

# Federal Calculator vs. ClearPATH

How does our actuarial value calculator compare to that provided by the federal government?

**CONTRIBUTION HEALTH**

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## Summary

Actuarial analysts at Contribution Health wanted to test the functionality of our actuarial value calculator, ClearPATH, by comparing it to the federal calculator. In order to show its validity, we performed the test below, using both calculators to evaluate several different plan designs. The results and conclusion are stated below.

## Background

In January 2016, the Centers for Medicare and Medicaid Services (CMS) released the Final 2017 Actuarial Value Calculator. In an effort to make the estimation of actuarial values more accessible to the public, actuarial analysts at Contribution Health developed freeactuarialvalue.com, which allows companies to enter plans into the website's actuarial value (AV) calculator and estimate their AV score for free. We used a public rate file prepared by UnitedHealthcare of Washington, Inc. on May 6, 2016 to compare the AV score estimated by the federal calculator to the value found using our calculator. We did this for nine unique plans, such as the one presented below.

### Federal calculator:

**User Inputs for Plan Parameters**

Use Integrated Medical and Drug Deductible?   
 Apply Inpatient Copay per Day?   
 Apply Skilled Nursing Facility Copay per Day?   
 Use Separate OOP Maximum for Medical and Drug Spending?   
 Indicate if Plan Meets CSR Standard?   
 Desired Metal Tier: Gold

	Tier 1 Plan Benefit Design		Tier 2 Plan Benefit Design	
	Medical	Drug	Medical	Drug
Deductible (\$)	\$500.00	\$0.00		
Coinsurance (% Insurer's Cost Share)	80.00%	100.00%		
OOP Maximum (\$)	\$5,000.00			
OOP Maximum if Separate (\$)				

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Type of Benefit	Tier 1				Tier 2				Tier 1	Tier 2
	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Subject to Deductible?	Subject to Coinsurance?	Coinsurance, if different	Copay, if separate	Copay applies only after deductible?	Copay applies only after deductible?
<b>Medical</b>	<input checked="" type="checkbox"/> All	<input type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Emergency Room Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
All Inpatient Hospital Services (inc. MHSA)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Primary Care Visit to Treat an Injury or Illness (exc. Preventive, and X-rays)	<input type="checkbox"/>	<input type="checkbox"/>		\$25.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialist Visit	<input type="checkbox"/>	<input type="checkbox"/>		\$50.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Mental/Behavioral Health and Substance Abuse Disorder Outpatient Services	<input type="checkbox"/>	<input type="checkbox"/>		\$25.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Imaging (CT/PET Scans, MRIs)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Rehabilitative Speech Therapy	<input type="checkbox"/>	<input type="checkbox"/>		\$25.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Rehabilitative Occupational and Rehabilitative Physical Therapy	<input type="checkbox"/>	<input type="checkbox"/>		\$25.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preventive Care/Screening/Immunization	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>	100%	\$0.00	<input type="checkbox"/>	<input type="checkbox"/>
Laboratory Outpatient and Professional Services	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
X-rays and Diagnostic Imaging	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Skilled Nursing Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Facility Fee (e.g., Ambulatory Surgery Center)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Outpatient Surgery Physician/Surgical Services	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
<b>Drugs</b>	<input type="checkbox"/> All	<input type="checkbox"/> All			<input checked="" type="checkbox"/> All	<input checked="" type="checkbox"/> All			<input type="checkbox"/> All	<input type="checkbox"/> All
Generics	<input type="checkbox"/>	<input type="checkbox"/>		\$15.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Preferred Brand Drugs	<input type="checkbox"/>	<input type="checkbox"/>		\$35.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Non-Preferred Brand Drugs	<input type="checkbox"/>	<input type="checkbox"/>		\$65.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>
Specialty Drugs (i.e. high-cost)	<input type="checkbox"/>	<input type="checkbox"/>		\$250.00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>

**Options for Additional Benefit Design Limits:**

Set a Maximum on Specialty Rx Coinsurance Payments?   
 Specialty Rx Coinsurance Maximum: \$0

Set a Maximum Number of Days for Charging an IP Copay?   
 # Days (1-10):

Begin Primary Care Cost-Sharing After a Set Number of Visits?   
 # Visits (1-10):

Begin Primary Care Deductible/Coinsurance After a Set Number of Copays?   
 # Copays (1-10):

**Plan Description:**  
 Name: [Input Plan Name]  
 Plan HIOS ID: [Input Plan HIOS ID]  
 Issuer HIOS ID: [Input Issuer HIOS ID]

**Output**

Calculate

Status/Error Messages: Calculation Successful.  
 Actuarial Value: 81.92%  
 Metal Tier: Gold

Customize the Plan Save the Plan

Plan ID: 1844 Plan Type: 3 Group ID: 822 Last Modified: 6/6/2016 10:30 AM

Step 1: Add a Plan Description

Step 2: Complete the Plan Design in the Form (below). Use the Clone (From) button to populate this plan from another plan to accelerate your efforts.

