Draft User Guide to the Proposed 2015 Actuarial Value Calculator

Introduction

The Actuarial Value Calculator (AV Calculator) is designed to give an estimate of network liability for a given plan design. This version of the AV Calculator uses data from a large national commercial database to build continuance tables by metal tier.

If you would like output tabs to be named with a custom prefix, please enter that prefix below (max 28 characters):

Data Properties

The AV Calculator uses 2010 claims and enrollment data from a national commercial database to provide information on utilization and cost-sharing for a standard population of enrollees. Because the database does not include plan benefit design information, the AV Calculator imputes cost-sharing parameters. To ensure that the imputation procedure can be applied effectively, plans with utilization data that are likely incomplete are excluded. Specifically, to be included, plans with more than 50 members must be Preferred Provider Organization (PPO)/Point of Service (POS) plans with positive drug enrollment in at least 1 month of a 12-month period, and plans with over 1,000 members must also have at least 1 claim with a maternity Diagnosis-Related Group (DRG). Moreover, all plans must have at least 1 member with over $5,000 in spending.

After imputing cost-sharing parameters, the Calculator applies additional logic to exclude the following implausible plan designs:

- Plans with zero spending for all enrollees
- Plans with imputed coinsurance rates that fall outside the range of 0-100%
- Plan-demographic group combinations with negative realized actuarial value
- Enrollees with unspecified sex

Ultimately, only utilization data from enrollees with at least 12 months of enrollment or newborns are used in the continuance tables to represent a consumer's view of the cost-sharing to expect in a full 12 months of eligibility.

The estimated actuarial value of individual plans is used to determine the metal tier continuance table in which the plans appear. The estimated Per Member Per Year (PMPY) cost of the following enrollee populations and services have been added to the continuance tables: Pre-Existing Condition Insurance Plan (PCIP), High Risk Pool (HRP), Pediatric Vision, and Pediatric Dental. In addition, skilled nursing facility (SNF) benefits for enrollees with below $10,000 total allowed charges have been omitted from the lower ranges of the continuance tables but left in the total PMPY benefit from $10,000 onwards. This data is then projected forward to 2014 values at a growth rate of 6.5% per year.

For additional details on the methodology used to construct the Calculator, please refer to the accompanying methodology document.

Usage

The AV Calculator enables users to select various plan design features and, based on those selections, estimate the network liability for the given design. Please note that any data entered into greyed-out boxes will not be included in the final calculation.

User Inputs for Plan Parameters

Use Integrated Medical and Drug Deductible

Select this option if the plan for which you are estimating AV has an integrated deductible for medical and drug spending.

Apply Inpatient Copay per Day and Apply Skilled Nursing Facility Copay per Day

Select these options if you would like copays to be applied per day for either inpatient or skilled nursing facility services.

Use Separate OOP Maximum for Medical and Drug Spending

Select this option to designate separate out-of-pocket (OOP) maximums for medical and drug spending. This option is only available if you do not select an integrated medical and drug deductible.

Indicate if Plan Meets CSR Standard

Select this option to determine whether the plan design satisfies the Affordable Care Act cost-sharing reduction (CSR) requirements. Below we provide guidance on which metal tier should be chosen to align with the expected utilization for each plan variation. Please note that the metal tier continuance tables below should be used regardless of any error message prompting the use of a different continuance table.

- Household Income of 100-150% FPL: Plan Variation AV of 94% using Platinum Continuance Table
- Household Income of 150-200% FPL: Plan Variation AV of 87% using Gold Continuance Table
- Household Income of 200-250% FPL: Plan Variation AV of 73% using Silver Continuance Table

Desired Metal Tier

Select the desired metal tier for the plan. If your plan design produces an estimate between metal tiers, please specify an alternative plan design.

HSA/HRA Options

The AV Calculator uses the continuance table for combined expenses to identify the average cost per enrollee at the annual HSA or HRA contribution amount. If the annual contribution amount falls between two spending thresholds in the continuance table, this amount is pro-rated and is included in the numerator. Next, the calculator identifies any plan-covered benefits obtained in the deductible stage and subtracts

them from the numerator, to avoid double-counting when these benefits are included in the numerator during the regular benefit calculation steps. At the conclusion of these steps, plan-covered expenses in the numerator include average costs at the annual HSA or HRA contribution amount less any plan-covered expenses in the deductible stage below the HSA or HRA contribution amount.

