



Medicare Shared Savings Program

SHARED SAVINGS AND LOSSES AND ASSIGNMENT METHODOLOGY

Specifications

February 2019 Version #7
Applicable Beginning Performance Year 2019 for ACOs Participating as of
January 1, 2019

REVISION HISTORY (from Version 6 to 7)

VERSION	DATE	REVISION/CHANGE DESCRIPTION	AFFECTED AREA
7	February 2019	Updated list of HCPCS and CPT codes for primary care services used in assignment to include new codes.	Table 9
7	February 2019	Revised the primary care service definition for FQHC/RHC to remove the use of attestation list and treating all services reported on an FQHC/RHC claim as a primary care service performed by a primary care physician.	Throughout
7	February 2019	Revised the description of voluntary alignment to remove the primary clinician's specialty requirement and requirement for primary care service at the ACO.	Throughout
7	February 2019	Removed use of POS 31 modifier and in its place indicate more generally that we will exclude services billed under CPT codes 99304 through 99318 when such services are furnished in a SNF.	Table 9
7	February 2019	Added extreme and uncontrollable circumstances policies for the Shared Savings Program.	Section 4.6
7	February 2019	Added information on determining savings and losses for 6-month performance year from January 1, 2019, through June 30, 2019.	Section 4.7

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EXECUTIVE SUMMARY

This document describes the specifications for beneficiary assignment and the shared savings and losses calculations under the Medicare Shared Savings Program (Shared Savings Program) codified at 42 CFR part 425, and the Medicare Accountable Care Organization (ACO) Track 1+ Model (Track 1+ Model) implemented under the authority of the Center for Medicare and Medicaid Innovation (Innovation Center). These specifications are pursuant to policies established by the Centers for Medicare & Medicaid Services (CMS) for the Shared Savings Program through notice and comment rulemaking and for the Track 1+ Model (detailed in [Section 1.1](#)).

Within the Shared Savings Program, CMS enters into agreements with ACOs. ACOs may share savings with CMS when they lower growth in Medicare Parts A and B fee-for-service (FFS) expenditures relative to their unique targets (i.e., benchmarks) while meeting quality of care performance standards, or in certain instances owe losses to CMS when they have higher growth in Medicare Parts A and B FFS expenditures relative to their benchmark. As of January 2019, ACOs participate under Track 1, which is a shared savings only model (one-sided model), or under Track 2 or Track 3, which are shared savings and losses models (two-sided models). ACOs that choose to be accountable for shared losses under Track 2 or Track 3 will have the opportunity to receive a greater portion of shared savings. ACOs also participate under the Track 1+ Model. The Track 1+ Model is a two-sided, time-limited Innovation Center model that includes features of both Track 1 and Track 3, but with lower downside risk than Track 2 and Track 3.

1 INTRODUCTION

THIS DOCUMENT IS SUBJECT TO PERIODIC CHANGE. ANY SUBSTANTIVE CHANGES TO THIS DOCUMENT WILL BE NOTED IN THE REVISION HISTORY.

This document applies to ACOs with agreement periods beginning January 2019 and prior. A subsequent version will be released that includes updates based on the *Pathways to Success Final Rule* (83 FR 67816) for ACOs with agreement periods that begin on July 1, 2019.

1.1 STATUTORY AND REGULATORY BACKGROUND

The Shared Savings Program was mandated by the Patient Protection and Affordable Care Act (ACA), as amended by the Health Care and Education Reconciliation Act of 2010. Section 1899 of the Social Security Act (the Act), added by Section 3022 of the ACA, established the Shared Savings Program. More recently, the requirements for assignment under the program were amended by the 21st Century Cures Act (December 2016). The 21st Century Cures Act amended the Act to require the Secretary to assign beneficiaries to ACOs participating in the Shared Savings Program based not only on their utilization of primary care services furnished by physicians, but also on their utilization of services furnished by Rural Health Clinics (RHCs) and Federally Qualified Health Centers (FQHCs), effective for performance years beginning on or after January 1, 2019.

CMS published a notice of proposed rulemaking for the Shared Savings Program on April 7, 2011, followed by a period of public comment. A final rule was published on November 2, 2011 (76 FR 67802). In subsequent rulemaking for the program, CMS finalized modifications to the

program's policies (which can be found on the CMS Shared Savings [Program Statutes & Regulations webpage](#)), including:

- Shared Savings Program Final Rule, published June 9, 2015 (80 FR 32692).
- Calendar Year (CY) 2016 Physician Fee Schedule Final Rule with comment period, published November 16, 2015 (80 FR 70886).
- Shared Savings Program Final Rule, published June 10, 2016 (81 FR 37950).
- CY 2017 Physician Fee Schedule Final Rule, published November 15, 2016 (81 FR 80170).
- CY 2018 Physician Fee Schedule Final Rule, published November 15, 2017 (82 FR 52976).
- Shared Savings Program, Interim Final Rule with comment period, published December 26, 2017 (82 FR 60912).
- CY 2019 Physician Fee Schedule Final Rule, published November 23, 2018 (83 FR 59452).
- Shared Savings Program Final Rule, published December 31, 2018 (83 FR 67816).
- CMS developed the Track 1+ Model for testing by the Innovation Center under section 1115A of the Act. Information about the Track 1+ Model is available in the [New Accountable Care Organization Model Opportunity: Medicare ACO Track 1+ Model Fact Sheet](#) and the [Medicare ACO Track 1+ Model Participation Agreement](#).

1.2 OVERVIEW OF FINANCIAL TRACKS

Prior to January 2019, ACOs had an option to choose between Track 1, Track 2, Track 3, and the Track 1+ Model. Track 1 ACOs participated under a one-sided model (shared savings only), while Track 2 and Track 3 ACOs participated under a two-sided model (shared savings and shared losses). ACOs had the opportunity to operate under a one-sided model for a maximum of two agreement periods. ACOs that began participating in the program under Track 1 in 2014 or 2015 also had the option to extend their first agreement period by 1 year if they applied for and were approved to enter a two-sided risk arrangement in their second agreement period. ACOs that entered an agreement with the Shared Savings Program under a two-sided model (Track 2 or Track 3) must remain under a two-sided model for the term of their agreement period and any subsequent agreement periods. Although the tracks share many common features—such as eligibility requirements, quality measures, and shared savings methodology—ACOs participating under two-sided models are accountable for shared losses, and in return may also earn a greater percentage of shared savings.

The Track 1+ Model is a time-limited Innovation Center model. The Track 1+ Model is based on Track 1, but incorporates elements of Track 3, including prospective beneficiary assignment, asymmetrical levels of risk and reward (upside based on Track 1 and downside with lower levels of risk than Track 2 or Track 3), and the option to apply for the Skilled Nursing Facility (SNF) 3-Day Rule Waiver.

1.3 AGREEMENT AND BENCHMARK PERIODS

The term of the agreement period is 3 calendar years (or performance years). Regardless of an ACO's start date, CMS determines the benchmark based on the 3 calendar years prior to an ACO's agreement period start date. [Appendix A](#) presents the relevant dates for both the

assignment windows and expenditures periods for Track 1, Track 1+, Track 2, and Track 3 ACOs, with a performance year that includes CY 2019. The benchmark years remain the same for all performance years of the agreement period. When an ACO renews its agreement for a second or subsequent agreement period, the benchmark is reset based on the 3 calendar years immediately preceding the start of the new agreement period. For ACOs that moved to the Track 1+ Model within their agreement period under Track 1, their benchmark was recalculated to reflect prospective beneficiary assignment, but was still based on the same benchmark years.

For example, the Shared Savings Program timeline for ACOs that began participating on January 1, 2018, is as follows:

- BY 1: January 1, 2015–December 31, 2015
- BY 2: January 1, 2016–December 31, 2016
- BY 3: January 1, 2017–December 31, 2017
- PY 1: January 1, 2018–December 31, 2018
- PY 2: January 1, 2019–December 31, 2019
- PY 3: January 1, 2020–December 31, 2020

2 BENEFICIARY ASSIGNMENT

The first step in calculating ACOs' shared savings or losses is to assign beneficiaries to an ACO. Beneficiary assignment is determined based on voluntary alignment and claims-based assignment.

In claims-based assignment, CMS uses Medicare beneficiaries' enrollment information and beneficiary Medicare FFS claims data to determine beneficiary assignment and calculate shared savings and losses for the program. Medicare enrollment information includes demographic information, enrollment dates, third party buy-in information, and Medicare-managed care enrollment information.

CMS claims have seven components:

- Inpatient
- Outpatient
- Carrier (physician/supplier Part B)
- SNF
- Home Health Agency (HHA)
- Durable Medical Equipment (DME)
- Hospice Claims

For Track 1 and Track 2 ACOs, claims-based beneficiary assignment is determined by preliminary prospective assignment with retrospective reconciliation at the end of the year for each benchmark and performance year based on Medicare FFS claims. For Track 1+ and Track

3 ACOs, claims-based beneficiary assignment is determined prospectively prior to the start of each benchmark and performance year based on Medicare FFS claims. Although beneficiaries will be assigned prospectively to Track 1+ and Track 3 ACOs, the claims-based assignment methodology is the same as that used to assign beneficiaries to ACOs participating under Track 1 and Track 2, with limited exceptions that are described below. A beneficiary assigned to an ACO in 1 year may not have been assigned to that ACO in the preceding years. Details of the data programming steps used in claims-based beneficiary assignment can be found in [Appendix C](#).

Beneficiaries may voluntarily align themselves to an ACO at any time during the year by logging into [MyMedicare.gov](#) and designating a primary care clinician who they believe to be responsible for coordinating their overall care. Beneficiaries who choose to voluntarily align on or before October 31st before the start of the performance year (regardless of ACO track) will be voluntarily aligned to the ACO; voluntary alignment supplements claims-based assignment. Voluntary alignment will also be accounted for in future benchmark calculations in which 2018 or subsequent years are benchmark years.

2.1 OVERVIEW OF ASSIGNMENT

2.1.1 TIMING OF ASSIGNMENT AND EXCLUSIONS

CMS provides all ACOs with an assignment list prior to the start of the performance year. The amount of claims run-out used in determining beneficiary assignment will vary. [Table 6](#) (Tracks 1 and 2) and [Table 7](#) (Track 1+ Model and Track 3) summarize the run-out periods.

2.1.1.1 ACOs Under Preliminary Prospective Assignment with Retrospective Reconciliation (Track 1 and Track 2)

Track 1 and Track 2 ACOs receive a preliminary prospective assignment list that includes beneficiaries preliminary prospectively assigned via claims and prospective voluntarily aligned beneficiaries prior to the start of each performance year. CMS will run claims-based assignment each quarter, generating a new preliminary prospective assignment list for these ACOs. The beneficiaries included in the quarterly preliminary prospective assignment list reports may change each quarter. Each list will identify the beneficiaries who received the plurality of primary care services provided during a rolling 12-month assignment window. These quarterly lists will also include the prospective voluntarily aligned beneficiaries who continue to meet the eligibility criteria for assignment to an ACO. Beneficiaries voluntarily aligned to ACOs before the start of the benchmark or performance year who meet exclusion criteria B, C, or E, identified in [Section 2.2](#) below, at the end of the year will be excluded from historical benchmarks and financial reconciliation. Voluntarily aligned beneficiaries with a date of death prior to the start of the benchmark or performance year will also be excluded.

2.1.1.2 ACOs Under Prospective Assignment (Track 1+ Model and Track 3)

Prior to the start of the performance year, CMS provides Track 1+ and Track 3 ACOs with a prospective assignment list that includes beneficiaries prospectively assigned via claims and beneficiaries who voluntarily aligned to the ACO. Each quarter, CMS will update the prospective assignment lists to identify beneficiaries who are no longer eligible for assignment to the ACO.

Prospective assignment uses an offset assignment window (refer to [Table 8](#)) to generate the list of prospectively assigned beneficiaries prior to the start of the performance year. Once a

beneficiary is prospectively assigned to an ACO for a benchmark or performance year, the beneficiary will not be eligible for assignment to a different ACO, even if the beneficiary obtains a plurality of his or her primary care services from a primary care physician, non-physician practitioner, or practitioner providing services at an FQHC/RHC in that ACO during the relevant benchmark or performance year.

Prospectively assigned beneficiaries who meet exclusion criteria B, C, D, or E, identified in [Section 2.2](#) below, at the end of a performance or benchmark year will be excluded from the prospective assignment list prior to calculating the historical benchmark or determining financial reconciliation. In addition, CMS will perform this exclusion on a quarterly basis during each performance year and incorporate these exclusions into quarterly reports provided to ACOs.

Also note that in determining prospective assignment for ACOs' benchmark and performance years, CMS will identify beneficiaries who, although assigned using the offset assignment window (October–September), died prior to the start of the benchmark or performance year. CMS will exclude these deceased beneficiaries from use in determining financial reconciliation for the performance year and in determining benchmark year assignments. ACOs are accountable for the cost and quality of care for prospectively assigned beneficiaries who pass during the performance year.

2.1.2 ROLE OF ACO PARTICIPANT LIST IN ASSIGNMENT

The ACO Participant List identifies the collection of ACO participants that comprise the ACO and is important to all related Shared Savings Program operations. Annually, an ACO may add ACO participants vetted through CMS' screening process or remove participants, which results in a certified ACO Participant List that is the basis for beneficiary assignment used in program operations for the ACO's next performance year. Specifically, the ACO's updated certified ACO Participant List is used to:

- Recalculate the ACO's historical benchmark based on the 3 years prior to the start of its agreement period (herein referred to as "adjusted historical benchmark");
- Determine performance year expenditures used in financial reconciliation and ACO participant Medicare Parts A and B FFS revenue for calculating the revenue-based loss-sharing limit for eligible Track 1+ ACOs;
- Determine the ACO's quality sample; and
- Produce quarterly and annual feedback reports.

As a result, an ACO may have up to three historical benchmarks for a 3-year agreement period if it makes changes to its ACO Participant List prior to the start of its second and third performance years. A Track 1 ACO that extended its first agreement period by 1 year before moving to a two-sided risk model may have up to four historical benchmarks for its first agreement period if it makes changes to its ACO Participant List prior to the start of its second, third, and fourth performance years. For more information on the ACO Participant List, refer to the [ACO Participant List and Participant Agreement Guidance](#).

2.2 BENEFICIARY ASSIGNMENT CRITERIA

For each year, a beneficiary will be assigned to a participating ACO if the following criteria are met (note that the letter designations are listed in the table below):

Table 1. Beneficiary assignment criteria

Criteria	Claims-based Assignment	Voluntary Alignment
A. Beneficiary must have at least 1 month of Part A and Part B enrollment, and cannot have any months of Part A only or Part B only enrollment.	✔	✔
B. Does not have any months of Medicare (private) health plan enrollment.	✔	✔
C. Is not assigned to any other Medicare shared savings initiatives.	✔	✔
D. Lived in the U.S. or U.S. territories in the last month of the assignment window.	✔	✔
E. Received a primary care service from a physician at the ACO.	✔	
F. Beneficiary must have received the largest share of his/her primary care services from the participating ACO. If a beneficiary meets the screening criteria in Parts A through F, he or she is eligible for assignment to an ACO.	✔	
G. Selected a primary clinician through MyMedicare.gov .		✔

A. Beneficiary must have Part A and Part B enrollment.

The beneficiary must have at least 1 month of Parts A and B enrollment, and cannot have any months of Part A only or Part B only enrollment.

B. The beneficiary cannot have any months of Medicare Health Plan (private) enrollment.

Only beneficiaries enrolled in the original Medicare FFS program under Parts A and B are eligible for assignment to an ACO participating in the Shared Savings Program. Those enrolled in a Medicare health plan, including beneficiaries enrolled in Medicare Advantage (MA) plans under Part C, eligible organizations under section 1876 of the Social Security Act, and Program of All-Inclusive Care for the Elderly (PACE) programs under section 1894 are not eligible. Medicare Secondary Payer (MSP) status does not exclude a beneficiary from assignment to an ACO.

C. Beneficiaries will be assigned to only one Medicare shared savings initiative.

Beneficiaries cannot be assigned to more than one Medicare shared savings initiative. For example, beneficiaries cannot be assigned to a Shared Savings Program ACO if they are associated with another Medicare shared savings initiative before the start of the ACO's performance year. Consequently, CMS will also exclude beneficiaries from each of the ACO's benchmark years if they are aligned to another Medicare shared savings initiative prior to establishment of the ACO's historical benchmark.

D. Beneficiary must live in the United States or U.S. territories and possessions.

CMS excludes beneficiaries who permanently reside outside of the United States or U.S. territories and possessions in the last available month of the benchmark or performance year assignment window. As these beneficiaries may have received care outside the U.S., Medicare claims may not be available. If a beneficiary was a U.S. resident in the last available month of the benchmark or performance year assignment window, CMS considers the beneficiary to be a U.S. resident for the entire period. CMS uses the same method (residency in the last available month of the assignment window) for quarterly preliminary prospective assignment lists for Track 1 and Track 2 ACOs. Similarly, CMS considers residency in the last available month of the quarter when performing quarterly exclusions for Track 1+ and Track 3 ACOs. U.S. residence includes the 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Northern Marianas.

E. Beneficiary must have received a primary care service from a physician at the ACO to which they are assigned.

To be eligible for claims-based assignment to an ACO, a beneficiary must have received at least one primary care service furnished by a qualifying physician used in assignment.¹ Qualifying physicians include the physician specialties listed in [Table 10](#) in [Appendix B](#) and practitioners who provide services at FQHCs or RHCs.

Note that beneficiaries who selected a primary clinician at an ACO and are assigned based on voluntary alignment are not required to receive a primary care service at that ACO.

F. Beneficiary must have received the largest share of his/her primary care services from the participating ACO.

If a beneficiary meets the screening criteria in Parts A through F, he or she is eligible for assignment to an ACO.

G. Beneficiary selected a primary clinician through [MyMedicare.gov](#).

CMS will assign a beneficiary to a participating ACO when the beneficiary selects a primary clinician at the ACO.

2.3 BENEFICIARY ASSIGNMENT PROCESS

Beneficiaries are assigned to an ACO either through voluntary alignment or through the two-step claims-based assignment process.

