

How do benefit changes drive Medicare Advantage enrollment?

A review of key enrollment drivers

Christopher S Kunkel, FSA, MAAA, PhD
Jordan Pettibon, ASA, MAAA



Everyone knows Medicare Advantage (MA) enrollees look at their options when choosing a plan. We analyzed what they look at most.

Medicare Advantage enrollees often choose their plans based on what shows up on the Medicare Plan Finder¹—premium, maximum out-of-pocket (MOOP), primary care physician (PCP) copay, etc.—but it's not clear how they might weigh different benefits when faced with uneven options. Using publically available MA plan data from the Centers for Medicare and Medicaid Services (CMS), consolidated in the Milliman MACVAT², we performed an analysis to understand how these benefits impact enrollment in Medicare Advantage general enrollment plans.

The benefits that matter

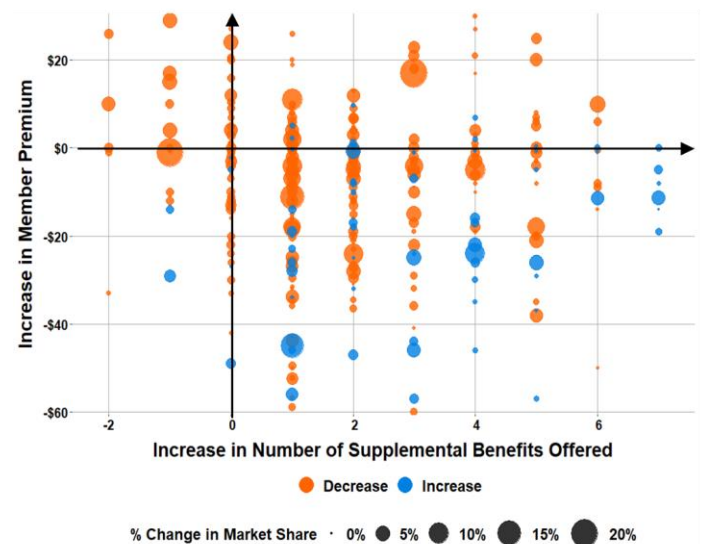
Consistent with conventional wisdom, we found that changes in member premium had the strongest predictive power of all variables we analyzed against plan market share changes year-to-year. PCP copay changes were a close second—on average, a \$5 copay change resulted in a change in total market share by about 0.5%. Both of these represent money directly leaving a member's pocket on a regular basis, so this should be no surprise to Medicare Advantage organizations (MAOs).

What may be surprising, however, is how strongly members care about supplemental benefits, even those outside of the common vision, dental, and hearing offerings. Several appeared as strong secondary indicators of market share improvement—or decline, for those plans that reduced member benefits. Adding two of these benefits has a market share impact similar to reducing member premiums by \$10.

We included several benefits not shown on the Medicare Plan Finder summaries in our modeling—these benefits are also related to growth in market share alongside the more visible enrollment drivers.

Figure 1 shows the average year-to-year change in plan enrollment based on changes to member premium and the number of supplemental benefits offered (excluding vision, dental, and hearing) for a general enrollment population. As expected, plans grow when premiums are reduced and more benefits are offered, and they shrink when the opposite occurs. It is important to note that the enrollment changes stemming from adding benefits are small compared to those of lowering member premiums. Implementing both changes at once is where the enrollment growth really kicks in, as shown in the lower right quadrant of Figure 1.

FIGURE 1: MARKET SHARE IMPACT BASED ON BENEFIT CHANGES FOR NON-SNP PLANS



¹ The Medicare Plan Finder is available at <https://www.medicare.gov/plan-compare>.

² For more information about the Milliman Medicare Advantage Competitive Value Added Tool (MACVAT), see <http://www.milliman.com/macvat/>.

³ Medicare Advantage and Part D general enrollment. Non-special needs plans (SNPs) enrollment from 2015 through 2019.

Modeling at a glance

Using public data from CMS (summarized from the Milliman MACVAT), we calculated the annual market share within each county for each plan,³ and then determined the year-to-year change in market share. We modeled this change in market share versus the change in several major benefits, all of which are visible to members via the Medicare Plan Finder website.

Supplemental benefits were grouped into vision, dental, hearing, and other services, with the last defined as the number of common supplemental benefits offered, such as fitness and nonemergency transportation. Cost sharing for these benefits was not considered, only the presence or absence of coverage.

Modeling was done using R, an open-source statistical language often used for data analysis. We tested several regression models, and ultimately settled on a linear model, as it produced the best fit. Predictive analytics techniques including stepwise processing and penalized regressions were used to narrow down the list of benefits for final modeling. After that, we considered various scaling and normalizing transformations, and settled on a simple scaling method with no transforms. While models with transforms slightly outperformed those without, we determined the trade-off of complexity and interpretability was too great, as these transforms muddy the waters when trying to estimate the impact of a simple benefit change (e.g., a \$10 premium decrease).

Final thoughts

While most of the key benefit drivers of enrollment appear in the basic summaries on Medicare Plan Finder, it is still important for MAOs to consider those that do not. In our analysis, we found that members' behavior is related to benefits that appear on the more detailed plan summaries and they take into account more than what they initially see when selecting a plan. While the impact of these benefits on enrollment is not as strong as the impact of the primary driver benefits (PCP copay, out-of-pocket maximum, etc.), MAOs should be aware of the effect of changing other benefits when trying to optimize the most visible ones.



Milliman is among the world's largest providers of actuarial and related products and services. The firm has consulting practices in life insurance and financial services, property & casualty insurance, healthcare, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

milliman.com

CONTACT

Christopher S Kunkel
chris.kunkel@milliman.com

Jordan Pettibon
jordan.pettibon@milliman.com