

MAKING  
**CAHPS**  
Transparent  
& Actionable



---

## INTRODUCTION:

# Impacting CAHPS at the Member Level

### The Challenge of CAHPS

Given the anonymized nature of the CMS survey process, CAHPS measures are among the most challenging measures to improve. We do not know who was targeted for the CAHPS survey last year, who responded, or how they responded. The same is true for this year - we do not know who will be surveyed, who will respond or how they will respond.

This is in stark contrast to some of the traditional health care measures (such as HEDIS or Medication Adherence). In these traditional measures, we have the necessary transparency to initiate action. At any point in time in the year, we know which members have open gaps (for HEDIS) and are non-adherent with their medications. Clearly, there are challenges with these measures. Not only does claims lag make it difficult to assess timely results, convincing a member to get a screening or to fill their medications requires creativity and skill. That said, the inherent transparency of these measures enables us to take action on the right members.

**This is not the case for CAHPS.** Given the importance of achieving Star success, it is critical for healthcare organizations to be able to understand CAHPS at a member level. To make a real impact, we need to discover which members will rate their experience poorly and take appropriate action.

### Taking Action

Sustainable improvements in CAHPS starts with being a high-quality plan with excellent access to care and processes to promote engagement and satisfaction. Yet even the highest quality plans have challenges because CAHPS is very dependent on the competitive nature of the market, and the demographic, socio-economic, utilization, and disease profile of the population. Impacting CAHPS needs more than institutional excellence. To truly impact CAHPS systemically we need to:

- Understand who is responding negatively (and positively) to CAHPS
- Predict who will likely respond negatively to CAHPS
- Predict who will likely respond to the CAHPS survey (if they are targeted)
- Determine a meaningful action plan to change survey response patterns



# The Importance of CAHPS

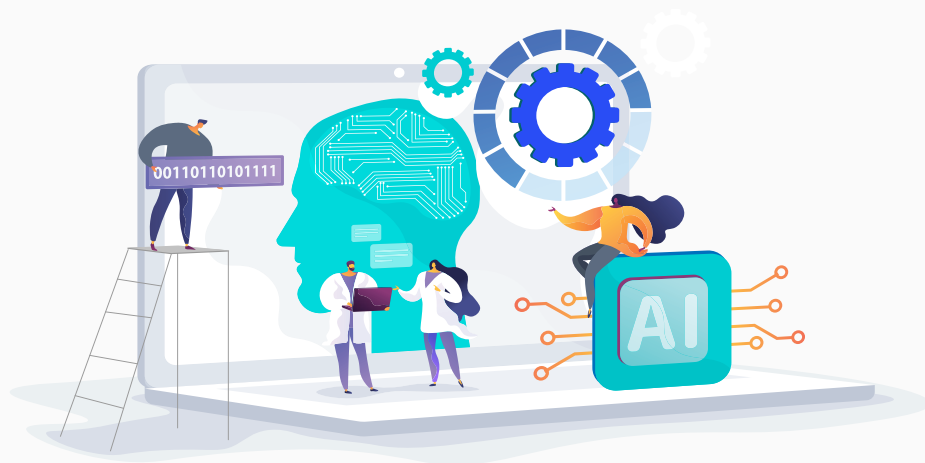
As many of us are aware, CMS is increasing the weighting of the CAHPS measures for its Medicare Star program. By 2023, the CAHPS measure grouping will be the single most important measure grouping for all of Medicare Star - CAHPS will account for 32% of Stars (contrasted with HEDIS which will account for 15% of Star and HOS which will account for 9% of Star). In fact, if CAHPS is grouped with all the Star member experience measures (such as members choosing to leave the plan and others), member experience as a group will account for 54% of Star. It is safe to say that plans that fail at member experience do not have a path of achieving or maintaining 4 or 5 Stars.

Even more critical than the weighting updates is the fact that CAHPS is correlated with every other Star measure. For example, members that are negative CAHPS responders are:

- **Twice as likely** to respond negatively to the HOS survey
- Are **three times more likely** to have an avoidable admission if they have a chronic condition
- Are **two times more likely** to have an avoidable ED event if they have a chronic condition
- Are **15%** less adherent
- Are **25%** less likely to visit their doctor if they have a chronic condition
- Are **33%** more likely to disenroll from the plan voluntarily

Member satisfaction impacts all critical health plan measures. Impacting CAHPS at the member-level will not only result in improved CAHPS ratings but also a noticeable improvement across other measures of importance.





