Medicare plan selection: Pharmacy costs alone are not enough

Consider all the costs when selecting plans

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Medicare beneficiaries are best served when total out-of-pocket costs are transparent and easy to understand.

While the Medicare market continues to grow,[1] competitive pressures are forcing insurance carriers and brokers to differentiate themselves. Insurance carriers continue to optimize their benefits to remain attractive while brokers increasingly focus on quickly finding the ideal plan for an individual. The purpose of this paper is to identify and evaluate strategies for making plan selections.

Plan selection

There are many items to review when selecting an insurance product, and cost is a key consideration. Today, in the Medicare Advantage market, it is common to shop and compare plans[2] based solely on a beneficiary's current medications. This is because the task of estimating the future medical services needed by a beneficiary is complex and time consuming, and there is no widely accepted approach to accomplish it for individual consumers. We refer to this plan selection strategy— using current medications as a proxy for healthcare costs—as the "Standard" strategy.

One way to improve on this Standard strategy is to better predict a beneficiary's likely medical costs. This is the kind of problem that is well suited for automated tools and machine learning and can help generate intelligent plan recommendations. For the purposes of this analysis, we refer to this as the "Enhanced" plan selection strategy. We set out in this paper to compare these two selection strategies and determine which is more effective for selecting a plan that minimizes a member's out-of-pocket (OOP) costs.

Results

The Enhanced approach generates a 10% annual OOP cost reduction on average.

To illustrate why looking at pharmacy costs alone tells only a partial story, we used beneficiaries' pharmacy *and* medical claims and adjudicated them through nearly all Medicare programs and

plans (medical and prescription drug coverage) available in the beneficiary's area. This adjudication process included the consideration of all premiums and cost-sharing components to arrive at annual OOP cost estimates under four scenarios.

The "Optimal" plan reflects costs resulting from placing everyone in the best possible plan if we had perfect knowledge of their future healthcare services.

The Enhanced selection includes plans recommended by our process, which incorporates insights from estimated medical utilization in addition to estimated prescription drug utilization.

The Standard selection represents the lowest-cost plan options based solely on each member's prescription drug claims.

We also include performance based on random plan selections for each member to show the full range of possible outcomes when no strategy is employed for plan selection.

FIGURE 1:   ANNUAL COST FOR EACH SCENARIO

Figure 1 shows that ignoring medical costs in plan selection costs members an average of $141 a year.

Background

MEDICARE GROWTH

As the Baby Boomer generation continues to age in to Medicare, the overall market for Medicare plans continues to grow. Prior analysis shows growth in both Medicare Advantage (MA),

Prescription Drug Plans (PDP), and Medicare Supplement with a slight decline in Original Medicare. The MA line of business also shows plan availability sharply increasing over the last few years,[3] leading to an abundance of choice for beneficiaries. The downside of choice overload is the increasing complexity required for seniors to wade through all available plans.

FIGURE 2:   MA PLAN GROWTH

More Medicare Advantage plans are available in 2021 than in any other year
Number of Medicare Advantage plans generally available by plan type, 2010-2021
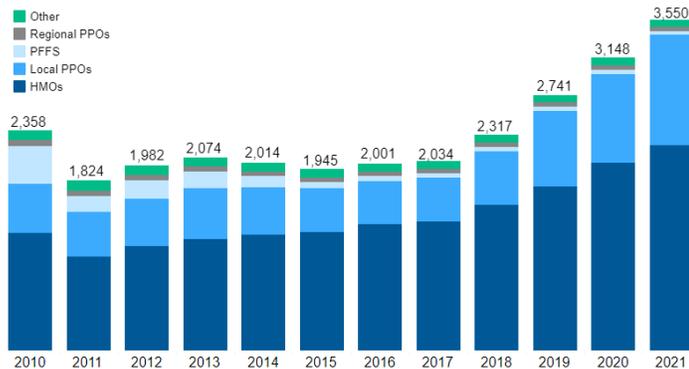
NOTE: Excludes SNPs, EGHPs, HCPPs, and PACE plans. Other category includes cost plans and Medicare MSAs. Numbers may differ from previous publications in cases where the Landscape File for the year was updated after initial publication.
SOURCE: KFF analysis of CMS's Landscape Files for 2010 – 2021.

BENEFICIARY SHOPPING JOURNEY

As part of the consumer Medicare plan shopping experience, carriers and brokers help beneficiaries understand their needs, evaluate solutions, and ultimately select an insurance product. Providing cost estimates remains a key component of the shopper journey.

