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# Using the Minimum Value Calculator

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One provision of the Affordable Care Act (ACA) was to define minimum essential coverage for employer-sponsored insurance. In determining whether a benefit plan is complying with this provision, benefits must meet a minimum 60 percent actuarial value. The Minimum Value Calculator was created to test this condition by inputting the benefit designs into the model and then calculating an actuarial value. The concept of actuarial value in this context is defined as the portion of services covered by the benefit plan administrator for a standard population.

The Department of Health and Human Services (HHS) commissioned two variations of the same model. The version used in the small group and individual markets is known as the Actuarial Value Calculator. This article addresses using the Minimum Value Calculator version in the large group and administrative services only (ASO) markets and understanding some of the limitations of the calculator. Some of these limitations also impact the Actuarial Value Calculator (AVC). The implications of tool limitations are actually more material for the AVC because the outputs must hit a much smaller range of actuarial values in order to fit into each of the metal level designations. The Minimum Value Calculator is a pass/fail test where very few plans fail or come close to the 60 percent pass mark.

In August 2013, the American Academy of Actuaries published an exposure draft on the Minimum Value and Actuarial Value Determinations under the ACA.<sup>1</sup> This exposure draft, and any finalized practice note that may be adopted in response to the feedback, should be the actuary's primary source for determining what to consider in using the calculators when things don't quite fit. However, it is important to point out that practice notes are meant to aid the profession in understanding best practices, and are not binding as are actuarial standards of practice. It is possible an exposure draft on a standard of practice for the minimum value tool could be coming.

Before the practice note was available, a cloud of mystery surrounded some aspects of this tool. Obviously any beta version of the model was likely to have small issues. There were two versions of the model released. An initial version was released in

the late fall of 2012 with a final version at the end of February 2013. It was hinted by HHS a new version would be released; however, we were told no data would be changed until at least 2015.

As in any model, there are only so many things the tool can handle and there is a balance between simplicity and flexibility. We will discuss the tool's limitations and offer solutions on how to address them. The exposure draft offers a much more detailed explanation of the development of the models.

The tool was designed, as the name implies, to define whether a benefit plan meets the new Minimum Actuarial Value regulation. The calculator is not intended to be used as a pricing tool, as the unique geographical cost structure, likely provider practice patterns, membership demographics and induced demand treatment will not line up to what is needed for any given insurer or employer. As mentioned earlier, there are some input limitations. Obviously, designing a fully robust model requires a large number of inputs and data to support it. And no matter how robust those inputs were designed to be, there are marketing, consultants and employers who have already created, or will create, benefit designs that any model would have been unable to handle without some very specific actuarial judgment.

Below are examples of limitations of the model, along with ideas actuaries have developed to create special adjustments to address these limitations. Along with each limitation, I discuss possible solutions and/or implications of the problem. Alternate solutions may illuminate the differences in AVs that exist when special adjustments are developed by different individuals, and this discussion also touches upon whether benefit design features are material in relation to the purpose of the model.

To use the model, you should differentiate between benefit design features that can be handled by inputting a representative cost sharing number into the model, as compared to features that should be adjusted for after the model calculates an AV. We will also discuss some features that theoretically should impact the AV result much differently than the model suggests. For many of the features below, you can fairly represent the benefit as some weight-



ed average and input that weighted average expectation into the model. There are other items that fall out of the scope of what the model was designed to do and must be adjusted as a top-line or bottom-line adjustment, depending on your perspective.

The model values medical and pharmacy benefits together. Items that are medically related, versus pharmacy related, are separated out in the descriptions below on how to handle them. Some of the issues below are addressed in the practice note as well, as noted.

Changes in MV may be illogical as employer contribution approaches the full amount of the deductible. For example, an MV at 95 percent contribution may exceed the MV at 100 percent contribution.

Because of the utilization assumptions in the continuance table, contributions levels impact the increases or decreases in utilization, thereby increasing or decreasing total costs. In actuarial pricing, more employer contributions given a set benefit design will create a more expensive product. The logic causing the issue above seems to have the correct pricing impact but does not account for the purpose of the model, which is to determine what proportion of the benefit is covered by the employer and what portion is covered as cost sharing by the employee or dependent.

