1.0 Introduction and Overview

This document describes the methodologies supporting beneficiary alignment and financial calculations for the first three performance years of the Pioneer ACO Model. It does not address the alternative methodologies that CMS will use for Pioneer ACOs who enter into the optional fourth and fifth performance years through an extended Participation Agreement.

The Pioneer ACO model will use a shared savings/losses arrangement in which the expenditure target for a performance year (PY) is based on the historical expenditures during a base period for a prospectively defined cohort of beneficiaries.

Under the Pioneer shared savings/losses method, savings or losses are defined as the difference between an expenditure benchmark for a performance year and the observed expenditure of that year’s aligned beneficiaries.

The expenditure benchmark is developed from three components:

1. **The baseline ACO expenditure.** The average baseline expenditure per person-year of alignment-eligible beneficiaries who were aligned with the Pioneer ACO for the performance year. The baseline expenditure for the ACO consists of multiple sub-components:
   a. The average baseline expenditure for all aligned beneficiaries who were alignment-eligible in the performance year.
   b. In PY1, PY2 and PY3, the average baseline (CY2011) expenditure for all aligned beneficiaries who died during CY2011.
   c. In PY2, and PY3, the average baseline (CY2011) expenditure for all aligned beneficiaries who died during CY2012.
   d. In PY3, the average baseline (CY2011) expenditure for all aligned beneficiaries who died during CY2013.

2. **The baseline reference expenditure.** The average baseline expenditure per person-year of all alignment-eligible beneficiaries. The baseline expenditure for all alignment-eligible beneficiaries also consists of multiple sub-components:
   a. The average baseline expenditure for all beneficiaries who were alignment-eligible in the performance year.
   b. In PY1, PY2, and PY3, the average baseline (CY2011) expenditure for all alignment-eligible beneficiaries who died during CY2011.
   c. In PY2 and PY3, the average baseline (CY2011) expenditure for all alignment-eligible beneficiaries who died during CY2012.
   d. In PY1, PY2 and PY3, the average baseline (CY2011) expenditure for all alignment-eligible beneficiaries who died during CY2013.

3. **The performance-year reference expenditure.** The average expenditure per person year incurred by all alignment-eligible beneficiaries in the performance year.
The reference baseline expenditure and the performance-year reference expenditure are both adjusted to reflect the composition of the ACO’s aligned beneficiaries by eligibility, age, and sex category.

The Pioneer benchmark is equal to the sum of:

1. The baseline ACO expenditure
2. Half (50%) of the product of the baseline ACO expenditure and the percentage difference between the baseline reference expenditure and the performance-year reference expenditure.
3. Half (50%) of the dollar difference between the baseline reference expenditure and the performance-year reference expenditure.

The beneficiaries aligned with a Pioneer ACO include two groups of beneficiaries:

1. Those alignment-eligible beneficiaries who received the plurality of their qualified Evaluation and Management (QEM) services from the ACO’s participating providers during a 3-year alignment period prior to the start of the performance period. These are referred to as “performance year aligned beneficiaries.”
2. Those alignment-eligible beneficiaries who died prior to the start of the performance period who received the plurality of their QEM services from the ACO’s participating providers during the appropriate alignment period. These are referred to as “aligned decedents.”

Section 2 of this document describes the criteria that are used to identify the three sets of alignment-eligible beneficiaries in PY2 and the four sets of alignment-eligible beneficiaries in PY3: (1) beneficiaries who are alignment-eligible in the performance year; (2) alignment-eligible beneficiaries who died in CY2011; (3) alignment-eligible beneficiaries who died in CY2012; and for PY3 (3) alignment-eligible beneficiaries who died in CY2013.

Section 3 of this document describes the methods that are used to determine whether an alignment-eligible beneficiary is aligned to a Pioneer ACO or to a non-ACO physician practice.

Section 4 of this document describes the expenditures that are used in all Pioneer shared savings calculations.

Section 5 of this document describes the calculation of the baseline expenditure for each alignment-eligible beneficiary and alignment-eligible baseline decedents. The calculation of baseline expenditures is the same for alignment-eligible and aligned beneficiaries. Aligned beneficiaries are simply the subset of all alignment-eligible beneficiaries who are aligned with a Pioneer ACO.

Section 6 of this document describes the calculation of the Pioneer ACO baseline expenditure.

Section 7 of this document describes the methods that are used to calculate the reference baseline expenditure for the Pioneer ACO.

Section 8 describes the methods that are used to calculate the performance year expenditure for Pioneer ACO’s aligned beneficiaries.
Section 9 describes the methods that are used to calculate the Pioneer ACO’s performance year reference expenditure.

Section 10 describes the methods that are used to calculate the Pioneer ACO expenditure benchmark using the ACO baseline expenditure, the reference baseline expenditure, and the performance-year reference expenditure.
2.0 Alignment-Eligible Beneficiaries

This section describes the requirements that beneficiaries must meet to be eligible for alignment with a Pioneer ACO.

Beneficiaries who are aligned with a Pioneer ACO are selected from the population of all Medicare beneficiaries who are eligible for alignment during the performance year. The population of all alignment-eligible beneficiaries is also referred to as the “reference population”.

For performance year three [PY3], four types or sets of beneficiaries are eligible for alignment:

1. Beneficiaries who are eligible for alignment during the performance year;
2. Beneficiaries who died during CY2011 and were eligible for alignment from July 2009 through date of death.; and
3. Beneficiaries who died in CY2012 and were eligible for alignment from July 2010 through date of death.
4. Beneficiaries who died in CY2013 and were eligible for alignment from July 2011 through date of death.

Beneficiaries who are eligible for alignment are identified approximately three months prior to the start of the performance year on the basis of the beneficiary demographic and Medicare eligibility data updated through the 2nd quarter of the calendar year in which alignment is conducted.

Beneficiaries who are determined to no longer meet the requirements for alignment-eligibility in either the performance period or the baseline period will be excluded from the alignment-eligible (and the aligned) population prior to the annual financial settlement. (See sections 2.4 and 2.6.) In addition, prior to the financial settlement for a performance year, certain alignment-eligible beneficiaries who do not live in or obtain services from provider practice locations within the service area of the Pioneer ACO will be retroactively excluded from the Pioneer ACO’s aligned population. (See section 2.5.)

Beneficiaries who are excluded from the alignment-eligible (and the aligned) population are not included in the calculation of both baseline and performance year expenditures.

2.1 Beneficiaries eligible for alignment in the performance year

The beneficiaries who are eligible for alignment with a Pioneer ACO during a performance year are initially identified on the basis of the eligibility data that are current through the 4th quarter of the third alignment year.

The data used in alignment are claims for qualifying E&M (QEM) services received by the beneficiary during each of the three alignment years in which the beneficiary was alignment-eligible. The three alignment years for each performance year are given in Table A-1. Briefly:

1. In performance year 2, the alignment period is the 36-month period from July 2009 through June 2012. A beneficiary’s eligibility is determined on the basis of the eligibility data updated
through the 2nd quarter of CY2012 (which is the 4th quarter of the 3rd alignment year for performance year 2).

2. In performance year 3, the alignment period is the 36-month period from July 2010 through June 2013. A beneficiary’s eligibility is determined on the basis of the eligibility data updated through the 2nd quarter of CY2013 (which is the 4th quarter of the 3rd alignment year for performance year 3).

A beneficiary is alignment-eligible in an alignment year if, during that year, the beneficiary had:

1. 12 months of coverage under Medicare Part A;
2. 12 months of coverage under Medicare Part B;
3. No months of coverage in which Medicare was the secondary payer;
4. No months of coverage under a Medicare managed care plan; and,
5. No months of residence outside the United States.

Alignment calculations will make use of claims for QEM services that are provided during (i.e., has a date-of-service within) an alignment year in which the beneficiary was alignment-eligible. Claims for QEM services that are provided during an alignment year in which the beneficiary is not alignment eligible are not used in alignment calculations. The date of service is the “through date” on the line-item claim for the QEM service.