## Predicting CAHPS Behavior

Decision Point recommends leveraging machine learning and artificial intelligence to identify the likelihood of negative CAHPS responses for every member in the plan and for each CAHPS question. This makes CAHPS actionable and transparent since it provides line-of-sight into every plan member's likely CAHPS response.

## Profiling Members & Machine Learning

The first step in creating a member-centric CAHPS improvement strategy is identifying and profiling members that are likely negative CAHPS respondents. On the surface, this does not seem feasible since it would require knowledge of each member's future survey responses. Leveraging machine learning and artificial intelligence (ML & AI) on "mock" or "simulated" CAHPS surveys enable healthcare organizations to profile and predict each member's likely CAHPS response. Like fingerprint recognition or facial recognition, ML and AI are pattern recognition technologies that enable the identification of members that exhibit similar behavior to negative CAHPS responders. Additionally, ML and AI enable healthcare organization to predict who will likely respond to the CAHPS survey if they are targeted for the survey. This helps narrow the focus to members that are likely survey completers as well as ones that are likely negative CAHPS raters.

## Leveraging Simulated Surveys & Outside, Enriched Data Sources

Since the official CAHPS survey is anonymized at the member level, member responses cannot be profiled using this official survey. The most effective way to leverage ML and AI is by incorporating mock CAHPS survey data. With mock survey data, plans have the flexibility to ensure that the survey responses are available at an identified member-level which can subsequently be linked with enriched data sources (discussed below). The mock survey can also be shortened or modified to meet specific plan needs. For example, mock survey data can be linked with historical administrative data (claims and enrollment), HEDIS data, medication adherence results, lab results, and outside data sources such as consumer data and publicly available neighborhood level data in order to profile members across multiple dimensions. ML and AI work to learn member patterns from these enriched survey responses in order to identify these patterns in the broader population.



## No Mock CAHPS, No Problem

Decision Point's research and development database includes 2.5 million Medicare mock CAHPS survey respondents and 5 million Medicaid mock CAHPS survey respondents linked with enriched data sources that enable effective machine learning. Machine learning techniques are used to extrapolate the results of the mock survey to all members in the plan. Machine learning helps identify members that exhibit similar behavior to members responding negatively to the mock CAHPS survey. Decision Point uses an ensemble-based machine learning system that runs multiple types of machine learning models at the same time to identify and select the best performing model. Models can include various types such as neural networks, decision trees, random forest, bagging, and more which provides the breadth of modeling to achieve the best predictive accuracy.

## Data Enrichment

Decision Point recommends that the mock CAHPS survey response data be linked to all member data points available and then be enriched further to provide insights into how these members move through the health system as well as the world. For example:

- Administrative data not only provides information on a member's disease history and utilization patterns, but it also provides information on household instability, fractured care, distance to doctor/pharmacy, out-of-pocket drug costs, proximity to the donut hole, provider switching, and so forth
- Consumer data (linked at the member level) provides information on living situation (living alone v. living with others), income, hobbies, credit cards, and more
- Public domain sources (such as Census and other data) provide neighborhood-level information on public transport availability, walkability, air quality, food deserts, and more

---

# Member-Centric CAHPS Improvement Approaches

## “Just-in-Time” and “Integrated” Member Outreaches

There is no “wrong” way to use ML and AI-based CAHPS risk scores, however Decision Point recommends the following 2 approaches to yield sustained CAHPS improvement:

### “JUST-IN-TIME” CAHPS OUTREACHES

These outreaches usually occur in the January through March timeframe (right before the official CAHPS survey goes out in March).

- Target members that are likely negative CAHPS responders and who are likely to respond to the official CAHPS survey (if targeted). The intent of the outreach depends on the member’s needs. The focus should span engaging unengaged members, identifying and lifting barriers to satisfaction, along with educating engaged members. The most effective outreach is usually in the form of a live call, though email and IVR can provide some success.
- Target members that are likely positive responders. The intent of this outreach is similar to a political “get out the vote” campaign, where the goal is to encourage positive responders to respond to the survey if they are targeted.