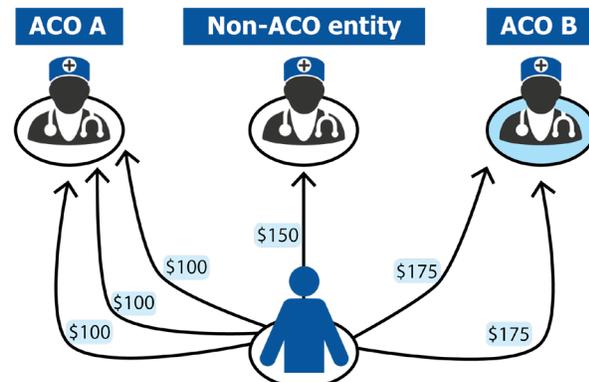
- **Voluntary Alignment:** CMS will assign a beneficiary to a participating ACO when the beneficiary selects a primary clinician at the ACO. If a beneficiary designates a primary clinician not on the ACO's participant list as his or her primary clinician, the beneficiary will

¹ Physicians utilized in assignment include primary care physicians specified under § 425.20 (internal medicine, general practice, family practice, geriatric medicine, or pediatric medicine) and physicians with primary specialty designations specified under § 425.402(c). These specialty designations include: (1) Cardiology, (2) Osteopathic manipulative medicine, (3) Neurology, (4) Obstetrics/gynecology, (5) Sports medicine, (6) Physical medicine and rehabilitation, (7) Psychiatry, (8) Geriatric psychiatry, (9) Pulmonary disease, (10) Nephrology, (11) Endocrinology, (12) Multispecialty clinic or group practice, (13) Addiction medicine, (14) Hematology, (15) Hematology/oncology, (16) Preventive medicine, (17) Neuro-psychiatry, (18) Medical oncology, and (19) Gynecology/oncology.

not be assigned to the ACO, even if the beneficiary would otherwise have been assigned to an ACO through claims-based assignment.

- **Claims-Based Assignment:** In performing claims-based assignment, CMS determines whether primary care physicians, non-physician practitioners, and/or practitioners providing services at an FQHC/RHC participating in an ACO have provided the plurality of a beneficiary's primary care services (as compared to another ACO, other individual practitioners, or groups of practitioners identified by TINs that are not participating in the Shared Savings Program).

- Step 1: CMS will assign a beneficiary to a participating ACO when the beneficiary receives at least one primary care service furnished by a primary care practitioner (primary care physician, nurse practitioner, physician assistant, clinical nurse specialist at the participating ACO, or a practitioner providing services at an FQHC/RHC) within the ACO (refer to [Table 9](#)), and more primary care services (measured by Medicare-allowed charges) furnished by primary care practitioners at the participating ACO than from the same type of providers at any other Shared Savings Program ACO, non-ACO CCN, or non-ACO individual or group TIN.²



Plurality of Primary Care Services

Plurality of primary care services is based on allowed charges. *Plurality* refers to a greater proportion of **primary care services** as measured in allowed charges *within the ACO* compared to primary care services *outside the ACO*. The plurality is determined by the total allowed charges for primary care services and can be less than a majority of the total number of primary care services provided. In this example, the beneficiary is assigned to **ACO B**, because ACO B provided the greatest amount of allowed charges.

Figure 1. Claims-based assignment is based on the plurality of allowed charges

[Table 11](#) lists specialty codes for ACO non-physician practitioners (nurse practitioners, clinical nurse specialists, or physician assistants) included in Claims-Based Assignment Step 1.

- Step 2: This step applies only to beneficiaries who have not received any primary care services from a primary care practitioner and were therefore not assigned in assignment Step 1. CMS will assign a beneficiary to a participating ACO in this step if the beneficiary received at least one primary care service from a specialist physician utilized in assignment (refer to [Table 10](#)) at the participating ACO, and more primary care services (measured by Medicare-allowed charges) from specialist physicians utilized in assignment at the participating ACO than from any other ACO, non-ACO CCN, or non-ACO individual or group TIN.

² As assigned by the U.S. Internal Revenue Service. There are two types of TINs: Social Security numbers and Employer Identification Numbers.

CMS will include TINs from the physician/supplier carrier claims file and other identifiers discussed below for Method II Critical Access Hospitals (CAHs), FQHCs, RHCs, and Electing Teaching Amendment (ETA) hospitals in the assignment algorithm using claims from the outpatient (institutional) file loaded in the IDR. [Appendix C](#) of this document contains details on how these other organization types will be identified in outpatient claims. These organizations may include either an ACO participant or a participant in a non-ACO organization.

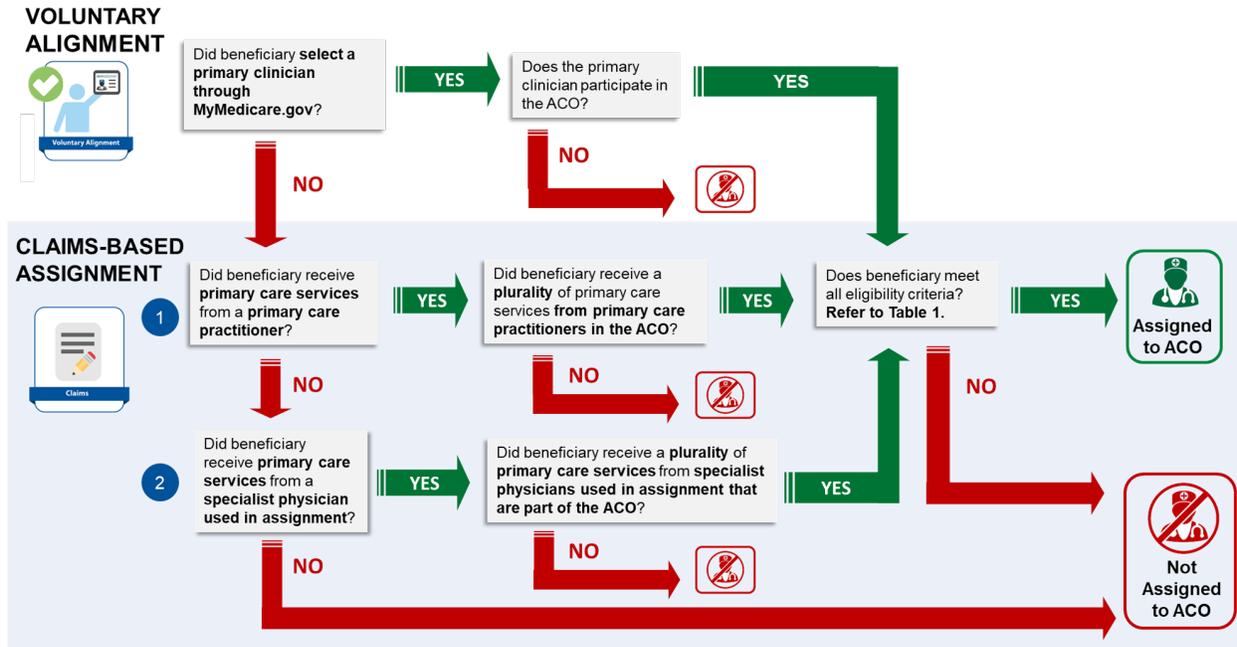


Figure 2. Voluntary Alignment and claims-based assignment process flow

For additional information related to assignment windows, primary care and specialty codes, and data used in the assignment methodology, please reference [Appendices A, B, and C](#). Also, as noted in [Table 9](#), beginning in 2017, CMS will not consider certain HCPCS codes in physician claims when the service is provided through a SNF to be primary care services for purposes of assignment. For performance years starting on January 1, 2019, and subsequent performance years, we no longer use the POS Code 31 to exclude claims, and in its place indicate more generally that CMS will exclude services billed under CPT codes 99304 through 99318 when such services are furnished through a SNF. Operationally, CMS will exclude professional services claims billed under CPT codes 99304 through 99318 from use in the assignment methodology when there is a SNF facility claim in our claims files with dates of service that overlap with the date of service for the professional service.

3 ACO PER CAPITA EXPENDITURES AND RISK ADJUSTMENT

This section describes how CMS will calculate per capita expenditures and risk scores for ACOs. This process begins after CMS completes beneficiary assignment, as described in

[Section 2](#) of this document. CMS performs separate calculations for each benchmark year, quarterly aggregate report, and performance year. Four key steps are reviewed in this section:

1. Calculating total Medicare Parts A and B expenditures for each beneficiary assigned to the ACO by Medicare enrollment type;
2. Calculating the fraction of the year during which each assigned beneficiary is enrolled in each Medicare enrollment type;
3. Calculating truncated, annualized expenditures and applying a completion factor; and
4. Calculating the weighted average of truncated, annualized expenditures for the ACO by Medicare enrollment type and weighting by the fraction of the year during which each beneficiary is enrolled in that Medicare enrollment type.

3.1 CALCULATING ACO-ASSIGNED BENEFICIARY EXPENDITURES

After CMS completes the beneficiary assignment process, it calculates expenditures for ACO-assigned beneficiaries separately for the following populations based on their Medicare enrollment type:

- ESRD: beneficiaries eligible for Medicare as a result of End-Stage Renal Disease (ESRD);
- Disabled: beneficiaries eligible for Medicare as a result of disability;
- Aged/dual-eligible: beneficiaries eligible for Medicare by age, and also eligible for Medicaid; or
- Aged/non-dual eligible: beneficiaries eligible for Medicare by age, but not eligible for Medicaid.

CMS will allocate eligible beneficiary months to each of these Medicare enrollment types, applying a hierarchy when determining monthly enrollment categories for each beneficiary. CMS will use Medicare paid amounts to calculate the ACO's benchmark and performance year expenditures. CMS will assign beneficiary expenditures separately in the following hierarchical order of Medicare enrollment type by month:

1. ESRD;
2. Disabled;
3. Aged/dual-eligible; or
4. Aged/non-dual eligible.

The Shared Savings Program identifies ESRD status based on Medicare enrollment/eligibility files. Beneficiaries meet the Medicare ESRD entitlement definition based on long-term dialysis or transplant status. Diagnoses codes on Medicare claims are not used as an indicator of whether a beneficiary is entitled to Medicare ESRD status. CMS does not use the 72x bill types (renal dialysis facilities) to determine whether a beneficiary is an ESRD beneficiary.

Beneficiaries on short-term dialysis are not defined as ESRD for Medicare eligibility purposes or in the Shared Savings Program. Additionally, beneficiaries greater than 3 months post-graft are not categorized as ESRD beneficiaries under the Shared Savings Program. This aligns with

how Medicare Advantage defines ESRD beneficiaries for purposes of CMS Hierarchical Condition Category (CMS-HCC) risk adjustment and how the CMS Office of the Actuary (OACT) defines ESRD beneficiaries. With respect to how the agency designates a beneficiary as ESRD, ESRD facilities are responsible for submitting Form 2728 data to CMS via the Consolidated Renal Operations in a Web-Enabled Network (CROWNWeb).³ This form must be completed within 45 days of the patient beginning or returning to dialysis treatment. Information in CROWNWeb supports the development of monthly ESRD status flags that are compiled in the final risk score file.

The Shared Savings Program identifies dual-eligible beneficiaries according to CMS' definitions of Medicare-Medicaid enrollees,⁴ including:

- Qualified Medicare Beneficiaries (QMBs) (referred to as having “partial-benefits”) and Qualified Medicare Beneficiaries plus full Medicaid or QMB-plus (referred to as having “full benefits”), identified in CMS data systems by dual status codes 01 and 02, respectively.
- Specified Low-Income Medicare Beneficiaries (SLMBs) plus full Medicaid or SLMB-plus, identified by dual status code 04.
- Other full benefit dual-eligible/Medicaid-only dual-eligible beneficiaries, identified by dual status code 08.

CMS distinguishes between the aged/dual-eligible and aged/non-dual eligible populations because CMS' models suggest these populations have significantly different expenditures. However, the ESRD and disabled categories include both dual-eligible and non-dual eligible beneficiaries because CMS models suggest these populations do not have significantly different levels of cost.

Step 1: Calculate total Medicare expenditures for each beneficiary assigned to the ACO.

For each beneficiary CMS assigns to an ACO, CMS will calculate total Medicare Parts A and B FFS expenditures for Shared Savings Program-eligible months from the inpatient, SNF, outpatient, carrier (physician/supplier Part B), DME, HHA, and hospice claims for each Medicare enrollment type. To calculate total Medicare FFS expenditures for each beneficiary enrolled in each Medicare enrollment type, CMS will sum expenditures (paid amounts) from all of the beneficiary's inpatient, SNF, outpatient, carrier (Part B), DME, HHA, and hospice claims at any provider. CMS will exclude denied payments and line items from the calculation.

Due to mandatory reductions in federal budgetary resources—known as sequestration—required by the Budget Control Act of 2011, when determining expenditures for quarterly and annual reports, CMS will adjust Parts A and B expenditures from April 1, 2013 onward to include the amount of payment withheld due to sequestration. [Table 2](#) contains a list of the variables CMS will use to determine the expenditure amount and denied line items or denied claims. CMS will also include individually identifiable payments made for beneficiaries under a demonstration, pilot, or time-limited program (e.g., care coordination payments) that are final and not subject to further reconciliation. CMS will remove Indirect Medical Education (IME) payments and Disproportionate Share Hospital (DSH) payments, including uncompensated care payments, from total expenditures. Since Maryland hospitals receive payment outside the inpatient

³ Refer to [CMS Form 2728](#).

⁴ Refer to [“Defining Medicare-Medicaid Enrollees in CMS Data Sources”](#) (Version date: February 16, 2017)

prospective payment system, these hospitals do not directly receive IME and DSH payments from Medicare. Therefore, the Shared Savings Program does not adjust for IME/DSH payments to Maryland hospitals. Pass-through payments are also excluded from expenditures. Pass-through payments include, but are not limited to, graduate medical education, kidney acquisition costs, and bad debt.

Shared Savings Program expenditure calculations will include Medicare claim payment adjustments resulting from incentive payment programs, including the Value-Based Payment Modifier, Hospital Value-Based Purchasing (VBP), and the Merit-based Incentive Payment System (MIPS). Advanced Alternative Payment Model (Advanced APM) lump sum incentive payments to qualified participants participating in Track 1+, Track 2, or Track 3 ACOs or other eligible programs will not be included in ACO expenditures.

In calculating expenditures for annual reports, CMS will allow up to 3 months after the end of the performance year for claims to run out. CMS will apply a completion factor, provided by OACT, to complete claims to 100 percent because generally claims will be approximately 98–99 percent complete at this time. For the quarterly aggregate reports, CMS will use up to a 7-day claims run-out period, depending on data availability, and apply a completion factor provided by OACT.

3.2 ANNUALIZING ASSIGNED BENEFICIARY EXPENDITURES

After CMS sums an ACO’s assigned beneficiaries’ expenditures for each Medicare enrollment type, CMS annualizes the expenditures by dividing them by the fraction of months in the year during which the beneficiary was enrolled in each Medicare enrollment type. All further analyses weight the annualized expenditures by this same fraction.

Annualization and weighting ensure that payments are correctly adjusted for months of beneficiary eligibility, including new Medicare enrollees and beneficiaries who die, and enables CMS to truncate outlier expenditures.

Table 2. Variables used in total beneficiary expenditure calculations

EXPENDITURE COMPONENT	PAYMENT IS EQUAL TO:	CLAIM DENIED IF LEFT JUSTIFIED VALUE IS:	LINE ITEM DENIED IF:	CLAIM THROUGH DATE
SNF (Claim type = 20, 30)	Claim payment amount	Any non-blank value for 'Claim Medicare Non-Payment reason code'	N/A	Claim through date
Inpatient (Claim type = 60)	Claim payment amount (excluding IME and DSH amounts)	Any non-blank value for 'Claim Medicare Non-Payment reason code'	N/A	Claim through date
Outpatient (Claim type= 40)	Claim payment amount	Any non-blank value for 'Claim Medicare Non-Payment reason code' Claim Billing Facility Type Code in (4, 5)	N/A	Claim through date

EXPENDITURE COMPONENT	PAYMENT IS EQUAL TO:	CLAIM DENIED IF LEFT JUSTIFIED VALUE IS:	LINE ITEM DENIED IF:	CLAIM THROUGH DATE
Home Health Agency (Claim type = 10)	Claim payment amount	Any non-blank value for 'Claim Medicare Non-Payment reason code' Claim Billing Facility Type Code in (4, 5)	N/A	Claim through date
Carrier (physician/supplier Part B) (Claim type = 71, 72)	Line NCH payment amount	'Carrier Claim Payment Denial Code' = '0' or 'D' through 'Y'	Line processing indicator code ≠ 'A,' 'R,' or 'S'	Line latest expense date
DME (Claim type = 81, 82)	Line NCH payment amount	'Carrier Claim Payment Denial Code' = '0' or 'D' through 'Y'	Line processing indicator code ≠ 'A,' 'R,' or 'S'	Line latest expense date
Hospice (Claim type = 50)	Claim payment amount	Any non-blank value for 'Claim Medicare Non-Payment reason code'	N/A	Claim through date

NOTE: Details on variables are available on the [Research Data Assistance Center website](#) .

Step 2: Calculate the fraction of the year during which each assigned beneficiary is enrolled in each Medicare enrollment type.

In this step, CMS calculates the number of months the beneficiary was enrolled in Medicare Parts A and B for each Medicare enrollment type. A beneficiary is enrolled in Medicare Parts A and B when the Medicare entitlement/Buy-in Indicator for the month in the Medicare enrollment files is equal to 3⁵ or C.⁶ CMS will then take the number of months during which the beneficiary is enrolled in each Medicare enrollment type and divide it by 12 (the number of months in a calendar year). CMS will use this fraction to annualize beneficiary expenditures in the next step. When CMS sums the fraction of the year enrolled in Medicare for all the beneficiaries assigned to the ACO, the result is the total person years for the ACO's assigned beneficiaries within the year. Person years are used to calculate the ACO's benchmark expenditures and to determine shared savings or losses.

Step 3: Calculate annualized expenditures.

CMS calculates annualized expenditures for each beneficiary assigned to the ACO according to Shared Savings Program-eligible months spent in each Medicare enrollment type. To annualize a beneficiary's expenditures, CMS will divide the total expenditures in the applicable months by the fraction of the year during which the beneficiary is enrolled in each Medicare enrollment type.

⁵ 3 = Medicare Parts A and B both

⁶ C = Medicare Parts A and B, and State Buy-In

3.3 TRUNCATING, APPLYING COMPLETION FACTOR, AND WEIGHTING ASSIGNED BENEFICIARY EXPENDITURES

After calculating annualized expenditures for each beneficiary assigned to the ACO, CMS will truncate annualized expenditures to an established threshold for beneficiaries whose annualized expenditures are greater than the threshold.

Step 4: Truncate annualized expenditures and apply completion factor.