To be eligible for prospective alignment, a beneficiary must:

1. Be eligible for alignment in alignment year 3 (AY3). For PY3, AY3 is the 12 month period from July 2012 through June 2013, and,
2. Have at least one paid claim for a QEM service during one or more of the alignment years in which the beneficiary was alignment-eligible.

**Note:** The alignment requirements that were applied during the first two performance years required at least one claim for a QEM service during the third alignment year. That requirement will be replaced beginning in performance year 3 by the requirement that the beneficiary have a paid claim for a QEM service during at least one or more of the alignment years in which the beneficiary was alignment-eligible.

### 2.2 Alignment-eligible baseline decedents

The prospective alignment-eligible population does not include decedents. To ensure that baseline expenditure for the reference population as well as the ACO-aligned population reflects expenditures incurred by decedents, baseline decedents will be identified for each performance year.

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1 For example, for PY2, a beneficiary who first became eligible for Medicare in March 2011, will be alignment-eligible in the 3rd alignment year (July 2011 through June 2012), but will not be alignment-eligible in the 2nd alignment year (July 2010 through June 2011) because he was covered under Parts A and B for only 4 months of the 2nd alignment year.
In PY2, baseline decedents include two groups of beneficiaries:

- **CY2011 decedents.** Alignment-eligible beneficiaries who die during CY2011.
- **CY2012 decedents.** Alignment-eligible beneficiaries who die during CY2012.

In PY3, baseline decedents include three groups of beneficiaries:

- **CY2011 decedents.** Alignment-eligible beneficiaries who die during CY2011.
- **CY2012 decedents.** Alignment-eligible beneficiaries who die during CY2012.
- **CY2013 decedents.** Alignment-eligible beneficiaries who die during CY2013.

The following section 2.2.1 describes the alignment-eligibility requirements for CY2011 decedents. Section 2.2.2 describes the alignment-eligibility requirements for CY2012 decedents which differ between PY1 and PY2. Section 2.2.3 describes the alignment-eligibility requirements for CY2013 decedents in PY3.

### 2.2.1 CY2011 alignment-eligible decedents

A CY2011 alignment-eligible decedent is a beneficiary who died during CY2011, and who was alignment-eligible in both CY2011 and in the 12-month alignment period ending June 2010. A CY2011 decedent is alignment-eligible if the beneficiary:

1. Was covered by Medicare Part A and Part B in January 2011;
2. Was covered under Medicare Part A in every month of CY2011 up to and including the month of death;
3. Was covered under Medicare Part B in every month of CY2011 up to and including the month of death;
4. Had no months of coverage during CY2011 in which Medicare was the secondary payer;
5. Had no months of coverage during CY2011 under a Medicare managed care plan; and,
6. Had no months of residence during CY2011 outside the United States.

Because alignment calculations will make use of claims for QEM services that are provided during the alignment year, a CY2011 decedent must also be alignment-eligible in the 12-month period ending June 2010. Specifically, a CY2011 decedent must have, during the 12-months from July 2009 through June 2010:

1. 12 months of coverage under Medicare Part A;
2. 12 months of coverage under Medicare Part B;
3. No months of coverage in which Medicare was the secondary payer;
4. No months of coverage under a Medicare managed care plan; and,
5. No months of residence outside the United States.

These requirements parallel the requirements for prospective alignment of beneficiaries who will die in the performance year.
2.2.1.1 CY2011 decedents in performance year 2

Because alignment makes use of claims of QEM services, a CY2011 alignment-eligible decedent must have at least one non-denied claim for a QEM service during the 12-month period ending in June 2010, the period used to perform alignment calculations.

2.2.1.2 CY2011 decedents in performance year 3

For performance year three, the alignment period for CY2011 decedents is instead the two-year time period from July 2008 to June 2010. The alignment period consists of two alignment-years, July 2008-June 2009 and July 2009-June 2010. In order to be aligned, a CY2011 alignment-eligible decedent must have at least one non-denied claim for a QEM service during at least one of the alignment years in which the beneficiary is alignment-eligible, and must have a paid claim, although not a claim for a QEM service, in the period from July 2009 through June 2010 (alignment-year 2).

2.2.2 CY2012 alignment-eligible decedents

In performance years 2 and 3, CY2012 decedents include beneficiaries who die during CY2012 and who are eligible for alignment in CY2012 and in the 12-month alignment period ending June 2011.

A CY2012 decedent is alignment-eligible if the beneficiary:

1. Was covered by Medicare Part A and Part B in January 2012;
2. Was covered under Medicare Part A in every month of CY2012 up to and including the month of death;
3. Was covered under Medicare Part B in every month of CY2012 up to and including the month of death;
4. Had no months of coverage during CY2012 in which Medicare was the secondary payer;
5. Had no months of coverage during CY2012 under a Medicare managed care plan; and,
6. Had no months of residence during CY2012 outside the United States.

Because alignment calculations will make use of claims for QEM services that are provided during the alignment year, a CY2012 decedent must also be alignment-eligible in the 12-month period ending June 2011. Specifically, a CY2012 decedent must also have, during the 12-months from July 2010 through June 2011:

1. 12 months of coverage under Medicare Part A;
2. 12 months of coverage under Medicare Part B;
3. No months of coverage in which Medicare was the secondary payer;
4. No months of coverage under a Medicare managed care plan; and,
5. No months of residence outside the United States.

These requirements parallel the requirements for prospective alignment of beneficiaries who will die in the performance year.
2.2.2.1 CY2012 decedents in performance year 2

Because alignment makes use of claims of QEM services, a CY2012 alignment-eligible decedent must have at least one non-denied claim for a QEM service during the 12-month period ending in June 2011, the period used to perform alignment calculations for CY2012 decedents.

Because alignment-eligibility is determined prospectively several months prior to the start of the performance year, only those CY2012 decedents who die during alignment year 3 (generally during the six months prior to the start of the performance year) are known at the time alignment is run. As a result, the CY2012 decedents that will be used in financial settlement will be identified after the final update of CY2012 eligibility data. Identification of CY2012 decedents after the start of the performance year is necessary to maintain comparability with beneficiaries who die during CY2013 (performance year 2).

2.2.2.2 CY2012 decedents in performance year 3

For performance year three, the alignment period for CY2012 decedents is the three-year time period from July 2008 to June 2011. The alignment period consists of three alignment-years, July 2008-June 2009, July 2009-June 2010, and July 2010-June 2011. In order to be aligned, a CY2012 alignment-eligible decedent must have at least one non-denied claim for a QEM service during at least one of the alignment years in which the beneficiary is alignment-eligible. In addition, the beneficiary must have a claim for a covered service, although not a QEM service, during the period July 2010-June 2011 (the 3rd alignment year).

2.2.3 CY2013 alignment-eligible decedents

In performance year 3, CY2013 decedents include beneficiaries who die during CY2013 and who are eligible for alignment in CY2013 and in the 12-month alignment period ending June 2012. Because alignment-eligibility is determined prospectively several months prior to the start of the performance year, only those CY2013 decedents who die during alignment year 3 (generally during the six months prior to the start of the performance year) are known at the time alignment is run. As a result, the CY2013 decedents that will be used in financial settlement will be identified after the final update of CY2013 eligibility data. Identification of CY2013 decedents after the start of the performance year is necessary to maintain comparability with beneficiaries who die during CY2014 (performance year 3).

A CY2013 decedent is alignment-eligible if the beneficiary:

2. Was covered under Medicare Part A in every month of CY2013 up to and including the month of death;
3. Was covered under Medicare Part B in every month of CY2013 up to and including the month of death;
4. Had no months of coverage during CY2013 in which Medicare was the secondary payer;
5. Had no months of coverage during CY2013 under a Medicare managed care plan; and,
6. Had no months of residence during CY2013 outside the United States.

