Medicare 2019 Part C & D Star Ratings Technical Notes

Updated – 03/21/2019

Document Change Log

Previous Version	Description of Change	Revision Date
	Final 2018 Part C & D Star Ratings Technical Notes, fall release	09/28/2018
09/28/2018	C30 / D05: Updated voluntary disenrollment measure calculations to exclude moves out of service area which did not use DRC 92 by excluding from the numerator disenrollees for which the new contract service area does not overlap with the old contract service area.	10/08/2018
09/28/2018	D10 – D12 updated general notes to describe how these measures are weighted when calculating higher level ratings for PR only contracts and when used in the improvement measure calculations	10/08/2018
10/08/2018	Removed extraneous text from table of contents under Attachment T sub-section 24	03/21/2019

OMB Approved Data Sources

The data collected for the Part C & D Star Ratings come from a variety of different data sources approved under the following Office of Management and Budget (OMB) Paperwork Reduction Act numbers

Data Source	OMB Number
Consumer Assessment of Healthcare Providers and Systems (CAHPS) Surveys	0938-0732
Health Outcomes Survey (HOS)	0938-0701
Healthcare Effectiveness Data and Information Set (HEDIS)	0938-1028
Part C Reporting Requirements	0938-1054
Part D Reporting Requirements	0938-0992
Data Validation of Part C/D Reporting Requirements data	0938-1115

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Introduction

CMS created the Part C & D Star Ratings to provide quality and performance information to Medicare beneficiaries to assist them in choosing their health and drug services during the annual fall open enrollment period. We refer to them as the '2019 Medicare Part C & D Star Ratings' because they are posted prior to the 2019 open enrollment period.

This document describes the methodology for creating the Part C & D Star Ratings displayed on the Medicare Plan Finder (MPF) at http://www.medicare.gov/ and posted on the CMS website at http://go.cms.gov/partcanddstarratings. A Glossary of Terms used in this document can be found in Attachment S.

The Star Ratings data are also displayed in the Health Plan Management System (HPMS). In the HPMS the data can be found by selecting: "Quality and Performance," then "Performance Metrics," then "Star Ratings and Display Measures," then "Star Ratings," and "2019" for the report period. See Attachment T: Health Plan Management System Module Reference for descriptions of the HPMS pages.

The Star Ratings Program is consistent with CMS' Quality Strategy of optimizing health outcomes by improving quality and transforming the health care system. The CMS Quality Strategy goals reflect the six priorities set out in the National Quality Strategy. These priorities include: safety, person- and caregiver-centered experience and outcomes, care coordination, clinical care, population/community health, and efficiency and cost reduction. The Star Ratings include measures applying to the following five broad categories:

1. Outcomes: Outcome measures reflect improvements in a beneficiary's health and are central to assessing quality of care.
2. Intermediate outcomes: Intermediate outcome measures reflect actions taken which can assist in improving a beneficiary's health status. Controlling Blood Pressure is an example of an intermediate outcome measure where the related outcome of interest would be better health status for beneficiaries with hypertension.
3. Patient experience: Patient experience measures reflect beneficiaries' perspectives of the care they received.
4. Access: Access measures reflect processes and issues that could create barriers to receiving needed care. Plan Makes Timely Decisions about Appeals is an example of an access measure.
5. Process: Process measures capture the health care services provided to beneficiaries which can assist in maintaining, monitoring, or improving their health status.

Differences between the 2018 Star Ratings and 2019 Star Ratings

There have been several changes between the 2018 Star Ratings and the 2019 Star Ratings. This section provides a synopsis of the notable differences; the reader should examine the entire document for full details about the 2019 Star Ratings. A table with the complete history of measures used in the Star Ratings can be found in Attachment J.

1. Changes
    a. Part C & D measures: C30/D05 – Members Choosing to Leave the Plan – added exclusions for plan benefit package (PBP) service area reductions (SARs) that result in the unavailability of PBPs that the enrollee is eligible to move to within the contract. The specific exclusions added are:
        i. The area reduced is part of non-Special Need Plan (SNP) PBPs and the only PBPs remaining in the contract that cover the area are SNP PBPs.
        ii. The area reduced is part of a SNP PBP and there are no non-SNP PBPs or another SNP PBP within the contract of the same SNP type that cover the area.
        iii. Cost contract disenrollments into the transition MA contract (H contract) will be excluded from the calculation of the cost contract disenrollment rate.

b. Part C measure: C31 – Health Plan Quality Improvement: added the following two-year Part C measures to the measure calculation.
    i. C19 – Improving Bladder Control
    ii. C20 – Medication Reconciliation Post-Discharge
    iii. C24 – Getting Appointments and Care Quickly
    iv. C25 – Customer Service
    v. C28 – Care Coordination
c. Part D measures: D10, D11 & D12 – Medication Adherence of Diabetes Medications, Hypertension (RAS antagonists), and Cholesterol (Statins):
    i. Excluded beneficiaries with ESRD per the PQA measures specifications for Hypertension and Diabetes Medications measures.
    ii. Days of discharge counted in the proportion of days covered (PDC) adjustment in all Adherence measures.

2. Additions
    a. Part C measure: C22 – Statin Therapy for Patients with Cardiovascular Disease.
    b. Part D measure: D14 – Statin Use in Persons with Diabetes (SUPD).
    c. Implemented scaled reductions in Part C & D appeal measures. Information on how the scaled reductions are applied to the appeals measures can be found in the section "Scaled Reductions for the Appeals Measures". The methodology used to determine the magnitude of the reduction is documented in Attachment P.
    d. Implemented adjustments for contracts affected by major disasters. Information on how the data are handled for contracts affected by a major disaster can be found in the section "Data Handling of Measures for Contracts Affected by a Major Disaster". The methodology used to determine if a contract was affected by a major disaster can be found in Attachment Q.
3. Transitioned measures (Moved to the display page on the CMS website: http://go.cms.gov/partcanddstarratings)
    a. Part C & D measure – Beneficiary Access and Performance Problems (BAPP)
4. Retired measures
    a. None

Health/Drug Organization Types Included in the Star Ratings

All health and drug plan quality and performance measure data described in this document are reported at the contract/sponsor level. Table 1 lists the contract year 2019 organization types and whether they are included in the Part C and/or Part D Star Ratings.

Table 1: Contract Year 2019 Organization Types Reported in the 2019 Star Ratings

Organization Type	Technical Notes Abbreviation	Medicare Advantage (MA)	Can Offer SNPs	Part C Ratings	Part D Ratings
1876 Cost	1876 Cost	No	No	Yes	Yes (if drugs offered)
Demonstration (Medicare-Medicaid Plan) †	MMP	No	No	No	No
Demonstration (Person Centered Community Care)	PCCC	No	No	No	No
Employer/Union Only Direct Contract Local Coordinated Care Plan (CCP)	CCP	Yes	No	Yes	Yes
Employer/Union Only Direct Contract Prescription Drug Plan (PDP)	PDP	No	No	No	Yes
Employer/Union Only Direct Contract Private Fee-for-Service (PFFS)	PFFS	Yes	No	Yes	Yes (if drugs offered)
HCPP 1833 Cost	HCPP	No	No	No	No
Local Coordinated Care Plan (CCP)	CCP	Yes	Yes	Yes	Yes

Organization Type	Technical Notes Abbreviation	Medicare Advantage (MA)	Can Offer SNPs	Part C Ratings	Part D Ratings
Medical Savings Account (MSA)	MSA	Yes	No	Yes	No
National PACE	PACE	No	No	No	No
Medicare Prescription Drug Plan (PDP)	PDP	No	No	No	Yes
Private Fee-for-Service (PFFS)	PFFS	Yes	No	Yes	Yes (if drugs offered)
Regional Coordinated Care Plan (CCP)	CCP	Yes	Yes	Yes	Yes
Religious Fraternal Benefit Private Fee-for-Service (RFB PFFS)	PFFS	Yes	No	Yes	Yes (if drugs offered)
Religious Fraternal Benefit Local Coordinated Care Plan (RFB CCP)	CCP	Yes	No	Yes	Yes

† Note: The measure scores are displayed in HPMS only during the first plan preview. Data from these organizations are not used in processing the Part C & D Star Ratings.

The Star Ratings Framework

The Star Ratings are based on health and drug plan quality and performance measures. Each measure is reported in two ways:

Score: A score is either a numeric value or an assigned 'missing data' message.

Star: The measure numeric value is converted to a Star Rating.

The measure star ratings are combined into three groups and each group is assigned 1-5 stars. The three groups are:

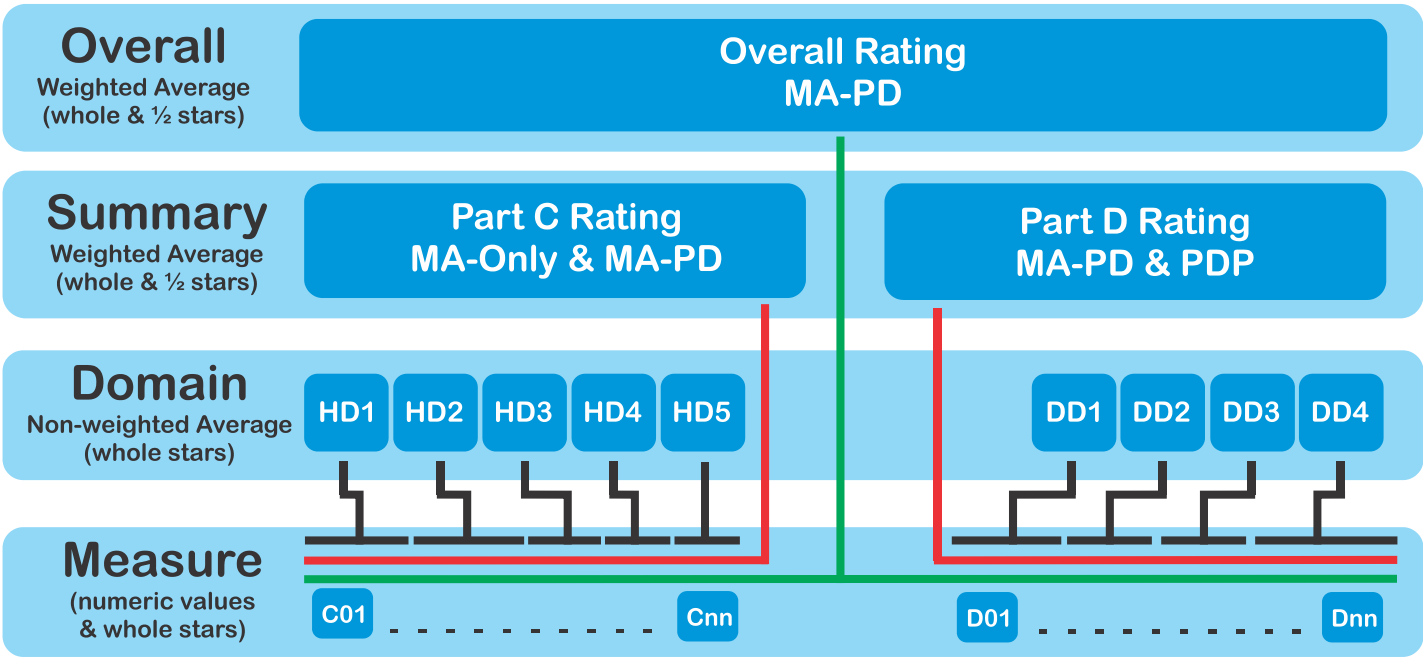
Domain: Domains group together measures of similar services. Star Ratings for domains are calculated using the non-weighted average Star Ratings of the included measures.

Summary: Part C measures are grouped to calculate a Part C Rating; Part D measures are grouped to calculate a Part D Rating. Summary ratings are calculated from the weighted average Star Ratings of the included measures.

Overall: For MA-PDs, all unique Part C and Part D measures are grouped to create an overall rating. The overall rating is calculated from the weighted average Star Ratings of the included measures.

Figure 1 shows the four levels of Star Ratings that are calculated and reported publicly.

Figure 1: The Four Levels of Star Ratings



The whole star scale used at the measure and domain levels is shown in Table 2.

Table 2: 5-Star Scale

Numeric	Graphic	Description
5	★★★★★	Excellent
4	★★★★	Above Average
3	★★★	Average
2	★★	Below Average
1	★	Poor

To allow for more variation across contracts, CMS assigns half stars in the summary and overall ratings.

As different organization types offer different benefits, CMS classifies contracts into three contract types. The highest level Star Rating differs among the contract types because the set of required measures differs by contract type. Table 3 clarifies how CMS classifies contracts for purposes of the Star Ratings and indicates the highest rating available for each contract type. Table 4 presents the relation among the three contract types and the organization types.

Table 3: Highest Rating by Contract Type

Contract Type	Offers Part C or 1876 Cost	Offers Part D	Highest Rating
MA-Only	Yes	No	Part C rating
MA-PD	Yes	Yes	Overall rating
PDP	No	Yes	Part D rating

Table 4: Relation of 2019 Organization Types to Contract Types in the 2019 Star Ratings

Organization Type	1876 Cost (no drugs)	1876 Cost (offers drugs)	CCP	MSA	PDP	PFFS (no drugs)	PFFS (offers drugs)
Rated As	MA-Only	MA-PD	MA-PD	MA-Only	PDP	MA-Only	MA-PD

Sources of the Star Ratings Measure Data

The 2019 Star Ratings include a maximum of 9 domains comprised of a maximum of 48 measures.

1. MA-Only contracts are measured on 5 domains with a maximum of 34 measures.
2. PDPs are measured on 4 domains with a maximum of 14 measures.
3. MA-PD contracts are measured on all 9 domains with a maximum of 48 measures, 46 of which are unique measures. Two of the measures are shown in both Part C and Part D so that the results for a MA-PD contract can be compared to an MA-Only contract or a PDP contract. Only one instance of those two measures is used in calculating the overall rating. The two duplicated measures are Complaints about the Health/Drug Plan (CTM), Members Choosing to Leave the Plan (MCLP).

For a health and/or drug plan to be included in the Part C & D Star Ratings, they must have an active contract with CMS to provide health and/or drug services to Medicare beneficiaries. All of the data used to rate the plan are collected through normal contractual requirements or directly from CMS systems. Information about Medicare Advantage contracting can be found at: https://www.cms.gov/Medicare/Medicare-Advantage/MedicareAdvantageApps/index.html and Prescription Drug Coverage contracting at: https://www.cms.gov/Medicare/Prescription-Drug-coverage/PrescriptionDrugCovContra/index.html.

The data used in the Star Ratings come from four categories of data sources which are shown in Figure 2.

Figure 2: The Four Categories of Data Sources

Improvement Measures

Unlike the other Star Rating measures which are derived from data sources external to the Star Ratings, the Part C and Part D improvement measures are derived through comparisons of a contract's current and prior year measure scores. For a measure to be included in the improvement calculation the measure must not have had a significant specification change during those years. The Part C improvement measure includes only Part C measure scores and the Part D improvement measure includes only Part D measure scores. The measures and formulas for the improvement measure calculations are found in Attachment I.

The numeric results of these calculations are not publicly posted; only the measure ratings are reported publicly. Further, to receive a Star Rating in the improvement measures, a contract must have measure scores for both years in at least half of the required measures used to calculate the Part C improvement or Part D improvement measures. Improvement scores are not calculated for reconfigured regional contracts until data is available for the reconfigured structure from both years. Table 5 presents the minimum number of measure scores required to receive a rating for the improvement measures.

Table 5: Minimum Number of Measure Scores Required for an Improvement Measure Rating by Contract Type

Part	1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
C	12 of 24	13 of 26	15 of 30	12 of 23	13 of 25	N/A	13 of 26
D	5 of 10*	6 of 11	6 of 11	5 of 9	N/A	6 of 11	6 of 11*

* Note: Does not apply to MA-Only, 1876 Cost, and PFFS contracts which do not offer drug benefits.

For a detailed description of all Part C and Part D measures, see the section entitled "Framework and Definitions for the Domain and Measure Details."

Contract Enrollment Data

The enrollment data used in the Part C and Part D "Complaints about the Health/Drug Plan" and Part D "Appeals Auto–Forward" measures are pulled from the HPMS. These enrollment files represent the number of enrolled beneficiaries the contract was paid for in a specific month. For these measures, twelve months of enrollment files are pulled (January 2017 through December 2017) and the average enrollment across those months is used in the calculations.

Enrollment data are also used when combining the plan-level data into contract-level data in the three Part C "Care for Older Adults" Healthcare Effectiveness Data and Information Set (HEDIS) measures. When there is a reported rate, the eligible population in the plan benefit package (PBP) submitted with the HEDIS data is used. If the audit designation for the PBP level HEDIS data is set to "Not Reported" (NR) or "Biased Rate" (BR) by the auditor (see following section), there is no value in the eligible population field. In these instances, twelve months of PBP-level enrollment files are pulled (January 2017 through December 2017), and the average enrollment in the plan across those months is used in calculating the combined rate.

Handling of Biased, Erroneous, and/or Not Reportable (NR) Data

The data used for CMS' Star Ratings must be accurate and reliable. CMS has identified issues with some contracts' data and has taken steps to protect the integrity of the data. For any measure scores CMS identifies to be based on inaccurate or biased data, CMS' policy is to reduce a contract's measure rating to 1 star and set the measure score to "CMS identified issues with this plan's data."

Inaccurate or biased data result from the mishandling of data, inappropriate processing, or implementation of incorrect practices. Examples include, but are not limited to: a contract's failure to adhere to HEDIS, Health Outcomes Survey (HOS), or CAHPS reporting requirements; a contract's failure to adhere to Medicare Plan Finder data requirements; a contract's errors in processing coverage determinations, organizational determinations, and appeals; a contract's failure to adhere to CMS-approved point-of-sale edits; compliance actions taken against the contract due to errors in operational areas that impact the data reported or processed for specific measures; or a contract's failure to pass validation of the data reported for specific measures. Note there is no minimum number of cases required for a contract's data to be subject to data integrity reviews.

For HEDIS data, CMS uses the audit designation information assigned by the HEDIS auditor. An audit designation of 'NR' (Not reported) is assigned when the contract chooses not to report the measure. An audit designation of 'BR' (Biased rate) is assigned when the individual measure score is materially biased (e.g., the auditor informs the contract the data cannot be reported to the National Committee for Quality Assurance (NCQA) or to CMS). When either a 'BR' or 'NR' designation is assigned to a HEDIS measure audit designation, the contract receives 1 star for the measure and the measure score is set to "CMS identified issues with this plan's data." In addition, CMS reduces contracts' HEDIS measure ratings to 1 star if the patient-level data files are not successfully submitted and validated by the submission deadline. Also, if the HEDIS summary-level data value varies substantially from the value in the patient-level data, the measure is reduced to a rating of 1 star. If an approved CAHPS or HOS vendor does not submit a contract's CAHPS or HOS data by the data submission deadline, the contract automatically receives a rating of 1 star for the CAHPS or HOS measures and the measure scores are set to "CMS identified issues with this plan's data."

Scaled Reductions for the Appeals Measures

At present, there are four Star Ratings appeals measures that rely on data submitted to the IRE. Two of the measures are Part C measures (Plan Makes Timely Decisions about Appeals and Reviewing Appeals Decisions), and two are Part D measures (Appeals Auto-Forward and Appeals Upheld). The completeness of the IRE data is critical to allow accurate measurement of each of the appeals measures. All contracts are responsible and held accountable for ensuring high quality and complete data to maintain the validity and reliability of the measures. CMS conducts an industry wide monitoring project to collect data to evaluate the timeliness of processing of Medicare Advantage (Part C) organization determinations and reconsiderations and Medicare Prescription Drug (Part D) coverage determinations and redeterminations. Through this Timeliness Monitoring Project's data collection (TMP data), CMS can assess all sponsors' timeliness, as well as sponsor compliance with forwarding cases to the IRE.

CMS uses statistical criteria to reduce a contract's appeals measure-level Star Ratings for data that are not complete or lack integrity using TMP or audit data. The reduction is applied to the measure-level Star Ratings of the applicable appeals measures. Because there are varying degrees of data issues, the methodology for reductions reflects the degree of the data accuracy issue for a contract instead of a one-size-fits-all approach. The methodology employs scaled reductions (one-star, two-star, three-star, or four-star reduction) based on the degree of missing IRE data. Contracts with the highest IRE data quality issues (i.e., largest percentage of missing or compromised data) receive the largest reductions, while contracts with a lower degree of missing IRE data receive a smaller reduction. The most severe reduction for IRE data completeness issues is a four-star reduction, thus resulting in measure-level Star Ratings of one star for the associated appeals measures. If a contract receives a reduction due to missing Part C IRE data, the reduction is applied to both of the contract's Part C appeals measures. Likewise, if a contract receives a reduction due to missing Part D IRE data, the reduction is applied to both of the contract's Part D appeals measures. If a contract fails to submit TMP data for CMS' review to ensure the completeness of their IRE data, the contract receives one-star for the associated appeals measures. (This is similar to how CMS treats measures dependent on contracts' completion of data validation of plan-reported data.)

CMS' scaled reduction methodology is a three-stage process using the TMP data or audit for the means to determine: first, whether a contract may be subject to a potential reduction for the Part C or Part D appeals measures; second, as the basis for the determination of the estimated error rate; and finally, whether the estimated value is statistically significantly greater than the cut points for the scaled reductions of 1, 2, 3, or 4 stars. Details of the methodology are available in Attachment P.

Once the scaled reduction for a contract is identified using the methodology, the reduction is applied to a contract's associated appeals measure-level Star Ratings. Since the minimum measure-level Star Rating is one star, if the difference between the associated appeals measure-level Star Rating (before the application of the reduction) and the identified scaled reduction is less than one, the contract will receive a measure-level Star Rating of one star for the appeals measure.

If a scaled reduction is applied to the Part C or Part D appeals measure, the associated appeals measures will not be eligible to be included in the respective improvement measure.

Data Handling of Measures for Contracts Affected by a Major Disaster

For a portion of the data time frame covered by the 2019 Star Ratings, there was an unprecedented number of major disasters affecting wide geographic areas of the United States and its territories. CMS developed a policy for making adjustments in these Star Ratings to take into account those disasters. That policy was published in the 2019 Call Letter (https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Announcements-and-Documents.html.)

This section describes how the policy is implemented for measures from each of the different data sources in the 2019 Star Ratings. The methodology for how CMS identified the major disaster geographic areas, which contracts were affected, and how much of their geographic service area and percent of enrollment resided in an affected area can be found in Attachment Q.

The disaster policy specified two distinct thresholds, "25% or more" and "60% or more" of the contract's membership at the time of the disaster resided in a FEMA designated Individual Assistance area. CMS calculated the percentage of membership affected for every contract being rated and will apply the following rules to the data from those contracts that meet or exceed either of the two thresholds. The policy also specified some adjustments for contracts only operating in Puerto Rico.

- CAHPS adjustments:
  - For Puerto Rico-only contracts, the 2018 survey was optional.
    - If a survey was administered, the contract receives the higher of the 2018 or 2019 Star Rating (and corresponding measure score) for each CAHPS survey measure (including the annual flu vaccine measure).
    - If a survey was not administered, the contract receives the 2018 measure star (and corresponding measure score).
  - All other contracts were required to administer the 2018 survey unless the contract requested and CMS approved an exception.
    - All affected contracts with at least 25% of beneficiaries in Individual Assistance areas at the time of the disaster receive the higher of the 2018 or the 2019 Star Rating (and corresponding measure score) for each CAHPS measure (including the annual flu vaccine measure).
    - Data were assessed for evidence of a measurable impact of FEMA-designated natural disasters on 2018 survey responses, but additional adjustment to the 2019 ratings for such effects was found not to be warranted. A CAHPS respondent was considered to reside in a FEMA-designated disaster area if the respondent's address is in a FEMA-designated Individual Assistance area at the time of the survey. In these analyses, we pooled across non-Puerto Rico contracts to develop separate estimates for each disaster. Unlike the usual procedures for case-mix adjustment, the coefficients were estimated in a difference-in-differences manner (controlling for the previous year's scores in the same contracts). In particular, the estimated effect of a disaster was the change in the mean CAHPS score from the previous to the current year in affected counties minus the mean CAHPS score change from the previous year in unaffected counties. This effect

was estimated only for the contracts that had sample in both the affected counties and unaffected counties. This approach distinguished changes that were specific to the affected areas from overall trends in CAHPS scores. The adjustment for the disaster effect is applied only to the fraction of contract enrollment in the affected areas. Effects were not in a consistent direction and additional adjustment would not be advantageous to contracts, so we did not adjust the 2019 measure-level CAHPS scores. However, affected contracts still received the higher of the 2018 or 2019 Star Rating (and corresponding measure score) for each CAHPS measure.

    - Contracts operating solely in Puerto Rico are excluded from 2019 Star Ratings cut point calculations for CAHPS measures.

- HOS adjustments:
    - The HOS data used in the 2019 Star Ratings were collected prior to the time when the major disasters occurred. There are no adjustments to the HOS or HEDIS/HOS measures this year.
- HEDIS adjustments:
    - Puerto Rico-only contracts had the option to report "NA" for all HEDIS measures.
        - A HEDIS measure with an "NA" reported receives the 2018 measure star (and corresponding measure score).
        - HEDIS measures with a numeric result receives the higher of the 2018 or 2019 measure stars (and corresponding measure scores).
    - All other contracts were required to report HEDIS 2018 unless the contract requested and CMS approved an exception. Contracts in affected areas were able to work with NCQA to adjust samples.
        - Contracts with 25% or more affected members receive the higher of the 2018 or 2019 measure stars (and corresponding measure scores).
- Call Center:
    - Puerto Rico-only contracts have these measures excluded.
    - For all other contracts no adjustments are made.
- New measures
    - Contracts with 25% or more affected members have a hold harmless provision applied which compares the result of a contract's overall rating with and without including the new Part C and Part D statin measures. If the "with" result is lower than the "without" result, then we use the "without" result as the final highest level rating.
    - A similar hold harmless provision is applied for the Part C and D summary ratings. If a contract has 25% or more affected members, the Part C and/or Part D summary rating is calculated "with" and "without" the new Part C and/or Part D statin measure(s), and if the "with" result is lower than the "without" result, then we use the "without" result for the final summary rating.
- All other measures:
    - Contracts with 25% or more affected members receive the higher of the 2018 or 2019 measure stars (and corresponding measure scores).
- Improvement measures:
    - For affected contracts that revert back to the data underlying the previous year's Star Rating for a particular measure, that measure is excluded from both the count of measures (for the determination of whether the contract has at least half of the measures needed to calculate the relevant improvement measure) and the applicable improvement measures for the current and next year's Star Ratings.
- Affected contracts with missing data:
    - If an affected contract has missing data in either the current or previous year (e.g., because of a biased rate, it is too new, or it is too small), the final measure rating comes from the current year.

- Reward Factor:
    - Affected contracts with 60% or more of their enrollees impacted are excluded from the determination of the performance summary and variance thresholds for the Reward Factor. However, those contracts are still eligible for the Reward Factor.
- Cut points:
    - Clustering methodology: For all measures that use the clustering methodology for cut point generation, the measure scores for contracts with 60% or more of their enrollment affected are excluded from creating those cut points.

Methodology for Assigning Stars to the Part C and Part D Measures

CMS assigns stars for each numeric measure score by applying one of two methods: clustering, or relative distribution and significance testing. Each method is described below. Attachment K explains the clustering and relative distribution and significance testing (CAHPS) methods in greater detail.

The *Trends in Part C & D Star Rating Measure Cut Points* document is posted on the website at http://go.cms.gov/partcanddstarratings and is updated after each rating cycle is released.

A. Clustering

This method is applied to the majority of the Star Ratings measures, ranging from operational and process-based measures, to HEDIS and other clinical care measures. Using this method, the Star Rating for each measure is determined by applying a clustering algorithm to all the measure's numeric value scores from all contracts. Conceptually, the clustering algorithm identifies the "gaps" among the scores and creates four cut points resulting in the creation of five levels (one for each Star Rating). The scores in the same Star Rating level are as similar as possible; the scores in different Star Rating levels are as different as possible. Star Rating levels 1 through 5 are assigned with 1 being the worst and 5 being the best.

Technically, the variance in measure scores is separated into within-cluster and between-cluster sum of squares components. The clusters reflect the groupings of numeric value scores that minimize the variance of scores within the clusters. The Star Ratings levels are assigned to the clusters that minimize the within-cluster sum of squares. The cut points for star assignments are derived from the range of measure scores per cluster, and the star levels associated with each cluster are determined by ordering the means of the clusters.

B. Relative Distribution and Significance Testing (CAHPS)

This method is applied to determine valid star cut points for CAHPS measures. In order to account for the reliability of scores produced from the CAHPS survey, the method combines evaluating the relative percentile distribution with significance testing. For example, to obtain 5 stars, a contract's CAHPS measure score needs to be ranked at least at the 80th percentile and be statistically significantly higher than the national average CAHPS measure score, as well as either have not low reliability or have a measure score more than one standard error above the 80th percentile. To obtain 1 star, a contract's CAHPS measure score needs to be ranked below the 15th percentile and be statistically significantly lower than the national average CAHPS measure score, as well as either have not low reliability or have a measure score more than one standard error below the 15th percentile.

Methodology for Calculating Stars at the Domain Level

A domain rating is the average, unweighted mean, of the domain's measure stars. To receive a domain rating, a contract must meet or exceed the minimum number of rated measures required for the domain. The minimum number of rated measures required for a domain is determined based on whether the total number of measures in the domain for a contract type is odd or even:

- If the total number of measures that comprise the domain for a contract type is odd, divide the number of measures in the domain by two and round the quotient to the next whole number.
    - Example: If the total number of measures required in a domain for a contract type is 3, the value 3 is divided by 2. The quotient, in this case 1.5, is then rounded to the next whole number. To receive a domain rating, the contract must have a Star Rating for at least 2 of the 3 required measures.

- If the total number of measures that comprise the domain for a contract type is even, divide the number of measures in the domain by two and add one to the quotient.
    - Example: If the total number of measures required in a domain for a contract type is 6, the value 6 is divided by 2. In this example, 1 is then added to the quotient of 3. To receive a domain rating, the contract must have a Star Rating for at least 4 of the 6 required measures.

Table 7 details the minimum number of rated measures required for a domain rating by contract type.

Table 7: Minimum Number of Rated Measures Required for a Domain Rating by Contract Type

Part	Domain Name (Identifier)	1876 Cost †	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
C	Staying Healthy: Screenings, Tests and Vaccines (HD1)	4 of 7	4 of 7	4 of 7	4 of 6	4 of 7	N/A	4 of 7
C	Managing Chronic (Long Term) Conditions (HD2)	5 of 9	6 of 11	8 of 15	8 of 15	6 of 11	N/A	6 of 11
C	Member Experience with Health Plan (HD3)	4 of 6	4 of 6	4 of 6	N/A	4 of 6	N/A	4 of 6
C	Member Complaints and Changes in the Health Plan's Performance (HD4)	2 of 3	2 of 3	2 of 3	2 of 3	2 of 3	N/A	2 of 3
C	Health Plan Customer Service (HD5)	2 of 2	2 of 3	2 of 3	2 of 3	2 of 2	N/A	2 of 3
D	Drug Plan Customer Service (DD1)	2 of 2*	2 of 3	2 of 3	2 of 3	N/A	2 of 3	2 of 3*
D	Member Complaints and Changes in the Drug Plan's Performance (DD2)	2 of 3*	2 of 3	2 of 3	2 of 3	N/A	2 of 3	2 of 3*
D	Member Experience with the Drug Plan (DD3)	2 of 2*	2 of 2	2 of 2	N/A	N/A	2 of 2	2 of 2*
D	Drug Safety and Accuracy of Drug Pricing (DD4)	4 of 6*	4 of 6	4 of 6	4 of 6	N/A	4 of 6	4 of 6*

* Note: Does not apply to MA-Only, 1876 Cost, and PFFS contracts which do not offer drug benefits.
† Note: 1876 Cost contracts which do not submit data for the MPF measure must have a rating in 3 out of 5 Drug Pricing and Patient Safety (DD4) measures to receive a rating in that domain.

Summary and Overall Ratings: Weighting of Measures

The summary and overall ratings are calculated as weighted averages of the measure stars. For the 2019 Star Ratings, CMS assigns the highest weight to the improvement measures, followed by the outcomes and intermediate outcomes measures, then by patient experience/complaints and access measures, and finally the process measures. New measures to the Star Ratings are given a weight of 1 for their first year in the ratings. In subsequent years the weight associated with the measure weighting category is used. The weights assigned to each measure and their weighting category are shown in Attachment G.

In calculating the summary and overall ratings, a measure given a weight of 3 counts three times as much as a measure given a weight of 1. Any measure without a rating is not included in the calculation. The first step in the calculation is to multiply each measure's weight by the measure's rating and summing these results. The second step is to divide this sum by the sum of the weights of the contract's rated measures. For the summary and overall ratings, half stars are assigned to allow for more variation across contracts.

Methodology for Calculating Part C and Part D Summary Ratings

The Part C and Part D summary ratings are calculated by taking a weighted average of the measure stars for Parts C and D, respectively. To receive a Part C and/or Part D summary rating, a contract must meet the minimum number of rated measures. The Parts C and D improvement measures are not included in the count of the minimum number of rated measures. The minimum number of rated measures required is determined as follows:

- If the total number of measures required for the organization type is odd, divide the number by two and round it to a whole number.
    - Example: if there are 13 required Part D measures for the organization, 13 / 2 = 6.5, when rounded the result is 7. The contract needs at least 7 measures with ratings out of the 13 total measures to receive a Part D summary rating.

- If the total number of measures required for the organization type is even, divide the number of measures by two.
    - Example: if there are 30 required Part C measures for the organization, 30 / 2 = 15. The contract needs at least 15 measures with ratings out of the 30 total measures to receive a Part C summary rating.

Table 8 shows the minimum number of rated measures required by each contract type to receive a summary rating.

Table 8: Minimum Number of Rated Measures Required for Part C and Part D Ratings by Contract Type

Rating	1876 Cost †	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Part C summary	13 of 26	15 of 29	17 of 33	13 of 26	14 of 28	N/A	15 of 29
Part D summary	6 of 12*	7 of 13	7 of 13	6 of 11	N/A	7 of 13	7 of 13*

* Note: Does not apply to MA-Only, 1876 Cost, and PFFS contracts which do not offer drug benefits.
† Note: 1876 Cost contracts which do not submit data for the MPF measure must have ratings in 6 out of 12 measures to receive a Part D rating.

Methodology for Calculating the Overall MA-PD Rating

For MA-PDs to receive an overall rating, the contract must have stars assigned to both the Part C and Part D summary ratings. If an MA-PD contract has only one of the two required summary ratings, the overall rating will show as "Not enough data available."

The overall rating for a MA-PD contract is calculated using a weighted average of the Part C and Part D measure stars. The weights assigned to each measure are shown in Attachment G.

There are a total of 48 measures (34 in Part C, 14 in Part D) in the 2019 Star Ratings. The following two measures are contained in both the Part C and D measure lists:

- Complaints about the Health/Drug Plan (CTM)
- Members Choosing to Leave the Plan (MCLP)

These measures share the same data source, so CMS includes only one instance of each of these two measures in the calculation of the overall rating. In addition, the Part C and D improvement measures are not included in the count for the minimum number of measures. Therefore, a total of 44 distinct measures are used in the calculation of the overall rating.

The minimum number of rated measures required for an overall MA-PD rating is determined using the same methodology as for the Part C and D summary ratings. Table 9 provides the minimum number of rated measures required for an overall Star Rating by contract type.

Table 9: Minimum Number of Rated Measures Required for an Overall Rating by Contract Type

Rating	1876 Cost †	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Overall Rating	18 of 36*	20 of 40	22 of 44	18 of 35	N/A	N/A	20 of 40*

* Note: Does not apply to MA-Only, 1876 Cost, and PFFS contracts which do not offer drug benefits.
† Note: 1876 Cost contracts which do not submit data for the MPF measure must have ratings in 17 out of 34 measures to receive an overall rating.

Completing the Summary and Overall Rating Calculations

There are two adjustments made to the results of the summary and overall calculations described above. First, to reward consistently high performance, CMS utilizes both the mean and the variance of the measure stars to differentiate contracts for the summary and overall ratings. If a contract has both high and stable relative performance, a reward factor is added to the contract's ratings. Details about the reward factor can be found in the section entitled "Applying the Reward Factor." Second, for the 2019 Star Ratings, the summary and overall ratings include a Categorical Adjustment Index (CAI) factor, which is added to or subtracted from a contract's summary and overall ratings. Details about the CAI can be found in the section entitled "Categorical Adjustment Index (CAI)."

The summary and overall rating calculations are run twice, once including the improvement measures and once without including the improvement measures. Based on a comparison of the results of these two calculations a decision is made as to whether the improvement measures are to be included in calculating a contract's final summary and overall ratings. Details about the application of the improvement measures can be found in the section entitled "Applying the Improvement Measure(s)."

Lastly, rounding rules are applied to convert the results of the final summary and overall ratings calculations into the publicly reported Star Ratings. Details about the rounding rules are presented in the section "Rounding Rules for Summary and Overall Ratings."

Applying the Improvement Measure(s)

The Part C Improvement Measure - Health Plan Quality Improvement (C31) and the Part D Improvement Measure - Drug Plan Quality Improvement (D06) were introduced earlier in this document in the section entitled "Improvement Measures." The measures and formulas for the improvement measures can be found in Attachment I. This section discusses whether and how to apply the improvement measures in calculating a contract's final summary and overall ratings.

Since high performing contracts have less room for improvement and consequently may have lower ratings on these measure(s), CMS has developed the following rules to not penalize contracts receiving 4 or more stars for their highest rating.

MA-PD Contracts

1. There are separate Part C and Part D improvement measures (C31 & D06) for MA-PD contracts.
   a. C31 is used in calculating the Part C summary rating of an MA-PD contract.
   b. D06 is used in calculating the Part D summary rating for an MA-PD contract.
   c. Both improvement measures will be used when calculating the overall rating in step 3.
2. Calculate the overall rating for MA-PD contracts without including either improvement measure.
3. Calculate the overall rating for MA-PD contracts with both improvement measures included.
4. If an MA-PD contract in step 2 has 2 or fewer stars, use the overall rating calculated in step 2.
5. If an MA-PD contract in step 2 has 4 or more stars, compare the two overall ratings calculated in steps 2 & 3. If the rating in step 3 is less than the value in step 2, use the overall rating from step 2; otherwise use the result from step 3.
6. For all other MA-PD contracts, use the overall rating from step 3.

MA-Only Contracts

1. Only the Part C improvement measure (C31) is used for MA-Only contracts.
2. Calculate the Part C summary rating for MA-Only contracts without including the improvement measure.
3. Calculate the Part C summary rating for MA-Only contracts with the Part C improvement measure.
4. If an MA-Only contract in step 2 has 2 or fewer stars, use the Part C summary rating calculated in step 2.
5. If an MA-Only contract in step 2 has 4 or more stars, compare the two Part C summary ratings. If the rating in step 3 is less than the value in step 2, use the Part C summary rating from step 2; otherwise use the result from step 3.
6. For all other MA-Only contracts, use the Part C summary rating from step 3.

PDP Contracts

1. Only the Part D improvement measure (D06) is used for PDP contracts.
2. Calculate the Part D summary rating for PDP contracts without including the improvement measure.
3. Calculate the Part D summary rating for PDP contracts with the Part D improvement measure.

4. If a PDP contract in step 2 has 2 or fewer stars, use the Part D summary rating calculated in step 2.
5. If a PDP contract in step 2 has 4 or more stars, compare the two Part D summary ratings. If the rating in step 3 is less than the value in step 2, use the Part D summary rating from step 2; otherwise use the result from step 3.
6. For all other PDP contracts, use the Part D summary rating from step 3.

Disaster Affected Contracts

New measure(s) will be included in the highest level rating for contracts with 25% or more disaster affected members if including the new measure(s) does not reduce the contract's highest level rating.

The following steps guide the determination of whether the improvement measure(s) and new measure(s) should be included.

1. Calculate the highest level rating without the improvement measure(s).
   a. Calculate the highest level rating for the contract without improvement measure(s) and without the new measure(s).
   b. Calculate the highest level rating for the contract without improvement measure(s) and with the new measure(s).
2. Take the greater of 1a and 1b to determine the highest level rating without the improvement measure(s).
3. Calculate the highest level rating with the improvement measure(s).
   a. Calculate the highest level rating for contracts with the improvement measure(s) and without the new measure(s).
   b. Calculate the highest level ratings for contracts with the improvement measure(s) and with the new measure(s).
4. Take the greater of 3a and 3b to determine the rating with the improvement measure(s).
5. Determine the final highest level rating.
   a. If a contract in step 2 has 2 or fewer stars, use the rating calculated in step 2.
   b. If a contract in step 2 has 4 or more stars, compare the two ratings calculated in steps 2 and 4. If the rating in step 4 is less than the value in step 2, use the rating from step 2; otherwise use the result from step 4.
   c. For all other contracts, use the rating calculated in step 4.

Applying the Reward Factor

The following represents the steps taken to calculate and include the reward factor in the Star Ratings summary and overall ratings. These calculations are performed both with and without the improvement measures included.

- Calculate the mean and the variance of all of the individual quality and performance measure stars at the contract level.
  - The mean is the summary or overall rating before the reward factor is applied, which is calculated as described in the section entitled "Weighting of Measures."
  - Using weights in the variance calculation accounts for the relative importance of measures in the reward factor calculation. To incorporate the weights shown in Attachment G into the variance calculation of the available individual performance measures for a given contract, the steps are as follows:
    - Subtract the summary or overall star from each performance measure's star; square the results; and multiply each squared result by the corresponding individual performance measure weight.
    - Sum these results; call this 'SUMWX.'
    - Set n equal to the number of individual performance measures available for the given contract.

    - Set W equal to the sum of the weights assigned to the n individual performance measures available for the given contract.
    - The weighted variance for the given contract is calculated as: n * SUMWX / (W * (n-1)). For the complete formula, please see Attachment H: Calculation of Weighted Star Rating and Variance Estimates.

- Categorize the variance into three categories:
    - low (0 to < 30th percentile),
    - medium (≥ 30th to < 70th percentile) and
    - high (≥ 70th percentile)
- Develop the reward factor as follows:
    - r-Factor = 0.4 (for contract w/ low variance & high mean (mean ≥ 85th percentile))
    - r-Factor = 0.3 (for contract w/ medium variance & high mean (mean ≥ 85th percentile))
    - r-Factor = 0.2 (for contract w/ low variance & relatively high mean (mean ≥ 65th & < 85th percentile))
    - r-Factor = 0.1 (for contract w/ medium variance & relatively high mean (mean ≥ 65th & < 85th percentile))
    - r-Factor = 0.0 (for all other contracts)

Tables 10 and 11 show the final threshold values used in reward factor calculations for the 2019 Star Ratings:

Table 10: Performance Summary Thresholds

Statins*	Improvement	Percentile	Part C Rating	Part D Rating (MA-PD)	Part D Rating (PDP)	Overall Rating
with	with	65th	3.635514	3.923077	3.636364	3.710345
with	without	65th	3.670103	3.866667	3.511111	3.703125
without	with	65th	3.639175	3.960000	3.698113	3.711111
without	without	65th	3.678161	3.906977	3.488372	3.720930
with	with	85th	3.909091	4.326531	4.191489	4.013072
with	without	85th	3.977528	4.311111	4.297297	4.000000
without	with	85th	3.933333	4.320000	4.160000	4.013889
without	without	85th	3.977011	4.372093	4.200000	4.015152

* Specifically the new Part C and/or Part D statin measure(s).

Table 11: Variance Thresholds

Statins*	Improvement	Percentile	Part C Rating	Part D Rating (MA-PD)	Part D Rating (PDP)	Overall Rating
with	with	30th	.952121	.770401	.844151	.977865
with	without	30th	.939513	.774892	.848477	.932747
without	with	30th	.953325	.756675	.801164	.971517
without	without	30th	.947353	.769313	.859592	.943134
with	with	70th	1.306484	1.353766	1.713988	1.318435
with	without	70th	1.255074	1.348176	1.516132	1.268226
without	with	70th	1.312206	1.326982	1.756319	1.318966
without	without	70th	1.277141	1.357813	1.548367	1.293901

* Specifically the new Part C and/or Part D statin measure(s).

Categorical Adjustment Index (CAI)

CMS has implemented an interim analytical adjustment called the Categorical Adjustment Index (CAI) while measure stewards undertake a comprehensive review of their measures in the Star Ratings program and the Office of the Assistant Secretary for Planning and Evaluation (ASPE) continues its work under the IMPACT Act. The CAI is a factor that is added to or subtracted from a contract's Overall and/or Summary Star Ratings to adjust for the average within-contract disparity in performance associated with a contract's percentages of beneficiaries with Low Income Subsidy/Dual Eligible (LIS/DE) and disability status. These adjustments are performed both with and without the improvement measures included. The value of the CAI varies by a contract's percentages of beneficiaries with Low Income Subsidy/Dual Eligible (LIS/DE) and disability status.

The CAI was developed using data collected for the 2018 Star Ratings. To calculate the CAI, case-mix adjustment is applied to a subset of Star Rating measure scores using a beneficiary-level logistic regression model with contract fixed effects and beneficiary-level indicators of LIS/DE and disability status, similar to the approach currently used to adjust CAHPS patient experience measures. However, unlike CAHPS case mix adjustment, the only adjusters are LIS/DE and disability status. Adjusted measure scores are then converted to measure stars using the 2018 rating year measure cutoffs and used to calculate Adjusted Overall and Summary Star Ratings. Unadjusted Overall and Summary Star Ratings are also determined per contract.

The 2018 measures used in the 2019 CAI adjustment calculations are:

- Breast Cancer Screening (Part C)
- Annual Flu Vaccine (Part C)
- Osteoporosis Management in Women who had a Fracture (Part C)
- Diabetes Care – Blood Sugar Controlled (Part C)
- Reducing the Risk of Falling (Part C)
- Medication Reconciliation Post-Discharge (Part C)
- Plan All-Cause Readmissions (Part C)
- Medication Adherence for Hypertension (RAS antagonists)
- MTM Program Completion Rate for CMR

To determine the value of the CAI, contracts are first divided into an initial set of categories based on the combination of a contract's LIS/DE and disability percentages. For the adjustment for the overall and summary ratings for MA-Only and MA-PD contracts, the initial groups are formed by the ten groups of LIS/DE and quintiles of disability, thus resulting in 50 initial categories. For PDPs, the initial groups are formed using quartiles for both LIS/DE and disability. The mean differences between the Adjusted Overall or Summary Star Rating and the corresponding Unadjusted Star Rating for contracts in each initial category are determined and examined.

The initial categories are collapsed to form final adjustment groups using criteria developed for the method and detailed later within this document. The CAI values are the mean differences between the Adjusted Overall or Summary Star Rating and the corresponding Unadjusted Star Rating for contracts within each final adjustment group. Separate CAI values are computed for the overall and summary ratings, and the rating-specific CAI value would be the same for all contracts that fall within the same final adjustment category.

The categorization of contracts into final adjustment categories for the Categorical Adjustment Index (CAI) relies on both the use of a contract's percentages of LIS/DE and disabled beneficiaries. Puerto Rico has a unique health care market with a large percentage of low-income individuals in both Medicare and Medicaid and a complex legal history that affects the health care system in many ways. Puerto Rican beneficiaries are not eligible for LIS. Since the percentage of LIS/DE is a critical element in the categorization of contracts to identify the contract's CAI, an additional adjustment is done for contracts that solely serve the population of beneficiaries in Puerto Rico to address the lack of LIS. The additional analysis for the adjustment results in a modified percentage of LIS/DE beneficiaries that is subsequently used to categorize the contract in its final adjustment category for the CAI. Details regarding the methodology for the Puerto Rico model are provided in Attachment O.

Tables 12 and 13 provide the range of the percentages that correspond to the LIS/DE initial groups and disability quintiles. For example, if a contract's percentage of LIS/DE beneficiaries is 13.60%, the contract's

LIS/DE initial group would be L4. The upper limit for each initial category is only included for the highest categories (L10 and D5), and includes 100% for both of these categories.

Table 12: Categorization of Contract's Members into LIS/DE Initial Groups for the Overall Rating

LIS/DE Initial Group	% LIS/DE
L1	≥ 0.000000 to < 6.147316
L2	≥ 6.147316 to < 9.486205
L3	≥ 9.486205 to < 11.709700
L4	≥ 11.709700 to < 14.743797
L5	≥ 14.743797 to < 19.979137
L6	≥ 19.979137 to < 26.817676
L7	≥ 26.817676 to < 39.929156
L8	≥ 39.929156 to < 69.752170
L9	≥ 69.752170 to < 100.000000
L10	100.000000

Table 13: Categorization of Contract's Members into Disability Quintiles for the Overall Rating

Disability Quintile	% Disabled
D1	≥ 0.000000 to < 15.059848
D2	≥ 15.059848 to < 20.932235
D3	≥ 20.932235 to < 27.405248
D4	≥ 27.405248 to < 38.060705
D5	≥ 38.060705 to ≤ 100.000000

Table 14 provides the description of each of the final adjustment categories and the associated value of the CAI per category for the overall rating.

