V-BID X: CREATING A VALUE-BASED INSURANCE DESIGN PLAN FOR THE EXCHANGE MARKET

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The University of Michigan Center for Value-Based Insurance Design (**V-BID Center**) is the leading advocate for development, implementation, and evaluation of *clinically nuanced* health benefit plans and payment models. Since 2005, the Center has been actively engaged in understanding the impact of innovative provider facing and consumer engagement initiatives, and collaborating with employers, consumer advocates, health plans, policy leaders, and academics to improve clinical outcomes and enhance economic efficiency of the U.S. health care system. For more information, find us at www.vbidcenter.org and follow us @UM_VBID.

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Executive Summary

Despite gains in health insurance coverage since the adoption of the Affordable Care Act (ACA), Americans are more likely than ever to be enrolled in health plans that require significant patient cost-sharing at the point of service. This results in under-consumption of evidence-based, high-value health care and a meaningful financial burden. Financial barriers to high-value care are particularly worrisome for low-income individuals and families, as well as those with chronic conditions, taking up coverage in the individual market. Value-Based Insurance Design (V-BID) offers one route to mitigate the harm associated with the under-consumption of high-value care and reduce the associated financial burden. However, the lack of a "standard" V-BID plan has slowed implementation of V-BID principles in commercial markets, including exchange plans.

The V-BID X project detailed in this report was designed to create an implementable V-BID plan that could be offered on the ACA exchanges and illustrate the tradeoffs that arise when creating such a plan. We create a prototype qualified health plan (QHP) that provides specified non-preventive, high value services at no cost-sharing, with proven benefits for health outcomes. Because the estimated savings from specified *low* value services were minimal, the added coverage generosity for high value services is financed by increasing beneficiary cost-sharing for targeted service categories likely to be overused, such as high-cost imaging. Balancing the added cost of high value services with decreased spending on these service categories led to no change in premiums for the V-BID X plan as compared to the base plan. The V-BID X plan demonstrates that coverage can favor the use of high-value services without increasing deductibles or premiums. In addition to the creation of a premium-neutral plan that incorporated V-BID principles, this report details crucial tradeoffs and recommendations for designing a V-BID plan for the commercial market.

Introduction to the V-BID X project

The cost of health care coverage in the United States continues to rise. In 2018, the average annual premium for employer-based family coverage grew 5% to nearly $20,000, outpacing wage growth.[1] On the individual exchanges, the average monthly premium in 2018 was $621, before advanced premium tax credits.[2] There is a concurrent trend of shifting the costs of health care to the enrollee through increases in cost-sharing (*e.g.,* higher deductibles, copays, or co-insurance) in all markets. Deductible increases largely drive this shift. Fewer people are meeting their deductible and enrollees are meeting their deductible later in the year than ever before.[3]

Although higher cost-sharing like deductibles reduces premiums, it also leads to under-consumption of high-value care – care that can materially improve the well-being of members. The added financial burden imposed on beneficiaries by increased cost-sharing is a blunt tool to reduce health care spending and creates inefficient spending, reducing the use of necessary and unnecessary services alike.

Given current cost trends, it is likely that Americans will increasingly be enrolled in health plans less generous than their current plans.[4] Cost-sharing subsidies for exchange enrollees help alleviate financial barriers, but do not entirely mitigate this concern, because millions of middle-income Americans who purchase coverage through the exchanges do not qualify for financial assistance.[5] Not only do cost-sharing reductions phase out at low levels of income (250 percent of poverty), an estimated 30 percent of marketplace enrollees under 250 percent of poverty have deductibles over $1,000. For those above 250 percent of poverty, 68 percent report having a high-deductible.[6] At the same time, four in ten Americans would not be able to pay $400 in unexpected costs without selling something or borrowing money.[7] The financial and health implications of this trend are particularly worrisome for those with low incomes or those with chronic clinical conditions.[8]

While cost-sharing assistance and premium subsidies help improve access to coverage, more can be done to reduce financial barriers to clinically valuable services. V-BID is one method to mitigate the deleterious effects of less generous plans and increased cost-sharing. V-BID attempts to align cost-sharing with the clinical value of the health care service. V-BID specifically calls for lower cost-sharing (including exemption from the deductible) for high-value services, such as those used to treat and prevent the progression of chronic disease, and higher cost-sharing for low-value services, such as those identified by the Choosing Wisely initiative.[9]

V-BID can be important for the health of people with chronic conditions. For example, a growing body of published research indicates that V-BID, especially in pharmaceuticals, can reduce cost-related non-adherence (CRN). CRN is a state where patients do not abide by recommended medical care due to financial barriers, which can lead to exacerbated chronic conditions, and in some cases, added costs. A 2018 *Health Affairs* systematic review of V-BID reported that lowering consumer cost-sharing on targeted drug classes modestly improved adherence and lowered consumer out-of-pocket costs, without increases in total spending.[10]

Building a V-BID plan for ACA exchanges – and commercial coverage more broadly – offers many advantages.[11] Greater incorporation of V-BID principles can help:

- Increase underused high-value services and medications, leading to better health outcomes;
- Decrease use of low-value care, potentially averting patient harm and better stewarding limited healthcare resources;
- Reduce the net out-of-pocket burden for patients with select conditions, especially chronic conditions; and
- Reduce health disparities.