Narrow Network Options
Narrow network plans have multiple tiers of service whereby the course of care is steered towards coordinated resource use and treatment. Patients typically pay more cost-sharing in the non-preferred tier. To calculate the AV of a plan with “narrow” network utilization or point of service cost-sharing structure, enable the blended network option. This requires you to populate two cost-sharing designs for the general benefit portion (deductible, co-insurance and MOOP) and for service-level cost-sharing for each tier. In both cases, you must input the proportion of claims cost that is anticipated to be utilized in each tier. Please note that these proportions should add up to 100%. Note that when calculating CSR plan variations, these percentages cannot vary from the percentages used for the base silver plan.

Tier 1 Plan Design and Tier 2 Plan Design
Select the deductible, general coinsurance rate (for services that will not be “carved out”), and MOOP limit. Note that the MOOP should be greater than or equal to the deductible amount, but no greater than the annual MOOP limit. If you selected the OOP maximum separate option, include separate OOP maximums for drug expenses and medical expenses. Fill in these values for Tier 1 only, unless the plan is a blended network plan. In that case, fill out specifications for Tier 1 and Tier 2.

Options for Specific Benefit Types

Subject to Deductible and Copay, if separate
You can generate a variety of plan designs based on whether or not a service is "Subject to Deductible” and on the value entered into the “Copay, if Separate” field.

- If “Subject to Deductible” is selected, and no copay is entered, the cost of the service is covered by the enrollee and applied to the deductible at 100%.
- If “Subject to Deductible” is selected and a copay is entered, the enrollee pays both the copay and the remainder of the cost, with the latter counting towards the deductible.
- If “Subject to Deductible” is not selected, and no copay or coinsurance is entered, the service is assumed to be covered at 100% by the plan in the deductible range.
- If “Subject to Deductible” is not selected and a copay is entered, the cost of the service is covered by the plan except for the copay amount, which is covered by the enrollee.

- If “Subject to Deductible” is selected, “Copay applies only after the deductible” is selected, and a copay is entered, the cost of the service is covered by the enrollee and applied to the deductible at 100%. Once the deductible is met, then, the copay applies (Please note that to use this feature, "Subject to Deductible" must be selected while "Subject to Coinsurance" must not be).

Subject to Coinsurance and Coinsurance, if Different
If you designate a service as "Subject to Coinsurance" but do not enter a custom rate, the general coinsurance rate will be applied. Otherwise, the custom rate will be used. If “Subject to Coinsurance” is not selected, then the copay rate will determine the cost of that service in the coinsurance range.

Benefit Type Details

Primary Care and Specialist Office Visits
If special cost-sharing provisions are indicated for Primary Care and/or Specialist Office Visits, certain office visits will be split into their component parts only if those office visits include services that do not have special cost-sharing provisions (not having special cost-sharing provisions is defined as being Subject to Deductible and Subject to Coinsurance, with no special coinsurance rate and no copay). This is applicable to X-rays, and the component parts are Primary Care Office Visit and Specialist Office Visit. For example, if Primary Care office visits are not subject to the deductible and have a $20 copay, but X-rays are subject to the deductible and general coinsurance, a Primary Care office visit that includes an X-ray will be split into two services: a Primary Care office visit and an X-ray.

Outpatient - Facility and Outpatient – Professional Visits
If special cost-sharing provisions are indicated for Outpatient - Facility and/or Outpatient - Professional claims, certain services including both an Outpatient-Facility and Outpatient-Professional component will be split into their component parts if these services do not have special cost-sharing provisions. The services subject to this potential splitting into component parts are Mental/Behavioral Health and Substance Abuse Disorder Outpatient Services; Imaging; Rehabilitative Speech Therapy; Occupational Therapy and Physical Therapy; and Laboratory Outpatient and Professional Services. The component parts are Outpatient – Facility and Outpatient - Professional.

Drug Benefits
The AV calculator includes four tiers of drug utilization. Below follows a brief description of each of the four tiers.

- Generic drugs indicate drugs marketed under their official non-proprietary or chemical name.
- Preferred brand drugs indicate formulary drugs or drugs with preferential pricing marketed under a brand name.
- Non-preferred brand drugs indicate formulary drugs or drugs with non-preferential pricing marketed under a brand name.
- Specialty drugs indicate drugs used to treat complex or rare conditions, and often have unit costs above $500 per script.