Because alignment calculations will make use of claims for QEM services that are provided during the alignment year, a CY2013 decedent must also be alignment-eligible in the 12-month period ending in June 2012. Specifically, a CY2012 decedent must also have, during the 12-months from July 2011 through June 2012:

1. 12 months of coverage under Medicare Part A;
2. 12 months of coverage under Medicare Part B;
3. No months of coverage in which Medicare was the secondary payer;
4. No months of coverage under a Medicare managed care plan; and,
5. No months of residence outside the United States.

These requirements parallel the requirements for prospective alignment of beneficiaries who will die in the performance year.

Because alignment-eligibility is determined prospectively several months prior to the start of the performance year, only those CY2013 decedents who die 7-12 months before the performance period begins (i.e. in the first half of CY2013) are known at the time alignment is run. As a result, the CY2013 decedents that will be used in financial settlement will be identified after the final update of CY2013 eligibility data. Identification of CY2013 decedents after the start of the performance year is necessary to maintain comparability with beneficiaries who die during the performance period.

For performance year three, the alignment period for CY2013 decedents is the three-year time period from July 2009 to June 2012. The alignment period consists of three alignment-years, July 2009-June 2010, July 2010-June 2011, and June 2011-July 2012. In order to be aligned, a CY2013 alignment-eligible decedent must have at least one non-denied claim for a QEM service during at least one of the alignment years in which the beneficiary is alignment-eligible. In addition, the beneficiary must have a claim for a covered service, although not a QEM service, during the period July 2011-June 2012 (the 3rd alignment year).

2.3 Quarterly exclusion of alignment-eligible beneficiaries during performance year

Because the beneficiaries eligible for alignment in the performance year are initially identified prior to the start of the performance year, the initial alignment-eligible population will include beneficiaries who lose eligibility during the performance year. Beneficiaries who lose alignment-eligibility during the performance year will be removed from the performance-year alignment-eligible population on a quarterly basis. Specifically, a beneficiary will be removed from the performance year alignment-eligible population if during the performance year he or she:

1. Dies prior to the start of the performance year;
2. Has one or more months of coverage under Medicare Part A only;
3. Has one or more months of coverage under Medicare Part B only;
4. Has one or more months during which Medicare is the secondary payer; or,
5. Has one or more months of coverage under a Medicare managed care plan.

Each quarter, following the update of eligibility data, the eligibility of each alignment-eligible beneficiary will be reviewed and any beneficiary who meets the above requirements will be removed from the alignment-eligible population. The Pioneer ACO with which such a beneficiary is aligned will be notified that an aligned beneficiary no longer meets alignment-eligibility requirements and has been excluded from their aligned population. An alignment-eligible beneficiary identified as having lost eligibility during a quarterly alignment-eligibility check will remain excluded even if subsequent updates to eligibility data indicate that the beneficiary remains alignment-eligible.

A beneficiary who is excluded from the alignment-eligible population for the performance year because he or she dies prior to the start of the performance year will, in general, be included as an aligned baseline decedent for the calendar year in which death occurred. These beneficiaries must be otherwise eligible for alignment as a baseline decedent.

2.4 Geographic exclusions

The prospectively aligned beneficiaries who will be included in financial reconciliation accordingly will be determined approximately 3 months after the end of each performance period when the final update of performance year eligibility data become available. In addition to the requirements specified in section 2.4, the final alignment-eligibility check prior to financial reconciliation will apply two tests to remove beneficiaries who move outside the ACO’s service area or do not obtain at least half of their primary care from providers practicing in the service area of the Pioneer ACO.

A beneficiary who is excluded from financial reconciliation on the basis of these geographic tests, or for any other reason, will be removed from both the calculation of the Pioneer ACO’s baseline expenditure and its performance year expenditure.

**Note:** These geographic exclusions apply only to aligned beneficiaries. They cannot be applied to all alignment-eligible beneficiaries because geographic exclusions are based on the service area of the Pioneer ACO.

2.4.1 Definition of the Pioneer ACO service area

The service area of a Pioneer ACO is defined as the counties in which the ACO’s participating primary care providers maintain practice locations and the counties adjacent to those counties. Each performance year the Pioneer ACO will identify the counties in which the participating providers who were used in alignment calculations maintain practice locations for purposes of identifying the Pioneer ACO service area for that performance year.
Note: The Pioneer ACO RFA indicates that the geographic exclusion criteria will be applied based on Core-based Statistical Areas (CBSAs) and not individual counties. Consideration may be given to requests by Pioneer ACOs to define their service area on the basis of CBSAs instead of counties, specifically when the idiosyncrasies of county definitions and patterns of care indicate that aligned beneficiaries travel substantial distances to obtain care from the ACO’s participating providers in both the alignment and performance period.

2.4.2 Exclusion of beneficiaries moving outside the Pioneer ACO service area

An aligned beneficiary whose county-of-residence, according to Medicare’s eligibility data, in the performance year differs from the beneficiary’s county-of-residence in Medicare’s eligibility data for the third alignment year, will be removed from the aligned population of the Pioneer ACO if:

1. The beneficiary’s county-of-residence in the third alignment year is within the ACO’s service area.
2. The beneficiary’s county-of-residence in the performance year is not a county included in the ACO’s service area, and;

Beneficiaries who live within the ACO’s service area in alignment year 3, who move outside of the ACO’s service area in the performance year, would be excluded. Beneficiaries who, in the most recent alignment year, do not live in the ACO’s service area, and who subsequently move to another county (either within or outside of the ACO’s service area) in the performance period, will not be excluded according to this rule.

Residency will be determined as of the most recent alignment year.

2.4.3 Exclusion of beneficiaries receiving a majority of primary care outside the Pioneer ACO service area

An aligned beneficiary who during the performance year, according to information on the site of service that is recorded on the claim, receives more than 50% of their QEM services at practice locations that are not part of the service area of the Pioneer ACO will be excluded from the aligned population. The determination of this percentage of QEM services will be made on the basis of allowable charges.

The practice location at which QEM services are provided will be determined on the basis of zip code or other information appearing on the claim for the QEM services that identifies the location where the service was provided.

2.5 Exclusion of beneficiaries not alignment-eligible in baseline period

To be included in financial calculations for a Pioneer ACO, a beneficiary must have at least one baseline year in which he or she was alignment-eligible. The baseline years for PY2 are CY2009 through CY2012. In each calendar year, a beneficiary is alignment-eligible if he or she had:
1. 12 months of coverage under Medicare Part A
2. 12 months of coverage under Medicare Part B;
3. No months of coverage in which Medicare was the secondary payer;
4. No months of coverage under a Medicare managed care plan; and,
5. No months of residence outside the United States.

These requirements apply to all alignment-eligible beneficiaries.

These requirements also generally apply to CY2011, CY2012, and CY2013 decedents.

1. In the case of CY2011 alignment-eligible decedents, the beneficiary is alignment-eligible if he or she:
   a. Was covered by Medicare Part A and Part B in January 2011;
   b. Was covered under Medicare Part A in every month of CY2011 through the month of death;
   c. Was covered under Medicare Part B in every month of CY2011 through the month of death;
   d. Had no months of coverage during CY2011 in which Medicare was the secondary payer;
   e. Had no months of coverage during CY2011 under a Medicare managed care plan; and,
   f. Had no months of residence during CY2011 outside the United States.

2. In the case of CY2012 and CY2013 alignment-eligible decedents, the beneficiary must be alignment-eligible in CY2012 by having, in CY2012:
   a. 12 months of coverage under Medicare Part A
   b. 12 months of coverage under Medicare Part B;
   c. No months of coverage in which Medicare was the secondary payer;
   d. No months of coverage under a Medicare managed care plan; and,
   e. No months of residence outside the United States.

Note: A beneficiary does not need to receive one or more QEM service during any calendar year for the beneficiary to be alignment-eligible in that year for the purpose of determining whether the year can be included in the ACO baseline.
3.0 Alignment of Alignment-Eligible Beneficiaries with the ACO

The beneficiaries aligned with a Pioneer ACO are identified prospectively in the sense that they are identified prior to the start of the performance year on the basis of their historical utilization. In general, a beneficiary is aligned with a Pioneer ACO if she or he received the largest amount of primary care services (or in certain circumstances, selected specialty care services) from the Pioneer ACO’s participating providers compared to providers affiliated with any other ACO or any non-ACO-affiliated provider.