CMS completes this step to prevent a small number of extremely costly beneficiaries from significantly affecting the ACO's per capita expenditures. For all beneficiaries, the threshold will be the national un-weighted 99th percentile of annualized expenditures for assignable beneficiaries by Medicare enrollment type, verified by OACT. The 99th percentile for ESRD beneficiaries is typically much higher than that of aged and disabled beneficiaries.

Similarly, CMS will truncate annualized negative expenditures. A negative payment amount may occur in two situations: when a beneficiary is charged the full Medicare deductible during a short inpatient stay and the deductible exceeds the amount Medicare pays, or when a beneficiary is charged a coinsurance amount during a long stay and the coinsurance amount plus deductible exceeds the amount Medicare pays. For a relatively low weight diagnosis-related group, the deductible plus coinsurance can exceed the Medicare diagnosis-related group payment amount. Medicare records the payment as a negative number on the claim and deducts the amount from the provider payment at the time it is sent. The beneficiary does not receive the excess. Negative annualized expenditures will be truncated at the applicable negative truncation threshold (i.e., the negative of the national un-weighted 99th percentile of annualized expenditures) by enrollment type.

Once expenditures are annualized and truncated, the appropriate completion factor is applied to expenditures. OACT calculates the nominal annualized expenditure truncation thresholds based on uncompleted claims. To be consistent with annualized expenditures, the uncompleted claims are truncated, and then the truncated claims are completed.

Example: Applying Completion Factor to Annualized and Truncated Expenditures

If annualized expenditures exceed the truncation threshold, the threshold amount is used—otherwise annualized expenditures are used.

- Year: 2017
- Medicare Enrollment Type: Aged/Dual
- Truncation Threshold (2017): \$189,563.38
- Completion factor with 3-month run-out: 1.013

- If annualized Aged/Dual expenditures: \$20,000
 - Annualized Expenditure × Completion Factor*
 - $\$20,000 \times 1.013 = \$20,260$

- If annualized Aged/Dual expenditures: \$200,000
 - Aged/Dual Truncation Threshold × Completion Factor*
 - $\$189,563.38 \times 1.013 = \$192,027.70$

Step 5: Calculate weighted average of truncated annualized expenditures for the ACO by Medicare enrollment type, weighting by the fraction of the year during which each beneficiary is enrolled in each Medicare enrollment type.

Once CMS has annualized and truncated expenditures for each assigned beneficiary's months in each Medicare enrollment type, CMS calculates weighted mean annualized expenditures. This yields per capita expenditures for the ACO for each Medicare enrollment type. CMS will weight ACO per capita expenditures for each Medicare enrollment type by the fraction of the year during which the beneficiary is enrolled in Medicare in each enrollment type. Therefore, beneficiaries for whom CMS has less than a year's worth of expenditures do not contribute equally to ACO per capita expenditures as compared to beneficiaries for whom CMS does have a full year of expenditure data.

CMS calculates the per capita expenditures for the ACO according to the following methodology. CMS uses truncated annualized Medicare expenditures as described above for each beneficiary for their Shared Savings Program-eligible months in each Medicare enrollment type and multiplies by each beneficiary's fraction of the year enrolled in each Medicare enrollment type (refer to the example below). CMS uses these ACO per capita expenditures to calculate shared savings and losses.

For example, CMS calculates this value for all beneficiaries in the disabled population assigned to the ACO, and then sums all these values and divides by the total number of person years in the disabled population assigned to the ACO. The beneficiary in the example would count as half of a person year for purposes of this calculation.

Example: Accounting for amount of time in Medicare enrollment type

Medicare enrollment type and duration: Disabled, 6 months

Annualized expenditures: \$12,500

Person years: 0.5

$$\mathbf{\$12,500 \times (0.5) = \$6,250}$$

3.4 RISK ADJUSTMENT

3.4.1 RISK ADJUSTMENT FOR ESTABLISHING THE HISTORICAL BENCHMARK

When establishing the historical benchmark, CMS will use the CMS-HCC prospective risk adjustment model to calculate beneficiary risk scores to adjust for changes in the health status of the population assigned to the ACO. These adjustments will account for changes in case mix between the first and third benchmark years and between the second and third benchmark years. Note that data used for the quarterly reports will not be risk-adjusted.

CMS maintains the CMS-HCC prospective risk adjustment models for the MA program. CMS calculates CMS-HCC risk scores for all Medicare beneficiaries, including FFS beneficiaries. For the benchmark and performance years, CMS will apply the MA risk adjustment model that exists for the current applicable year. CMS will remove the MA coding intensity adjustment in the applicable years and renormalize the risk scores by enrollment type based on a national assignable FFS population. For each beneficiary, CMS will use the final risk score for each month that the beneficiary is in a particular Medicare enrollment type used in the Shared Savings Program (ESRD, disabled, aged/dual-eligible, aged/non-dual eligible) to calculate the beneficiary's average risk score for that enrollment type for a given year. Risk adjustment

eligible diagnoses codes from final action FFS claims (inpatient, outpatient, and physician) are included in the CMS-HCC risk scores for FFS beneficiaries. Risk adjustment eligible diagnoses from these settings are considered in risk score calculation, including primary and secondary diagnoses codes. Additional information on the calculation of CMS-HCC risk scores can be found in Chapter 7 of the [Medicare Managed Care Manual](#).

A beneficiary's final risk score for each month is the risk score determined for that beneficiary based on the beneficiary's risk adjustment model status for that month. There are risk adjustment models for MA subpopulations, which include community versus institutional residence, new versus continuing Medicare enrollee status, ESRD versus aged versus disabled entitlement status, ESRD dialysis versus transplant versus functioning graft status, and full benefit dual-eligible versus partial benefit dual-eligible versus non-dual eligible. Therefore, the risk scores used for beneficiaries in a Shared Savings Program enrollment status (e.g., aged/non-dual eligible) may be derived from more than one risk adjustment model (e.g., community model versus institutional model versus new enrollee model).

A beneficiary's average risk score for a particular Medicare enrollment type for a given year will be renormalized to ensure that the mean national assignable FFS risk score for that enrollment type for that year equals 1.0. This adjustment ensures consistency in the FFS risk score year to year since risk adjustment models are refined and updated over time by CMS. Risk adjustment model statuses may not be the same across all years (e.g., aged, disabled, community-residing beneficiary). Additionally, to account for changes in health status of assigned beneficiaries between the benchmark and performance years, the historical benchmark is updated during financial reconciliation using performance year risk scores, rather than risk adjusting payments at the beginning of the year. CMS will not risk-adjust the projected absolute amount of growth in national per capita expenditures for Parts A and B services under the original FFS program used to update the benchmark during the ACO's first agreement period. CMS will add this flat dollar amount of growth to the risk-adjusted benchmark expenditures. However, in updating benchmarks for second or subsequent agreement periods beginning in 2017 and onward, CMS will risk-adjust the county-level expenditures used in calculating regional growth rates.

3.4.2 PERFORMANCE YEAR RISK ADJUSTMENT FOR NEWLY AND CONTINUOUSLY ASSIGNED BENEFICIARIES

When determining risk adjustment for newly or continuously assigned beneficiaries, CMS uses the risk adjustment methodology described in [Section 3.4.1](#). For each aged/disabled Medicare enrollment type used in the Shared Savings Program (disabled, aged/dual-eligible, aged/non-dual eligible), normalized risk scores are renormalized each year by dividing by the national assignable FFS mean demographic normalized risk score for that year for that enrollment type. ESRD-normalized risk scores for each year are renormalized by dividing by the ESRD national assignable FFS mean demographic normalized risk score for that year. These renormalized risk scores are used in financial reconciliation.

Normalized risk scores for each demographic category are calculated by dividing predicted expenditures for the category by the weighted mean expenditures of the relevant model's calibration sample. The demographic risk score is a risk score based on certain demographic attributes that do not vary with the beneficiary's health condition. Demographic risk adjustment categories are based on combinations of age, sex, Medicaid status, and original reason for Medicare entitlement. For both the aged/disabled and ESRD demographic risk adjustment

models, CMS uses a calibration sample to predict expenditures for different demographic categories of beneficiaries.

- For years prior to 2013, CMS uses the MA demographic risk adjustment models for aged/disabled and ESRD new Medicare enrollees to determine demographic risk scores used in the risk adjustment methodology.
- Beginning with 2013, the MA program restricted the samples used to calibrate its new Medicare enrollee models to beneficiaries newly enrolled in Medicare. Because the Shared Savings Program's calculation of demographic risk scores is not limited to beneficiaries who are newly enrolled in Medicare, for years 2013 and beyond, CMS uses a modified version of the MA aged/disabled and ESRD demographic models in order to calculate demographic factors for the entire Medicare population. The Shared Savings Program's demographic models are calibrated on 100 percent samples of the entire Medicare FFS population.

When determining if a beneficiary is newly or continuously assigned, CMS uses the same claims-based assignment eligibility requirements (as described in [Section 2.2](#)) and uses the ACO Participant List applicable for the performance year. During the assignment window for the most recent prior benchmark or performance year, if a beneficiary does not meet the eligibility criteria, he or she would be considered ineligible for assignment and considered newly assigned. The only differences between years are the parameter inputs used that reflect the current performance year, and more specifically, parameter inputs that include dates, the list of HCPCS codes used to define primary care services, the list of physician specialties used in assignment, and the ACO Participant List used to identify ACO participants. We use the current performance year ACO Participant List to determine visits with a primary care physician, a physician included in Step 2 of claims-based assignment, or a practitioner providing services at an FQHC/RHC participating in an ACO when identifying primary care services at the ACO in prior benchmark or performance years.

- **Newly assigned beneficiary:** a beneficiary assigned in the current performance year who neither was assigned to nor received a primary care service from any of the ACO's participants during the assignment window for the most recent prior benchmark or performance year.
- **Continuously assigned beneficiary:** a beneficiary assigned in the current performance year who either was assigned to or received a primary care service from any of the ACO's participants during the assignment window for the most recent prior benchmark or performance year.

CMS categorizes beneficiaries as ESRD, disabled, aged/dual-eligible and aged/non-dual eligible based on eligibility on a monthly basis. In each performance year, CMS will adjust the ACO's benchmark to account for changes in health status and demographic factors for newly assigned and continuously assigned beneficiaries. CMS will make these adjustments separately for each Medicare enrollment type. CMS will restate the ACO's updated historical benchmark in the appropriate performance year risk to recognize changes in the level of risk among the ACO's assigned beneficiaries.

For each performance year, CMS will use separate methodologies to risk-adjust the benchmark for newly assigned and continuously assigned beneficiaries. For newly assigned beneficiaries,

CMS will use the CMS-HCC prospective risk scores to adjust for changes in severity and case mix arising from this population's risk scores.

For the ACO's continuously assigned beneficiaries, CMS will calculate:

1. CMS-HCC prospective risk scores, and
2. Demographic scores.

CMS will then determine at the aggregate level (rather than within each Medicare enrollment type) whether a prospective CMS-HCC or demographic risk adjustment will be used for the continuously assigned population. CMS will calculate risk ratios for each continuously assigned beneficiary population in each Medicare enrollment type based on their CMS-HCC scores and demographic risk scores for the performance year relative to BY3. CMS will weight the risk ratios for each Medicare enrollment type relative to their respective person years and per capita benchmark dollars to obtain an overall dollar weighted average risk ratio. If the overall CMS-HCC risk ratio is less than one—thereby indicating the average HCC score for the continuously assigned beneficiaries has fallen relative to BY3—CMS applies CMS-HCC ratios to the continuously assigned population within each Medicare enrollment type. Alternatively, if the overall risk ratio is greater than or equal to one, then the demographic ratios are applied to the continuously assigned population within each Medicare enrollment type.

CMS will then update the ACO's historical benchmark risk scores for the continuously and newly assigned populations within each Medicare enrollment type based on the ratio of CMS-HCC or a combination of CMS-HCC and demographic scores in the performance period relative to BY3.

4 SHARED SAVINGS AND LOSSES CALCULATIONS

This section describes how CMS will calculate an ACO's historical benchmark, adjust and update the historical benchmark, and calculate annual ACO shared savings and shared losses during a Shared Savings Program agreement period.

CMS uses PY1, PY2, and PY3 to denote the 3 performance years of the Shared Savings Program agreement period, and in discussing ACO performance, CMS refers to the corresponding performance period to be clear. CMS uses BY1, BY2, and BY3 to denote the 3 years CMS uses to calculate the ACO's historical benchmark or rebased historical benchmark.

At the start of the agreement period, CMS provides ACOs with information on their benchmark values by issuing preliminary benchmark reports. After completion of the 3-month claims run-out period of the most recent benchmark year, CMS provides final benchmark reports to ACOs in the first performance year of an agreement period. This occurs approximately 6 months into the first performance year in order to allow time for claims run-out and production. Each subsequent performance year, shortly after the beginning of the year, CMS will recalculate (adjust) the historical benchmark to account for changes in an ACO's certified ACO Participant List or regulatory changes related to assignment or benchmarking methodology.

 **IMPORTANT**

An ACO's benchmark can change throughout its participation in the Shared Savings Program.

- **Establish:** An ACO's historical benchmark is established near the start of the ACO's first agreement period.
- **Adjust:** An ACO's historical benchmark is adjusted annually to account for changes in the ACO's certified ACO Participant List or if there are regulatory changes to the Shared Savings Program's assignment or benchmarking methodology. If there are no ACO Participant List or regulatory changes, the benchmark will not be adjusted.
- **Update:** An ACO's benchmark is updated during annual financial reconciliation to reflect trends in national or regional FFS spending and to account for changes between the benchmark and performance year assigned beneficiary health status.
- **Rebase:** An ACO's benchmark is reset at the start of a new agreement period.

There are differences between the methodology used to establish the ACO's first agreement period historical benchmark and the methodology used to reset (or rebase) an ACO's second or subsequent agreement period historical benchmark. The following sections will further describe these differences.

4.1 CALCULATING BENCHMARKS FOR ACOs IN THEIR FIRST AGREEMENT PERIOD

This section describes the methodologies used to calculate the historical benchmark and updated historical benchmark for any ACO in its first agreement period.

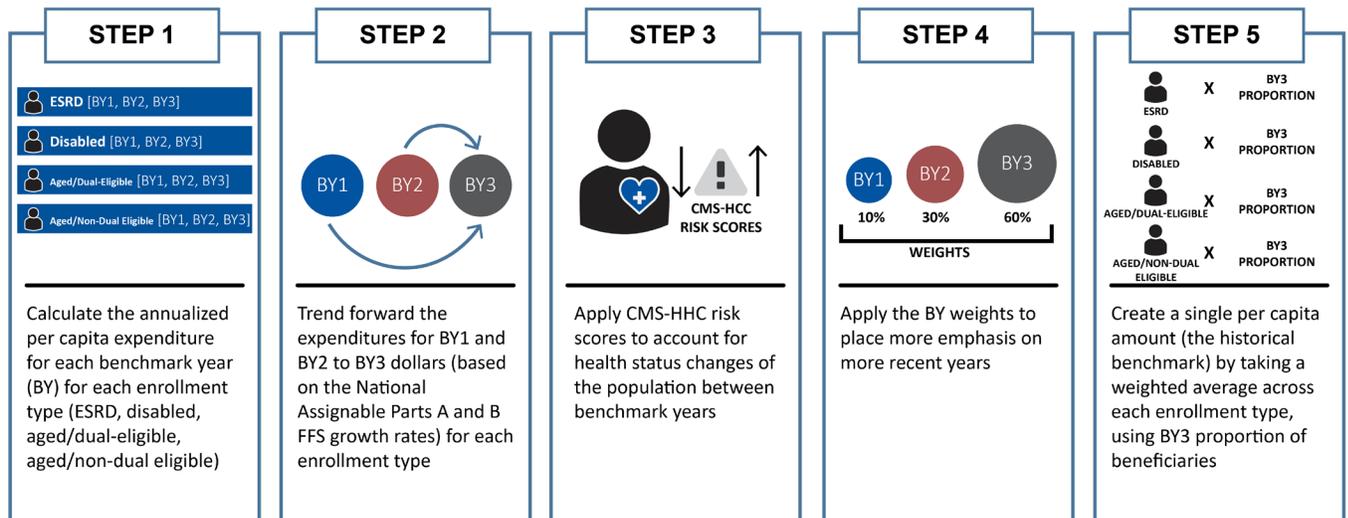


Figure 3. Establishing the historical benchmark in the first agreement period

4.1.1 CALCULATING THE HISTORICAL BENCHMARK FOR ACOs IN THEIR FIRST AGREEMENT PERIOD

For each ACO, CMS calculates the 3-year average per capita benchmark using expenditures for beneficiaries who would have been assigned to the ACO in each of the 3 calendar years prior to the start of the ACO's agreement period.

First, CMS calculates the ACO's assigned beneficiary annualized per capita expenditures for each of the 3 benchmark years (BY1–BY3) for the ESRD, disabled, aged/dual-eligible and aged/non-dual eligible populations by summing Parts A and B FFS expenditures for months spent in each Medicare enrollment type and dividing by the fraction of the year spent in the Medicare enrollment type. CMS will include individually identifiable final payments from the Medicare Trust Funds made for beneficiaries under a demonstration, pilot, or time-limited program, such as care coordination fees, in the ACO's benchmark. CMS will truncate expenditures at the national un-weighted 99th percentile of annualized expenditures for assignable beneficiaries.

CMS will trend forward the per capita dollars of expenditures for beneficiaries assigned in BY1 and BY2 to BY3 dollars based on the national average growth rate in Parts A and B FFS expenditures for assignable beneficiaries in the national FFS population verified by OACT. CMS will identify the OACT national assignable FFS expenditures by ESRD, disabled, aged/dual-eligible, and aged/non-dual eligible populations and will calculate separate growth factors for each Medicare enrollment type.

To risk-adjust the benchmark expenditures, CMS uses renormalized CMS-HCC risk scores for the ESRD, disabled, aged/dual-eligible and aged/non-dual eligible assigned populations for each ACO. CMS restates the BY1 and BY2 expenditures in BY3-assigned beneficiary level of risk by calculating and applying risk ratios of the BY3 risk score divided by each year's (i.e., BY1, BY2, BY3) risk score.

CMS will apply the benchmark year weights to the trended, risk-adjusted expenditures for the ESRD, disabled, aged/dual-eligible, and aged/non-dual eligible populations. BY1 has a weight of 10 percent, BY2 has a weight of 30 percent, and BY3 has a weight of 60 percent. This will give CMS the weighted average annual per capita expenditures for each population.