Other Benefit Type Notes

- Prescription benefits cannot be subjected to a different co-insurance rate and a separate copay.
- Preventive care visits are defined as those services covered at 100%, per section 2713 of the Affordable Care Act.
- Well-baby preventive care visits are included in preventive care, per section 2713 of the Affordable Care Act.
- Well-baby non-preventive care visits are included in Primary Care.
- Emergency room services and all inpatient hospital services are aggregated at the stay level.
- Emergency room services and all inpatient hospital services include both physician and facility components.

Options for Additional Benefit Design Limits

Set a Maximum on Specialty Rx Coinsurance Payments
Select this option to limit the amount of coinsurance on specialty prescription drugs by capping the maximum coinsurance payment on specialty drugs at a set amount. Enter the maximum coinsurance payments for specialty prescription drugs.

Set a Maximum Number of Days for Charging an IP Copay
Select this option to limit the number of days that a patient can be charged a copay for an inpatient stay, if the option to charge inpatient stays by day is selected. Enter the maximum number of days.

Begin Primary Care Cost-Sharing After a Set Number of Visits
Select this option to begin primary care cost-sharing after a certain number of (fully covered) visits have occurred. Enter the maximum number of visits.

Begin Primary Care Deductible/Coinsurance After a Set Number of Copays
Select this option to begin subjecting primary care visits to the deductible or coinsurance rates only after a certain number of primary care visits with copay have occurred. Enter the maximum number of visits.

Final Step: Pressing the Calculate Button

Once all parameters are entered, pressing the calculate button will begin the calculation. If the metal tier that was indicated as the desired metal tier does not match the calculated actuarial value, you will be prompted to recalculate using the appropriate continuance tables. Note that it is possible to cycle back and forth “between” metal tiers.

Frequently Asked Questions

Q: *My plan has a deductible equal to the MOOP. What do I put in the coinsurance field?*
A: A coinsurance rate of 100% should be entered to calculate the AV of a plan whose deductible is equal to the MOOP.

Q: *How do I enter a typical drug benefit design, such as copays for the first three tiers and coinsurance for a specialty drug (e.g., $10/$20/$50/75%)?*
A: Deselect "Use Integrated Medical and Drug Deductible," set the drug deductible to a desired amount (often $0), and set the specialty coinsurance rate (75%) under the general drug coinsurance rate. Next, enter the copays ($10/$20/$50) in the appropriate fields in the Drug Benefit section, deselecting "Subject to Deductible" and "Subject to Coinsurance." Finally, select "Subject to Deductible" and "Subject to Coinsurance" for Specialty Drugs.

Q: *How do I specify a copay in the deductible range and a coinsurance rate in the coinsurance range for drug benefits?*
A: To prevent a misinterpretation of the results for drug benefits, a separate copay and coinsurance for prescription fields is not directly supported. However, a design with both a copay in the deductible range and a coinsurance in the coinsurance range is possible by following the typical benefit drug instructions, with the exception of selecting "Subject to Coinsurance" to apply the general coinsurance with copays.

Q: *How do I specify copays that should be paid in conjunction with coinsurance in the cost-sharing range?*
A: This feature is not supported at this time.

Q: *Changing copay and MOOP structure does not seem to affect AV by more than 0.1.*
A: Ensure that all appropriate "Subject to Deductible" and "Subject to Coinsurance" check boxes are selected.

Q: Why does my plan's AV not exactly match when I input the same cost-sharing in different ways?
A: In most cases, the AV calculator calculates the same cost sharing regardless of how you input the plan design, but in certain cases, you may find when comparing methods to input plan designs into the AV calculator that there may be fractional differences in the AV depending on the methodology being used. This slight variation in AVs is permitted as long as it is within the de minimis range defined by regulation.

Q: What if my plan design has unique features that do not fit the parameters of the AV calculator and there is a material difference?
A: Please refer to 45 CFR § 156.135(b). While it is anticipated that the vast majority of plans will be able to use the AV calculator, the exceptions process under § 156.135(b) should only be used in cases where the unique plan features would result in a material difference in the AV of the plan design.

Q: *How do I remove beneficiary cost-sharing from a given service?*
A: Deselect "Subject to Deductible" and "Subject to Coinsurance" for the service desired to have 0% beneficiary cost-sharing. For primary care and specialist office visit services, input 0 into the "Copays, if separate" cell in order to subject both the office visit and any X-ray or Diagnostic Imaging services performed in the office setting to 0% beneficiary cost-sharing. Leave this cell blank if the visit is to be exempt from beneficiary cost-sharing, but not the X-ray and Diagnostic Imaging services performed in it. For all other services, leave the "Copays, if separate" cell blank.