3.1 Participating providers

The physicians and other practitioners that are used to perform alignment are identified by a Pioneer ACO as its participating providers. Participating providers are identified by a combination of:

1. Taxpayer Identification Numbers (TINs) or CMS Certification Number (CCNs); and
2. Individual National Provider Identifiers (NPIs) for the physician or non-physician practitioner (NPP).

Because alignment relies on claims data for QEM services, a participating provider is identified by the NPI of each individual physician or NPP and:

- The TIN(s) of the practice(s) at which the physician or NPP practices;
- The CCN(s) of the Federal Qualified Health Centers (FQHCs) at which the physician or NPP practices;
- The CCN(s) of the Rural Health Centers (RHCs) at which the physician or NPP practices; and,
- The CCN(s) of the Critical Access Hospitals paid under Method II at which the physician or NPP practices. ²

A physician or NPP may be a member of multiple practices. For example, a primary care physician may practice at private office location, at a clinic affiliated with an academic medical center, and at one or more FQHCs or RHCs. The Pioneer ACO should identify all TINs and CCNs that identify practices with which it has a participating provider agreement.

A primary care physician or practitioner (defined as a unique combination of a TIN and NPI or a CCN and NPI) may be affiliated as a primary care physician with one and only one Pioneer ACO. Specialist physicians may be affiliated with more than one Pioneer ACO.

² In performance year 1, alignment will be based only on professional claims. Claims for services provided by FQHCs, RHCs and Critical Access Hospitals will not be used in performance year 1 alignment calculations.
3.2 Alignment periods and weighting of claims

The claims experience of the beneficiary will be weighted to give greater importance to the use of services closer in time to the performance year. Claims for qualifying services will be weighted as follows:

- Claims incurred during alignment year 1 are weighted 10%.
- Claims incurred during alignment year 2 are weighted 30%.
- Claims incurred during alignment year 3 are weighted 60%.

When a beneficiary has fewer than three alignment-eligible years for use in alignment calculations, the weights are adjusted proportionately.

3.3 The 2-stage alignment algorithm

Alignment is based on the use of paid claims for QEM services. QEM services refer to the E&M services listed in Table A-2 that are provided by the select primary care and specialist physicians listed in Tables A-3 and A-4, respectively.

Alignment uses a two-stage alignment algorithm:

- **Alignment based on primary care services provided by providers who in a primary care specialty.** If 10% or more of the QEM services received by a beneficiary during all alignment-eligible years in the 3-year alignment period are provided by physicians and practitioners with a primary care specialty as defined in table A-3, then alignment is based on the QEM services provided by the primary care specialists. In this case, the beneficiary will be aligned with the ACO that, during all alignment-eligible years has the largest share of the weighted allowed charges for QEM services that are provided by primary care physicians and practitioners.

- **Alignment based on primary care services provided by providers with selected non-primary care specialties.** If less than 10% of the QEM services received by a beneficiary are provided by primary care providers, then alignment is based on the QEM services provided by physicians and practitioners with a non-primary specialty as defined in table A-3. In this case, the beneficiary will be aligned with the ACO that, during all alignment-eligible years has the largest share of the weighted allowed charges for QEM services that are provided by non-primary care specialty physicians and practitioners.

Provider specialty is determined by the specialty code that is assigned to the claim during claim processing or by the specialty associated with the NPI of the physician or NPP in the Medicare provider enrollment database.

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 Alignment of baseline decedents

Alignment of baseline decedents follows the same general methods that apply to prospectively aligned beneficiaries.

3.4.1 Alignment of CY2011 decedents

In Performance Years 1 and 2, CY2011 decedents will be aligned on the basis of the QEM services that they received during a 12-month alignment period ending in July 2010.

For performance year 3 the alignment period for CY2011 decedents is the two-year period from July 2008-June 2010.

3.4.2 Alignment of CY2012 decedents

In Performance Year 2, CY2012 decedents will be aligned on the basis of the QEM services that they received during the 12-month alignment period ending in July 2011.

For performance year 3 the alignment period for CY2012 decedents is the three-year period from July 2008-June 2011.

3.4.3 Alignment of CY2013 decedents

In Performance Year 3, CY2013 decedents will be aligned on the basis of the QEM services that they received during the 24-month alignment period ending in June 2012.
4.0 Expenditures Used in Financial Calculations

This section describes the calculation of the expenditure incurred by alignment-eligible beneficiaries that is used in financial calculations.

The expenditure incurred by an alignment-eligible 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 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, and
7. Hospice claims.

Claims are included in financial calculations and assigned to a performance (or baseline) year using the date of service, the effective date of the claim, and the Integrated Data Repository (IDR) load date. 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.
2. 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, 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 outpatient, physician, and DME claims, the date of service is the through date on the line item claim record. The requirements for the inclusion of claims are summarized in Table A-5 in Addendum A.

Adjustments based in Part A and B claims, including geographic payment adjustments, HVBP payments, indirect medical education adjustments and disproportionate share hospital adjustments, are included in expenditure calculations.

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

Direct Graduate Medical Education, PQRS, eRx, and EHR incentive payments for eligible professionals, and EHR incentive payments to hospitals will all be excluded from expenditure calculations.
Payments related to other Medicare demonstrations or pilots will be included in Pioneer expenditure calculations only if they are paid for services delivered to a specific beneficiary (e.g., are claims-based) as described in appendices to the Pioneer participation Agreement.

All shared savings calculations will use the amount of the payment that would have been made to the provider if budget sequestration had not been implemented in federal fiscal years 2013 and later.
5.0 Alignment-Eligible Beneficiary-Level Expenditure

The calculation of the baseline expenditure for each alignment-eligible beneficiary depends on whether the beneficiary is eligible for alignment during the performance year (as defined in section 2.1) or is an alignment-eligible decedent (as defined in sections 2.2 and 2.3). In the case of beneficiaries who are alignment-eligible during the performance year, the calculation of the baseline expenditure also differs depending on whether the beneficiary was alignment-eligible only in CY2012; alignment-eligible only in CY2013; or was alignment-eligible during the three-year baseline period (CY2009 through CY2011).

This section describes the calculation of expenditures at the level of the individual alignment-eligible beneficiary. Each alignment-eligible beneficiary will have one or more of the following:

1. Capped and uncapped CY2009 actual and trended (baseline; trended to CY2011) expenditure
2. Capped and uncapped CY2010 actual and trended (baseline; trended to CY2011) expenditure
3. Capped and uncapped CY2011 actual expenditure
4. Capped and uncapped CY2012 actual and trended (baseline) expenditure
5. Capped and uncapped CY2013 actual and trended (baseline) expenditure
6. Capped and uncapped baseline expenditure

Only beneficiaries who are first alignment-eligible in CY2012 will have a CY2012 trended expenditure. Only beneficiaries who are first alignment-eligible in CY2013 will have a CY2013 trended expenditure.

Section 6 describes how the beneficiary-level expenditures are combined to calculate the ACO-level baseline expenditure.

Section 7 describes how the beneficiary-level expenditures are used to calculate the Pioneer ACO’s reference baseline expenditure.

Section 8 describes how the beneficiary-level expenditures are combined to calculate the Pioneer ACO performance-year expenditure.

Section 9 describes how the beneficiary-level expenditures are used to calculate the Pioneer ACO’s performance-year reference expenditure.

5.1 Alignment-eligible years

Baseline calculations will only make use of claims that were incurred in a baseline year during which the beneficiary is alignment-eligible. A beneficiary’s claims experience for a baseline year will be used in the calculation of the baseline expenditure only if, during that calendar year, the prospectively aligned beneficiary:

1. Had 12 months of coverage under both Medicare Part A or, in the case of decedents, was covered under Part A in every month of the year up to and including the month of death;
2. Had 12 months of coverage under both Medicare Part B or, in the case of decedents, was covered under Part B in every month of the year up to and including the month of death;
3. Had no months of coverage in which Medicare was the secondary payer;
4. Had no months of coverage under a Medicare managed care plan; and,
5. Had no months of residence outside the United States.