Step 3:  Actuarial Value **83.1%**

Step 4:  HRA Value **.0%**

### Overall Plan Deductibles and Cost Sharing Features

In Network

Individual Deductible	500	<input checked="" type="checkbox"/>	Apply to Medical Only (unchecked = Applies to Med & Rx)
Family Deductible	1000	<input checked="" type="checkbox"/>	Traditional Deductible (unchecked = Aggregate)
CoInsurance	80		Individual pays: 20% of the next \$22,500.00
Individual Out Of Pocket Limit	5000	<input checked="" type="checkbox"/>	Does OOP include copays? Out of Pocket Limit includes a \$500 Deductible
Family Out Of Pocket Limit	10000		If Medical Deductible is 'Aggregate' (unchecked), Family Out Of Pocket will be handled as Aggregate.

Specific Deductibles or CoPayments	Pharmacy	Per Pregnancy Deductible	In-Patient Hospital (per admission)	In-Patient MH (per admission)	In-Patient SA (per admission)
	0	0	0	0	0

These deductibles only apply once (or per admission).

HSA/HRA Calculator	Include HRA?	HRA/HSA Amount (Med and Rx Ded Only)	Start	Stop	Percent	<input type="button" value="Save HRA Options"/>
	<input type="checkbox"/>	0	0	0	0	

### Specific Coverage and Cost Sharing for Services

Service Category	Service	Subject to Deductible?	Subject to CoInsurance?	Co-Pay Amount	Co-Pay Frequency	Adj Factor	Active?
Office Visits or Clinic	Primary Care Visit Co-pay	<input type="checkbox"/>	<input type="checkbox"/>	25	Per Visit	1.00	<input checked="" type="checkbox"/>
	Specialist Visit Co-Pay	<input type="checkbox"/>	<input type="checkbox"/>	50	Per Visit	1.00	<input checked="" type="checkbox"/>
	Other Physician Visit Co-Pay	<input type="checkbox"/>	<input type="checkbox"/>	50	Per Visit	1.00	<input checked="" type="checkbox"/>
	Preventive Care/Screening	<input type="checkbox"/>	<input type="checkbox"/>	0	Per Visit	1.00	<input checked="" type="checkbox"/>
	Mammograms	<input type="checkbox"/>	<input type="checkbox"/>	0	Per Test	1.00	<input checked="" type="checkbox"/>
Testing and Lab	Diagnostic Tests (x-ray, blood work)	<input type="checkbox"/>	<input type="checkbox"/>	0	Per Test	1.00	<input checked="" type="checkbox"/>
	Imaging (CT/PET Scans, MRI's)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	Per Test	1.00	<input checked="" type="checkbox"/>
Prescription Drugs	Generic	<input type="checkbox"/>	<input type="checkbox"/>	15	Rx CoInsurance	1.00	<input checked="" type="checkbox"/>
	Brand	<input type="checkbox"/>	<input type="checkbox"/>	35	Max Co-Pay	1.00	<input checked="" type="checkbox"/>
	Brand Non-formulary	<input type="checkbox"/>	<input type="checkbox"/>	70		1.00	<input checked="" type="checkbox"/>
	Specialty Drugs	<input type="checkbox"/>	<input type="checkbox"/>	250		1.00	<input checked="" type="checkbox"/>
Outpatient Surgery	Outpatient Surgery Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	Per Procedure	1.00	<input checked="" type="checkbox"/>
	Physician Surgery Fee	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	Per Procedure	1.00	<input checked="" type="checkbox"/>
Emergency Treatment	Emergency Room	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	Per Visit	1.00	<input checked="" type="checkbox"/>
	Emergency Medical Transportation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	Per Trip	1.00	<input checked="" type="checkbox"/>
	Urgent Care	<input type="checkbox"/>	<input type="checkbox"/>	50	Per Visit	1.00	<input checked="" type="checkbox"/>
Inpatient Hospital	Facility Fee	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	Per Day	1.00	<input checked="" type="checkbox"/>
	Physician/Surgery Fee	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	Per In-Patient Visit	1.00	<input checked="" type="checkbox"/>
Mental Health, Substance Abuse	Mental/Behavior Health Outpatient	<input type="checkbox"/>	<input type="checkbox"/>	25	Per Visit	1.00	<input checked="" type="checkbox"/>
	Mental/Behavior Health Inpatient	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	Per Day	1.00	<input checked="" type="checkbox"/>
	Substance Abuse Outpatient	<input type="checkbox"/>	<input type="checkbox"/>	25	Per Visit	1.00	<input checked="" type="checkbox"/>
	Substance Abuse Inpatient	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	Per Day	1.00	<input checked="" type="checkbox"/>
Pregnancy	Prenatal and Postnatal Care	<input type="checkbox"/>	<input type="checkbox"/>	25	Per Visit	1.00	<input checked="" type="checkbox"/>
	Delivery and all Inpatient	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	Per Day	1.00	<input checked="" type="checkbox"/>
Recovery or Other Special Health Needs	Home Health Care	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	Per Visit	1.00	<input checked="" type="checkbox"/>
	Rehabilitative Services	<input type="checkbox"/>	<input type="checkbox"/>	25	Per Visit	1.00	<input checked="" type="checkbox"/>
	Habilitative Services	<input type="checkbox"/>	<input type="checkbox"/>	25	Per Visit	1.00	<input checked="" type="checkbox"/>
	Skilled Nursing Care	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	Per Day	1.00	<input checked="" type="checkbox"/>
	Durable Medical Equipment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	Per Item	1.00	<input checked="" type="checkbox"/>
	Hospice Service	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	Per Day	1.00	<input checked="" type="checkbox"/>
Child Coverages	Eye Exam	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	Per Visit	1.00	<input checked="" type="checkbox"/>
	Glasses	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0	Per Pair	1.00	<input checked="" type="checkbox"/>
	Dental Check Up	<input type="checkbox"/>	<input type="checkbox"/>	0	Per Visit	1.00	<input checked="" type="checkbox"/>