### INTEGRATED CAHPS OUTREACH

As described in the next section, CAHPS impacts virtually all measures. Members with multiple CAHPS issues are more likely to disenroll, have HEDIS open gaps, be non-adherent with their medications and have HOS issues.

- Decision Point recommends weaving CAHPS into all member touch points to work toward becoming a CAHPS-centric organization. Member outreaches for Voluntary Disenrollment, Medication Adherence, HEDIS gap closure, and HOS can all be leveraged to incorporate CAHPS improvement.



---

# Optimizing Member Selection for Outreach

Regardless of the approach or approaches to member outreach selected by the plan, the precise selection of individual members for outreach is critical to the project's success. Member selection should be based on:

## YOUR CAHPS GOALS

Are your goals to improve all CAHPS measures, or a selection of measures?  
How much improvement are you seeking? 1%, 2%, 5%?

## YOUR MEMBER OUTREACH CHANNEL(S)

Member reach rates and impact rates are critical inputs into deciding how many members are selected for pre-CAHPS outreach. Different channels yield different rates for both reach and impact.

## PREDICTIVE MODEL ACCURACY

The precision of the model in determining likely negative CAHPS raters is key in determining how many members are selected for outreach: a model that yields a 75% accuracy rate will require less volume for outreach than a model that yields a 30% accuracy rate.

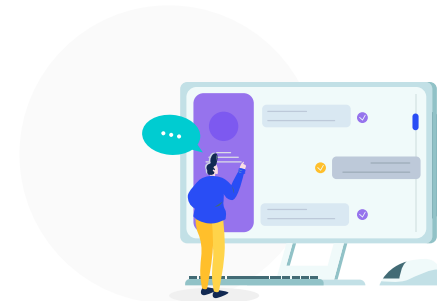
## THE NUMBER OF CAHPS ISSUES FOR THE MEMBER

Members could be at risk for up to 8 member experience CAHPS measures. Members with multiple issues should be prioritized if they are potentially struggling with multiple issues.

## LIKELIHOOD OF RESPONDING TO THE CAHPS SURVEY

Some members may have significant CAHPS issues, but are unlikely to respond to the survey (if targeted), while others are highly likely to respond. Optimizing member outreach that balances the member's CAHPS issues with their likelihood of responding to the survey creates more efficient outreaches to impact performance.

Decision Point uses all factors noted above to optimize member selection for outreach to impact CAHPS.



# Profiles of CAHPS Negative Responders

Whenever members groups are profiled and generalizations are made about the member grouping, it is important to keep in mind that not all members fit into a single profile. That said, member segmentation is important because it provides the health care organization with information regarding the overarching drivers of behavior which further enables more personalized outreach.

## ACCESS ISSUES: Negative Responders for Access-Related CAHPS Questions

Negative CAHPS access survey respondents fall into the category of “engaged but unfulfilled” and generally have the following characteristics:

- Identified markers of health literacy
- Relatively engaged with the PCP and specialists
- Higher percentage of PCP switching
- High avoidable utilization rates (avoidable admission and ED rates) for sicker members
- Low HEDIS and medication adherence rates

## PLAN ISSUES: Negative Responders for Plan-Related CAHPS Questions

Negative CAHPS plan survey respondents fall into the category of “unengaged and not benefiting” and generally have the following characteristics:

- Lower engagement with their PCPs and specialists
- Predominantly male
- Relatively new to the plan (under 36 months)
- Present as healthier (lower prevalence of chronic conditions)

## PROVIDER ISSUES: Negative Responders for Provider-Related CAHPS Questions

Negative CAHPS provider survey respondents fall into the category of “connected but not benefiting” and generally have the following characteristics:

- Significant percentage of members under the age of 65
- High prescription fill rates
- High avoidable utilization rates (avoidable admission and ED rates) for sicker members
- Lower primary care engagement