These requirements mean that all financial calculations will make use of claims only for years in which the prospectively aligned beneficiary had 12 months of fee-for-service (FFS) coverage under Medicare Part A and Medicare Part B.

5.2 Expenditure capping

For each beneficiary, the uncapped expenditure for an alignment-eligible year (or other performance period) is simply the expenditure that was incurred by the beneficiary during the specified year.

Financial reconciliation will be based on capped expenditures for all alignment-eligible beneficiaries unless the Pioneer ACO has submitted and CMS has approved another source of individual stop-loss insurance coverage that is actuarially equivalent, as stated in the Participation Agreement.

The capped, annualized expenditure of a beneficiary for an alignment-eligible year (or other performance period) is the lesser of two amounts:

1. The uncapped expenditure incurred by the beneficiary during the year; and
2. The expenditure cap that applies to the eligibility category of the beneficiary.
   a. For aged and disabled beneficiaries without ESRD the cap will be equal to the unweighted 99th percentile of the annualized expenditure distribution for the aged-disabled national reference population for the specified base year.
   b. For aligned ESRD beneficiaries the cap will be the unweighted 99th percentile of the annualized expenditure distribution for the ESRD national reference population for the specified year.

The eligibility category of a beneficiary is determined based on the eligibility data for July of the third alignment year.

5.3 2009 baseline expenditure (trended 2009 expenditure)

The 2009 baseline expenditure of beneficiary who was alignment-eligible in 2009, is based on the beneficiary’s actual CY2009 expenditure (capped or uncapped as determined by the Pioneer ACO’s election) and the average CY2009 capped expenditure of all alignment-eligible beneficiaries (the national reference population) who, as of July 1 of the third alignment year:

- Resided in the same state as the beneficiary;
- Had the same Medicare entitlement category (aged/originally disabled/ESRD) as the beneficiary;
- Was in the same age category as the beneficiary; and,
- Was of the same sex as the beneficiary.
The beneficiary’s 2009 baseline expenditure is:

- The actual CY2009 expenditure of the beneficiary;
- Multiplied by the average 2011 capped expenditure for all alignment-eligible (reference) beneficiaries with the same state of residence (as defined above), eligibility status, age and sex as the beneficiary; and,
- Divided by the average 2009 capped expenditure for all alignment-eligible (reference) beneficiaries with the same state of residence (as defined above), eligibility status, age and sex as the beneficiary.

The 2009 uncapped baseline expenditure is based on the beneficiary’s 2009 actual uncapped expenditure. The 2009 capped baseline expenditure is based on the beneficiary’s 2009 actual capped expenditure.

### 5.4 2010 baseline expenditure (trended 2010 expenditure)

The 2010 baseline expenditure of a beneficiary who was alignment-eligible in 2010, is based on the beneficiary’s actual CY2010 expenditure, whether capped or uncapped, and the average capped expenditure of all alignment-eligible (reference) beneficiaries who, as of July 1 of the third alignment year:

- Resided in the same state as the beneficiary;
- Had the same eligibility category (aged/originally disabled/ESRD) as the beneficiary;
- Was in the same age category as the beneficiary; and,
- Was of the same sex as the beneficiary.

The beneficiary’s 2010 baseline expenditure is:

- The actual CY2010 expenditure of the beneficiary;
- Multiplied by the average 2011 capped expenditure for all alignment-eligible (reference) beneficiaries with the same state of residence (as defined above), eligibility status, age and sex as the beneficiary; and,
- Divided by the average 2010 capped expenditure for all alignment-eligible (reference) beneficiaries with the same state of residence (as defined above), eligibility status, age and sex as the beneficiary.

The 2010 uncapped baseline expenditure is based on the beneficiary’s 2010 actual uncapped expenditure. The 2010 capped baseline expenditure is based on the beneficiary’s 2010 actual capped expenditure.

### 5.5 2012 baseline expenditure for beneficiaries alignment-eligible in CY2012 only

In performance year 2 and performance year 3, the baseline expenditure of beneficiary who was alignment-eligible in CY2012 but not in CY2009, CY2010, or CY2011, is based on the beneficiary’s
actual CY2012 expenditure, whether capped or uncapped, and the average capped expenditure of all alignment-eligible (reference) beneficiaries who, as of July 1 of the third alignment year:

- Resided in the same state as the beneficiary;
- Had the same eligibility category (aged/originally disabled/ESRD) as the beneficiary;
- Was in the same age category as the beneficiary; and,
- Was of the same sex as the beneficiary.

The beneficiary’s baseline expenditure is:

- The CY2012 expenditure of the beneficiary;
- Multiplied by the average CY2011 capped expenditure for all alignment-eligible beneficiaries with the same state of residence (as defined above), eligibility status, age and sex as the beneficiary; and,
- Divided by the average CY2012 capped expenditure for all alignment-eligible (reference) beneficiaries who were alignment-eligible only in CY2012 and who had the same state of residence (as defined above), eligibility status, age and sex as the beneficiary.

The beneficiary’s uncapped baseline expenditure is based on the beneficiary’s 2012 actual uncapped expenditure. The beneficiary’s capped baseline expenditure is based on the beneficiary’s 2012 actual capped expenditure.

**5.6 2013 baseline expenditure for beneficiaries alignment-eligible in CY2013 only**

In Performance year 3, the baseline expenditure of beneficiary who was alignment-eligible in CY2013 but not in CY2009, CY2010 or CY2011, is based on the beneficiary’s actual CY2013 expenditure, whether capped or uncapped, and the average capped expenditure of all alignment-eligible (reference) beneficiaries who, as of July 1 of the third alignment year:

- Resided in the same state as the beneficiary;
- Had the same eligibility category (aged/originally disabled/ESRD) as the beneficiary;
- Was in the same age category as the beneficiary; and,
- Was of the same sex as the beneficiary.

The beneficiary’s baseline expenditure is:

- The CY2013 expenditure of the beneficiary;
- Multiplied by the average CY2011 capped expenditure for all alignment-eligible beneficiaries with the same state of residence (as defined above), eligibility status, age and sex as the beneficiary; and,
- Divided by the average CY2013 capped expenditure for all alignment-eligible (reference) beneficiaries who were alignment-eligible only in CY2013 and who had the same state of residence (as defined above), eligibility status, age and sex as the beneficiary.
The beneficiary’s uncapped baseline expenditure is based on the beneficiary’s 2013 actual uncapped expenditure. The beneficiary’s capped baseline expenditure is based on the beneficiary’s 2013 actual capped expenditure.

5.7 The 3-year baseline expenditure

The 3-year baseline expenditure, whether capped or uncapped, for an alignment-eligible performance year beneficiary is the simple, unweighted average of the beneficiary’s expenditure in all baseline years in which the beneficiary was alignment-eligible. That is, expenditure data for only the base years in which the beneficiary was alignment-eligible is used in the calculation of the alignment-eligible beneficiary’s baseline expenditure.

5.7.1 The 3-year baseline expenditure for performance year 2

In performance year 2, the 3-year baseline expenditure for a beneficiary who was:

1. Alignment-eligible in CY2009 only is the beneficiary’s 2009 trended (baseline) expenditure;
2. Alignment-eligible in CY2010 only is the beneficiary’s 2010 trended (baseline) expenditure;
3. Alignment-eligible in CY2011 only is the beneficiary’s 2011 expenditure;
4. Alignment-eligible in CY2009 and CY2010 is the simple average of the beneficiary’s 2009 trended (baseline) and 2010 expenditures;
5. Alignment-eligible in CY2010 and CY2011 is the simple average of the beneficiary’s 2010 trended (baseline) and 2011 expenditures;
6. Alignment-eligible in CY2009 and CY2011 is the simple average of the beneficiary’s 2009 trended (baseline) and 2011 expenditures;
7. Alignment-eligible in CY2009, CY2010 and CY2011 is the simple average of the beneficiary’s 2009 trended (baseline), 2010 trended (baseline) and 2011 expenditures;
8. Alignment-eligible in CY2012 only is the beneficiary’s 2012 trended (baseline) expenditure.

