Pioneer ACO Alignment and Financial Reconciliation Methods

Contents

Intro	ductio	n and Overview	3
1.0	Over	view of the PY4 benchmarking method	4
2.0	Defin	nitions	5
	2.1	Performance Years, Base Years, and Alignment Years	5
	2.2	Alignment-eligible beneficiary	5
		2.2.1 Requirement for QEM during alignment period ("alignable" beneficiaries)	6
		2.2.2 Application of alignment-eligibility requirements to base-years	6
		2.2.3 Quarterly exclusion of beneficiaries during the performance-year	6
	2.3	Pioneer ACO Service Area	7
	2.4	Qualified Evaluation & Management services	
	2.5	Primary care specialists	7
	2.6	Participating provider	8
	2.7	Participating practice	8
	2.8	Participating practitioner	
	2.9	Legacy provider identifiers	
	2.10	Reference population	9
	2.11	Expenditures used in financial calculations	9
		2.11.1 Three-month run-out	9
		2.11.2 Care coordination fees	10
		2.11.3 Exclusion of certain provider payments	10
		2.11.4 Calculation on a pre-sequestration basis	10
		2.11.5 Adjustment for changes in policy related to uncompensated care	11
	2.12	Capped expenditures by entitlement category	11
	2.13	Beneficiary risk scores	11
	2.14	Locality adjustment	13
3.0	Align	ment of beneficiaries	13
	3.1	Use of weighted allowable charges in alignment	13
	3.2	The 2-stage alignment algorithm	14

	3.3	Tie-bre	eaker rule	14
	3.4	Volunt	ary alignment	14
4.0	Base	line exp	enditure	14
	4.1	Calcula	ation of baseline for entitlement categories	15
	4.2	Trende	ed, locality-adjusted base-year expenditures	16
	4.3	Base-y	ear risk ratios	17
		4.3.1	Normalized risk scores	17
		4.3.2	Base-year risk ratio for an entitlement category	18
	4.4	Localit	y-adjustment factors	19
		4.4.1	Development of county-level locality adjustment factors	19
		4.4.2	Locality-adjusted provider payment	20
		4.4.3	Calculation of locality-adjustment factor for aligned beneficiaries	21
		4.4.4	Base-year locality adjustment factors	21
		4.4.5	Performance-year locality adjustment factors	21
		4.4.6	Prospective calculation of locality-adjustment factors	21
	4.5	Fee-fo	r-service trend factors	22
5.0	Benc	hmark e	expenditure for the performance-year	22
	5.1	Risk-a	djusted ACO baseline expenditure	23
	5.2	Perfor	mance-year risk ratio for an entitlement category	24
	5.3	Combi	ning results for entitlement categories	24
	5.4	Perfor	mance Year 5 Risk Adjustment	24
Adde	endum	A: Cod	es used in Pioneer ACO alignment and benchmarking methods	25
Adde	endum	B: Attri	bution of experience to entitlement categories	29
	B.1	Logic f	or determination of entitlement category in a specified calendar month	29
	B.2	Attribu	ution of experience to entitlement categories	29
Adde	endum	C: Tech	nnical Description of state trend factors	33
Adde	endum	D: Crite	eria for identifying beneficiaries who are not alignment eligible	35

Introduction and Overview

This memorandum describes the methods that will be used in performance years 4 (PY4/CY2015) and 5 (PY5/CY2016) to calculate shared savings under the Pioneer Model.

- Section 1 provides an overview of the PY4/PY5 Pioneer benchmarking method.
- Section 2 defines key terms that are used in the description of the methods in sections 3, 4 and
 5.
- Section 3 describes the methods that will be used to align beneficiaries with Pioneer ACOs in each base year and in the performance year.
- Section 4 describes the calculation of the baseline expenditure for the Pioneer ACO.
- Section 5 describes the calculation of the performance year benchmark.

Certain aspects of the PY4 benchmarking method are unchanged from the methods that were used in the first three performance years.

- 1. A 'participating provider' will continue to be defined by a combination of a practice identifier and a practitioner identifier (i.e., the individual National Provider Identifier).
- 2. The definition of 'valid' claims (i.e., the expenditures for which the Pioneer ACO is held accountable) is the same.
- 3. Savings calculations will be made on a pre-sequestration basis.
- 4. Indirect Medical Education (IME) and Disproportionate Share Hospital (DSH) payments will continue to be included in expenditures.
- 5. DSH payments in the base years will be reduced to reflect the changes in DSH payment that were enacted as part of the Affordable Care Act (ACA).
- 6. The new Uncompensated Care (UCC) payments will be deducted from hospital payments.

The principal differences between the PY3 and the PY4 benchmarking methods are four:

- 1. The 3-year baseline will be a weighted average of:
 - a. The calendar year 2011 (CY2011) expenditure per person year (expenditure PBPY) of beneficiaries aligned in CY2011;
 - b. The calendar year 2012 (CY2012) expenditure PBPY of beneficiaries aligned in CY2012; and,
 - c. The calendar year 2013 (CY2013) expenditure PBPY of beneficiaries aligned in CY2013.

The average CY2011 and average CY2012 expenditure PBPY will be trended to CY2013.

- 2. The overall benchmark will be a weighted average of benchmarks that are calculated separately for four entitlement categories:
 - a. Aged beneficiaries enrolled in Medicare only (Aged/Non-dual);
 - b. Aged beneficiaries enrolled in both Medicare and Medicaid (Aged/dual);
 - c. Disabled beneficiaries; and,
 - d. Beneficiaries with End Stage Renal Disease (ESRD).

The expenditure caps and trend factors that are applied during the development of the benchmark are specific to these four entitlement categories.

- 3. The baseline expenditure will be adjusted for differences in the risk score (i.e., the expected cost) of the BY3-aligned beneficiaries and the PY-aligned beneficiaries.
- 4. The baseline expenditure will be adjusted for the impact of differences in the geographic adjustment factors used by Medicare fee schedules on provider payments between the base-year(s) and performance-year.

The PY4/5 methods will continue to use state-specific factors to trend BY1 and BY2 baseline expenditures to BY3 and will continue to use the 50/50 formula to calculate the benchmark(s).

1.0 Overview of the PY4 benchmarking method

In performance years 4 (PY4) and 5 (PY5) the expenditure benchmark will be based on methods that are similar, but not identical, to those used by the Shared Savings Program. Specifically, the Pioneer Model expenditure benchmark will:

- 1. Be based on a three-year baseline expenditure that includes adjustments for:
 - a. Changes in the average risk (i.e., expected cost) of the aligned beneficiaries over the three baseline years and between the baseline period and the performance year;
 - b. The impact of changes in the geographic adjustments between the baseline period and the performance year that fee-for-service Medicare makes under fee schedules for the acute inpatient prospective payment system, the prospective payment system for Skilled Nursing Facility services, the prospective payment system for home health services, the outpatient hospital prospective payment system, the hospice payment system, and the physician fee schedule (i.e., the Geographic Practice Cost Indices).
- 2. Make use of trend factors that reflect the actual experience of all beneficiaries who are eligible for alignment with a Pioneer ACO in each of the base- or performance-years (i.e., the national reference population).
- 3. Be developed separately based on entitlement category (i.e., whether in any given month a beneficiary was ESRD, disabled, aged and not entitled to benefits under Medicaid (Aged/non-dual), or aged and entitled to benefits under Medicaid (Aged/dual)).
- 4. For each entitlement category, be equal to the Pioneer ACO's adjusted baseline plus:
 - a. 50% of the dollar difference in the average expenditure of the reference population between the 3rd base-year and the performance-year; and,
 - b. 50% of the percentage change in the average expenditure of the reference population between the 3rd base-year and the performance-year.

The aligned population for each base-year and for the performance-year will be determined based on receipt of primary care services from the Participating Providers of the Pioneer ACO. The aligned population will be identified prospectively (i.e., prior to the start of the performance-year). During the performance-year beneficiaries who do not meet the alignment-eligibility requirements will be excluded. The exclusion of a beneficiary will have no effect on the Pioneer ACO's baseline, but will completely remove the beneficiary from the calculation of the performance-year expenditure.

2.0 Definitions

This section 2.0 defines certain terms that are used throughout this document unless otherwise noted.

2.1 Performance Years, Base Years, and Alignment Years

Performance Year 4 (PY4) is calendar year 2015 (CY2015). Performance Year 5 (PY5) is calendar year 2016 (CY2016)

The three base years for PY4 and PY5 are calendar years 2011, 2012, and 2013.