CMS will then weight the final benchmark to reflect the BY3 proportions of the ACO-assigned beneficiary populations that are ESRD, disabled, aged/dual-eligible, and aged/non-dual eligible beneficiaries. CMS will state the ACO's historical benchmark as a single per capita amount.

4.1.2 CALCULATING THE ADJUSTED BENCHMARK BASED ON PARTICIPANT LIST CHANGES FOR ACOs IN THEIR FIRST AGREEMENT PERIOD

For an ACO in its first agreement period, CMS will recalculate the historical benchmark using the same methodology described in [Section 4.1.1](#) and based on the same 3 benchmark years (prior to the start of its agreement period) to account for changes in the ACO Participant List certified prior to the start of each performance year. The result is an adjusted historical benchmark. The finalized historical benchmark, either the benchmark issued during

IMPORTANT

If an ACO does not make changes to its ACO Participant List, and if there are no regulatory changes, it will not have an adjusted benchmark.

the ACO's first performance year or the adjusted historical benchmark (in the event the ACO finalizes ACO Participant List changes effective for the performance year), will be used to produce the updated historical benchmark for determining shared savings/losses for the relevant performance year.

4.1.3 CALCULATING THE UPDATED HISTORICAL BENCHMARK FOR ACOs IN THEIR FIRST AGREEMENT PERIOD

CMS calculates the updated historical benchmark expenditures for each performance year in an ACO's first agreement period as the sum of risk-adjusted historical benchmark expenditures and the flat dollar amount equal to the projected absolute amount of growth in national per capita expenditures for Parts A and B services for assignable beneficiaries under the original FFS program from the benchmark to the performance year.

To calculate the updated historical benchmark, CMS first risk-adjusts the historical benchmark expenditures calculated in [Section 4.1.1](#) or [4.1.2](#) for each Medicare enrollment type (i.e., ESRD, disabled, aged/dual-eligible, aged/non-dual eligible) using the method described in [Section 3.4.2](#) that accounts separately for newly and continuously assigned beneficiaries. CMS then determines the national projected absolute amount of growth in per capita expenditures among assignable beneficiaries for each Medicare enrollment type. CMS will add this flat dollar amount to the risk-adjusted historical benchmark expenditures from above. For example, CMS would add the aged/dual-eligible national amount of growth from historical benchmark to performance year to the aged/dual-eligible risk-adjusted portion of the historical benchmark.

The overall updated historical benchmark for a performance year is the weighted average of per capita expenditures for each of the Medicare enrollment types. To obtain the updated historical benchmark for a performance year, CMS will take a weighted average of ESRD, disabled, aged/dual-eligible and aged/non-dual eligible updated benchmark expenditures, using the performance year ACO-assigned beneficiary proportions of ESRD, disabled, aged/dual-eligible and aged/non-dual eligible person years. The updated historical benchmark will be provided in the Financial Reconciliation Report and will show the calculation of shared savings eligibility.

4.2 CALCULATING BENCHMARKS FOR ACOs THAT ENTERED A SECOND AGREEMENT PERIOD IN 2016 ONLY

The first step in calculating annual shared savings and losses for a performance year in an ACO's second or subsequent agreement periods is to calculate a rebased, or reset, benchmark that is based on 3-year historical average benchmark expenditures for assigned beneficiaries in the 3 years preceding the new agreement period. The steps used to calculate an ACO's rebased historical benchmark, as well as to adjust the rebased historical benchmark or update the rebased historical benchmark, will depend on the year in which the ACO is entering its second agreement period. This section describes the methodologies that apply for the second agreement period only for ACOs that first entered the Shared Savings Program in 2012 or 2013 and renewed for a second agreement period beginning in 2016.

4.2.1 CALCULATING THE REBASED HISTORICAL BENCHMARK: 2016 RENEWALS

The methodology used to calculate the rebased historical benchmark for ACOs that entered a second agreement period in 2016 (i.e., the PY 2016 rebased benchmark) is the same as the

methodology described in [Section 4.1.1](#) above for an ACO in its first agreement period, with two exceptions.

- First, CMS will apply equal weights to the benchmark years' trended, risk-adjusted expenditures for the ESRD, disabled, aged/dual-eligible, and aged/non-dual eligible populations. That is, each benchmark year will be weighted one-third, rather than using weights of 10 percent, 30 percent, and 60 percent for BY1, BY2, and BY3, respectively.
- Second, CMS will use data from the ACO's finalized financial reconciliation reports for the performance years that correspond to the current benchmark years (i.e., 2013, 2014, and 2015) to calculate an adjustment for savings generated in the prior agreement period. The calculation will include the following steps (which are also illustrated in [Table 3](#)).

Step 1. Determine whether the ACO generated net savings.

For each performance year, CMS will determine an average per capita amount reflecting the quotient of the ACO's total updated historical benchmark expenditures minus total performance year expenditures divided by performance year assigned beneficiary person years. However, the ACO's total updated historical benchmark expenditures minus total performance year expenditures may not exceed the performance payment limit for the relevant track. The limit on the adjustment for prior savings is calculated under a different methodology than the cap that is applied to shared savings payments during financial reconciliation for a performance year. The calculations are intentionally different to accomplish two separate functions within the Shared Savings Program.

The goal of the prior savings adjustment is to make an ACO's rebased historical benchmark more reflective of the total cost of care for an ACO's assigned beneficiaries during the prior agreement period. Additionally, it encourages continued participation in subsequent agreement periods, while preventing situations in which the reset benchmark becomes overly inflated based on prior performance to the point where an ACO needs to do little to maintain or change its care practices to generate shared savings. In contrast, the shared savings cap avoids giving ACOs incentives for inappropriate reductions in utilization and expenditures, while rewarding performance for lowering growth in expenditures and meeting quality performance standards.

If the sum of the three performance year per capita amounts is positive, the ACO is determined to have net savings and CMS will proceed with Steps 2 and 3 below. If the sum of the three performance year per capita amounts is zero or negative, CMS will not make any adjustment to the ACO's rebased benchmark to account for any savings the ACO may have generated under its prior agreement period.

Step 2. Calculate an average per capita amount of savings reflecting the ACO's final sharing rates based on quality performance.

CMS will average the performance year per capita amounts determined in Step 1 above to determine the average per capita amount for the agreement period. CMS will also determine the ACO's average final sharing rate based on an average of the ACO's quality performance in each performance year of the agreement period. Therefore, the average per capita amount of savings will account for those situations where an ACO's sharing rate for a performance year is set equal to zero (based on the ACO's failure to meet the quality performance standard for that year). CMS will then calculate an average per capita amount of savings, which is the product of

the average performance year per capita amount and the average final sharing rate based on quality performance.

Step 3. Add the average per capita amount of savings determined in Step 2 to the ACO’s rebased historical benchmark.

The additional per capita amount will be applied to the ACO’s rebased historical benchmark for a number of assigned beneficiaries (expressed as person years) not to exceed the average number of assigned beneficiaries (expressed as person years) under the ACO’s first agreement period. Imposing this limit ensures that the adjustment does not exceed the amount of net savings generated by the ACO during the first agreement period due to ACO Participant List changes that may have increased the number of assigned beneficiaries in the second agreement period.

Note that ACOs with an agreement start date of April 1, 2012, or July 1, 2012, had a first performance year spanning a 21-month or 18-month period (respectively), concluding on December 31, 2013. In calculating the average per capita amount of savings for these ACOs, CMS will use Calendar Year 2013 data from the PY1 final financial reconciliation for these ACOs to align with the same 12-month period for the corresponding benchmark year under their second agreement.

Table 3. Hypothetical performance data - incorporating savings into rebased benchmark

CATEGORY	PY1	PY2	PY3	AVERAGE
A. Person years	31,024	32,579	32,463	32,022 (average of A for PY1, PY2, PY3)
B. Total benchmark expenditures minus total expenditures	\$19,265,778.00	(\$8,470,676.00)	\$21,824,075.00	—
C. Per capita total benchmark minus total expenditures (C = B/A)	\$621.00	(\$260.00)	\$672.28	\$344.42 (average of C for PY1, PY2, PY3)
D. Final sharing rate	50%	0%	40%	30% (average of D for PY1, PY2, PY3)
E. Average per capita amount to add to rebased historical benchmark	—	—	—	\$103.33 (E = average C * average D)

4.2.2 CALCULATING THE ADJUSTED REBASED HISTORICAL BENCHMARK BASED ON PARTICIPANT LIST CHANGES: 2016 RENEWALS

CMS will recalculate the rebased historical benchmark using the same methodology described in [Section 4.2.1](#) above and based on the same 3 benchmark years (prior to the start of its current agreement period) to account for changes in the ACO’s certified ACO Participant List. The result is an adjusted rebased historical benchmark.

4.2.3 CALCULATING THE UPDATED REBASED BENCHMARK: 2016 RENEWALS

For ACOs that started a second agreement period in 2016, CMS will calculate the updated rebased benchmark expenditures for each performance year in the second agreement period as the sum of risk-adjusted rebased benchmark expenditures (prior to the application of any adjustment for prior agreement period savings) and the flat dollar amount equal to the projected absolute amount of growth in national per capita expenditures for Parts A and B services for assignable beneficiaries under the original FFS program from the benchmark to the performance year, as described in [Section 4.1.3](#) for ACOs in their first agreement period. The adjustment for prior period savings will then be applied to the updated benchmark. The finalized rebased (issued during the ACO's first performance year of its second agreement period) or adjusted rebased (in the event the ACO finalizes ACO Participant List changes effective for the performance year) historical benchmark will be used to produce the updated rebased historical benchmark for determining shared savings/losses for the relevant performance year. The adjustment for savings generated in the ACO's first agreement period (described in [Section 4.2.1](#)) will be applied to the ACO's rebased historical benchmark adjusted for changes in its ACO Participant List.

4.3 CALCULATING BENCHMARKS FOR ACOs ENTERING A SECOND AGREEMENT PERIOD IN 2017, 2018, OR JANUARY 1, 2019

This section describes the methodologies used to calculate the rebased historical benchmark and to adjust and update the rebased historical benchmark for ACOs entering their second agreement period in 2017, 2018, or January 1, 2019.

4.3.1 DETERMINING REGIONAL FFS EXPENDITURES

The ACO's regional service area is defined as all counties in which one or more beneficiaries assigned to the ACO reside (§ 425.20).

To determine factors based on regional FFS expenditures used in benchmark calculations for second agreement periods beginning in 2017, 2018, or January 1, 2019, CMS does the following:

- 1. Determines truncated, risk-adjusted county-level Parts A and B expenditures for assignable beneficiaries.**

CMS determines county FFS expenditures based on the expenditures of the assignable population of beneficiaries in each county, where assignable beneficiaries are identified for the 12-month period corresponding to the applicable calendar year (refer to [Appendix C](#)). In calculating expenditures for the assignable population, CMS will allow 3 months after the end of the calendar year for claims to run out, and will apply a completion factor provided by OACT to complete claims to 100 percent.

For each assignable beneficiary in a county, CMS will compute annualized, truncated expenditures for each enrollment type (ESRD, disabled, aged/dual-eligible, aged/non-dual eligible). CMS will then calculate the weighted average of the truncated annualized expenditures for the county, weighting by the fraction of the year that each assignable beneficiary is enrolled in each Medicare enrollment type.

CMS adjusts county FFS expenditures for severity and case mix of assignable beneficiaries in the county using CMS-HCC prospective risk scores (as described below). Therefore, CMS will determine the CMS-HCC prospective risk score for each assignable beneficiary for each Medicare enrollment type (ESRD, disabled, aged/dual-eligible, and aged/non-dual eligible) and compute weighted average CMS-HCC prospective risk scores for each county for each Medicare enrollment type, again using beneficiary eligibility fractions as weights.

When calculating assignable beneficiary annualized truncated expenditures, CMS-HCC risk scores, and Medicare enrollment type eligibility fractions, CMS will only consider months in which the beneficiary is enrolled in both Part A and Part B and is not enrolled in a Medicare health plan. For example, if a beneficiary with disabled status is enrolled in both Part A and Part B and not enrolled in a Medicare health plan for the first 6 months of the year but enrolled in a Medicare health plan for the second 6 months of the year, his/her disability eligibility fraction would be equal to 0.5 (6/12) and his/her annualized truncated expenditures and CMS-HCC risk score would be computed based only on the first 6 months of the year.

Note that county-level expenditure and risk score data will be publicly released by CMS annually in the summer following the conclusion of the calendar year to which the data relates.

2. Determines the counties of residence for the ACO's assigned population to establish the ACO's regional service area.

CMS will determine the ACO's regional service area using beneficiary assignment for the relevant benchmark or performance year.

Note that ACO-specific aggregate data on counties of residence for the ACO's assigned population for each performance year will be publicly released by CMS annually following the public announcement of results for the relevant performance year on the [Shared Savings Program Benchmark Rebasing PUFs webpage](#).

3. Calculates risk-adjusted regional per capita FFS expenditures for the ACO's regional service area.

For each county and Medicare enrollment type (ESRD, disabled, aged/dual-eligible, and aged/non-dual eligible) in the ACO's regional service area, CMS will divide county per capita expenditures by the county average CMS-HCC risk score to obtain risk-adjusted county expenditures.

CMS will weight these expenditures by the ACO's proportion of assigned beneficiary person years in the county for the applicable Medicare enrollment type (ESRD, disabled, aged/dual-eligible, and aged/non-dual eligible). CMS will then aggregate these values, across counties within the ACO's regional service area, for each population by Medicare enrollment type. This will result in a separate value for each of the four populations identified by Medicare enrollment type, representing county weighted regional FFS expenditures for that Medicare enrollment type.

4.3.2 CALCULATING THE REBASED HISTORICAL BENCHMARK

The methodology that will be used to calculate the rebased historical benchmark for ACOs that enter a second agreement period in 2017, 2018, or January 1, 2019 will differ from the

methodology used to calculate an ACO's historical benchmark for its first agreement period (and described in [Section 4.1.1](#) above) in the following ways.

CMS will replace the national FFS trend factors with regional trend factors to trend forward BY1 and BY2 expenditures to BY3, expressed as growth rates based on regional FFS expenditures. CMS will use the following steps to calculate these regional growth rates:

1. For each benchmark year, calculate risk-adjusted county FFS expenditures for the ACO's regional service area.
2. For each benchmark year, compute a weighted average of risk-adjusted county-level FFS expenditures using weights that reflect the proportion of an ACO's assigned beneficiaries residing in each county within the ACO's regional service area. Calculations would be performed by Medicare enrollment type (ESRD, disabled, aged/dual-eligible, aged/non-dual eligible) based on the ACO's benchmark year assigned population.
3. Compute the average growth rates from BY1 to BY3 and from BY2 to BY3 using the weighted average of risk-adjusted county-level FFS expenditures for the respective benchmark years for each Medicare enrollment type.

CMS will apply equal weights to the benchmark years' trended, risk-adjusted expenditures for the ESRD, disabled, aged/dual-eligible, and aged/non-dual eligible populations. That is, each benchmark year will be weighted one-third, rather than using weights of 10 percent, 30 percent, and 60 percent for BY1, BY2, and BY3, respectively.

CMS will also adjust the rebased historical benchmark by a percentage of the difference between the average per capita expenditure amount for the ACO's regional service area and the ACO's rebased historical benchmark amount (referred to herein as the "regional FFS adjustment"). The percentage that is applied in calculating the regional FFS adjustment will depend on whether the ACO has higher or lower spending compared to the ACO's regional service area and on the agreement period in which the adjustment is being made (refer to [Table 4](#)).

To calculate the regional FFS adjustment, CMS follows these steps for each Medicare enrollment type (i.e., ESRD, disabled, aged/dual-eligible, and aged/non-dual eligible):

Step 1: For each enrollment type, CMS will multiply the average per capita amount of expenditures for the ACO's regional service area for BY3 as calculated in [Section 3.2](#) (weighted average of county risk-adjusted expenditures with weights based on the proportion of ACO-assigned beneficiaries residing in each county for BY3) by the ACO's BY3 CMS-HCC risk score, to adjust for differences in severity and case mix between the ACO's assigned beneficiary population and the assignable beneficiary population for the ACO's regional service area. Under this approach, if an ACO's population is healthier than the assignable beneficiaries in the ACO's regional service area, with lower average risk scores for the relevant period, the risk adjustment would reduce the amount of the regional FFS adjustment. Similarly, if the ACO's assigned beneficiary population is comparably sicker than the assignable beneficiaries in the ACO's regional service area, with higher average risk scores for the relevant period, the risk adjustment would increase the amount of the regional FFS adjustment.

Step 2: From the risk-adjusted average per capita expenditure amount for the ACO’s regional service area calculated in Step 1, CMS will subtract the average per capita amount of the ACO’s rebased historical benchmark.

Step 3: CMS will multiply the difference for each Medicare enrollment type calculated in Step 2 by the determined percentage (as noted below) to obtain the regional FFS adjustment for that enrollment type.

Step 4: CMS will then add the regional FFS adjustment amount for the Medicare enrollment type calculated in Step 3, which may be positive or negative, to the truncated, trended, and risk-adjusted average per capita value of the ACO’s rebased historical benchmark for the same Medicare enrollment type.

Step 5: The last step will be to take a weighted average of the adjusted values of the ACO’s rebased historical benchmark across the four Medicare enrollment types using the ACO’s BY3 assigned beneficiary proportions for each Medicare enrollment type as weights.

To determine the percentage that will be applied when calculating the regional FFS adjustment, CMS will first determine whether, on average, the ACO has higher or lower spending than the ACO’s regional service area. After CMS has determined the difference between the risk-adjusted average per capita amount for the ACO’s regional service area and the average per capita amount of the ACO’s rebased historical benchmark for each enrollment type (Step 1 above), CMS will multiply the difference for each Medicare enrollment type by the ACO’s BY3 assigned beneficiary proportions for each Medicare enrollment type. Then CMS will take the sum of these weighted differences across the four Medicare enrollment types.

If the sum computed above is a net positive value (i.e., ACO’s historical spending is lower than its regional service area), CMS will use a weight of 35 percent if the performance year is within the agreement period in which the ACO is subject to the revised rebasing methodology for the first time. If the sum is a net negative value (i.e., ACO’s historical spending is higher than its regional service area), CMS will use a lower weight of 25 percent if the performance year is within the agreement period in which the ACO is subject to the revised rebasing methodology.