Despite the general enthusiasm for V-BID, no "standard" V-BID designs exist, to date. A standard V-BID plan – one example of the V-BID concept that plans could adapt – could accelerate adoption of V-BID principles in the individual market and in other settings. Standard designs are important to support adoption and to avoid the confusion of many different plan options in the market, and potentially give rise to adverse selection that will impede efficient market performance.

It is important to note, however: there is no one way to design a value-based health plan for the exchange market; the elements of the V-BID plan described in this report should be viewed as one possible approach that represents a "proof of concept", to be adapted by issuers given the lessons and recommendations presented, rather than a prescriptive list of services or cost-sharing changes. This report also details the collaborative process used to arrive at a standard V-BID plan, but plans may take a different approach.

Methods and guiding principles

V-BID plan design process and analytical methods

With support from Arnold Ventures, the Health Care Markets and Regulation Lab at Harvard Medical School convened a group of public and private stakeholders over the course of four meetings to develop the V-BID X framework. Individuals from America's Health Insurance Plans (AHIP), Blue Cross Blue Shield Association (BCBSA, the federal Center for Consumer Information and Insurance Oversight (CCIIO), Massachusetts Connector, and Covered California participated.* The project team also included Michael Chernew and John Hsu from Harvard and A. Mark Fendrick from the University of Michigan.

The goal was to:

- Establish a relevant base plan from typical exchange-based plans currently offered;
- Define what high-value services to target for reduced cost-sharing;
- Define what low-value services to target for increased cost-sharing;
- Combine high- and low-value services into a standard plan or set of plans, and score the increase or decrease in actuarial value (AV); and
- Increase cost-sharing to reach specific premium (and AV) goals.

The actuarial consulting firm Oliver Wyman used its proprietary Medical Actuarial Relative Value (MARVAL™) pricing model in conjunction with the 2018 AV calculator to evaluate the impact of cost-sharing changes to high- and low-value services on AV, a general measure of plan generosity, relative to a base plan. The data underlying the analysis are based on nationwide group market employees and their covered dependents, and therefore only

* This research was supported by Arnold Ventures. The views presented here are those of the authors and not necessarily those of the Laura and John Arnold Foundation, its directors, officers, or staff. It was explicitly noted that any input from any individual project member did not represent their respective organizations.

provide an estimate of the exchange market (data limitations can be found in Appendix A). AVs from the Oliver Wyman analysis can be roughly translated to premiums, meaning that an increase in AV generally results in an increase in premiums, and vice versa. The analysis accounts for whether or not a copay applies before or after the deductible. **The specific intent was to design a V-BID plan that did not impact the actuarial value (*i.e.*, had no effect on premiums), but favored high- over low-value services**. The modeling results offer a look at how V-BID principles can be used to design a plan with no change in total spending.

The AV scoring by Oliver Wyman is intended to provide rough estimates. We expect carriers would perform their own analyses before implementation, and the results produced may vary, potentially significantly, due to differences in risk pool and market-specific variations, among other factors. The AV calculations take into consideration induced utilization due to lower cost-sharing (*i.e.,* utilization effects), but not adverse selection. We assume that payments under the risk adjustment program would offset the effects of any adverse selection resulting from the V-BID plan design in the individual market.

Overview of select high- and low-value services

The V-BID X stakeholder group first established a list of high- and low-value services (*Tables 1 and 2 on the next page*) for which cost-sharing would be altered.** In general, services were selected along the following guiding principles:

1. Favor services with the strongest evidence-base and external validation
2. Favor services that are more responsive to cost-sharing
3. Favor services with a high likelihood to be high- or low-value, independent of the clinical context – services with the least nuance in value are the easiest to implement
4. Consider how V-BID plan features intersect with related reforms and initiatives (*e.g.*, favor services already rewarded under value-based payment models)
5. Focus on areas with most need for improvement
6. Consider equity, adverse selection, impact on special populations, and the risk pool

Further, the high-value services are HEDIS-relevant (*i.e.* they closely track the same measures that are used to measure physician performance), with the addition of some services grounded in expert feedback from the group and timely public health challenges, such as treatment options for opioid use disorder. High-value services, with the exception of select high-value brand drugs, were modeled with zero cost-sharing. This modeling decision was made primarily for analytic convenience. In practice we expect plans would waive or reduce cost sharing only for selected drugs in a class (which would improve the financial profile of the V-BID program). For low-value services, the group considered services that have been emphasized by aligned efforts, such as the Choosing Wisely initiative, the VBID Health Task Force on Low-Value Care, the Oregon Public Employee's Benefits Board, SmarterCare CA, and the Washington State Health Authority.