- Base Year 3 (BY3) is calendar year 2013 (CY2013).
- Base Year 2 (BY2) is calendar year 2012 (CY2012).
- Base Year 1 (BY1) is calendar year 2011 (CY2011).

Each performance-year or base-year is associated with two alignment-years. The first alignment-year for a performance or base year is the 12-month period ending 18 months prior to the start of the performance- or base-year. The second-alignment year is the 12-month period ending 6 months prior to the start of the performance- or base-year. In this document, an Alignment Year is identified by the calendar year in which the alignment-year ends. For example, Alignment Year 2014 (AY2014) is the 12-month period ending in June 2014.

Table 2.1 specifies the period covered by each base year and performance year, and their corresponding alignment years.

Table 2.1: Definition of ba	se years and r	performance y	/ears
-----------------------------	----------------	---------------	-------

Period	Period covered ¹	Corresponding alignment years (AY)
Performance Year 5	01/01/2016–12/31/2016	PY5/AY1: 07/01/2013-06/30/2014 (AY2014)
(PY5)		PY5/AY2: 07/01/2014-06/30/2015 (AY2015)
Performance Year 4	01/01/2015-12/31/2015	PY4/AY1: 07/01/2012-06/30/2013 (AY2013)
(PY4)		PY4/AY2: 07/01/2013-06/30/2014 (AY2014)
Base Year 3 (BY3)	01/01/2013-12/31/2013	BY1/AY1: 07/01/2010-06/30/2011 (AY2011)
		BY1/AY2: 07/01/2011-06/30/2012 (AY2012)
Base Year 2 (BY2)	01/01/2012-12/31/2012	BY2/AY1: 07/01/2009-06/30/2010 (AY2010)
		BY2/AY2: 07/01/2010-06/30/2011 (AY2011)
Base Year 1 (BY1)	01/01/2011–12/31/2011	BY1/AY1: 07/01/2008-06/30/2009 (AY2009)
		BY1/AY2: 07/01/2009-06/30/2010 (AY2010)

¹ The period covered is the calendar year for which the expenditures of aligned beneficiaries will be calculated for purposes of setting the Pioneer baseline or determining performance period savings.

2.2 Alignment-eligible beneficiary

A beneficiary is alignment-eligible for a base- or performance-year if:

1. During the related 2-year alignment period, the beneficiary had at least one paid claim for a QEM service; and,

- 2. During the base- or performance-year, the beneficiary:
 - a. Has at least one month of coverage under Part A;
 - b. Has no months of coverage under only Part A;
 - c. Has no months of coverage under only Part B;
 - d. Has no months of coverage under a Medicare Advantage or other Medicare managed care plan;
 - e. Has no months in which Medicare was the secondary payer;
 - f. Was a resident of the United States;
 - g. Had not relocated from a county that was included in the Pioneer ACO's service area to a county that was not included in the Pioneer ACO's service area; and,
 - h. During the base- or performance-year did not receive more than 50% of their QEM services from providers practicing in counties that are not included in the Pioneer ACO's service area.

A beneficiary may be alignment-eligible in a base-year but not a performance-year and may be alignment-eligible in a performance-year but not a base-year.

2.2.1 Requirement for QEM during alignment period ("alignable" beneficiaries)

To be aligned, a beneficiary necessarily must have at least one paid claim for a QEM service during the 2-year alignment period, but the beneficiary is not required to be alignment-eligible in either of the two alignment years. Consequently, the beneficiaries who are aligned for a base- or performance-year, *prior to the application of the requirements for alignment-eligibility*, include all beneficiaries who have at least one QEM service that was paid by fee-for-service Medicare during the 2-year alignment period. These beneficiaries may be referred to as "alignable" beneficiaries.

2.2.2 Application of alignment-eligibility requirements to base-years

After alignment is performed and prior to the start of the performance year, the alignment-eligibility criteria (2.a through 2.h) will be applied to each of the three base years to exclude from the "alignable" population beneficiaries who are not alignment-eligible in the base- year or performance-year.

2.2.3 Quarterly exclusion of beneficiaries during the performance-year

Alignment-eligibility requirements 2.a through 2.f will be applied to the performance year as part of the quarterly exclusion process. Exclusions will be performed at six points during the year:

- 1. In January of the performance year, PY-aligned beneficiaries who became ineligible for alignment because they died prior to the start of the performance year will be excluded.
- 2. In April of the performance year PY-aligned beneficiaries who enrolled in Medicare Advantage plans will be excluded.
- 3. In July of the performance year, PY-aligned beneficiaries who became ineligible for alignment during the first quarter of the performance-year will be excluded.
- 4. In October of the performance year, PY-aligned beneficiaries who became ineligible for alignment during the 2nd quarter of the performance-year will be excluded.

- 5. In the January following the end of the performance year, PY-aligned beneficiaries who became ineligible for alignment during the 3rd quarter of the performance-year will be excluded.
- 6. Prior to the preliminary financial settlement in the April following the end of the performance year, PY-aligned beneficiaries who became ineligible for alignment during the 4th quarter of the performance-year will be excluded along with beneficiaries not meeting the alignment requirements related to the service area of the Pioneer ACO.

A beneficiary who is determined to be not alignment-eligible in one quarter will be continue to be considered ineligible even if subsequent updates to eligibility data indicate that the beneficiary was eligible in a subsequent quarter. Once a beneficiary is excluded, the beneficiary is removed from all financial calculations for that year. All alignment-eligible beneficiaries except those who die during the performance year will, therefore, contribute 12 months of experience to the performance-year expenditure.

Addendum D translates the alignment-eligibility requirements into the criteria that will be applied to exclude beneficiaries from the alignment-eligible or aligned population in a base- or performance-year.

2.3 Pioneer ACO Service Area

The Pioneer ACO's Service Area consists of all counties in which Participating Providers who are primary care specialists have office locations and the adjacent counties. The counties in which Participating Providers have office locations will be referred to as the "core" service area. The counties adjacent to the "core" service area may be referred to as the "extended" service area. The Pioneer ACO is responsible for identifying the counties in which their Participating Providers have office locations, i.e., the "core" service area.

2.4 Qualified Evaluation & Management services

Qualified Evaluation & Management (QEM) services are identified by the Healthcare Common Procedure Coding System (HCPCS) codes listed in Addendum A, Table A-1, and physician specialty.

In the case of claims submitted by physician practices, a QEM service must be provided by a physician specialty listed in Addendum A, Tables A-2 or A-3.

In the case of claims submitted by institutional practices, a QEM service must be provided by the physician's primary specialty as recorded in NPPES or PECOS.

2.5 Primary care specialists

A primary care specialist is a physician or NPP whose principal specialty is included in Addendum A, Table A-2.

For purposes of applying the provider exclusivity requirements, the physician or NPP's specialty will be determined based on the physician or NPP's current information in the National Plan & Provider Enumeration System (NPPES) at the time the participating provider data is submitted to the Center for Medicare and Medicaid Innovation (CMMI).

For purposes of applying the 2-stage alignment algorithm described in Section 3.2, the physician or NPP's specialty will be determined based on the CMS Specialty Code recorded on the claim for a qualified E&M service. In the case of QEM services obtained from FQHC, RHC, or CAH2 providers the specialty code may be determined based on the physician's primary specialty as recorded in NPPES or PECOS.

2.6 Participating provider

A participating provider is either a physician or non-physician practitioner (NPP) who is a member of a participating practice or an institutional provider or a supplier that has entered into an agreement with the Pioneer ACO.

Participating providers are identified by either:

- 1. In the case of physician practices, a combination of Taxpayer Identification Number (TIN) and the practitioner's individual National Provider Identifier (NPI).
- 2. In the case of institutional practices (including FQHCs, RHCs, and CAH2s), a combination of a CMS Certification Number (CCN) and the practitioner's individual NPI.

A primary care specialist may be identified as a participating provider by one and only one Pioneer ACO.

2.7 Participating practice

A participating practice is:

- a. A physician practice,
- b. A Federally Qualified Health Center (FQHC),
- c. A Rural Health Clinic (RHC), or
- d. A Critical Access Hospital that elects payment under Method 2 (CAH2) that has an agreement with a Pioneer ACO.

A participating physician practice is identified by TIN.

An FQHC, RHC, or CAH2 practice is identified by TIN, CCN, and an organizational NPI.

2.8 Participating practitioner

A participating practitioner is a physician or NPP identified by an <u>individual</u> National Provider Identifier (NPI) who is a member of a participating practice. A practitioner may participate in more than one Pioneer ACO.