Table 4. Percentage weight used in calculating the regional FFS adjustment for second agreement periods starting in 2017, 2018, or January 1, 2019

AGREEMENT PERIOD IN SHARED SAVINGS PROGRAM	AGREEMENT PERIOD ACO IS SUBJECT TO REGIONAL FFS ADJUSTMENT [^]	ACO’S SPENDING RELATIVE TO ITS REGION	WEIGHT USED TO CALCULATE ADJUSTMENT FOR PERFORMANCE YEARS ^{^^}
Second	First	ACO spending lower	35%
Second	First	ACO spending higher	25%

[^]ACOs with initial start dates in 2012 and 2013 renewed for a second agreement period in 2016. These ACOs will have a regional FFS adjustment applied beginning in July 2019.

^{^^} Please reference the Pathways to Success Final Rule (83 FR 67816) [Table 6](#) for additional information related to regional adjustment weights based on agreement start date and applicant type.

4.3.3 CALCULATING THE ADJUSTED REBASED HISTORICAL BENCHMARK BASED ON PARTICIPANT LIST CHANGES

For an ACO that changes its ACO Participant List for the second or third performance year of an agreement period in which it is subject to the rebasing methodology that incorporates factors

based on regional FFS expenditures, CMS will recalculate the rebased historical benchmark using the same methodology described in [Section 4.3.2](#) of this document to account for changes in the ACO's certified ACO Participant List. The resulting adjusted rebased historical benchmark is based on the same 3 benchmark years (prior to the start of its current agreement period). The risk-adjusted regional expenditures used to calculate regional trend factors used to establish the rebased historical benchmark and the regional FFS adjustment to the rebased benchmark will be recalculated such that the weights applied to county-level expenditures will reflect benchmark year assignment based on the ACO's new participant list. Specifically, in redetermining the regional FFS adjustment to account for changes to the ACO's certified ACO Participant List, CMS will:

- Redetermine the ACO's regional service area during BY3 based on the residence of the ACO's assigned beneficiaries for BY3 determined using the new ACO Participant List.
- Redetermine the regional FFS adjustment to the ACO's rebased historical benchmark based on regional average expenditures for the ACO's updated regional service area. In redetermining the regional FFS adjustment, CMS would also adjust for differences between the health statuses of the ACO's assigned beneficiaries determined using the new ACO Participant List and the population of assignable beneficiaries in the ACO's regional service area for BY3. CMS will also use the BY3 assigned population determined using the new ACO Participant List to determine the ACO's proportion of beneficiaries by Medicare enrollment type (ESRD, disabled, aged/dual-eligible, aged/non-dual eligible) in calculating the regional FFS adjustment.
- Redetermine whether the ACO is considered to have lower or higher spending compared to the ACO's regional service area for purposes of determining the percentage to be used in calculating the regional FFS adjustment.

4.3.4 CALCULATING THE UPDATED REBASED BENCHMARK

For ACOs starting a second agreement period in 2017, 2018, or January 1, 2019, CMS will calculate updated rebased benchmark expenditures for each performance year. Before applying the update, CMS will first risk-adjust the regionally adjusted rebased historical benchmark expenditures for each Medicare enrollment type (ESRD, disabled, aged/dual-eligible, aged/non-dual eligible) using the method described in [Section 3.4.2](#) that accounts separately for newly and continuously assigned beneficiaries. CMS will then multiply the risk-adjusted rebased historical benchmark expenditures for each enrollment type by a regional update factor. The regional update factor for a given Medicare enrollment type is expressed as a growth rate and is calculated as the ratio of performance year risk-adjusted regional expenditures to BY3 risk-adjusted regional expenditures. CMS will use the following steps to calculate the benchmark update:

1. For each calendar year corresponding to a performance year, determine the ACO's regional service area defined based on the ACO's assigned beneficiary population used to perform financial reconciliation for the relevant performance year and calculate risk-adjusted county FFS expenditures for the ACO's regional service area.
2. Compute growth rates as the ratio of weighted average risk-adjusted county-level FFS expenditures for the two applicable years, comparing expenditures determined in the

previous step for the relevant performance year with expenditures determined for the ACO's regional service area for BY3.

3. To obtain the overall updated rebased benchmark for the performance year, CMS will then take a weighted average across the four Medicare enrollment types, using the performance year Medicare enrollment type proportions as weights.

4.4 MINIMUM SAVINGS RATE AND MINIMUM LOSS RATE

The shared savings methodologies used under the one- and two-sided models are largely the same. CMS will compare the updated historical benchmark to an ACO's assigned beneficiaries' per capita expenditures during the performance year to determine whether the ACO may share in savings or losses, if owed. To qualify for shared savings, an ACO must meet or exceed a prescribed minimum savings rate (MSR), fulfill the minimum quality performance standards, and otherwise maintain eligibility to participate in the Shared Savings Program. ACOs that meet these requirements may share in savings at a rate determined by their quality performance up to a performance payment limit.

The structure and features of the shared savings and losses methodologies are similar. To be liable for shared losses, an ACO must meet or exceed a prescribed minimum loss rate (MLR). Once this MLR is met or exceeded, the ACO will share in losses at a rate determined by its quality performance up to a loss recoupment limit (also referred to as a loss sharing limit).

The MSR is designed to provide a level of confidence that Medicare is measuring true cost savings (efficiency) on the part of the ACO rather than paying for normal expenditure fluctuations. There is "normal" variation in the incidence and severity of illness in patient populations, so variation in medical expenditures does exist. Variation in annual per capita medical care expenditures (claims costs) for an ACO's patient population creates uncertainty in determining savings. The question then arises as to whether observed (measured) savings are the result of the ACO or the result of normal fluctuations in medical expenditures for the assigned beneficiary population. A similar issue arises with respect to shared losses; therefore, an MLR is applied to protect against losses resulting from normal variation.

The MSR and MLR are expressed as percentages of the ACO's updated historical benchmark and serve as thresholds the ACO must meet or exceed before sharing in savings or losses (respectively).

IMPORTANT

- The MSR and MLR are thresholds that the ACO must meet or surpass prior to sharing in savings or owing losses.
- The MSR for Track 1 ACOs ranges based on number of assigned beneficiaries. ACOs with more beneficiaries have a lower MSR (Refer to [Table 5](#)).
- ACOs in two-sided models (Track 1+ Model, Track 2, and Track 3) can select a symmetrical MSR/MLR ranging from 0-2.0 percent, or use the same approach as Track 1 ACOs.

4.4.1 MSR ONE-SIDED MODEL

Under Track 1, CMS will base an ACO's MSR on the ACO's number of assigned beneficiaries in the performance year. [Table 5](#) shows the MSR as a function of the number of beneficiaries annually assigned to the ACO. For example, the minimum MSR is set at 2 percent for ACOs with 60,000 or more beneficiaries and 3.9 percent for ACOs with 5,000 beneficiaries. MSRs that are in between the stated endpoints are calculated by the below specified equation, which is a weighted average of the stated endpoints in [Table 5](#).

Example: Determining MSR for Track 1 ACOs

Total assigned beneficiaries: 5,333 beneficiaries

MSR Low End: 3.9%

MSR High End: 3.6%

NUMBER OF ASSIGNED BENEFICIARIES	MSR (LOW END OF ASSIGNED BENEFICIARIES)	MSR (HIGH END OF ASSIGNED BENEFICIARIES)
5,000-5,999	3.9%	3.6%

$$\frac{MSR_{Low} \times (Upper\ bound - Assigned\ beneficiaries)}{(Upper\ bound - Lower\ bound)} + \frac{MSR_{High} \times (Assigned\ beneficiaries - Lower\ bound)}{(Upper\ bound - Lower\ bound)}$$

$$\frac{3.9\% \times (5,999 - 5,333)}{(5,999 - 5,000)} + \frac{3.6\% \times (5,333 - 5,000)}{5,999 - 5,000} = 3.8\%$$

Table 5. MSR by number of assigned beneficiaries

NUMBER OF ASSIGNED BENEFICIARIES*	MSR (LOW END OF ASSIGNED BENEFICIARIES)	MSR (HIGH END OF ASSIGNED BENEFICIARIES)
0-499	>12.2%	>12.2%
500-999	12.2%	8.7%
1,000-2,999	8.7%	5.0%
3,000-4,999	5.0%	3.9%
5,000-5,999	3.9%	3.6%
6,000-6,999	3.6%	3.4%
7,000-7,999	3.4%	3.2%
8,000-8,999	3.2%	3.1%
9,000-9,999	3.1%	3.0%
10,000-14,999	3.0%	2.7%
15,000-19,999	2.7%	2.5%
20,000-49,999	2.5%	2.2%
50,000-59,999	2.2%	2.0%
60,000 +	2.0%	2.0%

* An ACO must have at least 5,000 assigned beneficiaries in each of the 3 years prior to the start of its agreement period and during each performance year of its agreement period, as specified under Shared Savings Program regulations at 42 CFR § 425.110.

Since ACOs participating under a one-sided model are not accountable for shared losses, no corresponding MLR is applied.

4.4.2 MSR/MLR TWO-SIDED MODELS

ACOs participating in the Track 1+ Model, Track 2, or Track 3 must choose from one of the following options for the MSR/MLR:

1. Zero percent MSR/MLR,
2. Symmetrical MSR/MLR in a 0.5 percent increment between 0.5 - 2 percent, or
3. Symmetrical MSR/MLR that varies based on the number of beneficiaries assigned to the ACO (as used for Track 1).

This selection, made at the time of application to the program, applies for the duration of an ACO's agreement period. These MSR/MLR options give ACOs flexibility in setting the threshold they must meet before being eligible to share in savings or being held accountable for losses. By selecting a higher MSR/MLR, an ACO will have the protection of a higher threshold before liability for losses. However, they will also have a higher threshold to meet before being eligible to share in savings. By selecting a lower MSR/MLR, an ACO will have less protection against liability for losses, but will benefit from a corresponding lower threshold for sharing in savings. By choosing the option for an MSR/MLR to vary according to the size of the ACO's population, a smaller ACO will have a relatively higher threshold to meet before being accountable for losses and therefore greater protection against performance-based risk. However, they will have a corresponding higher threshold to meet before sharing in savings. ACOs with larger populations of 60,000 beneficiaries or more, will have an MSR/MLR set at 2.0 percent.

4.5 ANNUAL FINANCIAL RECONCILIATION CALCULATIONS - ONE-SIDED MODEL

This section details how CMS will perform annual financial reconciliation calculations for ACOs participating under a one-sided model. First, CMS will calculate the per capita updated historical benchmark as described above. CMS will then run the claims-based assignment algorithm at the end of each performance year and exclude prospective voluntarily aligned beneficiaries who died before the performance year or became ineligible during the year. CMS will then calculate per capita assigned beneficiary performance year expenditures. For both the benchmark and the applicable performance year, CMS will multiply each ACO's per capita expenditures by the assigned beneficiary person years in the performance year.

Next, CMS will calculate the potential for savings for the performance year following the steps below:

1. **Determine Potential for Savings.** If the total updated historical benchmark minus the total assigned beneficiary performance year expenditures is greater than zero, then the ACO has the potential to share in savings.
2. **Determine if Savings Generated Are Greater than the MSR.** CMS determines whether the potential savings generated by the ACO are greater than or equal to the MSR, which is based on the number of assigned beneficiaries. As noted in [Section 4](#), the MSR is the minimum threshold ACOs must meet in order to share in savings. Note that under a one-

sided model, the ACO's MSR is based on a sliding scale relative to the size of its assigned beneficiary population, ranging from 2.0 to 3.9 percent of the ACO's updated historical benchmark for ACOs with at least 5,000 assigned beneficiaries. If potential savings are greater than or equal to the MSR, then savings occurred. Otherwise, there are neither shared savings nor shared losses since ACOs participating under a one-sided model are not responsible for any losses.

- 3. Calculate the Shared Savings Percentage (Final Sharing Rate).** The maximum quality performance sharing rate percentage is 50 percent under a one-sided model. CMS will base the quality-sharing rate on the ACO's quality performance. The final sharing rate is equal to the product of the ACO's quality score and the maximum sharing rate of 50 percent (if the ACO has met the quality performance standard for the performance year). In an ACO's first performance year, an ACO can earn the maximum 50 percent of shareable savings for quality performance based on complete and accurate reporting of quality measures (known as pay-for-reporting). Following the first performance year, an ACO must continue to report completely and accurately on all measures and its performance will be assessed relative to performance benchmarks for a specified set of measures in each performance year (known as pay-for-performance). If the ACO does not meet the quality performance standard for the performance year, it will not be eligible for any shared savings (i.e., the final sharing rate will be zero percent).
- 4. Reduce Shared Savings Amount by Two Percent for Sequestration:** If an ACO is eligible to receive shared savings, CMS will reduce the shared savings amount paid to the ACO by two percent due to sequestration. This two percent reduction will be applied after all other calculations for shared savings are complete and prior to applying the cap.
- 5. Apply the Shared Savings Cap, if Applicable:** Under a one-sided model, shared savings are subject to a cap equal to 10 percent of total updated historical benchmark expenditures in each performance year. For those ACOs that are participating in the Advance Payment ACO Model or the ACO Investment Model, sequestration is applied to the gross payment amount and then the advance payment withhold is subtracted.
- 6. Calculate Shared Savings Amount:** The final savings rate will apply to an ACO's savings on a first dollar basis; it will apply to an ACO's potential savings below its benchmark, not only savings that exceed the MSR.

Example: Calculating Shared Savings

Track 1 ACO

Minimum savings rate (MSR): 2%

Quality score: 95%

Benchmark expenditures: \$1 M

Performance year expenditures = \$700,000

Step 1: Determine if the total performance year expenditures is less than the total benchmark expenditures to determine total savings

$$\$1M - \$700k = \$300k \text{ total savings}$$

Step 2: Determine if the total savings exceeds the MSR

$$\text{MSR} = 2\% = \$1M \times 2\% = \$20k$$

If total savings (*in this example \$300k*) is equal to or > the MSR (*in this example \$20k*), proceed to Step 3, if not the ACO is not eligible for shared savings.

Step 3: Multiply the total savings by the product of the maximum sharing rate and the quality score

$$\text{Maximum sharing rate} = 50\%$$

$$\text{Quality score} = 95\%$$

$$50\% \times 95\% = 47.5\%$$

$$\$300k \times 47.5\% = \$142.5k$$

Step 4: Reduce shared savings by sequestration

$$\text{Sequestration} = 2\% \times \$142.5k = \$2,850; \$142.5k - \$2,850 = \$139.65k$$

(the shared savings cap was also exceeded, reference Step 5)

Step 5: Apply shared savings cap, if applicable

$$\text{Savings cap} = 10\%$$

$$10\% \times \$1M = \$100k$$

$$\$139.65 > \$100k$$

Step 6: Earned performance payment

In this example, the shared savings of \$139.65k *exceeded the shared savings cap*, and the earned performance payment would = \$100k

4.6 ANNUAL FINANCIAL RECONCILIATION CALCULATIONS - TWO-SIDED MODELS

This section describes how CMS will perform annual financial reconciliation calculations under two-sided models.

1. **Calculate Updated Historical Benchmark:** CMS will calculate the per capita updated historical benchmark as described above.
 - a. For Track 2 ACOs, CMS will run its assignment algorithm at the end of each performance year to determine the final list of retrospectively assigned beneficiaries and exclude prospective voluntarily aligned beneficiaries who died before the performance year or became ineligible during the year. CMS will then calculate per capita assigned beneficiary performance year expenditures.
 - b. For Track 1+ and Track 3 ACOs, CMS will determine the final list of prospectively assigned and voluntarily aligned beneficiaries, having excluded beneficiaries who match the assignment criteria B, C, D, and E described in [Section 2](#) above and beneficiaries

who died prior to the start of the performance year. To determine total expenditures, CMS will multiply each ACO's per capita updated historical benchmark and performance year expenditures by the assigned beneficiary person years in the performance year.

2. **Determine Potential for Savings or Losses:** CMS determines if the total updated historical benchmark minus the total assigned beneficiary performance year expenditures is greater than zero (potential savings) or less than zero (potential losses).
3. **Determine if Savings/Losses Generated Are Greater than the MSR/MLR:** CMS then determines whether the potential savings or losses generated by the ACO are equal to or greater than the MSR or the MLR, expressed as a percentage of the ACO's updated historical benchmark. The choices of symmetrical MSR and MLR under the two-sided models are described in [Section 4](#). For example, with an MSR of 2 percent, the total updated historical benchmark expenditures multiplied by 2 percent is the MSR dollar amount. Likewise, if the MLR percentage is set at negative 2 percent, the MLR dollar amount is equal to the total updated historical benchmark expenditures multiplied by negative 2 percent.
 - a. If potential savings are equal to or greater than the MSR, then the ACO may be eligible to receive a share of these savings, depending on quality performance.
 - b. If total losses are equal to or greater than the MLR, then the ACO will be accountable for repaying a share of those losses. Otherwise, there are neither shared savings nor shared losses.
4. **Calculate Shared Savings/Losses Percentage:** Under the two-sided models, the maximum sharing rate percentage and final loss rate varies by track:

MAXIMUM SHARING RATE/ MAXIMUM LOSS RATE	TRACK 1+ MODEL	TRACK 2	TRACK 3
Maximum Sharing Rate	50%	60%	75%
Maximum Loss Rate	30%	1–final sharing rate, must range from 40% - 60%	1–final sharing rate, must range from 40% - 75%

CMS will base the final sharing rate on the ACO's quality performance. In the first performance year, quality performance is based on complete and accurate reporting of quality measures (known as pay-for-reporting). Following the first performance year, an ACO must continue to report completely and accurately on all measures and its performance will be assessed relative to performance benchmarks for a specified set of measures in each performance year (known as pay-for-performance). The final sharing rate is equal to the product of the ACO's quality score and the maximum sharing rate. If the ACO does not meet the quality performance standard for the performance year, it will not be eligible for any shared savings. Furthermore, Track 1+, Track 2, and Track 3 ACOs that do not meet the quality performance standard for the performance year will be accountable for shared losses based on the highest shared loss rate.

The final shared savings and loss rates will apply to an ACO's savings or losses on a first dollar basis.