FIGURE 3:   TYPICAL SHOPPER JOURNEY

PRIOR ANALYSES

Existing literature demonstrates the factors that influence beneficiary shopping behavior. A summary of our findings is below:

- When choosing between Original Medicare and MA, large switching costs may result, potentially reducing the value to consumers.[4]

- Beneficiaries' enrollment decisions may be impaired when a larger set of plans is made available. Simplifying choices could improve their enrollment decisions.[5]

- A sizable portion of consumers selecting plans are not optimizing effectively.[6,7,8]

- Providing personalized expert recommendations can help people more effectively choose a plan.[9]

A RENEWED SHOPPING EXPERIENCE

Depending on the carrier, broker, and technology used, individuals face a diverse set of experiences. Some brokers and tools may only focus on premiums for the available Medicare plans. Others may only focus on premiums and drug cost estimates due to the perceived predictability of these OOP expenses. The latest generation of plan evaluation solutions now include medical cost estimates along with premiums and estimated drug costs, and additional attributes to help the individual make the most fully informed and optimal decision possible.

A new approach

The intent of this new approach is to help brokers, carriers, and individuals better match their health status and health claims history to the right Medicare product and plan. This is possible by using newer application programming interface (API)-first, cloud-based technologies which:

- Uses a variety of data sources to automatically pull a person's health claims history

- Incorporates the next generation of supervised learning algorithms and billions of data points to give deep insight into the next year's projected healthcare services and costs, and thus, better beneficiary OOP cost estimates

- Speeds up operations and makes plan selection more efficient for brokers and beneficiaries

Analysis

We observe that the recommended Enhanced selection strategy proves to be more optimal than the Standard method for every slice of data in our test sample. Our analysis shows there is no age, gender, or geography for which the recommended strategy fails to produce lower OOP cost plan selections.

FIGURE 4: RELATIVE COST REDUCTION OF ENHANCED SELECTION STRATEGY BY AGE AND GENDER
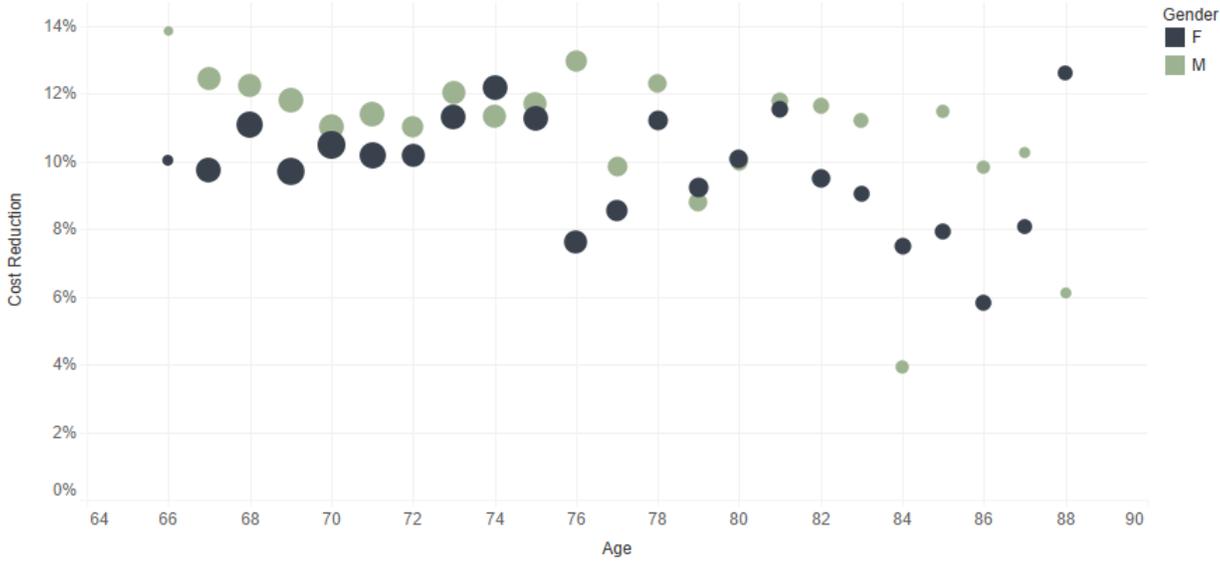
Overall, the Enhanced strategy reduces annual beneficiary costs by more than 10% over the Standard strategy.