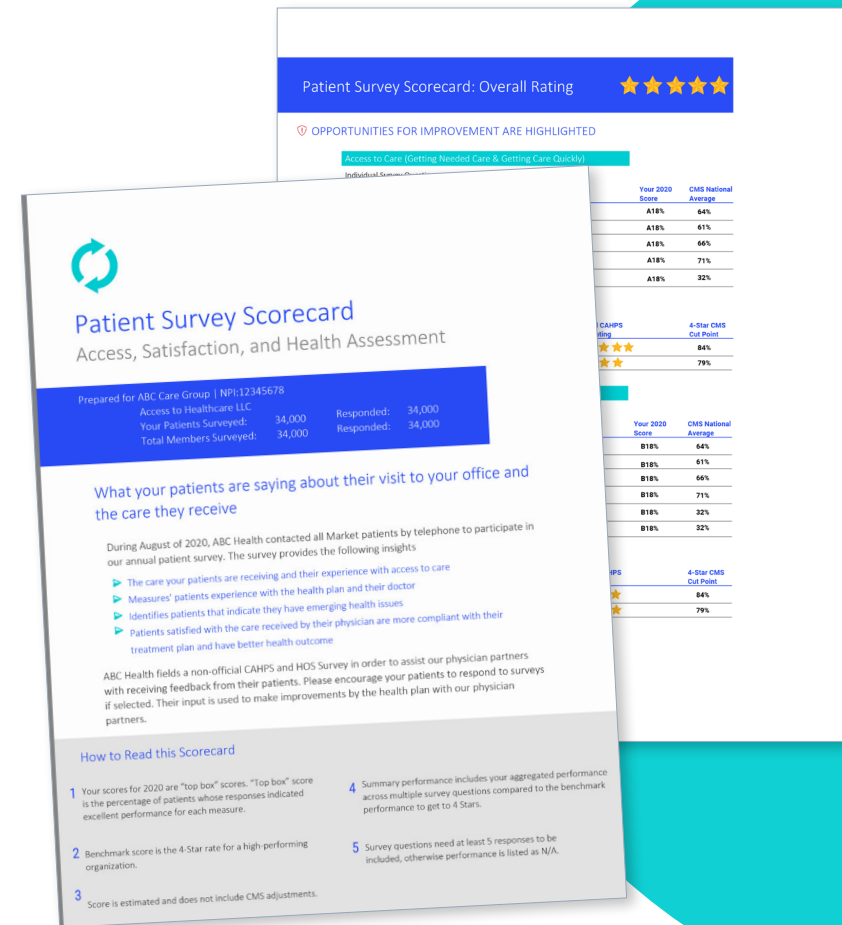


# Provider-Centric CAHPS Improvement Approaches

Though member-centric outreaches are very effective in improving CAHPS, sustained year-over-year improvement in CAHPS also requires provider engagement. For some of the CAHPS measures (care coordination and getting appointments quickly, for example) providers are in the best position to impact performance across these measures.

Decision Point recommends delivering a CAHPS scorecard to providers to enable providers to gauge their performance across various CAHPS measures and also compare their performance to other providers and CMS benchmarks. The data seeding these scorecards can be a combination of mock survey responses and machine learning-based predictive analytics. Since sometimes plans have a difficult time generating the mock CAHPS response volume required to seed these scorecards, predictive analytics can help fill the gaps and offer the provider a more robust view of their CAHPS performance.

For it to be the most effective, the content of the CAHPS scorecards must not only include CAHPS performance, but also objective metrics to help the provider understand the correlation of CAHPS performance with other metrics (such as HEDIS, avoidable utilization, HOS, and medication adherence).





---

## Measuring Outcomes

Based on Decision Point's experience, targeting the right members and taking action on high-risk CAHPS members can yield an average of one Medicare Star improvement across 5 of 8 CAHPS member experience measures annually.

Since the official CAHPS survey is an anonymous survey, a direct correlation between action and actual CAHPS outcomes is not possible. Decision Point recommends measuring outcomes using the subsequent year mock CAHPS survey by comparing the mock survey performance of members who were outreached in the pre-CAHPS outreach (see Member-Centric CAHPS Improvement Approaches section, above) to a control group that is made up of members with the same CAHPS risk composition.

---

Interested in improving  
your CAHPS ratings?  
We'd love to chat with you.

You can reach us at [inquiries@decisionpointhealth.com](mailto:inquiries@decisionpointhealth.com)