2.9 Legacy provider identifiers

A legacy practice identifier is a TIN or CCN that was used by a participating practice to bill for services provided to Medicare beneficiaries in an alignment-year for any of the base- or performance-years but that will <u>not</u> be used by a participating practice during the performance-year. A legacy provider identifier may be used to conduct alignment only if:

- 1. Merger, acquisition, or corporate reorganization has resulted in the consolidation or replacement of a TIN or CCN that appears on claims for QEM services provided during an alignment-year; and,
- 2. The TIN or CCN will not be used to bill for QEM services provided during the performance-year.

A legacy practice identifier (a TIN or CCN) cannot be used to identify a Pioneer ACO Participating Provider if the practice it identifies is participating in or intends to participate in a Shared Savings Program ACO during the performance-year.

2.10 Reference population

The "reference population" for each base- or performance-year will consist of all beneficiaries who are alignment-eligible in each base- or performance-year. The same exclusion criteria will apply to both aligned and non-aligned "reference" beneficiaries, with the exception of the exclusion criteria that involve the Pioneer ACO service area.

2.11 Expenditures used in financial calculations

In general and subject to the exceptions discussed below, the expenditure incurred by an alignmenteligible beneficiary, for purposes of financial calculations for any performance or baseline period, is the sum of all Medicare payments on claims for services covered by Part A or Part B of Medicare, subject to the adjustments described in this section, including:

- 1. Inpatient claims,
- 2. Outpatient claims,
- 3. Physician claims,
- 4. Skilled Nursing Facility (SNF) claims,
- 5. Home Health Agency (HHA) claims,
- 6. Durable Medical Equipment (DME) claims,
- 7. Hospice claims, and
- 8. Care coordination fees

Adjustments that are reflected in the amount paid on Part A and B claims, including geographic payment adjustments, HVBP payments, indirect medical education adjustments and disproportionate share hospital and uncompensated care payments (subject to the adjustment described in section 2.11.4), are <u>included</u> in expenditure calculations.

The requirements for the inclusion of claims are summarized in Addendum A, Table A-4.

2.11.1 Three-month run-out

The expenditure that is used in financial calculations is the total amount paid to providers for services covered by Medicare Parts A and B that are incurred during the base- or performance-year and paid within 3 months of the close of the base- or performance-year.

1. The incurred date for a claim is determined by the date of service, as discussed below.

2. The paid date for a claim is the effective date of the claim in conjunction with the date the claim is loaded into the Integrated Data Repository (IDR).

More specifically, to be included in financial calculations:

- 1. The date of service on the claim must be between the start and end dates (inclusive) of a baseline year or performance period.
- The effective date of the claim must be within the run-out period for the baseline period or the performance period (i.e., three calendar months following the close of either the baseline or performance period).
- 3. The IDR load date must be the first IDR load date following the last effective date included in the run-out period.

The date of service is the "through date" of the period covered by the claim. In the case of claims for inpatient, outpatient, SNF, HHA and hospice claims, the "date of service" is the through date on the Part A claim header record. In the case of hospital physician, and DME claims, the date of service is the through date on the line item claim record.

2.11.2 Care coordination fees

Payments made under care-coordination programs that are tied to coordination services provided to identifiable beneficiaries but that are paid outside the standard Part A and Part B claims systems will also be included in calculation of the ACO and reference baseline and performance-period expenditures. These programs include the Health Care Quality (HCQ) demonstration and the Community-based Care Transition Program (CCTP) but may include additional programs as specified by the Centers for Medicare and Medicaid Services (CMS).

2.11.3 Exclusion of certain provider payments

Medicare inpatient pass-through payment amounts (estimates) on inpatient claims will be <u>excluded</u> from expenditures.

Direct Graduate Medical Education, PQRS, eRx, and EHR incentive payments for eligible professionals, and EHR incentive payments to hospitals will all be <u>excluded</u> from expenditure calculations.

Payments related to other Medicare demonstrations or pilots will be <u>included</u> in Pioneer expenditure calculations <u>only</u> if they are paid for services delivered to a specific beneficiary (e.g., represent a payment for identifiable services provided to the beneficiary) as described in appendices to the Pioneer participation Agreement.

2.11.4 Calculation on a pre-sequestration basis

All financial calculations will be based on the amount of payment that would have been made to providers if sequestration had not been required (i.e., on a *pre*-sequestration basis).

2.11.5 Adjustment for changes in policy related to uncompensated care

In calculating the baseline expenditure, 75% of the Disproportionate Share Hospital (DSH) component of payment will be deducted from the provider payment on claims that are incurred:

- 1. Between January 1, 2011, and December 31, 2011, inclusive;
- 2. Between January 1, 2012, and December 31, 2012, inclusive;
- 3. Between January 1, 2013, and September 30, 2013, inclusive;

In calculating both baseline and performance-period expenditures, 100% of the Uncompensated Care (UCC) component of payment under the Inpatient Prospective Payment System (IPPS) for services that are incurred on or after October 1, 2013, will be removed from the provider payment.

2.12 Capped expenditures by entitlement category

When stipulated in the agreement between the Pioneer ACO and CMMI, all baseline and savings calculations are based on capped expenditures. The capped expenditure incurred by a beneficiary is determined separately by entitlement category based on the expenditure incurred by a beneficiary during months in which the beneficiary contributed experience to an entitlement category. The capped expenditure incurred by the beneficiary is the lesser of:

- 1. The expenditure incurred by the beneficiary during a base- or performance-year; and,
- 2. The expenditure cap that applies to that entitlement category for that year.

The cap is specific to the entitlement category, and is applied to the expenditure PBPM (or equivalently the 'annualized' expenditure) that the beneficiary incurred during the months in which the beneficiary contributed experience to the category.

The expenditure cap, for a given entitlement category, is the 99th percentile of the expenditure PBPM incurred by all alignment-eligible beneficiaries who accrue experience to the entitlement category. The expenditure caps will reflect national experience.

The expenditure PBPM incurred by a beneficiary in months that a beneficiary contributes experience to an entitlement category is equal to the beneficiary's total expenditure while assigned to the category divided by the number of months accrued to the category. (The 'annualized expenditure' per month during months in which the beneficiary contributed experience to the entitlement category is the expenditure PBPM multiplied by 12.)

Addendum B also illustrates the application of caps to the entitlement categories for the five hypothetical beneficiaries described in addendum Table B-2.

2.13 Beneficiary risk scores

Risk scores are a measure of the expected expenditure of a beneficiary that is based on the clinical conditions for which a beneficiary was treated in the prior year. CMS maintains the CMS-HCC

prospective risk adjustment models for the Medicare Advantage (MA) program,¹ which are used to calculate CMS-HCC risk scores for all Medicare beneficiaries, including FFS beneficiaries. Separate models for different beneficiary subpopulations are created, including:

- 1. Aged/Disabled subpopulation models for:
 - a. Community-residing beneficiaries;
 - b. Beneficiaries residing in long-term institutional settings;
 - c. New Medicare enrollees; and,
 - d. Functioning graft (post-kidney-transplant) beneficiaries.
- 2. ESRD subpopulation models for:
 - a. Beneficiaries receiving dialysis;
 - b. Beneficiaries receiving a kidney transplant.

One or more of these risk scores may be applicable to a beneficiary during a given year. For example, a beneficiary who has been living in the community may become a resident of a long-term care institution during the year. The risk score from the community-residing model will be used for months in which the beneficiary was living in the community, while the long-term institutional risk score will be used for months in which the beneficiary is a long-term resident of a nursing facility.

The MA risk adjustment model(s) that are used for each benchmark and performance year will be used for risk adjustment in the Pioneer program. That is, the CY2011 risk score(s) for a beneficiary will be the risk score(s) that were developed for the beneficiary using the MA risk adjustment models for CY2011. Risk scores without the MA coding intensity adjustment will be used for Pioneer risk adjustment.

Risk scores will be "normalized" to the average risk score of all alignment-eligible beneficiaries contributing experience to an entitlement category (e.g., aged/dual-eligible or ESRD) in each base- or performance-year. As a result, in each base- or performance-year the average normalized risk score for an entitlement category has a value of one (1.000). In other words, the risk scores are normalized to the reference population. A beneficiary's 'normalized' risk score for months in which a beneficiary contributes experience to an entitlement category is:

- The beneficiary's average risk score for months in which the beneficiary contributed experience to the entitlement category during the base- or performance-year; divided by,
- The average risk score of all beneficiaries who contribute experience to the category during the base- or performance-year.

The normalized risk score is calculated on a person-month weighted basis. An ACO's normalized risk score measures the extent to which the beneficiaries aligned with the ACO who contribute experience to an entitlement category have a higher or lower expected cost in a base- or a performance-year relative to the average beneficiary contributing experience to that entitlement category in that year.