5. **Reduce Shared Savings Amount by Two Percent for Sequestration:** If an ACO is eligible to receive shared savings, CMS will reduce the shared savings amount paid to the ACO by 2 percent due to sequestration. This 2 percent reduction will be applied after all other calculations for shared savings are complete and prior to applying the cap. For ACOs that are participating in the Advance Payment ACO Model or the ACO Investment Model, sequestration is applied to the gross payment amount and then the advance payment withhold is subtracted.
6. **Reduce Shared Losses for ACOs Affected by Extreme and Uncontrollable Circumstances:** If an ACO is affected by extreme and uncontrollable circumstances and owes shared losses, CMS will reduce the amount of shared losses calculated for the performance year by an amount determined by multiplying (1) the percentage of total months in the performance year affected by an extreme and uncontrollable circumstance; and (2) the percentage of the ACO's assigned beneficiaries who reside in an area affected by an extreme and uncontrollable circumstance.⁷
7. **Calculate Shared Savings/Losses Amount:** Under the two-sided models, shared savings and losses are subject to caps, which are a percentage of the total updated historical benchmark. These limits vary by track.

SAVINGS CAP/ LOSSES CAP	TRACK 1+ MODEL	TRACK 2	TRACK 3
Savings Cap	10%	15%	20%
Losses Cap	Bifurcated approach	<p><i>1st Agreement Period</i></p> <ul style="list-style-type: none"> ▪ PY1: 5% of total updated historical benchmark expenditures in PY1 ▪ PY2: 7.5% of total updated historical benchmark expenditures in PY2 ▪ PY3: 10% of total updated historical benchmark expenditures in PY3 <p><i>Additional Agreement Periods</i></p> <ul style="list-style-type: none"> ▪ 10% of total updated historical benchmark expenditures for each performance year 	15% of total updated historical benchmark expenditures for each performance year

8. **Reconcile Losses:** If an ACO has shared losses, the ACO must pay CMS in full within 90 days of receiving the notification. CMS shall draw upon the repayment mechanism established by the ACO as a condition of eligibility to participate in the two-sided model at the request of the ACO during the 90-day repayment period and if the ACO fails to make payment in full within this time. If an ACO's self-executing repayment mechanism is not adequate to pay for all of the losses in the current year, the unpaid amount and any accrued interest are due in full.

⁷ There is no minimum threshold for percentage of an ACO's assigned beneficiaries residing in an affected area for an ACO to receive the adjustment to shared losses.

Example: Calculating Shared Losses

Track 3 ACO

Performance year: second

Minimum loss rate (MLR): 1%

Quality score: 92%

Benchmark expenditures: \$2 M

Performance year expenditures = \$2.2M

Step 1: Determine if the total performance year expenditures is greater than the total benchmark expenditures to determine total losses

$$\$2M - \$2.2M = -\$200k \text{ total losses}$$

Step 2: Determine if the total losses exceed the MLR

$$MLR = 1\% = \$2M \times 1\% = \$20k$$

If total losses (*in this example \$200k*) is equal to or > the MLR (*in this example \$20k*), proceed to Step 3, as the ACO is accountable for repaying a share of those losses

Step 3: Determine the percentage of losses owed. This is done by calculating the maximum loss rate, which is equal to 1 minus the final sharing rate*

$$\text{Maximum loss rate} = 1 - (\text{quality score} \times \text{maximum sharing rate})$$

$$\text{Quality score} = 92\%$$

$$\text{Maximum sharing rate} = 75\%$$

$$1 - (92\% \times 75\%) = 31\%$$

(must range from 40-75%)

$$\$200k \times 40\% = \$80k$$

* If an ACO is affected by extreme and uncontrollable circumstances and owes shared losses, CMS will reduce the amount of shared losses calculated for the performance year by an amount determined by multiplying (1) the percentage of total months in the performance year affected by an extreme and uncontrollable circumstance; and (2) the percentage of the ACO's assigned beneficiaries who reside in an area affected by an extreme and uncontrollable circumstance.

Step 4: Apply shared losses cap, if applicable

$$\text{Losses cap} = \text{For Track 3, 15\% of total historical benchmark expenditures}$$

$$15\% \times \$2M = \$300k$$

$$\$80k < \$300k$$

In this example, the shared losses of \$80K *did not exceed the shared losses cap*

Step 5: The ACO must pay CMS the losses owed (*in this example \$80k*) within 90 days of receiving notification

4.6.1 LOSS-SHARING LIMIT FOR TRACK 1+ ACOs

Track 1+ ACOs are subject to either a revenue- or benchmark-based loss-sharing limit based on whether any of the following criteria are met: the ACO includes an ACO participant that is an inpatient prospective payment system (IPPS) hospital, cancer center, or a rural hospital with more than 100 beds, or is owned or operated by, in whole or in part, such a hospital or by an organization that owns or operates such a hospital.

If none of these criteria are met, the ACO's loss-sharing limit is 8 percent of the ACO participant Medicare Parts A and B FFS annual revenue for PY 2018, PY 2019, and PY 2020. ACO participant Medicare FFS revenue is based on total Parts A and B FFS revenue for all providers

and suppliers that bill through the TIN of an ACO participant. It is calculated as the sum of Medicare paid amounts on all non-denied claims associated with ACO participant TINs for all claim types used in program expenditure calculations that have dates of service during the performance year using 3 months of claims run-out. ACO participant Medicare FFS revenue will not be limited to claims associated with the ACO's assigned beneficiaries and will not be truncated or adjusted to remove payments for IME, DSH, or uncompensated care payments or to add back in reductions made for sequestration. ACO participant Medicare FFS revenue will include any payment adjustments reflected in the claim payment amounts (e.g., value-based payment modifier or MIPS) and will also include individually identifiable final payments made under a demonstration, pilot, or time-limited program, and will be determined using the same completion factor used for annual expenditure calculations. If the loss-sharing limit, as a percentage of ACO participants' Part A and Part B FFS revenue exceeds the amount that is 4 percent of the ACO's updated historical benchmark, then the loss-sharing limit would be capped and set at 4 percent of the updated historical benchmark.

The loss-sharing limit under this bifurcated structure is determined by CMS near the start of the ACO's agreement period under the Track 1+ Model (based on the ACO's initial application to the model or application for renewal under the model), and re-determined annually based on an Annual Certification process. Changes to the ACO's loss-sharing limit (applicability of either the revenue- or benchmark-based methodology) may be made by CMS based on the Annual Certification process that occurs prior to the start of a performance year under the Track 1+ Model. An ACO's loss-sharing limit could be adjusted up or down on this basis.

4.7 DETERMINING SAVINGS AND LOSSES FOR 6-MONTH PERFORMANCE YEAR FROM JANUARY 1, 2019, THROUGH JUNE 30, 2019, FOR ACOs SIGNING A 6-MONTH EXTENSION

CMS will apply the methodology for determining shared savings and shared losses according to the approach specified for the ACO's track under the terms of the participation agreement that was in effect on January 1, 2019 (as described in sections above).

CMS will determine an ACO's financial performance during the 6-month performance year from January 1, 2019, through June 30, 2019, by comparing the ACO's historical benchmark updated for CY 2019 to the expenditures during CY 2019 for the ACO's performance year assigned beneficiaries. If the difference is positive and is greater than or equal to the MSR and the ACO has met the quality performance standard, the ACO will be eligible for shared savings. If the ACO is in a two-sided model and the difference between the updated benchmark and assigned beneficiary expenditures is negative and is greater than or equal to the MLR (in absolute value terms), the ACO will be liable for shared losses. ACOs will share in first dollar savings and losses. The amount of any shared savings will be determined using the applicable final sharing rate, which is determined based on the ACO's track for the applicable agreement period, and taking into account the ACO's quality performance for 2019.

CMS will adjust the amount of shared savings for sequestration, and then cap the amount of shared savings at the applicable performance payment limit for the ACO's track. Similarly, the amount of any shared losses will be determined using the loss sharing rate for the ACO's track and, as applicable, for ACOs in tracks with a loss sharing rate that depends upon quality performance, the ACO's quality performance for 2019. CMS will then cap the amount of shared losses at the applicable loss sharing limit for the ACO's track. CMS will then pro-rate any shared

savings or shared losses by multiplying by one-half, which represents the fraction of the calendar year covered by the 6-month performance year. This pro-rated amount will be the final amount of shared savings earned or shared losses owed by the ACO for the 6-month performance year.

4.8 REPAYMENT MECHANISM

ACOs choosing a two-sided model (Track 1+ Model, Track 2, or Track 3) must show they have a repayment mechanism in place to assure CMS that they can repay losses for which they may be liable.

An ACO participating in Track 2 or Track 3 must show that it can repay at least 1 percent of its total annual estimated per capita Medicare FFS Parts A and B expenditures for its assigned beneficiaries based on expenditures used to establish the historical benchmark. CMS will determine whether this repayment mechanism is adequate when looking at an ACO's application to participate in the program. Beginning with PY 2016, ACOs participating under Track 2 or Track 3 must show that this repayment mechanism is adequate once at the beginning of a 3-year agreement period.

For Track 1+ ACOs, a bifurcated approach will be used to determine the amount of the repayment mechanism, for consistency with the bifurcated approach to determining the loss-sharing limit. Consistent with Track 2 and Track 3, a Track 1+ ACO subject to the benchmark-based loss-sharing limit must establish a repayment mechanism equal to at least 1 percent of its total annual estimated Medicare Parts A and B FFS expenditures for its assigned beneficiaries, as determined based on per capita expenditures used to establish the ACO's benchmark. Track 1+ ACOs under the revenue-based loss-sharing limit must establish a repayment mechanism equal to at least 2 percent of ACO participant Medicare Parts A and B FFS revenue (total annual Parts A and B FFS revenue). The repayment mechanism amount for these ACOs will be capped at 1 percent of the ACO's total annual estimated Medicare Parts A and B FFS expenditures for its assigned beneficiaries, as determined based on per capita expenditures used to establish the ACO's benchmark. Unlike for Track 2 and Track 3 ACOs, the repayment mechanism amount for Track 1+ ACOs may be re-determined each performance year in an agreement period if the ACO's composition changes. The Track 1+ ACO's repayment mechanism amount could be adjusted up or down on this basis.

All ACOs under a two-sided model must select one or more of the following three types of repayment arrangements:

1. Funds placed in escrow;
2. A line of credit as evidenced by a letter of credit; or
3. A surety bond.

ACOs must also demonstrate that they would be able to repay shared losses incurred at any time within the agreement period, and for a reasonable period after the end of each agreement period (the "tail period"). If any portion of the repayment mechanism is used to repay shared losses owed to CMS, an ACO is required to replenish the amount of its repayment mechanism within 90 days. For additional details, refer to the [Medicare Shared Savings Program & Medicare ACO Track 1+ Model Repayment Mechanism Arrangements Guidance](#).

4.9 ADVANCE PAYMENT ACO MODEL AND ACO INVESTMENT MODEL

Some ACOs participating in the Shared Savings Program also participate in the Advance Payment ACO Model or ACO Investment Model. Through the Advance Payment ACO Model and ACO Investment Model, selected small, rural, or physician-only ACOs receive upfront and monthly payments which are considered an advance on future shared savings payments. CMS will automatically withhold any shared savings payments earned during the agreement period until the full amount of advance payments to the ACO as of the date of the financial reconciliation is offset and thereby repaid by the ACO. For a performance payment to be offset to repay advance payments, an ACO must earn a performance payment (generate shared savings that meet or exceed its MSR) and otherwise qualify for a performance payment (e.g., through adequate quality reporting or performance). In any given performance year, the repayment for advance payments cannot exceed the value of the earned shared savings.

5 REPORTS PROVIDED TO ACOs

CMS will provide ACOs with information on their assigned populations (including beneficiaries assigned via voluntary alignment) and financial performance at the start of the agreement period and routinely throughout the performance year. CMS will provide:

- Assignment List Reports with beneficiary identifiable information on the ACO's assigned population and identifying select ACO participants (TINs) and ACO providers/suppliers (NPIs, CCNs) who treat assigned beneficiaries.
 - ACOs with retrospective beneficiary assignment: ACOs receive an initial preliminary prospective assignment list close to the start of each performance year, retrospective assignment lists for each benchmark year, quarterly reports on the ACO's preliminary prospectively assigned population throughout each performance year, and a year-end report on retrospectively assigned beneficiaries used for financial reconciliation.
 - ACOs with prospective beneficiary assignment: ACOs receive a prospective assignment list for the performance year close to the start of the year, prospective assignment lists for each benchmark year, quarterly lists for the performance year indicating which beneficiaries have been removed from the ACO's assignment list as a result of meeting select assignment exclusion criteria, and a year-end report on assigned beneficiaries used for financial reconciliation (similarly indicating beneficiaries determined to be excluded from assignment based on select criteria).

For the annual reports, CMS uses a 3-month claims run-out period when determining assigned beneficiaries. For the quarterly reports for ACOs with preliminary prospective assignment, CMS runs assignment data in the month following every calendar year quarter using a rolling 12 months of data and, at most, a 7-day claims run-out period. For the quarterly reports for ACOs with prospective beneficiary assignment, CMS determines exclusions on a year-to-date basis following every calendar quarter using, at most, a 7-day claims run-out period. For annual reports, the claims effective date is generally set as the last Friday of the 3-month run-out period, whereas for quarterly reports the effective date is generally set as the first Friday following the end of the quarter.

- Assignment Summary Reports providing aggregate information on the ACO's assigned beneficiaries and the primary care services they received.
 - ACOs with retrospective beneficiary assignment: ACOs receive a report based on their initial preliminary prospective assignment list close to the start of each performance year, a report based on preliminary prospectively assigned population for each benchmark year, reports based on preliminary prospectively assigned population for each quarter, and a year-end report on beneficiaries retrospectively assigned for financial reconciliation.
 - ACOs with prospective beneficiary assignment: ACOs receive a report based on their prospective assignment list close to the start of each performance year, reports based on prospectively assigned beneficiaries for each benchmark year, quarterly reports based on the ACO's currently assigned beneficiaries for the performance year updated to identify exclusions made in the year-to-date period, and a year-end report on prospectively assigned beneficiaries for the performance year updated to identify beneficiaries no longer eligible for assignment at the end of the performance year.
- Aggregate Expenditure and Utilization Reports provide ACOs with expenditures and utilization rates for their assigned beneficiaries compared to other ACOs, and national means to assist with identifying trends and outliers. Reports are provided each quarter during the agreement period, provided for each benchmark year, and provided annually for each performance period.
- Historical Benchmark Reports specifying the calculation of the ACO's 3-year average per capita benchmark value. A preliminary Historical Benchmark Report is provided within 3 months of the ACO's agreement start date. These Historical Benchmark Reports may be adjusted each performance year to account for changes in the ACO's certified ACO Participant List effective for the performance year and/or to account for program-wide regulatory changes. ACOs that are new starters or renewals will also receive a final Historical Benchmark Report in the summer of the first performance year of their new agreement period, based on finalized data for BY3. An updated historical benchmark that reflects performance year growth factors is provided to all ACOs with financial reconciliation report packages. Benchmark Report packages include informational reports: Assignment List Report, Assignment Summary Report and Aggregate Expenditure/Utilization Report for the assigned population for each benchmark year.
- Reconciliation packages containing financial and quality performance reports and informational reports on the ACO's performance year assigned population.
- Financial reconciliation reports specifying the calculation of the ACO's historical benchmark, updated historical benchmark, and determination of shared savings/losses.
- Quality performance reports specifying the ACO's quality performance results for the performance year, including an overall report on quality performance and a detailed Consumer Assessment of Healthcare Providers and Systems (CAHPS®) for ACOs report.

Table 6 below provides a comparison of characteristics and data sources for the above-mentioned ACO reports for Track 1 and Track 2 ACOs. Table 7 provides the same information for Track 1+ and Track 3 ACOs. In order to provide timely data to the ACOs during each

quarter, a shorter claims run-out period must be used. Consequently, the expenditure completion factors must be larger for quarterly data to account for this shorter claims run-out period. These tables illustrate the differences between reports produced on a quarterly basis and reports produced on an annual basis. For reports produced annually, a 3-month claims run-out period is used, whereas a run-out period of up to 7 days is used for reports produced quarterly. [Table 13](#) provides a data and report schedule for 2019.

CMS also provides dynamic report functionality (referred to as Cognos/Dynamic Reporting) in the [Shared Savings Program ACO Portal](#) (SSP ACO Portal). This functionality includes the capacity for ACOs to generate reports electronically by selecting variables provided in static reports from multiple timeframes and to download these reports. ACOs may also access additional data for certain static report measures through the dynamic report functionality.

Table 6. Selected characteristics of Shared Savings Program ACO reports for Tracks 1 and 2 ACOs

CHARACTERISTIC	ASSIGNMENT SUMMARY REPORT (QUARTERLY)	ASSIGNMENT SUMMARY REPORT (ANNUAL)	EXPENDITURE /UTILIZATION REPORT (QUARTERLY)	EXPENDITURE /UTILIZATION REPORT (ANNUAL)	HISTORICAL BENCHMARK REPORT
Claims Run-out	< 7 days	3 months	< 7 days	3 months	3 months
Assignment Dates of Service	Most recent 12 months	Calendar Year	Most recent 12 months	Calendar Year	Calendar Year
Expenditure Completion Factors	N/A	N/A	1.072	1.013	1.013
Medicare Enrollment Type Determined	Monthly	Monthly	Monthly	Monthly	Monthly

N/A = not applicable. Expenditures and utilization are not included in all reports, and a completion factor is not used for utilization rates.

Table 7. Selected characteristics of Shared Savings Program ACO reports for Track 1+ and Track 3 ACOs

CHARACTERISTIC	ASSIGNMENT SUMMARY REPORT (QUARTERLY)	ASSIGNMENT SUMMARY REPORT (ANNUAL)	EXPENDITURE /UTILIZATION REPORT (QUARTERLY)	EXPENDITURE/UTILIZATION REPORT (ANNUAL)	HISTORICAL BENCHMARK REPORT
Claims Run-out	< 7 days	3 months	< 7 days	3 months	3 months
Assignment Dates of Service	Prospective Assignment Period	Prospective Assignment Period	Prospective Assignment Period	Prospective Assignment Period	Prospective Assignment Period
Assignment Exclusion Dates of Service	Calendar Year to Date	Calendar Year	Calendar Year to Date	Calendar Year	Calendar Year
Expenditure Completion Factors	N/A	N/A	Q1 1.283 Q2 1.139 Q3 1.091 Q4 1.072	1.013	1.013
Medicare Enrollment Type Determined	Monthly	Monthly	Monthly	Monthly	Monthly

Prospective Assignment Period uses data from October 1 two years prior to the start of the performance or benchmark year through September 30 of the year prior to the performance or benchmark year. Beneficiaries are excluded from the prospective assignment lists on a quarterly basis and annually prior to financial reconciliation based on select assignment exclusion criteria. N/A = not applicable. Expenditures and utilization are not included in all reports, and a completion factor is not used for utilization rates.

