team made some judgments on what we thought the utilization changes might be on both ends from reducing cost sharing on the office visits, we would expect to see an increase in utilization and then on the other hand, we will expect a corresponding decrease in in-patients SNP and ER visits. So, there were judgments from the clinical team based on our actuarial experience and how much utilization patterns might change.” (PInsurer02)

Focus on maximizing long-term outcomes

“We saw this as an opportunity to improve health outcomes, and also an opportunity to reduce care costs. We wanted to increase the access to health plan nurses, pharmacists, and health coaches through on-going education support, identifying and addressing barriers to care, coordinate the needs of the care, and improve health literacy of the chronic conditions. And then we focused on the vulnerable populations with multiple comorbidities.” (PInsurer06)

“We’re excited to be part of this initiative which tests the hypothesis that if health plans have more flexibility to offer supplemental benefits or reduce cost sharing to targeted groups of enrollees with chronic conditions, it might motivate them to use high-value services and have better outcomes with more cost efficient care.” (PInsurer05)

“I think it will have the most positive impact to members, because they feel that we value their health. We invest in initiatives in terms of valuing them as members.” (PInsurer08)

“It’s a real member focused type of activity making – our tagline is ‘making our communities healthy.’ So, it really is an opportunity to put that into action.” (PInsurer03)

Develop approaches to tracking eligibility, participation status, and correct copayment amounts

“The enrollment staff know how to enroll a member, get him in the right program, [and] make sure transactions [go] to CMS. But in this case, they need to understand what is happening in the medical management section of it so they can understand how it is going to affect them downstream.” (PInsurer04)

“My team actually receives a file from our medical economics team. And based on that file we then load that into our core system that these members are eligible. My team doesn’t go through any of the eligibility rules for the VBID. We just receive the file and load that into our system...We did [create a flag], we actually created what is called the attributes in our core system to house that information.” (PInsurer03)

“We essentially use the ICD codes that are provided to identify who has the conditions of heart failure COPD. We add some criteria, in term of the services that we’re looking for, for those diagnoses, it’s a one in-patient visit or two or more outpatient visits or office visits that are required. So, just one outpatient instance isn’t enough to meet the administrative criteria to say the person has the condition. So, once we identify the population, who has the condition, we’ve also then love to see who is already enrolled in our care management program and those people are essentially automatically enrolled in the benefit.” (PInsurer02)

Communicate with beneficiaries via multiple channels

“Our program includes three telephonic outreaches as well as the notice of VBID benefits being sent out and then the additional letter being sent midway through the outreach.” (PInsurer01)

“The actual structure in which they were contacted was more on the operational side. So we were informed of what communications needed to go out. So we created letters that were anywhere from the opt-in, opt-out process...So those members who have told us that they did not want to be contacted via phone, we developed a letter kind of explaining all of those things that what has normally been discussed in that conversation distributed that to those members.” (PInsurer07)

“We're going to do an IVR (Interactive Voice Recording) call to them. So, we've identified them and what we're going to do is ask them some questions, understand like the barriers of not taking, we're going to basically promote the VBID. But then we're going to ask them what the barrier is.” (PInsurer08)

“Care manager is calling them initially after we get record that they're getting to know your survey is done; we outreach into the VBID PHR and establish the care plan as according to what they want to do incentive wise.” (PInsurer06)