Table 14: Final Adjustment Categories and CAI Values for the Overall Rating

Final Adjustment Category	LIS/DE Initial Group	Disability Quintile	CAI Value
A	L1	D1 – D3	-0.031461
B	L2 – L4	D1 – D4	-0.005122
	L5	D1 – D2	
	L1	D4	
C	L6 – L7	D1 – D3	0.007895
	L8 – L9	D1	
	L5	D3 – D4	
	L6	D4	
	L1 – L5	D5	
D	L10	D1	0.035958
	L8	D2 – D5	
	L7	D4	
	L9 – L10	D2	
	L6 – L7	D5	
E	L9 - L10	D3 – D4	0.091276
	L9	D5	
F	L10	D5	0.131385

Tables 15 and 16 provide the range of the percentages that correspond to the LIS/DE initial groups and disability quintiles for the initial categories for the determination of the CAI values for the Part C summary.

Table 15: Categorization of Contract's Members into LIS/DE Initial Groups for the Part C Summary

LIS/DE Initial Group	% Members
L1	≥ 0.000000 to < 5.992616
L2	≥ 5.992616 to < 8.988495
L3	≥ 8.988495 to < 11.438062
L4	≥ 11.438062 to < 14.634338
L5	≥ 14.634338 to < 19.378661
L6	≥ 19.378661 to < 26.317568
L7	≥ 26.317568 to < 39.614595
L8	≥ 39.614595 to < 69.705289
L9	≥ 69.705289 to < 100.000000
L10	100.000000

Table 16: Categorization of Contract's Members into Disability Quintiles for the Part C Summary

Disability Quintile	% Members
D1	≥ 0.000000 to < 14.826108
D2	≥ 14.826108 to < 20.812509
D3	≥ 20.812509 to < 27.249755
D4	≥ 27.249755 to < 38.009950
D5	≥ 38.009950 to ≤ 100.000000

Table 17 provides the description of each of the final adjustment categories for the Part C summary and the associated value of the CAI for each final adjustment category.

Table 17: Final Adjustment Categories and CAI Values for the Part C Summary

Final Adjustment Category	LIS/DE Initial Group	Disability Quintile	CAI Value
A	L1 – L4	D1 – D2	-0.005385
	L1 – L2	D3	
B	L5 – L7	D1 – D5	0.009151
	L8 – L9	D1	
	L3 – L4	D3 – D5	
	L1 – L2	D4 – D5	
C	L8 – L10	D2 – D3	0.037128
	L10	D1	
	L8	D4 – D5	
D	L9 – L10	D4	0.063253
	L9	D5	
E	L10	D5	0.109867

Tables 18 and 19 provide the range of the percentages that correspond to the LIS/DE initial groups and the disability quintiles for the initial categories for the determination of the CAI values for the Part D summary rating for MA-PDs.

Table 18: Categorization of Contract's Members into LIS/DE Initial Groups for the MA-PD Part D Summary

LIS/DE Initial Group	% Members
L1	≥ 0.000000 to < 6.086006
L2	≥ 6.086006 to < 9.486205
L3	≥ 9.486205 to < 11.818672
L4	≥ 11.818672 to < 15.062762
L5	≥ 15.062762 to < 20.400000
L6	≥ 20.400000 to < 28.005752
L7	≥ 28.005752 to < 41.258946
L8	≥ 41.258946 to < 72.787572
L9	≥ 72.787572 to < 100.000000
L10	100.000000

Table 19: Categorization of Contract's Members into Disability Quintiles for the MA-PD Part D Summary

Disability Quintile	% Members
D1	≥ 0.000000 to < 15.064161
D2	≥ 15.064161 to < 21.113304
D3	≥ 21.113304 to < 27.887822
D4	≥ 27.887822 to < 39.190317
D5	≥ 39.190317 to ≤ 100.000000

Table 20 provides the description of each of the final adjustment categories for the MA-PD Part D summary and the associated values of the CAI for each final adjustment category.

Table 20: Final Adjustment Categories and CAI Values for the MA-PD Part D Summary

CAI Category	LIS/DE Initial Group	Disability Quintile	CAI Value
A	L1 – L3	D1	−0.031272
	L1	D2 – D3	
B	L4 – L8	D1 – D3	−0.007584
	L9	D1 – D2	
	L2 – L3	D2 – D3	
C	L1 – L6	D4 – D5	0.015478
	L7	D4	
D	L9 – L10	D3 – D4	0.086029
	L10	D1 – D2	
	L8	D4	
	L7 – L9	D5	
E	L10	D5	0.142243

Tables 21 and 22 provide the range of the percentages that correspond to the LIS/DE and disability quartiles for the initial categories for the determination of the CAI values for the PDP Part D summary. Quartiles are used for both dimensions due to the limited number of PDPs as compared to MA-PD contracts.

Table 21: Categorization of Contract's Members into Quartiles of LIS/DE for the PDP Part D Summary

LIS/DE Quartile	% Members
L1	≥ 0.000000 to < 1.669196
L2	≥ 1.669196 to < 4.001965
L3	≥ 4.001965 to < 15.204859
L4	≥ 15.204859 to ≤ 100.000000

Table 22: Categorization of Contract's Members into Quartiles of Disability for the PDP Part D Summary

LIS/DE Quartile	% Members
D1	≥ 0.000000 to < 7.415977
D2	≥ 7.415977 to < 12.842575
D3	≥ 12.842575 to < 19.147148
D4	≥ 19.147148 to ≤ 100.000000

Table 23 provides the description of each of the final adjustment categories for the PDP Part D summary and the associated value of the CAI per final adjustment category. Please note that the CAI values for the PDP Part D summary are different from the CAI values for the MA-PD Part D summary. Categories were chosen to enforce monotonicity and to yield a minimum of 10 contracts per final adjustment category. There are three final adjustment categories for the PDP Part D summary.

Table 23: Final Adjustment Categories and CAI Values for the PDP Part D Summary

Final Adjustment Category	LIS/DE Quartile	Disability Quartile	CAI Value
A	L1	D1 – D3	−0.243619
B	L2 – L3	D1 – D4	−0.119773
	L1	D4	
C	L4	D1 – D4	0.047909

Calculation Precision

CMS and its contractors have always used software called SAS (an integrated system of software products provided by SAS Institute Inc.) to perform the calculations used in the Star Ratings. For all measures, except the improvement measures, the precision used in scoring the measure is indicated next to the label "Data Display" within the detailed description of each measure. The improvement measures are discussed below. The domain ratings are the unweighted average of the star measures and are rounded to the nearest integer.

The improvement measures, summary and overall ratings are calculated with at least six digits of precision after the decimal whenever the data allow it. With the exception of the Plan All-Cause Readmission measure, the HEDIS measure scores have two digits of precision after the decimal. All other measures have at least six digits of precision when used in the improvement calculation.

In the second HPMS plan preview, we display six digits after the decimal in the summary and overall calculation results. In previous years, we displayed fewer digits after the decimal, but there were instances where these artificially rounded values made it appear that the results had achieved a boundary when they actually had not. There may still be instances where displaying six digits will appear to be at a boundary. If this situation occurs, contact the ratings mailbox which can provide a contract-specific calculation spreadsheet which emulates the actual SAS calculations.

It is not possible to replicate CMS' calculations exactly due to factors including, but not limited to: using published measure data from sources other than CMS' Star Rating program which use different rounding rules; and CMS excluding some contracts' ratings from publicly-posted data (e.g., terminated contracts).

Rounding Rules for Measure Scores

Measure scores are rounded to the precision indicated next to the label “Data Display” within the detailed description of each measure. Measure scores are rounded using standard round to nearest rules prior to cut point analysis. Measure scores that end in 0.49 (0.049, 0.0049) or less are rounded down and measure scores that end in 0.50 (0.050, 0.0050) or more are rounded up. For example, a measure listed with a Data Display of “Percentage with no decimal point” that has a value of 83.49 rounds down to 83, while a value of 83.50 rounds up to 84.

Rounding Rules for Summary and Overall Ratings

The results of the summary and overall calculations are rounded to the nearest half star (i.e., 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0) using consistent rounding rules. Table 24 summarizes the rounding rules for converting the Part C and D summary and overall ratings into the publicly reported Star Ratings.

Table 24: Rounding Rules for Summary and Overall Ratings

Raw Summary / Overall Score	Final Summary / Overall Rating
≥ 0.000 and < 0.250	0
≥ 0.250 and < 0.750	0.5
≥ 0.750 and < 1.250	1.0
≥ 1.250 and < 1.750	1.5
≥ 1.750 and < 2.250	2.0
≥ 2.250 and < 2.750	2.5
≥ 2.750 and < 3.250	3.0
≥ 3.250 and < 3.750	3.5
≥ 3.750 and < 4.250	4.0
≥ 4.250 and < 4.750	4.5
≥ 4.750	5.0

For example, a summary or overall rating of 3.749 rounds down to a rating of 3.5, and a rating of 3.751 rounds up to rating of 4.

Methodology for Calculating the High Performing Icon

A contract may receive a high performing icon as a result of its performance on the Parts C and D measures. The high performing icon is assigned to an MA-Only contract for achieving a 5-star Part C summary rating, a PDP contract for a 5-star Part D summary rating, and an MA-PD contract for a 5-star overall rating. Figure 3 shows the high performing icon used in the MPF:

Figure 3: The High Performing Icon

Methodology for Calculating the Low Performing Icon

A contract can receive a low performing icon as a result of its performance on the Part C and/or Part D summary ratings. The low performing icon is calculated by evaluating the Part C and Part D summary ratings for the current year and the past two years (i.e., the 2017, 2018, and 2019 Star Ratings). If the contract had any combination of Part C and/or Part D summary ratings of 2.5 or lower in all three years of data, it is marked with a low performing icon (LPI). A contract must have a rating in either Part C and/or Part D for all three years to be considered for this icon.

Figure 4 shows the low performing contract icon used in the MPF:

Figure 4: The Low Performing Icon

Table 25 shows example contracts which would receive an LPI.

Table 25: Example LPI Contracts

Contract/Rating	Rated As	2017 C	2018 C	2019 C	2017 D	2018 D	2019 D	LPI Awarded	LPI Reason
HAAAA	MA-PD	2	2.5	2.5	3	3	3	Yes	Part C
HBBBB	MA-PD	3	3	3	2.5	2	2.5	Yes	Part D
HCCCC	MA-PD	2.5	3	3	3	2.5	2.5	Yes	Part C or D
HDDDD	MA-PD	3	2.5	3	2.5	3	2.5	Yes	Part C or D
HEEEE	MA-PD	2.5	2	2.5	2	2.5	2.5	Yes	Part C and D
HFFFF	MA-Only	2.5	2	2.5	-	-	-	Yes	Part C
SAAAA	PDP	-	-	-	2.5	2.5	2	Yes	Part D

Mergers, Novations, and Consolidations

This section covers how the Star Ratings are affected by mergers, novation and consolidations. To ensure a common understanding, we begin by defining each of the terms.

1. Merger: when two (or more) companies join together to become a single business. Each of these separate businesses had one or more contracts with CMS for offering health and/or drug services to Medicare beneficiaries. After the merger, all of those individual contracts with CMS are still intact, only the ownership changes in each of the contracts to the name of the new single business. Mergers can occur at any time during a contract year.
2. Novation: when one company acquires another company. Each of these separate businesses had one or more contracts with CMS for offering health and/or drug services to beneficiaries. After the novation, all of those individual contracts with CMS are still intact. The owner's names of the contracts acquired are changed to the new owner's name. Novations can occur at any time during the contract year.
3. Consolidation: when an organization/sponsor that has at least two contracts with CMS for offering health and/or drug services to beneficiaries combines multiple contracts into a single contract with CMS. Consolidations occur only at the change of the contract year. The one or more contracts that will no longer exist at contract year's end; these are known as the consumed contracts. The contract that will still exist is known as the surviving contract and all of the beneficiaries still enrolled in the consumed contract(s) are moved to the surviving contract.

None of these types of change the ratings earned by an individual contract in any way.

For a merger or novation, the only change is the company listed as owning the contract; there is no change in contract structure, so the Star Ratings earned by the contract remains with them until the next rating cycle. This includes any High Performer or Low Performing icons earned by any of the contracts.

Consolidations become effective the first day of the calendar year. The Star Ratings are released the previous October so they are available when open enrollment begins. Each of the consumed contracts and the surviving contract will earn its own individual Star Ratings. The Star Ratings for the consumed contracts will be shared with the owning organization in the HPMS previews but will not be released publicly and are not included in determining Quality Bonus Payment (QBP) ratings. The ratings for the consumed contracts will only be used in the Past Performance Analysis performed by CMS. The surviving contract's ratings are posted publicly, used in determining QBP ratings, and included in the Past Performance Analysis.

Reliability Requirement for Low-enrollment Contracts

HEDIS measures for contracts whose enrollment as of July 2017 was at least 500 but less than 1,000 will be included in the Star Ratings in 2019 when the contract-specific measure score reliability is equal to or greater than 0.7. The reliability calculations are implemented using SAS PROC MIXED as documented on pages 31-32 of the report "The Reliability of Provider Profiling – A Tutorial," available at http://www.ncqa.org/HEDISQualityMeasurement/Research.aspx.

Special Needs Plan (SNP) Data

A Special Needs Plan (SNP) is a Medicare Advantage (MA) coordinated care plan (CCP) specifically designed to provide targeted care and limits enrollment to special needs individuals. There are three major types of SNPs: 1) Chronic Condition SNP (C-SNP), 2) Dual Eligible SNP (D-SNP), and 3) Institutional SNP (I-SNP). Further details on SNP plans can be found in the glossary, Attachment S.

CMS has included four SNP-specific measures in the 2019 Star Ratings. The Part C 'Special Needs Plan Care Management' measure is based on data reported by contracts through the Medicare Part C Reporting Requirements. The three Part C 'Care for Older Adults' measures are based on HEDIS data. The data for all of these measures are reported at the plan benefit package (PBP) level, while the Star Ratings are reported at the contract level.

The methodology used to combine the PBP data to the contract level is different between the two data sources. The Part C Reporting Requirements data are summed into a contract-level rate after excluding PBPs that do not map to any PBP offered by the contract in the calendar year for which the Reporting Requirements data underwent data validation. The HEDIS data are summed into a contract-level rate as long as the contract will be offering a SNP PBP in the Star Ratings year.

The two methodologies used to combine the PBP data within a contract for these measures are described further in Attachment E.

Star Ratings and Marketing

Plan sponsors must ensure the Star Ratings document and all marketing of Star Ratings information is compliant with CMS' Medicare Marketing Guidelines. Failure to follow CMS' guidance may result in compliance action against the contract. The Medicare Marketing Guidelines were issued as Chapters 2 and 3 of the Prescription Drug Benefit Manual and the Medicare Managed Care Manual, respectively. Please direct questions about marketing Star Ratings information to your Account Manager.

Contact Information

The contact below can assist you with various aspects of the Star Ratings.

- Part C & D Star Ratings: PartCandDStarRatings@cms.hhs.gov

If you have questions or require information about the specific subject areas associated with the Star Ratings please write to those contacts directly and cc the Part C & D Star Ratings mailbox.

- CAHPS (MA & Part D): MP-CAHPS@cms.hhs.gov
- Call Center Monitoring: CallCenterMonitoring@cms.hhs.gov
- Compliance Activity Module issues (Part C): PartCCompliance@cms.hhs.gov
- Compliance Activity Module issues (Part D): PartD_Monitoring@cms.hhs.gov
- Data Integrity: PARTCDQA@cms.hhs.gov
- Demonstration (Medicare-Medicaid Plan) Ratings: mmcocapsmodel@cms.hhs.gov
- Disenrollment Reasons Survey: DisenrollSurvey@cms.hhs.gov
- HEDIS: HEDISquestions@cms.hhs.gov
- HOS: HOS@cms.hhs.gov
- HPMS Access issues: CMSHPMS_Access@cms.hhs.gov
- HPMS Help Desk (all other HPMS issues): HPMS@cms.hhs.gov
- Marketing: marketing@cms.hhs.gov
- Part C Compliance Activity issues: PartCCompliance@cms.hhs.gov
- Part D Compliance Activity issues: PartD_Monitoring@cms.hhs.gov
- Plan Reporting (Part C): Partcplanreporting@cms.hhs.gov
- Plan Reporting (Part D): Partd-planreporting@cms.hhs.gov
- Plan Reporting Data Validation (Part C & D): PartCandD_Data_Validation@cms.hhs.gov
- QBP Ratings and Appeals questions: QBPAppeals@cms.hhs.gov
- QBP Payment or Risk Analysis questions: riskadjustment@cms.hhs.gov

Framework and Definitions for the Domain and Measure Details Section

This page contains the formatting framework and definition of each sub-section that is used to describe the domain and measure details on the following pages.

Domain: The name of the domain to which the measures following this heading belong

Measure: The measure ID and common name of the ratings measure

Title	Description
Label for Stars:	The label that appears with the stars for this measure on Medicare.gov.
Label for Data:	The label that appears with the numeric data for this measure on Medicare.gov.
Description:	The English language description shown for the measure on the Medicare.gov. The text in this sub-section has been cognitively tested with beneficiaries to aid in their understanding the purpose of the measure.
HEDIS Label:	Optional – contains the full NCQA HEDIS measure name.
Measure Reference:	Optional – this sub-section contains the location of the detailed measure specification in the NCQA documentation for all HEDIS and HEDIS/HOS measures.
Metric:	Defines how the measure is calculated.
Primary Data Source:	The primary source of the data used in the measure.
Data Source Description:	Optional – contains information about additional data sources needed for calculating the measure.
Data Source Category:	The category of this data source.
Exclusions:	Optional – lists any exclusions applied to the data used for the measure.
General Notes:	Optional – contains additional information about the measure and the data used.
Data Time Frame:	The time frame of data used from the data source. In some HEDIS measures this date range may appear to conflict with the specific data time frame defined in the NCQA Technical Specifications. In those cases, the data used by CMS is unchanged from what was submitted to NCQA. CMS uses the data time frame of the overall HEDIS submission which is the HEDIS measurement year.
General Trend:	Indicates whether high values are better or low values are better for the measure.
Statistical Method:	The methodology used for assigning stars in this measure; see the section entitled “Methodology for Assigning Part C and Part D Measure Star Ratings” for an explanation of each of the possible entries in this sub-section.
Improvement Measure:	Indicates whether this measure is included in the improvement measure.
CAI Usage:	Indicates if the measure is used in the Categorical Adjustment Index calculation.
Case Mix Adjusted:	Indicates if the data are case mix adjusted prior to being used for the Star Ratings.
Weighting Category:	The weighting category of this measure.
Weighting Value:	The numeric weight for this measure in the summary and overall rating calculations.
CMS Framework Area:	Contains the area where this measure fits into the CMS Quality Framework.
NQF #:	The National Quality Framework (NQF) number for the measure or “None” if there is no equivalent measure with NQF endorsement.
Data Display:	The format used to the display the numeric data on Medicare.gov
Reporting Requirements:	Table indicating which organization types are required to report the measure. “Yes” for organizations required to report; “No” for organizations not required to report.
Cut Points:	Table containing the cut points used in the measure. For CAHPS measures, the table contains the Base Group Cut Points which are used prior to the final star assignment rules being applied.

Part C Domain and Measure Details

See Attachment C for the national averages of individual Part C measures.

Domain: 1 - Staying Healthy: Screenings, Tests and Vaccines

Measure: C01 - Breast Cancer Screening

Title	Description
Label for Stars:	Breast Cancer Screening
Label for Data:	Breast Cancer Screening
Description:	Percent of female plan members aged 52-74 who had a mammogram during the past two years.
HEDIS Label:	Breast Cancer Screening (BCS)
Measure Reference:	NCQA HEDIS 2018 Technical Specifications Volume 2, page 79
Metric:	The percentage of women MA enrollees 50 to 74 years of age (denominator) who had a mammogram to screen for breast cancer (numerator).
Primary Data Source:	HEDIS
Data Source Category:	Health and Drug Plans
Exclusions:	(optional) Bilateral mastectomy any time during the member's history through December 31 of the measurement year. Any of the following meet criteria for bilateral mastectomy: • Bilateral mastectomy (Bilateral Mastectomy Value Set). • Unilateral mastectomy (Unilateral Mastectomy Value Set) with a bilateral modifier (Bilateral Modifier Value Set). • Two unilateral mastectomies (Unilateral Mastectomy Value Set) with service dates 14 days or more apart. For example, if the service date for the first unilateral mastectomy was February 1 of the measurement year, the service date for the second unilateral mastectomy must be on or after February 15. • Both of the following (on the same or a different date of service): – Unilateral mastectomy (Unilateral Mastectomy Value Set) with a right-side modifier (Right Modifier Value Set) (same date of service). – Unilateral mastectomy (Unilateral Mastectomy Value Set) with a left-side modifier (Left Modifier Value Set) (same date of service). • Absence of the left breast (Absence of Left Breast Value Set) and absence of the right breast (Absence of Right Breast Value Set) on the same or different date of service. • History of bilateral mastectomy (History of Bilateral Mastectomy Value Set). • Left unilateral mastectomy (Unilateral Mastectomy Left Value Set) and right unilateral mastectomy (Unilateral Mastectomy Right Value Set) on the same or different date of service. Contracts whose enrollment was at least 500 but less than 1,000 as of the July 2017 enrollment report and having measure score reliability less than 0.7 are excluded. Contracts whose enrollment was less than 500 as of the July 2017 enrollment report are excluded from this measure.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Included

Title	Description
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Clinical care
NQF #:	0031
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 47%	≥ 47% to < 68%	≥ 68% to < 76%	≥ 76% to < 82%	≥ 82%

Measure: C02 - Colorectal Cancer Screening

Title	Description
Label for Stars:	Colorectal Cancer Screening
Label for Data:	Colorectal Cancer Screening
Description:	Percent of plan members aged 50-75 who had appropriate screening for colon cancer.
HEDIS Label:	Colorectal Cancer Screening (COL)
Measure Reference:	NCQA HEDIS 2018 Technical Specifications Volume 2, page 86
Metric:	The percentage of MA enrollees aged 50 to 75 (denominator) who had appropriate screenings for colorectal cancer (numerator).
Primary Data Source:	HEDIS
Data Source Category:	Health and Drug Plans
Exclusions:	(optional) Refer to Administrative Specification for exclusion criteria. Exclusionary evidence in the medical record must include a note indicating colorectal cancer or total colectomy any time during the member's history through December 31 of the measurement year. Contracts whose enrollment was at least 500 but less than 1,000 as of the July 2017 enrollment report and having measure score reliability less than 0.7 are excluded. Contracts whose enrollment was less than 500 as of the July 2017 enrollment report are excluded from this measure.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Included
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Clinical care
NQF #:	0034

Title	Description
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 55%	≥ 55% to < 63%	≥ 63% to < 72%	≥ 72% to < 79%	≥ 79%

Measure: C03 - Annual Flu Vaccine

Title	Description
Label for Stars:	Annual Flu Vaccine
Label for Data:	Annual Flu Vaccine
Description:	Percent of plan members who got a vaccine (flu shot) prior to flu season.
Metric:	The percentage of sampled Medicare enrollees (denominator) who received an influenza vaccination during the measurement year (numerator).
Primary Data Source:	CAHPS
Data Source Description:	CAHPS Survey Question (question number varies depending on survey type): • Have you had a flu shot since July 1, 2017?
Data Source Category:	Survey of Enrollees
General Notes:	This measure is not case-mix adjusted. CAHPS Survey results were sent to each contract's Medicare Compliance Officer in August 2018. These reports provide further explanation of the CAHPS scoring methodology and provide detailed information on why a specific rating was assigned.
Data Time Frame:	03/2018 – 06/2018
General Trend:	Higher is better
Statistical Method:	Relative Distribution and Significance Testing
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Clinical care
NQF #:	0040
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	No	Yes	No	Yes

Base Group Cut Points:

Base Group 1	Base Group 2	Base Group 3	Base Group 4	Base Group 5
< 66	≥ 66 to < 70	≥ 70 to < 75	≥ 75 to < 78	≥ 78

These technical notes show the base group cut points for CAHPS measures; please see the Attachment K for the CAHPS Methodology for final star assignment rules.

Measure: C04 - Improving or Maintaining Physical Health

Title	Description
Label for Stars:	Improving or Maintaining Physical Health
Label for Data:	Improving or Maintaining Physical Health
Description:	Percent of plan members whose physical health was the same or better than expected after two years.
Metric:	The percentage of sampled Medicare enrollees 65 years of age or older (denominator) whose physical health status was the same or better than expected (numerator).
Primary Data Source:	HOS
Data Source Description:	2015-2017 Cohort 18 Performance Measurement Results (2015 Baseline data collection, 2017 Follow-up data collection) 2-year PCS change – Questions: 1, 2a-b, 3a-b & 5
Data Source Category:	Survey of Enrollees
Exclusions:	Contracts with less than 30 responses are suppressed.
Data Time Frame:	04/01/2017 – 07/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Not Included
CAI Usage:	Not Included
Case-mix adjusted:	Yes
Weighting Category:	Outcome Measure
Weighting Value:	3
Major Disaster:	No adjustment, data collected prior to disasters
CMS Framework Area:	Person- and caregiver-centered experience and outcomes
NQF #:	Not Applicable
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 64%	≥ 64% to < 68%	≥ 68% to < 70%	≥ 70% to < 75%	≥ 75%

Measure: C05 - Improving or Maintaining Mental Health

Title	Description
Label for Stars:	Improving or Maintaining Mental Health
Label for Data:	Improving or Maintaining Mental Health
Description:	Percent of plan members whose mental health was the same or better than expected after two years.
Metric:	The percentage of sampled Medicare enrollees 65 years of age or older (denominator) whose mental health status was the same or better than expected (numerator).
Primary Data Source:	HOS
Data Source Description:	2015-2017 Cohort 18 Performance Measurement Results (2015 Baseline data collection, 2017 Follow-up data collection) 2-year MCS change – Questions: 4a-b, 6a-c & 7

Title	Description
Data Source Category:	Survey of Enrollees
Exclusions:	Contracts with less than 30 responses are suppressed.
Data Time Frame:	04/01/2017 – 07/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Not Included
CAI Usage:	Not Included
Case-mix adjusted:	Yes
Weighting Category:	Outcome Measure
Weighting Value:	3
Major Disaster:	No adjustment, data collected prior to disasters
CMS Framework Area:	Person- and caregiver-centered experience and outcomes
NQF #:	Not Applicable
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 76%	≥ 76% to < 80%	≥ 80% to < 84%	≥ 84% to < 86%	≥ 86%

Measure: C06 - Monitoring Physical Activity

Title	Description
Label for Stars:	Monitoring Physical Activity
Label for Data:	Monitoring Physical Activity
Description:	Percent of senior plan members who discussed exercise with their doctor and were advised to start, increase, or maintain their physical activity during the year.
HEDIS Label:	Physical Activity in Older Adults (PAO)
Measure Reference:	NCQA HEDIS 2017 Specifications for The Medicare Health Outcomes Survey Volume 6, page 34
Metric:	The percentage of sampled Medicare members 65 years of age or older (denominator) who had a doctor's visit in the past 12 months and who received advice to start, increase or maintain their level exercise or physical activity (numerator).
Primary Data Source:	HEDIS / HOS
Data Source Description:	Cohort 18 Follow-up Data collection (2017) and Cohort 20 Baseline data collection (2017). HOS Survey Question 46: In the past 12 months, did you talk with a doctor or other health provider about your level of exercise of physical activity? For example, a doctor or other health provider may ask if you exercise regularly or take part in physical exercise. HOS Survey Question 47: In the past 12 months, did a doctor or other health care provider advise you to start, increase or maintain your level of exercise or physical activity? For example, in order to improve your health, your doctor or other health provider may advise you to start taking the stairs, increase walking from 10 to 20 minutes every day or to maintain your current exercise program.

Title	Description
Data Source Category:	Survey of Enrollees
Exclusions:	Members who responded "I had no visits in the past 12 months" to Question 46 are excluded from results calculations for Question 47. Contracts must achieve a denominator of at least 100 to obtain a reportable result. If the denominator is less than 100, the measure result will be "Not enough data available." Members with evidence from CMS administrative records of a hospice start date are excluded.
Data Time Frame:	04/01/2017 – 07/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	No adjustment, data collected prior to disasters
CMS Framework Area:	Person- and caregiver-centered experience and outcomes
NQF #:	0029
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 44%	≥ 44% to < 51%	≥ 51% to < 56%	≥ 56% to < 66%	≥ 66%

Measure: C07 - Adult BMI Assessment

Title	Description
Label for Stars:	Checking to See if Members Are at a Healthy Weight
Label for Data:	Checking to See if Members Are at a Healthy Weight
Description:	Percent of plan members with an outpatient visit who had their Body Mass Index (BMI) calculated from their height and weight and recorded in their medical record.
HEDIS Label:	Adult BMI Assessment (ABA)
Measure Reference:	NCQA HEDIS 2018 Technical Specifications Volume 2, page 58
Metric:	The percentage of MA enrollees 18-74 years of age (denominator) who had an outpatient visit and whose body mass index (BMI) was documented during the measurement year or the year prior the measurement year (numerator).
Primary Data Source:	HEDIS
Data Source Category:	Health and Drug Plans
Exclusions:	(optional) Members who have a diagnosis of pregnancy (Pregnancy Value Set) during the measurement year or the year prior to the measurement year. Contracts whose enrollment was at least 500 but less than 1,000 as of the July 2017 enrollment report and having measure score reliability less than 0.7 are excluded. Contracts whose enrollment was less than 500 as of the July 2017 enrollment report are excluded from this measure.
Data Time Frame:	01/01/2017 – 12/31/2017

Title	Description
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Clinical care
NQF #:	0421
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 76%	≥ 76% to < 84%	≥ 84% to < 93%	≥ 93% to < 98%	≥ 98%

Domain: 2 - Managing Chronic (Long Term) Conditions

Measure: C08 - Special Needs Plan (SNP) Care Management

Title	Description
Label for Stars:	Members Whose Plan Did an Assessment of Their Health Needs and Risks
Label for Data:	Members Whose Plan Did an Assessment of Their Health Needs and Risks
Description:	Percent of members whose plan did an assessment of their health needs and risks in the past year. The results of this review are used to help the member get the care they need. (Medicare does not collect this information from all plans. Medicare collects it only for Special Needs Plans. These plans are a type of Medicare Advantage plan designed for certain people with Medicare. Some Special Needs Plans are for people with certain chronic diseases and conditions, some are for people who have both Medicare and Medicaid, and some are for people who live in an institution such as a nursing home.)
Metric:	This measure is defined as the percent of eligible Special Needs Plan (SNP) enrollees who received a health risk assessment (HRA) during the measurement year. The denominator for this measure is the sum of the number of new enrollees due for an Initial HRA (Element 13.1) and the number of enrollees eligible for an annual HRA (Element 13.2). The numerator for this measure is the sum of the number of initial HRAs performed on new enrollees (Element 13.3) and the number of annual reassessments performed (Element 13.6). The equation for calculating the SNP Care Management Assessment Rate is: [Number of initial HRAs performed on new enrollees (Element 13.3) + Number of annual reassessments performed (Element 13.6)] / [Number of new enrollees due for an Initial HRA (Element 13.1) + Number of enrollees eligible for an annual HRA (Element 13.2)]
Primary Data Source:	Part C Plan Reporting
Data Source Description:	Data were reported by contracts to CMS per the Part C Reporting Requirements. Validation of these data was performed during the 2017 Data Validation cycle.
Data Source Category:	Health and Drug Plans
Exclusions:	Contracts and PBPs with an effective termination date on or before the deadline to submit data validation results to CMS (June 30, 2018) are excluded and listed as “No data available.” SNP Care Management Assessment Rates are not provided for contracts that did not score at least 95% on data validation for the SNP Care Management reporting section or were not compliant with data validation standards/sub-standards for any the following SNP Care Management data elements: • Number of new enrollees due for an initial HRA (Element 13.1) • Number of enrollees eligible for an annual HRA (Element 13.2) • Number of initial HRAs performed on new enrollees (Element 13.3) • Number of annual reassessments performed (Element 13.6) Contracts can view their data validation results in HPMS (https://hpms.cms.gov/). From the home page, select Monitoring | Plan Reporting Data Validation. If you cannot see the Plan Reporting Data Validation module, contact CMSHPMS_Access@cms.hhs.gov. Contracts excluded from the SNP Care Management Assessment Rates due to data validation issues are shown as “CMS identified issues with this plan's data.”

Title	Description
	Additionally, contracts must have 30 or more enrollees in the denominator [Number of new enrollees (Element 13.1) + Number of enrollees eligible for an annual HRA (Element 13.2) ≥ 30] in order to have a calculated rate. Contracts with fewer than 30 eligible enrollees are listed as "No data available."
General Notes:	More information about the data used to calculate this measure can be found in Attachment E. The 2017 Part C reporting requirement fields listed below are not used in calculating this measure: 13.4 Number of initial HRA refusals 13.5 Number of initial HRAs where SNP is unable to reach new enrollees 13.7 Number of annual reassessment refusals 13.8 Number of annual reassessments where SNP is unable to reach enrollee
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Clinical care
NQF #:	Not Applicable
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
No	No	Yes	Yes	No	No	No

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 46%	≥ 46% to < 63%	≥ 63% to < 73%	≥ 73% to < 89%	≥ 89%

Measure: C09 - Care for Older Adults – Medication Review

Title	Description
Label for Stars:	Yearly Review of All Medications and Supplements Being Taken
Label for Data:	Yearly Review of All Medications and Supplements Being Taken
Description:	Percent of plan members whose doctor or clinical pharmacist reviewed a list of everything they take (prescription and non-prescription drugs, vitamins, herbal remedies, other supplements) at least once a year. (Medicare does not collect this information from all plans. Medicare collects it only for Special Needs Plans. These plans are a type of Medicare Advantage plan designed for certain people with Medicare. Some Special Needs Plans are for people with certain chronic diseases and conditions, some are for people who have both Medicare and Medicaid, and some are for people who live in an institution such as a nursing home.)
HEDIS Label:	Care for Older Adults (COA) – Medication Review
Measure Reference:	NCQA HEDIS 2018 Technical Specifications Volume 2, page 93
Metric:	The percentage of Medicare Advantage Special Needs Plan enrollees 66 years and older (denominator) who received at least one medication review (Medication Review

Title	Description
	Value Set) conducted by a prescribing practitioner or clinical pharmacist during the measurement year and the presence of a medication list in the medical record (Medication List Value Set) (numerator).
Primary Data Source:	HEDIS
Data Source Category:	Health and Drug Plans
Exclusions:	SNP benefit packages whose enrollment was less than 30 as of February 2016 SNP Comprehensive Report were excluded from this measure.
General Notes:	The formula used to calculate this measure can be found in Attachment E.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Clinical care
NQF #:	0553
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
No	No	Yes	Yes	No	No	No

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 1%	≥ 1% to < 54%	≥ 54% to < 83%	≥ 83% to < 92%	≥ 92%

Measure: C10 - Care for Older Adults – Functional Status Assessment

Title	Description
Label for Stars:	Yearly Assessment of How Well Plan Members Are Able to Do Activities of Daily Living
Label for Data:	Yearly Assessment of How Well Plan Members Are Able to Do Activities of Daily Living
Description:	Percent of plan members whose doctor has done a functional status assessment to see how well they are able to do Activities of Daily Living such as dressing, eating, and bathing. (Medicare does not collect this information from all plans. Medicare collects it only for Special Needs Plans. These plans are a type of Medicare Advantage plan designed for certain people with Medicare. Some Special Needs Plans are for people with certain chronic diseases and conditions, some are for people who have both Medicare and Medicaid, and some are for people who live in an institution such as a nursing home.)
HEDIS Label:	Care for Older Adults (COA) – Functional Status Assessment
Measure Reference:	NCQA HEDIS 2018 Technical Specifications Volume 2, page 93
Metric:	The percentage of Medicare Advantage Special Needs Plan enrollees 66 years and older (denominator) who received at least one functional status assessment (Functional Status Assessment Value Set) during the measurement year (numerator).
Primary Data Source:	HEDIS
Data Source Category:	Health and Drug Plans

Title	Description
Exclusions:	SNP benefit packages whose enrollment was less than 30 as of February 2016 SNP Comprehensive Report were excluded from this measure.
General Notes:	The formula used to calculate this measure can be found in Attachment E.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Clinical care
NQF #:	Not Applicable
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
No	No	Yes	Yes	No	No	No

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 27%	≥ 27% to < 68%	≥ 68% to < 77%	≥ 77% to < 90%	≥ 90%

Measure: C11 - Care for Older Adults – Pain Assessment

Title	Description
Label for Stars:	Yearly Pain Screening or Pain Management Plan
Label for Data:	Yearly Pain Screening or Pain Management Plan
Description:	Percent of plan members who had a pain screening at least once during the year. (Medicare does not collect this information from all plans. Medicare collects it only for Special Needs Plans. These plans are a type of Medicare Advantage plan designed for certain people with Medicare. Some Special Needs Plans are for people with certain chronic diseases and conditions, some are for people who have both Medicare and Medicaid, and some are for people who live in an institution such as a nursing home.)
HEDIS Label:	Care for Older Adults (COA) – Pain Screening
Measure Reference:	NCQA HEDIS 2018 Technical Specifications Volume 2, page 93
Metric:	The percentage of Medicare Advantage Special Needs Plan enrollees 66 years and older (denominator) who received at least one pain assessment (Pain Assessment Value Set) plan during the measurement year (numerator).
Primary Data Source:	HEDIS
Data Source Category:	Health and Drug Plans
Exclusions:	SNP benefit packages whose enrollment was less than 30 as of February 2016 SNP Comprehensive Report were excluded from this measure.
General Notes:	The formula used to calculate this measure can be found in Attachment E.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering

Title	Description
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Clinical care
NQF #:	Not Applicable
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
No	No	Yes	Yes	No	No	No

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 41%	≥ 41% to < 73%	≥ 73% to < 89%	≥ 89% to < 97%	≥ 97%

Measure: C12 - Osteoporosis Management in Women who had a Fracture

Title	Description
Label for Stars:	Osteoporosis Management
Label for Data:	Osteoporosis Management
Description:	Percent of female plan members who broke a bone and got screening or treatment for osteoporosis within 6 months.
HEDIS Label:	Osteoporosis Management in Women Who Had a Fracture (OMW)
Measure Reference:	NCQA HEDIS 2018 Technical Specifications Volume 2, page 165
Metric:	The percentage of woman MA enrollees 67 - 85 who suffered a fracture (denominator) and who had either a bone mineral density (BMD) test or prescription for a drug to treat osteoporosis in the six months after the fracture (numerator).
Primary Data Source:	HEDIS
Data Source Category:	Health and Drug Plans
Exclusions:	Contracts whose enrollment was at least 500 but less than 1,000 as of the July 2017 enrollment report and having measure score reliability less than 0.7 are excluded. Contracts whose enrollment was less than 500 as of the July 2017 enrollment report are excluded from this measure.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Included
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Clinical care
NQF #:	0053

Title	Description
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 29%	≥ 29% to < 45%	≥ 45% to < 57%	≥ 57% to < 78%	≥ 78%

Measure: C13 - Diabetes Care – Eye Exam

Title	Description
Label for Stars:	Eye Exam to Check for Damage from Diabetes
Label for Data:	Eye Exam to Check for Damage from Diabetes
Description:	Percent of plan members with diabetes who had an eye exam to check for damage from diabetes during the year.
HEDIS Label:	Comprehensive Diabetes Care (CDC) – Eye Exam (Retinal) Performed
Measure Reference:	NCQA HEDIS 2018 Technical Specifications Volume 2, page 140
Metric:	The percentage of diabetic MA enrollees 18-75 with diabetes (type 1 and type 2) (denominator) who had an eye exam (retinal) performed during the measurement year (numerator).
Primary Data Source:	HEDIS
Data Source Category:	Health and Drug Plans
Exclusions:	(optional) Members who do not have a diagnosis of diabetes (Diabetes Value Set), in any setting, during the measurement year or the year prior to the measurement year and who had a diagnosis of gestational diabetes or steroid-induced diabetes (Diabetes Exclusions Value Set), in any setting, during the measurement year or the year prior to the measurement year. Organizations that apply optional exclusions must exclude members from the denominator for all indicators. The denominator for all rates must be the same, with the exception of the HbA1c Control (<7.0%) for a Selected Population denominator. If the member was included in the measure based on claim or encounter data, as described in the event/ diagnosis criteria, the optional exclusions do not apply because the member had a diagnosis of diabetes. Contracts whose enrollment was at least 500 but less than 1,000 as of the July 2017 enrollment report and having measure score reliability less than 0.7 are excluded. Contracts whose enrollment was less than 500 as of the July 2017 enrollment report are excluded from this measure.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1

Title	Description
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Clinical care
NQF #:	0055
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 56%	≥ 56% to < 64%	≥ 64% to < 73%	≥ 73% to < 80%	≥ 80%

Measure: C14 - Diabetes Care – Kidney Disease Monitoring

Title	Description
Label for Stars:	Kidney Function Testing for Members with Diabetes
Label for Data:	Kidney Function Testing for Members with Diabetes
Description:	Percent of plan members with diabetes who had a kidney function test during the year.
HEDIS Label:	Comprehensive Diabetes Care (CDC) – Medical Attention for Nephropathy
Measure Reference:	NCQA HEDIS 2018 Technical Specifications Volume 2, page 140
Metric:	The percentage of diabetic MA enrollees 18-75 with diabetes (type 1 and type 2) (denominator) who had medical attention for nephropathy during the measurement year (numerator).
Primary Data Source:	HEDIS
Data Source Category:	Health and Drug Plans
Exclusions:	(optional) Members who do not have a diagnosis of diabetes (Diabetes Value Set), in any setting, during the measurement year or the year prior to the measurement year and who had a diagnosis of gestational diabetes or steroid-induced diabetes (Diabetes Exclusions Value Set), in any setting, during the measurement year or the year prior to the measurement year. Organizations that apply optional exclusions must exclude members from the denominator for all indicators. The denominator for all rates must be the same, with the exception of the HbA1c Control (<7.0%) for a Selected Population denominator. If the member was included in the measure based on claim or encounter data, as described in the event/ diagnosis criteria, the optional exclusions do not apply because the member had a diagnosis of diabetes. Contracts whose enrollment was at least 500 but less than 1,000 as of the July 2017 enrollment report and having measure score reliability less than 0.7 are excluded. Contracts whose enrollment was less than 500 as of the July 2017 enrollment report are excluded from this measure.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No

Title	Description
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Clinical care
NQF #:	0062
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
NA	NA	≥ 87% to < 95%	≥ 95% to < 97%	≥ 97%

Measure: C15 - Diabetes Care – Blood Sugar Controlled

Title	Description
Label for Stars:	Plan Members with Diabetes whose Blood Sugar is Under Control
Label for Data:	Plan Members with Diabetes whose Blood Sugar is Under Control
Description:	Percent of plan members with diabetes who had an A1C lab test during the year that showed their average blood sugar is under control.
HEDIS Label:	Comprehensive Diabetes Care (CDC) – HbA1c poor control (>9.0%)
Measure Reference:	NCQA HEDIS 2018 Technical Specifications Volume 2, page 140
Metric:	The percentage of diabetic MA enrollees 18-75 (denominator) whose most recent HbA1c level is greater than 9%, or who were not tested during the measurement year (numerator). (This measure for public reporting is reverse scored so higher scores are better.) To calculate this measure, subtract the submitted rate from 100.
Primary Data Source:	HEDIS
Data Source Category:	Health and Drug Plans
Exclusions:	(optional) Members who do not have a diagnosis of diabetes (Diabetes Value Set), in any setting, during the measurement year or the year prior to the measurement year and who had a diagnosis of gestational diabetes or steroid-induced diabetes (Diabetes Exclusions Value Set), in any setting, during the measurement year or the year prior to the measurement year. Organizations that apply optional exclusions must exclude members from the denominator for all indicators. The denominator for all rates must be the same, with the exception of the HbA1c Control (<7.0%) for a Selected Population denominator. If the member was included in the measure based on claim or encounter data, as described in the event/ diagnosis criteria, the optional exclusions do not apply because the member had a diagnosis of diabetes. Contracts whose enrollment was at least 500 but less than 1,000 as of the July 2017 enrollment report and having measure score reliability less than 0.7 are excluded. Contracts whose enrollment was less than 500 as of the July 2017 enrollment report are excluded from this measure.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering

Title	Description
Improvement Measure:	Included
CAI Usage:	Included
Case-mix adjusted:	No
Weighting Category:	Intermediate Outcome Measure
Weighting Value:	3
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Clinical care
NQF #:	0059
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 39%	≥ 39% to < 68%	≥ 68% to < 78%	≥ 78% to < 87%	≥ 87%

Measure: C16 - Controlling Blood Pressure

Title	Description
Label for Stars:	Controlling Blood Pressure
Label for Data:	Controlling Blood Pressure
Description:	Percent of plan members with high blood pressure who got treatment and were able to maintain a healthy pressure.
HEDIS Label:	Controlling High Blood Pressure (CBP)
Measure Reference:	NCQA HEDIS 2018 Technical Specifications Volume 2, page 122
Metric:	The percentage of MA members 18–85 years of age who had a diagnosis of hypertension (HTN) (denominator) and whose BP was adequately controlled (<140/90) for members 18-59 years of age and 60-85 years of age with diagnosis of diabetes or (150/90) for members 60-85 without a diagnosis of diabetes during the measurement year (numerator).
Primary Data Source:	HEDIS
Data Source Category:	Health and Drug Plans
Exclusions:	(optional) • Exclude from the eligible population all members with evidence of end-stage renal disease (ESRD) (ESRD Value Set; ESRD Obsolete Value Set) or kidney transplant (Kidney Transplant Value Set) on or prior to December 31 of the measurement year. Documentation in the medical record must include a dated note indicating evidence of ESRD, kidney transplant or dialysis. • Exclude from the eligible population all members with a diagnosis of pregnancy (Pregnancy Value Set) during the measurement year. • Exclude from the eligible population all members who had a nonacute inpatient admission during the measurement year. To identify nonacute inpatient admissions: 1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set). 2. Confirm the stay was for nonacute care based on the presence of a nonacute code (Nonacute Inpatient Stay Value Set) on the claim. 3. Identify the discharge date for the stay. Contracts whose enrollment was at least 500 but less than 1,000 as of the July 2017 enrollment report and having measure score reliability less than 0.7 are excluded.