APPENDIX A: ASSIGNMENT WINDOW AND EXPENDITURES PERIOD DATES

Table 8. Relevant assignment window and expenditures period dates for Track 1, Track 1+, Track 2, and Track 3 ACOs with an agreement period that includes PY 2019

AGREEMENT PERIOD START YEAR	BENCHMARK YEAR OR PERFORMANCE YEAR	TRACKS 1 & 2 ASSIGNMENT WINDOW [^]	TRACK 1+ MODEL & TRACK 3 ASSIGNMENT WINDOW [^]	EXPENDITURES PERIOD (ALL ACOs)
2016 (New Starters and Renewals)	PY4: Jan 1, 2019–Jun 30, 2019	Jan 1, 2019–Dec 31, 2019	Oct 1, 2017–Sep 30, 2018	Jan 1, 2019–Dec 31, 2019
2016 (New Starters and Renewals)	BY3: CY 2015	Jan 1, 2015–Dec 31, 2015	Oct 1, 2013–Sep 30, 2014	Jan 1, 2015–Dec 31, 2015
2016 (New Starters and Renewals)	BY2: CY 2014	Jan 1, 2014–Dec 31, 2014	Oct 1, 2012–Sep 30, 2013	Jan 1, 2014–Dec 31, 2014
2016 New Starters and Renewals)	BY1: CY 2013	Jan 1, 2013–Dec 31, 2013	Oct 1, 2011–Sep 30, 2012	Jan 1, 2013–Dec 31, 2013
2017 (New Starters and Renewals)	PY3: CY 2019	Jan 1, 2019–Dec 31, 2019	Oct 1, 2017–Sep 30, 2018	Jan 1, 2019–Dec 31, 2019
2017 (New Starters and Renewals)	BY3: CY 2016	Jan 1, 2016–Dec 31, 2016	Oct 1, 2014–Sep 30, 2015	Jan 1, 2016–Dec 31, 2016
2017 (New Starters and Renewals)	BY2: CY 2015	Jan 1, 2015–Dec 31, 2015	Oct 1, 2013–Sep 30, 2014	Jan 1, 2015–Dec 31, 2015
2017 New Starters and Renewals)	BY1: CY 2014	Jan 1, 2014–Dec 31, 2014	Oct 1, 2012–Sep 30, 2013	Jan 1, 2014–Dec 31, 2014
2018 (New Starters and Renewals*)	PY2: CY 2019	Jan 1, 2019–Dec 31, 2019	Oct 1, 2017–Sep 30, 2018	Jan 1, 2019–Dec 31, 2019
2018 (New Starters and Renewals*)	BY3: CY 2017	Jan 1, 2017–Dec 31, 2017	Oct 1, 2015–Sep 30, 2016	Jan 1, 2017–Dec 31, 2017
2018 (New Starters and Renewals*)	BY2: CY 2016	Jan 1, 2016–Dec 31, 2016	Oct 1, 2014–Sep 30, 2015	Jan 1, 2016–Dec 31, 2016
2018 (New Starters and Renewals*)	BY1: CY 2015	Jan 1, 2015–Dec 31, 2015	Oct 1, 2013–Sep 30, 2014	Jan 1, 2015–Dec 31, 2015
2019 Renewals**	PY1: CY 2019	Jan 1, 2019–Dec 31, 2019	Oct 1, 2017–Sep 30, 2018	Jan 1, 2019–Dec 31, 2019
2019 Renewals**	BY3: CY 2018	Jan 1, 2018–Dec 31, 2018	Oct 1, 2016–Sep 30, 2017	Jan 1, 2018–Dec 31, 2018
2019 Renewals**	BY2: CY 2017	Jan 1, 2017–Dec 31, 2017	Oct 1, 2015–Sep 30, 2016	Jan 1, 2017–Dec 31, 2017
2019 Renewals**	BY1: CY 2016	Jan 1, 2016–Dec 31, 2016	Oct 1, 2014–Sep 30, 2015	Jan 1, 2016–Dec 31, 2016

*Includes 2014 starters that deferred renewal by 1 year to 2018.

** Includes 2015 starters that deferred renewal by 1 year to 2019.

[^] Note that voluntary alignment was incorporated into the assignment methodology for PY 2018 and subsequent performance years. Voluntary alignment is applied prospectively for all tracks and uses an offset window with beneficiary designations through October 31 of the previous year. For PY 2018, voluntarily aligned beneficiaries are only included in assigned beneficiary lists for the performance year. In future performance years, for which 2018 and subsequent years will be a benchmark year, voluntarily aligned beneficiaries will also be included in assigned beneficiary lists for benchmark years.

APPENDIX B: PRIMARY CARE AND SPECIALTY CODES USED IN ASSIGNMENT

- Table 9 lists the primary care codes (HCPCS and Revenue Center Codes) included in beneficiary assignment criteria.

Table 9. Primary care codes included in beneficiary assignment criteria

PRIMARY CARE CODES AND SERVICES
For services billed under the Physician Fee Schedule (including Method II CAHs), and for FQHC services furnished after 1/1/2011, primary care services include services identified by the following HCPCS/CPT⁸ codes:
Office or Other Outpatient Services
99201 New Patient, brief
99202 New Patient, limited
99203 New Patient, moderate
99204 New Patient, comprehensive
99205 New Patient, extensive
99211 Established Patient, brief
99212 Established Patient, limited
99213 Established Patient, moderate
99214 Established Patient, comprehensive
99215 Established Patient, extensive
Initial Nursing Facility Care
99304 New or Established Patient, brief (use except when provided in a SNF)*
99305 New or Established Patient, moderate (use except when provided in a SNF)*
99306 New or Established Patient, comprehensive (use except when provided in a SNF)*
Subsequent Nursing Facility Care
99307 New or Established Patient, brief (use except when provided in a SNF)*
99308 New or Established Patient, limited (use except when provided in a SNF)*
99309 New or Established Patient, comprehensive (use except when provided in a SNF)*
99310 New or Established Patient, extensive (use except when provided in a SNF)*
Nursing Facility Discharge Services
99315 New or Established Patient, brief (use except when provided in a SNF)*
99316 New or Established Patient, comprehensive (use except when provided in a SNF)*
Other Nursing Facility Services
99318 New or Established Patient (use except when provided in a SNF)*
Domiciliary, Rest Home, or Custodial Care Services
99324 New Patient, brief
99325 New Patient, limited

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PRIMARY CARE CODES AND SERVICES
99326 New Patient, moderate
99327 New Patient, comprehensive
99328 New Patient, extensive
99334 Established Patient, brief
99335 Established Patient, moderate
99336 Established Patient, comprehensive
99337 Established Patient, extensive
Domiciliary, Rest Home, or Home Care Plan Oversight Services
99339, brief
99340, comprehensive
Home Services
99341 New Patient, brief
99342 New Patient, limited
99343 New Patient, moderate
99344 New Patient, comprehensive
99345 New Patient, extensive
99347 Established Patient, brief
99348 Established Patient, moderate
99349 Established Patient, comprehensive
99350 Established Patient, extensive
99354 Prolonged Services with Direct Patient Contact*
99355 Prolonged Services with Direct Patient Contact*
96160 Administration of Health Risk Assessment (Telehealth)*
96161 Administration of Health Risk Assessment (Telehealth)*
99484 General Behavioral Health Integration Care Management*
99487 Chronic Care Management Service*
99489 Chronic Care Management Service*
99490 Chronic Care Management Service, 20 minutes
99492 Behavioral Health Integration*
99493 Behavioral Health Integration*
99494 Behavioral Health Integration*
99495 Transitional Care Management Services within 14 days of discharge
99496 Transitional Care Management Services within 7 days of discharge
99497 Advance Care Planning*
99498 Advance Care Planning*

PRIMARY CARE CODES AND SERVICES	
Wellness Visits	
G0402	Welcome to Medicare Visit
G0438	Annual Wellness Visit
G0439	Annual Wellness Visit
G0442	Annual Alcohol Misuse Screening*
G0443	Annual Alcohol Misuse Counseling*
G0444	Annual Depression Screening*
New G Code for Outpatient Hospital Claims	
G0463	Hospital Outpatient Clinic Visit (refer to note below)
G0506	Chronic Care Management*

NOTE: 42 CFR part 425 defines primary care services as the set of services identified by the following HCPCS codes: 99201 through 99215; 99304 through 99340; 99341 through 99350; G0402; G0438; G0439; and G0463 and revenue center codes 0521, 0522, 0524, and 0525. Table 2 contains all codes in that range that are currently in use. When comment indicates “use except when provided in a SNF,” this refers to physician claims only (Claim Type = 71 or 72). While G0463 is used by hospital outpatient departments covered by Outpatient Prospective Payment System (OPPS) (bill type 13x) since January 1, 2014, for assignment purposes it is used only for ETA hospitals. The Shared Savings Program assignment algorithm ignores claims with bill type 13x except for ETA hospitals. That is, only CCNs belonging to ETA hospitals can use G0463 during the assignment process. The codes in this table will also be used to determine eligibility for voluntary alignment.

*Indicates new or modified CPT codes included in the definition of primary care services starting in PY19.

- Table 10 lists specialty codes used to identify physicians who are the basis for beneficiary assignment. Physician specialty is identified by the specialty code associated with each line item on a claim. The table includes the specialty codes used to define a primary care physician (used in Assignment Step 1 and specified under § 425.20), and specialists (used in Assignment Step 2 and specified under § 425.402(c)). Note that the definition of a physician, for purposes of the Shared Savings Program, includes only MD/DO physicians.

Table 10. Use of physician specialty codes in assignment

SPECIALTY CODE	DESCRIPTION	PRIMARY CARE PHYSICIAN (STEP 1)	SPECIALIST (STEP 2)
01	General practice	Yes	No
06	Cardiology	No	Yes
08	Family practice	Yes	No
11	Internal medicine	Yes	No
12	Osteopathic manipulative medicine	No	Yes
13	Neurology	No	Yes
16	Obstetrics/gynecology	No	Yes
23	Sports medicine	No	Yes
25	Physical medicine and rehabilitation	No	Yes
26	Psychiatry	No	Yes
27	Geriatric psychiatry	No	Yes
29	Pulmonary disease	No	Yes
37	Pediatric medicine	Yes	No

SPECIALTY CODE	DESCRIPTION	PRIMARY CARE PHYSICIAN (STEP 1)	SPECIALIST (STEP 2)
38	Geriatric medicine	Yes	No
39	Nephrology	No	Yes
46	Endocrinology (eff. 5/1992)	No	Yes
70	Multispecialty clinic or group practice	No	Yes
79	Addiction medicine (eff. 5/1992)	No	Yes
82	Hematology (eff. 5/1992)	No	Yes
83	Hematology/oncology (eff. 5/1992)	No	Yes
84	Preventive medicine (eff. 5/1992)	No	Yes
86	Neuropsychiatry (eff. 5/1992)	No	Yes
90	Medical oncology (eff. 5/1992)	No	Yes
98	Gynecologist/oncologist (eff. 10/1994)	No	Yes

NOTE: All specialties listed in this table are used to create the finder file based on non-FQHC/RHC claims. For FQHCs/RHCs participating in an ACO, CMS will use all claims for services furnished by all FQHC/RHC practitioners submitted by the FQHC or RHC, when creating the finder file. In Assignment Step 1, CMS includes any MD/DO at an FQHC/RHC, including those with specialties not listed in the above table. The same finder file used for prospective claims-based assignment will be used for determining eligibility for voluntary alignment.

- Table 11 lists specialty codes for non-physician practitioners included in Claims-Based Assignment Step 1.

Table 11. Specialty codes for non-physician practitioners included in the definition of an ACO professional used in Step 1 of assignment.

SPECIALTY CODE	DESCRIPTION
50	Nurse practitioner
89	Clinical nurse specialist
97	Physician assistant

- Table 12 lists the bill types for selecting carrier (physician/supplier Part B), Method II CAH, FQHC, RHC, and ETA institutional claims.

Table 12. Bill types used for identifying Method II CAH, FQHC/RHC, and ETA institutional claims

SPECIALTY CODE	SPECIALTY CODE NAME
Method II CAH Claims	Type of bill 85X with the presence of one or more of the following revenue center codes: 096x, 097x, and/or 098x
RHC Claims	71x bill types
FQHC Claims	73x (for dates of service prior to 4/1/2010) and 77x (for dates of service on or after 4/1/2010)
ETA Claims	13x bill types (from ETA hospitals)

APPENDIX C: DATA USED IN ASSIGNMENT AND FINANCIAL CALCULATIONS

Based on historical trends, CMS expects to have between 98–99 percent of complete claims data 3 months after the end of the calendar year. CMS will calculate the payment amounts included in Parts A and B FFS claims using a 3-month claims run-out period with a completion factor provided by OACT. As explained in the April 2011 proposed rule, the claims run-out period is the time between when a Medicare-covered service has been furnished to a beneficiary and when the final payment is actually issued for the respective service (76 FR 19554). For example, CMS determines expenditures for a calendar year by accounting for claims with dates of service during the 12-month period paid up to 3 months following the end of the year (e.g., paid no later than the end of March the following year). CMS will also use claims data and other sources for individually identifiable final payments made from the Medicare Trust Funds for beneficiaries under a demonstration, pilot, or time-limited program—such as care coordination fees.

PROGRAMMING STEPS FOR CLAIMS-BASED ASSIGNMENT

There are five programming steps involved in assigning beneficiaries to an ACO via claims-based assignment.

Step 1: Identify only those beneficiaries who have made a voluntary alignment selection or have received a primary care service from a physician at the ACO ([Section 2.2](#), Criteria E, G).

CMS identifies all beneficiaries voluntarily aligned to a primary clinician who is affiliated or not affiliated with an ACO.

CMS identifies all Part B claims that have at least one line item with a primary care service code furnished by a primary care physician, physician included in Step 2 of claims-based assignment, or practitioner providing services at an FQHC/RHC participating in an ACO billing under an ACO participant TIN. CMS will use an ACO participant's TIN to identify beneficiaries with a Part B claim that includes at least one primary care service (identified by the Healthcare Common Procedure Coding System (HCPCS) and/or revenue center codes listed in [Table 9](#)) furnished by a physician utilized in assignment at the ACO. Physician specialty is identified by the specialty code associated with each line item on a claim. [Table 10](#) includes the specialty codes used to define a primary care physician (used in assignment Step 1) and specialists (used in assignment Step 2). Note that the definition of a physician, for purposes of the Shared Savings Program, includes only MD/DO physicians.

As noted in [Table 9](#), beginning in 2017, CMS will not consider certain HCPCS codes in physician claims when the service is provided through a SNF to be primary care services for purposes of assignment. For performance years starting on January 1, 2019 and subsequent performance years, we no longer use the POS Code 31 to exclude claims, and in its place indicate more generally that CMS will exclude services billed under CPT codes 99304 through 99318 when such services are furnished through a SNF. RHCs, FQHCs, ETA hospitals, and Method II CAHs will be identified on claims by their CMS Certification Numbers (CCNs). For performance years starting on January 1, 2019, all services reported on an FQHC/RHC claim are treated as primary care services performed by a primary care physician.

Step 2: Create finder file for beneficiaries identified in Step 1.

CMS will create a “finder file” of the beneficiaries identified in programming Step 1 for each ACO. The finder file includes the beneficiary identifier for each beneficiary who selected a primary clinician or received at least one primary care service from the ACO’s physicians utilized in assignment or practitioners who provide services at FQHCs or RHCs within the assignment window.

Step 3: Obtain selected claims, enrollment, and demographic information for beneficiaries.

CMS will use the finder file from programming Step 2 to obtain enrollment information for each beneficiary who received a primary care service from physicians utilized in assignment at the ACO. Eligibility information includes Medicare Parts A and B enrollment, enrollment in a Medicare health plan, and other enrollment information for these beneficiaries. CMS will ultimately remove beneficiaries who do not meet general eligibility requirements (described in [Section 2.2](#) above).

Step 4: Assign beneficiaries to ACOs using voluntary alignment.

For beneficiaries identified in the finder file in programming Step 3 who selected a primary clinician, CMS will assign a beneficiary to a participating ACO when the primary clinician is affiliated with an ACO. Beneficiaries who select a primary clinician not affiliated with an ACO are excluded from assignment to an ACO, even if the beneficiary would otherwise have been assigned to an ACO through claims-based assignment.

Step 5: Assign beneficiaries to ACOs using claims-based Assignment Step 1 ([Section 2.2](#), Criteria F).

For beneficiaries identified in the finder file in programming Step 3, CMS will identify primary care services received from a primary care practitioner at the participating ACO during the assignment window. CMS will assign beneficiaries who meet this condition to an ACO if the allowed charges for primary care services provided to the beneficiary by primary care practitioners at the participating ACO are greater than the allowed charges for primary care services furnished by primary care practitioners in any other ACO, and greater than the allowed charges for primary care services from the same type of providers in each non-ACO individual or group TIN or CCN for FQHC, RHC, ETA hospital, or Method II CAH.

For each ACO, CMS will sum allowed charges for primary care services by the beneficiary identifier. CMS includes the primary care-allowed charges for each beneficiary at each ACO participant (TINs and CCNs) identified as associated with the ACO’s organizational ID.⁹ Note that the CCN is used for FQHC, RHC, Method II CAH, and ETA hospital claims.

CMS will sum primary care-allowed charges by the “Line HCPCS Code” on Part B, FQHC,¹⁰ and Method II CAH claims, and by revenue codes on claims from RHCs. Refer to [Table 9](#) for a list of the primary care HCPCS and revenue codes included in beneficiary assignment. CMS will use allowed charges for assignment because unlike expenditures, allowed charges include the

⁹ All ACOs will have special identifiers (ACO IDs) in the form of Axxxx (with the x’s signifying a four-digit number).

¹⁰ For claims prior to January 1, 2011, revenue center codes on FQHC claims were used to identify primary care services. For FQHC claims on or after January 1, 2011, the “line HCPCS codes” are used.

Medicare deductible—the first dollars of Medicare Part B payments by a beneficiary within the year (e.g., \$185 in 2019). By using allowed charges rather than a simple service count, CMS also reduces the likelihood of ties.

To determine where a beneficiary received the plurality of his or her primary care services, CMS compares the allowed charges for each beneficiary for primary care services provided by the ACO (in total for all ACO participants) to the allowed charges for primary care services provided by other ACOs and non-ACO providers.