¹ The CMS-HCC risk models are prospective in the sense that diagnoses obtained from claims in the prior year are used to predict expenditure in the current year. For example, diagnoses from claims for services provided in CY2014 are used to calculate the CY2015 risk score, which represents the beneficiary's expected CY2015 expenditure.

For example, if for aged beneficiaries who are not dual-eligible (aged/non-dual) in BY3/CY2013:

- The average risk score for aligned aged/non-dual beneficiaries is 1.052; and,
- The average risk score for all alignment-eligible aged/non-dual beneficiaries is 1.038; then
- The average normalized risk score for the aligned aged/non-dual beneficiaries is 1.013 = 1.052 ÷ 1.038.

The normalized risk score indicates that, in CY2013, the aligned beneficiaries had an expected cost that is 1.3 percent higher than all alignment-eligible aged/non-dual beneficiaries.

2.14 Locality adjustment

A geographic or locality adjustment will be applied to baseline expenditures as described in section 4.4.

3.0 Alignment of beneficiaries

The beneficiaries aligned with a Pioneer ACO are identified prospectively, *prior to the start of the performance year*. Similarly, the beneficiaries who are aligned in each base-year for the purpose of calculating the baseline expenditure are identified on the basis of each beneficiary's use of QEM services in the 2-year alignment period ending *prior* to the start of the base-year.

Alignment of a beneficiary is determined by comparing:

- 1. The weighted allowable charge for all QEM services that the beneficiary received from each Pioneer ACOs' participating providers;
- 2. The weighted allowable charge for all QEM services that the beneficiary received from each physician practice (including institutional practices) whose members are not participating in a Pioneer ACO.

A beneficiary is aligned with the Pioneer ACO or the physician practice from which the beneficiary received the largest amount of QEM services during the 2-year alignment period.

Only claims that are identified as being provided by the primary care specialists listed in Table A-2 and the non-primary primary care specialists listed in Table A-3 will be used in alignment calculations.

3.1 Use of weighted allowable charges in alignment

The allowable charge on paid claims for services received during the two alignment-years associated with each base- or performance-year will be used to determine the Pioneer ACO or physician practice from which the beneficiary received the most QEM services.

- 1. The allowable charge for QEM services provided during the 1st (earlier) alignment-year will be weighted by a factor of ½.
- 2. The allowable charge for QEM services provided during the 2nd (later or more recent) alignment-year will be weighted by a factor of ²/₃.

The allowable charge that is used in alignment will be obtained from claims for QEM services that are:

- 3. Incurred in each alignment-year as determined by the date-of-service on the claim line-item; and,
- 4. Paid within 3-months following the end of the 2nd alignment-year as determined by the effective date of the claim.

3.2 The 2-stage alignment algorithm

Alignment for a base- or performance-year uses a two-stage alignment algorithm.

- Alignment based on primary care services provided by primary care specialists. If 10% or more of the allowable charges incurred on QEM services received by a beneficiary during the 2-year alignment period are obtained from physicians and practitioners with a primary care specialty as defined in Addendum A, Table A-2, then alignment is based on the allowable charges incurred on QEM services provided by primary care specialists.
- Alignment based on primary care services provided by selected non-primary care specialties. If less than 10% of the QEM services received by a beneficiary during the 2-year alignment period are provided by primary care providers, then alignment is based on the QEM services provided by physicians and practitioners with certain non-primary specialties as defined in Addendum A, Table A-3.

Provider specialty is determined by the specialty code that is assigned to the claim during claim processing, in the case of physician claims, or by the specialty associated with the NPI of the physician or NPP in the Medicare provider enrollment database in the case of certain FQHC, RHC and CAH2 claims.

3.3 Tie-breaker rule

In the case of a tie in the dollar amount of the weighted allowed charges for QEM services, the beneficiary will be aligned with the provider from whom the beneficiary most recently obtained a QEM service.

3.4 Voluntary alignment

A beneficiary who has agreed to voluntary alignment for a performance-year with a Pioneer ACO will be aligned to that Pioneer ACO for that performance-year (and related base-years) regardless of the Pioneer ACO with which the beneficiary would be aligned based on the 2-stage alignment algorithm.

Beneficiaries who have voluntarily aligned with a Pioneer ACO will also be excluded from the base- or performance-year alignment if they do not meet the alignment-eligibility requirements described in Section 2.2 during the base- or performance-year.

4.0 Baseline expenditure

The baseline expenditure for a Pioneer ACO is derived from the average expenditure PBPY/PBPM of the beneficiaries who were aligned with the Pioneer ACO in each of the three base-years.

A separate baseline will be calculated for four entitlement categories. A single beneficiary may contribute experience to more than one entitlement category based on the entitlement status of each beneficiary in each base-year.

For each entitlement category, the ACO baseline will be a weighted average of the trended localityadjusted expenditure per person-year (PBPY) of:

- 1. Beneficiaries aligned in CY2011;
- 2. Beneficiaries aligned in CY2012; and,
- 3. Beneficiaries aligned in CY2013.

Specifically, the Pioneer baseline will be:

- One-third of the trended, locality-adjusted average CY2011 expenditure per beneficiary per year (PBPY) of beneficiaries aligned with the Pioneer's participating providers in CY2011.
- One-third of the trended, locality-adjusted average CY2012 expenditure PBPY of beneficiaries aligned with the Pioneer's participating providers in CY2012.
- One-third of the risk-adjusted CY2013 expenditure PBPY of beneficiaries aligned with the Pioneer's participating providers in CY2013.

Table 4.0 illustrates the calculation of the baseline expenditure by entitlement category.

Table 4.0: Pioneer 3-year baseline expenditure PBPM for entitlement categories

	Trende	3-year		
Entitlement category	BY1 (CY2011) ¹	BY2 (CY2012) ²	BY3 (CY2013) ³	baseline ⁴
Aged/non-dual	\$826.77	\$846.57	\$828.00	\$833.78
Aged/dual	\$1,078.00	\$1,079.41	\$1,077.00	\$1,078.14
Disabled	\$726.02	\$756.62	\$747.00	\$743.21
ESRD	\$4,149.19	\$4,150.93	\$4,139.00	\$4,146.37
Baseline weights	1/3	1/3	1/3	1.000

¹ The CY2011 expenditure PMPM of BY1-aligned beneficiaries after trend factors have been applied.

4.1 Calculation of baseline for entitlement categories

The baseline (and performance-year) expenditure is calculated separately for months in which aligned beneficiaries are classified as:

- 1. Having End Stage Renal Disease (ESRD).
- 2. Being eligible for Medicare due to disability (Disabled)
- 3. Being eligible for Medicare on the basis of age and being enrolled in both Medicare and Medicaid (Aged/Dual-eligible)

² The CY2012 expenditure PMPM of BY2-aligned beneficiaries after trend factors have been applied.

³ The CY2013 expenditure PMPM of BY3-aligned beneficiaries after trend factors have been applied.

⁴ The BY1 expenditure PBPM multiplied by the BY1 weight (½), plus the BY2 expenditure PBPM multiplied by the BY2 weight (½), plus the BY3 expenditure PBPM multiplied by the BY3 weight (½).

4. Being eligible for Medicare on the basis of age and being enrolled only in Medicare (Aged/Non-dual)

A beneficiary may contribute experience to several entitlement categories. Most beneficiaries, however, will contribute experience to only one entitlement category. Addendum B provides examples of how attribution of experience to an entitlement category will work.

4.2 Trended, locality-adjusted base-year expenditures

The trended, locality-adjusted BY1 average expenditure PBPM for all aligned beneficiaries contributing to an entitlement category is the product of:

- 1. The BY1 expenditure PBPM of BY1-aligned beneficiaries contributing to that entitlement category in BY1;
- 2. The BY1 baseline risk-ratio for that entitlement category;
- 3. The BY1 baseline locality-adjustment factor; and,
- 4. The BY1 state-specific baseline trend factor for the entitlement category.

The trended, locality-adjusted BY2 expenditure for an entitlement category is the product of:

- 1. The BY2 expenditure PBPM of BY2-aligned beneficiaries contributing to that entitlement category in BY2;
- 2. The BY2 baseline risk-ratio for that entitlement category;
- 3. The BY2 baseline locality-adjustment factor; and,
- 4. The BY2 state-specific baseline trend factor for the entitlement category.

The trended, locality-adjusted BY3 expenditure for an entitlement category is the product of:

- 1. The BY3 expenditure PBPM of BY3-aligned beneficiaries contributing to that entitlement category in BY3; and,
- 2. The BY3 risk-ratio for that entitlement category which, by definition, is equal to 1.000; and,
- 3. The BY3 locality-adjustment factor which, by definition, is equal to 1.000.

