

Health Insurance Marketplace Costs

Data.Healthcare.Gov [released](#) QHP cost information for various health care plans for states in the Federally-Facilitated and State-Partnership Marketplaces. The data is available in a variety of formats and lays out costs for various levels of health care plans (Gold, Silver, Bronze and Catastrophe) for different categories.

Premium Information

Premium amounts do not include tax credits that will lower premiums for the majority of those applying, specifically those with income up to 400 percent of the federal poverty level. The document shows premiums for the following example rating scenarios below:

- Adult Individual Age 27 = one adult age 27
- Adult Individual Age 50 = one adult age 50
- Family = two adults age 30, two children
- Single Parent Family = one adult age 30, two children
- Couple = two adults age 40, no children
- Child = one child any age

Cost Comparisons

Looking at the information, I wanted to do some comparisons across the various plans and rating scenarios to see where the highest costs were, what states had the largest [variance](#) and to look at the [standard deviation](#) across states/plans.

While I could have run this in Excel or R, I decided to write a simple Pig job to determine the maximum, minimum and average costs by plan for each state. I also then calculated the variance and standard deviations.

Initial Cost Analysis

There is a wide range in costs across the states with Virginia being consistently the highest average cost plan. Looking at the catastrophic costs, Virginia plans are five times (5x) more expensive than Kansas or Alabama.

For Gold plans, Virginia is again between two and three times (2-3X) more expensive to buy insurance.

Variance and Standard Deviation

It comes as no surprise that Virginia has the largest variance and standard deviation for the cost data by a large margin. Virginia's variance on the Gold plans is 2742 times that of Alabama. New Hampshire, Alaska, Delaware and Utah all have small variances and are consistent across the rating scenarios.

Again, Virginia's variance on the bronze plans are way out of balance compared to other states.

However, for a Platinum plan, has the ninth smallest variation across all rating scenarios. New Jersey, Michigan and Wisconsin have the largest variations.

Intelliwareness

Blog on Big Data, Data Analytics and Other IT

<http://www.intelliwareness.org>

Code and Data

The code and data is on [Github](#). If you have questions, you can reach me at dsfauth at gmail dot com.