Title	Description
	Contracts whose enrollment was less than 500 as of the July 2017 enrollment report are excluded from this measure.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Intermediate Outcome Measure
Weighting Value:	3
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Clinical care
NQF #:	0018
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 51%	≥ 51% to < 62%	≥ 62% to < 75%	≥ 75% to < 82%	≥ 82%

Measure: C17 - Rheumatoid Arthritis Management

Title	Description
Label for Stars:	Rheumatoid Arthritis Management
Label for Data:	Rheumatoid Arthritis Management
Description:	Percent of plan members with rheumatoid arthritis who got one or more prescriptions for an anti-rheumatic drug.
HEDIS Label:	Disease-Modifying Anti-Rheumatic Drug Therapy for Rheumatoid Arthritis (ART)
Measure Reference:	NCQA HEDIS 2018 Technical Specifications Volume 2, page 162
Metric:	The percentage of MA members who were diagnosed with rheumatoid arthritis during the measurement year (denominator), and who were dispensed at least one ambulatory prescription for a disease modifying anti-rheumatic drug (DMARD) (numerator).
Primary Data Source:	HEDIS
Data Source Category:	Health and Drug Plans
Exclusions:	(optional) • A diagnosis of HIV (HIV Value Set) any time during the member's history through December 31 of the measurement year. • A diagnosis of pregnancy (Pregnancy Value Set) any time during the measurement year. Contracts whose enrollment was at least 500 but less than 1,000 as of the July 2017 enrollment report and having measure score reliability less than 0.7 are excluded. Contracts whose enrollment was less than 500 as of the July 2017 enrollment report are excluded from this measure.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better

Title	Description
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Included
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Clinical care
NQF #:	0054
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 69%	≥ 69% to < 76%	≥ 76% to < 83%	≥ 83% to < 89%	≥ 89%

Measure: C18 - Reducing the Risk of Falling

Title	Description
Label for Stars:	Reducing the Risk of Falling
Label for Data:	Reducing the Risk of Falling
Description:	Percent of plan members with a problem falling, walking, or balancing who discussed it with their doctor and received a recommendation for how to prevent falls during the year.
HEDIS Label:	Fall Risk Management (FRM)
Measure Reference:	NCQA HEDIS 2017 Specifications for The Medicare Health Outcomes Survey Volume 6, page 36
Metric:	The percentage of Medicare members 65 years of age or older who had a fall or had problems with balance or walking in the past 12 months, who were seen by a practitioner in the past 12 months (denominator) and who received a recommendation for how to prevent falls or treat problems with balance or walking from their current practitioner (numerator).
Primary Data Source:	HEDIS / HOS
Data Source Description:	Cohort 18 Follow-up Data collection (2017) and Cohort 20 Baseline data collection (2017). HOS Survey Question 48: A fall is when your body goes to the ground without being pushed. In the past 12 months, did your doctor or other health provider talk with you about falling or problems with balance or walking? HOS Survey Question 49: Did you fall in the past 12 months? HOS Survey Question 50: In the past 12 months have you had a problem with balance or walking? HOS Survey Question 51: Has your doctor or other health provider done anything to help prevent falls or treat problems with balance or walking? Some things they might do include: • Suggest that you use a cane or walker

Title	Description
	• Suggest that you do an exercise or physical therapy program • Suggest a vision or hearing testing
Data Source Category:	Survey of Enrollees
Exclusions:	Contracts must achieve a denominator of at least 100 to obtain a reportable result. If the denominator is less than 100, the measure result will be "Not enough data available." Members with evidence from CMS administrative records of a hospice start date are excluded.
Data Time Frame:	04/01/2017 – 07/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Included
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	No adjustment, data collected prior to disasters
CMS Framework Area:	Clinical care
NQF #:	0035
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 48%	≥ 48% to < 54%	≥ 54% to < 61%	≥ 61% to < 70%	≥ 70%

Measure: C19 - Improving Bladder Control

Title	Description
Label for Stars:	Improving Bladder Control
Label for Data:	Improving Bladder Control
Description:	Percent of plan members with a urine leakage problem in the past 6 months who discussed treatment options with a provider.
HEDIS Label:	Management of Urinary Incontinence in Older Adults (MUI)
Measure Reference:	NCQA HEDIS 2017 Specifications for The Medicare Health Outcomes Survey Volume 6, page 31
Metric:	The percentage of Medicare members 65 years of age or older who reported having any urine leakage in the past six months (denominator) and who discussed treatment options for their urinary incontinence with a provider (numerator).
Primary Data Source:	HEDIS / HOS
Data Source Description:	Cohort 18 Follow-up Data collection (2017) and Cohort 20 Baseline data collection (2017). HOS Survey Question 42: Many people experience leaking of urine, also called urinary incontinence. In the past six months, have you experienced leaking of urine? HOS Survey Question 45: There are many ways to control or manage the leaking of urine, including bladder training exercises, medication and surgery. Have you ever

Title	Description
	talked with a doctor, nurse, or other health care provider about any of these approaches? Member choices must be as follows to be included in the denominator: • Q42 = "Yes." • Q45 = "Yes" or "No." The numerator contains the number of members in the denominator who indicated they discussed treatment options for their urinary incontinence with a health care provider. Member choice must be as follows to be included in the numerator: • Q45 = "Yes."
Data Source Category:	Survey of Enrollees
Exclusions:	Contracts must achieve a denominator of at least 100 to obtain a reportable result. If the denominator is less than 100, the measure result will be "Not enough data available." Members with evidence from CMS administrative records of a hospice start date are excluded.
Data Time Frame:	04/01/2017 – 07/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	No adjustment, data collected prior to disasters
CMS Framework Area:	Clinical care
NQF #:	0030
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 38%	≥ 38% to < 42%	≥ 42% to < 48%	≥ 48% to < 53%	≥ 53%

Measure: C20 - Medication Reconciliation Post-Discharge

Title	Description
Label for Stars:	The Plan Makes Sure Member Medication Records Are Up-to-Date After Hospital Discharge
Label for Data:	The Plan Makes Sure Member Medication Records Are Up-to-Date After Hospital Discharge
Description:	This shows the percent of plan members whose medication records were updated within 30 days after leaving the hospital. To update the record, a doctor or other health care professional looks at the new medications prescribed in the hospital and compares them with the other medications the patient takes. Updating medication records can help to prevent errors that can occur when medications are changed.
HEDIS Label:	Medication Reconciliation Post-Discharge (MRP)

Title	Description
Measure Reference:	NCQA HEDIS 2018 Technical Specifications Volume 2, page 212
Metric:	The percentage of discharges from January 1–December 1 of the measurement year for members 18 years of age and older for whom medications were reconciled the date of discharge through 30 days after discharge (31 total days).
Primary Data Source:	HEDIS
Data Source Category:	Health and Drug Plans
Exclusions:	Contracts whose enrollment was at least 500 but less than 1,000 as of the July 2017 enrollment report and having measure score reliability less than 0.7 are excluded. Contracts whose enrollment was less than 500 as of the July 2017 enrollment report are excluded from this measure.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Care coordination
NQF #:	0554
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 37%	≥ 37% to < 54%	≥ 54% to < 66%	≥ 66% to < 79%	≥ 79%

Measure: C21 - Plan All-Cause Readmissions

Title	Description
Label for Stars:	Readmission to a Hospital within 30 Days of Being Discharged (more stars are better because it means fewer members are being readmitted)
Label for Data:	Readmission to a Hospital within 30 Days of Being Discharged (lower percentages are better because it means fewer members are being readmitted)
Description:	Percent of senior plan members discharged from a hospital stay who were readmitted to a hospital within 30 days, either for the same condition as their recent hospital stay or for a different reason. (Patients may have been readmitted back to the same hospital or to a different one. Rates of readmission take into account how sick patients were when they went into the hospital the first time. This “risk-adjustment” helps make the comparisons between plans fair and meaningful.)
HEDIS Label:	Plan All-Cause Readmissions (PCR)
Measure Reference:	NCQA HEDIS 2018 Technical Specifications Volume 2, page 379
Metric:	The percentage of acute inpatient stays during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days, for

Title	Description
	members 65 years of age and older using the following formula to control for differences in the case mix of patients across different contracts. For contract A, their case-mix adjusted readmission rate relative to the national average is the observed readmission rate for contract A divided by the expected readmission rate for contract A. This ratio is then multiplied by the national average observed rate. To calculate the observed rate and expected rate for contract A for members 65 years and older, the following formulas were used: 1. The observed readmission rate for contract A equals the sum of the count of 30-day readmissions across the three age bands (65-74, 75-84 and 85+) divided by the sum of the count of index stays across the three age bands (65-74, 75-84 and 85+). 2. The expected readmission rate for contract A equals the sum of the average adjusted probabilities across the three age bands (65-74, 75-84 and 85+), weighted by the percentage of index stays in each age band. See Attachment F: Calculating Measure C21: Plan All-Cause Readmissions for the complete formula, example calculation and National Average Observation value used to complete this measure.
Primary Data Source:	HEDIS
Data Source Category:	Health and Drug Plans
Exclusions:	Contracts whose enrollment was at least 500 but less than 1,000 as of the July 2017 enrollment report and having measure score reliability less than 0.7 are excluded. Contracts whose enrollment was less than 500 as of the July 2017 enrollment report are excluded from this measure. As listed in the HEDIS Technical Specifications. CMS has excluded contracts whose denominator was 10 or less.
General Notes:	In past Star Ratings, 1876 Cost contracts voluntarily reported data in this measure even though they were not required to do so. For the HEDIS 2018 submission 1876 Cost contracts were not permitted to report this measure, so no additional action needed to be taken. For HEDIS 2018 (used in these ratings), NCQA replaced all references to “Average Adjusted Probability of Readmission” with “Expected Readmissions Rate.” The changes are cosmetic only and do not change how the measure is reported or calculated.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Lower is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	Yes
Weighting Category:	Outcome Measure
Weighting Value:	3
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Care coordination
NQF #:	1768

Title	Description
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
No	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
> 12%	> 10% to ≤ 12%	> 8% to ≤ 10%	> 5% to ≤ 8%	≤ 5%

Measure: C22 - Statin Therapy for Patients with Cardiovascular Disease

Title	Description
Label for Stars:	The Plan Makes Sure Members with Heart Disease Get the Most Effective Drugs to Treat High Cholesterol
Label for Data:	The Plan Makes Sure Members with Heart Disease Get the Most Effective Drugs to Treat High Cholesterol
Description:	This rating is based on the percent of plan members with heart disease who get the right type of cholesterol-lowering drugs. Health plans can help make sure their members are prescribed medications that are more effective for them.
HEDIS Label:	Statin Therapy for Patients with Cardiovascular Disease (SPC)
Measure Reference:	NCQA HEDIS 2018 Technical Specifications Volume 2, page 133
Metric:	The percentage of males 21–75 years of age and females 40–75 years of age during the measurement year, who were identified as having clinical atherosclerotic cardiovascular disease (ASCVD) (denominator) and were dispensed at least one high or moderate-intensity statin medication during the measurement year (numerator).
Primary Data Source:	HEDIS
Data Source Category:	Health and Drug Plans
Exclusions:	Exclude members who meet any of the following criteria: • Pregnancy (Pregnancy Value Set) during the measurement year or year prior to the measurement year. • In vitro fertilization (IVF Value Set) in the measurement year or year prior to the measurement year. • Dispensed at least one prescription for clomiphene (Table SPC-A) during the measurement year or the year prior to the measurement year. • ESRD (ESRD Value Set) during the measurement year or the year prior to the measurement year. • Cirrhosis (Cirrhosis Value Set) during the measurement year or the year prior to the measurement year. • Myalgia, myositis, myopathy, or rhabdomyolysis (Muscular Pain and Disease Value Set) during the measurement year. Contracts whose enrollment was at least 500 but less than 1,000 as of the July 2017 enrollment report and having measure score reliability less than 0.7 are excluded. Contracts whose enrollment was less than 500 as of the July 2017 enrollment report are excluded from this measure.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Not Included
CAI Usage:	Not Included

Title	Description
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Clinical care
NQF #:	Not Applicable
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
No	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 70%	≥ 70% to < 76%	≥ 76% to < 81%	≥ 81% to < 85%	≥ 85%

Domain: 3 - Member Experience with Health Plan

Measure: C23 - Getting Needed Care

Title	Description
Label for Stars:	Ease of Getting Needed Care and Seeing Specialists
Label for Data:	Ease of Getting Needed Care and Seeing Specialists (on a scale from 0 to 100)
Description:	Percent of the best possible score the plan earned on how easy it is for members to get needed care, including care from specialists.
Metric:	This case-mix adjusted composite measure is used to assess how easy it was for a member to get needed care and see specialists. The Consumer Assessment of Healthcare Providers and Systems (CAHPS) score uses the mean of the distribution of responses converted to a scale from 0 to 100. The score shown is the percentage of the best possible score each contract earned.
Primary Data Source:	CAHPS
Data Source Description:	CAHPS Survey Questions (question numbers vary depending on survey type): • In the last 6 months, how often did you get an appointment to see a specialist as soon as you needed? • In the last 6 months, how often was it easy to get the care, tests or treatment you needed?
Data Source Category:	Survey of Enrollees
General Notes:	CAHPS Survey results were sent to each contract's Medicare Compliance Officer in August 2018. These reports provide further explanation of the CAHPS scoring methodology and provide detailed information on why a specific rating was assigned.
Data Time Frame:	03/2018 – 06/2018
General Trend:	Higher is better
Statistical Method:	Relative Distribution and Significance Testing
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	Yes
Weighting Category:	Patients' Experience and Complaints Measure
Weighting Value:	1.5
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Person- and caregiver-centered experience and outcomes
NQF #:	0006
Data Display:	Numeric with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	No	Yes	No	Yes

Base Group Cut Points:

Base Group 1	Base Group 2	Base Group 3	Base Group 4	Base Group 5
< 80	≥ 80 to < 82	≥ 82 to < 84	≥ 84 to < 85	≥ 85

These technical notes show the base group cut points for CAHPS measures; please see the Attachment K for the CAHPS Methodology for final star assignment rules.

Measure: C24 - Getting Appointments and Care Quickly

Title	Description
Label for Stars:	Getting Appointments and Care Quickly
Label for Data:	Getting Appointments and Care Quickly (on a scale from 0 to 100)
Description:	Percent of the best possible score the plan earned on how quickly members get appointments and care.
Metric:	This case-mix adjusted composite measure is used to assess how quickly the member was able to get appointments and care. The Consumer Assessment of Healthcare Providers and Systems (CAHPS) score uses the mean of the distribution of responses converted to a scale from 0 to 100. The score shown is the percentage of the best possible score each contract earned.
Primary Data Source:	CAHPS
Data Source Description:	CAHPS Survey Questions (question numbers vary depending on survey type): • In the last 6 months, when you needed care right away, how often did you get care as soon as you needed? • In the last 6 months, how often did you get an appointment for a check-up or routine care as soon as you needed? • In the last 6 months, how often did you see the person you came to see within 15 minutes of your appointment time?
Data Source Category:	Survey of Enrollees
General Notes:	CAHPS Survey results were sent to each contract's Medicare Compliance Officer in August 2018. These reports provide further explanation of the CAHPS scoring methodology and provide detailed information on why a specific rating was assigned.
Data Time Frame:	03/2018 – 06/2018
General Trend:	Higher is better
Statistical Method:	Relative Distribution and Significance Testing
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	Yes
Weighting Category:	Patients' Experience and Complaints Measure
Weighting Value:	1.5
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Person- and caregiver-centered experience and outcomes
NQF #:	0006
Data Display:	Numeric with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	No	Yes	No	Yes

Base Group Cut Points:

Base Group 1	Base Group 2	Base Group 3	Base Group 4	Base Group 5
< 74	≥ 74 to < 77	≥ 77 to < 79	≥ 79 to < 81	≥ 81

These technical notes show the base group cut points for CAHPS measures; please see the Attachment K for the CAHPS Methodology for final star assignment rules.

Measure: C25 - Customer Service

Title	Description
Label for Stars:	Health Plan Provides Information or Help When Members Need It
Label for Data:	Health Plan Provides Information or Help When Members Need It (on a scale from 0 to 100)
Description:	Percent of the best possible score the plan earned on how easy it is for members to get information and help from the plan when needed.
Metric:	This case-mix adjusted composite measure is used to assess how easy it was for the member to get information and help when needed. The Consumer Assessment of Healthcare Providers and Systems (CAHPS) score uses the mean of the distribution of responses converted to a scale from 0 to 100. The score shown is the percentage of the best possible score each contract earned.
Primary Data Source:	CAHPS
Data Source Description:	CAHPS Survey Questions (question numbers vary depending on survey type): • In the last 6 months, how often did your health plan's customer service give you the information or help you needed? • In the last 6 months, how often did your health plan's customer service treat you with courtesy and respect? • In the last 6 months, how often were the forms from your health plan easy to fill out?
Data Source Category:	Survey of Enrollees
General Notes:	CAHPS Survey results were sent to each contract's Medicare Compliance Officer in August 2018. These reports provide further explanation of the CAHPS scoring methodology and provide detailed information on why a specific rating was assigned.
Data Time Frame:	03/2018 – 06/2018
General Trend:	Higher is better
Statistical Method:	Relative Distribution and Significance Testing
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	Yes
Weighting Category:	Patients' Experience and Complaints Measure
Weighting Value:	1.5
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Person- and caregiver-centered experience and outcomes
NQF #:	0006
Data Display:	Numeric with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	No	Yes	No	Yes

Base Group Cut Points:

Base Group 1	Base Group 2	Base Group 3	Base Group 4	Base Group 5
< 88	≥ 88 to < 89	≥ 89 to < 91	≥ 91 to < 92	≥ 92

These technical notes show the base group cut points for CAHPS measures; please see the Attachment K for the CAHPS Methodology for final star assignment rules.

Measure: C26 - Rating of Health Care Quality

Title	Description
Label for Stars:	Member's Rating of Health Care Quality
Label for Data:	Member's Rating of Health Care Quality (on a scale from 0 to 100)
Description:	Percent of the best possible score the plan earned from members who rated the quality of the health care they received.
Metric:	This case-mix adjusted measure is used to assess members' view of the quality of care received from the health plan. The Consumer Assessment of Healthcare Providers and Systems (CAHPS) score uses the mean of the distribution of responses converted to a scale from 0 to 100. The score shown is the percentage of the best possible score each contract earned.
Primary Data Source:	CAHPS
Data Source Description:	CAHPS Survey Question (question numbers vary depending on survey type): • Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last 6 months?
Data Source Category:	Survey of Enrollees
General Notes:	CAHPS Survey results were sent to each contract's Medicare Compliance Officer in August 2018. These reports provide further explanation of the CAHPS scoring methodology and provide detailed information on why a specific rating was assigned.
Data Time Frame:	03/2018 – 06/2018
General Trend:	Higher is better
Statistical Method:	Relative Distribution and Significance Testing
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	Yes
Weighting Category:	Patients' Experience and Complaints Measure
Weighting Value:	1.5
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Person- and caregiver-centered experience and outcomes
NQF #:	0006
Data Display:	Numeric with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	No	Yes	No	Yes

Base Group Cut Points:

Base Group 1	Base Group 2	Base Group 3	Base Group 4	Base Group 5
< 84	≥ 84 to < 85	≥ 85 to < 87	≥ 87 to < 88	≥ 88

These technical notes show the base group cut points for CAHPS measures; please see the Attachment K for the CAHPS Methodology for final star assignment rules.

Measure: C27 - Rating of Health Plan

Title	Description
Label for Stars:	Member's Rating of Health Plan
Label for Data:	Member's Rating of Health Plan (on a scale from 0 to 100)
Description:	Percent of the best possible score the plan earned from members who rated the health plan.
Metric:	This case-mix adjusted measure is used to assess members' overall view of their health plan. The Consumer Assessment of Healthcare Providers and Systems (CAHPS) score uses the mean of the distribution of responses converted to a scale from 0 to 100. The score shown is the percentage of the best possible score each contract earned.
Primary Data Source:	CAHPS
Data Source Description:	CAHPS Survey Question (question numbers vary depending on survey type): • Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your health plan?
Data Source Category:	Survey of Enrollees
General Notes:	CAHPS Survey results were sent to each contract's Medicare Compliance Officer in August 2018. These reports provide further explanation of the CAHPS scoring methodology and provide detailed information on why a specific rating was assigned.
Data Time Frame:	03/2018 – 06/2018
General Trend:	Higher is better
Statistical Method:	Relative Distribution and Significance Testing
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	Yes
Weighting Category:	Patients' Experience and Complaints Measure
Weighting Value:	1.5
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Person- and caregiver-centered experience and outcomes
NQF #:	0006
Data Display:	Numeric with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	No	Yes	No	Yes

Base Group Cut Points:

Base Group 1	Base Group 2	Base Group 3	Base Group 4	Base Group 5
< 83	≥ 83 to < 84	≥ 84 to < 86	≥ 86 to < 88	≥ 88

These technical notes show the base group cut points for CAHPS measures; please see the Attachment K for the CAHPS Methodology for final star assignment rules.

Measure: C28 - Care Coordination

Title	Description
Label for Stars:	Coordination of Members' Health Care Services
Label for Data:	Coordination of Members' Health Care Services (on a scale from 0 to 100)
Description:	Percent of the best possible score the plan earned on how well the plan coordinates members' care. (This includes whether doctors had the records and information they needed about members' care and how quickly members got their test results.)
Metric:	This case-mix adjusted composite measure is used to assess Care Coordination. The Consumer Assessment of Healthcare Providers and Systems (CAHPS) score uses the mean of the distribution of responses converted to a scale of 0 to 100. The score shown is the percentage of the best possible score each contract earned.
Primary Data Source:	CAHPS
Data Source Description:	CAHPS Survey Questions (question numbers vary depending on survey type): • In the last 6 months, when you visited your personal doctor for a scheduled appointment, how often did he or she have your medical records or other information about your care? • In the last 6 months, when your personal doctor ordered a blood test, x-ray or other test for you, how often did someone from your personal doctor's office follow up to give you those results? • In the last 6 months, when your personal doctor ordered a blood test, x-ray or other test for you, how often did you get those results as soon as you needed them? • In the last 6 months, how often did you and your personal doctor talk about all the prescription medicines you were taking? • In the last 6 months, did you get the help you needed from your personal doctor's office to manage your care among these different providers and services? • In the last 6 months, how often did your personal doctor seem informed and up-to-date about the care you got from specialists?
Data Source Category:	Survey of Enrollees
General Notes:	CAHPS Survey results were sent to each contract's Medicare Compliance Officer in August 2018. These reports provide further explanation of the CAHPS scoring methodology and provide detailed information on why a specific rating was assigned.
Data Time Frame:	03/2018 – 06/2018
General Trend:	Higher is better
Statistical Method:	Relative Distribution and Significance Testing
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	Yes
Weighting Category:	Patients' Experience and Complaints Measure
Weighting Value:	1.5
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Care coordination
NQF #:	Not Applicable
Data Display:	Numeric with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	No	Yes	No	Yes

Base Group Cut Points:

Base Group 1	Base Group 2	Base Group 3	Base Group 4	Base Group 5
< 84	≥ 84 to < 85	≥ 85 to < 86	≥ 86 to < 88	≥ 88

These technical notes show the base group cut points for CAHPS measures; please see the Attachment K for the CAHPS Methodology for final star assignment rules.

Domain: 4 - Member Complaints and Changes in the Health Plan's Performance

Measure: C29 - Complaints about the Health Plan

Title	Description
Label for Stars:	Complaints about the Health Plan (more stars are better because it means fewer complaints)
Label for Data:	Complaints about the Health Plan (lower numbers are better because it means fewer complaints)
Description:	Percent of members filing complaints with Medicare about the health plan.
Metric:	Rate of complaints about the health plan per 1,000 members. For each contract, this rate is calculated as: [(Total number of all complaints logged into the Complaints Tracking Module (CTM)) / (Average Contract enrollment)] * 1,000 * 30 / (Number of Days in Period). Number of Days in Period = 366 for leap years, 365 for all other years. • Complaints data are pulled after the end of the measurement timeframe to serve as a snapshot of CTM data. • Enrollment numbers used to calculate the complaint rate were based on the average enrollment for the time period measured for each contract. • A contract's failure to follow CMS' CTM Standard Operating Procedures will not result in CMS' adjustment of the data used for these measures.
Primary Data Source:	Complaints Tracking Module (CTM)
Data Source Description:	Data were obtained from the CTM based on the contract entry date (the date that complaints are assigned or re-assigned to contracts; also known as the contract assignment/reassignment date) for the reporting period specified. The status of any specific complaint at the time the data are pulled stands for use in the reports. Any changes to the complaints data subsequent to the data pull cannot be excluded retroactively. CMS allows for an approximate 6-month "wash out" period to account for any adjustments per CMS' CTM Standard Operating Procedures. Complaint rates per 1,000 enrollees are adjusted to a 30-day basis.
Data Source Category:	CMS Administrative Data
Exclusions:	Some complaints that cannot be clearly attributed to the plan are excluded, please see Attachment B: Complaints Tracking Module Exclusion List. Complaint rates are not calculated for contracts with average enrollment of less than 800 enrollees during the measurement period.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Lower is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Patients' Experience and Complaints Measure
Weighting Value:	1.5
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Person- and caregiver-centered experience and outcomes
NQF #:	Not Applicable

Title	Description
Data Display:	Numeric with 2 decimal places

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
> 0.64	> 0.31 to ≤ 0.64	> 0.18 to ≤ 0.31	> 0.10 to ≤ 0.18	≤ 0.10

Measure: C30 - Members Choosing to Leave the Plan

Title	Description
Label for Stars:	Members Choosing to Leave the Plan (more stars are better because it means fewer members choose to leave the plan)
Label for Data:	Members Choosing to Leave the Plan (lower percentages are better because it means fewer members choose to leave the plan)
Description:	Percent of plan members who chose to leave the plan.
Metric:	The percent of members who chose to leave the contract comes from disenrollment reason codes in Medicare's enrollment system. The percent is calculated as the number of members who chose to leave the contract between January 1, 2017–December 31, 2017 (numerator) divided by all members enrolled in the contract at any time during 2017 (denominator).
Primary Data Source:	MBDSS
Data Source Description:	Medicare Beneficiary Database Suite of Systems (MBDSS)
Data Source Category:	CMS Administrative Data
Exclusions:	Members who involuntarily left their contract due to circumstances beyond their control are removed from the final numerator, specifically: • Members affected by a contract service area reduction • Members affected by PBP termination • Members in PBPs that were granted special enrollment exceptions • Members affected by PBP service area reductions where there are no PBPs left within the contract that the enrollee is eligible to enroll into • Members affected by LIS reassignments • Members who are enrolled in employer group plans • Members who were passively enrolled into a Demonstration (MMP) • Contracts with less than 1,000 enrollees • 1876 Cost contract disenrollments into the transition MA contract (H contract) • Members where the service area of the contract they enrolled into does not intersect with the service area of the contract from which they disenrolled
General Notes:	This measure includes members with a disenrollment effective date between 1/1/2017 and 12/31/2017 who disenrolled from the contract with any one of the following disenrollment reason codes: 11 - Voluntary Disenrollment through plan 13 - Disenrollment because of enrollment in another Plan 14 - Retroactive 99 - Other (not supplied by beneficiary). If all potential members in the numerator meet one or more of the exclusion criteria, the measure result will be "Not enough data available". The Disenrollment Reasons Survey (DRS) data available in the HPMS plan preview, as part of Medicare Plan Finder and in the CMS downloadable Master Table, are not used

Title	Description
	in the calculation of this measure. The DRS data are presented in each of the systems for information purposes only.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Lower is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Patients' Experience and Complaints Measure
Weighting Value:	1.5
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Person- and caregiver-centered experience and outcomes
NQF #:	Not Applicable
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
> 23%	> 18% to ≤ 23%	> 11% to ≤ 18%	> 6% to ≤ 11%	≤ 6%

Measure: C31 - Health Plan Quality Improvement

Title	Description
Label for Stars:	Improvement (if any) in the Health Plan's Performance
Label for Data:	Improvement (if any) in the Health Plan's Performance
Description:	This shows how much the health plan's performance improved or declined from one year to the next. If a plan receives **1 or 2 stars**, it means, on average, the plan's scores **declined** (got worse). If a plan receives **3 stars**, it means, on average, the plan's scores **stayed about the same**. If a plan receives **4 or 5 stars**, it means, on average, the plan's scores **improved**. Keep in mind that a plan that is already doing well in most areas may not show much improvement. It is also possible that a plan can start with low ratings, show a lot of improvement, and still not be performing very well.
Metric:	The numerator is the net improvement, which is a sum of the number of significantly improved measures minus the number of significantly declined measures. The denominator is the number of measures eligible for the improvement measure (i.e., the measures that were included in the 2017 and 2018 Star Ratings for this contract and had no specification changes).
Primary Data Source:	Star Ratings
Data Source Description:	2018 and 2019 Star Ratings
Data Source Category:	Star Ratings
Exclusions:	Contracts must have data in at least half of the measures used to calculate improvement to be rated in this measure.

Title	Description
General Notes:	Attachment I contains the formulas used to calculate the improvement measure and lists indicating which measures were used.
Data Time Frame:	Not Applicable
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Not Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Improvement Measure
Weighting Value:	5
Major Disaster:	Includes only measures which have data from both years
CMS Framework Area:	Population / community health
NQF #:	Not Applicable
Data Display:	Not Applicable

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< -0.215	≥ -0.215 to < 0.000	≥ 0.000 to < 0.190	≥ 0.190 to < 0.333	≥ 0.333

Domain: 5 - Health Plan Customer Service

Measure: C32 - Plan Makes Timely Decisions about Appeals

Title	Description
Label for Stars:	Health Plan Makes Timely Decisions about Appeals
Label for Data:	Health Plan Makes Timely Decisions about Appeals
Description:	Percent of plan members who got a timely response when they made an appeal request to the health plan about a decision to refuse payment or coverage.
Metric:	Percent of appeals timely processed by the plan (numerator) out of all the plan‘s appeals decided by the Independent Review Entity (IRE) (includes upheld, overturned and partially overturned appeals) (denominator). This is calculated as: ([Number of Timely Appeals] / ([Appeals Upheld] + [Appeals Overturned] + [Appeals Partially Overturned]) * 100.
Primary Data Source:	Independent Review Entity (IRE)
Data Source Description:	Data were obtained from the Independent Review Entity (IRE) contracted by CMS for Part C appeals. The appeals used in this measure are based on the date in the calendar year the appeal was received (or should have been received) by the IRE, not the date a decision was reached by the IRE. If a Reopening occurs and is decided prior to May 1, 2018, the Reopened decision is used in place of the Reconsideration decision. Reopenings decided on or after May 1, 2018 are not reflected in these data, the original decision result is used. The results of appeals that occur beyond Level 2 (i.e., Administrative Law Judge or Medicare Appeals Council appeals) are not included in the data.
Data Source Category:	Data Collected by CMS Contractors
Exclusions:	If the denominator is ≤ 10, the result is —”Not enough data available.” Dismissed and Withdrawn appeals are excluded from this measure.
General Notes:	This measure includes all Standard Coverage, Standard Claim, and Expedited appeals received by the IRE, regardless of the appellant. This includes appeals requested by a beneficiary, appeals requested by a party on behalf of a beneficiary, and appeals requested by non-contract providers. The number of timely appeals can be calculated using this formula: [Number of Timely Appeals] = ([Appeals Upheld] + [Appeals Overturned] + [Appeals Partially Overturned]) - [Late]
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Measures Capturing Access
Weighting Value:	1.5
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Population / community health
NQF #:	Not Applicable
Data Display:	Percentage with no decimal place

Title	Description

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 77%	≥ 77% to < 86%	≥ 86% to < 93%	≥ 93% to < 98%	≥ 98%

Measure: C33 - Reviewing Appeals Decisions

Title	Description
Label for Stars:	Fairness of the Health Plan's Appeal Decisions, Based on an Independent Reviewer
Label for Data:	Fairness of the Health Plan's Appeal Decisions, Based on an Independent Reviewer
Description:	This rating shows how often an **independent reviewer** thought the health plan's decision to deny an appeal was fair. This includes appeals made by plan members and out-of-network providers. (This rating is not based on how often the plan denies appeals, but rather *how fair* the plan is when they deny an appeal.)
Metric:	Percent of appeals where a plan's decision was "upheld" by the Independent Review Entity (IRE) (numerator) out of all the plan's appeals (upheld, overturned, and partially overturned appeals only) that the IRE reviewed (denominator). This is calculated as: ([Appeals Upheld] / ([Appeals Upheld] + [Appeals Overturned] + [Appeals Partially Overturned]))* 100.
Primary Data Source:	Independent Review Entity (IRE)
Data Source Description:	Data were obtained from the Independent Review Entity (IRE) contracted by CMS for Part C appeals. The appeals used in this measure are based on the date in the calendar year the appeal was received (or should have been received) by the IRE, not the date a decision was reached by the IRE. If a Reopening occurs and is decided prior to May 1, 2018, the Reopened decision is used in place of the Reconsideration decision. Reopenings decided on or after May 1, 2018 are not reflected in these data, the original decision result is used. The results of appeals that occur beyond Level 2 (i.e., Administrative Law Judge or Medicare Appeals Council appeals) are not included in the data.
Data Source Category:	Data Collected by CMS Contractors
Exclusions:	If the minimum number of appeals (upheld + overturned + partially overturned) is ≤ 10, the result is "Not enough data available." Dismissed and Withdrawn appeals are excluded from this measure.
General Notes:	This measure includes all Standard Coverage, Standard Claim, and Expedited appeals received by the IRE, regardless of the appellant. This includes appeals requested by a beneficiary, appeals requested by a party on behalf of a beneficiary, and appeals requested by non-contract providers.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Measures Capturing Access
Weighting Value:	1.5
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected

Title	Description
CMS Framework Area:	Population / community health
NQF #:	Not Applicable
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	Yes	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 59%	≥ 59% to < 78%	≥ 78% to < 88%	≥ 88% to < 97%	≥ 97%

Measure: C34 - Call Center – Foreign Language Interpreter and TTY Availability

Title	Description
Label for Stars:	Availability of TTY Services and Foreign Language Interpretation When Prospective Members Call the Health Plan
Label for Data:	Availability of TTY Services and Foreign Language Interpretation When Prospective Members Call the Health Plan
Description:	Percent of time that TTY services and foreign language interpretation were available when needed by people who called the health plan's prospective enrollee customer service phone line.
Metric:	The calculation of this measure is the number of successful contacts with the interpreter and TTY divided by the number of attempted contacts. Successful contact with an interpreter is defined as establishing contact with an interpreter and beginning the first of three survey questions. Interpreters must be able to communicate responses to the call surveyor in the call center's non-primary language about the plan sponsor's Medicare benefits. (The primary language is Spanish in Puerto Rico and English elsewhere.) Successful contact with a TTY service is defined as establishing contact with and confirming that the TTY operator can answer questions about the plan's Medicare Part C benefit.
Primary Data Source:	Call Center
Data Source Description:	Call center monitoring data collected by CMS. The Customer Service Contact for Prospective Members phone number associated with each contract was monitored.
Data Source Category:	Data Collected by CMS Contractors
Exclusions:	Data were collected from contracts that cover U.S territories but were not collected from the following organization types: 1876 Cost, Employer/Union Only Direct Contract PDP, Employer/Union Only Direct Contract PFFS, National PACE, MSA, employer contracts, organizations that did not have a phone number accessible to survey callers, and MAOs, MA-PDs, and MMPs under sanction.
General Notes:	Specific questions about Call Center Monitoring and requests for detail data should be directed to the CallCenterMonitoring@cms.hhs.gov
Data Time Frame:	02/2018 – 06/2018
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Measures Capturing Access
Weighting Value:	1.5
Major Disaster:	No adjustment for most contracts, Puerto Rico only contracts exempted

Title	Description
CMS Framework Area:	Population / community health
NQF #:	Not Applicable
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
No	Yes	Yes	Yes	No	No	Yes

Cut Points:

1 Star	2 Stars	3 Stars	4 Stars	5 Stars
< 72%	≥ 72% to < 84%	≥ 84% to < 88%	≥ 88% to < 97%	≥ 97%

Part D Domain and Measure Details

See Attachment C for the national averages of individual Part D measures.

Domain: 1 - Drug Plan Customer Service

Measure: D01 - Call Center – Foreign Language Interpreter and TTY Availability

Title	Description
Label for Stars:	Availability of TTY Services and Foreign Language Interpretation When Prospective Members Call the Drug Plan
Label for Data:	Availability of TTY Services and Foreign Language Interpretation When Prospective Members Call the Drug Plan
Description:	Percent of time that TTY services and foreign language interpretation were available when needed by people who called the drug plan's prospective enrollee customer service line.
Metric:	The calculation of this measure is the number of successful contacts with the interpreter and TTY divided by the number of attempted contacts. Successful contact with an interpreter is defined as establishing contact with an interpreter and beginning the first of three survey questions. Interpreters must be able to communicate responses to the call surveyor in the call center's non-primary language about the plan sponsor's Medicare benefits. (The primary language is Spanish in Puerto Rico and English elsewhere.) Successful contact with a TTY service is defined as establishing contact with and confirming that the TTY operator can answer questions about the plan's Medicare Part D benefit.
Primary Data Source:	Call Center
Data Source Description:	Call center monitoring data collected by CMS. The Customer Service Contact for Prospective Members phone number associated with each contract was monitored.
Data Source Category:	Data Collected by CMS Contractors
Exclusions:	Data were collected from contracts that cover U.S territories but were not collected from the following organization types: 1876 Cost, Employer/Union Only Direct Contract PDP, Employer/Union Only Direct Contract PFFS, National PACE, MSA, employer contracts, organizations that did not have a phone number accessible to survey callers, and MA-PDs, PDPs, and MMPs under sanction.
General Notes:	Specific questions about Call Center Monitoring and requests for detail data should be directed to the CallCenterMonitoring@cms.hhs.gov
Data Time Frame:	02/2018 – 06/2018
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Measures Capturing Access
Weighting Value:	1.5
Major Disaster:	No adjustment for most contracts, Puerto Rico only contracts exempted
CMS Framework Area:	Population / community health
NQF #:	Not Applicable
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
No	Yes	Yes	Yes	No	Yes	Yes

Title	Description

Cut Points:

Type	1 Star	2 Stars	3 Stars	4 Stars	5 Stars
MA-PD	< 74%	≥ 74% to < 87%	≥ 87% to < 92%	≥ 92% to < 97%	≥ 97%
PDP	< 63%	≥ 63% to < 73%	≥ 73% to < 88%	≥ 88% to < 97%	≥ 97%

Measure: D02 - Appeals Auto–Forward

Title	Description

Label for Stars: Drug Plan Fails to Make Timely Decisions about Appeals (more stars are better because it means fewer delays)

Label for Data: Drug Plan Fails to Make Timely Decisions about Appeals (for every 10,000 members)

Description: Percent of plan members who failed to get a timely response when they made an appeal request to the drug plan about a decision to refuse payment or coverage. If you would like more information about Medicare appeals, click on http://www.medicare.gov/claims-and-appeals/index.html

Metric: This measure is defined as the rate of cases auto-forwarded to the Independent Review Entity (IRE) because the plan exceeded decision timeframes for coverage determinations or redeterminations. This is calculated as:

[(Total number of cases auto-forwarded to the IRE) / (Average Medicare Part D enrollment)] * 10,000.

There is no minimum number of cases required to receive a rating.

Primary Data Source: Independent Review Entity (IRE)

Data Source Description: Data were obtained from the Independent Review Entity (IRE) contracted by CMS.

Data Source Category: Data Collected by CMS Contractors

Exclusions: Rates are not calculated for contracts with average enrollment less than 800 enrollees during the measurement period. Cases the IRE remands back to the plan are not included in these data.

Data Time Frame: 01/01/2017 – 12/31/2017

General Trend: Lower is better

Statistical Method: Clustering

Improvement Measure: Included

CAI Usage: Not Included

Case-mix adjusted: No

Weighting Category: Measures Capturing Access

Weighting Value: 1.5

Major Disaster: Higher measure star (2018-2019) for contracts with 25% or more enrolled affected

CMS Framework Area: Population / community health

NQF #: Not Applicable

Data Display: Numeric with 1 decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	No	Yes	Yes

Cut Points:

Type	1 Star	2 Stars	3 Stars	4 Stars	5 Stars
MA-PD	> 50.4	> 32.1 to ≤ 50.4	> 9.4 to ≤ 32.1	> 3.7 to ≤ 9.4	≤ 3.7
PDP	> 30.7	> 10.8 to ≤ 30.7	> 5.2 to ≤ 10.8	> 1.8 to ≤ 5.2	≤ 1.8

Measure: D03 - Appeals Upheld

Title	Description
Label for Stars:	Fairness of Drug Plan's Appeal Decisions, Based on an Independent Reviewer
Label for Data:	Fairness of Drug Plan's Appeal Decisions, Based on an Independent Reviewer
Description:	How often an **independent reviewer** thought the drug plan's decision to deny an appeal was fair. This includes appeals made by plan members and out-of-network providers. (This rating is not based on how often the plan denies appeals, but rather *how fair* the plan is when they deny an appeal.)
Metric:	This measure is defined as the percent of IRE confirmations of upholding the plans' decisions. This is calculated as: [(Number of cases upheld) / (Total number of cases reviewed)] * 100. Total number of cases reviewed is defined all cases received by the IRE during the timeframe and receiving a decision before May 1, 2018. The denominator is equal to the number of cases upheld, fully reversed, and partially reversed. Dismissed, remanded, and withdrawn cases are not included in the denominator. Auto-forwarded cases are included, as these are considered to be adverse decisions per Subpart M rules. If a Reopening occurs and is decided prior to May 1, 2018, the Reopened decision is used in place of the Reconsideration decision. Reopenings decided on or after May 1, 2018 are not reflected in these data, the original decision result is used. The results of appeals that occur beyond Level 2 (i.e., Administrative Law Judge or Medicare Appeals Council appeals) are not included in the data. Contracts with no IRE cases reviewed will not receive a score in this measure.
Primary Data Source:	Independent Review Entity (IRE)
Data Source Description:	Data were obtained from the Independent Review Entity (IRE) contracted by CMS for Part D reconsiderations. The appeals used in this measure are based on the date they were received by the IRE, not the date a decision was reached by the IRE.
Data Source Category:	Data Collected by CMS Contractors
Exclusions:	Contracts with fewer than 10 cases reviewed by the IRE.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Measures Capturing Access
Weighting Value:	1.5
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Population / community health
NQF #:	Not Applicable
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	No	Yes	Yes

Cut Points:

Type	1 Star	2 Stars	3 Stars	4 Stars	5 Stars
MA-PD	< 60%	≥ 60% to < 69%	≥ 69% to < 81%	≥ 81% to < 92%	≥ 92%
PDP	< 64%	≥ 64% to < 78%	≥ 78% to < 89%	≥ 89% to < 91%	≥ 91%

Domain: 2 - Member Complaints and Changes in the Drug Plan's Performance

Measure: D04 - Complaints about the Drug Plan

Title	Description
Label for Stars:	Complaints about the Drug Plan (more stars are better because it means fewer complaints)
Label for Data:	Complaints about the Drug Plan (number of complaints for every 1,000 members). (Lower numbers are better because it means fewer complaints.)
Description:	Percent of members filing complaints with Medicare about the drug plan.
Metric:	Rate of complaints about the drug plan per 1,000 members. For each contract, this rate is calculated as: [(Total number of all complaints logged into the Complaints Tracking Module (CTM)) / (Average Contract enrollment)] * 1,000 * 30 / (Number of Days in Period). Number of Days in Period = 366 for leap years, 365 for all other years. • Complaints data are pulled after the end of the measurement timeframe to serve as a snapshot of CTM data. • Enrollment numbers used to calculate the complaint rate were based on the average enrollment for the time period measured for each contract. • A contract's failure to follow CMS' CTM Standard Operating Procedures will not result in CMS' adjustment of the data used for these measures.
Primary Data Source:	Complaints Tracking Module (CTM)
Data Source Description:	Data were obtained from the CTM based on the contract entry date (the date that complaints are assigned or re-assigned to contracts; also known as the contract assignment/reassignment date) for the reporting period specified. The status of any specific complaint at the time the data are pulled stands for use in the reports. Any changes to the complaints data subsequent to the data pull cannot be excluded retroactively. CMS allows for an approximate 6-month "wash out" period to account for any adjustments per CMS' CTM Standard Operating Procedures. Complaint rates per 1,000 enrollees are adjusted to a 30-day basis.
Data Source Category:	CMS Administrative Data
Exclusions:	Some complaints that cannot be clearly attributed to the plan are excluded, please see Attachment B: Complaints Tracking Module Exclusion List. Complaint rates are not calculated for contracts with average enrollment of less than 800 enrollees during the measurement period.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Lower is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Patients' Experience and Complaints Measure
Weighting Value:	1.5
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Person- and caregiver-centered experience and outcomes
NQF #:	Not Applicable

Title	Description

Data Display: Numeric with 2 decimal places

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	No	Yes	Yes

Cut Points:

Type	1 Star	2 Stars	3 Stars	4 Stars	5 Stars
MA-PD	> 0.64	> 0.31 to ≤ 0.64	> 0.18 to ≤ 0.31	> 0.10 to ≤ 0.18	≤ 0.10
PDP	> 0.15	> 0.07 to ≤ 0.15	> 0.03 to ≤ 0.07	> 0.01 to ≤ 0.03	≤ 0.01

Measure: D05 - Members Choosing to Leave the Plan

Title	Description

Label for Stars: Members Choosing to Leave the Plan (more stars are better because it means fewer members choose to leave the plan)

Label for Data: Members Choosing to Leave the Plan (lower percents are better because it means fewer members choose to leave the plan)

Description: Percent of plan members who chose to leave the plan.

Metric: The percent of members who chose to leave the contract comes from disenrollment reason codes in Medicare's enrollment system. The percent is calculated as the number of members who chose to leave the contract between January 1, 2017–December 31, 2017 (numerator) divided by all members enrolled in the contract at any time during 2017 (denominator).

Primary Data Source: MBDSS

Data Source Description: Medicare Beneficiary Database Suite of Systems (MBDSS)

Data Source Category: CMS Administrative Data

Exclusions: Members who involuntarily left their contract due to circumstances beyond their control are removed from the final numerator, specifically:

- Members affected by a contract service area reduction
- Members affected by PBP termination
- Members in PBPs that were granted special enrollment exceptions
- Members affected by PBP service area reductions where there are no PBPs left within the contract that the enrollee is eligible to enroll into
- Members affected by LIS reassignments
- Members who are enrolled in employer group plans
- Members who were passively enrolled into a Demonstration (MMP)
- Contracts with less than 1,000 enrollees
- 1876 Cost contract disenrollments into the transition MA contract (H contract)
- Members where the service area of the contract they enrolled into does not intersect with the service area of the contract from which they disenrolled

General Notes: This measure includes members with a disenrollment effective date between 1/1/2017 and 12/31/2017 who disenrolled from the contract with any one of the following disenrollment reason codes:

11 - Voluntary Disenrollment through plan
13 - Disenrollment because of enrollment in another Plan
14 - Retroactive
99 - Other (not supplied by beneficiary).

If all potential members in the numerator meet one or more of the exclusion criteria, the measure result will be "Not enough data available".

The Disenrollment Reasons Survey (DRS) data available in the HPMS plan preview, as part of Medicare Plan Finder and in the CMS downloadable Master Table, are not used

Title	Description
	in the calculation of this measure. The DRS data are presented in each of the systems for information purposes only.
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Lower is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Patients' Experience and Complaints Measure
Weighting Value:	1.5
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Person- and caregiver-centered experience and outcomes
NQF #:	Not Applicable
Data Display:	Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	No	Yes	Yes

Cut Points:

Type	1 Star	2 Stars	3 Stars	4 Stars	5 Stars
MA-PD	> 23%	> 18% to ≤ 23%	> 11% to ≤ 18%	> 6% to ≤ 11%	≤ 6%
PDP	> 24%	> 15% to ≤ 24%	> 10% to ≤ 15%	> 6% to ≤ 10%	≤ 6%

Measure: D06 - Drug Plan Quality Improvement

Title	Description
Label for Stars:	Improvement (if any) in the Drug Plan's Performance
Label for Data:	Improvement (If any) in the Drug Plan's Performance
Description:	This shows how much the drug plan's performance has improved or declined from one year to the next year. If a plan receives **1 or 2 stars**, it means, on average, the plan's scores **declined** (got worse). If a plan receives **3 stars**, it means, on average, the plan's scores **stayed about the same**. If a plan receives **4 or 5 stars**, it means, on average, the plan's scores **improved**. Keep in mind that a plan that is already doing well in most areas may not show much improvement. It is also possible that a plan can start with low ratings, show a lot of improvement, and still not be performing very well.
Metric:	The numerator is the net improvement, which is a sum of the number of significantly improved measures minus the number of significantly declined measures. The denominator is the number of measures eligible for the improvement measure (i.e., the measures that were included in the 2017 and 2018 Star Ratings for this contract and had no specification changes).
Primary Data Source:	Star Ratings
Data Source Description:	2018 and 2019 Star Ratings
Data Source Category:	Star Ratings
Exclusions:	Contracts must have data in at least half of the measures used to calculate improvement to be rated in this measure.

Title	Description

General Notes: Attachment I contains the formulas used to calculate the improvement measure and lists indicating which measures were used.

Data Time Frame: Not Applicable

General Trend: Higher is better

Statistical Method: Clustering

Improvement Measure: Not Included

CAI Usage: Not Included

Case-mix adjusted: No

Weighting Category: Improvement Measure

Weighting Value: 5

Major Disaster: Includes only measures which have data from both years

CMS Framework Area: Population / community health

NQF #: Not Applicable

Data Display: Not Applicable

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	No	Yes	Yes

Cut Points:

Type	1 Star	2 Stars	3 Stars	4 Stars	5 Stars
MA-PD	< -0.342	≥ -0.342 to < 0.000	≥ 0.000 to < 0.316	≥ 0.316 to < 0.463	≥ 0.463
PDP	NA	NA	≥ 0.000 to < 0.341	≥ 0.341 to < 0.512	≥ 0.512

Domain: 3 - Member Experience with the Drug Plan

Measure: D07 - Rating of Drug Plan

Title	Description
Label for Stars:	Members' Rating of Drug Plan
Label for Data:	Members' Rating of Drug Plan (on a scale from 0 to 100)
Description:	Percent of the best possible score the plan earned from members who rated the prescription drug plan.
Metric:	This case-mix adjusted measure is used to assess members' overall view of their prescription drug plan. The Consumer Assessment of Healthcare Providers and Systems (CAHPS) score uses the mean of the distribution of responses converted to a scale from 0 to 100. The score shown is the percentage of the best possible score each contract earned.
Primary Data Source:	CAHPS
Data Source Description:	CAHPS Survey Questions (question numbers vary depending on survey type): • Using any number from 0 to 10, where 0 is the worst prescription drug plan possible and 10 is the best prescription drug plan possible, what number would you use to rate your prescription drug plan?
Data Source Category:	Survey of Enrollees
General Notes:	CAHPS Survey results were sent to each contract's Medicare Compliance Officer in August 2018. These reports provide further explanation of the CAHPS scoring methodology and provide detailed information on why a specific rating was assigned.
Data Time Frame:	03/2018 – 06/2018
General Trend:	Higher is better
Statistical Method:	Relative Distribution and Significance Testing
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	Yes
Weighting Category:	Patients' Experience and Complaints Measure
Weighting Value:	1.5
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Person- and caregiver-centered experience and outcomes
NQF #:	Not Applicable
Data Display:	Numeric with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	No	No	Yes	Yes

Base Group Cut Points:

Type	Base Group 1	Base Group 2	Base Group 3	Base Group 4	Base Group 5
MA-PD	< 82	≥ 82 to < 83	≥ 83 to < 85	≥ 85 to < 87	≥ 87
PDP	< 80	≥ 80 to < 81	≥ 81 to < 84	≥ 84 to < 86	≥ 86

These technical notes show the base group cut points for CAHPS measures; please see the Attachment K for the CAHPS Methodology for final star assignment rules.