** HCPCS and RXCUI codes used for purposes of modeling to be provided in an online appendix, see Appendix D.

Table 1. High-value services and drug classes

High-Value Services with Zero Cost-Sharing
Glucometers and testing strips
LDL testing
Hemoglobin A1C testing
Cardiac rehabilitation
INR testing
Pulmonary rehabilitation
Peak flow meters
Blood pressure monitors
Cardiac rehabilitation
High-Value Generic Drugs with Zero Cost-Sharing
Antiretrovirals
Anti-thrombotic/anticoagulants
Anti-depressants
Statins
Antipsychotics
ACE inhibitors and ARBs
Beta blockers
Buprenorphine-naloxone
Anti-resorptive therapy
Tobacco cessation treatments
Naloxone
Glucose lowering agents (not including insulin)
Rheumatoid arthritis medications
Inhaled corticosteroids
Thyroid-related
High-Value Branded Drugs with Reduced Cost-Sharing
Hepatitis C direct-acting combination
Anti-TNF

Table 2. Low-value services and categories

Specific Low-Value Services Considered
Spinal fusions
Vertebroplasty and kyphoplasty
Vitamin D testing
Proton beam for prostate cancer
Commonly Overused Service Categories with Increased Cost-Sharing
Outpatient specialist services
Outpatient labs
High-cost imaging
X-rays and other diagnostic imaging
Outpatient surgical services
Non-preferred branded drugs

Notes: These tables represent a reasonable, rather than prescriptive, list of high- and low-value services for a stock V-BID plan. Each carrier should conduct their own assessment and actuarial modeling. *All drugs within the listed high-value generic classes have been modeled with zero cost-sharing.* This modeling decision was made for analytic convenience. In practice we expect plans would waive or reduce cost sharing only for selected drugs in a class. *Hep-C and Anti-TNF brand drugs have been modeled with reduced, but not zero, cost-sharing.*

Overview of the base plan

We derived the V-BID plans discussed in this report by adding core V-BID principles (*i.e.*, reduced cost-sharing for high-value services and increased cost-sharing for low-value services) to an exchange-relevant "base plan". Again, differences in laws and regulations, market dynamics, and consumer preferences by state prohibit the creation of a perfect "one-size-fits-all" V-BID plan. That said, states and carriers should nevertheless be able to adapt the key value-based features to their respective environment.

We analyzed the effects of altering cost-sharing for a Silver metal plan (70.91% AV) typical for the exchanges (*Table 3*) – about 63% of exchange enrollees were enrolled in Silver plans in 2018.[12] The plan includes a number of cost-sharing elements, but the majority of costs, and service categories, are subject to a copay. While the overall AV impact of covering high-value services will generally be similar in magnitude for a given level of benefit richness whether it is a deductible and coinsurance plan, or a copay-based plan, it is easier to understand the magnitude of changes in enrollee cost-sharing to offset the AV impact using a primarily copay-based plan. **(Appendix B details cost-sharing changes and notes where some copays only apply after the deductible).**

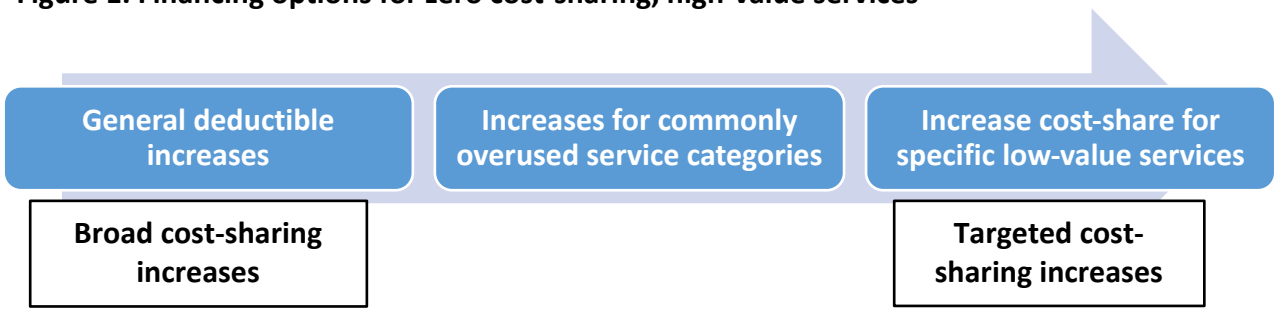
Table 3. General base plan elements

Plan Element	Base Plan and V-BID X Plan
Individual Deductible (Med/Rx)	$3,500/$500
Family Deductible (Med/Rx)	$7,000/$1,000
Individual Out-of-Pocket Maximum	$7,350
Family Out-of-Pocket Maximum	$14,700
Medical Default Coinsurance	80%
Pharmacy Default Coinsurance	60%

Financing Reduced Cost-Sharing for High-Value Services

The core principle of V-BID plans is to increase access to high-value services by reducing the enrollee's out-of-pocket costs for those services. For many but not all carriers, a feasible V-BID plan would still have to maintain the base plan's AV (*i.e.*, premium) or lower it. This is because some but not all plans in the market may already meet the highest statutory AV limit, as defined by the ACA, for their given metal category. Further, an increase to the AV from pre-deductible coverage of high-value services could result in a competitive disadvantage in the market for some plans. **Any increased plan generosity due to reduced cost-sharing for high-value services would therefore needs to be offset completely by increased cost-sharing, preferably targeted to specific low-value services rather than general deductibles.** Financing options are summarized in *Figure 1.* Accordingly, a V-BID plan that would meet this AV constraint in the most popular metal tier (Silver plans) is the primary focus of this report.