FIGURE 5: RELATIVE COST REDUCTION BY STATE FOR ENHANCED OVER STANDARD STRATEGY
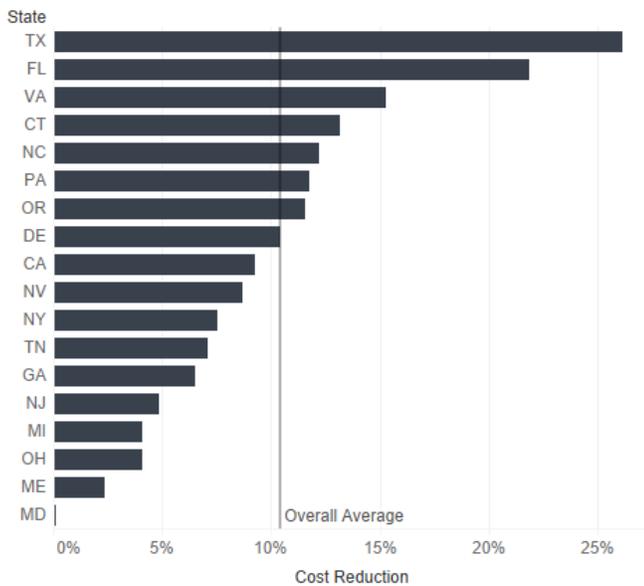
We see consistent cost reduction in the Enhanced strategy over the Standard strategy across all age and gender groups as shown in Figure 4.

Conclusion

Brokers and carriers should recognize the value in looking at medical costs when helping members with plan selection.

Ignoring medical costs and focusing exclusively on pharmacy claims does a disservice to the member in the process of trying to minimize expected OOP costs. Newer approaches use a person's whole health claims history to arrive at better cost estimates, making better use of time and a better customer experience for the beneficiary.

Many factors play a role in plan selection including, but not limited to, the provider network, supplement benefits, income status, brand loyalty, and OOP costs. Plans are sticky,[6] matching health status to costs is challenging, and beneficiaries may not perfectly recall the providers they've seen or prescriptions they've filled over the last year. Using solutions that automatically retrieve an individual's claims data and leverage sophisticated algorithms to better estimate future costs can lead to improved customer satisfaction.

Methodology

DATA SOURCES

A Milliman research database, which contains annual enrollment and medical and pharmacy claims for millions of insured individuals covered by large employers, commercial, Medicare, and Medicaid carriers was used for this study. For the analysis, only Medicare claims were used.

INCLUSION/EXCLUSION CRITERIA

Quality indicators were used to identify valid claims and individuals. Individuals were required to have 24 months of coverage between January 2017 and December 2018. A total of 670,326 members met the inclusion criteria.

From this data, a test panel of 50,000 members was set aside in model training for the study. From this test panel, a total of 50 metropolitan statistical areas (MSAs) in the contiguous United States were randomly selected for analysis with more weight given to geographies with higher membership.

Geographies with fewer than 10 available Medicare Advantage Prescription Drug (MAPD) plans or fewer than 100 members were eliminated from the analysis.

A very small number of members with outlier costs (greater than six standard deviations from the mean) were removed. A total of 20,401 members were included in the final cost comparison.

OTHER CONSIDERATIONS

Activities, such as translating client problems to formal diagnoses (coding) and claims data, vary among payers and providers. Final costs may not represent the actual true and final costs.

For MAPD plans, only non-Special Needs Plans (SNPs) were considered.

For Medicare Supplement plans, premiums were based on national averages. Age, gender, and geographic adjustment factors were not considered in premiums.

MEDICARE PRODUCT TYPES

All members (and their medical and pharmacy claims) were evaluated through a set of different product types based on plans available in the 2020 plan year:

- MAPD: All plans available to a member in a geographic area (a single county)
- Original Medicare and PDP: Medicare Part A and B cost sharing paired with the PDP with the lowest estimated cost

- Medigap Plan F and PDP: A standard Plan F using national average premium, paired with the PDP with the lowest estimated cost
- Medigap Plan N and PDP: A standard Plan N using national average premium, paired with the PDP with the lowest estimated cost

SCENARIOS AND COMPARISONS

There were two main plan selection strategies we compared in this analysis. The Standard selection strategy only factors in prescription drug cost estimates (based on a recent year of utilization) and premiums. The Enhanced strategy adds predicted medical costs into the cost equation when identifying an optimal plan.

In order to analyze cost performance between these strategies, we simulated plan selections and cost outcomes using 2017 and 2018 claims for a block of test members, pulled from our proprietary research data sets. We first made a snapshot of each member's health history as of December 31, 2017. This snapshot was used to select a plan for each member under each selection strategy (Standard versus Enhanced).

Part D cost estimates were established by adjudicating each member's 2017 prescription drug claims as the basis for estimating future annual costs on a given plan.

For the Enhanced strategy, we established Medicare Parts A and B cost estimates using a common modeling framework and we have several models available for making medical cost predictions. For the purposes of this analysis, we used the model that contains only demographic and prescription drug utilization features (predictor variables). This approach allows us to demonstrate the ability to predict medical cost estimates, even if only drug utilization history is available for informing the plan selection process.

The 2018 claims data was set aside to represent future actual claims for each of our test members. We took each member's 2018 medical and prescription drug claims and adjudicated them against all plans available in the member's assigned county. This cost matrix allowed us to determine actual costs for any given plan a member might enroll in during a simulated future benefit year.

Endnotes

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