Measure: D08 - Getting Needed Prescription Drugs

Title	Description
Label for Stars:	Ease of Getting Prescriptions Filled When Using the Plan
Label for Data:	Ease of Getting Prescriptions Filled When Using the Plan (on a scale from 0 to 100)
Description:	Percent of the best possible score the plan earned on how easy it is for members to get the prescription drugs they need using the plan.
Metric:	This case-mix adjusted measure is used to assess the ease with which a beneficiary gets the medicines their doctor prescribed. The Consumer Assessment of Healthcare Providers and Systems (CAHPS) score uses the mean of the distribution of responses converted to a scale from 0 to 100. The score shown is the percentage of the best possible score each contract earned.
Primary Data Source:	CAHPS
Data Source Description:	CAHPS Survey Questions (question numbers vary depending on survey type): • In the last 6 months, how often was it easy to use your prescription drug plan to get the medicines your doctor prescribed? • In the last 6 months, how often was it easy to use your prescription drug plan to fill a prescription at your local pharmacy? • In the last 6 months, how often was it easy to use your prescription drug plan to fill a prescription by mail?
Data Source Category:	Survey of Enrollees
General Notes:	CAHPS Survey results were sent to each contract's Medicare Compliance Officer in August 2018. These reports provide further explanation of the CAHPS scoring methodology and provide detailed information on why a specific rating was assigned.
Data Time Frame:	03/2018 – 06/2018
General Trend:	Higher is better
Statistical Method:	Relative Distribution and Significance Testing
Improvement Measure:	Included
CAI Usage:	Not Included
Case-mix adjusted:	Yes
Weighting Category:	Patients' Experience and Complaints Measure
Weighting Value:	1.5
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Person- and caregiver-centered experience and outcomes
NQF #:	Not Applicable
Data Display:	Numeric with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	No	No	Yes	Yes

Base Group Cut Points:

Type	Base Group 1	Base Group 2	Base Group 3	Base Group 4	Base Group 5
MA-PD	< 88	≥ 88 to < 89	≥ 89 to < 90	≥ 90 to < 92	≥ 92
PDP	< 88	≥ 88 to < 89	≥ 89 to < 91	≥ 91 to < 92	≥ 92

These technical notes show the base group cut points for CAHPS measures; please see the Attachment K for the CAHPS Methodology for final star assignment rules.

Domain: 4 - Drug Safety and Accuracy of Drug Pricing

Measure: D09 - MPF Price Accuracy

Title	Description
Label for Stars:	Plan Provides Accurate Drug Pricing Information for This Website
Label for Data:	Plan Provides Accurate Drug Pricing Information for This Website (higher scores are better because they mean more accurate prices)
Description:	A score comparing the prices members actually pay for their drugs to the drug prices the plan provided for this website (Medicare's Plan Finder website). Higher scores are better because they mean the plan provided more accurate prices
Metric:	This measure evaluates the accuracy of drug prices posted on the MPF tool. A contract's score is based on the accuracy index. The accuracy price index compares point-of-sale PDE prices to plan-reported MPF prices and determines the magnitude of differences found. Using each PDE's date of service, the price displayed on MPF is compared to the PDE price. The accuracy index considers both ingredient cost and dispensing fee and measures the amount that the PDE price is higher than the MPF price. Therefore, prices that are overstated on MPF—that is, the reported price is higher than the actual price—will not count against a plan's accuracy score. The index is computed as: (Total amount that PDE is higher than PF + Total PDE cost) / (Total PDE cost). The best possible accuracy index is 1. An index of 1 indicates that a plan did not have PDE prices greater than MPF prices. A contract's score is computed using its accuracy index as: 100 – ((accuracy index - 1) x 100).
Primary Data Source:	PDE data, MPF Pricing Files
Data Source Description:	Data used in this measure are obtained from a number of sources: PDE data and MPF Pricing Files are the primary data sources. The HPMS-approved formulary extracts, and data from First DataBank and Medi-span are also used. Post-reconciliation PDE adjustments are not reflected in this measure.
Data Source Category:	Data Collected by CMS Contractors
Exclusions:	A contract with less than 30 PDE claims over the measurement period. PDEs must also meet the following criteria: • Pharmacy number on PDE must appear in MPF pharmacy cost file as either a retail-only pharmacy or a retail and limited access-only pharmacy (PDE with pharmacy numbers reported as non-retail pharmacy types or both retail and mail order/HI/LTC are excluded) • Drug must appear in formulary file and in MPF pricing file • PDE must be a 30 day supply • Date of service must occur at a time that data are not suppressed for the plan on MPF • PDE must not be a compound claim • PDE must not be a non-covered drug
General Notes:	Please see Attachment M: Methodology for Price Accuracy Measure for more information about this measure.
Data Time Frame:	01/01/2017 – 09/30/2017

Title	Description
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Not Included
CAI Usage:	Not Included
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Efficiency and cost reduction
NQF #:	Not Applicable
Data Display:	Numeric with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	No	Yes	Yes

Cut Points:

Type	1 Star	2 Stars	3 Stars	4 Stars	5 Stars
MA-PD	NA	NA	≥ 91 to < 95	≥ 95 to < 99	≥ 99
PDP	NA	NA	≥ 96 to < 98	≥ 98 to < 99	≥ 99

Measure: D10 - Medication Adherence for Diabetes Medications

Title	Description
Label for Stars:	Taking Diabetes Medication as Directed
Label for Data:	Taking Diabetes Medication as Directed
Description:	Percent of plan members with a prescription for diabetes medication who fill their prescription often enough to cover 80% or more of the time they are supposed to be taking the medication. One of the most important ways people with diabetes can manage their health is by taking their medication as directed. The plan, the doctor, and the member can work together to find ways to do this. ("Diabetes medication" means a *biguanide drug,* a *sulfonylurea drug,* a *thiazolidinedione drug*, a *DPP-IV inhibitor,* an *incretin mimetic drug,* a *meglitinide drug,* or an *SGLT2 inhibitor*. Plan members who take insulin are not included.)
Metric:	This measure is defined as the percent of Medicare Part D beneficiaries 18 years and older who adhere to their prescribed drug therapy across classes of diabetes medications: biguanides, sulfonylureas, thiazolidinediones, and DiPeptidyl Peptidase (DPP)-IV Inhibitors, incretin mimetics, meglitinides, and sodium glucose cotransporter 2 (SGLT2) inhibitors. This percentage is calculated as the number of member-years of enrolled beneficiaries 18 years and older with a proportion of days covered (PDC) at 80 percent or higher across the classes of diabetes medications during the measurement period (numerator) divided by the number of member-years of enrolled beneficiaries 18 years and older with at least two fills of diabetes medication(s) on unique dates of service during the measurement period (denominator). The PDC is the percent of days in the measurement period "covered" by prescription claims for the same medication or another in its therapeutic category. Beneficiaries with one or more fills for insulin or an ESRD diagnoses or coverage dates anytime during the measurement period are excluded. Beneficiaries are only included in the measure calculation if the first fill of their medication occurs at least 91 days before the end of the enrollment period.

Title	Description
	The Medication Adherence measure is adapted from the Medication Adherence-Proportion of Days Covered measure that was developed and endorsed by the Pharmacy Quality Alliance (PQA). See the medication list for this measure. The Medication Adherence rate is calculated using the National Drug Code (NDC) list and obsolete NDC date methodology maintained by the PQA. The complete NDC list, including diagnosis codes, is posted along with these technical notes. NDCs with obsolete dates are included in the measure calculation if the obsolete dates as reported by PQA are within the period of measurement (measurement year) or within six months prior to the beginning of the measurement year.
Primary Data Source:	Prescription Drug Event (PDE) data
Data Source Description:	The data for this measure come from PDE data files submitted by drug plans to Medicare by June 30, 2018 with dates of service from January 1, 2017-December 31, 2017. Only final action PDE claims are used to calculate this measure. PDE claims are limited to members who received at least two prescriptions on unique dates of service for diabetes medication(s). PDE adjustments made post-reconciliation are not reflected in this measure. Additional data sources include the Common Medicare Environment (CME), the Medicare Enrollment Database (EDB), the Common Working File (CWF), and the Risk Adjustment Processing System (RAPS). • CME is used for enrollment information. • EDB is used for hospice enrollment and ESRD status (using the ESRD indicator). • CWF is used to identify exclusion diagnoses based on ICD-10-CM codes, inpatient stays for PDPs and MA-PDs, and skilled nursing facility stays for PDPs. • RAPS is used for diagnosis information, RxHCC - Dialysis Status (most recent available Payment Year).
Data Source Category:	Health and Drug Plans
Exclusions:	Contracts with 30 or fewer enrolled member-years (in the denominator)
General Notes:	Part D drugs do not include drugs or classes of drugs, or their medical uses, which may be excluded from coverage or otherwise restricted under section 1927(d)(2) of the Act, except for smoking cessation agents. As such, these drugs, which may be included in the medication or NDC lists, are excluded from CMS analyses. Also, the member-years of enrollment adjustment is made by CMS to account for partial enrollment within the benefit year. Enrollment is measured at the episode level, and inclusion in the measure is determined separately for each episode – i.e., to be included for a given episode, the beneficiary must meet the initial inclusion criteria for the measure during that episode. The measure is weighted based on the total number of member years for each episode in which the beneficiary meets the measure criteria. For instance, if a beneficiary is enrolled for a three-month episode, disenrolled for a six-month episode, reenrolled for a three-month episode, and meets the measure criteria during each enrollment episode, s/he will count as 0.5 member years in the rate calculation (3/12 + 3/12 = 6/12). The PDC calculation is adjusted for overlapping prescriptions for the same drug which is defined by the active ingredient at the generic name level using the Medi-Span generic ingredient name. The calculation also adjusts for Part D beneficiaries' stays in inpatient (IP) settings, hospice enrollments, and stays in skilled nursing facilities (SNFs). The SNF adjustment only applies to PDPs because SNF data are not currently available for MA-PDs. Please see Attachment L: Medication Adherence Measure Calculations for more information about these calculation adjustments.

Title	Description

When available, beneficiary death date from the CME is the end date of a beneficiary's measurement period.

For contracts whose non-employer service area only covers Puerto Rico, the weight for this adherence measure is set to zero (0) when calculating the summary and overall rating. This weight of this measure remains three (3) within the improvement measure calculations for all contracts.

Data Time Frame: 01/01/2017 – 12/31/2017

General Trend: Higher is better

Statistical Method: Clustering

Improvement Measure: Included

CAI Usage: Not Included

Case-mix adjusted: No

Weighting Category: Intermediate Outcome Measure

Weighting Value: 3

Major Disaster: Higher measure star (2018-2019) for contracts with 25% or more enrolled affected

CMS Framework Area: Clinical care

NQF #: 0541

Data Display: Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	No	Yes	Yes

Cut Points:

Type	1 Star	2 Stars	3 Stars	4 Stars	5 Stars
MA-PD	< 72%	≥ 72% to < 78%	≥ 78% to < 81%	≥ 81% to < 85%	≥ 85%
PDP	< 82%	≥ 82% to < 84%	≥ 84% to < 86%	≥ 86% to < 88%	≥ 88%

Measure: D11 - Medication Adherence for Hypertension (RAS antagonists)

Title	Description

Label for Stars: Taking Blood Pressure Medication as Directed

Label for Data: Taking Blood Pressure Medication as Directed

Description: Percent of plan members with a prescription for a blood pressure medication who fill their prescription often enough to cover 80% or more of the time they are supposed to be taking the medication.
One of the most important ways people with high blood pressure can manage their health is by taking medication as directed. The plan, the doctor, and the member can work together to do this. ("Blood pressure medication" means an *ACE (angiotensin converting enzyme) inhibitor*, an *ARB (angiotensin receptor blocker),* or a *direct renin inhibitor drug*.)

Metric: This measure is defined as the percent of Medicare Part D beneficiaries 18 years and older who adhere to their prescribed drug therapy for renin angiotensin system (RAS) antagonists: angiotensin converting enzyme inhibitor (ACEI), angiotensin receptor blocker (ARB), or direct renin inhibitor medications. This percentage is calculated as the number of member-years of enrolled beneficiaries 18 years and older with a proportion of days covered (PDC) at 80 percent or higher for RAS antagonist medications during the measurement period (numerator) divided by the number of member-years of enrolled beneficiaries 18 years and older with at least two blood pressure medications fills on unique dates of service during the measurement period (denominator).

Title	Description
	The PDC is the percent of days in the measurement period “covered” by prescription claims for the same medication or another in its therapeutic category. Beneficiaries with ESRD diagnosis or coverage dates, or that received one or more prescriptions for sacubitril/valsartan anytime during the measurement period are excluded. Beneficiaries are only included in the measure calculation if the first fill of their medication occurs at least 91 days before the end of the enrollment period. The Part D Medication Adherence measure is adapted from the Medication Adherence-Proportion of Days Covered measure that was developed and endorsed by the Pharmacy Quality Alliance (PQA). See the medication list for this measure. The Part D Medication Adherence rate is calculated using the National Drug Code (NDC) list and obsolete NDC date methodology maintained by the PQA. The complete NDC list, including diagnosis codes, is posted along with these technical notes. NDCs with obsolete dates are included in the measure calculation if the obsolete dates as reported by PQA are within the period of measurement (measurement year) or within six months prior to the beginning of the measurement year.
Primary Data Source:	Prescription Drug Event (PDE) data
Data Source Description:	The data for this measure come from PDE data files submitted by drug plans to Medicare by June 30, 2018 with dates of service from January 1, 2017-December 31, 2017. Only final action PDE claims are used to calculate this measure. PDE claims are limited to members who received at least two prescriptions on unique dates of service for RAS antagonist medication(s). PDE adjustments made post-reconciliation are not reflected in this measure. Additional data sources include the Common Medicare Environment (CME), the Medicare Enrollment Database (EDB), and the Common Working File (CWF), and the Risk Adjustment Processing System (RAPS). • CME is used for enrollment information. • EDB is used for hospice enrollment and ESRD status (using the ESRD indicator). • CWF is used to identify exclusion diagnoses based on ICD-10-CM codes, inpatient stays for PDPs and MA-PDs, and skilled nursing facility stays for PDPs. • Risk Adjustment Processing System (RAPS) is –- used for diagnosis information, RxHCC - Dialysis Status (most recent available Payment Year)
Data Source Category:	Health and Drug Plans
Exclusions:	Contracts with 30 or fewer enrolled member-years (in the denominator)
General Notes:	Part D drugs do not include drugs or classes of drugs, or their medical uses, which may be excluded from coverage or otherwise restricted under section 1927(d)(2) of the Act, except for smoking cessation agents. As such, these drugs, which may be included in the medication or NDC lists, are excluded from CMS analyses. Also, the member-years of enrollment adjustment is made by CMS to account for partial enrollment within the benefit year. Enrollment is measured at the episode level, and inclusion in the measure is determined separately for each episode – i.e., to be included for a given episode, the beneficiary must meet the initial inclusion criteria for the measure during that episode. The measure is weighted based on the total number of member years for each episode in which the beneficiary meets the measure criteria. For instance, if a beneficiary is enrolled for a three-month episode, disenrolled for a six-month episode, reenrolled for a three-month episode, and meets the measure criteria during each enrollment episode, s/he will count as 0.5 member years in the rate calculation (3/12 + 3/12 = 6/12). The PDC calculation is adjusted for overlapping prescriptions for the same drug which is defined by active ingredient at the generic name level using the Medi-Span generic

Title	Description

ingredient name. The calculation also adjusts for Part D beneficiaries' stays in inpatient (IP) settings, hospice enrollments, and stays in skilled nursing facilities (SNFs). The SNF adjustment only applies to PDPs because SNF data are not currently available for MA-PDs. Please see Attachment L: Medication Adherence Measure Calculations for more information about these calculation adjustments.

When available, beneficiary death date from the CME is the end date of a beneficiary's measurement period.

For contracts whose non-employer service area only covers Puerto Rico, the weight for this adherence measure is set to zero (0) when calculating the summary and overall rating. This weight of this measure remains three (3) within the improvement measure calculations for all contracts.

Data Time Frame: 01/01/2017 – 12/31/2017

General Trend: Higher is better

Statistical Method: Clustering

Improvement Measure: Included

CAI Usage: Included

Case-mix adjusted: No

Weighting Category: Intermediate Outcome Measure

Weighting Value: 3

Major Disaster: Higher measure star (2018-2019) for contracts with 25% or more enrolled affected

CMS Framework Area: Clinical care

NQF #: 0541

Data Display: Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	No	Yes	Yes

Cut Points:

Type	1 Star	2 Stars	3 Stars	4 Stars	5 Stars
MA-PD	< 79%	≥ 79% to < 83%	≥ 83% to < 86%	≥ 86% to < 88%	≥ 88%
PDP	< 84%	≥ 84% to < 86%	≥ 86% to < 87%	≥ 87% to < 89%	≥ 89%

Measure: D12 - Medication Adherence for Cholesterol (Statins)

Title	Description
Label for Stars:	Taking Cholesterol Medication as Directed
Label for Data:	Taking Cholesterol Medication as Directed
Description:	Percent of plan members with a prescription for a cholesterol medication (a *statin drug*) who fill their prescription often enough to cover 80% or more of the time they are supposed to be taking the medication. One of the most important ways people with high cholesterol can manage their health is by taking medication as directed. The plan, the doctor, and the member can work together to do this.
Metric:	This measure is defined as the percent of Medicare Part D beneficiaries 18 years and older who adhere to their prescribed drug therapy for statin cholesterol medications. This percentage is calculated as the number of member-years of enrolled beneficiaries 18 years and older with a proportion of days covered (PDC) at 80 percent or higher for statin cholesterol medication(s) during the measurement period (numerator) divided by the number of member-years of enrolled beneficiaries 18 years and older with at least two statin cholesterol medication fills on unique dates of service during the measurement period (denominator). The PDC is the percent of days in the measurement period “covered” by prescription claims for the same medication or another in the therapeutic category. Beneficiaries are only included in the measure calculation if the first fill of their medication occurs at least 91 days before the end of the enrollment period. The Medication Adherence measure is adapted from the Medication Adherence-Proportion of Days Covered measure that was developed and endorsed by the Pharmacy Quality Alliance (PQA). See the medication list for this measure. The Medication Adherence rate is calculated using the National Drug Code (NDC) list and obsolete NDC date methodology maintained by the PQA. The complete NDC list is posted along with these technical notes. NDCs with obsolete dates are included in the measure calculation if the obsolete dates as reported by PQA are within the period of measurement (measurement year) or within six months prior to the beginning of the measurement year.
Primary Data Source:	Prescription Drug Event (PDE) data
Data Source Description:	The data for this measure come from PDE data files submitted by drug plans to Medicare by June 30, 2018 with dates of service from January 1, 2017-December 31, 2017. Only final action PDE claims are used to calculate this measure. PDE claims are limited to members who received at least two prescriptions on unique dates of service for statin drug(s). PDE adjustments made post-reconciliation are not reflected in this measure. Additional data sources include the Common Medicare Environment (CME), the Medicare Enrollment Database (EDB), and the Common Working File (CWF). • CME is used for enrollment information. • EDB is used for hospice enrollment. • CWF is used to identify inpatient stays for PDPs and MA-PDs, and skilled nursing facility stays for PDPs.
Data Source Category:	Health and Drug Plans
Exclusions:	Contracts with 30 or fewer enrolled member-years (in the denominator)
General Notes:	Part D drugs do not include drugs or classes of drugs, or their medical uses, which may be excluded from coverage or otherwise restricted under section 1927(d)(2) of the Act, except for smoking cessation agents. As such, these drugs, which may be included in

Title	Description

the medication or NDC lists, are excluded from CMS analyses. Also, the member-years of enrollment adjustment is made by CMS to account for partial enrollment within the benefit year. Enrollment is measured at the episode level, and inclusion in the measure is determined separately for each episode – i.e., to be included for a given episode, the beneficiary must meet the initial inclusion criteria for the measure during that episode.

The measure is weighted based on the total number of member years for each episode in which the beneficiary meets the measure criteria. For instance, if a beneficiary is enrolled for a three-month episode, disenrolled for a six-month episode, reenrolled for a three-month episode, and meets the measure criteria during each enrollment episode, s/he will count as 0.5 member years in the rate calculation (3/12 + 3/12 = 6/12).

The PDC calculation is adjusted for overlapping prescriptions for the same drug which is defined by active ingredient at the generic name level using the Medi-Span generic ingredient name. The calculation also adjusts for Part D beneficiaries' stays in inpatient (IP) settings, hospice enrollments, and stays in skilled nursing facilities (SNFs). The SNF adjustment only applies to PDPs because SNF data are not currently available for MA-PDs. Please see Attachment L: Medication Adherence Measure Calculations for more information about these calculation adjustments.

When available, beneficiary death date from the CME is the end date of a beneficiary's measurement period.

For contracts whose non-employer service area only covers Puerto Rico, the weight for this adherence measure is set to zero (0) when calculating the summary and overall rating. This weight of this measure remains three (3) within the improvement measure calculations for all contracts.

Data Time Frame: 01/01/2017 – 12/31/2017

General Trend: Higher is better

Statistical Method: Clustering

Improvement Measure: Included

CAI Usage: Not Included

Case-mix adjusted: No

Weighting Category: Intermediate Outcome Measure

Weighting Value: 3

Major Disaster: Higher measure star (2018-2019) for contracts with 25% or more enrolled affected

CMS Framework Area: Clinical care

NQF #: 0541

Data Display: Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	No	Yes	Yes

Cut Points:

Type	1 Star	2 Stars	3 Stars	4 Stars	5 Stars
MA-PD	< 73%	≥ 73% to < 77%	≥ 77% to < 83%	≥ 83% to < 87%	≥ 87%
PDP	< 80%	≥ 80% to < 82%	≥ 82% to < 84%	≥ 84% to < 88%	≥ 88%

Measure: D13 - MTM Program Completion Rate for CMR

Title	Description
Label for Stars:	Members Who Had a Pharmacist (or Other Health Professional) Help them Understand and Manage Their Medications
Label for Data:	Members Who Had a Pharmacist (or Other Health Professional) Help them Understand and Manage Their Medications
Description:	Some plan members are in a program (called a *Medication Therapy Management* program) to help them manage their drugs. The measure shows how many members in the program had an assessment of their medications from the plan. The assessment includes a discussion between the member and a pharmacist (or other health care professional) about all of the member's medications. The member also receives a written summary of the discussion, including an action plan that recommends what the member can do to better understand and use his or her medications.
Metric:	This measure is defined as the percent of Medication Therapy Management (MTM) program enrollees who received a Comprehensive Medication Review (CMR) during the reporting period. Numerator = Number of beneficiaries from the denominator who received a CMR at any time during their period of MTM enrollment in the reporting period. Denominator = Number of beneficiaries who were at least 18 years or older as of the beginning of the reporting period and who were enrolled in the MTM program for at least 60 days during the reporting period. Only those beneficiaries who meet the contracts' specified targeting criteria per CMS – Part D requirements pursuant to §423.153(d) of the regulations at any time in the reporting period are included in this measure. Beneficiaries who were in hospice at any point during the reporting period are excluded. A beneficiary's MTM eligibility, receipt of CMRs, etc., is determined for each contract he/she was enrolled in during the measurement period. Similarly, a contract's CMR completion rate is calculated based on each of its eligible MTM enrolled beneficiaries. For example, a beneficiary must meet the inclusion criteria for the contract to be included in the contract's CMR rate. A beneficiary who is enrolled in two different contracts' MTM programs for 30 days each is therefore excluded from both contracts' CMR rates. The beneficiary is only included in the measure calculation for the contract(s) where they were enrolled at least 60 days. Beneficiaries with multiple records that contain varying information for the same contract are excluded from the measure calculation for that contract. Beneficiaries may be enrolled in MTM based on the contracts' specified targeting criteria per CMS – Part D requirements and/or based on expanded, other plan-specific targeting criteria. Beneficiaries who were initially enrolled in MTM due to other plan-specific (expanded) criteria and then later met the contracts' specified targeting criteria per CMS – Part D requirements at any time in the reporting period are included in this measure. In these cases, a CMR received after the date of MTM enrollment but before the date the beneficiary met the specified targeting criteria per CMS – Part D requirements are included.
Primary Data Source:	Part D Plan Reporting
Data Source Description:	Additional data sources used to calculate the measure: Medicare Enrollment Database (EDB) File.

Title	Description
	Data were reported by contracts to CMS per the Part D Reporting Requirements. Validation of these data was performed retrospectively during the 2018 Data Validation cycle.
Data Source Category:	Health and Drug Plans
Exclusions:	Contracts with an effective termination date on or before the deadline to submit data validation results to CMS (June 30, 2018) are excluded and listed as “No data available.” The current MTM requirements are waived for the PBPs approved to participate in the Enhanced MTM Model and data on participating PBPs must not be reported per the Part D Reporting Requirements under the current MTM program. This MTM data will instead be reported in accordance with model terms and conditions and not included in the measure calculation. MTM CMR rates are not provided for contracts that did not score at least 95% on data validation for the Medication Therapy Management Program reporting section or were not compliant with data validation standards/sub-standards for any the following Medication Therapy Management Program data elements. We define a contract as being non-complaint if either it receives a "No" or a 1, 2, or 3 on the 5-point Likert scale in the specific data element's data validation. • HICN or RRB Number (Element B) • Met the specified targeting criteria per CMS – Part D requirements (Element G) • Date of MTM program enrollment (Element I) • Date met the specified targeting criteria per CMS – Part D requirements (Element J) • Date of MTM program opt-out, if applicable (Element K) • Received annual CMR with written summary in CMS standardized format (Element O) • Date(s) of CMR(s) with written summary in CMS standardized format (Element Q) MTM CMR rates are also not provided for contracts that failed to submit their MTM file and pass system validation by the reporting deadline or who had a missing data validation score for MTM. Contracts excluded from the MTM CMR Rates due to data validation issues are shown as “CMS identified issues with this plan's data.” Contracts can view their data validation results in HPMS (https://hpms.cms.gov/). From the home page, select Monitoring | Plan Reporting Data Validation. If you cannot see the Plan Reporting Data Validation module, contact CMSHPMS_Access@cms.hhs.gov. Additionally, contracts must have 31 or more enrollees in the denominator in order to have a calculated rate. Contracts with fewer than 31 eligible enrollees are listed as "Not enough data available".
Data Time Frame:	01/01/2017 – 12/31/2017
General Trend:	Higher is better
Statistical Method:	Clustering
Improvement Measure:	Included
CAI Usage:	Included
Case-mix adjusted:	No
Weighting Category:	Process Measure
Weighting Value:	1
Major Disaster:	Higher measure star (2018-2019) for contracts with 25% or more enrolled affected
CMS Framework Area:	Clinical care
NQF #:	Not Applicable
Data Display:	Percentage with no decimal place

Title	Description

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	No	Yes	Yes

Cut Points:

Type	1 Star	2 Stars	3 Stars	4 Stars	5 Stars
MA-PD	< 50%	≥ 50% to < 66%	≥ 66% to < 73%	≥ 73% to < 85%	≥ 85%
PDP	< 21%	≥ 21% to < 39%	≥ 39% to < 56%	≥ 56% to < 72%	≥ 72%

Measure: D14 - Statin Use in Persons with Diabetes (SUPD)

Title	Description

Label for Stars: The Plan Makes Sure Members with Diabetes Take the Most Effective Drugs to Treat High Cholesterol

Label for Data: The Plan Makes Sure Members with Diabetes Take the Most Effective Drugs to Treat High Cholesterol

Description: To lower their risk of developing heart disease, most people with diabetes should take cholesterol medication. This rating is based on the percent of plan members with diabetes who take the most effective cholesterol-lowering drugs. Plans can help make sure their members get these prescriptions filled.

Metric: This measure is defined as the percent of Medicare Part D beneficiaries 40-75 years old who were dispensed at least two diabetes medication fills who received a statin medication fill during the measurement period. The percentage is calculated as the number of member-years of enrolled beneficiaries 40-75 years old who received a statin medication fill during the measurement period (numerator) divided by the number of member-years of enrolled beneficiaries 40-75 years old with at least two diabetes medication fills during the measurement period (denominator).

Beneficiaries with an ESRD diagnosis or coverage dates, or enrolled in hospice are excluded.

The SUPD measure is adapted from the measure concept that was developed and endorsed by the Pharmacy Quality Alliance (PQA).

See the medication list for this measure. The SUPD measure is calculated using the National Drug Code (NDC) lists updated by the PQA. The complete NDC lists, including diagnosis codes, are posted along with these technical notes. NDCs with obsolete dates will be included in the measure calculation if the obsolete dates as reported by PQA are within the period of measurement (measurement year) or within six months prior to the beginning of the measurement year.

Primary Data Source: Prescription Drug Event (PDE) data

Data Source Description: The data for this measure come from Prescription Drug Event (PDE) data files submitted by drug plans to Medicare for dates of service from January 1, 2017-December 31, 2017, and processed by June 30, 2018. Only final action PDE claims are used to calculate the patient safety measures. PDE adjustments made post-reconciliation were not reflected in this measure. Additional data sources include the Common Medicare Environment (CME), the Medicare Enrollment Database (EDB), the Common Working File (CWF), and the Risk Adjustment Processing System (RAPS).
- CME is used for enrollment information.
- EDB is used for hospice enrollment and ESRD status (using the ESRD indicator).
- CWF is used to identify exclusion diagnoses based on ICD-10-CM codes
- RAPS is used for diagnosis information, RxHCC - Dialysis Status (most recent available Payment Year)

Data Source Category: Health and Drug Plans

Title	Description

Exclusions: A percentage is not calculated for contracts with 30 or fewer beneficiary member years (in the denominator).

General Notes: Part D drugs do not include drugs or classes of drugs, or their medical uses, which may be excluded from coverage or otherwise restricted under section 1927(d)(2) of the Act, except for smoking cessation agents. As such, these drugs, which may be included in the medication or NDC lists, are excluded from CMS analyses. Also, the member-years of enrollment adjustment is made by CMS to account for partial enrollment within the benefit year. Enrollment is measured at the episode level, and inclusion in the measure is determined separately for each episode – i.e., to be included for a given episode, the beneficiary must meet the initial inclusion criteria for the measure during that episode.

The measure is weighted based on the total number of member years for each episode in which the beneficiary meets the measure criteria. For instance, if a beneficiary is enrolled for a three-month episode, disenrolled for a six-month episode, reenrolled for a three-month episode, and meets the measure criteria during each enrollment episode, s/he will count as 0.5 member years in the rate calculation (3/12 + 3/12 = 6/12).

When available, beneficiary death date from the CME is the end date of a beneficiary's measurement period.

Data Time Frame: 01/01/2017 – 12/31/2017

General Trend: Higher is better

Statistical Method: Clustering

Improvement Measure: Not Included

CAI Usage: Not Included

Case-mix adjusted: No

Weighting Category: Intermediate Outcome Measure

Weighting Value: 1

Major Disaster: Higher measure star (2018-2019) for contracts with 25% or more enrolled affected

CMS Framework Area: Clinical care

NQF #: 2712

Data Display: Percentage with no decimal place

Reporting Requirements:

1876 Cost	CCP w/o SNP	CCP with SNP	CCP with Only I-SNP	MSA	PDP	PFFS
Yes	Yes	Yes	Yes	No	Yes	Yes

Cut Points:

Type	1 Star	2 Stars	3 Stars	4 Stars	5 Stars
MA-PD	< 72%	≥ 72% to < 76%	≥ 76% to < 80%	≥ 80% to < 83%	≥ 83%
PDP	< 73%	≥ 73% to < 77%	≥ 77% to < 79%	≥ 79% to < 82%	≥ 82%

Attachment A: CAHPS and HOS Case-Mix Adjustment

CAHPS Case-Mix Adjustment

The CAHPS measures are case-mix adjusted to take into account the mix of enrollees. Case-mix variables include dual eligibility and education among other variables. The table below includes the case-mix variables and shows the case-mix coefficients for each of the CAHPS measures included in the Star Ratings. The coefficients indicate how much higher or lower people with a given characteristic tend to respond compared to others with the baseline value for that characteristic, on the 0-100 scale used in consumer reports.

For example, for the measure "Getting Needed Care," the coefficient for "age 75-79" is 0.0179, indicating that respondents in that age range tend to score their plans 0.0179 points higher than otherwise similar people in the 70-74 age range (the baseline or reference category). Similarly, Medicaid dual eligibles tend to respond 0.0350 points lower on this item than otherwise similar non-duals. Contracts with higher proportions of beneficiaries who are in the 75-79 age range will be adjusted downward on this measure to compensate for the positive response tendency of their respondents. Similarly, contracts with higher proportions of respondents who are Medicaid dual eligibles will be adjusted upward on this measure to compensate for their respondents' negative response tendency. The case-mix patterns are not always consistent across measures.

The composites consist of multiple items, each of which is adjusted separately before combining the adjusted scores into a composite score. In the tables we report the average of the coefficients for these several items, for each of the categories (rows) of the table, as a summary of the adjustment for the composite.

Table A-1: Part C CAHPS Measures

Predictor	C03: Annual Flu Vaccine	C23: Getting Needed Care (Comp)	C24: Getting Appointments and Care Quickly (Comp)	C25: Customer Service (Comp)	C26: Rating of Health Care Quality	C27: Rating of Health Plan	C28: Care Coordination (Comp)
Age: 64 or under	N/A	-0.0144	-0.0104	-0.0354	-0.1148	-0.1554	-0.0064
Age: 65 - 69	N/A	-0.0118	-0.0039	0.0171	-0.0597	-0.0319	0.0065
Age: 75 - 79	N/A	0.0179	0.0293	0.0055	0.0470	0.0718	0.0071
Age: 80 - 84	N/A	-0.0012	0.0194	0.0024	0.0400	0.0930	-0.0089
Age: 85 and older	N/A	0.0005	0.0256	0.0124	0.0572	0.1608	-0.0470
Less than an 8th grade education	N/A	-0.0262	-0.0371	-0.0242	-0.0207	0.1161	-0.0045
Some high school	N/A	-0.0303	-0.0239	-0.0056	-0.1059	0.0476	0.0005
Some college	N/A	-0.0305	-0.0055	-0.0362	-0.1059	-0.2054	-0.0206
College graduate	N/A	-0.0384	-0.0076	-0.0832	-0.1543	-0.3332	-0.0585
More than a bachelor's degree	N/A	-0.0547	-0.0116	-0.1208	-0.2220	-0.3904	-0.0417
General health rating: excellent	N/A	0.0552	0.1111	0.0083	0.3767	0.2886	0.0627
General health rating: very good	N/A	0.0514	0.0478	0.0224	0.1949	0.1771	0.0346
General health rating: fair	N/A	-0.0632	-0.0451	-0.0299	-0.2882	-0.1828	-0.0434
General health rating: poor	N/A	-0.0968	-0.0370	-0.0331	-0.5000	-0.3182	-0.0871
Mental health rating: excellent	N/A	0.1704	0.1210	0.1199	0.4867	0.3769	0.1272
Mental health rating: very good	N/A	0.0757	0.0486	0.0578	0.2234	0.1876	0.0518
Mental health rating: fair	N/A	-0.0203	-0.0073	-0.0197	-0.1080	-0.0879	-0.0372
Mental health rating: poor	N/A	-0.1331	-0.1090	-0.0526	-0.5556	-0.4349	-0.1032
Proxy helped	N/A	0.0071	-0.0093	-0.0104	-0.1186	-0.0459	0.0400
Proxy answered	N/A	0.0175	0.0068	-0.0336	-0.0166	-0.0450	0.0150
Medicaid dual eligible	N/A	-0.0350	-0.0317	0.0147	0.0247	0.2844	-0.0087
Low-income subsidy (LIS)	N/A	-0.0471	-0.0023	-0.0094	0.0002	0.0691	-0.0100
Chinese Language	N/A	-0.2842	-0.4077	-0.3308	-0.3235	-0.8711	-0.1307

Table A-2: Part D CAHPS Measures

Predictor	MA-PD D07: Rating of Drug Plan	MA-PD D08: Getting Needed Prescription Drugs (Comp)	PDP D07: Rating of Drug Plan	PDP D08: Getting Needed Prescription Drugs (Comp)
Age: 64 or under	-0.2105	-0.0469	-0.3323	-0.0929
Age: 65 - 69	-0.0605	-0.0157	-0.2681	-0.0704
Age: 75 - 79	0.1228	0.0295	0.0785	0.0221
Age: 80 - 84	0.1898	0.0285	0.2479	0.0468
Age: 85 and older	0.2949	0.0280	0.4035	0.0167
Less than an 8th grade education	0.1043	-0.0651	0.2482	-0.0866
Some high school	0.0866	-0.0078	0.3167	-0.0008
Some college	-0.2464	-0.0425	-0.2814	-0.0361
College graduate	-0.3371	-0.0463	-0.2145	-0.0560
More than a bachelor's degree	-0.3693	-0.0633	-0.2559	-0.0813
General health rating: excellent	0.2879	0.0388	0.2374	0.0523
General health rating: very good	0.1925	0.0398	0.1642	0.0366
General health rating: fair	-0.1829	-0.0646	-0.1739	-0.0717
General health rating: poor	-0.3672	-0.1052	-0.1732	-0.1069
Mental health rating: excellent	0.3347	0.1040	0.1597	0.0386
Mental health rating: very good	0.1378	0.0524	0.1692	0.0321
Mental health rating: fair	-0.0636	-0.0185	0.0174	-0.0226
Mental health rating: poor	-0.2989	-0.0431	-0.3051	-0.0386
Proxy helped	-0.1712	-0.0073	-0.2270	0.0018
Proxy answered	-0.1232	0.0107	-0.0848	0.0303
Medicaid dual eligible	0.5920	0.0443	0.7898	0.0645
Low-income subsidy (LIS)	0.4848	0.0361	0.8629	0.1446
Chinese Language	-0.7368	-0.0816	0.0000	0.0000

HOS *2015-2017 Cohort 18* Case-Mix Adjustment

The longitudinal outcomes for the Medicare Health Outcomes Survey (HOS) *2015-2017 Cohort 18 Performance Measurement* analysis are based on risk-adjusted mortality rates, changes in physical health as measured by the physical component summary (PCS) score, and changes in mental health as measured by the mental component summary (MCS) score for the participating Medicare Advantage Organizations (MAOs). For reporting purposes, death and PCS outcomes are combined into one overall measure of change in physical health. Thus, there are two primary outcomes: (1) Alive and PCS Better + Same (vs. PCS Worse or Death) and (2) MCS Better + Same (vs. MCS Worse). For the Medicare Part C Star Ratings, the primary outcomes are reported as the percentage of respondents within an MAO who are "*Improving or Maintaining Physical Health"* (C04), and the percentage within an MAO who are "*Improving or Maintaining Mental Health"* (C05) over the two-year period, after adjustment for case-mix.

The analysis of death outcomes for the HOS performance measurement includes beneficiaries who are age 65 or older at baseline, completed the HOS at baseline with a calculable PCS or MCS score, and whose MAO participated in the HOS at follow up. Beneficiaries are included in the analysis of PCS and MCS change scores if they are age 65 or older at baseline, alive at follow up, enrolled in their original MAO at follow up, and completed the HOS with calculable PCS and MCS scores at baseline and follow up. HOS outcomes are analyzed by calculating the national averages, and the differences between actual and expected contract-level results for death, PCS, and MCS over two years. The expected results are adjusted for the case-mix of beneficiaries within an MAO to control for pre-existing baseline differences across MAOs with respect to covariates, such as baseline measures of sociodemographic characteristics, chronic medical conditions, and functional health status. The PCS results are combined with the percentage remaining alive in the MAO. An adjusted contract-level percentage for each of the two primary outcomes (PCS and MCS change scores) is calculated by combining the national average and the MAO difference score, using a logit transformation.

Tables A-3 – A-5 below include a series of 12 different multivariate logistic regression models (six death models, three PCS models, and three MCS models) that are used to case-mix adjust HOS outcomes, and to calculate expected outcomes for each beneficiary. For each of the three types of models (death, PCS, and MCS), the first model (Model A) is used for those beneficiaries with complete data and the other alternative models are used for those respondents with different patterns of missing data for the model outcome. To address the issue of missing data, a series of cascading logistic regression models was developed. Alternative death, PCS, and MCS models allow for missing income, education, marital status, and homeownership, which generally are the most commonly missing variables. These models also allow for the CMS administrative (rather than self-reported) race/ethnicity, which is non-missing for all beneficiaries. In addition, the alternative death models allow for different patterns of missing across the baseline chronic medical conditions and functional status items.

The coefficients in the tables report the log-odds for beneficiaries with a given characteristic having the expected outcome compared to beneficiaries in the reference category for that characteristic, controlling for all other model characteristics. In Table A-4: HOS PCS Better + Same Model Covariates, the Model A coefficient for "Female" is -0.163, indicating a lower probability of PCS Better + Same for female compared to male respondents (the reference category), who otherwise have the same demographic and health characteristics. However, the coefficient for age and gender interaction in the PCS Better + Same Model A is 0.003, indicating a very small positive difference in the expected outcome between females and males of the same age. It is important to note that the case-mix patterns are not always consistent across the 12 different logistic regression models.

More information about the calculation of HOS outcomes at the beneficiary and MAO contract levels is available on the HOS website at www.hosonline.org.

Table A-3a: HOS Death Model Covariates – Baseline Demographics

Death Model Covariates - Baseline Demographics	Model A	Model B	Model C	Model D	Model E	Model F
Constant	-6.881	-7.010	-7.032	-4.285	-4.703	-8.195
Age (linear)	0.065	0.066	0.064	0.064	0.068	0.071
Age 75+	0.022	0.018	0.023	0.026	0.024	0.044
Age 85+	0.015	0.021	0.023	0.029	0.025	0.018
Age and gender interaction	0.002	0.001	0.001	0.003	0.001	0.001
Female	-0.622	-0.496	-0.434	-0.619	-0.582	-0.552
Married	-0.145	-0.150				
Hispanic only	-0.481	-0.498				
Asian only	-0.702	-0.764				
Native Hawaiian or Pacific Islander only	-0.090	-0.069				
Black only	-0.176	-0.179				
American Indian or Alaskan Native only	-0.218	-0.099				
Multiracial	-0.088	-0.078				
CMS Hispanic only			-0.582	-0.601	-0.681	-0.584
CMS Asian or Pacific Islander only			-0.787	-0.725	-0.781	-0.791
CMS Black only			-0.115	-0.122	-0.161	-0.152
CMS American Indian or Alaskan Native only			-0.190	-0.123	-0.190	-0.087
CMS other race only			-0.240	-0.181	-0.190	-0.243
CMS unknown race only			-0.344	-0.330	-0.396	-0.582
Receive Medicaid	0.072	0.084	0.179	0.299	0.327	0.703
Eligible for SSI	0.161	0.133	0.199	0.170	0.156	0.846
Home owner	-0.154	-0.156				
High school graduate or greater	0.080	0.067				
Household income <$20,000	0.042	0.030				

Table A-3b: HOS Death Model Covariates – Baseline Functional Status

Death Model Covariates –Baseline Functional Status	Model A	Model B	Model C	Model D	Model E	Model F
One-item measure of General Health compared to others	0.235	0.250	0.228			
Physical Functioning/Activities of Daily Living Scale	-0.019	-0.018	-0.020			
General Health item	0.202	0.209	0.205			
Physical Functioning item (limitations in moderate activities)	-0.047	-0.047	-0.028			
Physical Functioning item (limitations climbing several flights of stairs)	0.033	0.029	0.045			
Role Physical item (accomplished less than would like)	0.042	0.042	0.003			
Role-Physical item (limited in the kind of work or other activities)	0.047	0.050	0.056			
Role-Emotional item (accomplished less than would like)	0.018	0.009	0.016			
Role-Emotional item (did not do work or other activities as carefully)	-0.021	-0.024	-0.033			
Bodily Pain item (pain interfered with normal work)	-0.087	-0.097	-0.093			
Mental Health item (felt calm and peaceful)	-0.014	-0.016	-0.018			
Vitality item (had a lot of energy)	0.020	0.029	0.063			
Mental Health item (felt downhearted and blue)	-0.001	0.002	0.016			
Social Functioning item (health interfered with social activities)	-0.090	-0.089	-0.082			

Table A-3c: HOS Death Model Covariates – Baseline Chronic Medical Conditions

HOS Death Model Covariates – Baseline Chronic Medical Conditions	Model A	Model B	Model C	Model D	Model E	Model F
Hypertension	-0.115					
Angina/coronary artery disease	-0.036					
Congestive heart failure	0.536					
Myocardial infarction	0.159					
Other heart conditions	0.014					
Stroke	0.119					
Pulmonary disease	0.309					
Gastrointestinal disorders	-0.177					
Arthritis of hip or knee	-0.324					
Arthritis of hand or wrist	-0.147					
Sciatica	-0.300					
Diabetes	0.111					
Depression	-0.071					
Any cancer other than skin cancer	0.419					
Colon cancer treatment	0.320					
Breast cancer treatment	-0.061					
Prostate cancer treatment	-0.198					
Lung cancer treatment	1.119					
Large positive disease groups[1]		1.894	1.821	1.888		
Medium positive disease groups[2]		0.712	0.727	0.902		
Nominal disease groups[3]		-0.090	-0.046	-0.054		
Negative disease groups[4]		-1.326	-1.377	-1.536		

[1] congestive heart failure, any cancer, lung cancer, and colon/rectal cancer
[2] pulmonary disease, stroke, diabetes, and myocardial infarction
[3] angina/coronary artery disease, breast cancer, depression, and other heart conditions
[4] gastrointestinal disorders, arthritis [both types], sciatica, hypertension, and prostate cancer

Table A-3d: HOS Death Model Covariates – Baseline Summary Scores

HOS Death Model Covariates – Baseline Summary Scores	Model A	Model B	Model C	Model D	Model E	Model F
Baseline PCS				-0.049	-0.049	
Baseline MCS				-0.027	-0.025	

Table A-4: HOS PCS Better + Same Model Covariates

PCS Better + Same Model Covariates	Model A	Model B	Model C
Constant	1.851	1.868	1.926
Age (linear)	-0.011	-0.012	-0.011
Age 75+	-0.024	-0.024	-0.026
Age 85+	0.036	0.028	0.033
Age and gender interaction	0.003	0.004	0.003
Female	-0.163	-0.239	-0.206
Married	0.022	0.026	
Hispanic only	-0.010	-0.022	
Asian only	0.058	0.037	
Native Hawaiian or Pacific Islander only	0.010	-0.007	
Black only	0.060	0.054	
American Indian or Alaskan Native only	0.168	0.217	
Multiracial	0.050	0.015	
CMS Hispanic only			-0.074
CMS Asian or Pacific Islander only			0.026
CMS Black only			0.027
CMS American Indian or Alaskan Native only			0.076
CMS other race only			0.035
CMS unknown race only			0.250
Receive Medicaid	-0.049	-0.066	-0.109
Eligible for SSI	-0.027	-0.043	-0.040
Home owner	0.026	0.041	
High school graduate or greater	0.074	0.084	
Household income <$20,000	-0.063		

Table A-5: HOS MCS Better + Same Model Covariates

MCS Better + Same Model Covariates	Model A	Model B	Model C
Constant	2.257	2.288	2.681
Age (linear)	-0.009	-0.011	-0.012
Age 75+	-0.032	-0.031	-0.030
Age 85+	0.009	0.010	0.008
Age and gender interaction	0.005	0.005	0.005
Female	-0.392	-0.410	-0.335
Married	-0.138	-0.095	
Hispanic only	-0.205	-0.226	
Asian only	-0.085	-0.124	
Native Hawaiian or Pacific Islander only	-0.469	-0.507	
Black only	-0.090	-0.115	
American Indian or Alaskan Native only	-0.341	-0.374	
Multiracial	-0.148	-0.163	
CMS Hispanic only			-0.300
CMS Asian or Pacific Islander only			-0.109
CMS Black only			-0.115
CMS American Indian or Alaskan Native only			-0.522
CMS other race only			-0.188
CMS unknown race only			0.206
Receive Medicaid	-0.129	-0.249	-0.388
Eligible for SSI	-0.388	-0.408	-0.411
Home owner	0.152	0.156	
High school graduate or greater	0.277	0.321	
Household income <$20,000	-0.223		

Attachment B: Complaints Tracking Module Exclusion List

Some complaints that cannot be clearly attributed to the plan are excluded; these include the following complaint types: enrollment or plan change issues outside available enrollment period; disenrollment due to loss of Medicare entitlement; IRMAA equitable relief or good cause requests; plan premium good cause requests; contractor or partner performance; program integrity issues; and Medicaid eligibility issues. Complaints flagged as CMS issue or requiring CMS review will also be excluded.