Actuaries familiar with pricing benefits know that very rich benefits cost more than leaner benefits because of increased utilization. This is not due to the fact that more benefits are being covered.

For purposes of meeting the minimum value, this is clearly immaterial since it is at the upper end of the AVs and therefore should be documented but not be a cause for further determination.

*Service-specific deductibles separate from the global deductible (for example, an inpatient deductible)*

In the past few years, carriers have introduced focused deductibles or deductibles that apply to only specific services. The purpose of these deductibles is to incent patients to seek out lower costing settings for care. For example, a carrier may use a deductible if the service is performed in a hospital, but that deductible is waived if the service is performed at an ambulatory surgical center or a comprehensive medical facility. The Minimum Value tool clearly does not have the required inputs to value this plan feature.

The model does allow you to use global deductibles for specific categories of services, such as emergency room or outpatient services. The academy's practice note and guidance from HHS state that the actuary can use his judgment in adjusting the global deductible in the model to reflect its partial application for different service settings. The actuary should document how this deductible adjustment was developed. Also, if the deductible applied is different by category of service, this may be problematic since the model only allows one deductible to be used for all medical services.

*Copays in conjunction with coinsurance (for example, \$250 + 10 percent)*

*Copays apply after the deductible (see practice note draft page 10)*

*Visit maximums (if material)*

*Stepping up copays (emergency room, for example)*

The authors of the model could not include all of the unique possible options to provide for all the possible combinations of benefits allowed in the market place and still make it a fairly simple model to use.

In stepping up copays for emergency room visits, actuaries can use their own past experience to determine the frequency of visits and weight each step of the copay. An actuary would then enter the average copay of the steps and enter that average into the tool. However, the continuance tables of the model should be consulted for the calibration because the calculation should be based on a standard population and not based on the carrier's experience. That said, there are instances where the underlying data for the tool does not provide sufficient detail to allow these one-off calculations and calibrations.

#### *Copays on outpatient services*

At my organization, this limitation came as a complete surprise. The explanation given for this omission is that the data source behind the model did not have the ability to split utilization for this category. The source data came from a preferred provider organization (PPO) network where claims were paid on a coinsurance basis. Therefore, there was no way to determine the value of a copay on outpatient services. In creating special adjustments, the actuary should estimate a coinsurance equivalent to the copay and use that value in the tool. It is a good idea for your organization to create a table that converts outpatient surgery copays into equivalent coinsurance amounts. Such a table should be built, or at least calibrated, upon the Minimum Value tool's standard population table. The exposure note covers this specific example on page 11 as example 1.

#### *Per script minimums and/or maximums*

##### *Preventive drug list*

##### *Mail order copay*

The section for prescription drugs is simplified over what is available in the market place. To differentiate themselves, carriers over the past few years have done a good job of determining new benefit tiers to use for prescriptions drugs. These varying benefit tiers also are important in steering usage to lower costing drugs and to limit selection exposure in the market place. The tool handles generics, preferred brands, nonpreferred brands and specialty drug benefit tiers. The tool also allows a unique pharmacy deductible to be applied, or not applied, to each of these categories.

The practice note discusses on page 11 how to handle minimum and maximum per script limits. The exposure draft suggests the data provided within the tool includes the average cost per script within each drug tier. However, the tool's data source does not capture the variety of costs that built up to the average cost per script, which is very important to consider when valuing minimum and maximum limits. Actuaries should be able to convert the cap or floor into a coinsurance or copay and therefore input into the model that way, but will likely need to seek their own pharmacy experience and think about calibrating that experience to the tool's pharmacy averages.

For both preventive drug lists, where the copays are low or zero, as well as for mail order copays, where a more generous (lower) multiple of the monthly copay is used for 90-day supply, a weighted copay or an adjusted coinsurance level can be used.