5.7.2 The 3-year baseline expenditure for performance year 3

In performance year 2, the 3-year baseline expenditure for a beneficiary who was:

1. Alignment-eligible in CY2009 only is the beneficiary’s 2009 trended (baseline) expenditure;
2. Alignment-eligible in CY2010 only is the beneficiary’s 2010 trended (baseline) expenditure;
3. Alignment-eligible in CY2011 only is the beneficiary’s 2011 expenditure;
4. Alignment-eligible in CY2009 and CY2010 is the simple average of the beneficiary’s 2009 trended (baseline) and 2010 expenditures;
5. Alignment-eligible in CY2010 and CY2011 is the simple average of the beneficiary’s 2010 trended (baseline) and 2011 expenditures;
6. Alignment-eligible in CY2009 and CY2011 is the simple average of the beneficiary’s 2009 trended (baseline) and 2011 expenditures;
7. Alignment-eligible in CY2009, CY2010 and CY2011 is the simple average of the beneficiary’s 2009 trended (baseline), 2010 trended (baseline) and 2011 expenditures;
8. First alignment-eligible in CY2012 is the beneficiary’s 2012 trended (baseline) expenditure;
9. First alignment-eligible in CY2013 is the beneficiary’s 2013 trended (baseline) expenditure.

5.8 Baseline expenditure of CY2011 decedents

The uncapped baseline expenditure of a CY2011 decedent is the actual expenditure incurred by the beneficiary in CY2011.

The beneficiary’s capped baseline expenditure is the lesser of the beneficiary’s uncapped baseline expenditure and the CY2011 cap that applies to the beneficiary’s eligibility category, adjusted to reflect the number of months the beneficiary was alive during CY2011. To calculate the beneficiary’s capped baseline expenditure:

1. The beneficiary’s CY2011 expenditure is divided by the number of months during which the beneficiary was alive during CY2011 and then multiplied by 12. This is the beneficiary’s annualized CY2011 expenditure.
2. The beneficiary’s capped, annualized expenditure is the lesser of the beneficiary’s uncapped annualized baseline expenditure and the CY2011 cap that applies to the beneficiary’s eligibility category.
3. The beneficiary’s capped baseline expenditure is the beneficiary’s capped, annualized expenditure, divided by 12, and then multiplied by the number of months the beneficiary was alive during CY2011.

5.9 Baseline expenditure of CY2012 decedents

In performance year 2 and performance year 3, the uncapped baseline expenditure of a CY2012 decedent is the CY2011 expenditure of the beneficiary.

The beneficiary’s capped baseline expenditure is the lesser of the beneficiary’s uncapped baseline expenditure and the CY2011 cap that applies to the beneficiary’s eligibility category.

Note: All CY2012 decedents, by definition, were alignment-eligible for 12 months during CY2011. The annualized CY2011 expenditure of a CY2012 decedent is, therefore, equal to the beneficiary’s actual CY2011 expenditure.

5.10 Baseline expenditure of CY2013 decedents

In performance year 3, the uncapped baseline expenditure of a CY2013 decedent is the CY2011 expenditure of the beneficiary.

The beneficiary’s capped baseline expenditure is the lesser of the beneficiary’s uncapped baseline expenditure and the CY2011 cap that applies to the beneficiary’s eligibility category.
Note: All CY2013 decedents, by definition, were alignment-eligible for 12 months during CY2011. The annualized CY2011 expenditure of a CY2013 decedent is, therefore, equal to the beneficiary’s actual CY2011 expenditure.

5.11 CY2013 expenditure (performance year 2)

The uncapped CY2013 expenditure of a beneficiary who is alignment-eligible in CY2013 is simply the expenditure that was incurred by the beneficiary during CY2013.

The beneficiary’s capped CY2013 expenditure is the lesser of the beneficiary’s uncapped CY2013 expenditure and the CY2013 cap that applies to the beneficiary’s eligibility category, adjusted to reflect the number of months the beneficiary was alive during CY2013. To calculate the beneficiary’s capped CY2013 expenditure:

1. The beneficiary’s CY2013 expenditure is divided by the number of months during which the beneficiary was alive during CY2013 and then multiplied by 12. This is the beneficiary’s annualized CY2013 expenditure.
2. The beneficiary’s capped, annualized CY2013 expenditure is the lesser of the beneficiary’s uncapped baseline expenditure and the CY2013 cap that applies to the beneficiary’s eligibility category.
3. The beneficiary’s capped baseline expenditure is the beneficiary’s capped, annualized CY2013 expenditure, divided by 12, and then multiplied by the number of months the beneficiary was alive during CY2013.

In performance year 2, the performance year expenditure is the beneficiary’s CY2013 expenditure.

5.12 CY2014 expenditure (performance year 3)

The uncapped CY2014 expenditure of a beneficiary who is alignment-eligible in the CY2014 is the expenditure that was incurred by the beneficiary during the performance year (CY2014).

The beneficiary’s capped CY2014 expenditure is the lesser of the beneficiary’s uncapped CY2014 expenditure and the CY2014 cap that applies to the beneficiary’s eligibility category, adjusted to reflect the number of months the beneficiary was alive during CY2014. To calculate the beneficiary’s capped CY2014 expenditure:

1. The beneficiary’s CY2014 expenditure is divided by the number of months during which the beneficiary was alive during CY2014 and then multiplied by 12. This is the beneficiary’s annualized CY2014 expenditure.
2. The beneficiary’s capped, annualized CY2014 expenditure is the lesser of the beneficiary’s uncapped baseline expenditure and the CY2014 cap that applies to the beneficiary’s eligibility category.
3. The beneficiary’s capped baseline expenditure is the beneficiary’s capped, annualized CY2014 expenditure, divided by 12, and then multiplied by the number of months the beneficiary was alive during CY2014.

In performance year 3, the performance year expenditure is the beneficiary’s CY2014 expenditure.
6.0  **Pioneer ACO Baseline Expenditure**

The Pioneer ACO baseline expenditure is the baseline expenditure of all aligned beneficiaries per eligible person-year. It is calculated by dividing into the aggregate baseline expenditure for all aligned beneficiaries for a performance year the total eligible person-years accrued by those beneficiaries during CY2011.

6.1  **Pioneer ACO baseline expenditure for performance year 2**

In performance year 2, the aggregate baseline expenditure for a Pioneer ACO is the sum of:

1. The baseline expenditure of each performance-year aligned beneficiary.
2. The baseline expenditure of each aligned CY2011 decedent.
3. The baseline expenditure of each aligned CY2012 decedent.

The total eligible person-years accrued during CY2011 by aligned beneficiaries is the sum of:

1. The number of aligned beneficiaries who were alignment-eligible in CY2009, CY2010, and/or CY2011;
2. The number of aligned beneficiaries who were alignment-eligible only in CY2012;
3. The number of person-years accrued in CY2011 by aligned CY2011 decedents between January 2011 and the month of death; and,
4. The number of aligned CY2012 decedents.

The Pioneer ACO baseline is the aggregate baseline expenditure divided by total eligible person-years accrued during CY2011.

The Pioneer ACO capped baseline is calculated in the same manner as the uncapped baseline expenditure, except that each beneficiary’s capped expenditure is used instead of the beneficiary’s uncapped expenditure.

6.2  **Pioneer ACO baseline expenditure for performance year 3**

In performance year 3, the aggregate baseline expenditure for a Pioneer ACO is the sum of:

1. The baseline expenditure of each performance-year aligned beneficiary.
2. The baseline expenditure of each aligned CY2011 decedent.
3. The baseline expenditure of each aligned CY2012 decedent.
4. The baseline expenditure of each aligned CY2013 decedent.