Figure 1. Financing options for zero cost-sharing, high-value services



Results

We analyzed a template V-BID plan and obtained a 0.0% change in AV relative to the base plan. The base plan and the V-BID X plan have an actuarial value of 70.91%. We kept the basic plan elements the same between the two plans (*Table 3*): a $3,500/$500 deductible (medical/Rx), a $7,350 out-of-pocket maximum, a default medical coinsurance of 80%, and a pharmacy default coinsurance of 60%.

The V-BID X plan covers all high-value services with zero cost-sharing, with the exception of select high-value brand specialty drugs for which cost sharing was reduced by 25% (Hepatitis C and anti-TNF drugs). With no offsetting changes, we found the favorable treatment of the selected high-value services would add approximately 1.4% to the actuarial value. The V-BID X plan analyzed used zero cost-sharing for modeling and plan design simplicity. Plans could nonetheless choose to use non-zero cost-sharing changes for high-value services.

Ultimately, the V-BID X plan in this report maintains the base plan AV by increasing enrollee copays on targeted service categories (*Table 4*), rather than specific, select low-value services. A service category means, for example, advanced imaging of all kinds (e.g., CT scan or MRI) for any clinical indication. A specific low-value service would mean, for example, a CT scan for a specific indication like uncomplicated musculoskeletal back pain. The former captures more services and is less nuanced than the latter, although we focused on service categories known to be commonly overused.

Table 4. Summary of cost-sharing changes to targeted service categories

Service Category	Base Plan	V-BID X
Specialist Visit	$65	*$75*
Laboratory Services*	$30	*$40*
CT Scan	$500	*$750*
MRI	$500	*$750*
PET Scan	$500	*$750*
X-Ray and Diagnostic Imaging*	$30	*$40*
Outpatient Hospital Surgical Services*	$500	*$750*
Preferred Brand Drugs	$50	*$75*
Non-Preferred Brand Drugs	$100	*$175*

* Copays apply after the medical deductible has been reached

Although targeting only specific low-value services was the original goal of the V-BID X project, actuarial analyses showed that increasing cost-sharing on the specific low-value services we chose for analysis has a marginal effect on metal AV. The lack of savings from specific low-value services is largely the result of low spending on the specific low-value services from Table 2. *Therefore, increased cost-sharing on specific low-value services was not ultimately included in the AV analysis.* Instead, increased cost-sharing for service categories was used entirely to offset the 1.4% increase in AV from the high-value services. The increase in copays for certain service categories to maintain AV neutrality range in magnitude from about 15% to 50% compared to the base plan (*Table 4*).

Discussion – tradeoffs associated with financing high-value services at zero cost-sharing

We faced challenging benefit design tradeoffs, and regulatory constraints, when trying to finance cost-sharing for high-value services without raising premiums. We faced tradeoffs along the spectrum represented by *Figure 1*.

igher medical deductibles are the bluntest instrument and we explicitly chose to avoid any increase to deductibles. Although reduced cost-sharing for high-value services equitably reduces the financial burden for key services for those who need it the most (*e.g.,* low income people with chronic diseases), increased medical deductibles would affect all enrollees regardless of the service's value and could pose significant risk to members. Thus, increasing deductibles – the bluntest tool to offset the costs of high-value services – would have been antithetical to V-BID principles.

Increasing cost-sharing for specific low-value services is, on the other extreme, the most targeted approach. In an ideal world, we would finance all high-value services using this approach; the cost-sharing increases would only affect enrollees receiving overused, low-value services. However, this approach still has drawbacks. Even the most targeted cost-sharing is not nuanced enough to only capture enrollees seeking those services in low-value circumstances – no service is inherently high- or low-value all of the time and for every person (*e.g.,* even testing for Vitamin D deficiency is clinically appropriate with specific symptoms or diagnoses). Our analysis, and the analysis that most carriers would be able to perform, is not nuanced enough to distinguish this clinical heterogeneity.

Although specific low-value services represent the ideal route, we ultimately could not finance the high-value services using the specific low-value services. *Table 5* summarizes per-member per-month estimates of the allowed claim costs associated with the low-value services we analyzed. With the exception of spinal fusions, the lack of claim dollars from these services prevented us, primarily, from only increasing cost-sharing for specific low-value services.

Table 5. PMPM estimates of low-value care services

Service	Utilization per 1,000 per year	Average Allowed Cost per Service	Allowed PMPM
Spinal Fusions	7.8	$ 12,507	$ 8.17
Vertebroplasty, kyphoplasty	0.2	$ 6,290	$ 0.13
Vitamin D testing	23.0	$ 260	$ 0.50
Proton Beam Therapy for Prostate Cancer	0.1	$ 3,779	$ 0.02

Notes: Based on calendar year 2016 incurred claims for an employer-based population; derivation of the allowed PMPM from the utilization and average cost per service statistics may vary relative to the allowed PMPM shown due to rounding. Exact PMPM will vary for the exchange versus employer market.