Q: *How do I remove coverage from a given service below MOOP?*
A: Select both "Subject to Deductible" and "Subject to Coinsurance," then input 0 in the "Coinsurance, if different" cell for the service desired to have 0% insurer cost-sharing.

Q: *Can cross-accumulation of deductibles between tiers work?*
A: The Calculator determines the single AVs associated with each individual tier plan benefit design and averages those AVs according to the input utilization weights. Though there is no specific cross-accumulation of deductibles algorithm between tiers, this weighted average can be interpreted as a cross-accumulation of deductibles.

Q: *How do I split service categories exclusively between two different tiers?*
A: The Calculator does not have this functionality explicitly built-in. An approximation may be arrived at by referring to the continuance tables and determining what percentage of the total PMPY benefit the exclusive categories constitute. This percentage can then be used to weight the two tiers of plan designs based on the split service when you input the other cost-sharing into the second tier.

Notes to Users

Nested deductibles are used in calculating plans with separate deductibles and combined MOOP
Whenever the user specifies a plan with separate deductibles but a combined MOOP, the Calculator will check whether it is necessary to "nest" the deductibles such that the deductible point is between the Medical and Drug indicated fields, but below the full deductible amount. When this algorithm is employed (for example, if the deductibles added together are greater than the indicated combined MOOP), any successful calculation will be accompanied by text indicating that the nesting feature has been engaged.

Effect of changing copays for inpatient hospital services, rehabilitative speech therapy, and SNF stays
Changing copays for services such as inpatient hospital services typically does not have a substantial effect on calculated actuarial value. There is relatively little use of these services below the MOOP in the underlying utilization data, so plan-covered spending is not greatly affected by changes in the amount of beneficiary cost-sharing.

Effect of service unit cost if less than copay
The AV Calculator compares average service cost at the specified level of spending to the copay when implementing this logic. Therefore, this operation affects the calculation only if the average service cost is less than the copay, even if the copay exceeds service cost for some individuals. For example, while most generic prescription costs are low and would therefore be less than the typical generic copay, average generic costs include some high-cost generics and may not exceed the copay.

Lack of copay option for outpatient
The national claims database does not include data on outpatient professional and facilities services at the stay level. Because copays are applied per stay, the Calculator cannot support the option to enter a copay for these services. Users may convert their copays into coinsurance amounts to input their plan design into the Calculator. Please note that this is not a substitute for copay benefits during the deductible phase and that this consideration should be taken into account when choosing a coinsurance amount for outpatient services.

The Calculator accepts 100% general coinsurance for copay based and non-copay based plans
The Calculator uses effective coinsurance to calculate the point at which maximum out-of-pocket spending is reached, allowing for a coinsurance of 100% to be specified for the general coinsurance in non-copay based plans.

When effective coinsurance equals 100%, MOOP is set equal to the deductible
If benefits are entered into the Calculator such that the effective coinsurance is equal to 100%, the Calculator sets the MOOP equal to the deductible for the purposes of the AV calculation since there is no independent coinsurance range.

Copays are not allowed to exceed service unit costs
For the purposes of the AV calculation, all copays are capped at the value of the service unit cost for the corresponding benefit.

Effective coinsurance impact dependent on final cost distribution
When calculating effective coinsurance, the overall PMPY quantities are used to calculate the level at which MOOP is hit. Services with relatively low utilization below the MOOP (e.g. inpatient hospital services) will have their copay benefits overshadowed by the impact that these copays have on the level that MOOP is hit.

Effects of the Drug Deductible on AV
Increasing the drug deductible under certain circumstances can result in increases in the AV due to the calculated level at which MOOP is hit and the interactions with copays and medical benefits. Although efforts have been made to evaluate plans with similar deductibles on equal footing with regards to the point at which MOOP is hit, the interaction of the drug deductible with medical benefits can result in counter-intuitive AV movements that may be accurate based on the impact of higher deductible on the calculated level of the MOOP limit of the plan design.

Operation of the Plan Design "Snapshot" Feature

Unless a custom prefix is specified in cell B6 of the User Guide, the AV Calculator inserts a tab named "Output[x]" each time the AV of a new benefit plan design is calculated. Because [x] resets with every session, the AV Calculator will produce an error if a new excel session is started and previous plan design tabs remain. To avoid this error from occurring, each session should be saved under a different workbook name and if reuse of a workbook is required, previous outputs should either deleted or renamed using a separate naming scheme.