Table B-1 contains the exclusions applied to the CTM based on the revised categories and subcategories that were applied between September 25, 2010 and March 17, 2017

Table B-1: Exclusions between September 25, 2010 and March 17, 2017

Category ID	Category Description	Subcategory ID	Subcategory Description	Effective Date
11	Enrollment/Disenrollment	16	Facilitated/Auto Enrollment issues	September 25, 2010
		18	Enrollment Exceptions (EE)	
13	Pricing/Co-Insurance	06	Beneficiary has lost LIS Status/Eligibility or was denied LIS	
		16	Part D IRMAA	
30	Beneficiary Needs Assistance with Acquiring Medicaid Eligibility Information	01	Beneficiary Needs Assistance with Acquiring Medicaid Eligibility Information	
		90	Other Beneficiary Needs Assistance with Acquiring Medicaid Eligibility Information Issue	
38	Contractor/Partner Performance	90	Other Contractor/Partner Performance	
26	Contractor/Partner Performance	90	Other Contractor/Partner Performance	December 16, 2011
44	Equitable Relief/Good Cause Requests	01	Good Cause - Disenrollment for Failure to Pay Premiums	
		90	Other Equitable Relief/Good Cause Request	
45	Equitable Relief/Good Cause Requests	01	Good Cause - Disenrollment for Failure to Pay Premiums	
		02	Refund/Non-Receipt Part D IRMAA	
		03	Good Cause Part D IRMAA	
		04	Equitable Relief Part D IRMAA	
		90	Other Equitable Relief/Good Cause Request	
49	Contractor/Partner Performance	90	Other Contractor/Partner Performance	
50	Contractor/Partner Performance	90	Other Contractor/Partner Performance	
03	Enrollment/ Disenrollment	11	Disenrollment Due to Loss of Entitlement	June 1, 2013
11	Enrollment/ Disenrollment	24	Disenrollment Due to Loss of Entitlement	

Note: Program Integrity complaints, which are in the CTM but not viewable by plans, are excluded as well.

Attachment C: National Averages for Part C and D Measures

The tables below contain the average of the numeric and star values for each measure reported in the 2019 Star Ratings[1].

Table C-1: National Averages for Part C Measures

Measure ID	Measure Name	Numeric Average	Star Average
C01	Breast Cancer Screening	74%	3.4
C02	Colorectal Cancer Screening	73%	3.8
C03	Annual Flu Vaccine	72%	3.2
C04	Improving or Maintaining Physical Health	68%	3.0
C05	Improving or Maintaining Mental Health	82%	3.3
C06	Monitoring Physical Activity	52%	2.8
C07	Adult BMI Assessment	96%	4.4
C08	Special Needs Plan (SNP) Care Management	71%	3.2
C09	Care for Older Adults – Medication Review	90%	4.4
C10	Care for Older Adults – Functional Status Assessment	85%	4.1
C11	Care for Older Adults – Pain Assessment	89%	4.0
C12	Osteoporosis Management in Women who had a Fracture	45%	2.6
C13	Diabetes Care – Eye Exam	74%	3.7
C14	Diabetes Care – Kidney Disease Monitoring	96%	4.2
C15	Diabetes Care – Blood Sugar Controlled	78%	3.7
C16	Controlling Blood Pressure	74%	3.6
C17	Rheumatoid Arthritis Management	79%	3.0
C18	Reducing the Risk of Falling	58%	3.0
C19	Improving Bladder Control	45%	3.1
C20	Medication Reconciliation Post-Discharge	57%	2.9
C21	Plan All-Cause Readmissions	9%	3.0
C22	Statin Therapy for Patients with Cardiovascular Disease	79%	3.3
C23	Getting Needed Care	83	3.3
C24	Getting Appointments and Care Quickly	78	3.4
C25	Customer Service	90	3.4
C26	Rating of Health Care Quality	86	3.3
C27	Rating of Health Plan	86	3.3
C28	Care Coordination	86	3.4
C29	Complaints about the Health Plan	0.16	4.0
C30	Members Choosing to Leave the Plan	10%	3.9
C31	Health Plan Quality Improvement	Medicare shows only a Star Rating for this topic	3.4
C32	Plan Makes Timely Decisions about Appeals	96%	4.2
C33	Reviewing Appeals Decisions	91%	3.9
C34	Call Center – Foreign Language Interpreter and TTY Availability	94%	4.3

[1] All contracts are weighted equally in these averages.

Table C-2: National Averages for Part D Measures

Measure ID	Measure Name	MA-PD Numeric Average	MA-PD Star Average	PDP Numeric Average	PDP Star Average
D01	Call Center – Foreign Language Interpreter and TTY Availability	94%	4.3	92%	4.2
D02	Appeals Auto–Forward	4.8	4.5	7.9	4.2
D03	Appeals Upheld	85%	3.9	81%	3.1
D04	Complaints about the Drug Plan	0.16	4.0	0.05	3.6
D05	Members Choosing to Leave the Plan	10%	3.9	9%	4.1
D06	Drug Plan Quality Improvement	Medicare shows only a Star Rating for this topic	4.2	Medicare shows only a Star Rating for this topic	4.2
D07	Rating of Drug Plan	85	3.2	83	3.3
D08	Getting Needed Prescription Drugs	90	3.5	90	3.4
D09	MPF Price Accuracy	99	4.8	98	4.6
D10	Medication Adherence for Diabetes Medications	82%	3.7	83%	2.6
D11	Medication Adherence for Hypertension (RAS antagonists)	84%	3.1	86%	3.0
D12	Medication Adherence for Cholesterol (Statins)	80%	3.2	83%	3.1
D13	MTM Program Completion Rate for CMR	71%	3.3	38%	2.6
D14	Statin Use in Persons with Diabetes (SUPD)	79%	3.3	77%	2.9

Attachment D: Part C and D Data Time Frames

Table D-1: Part C Measure Data Time Frames

Measure ID	Measure Name	Primary Data Source	Data Time Frame
C01	Breast Cancer Screening	HEDIS	01/01/2017 – 12/31/2017
C02	Colorectal Cancer Screening	HEDIS	01/01/2017 – 12/31/2017
C03	Annual Flu Vaccine	CAHPS	03/2018 – 06/2018
C04	Improving or Maintaining Physical Health	HOS	04/01/2017 – 07/31/2017
C05	Improving or Maintaining Mental Health	HOS	04/01/2017 – 07/31/2017
C06	Monitoring Physical Activity	HEDIS / HOS	04/01/2017 – 07/31/2017
C07	Adult BMI Assessment	HEDIS	01/01/2017 – 12/31/2017
C08	Special Needs Plan (SNP) Care Management	Part C Plan Reporting	01/01/2017 – 12/31/2017
C09	Care for Older Adults – Medication Review	HEDIS	01/01/2017 – 12/31/2017
C10	Care for Older Adults – Functional Status Assessment	HEDIS	01/01/2017 – 12/31/2017
C11	Care for Older Adults – Pain Assessment	HEDIS	01/01/2017 – 12/31/2017
C12	Osteoporosis Management in Women who had a Fracture	HEDIS	01/01/2017 – 12/31/2017
C13	Diabetes Care – Eye Exam	HEDIS	01/01/2017 – 12/31/2017
C14	Diabetes Care – Kidney Disease Monitoring	HEDIS	01/01/2017 – 12/31/2017
C15	Diabetes Care – Blood Sugar Controlled	HEDIS	01/01/2017 – 12/31/2017
C16	Controlling Blood Pressure	HEDIS	01/01/2017 – 12/31/2017
C17	Rheumatoid Arthritis Management	HEDIS	01/01/2017 – 12/31/2017
C18	Reducing the Risk of Falling	HEDIS / HOS	04/01/2017 – 07/31/2017
C19	Improving Bladder Control	HEDIS / HOS	04/01/2017 – 07/31/2017
C20	Medication Reconciliation Post-Discharge	HEDIS	01/01/2017 – 12/31/2017
C21	Plan All-Cause Readmissions	HEDIS	01/01/2017 – 12/31/2017
C22	Statin Therapy for Patients with Cardiovascular Disease	HEDIS	01/01/2017 – 12/31/2017
C23	Getting Needed Care	CAHPS	03/2018 – 06/2018
C24	Getting Appointments and Care Quickly	CAHPS	03/2018 – 06/2018
C25	Customer Service	CAHPS	03/2018 – 06/2018
C26	Rating of Health Care Quality	CAHPS	03/2018 – 06/2018
C27	Rating of Health Plan	CAHPS	03/2018 – 06/2018
C28	Care Coordination	CAHPS	03/2018 – 06/2018
C29	Complaints about the Health Plan	Complaints Tracking Module (CTM)	01/01/2017 – 12/31/2017
C30	Members Choosing to Leave the Plan	MBDSS	01/01/2017 – 12/31/2017
C31	Health Plan Quality Improvement	Star Ratings	Not Applicable
C32	Plan Makes Timely Decisions about Appeals	Independent Review Entity (IRE)	01/01/2017 – 12/31/2017
C33	Reviewing Appeals Decisions	Independent Review Entity (IRE)	01/01/2017 – 12/31/2017
C34	Call Center – Foreign Language Interpreter and TTY Availability	Call Center	02/2018 – 06/2018

Table D-2: Part D Measure Data Time Frames

Measure ID	Measure Name	Primary Data Source	Data Time Frame
D01	Call Center – Foreign Language Interpreter and TTY Availability	Call Center	02/2018 – 06/2018
D02	Appeals Auto–Forward	Independent Review Entity (IRE)	01/01/2017 – 12/31/2017
D03	Appeals Upheld	Independent Review Entity (IRE)	01/01/2017 – 12/31/2017
D04	Complaints about the Drug Plan	Complaints Tracking Module (CTM)	01/01/2017 – 12/31/2017
D05	Members Choosing to Leave the Plan	MBDSS	01/01/2017 – 12/31/2017
D06	Drug Plan Quality Improvement	Star Ratings	Not Applicable
D07	Rating of Drug Plan	CAHPS	03/2018 – 06/2018
D08	Getting Needed Prescription Drugs	CAHPS	03/2018 – 06/2018
D09	MPF Price Accuracy	PDE data, MPF Pricing Files	01/01/2017 – 09/30/2017
D10	Medication Adherence for Diabetes Medications	Prescription Drug Event (PDE) data	01/01/2017 – 12/31/2017
D11	Medication Adherence for Hypertension (RAS antagonists)	Prescription Drug Event (PDE) data	01/01/2017 – 12/31/2017
D12	Medication Adherence for Cholesterol (Statins)	Prescription Drug Event (PDE) data	01/01/2017 – 12/31/2017
D13	MTM Program Completion Rate for CMR	Part D Plan Reporting	01/01/2017 – 12/31/2017
D14	Statin Use in Persons with Diabetes (SUPD)	Prescription Drug Event (PDE) data	01/01/2017 – 12/31/2017

Attachment E: SNP Measure Scoring Methodologies

1. Medicare Part C Reporting Requirements Measure (C08: SNP Care Management)

Step 1: Start with all contracts that offer at least one SNP plan that was active at any point during contract year 2017.

Step 2: Exclude any PBP that is not required to report data for the contract year 2017 Part C SNP Care Reporting Requirements, based on terminations on or before the end of the contract year. This exclusion is consistent with the statement from page 4 of the CY 2017 Medicare Part C Plan Reporting Requirements Technical Specifications Document: "If a plan terminates before or at the end of its contract year (CY), it is not required to report and/or have its data validated for that CY." This excludes:

- PBPs that terminate in transition from CY 2017 to CY 2018 according to the plan crosswalk
- Contracts that terminate on or before 12/31/2017 according to the Contract Info extract

We then also **exclude** those that are **not required to undergo data validation (DV)** for the contract year 2017 Part C SNP Care Reporting Requirements, based on terminations on or before the deadline for submission of DV results to CMS. This exclusion is consistent with the following statement from page 2 of the Medicare Part C and Part D Reporting Requirements Data Validation Procedure Manual:

"A sponsoring organization that terminates its contract(s) to offer Medicare Part C and/or Part D benefits, or that is subject to a CMS termination of its contract(s), is not required to undergo a DV review for the final contract year's reported data. Similarly, for reporting sections that are reported at the plan benefit package (PBP) level, PBPs that terminate are not required to undergo a DV review for the final year's reported data."

This excludes: Contracts and PBP with an effective termination data that occurs between 1/1/2018 and 6/30/2018 according to the Contract Info extract

Step 3: After removing contract/PBP data excluded above, suppress contract rates based on the following rules:

Section-level DV failure: Contracts that score less than 95% in DV for their CY 2017 SNP Care Reporting Requirements data are listed as "CMS identified issues with this plan's data."

Element-level DV failure: Contracts that score 95% or higher in DV for their CY 2017 SNP Care Reporting Requirements data but that failed at least one of the four data elements (elements 13.1, 13.2, 13.3, and 13.6) are listed as "CMS identified issues with this plan's data."

Small size: Contracts that have not yet been suppressed and have a SNP Care Assessment rate denominator [Number of New Enrollees (Element 13.1) + Number of enrollees eligible for an annual HRA (Element 13.2)] of fewer than 30 are listed as "No Data Available."

Organizations can view their own plan reporting data validation results in HPMS (https://hpms.cms.gov/). From the home page, select Monitoring | Plan Reporting Data Validation.

Step 4: Calculate the rate for the remaining contract/PBPs using the formula:

[Number of initial HRAs performed on new enrollees (Element 13.3)
+ Number of annual reassessments performed (Element 13.6)]
/ [Number of new enrollees (Element 13.1)
+ Number of enrollees eligible for an annual HRA (Element 13.2)]

2. NCQA HEDIS Measures - (C09 - C11: Care for Older Adults)

The example NCQA measure combining methodology specifications below is written for two Plan Benefit Package (PBP) submissions, which we distinguish as 1 and 2, but the methodology easily extends to any number of submissions.

Rates are produced for any contract offering a SNP in the ratings year which provided SNP HEDIS data in the measurement year.

Definitions

Let N_1 = The Total Number of Members Eligible for the HEDIS measure in the first PBP ("fixed" and auditable)

Let N_2 = The Total Number of Members Eligible for the HEDIS measure in the second PBP ("fixed" and auditable)

Let P_1 = The estimated rate (mean) for the HEDIS measure in the first PBP (auditable)

Let P_2 = The estimated rate (mean) for the same HEDIS measure in the second PBP (auditable)

Setup Calculations

Based on the above definitions, there are two additional calculations:

Let W_1 = The weight assigned to the first PBP results (estimated, auditable). This is estimated from the formula $W_1 = N_1 / (N_1 + N_2)$

Let W_2 = The weight assigned to the second PBP results (estimated, auditable). This is estimated from the formula $W_2 = N_2 / (N_1 + N_2)$

Pooled Analysis

The pooled result from the two rates (means) is calculated as: $P_{pooled} = W_1 * P_1 + W_2 * P_2$

NOTES:
Weights are based on the eligible member population. While it may be more accurate to remove all excluded members before weighting, NCQA and CMS have chosen not do this (to simplify the method) for two reasons: 1) the number of exclusions relative to the size of the population should be small, and 2) exclusion rates (as a percentage of the eligible population) should be similar for each PBP and negligibly affect the weights.

If one or more of the submissions has an audit designation of NA, those submissions are dropped and not included in the weighted rate (mean) calculations. If one or more of the submissions has an audit designation of BR or NR (which has been determined to be biased or is not reported by choice of the contract), the rate is set to zero as detailed in the section titled “Handling of Biased, Erroneous and/or Not Reportable (NR) Data” and the average enrollment for the year is used for the eligible population in the PBP.

Numeric Example Using an Effectiveness of Care Rate	
# of Total Members Eligible for the HEDIS measure in PBP 1, N_1 =	1500
# of Total Members Eligible for the HEDIS measure in PBP 2, N_2 =	2500
HEDIS Result for PBP 1, Enter as a Proportion between 0 and 1, P_1 =	0.75
HEDIS Result for PBP 2, Enter as a Proportion between 0 and 1, P_2 =	0.5
Setup Calculations - Initialize Some Intermediate Results	
The weight for PBP 1 product estimated by $W_1 = N_1 / (N_1 + N_2)$	0.375
The weight for PBP 2 product estimated by $W_2 = N_2 / (N_1 + N_2)$	0.625
Pooled Results	
$P_{pooled} = W_1 * P_1 + W_2 * P_2$	0.59375

Attachment F: Calculating Measure C21: Plan All-Cause Readmissions

All data come from the HEDIS 2018 M18_PCRb data file. The CMS MA HEDIS Public Use File (PUF) data can be found on this page: Medicare Advantage/Part D Contract and Enrollment Data

Formula Value	PCRb Field	Field Description	PUF Field
A	is6574	Count of Index Stays (Denominator) 65-74	UOS524-0010
D	r6574	Count of 30-Day readmissions (numerator) 65-74	UOS524-0020
G	err6574	Expected Readmissions Rate (Expected Readmission/Den) 65-74	UOS524-0030
B	is7584	Count of Index Stays (Denominator) 75-84	UOS524-0040
E	r7584	Count of 30-Day readmissions (numerator) 75-84	UOS524-0050
H	err7584	Expected Readmissions Rate (Expected Readmission/Den) 75-84	UOS524-0060
C	is85	Count of Index Stays (Denominator) 85+	UOS524-0070
F	r85	Count of 30-Day readmissions (numerator) 85+	UOS524-0080
I	err85	Expected Readmissions Rate (Expected Readmission/Den) 85+	UOS524-0090

$$\text{NatAvgObs} = \text{Average}\left(\left(\frac{D_1+E_1+F_1}{A_1+B_1+C_1}\right)+\ldots+\left(\frac{D_n+E_n+F_n}{A_n+B_n+C_n}\right)\right)$$ Where 1 through n are all contracts with numeric data.

$$\text{Denominator} = A + B + C$$

$$\text{Observed} = \frac{D+E+F}{A+B+C}$$

$$\text{Expected} = \left(\left(\frac{A}{A+B+C}\right)\times G\right) + \left(\left(\frac{B}{A+B+C}\right)\times H\right) + \left(\left(\frac{C}{A+B+C}\right)\times I\right)$$

$$\text{Final Rate} = \left(\left(\frac{\text{Observed}}{\text{Expected}}\right)\times \text{NatAvgObs}\right)\times 100$$

Example: Calculating the final rate for Contract 1

Formula Value	PCR Field	Contract 1	Contract 2	Contract 3	Contract 4
A	is6574	2,217	1,196	4,157	221
D	r6574	287	135	496	30
G	err6574	0.126216947	0.141087156	0.122390927	0.129711036
B	is7584	1,229	2,483	3,201	180
E	r7584	151	333	434	27
H	err7584	0.143395345	0.141574415	0.168403941	0.165909069
C	is85	1,346	1,082	1,271	132
F	r85	203	220	196	22
I	err85	0.165292297	0.175702614	0.182608065	0.145632638

$$\text{NatAvgObs} = \text{Average}\left(\left(\frac{287+151+203}{2217+1229+1346}\right)+\left(\frac{135+333+220}{1196+2438+1082}\right)+\left(\frac{496+434+196}{4157+3201+1271}\right)+\left(\frac{30+27+22}{221+180+132}\right)\right)$$

$$\text{NatAvgObs} = \text{Average}\left((0.13376)+(0.14451)+(0.13049)+(0.14822)\right)$$

$$\text{NatAvgObs} = 0.13924$$

$$\text{Observed Contract 1} = \frac{287+151+203}{2217+1229+1346} = 0.13376$$

$$\text{Expected Contract 1} = \left(\begin{array}{c}\left(\left(\frac{2217}{2217+1229+1346}\right)\times 0.126216947\right)+\left(\left(\frac{1229}{2217+1229+1346}\right)\times 0.143395345\right)+\\ \left(\left(\frac{1346}{2217+1229+1346}\right)\times 0.165292297\right)\end{array}\right)$$

$$\text{Expected Contract 1} = (0.058 + 0.037 + 0.046) = 0.142$$

$$\text{Final Rate Contract 1} = \left(\left(\frac{0.13376}{0.142}\right)\times 0.13924\right)\times 100 = 13.1160158$$

Final Rate reported in the Star Ratings for Contract 1 = 13%

The actual calculated NatAvgObs value used in the 2019 Star Ratings was 0.123796137345615

Attachment G: Weights Assigned to Individual Performance Measures

Table G-1: Part C Measure Weights

Measure ID	Measure Name	Weighting Category	Part C Summary	MA-PD Overall
C01	Breast Cancer Screening	Process Measure	1	1
C02	Colorectal Cancer Screening	Process Measure	1	1
C03	Annual Flu Vaccine	Process Measure	1	1
C04	Improving or Maintaining Physical Health	Outcome Measure	3	3
C05	Improving or Maintaining Mental Health	Outcome Measure	3	3
C06	Monitoring Physical Activity	Process Measure	1	1
C07	Adult BMI Assessment	Process Measure	1	1
C08	Special Needs Plan (SNP) Care Management	Process Measure	1	1
C09	Care for Older Adults – Medication Review	Process Measure	1	1
C10	Care for Older Adults – Functional Status Assessment	Process Measure	1	1
C11	Care for Older Adults – Pain Assessment	Process Measure	1	1
C12	Osteoporosis Management in Women who had a Fracture	Process Measure	1	1
C13	Diabetes Care – Eye Exam	Process Measure	1	1
C14	Diabetes Care – Kidney Disease Monitoring	Process Measure	1	1
C15	Diabetes Care – Blood Sugar Controlled	Intermediate Outcome Measure	3	3
C16	Controlling Blood Pressure	Intermediate Outcome Measure	3	3
C17	Rheumatoid Arthritis Management	Process Measure	1	1
C18	Reducing the Risk of Falling	Process Measure	1	1
C19	Improving Bladder Control	Process Measure	1	1
C20	Medication Reconciliation Post-Discharge	Process Measure	1	1
C21	Plan All-Cause Readmissions	Outcome Measure	3	3
C22	Statin Therapy for Patients with Cardiovascular Disease	Process Measure	1	1
C23	Getting Needed Care	Patients' Experience and Complaints Measure	1.5	1.5
C24	Getting Appointments and Care Quickly	Patients' Experience and Complaints Measure	1.5	1.5
C25	Customer Service	Patients' Experience and Complaints Measure	1.5	1.5
C26	Rating of Health Care Quality	Patients' Experience and Complaints Measure	1.5	1.5
C27	Rating of Health Plan	Patients' Experience and Complaints Measure	1.5	1.5
C28	Care Coordination	Patients' Experience and Complaints Measure	1.5	1.5
C29	Complaints about the Health Plan	Patients' Experience and Complaints Measure	1.5	1.5
C30	Members Choosing to Leave the Plan	Patients' Experience and Complaints Measure	1.5	1.5
C31	Health Plan Quality Improvement	Improvement Measure	5	5
C32	Plan Makes Timely Decisions about Appeals	Measures Capturing Access	1.5	1.5
C33	Reviewing Appeals Decisions	Measures Capturing Access	1.5	1.5
C34	Call Center – Foreign Language Interpreter and TTY Availability	Measures Capturing Access	1.5	1.5

Table G-2: Part D Measure Weights

Measure ID	Measure Name	Weighting Category	Part D Summary	MA-PD Overall
D01	Call Center – Foreign Language Interpreter and TTY Availability	Measures Capturing Access	1.5	1.5
D02	Appeals Auto–Forward	Measures Capturing Access	1.5	1.5
D03	Appeals Upheld	Measures Capturing Access	1.5	1.5
D04	Complaints about the Drug Plan	Patients' Experience and Complaints Measure	1.5	1.5
D05	Members Choosing to Leave the Plan	Patients' Experience and Complaints Measure	1.5	1.5
D06	Drug Plan Quality Improvement	Improvement Measure	5	5
D07	Rating of Drug Plan	Patients' Experience and Complaints Measure	1.5	1.5
D08	Getting Needed Prescription Drugs	Patients' Experience and Complaints Measure	1.5	1.5
D09	MPF Price Accuracy	Process Measure	1	1
D10	Medication Adherence for Diabetes Medications	Intermediate Outcome Measure	3	3
D11	Medication Adherence for Hypertension (RAS antagonists)	Intermediate Outcome Measure	3	3
D12	Medication Adherence for Cholesterol (Statins)	Intermediate Outcome Measure	3	3
D13	MTM Program Completion Rate for CMR	Process Measure	1	1
D14	Statin Use in Persons with Diabetes (SUPD)	Intermediate Outcome Measure	1†	1†

† First year measures are always weighted 1.

Attachment H: Calculation of Weighted Star Rating and Variance Estimates

The weighted summary (or overall) Star Rating for contract *j* is estimated as:

$$\bar{x}_j = \frac{\sum_{i=1}^{n_j} w_{ij} x_{ij}}{\sum_{i=1}^{n_j} w_{ij}}$$

where n_j is the number of performance measures for which contract *j* is eligible; w_{ij} is the weight assigned to performance measure *i* for contract *j*; and x_{ij} is the measure star for performance measure *i* for contract *j*. The variance of the Star Ratings for each contract *j*, s_j^2, must also be computed in order to estimate the reward factor (r-Factor):

$$s_j^2 = \frac{n_j}{(n_j - 1)\left(\sum_{i=1}^{n_j} w_{ij}\right)} \left[\sum_{i=1}^{n_j} w_{ij} \left(x_{ij} - \bar{x}_j\right)^2\right]$$

Thus, the $\bar{x}_j$'s are the new summary (or overall) Star Ratings for the contracts. The variance estimate, s_j^2, simply replaces the non-weighted variance estimate that was previously used for the r-Factor calculation. For all contracts *j*, $w_{ij} = w_i$ (i.e., the performance measure weights are the same for all contracts when estimating a given Star Rating (Part C or Part D summary or MA-PD overall ratings).

Attachment I: Calculating the Improvement Measure and the Measures Used

Calculating the Improvement Measure

Contracts must have data for at least half of the attainment measures used to calculate the Part C or Part D improvement measure to be eligible to receive a rating in that improvement measure.

The improvement change score was determined for each measure for which a contract was eligible by calculating the difference in measure scores between Star Rating years 2018 and 2019:

For measures where a higher score is better:

$$\text{Improvement Change Score} = \text{Score in 2019} - \text{Score in 2018}.$$

For measures where a lower score is better:

$$\text{Improvement Change Score} = \text{Score in 2018} - \text{Score in 2019}$$

An eligible measure was defined as a measure for which a contract was scored in both the 2018 and 2019 Star Ratings and there were no significant measure specification changes or a regional contract reconfiguration.

For each measure, significant improvement or decline between Star Ratings years 2018 and 2019 was determined by a t-test at the 95% significance level:

$$\text{If } \frac{\text{Improvement Change Score}}{\text{Standard Error of Improvement Change Score}} > 1.96, \text{ then YES = significant improvement}$$

$$\text{If } \frac{\text{Improvement Change Score}}{\text{Standard Error of Improvement Change Score}} < -1.96, \text{ then YES = significant decline}$$

Hold Harmless Provision for Individual Measures: If a contract demonstrated statistically significant decline (at the 0.05 significance level) on an attainment measure for which they received five stars during both the current contract year and the prior contract year, then this measure will be counted as showing no significant change. Measures that are held harmless as described here will be considered eligible for the improvement measure.

Net improvement is calculated for each class of measures (e.g., outcome, access, and process) by subtracting the number of significantly declined measures from the number of significantly improved measures.

$$\text{Net Improvement} = \#\text{ of significantly improved measures} - \#\text{ of significantly declined measures}$$

The improvement measure score is calculated for Parts C and D separately by taking a weighted sum of net improvement divided by the weighted sum of the number of eligible measures.

Measures are weighted as follows:

Outcome or intermediate outcome measure: Weight of 3

Access or patient experience measure: Weight of 1.5

Process measure: Weight of 1

When the weight of an individual measure changes over the two years of data used, the lower weight value is used in the improvement calculation.

$$\text{Improvement Measure Score} = \frac{\text{Net\_Imp\_Process} + 1.5 * \text{Net\_Imp\_PtExp} + 3 * \text{Net\_Imp\_Outcome}}{\text{Elig\_Process} + 1.5 * \text{Elig\_PtExp} + 3 * \text{Elig\_Outcome}}$$

Net_Imp_Process = Net improvement for process measures
Net_Imp_PtExp = Net improvement for patient experience and access measures
Net_Imp_Outcome = Net improvement for outcome and intermediate outcome measures
Elig_Process = Number of eligible process measures
Elig_PtExp = Number of eligible patient experience and access measures
Elig_Outcome = Number of eligible outcome and intermediate outcome measures

The improvement measure score is converted into a Star Rating using the clustering method. Conceptually, the clustering algorithm identifies the "gaps" in the data and creates cut points that result in the creation of five categories (one for each Star Rating) such that scores of contracts in the same score category (Star Rating) are as similar as possible, and scores of contracts in different categories are as different as possible. Improvement scores of 0 (equivalent to no net change on the attainment measures included in the improvement measure calculation) will be centered at 3 stars when assigning the improvement measure Star Rating. Then, the remaining contracts are split into two groups and clustered: 1) improvement scores less than zero receive one or two stars on the improvement measure and 2) improvement scores greater than or equal to zero receive 3, 4, or 5 stars.

Contracts with 2 or fewer stars for their highest rating when calculated without improvement will not have their data calculated with the improvement measure included.

Hold Harmless Provision: Contracts with 4 or more stars for their highest rating that would have had their overall rating decreased with the addition of the improvement measures were held harmless. That is, the highest Star Rating would not be decreased from 4 or more stars when the improvement measures were added to the overall Star Rating calculation. In addition, the reward factor is recalculated without the improvement measures included.

General Standard Error Formula

Because a contract's score in one year is not independent of the score in the next year, the standard error is calculated using the standard estimation of the variance of the difference between two variables that are not necessarily independent. The standard error of the improvement change score is calculated using the formula

$$\sqrt{se(Y_{i2})^2 + se(Y_{i1})^2 - 2 * Cov(Y_{i2}, Y_{i1})}$$

Using measure C01 as an example, the change score standard error is:

$se(Y_{i2})$ Represents the 2019 standard error for contract i on measure C01

$se(Y_{i1})$ Represents the 2018 standard error for contract i on measure C01

Y_{i2} Represents the 2019 rate for contract i on measure C01

Y_{i1} Represents the 2018 rate for contract i on measure C01

cov Represents the covariance between Y_{i2} and Y_{i1} computed using the correlation across all contracts observed at both time points (2019 and 2018). In other words:

$$cov(Y_{i2}, Y_{i1}) = se(Y_{i2}) * se(Y_{i1}) * Corr(Y_{i2}, Y_{i1})$$

where the correlation $Corr(Y_{i2}, Y_{i1})$ is assumed to be the same for all contracts and is computed using data for all contracts. This assumption was needed because only one score is observed for each contract in each year; therefore, it is not possible to compute the contract specific correlation.

Standard Error Numerical Example

For measure C03, contract A:

$se(Y_{i2})$ = 2.805

$se(Y_{i1})$ = 3.000

$Corr(Y_{i2}, Y_{i1})$ = 0.901

Standard error for measure C03 for contract A = sqrt (2.805^2 + 3.000^2 – 2 * 0.901 * 2.805 * 3.000) = 1.305

Standard Error Formulas (SEF) for Specific Measures

The following formulas are used for calculating the standard error for specific measures in the 2019 Star Ratings. These are modifications to the general standard error formula provide above to account for the specific type of data in the measure.

1. SEF for Measures: C01, C02, C06 – C08, C12 – C20, C22, C30, C32 – C34, D01, D03, D05, D10 – D13

$$SE_y = \sqrt{\frac{Score_y * (100 - Score_y)}{Denominator_y}}$$

for y = 2018, 2019

$Denominator_y$ is as defined in the Measure Details section for each measure

2. SEF for Measures: C09 – C11

These measures are rolled up from the plan level to the contract level following the formula outlined in "Attachment E: NCQA HEDIS Measures." The standard error at the contract level is calculated as shown below. The specifications are written for two PBP submissions, which we distinguish as 1 and 2, but the methodology easily extends to any number of submissions.

The plan level standard error is calculated as:

$$SE_{yj} = \sqrt{\frac{Score_{yj} * (100 - Score_{yj})}{Denominator_{yj}}}$$

for y = 2018, 2019 and j = Plan 1, Plan 2

The contract level standard error is then calculated as:

Let Wy1 = The weight assigned to the first PBP results (estimated, auditable) for year y, where y = 2018, 2019. This result is estimated by the formula Wy1 = Ny1 / (Ny1 + Ny2)

Let Wy2 = The weight assigned to the second PBP results (estimated, auditable) for year y, where y = 2018, 2019. This result is estimated by the formula Wy2 = Ny2 / (Ny1 + Ny2)

$$SE_{yi} = \sqrt{(W_{y1})^2 * (SE_{y1})^2 + (W_{y2})^2 * (SE_{y2})^2}$$

for y = Contract Year 2018, Contract Year 2019 and i = Contract i

3. SEF for Measure: C21

$$SE_y = 100 * NatAvgObs * \sqrt{\frac{\text{Observed Count of Readmissions}_y}{\left(\text{Expected Count of Readmissions}_y\right)^2}}$$

for y = 2018, 2019

The calculation of NatAvgObs is explained in "Attachment F: Calculating Measure C21: Plan All-Cause Readmissions." The observed count of readmissions is calculated as D + E + F, where D, E, and F are formula values in Attachment F. The expected count of readmissions is calculated using the formula A * G + B * H + C * I, and A, B, C, G, H, and I are formula values in Attachment F.

4. SEF for Measures: C03, C23 – C28, and D07 – D08

The CAHPS measure standard errors for 2018 and 2019 were provided to CMS by the CAHPS contractor following the formulas documented in the CAHPS Macro Manual. The actual values used for each contract are included on the Measure Detail CAHPS page in the HPMS preview area.

5. SEF for Measure: D02

$$SE_y = \sqrt{\frac{\text{Total Number of Cases Auto-Forwarded to IRE}_y}{(\text{Average Medicare Part D Enrollment}_y)^2}} * 10{,}000$$

6. SEF for Measures C29, D04

$$SE_y = \sqrt{\frac{\text{Total Number of Complaints}_y}{(\text{Average Contract Enrollment}_y)^2}} * \frac{1000 * 30}{NumDays}$$

NumDays: 2018 = 366, 2019 = 365

Star Ratings Measures Used in the Improvement Measures

Table I-1: Part C Measures Used in the Improvement Measure

Measure ID	Measure Name	Measure Usage	Correlation
C01	Breast Cancer Screening	Included	0.875181
C02	Colorectal Cancer Screening	Included	0.820251
C03	Annual Flu Vaccine	Included	0.928255
C04	Improving or Maintaining Physical Health	Not Included	-
C05	Improving or Maintaining Mental Health	Not Included	-
C06	Monitoring Physical Activity	Included	0.816268
C07	Adult BMI Assessment	Included	0.580348
C08	Special Needs Plan (SNP) Care Management	Included	0.873359
C09	Care for Older Adults – Medication Review	Included	0.360448
C10	Care for Older Adults – Functional Status Assessment	Included	0.767358
C11	Care for Older Adults – Pain Assessment	Included	0.314246
C12	Osteoporosis Management in Women who had a Fracture	Included	0.825328
C13	Diabetes Care – Eye Exam	Included	0.846875
C14	Diabetes Care – Kidney Disease Monitoring	Included	0.699605
C15	Diabetes Care – Blood Sugar Controlled	Included	0.749616
C16	Controlling Blood Pressure	Included	0.817616
C17	Rheumatoid Arthritis Management	Included	0.666718
C18	Reducing the Risk of Falling	Included	0.843896
C19	Improving Bladder Control	Included	0.432829
C20	Medication Reconciliation Post-Discharge	Included	0.752712
C21	Plan All-Cause Readmissions	Included	0.360403
C22	Statin Therapy for Patients with Cardiovascular Disease	Not Included	-
C23	Getting Needed Care	Included	0.851175
C24	Getting Appointments and Care Quickly	Included	0.8894
C25	Customer Service	Included	0.701564
C26	Rating of Health Care Quality	Included	0.823487
C27	Rating of Health Plan	Included	0.870952
C28	Care Coordination	Included	0.792216
C29	Complaints about the Health Plan	Included	0.718824
C30	Members Choosing to Leave the Plan	Included	0.735691
C31	Health Plan Quality Improvement	Not Included	-
C32	Plan Makes Timely Decisions about Appeals	Included	0.385631
C33	Reviewing Appeals Decisions	Included	0.633824
C34	Call Center – Foreign Language Interpreter and TTY Availability	Included	0.411022

Table I-2: Part D Measures Used in the Improvement Measure

Measure ID	Measure Name	Measure Usage	Correlation
D01	Call Center – Foreign Language Interpreter and TTY Availability	Included	0.506665
D02	Appeals Auto–Forward	Included	0.36213
D03	Appeals Upheld	Included	0.494887
D04	Complaints about the Drug Plan	Included	0.742515
D05	Members Choosing to Leave the Plan	Included	0.740202
D06	Drug Plan Quality Improvement	Not Included	-
D07	Rating of Drug Plan	Included	0.852936
D08	Getting Needed Prescription Drugs	Included	0.769587
D09	MPF Price Accuracy	Not Included	-
D10	Medication Adherence for Diabetes Medications	Included	0.890121
D11	Medication Adherence for Hypertension (RAS antagonists)	Included	0.923256
D12	Medication Adherence for Cholesterol (Statins)	Included	0.922836
D13	MTM Program Completion Rate for CMR	Included	0.720833
D14	Statin Use in Persons with Diabetes (SUPD)	Not Included	-

Attachment J: Star Ratings Measure History

The tables below cross-reference the measures code in each of the yearly Star Ratings releases. Measure codes that begin with DM are display measures which are posted on CMS.gov on this page: http://go.cms.gov/partcanddstarratings.

Table J-1: Part C Measure History

Part	Measure Name	Data Source	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	Notes
C	Access to Primary Care Doctor Visits	HEDIS	DMC09	DMC10	DMC10	DMC11	DMC10	DMC12	DMC12	C11	C13	C12	C13	C09	
C	Adult BMI Assessment	HEDIS	C07	C07	C07	C07	C08	C10	C10	C12	DMC05				
C	Annual Flu Vaccine	CAHPS	C03	C03	C03	C03	C04	C06	C06	C06	C07	C06	C07	C07	
C	Antidepressant Medication Management (6 months)	HEDIS	DMC02	DMC02	DMC02	DMC03	DMC03	DMC03	DMC03	DMC03	DMC03	DMC04	C28	C23	
C	Appropriate Monitoring of Patients Taking Long-term Medications	HEDIS		DMC04	DMC04	DMC05	DMC05	DMC05	DMC05	DMC05	C06	C05	C06	C06	
C	Asthma Medication Ratio	HEDIS		DMC18	DMC27										
C	Beneficiary Access and Performance Problems	Administrative Data	DME07	C30	C28	C28	DME08	C31	C31	C32	C33	C30			
C	Breast Cancer Screening	HEDIS	C01	C01	C01	C01	DMC22	C01	C01	C01	C01	C01	C01	C01	
C	Call Answer Timeliness	HEDIS				DMC02	DMC02	DMC02	DMC02	DMC02	DMC02	DMC01	C20	C16	
C	Call Center – Beneficiary Hold Time	Call Center Monitoring	DMC07	DMC08	DMC08	DMC09		DMC09	DMC09	DMC09	C34	C31			
C	Call Center - Calls Disconnected When Customer Calls Health Plan	Call Center Monitoring	DMC10	DMC11	DMC11	DMC12		DMC15	DMC15						
C	Call Center – CSR Understandability	Call Center Monitoring										DMC02			
C	Call Center – Foreign Language Interpreter and TTY Availability	Call Center Monitoring	C34	C34	C32	C32		C36	C36	C36	C36	C33			
C	Call Center – Information Accuracy	Call Center Monitoring						DMC10	DMC10	DMC10	C35	C32			
C	Cardiovascular Care – Cholesterol Screening	HEDIS					C02	C03	C03	C03	C03		C03	C03	A
C	Care Coordination	CAHPS	C28	C27	C25	C25	C28	C29	C29						
C	Care for Older Adults – Functional Status Assessment	HEDIS	C10	C10	C10	C10	C11	C12	C12	C14					
C	Care for Older Adults – Medication Review	HEDIS	C09	C09	C09	C09	C10	C11	C11	C13					
C	Care for Older Adults – Pain Assessment	HEDIS	C11	C11	C11	C11	C12	C13	C13	C15					
C	Cholesterol Screening	HEDIS										C03			B
C	Colorectal Cancer Screening	HEDIS	C02	C02	C02	C02	C01	C02	C02	C02	C02	C02	C02	C02	
C	Complaints about the Health Plan	CTM	C29 / D04	C28 / D04	C26 / D04	C26 / D04	C29 / D03	C30 / D04	C30 / D06	C31 / D06	C30	C26			
C	Computer use by provider helpful	CAHPS			DMC20	DMC21	DMC20								
C	Computer use made talking to provider easier	CAHPS			DMC21	DMC22	DMC21								

Part	Measure Name	Data Source	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	Notes
C	Computer used during office visits	CAHPS			DMC19	DMC20	DMC19								
C	Continuous Beta Blocker Treatment	HEDIS	DMC03	DMC03	DMC03	DMC04	DMC04	DMC04	DMC04	DMC04	DMC04	DMC05	C32	C27	
C	Controlling Blood Pressure	HEDIS	C16	C16	C16	C16	C18	C19	C19	C21	C19	C15	C29	C24	
C	Customer Service	CAHPS	C25	C24	C22	C22	C25	C26	C26	C28	C27	C23	C22		
C	Diabetes Care	HEDIS										C14			C
C	Diabetes Care – Blood Sugar Controlled	HEDIS	C15	C15	C15	C15	C16	C17	C17	C19	C17		C26	C21	D
C	Diabetes Care – Cholesterol Controlled	HEDIS					C17	C18	C18	C20	C18		C27	C22	D
C	Diabetes Care – Cholesterol Screening	HEDIS					C03	C04	C04	C04	C04		C04	C04	A
C	Diabetes Care – Eye Exam	HEDIS	C13	C13	C13	C13	C14	C15	C15	C17	C15		C24	C19	D
C	Diabetes Care – Kidney Disease Monitoring	HEDIS	C14	C14	C14	C14	C15	C16	C16	C18	C16		C25	C20	D
C	Doctor Follow up for Depression	HEDIS											C15	C11	
C	Doctors who Communicate Well	CAHPS	DMC06	DMC07	DMC07	DMC08	DMC08	DMC08	DMC08	DMC08	C25	C21	C21	C17	
C	Engagement of Alcohol or other Drug Treatment	HEDIS	DMC14	DMC15	DMC15	DMC16	DMC15	DMC19							
C	Enrollment Timeliness	MARx		DME01	DME01	DME01	DME01	DME01	C37 / D05	D05	DMD03	DMD03			
C	Follow-up visit after Hospital Stay for Mental Illness (within 30 days of Discharge)	HEDIS	DMC01	DMC01	DMC01	DMC01	DMC01	DMC01	DMC01	DMC01	DMC01	DMC03	C14	C10	
C	Getting Appointments and Care Quickly	CAHPS	C24	C23	C21	C21	C24	C25	C25	C27	C26	C22	C17	C13	
C	Getting Needed Care	CAHPS	C23	C22	C20	C20	C23	C24	C24	C26	C24	C20	C16	C12	
C	Glaucoma Testing	HEDIS						C05	C05	C05	C05	C04	C05	C05	
C	Grievance Rate	Part C & D Plan Reporting	DME01	DME02	DME02	DME02	DME02	DMC13 / DMD11	DMC13 / DMD11						
C	Health Plan Quality Improvement	Star Ratings	C31	C31	C29	C29	C31	C33	C33						
C	Hospitalizations for Potentially Preventable Complications	HEDIS	DMC15	DMC16	DMC24										
C	Improving Bladder Control	HEDIS / HOS	C19	C19	DMC22	DMC23	C20	C21	C21	C23	C22	C18	C33		
C	Improving or Maintaining Mental Health	HOS	C05	C05	C05	C05	C06	C08	C08	C09	C10	C09	C10		
C	Improving or Maintaining Physical Health	HOS	C04	C04	C04	C04	C05	C07	C07	C08	C09	C08	C09		
C	Initiation of Alcohol or other Drug Treatment	HEDIS	DMC13	DMC14	DMC14	DMC15	DMC14	DMC18							
C	Medication Management for People With Asthma	HEDIS			DMC26										
C	Medication Reconciliation Post-Discharge	HEDIS	C20	C20	DMC23										
C	Members Choosing to Leave the Plan	MBDSS	C30 / D05	C29 / D05	C27 / D05	C27 / D05	C30 / D04	C32 / D06	C32 / D08	C33 / D08	DME01	C29 / D10			
C	Monitoring Physical Activity	HEDIS / HOS	C06	C06	C06	C06	C07	C09	C09	C10	C12	C11	C12		

Part	Measure Name	Data Source	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	Notes
C	Osteoporosis Management in Women who had a Fracture	HEDIS	C12	C12	C12	C12	C13	C14	C14	C16	C14	C13	C23	C18	
C	Osteoporosis Testing	HEDIS / HOS	DMC04	DMC05	DMC05	DMC06	DMC06	DMC06	DMC06	DMC06	C11	C10	C11		
C	Pharmacotherapy Management of COPD Exacerbation – Bronchodilator	HEDIS	DMC12	DMC13	DMC13	DMC14	DMC13	DMC17							
C	Pharmacotherapy Management of COPD Exacerbation – Systemic Corticosteroid	HEDIS	DMC11	DMC12	DMC12	DMC13	DMC12	DMC16							
C	Plan All-Cause Readmissions	HEDIS	C21	C21	C19	C19	C22	C23	C23	C25					
C	Plan Makes Timely Decisions about Appeals	Independent Review Entity (IRE) / Maximus	C32	C32	C30	C30	C32	C34	C34	C34	C31	C27	C35	C28	
C	Pneumonia Vaccine	CAHPS	DMC08	DMC09	DMC09	DMC10	DMC09	DMC11	DMC11	C07	C08	C07	C08	C08	
C	Rating of Health Care Quality	CAHPS	C26	C25	C23	C23	C26	C27	C27	C29	C28	C24	C18	C14	
C	Rating of Health Plan	CAHPS	C27	C26	C24	C24	C27	C28	C28	C30	C29	C25	C19	C15	
C	Reducing the Risk of Falling	HEDIS / HOS	C18	C18	C18	C18	C21	C22	C22	C24	C23	C19	C34		
C	Reminders for appointments	CAHPS			DMC16	DMC17	DMC16								
C	Reminders for immunizations	CAHPS			DMC17	DMC18	DMC17								
C	Reminders for screening tests	CAHPS			DMC18	DMC19	DMC18								
C	Reviewing Appeals Decisions	Independent Review Entity (IRE) / Maximus	C33	C33	C31	C31	C33	C35	C35	C35	C32	C28	C36	C29	
C	Rheumatoid Arthritis Management	HEDIS	C17	C17	C17	C17	C19	C20	C20	C22	C20	C16	C30	C25	
C	Special Needs Plan (SNP) Care Management	Part C Plan Reporting	C08	C08	C08	C08	C09	DMC14	DMC14						
C	Statin Therapy for Patients with Cardiovascular Disease	HEDIS	C22	DMC17	DMC25										
C	Testing to Confirm Chronic Obstructive Pulmonary Disease	HEDIS	DMC05	DMC06	DMC06	DMC07	DMC07	DMC07	DMC07	DMC07	C21	C17	C31	C26	

Notes:

A: Part of composite measure Cholesterol Screening in 2010
B: Composite Measure - combined Cardiovascular Care – Cholesterol Screening and Diabetes Care – Cholesterol Screening measures
C: Composite Measure - combined Diabetes Care – Blood Sugar Controlled, Diabetes Care – Cholesterol Controlled, Diabetes Care – Eye Exam, and Diabetes Care – Kidney Disease Monitoring measures
D: Part of composite measure Diabetes Care in 2010