Table 4.2 illustrates the calculation of the trended baseline expenditure for each base-year.

		Base year		
Aged/non-dual	BY1 (CY2011) ¹	BY2 (CY2012) ²	BY3 (CY2013) ³	
Expenditure PBPM ⁴	\$800.00	\$834.00	\$828.00	
HCC-based normalized risk score ⁵	0.990	0.995	0.997	
Risk ratio ⁶	1.007	1.002	1.000	
Locality adjustment factor ⁷	1.014	1.007	1.000	
FFS expenditure PBPM ⁸	\$900.00	\$905.40	\$910.83	
FFS trend factor ⁹	1.012	1.006	1.000	
Baseline expenditure PBPM ¹⁰	\$826.77	\$846.57	\$828.00	

Table 4.2: Calculation of the trended baseline expenditure

- ¹ The CY2011 expenditure and related factors of BY1-aligned beneficiaries.
- ² The CY2012 expenditure and related factors of BY2-aligned beneficiaries.
- ³ The CY2013 expenditure and related factors of BY3-aligned beneficiaries.
- ⁴ The average capped expenditure PBPM incurred by beneficiaries in each base-year.
- ⁵ The HCC-based risk score for aged/non-dual beneficiaries aligned with the Pioneer ACO in each base year.
- $^{\rm 6}$ The trend in the HCC-based risk score between BY1 or BY2 and BY3. The risk score trend between BY1 and BY3 is 1.007 (= 0.997 \div 0.990).
 - Between BY2 and BY3, it is 1.002 (= 0.997 ÷ 0.995).
- The person-month-weighted average locality adjustment factor for aligned beneficiaries.
- The weighted average FFS expenditure PBPM for months in which all FFS alignment-eligible beneficiaries in each base-year were Aged/non-dual based on the state-of-residence of aligned beneficiaries.
- $^{\rm 9}$ $\,$ The trend in the FFS expenditure PBPM between BY1 or BY2 and BY3.
 - The FFS trend between BY1 and BY3 is 1.012 (= \$910.83 \div \$900.00).
 - Between BY2 and BY3 it is 1.006 (= \$910.83 ÷ \$905.40).
- ¹⁰ The baseline expenditure PBPM for each base year after application of the risk, locality, and FFS trend factors.
 - The BY1 trended baseline expenditure PBPM is \$826.77 (= \$800.00 x 1.007 x 1.014 x 1.012).
 - The BY2 trended baseline expenditure PBPM is \$846.57 (= \$834.00 x 1.002 x 1.007 x 1.006)

4.3 Base-year risk ratios

Base-year HCC-based risk ratios for the aligned beneficiary population are calculated for each entitlement category.

4.3.1 Normalized risk scores

Risk scores are normalized within entitlement categories based on the average HCC-based risk score of all alignment-eligible beneficiaries contributing to the entitlement category as discussed in section 2.13. The normalized risk score can be calculated either at the level of the individual beneficiary or at the level of the average risk score of all aligned beneficiaries. The normalized risk score is the risk-score for the aligned beneficiary (or average risk score for all aligned beneficiaries) divided by the average risk score for all alignment-eligible beneficiaries contributing experience to the entitlement category. Generally:

$$R'_{i,a,n,y} = \frac{R_{i,a,n,y}}{\bar{R}_{n,y}}$$

where

$$\bar{R}_{n,y} = \frac{\sum_{i} \left(R_{i,n,y} \times M_{i,n,y} \right)}{\sum_{i} M_{i,n,y}}$$

and

 $R'_{i,a,n,y}$ = the normalized risk score of the i^{th} beneficiary aligned with Pioneer ACO a who contributes experience to entitlement category n in year y

 $R_{i,a,n,y}$ = the annual risk score of the i^{th} beneficiary aligned with Pioneer ACO a who contributes experience to entitlement category n in year y

 $\bar{R}_{n,y}$ = the average risk score of all alignment-eligible beneficiary contributing experience to entitlement category n in year y

 $R_{i,n,y}$ = the risk score of the i^{th} alignment-eligible beneficiary contributing experience to entitlement category n in year y

 $M_{i,n,y}$ = the number of months accrued to entitlement category n by alignment-eligible beneficiary contributing experience to entitlement category n in year y

Consequently the average risk score for all <u>alignment-eligible</u> beneficiaries with experience in a particular entitlement category will be equal to 1.0 (one) in each year. In the following discussion all references to risk scores are to normalized risk scores.

4.3.2 Base-year risk ratio for an entitlement category

The BY1 risk ratio for an entitlement category is the ratio of:

- 1. The person-month-weighted average BY3 (CY2013) HCC-based risk score of all beneficiaries contributing experience to an entitlement category in CY2013; divided by,
- 2. The person-month-weighted average BY1 (CY2011) HCC-based risk score of all beneficiaries contributing experience to an entitlement category in CY2011.

The BY2 risk ratio for an entitlement category is the ratio of:

- The person-month-weighted average BY3 (CY2013) HCC-based risk score of all beneficiaries contributing experience to an entitlement category in CY2013; divided by
- 2. The person-month-weighted average BY2 (CY2012) HCC-based risk score of all beneficiaries contributing experience to an entitlement category in CY2012.

The average risk scores for each entitlement category are weighted by the number of months in which each beneficiary contributed experience to the entitlement category during the year.

The Pioneer ACO's average risk score for an entitlement category in a given year is calculated as follows:

$$\bar{R}_{a,n,y} = \frac{\sum_{i} \left(R_{i,a,n,y} \times M_{i,a,n,y}\right)}{\sum_{i} M_{i,a,n,y}}$$

where

 $\bar{R}_{a,n,y}$ = the average risk score of Pioneer ACO a for entitlement category n in year y = the average risk score of the ith beneficiary aligned with Pioneer ACO a who

contributes experience to entitlement category *n* in year *y*

 $M_{i,a,n,y}$ = the number of months accrued to entitlement category n by the i^{th} beneficiary aligned with Pioneer ACO a in year y

The risk score of the beneficiary may vary from month-to-month. For example, an aged/dual-eligible beneficiary may reside in the community during the first four months of the year, but then transition into a long-term nursing facility beginning in the fifth month of the year. The beneficiary's risk score for the first four months of the year would be based on the CMS-HCC "community" model, while the beneficiary's risk score for the last eight months of the year would be based on the CMS-HCC "institutional" model. The contribution of the beneficiary to the average risk score for the entitlement category is calculated by averaging the beneficiary's risk score during each month in which a beneficiary was alignment-eligible and contributing experience to a particular entitlement category.

4.4 Locality-adjustment factors

Medicare fee-for-service payments under most Medicare payment systems, including but not limited to those for inpatient hospital services, SNF services, home health services, and physician services, include adjustments reflecting the cost-of-doing-business in the local area in which the provider operates. These "locality adjustments" are updated annually.

To correct for the impact of changes in locality adjustments across base- and performance-years, a locality adjustment will be implemented in the PY4/PY5 Pioneer benchmarking method. The purpose of the Pioneer ACO baseline locality adjustment would be to minimize the impact of changes in locality adjustments under the FFS payment systems on shared savings (loss) calculations. The locality adjustment method implemented by the Pioneer ACO model will be similar to the locality adjustment method that is used by the Medicare Advantage program as part of the development of its annual rate book.

4.4.1 Development of county-level locality adjustment factors

The Pioneer locality adjustment will be a *county level* adjustment based on an estimate of the impact of changes in geographic adjustment factors on provider payments for all alignment-eligible beneficiaries (whether or not aligned to a Pioneer ACO) residing in the county.

The locality adjustment factor for a county will be the ratio of:

- 1. The locality-adjusted expenditure incurred by all alignment-eligible residents of the county; to
- 2. The incurred expenditure of those same beneficiaries.

The locality-adjusted expenditure for an alignment-eligible beneficiary for a given year is an estimate of the payment that would have been made in that year if the geographic adjustment factors that were

applied in a target year had been applied. The locality-adjustment factors are, therefore, specific to each performance year and may differ between PY4 and PY5. For example:

- 1. In PY4/CY2015, the locality-adjusted CY2013 expenditure for a county is an estimate of the expenditure that would have been incurred by residents of that county in CY2013 if the CY2015 geographic adjustment factors (i.e., the FY2015 Area Wage Index, the CY2015 Geographic Practice Cost Indexes, etc.) had been used to determine the CY2013 payments.
- 2. In PY5/CY2016, the locality-adjusted CY2013 expenditure for a county is an estimate of the expenditure that would have been incurred by residents of that county in CY2013 if the CY2016 geographic adjustment factors (i.e., the FY2016 Area Wage Index, the CY2016 Geographic Practice Cost Indexes, etc.) had been used to determine the CY2013 payments.