CMS has established the following policy in the event of a tie: the tiebreaker will be the ACO or non-ACO individual or group TIN or other organizational identifier (for FQHCs, RHCs, ETA hospitals, and Method II CAHs) that provided the most recent primary care service through a primary care physician or a non-physician practitioner. If there is still a tie, then the tiebreaker will be the ACO or non-ACO individual or group TIN or other organizational identifier (for Method II CAHs, and ETA hospitals) that provided the most recent primary care service through a physician utilized in assignment. Though extremely rare, if there is still a tie, the beneficiary is randomly assigned using a random assignment computer calculation.

Step 6: Apply Claims-Based Assignment Step 2 to beneficiaries who were not assigned in Claims-Based Assignment Step 1.

This step applies only to beneficiaries who have not received any primary care services from a primary care physician, nurse practitioner, physician assistant, clinical nurse specialist, or practitioner providing services at an FQHC/RHC at the participating ACO, or the same type of providers outside of the ACO. In other words, it applies to beneficiaries in the finder file from programming Step 2 who, after Step 5, remain unassigned to any ACO, non-ACO individual or group TIN, or non-ACO FQHC, RHC, ETA hospital, or Method II CAH. CMS will assign each of these beneficiaries to an ACO if:

- The allowed charges for primary care services to the beneficiary by all other ACO physicians utilized in assignment (including physician specialists as indicated in [Table 9](#)) are greater than the allowed charges for primary care services furnished by all ACO physician specialists used in assignment in each other ACO, and
- The allowed charges are greater than the allowed charges for primary care services furnished by physician specialists used in assignment in each non-ACO individual or group TIN or Method II CAH or ETA hospitals.

[Table 10](#) lists all specialty codes included in the definition of a physician utilized in assignment. Note that the definition of a physician for purposes of the Shared Savings Program includes only MD/DO physicians.

[Table 11](#) lists specialty codes for ACO non-physician practitioners (nurse practitioners, clinical nurse specialists, or physician assistants) included in Claims-Based Assignment Step 1.

SPECIAL POLICY FOR PROCESSING METHOD II CAH CLAIMS FOR PROFESSIONAL SERVICES

Method II CAH professional services are billed on institutional claim Form 1450, bill type 85X, with the presence of one or more of the following revenue center codes: 096x, 097x, and/or 098x. These services require special processing for purposes of the Shared Savings Program.

In general, ACOs are identified by TINs. However, the TINs for Method II CAHs are not included in the National Claims History (NCH) and IDR claims files. These CAHs submit line item bills using HCPCS. The rendering physician/practitioner is not reported for each line item.

- CMS will use the CCN as the unique identifier for an individual Method II CAH.
- To obtain the rendering physician/practitioner for Method II CAH claims, CMS will use the “rendering” NPI field. In the event the “rendering” NPI field is blank, CMS will use the “other provider” NPI field. If the “other provider” NPI field is also blank on a claim, CMS will use the “attending” NPI field.
- CMS uses the Provider Enrollment, Chain, and Ownership System (PECOS) to obtain the CMS specialty for Method II CAH claims.

SPECIAL RULES FOR PROCESSING FQHC AND RHC CLAIMS

FQHC and RHC services are billed on an institutional claim form (refer to [Table 12](#)).

FQHC and RHC services require special handling to be incorporated into the beneficiary assignment process. In general, ACO participants are identified by their TINs. However, the TINs for FQHCs and RHCs are not included in the NCH and IDR claims files. Note that the definition of a primary care service or a primary care physician depends on the bill type and date of service.

- For FQHCs/RHCs, CMS treats all FQHC or RHC services reported on an institutional claim as primary care services performed by a primary care physician. If a beneficiary is eligible for assignment to an ACO, then CMS will use all claims for services furnished by all FQHC/RHC practitioners submitted by the FQHC or RHC to determine whether the beneficiary received a plurality of his or her primary care services from the ACO under claims-based assignment Step 1.
- CMS uses the CCN as the unique identifier for an individual FQHC/RHC.

SPECIAL RULES FOR PROCESSING ETA INSTITUTIONAL CLAIMS

ETA hospitals are hospitals that have voluntarily elected to receive payment on a reasonable cost basis for the direct medical and surgical services of their physicians in lieu of the Medicare fee schedule payments that might otherwise be made.

ETA institutional claims are identified with a claim type code equal to 40, bill type equal to 13, and require that the CCN on the claim be on a list of CMS-recognized ETA hospitals. The line item HCPCS codes on the ETA institutional claims are used to identify whether a primary care service was provided. The reason for this identification method is that physician services provided at ETA hospitals do not otherwise appear in either outpatient or physician claims.¹¹ ETA hospitals, however, do bill CMS to recover facility costs incurred when ETA hospital physicians provide services. Therefore, the HCPCS code will identify that a primary care service was provided to a beneficiary. However, CMS will not scan revenue center codes. [Table 9](#) lists the HCPCS codes that will be used to identify primary care services for ETA institutional claims,

¹¹ The physician services, per se, are reimbursed during settlement of the annual Medicare Cost Report for ETA hospitals.

except for two: G0438 and G0439 are not included in the list of HCPCS codes for ETA hospitals in 2009 and 2010.

- To obtain the rendering physician/practitioner for ETA institutional claims, CMS will use the “other provider” NPI field. If this field is blank on a claim, CMS will use the “attending” NPI field.
- CMS uses PECOS to obtain the CMS specialty for ETA institutional claims.
- Allowed charges for ETA claims are imputed using the formula used by Medicare’s Physician Fee Schedule for calculating allowed charges for each HCPCS code.

DETERMINING ASSIGNABLE FFS BENEFICIARIES IN CALCULATING FACTORS BASED ON NATIONAL AND REGIONAL FFS EXPENDITURES

Assignable FFS beneficiaries are a subset of the broader FFS population and include any beneficiary receiving a primary care service from a primary care physician or from a physician with one of the primary specialty designations included in [Table 10](#) or from a practitioner who provides services at FQHCs or RHCs. This primary care service must be one that is billed under traditional FFS Medicare ([Table 9](#)) with a date of service during the 12-month assignment window as defined under § 425.20 (refer to [Appendix A](#)). CMS uses a 3-month claims run-out period when determining assignable beneficiaries.

Using only assignable beneficiaries in expenditure calculations avoids biases that could result from including Medicare FFS beneficiaries who have not utilized services, among other factors, that would be present in calculations based on the larger Medicare FFS population.

APPENDIX D: 2019 SHARED SAVINGS PROGRAM REPORT SCHEDULE

Table 13. 2019 Shared Savings Program report schedule for January 2019 participating ACOs

MONTH ¹	CMS REPORT	REPORT RECIPIENTS ^{2,3} & NOTES: JANUARY 2019 PARTICIPATING ACOs
December	2019 Assignment List Report & Assignment Summary Report	<ul style="list-style-type: none"> Existing ACOs and January 2019 deferred renewals.
Monthly	2019 Claim and Claim Line Feed (CCLF) files	<ul style="list-style-type: none"> Made available January–December to existing ACOs and January 2019 deferred renewals. Beneficiary- and provider-identifiable claims data.
December	2018 CMS Web Interface Patient Ranking file	<ul style="list-style-type: none"> Existing ACOs and January 2019 deferred renewals. List of assigned beneficiaries sampled for CMS Web Interface data collection.
February	2018 Quarter 4 Report Package: Assignment List Report; Assignment Summary Report; Aggregate Expenditure/Utilization Report; Non-Claims Based Payment File	<ul style="list-style-type: none"> Existing ACOs and January 2019 deferred renewals.
February	2018 Quarter 3 Claims-based Quality Measures Report	<ul style="list-style-type: none"> Existing ACOs and January 2019 deferred renewals.
March	2019 Adjusted Historical Benchmark Report	<ul style="list-style-type: none"> Existing ACOs only. For Performance Year (PY) 2019, all existing ACOs receive an adjusted historical benchmark based on regulatory changes to the Shared Savings Program's assignment methodology. These adjusted benchmarks also account for modifications ACOs made to their certified ACO Participant List effective for PY 2019.
March	2019 Preliminary Rebased Historical Benchmark Report	<ul style="list-style-type: none"> January 2019 deferred renewals only.
May	2019 Quarter 1 Report Package: Assignment List Report; Assignment Summary Report; Aggregate Expenditure/Utilization Report; Non-Claims Based Payment File	<ul style="list-style-type: none"> Existing ACOs and January 2019 deferred renewals.
May	2018 Quarter 4 Claims-based Quality Measures Report	<ul style="list-style-type: none"> Existing ACOs and January 2019 deferred renewals. This will be the same utilization period and assignment as the annual performance measure calculations for PY 2018. These scores will be the ACOs PY 2018 scores provided in the PY 2018 Quality Report to be delivered in July.
June	2019 Quarter 1 Opioid Measures Report	<ul style="list-style-type: none"> Existing ACOs and January 2019 deferred renewals.
July	2018 ACO Quality Performance Reports	<ul style="list-style-type: none"> Existing ACOs and January 2019 deferred renewals.
July	2019 Final Rebased Historical Benchmark Report	<ul style="list-style-type: none"> January 2019 deferred renewals only.

MONTH ¹	CMS REPORT	REPORT RECIPIENTS ^{2,3} & NOTES: JANUARY 2019 PARTICIPATING ACOS
August	2018 Financial Reconciliation Package	<ul style="list-style-type: none"> Existing ACOs and January 2019 deferred renewals. Report packages contain informational reports on the ACO's PY 2018 assigned population, including: Assignment List Report, Assignment Summary Report, and Aggregate Expenditure/Utilization Report; Non-Claims Based Payment File, and Financial Reconciliation report
August	2019 Quarter 2 Report Package: Assignment List Report; Assignment Summary Report; Aggregate Expenditure/Utilization Report; Non-Claims Based Payment File	<ul style="list-style-type: none"> Existing ACOs and January 2019 deferred renewals.
August	2019 Quarter 1 Claims-based Quality Measures Report	<ul style="list-style-type: none"> Existing ACOs and January 2019 deferred renewals.
September	2019 Quarter 2 Opioid Measures Report	<ul style="list-style-type: none"> Existing ACOs and January 2019 deferred renewals.
November	2019 Quarter 3 Report Package: Assignment List Report; Assignment Summary Report; Aggregate Expenditure/Utilization Report; Non-Claims Based Payment File	<ul style="list-style-type: none"> Existing ACOs and January 2019 deferred renewals.
November	2019 Quarter 2 Claims-based Quality Measures Report	<ul style="list-style-type: none"> Existing ACOs and January 2019 deferred renewals.
December	2019 Quarter 3 Opioid Measures Report	<ul style="list-style-type: none"> Existing ACOs and January 2019 deferred renewals.
December	2020 Assignment List Report & Assignment Summary Report	<ul style="list-style-type: none"> Made available to ACOs continuing for PY 2020, and those entering the program or renewing for agreement periods beginning January 1, 2020.

Notes:

¹ This is the planned report delivery schedule; dates are subject to change.

² Existing ACOs include 2016, 2017 and 2018 starters within their first agreement period, and 2016, 2017, and 2018 renewals.

³ January 2019 Renewals only include 2015 starters that began in Track 1 and were approved to defer by 1 year entering a two-sided risk track for their second agreement period starting January 1, 2019.

REPORT DESCRIPTIONS

The Assignment List Report provides ACOs with beneficiary identifiable information on their assigned population:

- ACOs with retrospective beneficiary assignment: ACOs receive an initial preliminary prospective assignment list close to the start of each performance year, retrospective assignment lists for each benchmark year, quarterly reports on the ACO's preliminary prospectively assigned population throughout each performance year, and a year-end report on retrospectively assigned beneficiaries used for financial reconciliation.

ACOs with prospective beneficiary assignment: ACOs receive a prospective assignment list for the performance year close to the start of the year, prospective assignment lists for each benchmark year, quarterly lists for the performance year indicating which beneficiaries have been removed from the ACO's assignment list as a result of meeting select assignment exclusion criteria, and a year-end report on assigned beneficiaries used for financial reconciliation (similarly indicating beneficiaries determined to be excluded from assignment based on select criteria). **The Assignment Summary Report** provides summary information on the ACO's assigned beneficiary population including demographic and eligibility characteristics, proportion and number of primary care services provided to assigned beneficiaries, disease categories, and distribution of assigned-beneficiary residence by county.

- ACOs with retrospective beneficiary assignment: ACOs receive a report based on their initial preliminary prospective assignment list close to the start of each performance year, a report based on preliminary prospectively assigned population for each benchmark year, reports based on preliminary prospectively assigned population for each quarter, and a year-end report on beneficiaries retrospectively assigned for financial reconciliation.
- ACOs with prospective beneficiary assignment: ACOs receive a report based on their prospective assignment list close to the start of each performance year, reports based on prospectively assigned beneficiaries for each benchmark year, quarterly reports based on the ACO's currently assigned beneficiaries for the performance year updated to identify exclusions made in the year-to-date period, and a year-end report on prospectively assigned beneficiaries for the performance year updated to identify beneficiaries no longer eligible for assignment at the end of the performance year.

The Aggregate Expenditure/Utilization Report provides ACOs with expenditures and utilization rates for their assigned beneficiaries compared to other ACOs, and national means to assist with identifying trends and outliers. Reports are provided each quarter during the agreement period, provided for each benchmark year, and provided annually for each performance period.

The Non-Claims Based Payment File provides beneficiary-level data on non-claims based payments for the ACO's assigned population.

The Historical Benchmark Report specifies the calculation of the ACO's 3-year average per capita benchmark value. A preliminary Historical Benchmark Report is provided within 3 months of the ACO's agreement start date. These Historical Benchmark Reports may be adjusted each performance year to account for changes in the ACO's certified ACO Participant List effective

for the performance year and/or to account for program-wide regulatory changes. ACOs that are new starters or renewals will also receive a final Historical Benchmark Report in the summer of the first performance year of their new agreement period, based on finalized data for BY3. An updated historical benchmark that reflects performance year growth factors is provided to all ACOs with financial reconciliation report packages. Benchmark Report packages include informational reports: Assignment List Report, Assignment Summary Report and Aggregate Expenditure/Utilization Report for the assigned population for each benchmark year.

The Financial Reconciliation Report specifies the ACO's historical benchmark, updated benchmark, and determination of shared savings/losses.

The Quality Performance Reports specify the ACO's quality performance results for the performance year: overall report on quality performance, and a detailed CAHPS® for ACOs report.

The Claims-Based Quality Measures Report provides quarterly estimates of the claims-based quality measures.

The Opioid Measures Report identifies beneficiaries who meet certain Part D opioid metric criteria.

APPENDIX E: CHARACTERISTICS OF BENCHMARKING APPROACHES BY AGREEMENT PERIOD

Table 14. Characteristics of Benchmarking Approaches by Agreement Period

SOURCE OF METHODOLOGY	AGREEMENT PERIOD	HISTORICAL BENCHMARK TREND FACTORS (TREND BY1, BY2, TO BY3)	ADJUSTMENT TO THE HISTORICAL BENCHMARK FOR REGIONAL FFS EXPENDITURES (PERCENTAGE APPLIED IN CALCULATING ADJUSTMENT)	ADJUSTMENT TO THE HISTORICAL BENCHMARK FOR SAVINGS IN PRIOR AGREEMENT PERIOD	ADJUSTMENT TO THE HISTORICAL BENCHMARK FOR ACO PARTICIPANT LIST CHANGES	ADJUSTMENT TO THE HISTORICAL BENCHMARK FOR HEALTH STATUS AND DEMOGRAPHIC FACTORS OF PERFORMANCE YEAR ASSIGNED BENEFICIARIES	UPDATE TO THE HISTORICAL BENCHMARK FOR GROWTH IN FFS SPENDING
November 2011 Final Rule	First	National FFS	No	No	Calculated using benchmark year assignment based on the ACO's certified ACO Participant List for the performance year.	Newly assigned beneficiaries adjusted using CMS-HCC model; continuously assigned beneficiaries adjusted using demographic factors alone unless CMS-HCC risk scores result in a lower risk score	National FFS
As modified by June 2015 Final Rule	Second (beginning 2016)	National FFS	No	Yes	Same as methodology for first agreement period.	Same as methodology for first agreement period	National FFS
As modified by the June 2016 Final Rule: Rebasing Methodology for second agreement periods beginning 2017, 2018, or January 1, 2019	First	National Assignable FFS	No	No	Same as original methodology for first agreement period.	Same as original methodology for first agreement period	National Assignable FFS
	Second	Regional	Yes (35 percent, or 25 percent if ACO is determined to have higher spending compared to its region.)	No	Same as methodology for first agreement period; regional FFS adjustment redetermined based on ACO's certified ACO Participant List for the performance year.	No change	Regional
*Please reference the Shared Savings Program December 2018 Final Rule (83 FR 67816) Table 6 for additional information related to regional adjustment weights based on agreement start date and applicant type.							

LIST OF ABBREVIATIONS

Acronym	Definition
ACO	Accountable Care Organization
APM	Alternative Payment Model
BY	Benchmark Year
CAH	Critical Access Hospital
CCN	CMS Certification Number
CFR	Code of Federal Regulations
CAHPS®	Consumer Assessment of Healthcare Providers and Systems
CMS	Centers for Medicare & Medicaid Services
CMS-HCC	CMS Hierarchical Condition Category
CPT	Current Procedural Terminology
CY	Calendar Year
DME	Durable Medical Equipment
DO	Doctor of Osteopathic Medicine
DSH	Disproportionate Share Hospital
EIN	Employer Identification Number
ESRD	End-Stage Renal Disease
ETA	Electing Teaching Amendment
FFS	Fee-for-Service
FQHC	Federally Qualified Health Center
HCPCS	Healthcare Common Procedure Coding System
HHA	Home Health Agency
IDR	Integrated Data Repository
IME	Indirect Medical Education
MA	Medicare Advantage
MD	Medical Doctor
MIPS	Merit-based Incentive Payment System
MLR	Minimum Loss Rate
MSP	Medicare Secondary Payer
MSR	Minimum Savings Rate
NCH	National Claims History
NPI	National Provider Identifier
OACT	CMS Office of the Actuary
OPPS	Outpatient Prospective Payment System
PACE	Program of All-Inclusive Care for the Elderly
PECOS	Provider Enrollment, Chain, and Ownership System
PY	Performance Year
QMBs	Qualified Medicare beneficiaries
RHC	Rural Health Clinic
SLMBs	Specified Low-Income Medicare beneficiaries
SNF	Skilled Nursing Facility
SSN	Social Security Number
TIN	Taxpayer Identification Number