Table J-2: Part D Measure History

Part	Measure Name	Data Source	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	Notes
D	4Rx Timeliness	Acumen / OIS (4Rx)								DMD03	D07	D07		D09	
D	Adherence - Proportion of Days Covered	Prescription Drug Event (PDE) Data									DMD07				
D	Antipsychotic Use in Persons with Dementia	Prescription Drug Event (PDE) Data	DMD16	DMD18											
D	Appeals Auto–Forward	Independent Review Entity (IRE) / Maximus	D02	D02	D02	D02	D01	D02	D03	D03	D05	D05	D05	D13	
D	Appeals Upheld	Independent Review Entity (IRE) / Maximus	D03	D03	D03	D03	D02	D03	D04	D04	D06	D06	D06	D14	
D	Beneficiary Access and Performance Problems	Administrative Data	DME07	D06	D06	D06	DME08	D05	D07	D07	D10	D11			
D	Call Center – Beneficiary Hold Time	Call Center Monitoring	DMD04	DMD04	DMD04	DMD04		DMD04	DMD04	DMD05	D01	D01	D01	D01	
D	Call Center – Calls Disconnected - Pharmacist	Call Center Monitoring										DMD05	D04	D04	
D	Call Center - Calls Disconnected When Customer Calls Drug Plan	Call Center Monitoring	DMD03	DMD03	DMD03	DMD03		DMD03	DMD03	DMD04	DMD04	DMD04	D02	D02	
D	Call Center – CSR Understandability	Call Center Monitoring										DMD06			
D	Call Center – Foreign Language Interpreter and TTY Availability	Call Center Monitoring	D01	D01	D01	D01		D01	D02	D02	D04	D04			
D	Call Center – Information Accuracy	Call Center Monitoring						DMD05	DMD05	DMD06	D03	D03			
D	Call Center – Pharmacy Hold Time	Call Center Monitoring	DMD09	DMD09	DMD11	DMD11		DMD15	D01	D01	D02	D02	D03	D03	
D	Complaint Resolution	Complaints Tracking Module (CTM)										DMD07			
D	Complaints - Benefits	Complaints Tracking Module (CTM)											D07	D11	
D	Complaints - Enrollment	Complaints Tracking Module (CTM)									D08	D08	D08	D12	
D	Complaints - Other	Complaints Tracking Module (CTM)									D09	D09	D10		
D	Complaints - Pricing	Complaints Tracking Module (CTM)											D09	D17	
D	Complaints about the Drug Plan	Complaints Tracking Module (CTM)	C29 / D04	C28 / D04	C26 / D04	C26 / D04	C29 / D03	C30 / D04	C30 / D06	C31 / D06				D05	
D	Diabetes Medication Dosing	Prescription Drug Event (PDE) Data	DMD06	DMD06	DMD06	DMD06	DMD04	DMD07	DMD07	DMD08	DMD06	DMD09			
D	Diabetes Treatment	Prescription Drug Event (PDE) Data					D10	D12	D15	D14	D17	D19			

Part	Measure Name	Data Source	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	Notes
D	Drug Plan Provides Current Information on Costs and Coverage for Medicare's Website	Acumen / OIS (LIS Match Rates)	DMD07	DMD07	DMD07	DMD07	DMD05	DMD08	DMD08	DMD09	D14	D15	D15	D10	
D	Drug Plan Quality Improvement	Star Ratings	D06	D07	D07	D07	D05	D07	D09						
D	Drug-Drug Interactions	Prescription Drug Event (PDE) Data	DMD05	DMD05	DMD05	DMD05	DMD03	DMD06	DMD06	DMD07	DMD05	DMD08			
D	Enrollment Timeliness	MARx		DME01	DME01	DME01	DME01	DME01	C37 / D05	D05	DMD03	DMD03			
D	Formulary Administration Analysis	Part D Sponsor	DMD15	DMD17											
D	Getting Information From Drug Plan	CAHPS			DMD10	DMD10	DMD09	DMD14	D10	D09	D11	D12	D12	D06	
D	Getting Needed Prescription Drugs	CAHPS	D08	D09	D09	D09	D07	D09	D12	D11	D13	D14	D14	D08	
D	Grievance Rate	Part C & D Plan Reporting	DME01	DME02	DME02	DME02	DME02	DMC13 / DMD11	DMC13 / DMD11						
D	High Risk Medication	Prescription Drug Event (PDE) Data	DMD14	DMD16	D11	D11	D09	D11	D14	D13	D16	D18	D19		
D	Medication Adherence for Cholesterol (Statins)	Prescription Drug Event (PDE) Data	D12	D13	D14	D14	D13	D15	D18	D17					
D	Medication Adherence for Diabetes Medications	Prescription Drug Event (PDE) Data	D10	D11	D12	D12	D11	D13	D16	D15					
D	Medication Adherence for Hypertension (RAS antagonists)	Prescription Drug Event (PDE) Data	D11	D12	D13	D13	D12	D14	D17	D16					
D	Member Retention	MBDSS											D11		
D	Members Choosing to Leave the Plan	MBDSS	C30 / D05	C29 / D05	C27 / D05	C27 / D05	C30 / D04	C32 / D06	C32 / D08	C33 / D08	DME01	C29 / D10			
D	MPF - Composite	PDE Data, MPF Pricing Files								D12	D15				B
D	MPF – Stability	PDE Data, MPF Pricing Files	DMD08	DMD08	DMD08	DMD08	DMD06	DMD10	DMD10			D16	D17	D16	A
D	MPF – Updates	PDE Data, MPF Pricing Files						DMD09	DMD09	DMD10	DMD08	DMD10	D16	D15	
D	MPF Price Accuracy	PDE Data, MPF Pricing Files	D09	D10	D10	D10	D08	D10	D13			D17	D18		A
D	MTM Program Completion Rate for CMR	Prescription Drug Event (PDE) Data	D13	D14	D15	D15	DMD07	DMD12	DMD12						
D	Plan Submitted Higher Prices for Display on MPF	PDE Data, MPF Pricing Files	DMD10	DMD10	DMD12	DMD12	DMD10	DMD16							
D	Rate of Chronic Use of Atypical Antipsychotics by Elderly Beneficiaries in Nursing Homes	Fu Associates			DMD09	DMD09	DMD08	DMD13	DMD13						

Part	Measure Name	Data Source	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	Notes
D	Rating of Drug Plan	CAHPS	D07	D08	D08	D08	D06	D08	D11	D10	D12	D13	D13	D07	
D	Reminders to fill prescriptions	CAHPS	DMD12	DMD13	DMD15	DMD15	DMD13								
D	Reminders to take medications	CAHPS	DMD13	DMD14	DMD16	DMD16	DMD14								
D	Statin Use in Persons with Diabetes (SUPD)	Prescription Drug Event (PDE) Data	D14	DMD15	DMD17										
D	Timely Effectuation of Appeals	Independent Review Entity (IRE) / Maximus	DMD02	DMD02	DMD02	DMD02	DMD02	DMD02	DMD02	DMD02	DMD02	DMD02			
D	Timely Receipt of Case Files for Appeals	Independent Review Entity (IRE) / Maximus	DMD01	DMD01	DMD01	DMD01	DMD01	DMD01	DMD01	DMD01	DMD01	DMD01			
D	Transition monitoring	Transition Monitoring Program Analysis	DMD11												D
D	Transition monitoring - failure rate for all other drugs	Transition Monitoring Program Analysis		DMD12	DMD14	DMD14	DMD12								C
D	Transition monitoring - failure rate for drugs within classes of clinical concern	Transition Monitoring Program Analysis		DMD11	DMD13	DMD13	DMD11								C

Notes:

A: Part of composite measure MPF - Composite in 2011 – 2012
B: Composite measure - combined MPF - Accuracy and MPF Stability
C: Part of composite measure Transition Monitoring - Composite starting in 2019
D: Composite Measure – “Transition monitoring - failure rate for drugs within classes of clinical concern” and “Transition monitoring - failure rate for all other drugs”

Table J-3: Common Part C & Part D Measure History

Part	Measure Name	Data Source	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
E	Beneficiary Access and Performance Problems	Administrative Data	DME07	C30 / D06	C28 / D06	C28 / D06	DME08	C31 / D05	C31 / D07	C32 / D07	C33 / D10	C30 / D11
E	Disenrollment Reasons - Financial Reasons for Disenrollment (MA-PD, MA-Only, PDP)	Disenrollment Reasons Survey	DME04	DME05	DME05	DME05	DME05					
E	Disenrollment Reasons - Problems Getting Information and Help from the Plan (MA-PD, PDP)	Disenrollment Reasons Survey	DME06	DME07	DME07	DME07	DME07					
E	Disenrollment Reasons - Problems Getting Needed Care, Coverage, and Cost Information (MA-PD, MA-Only)	Disenrollment Reasons Survey	DME02	DME03	DME03	DME03	DME03					
E	Disenrollment Reasons - Problems with Coverage of Doctors and Hospitals (MA-PD, MA-Only)	Disenrollment Reasons Survey	DME03	DME04	DME04	DME04	DME04					
E	Disenrollment Reasons - Problems with Prescription Drug Benefits and Coverage (MA-PD, PDP)	Disenrollment Reasons Survey	DME05	DME06	DME06	DME06	DME06					
E	Enrollment Timeliness	MARx		DME01	DME01	DME01	DME01	DME01	C37 / D05	D05	DMD03	DMD03
E	Grievance Rate	Part C & D Plan Reporting	DME01	DME02	DME02	DME02	DME02	DMC13 / DMD11	DMC13 / DMD11			

Attachment K: Individual Measure Star Assignment Process

This attachment provides detailed information about the clustering and the relative distribution and significance testing (CAHPS) methodologies used to assign stars to individual measures.

Clustering Methodology Introduction

To separate a distribution of scores into distinct groups or categories, a set of values must be identified to separate one group from another group. The set of values that break the distribution of the scores into non-overlapping groups is the set of cut points.

For each individual measure, CMS determines the measure cut points using the information provided from the hierarchical clustering algorithm in SAS, described in "Clustering Methodology Detail" below. Conceptually, the clustering algorithm identifies the natural gaps that exist within the distribution of the scores and creates groups (clusters) that are then used to identify the cut points that result in the creation of a pre-specified number of categories.

For Star Ratings, the algorithm is run with the goal of determining the four cut points (labeled in the Figure K-1 below as A, B, C, and D) that are used to create the five non-overlapping groups that correspond to each of the Star Ratings (labeled in the diagram below as G1, G2, G3, G4, and G5). For Part D measures, CMS determines MA-PD and PDP cut points separately. All observations are included in the algorithm, with the exception of any data identified to be biased, erroneous or excluded by disaster rules. The scores are grouped such that scores within the same Star Rating category are as similar as possible, and scores in different categories are as different as possible.

Figure K-1: Diagram showing gaps in data where cut points are assigned

As mentioned, the cut points are used to create five non-overlapping groups. The value of the lower bound for each group is included in the category, while the value of the upper bound is not included in the category. CMS does not require the same number of observations (contracts) within each group. The groups are identified such that within a group the measure scores must be similar to each other and between groups, the measure scores in one group are not similar to measures scores in another group. The groups are then used for the conversion of the measure scores to one of five Star Ratings categories. For most measures, a higher score is better, and thus, the group with the highest range of measure scores is converted to a rating of five stars. An example of a measure for which higher is better is *Medication Adherence for Diabetes Medications*. For some measures a lower score is better, and thus, the group with the lowest range of measures scores is converted to a rating of five stars. An example of a measure for which a lower score is better is *Members Choosing to Leave the Plan*.

Example 1 – Clustering Methodology for a Higher is Better measure

Consider the information provided for the cut points for *Medication Adherence for Diabetes Medications* in Table K-1 below. As stated previously, for Part D measures CMS calculates MA-PD and PDP cut points separately. The 2018 MA-PD cut points identified using the clustering algorithm are 60%, 69%, 75%, and 82%; for PDPs, the cut points are 75%, 80%, 83%, and 95%. (The set of values corresponds to the cut points in the diagram below as A, B, C, and D and the categories for each of the five Star Ratings are indicated above each group.) Since a measure score can only assume a value between 0% and 100% (including 0% and 100%), the one-star and five-star categories contain only a single value in the table below as the upper or lower bound.

Table K-1: Medication Adherence for Diabetes Medications cut points example

Type	1 Star	2 Stars	3 Stars	4 Stars	5 Stars
MA-PD	< 60%	≥ 60% to < 69%	≥ 69% to < 75%	≥ 75% to < 82%	≥ 82%
PDP	< 75%	≥ 75% to < 80%	≥ 80% to < 83%	≥ 83% to < 95%	≥ 95%

Since higher is better for *Medication Adherence for Diabetes Medications*, a rating of one star is assigned to all MA-PD measure scores below 60%. For each of the other Star Rating categories, the value of the lower bound is included in the rating category, while the upper bound value is not included. Focusing solely on the cut points for MA-PDs, a rating of two stars is assigned to each measure score that is at least 60% (the first cut point) to less than 69% (the second cut point). Since measure scores are reported as percents that are whole numbers, any measure score of 60% to 68% would be assigned two stars, while a measure score of 69% would be assigned a rating of three stars. Measure scores that are at least 69% to less than 75% are assigned a rating of three stars. For a conversion to four stars, a measure score of at least 75% to less than 82% is needed. A rating of five stars is assigned to any measures score of 82% or more. PDPs have different cut points, but the same overall rules apply for converting the measure score to a Star Rating.

Example 2 – Clustering Methodology for a Lower is Better measure

Consider the information provided for the 2018 cut points for *Members Choosing to Leave the Plan* in Table K-2 below. As stated previously, for Part D measures CMS calculates MA-PD and PDP cut points separately. The 2018 MA-PD cut points for *Members Choosing to Leave the Plan* determined using the clustering algorithm are 31%, 23%, 16%, and 10%; for PDPs, the cut points are 23%, 13%, 9%, and 5%. (These correspond to the cut points in the diagram above as A, B, C, and D).

Since lower is better for this measure, the five-star category will have the lowest measure score range, while the one-star category will have scores that are highest in value. For each of the other Star Rating categories, the value of the lower bound is not included in the rating category, while the upper bound value is included. (The inclusivity and exclusivity of the upper and lower bounds is opposite for a measure score where lower is better as compared to higher is better.) A rating of five stars is assigned to measure scores of 10% or less. Measure scores that are greater than 10% to a maximum value of 16% (including a measure score of 16%) are assigned a rating of four stars. A rating of three stars is assigned to measure scores greater than 16% to a maximum value of 23%. A rating of two stars is assigned to a measure score that is greater than 23% up to and including 31%. A rating of one star is assigned to any measure score greater than 31%. PDPs have different cut points, but the same overall rules apply for converting the measure score to a Star Rating

Table K-2: Members Choosing to Leave the Plan cut points example

Type	1 Star	2 Stars	3 Stars	4 Stars	5 Stars
MA-PD	> 31%	> 23% to ≤ 31%	> 16% to ≤ 23%	> 10% to ≤ 16%	≤ 10%
PDP	> 23%	> 13% to ≤ 23%	> 9% to ≤ 13%	> 5% to ≤ 9%	≤ 5%

Clustering Methodology Detail

This section details the steps of the clustering method performed in SAS to allow the conversion of the measure scores to measure-level stars. For each measure, the clustering method does the following:

1. Produces the individual measure distance matrix.
2. Groups the measure scores into an initial set of clusters.
3. Selects the final set of clusters.

1. Produce the individual measure distance matrix.

For each pair of contracts j and k (j>=k) among the n contracts with measure score data, compute the Euclidian distance of their measure scores (e.g., the absolute value of the difference between the two measure scores). Enter this distance in row j and column k of a distance matrix with n rows and n columns. This matrix can be produced using the DISTANCE procedure in SAS as follows:

```
proc distance data=inclusterdat out=distancedat method=Euclid;
        var interval(measure_score);
        id contract_id;
    run;
```

In the above code, the input data set, *inclusterdat,* is the list of contracts without missing, flagged, excluded by disaster rules or voluntary contract scores for a particular measure. Each record has a unique contract identifier, *contract_id*. The option *method=Euclid* specifies that distances between contract measure scores should be based on Euclidean distance. The input data contain a variable called *measure_score* that is formatted to the display criteria outlined in the Technical Notes. In the *var* call, the parentheses around *measure_score* indicate that *measure_score* is considered to be an interval or numeric variable. The distances computed by this code are stored to an output data set called *distancedat.*

2. Create a tree of cluster assignments.

The distance matrix calculated in Step 1 is the input to the clustering procedure. The stored distance algorithm is implemented to compute cluster assignments. The following process is implemented by using the CLUSTER procedure in SAS:

1. The input measure score distances are squared.
2. The clusters are initialized by assigning each contract to its own cluster.
3. In order to determine which pair of clusters to merge, Ward's minimum variance method is used to separate the variance of the measure scores into within-cluster and between-cluster sum of squares components.
4. From the existing clusters, two clusters are selected for merging to minimize the within-cluster sum of squares over all possible sets of clusters that might result from a merge.
5. Steps 3 and 4 are repeated to reduce the number of clusters by one until a single cluster containing all contracts results.

The result is a data set that contains a tree-like structure of cluster assignments, from which any number of clusters between 1 and the number of contract measure scores could be computed. The SAS code for implementing these steps is:

```
proc cluster data=distancedat method=ward outtree=treedat noprint;
        id contract_id;
    run;
```

The *distancedat* data set containing the Euclidian distances was created in Step 1. The option *method=ward* indicates that Ward's minimum variance method should be used to group clusters. The output data set is denoted with the outtree option and is called *treedat*.

3. Select the final set of clusters from the tree of cluster assignments.

The process outlined in Step 2 will produce a tree of cluster assignments, from which the final number of clusters is selected using the TREE procedure in SAS as follows:

```
proc tree data=treedat ncl=NSTARS horizontal out=outclusterdat noprint;
            id contract_id;
    run;
```

The input data set, treedat, is created in Step 2 above. The syntax, ncl=NSTARS, denotes the desired final number of clusters (or star levels). For most measures, NSTARS= 5. Since the improvement measures have a constraint that contracts with improvement scores of zero or greater are to be assigned at least 3 stars for improvement, the clustering is conducted separately for contract measure scores greater than or equal to zero versus less than zero. Specifically, Steps 1-3 are first applied to contracts with improvement scores that meet or exceed zero, in which case NSTARS equals three. The resulting improvement measure stars can take on values of 3, 4, or 5. For those contracts with improvement scores less than zero, Steps 1-3 are applied with NSTARS=2 and these contracts will either receive 1 or 2 stars.

4. Final Threshold and Star Creation

The cluster assignments produced by the above approach have cluster labels that are unordered. The final step after applying the above steps to all contract measure scores is to order the cluster labels so that the 5-star category reflects the cluster with the best performance and the 1-star category reflects the cluster with the worst performance. With the exception of the lower 3-star threshold of zero for the improvement measures, the measure thresholds are defined by examining the range of measure scores within each of the final clusters. The lower limit of each cluster becomes the cut point for the star categories.

Relative Distribution and Significance Testing (CAHPS) Methodology

The CAHPS measures are case-mix adjusted to take into account differences in the characteristics of enrollees across contracts that may potentially impact survey responses. See Attachment A for the case-mix adjusters.

The percentile cut points for base groups are defined by current-year distribution of case-mix adjusted contract means. Percentile cut points are rounded to the nearest integer on the 0-100 reporting scale, and each base group includes those contracts whose rounded mean score is at or above the lower limit and below the upper limit. The number of stars assigned is determined by the position of the contract mean score relative to percentile cutoffs from the distribution of contract weighted mean scores from all contracts (which determines the base group); statistical significance of the difference of the contract mean from the national mean along with the direction of the difference; the statistical reliability of the estimate (based on the ratio of sampling variation for each contract mean to between-contract variation); and the standard error of the mean score. All statistical tests, including comparisons involving standard errors, are computed using unrounded scores.

CAHPS reliability calculation details are provided in the document, "Instructions for Analyzing Data from CAHPS® Surveys: Using the CAHPS Analysis Program Version 4.1."

Tables K-3 and K-4 contain the rules applied to determine the final CAHPS measure star value.

Table K-3: CAHPS Star Assignment Rules

Star	Criteria for Assigning Star Ratings
1	A contract is assigned one star if both criteria (a) and (b) are met plus at least one of criteria (c) and (d): (a) its average CAHPS measure score is lower than the 15th percentile; AND (b) its average CAHPS measure score is statistically significantly lower than the national average CAHPS measure score; (c) the reliability is not low; OR (d) its average CAHPS measure score is more than one standard error (SE) below the 15th percentile.
2	A contract is assigned two stars if it does not meet the one-star criteria and meets at least one of these three criteria: (a) its average CAHPS measure score is lower than the 30th percentile and the measure does not have low reliability; OR (b) its average CAHPS measure score is lower than the 15th percentile and the measure has low reliability; OR (c) its average CAHPS measure score is statistically significantly lower than the national average CAHPS measure score and below the 60th percentile.
3	A contract is assigned three stars if it meets at least one of these three criteria: (a) its average CAHPS measure score is at or above the 30th percentile and lower than the 60th percentile, AND it is not statistically significantly different from the national average CAHPS measure score; OR (b) its average CAHPS measure score is at or above the 15th percentile and lower than the 30th percentile, AND the reliability is low, AND the score is not statistically significantly lower than the national average CAHPS measure score; OR (c) its average CAHPS measure score is at or above the 60th percentile and lower than the 80th percentile, AND the reliability is low, AND the score is not statistically significantly higher than the national average CAHPS measure score.
4	A contract is assigned four stars if it does not meet the five-star criteria and meets at least one of these three criteria: (a) its average CAHPS measure score is at or above the 60th percentile and the measure does not have low reliability; OR (b) its average CAHPS measure score is at or above the 80th percentile and the measure has low reliability; OR (c) its average CAHPS measure score is statistically significantly higher than the national average CAHPS measure score and above the 30th percentile.
5	A contract is assigned five stars if both criteria (a) and (b) are met plus at least one of criteria (c) and (d): (a) its average CAHPS measure score is at or above the 80th percentile; AND (b) its average CAHPS measure score is statistically significantly higher than the national average CAHPS measure score; (c) the reliability is not low; OR (d) its average CAHPS measure score is more than one standard error (SE) above the 80th percentile.

Table K-4: CAHPS Star Assignment Alternate Representation

Mean Score	Base Group	Signif. below avg., low reliability	Signif. below avg., not low reliability	Not signif. diff. from avg., low reliability	Not signif. diff. from avg., not low reliability	Signif. above avg., low reliability	Signif. above avg., not low reliability
< 15th percentile by > 1 SE	1	1	1	2	2	2	2
< 15th percentile by ≤ 1 SE		2	1	2	2	2	2
≥ 15th to < 30th percentile	2	2	2	3	2	3	2
≥ 30th to < 60th percentile	3	2	2	3	3	4	4
≥ 60th to < 80th percentile	4	3	4	3	4	4	4
≥ 80th percentile by ≤ 1 SE	5	4	4	4	4	4	5
≥ 80th percentile by > 1 SE		4	4	4	4	5	5

Notes: If reliability is very low (<0.60), the contract does not receive a Star Rating. Low reliability scores are defined as those with at least 11 respondents and reliability ≥0.60 but <0.75 and also in the lowest 12% of contracts ordered by reliability. The SE is considered when the measure score is below the 15th percentile (in base group 1), significantly below average, and has low reliability: in this case, 1 star is assigned if and only if the measure score is at least 1 SE below the unrounded base group 1/2 cut point. Similarly, the SE is considered when the measure score is at or above the 80th percentile (in base group 5), significantly above average, and has low reliability: in this case, 5 stars are assigned if and only if the measure score is at least 1 SE above the unrounded base group 4/5 cut point.

For example, a contract in base group 4 that was not significantly different from average and was low reliability would receive 3 final stars.

Attachment L: Medication Adherence Measure Calculations

Part D sponsors currently have access to monthly Patient Safety Reports via the Patient Safety Analysis Website to compare their performance to overall averages and monitor their progress in improving the Part D patient safety measures over time. Sponsors are required to use the website to view and download the reports and should be engaged in performance monitoring.

Report User Guides are available on the website under Help Documents and provide detailed information about the measure calculations and reports. The following information is an excerpt from the Adherence Measures Report Guide (Appendices B and C) and illustrates the days covered calculation and the modification for inpatient stays, hospice enrollments, and skilled nursing facility stays.

Proportion of Days Covered Calculation

In calculating the Proportion of Days Covered (PDC), we first count the number of days the patient was "covered" by at least one drug in the target drug class. The number of days is based on the prescription fill date and days' supply. PDC is calculated by dividing the number of covered days by the number of days in the measurement period. Both of these numbers may be adjusted for IP stays, as described in the 'Days Covered Modification for Inpatient Stays, Hospice Enrollment, and Skilled Nursing Facility Stays' section that follows.

Example 1: Non-Overlapping Fills of Two Different Drugs

In this example, a beneficiary fills Benazepril and Captopril, two drugs in the RAS antagonist hypertension target drug class. The covered days do not overlap, meaning the beneficiary filled the Captopril prescription after the days' supply for the Benazepril medication ended.

Table L-1: No Adjustment

	January		February		March	
	1/1/2017	1/16/2017	2/1/2017	2/16/2017	3/1/2017	3/16/2017
Benazepril	15	16	15	13		
Captopril					15	16

PDC Calculation
Covered Days: 90
Measurement Period: 90
PDC: 90/90 = 100%

Example 2: Overlapping Fills of the Same Generic Ingredient across Single and Combination Products

In this example, a beneficiary fills a drug with the same target generic ingredient prior to the end of the days' supply of the first fill. In rows one and two, there is an overlap between a single and combination drug product, both containing Lisinopril. For this scenario, the overlapping days are shifted because the combination drug product includes the targeted generic ingredient. An adjustment is made to the PDC to account for the overlap in days covered.

In rows two and three, there is an overlap between two combination drug products, both containing Hydrochlorothiazide. However, Hydrochlorothiazide is not a RAS antagonist or targeted generic ingredient, so this overlap is not shifted.

Table L-2: Before Overlap Adjustment

	January		February		March	
	1/1/2017	1/16/2017	2/1/2017	2/16/2017	3/1/2017	3/16/2017
Lisinopril	15	16				
Lisinopril & HCTZ		16	15			
Benazepril & HCTZ			15	13		

PDC Calculation
Covered Days: 59
Measurement Period: 90
PDC: 59/90 = 66%

Table L-3: After Overlap Adjustment

	January		February		March	
	1/1/2017	1/16/2017	2/1/2017	2/16/2017	3/1/2017	3/16/2017
Lisinopril	15	16				
Lisinopril & HCTZ			15	13	3	
Benazepril & HCTZ			15	13		

PDC Calculation
Covered Days: 62
Measurement Period: 90
PDC: 62/90 = 69%

Example 3: Overlapping Fills of the Same and Different Target Drugs

In this example, a beneficiary is refilling both Lisinopril and Captopril. When a single and combination product both containing Lisinopril overlap, there is an adjustment to the PDC. When Lisinopril overlaps with Captopril, we do not make any adjustment to the days covered.

Table L-4: Before Overlap Adjustment

	January		February		March		April	
	1/1/2017	1/16/2017	2/1/2017	2/16/2017	3/1/2017	3/16/2017	4/1/2017	4/16/2017
Lisinopril	15	16						
Lisinopril & HCTZ		16	15					
Captopril					15	16		
Lisinopril						16	15	

PDC Calculation
Covered Days: 92
Measurement Period: 120
PDC: 92/120: 77%

Table L-5: After Overlap Adjustment

	January		February		March		April	
	1/1/2017	1/16/2017	2/1/2017	2/16/2017	3/1/2017	3/16/2017	4/1/2017	4/16/2017
Lisinopril	15	16						
Lisinopril & HCTZ			15	13	3			
Captopril					15	16		
Lisinopril						16	15	

PDC Calculation
Covered Days: 105
Measurement Period: 120
PDC: 105/120: 88%

PDC Adjustment for Inpatient, Hospice, and Skilled Nursing Facility Stays Examples

In response to Part D sponsor feedback, CMS modified the PDC calculation, starting with the 2013 Star Ratings (using 2011 PDE data) to adjust for beneficiary stays in inpatient (IP) facilities, and with the 2015 Star Ratings (using 2013 PDE data) to also adjust for hospice enrollments and beneficiary stays in skilled nursing facilities (SNF). These adjustments account for periods that the Part D sponsor would not be responsible for providing prescription fills for targeted medications or more accurately reflect drugs covered under the hospice benefit or waived through the beneficiary's hospice election; thus, their medication fills during an IP or SNF stay or during hospice enrollment would not be included in the PDE claims used to calculate the Patient Safety adherence measures.

The PDC modification for IP stays, hospice enrollments, and SNF stays reflects this situation. Please note that while this modification will enhance the adherence measure calculation, extensive testing indicates that most Part D contracts will experience a negligible impact on their adherence rates. On average, the 2011 adherence rates increased 0.4 to 0.6 percentage points due to the inpatient stay adjustment, and the adjustment may impact the rates positively or negatively.

The hospice and SNF adjustments were tested on 2013 PDE data and overall increased the rates by 0.13 to 0.15 percentage points and 0.29 to 0.35 percentage points, respectively. While hospice information from the Medicare Enrollment Database (EDB) and inpatient claims from the Common Working File (CWF) are available for both PDPs and MA-PDs, SNF claims are only available for Medicare Fee-for-Service (FFS) beneficiaries who are also enrolled in PDPs. Therefore, the SNF adjustment will only impact PDP sponsors at this time.

Calculating the PDC Adjustment for IP Stays, Hospice Enrollments, and SNF Stays

The PDC modification for IP stays, hospice enrollments, and SNF stays is based on two assumptions: 1) a beneficiary receives their medications through the facility during IP or SNF stay or has drugs covered under the hospice benefit or waived through the beneficiary's hospice election, and 2) if a beneficiary accumulates an extra supply of their Part D medication during an IP stay, hospice enrollment, or SNF stay, that supply can be used once he/she returns home. The modification is applied using the steps below:

1. Identify start and end dates of relevant types of stays or hospice enrollments for beneficiaries included in adherence measures.
    - Use IP claims from the CWF to identify IP stays.
    - Use SNF claims with positive payment amounts from the CWF to identify SNF stays.
    - Use hospice records from the EDB to identify hospice enrollments.
2. Remove days of relevant stays occurring during the measurement period from the numerator and denominator of the proportion-of-days covered calculation.
3. Shift days' supply from Part D prescription fills that overlap with the stay to uncovered days after the end of the relevant stay, if applicable. This assumes the beneficiary receives the relevant medication from a different source during the stay and accumulates the Part D prescription fills for later use.

The following examples provide illustrations of the implementation of these assumptions when calculating PDC.

Example 1: Gap in Coverage after IP Stay

In this example, the measurement period is 15 days and the beneficiary qualifies for inclusion in the measure by receiving at least 2 fills. This beneficiary had drug coverage on days 1-8 and 12-15 and an IP stay on days 5 and 6, as illustrated in Table L-6.

Table L-6: Before Adjustment

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Drug Coverage	X	X	X	X	X	X	X	X				X	X	X	X
Inpatient Stay					+	+									

PDC Calculation:
Covered Days: 12
Measurement Period: 15
PDC: 12/15 = 80%

With the adjustment for the IP stay, days 5 and 6 are deleted from the measurement period. Additionally, the drug coverage during the IP stay is shifted to subsequent days of no supply (in this case, days 9 and 10), based on the assumption that if a beneficiary received his/her medication through the hospital on days 5 and 6, then he/she accumulated two extra days' supply during the IP stay. The two extra days' supply is used to cover the gaps in Part D drug coverage in days 9 and 10. This is illustrated in Table L-7.

Table L-7: After Adjustment

Day	1	2	3	4	7	8	9	10	11	12	13	14	15
Drug Coverage	X	X	X	X	X	X	X	X		X	X	X	X
Inpatient Stay													

PDC Calculation:
Covered Days: 12
Measurement Period: 13
PDC: 12/15 = 92%

Example 2: Gap in Coverage before IP Stay

In this example, the measurement period is 15 days and the beneficiary qualifies for inclusion in the measure by receiving at least 2 fills. This beneficiary had drug coverage from days 1-7 and 12-15, and an IP stay on days 12 and13, as illustrated in Table L-8.

Table L-8: Before Adjustment:

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Drug Coverage	X	X	X	X	X	X	X					X	X	X	X
Inpatient Stay												+	+		

PDC Calculation:
Covered Days: 11
Measurement Period: 15
PDC: 11/15 = 73%

With the adjustment for the IP stay, days 12 and 13 are deleted from the measurement period. While there are two days' supply from the IP stay on days 12 and 13, there are no days without drug coverage after the IP stay. Thus, the extra days' supply are not shifted. This is illustrated in Table L-9.

Table L-9: After Adjustment

Day	1	2	3	4	5	6	7	8	9	10	11	14	15
Drug Coverage	X	X	X	X	X	X	X					X	X
Inpatient Stay													

PDC Calculation:
Covered Days: 9
Measurement Period: 13
PDC: 9/13 = 69%

Example 3: Gap in Coverage Before and After IP Stay

In this example, the measurement period is 15 days and the beneficiary qualifies for inclusion in the measure by receiving at least 2 fills. This beneficiary had drug coverage from days 1-3, 6-9, and 12-15, and an IP stay on days 6-9, as illustrated in Table L-10.

Table L-10: Before Adjustment

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Drug Coverage	X	X	X			X	X	X	X			X	X	X	X
Inpatient Stay						+	+	+	+						

PDC Calculation:
Covered Days: 11
Measurement Period: 15
PDC: 11/15 = 73%

With the adjustment for the IP stay, days 6-9 are deleted from the measurement period. Additionally, the drug coverage during the IP stay can be applied to any days without drug coverage after the IP stay, based on the assumption that the beneficiary received his/her medication through the hospital on days 6-9. In this case, only days 10 and 11 do not have drug coverage and are after the IP stay, so two days' supply are shifted to days 10 and 11. This is illustrated in Table L-11.

Table L-11: After Adjustment

Day	1	2	3	4	5	10	11	12	13	14	15
Drug Coverage	X	X	X			X	X	X	X	X	X
Inpatient Stay											

PDC Calculation:
Covered Days: 9
Measurement Period: 11
PDC: 9/11 = 82%

Attachment M: Methodology for Price Accuracy Measure

CMS' drug pricing performance measure evaluates the accuracy of prices displayed on Medicare Plan Finder (PF) for beneficiaries' comparison of plan options. The accuracy score is calculated by comparing the PF price to the PDE price and determining the magnitude of differences found when the latter exceeds the former. This document summarizes the methods currently used to construct each contract's accuracy index.

Contract Selection

The Part D Star Ratings rely in part on the submission of pricing data to PF. Therefore, only contracts with at least one plan meeting all of the following criteria are included in the analysis:

- Not a PACE plan
- Not a demonstration plan
- Not an employer plan
- Part D plan
- Plan not terminated during the contract year

Only contracts with at least 30 claims throughout the year are included in the accuracy measure. This ensures that the sample size of PDEs is large enough to produce a reliable accuracy score. Only covered drugs for PDEs that are not compound claims are included.

PF Price Accuracy Index

To calculate the PF Price Accuracy index, the point of sale cost (ingredient costs plus dispensing fee) reported on each PDE claim is compared to the cost resulting from using the unit price reported on Plan Finder.[1] This comparison includes only PDEs for which a PF cost can be assigned. In particular, a PDE must meet seven conditions to be included in the analysis:

1. The NCPDP number for the pharmacy on the PDE claim must appear in the pharmacy cost file as either a retail-only pharmacy or a retail and limited access-only pharmacy. PDE with NPI numbers reported as non-retail pharmacy types or both retail and mail order/HI/LTC are excluded. NCPDP numbers are mapped to their corresponding NPI numbers.
2. The corresponding reference NDC must appear under the relevant price ID for the pharmacy in the pricing file.[2]
3. The reference NDC must be on the plan's formulary.
4. Because the retail unit cost reported on Plan Finder is intended to apply to a 30-day supply of a drug, only claims with a 30-day supply are included. Claims reporting a different day supply value are excluded.
5. PDEs for dates of service during which the plan was suppressed from Plan Finder or where the relevant pharmacy or drug was not reported in Plan Finder are not included since no Plan Finder cost can be assigned.[3]
6. PDEs for compound drugs or non-covered drugs are not included.
7. The PDE must occur in quarter 1 through 3 of the year. Quarter 4 PDEs are not included because PF prices are not updated during this last quarter.

[1] Plan Finder unit costs are reported by plan, drug, and pharmacy. The plan, drug, and pharmacy from the PDE are used to assign the corresponding Plan Finder unit cost posted on medicare.gov on the date of the PDE.

[2] Plan Finder prices are reported at the reference NDC level. A reference NDC is a representative NDC of drugs with the same brand name, generic name, strength, and dosage form. To map NDCs on PDEs to a reference NDC, we use First Data Bank (FDB) and Medi-Span to create an expanded list of NDCs for each reference NDC, consisting of NDCs with the same brand name, generic name, strength, and dosage form as the reference NDC. This expanded NDC list allows us to map PDE NDCs to PF reference NDCs.

[3] Because CMS continues to display pharmacy and drug pricing data for sanctioned plans on MPF to their current enrollees, sanctioned plans are not excluded from this measure. If, however, CMS completely suppresses a sanctioned contract's data from MPF display, then they would be excluded from the measure.

Once PF unit ingredient costs are assigned, the PF ingredient cost is calculated by multiplying the unit costs reported on PF by the quantity listed on the PDE.[4] The PDE cost (TC) is the sum of the PDE ingredient cost paid and the PDE dispensing fee. Likewise, the PF TC is the sum of the PF ingredient cost and the PF dispensing fee that corresponds to the same pharmacy and plan as that observed in the PDE. Each claim is then given a score based on the difference between the PDE TC and the PF TC. If the PDE TC is lower than the PF TC, the claim receives a score equal to zero. In other words, contracts are not penalized when point of sale costs are lower than the advertised costs. However, if the PDE TC is higher than the PF TC, then the claim receives a score equal to the difference between the PDE TC and the PF TC.[5, 6] The contract level PF Price Accuracy index is the sum of the claim level scores across all PDEs that meet the inclusion criteria. Note that the best possible PF Price Accuracy Index is 1. This occurs when the PF TC is never lower than the PDE TC. The formula below illustrates the calculation of the contract level PF Price Accuracy Index:

$$A_j = \frac{\sum_i \max(TC_{iPDE} - TC_{iPF}, 0) + \sum_i TC_{iPDE}}{\sum_i TC_{iPDE}}$$

where

TC_{iPDE} is the ingredient cost plus dispensing fee reported in PDE_i, and

TC_{iPF} is the ingredient cost plus dispensing fee calculated from PF data, based on the PDE_i reported NDC, days of supply and pharmacy.

We use the following formula to convert the Price Accuracy Index into a score:

100 – ((accuracy index – 1) x 100)

The score is rounded to the nearest whole number.

[4] For PDEs with outlying values of reported quantities, we adjust the quantity using drug- and plan-level distributions of price and quantity.

[5] To account for potential rounding errors, this analysis requires that the PDE cost exceed the PF cost by at least half a cent ($0.005) in order to be counted towards the accuracy score. For example, if the PDE cost is $10.25 and the PF cost is $10.242, the .008 cent difference would be counted towards the plan's accuracy score. However, if the PF cost is higher than $10.245, the difference would not be considered problematic, and it would not count towards the plan's accuracy score.

[6] The PF data includes floor pricing. For plan-pharmacy drugs with a floor price, if the PF price is lower than the floor price, the PDE price is compared against the floor price.

Example of Accuracy Index Calculation

Table M-1 shows an example of the Accuracy Index calculation. This contract has 4 claims, for 4 different NDCs and 4 different pharmacies. This is an abbreviated example for illustrative purposes only; in the actual accuracy index, a contract must have 30 claims to be evaluated.

From each of the 4 claims, the PDE ingredient cost, dispensing fee, and quantity dispensed are obtained. Additionally, the plan ID, date of service, and pharmacy number are collected from each PDE to identify the PF data that had been submitted by the contract and posted on Medicare.gov on the PDE dates of service. The NDC on the claim is first assigned the appropriate reference NDC, based on the brand name, generic name, strength, and dosage form. Using the reference NDC, the following PF data are obtained: brand/generic dispensing fee (as assigned by the pharmacy cost file) and 30 day unit cost (as assigned by the Price File corresponding to that pharmacy on the date of service). The PDE cost is the sum of the PDE ingredient cost and dispensing fee. The PF cost is computed as the quantity dispensed from PDE multiplied by the PF unit cost plus the PF brand/generic dispensing fee (brand or generic status is assigned based on the NDC).

The last column shows the amount by which the PDE cost is higher than the PF cost. When PDE cost is less than PF cost, this value is zero. The accuracy index is the sum of the last column plus the sum of PDE costs divided by the sum of PDE costs.

Table M-1: Example of Price Accuracy Index Calculation

NDC	Pharmacy Number	PDE Data DOS	PDE Data Ingredient Cost	PDE Data Dispensing Fee	PDE Data Quantity Dispensed	PF Data Biweekly Posting Period	PF Data Unit Cost for 30 Day Supply	PF Data Dispensing Fee Brand	PF Data Dispensing Fee Generic	Calculated Value Brand or Generic Status	Calculated Value Total Cost PDE	Calculated Value Total Cost PF	Calculated Value Amount that PDE is higher than PF
A	111	01/08/2017	3.82	2	60	01/02/17 - 01/15/17	0.014	2.25	2.75	B	5.82	3.09	2.73
B	222	01/24/2017	0.98	2	30	01/16/17 - 01/29/17	0.83	1.75	2.5	G	2.98	27.40	0
C	333	02/11/2017	10.48	1.5	24	01/30/17 - 02/12/17	0.483	2.5	2.5	B	11.98	14.09	0
D	444	02/21/2017	47	1.5	90	02/13/17 - 02/26/17	0.48	1.5	2.25	G	48.5	45.45	3.05
										Totals	69.28		5.78
										Accuracy Index			1.08343
										Accuracy Score			92

PDE = Prescription Drug Event
PF = Plan Finder

Attachment N: MTM CMR Completion Rate Measure Scoring Methodologies

Medicare Part D Reporting Requirements Measure (D13: MTM CMR Completion Rate Measure)

Step 1: Start with all contracts that enrolled beneficiaries in MTM at any point during contract year 2017. Beneficiaries with multiple records that contain varying information for the same contract are excluded from the measure calculation for that contract.

Step 2: Exclude contracts that did not enroll 31 or more beneficiaries in their MTM program who met the measure denominator criteria during contract year 2017.

Next, exclude contracts with an effective termination date on or before the deadline to submit data validation results to CMS (June 30, 2018), or that were not required to participate in data validation. The current MTM requirements are waived for the PBPs approved to participate in the Enhanced MTM Model and data on participating PBPs must not be reported per the Part D Reporting Requirements under the current MTM program. This MTM data will instead be reported in accordance with model terms and conditions and not included in the measure calculation.

Additionally, exclude contracts that did not score at least 95% on data validation for their plan reporting of the MTM Program section and contracts that scored 95% or higher on data validation for the MTM Program section but that were not compliant with data validation standards/sub-standards for at least one of the following MTM data elements. We define a contract as being non-complaint if either it receives a "No" or a 1, 2, or 3 on the 5-point Likert scale in the specific data element's data validation.

- HICN or RRB Number (Element B)
- Met the specified targeting criteria per CMS – Part D requirements (Element G)
- Date of MTM program enrollment (Element I)
- Date met the specified targeting criteria per CMS – Part D requirements (Element J)
- Date of MTM program opt-out, if applicable (Element K)
- Received annual CMR with written summary in CMS standardized format (Element O)
- Date(s) of CMR(s) with written summary in CMS standardized format (Element Q)

Step 3: After removing contracts' and beneficiaries' data excluded above, suppress contract rates based on the following rules:

File DV failure: Contracts that failed to submit the CY 2017 MTM Program Reporting Requirements data file or who had a missing DV score for MTM are listed as "CMS identified issues with this plan's data."

Section-level DV failure: Contracts that score less than 95% in DV for their CY 2017 MTM Program Reporting Requirements data are listed as "CMS identified issues with this plan's data."

Element-level DV failure: Contracts that score 95% or higher in DV for their CY 2017 MTM Program Reporting Requirements data but that failed at least one of the seven data elements are listed as "CMS identified issues with this plan's data."

Small size: Contracts that have not yet been suppressed and have fewer than 31 beneficiaries enrolled are listed as "Not enough data available."

Organizations can view their own plan reporting data validation results in HPMS (https://hpms.cms.gov/). From the home page, select Monitoring | Plan Reporting Data Validation.

Step 4: Calculate the rate for the remaining contracts using the following formula:

Number of beneficiaries from the denominator who received a CMR at any time during their period of MTM enrollment in the reporting period / Number of beneficiaries who were at least 18 years or older as of the beginning of the reporting period, met the specified targeting criteria per CMS during the reporting period, weren't in hospice at any point during the reporting period, and who were enrolled in the MTM program for at least 60 days during the reporting period.

Attachment O: Methodology for the Puerto Rico Model

Puerto Rico has a unique health care market with a large percentage of low-income individuals in both Medicare and Medicaid and a complex legal history that affects the health care system in many ways. Puerto Rican beneficiaries are not eligible for LIS. The categorization of contracts into final adjustment categories for the Categorical Adjustment Index (CAI) relies on both the use of a contract's percentages of beneficiaries with Low Income Subsidy/Dual Eligible (LIS/DE) and disabled beneficiaries. Since the percentage of LIS/DE is a critical element in the categorization of contracts to identify the contract's CAI, an additional adjustment is done for contracts that solely serve the population of beneficiaries in Puerto Rico to address the lack of LIS. The additional analysis for the adjustment results in a modified percentage of LIS/DE beneficiaries that is subsequently used to categorize the contract in its final adjustment category for the CAI.

The contract-level modified LIS/DE percentage for Puerto Rico for the 2019 Star Ratings is developed using the following sources of information:

1. The 2016 1-year American Community Survey (ACS) estimates for the percentage of people living below the Federal Poverty Level (FPL);
2. The 2016 ACS 5-year estimates for the percentage of people living below 150% of the FPL;[1] for Puerto Rico and for the 10 poorest US states (which may include the District of Columbia).
3. The Medicare enrollment data file from CY 2017 provided for beneficiaries in the 10 US states with the highest poverty rates for the percentage of a contract's DE beneficiaries using the monthly beneficiary dual status code and the contract percentage of monthly beneficiary LIS status codes. The Puerto Rico DE percentages came from the average percent of Medicaid beneficiaries from the HPMS monthly contract enrollment data for the measurement 2017 year.

The following steps are employed to determine the modified percentages of LIS/DE for MA contracts solely serving the population of beneficiaries in Puerto Rico. All references to contracts in Puerto Rico are limited to the contracts solely serving the population of beneficiaries in Puerto Rico.

1. The 10 states with the highest proportion of people living below the FPL are identified, based on 2016 1-year data from ACS (https://www.census.gov/content/dam/Census/library/publications/2017/acs/acsbr16-01.pdf, see Table 1). *The states identified are: Alabama, Arizona, Arkansas, District of Columbia, Kentucky, Louisiana, Mississippi, New Mexico, Oklahoma, and West Virginia.*
2. Data are aggregated from Medicare Advantage contracts that had at least 90% of their beneficiaries enrolled with mailing addresses within the 10 highest poverty states identified in step (1). *For the 2019 Star Ratings adjustment, the data used for the model development included a total of 59 Medicare Advantage contracts with at least 90% of their beneficiaries with mailing addresses in one of the ten states.*
3. A linear regression model is developed using the known LIS/DE percentage and the corresponding DE percentage from the MA contracts in the 10 highest poverty states with at least 90% of their beneficiaries with mailing addresses in one of the ten states
4. The model for Puerto Rico is developed using the model in step (3) as its base.

   The estimated slope from the linear fit in the previous step (3) is retained to approximate the expected relationship between LIS/DE for each contract in Puerto Rico and its DE percentage. However, as Puerto Rico contracts are expected to have a larger percentage of low income beneficiaries, the intercept term is adjusted to be more suitable for use with Puerto Rico contracts as follows:

   The intercept term for the Puerto Rico model is estimated by assuming that the Puerto Rico model will pass through the point (x, y) where x is the observed average DE percentage in the Puerto Rico contracts, and y is the expected average percentage of LIS/DE in Puerto Rico. The expected average

[1] The most recent ACS 5-year estimates are employed for the model development. For the 2019 Star Ratings, the most recent data are the 2016 ACS 5-year estimates.

percentage of LIS/DE in Puerto Rico (the y value) is not observable, but is estimated by multiplying the observed average percentage of LIS/DE in the 10 highest poverty states identified in step (1) by the ratio based on the 2016 5-year ACS estimates of the percentage living below 150% of the FPL in Puerto Rico compared to the corresponding percentage in the 10 poorest US states.

5. To obtain each Puerto Rico contract's modified LIS/DE percentage, a contract's observed DE percentage is used in the Puerto Rico model developed in the previous step (4).

   A contract's observed DE percentage is multiplied by the slope estimate, and then, the newly derived intercept term is added to the product. The estimated modified LIS/DE percentage is capped at 100%. Any estimated LIS/DE percentage that exceeds 100% is categorized in the final adjustment category for LIS/DE with an upper bound of 100%.

   Note that the District of Columbia is included with the 50 US states when determining the 10 poorest in 2016. All estimated modified LIS/DE values for Puerto Rico are rounded to six decimal places when expressed as a percentage. (This rounding rule aligns with the limits for the adjustment categories for LIS/DE for the CAI.)

Model

The generic model developed to estimate a contract's LIS/DE percentage using its DE percentage is as follows:

$$\widehat{LIS/DE} = (\text{Slope} * \text{contract's DE percentage}) + (\text{intercept})$$

Using the data from the 10 highest poverty states, the estimated slope was calculated to be 0.935390.

$$\widehat{LIS/DE} = (0.935390 * \text{contract's DE percentage}) + (\text{intercept})$$

Next, the intercept for the Puerto Rico model was determined using the point (x, y) where x is the observed average DE percentage in Puerto Rico contracts (31.173025%) and y is an estimated expected average percentage of LIS/DE in Puerto Rico.