Plans could choose additional or different low-value services to finance the incremental cost associated with increased use of high-value services. Choosing low-value services with high claim dollars, however, may not produce the desired results. While there are significant claim dollars associated with spinal fusions, for example, when analyzing the total cost of care for individuals receiving spinal fusions, an increase in enrollee cost-sharing for spinal fusion services would only result in the enrollee reaching the maximum out of pocket spending limits (MOOPs) more quickly. The data showed enrollees receiving spinal fusion services were generally expected to have reached their MOOP for the plans modeled.

In the end, the V-BID X plan detailed in this report uses increases in cost-sharing on service *categories* to achieve the savings needed to reduce financial barriers to high-value services (Appendix B details our cost-sharing changes for these categories). However, the clinical heterogeneity problem described above for specific low-value services is exacerbated when increasing cost-sharing for service categories; even the most "targeted" categories (*e.g.*, categories that are most often overused) is not nuanced enough to capture only those who seek a service in a low-value setting or circumstance. Carriers could *first target cost-sharing across service categories that commonly contain a number of low-value services, and avoid categories generally considered high-value.* For example, the service category for high-cost imaging would capture MRIs, CT scans, and x-rays for non-specific low-back pain or headaches. Expensive and unnecessary imaging for non-specific low-back pain is a commonly cited low-value service, although not specifically named in our low-value list.

For modeling simplicity, we chose to reduce cost-sharing for almost all of high-value services by 100%, which generally would increase AV more than reducing cost-sharing by less than 100%, for the same list of services. Issuers could reduce the cost of the high-value services by reducing cost-sharing for more services to some amount above zero. This tactic would allow issuers to more easily offset the cost of high-value services, and perhaps through more targeted cost-sharing increases. However, smaller reductions in cost-sharing for high-value services could result in smaller increases in high-value service utilization compared to zero cost-sharing.

In all scenarios, we faced a number of other constraints financing the increased value of the V-BID plans. These include MOOP spending limits or maximum coinsurance limits at 50%. In practice, options for increased cost-sharing, especially through increased general deductibles, would also be constrained by market forces. For example, whether a V-BID plan could be viable in a given market with a significantly higher general deductible than non-V-BID plans, despite the value of the non-preventive services covered at no member cost-sharing or reduced member cost-sharing, could vary.

Furthermore, because of these constraints described above, particularly the difficulty in identifying low-value services with considerable baseline spending and our hesitancy to aggressively change cost-sharing for broad service lines, we could not expand coverage for even more high-value services.

Limitations and Lessons

The V-BID X plan is just one example of how to devise a V-BID plan, the services to select, and the cost-sharing changes to make. V-BID X faced a number of unique constraints (e.g., a diverse stakeholder decision-making process) and a number of universal constraints (e.g., gaps in data to include other services that could be considered "high-value") in devising the high- and low-value lists. Also, the process to determine these services is not the only process. Although the multi-stakeholder collaboration process was the approach taken by the V-BID X team to identify the list of services for this template, a different decision-making process could yield desirable AV results with larger, smaller, or different pools of high- and low-value services. The inability to finance high-value services solely through increases in specific low-value services is not a guaranteed finding when attempting to finance a list of high-value services with changes in cost-sharing to low-value care.

Key Lessons

- *Cost neutral V-BID designs are feasible without raising deductibles.*
- *Spending on our selected low value-services is too low to significantly offset more generous coverage on high-value services. As a result, the costs are spread across broad service categories.*
- *The high- and low-value services used for this standard V-BID design are not the only options. There are a number of plausible combinations of services or cost-sharing changes that could fit different needs and goals, depending on the carrier and market.*

Recommendations – how a carrier might address the tradeoffs in a market-ready V-BID plan

In general, this V-BID plan required a tradeoff between the added benefit of high-value services covered with no or lower cost-sharing before the deductible and increased cost-sharing for all plan enrollees for targeted service categories. The enrollees who benefit the most from this arrangement are those with chronic conditions. The V-BID X template provided here represents one way to address these tradeoffs, given our guiding principles, while reducing the cost-sharing for a fairly comprehensive list of high-value services to zero. Most importantly, we were able to demonstrate that covering non-preventive services and drugs while maintaining or lowering the overall generosity (and therefore premiums) of a plan to be possible given current tools and without deductible increases.

The framework we chose should be adapted by different carriers and markets to fit their own needs. For example, carriers could choose to:

- *Devise a different list of a high-value services*. A smaller pool of high-value services, or a different list of less costly high-value services, would mitigate the need to use broader cost-sharing tools like medical deductibles or increased cost-sharing for targeted service categories. Conversely, a larger list would require more aggressive offsets. The high-value services list used in this paper for the V-BID X template was foremost designed to highlight that a reasonably robust high-value plan was possible, and without significant increases to actuarial value. The list of high-value services was constrained by a number of factors, including some services we chose not to use are too nuanced or we do not have the necessary data to adjudicate value.