A single locality-adjustment factor will be developed for each county based on the experience of all alignment-eligible beneficiaries residing in the county.

The locality adjustment for a Pioneer ACO will be calculated based on the county-of-residence of all aligned beneficiaries for a base- or performance-year. It is the person-month weighted average of the county-level locality adjustment factors for the county-of-residence of each aligned beneficiary.

4.4.2 Locality-adjusted provider payment

The locality-adjusted expenditure incurred by an alignment-eligible beneficiary will be the sum of all locality-adjusted provider payments. The locality-adjusted provider payment for a given base-year will, in general, be:

- 1. The actual provider payment;
- 2. Multiplied by the ratio of:
 - a. The geographic adjustment factor for the locality in a target year (either BY3, in the case of base-year locality adjustments, or the performance-year); to
 - b. The geographic adjustment factor for the locality that was applied in the given base-year.

In calculating the locality-adjusted provider payment, the geographic adjustment factors will be weighted using the appropriate base-year weighting factors. For example, the geographic adjustment under the Inpatient Prospective Payment System (IPPS), the Area Wage Index (AWI), is weighted by the proportion of cost that is attributable to labor. Under the Physician Fee Schedule, the three Geographic Practice Cost Indexes (GPCIs) are weighted by the corresponding relative value units. The weights that are applied to the geographic payment factors when calculating the locality-adjusted payment are the weights that applied to the payment in the year in which the claim was incurred.

A locality-adjusted payment will be calculated for the following types of claims:

- 1. Inpatient claims paid under the Inpatient Prospective Payment System (IPPS).
- Outpatient claims paid under the Hospital Outpatient Prospective Payment System (HOPPS).
- 3. Skilled Nursing Facility claims paid under the SNF Prospective Payment System.

- 4. Home Health claims paid under the HHA Prospective Payment System.
- 5. Hospice claims.
- 6. Physician claims paid under the Physician Fee Schedule.

For all other claims, the "locality-adjusted payment" will be the actual payment.

4.4.3 Calculation of locality-adjustment factor for aligned beneficiaries

The locality-adjustment factor for a base-year will be a weighted average of the county-level locality-adjustment factors for the counties in which the Pioneer ACO's aligned beneficiaries reside. The weights that are applied will be derived from the number of person-months in which the beneficiary was alignment-eligible during the base-year. The only beneficiaries who will have fewer than 12 alignment-eligible months during a base-year are beneficiaries who die during the base-year.

For purposes of the locality adjustment a beneficiary will be considered to reside in the county in which the beneficiary lived in January of the base- or performance-year.

4.4.4 Base-year locality adjustment factors

One set of locality adjustments will be developed for the three baseline years, reflecting the impact of changes in geographic adjustment factors on CY2011 (BY1) and CY2012 (BY2) provider payments relative to provider payments in CY2013 (BY3). These adjustment factors will be normalized to reflect the relative impact on expenditures within the payment localities of a state relative to state-wide average expenditures in BY3. These state-specific locality adjustment factors will be used to calculate the ACO baseline.

4.4.5 Performance-year locality adjustment factors

A second set of locality adjustment factors will be developed that reflects the impact of changes in geographic adjustment factors on CY2013 (BY3) provider payments relative to provider payments in the performance year (i.e., CY2015 or CY2016). These adjustment factors will be normalized to reflect the relative impact on expenditures within the payment localities relative to national average expenditures. These national adjustment factors will be used to calculate the 3-year average ACO baseline.

4.4.6 Prospective calculation of locality-adjustment factors

The locality adjustment factors are expected to be calculated prospectively and made available prior to the start of the performance year. They will be based on the locality adjustments published by CMS in the final rules for the various FFS payment systems that are applicable to each calendar or federal fiscal year. Generally, these final rules are published prior to the start of the period to which they apply. Should geographic adjustment factors be revised mid-year an updated schedule of locality factors will be prepared.

4.5 Fee-for-service trend factors

The fee-for-service (FFS) trend factor applicable to BY1 for an entitlement category is the ratio of:

- The BY3 (CY2013) average expenditure per person-month of reference beneficiaries in the entitlement category residing in the same state as the aligned beneficiaries; to
- The BY1 (CY2011) average expenditure per person-month of reference beneficiaries in the entitlement category residing in the same state as the aligned beneficiaries.

The fee-for-service (FFS) trend factor applicable to BY2 for an entitlement category is the ratio of:

- The BY3 (CY2013) average expenditure per person-month of reference beneficiaries in the entitlement category residing in the same state as the aligned beneficiaries; to
- The BY2 (BY2012) average expenditure per person-month of reference beneficiaries in the entitlement category residing in the same state as the aligned beneficiaries.

The reference expenditure for a year is calculated as follows:

$$\hat{P}_{a,n,y} = \frac{\sum_{s} (\hat{P}_{s,n,y} \times M_{a,s,n,y})}{\sum_{s} M_{a,s,n,y}}$$

where

 $\hat{P}_{a,n,y}$ = the average reference expenditure for entitlement category n of Pioneer ACO a in year y

 $\hat{P}_{s,n,y}$ = the average reference expenditure for entitlement category n of State s in year y

 $M_{a,s,n,y}$ = the number of months accrued in entitlement category n by the beneficiaries aligned with Pioneer ACO a who reside in State s in year y

Separate trend factors will be calculated for capped expenditures and uncapped expenditures. A Pioneer ACO whose savings are measured against an uncapped benchmark will use the uncapped trend factors. All other Pioneers will use the capped trend factors.

5.0 Benchmark expenditure for the performance-year

An expenditure benchmark for a performance year is calculated for each of the entitlement categories. The expenditure benchmark for an entitlement category is equal to:

- 1. The ACO risk-adjusted baseline expenditure;
- 2. Plus: 50% of the dollar change in the reference expenditure between BY3 and the performance-year;
- 3. Plus: 50% of the product of:
 - a. The percentage change in the reference expenditure between BY3 and the performance-year; and,
 - b. The ACO risk-adjusted baseline expenditure.

Table 5.0 illustrates the Pioneer ACO benchmark calculation for an entitlement category.

Table 5.0: Calculation of Pioneer ACO benchmark for an entitlement category

	Aged/non-dual	BY3/CY2013	3-year baseline	PY4/CY2015
1.	Reference expenditure PBPM	\$808.02		\$821.81
2.	Dollar change in reference expenditure ¹			\$13.79
3.	Reference trend ²			1.7%
4.	ACO risk-adjusted baseline		\$860.57	
5.	Trend component of benchmark ³			\$14.69
6.	Change to baseline ⁴			\$14.24
7.	Benchmark⁵			\$874.81

¹ Line 1, PY4/CY2015 reference expenditure less line 1, BY3/CY2013 reference expenditure.

5.1 Risk-adjusted ACO baseline expenditure

The Pioneer ACO performance-year benchmark for an entitlement category will be based on the risk-adjusted ACO baseline expenditure for the category. The risk-adjusted baseline for the category will be equal to the 3-year baseline expenditure for the entitlement category, multiplied by two factors:

- 1. The CY2015 locality-adjustment factor
- 2. The performance-year risk ratio, which in PY4 is equal to:
 - a. The PY4 (CY2015) HCC-based risk score of all aligned CY2015-aligned beneficiaries belonging to the entitlement category in CY2015; divided by
 - b. The average BY3 (CY2013) HCC-based risk score of all CY2013-aligned beneficiaries belonging to the entitlement category in CY2013.

Table 5.1 illustrates the calculation of the risk-adjusted ACO baseline expenditure for an entitlement category.

Table 5.1: Calculating the risk-adjusted ACO baseline for Aged/non-dual beneficiaries

Calculation	Value
CY2013 locality adjusted baseline ¹	\$833.78
CY2015 locality-adjustment factor ²	1.015
CY2015 locality adjusted baseline ³	\$846.29
CY2015 risk ratio⁴	1.017
CY2015 risk-adjusted baseline⁵	\$860.57

¹ See Section 4, Table 4.0.

² Line 2 divided by line 1, PY4/CY2015 reference expenditure.

³ Line 3 multiplied by line 4.

⁴ 50% of line 2 plus 50% of line 5.

⁵ Line 4 plus line 6.

² See Section 4.4.5.

³ Line 1 multiplied by line 2.

⁴ See Section 5.2

⁵ Line 3 multiplied by line 4.