To calculate the estimated expected average percentage of LIS/DE in Puerto Rico, the observed average percentage of LIS/DE in the 10 poorest US states identified in step (1) is multiplied by the ratio of the percentage of Puerto Rico residents living below 150% of the FPL to the analogous percentage in the 10 poorest US states.

Description	Value
Percent of PR residents below 150% of FPL	61.600000%
Percent of residents in the 10 poorest US states below 150% of FPL	29.646036%
Observed average LIS/DE percentage in the 10 poorest US states	34.905266%
Observed average DE percentage in Puerto Rico contracts	31.173025%

The product thus becomes $\left(34.905266 * \frac{61.600000}{29.646036}\right)$.

The new intercept for the Puerto Rico model is as follows:

$$\text{new intercept} = \left(34.905266 * \frac{61.600000}{29.646036}\right) - (0.935390 * 31.173025)$$

The final model to estimate the percentage of LIS/DE in Puerto Rico model is as follows:

$$\widehat{LIS/DE} = (0.935390 * \text{contract's DE percentage}) + \left((34.905266 * \frac{61.600000}{29.646036}) - (0.935390 * 31.173025) \right)$$

Example

To calculate the contract-level modified LIS/DE percentage for a hypothetical contract from Puerto Rico with an observed DE percentage of 25%, the value of 25.000000% is used in the model developed.

$$\widehat{LIS/DE} = (0.935390* \text{ contract's DE percentage}) + \left(34.905266 * \frac{61.600000}{29.646036} - (0.935390 * 31.173025)\right)$$

The contracts percentage of 25.000000% is substituted into the Puerto Rico model.

$$\widehat{LIS/DE} = (0.935390* 25.000000) + \left(34.905266 * \frac{61.600000}{29.646036} - (0.935390 * 31.173025)\right)$$

The contract-level modified LIS/DE percentage for the Puerto Rico contract that has an observed DE percentage of 25.000000% is 66.753702%.

The final adjustment category for the CAI adjustment is identified using the DE percentage of 25.000000% and the LIS/DE percentage of 66.753702%.

Attachment P: Scaled Reductions for Appeals IRE Data

Part C Scaled Reduction Methodology

CMS' scaled reduction methodology is a three-stage process that uses the Timeliness Monitoring Project (TMP) or audit data as the means to determine: first, whether a contract may be subject to a potential reduction for the Part C appeals measures due to an IRE data completeness issue; second, as the basis to determine the estimated error rate; and finally, to see whether the estimated error rate is statistically significantly greater than established thresholds for a scaled reduction.

Stage 1: Determine Whether the Contract is Subject to a Potential Reduction for the Part C Appeals Measures Due to an IRE Data Completeness Issue

Step 1A: Data Source and Data Values

The scaled reduction methodology uses the data submitted for the Timeliness Monitoring Project (TMP) for the measurement year that is associated with the Star Ratings' year. For example, the 2019 Star Ratings scaled reductions are based on the 2017 TMP data submitted in 2018. The data, submitted at the Parent Organization level, are disaggregated to the contract level for analysis.

The following information is needed to begin the steps to determine whether a contract will be subject to a possible scaled reduction for their Part C appeals measures because of data integrity issues. The information is available in HPMS during Plan Preview. The field name in HPMS is provided within parentheses after the description in the bulleted list below.

- Number of Cases Not Forwarded to the IRE (Cases Not Forwarded to IRE)
- Number of Cases Forwarded to the IRE (Cases Forwarded to IRE)
- Total Number of Cases that Should Have Been Forwarded to the IRE (Total IRE Cases)
- TMP Data Collection Period (Months)
- Part C Calculated Error Rate

The Total Number of Cases that Should Have Been Forwarded to the IRE is calculated by adding the Number of Cases Not Forwarded to the IRE (Cases Not Forwarded to IRE) and the Number of Cases Forwarded to the IRE (Cases Forwarded to IRE) (Equation A).

Equation (A)

$$\text{Total Number of Cases that Should Have Been Forwarded to IRE} = \text{Number of Cases Not Forwarded to IRE} + \text{Number of Cases Forwarded to IRE}$$

Step 1B: Part C Calculated Error Rate

Using the values in Step 1A, determine the Part C Calculated Error Rate.

The Calculated Error Rate is the quotient of the Number of Cases Not Forwarded to the IRE during the TMP collection period and the Total Number of Cases that Should Have Been Forwarded to the IRE in the same period (Equation B).

Equation (B)

$$\text{Part C Calculated Error Rate} = \frac{\text{Number of Cases Not Forwarded to the IRE}}{\text{Total Number of Cases that Should Have Been Forwarded to the IRE}}$$

Step 1C: 3-month Projected Number of Cases

Since the timeframe for the TMP or audit data is dependent on a contract's enrollment, a 3-month Projected Number of Cases Not Forwarded to the IRE is determined to allow a consistent application of the developed criteria.

To calculate a contract's 3-month Projected Number of Cases Not Forwarded to the IRE, first identify the multiplying factor using Table P-1. Locate the row (months) that corresponds to the TMP Data Collection Period.

Table P-1: Multiplying Factor to calculate the 3-month Projected Number of Cases Not Forwarded to the IRE

TMP Data Collection Period (Months)	Multiplying Factor for the 3-month Projected Number of Cases Not Forwarded to IRE
1	3.0
2	1.5
3	1.0

Next, multiply the Number of Cases Not Forwarded to the IRE that was posted in HPMS by the factor identified in Table 1 for the contract (Equation C). The product is the 3-month Projected Number of Cases Not Forwarded to the IRE.

Equation (C)

3-month Projected Number of Cases Not Forwarded to the IRE =
Multiplying Factor x Number of Cases Not Forwarded to IRE in the TMP period

Step 1D: Subject to Reduction

Criteria were developed to determine if a contract's Part C appeals measures may be subject to a possible IRE data completeness reduction.

A contract is subject to a possible reduction due to lack of IRE data completeness if both conditions are met:

1. The Calculated Error Rate is 20% or more.
2. The 3-month Projected Number of Cases Not Forwarded to the IRE is at least 10.

Using the Part C Calculated Error Rate and the 3-month Projected Number of Cases Not Forwarded to the IRE, check the criteria to determine if the contract is subject to a possible reduction. Table P-2 below is provided to determine if a contract is subject to a possible reduction.

Table P-2: Identification of a Contract that is Subject to a Possible Scaled Reduction

Calculated Error Rate	3-month Projected Number of Cases Not Forwarded to IRE	Contract Subject to a Possible Reduction
Less than 20%	Less than 10 cases	No
Less than 20%	10 cases or more	No
At Least 20%	Less than 10 cases	No
At Least 20%	10 cases or more	Yes

If a contract is not subject to a possible reduction, the contract will receive the measure-level Star Ratings for the Part C appeals measures determined by the specification detailed in the section regarding the Methodology for Assigning Stars to the Part C and Part D measures in this document.

If a contract is subject to a possible reduction, then continue to Stage 2.

Stage 2: Estimated Error Rate

Step 2A: Lower Bound of the Score Interval

Using the Part C Calculated Error Rate in Step 1B, the lower bound of the confidence interval (Wilson Score Interval) is determined and used to statistically test the value against a set of thresholds to identify the scaled reduction for a contract's Part C appeals measures.

To determine the lower bound, first, the midpoint of the interval must be calculated. There are two values needed to calculate the midpoint of the interval for a contract – the Part C Calculated Error Rate and the Total Number of Cases that Should Have Been Forwarded to the IRE in the TMP Data Collection Period.[1]

[1] The Total Number of Cases that Should Have Been Forwarded to the IRE in the TMP Data Collection Period is not the same as the 3-month Projected Number of Cases Not Forwarded to the IRE determined in Step 1C.

Substitute the Calculated Error Rate and the Total Number of Cases that Should Have Been Forwarded to the IRE for the Total Number of Cases in Equation (D). The z value used for the calculation of the interval is 1.959964.[2]

Equation (D)

$$\text{Midpoint} = \text{Calculated Error Rate} \times \left(\frac{\text{Total Number of Cases}}{\text{Total Number of Cases} + z^2}\right) + \frac{1}{2}\left(\frac{z^2}{\text{Total Number of Cases} + z^2}\right)$$

Once the midpoint is calculated, determine the value of the lower bound of the interval.

The lower bound of the interval is found by substituting the value determined for the midpoint, the Calculated Error Rate, the value of 1.959964 for z, and the Total Number of Cases that Should Have Been Forwarded to the IRE for the value for n in Equation (E).

Equation (E)

$$\text{Lower Bound} = \text{Midpoint} - z \times \sqrt{\frac{1}{n + z^2}\left[(\text{Calculated Error Rate})\,(1-\text{Calculated Error Rate})\left(\frac{n}{n + z^2}\right) + \frac{1}{4}\left(\frac{z^2}{n + z^2}\right)\right]}$$

Convert the lower bound to a percent by multiplying by 100.

Stage 3: Scaled Reduction

Step 3A: Statistical Testing

Once the value of the lower bound is determined (Stage 2), the value is compared to the thresholds in Table P-3 to determine if a contract's estimated value is significantly greater than the thresholds.

Using the calculated value for the lower bound in Step 2A, identify the value(s) in the table for which the calculated lower bound exceeds the threshold in the row. Next, identify the highest threshold that the lower bound exceeds.

Note: A contract's lower bound can be statistically significantly higher for more than one threshold. The scaled reduction will be determined by the highest associated scaled reduction.

Table P-3: Thresholds and Associated Reductions

Threshold	Reduction for Incomplete IRE Data (Stars)
20%	1
40%	2
60%	3
80%	4

Using the highest threshold in Table P-3 that the contract's lower bound exceeds, identify the associated reduction for incomplete IRE data.

Step 3B: Application of the Scaled Reduction

The identified scaled reduction in Table P-3 is subtracted from the measure-level Star Rating for both Part C appeals measure-level Star Ratings. If the resulting measure-level Star Rating is less than one-star, the measure is assigned one star.

Note: If the Part C appeals measures receive a scaled reduction, the Part C appeals measures would not be eligible for inclusion in of the Part C improvement measure.

[2] The z used for the calculated of the interval corresponds to a level of statistical significance of 0.05.

Part D Scaled Reduction Methodology

The methodology to determine if a contract's Part D appeals measures will be reduced due to an IRE data completeness issue aligns with the Part C methodology. An abridged presentation of the Part D methodology is presented.

Stage 1: Determine Whether the Contract is Subject to a Potential Reduction for the Part D Appeals Measures Due to an IRE Data Completeness Issue

Step 1A: Data Source and Data Values

The following information is needed to begin the steps to determine whether a contract will be subject to a possible scaled reduction for their Part D appeals measures because of data integrity issues. The information is available in HPMS during Plan Preview. The field name in HPMS is provided within parentheses after the description in the bulleted list below.

- Number of Untimely Cases Not Auto-Forwarded to the IRE (Untimely Cases not Auto-Forwarded)
- Number of Untimely Cases in the TMP Data Collection Period (Total Number of Untimely Cases)[3]
- TMP Data Collection Period (Months)
- Part D Calculated Error Rate

Step 1B: Part D Calculated Error Rate

Using the values in Step 1A, determine the Part D Calculated Error Rate.

The Calculated Error Rate is the quotient of the Number of Untimely Cases Not Auto-Forwarded to the IRE during the TMP collection period and the Total Number of Untimely Cases (Equation F).

Equation (F)

$$\text{Part D Calculated Error Rate} = \frac{\text{Number of Untimely Cases Not Auto-Forwarded to the IRE}}{\text{Total Number of Untimely Cases}}$$

Step 1C: 3-month Projected Number of Cases

Since the timeframe for the TMP or audit data is dependent on a contract's enrollment, a 3-month projected number of cases is determined to allow a consistent application of the developed criteria.

To calculate a contract's 3-month Projected Number of Untimely Cases not Auto-Forwarded to the IRE, first identify the multiplying factor using Table P-4. Locate the row (months) that corresponds to the TMP Data Collection Period.

Table P-4: Multiplying Factor to calculate the 3-month Projected Number of Untimely Cases not Auto-Forwarded to the IRE

TMP Data Collection Period (Months)	Multiplying Factor for the 3-month Projected Number of Untimely Cases not Auto-Forwarded
1.0	3.0
2.0	1.5
3.0	1.0

Next, multiply the Number of Untimely Cases Not Auto-Forwarded to the IRE that was posted in HPMS by the multiplying factor identified in Table 4 for the contract (Equation G). The product is the 3-month Projected Number of Untimely Cases Not Auto-Forwarded to the IRE.

Equation (G)

3-month Projected Number of Untimely Cases Not Auto-Forwarded to the IRE=
Multiplying Factor x Number of Untimely Cases Not Auto-Forwarded to IRE in the TMP data Collection Period

[3] The Total Number of Untimely Cases includes the untimely cases not auto-forward to the IRE.

Step 1D: Subject to Reduction

Criteria were developed to determine if a contract's Part D appeals measures may be subject to a possible IRE data completeness reduction.

A contract is subject to a possible reduction due to lack of IRE data completeness if both conditions are met:

1. The Calculated Error Rate is 20% or more.
2. The 3-month Projected Number of Untimely Cases Not Auto-Forwarded to the IRE is at least 10.

Using the Part D Calculated Error Rate and the 3-month Projected Number of Untimely Cases Not Auto-Forwarded to the IRE, check the criteria to determine if the contract is subject to a possible reduction. Table P-5 below is provided to determine if a contract is subject to a possible reduction.

Table P-5: Identification of a Contract that is Subject to a Possible Scaled Reduction

Calculated Error Rate	3-month Projected Number of Untimely Cases Not Auto-Forwarded to IRE	Contract Subject to a Possible Reduction
Less than 20%	Less than 10 cases	No
Less than 20%	10 cases or more	No
At Least 20%	Less than 10 cases	No
At Least 20%	10 cases or more	Yes

If a contract is not subject to a possible reduction, the contract will receive the measure-level Star Ratings for the Part D appeals measures determined by the specification detailed in the section regarding the Methodology for Assigning Stars to the Part C and Part D Measures in this document.

If a contract is subject to a possible reduction, then continue to Stage 2.

Stage 2: Estimated Error Rate

Step 2A: Lower Bound of the Score Interval

Using the Part D Calculated Error Rate in Step 1B, the lower bound of the confidence interval (Wilson Score Interval) is determined and used to statistically test the value against a set of thresholds to identify the scaled reduction for a contract's Part D appeals measures.

To determine the lower bound, first, the midpoint of the interval must be calculated. There are two values needed to calculate the midpoint of the interval for a contract – the Part D Calculated Error Rate and the Total Number of Untimely Cases in the TMP Data Collection Period.[4]

Substitute the Calculated Error Rate and the Total Number of Untimely Cases for the Total Number of Cases in Equation (H). The z value used for the purpose of the calculation of the interval is 1.959964.[5]

Equation (H)

$$\text{Midpoint} = \text{Calculated Error Rate} \times \left(\frac{\text{Total Number of Cases}}{\text{Total Number of Cases} + z^2}\right) + \frac{1}{2}\left(\frac{z^2}{\text{Total Number of Cases} + z^2}\right)$$

Once the midpoint is calculated, determine the value of the lower bound of the interval.

The lower bound of the interval is found by substituting the value determined for the midpoint, the Calculated Error Rate, the value of 1.959964 for z, and the Total Number of Untimely Cases for the value for n in Equation (I).

[4] The Total Number of Untimely Cases in the TMP Data Collection Period is not the same as the 3-month Projected Number of Untimely Cases not Auto-Forwarded determined in Step 1C.

[5] The z used for the calculated of the interval corresponds to a level of statistical significance of 0.05.

Equation (I)

$$\text{Lower Bound} = \text{Midpoint} - z \times \sqrt{\frac{1}{n + z^2}\left[(\text{Calculated Error Rate})(1 - \text{Calculated Error Rate})\left(\frac{n}{n + z^2}\right) + \frac{1}{4}\left(\frac{z^2}{n + z^2}\right)\right]}$$

Convert the lower bound to a percent by multiplying by 100.

Stage 3: Scaled Reduction

Step 3A: Statistical Testing

Once the value of the lower bound is determined (Stage 2), the value is compared to the thresholds in Table P-6 to determine if a contract's estimated value is significantly greater than the thresholds.

Using the calculated value for the lower bound in Step 2A, identify the value(s) in the table for which the calculated lower bound exceeds the threshold in the row. Next, identify the highest threshold that the lower bound exceeds.

Note: A contract's lower bound can be statistically significantly higher for more than one threshold. The scaled reduction will be determined by the highest associated scaled reduction.

Table P-6: Thresholds and Associated Reductions

Threshold	Reduction for Incomplete IRE Data (Stars)
20%	1
40%	2
60%	3
80%	4

Using the highest threshold in Table P-6 that the contract's lower bound exceeds, identify the associated reduction for incomplete IRE data.

Step 3B: Application of the Scaled Reduction

The identified scaled reduction in Table 6 is subtracted from the measure-level Star Rating for both Part D appeals measure-level Star Ratings. If the resulting measure-level Star Rating is less than one-star, the measure is assigned one star.

Note: If the Part D appeals measures receive a scaled reduction, the Part D appeals measures would not be eligible for inclusion in the Part D improvement measure.

Attachment Q: Identification of Contracts Affected by Disasters

Natural disasters such as hurricanes and wildfires can directly affect Medicare beneficiaries and providers, as well as the Parts C and D organizations that provide them with important medical care and prescription drug coverage. These disasters may negatively affect the underlying operational and clinical systems that CMS relies on for accurate performance measurement in the Star Ratings program.

The 2019 Call Letter (https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Announcements-and-Documents.html) documented CMS' policy for making adjustments in the Star Ratings to take into account the effects of extreme and uncontrollable circumstances which occurred during the performance period.

Operational Steps to Calculating Enrollment Impacted in Affected Contracts.

1. Identify the areas which experienced both extreme and uncontrollable circumstances as defined in Section 1135 (g) of the Act and also are within a county or statistically equivalent entity[1], U.S. territory or tribal government designated in a major disaster declaration under the Stafford Act.
   a. Areas where the Health and Human Services (HHS) Secretary exercised their authority under Section 1135 of the Act can be found at the Public Health Emergency website at https://www.phe.gov/emergency/news/healthactions/section1135/Pages/default.aspx
   b. Major disaster areas are identified by the Federal Emergency Management Agency (FEMA) website at: https://www.fema.gov/disasters.

   Table Q-1 contains the list of Section 1135 waivers issued by the HHS Secretary along with associated FEMA major disaster information that falls within the performance period for the 2019 Star Ratings. Some of the entries do not qualify for consideration of having an extreme or uncontrollable circumstance. For example, no counties in Florida and Louisiana have FEMA major disaster declarations associated with Hurricane Nate.

Table Q-1: List of Section 1135 waivers issued in relation to the FEMA major disaster declarations

Section 1135 Waiver Date Issued	Waiver or Modification of Requirements Under Section 1135 of the Social Security Act	FEMA Major Disaster Declaration	FEMA Incident Type	Affected State	Incident Start Date	Incident End Date	Declared Major Disaster
12/11/2017	CA as the result of wildfires	DR-4353	Flood, Mud/Landslide, Wildfire	CA	12/04/2017	12/04/2017	01/02/2018
10/15/2017	CA as the result of wildfires	DR-4344	Fire	CA	10/08/2017	10/31/2017	10/10/2017
10/08/2017	AL as the result of hurricane Nate	DR-4349	Hurricane – Nate	AL	10/06/2017	10/10/2017	11/16/2017
10/08/2017	FL as the result of hurricane Nate	None	N/A	N/A	N/A	N/A	N/A
10/08/2017	LA as the result of hurricane Nate	None	N/A	N/A	N/A	N/A	N/A
10/08/2017	MS as the result of hurricane Nate	DR-4350	Hurricane – Nate	MS	10/06/2017	10/10/2017	11/22/2017
09/19/2017	PR as the result of hurricane Maria	DR-4339	Hurricane – Maria	PR	09/17/2017	11/15/2017	09/20/2017
09/19/2017	VI as the result of hurricane Maria	DR-4340	Hurricane – Maria	VI	09/16/2017	09/22/2017	09/20/2017
09/08/2017	SC as the result of hurricane Irma	DR-4346	Hurricane – Irma	SC	09/06/2017	09/13/2017	10/16/2017
09/08/2017	GA as the result of hurricane Irma	DR-4338	Hurricane – Irma	GA	09/07/2017	09/20/2017	09/15/2017
09/07/2017	FL as the result of hurricane Irma	DR-4337	Hurricane – Irma	FL	09/04/2017	10/18/2017	09/10/2017
09/06/2017	PR as the result of hurricane Irma	DR-4336	Hurricane – Irma	PR	09/05/2017	09/07/2017	09/10/2017
09/06/2017	VI as the result of hurricane Irma	DR-4335	Hurricane – Irma	VI	09/05/2017	09/07/2017	09/07/2017
08/28/2017	LA as the result of hurricane Harvey	DR-4345	Hurricane – Harvey	LA	08/27/2017	09/10/2017	10/16/2017
08/26/2017	TX as the result of hurricane Harvey	DR-4332	Hurricane – Harvey	TX	08/23/2017	09/15/2017	08/25/2017

[1] The Census Bureau has been charged by the U.S. Congress to maintain the geographic reference information for the United States and its territories. The full definition of "county or statistically equivalent entities" can be found at their website https://www.census.gov/geo/reference/gtc/gtc_cou.html.

2. Identify the counties or statistically equivalent entities which were declared as Individual Assistance areas by each of the FEMA major disaster declarations that meet the criteria set out in Step 1.

   Table Q-2 list all of the FEMA major disaster declarations from Table Q-1 along with the state and associated Individual Assistance counties, if any.

Table Q-2: Individual Assistance counties in FEMA Major Disaster Declared States

FEMA Declaration	State	FEMA Individual Assistance Counties
DR-4332	Texas	Aransas, Austin, Bastrop, Bee, Brazoria, Caldwell, Calhoun, Chambers, Colorado, DeWitt, Fayette, Fort Bend, Galveston, Goliad, Gonzales, Grimes, Hardin, Harris, Jackson, Jasper, Jefferson, Karnes, Kleberg, Lavaca, Lee, Liberty, Matagorda, Montgomery, Newton, Nueces, Orange, Polk, Refugio, Sabine, San Jacinto, San Patricio, Tyler, Victoria, Walker, Waller, Wharton
DR-4335	Virgin Islands	St. John, St. Thomas
DR-4336	Puerto Rico	Canovanas, Catano, Culebra, Dorado, Fajardo, Loiza, Luquillo, Toa Baja, Vega Baja, Vieques
DR-4337	Florida	Alachua, Baker, Bradford, Brevard, Broward, Charlotte, Citrus, Clay, Collier, Columbia, DeSoto, Dixie, Duval, Flagler, Gilchrist, Glades, Hardee, Hendry, Hernando, Highlands, Hillsborough, Indian River, Lafayette, Lake, Lee, Levy, Manatee, Marion, Martin, Miami-Dade, Monroe, Nassau, Okeechobee, Orange, Osceola, Palm Beach, Pasco, Pinellas, Polk, Putnam, Sarasota, Seminole, St. Johns, St. Lucie, Sumter, Suwannee, Union, Volusia
DR-4338	Georgia	Camden, Charlton, Chatham, Coffee, Glynn, Liberty, McIntosh
DR-4339	Puerto Rico	Adjuntas, Aguada, Aguadilla, Aguas Buenas, Aibonito, Anasco, Arecibo, Arroyo, Barceloneta, Barranquitas, Bayamon, Cabo Rojo, Caguas, Camuy, Canovanas, Carolina, Catano, Cayey, Ceiba, Ciales, Cidra, Coamo, Comerio, Corozal, Culebra, Dorado, Fajardo, Florida, Guanica, Guayama, Guayanilla, Guaynabo, Gurabo, Hatillo, Hormigueros, Humacao, Isabela, Jayuya, Juana Diaz, Juncos, Lajas, Lares, Las Marias, Las Piedras, Loiza, Luquillo, Manati, Maricao, Maunabo, Mayaguez, Moca, Morovis, Naguabo, Naranjito, Orocovis, Patillas, Penuelas, Ponce, Quebradillas, Rincon, Rio Grande, Sabana Grande, Salinas, San German, San Juan, San Lorenzo, San Sebastian, Santa Isabel, Toa Alta, Toa Baja, Trujillo Alto, Utuado, Vega Alta, Vega Baja, Vieques, Villalba, Yabucoa, Yauco
DR-4340	Virgin Islands	St. Croix, St. John, St. Thomas
DR-4344	California	Butte, Lake, Mendocino, Napa, Nevada, Orange, Sonoma, Yuba
DR-4345	Louisiana	None
DR-4346	South Carolina	None
DR-4349	Alabama	None
DR-4350	Mississippi	None
DR-4353	California	Los Angeles, San Diego, Santa Barbara, Ventura

3. Identify the service area at the state/county level for each contract in operation during the performance period. The service area of some organization types rated in the Star Ratings are not defined at the state/county level, so their service area must be transformed to include all states and counties covered by their service area.

   Table Q-3 lists how the service area for each organization type rated in the Star Ratings is defined and what transformation, if any, is needed to create a common state/county level file for all contracts.

Table Q-3: Organization type service areas and necessary transformations

Star Rating Organization Types	How Service Area is defined	How Service Area is transformed
1876 Cost, E-CCP, E-PDP, E-PFFS, Local CCP, MSA, PFFS, R-PFFS & R-CCP	State/County	Not necessary, service area is defined at the state/county level
Regional CCP	MA Region	A record is created for each state/county within the MA region
PDP	PDP Region	A record is created for each state/county within the PDP region

4. Compare the Individual Assistance states and counties from Step 2 to the service area from all contracts created in Step 3 with the state and counties. Create a list of all contracts which have any county that matches in both lists.

5. Create a second list of all contracts that do not share any service area with the Individual Assistance counties, so that information on the status of all contracts is accounted for during the performance period.

6. Identify the timeframe for each disaster and the associated enrollment files. Each of the disasters occurred during a specific period of time spread across the second half of the performance period. Since the enrollment in a contract is constantly changing, CMS used the enrollment the contract was paid for in a month that as closely matched the disaster period in the specific state/county as possible for all further processing, following the months in the table below.

   Table Q-4 shows each of the disasters where relief was granted along with the disaster start date, end date, and the enrollment file month that was used for that specific disaster. The enrollment file choice was based on the enrollment file cut-off date the file was created.

Table Q-4: Major Disasters with associated enrollment months

FEMA Declaration	State	Start Date	End Date	Declaration Date	Enroll File	Enroll Cut Off
DR-4332	Texas	08/23/2017	09/15/2017	08/25/2017	2017_09	08/11/2017
DR-4335	Virgin Islands	09/05/2017	09/07/2017	09/07/2017	2017_10	09/08/2017
DR-4336	Puerto Rico	09/05/2017	09/07/2017	09/10/2017	2017_10	09/08/2017
DR-4337	Florida	09/04/2017	10/18/2017	09/10/2017	2017_10	09/08/2017
DR-4338	Georgia	09/07/2017	09/20/2017	09/15/2017	2017_10	09/08/2017
DR-4339	Puerto Rico	09/17/2017	11/15/2017	09/20/2017	2017_10	09/08/2017
DR-4340	Virgin Islands	09/16/2017	09/22/2017	09/20/2017	2017_10	09/08/2017
DR-4344	California	10/08/2017	10/31/2017	10/10/2017	2017_11	10/06/2017
DR-4353	California	12/04/2017	12/04/2017	01/02/2018	2018_01	12/08/2017

7. Calculate impacted enrollments by contract taking into account contracts experiencing multiple disasters. Because of the varying sizes of the areas served by the contracts being rated, it is common for a contract to be affected by more than one of the disasters. To account for this, CMS rolled up the enrollment for each contract at the state/county level and then when more than one enrollment period applied an average of the enrollments from each of corresponding enrollment periods where the contract was affected was used.

   Table Q-5 shows an example where all possible enrollment periods are accounted for and how the enrollment for a contract in a state/county which matched the contract's service area state/county was calculated. Enrollment in out of service area state/counties was not included.

Table Q-5: How enrollment periods were combined for contracts experiencing multiple disasters

Formula ID	Enrolled 2017_09	Enrolled 2017_10	Enrolled 2017_11	Enrolled 2018_01	Enrollment Used
A	True	True	True	True	(2017_09 + 2017_10 + 2017_11 + 2018_01) / 4
B	True	True	True		(2017_09 + 2017_10 + 2017_11) / 3
C	True	True		True	(2017_09 + 2017_10 + 2018_01) / 3
D	True	True			(2017_09 + 2017_10) / 2
E	True		True	True	(2017_09 + 2017_11 + 2018_01) / 3
F	True		True		(2017_09 + 2017_11) / 2
G	True			True	(2017_09 + 2018_01) / 2
H	True				2017_09
I		True	True	True	(2017_10 + 2017_11 + 2018_01) / 3
J		True	True		(2017_10 + 2017_11) / 2
K		True		True	(2017_10 + 2018_01) / 2
L		True			2017_10
M			True	True	(2017_11 + 2018_01) / 2

Formula ID	Enrolled 2017_09	Enrolled 2017_10	Enrolled 2017_11	Enrolled 2018_01	Enrollment Used
N			True		2017_11
O				True	2018_01
P					0 (zero)

8. Using the enrollment for the contract developed in Step 7, take the sum of the enrollment in the entire service area for the contract to be used in further processing.
9. Using the enrollment for the contract developed in Step 7, take the sum of the enrollment in all of the Individual Assistance counties that correspond to the contract service area.
10. Using the final list of affected contracts from Step 4, calculate the percentage of the contract's total service area enrollment that was affected by the Individual Assistance area enrollment. Create flags for the ≥25% and ≥60% thresholds for processing of the ratings data for those contracts.

    The disaster policy includes a distinction for contracts operating solely in Puerto Rico. Please note that all "Puerto Rico Only" contracts that had enrollment during the 2019 Star Ratings data time frame have 100% of their membership affected in the above calculations.

Example:

For this example, steps 1 and 2 use the disasters and counties that have already been defined in Tables Q-1 & Q-2. For steps 3 through 10, we use an example contract, HAAAA, which offers services to some counties from both California and Texas.

Step 3, Table Q-6 below contains the full list of counties that make up the service area for contract HAAAA.

Step 4, the Individual Assistance County column is included in Table Q-6. Rows marked TRUE are matches from Individual Assistance counties in disasters DR-4332 and D-4344 and the service areas of HAAAA. The rows marked FALSE were not Individual Assistance counties for any of the disasters in HAAAA.

Step 5, since the example contract HAAAA has service areas that coincide with disaster counties, it is not included in the list of contracts not affected.

Step 6, there are two separate enrollment periods associated with the disasters that match example contract HAAAA's service area. Those enrollment periods are 2017/09 & 2017/11. Columns for all enrollment periods are included in table Q-6, but only the valid enrollment periods contain the necessary data.

Step 7, the average enrollment is calculated for the included enrollment periods. The formula for average enrollment comes from the Table Q-5 row F under the column Formula ID. The result of each average calculation for each county in the example contract's service area is shown in the final column of Table Q-6.

Table Q-6: Example Contract HAAAA's Service Areas and Enrollment during Relevant Disasters

FIPS Code	County Name	ST CD	EGHP County	Individual Assistance County	Enrolled 2017/09	Enrolled 2017/10	Enrolled 2017/11	Enrolled 2018/01	Average Enrollment
06003	Alpine	CA	No	FALSE	8	-	8	-	8
06009	Calaveras	CA	No	FALSE	849	-	850	-	850
06011	Colusa	CA	No	FALSE	168	-	166	-	167
06015	Del Norte	CA	No	FALSE	369	-	360	-	364
06023	Humboldt	CA	No	FALSE	702	-	710	-	706
06045	Mendocino	CA	No	TRUE	428	-	429	-	428
06049	Modoc	CA	No	FALSE	157	-	158	-	158
06063	Plumas	CA	No	FALSE	182	-	181	-	182
06093	Siskiyou	CA	No	FALSE	798	-	800	-	799
06105	Trinity	CA	No	FALSE	150	-	150	-	150

FIPS Code	County Name	ST CD	EGHP County	Individual Assistance County	Enrolled 2017/09	Enrolled 2017/10	Enrolled 2017/11	Enrolled 2018/01	Average Enrollment
48043	Brewster	TX	Yes	FALSE	16	-	15	-	16
48047	Brooks	TX	Yes	FALSE	28	-	27	-	28
48049	Brown	TX	Yes	FALSE	64	-	65	-	64
48057	Calhoun	TX	Yes	TRUE	28	-	28	-	28
48093	Comanche	TX	Yes	FALSE	33	-	32	-	32
48103	Crane	TX	Yes	FALSE	8	-	8	-	8
48109	Culberson	TX	Yes	FALSE	3	-	3	-	3
48123	DeWitt	TX	Yes	TRUE	26	-	26	-	26
48131	Duval	TX	Yes	FALSE	30	-	28	-	29
48133	Eastland	TX	Yes	FALSE	64	-	62	-	63
48143	Erath	TX	Yes	FALSE	61	-	59	-	60
48163	Frio	TX	Yes	FALSE	43	-	42	-	42
48171	Gillespie	TX	Yes	FALSE	17	-	17	-	17
48175	Goliad	TX	Yes	TRUE	18	-	18	-	18
48177	Gonzales	TX	Yes	TRUE	41	-	41	-	41
48237	Jack	TX	Yes	FALSE	35	-	34	-	34
48239	Jackson	TX	Yes	TRUE	30	-	30	-	30
48255	Karnes	TX	Yes	TRUE	19	-	19	-	19
48265	Kerr	TX	Yes	FALSE	85	-	86	-	86
48283	La Salle	TX	Yes	FALSE	25	-	25	-	25
48297	Live Oak	TX	Yes	FALSE	24	-	24	-	24
48301	Loving	TX	Yes	FALSE	0	-	0	-	0
48311	McMullen	TX	Yes	FALSE	4	-	4	-	4
48321	Matagorda	TX	Yes	TRUE	144	-	140	-	142
48323	Maverick	TX	Yes	FALSE	160	-	156	-	158
48371	Pecos	TX	Yes	FALSE	20	-	21	-	20
48377	Presidio	TX	Yes	FALSE	50	-	49	-	50
48389	Reeves	TX	Yes	FALSE	8	-	8	-	8
48391	Refugio	TX	Yes	TRUE	21	-	21	-	21
48443	Terrell	TX	Yes	FALSE	9	-	9	-	9
48463	Uvalde	TX	Yes	FALSE	13	-	10	-	12
48469	Victoria	TX	Yes	TRUE	158	-	154	-	156
48475	Ward	TX	Yes	FALSE	15	-	15	-	15
48495	Winkler	TX	Yes	FALSE	20	-	20	-	20

Step 8, sum the average enrollment from all rows from Table Q-6. The total comes out to 5,120 for contract HAAAA.

Step 9, sum the average enrollment from all the rows from Table Q-6 where the Individual Assistance counties is TRUE for contract HAAAA. The Individual Assistance total comes out to 909.

Step 10, calculate the final percentage for contract HAAAA. (909 / 5,120) * 100 = 17.753906 = 18%. Both flags for >=25% and >=60% are set to false since the example contract did not meet those thresholds.

Attachment R: Missing Data Messages

CMS uses a standard set of messages in the Star Ratings when there are no numeric data available for a contract. This attachment provides the rules for assignment of those messages in each level of the Star Ratings.

Measure level messages

Table R-1 contains all of the possible messages that could be assigned to missing data at the measure level.

Table R-1: Measure level missing data messages

Message	Measure Level
Coming Soon	Used for all measures in MPF between Oct 1 and when the actual Star Rating data go live
Medicare shows only a Star Rating for this topic	Used in the numeric data for the Part C & D improvement measures in MPF and Plan Preview 2
Not enough data available	There were data for the contract, but not enough to pass the measure exclusion rules
CMS identified issues with this plan's data	Data were materially biased, erroneous and/or not reported by a contract required to report
Not Applicable	Used in the numeric data for the improvement measures in Plan Preview 1. In the HPMS Measure Star Page when a measure does not apply for a contract. When a Disenrollment Reasons Survey measure does not apply to the contract type.
Benefit not offered by plan	The contract was required to report this HEDIS measure but doesn't offer the benefit to members
Plan too new to be measured	The contract is too new to have submitted measure data
No data available	There were no data for the contract included in the source data for the measure
Plan too small to be measured	The contract had data but did not have enough enrollment to pass the measure exclusion rules
Plan not required to report measure	The contract was not required to report the measure

Assignment rules for Part C measure messages

Part C uses a set of rules for assigning the missing data message that varies by the data source. The rules for each data source are defined below.

Appeals (IRE) measures (C32 & C33):

Has CMS identified issues with the contract's data?
- Yes: Display message: CMS identified issues with this plan's data
- No: Is there a valid numeric measure rate?
  - Yes: Display the numeric measure rate
  - No: Is the contract effective date > 01/01/2017?
    - Yes: Display message: Plan too new to be measured
    - No: Display message: Not enough data available

CAHPS measures (C03, C23, C24, C25, C26, C27, & C28):

Is there a valid numeric CAHPS measure rate?
- Yes: Display the numeric CAHPS measure rate
- No: Is the contract effective date > 07/01/2017?
  - Yes: Display message: Plan too new to be measured
  - No: Is the CAHPS measure rate NR?
    - Yes: Display message: Not enough data available
    - No: Is the CAHPS measure rate NA?
      - Yes: Display message: No data available
      - No: Display message: Plan too small to be measured

Call Center – Foreign Language Interpreter and TTY Availability measure (C34):

Is there a valid call center numeric rate?
- Yes: Display the call center numeric rate
- No: Is the organization type 1876 Cost?
  - Yes: Display message: Plan not required to report measure
  - No: Is the contract effective date > 01/01/2018?
    - Yes: Display message: Plan too new to be measured
    - No: Display message: Not enough data available

Complaints (CTM) measure (C29):

Is the contract effective date > 01/01/2017?
- Yes: Display message: Plan too new to be measured
- No: Was the average contract enrollment < 800 in 2017?
  - Yes: Display message: Not enough data available
  - No: Is there a valid numeric CTM rate?
    - Yes: Display the numeric CTM rate
    - No: Display message: No data available

HEDIS measures (C01, C02, C07, C12 – C17, C20 & C22):

Was the contract required to report HEDIS?
- Yes: Was the contract enrollment < 500 in July 2017?
  - Yes: Display message: Plan too small to be measured
  - No: What is the HEDIS measure audit designation?
    - BD: Display message: CMS identified issues with this plan's data
    - BR: Display message: CMS identified issues with this plan's data
    - NA: Display message: Not enough data available
    - NB: Display message: Benefit not offered by plan
    - NR: Display message: CMS identified issues with this plan's data
    - NQ: Display message: Plan not required to report measure
    - R: Was a valid patient level detail file 1 submitted and the measure data usable?
      - Yes: Was contract enrollment at least 500 but less than 1,000?
        - Yes: Is the measure reliability at least 0.7?
          - Yes: Display the HEDIS measure numeric rate
          - No: Display message: No data available
        - No: Display the HEDIS measure numeric rate
      - No: Display message: CMS identified issues with this plan's data
- No: Is the contract effective date > 01/01/2017?
  - Yes: Display message: Plan too new to be measured
  - No: Display message: Plan not required to report measure

HEDIS PCR measure (C21)

Was the contract required to report HEDIS?
- Yes: Was the contract enrollment < 500 in July 2017?
  - Yes: Display message: Plan too small to be measured
  - No: What is the HEDIS measure audit designation?
    - BD: Display message: CMS identified issues with this plan's data
    - BR: Display message: CMS identified issues with this plan's data
    - NA: Display message: Not enough data available
    - NB: Display message: Benefit not offered by plan
    - NR: Display message: CMS identified issues with this plan's data
    - NQ: Display message: Plan not required to report measure
    - R: Was a valid patient level detail file 2 submitted and the measure data usable?
      - Yes: Was contract enrollment at least 500 but less than 1,000?
        - Yes: Is the measure reliability at least 0.7?
          - Yes: Display the HEDIS measure numeric rate
          - No: Display message: No data available
        - No: Display the HEDIS measure numeric rate
      - No: Display message: CMS identified issues with this plan's data
- No: Is the contract effective date > 01/01/2017?
  - Yes: Display message: Plan too new to be measured
  - No: Display message: Plan not required to report measure

HEDIS SNP measures (C09, C10, & C11):

Is the organization type (1876 Cost, PFFS, MSA) or SNP offered in 2019= No?
- Yes: Display message: Plan not required to report measure
- No: Is the contract effective date > 01/01/2017?
  - Yes: Display message: Plan too new to be measured
  - No: What is the HEDIS measure audit designation?
    - BD: Display message: CMS identified issues with this plan's data
    - BR: Display message: CMS identified issues with this plan's data
    - NA: Display message: Not enough data available
    - NB: Display message: Benefit not offered by plan
    - NR: Display message: CMS identified issues with this plan's data
    - NQ: Display message: Plan not required to report measure
    - R: Is there a valid HEDIS measure numeric rate?
      - Yes: Display the HEDIS measure numeric rate
      - No: Display message: No data available

HEDIS / HOS measures (C06, C18, & C19):

Is there a valid HEDIS / HOS numeric rate?
- Yes: Display the HEDIS / HOS numeric rate
- No: Is the contract effective date > 01/01/2016?
  - Yes: Display message: Plan too new to be measured
  - No: Is the contract enrollment < 500?
    - Yes: Display message: Plan too small to be measured
    - No: Is there a HEDIS / HOS rate code?
      - Yes: Assign message according to value below:
        - NA: Display message: Not enough data available
        - NB: Display message: Benefit not offered by plan
      - No: Display message: No data available

HOS measures (C04 & C05):

Is there a valid numeric HOS measure rate?
- Yes: Display the numeric HOS rate
- No: Was the HOS measure rate NA?
  - Yes: Display message: No data available
  - No: Is the contract effective date > 01/01/2014?
  - Yes: Display message: Plan too new to be measured
  - No: Was the contract enrollment < 500 at time of baseline collection?
    - Yes: Display message: Plan too small to be measured
    - No: Display message: Not enough data available

Members Choosing to Leave the Plan (C30):

Is there a valid numeric voluntary disenrollment rate?
- Yes: Display the numeric voluntary disenrollment rate
- No: Is the contract effective date ≥ 01/01/2018?
  - Yes: Display message: Plan too new to be measured
  - No: Display message: Not enough data available

Plan Reporting SNP measure (C08):

Is the organization type (1876 Cost, PFFS, MSA) or SNP offered in 2019 = No?
- Yes: Display message: Plan not required to report measure
- No: Is there a valid Plan Reporting numeric rate?
  - Yes: Display the Plan Reporting numeric rate
  - No: Were there Data Issues Found?
    - Yes: Display message: CMS identified issues with this plan's data
    - No: Is the contract effective date > 01/01/2017?
      - Yes: Display message: Plan too new to be measured
      - No: Display message: No data available

Improvement (Star Ratings) measure (C31):

Is there a valid improvement measure rate?
- Yes: Display message: Medicare shows only a Star Rating for this topic
- No: Is the contract effective date > 01/01/2017?
  - Yes: Display message: Plan too new to be measured
  - No: Display message: Not enough data available

Assignment rules for Part D measure messages

Appeals Auto-Forward (IRE) measure (D02):

Has CMS identified issues with the contract's data?
- Yes: Display message: CMS identified issues with this plan's data
- No: Was the average contract enrollment < 800 in 2017?
  - Yes: Display message: Not enough data available
  - No: Is the contract effective date > 12/31/2017?
    - Yes: Display message: Plan too new to be measured
    - No: Is there a valid numeric measure rate?
      - Yes: Display numeric measure rate
      - No: Display message: No data available

Appeals Upheld (IRE) measure (D03):

Has CMS identified issues with the contract's data?
- Yes: Display message: CMS identified issues with this plan's data
- No: Is the contract effective date > 01/01/2017?
  - Yes: Display message: Plan too new to be measured
  - No: Were fewer than 10 cases reviewed by the IRE?
    - Yes: Display message: Not enough data available
    - No: Is there a valid numeric measure percentage?
      - Yes: Display numeric measure percentage
      - No: Display message: No data available

CAHPS measures (D07, D08):

Is there a valid numeric CAHPS measure rate?
- Yes: Display the numeric CAHPS measure rate
- No: Is the contract effective date > 07/01/2017?
  - Yes: Display message: Plan too new to be measured
  - No: Is the CAHPS measure rate NR?
    - Yes: Display message: Not enough data available
    - No: Is the CAHPS measure rate NA?
      - Yes: Display message: No data available
      - No: Display message: Plan too small to be measured

Call Center – Foreign Language Interpreter and TTY Availability measure (D01):

Is there a valid call center numeric rate?
- Yes: Display the call center numeric rate
- No: Is the organization type 1876 Cost?
  - Yes: Display message: Plan not required to report measure
  - No: Is the contract effective date > 01/01/2018?
    - Yes: Display message: Plan too new to be measured
    - No: Display message: Not enough data available

Complaints (CTM) measure (D04):

Is the contract effective date > 01/01/2017?
- Yes: Display message: Plan too new to be measured
- No: Was the average contract enrollment < 800 in 2017?
  - Yes: Display message: Not enough data available
  - No: Is there a valid numeric CTM rate?
    - Yes: Display the numeric CTM rate
    - No: Display message: No data available

Improvement (Star Ratings) measure (D06):

Is there a valid improvement measure rate?
- Yes: Display message: Medicare shows only a Star Rating for this topic
- No: Is the contract effective date > 01/01/2017?
  - Yes: Display message: Plan too new to be measured
  - No: Display message: Not enough data available

Members Choosing to Leave the Plan (D05):

Is there a valid numeric voluntary disenrollment rate?
- Yes: Display the numeric voluntary disenrollment rate
- No: Is the contract effective date ≥ 01/01/2018?
  - Yes: Display message: Plan too new to be measured
  - No: Display message: Not enough data available

MPF Price Accuracy measure (D09):

Is the contract effective date > 9/30/2017?
- Yes: Display message: Plan too new to be measured
- No: Does contract have at least 30 claims over the measurement period for the price accuracy index?
  - Yes: Display the numeric price accuracy rate
  - No: Is the organization type 1876 Cost and does not offer Drugs?
    - Yes: Display message: Plan not required to report measure
    - No: Display message: Not enough data available

Patient Safety measures – Adherence (D10 - D12) & SUPD (D14):

Is the contract effective date > 12/31/2017?
- Yes: Display message: Plan too new to be measured
- No: Does contract have 30 or fewer enrolled beneficiary member years (measure denominator)?
  - Yes: Display message: Not enough data available
  - No: Display numeric measure percentage

Patient Safety measure – MTM CMR (D13)

Is the contract effective date > 12/31/2017?
- Yes: Display message: Plan too new to be measured
- No: Is Part D Offered=False?
  - Yes: Display message: Plan not required to report measure
  - No: Is there a numeric rate?
    - Yes: Display numeric measure percentage
    - No: Is there a Reason(s) for Display Message?
      - Yes: Display appropriate message per table R-2

Table R-2: MTM CMR Reason(s) for Display Message conversion

Reason(s) for Display Message	Star Ratings Message
Contract failed to submit file and pass system validation by the reporting deadline	CMS identified issues with this plan's data
Contract did not pass element-level DV for at least one element	CMS identified issues with this plan's data
Contract had missing score on MTM section DV	CMS identified issues with this plan's data
Contract scored less than 95% on MTM section DV	CMS identified issues with this plan's data
Contract had all plans terminate by validation deadline	No data available
Contract had no MTM enrollees to report	No data available
Contract has 0 Part D enrollees	No data available
Contract had 30 or fewer beneficiaries meeting denominator criteria	Not enough data available
Contract not required to submit MTM program	Not required to report

Domain, Summary and Overall level messages

Table R-3 contains all of the possible messages that could be assigned to missing data at the domain, summary, and overall levels.

Table R-3: Domain, Summary, and Overall level missing data messages

Message	Domain Level	Summary & Overall Level
Coming Soon	Used for all domain ratings in MPF between Oct 1 and when the actual Star Rating data go live	Used for all summary and overall ratings in MPF between Oct 1 and when the actual Star Rating data go live
Not enough data available	The contract did not have enough rated measures to calculate the domain rating	The contract did not have enough rated measures to calculate the summary or overall rating
Plan too new to be measured	The contract is too new to have submitted measure data for a domain rating to be calculated	The contract is too new to have submitted data to be rated in the summary or overall levels

Assignment rules for Part C & Part D domain rating level messages

Part C & D domain message assignment rules:

Is there a numeric domain star?
- Yes: Display the numeric domain star
- No: Is the contract effective date > 01/01/2017?
  - Yes: Display message: Plan too new to be measured
  - No: Display message: Not enough data available

Assignment rules for Part C & Part D summary rating level messages

Part C & D summary rating message assignment rules:

Is there a numeric summary rating star?
- Yes: Display the numeric summary rating star
- No: Is the contract effective date > 01/01/2017?
  - Yes: Display message: Plan too new to be measured
  - No: Display message: Not enough data available

Assignment rules for overall rating level messages

Overall rating message assignment rules:

Is there a numeric overall rating star?
- Yes: Display the numeric overall rating star
- No: Is the contract effective date > 01/01/2017?
  - Yes: Display message: Plan too new to be measured
  - No: Display message: Not enough data available

Disenrollment Reasons messages

The 2019 Star Ratings posted to the Medicare Plan Finder includes data collected from the Disenrollment Reasons Survey (DRS). The DRS data was not used at any point in the calculation of the Star Ratings. The data are provided in MPF for beneficiary information only, and are shown in HPMS with the Star Ratings data so organizations can preview them prior to public posting.