The total eligible person-years accrued during CY2011 by aligned beneficiaries is the sum of:

1. The number of aligned beneficiaries who were alignment-eligible in CY2009, CY2010, and/or CY2011;
2. The number of aligned beneficiaries who were alignment-eligible only in CY2012;
3. The number of aligned beneficiaries who were alignment-eligible only in CY2013;
4. The number of person-years accrued in CY2011 by aligned CY2011 decedents between January 2011 and the month of death; and,
5. The number of aligned CY2012 decedents.
6. The number of aligned CY2013 decedents.

The Pioneer ACO baseline is the aggregate baseline expenditure divided by total eligible person-years accrued during CY2011.

The Pioneer ACO capped baseline is calculated in the same manner as the uncapped baseline expenditure, except that each beneficiary’s capped expenditure is used instead of the beneficiary’s uncapped expenditure.
7.0 **Pioneer Baseline Reference Expenditure**

The calculation of the reference baseline expenditure for a Pioneer ACO is directly analogous to the calculation of the Pioneer ACO’s own baseline expenditure. Instead of using the aligned beneficiary’s own expenditure, however, the calculation of the reference baseline uses the reference expenditure for each aligned beneficiary.

7.1 **Reference baseline expenditure of each aligned beneficiary**

The reference baseline expenditure for an aligned beneficiary is the person-year-weighted average expenditure of all alignment-eligible (reference) beneficiaries with the same baseline decedent status who belongs to the same eligibility, age, and sex category (as defined in Table A-6).

1. The reference baseline expenditure for an aligned performance-year beneficiary is the average baseline expenditure of all alignment-eligible (reference) performance year beneficiaries with the same eligibility, age and sex as the aligned beneficiary.
2. The reference baseline expenditure for an aligned CY2011 decedent is the average baseline expenditure per person-year of all CY2011 decedents with the same eligibility, age and sex as the aligned beneficiary multiplied by the number of months the aligned CY2011 decedent was alive in CY2011 and divided by 12. (Computationally, this amount is equivalent to multiplying the average expenditure PBPM of all CY2011 alignment-eligible decedents by the number of months that the aligned CY2011 decedent was alive in CY2011.)
3. In performance years 2 and 3, the reference baseline expenditure for an aligned CY2012 decedent is the average baseline expenditure of all CY2012 alignment-eligible decedents with the same eligibility, age and sex as the aligned beneficiary.
4. In performance year 3, the reference baseline expenditure for an aligned CY2013 decedent is the average baseline expenditure of all CY2013 alignment-eligible decedents with the same eligibility, age and sex as the aligned beneficiary.

7.2 **Calculation of Pioneer ACO reference baseline expenditure**

The Pioneer ACO reference baseline expenditure is the baseline reference expenditure of all aligned beneficiaries per eligible person-year. It is calculated by dividing into the aggregate baseline reference expenditure for all aligned beneficiaries the total eligible person-years accrued during CY2011 by aligned beneficiaries.

7.2.1 **Pioneer ACO reference baseline expenditure for performance year 2**

In performance year 2, the aggregate reference baseline expenditure for a Pioneer ACO is the sum of:

1. The baseline reference expenditure of each performance-year aligned beneficiary.
2. The baseline reference expenditure of each aligned CY2011 decedent.
3. The baseline reference expenditure of each aligned CY2012 decedent.
The total eligible person-years accrued during CY2011 by aligned beneficiaries is the sum of:

1. The number of aligned beneficiaries who were alignment-eligible in CY2009, CY2010, and/or CY2011;
2. The number of aligned beneficiaries who were alignment-eligible only in CY2012;
3. The number of person-years accrued in CY2011 by aligned CY2011 decedents between January 2011 and the month of death; and,
4. The number of aligned CY2012 decedents.

The Pioneer ACO reference baseline expenditure is the aggregate reference baseline expenditure divided by total eligible person-years accrued during CY2011.

The Pioneer ACO capped reference baseline expenditure is calculated in the same manner as the uncapped reference baseline expenditure, except that it uses each beneficiary’s capped reference expenditure instead of the beneficiary’s uncapped reference expenditure.

7.2.2 **Pioneer ACO reference baseline expenditure for performance year 3**

In performance year 3, the aggregate reference baseline expenditure for a Pioneer ACO is the sum of:

1. The baseline reference expenditure of each performance-year aligned beneficiary.
2. The baseline reference expenditure of each aligned CY2011 decedent.
3. The baseline reference expenditure of each aligned CY2012 decedent.
4. The baseline reference expenditure of each aligned CY2013 decedent.

The total eligible person-years accrued during CY2011 by aligned beneficiaries is the sum of:

1. The number of aligned beneficiaries who were alignment-eligible in CY2009, CY2010, and/or CY2011;
2. The number of aligned beneficiaries who were first alignment-eligible in CY2012;
3. The number of aligned beneficiaries who were first alignment-eligible in CY2013;
4. The number of person-years accrued in CY2011 by aligned CY2011 decedents between January 2011 and the month of death; and,
5. The number of aligned CY2012 decedents; and,
6. The number of aligned CY2013 decedents.

The Pioneer ACO reference baseline expenditure is the aggregate reference baseline expenditure divided by total eligible person-years accrued during CY2011.

The Pioneer ACO capped reference baseline expenditure is calculated in the same manner as the uncapped reference baseline expenditure, except that it uses each beneficiary’s capped reference expenditure instead of the beneficiary’s uncapped reference expenditure.
8.0 Pioneer ACO Performance Year Expenditure

The Pioneer ACO performance year expenditure is the expenditure of all aligned beneficiaries per eligible person-year. It is calculated by dividing into the aggregate expenditure incurred by all aligned beneficiaries the total eligible person-years accrued by those beneficiaries during the performance year.

8.1 Pioneer ACO performance year 2 expenditure

The Pioneer ACO performance year 2 expenditure is the CY2013 expenditure incurred by all aligned beneficiaries per eligible person-year. It is calculated by dividing into the aggregate CY2013 expenditure incurred by all aligned beneficiaries the total eligible person-years accrued by those beneficiaries during CY2013.

The aggregate CY2013 expenditure for a Pioneer ACO is the sum of:

1. The CY2013 expenditure of each performance-year aligned beneficiary who did not die during CY2013; and,
2. The CY2013 expenditure of each performance-year aligned beneficiary who died during CY2013.

The total eligible person-years accrued during CY2013 by aligned beneficiaries is the sum of:

1. The number of aligned beneficiaries who did not die during CY2013; and,
2. The number of person-years accrued during CY2013 by aligned beneficiaries who died during CY2013.

The Pioneer ACO uncapped performance year expenditure is the aggregate CY2013 expenditure divided by total eligible person-years accrued during CY2013.

The Pioneer ACO capped performance year expenditure is calculated in the same manner as the uncapped performance year expenditure, except that it uses each beneficiary’s CY2013 capped expenditure instead of the beneficiary’s uncapped CY2013 expenditure.

8.2 Pioneer ACO performance year 3 expenditure

The Pioneer ACO performance year 3 expenditure is the CY2014 expenditure incurred by all aligned beneficiaries per eligible person-year. It is calculated by dividing into the aggregate CY2014 expenditure incurred by all aligned beneficiaries the total eligible person-years accrued by those beneficiaries during CY2014.

The aggregate CY2014 expenditure for a Pioneer ACO is the sum of:

1. The CY2014 expenditure of each performance-year aligned beneficiary who did not die during CY2014; and,
The CY2014 expenditure of each performance-year aligned beneficiary who died during CY2014.

The total eligible person-years accrued during CY2014 by aligned beneficiaries is the sum of:

1. The number of aligned beneficiaries who did not die during CY2014; and,
2. The number person-years accrued during CY2014 of aligned beneficiaries who died during CY2014.

The Pioneer ACO uncapped performance year expenditure is the aggregate CY2014 expenditure divided by total eligible person-years accrued during CY2014.