5.2 Performance-year risk ratio for an entitlement category

The PY4 (CY2015) risk ratio of all beneficiaries contributing experience to an entitlement category will be equal to the person-month (or person-year) weighted average of:

- 1. The average PY4 (CY2015) HCC-based risk score of all PY4-aligned beneficiaries contributing experience to the eligibility category in PY4/CY2015; and,
- 2. The average BY3 (CY2013) HCC-based risk score of all BY3-aligned beneficiaries contributing experience to the eligibility category in BY3/CY2013.

The same procedure applies to PY5 but PY5/CY2016 is substituted for PY4/CY2015.

5.3 Combining results for entitlement categories

The overall PY4/2015 benchmark is the PY4 person-month weighted average of the four entitlement category specific benchmarks. The gross savings or loss is the sum of the savings or loss calculated for each entitlement category.

The Minimum Savings (or Loss) Rate is applied at the level of the total savings or loss across all entitlement categories combined.

5.4 Performance Year 5 Risk Adjustment

CMS will analyze risk score information to determine if adjustments are required to the risk adjustment approach for Performance Year 5 (CY2016) in order to ensure the actuarial soundness of the Pioneer model. In the event that CMS decides to make changes to the risk adjustment approach, they will be specified prior to the performance year or at least 60 days prior to the final date on which Pioneers may withdraw from Performance Year 5 without financial reconciliation. If any such changes are applied, they would apply solely to Performance Year 5 and would thus have no effect on Pioneer ACO Performance Year 4 financial reconciliation calculations.

Addendum A: Codes used in Pioneer ACO alignment and benchmarking methods

- Table A-1. Evaluation & Management Services
- Table A-2. Specialty codes used for alignment based on primary care specialists
- Table A-3. Specialty codes used for alignment based on other selected specialists
- Table A-4. Parameters for expenditure calculations

Table A-1. Evaluation & Management Services				
Code	Description			
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			
Nursing Fac	ility Care			
99304	Initial Nursing Facility Care, brief			
99305	Initial Nursing Facility Care, moderate			
99306	Initial Nursing Facility Care, comprehensive			
99307	Subsequent Nursing Facility Care, brief			
99308	Subsequent Nursing Facility Care, limited			
99309	Subsequent Nursing Facility Care, comprehensive			
99310	Subsequent Nursing Facility Care, extensive			
99315	Nursing Facility Discharge Services, brief			
99316	Nursing Facility Discharge Services, comprehensive			
99318	Other Nursing Facility Services			
Domiciliary	, Rest Home, or Custodial Care Services			
99324	New Patient, brief			
99325	New Patient, limited			
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			

(continued)

Table A-1. Evaluation & Management Services (continued)

Code	Description			
Home Service	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			
Wellness Visits				
G0402	Welcome to Medicare visit			
G0438	Annual wellness visit			
G0439	Annual wellness visit			

Table A-2. Specialty codes used for alignment based on primary care specialists

Code	Specialty
1	General Practice
8	Family Medicine
11	Internal Medicine
38	Geriatric Medicine
50	Nurse Practitioner
97	Physician Assistant

Table A-3. Specialty codes used for alignment based on other selected specialists

Code	Specialty
6	Cardiology
13	Neurology
29	Pulmonology
39	Nephrology
46	Endocrinology
66	Rheumatology
83	Hematology/oncology
90	Medical oncology
91	Surgical oncology
92	Radiation oncology
98	Gynecological/oncology
86	Neuropsychiatry

Table A-4. Parameters for expenditure calculations

Expenditure Category	Expenditure is equal to ¹ :	Claim is excluded if:	Line item is excluded if:	Incurred date:
Inpatient ²	Claim Payment Amount ²	Any value for 'Claim Medicare Non-Payment reason code '	No exclusion	Claim Through Date
SNF	Claim Payment Amount	Any value for 'Claim Medicare Non-Payment reason code '	No exclusion	Claim Through Date
Home Health	Claim Payment Amount	Any value for 'Claim Medicare Non-Payment reason code '	No exclusion	Claim Through Date
Hospice	Claim Payment Amount	Any value for 'Claim Medicare Non-Payment reason code'	No exclusion	Claim Through Date
Physician/ Supplier Part B	Line NCH Payment Amount	'Carrier Claim Payment Denial Code' = 0 or D through Y	Line Processing Indicator Code ≠ A, R, or S	Line Through Date
Outpatient	Claim Payment Amount	Any value for 'Claim Medicare Non-Payment reason code '	No exclusion	Claim Through Date
DME	Line NCH Payment Amount	'Carrier Claim Payment Denial Code' = 0 or D through Y	Line Processing Indicator Code ≠ A, R, or S	Line Through Date

¹ All expenditures will be on a pre-sequestration basis.

² Inpatient expenditures will not include pass-through amounts.

In CY2011, CY2012, and the first 9 months of CY2013, 75% of the operating Disproportionate Share Hospital payment will be deducted from the total amount paid. All uncompensated care payments will be deducted from the claim payment amount.

Addendum B: Attribution of experience to entitlement categories

B.1 Logic for determination of entitlement category in a specified calendar month

In each calendar month a beneficiary is assigned to one of four entitlement categories for purposes of accrual of experience and expenditures. The beneficiary's assignment in each calendar month is based on the beneficiary's status in that month. Generally the beneficiary's ESRD status is determined first, followed by the beneficiary's disability status, followed by the beneficiary's dual-eligibility status.

- 1. A month is assigned to the ESRD entitlement category if:
 - a. The beneficiary had a kidney transplant on a date prior to the first day of that month; or,
 - b. The beneficiary was receiving dialysis for a period that includes any day within the calendar month.
- 2. If a beneficiary is not assigned to the ESRD entitlement for a month (as defined by #1), the month is assigned to the DISABILITY entitlement category if the beneficiary was under the age of 65 on the last day of the month.
- 3. If a beneficiary is not assigned to the ESRD entitlement category for a month (as defined by #1) and is age 65 or older on the last day of the month, the month is assigned to the Aged/non-dual category if the beneficiary is not QMB or QMB+ in the month.
- 4. If a beneficiary is not assigned to the ESRD entitlement category for a month (as defined by #1) and is age 65 or older on the last day of the month, the month is assigned to the Aged/Dual-eligible category if the beneficiary is QMB or QMB+ in the month.

B.2 Attribution of experience to entitlement categories

While most beneficiaries will contribute experience only to one entitlement category, it is possible for a beneficiary to contribute experience to multiple categories. This addendum uses five hypothetical beneficiaries to illustrate both the process of attribution to entitlement categories and how that attribution factors into the calculation of both base- and performance-year expenditures.

- 1. Beneficiary A is entitled to Medicare on the basis of age and is not enrolled in Medicaid for the first 5 months of the year (January through May), and is enrolled in both Medicare and Medicaid for the last 7 months of the year (June through December). Beneficiary A will accrue:
 - a. 5 months of experience and any expenditures incurred between January and May to the Aged/Non-dual entitlement category; and,
 - b. 7 months of experience and any expenditure incurred between June and December to the Aged/Dual entitlement category.
- 2. Beneficiary B is entitled to Medicare on the basis of age and is enrolled in Medicaid for the first 8 months of the year (January through August). In September, Beneficiary B begins renal dialysis for ESRD. Beneficiary B is alive in December. Beneficiary B will accrue:
 - a. 8 months of experience and any expenditures incurred between January and August to the Aged/Dual entitlement category; and,
 - b. 4 months of experience and any expenditure incurred between August and December to the ESRD entitlement category.

- 3. Beneficiary C is entitled to Medicare on the basis of disability and is enrolled in Medicaid for the first 2 months of the year. Beneficiary C turns 65 in March and remains enrolled in Medicaid through December. Beneficiary C will accrue:
 - a. 2 months of experience and any expenditures incurred between January and February to the Disabled entitlement category; and,
 - b. 10 months of experience and any expenditure incurred between March and December to the Aged/Dual entitlement category.
- 4. Beneficiary D is entitled to Medicare on the basis of age and is enrolled in Medicaid for the first 4 months of the year. Beneficiary D begins renal dialysis in May and dies in October. Beneficiary D will accrue:
 - a. 6 months of experience and any expenditures incurred between January and June to the Aged/Dual entitlement category; and,
 - b. 4 months of experience and any expenditure incurred between July and October to the ESRD entitlement category.
- 5. Beneficiary E is entitled to Medicare on the basis of age, is not enrolled in Medicaid, and dies in March. Beneficiary E will accrue:
 - a. 3 months of experience and any expenditures incurred between January and March to the Aged/Non-dual entitlement category.