Because there are instances where a contract does not have data to display, a set of rules was developed to assign messages where data was missing so the data area would not be left blank.

Table R-4 contains all of the possible messages that could be assigned to missing data in the disenrollment reason data displayed in the Medicare Plan finder and HPMS.

Table R-4: Disenrollment Reason missing data messages

Message	Meaning
Coming Soon	Used for all ratings in MPF between Oct 1 and when the actual data go live
Not Applicable	Used when the DRS measure does not apply to the contract type
Not Available	Used when there is no numeric data available or data reliability indicated the value should be suppressed
Plan too new to be measured	The contract is too new for data to be collected for the measure

Disenrollment Reasons message assignment rules:

Is the contract effective date > 1/1/2017?
- Yes: Display message: Plan too new to be measured
- No: Is there numeric data for the contract in this DRS measure?
  - Yes: Did the data reliability check indicate the data should be suppressed?
    - Yes: Display message: Not Available
    - No: Display the numeric DRS rate
  - No: Does the DRS measure apply to the organization type
    - Yes: Display message: Not Available
    - No: Display message: Not Applicable

Attachment S: Glossary of Terms

AEP	The annual period from October 15 until December 7 when a Medicare beneficiary can enroll into a Medicare Part D plan or re-enroll into their existing Medicare Part D Plan or change into another Medicare Part D plan is known as the Annual Election Period (AEP). Beneficiaries can also switch to a Medicare Advantage Plan that has a Prescription Drug Plan (MA-PD). The chosen Medicare Part D plan coverage begins on January 1st.
C-SNP	Chronic Condition Special Needs Plans (C-SNPs) are SNPs that restrict enrollment to special needs individuals with specific severe or disabling chronic conditions, defined in 42 CFR 422.2.
CAHPS	The term CAHPS refers to a comprehensive and evolving family of surveys that ask consumers and patients to evaluate the interpersonal aspects of health care. CAHPS surveys probe those aspects of care for which consumers and patients are the best and/or only source of information, as well as those that consumers and patients have identified as being important. CAHPS initially stood for the Consumer Assessment of Health Plans Study, but as the products have evolved beyond health plans, the acronym now stands for Consumer Assessment of Healthcare Providers and Systems.
CCP	A Coordinated Care Plan (CCP) is a health plan that includes a network of providers that are under contract or arrangement with the organization to deliver the benefit package approved by CMS. The CCP network is approved by CMS to ensure that all applicable requirements are met, including access and availability, service area, and quality requirements. CCPs may use mechanisms to control utilization, such as referrals from a gatekeeper for an enrollee to receive services within the plan, and financial arrangements that offer incentives to providers to furnish high quality and cost-effective care. CCPs include HMOs, PSOs, local and regional PPOs, and senior housing facility plans. SNPs can be offered under any type of CCP that meets CMS' requirements.
Cohort	A cohort is a group of people who share a common designation, experience, or condition (e.g., Medicare beneficiaries). For the HOS, a cohort refers to a random sample of Medicare beneficiaries that is drawn from each Medicare Advantage Organization (MAO) with a minimum of 500 enrollees and surveyed every spring (i.e., a baseline survey is administered to a new cohort each year). Two years later, the baseline respondents are surveyed again (i.e., follow up measurement). For data collection years 1998-2006, the MAO sample size was 1,000. Effective 2007, the MAO sample size was increased to 1,200.
Cost Plan	A plan operated by a Health Maintenance Organization (HMO) or Competitive Medical Plan in accordance with a cost reimbursement contract under §1876(h) of the Act. In the Star Ratings, CMS classifies a Cost Plan not offering Part D as MA-Only and a Cost Plan offering Part D as MA-PD.
D-SNP	Dual Eligible Special Needs Plans (D-SNPs) enroll individuals who are entitled to both Medicare (title XVIII) and medical assistance from a state plan under Medicaid (title XIX). States cover some Medicare costs, depending on the state and the individual's eligibility.
Disability Status	Based on the original reason for entitlement for Medicare.
Dual eligibles	Individuals who are entitled to Medicare Part A and/or Part B and are eligible for some form of Medicaid benefit.
Euclidean distance	The absolute value of the difference between two points, x-y.

HEDIS	The Healthcare Effectiveness Data and Information Set (HEDIS) is a widely used set of performance measures in the managed care industry, developed and maintained by the National Committee for Quality Assurance (NCQA).
HOS	The Medicare Health Outcomes Survey (HOS) is the first patient reported outcomes measure used in Medicare managed care. The goal of the Medicare HOS program is to gather valid, reliable, and clinically meaningful health status data in the Medicare Advantage (MA) program for use in quality improvement activities, pay for performance, program oversight, public reporting, and improving health. All managed care organizations with MA contracts must participate.
I-SNP	Institutional Special Needs Plans (I-SNPs) are SNPs that restrict enrollment to MA eligible individuals who, for 90 days or longer, have had or are expected to need the level of services provided in a long-term care (LTC) skilled nursing facility (SNF), a LTC nursing facility (NF), a SNF/NF, an intermediate care facility for individuals with intellectual disabilities (ICF/IDD), or an inpatient psychiatric facility.
ICEP	The 3 months immediately before beneficiaries are entitled to Medicare Part A and enrolled in Part B are known as the Initial Coverage Election Period (ICEP). Beneficiaries may choose a Medicare health plan during their ICEP and the plan must accept them unless it has reached its limit in the number of members. This limit is approved by CMS.
IRE	The Independent Review Entity (IRE) is an independent entity contracted by CMS to review Medicare health and drug plans' adverse reconsiderations of organization determinations.
IVR	Interactive voice response (IVR) is a technology that allows a computer to interact with humans through the use of voice and dual-tone multi-frequency keypad inputs.
LIS	The Low Income Subsidy (LIS) from Medicare provides financial assistance for beneficiaries who have limited income and resources. Those who receive the LIS get help paying for their monthly premium, yearly deductible, prescription coinsurance, and copayments and they will have no gap in coverage.
LIS/DE	Beneficiaries who qualify at any point in the year for a low income subsidy through the application process and/or who are full or partial Dual (Medicare and Medicaid) beneficiaries.
MA	A Medicare Advantage (MA) organization is a public or private entity organized and licensed by a State as a risk-bearing entity (with the exception of provider-sponsored organizations receiving waivers) that is certified by CMS as meeting the MA contract requirements.
MA-Only	An MA organization that does not offer Medicare prescription drug coverage.
MA-PD	An MA organization that offers Medicare prescription drug coverage and Part A and Part B benefits in one plan.
MSA	Medicare Medical Savings Account (MSA) plans combine a high deductible MA plan and a medical savings account (which is an account established for the purpose of paying the qualified medical expenses of the account holder).
Percentage	A part of a whole expressed in hundredths. For example, a score of 45 out of 100 possible points is the same as 45%.

Percentile	The value below which a certain percent of observations fall. For example, a score equal to or greater than 97 percent of other scores attained on the same measure is said to be in the 97th percentile.
PDP	A Prescription Drug Plan (PDP) is a stand-alone drug plan, offered by insurers and other private companies to beneficiaries who receive their Medicare Part A and/or B benefits either through the Original Medicare Plan, Medicare Private Fee-for-Service Plans that do not offer prescription drug coverage, or Medicare Cost Plans that do not offer Medicare prescription drug coverage.
PFFS	Private Fee-for-Service (PFFS) is defined as an MA plan that pays providers of services at a rate determined by the plan on a fee-for-service basis without placing the provider at financial risk; does not vary the rates for a provider based on the utilization of that provider's services; and does not restrict enrollees' choices among providers who are lawfully authorized to provide services and agree to accept the plan's terms and conditions of payment. The Medicare Improvements for Patients and Providers Act (MIPPA) added that although payment rates cannot vary based solely on utilization of services by a provider, a PFFS plan is permitted to vary the payment rates for a provider based on the specialty of the provider, the location of the provider, or other factors related to the provider that are not related to utilization. Furthermore, MIPPA also allows PFFS plans to increase payment rates to a provider based on increased utilization of specified preventive or screening services. See section 30.4 of the Medicare Managed Care Manual Chapter 1 for further details on PFFS plans.
Reliability	A measure of the fraction of the variation among the observed measure values that is due to real differences in quality (“signal”) rather than random variation (“noise”). On a scale from 0 (all differences among plans are due to randomness of sampling) to 1 (every plan's quality is measured with perfect accuracy).
SNP	A Special Needs Plan (SNP) is a Medicare Advantage (MA) coordinated care plan (CCP) specifically designed to provide targeted care and limits enrollment to special needs individuals. A special needs individual could be any one of the following: 1) an institutionalized individual, 2) a dual eligible beneficiary, or 3) an individual with a severe or disabling chronic condition, as specified by CMS. A SNP may be any type of MA CCP. There are three major types of SNPs: 1) Chronic Condition SNP (C-SNP), 2) Dual Eligible SNP (D-SNP), and 3) Institutional SNP (I-SNP).
Sponsor	An entity that sponsors a health or drug plan.
Statistical Significance	Statistical significance assesses how likely differences observed are due to chance when plans are actually the same. CMS uses statistical tests (e.g., t-test) to determine if a contract’s measure value is statistically significantly greater or less than the national average for that measure, or whether conversely the observed differences from the national average could have arisen by chance.
Sum of Squares	Method used to measure variation or deviation from the mean.
TTY	A teletypewriter (TTY) is an electronic device for text communication via a telephone line, used when one or more of the parties has hearing or speech difficulties.
Very Low Reliability	For CAHPS, an indication that reliability is less than 0.6, indicating that 40% or more of observed variation is due to random noise.

Attachment T: Health Plan Management System Module Reference

This attachment is designed to assist reviewers of the data displayed in HPMS (https://hpms.cms.gov) to understand the various pages and fields shown in the HPMS Star Ratings module. This module employs standard HPMS user access rights so that users can only see contracts associated with their user id.

HPMS Star Ratings Module

The HPMS Star Ratings module contains the Part C & Part D data and stars for all contracts that were rated in the ratings year along with much of the detailed data that went into the various calculations. To access the Star Ratings module you must be logged into HPMS. If you do not have access to HPMS, information on how to obtain access can be found here: https://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/HPMS/Overview.html

Once you are logged into HPMS, from the home page, select *Performance Metrics* from the *Quality and Performance* menu; the Performance Metrics page will be displayed. If you do not see *Performance Metrics*, your user id does not have the correct access permissions, please contact CMSHPMS_Access@cms.hhs.gov

From the Performance Metrics page; select *Star Ratings and Display Measures* from the left side menu. The *Star Ratings and Display Measures* home page will be displayed.

On the *Star Ratings and Display Measures* home page, select *Star Ratings* from the left hand menu. You will be presented with a screen that allows you to select a reporting period. The remainder of this attachment describes the HPMS pages available for the 2019 Star Ratings.

1. Measure Data page

The Measure Data page displays the numeric data for all Part C and Part D measures. This page is available during the first plan preview.

The first four columns contain contract identifying information. The remaining columns contain the measures which will display in MPF. There is one column for each of the Part C and Part D measures. The measure columns are identified by measure id and measure name. The row immediately above this measure information contains the domain name. The row immediately below the measure information contains the data time frame of the measure. All subsequent rows contain the data for all individual contracts associated with the user's login id. Table T-1 below shows a sample of the left hand most columns shown in HPMS.

Table T-1: Measure Data page sample

Medicare Star Ratings Report Card Master Table						
Contract Number	Organization Marketing Name	Contract Name	Parent Organization	HD1: Staying Healthy: Screenings, Tests and Vaccines		
				C01: Breast Cancer Screening	C02: Colorectal Cancer Screening	C03: Annual Flu Vaccine
				01/01/2017 - 12/31/2017	01/01/2017 - 12/31/2017	02/15/2018 - 05/31/2018
HAAAA	Market A	Contract A	PO A	Plan too new to be measured	Plan too new to be measured	Not enough data available
HBBBB	Market B	Contract B	PO B	Not enough data available	73%	81%
HCCCC	Market C	Contract C	PO C	63%	71%	80%

2. Measure Detail page

The Measure Detail page contains the underlying data used for the Part C and Part D Complaints (C29/D04) and Part C & D Appeals measures (C32, C33, D02, & D03). This page is available during the first plan preview. Table T-2 below explains each of the columns displayed on this page.

Table T-2: Measure Detail page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The name of the parent organization for the contract
Total Number of Complaints	Number of non-excluded complaints for the contract
Complaint Average Enrollment	The average enrollment used in the final calculation
Complaints < 800 Enrolled	Yes / No, Yes = average enrollment < 800, No = average enrollment ≥ 800
Part C Total Appeals Cases	Total number of Part C appeals cases processed by the IRE (Maximus)
Part C Appeals Upheld	Number of Part C appeals which were upheld
Part C Appeals Overturned	Number of Part C appeals which were overturned
Part C Appeals Partly Overturned	Number of Part C appeals which were partially overturned
Part C Appeals Dismissed	Number of Part C appeals which were dismissed
Part C Appeals Withdrawn	Number of Part C appeals which were withdrawn
Part C Late Appeals	Number of Part C appeals which Maximus considered to be late
Part C Percent of Timely Appeals	Percent of Part C appeals which were processed in a timely manner
Part D Auto-Forward Cases	Number of Part D appeals not processed in a timely manner and subsequently auto-forwarded to the IRE (Maximus)
Part D 2017 enrollment	Average Part D 2017 monthly enrollment
Part D Appeals Upheld Cases	Total number of Part D appeals cases which were upheld
Part D Upheld Cases	Number of Part D appeals cases which were upheld
Part D Upheld: Fully Reversed	Number of Part D appeals cases which were reversed
Part D Upheld: Partially Reversed	Number of Part D appeals cases which were partially reversed

3. Measure Detail – Part C Appeals page

The Measure Detail – Part C Appeals page contains the case-level data of the non-excluded cases used in producing the Part C Appeals measures Plan Makes Timely Decisions about Appeals (C32) and Reviewing Appeals Decisions (C33). The data displayed on this page reflect the state of the appeals case at the time the data were pulled for use in the 2019 Star Ratings. This page is available during the first plan preview. Table T-2 below explains each of the columns displayed on this page.

Table T-3: Measure Detail – Part C Appeals page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The parent organization of the contract
Appeal Number	The case ID assigned to the appeal request
Appeal Priority	The priority of the appeal (Std Pre-Service, Exp Pre-Service, or Retro)
Status	The status of the appeal (Closed, Decided, Pending, Promoted, Remanded, Reopened, Requested)
Date Appeal Filed	The Date the Plan Reconsideration was requested, as reported by the Part C Plan
Corrected Appeal Date	The Date Appeal Filed, as determined by the IRE/QIC
Date File Received (QIC)	The Date the IRE/QIC received the Appeal from the Part C Plan
Level 1 Extension	Indicates if the contract took an extension during their processing of the reconsideration, as reported by the contract
Adjusted Plan Interval	The number of days between the Date Appeal Filed (or Corrected Appeal Date, if applicable) and the Date File Received (QIC) adjusted based on the Appeal Priority (Std Pre-Service, Exp Pre-Service, or Retro) and adjusted to account for 5 mailing days
Appeal Decision	Decision associated with the appeal (Dismiss Appeal, Overturn MCO Denial, Partly Overturn MCO Denial, Unspecified, Uphold MCO Denial, Withdraw Appeal)

HPMS Field Label	Field Description
Late Indicator	Indicates if the appeal case was considered late or not (0=Not Late, 1=Late)

4. Measure Detail – Auto-Forward page

The Measure Detail – Auto-Forward page contains the case-level data of the non-excluded cases used in producing the Part D Appeals Auto-Forward measure (D02). This page is available during the first plan preview. Table T-4 below explains each of the columns displayed on this page.

Table T-4: Measure Detail – Auto-Forward page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The parent organization of the contract
Appeal Number	The case ID assigned to the appeal request
Request Received Date	The date the appeal was received by the IRE
Request Type	The type of appeal (auto-forward)
Appeal Priority	The priority of the appeal (standard or expedited)
Appeal Disposition	The disposition of the IRE (Maximus)
Appeal End Date	The end date of the appeal

5. Measure Detail – Upheld page

The Measure Detail – Upheld page contains the case-level data of the non-excluded cases used in producing the Part D Appeals Upheld measure (D03). This page is available during the first plan preview. Table T-5 below explains each of the columns displayed on this page.

Table T-5: Measure Detail – Upheld page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The parent organization of the contract
Appeal Number	The case ID assigned to the appeal request
Request Received Date	The date the appeal was received by the IRE
Deadline	The deadline for the decision
Appeal Priority	The priority of the appeal (standard or expedited)
Appeal Disposition	The disposition of the IRE (Maximus)
Appeal End Date	The end date of the appeal
Status	The status of the appeal

6. Measure Detail – SNP CM page

The Measure Detail – SNP CM page contains the underlying data used in calculating the Part C SNP Care Management measure (C08). The formulas used to calculate the SNP CM measure are detailed in Attachment E. This page is available during the first plan preview. Table T-6 below explains each of the columns displayed on this page.

Table T-6: Measure Detail – SNP CM page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The name of the parent organization for the contract
Number of new enrollees	Number of new SNP enrollees eligible for an initial assessment (Element 13.1)
Number of enrollees eligible for an annual HRA	Number of SNP enrollees eligible for an annual reassessment (Element 13.2)
Number of initial HRAs performed on new enrollees	Number of initial assessments performed on new SNP enrollees (Element 13.3)
Number of annual reassessments performed	Number of annual reassessments performed on eligible SNP enrollees (Element 13.6)
Total Number of SNP Enrollees Eligible	Final measure numerator (Elements 13.1 + 13.2)
Total Number of Assessments Performed	Final measure denominator (Elements 13.3 + 13.6)
Percent of Eligible SNP Enrollees Receiving an Assessment	Final measure score
Data Validation Score	The data validation score for the contract
Reason for Exclusion	Reason (if any) contract submitted data was not used to generate a score

7. Measure Detail – SNP COA page

The Measure Detail – SNP COA page contains the underlying data used in calculating the Part C HEDIS SNP Care for Older Adult measures (C09, C10 & C11). The formulas used to calculate these SNP measures are detailed in Attachment E. This page is available during the first plan preview. Table T-7 below explains each of the columns displayed on this page.

Table T-7: Measure Detail – SNP COA page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The name of the parent organization for the contract
PBP ID	The Plan Benefit Package number associated with the data
Eligible Population – MR	The Eligible population - Medication Review, entered by the contract into NCQA IDSS (Field: eligpopmr)
Eligible Population – FSA	The Eligible population - Functional Status Assessment, entered by the contract into NCQA IDSS (Field: eligpopfsa)
Eligible Population – PA	The Eligible population - Pain Assessment, entered by the contract into NCQA IDSS (Field: eligpopps)
Average Plan Enrollment	The average enrollment in the PBP during 2017 (see section Contract Enrollment Data)
COA – MR Rate	The COA Medication Review Rate calculated by the NCQA data submission tool (Field: ratemr)
COA – FSA Rate	The COA Functional Status Assessment Rate calculated by the NCQA data submission tool (Field: ratefsa)
COA – PA Rate	The COA Pain Assessment Rate calculated by the NCQA data submission tool (Field: rateps)
COA - MR Audit Designation	The audit designation for the COA Medication Review Rate (the audit codes defined next table)
COA – FSA Audit Designation	The audit designation for the COA Functional Status Assessment Rate (the audit codes defined next table)
COA – PA Audit Designation	The audit designation for the COA Pain Assessment Rate (the audit codes defined next table)

Table T-8: HEDIS 2018 Audit Designations and 2019 Star Ratings

Audit Designation	NCQA Description	Resultant Star Rating
R	Reportable	Assigned 1 to 5 stars depending on reported value
BR	Biased Rate	1 star, numeric data set to “CMS identified issues with this plan’s data”
NA	Small Denominator	“Not enough data available”
NB	No Benefit	“Benefit not offered by plan”
NR	Not Reported	1 star, numeric data set to “CMS identified issues with this plan’s data”
NQ	Not Required	“Plan not required to report measure” (applies only to 1876 Cost in the PCRb measure)
UN	Un-Audited	Not possible in Star Ratings measures which only use audited data

8. Measure Detail – CTM page

The Measure Detail – CTM page contains the case level data of the non-excluded cases used in producing the Part C & Part D Complaints measure (C29/D04). This page is available during the first plan preview. Table T-9 below explains each of the columns displayed on this page.

Table T-9: Measure Detail – CTM page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The name of the parent organization for the contract
Complaint ID	The case number associated with the complaint in the HPMS CTM module
Complaint Lead	The complaint lead code
CMS Issue	Is the complaint designated as a CMS issue? (Yes/No)
Category	The complaint category description of CMS or plan lead
Subcategory	The complaint subcategory description associated with this case
Subcategory - Other	The complaint additional subcategory description associated with this case
Contract Assignment / Reassignment Date	The date that complaints are assigned or re-assigned to contracts

9. Measure Detail – Disenrollment

The Measure Detail – Disenrollment page contains data that are used in calculating the Part C & Part D disenrollment measure (C30/D05). The page shows the denominator, unadjusted numerator and original rate received from the MBDSS annual report. It also contains the adjusted numerator and final rate after all members meeting the measure exclusion criteria described in the measure description have been removed. This page is available during the first plan preview. Table T-10 below explains each of the columns displayed on this page.

Table T-10: Measure Detail – Disenrollment page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The parent organization of the contract
Number Enrolled	The number of all members in the contract from MBDSS annual report
Number Disenrolled	The number disenrolled with a disenrollment reason code of 11, 13, 14 or 99, from the MBDSS annual report
Original Rate	The disenrollment rate as calculated by the annual MBDSS report
Adjusted Disenrolled	The adjusted numerator when all members who meet the measure exclusion criteria are removed
Adjusted Rate	The final adjusted disenrollment rate used in the Star Ratings
>1000 Enrolled	Flag indicates contract non-employer group enrollment >1,000 members during the year (True = Yes, False = No)

10. Measure Detail – DR (Disenrollment Reasons)

The Measure Detail – Disenrollment Reasons page contains the data from the Disenrollment Reasons Survey (DRS) which will be displayed in the Medicare Plan Finder when the user drills down under the Star Ratings Disenrollment measure. The Disenrollment Reasons data are not used at any point in the calculations of the Star Ratings. The Disenrollment Reasons data are provided in MPF for beneficiary information only and in HPMS with the Star Ratings data so organizations can preview them prior to being posted publicly. The data comes from surveys sent to enrollees who disenrolled between 1/1/2017 and 12/31/2017. This page is available during the first plan preview. Table T-11 below explains each of the columns displayed on this page.

Table T-11: Measure Detail – Disenrollment Reasons page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The parent organization of the contract
DR PGNCCC	Disenrollment Reasons - Problems Getting Needed Care, Coverage, and Cost Information (MA-PD, MA-Only)
DR PCDH	Disenrollment Reasons - Problems with Coverage of Doctors and Hospitals (MA-PD, MA-Only)
DR FRD	Disenrollment Reasons - Financial Reasons for Disenrollment (MA-PD, MA-Only, PDP)
DR PPDBC	Disenrollment Reasons - Problems with Prescription Drug Benefits and Coverage (MA-PD, PDP)
DR PGIPD	Disenrollment Reasons - Problems Getting Information and Help from the Plan (MA-PD, PDP)

11. Measure Detail – MTM page

The Measure Detail – MTM page contains each contract's underlying denominator and numerator after measure specifications have been applied to the plan-reported validated data to calculate the Part D MTM Program Completion Rate for CMR (D13). The formulas used to calculate the MTM measure are detailed in Attachment N. This page is available during the first plan preview. Table T-12 below explains each of the columns displayed on this page.

Table T-12: Measure Detail – MTM page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The name of the parent organization for the contract
Total Part D Enrollees	The number of Part D enrollees in the contract (average monthly HPMS enrollment)
Total MTM Enrollees, All	The number of Part D enrollees enrolled in the contract's MTM program (as reported in the Part D MTM plan-reported data). Includes beneficiaries that had an enrollment start date anytime in the measurement period, regardless of age, hospice status, or duration of MTM enrollment. Excludes records where the HICN could not be mapped to a valid beneficiary or where the beneficiary was reported with multiple, conflicting records in the same contract's data.
Total MTM Enrollees, Targeted	The number of Part D enrollees enrolled in the contract's MTM program that met the specified targeting criteria per CMS-Part D requirements pursuant to §423.153(d) of the regulations (as reported in the Part D MTM plan-reported data). Includes beneficiaries that had an enrollment start date anytime in the measurement period, regardless of age, hospice status, or duration of MTM enrollment. Excludes records where the HICN could not be mapped to a valid beneficiary or where the beneficiary was reported with multiple, conflicting records in the same contract's data.
Total MTM Enrollees, Targeted, Adjusted	The number of Part D enrollees enrolled in the contract's MTM program that met the specified targeting criteria per CMS-Part D requirements pursuant to §423.153(d) of the regulations (as reported in the Part D plan-reported data) after measure specifications applied as detailed in Attachment N. (Measure Denominator)
Total MTM Enrollees, Targeted, Adjusted, Who Received a CMR	The number of beneficiaries from the denominator who received a CMR. (Measure Numerator)
MTM Program Completion Rate for CMR	The percent of MTM program enrollees who received a CMR. (Measure Numerator)/(Measure Denominator)
MTM Section Data Validation Score	Contract's score in data validation (DV) for their MTM Program Reporting Requirements data
Reason(s) for Display Message	Reason(s) for display message assignment (if applicable)

12. Measure Detail – CAHPS page

The Measure Detail – CAHPS page contains the underlying data used in calculating the Part C & D CAHPS measures: Annual Flu Vaccine (C03), Getting Needed Care (C23), Getting Appointments and Care

Quickly (C24), Customer Service (C25), Rating of Health Care Quality (C26), Rating of Health Plan (C27), Care Coordination (C28), Rating of Drug Plan (D07), and Getting Needed Prescription Drugs (D08). This page is available during the first plan preview. Table T-13 below explains each of the columns displayed on this page.

Table T-13: Measure Detail – CAHPS page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The parent organization of the contract
CAHPS Measure	The CAHPS measure identifier followed by the Star Ratings measure id in parenthesis
Reliability	The contract-level reliability of the measure data
Statistical Significance	The statistical significance of the measure data (Below Average, No Difference, Above Average, Not Reported)
Use N	The number of usable surveys with responses to the item, or at least one item of a composite
Mean Score on Original Scale	The mean score on the original survey response scale
Variance of Mean on Original Scale	The sampling variance of contract mean ("Mean score") on the original scale
Standard Error on Original Scale	The standard error of the contract mean ("Mean score") on the original scale; square root of "variance"
Scaled Mean	The contract mean score rescaled to a 0-100 scale
Scaled SE	The standard error of the 0-100 scaled mean
Base Group	Categories determined by the percentile cutoffs from the distribution of mean scores
Star Rating	Determined by the percentile cutoffs, statistical significance of the difference of the contract mean from the overall mean, the statistical reliability of the estimate, and standard error of the mean score

13. Calculation Detail – CSR

The Calculation Detail – CSR (Part C Scaled Reduction) page contains the underlying data used in calculating the reduction applied to the two Part C appeals measures. This page is available during the first plan preview. Table T-14 below explains the columns displayed on this page.

Table T-14: Measure Detail – Part C Scaled Reductions page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The parent organization of the contract
TMP Time Period	The time period associated with the TMP data submission; a zero indicates contract did not submit data
Cases Not Forwarded to IRE	The number of cases not forwarded to the IRE in the TMP time period
Cases Forwarded to IRE	The number of cases forwarded to the IRE in the TMP time period
Total IRE Cases	The total number of cases that should have been forwarded to the IRE in the TMP time period
TMP data submitted	A flag that indicates whether the contract submitted TMP data (Yes/No)
Projected Cases	The projected number of cases not forwarded to the IRE in a three-month period
Calculated Error Rate	The Calculated Error Rate is the quotient of Cases Not forwarded to IRE and Total IRE cases
Lower Bound	Lower Bound of the Score Interval
Part C Appeals Reduction	Part C Appeals measures Star Ratings reduction due to IRE completeness issues

14. Calculation Detail – DSR

The Calculation Detail – DSR (Part D Scaled Reduction) page contains the underlying data used in calculating the reduction applied to the two Part D appeals measures. This page is available during the first plan preview. Table T-15 below explains the columns displayed on this page.

Table T-15: Measure Detail – Part D Scaled Reductions page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name of the contract as known by in HPMS
Parent Organization	The parent organization of the contract
TMP Time Period	The time period associated with the TMP data submission; a zero indicates contract did not submit data
Untimely Cases not Auto-forwarded	The number of untimely cases not auto-forwarded to the IRE in the TMP time period
Total of Untimely Cases	The number of untimely cases in the TMP time period
TMP data submitted	A flag that indicates whether the contract submitted TMP data (Yes/No)
Projected Cases	The projected number of cases not forwarded to the IRE in a three-month period
Calculated Error Rate	The Calculated Error Rate is the quotient of Untimely Cases not Auto-forwarded and Total of Untimely Cases
Lower Bound	Lower Bound of the Score Interval
Part D Appeals Reduction	Part D Appeals measures Star Ratings reduction due to IRE completeness issues

15. Calculation Detail – MD

The Calculation Detail – MD page contains the summary of service area and enrollment data used to calculate the percentages for use in the Major Disaster rules for the individual measures. This page is available during the first plan preview. Table T-16 below explains the columns displayed on this page.

Table T-16: Calculation Detail – MD page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The parent organization of the contract
Puerto Rico Only	Does the contract's non-employer service area only cover Puerto Rico? Yes or No
Disaster Flag	Indicates if the contract was affected by a disaster or not (valid values "Affected", "Not Affected" or "Too New")
Total Cnty in SA	The total number of counties in the contract's 2017 service area (SA)
Num Cnty IA	The number of counties from the contract's total SA designated as FEMA Individual Assistance (IA) counties
IA Non-Employer	The number of members in Non-Employer PBPs residing in the contract SA designated FEMA IA counties
IA Employer	The number of members in Employer PBPs residing in the contract SA designated FEMA IA counties
IA Total Enrolled	The total number of members in residing in the contract SA designated FEMA IA counties
Total Non-Employer	The total number of members in Non-Employer PBPs in the contract SA
Total Employer	The total number of members in Employer PBPs residing in the contract SA
Total Enrolled	The total number of members in residing in the contract SA
IA %	The percent of members living in IA areas (IA Total Enrolled)/(Total Enrolled)
IA % Rounded	The percent of members living in IA areas rounded to an integer
>25%	Flag that indicates if the contract has meet the 25% threshold (Yes: >= 25 %, No: <25%)
>60%	Flag that indicates if the contract has meet the 60% threshold (Yes: >= 60 %, No: <60%)

16. Calculation Detail – CAI

The Calculation Detail – CAI page contains the enrollment data used to calculate the percentages for use in the Categorical Adjustment Index (CAI) to determine the Final Adjustment Categories for each of the summary and overall rating calculations. This page is available during the first plan preview. Table T-17 below explains the columns displayed on this page.

Table T-17: Measure Detail – CAI page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The name of the parent organization for the contract
Puerto Rico Only	Does the contract's non-employer service area only cover Puerto Rico? Yes or No
Contract Type	The contract plan type used to compute the ratings
Part D Offered	Is Part D offered by the contract? Yes or No
Enrolled	The total number enrolled in the contract used to determine the % LIS/DE and % Disabled
# LIS/DE	The number of LIS/DE enrolled in the contract
# Disabled	The number of Disabled enrolled in the contract
% LIS/DE	The percent of LIS/DE in the contract
% Disabled	The percent Disabled in the contract
Part C LIS/DE Initial Group	The Part C LIS/DE initial group this contract is in
Part C Disabled Quintile	The Part C Disabled Quintile group this contract is in
Part C FAC	The Part C Final adjustment category this contract is in
Part C CAI Value	The CAI value that will be combined with the final Part C summary score prior to rounding to half stars
Part D MA-PD LIS/DE Initial Group	The Part D MA-PD LIS/DE initial group this contract is in
Part D MA-PD Disabled Quintile	The Part D MA-PD Disabled Quintile group this contract is in
Part D MA-PD FAC	The Part D MA-PD Final adjustment category this contract is in
Part D MA-PD CAI Value	The CAI value that will be combined with the final Part D MA-PD summary score prior to rounding to half stars
Part D PDP LIS/DE Quartile	The Part D PDP LIS/DE Quartile group this contract is in
Part D PDP Disabled Quartile	The Part D PDP Disabled Quartile group this contract is in
Part D PDP FAC	The Part D PDP Final adjustment category this contract is in
Part D PDP CAI Value	The CAI value that will be combined with the final Part D PDP summary score prior to rounding to half stars
Overall LIS/DE Initial Group	The overall LIS/DE initial group this contract is in
Overall Disabled Quintile	The overall disabled Quintile group this contract is in
Overall FAC	The overall final adjustment category this contract is in
Overall CAI Value	The CAI value that will be combined with the final overall score prior to rounding to half stars

17. Measure Detail – HEDIS LE page

The Measure Detail – HEDIS LE page contains the data used to calculate the reliability of the HEDIS measures (C01, C02, C07, C13 – C17, C20 – C22) data for contracts with ≥ 500 and < 1,000 members enrolled in July of the measurement year (July 01, 2017). This page is available during the second plan preview. Table T-18 below explains each of the columns displayed on this page.

Table T-18: Measure Detail – HEDIS LE page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The parent organization of the contract
Measure ID	The Star Ratings measure that the other data on this row is associated with
Rate	The submitted HEDIS rate
Score	The rounded value used for the measure in the Star Ratings
Enrollment	The contract enrollment for July 2017
Reliability	The computed reliability for the contract measure
Usable	The computed reliability ≥ 0.7 and rate is used = True, reliability < 0.7 and rate was not used = False

18. Measure Detail – C Disaster Results

The Part C Disaster Results page displays the measure level data handling results for contracts which had ≥25% of their enrollment living in areas affected by major disasters during the measurement period. Only the measures where the disaster policy required a comparison between two ratings years are displayed in the data. This page is available during the second plan preview. Table T-19 below explains the columns displayed on this page.

Table T-19: Measure Detail – C Disaster Results

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The name of the parent organization for the contract
Measure ID	The 2019 Star Ratings Part C measure ID
2018 Value	The numeric measure value for the contract from the 2018 Star Ratings
2018 Star	The measure star for the contract from the 2018 Star Ratings
2019 Value	The numeric measure value for the contract from the 2019 Star Ratings
2019 Star	The measure star for the contract from the 2019 Star Ratings
Final Value	The measure value to be used in the 2019 Star Ratings after the data handling policy for disasters was applied
Final Star	The measure star to be used in the 2019 Star Ratings after the data handling policy for disasters was applied
Final From	The Star Ratings year where the final data for the measure came from

19. Measure Detail – D Disaster Results

The Part D Disaster Results page displays the measure level data handling results for contracts which had ≥25% of their enrollment living in areas affected by major disasters during the measurement period. Only the measures where the disaster policy required a comparison between two ratings years are displayed in the data. This page is available during the second plan preview. Table T-20 below explains the columns displayed on this page.

Table T-20: Measure Detail – D Disaster Results

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The name of the parent organization for the contract
Measure ID	The 2019 Star Ratings Part D measure ID
2018 Value	The numeric measure value for the contract from the 2018 Star Ratings
2018 Star	The measure star for the contract from the 2018 Star Ratings
2019 Value	The numeric measure value for the contract from the 2019 Star Ratings
2019 Star	The measure star for the contract from the 2019 Star Ratings
Final Value	The measure value to be used in the 2019 Star Ratings after the data handling policy for disasters was applied
Final Star	The measure star to be used in the 2019 Star Ratings after the data handling policy for disasters was applied
Final From	The Star Ratings year where the final data for the measure came from

20. Measure Detail – C Improvement page

The Improvement page is constructed in a similar manner as the Measure Data page. This page is available during the second plan preview.

The first four columns contain contract identifying information. The remaining columns contain the results of the improvement calculation for the specific Part C measures. There is one column for each Part C measure. The measure columns are identified by measure id and measure name. There is an additional column to the right of the Part C measure columns which contain the finals numeric Part C improvement score. This numeric result from step 4 is described in Attachment I: "Calculating the Improvement Measure and the Measures Used."

The row immediately above this measure information contains the domain id and domain name. The row immediately below the measure information contains a flag (Included or Not Included) to show if the measure was used to calculate the final improvement measure. All subsequent rows contain the data associated with an individual contract. The possible results for Part C measure calculations are shown in Table T-21 below.

Table T-21: Part C Measure Improvement Results

Improvement Measure Result	Description
No significant change	There was no significant change in the values between the two years
Significant improvement	There was a significant improvement from last year to this year
Significant decline	There was a significant decline from last year to this year
Not included in calculation	There was only one year of data available so the calculation could not be completed
Not Applicable	The measure is not an improvement measure
Not Eligible	The contract did not have data in more than half of the improvement measures or was too new
Held Harmless	The contract had 5 stars in this measure last year and this year
Low reliability and low enrollment	The low-enrollment contract measure score did not have sufficiently high reliability

21. Measure Detail – D Improvement page

The Improvement page is constructed in a similar manner as the Measure Data page. This page is available during the second plan preview.

The first four columns contain contract identifying information. The remaining columns contain the results of the improvement calculation for the specific Part D measures. There is one column for each Part D measure. The measure columns are identified by measure id and measure name. There is an additional column to the right of the Part D measure columns which contain the finals numeric Part D improvement

score. This numeric result from step 4 is described in Attachment I: "Calculating the Improvement Measure and the Measures Used."

The row immediately above this measure information contains the domain id and domain name. The row immediately below the measure information contains a flag (Included or Not Included) to show if the measure was used to calculate the final improvement measure. All subsequent rows contain the data associated with an individual contract. The possible results for Part D measure calculations are shown in Table T-22 below.

Table T-22: Part D Measure Improvement Results

Improvement Measure Result	Description
No significant change	There was no significant change in the values between the two years
Significant improvement	There was a significant improvement from last year to this year
Significant decline	There was a significant decline from last year to this year
Not included in calculation	There was only one year of data available so the calculation could not be completed
Not Applicable	The measure is not an improvement measure
Not Eligible	The contract did not have data in more than half of the improvement measures or was too new
Held Harmless	The contract had 5 stars in this measure last year and this year

22. Measure Stars page

The Measure Stars page displays the Star Rating for each Part C and Part D measure. This page is available during the second plan preview.

The first four columns contain contract identifying information. The remaining columns contain the measure stars which will display in MPF. There is one column for each of the Part C and Part D measures. The measure columns are identified by measure id and measure name. The row immediately above this measure information contains the domain id and domain name. The row immediately below the measure information contains the data time frame. All subsequent rows contain the data for all individual contracts associated with the user's login id. Table T-23 below shows a sample of the left hand most columns shown in HPMS.

Table T-23: Measure Star page sample

				Medicare Star Ratings Report Card Master Table		
Contract Number	Organization Marketing Name	Contract Name	Parent Organization	HD1: Staying Healthy: Screenings, Tests and Vaccines		
				C01: Breast Cancer Screening	C02: Colorectal Cancer Screening	C03: Annual Flu Vaccine
				01/01/2017 - 12/31/2017	01/01/2017 - 12/31/2017	02/15/2018 - 05/31/2018
HAAAA	Market A	Contract A	PO A	Plan too new to be measured	Plan too new to be measured	Not enough data available
HBBBB	Market B	Contract B	PO B	Not enough data available	4	5
HCCCC	Market C	Contract C	PO C	3	4	5

23. Domain Stars page

The Domain Stars page displays the Star Rating for each Part C and Part D domain. This page is available during the second plan preview.

The first four columns contain contract identifying information. The remaining columns contain the domain stars which will display in MPF. There is one column for each of the Part C and Part D domains. The domain columns are identified by the domain id and domain name. All subsequent rows contain the stars associated with an individual contract. Table T-24 below shows a sample of the left hand most columns shown in HPMS.

Table T-24: Domain Star page sample

Medicare Star Ratings Report Card Master Table						
Contract Number	Organization Marketing Name	Contract Name	Parent Organization	HD1: Staying Healthy: Screenings, Tests and Vaccines	HD2: Managing Chronic (Long Term) Conditions	HD3: Member Experience with Health Plan
HAAAA	Market A	Contract A	PO A	4	3	4
HBBBB	Market B	Contract B	PO B	3	3	3
HCCCC	Market C	Contract C	PO C	3	3	4

24. Part C Summary Rating page

The Part C Summary Rating page displays the Part C rating and data associated with calculating the final Part C summary rating. This page is available during the second plan preview. Note, this page shows the results of with the new Part C statin measure and with Improvement measures for all fields except the final rating. There are flags to indicate if the final rating came from a without the new measure or without improvement calculation. Table T-25 below explains each of the columns contained on this page.

Table T-25: Part C Summary Rating page fields

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The name of the parent organization for the contract
Contract Type	The contract plan type used to compute the ratings
SNP Plans	Does the contract offer a SNP? (Yes/No)
Major Disaster Percentage	The percentage of members living in an Individual Assistance area rounded to an integer
Number Measures Required	The minimum number of measures required to calculate a rating out all required for the contract type.
Number Missing Measures	The number of measures that were missing stars
Number Rated Measures	The number of measures that were assigned stars
Calculated Summary Mean	Contains the mean of the stars for rated measures
Calculated Variance	The variance of the calculated summary mean
Calculated Score Percentile Rank	Percentile ranking of Calculated Summary Mean
Variance Percentile Rank	Percentile ranking of Calculated Variance
Variance Category	The reward factor variance category for the contract (low, medium, or high)
Reward Factor	The calculated reward factor for the contract (0, 0.1, 0.2, 0.3, or 0.4)
Interim Summary	The sum of the Calculated Summary Mean and the Reward Factor
Part C Summary FAC	Part C summary final adjustment category for the contract
CAI Value	The Part C summary CAI value for the contract
Final Summary	The sum of the Interim Summary and the CAI Value
Statin Measure Usage	Did the final Part C summary rating come from the calculation using the new statin measure (C22)? (Yes/No)
Improvement Measure Usage	Did the final Part C summary rating come from the calculation using the improvement measure (C31)? (Yes/No)
2019 Part C Summary Rating	The final rounded 2019 Part C Summary Rating

25. Part D Summary Rating page

The Part D Summary Rating page displays the Part D rating and data associated with calculating the final Part D summary rating. This page is available during the second plan preview. Note, this page shows the results of with the new Part D statin measure and with Improvement measures for all fields except the final rating. There are flags to indicate if the final rating came from a without the new measure or without improvement calculation. Table T-26 below explains each of the columns contained on this page.

Table T-26: Part D Summary Rating View

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The name of the parent organization for the contract
Contract Type	The contract plan type used to compute the ratings
Major Disaster Percentage	The percentage of members living in an Individual Assistance area rounded to an integer
Number Measures Required	The minimum number of measures required to calculate a rating out all required for the contract type
Number Missing Measures	The number of measures that were missing stars
Number Rated Measures	The number of measures that were assigned stars
Calculated Summary Mean	Contains the mean of the stars for rated measures
Calculated Variance	The variance of the calculated summary mean
Calculated Score Percentile Rank	Percentile ranking of Calculated Summary Mean
Variance Percentile Rank	Percentile ranking of Calculated Variance
Variance Category	The reward factor variance category for the contract (low, medium, or high)
Reward Factor	The calculated reward factor for the contract (0, 0.1, 0.2, 0.3, or 0.4)
Interim Summary	The sum of the Calculated Summary Mean and the Reward Factor
Part D Summary FAC	Part D summary final adjustment category for the contract
CAI Value	The Part D summary CAI value for the contract
Final Summary	The sum of the Interim Summary and the CAI Value
Statin Measure Usage	Did the final Part D summary rating come from the calculation using the new statin measure (D14)? (Yes/No)
Improvement Measure Usage	Did the final Part D summary rating come from the calculation using the improvement measure (D06)? (Yes/No)
2019 Part D Summary Rating	The final rounded 2019 Part D Summary Rating

26. Overall Rating page

The Overall Rating page displays the overall rating for MA-PD contracts and data associated with calculating the final overall rating. This page is available during the second plan preview. Note, this page shows the results of with the new Part C and Part D statin measures and with Improvement measures for all fields except the final rating. There are flags to indicate if the final rating came from a without new measures or without improvement calculation. Table T-27 below explains each of the columns contained on this page.

Table T-27: Overall Rating View

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The name of the parent organization for the contract
Contract Type	The contract plan type used to compute the ratings
SNP Plans	Does the contract offer a SNP? (Yes/No)
Major Disaster Percentage	The percentage of members living in an Individual Assistance area rounded to an integer
Number Measures Required	The minimum number of measures required to calculate a rating out all required for the contract type
Number Missing Measures	The number of measures that were missing stars
Number Rated Measures	The number of measures that were assigned stars
2019 Part C Summary Rating	The 2019 Part C Summary Rating
2019 Part D Summary Rating	The 2019 Part D Summary Rating
Calculated Summary Mean	Contains the weighted mean of the stars for rated measures
Calculated Variance	The variance of the calculated summary mean
Calculated Score Percentile Rank	Percentile ranking of Calculated Summary Mean
Variance Percentile Rank	Percentile ranking of Calculated Variance
Variance Category	The reward factor variance category for the contract (low, medium, or high)
Reward Factor	The calculated reward factor for the contract (0, 0.1, 0.2, 0.3, or 0.4)
Interim Summary	The sum of the Calculated Summary Mean and the Reward Factor
Overall FAC	Overall final adjustment category for the contract
CAI Value	The Overall CAI value for the contract
Final Summary	The sum of the Interim Summary and the CAI Value
Statin Measure Usage	Did the final overall rating come from the calculation using the new statin measures (C22 & D14)? (Yes/No)
Improvement Measure Usage	Did the final overall rating come from the calculation using the improvement measures (C31 & D06)? (Yes/No)
2019 Overall Rating	The final 2019 Overall Rating

27. Low Performing Contract List

The Low Performing Contract List page displays the contracts that received a Low Performing Icon and the data used to calculate the assignment. This page is available during the second plan preview. HPMS users in contracting organizations will see only their own contracts in this list. None will be displayed if no contract in the organization was assigned a Low Performing Icon. Table T-28 below explains each of the columns contained on this page.

Table T-28: Low Performing Contract List

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The name of the parent organization for the contract
Rated As	The type of rating for this contract, valid values are “MA-Only,” “MA-PD,” and “PDP”
2017 C Summary	The 2017 Part C Summary Rating earned by the contract
2017 D Summary	The 2017 Part D Summary Rating earned by the contract
2018 C Summary	The 2018 Part C Summary Rating earned by the contract
2018 D Summary	The 2018 Part D Summary Rating earned by the contract
2019 C Summary	The 2019 Part C Summary Rating earned by the contract
2019 D Summary	The 2019 Part D Summary Rating earned by the contract
Reason for LPI	The combination of ratings that met the Low Performing Icon rules. Valid values are “Part C,” “Part D,” “Part C and D,” & “Part C or D.” See the section titled “Methodology for Calculating the Low Performing Icon” for details.

28. High Performing Contract List

The High Performing Contract List page displays the contracts that received a High Performing Icon. This page is available during the second plan preview. HPMS users in contracting organizations will see only their own contracts in this list. None will be displayed if no contract in the organization was assigned a High Performing Icon. Table T-29 below explains each of the columns contained on this page.

Table T-29: High Performing Contract List

HPMS Field Label	Field Description
Contract Number	The contract number associated with the data
Organization Marketing Name	The name the contract markets to members
Contract Name	The name the contract is known by in HPMS
Parent Organization	The name of the parent organization for the contract
Rated As	The type of rating for this contract, valid values are “MA-Only,” “MA-PD,” and “PDP”
Highest Rating	The highest level of rating that can be achieved for this organization, valid values are “Part C Summary,” “Part D Summary,” “Overall Rating”
Rating	The star value attained in the highest rating for the organization type

29. Technical Notes link

The Technical Notes link provides the user with a copy of the 2019 Star Ratings Technical Notes. A draft version of these technical notes is available during the first plan preview. The draft is then updated for the second plan preview, and then finalized when the ratings data have been posted to MPF. Other updates may occur to the technical if errors are identified outside of the plan preview periods and after MPF data release.

Left clicking on the Technical Notes link will open a new browser window which will display a PDF (portable document format) copy of the 2019 Star Ratings Technical Notes. Right clicking on the Technical Notes link will pop up a context menu which contains Save Target As…; clicking on this will allow the user to download and save a copy of the PDF document

30. Medication NDC List

The Medication NDC List link provides the user a means to download a copy of the medication lists used for the Medication Adherence measures (D10 – D12) & SUPD (D14). This downloadable file is in Zip format and contains two Excel files.