- *Devise a different list of low-value services.* The low-value services chosen in this report are illustrative and a different list could produce the same AV-neutral result. A larger pool of low-value services, or a different list of services for which there is more spending pre-deductible before the out of pocket maximum, would help mitigate the need to use broader cost-sharing tools like deductibles or increased cost-sharing for targeted service categories, both of which are less targeted than specific services. More pre-deductible spending associated with the low-value service pool could allow for a more aggressive list of high-value services as well. *Table 6* shows the proposed low-value services originally considered by the team, and the spending associated with these services. Specific low-value services are likely best when they have low (as low as possible) clinical heterogeneity, easily identifiable in claims data, and high baseline spending at a point along the deductible curve to make a noticeable difference to AV.

Table 6. Full list of proposed low-value services from the V-BID X group

Service	Utilization Per 1,000*	Average cost per service	Allowed PMPM	Paid PMPM	Paid-to-Allowed
Spinal Fusions**	7.8	$ 12,507	$ 8.17	$ 6.64	0.814
Imaging of Back	52.6	513	2.25	1.61	0.716
Knee Arthroscopy**	11.6	2,247	2.17	1.63	0.75
In-Lab Sleep Studies	12.2	1,126	1.15	0.89	0.774
In-Home Sleep Studies	5.6	333	0.16	0.1	0.658
Spinal Injections	14.8	821	1.01	0.76	0.75
Vitamin D Testing	23	260	0.5	0.31	0.644
Vertebroplasty, Kyphoplasty**	0.2	6,290	0.13	0.1	0.8
Proton Beam Therapy for Prostate Cancer	0.1	3,779	0.02	0.02	0.961
IMRT	1.5	1,771	0.21	0.19	0.904
Renal Artery Angioplasty of Stenting**	0	8,538	0.03	0.03	0.903
Paps	0.1	56	0	0	0.906
Total	122.5	$ 1,511.00	$ 15.42	$ 12.00	0.778

* utilization per 1,000 per year

** includes claim costs for all services performed on the same service date, including inpatient facility stays that began on the same service date

- *Increase cost-sharing for different service categories, if necessary*. For illustration purposes only, as part of the AV analysis process, we tweaked our final V-BID X template one more time to increase cost-sharing on physical, occupational, and speech therapy services by $45 (from $65 to $110), instead of increasing copays on preferred brand drugs from $50 to $75 (see *Table 7*). **These changes demonstrate that there is flexibility to alter low-value care cost-sharing in different ways to achieve the same AV results.**

Table 7. Alternative cost-sharing changes example

Service Category	Base Plan Copays	V-BID X Copays	V-BID X 2.0 Copays
Specialist Visit	$65	$75	$75
Laboratory Services*	$30	$40	$40
CT Scan	$500	$750	$750
MRI	$500	$750	$750
PET Scan	$500	$750	$750
Physical, Speech, Occupational Therapy	$65	$65	$110
X-Ray and Diagnostic Imaging*	$30	$40	$40
Outpatient Hospital Surgical Services*	$500	$750	$750
Preferred Brand Drugs	$50	$75	$50
Non-Preferred Brand Drugs	$100	$175	$175

It's also important to note from this example that AV sensitivity varies by category: we needed to increase the copay for PT/ST/OT by almost 70 percent to achieve the same results as a 50 percent increase in preferred drug copays. We chose this example because we hypothesized that increases in cost-sharing for preferred brand drugs could impact a large number of high-value treatments. Therefore, we modeled a second template where we chose to increase cost-sharing in a different category (PT/ST/OT). There Is likely a middle ground that does not require such a large marginal increase in therapy copays, but this shows an example of potential tradeoffs. [***]

- *Reduce cost-sharing to non-zero levels for high-value services*. Although this potentially adds plan complexity, especially for standardized exchange plans, plans would find smaller AV increases by not reducing high-value cost-sharing to zero.

  *Generally, if a plan were to reduce cost-sharing for high-value services by less than 100% (i.e., reduce cost-sharing to somewhere between the base plan and zero), we can be relatively confident that the required increases in cost-sharing for low-value services or categories to maintain AV neutrality would be smaller as well***.** In other words, if cost-sharing increases were assumed to be 50% of the current template, cost-sharing increases may be reduced by a similar, but likely not exact, offsetting amount. The offsetting changes will not be exactly the same, because changes in member cost-sharing do not have a linear impact on changes in claim costs. For example, we applied this idea to the cost sharing for brand Hepatitis C and Anti-TNF drugs; cost-sharing for these drugs was reduced by 25% rather than reduced to zero. This reduced the number of service categories affected by increases in cost-sharing and, to some degree, the magnitude by which we needed to increase cost-sharing.

- *Reduce premiums by a smaller amount.* We ultimately designed an actuarially neutral plan (0.0% change in AV compared to base plan), but carriers could theoretically allow the V-BID plan to have a higher AV than the base plan as long as the V-BID plan adheres to any statutory AV requirements.