#### *Family tiering: family deductible and out-of-pocket (OOP) max (e.g., single 2x versus 3x)*

##### *Embedded vs. aggregate family deductible*

The data for the standard model was based on a single deductible and out of pocket applying to one member. The impact of a family limit was not considered. The practice note describes this further under example 3 on page 11. The note states that the data collected was under single claimants only. It goes on to suggest that actuaries interested in determining the impact of these family limits should use the underlying data and create an impact that is added/subtracted to the final AV calculation. This topic is described in more detail by Kristi Bohn in this same issue, but that article relates to the AVC for the small group and individual markets. Some actuaries believe that family design considerations is not a critical topic in relation to the Minimum Value calculations because the family aspects of affordability and benefits were taken off the table for the most part, and that the guidance focuses on the benefits offered to employees within the single contracts they are eligible to enroll in. Clarity from HHS on how family tiering and aggregate family deductibles fit in to Minimum Value regulations would be welcome.

*Different results for global coinsurance at 100 percent versus 99.9 percent*

*Coinsurance that is the same as the global coinsurance may yield different AVs*

*When there is no deductible, an integrated deductible can yield a different AV than using a separate deductible*

*Increasing the drug deductible can increase AV*

In some cases, actuaries are finding some of the results of the inputs are counterintuitive. The actuary should try to determine the impact of these benefit differences. If the answer is counterintuitive, then it is important to determine whether the issue is material to the task at hand. If it is something the model was not designed to do but can be translated into the inputs the model does accept, then do so.

There are certain limitations in the model. I am assuming the reader is familiar enough with Excel to realize that table look ups and continuance tables jump in a discrete manner from one value to another. In the real world, small changes in inputs should equal small changes in outputs. In reality, models do not interpolate between values in tables and therefore the jumps in values are much greater. The actuary should use sound judgment and not take advantage of these discrepancies. This issue is discussed at more length in the practice note. These discrepancies seem more troubling in cases where actuaries and nonactuaries are not working with the tool long enough to notice these issues. However, very often employer plans are generous enough (maybe more than 95 percent of the time) that these issues do not affect the ultimate pass/fail answer of the test. It is when plans are close to the 60 percent threshold that the tool's technical issues become worrisome.

*Tiered plans with cross-applicable deductibles and OOP maximums*

While the model does handle a multiple tiered product, the deductibles are assumed to apply to services within a tier. The actuary should use a deductible in each tier that is adjusted down for the impact of cross accumulation across tiers. The OOP maximum

would also be lowered in each tier to reflect the amount being spent in the other tier.

*Wellness incentives incorporated into plan design*

Wellness benefits may or may not impact the cost of the plan. Incentives that shift utilization and perhaps adjust the portion paid by the benefit administrator for an expected reduction in the total cost of the plan could not be used to adjust the AV.

After all this work, we may have been amused to figure out that a plan will always meet or exceed 60 percent as long as it's nongrandfathered and therefore compliant with the newly applicable IRS limits on deductibles and OOP maximums. It almost begged the question "what is the point?" This is the case for 2014 at least, and may have been coincidental, but it will be interesting to see how the tool's results and the IRS limits evolve through time.

The calculator is accessible to the public; folks from all areas are using it. This is potentially dangerous in light of the calculator's subjectivity on how inputs should be entered. Ask an actuary, an underwriter, an account manager and a broker what a plan's MV is, and you could get four different answers. As an actuary, you should be aware of potential areas where the benefit inputs may not adequately represent the actual benefit design. This will give you the opportunity to defend your answer in light of potentially different interpretations. ■

*I would like to thank James Chu, Kristi Bohn and Rebecca Katz for reviewing the article and suggesting items to discuss.*

#### END NOTES

<sup>1</sup> MV/AV Practice Note Work Group of the American Academy of Actuaries, "Minimum Value and Actuarial Value Determinations Under the Affordable Care Act," August 2013, [http://www.actuary.org/files/MVAV\\_exposure\\_draft\\_081213.pdf](http://www.actuary.org/files/MVAV_exposure_draft_081213.pdf).

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