## Results

The results of our tests are displayed in the table below:

Plan	Federal Value	Our Value	Difference
Gold Navigate 25/500/80	81.92%	83.10%	-1.18%
UHC Navigate Bronze 6500/100-2	61.05%	62.50%	-1.45%
UHC Navigate Silver 2500-2	71.86%	71.50%	0.36%
UHC Navigate Gold 1500-2	78.01%	77.80%	0.21%
UHC Navigate Silver 5000-3	68.03%	68.80%	-0.77%
Silver Navigate HSA 5500/70	71.55%	73.20%	-1.65%
Bronze Navigate HSA 5500/70	61.74%	60.60%	1.14%
UHC Navigate HSA Gold 2700-2	81.96%	83.20%	-1.24%
UHC Navigate HSA Silver 2700-2	69.10%	68.40%	0.70%

The distribution of the differences between the two values can be summarized as below:

<i>Data Summary of Differences</i>	
Mean	-0.43%
Standard Error	0.35%
Median	-0.77%
Standard Deviation	1.04%
Sample Variance	0.01%
Range	2.79%
Minimum	-1.65%
Maximum	1.14%
Count	9

## Conclusion

For each plan simulated, the value found using our calculator fell within two percentage points of the AV score estimated by the federal calculator. These results demonstrate the accuracy of ClearPATH, and they provide support for the validity and usefulness of the ClearPATH Actuarial Value Calculator.

### About [freeactuarialvalue.com](http://freeactuarialvalue.com)

We believe ClearPATH is the best Actuarial Value Calculator available for Administrator, Broker, and Employer use.

This tool is designed for ease of use with tracking and cataloging of all groups, plan design, and values. Brokers and others can use this to create a library of their entire book of business, help employers design an array of plans, benchmark plan values and generally gain advantage in the marketplace.

With amazing transparency, the black box details are revealed showing the value of deductible, coinsurance, and copays for each plan, and for each line of medical coverage. Our calculator is engineered to avoid the "counterintuitive results" that plague the federal calculator (This means our calculator moves in the right direction with any change in plan design. Sometimes the federal calculator gives counterintuitive results such as when an increase in copay raises the AV score).

Further, skinny plans are accurately calculated as categories of medical coverage are eliminated, another problem suffered by the federal calculator.

#### Features:

- Do deductible and coinsurance apply?
  - Deductible and coinsurance application can be chosen for all 33 rows of medical expense
- Cloning
  - After building a plan, a similar plan can be built by cloning the first plan and making a minor change.
- Summary results of AV score
  - A table summarizes the components of AV by the major categories of deductible, coinsurance, and copays. The value of any HRA is shown as well.
- Plan ID
  - Plan ID, description of plan, and user ID are all easily catalogued and identified on the output.
- Full details with print and export functionality
  - Our calculator shows line by line details of the entire AV score calculation, including values of deductible, coinsurance, and copays by category of coverage. Even number of copays per 1,000 members are shown for each line of medical expense. This is the only calculator available with such transparency.
  - Easy download and print utilities are included.

## ClearPATH Cost Modeling Projector

ClearPATH Cost Modeling Projector uses the Actuarial Value Calculator at the core of a long term modeling and ACA compliance tool. It is a dynamic HCR analysis and renewal modeling system that goes far beyond the first generation AV calculators:

- Full-featured Actuarial Value Calculator
- Dynamic Plan Design Modeling
- Long Term Planning Tool
- Play or Pay Modeling Tool

ClearPATH is SaaS, a cloud-based system designed as an ongoing solution for producers and their clients to conduct strategic planning during the annual renewal cycle, as well as navigating through the HCR maze each year.