Conclusion

We model an exchange-relevant plan benefit design that provides enhanced access to high-value services that does *not* require increases in premiums or deductibles. Instead, savings that result from targeted cost-sharing increases on services more likely to be low value are used to fund the more generous coverage of services that are typically deemed to be high value and included in provider quality metrics. The specific list of high- and low-value services could be important to different market segments. A standard V-BID plan like this

[***] Note: this example is not intended to compare the average clinical value of physical, speech, and occupational therapy versus preferred brand drugs, but intended to illustrate that there is flexibility to change cost-sharing for different services, to fit a hypothesis that an issuer may have, and still maintain AV neutrality. Comparing the clinical value of therapy versus brand drugs is outside the scope of this report.

one should help carriers implement value-based principles into exchange-based plans. V-BID is one method to increase the efficiency of exchange plans and materially benefit the health of members, mitigating the negative effects (both in terms of out-of-pocket spending and health) of increasingly less generous health plans. A more robust pool of low-value services would aid in financing without the need to increase cost-sharing with more blunt methods or raise premiums. Tradeoffs associated with financing high-value care are challenging, but feasible, as demonstrated by the V-BID X plan.

End Notes

1. https://www.kff.org/health-costs/press-release/employer-sponsored-family-coverage-premiums-rise-5-percent-in-2018/

2. https://www.kff.org/health-reform/state-indicator/marketplace-average-premiums-and-average-advanced-premium-tax-credit-aptc/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D

3. https://www.healthsystemtracker.org/brief/deductible-relief-day-how-rising-deductibles-are-affecting-people-with-employer-coverage/#item-start

4. https://www.benefitnews.com/news/number-of-hsa-expected-to-continue

5. https://www.kff.org/health-reform/issue-brief/how-affordable-are-2019-aca-premiums-for-middle-income-people/

6. https://www.commonwealthfund.org/publications/issue-briefs/2016/jul/americans-experiences-aca-marketplace-coverage-affordability-and

7. https://www.federalreserve.gov/publications/files/2017-report-economic-well-being-us-households-201805.pdf

8. https://www.commonwealthfund.org/press-release/2017/underinsured-rate-increased-sharply-2016-more-two-five-marketplace-enrollees-and

9. http://www.choosingwisely.org/

10. https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2017.1633?journalCode=hlthaff

11. http://V-BIDcenter.org/wp-content/uploads/2016/08/MA-White-Paper_final-8-16-16.pdf

12. https://www.kff.org/private-insurance/issue-brief/tracking-2019-premium-changes-on-aca-exchanges/

Appendices

Appendix A – Data limitations and caveats

Adverse selection

The model used by Oliver Wyman accounts for induced utilization as a result of increased or reduced cost-sharing (utilization effect), but does not account for changes in the morbidity associated with population expected to enroll (adverse selection). For example, the standard V-BID plans above may attract more enrollees with diabetes, given the reduction in cost-sharing for crucial drugs and screenings, relative to the base plan. Our analysis assumes payments from the risk adjustment program would account for any adverse selection experienced by a carrier offering a standard V-BID plan.

Data limitations

The data underlying the analysis is based on nationwide group market employees and their covered dependents. There are known population differences between the group market and the ACA exchange market. While MARVAL™ was calibrated to reflect projected allowed claim costs in 2018 for individual market enrollees nationwide and adjusted to reflect the demographic characteristics of the nongroup market, differences in the morbidity of a nongroup population and a group market population are likely still present.* Additionally, given the wide variation in the ACA nongroup population by state, our analysis could change materially if the analysis is replicated to reflect the experience in a particular state or if the nongroup experience deviates materially from the claim cost information underlying MARVAL™.

The data underlying the analysis reflects a mix of drug formularies. Variations in drug formularies will result in variations in enrollee cost-sharing for a given drug, all else equal, which could result in differences in utilization between what is suggested by the underlying data and what occurs in the ACA nongroup market. Additionally, drug formularies in the ACA nongroup market tend to be more restrictive relative to the data underlying the analysis, which means our analysis may overstate the utilization of brand drugs when a generic equivalent is available. Drug rebates were not considered in the analysis. Including drug rebates could influence the expected costs associated with brand drugs that are considered high value.

Further, the provider networks associated with the data underlying the analysis are believed to be broader than what is typically observed in the ACA nongroup market. A narrow network product may give more weight to pharmacy services relative to a broad network product, assuming the provider discounts associated with the narrow network product are more favorable. Additionally, narrow networks tend to be associated with HMO products relative to open-access products (i.e., POS and PPO). Generally, HMO products tend to give more weight to physician services relative to open-access products.

* The demographic characteristics of the nongroup market were evaluated using 2018 open enrollment period data published by CMS.

Plan Design

Our analysis is based on a Silver, copay-based plan. If the cost-sharing parameters of the base plan design are altered, the anticipated premium impact associated with covering high-value services at no cost sharing could change materially. In general, the cost associated with covering high-value services will be higher for leaner benefit plan designs relative to richer plan designs, since the shifting of enrollee cost-sharing is greater for leaner benefit plans.