Table B-1 summarizes the entitlement status for these five hypothetical beneficiaries. The top section of the table shows the months in which each beneficiary was in each entitlement status and the total claims incurred by the beneficiary during this period. The second section of the table gives the total months that the beneficiary accrued in each entitlement status. The last section of the table gives the expenditure incurred by the beneficiary while in each entitlement status.

Table B-2 illustrates the calculation of a beneficiary's annualized expenditure by entitlement category, and the application of the expenditure cap for the entitlement category. Only beneficiaries D and E incurred expenditures that were subject to the cap. The capped amounts are highlighted in red.

Table B-1. Entitlement status of hypothetical beneficiaries.

	Beneficiary							
	Α	В	С	D	E			
Detailed history								
Jan			Disabled		Aged			
Feb	Aged		\$1,700		Non-dual			
Mar	Non-dual			Aged	\$40,050			
Apr	\$625	Aged		Dual \$91,650				
May		Dual \$70,000	Aged Dual \$9,200	\$51,030				
Jun		770,000						
Jul				ESRD \$101,000				
Aug	Aged				Deceased			
Sep	Dual	ESRD \$51,200						
Oct	\$1,750							
Nov				Deceased				
Dec				Deceased				
Months								
Aged/Non-dual	5	8	_	_	3			
Aged/Dual	7	_	10	6	_			
Disabled	_	_	2	_	_			
ESRD	_	4	_	4	_			
Total	12	12	12	10	3			
Expenditures								
Aged/Non-dual	\$625	_	_	_	\$40,050			
Aged/Dual	\$1,750	\$70,000	\$9,200	\$91,650	_			
Disabled	_	_	\$1,700	_	_			
ESRD	_	\$51,200	_	\$101,000	_			
Total	\$2,375	\$121,200	\$10,900	\$192,650	\$40,050			

Table B-2: Application of expenditure caps by entitlement category

	Beneficiary					
	Α	В	С	D	E	
Expenditure ¹						
Aged/Non-dual	\$625	_	_	_	\$40,050	
Aged/Dual	\$1,750	\$70,000	\$9,200	\$91,650	_	
Disabled	_	_	\$1,700	_	_	
ESRD	_	\$51,200	_	\$101,000	_	
Total	\$2,375	\$121,200	\$10,900	\$192,650	\$40,050	
Annualized expenditure ²						
Aged/Non-dual	\$1,500	_	_	_	\$160,200	
Aged/Dual	\$3,000	\$105,000	\$11,040	\$183,300	_	
Disabled	_	_	\$10,200	_	_	
ESRD	_	\$153,600	_	\$303,000	_	
Expenditure cap ³						
Aged/Non-dual	\$115,469	_	_	_	\$115,469	
Aged/Dual	\$164,458	\$164,458	\$115,469	\$164,458	_	
Disabled	_	_	\$108,599	_	_	
ESRD	_	\$450,312	_	\$450,312	_	
Capped annualized expenditure ⁴						
Aged/Non-dual	\$1,500	_	_	_	\$115,469	
Aged/Dual	\$3,000	\$105,000	\$11,040	\$164,458	_	
Disabled	_	_	\$10,200	_	_	
ESRD	_	\$153,600	_	\$303,000	_	
Capped expenditure⁵						
Aged/Non-dual	\$625	_	_	_	\$28,867	
Aged/Dual	\$1,750	\$70,000	\$9,200	\$82,229	_	
Disabled	_	_	\$1,700	_	_	
ESRD	_	\$51,200	_	\$101,000	_	
Total	\$2,375	\$121,200	\$10,900	\$183,229	\$28,867	

¹ The actual expenditure incurred by the beneficiary in months during which the beneficiary was classified in the specified entitlement category. These are the same values as in Table B-1.

The actual expenditure "in category" divided by the number of months "in category" (see Table B-1) and then multiplied by 12.

³ The cap on annualized expenditure that applies to the entitlement category. Shown only when the beneficiary has any months of expenditures in the entitlement category.

⁴ The lesser of the expenditure cap for the entitlement category and the beneficiary's annualized expenditure while "in category."

⁵ The capped annualized expenditure divided by 12, then multiplied by the number of months "in category" (see Table B-1).

Addendum C: Technical Description of state trend factors

The reference trend for a State for a base-year, y, is given by:

$$T_{s,y} = \frac{\overline{P}_{s,2013}}{\overline{P}_{s,y}}$$

where

 $T_{s,y}$ = the trend factor for year y that applies to beneficiaries residing in state s

 $\bar{P}_{s,y}$ = the average expenditure PBPM in year y incurred by alignment-eligible beneficiaries residing in state s

 $\bar{P}_{s,2013}$ = the average expenditure PBPM in CY2013 incurred by alignment-eligible beneficiaries residing in state s

The average expenditure PBPM for beneficiaries residing in state *s* in CY2013 and year *y* are given, respectively, by:

$$\bar{P}_{s,2013} = \frac{P_{s,2013}}{M_{s,2013}}$$

$$\bar{P}_{s,y} = \frac{P_{s,y}}{M_{s,y}}$$

where

 $P_{s,2013}$ = the aggregate expenditure incurred in CY2013 by all alignment-eligible beneficiaries residing in state s

 $M_{s,2013}$ = the aggregate alignment-eligible months accrued in CY2013 by all alignment-eligible beneficiaries residing in state s

 $P_{S,y}$ = the aggregate expenditure incurred in year y by all alignment-eligible beneficiaries residing in state s

 $M_{S,y}$ the aggregate alignment-eligible months accrued in year y by all alignment-eligible beneficiary residing in state s

Restating in terms of state-wide aggregates:

$$T_{s,y} = \left[\frac{P_{s,2013}}{P_{s,y}} \right] \times \left[\frac{M_{s,y}}{M_{s,2013}} \right]$$

where

$$P_{s,y} = \sum_{i} (P_{i,s,y})_{and}$$

 $P_{i,s,y}$ = the actual expenditure incurred in year y by the i^{th} alignment-eligible beneficiary residing in state s

$$M_{s,y} = \sum_{i} (M_{i,s,y})_{and}$$

 $M_{i,s,y}$ = the alignment-eligible months accrued during year y by the i^{th} alignment-eligible beneficiary residing in state s

The calculation of the state aggregates also can be stated as an aggregation of county-level data for the counties that comprise the state:

$$P_{s,y} = \sum_{j} (P_{j,s,y})$$

$$M_{s,y} = \sum_{j} (M_{j,s,y})$$

where

 $P_{j,s,y}$ = the aggregate expenditure incurred in year y by all alignment-eligible beneficiaries residing in county j of state s

 $M_{j,s,y}$ = the aggregate alignment-eligible months accrued in year y by all alignment-eligible beneficiary residing in county i of state s

The county-level aggregates are given by:

$$P_{j,s,y} = \sum_{i} (P_{i,j,s,y})$$

$$M_{j,s,y} = \sum_i \bigl(M_{i,j,s,y} \bigr)$$

where

 $P_{i,j,s,y}$ = the actual expenditure incurred in year y by the i^{th} alignment-eligible beneficiary residing in county j of state s

 $M_{i,j,s,y}$ = the number of alignment-eligible months accrued during year y by which the i^{th} alignment-eligible beneficiary residing in county j of state s

Addendum D: Criteria for identifying beneficiaries who are not alignment eligible

Section 2.2 identifies the criteria for identifying beneficiaries who are alignment-eligible. These criteria can also be expressed as exclusion criteria that will be applied to beneficiaries who are initially alignable but who are not alignment-eligible during a base- or performance-year.

A beneficiary is not alignment-eligible during a base- or performance-year if during the base- or performance-year the beneficiary:

- 1. Was not alive on January 1;
- 2. Was not enrolled in and covered by both Part A and Part B in January;
- 3. Was covered only under Part A in one or more months;
- 4. Was covered only under Part B in one or more months;
- 5. Was enrolled in a Medicare Managed Care plan in one or more months;
- 6. Was covered by Medicare as the secondary payer in one or more months; or,
- 7. Was not a U.S. resident in one or more months.

A beneficiary who is alignment-eligible during a base- or performance-year and aligned with a Pioneer ACO will be removed from the aligned population of that ACO for that base- or performance-year if the beneficiary:

- 1. Was a resident of a county that is part of the Pioneer ACO's service area in the last month of the 2nd alignment-year and was not a resident of a county that is part of the Pioneer ACO's service area in the last month of the base- or performance-year; or,
- 2. Obtained more than 50% of their QEM services from providers practicing in counties that are not included in the Pioneer ACO's Service Area during the base- or performance-year.