Appendix B – Detailed base plan elements and cost-sharing changes

General Information	Base Plan	V-BID X Plan	V-BID X Plan 2.0
Individual Deductible (Med / Rx)	$3,500/$500	$3,500/$500	$3,500/$500
Family Deductible (Med / Rx)	$7,000/$1,000	$7,000/$1,000	$7,000/$1,000
Individual Out-of-Pocket Maximum	$7,350	$7,350	$7,350
Family Out-of-Pocket Maximum	$14,700	$14,700	$14,700
Medical Default Coinsurance	80%	80%	80%
Pharmacy Default Coinsurance	60%	60%	60%
Medical Services	**Base Plan**	**V-BID X Plan**	**V-BID X Plan**
Inpatient Hospital			
Skilled Nursing Facility (per admit)*	$1,000 Copay	$1,000 Copay	$1,000 Copay
Hospice*	$1,000 Copay	$1,000 Copay	$1,000 Copay
Maternity*	$1,000 Copay	$1,000 Copay	$1,000 Copay
Medical*	$1,000 Copay	$1,000 Copay	$1,000 Copay
Mental Health/Substance Abuse*	$1,000 Copay	$1,000 Copay	$1,000 Copay
Neonates*	$1,000 Copay	$1,000 Copay	$1,000 Copay
Rehabilitation*	$1,000 Copay	$1,000 Copay	$1,000 Copay
Surgical*	$1,000 Copay	$1,000 Copay	$1,000 Copay
Office Visit/Outpatient Services			
Primary Care	$30 Copay	$30 Copay	$30 Copay
Specialist	$65 Copay	$75 Copay	$75 Copay
Acupuncture	Ded/Coins	Ded/Coins	Ded/Coins
Chiropractic	Ded/Coins	Ded/Coins	Ded/Coins
Surgery	Ded/Coins	Ded/Coins	Ded/Coins
Urgent Care	Ded/Coins	Ded/Coins	Ded/Coins
Mental Health/Substance Abuse	$30 Copay	$30 Copay	$30 Copay
Laboratory Services*	$30 Copay	$40 Copay	$40 Copay
Cardiology	Ded/Coins	Ded/Coins	Ded/Coins
Maternity	Ded/Coins	Ded/Coins	Ded/Coins
Rehabilitation	Ded/Coins	Ded/Coins	Ded/Coins
Imaging			
CT Scan	$500 Copay	$750 Copay	$750 Copay
MRI	$500 Copay	$750 Copay	$750 Copay
Pet Scan	$500 Copay	$750 Copay	$750 Copay
ECG/EKG/EEG	Ded/Coins	Ded/Coins	Ded/Coins
Mammogram	Ded/Coins	Ded/Coins	Ded/Coins
Ultrasound	Ded/Coins	Ded/Coins	Ded/Coins
X-Ray and Diagnostic Imaging*	$30 Copay	$40 Copay	$40 Copay
Therapy			
Physical, Speech, Occupational	$65 Copay	$65 Copay	$110 Copay
Cardiac	Ded/Coins	Ded/Coins	Ded/Coins
IV/Infusion	Ded/Coins	Ded/Coins	Ded/Coins
Respiratory	Ded/Coins	Ded/Coins	Ded/Coins
Other Therapies (e.g., cardiac, respiratory)	Ded/Coins	Ded/Coins	Ded/Coins
Other Services			
Allergy Shots	Ded/Coins	Ded/Coins	Ded/Coins
Ambulance - Air/Water	Ded/Coins	Ded/Coins	Ded/Coins
Ambulance - Ground	Ded/Coins	Ded/Coins	Ded/Coins
Consultations	Ded/Coins	Ded/Coins	Ded/Coins
Dental	Ded/Coins	Ded/Coins	Ded/Coins
Dialysis	Ded/Coins	Ded/Coins	Ded/Coins
DME	Ded/Coins	Ded/Coins	Ded/Coins
Hearing Exam	Ded/Coins	Ded/Coins	Ded/Coins
Home Health	Ded/Coins	Ded/Coins	Ded/Coins
Injectable Drugs	Ded/Coins	Ded/Coins	Ded/Coins
Medical Supplies	Ded/Coins	Ded/Coins	Ded/Coins
Vision Exam	Ded/Coins	Ded/Coins	Ded/Coins
Emergency Room Visits	$500 Copay	$500 Copay	$500 Copay
Outpatient Hospital Surgical Services (facility and physician services combined)*	$500 Copay	$750 Copay	$750 Copay
ASC Surgical Services (facility and physician services combined)*	$500 Copay	$500 Copay	$500 Copay
Pharmacy	**Base Plan**	**V-BID X Plan**	**V-BID X Plan**
Generic Drugs	$15 Copay	$15 Copay	$15 Copay
Preferred Brand Drugs	$50 Copay	$75 Copay	$50 Copay
Non-Preferred Brand Drugs	$100 Copay	$175 Copay	$175 Copay
Hep C and Anti TNF Drugs (limited to $500 per script)	Ded/40% Coins	Ded/30% Coins**	Ded/30% Coins**
Specialty Drugs (limited to $500 per script)	Ded/40% Coins	Ded/40% Coins	Ded/40% Coins
Estimated Metal AV	70.91%	70.91%	70.91%
AV Relative to Base Plan	N/A	0.00%	0.00%

*Copay applies after the deductible has been fulfilled

**Drug costs limited to $375 per script to reduce member cost-sharing by 25%

Notes: the base plan AV does not take into consideration high-value services. The V-BID X plans account for both high-value services and the shown cost-sharing increases.

Appendix D – HCPCS, CPT, and RXCUI codes relevant to high- and low-value services

Please visit http://vbidcenter.org/initiatives/vbid-x/ to find a current list of codes.