The Pioneer ACO capped performance year expenditure is calculated in the same manner as the uncapped performance year expenditure, except that it uses each beneficiary’s CY2014 capped expenditure instead of the beneficiary’s uncapped CY2014 expenditure.
9.0 **Performance Year ACO Reference Expenditure**

The performance-year reference expenditure for a Pioneer ACO is directly analogous to the calculation of the Pioneer ACO’s own performance-year expenditure. Instead of using the aligned beneficiary’s own expenditure, the calculation of the performance-year reference expenditure uses the reference expenditure for each aligned beneficiary.

9.1 **Performance-year reference expenditure of each aligned beneficiary**

The performance-year reference expenditure for each aligned beneficiary is the person-year-weighted average expenditure of all alignment-eligible beneficiaries with the same performance-year decedent status, eligibility, age, and sex (as defined in Table A-6) as the aligned beneficiary.

1. The reference performance-year expenditure for an aligned beneficiary who did not die during the performance year is the average performance-year expenditure of all alignment-eligible beneficiaries who did not die during the performance year with the same eligibility, age and sex as the aligned beneficiary.

2. In PY2, the reference performance-year expenditure for an aligned beneficiary who died during the performance year is the average performance-year expenditure per person-year of all alignment-eligible beneficiaries who died during CY2013 multiplied by the number of months the aligned performance-year decedent was alive in CY2013 and divided by 12. (Computationally, this amount is equivalent to multiplying the average performance-year expenditure PBPM of all CY2013 alignment-eligible decedents by the number of months that the aligned CY2013 decedent was alive in CY2013.)

3. In PY3, the reference performance-year expenditure for an aligned beneficiary who died during the performance year is the average performance-year expenditure per person-year of all alignment-eligible beneficiaries who died during CY2014 multiplied by the number of months the aligned performance-year decedent was alive in CY2014 and divided by 12. (Computationally, this amount is equivalent to multiplying the average performance-year expenditure PBPM of all CY2014 alignment-eligible decedents by the number of months that the aligned CY2014 decedent was alive in CY2014.)

9.2 **Calculation of Pioneer ACO performance-year reference expenditure**

The Pioneer ACO performance-year reference expenditure is the performance-year reference expenditure of all aligned beneficiaries per eligible person-year. It is calculated by dividing into the aggregate performance-year reference expenditure for all aligned beneficiaries the total eligible person-years accrued during the performance year by aligned beneficiaries.

9.2.1 **Pioneer ACO reference expenditure for performance year 2**

In performance year 2, the Pioneer ACO performance-year reference expenditure is the CY2013 reference expenditure of all aligned beneficiaries per eligible person-year. It is calculated by dividing
into the aggregate CY2013 reference expenditure for all aligned beneficiaries the total eligible person-years accrued during CY2013 by aligned beneficiaries.

The aggregate CY2013 reference expenditure for a Pioneer ACO is the sum of:

1. The CY2013 reference expenditure of each performance-year aligned beneficiary.
2. The CY2013 reference expenditure of each CY2013 decedent.

The total eligible person-years accrued during CY2013 by aligned beneficiaries is the sum of:

1. The number of aligned beneficiaries who did not die during CY2013; and,
2. The number of person-years accrued in CY2013 by aligned beneficiaries who died in CY2013 (the number of eligible months accrued between January 2013 and the month of death, divided by 12).

The Pioneer ACO performance-year reference expenditure is the aggregate performance-year reference expenditure divided by total eligible person-years accrued during CY2013.

The Pioneer ACO capped performance-year reference expenditure is calculated in the same manner as the uncapped performance-year reference expenditure, except that it uses each beneficiary’s capped performance-year reference expenditure instead of the beneficiary’s uncapped reference expenditure.

**9.2.2 Pioneer ACO reference expenditure for performance year 3**

In performance year 3, the Pioneer ACO performance-year reference expenditure is the CY2014 reference expenditure of all aligned beneficiaries per eligible person-year. It is calculated by dividing into the aggregate CY2014 reference expenditure for all aligned beneficiaries the total eligible person-years accrued during CY2014 by aligned beneficiaries.

The aggregate CY2014 reference expenditure for a Pioneer ACO is the sum of:

1. The CY2014 reference expenditure of each performance-year aligned beneficiary.

The total eligible person-years accrued during CY2014 by aligned beneficiaries is the sum of:

1. The number of aligned beneficiaries who did not die during CY2014; and,
2. The number of person-years accrued in CY2014 by aligned beneficiaries who died in CY2014 (the number of eligible months accrued between January 2014 and the month of death, divided by 12).

The Pioneer ACO performance-year reference expenditure is the aggregate performance-year reference expenditure divided by total eligible person-years accrued during CY2014.

The Pioneer ACO capped performance-year reference expenditure is calculated in the same manner as the uncapped performance-year reference expenditure, except that it uses each beneficiary’s capped performance-year reference expenditure instead of the beneficiary’s uncapped reference expenditure.
The ACO-specific expenditure benchmark is calculated by adding:

1. the ACO-specific baseline expenditure for the performance year:
2. 50% of the absolute dollar difference between the ACO-specific baseline reference expenditure and the ACO-specific performance year reference expenditure; and,
3. 50% of the product of the ACO-specific baseline expenditure for the performance year and the percentage difference (change) between the ACO-specific baseline reference expenditure and the ACO-specific performance year reference expenditure.

The capped baseline is calculated using the capped ACO-specific baseline expenditure, and the capped reference expenditure for the ACO’s aligned beneficiaries.
Addendum A: Tables Referenced in Text

Table A-1. Alignment and Baseline Periods for Pioneer ACOs

<table>
<thead>
<tr>
<th>Period</th>
<th>Performance Years (CY 2012)</th>
<th>Performance Year 2 (CY 2013)</th>
<th>Performance Year 3 (CY 2014)</th>
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<td>AY3: 7/1/2012 – 6/30/2013</td>
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<tr>
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<tr>
<td></td>
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<td>CY 2013³</td>
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</tbody>
</table>

¹ The claims experience for the specified period will be trended forward to third base year, e.g., claims incurred during calendar year 2009 will be trended forward to calendar year 2011 by applying the growth in expenditures for the reference population.

² The claims experience during CY2012 for beneficiaries who are first alignment-eligible in CY2012 will be back-cast to CY2011 to create the beneficiary's baseline expenditure.

³ The claims experience during CY2013 for beneficiaries who are first alignment-eligible in CY2013 will be back-cast to CY2011 to create the beneficiary's baseline expenditure.
### Table A-2. Qualified E&M Procedure Codes

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Procedure Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Office or Other Outpatient Services</strong></td>
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</tr>
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<td>New Patient, brief</td>
<td>99201</td>
</tr>
<tr>
<td>New Patient, limited</td>
<td>99202</td>
</tr>
<tr>
<td>New Patient, moderate</td>
<td>99203</td>
</tr>
<tr>
<td>New Patient, comprehensive</td>
<td>99204</td>
</tr>
<tr>
<td>New Patient, extensive</td>
<td>99205</td>
</tr>
<tr>
<td>Established Patient, brief</td>
<td>99211</td>
</tr>
<tr>
<td>Established Patient, limited</td>
<td>99212</td>
</tr>
<tr>
<td>Established Patient, moderate</td>
<td>99213</td>
</tr>
<tr>
<td>Established Patient, comprehensive</td>
<td>99214</td>
</tr>
<tr>
<td>Established Patient, extensive</td>
<td>99215</td>
</tr>
<tr>
<td><strong>Initial Nursing Facility Care</strong></td>
<td></td>
</tr>
<tr>
<td>New or Established Patient, brief</td>
<td>99304</td>
</tr>
<tr>
<td>New or Established Patient, moderate</td>
<td>99305</td>
</tr>
<tr>
<td>New or Established Patient, comprehensive</td>
<td>99306</td>
</tr>
<tr>
<td><strong>Subsequent Nursing Facility Care</strong></td>
<td></td>
</tr>
<tr>
<td>New or Established Patient, brief</td>
<td>99307</td>
</tr>
<tr>
<td>New or Established Patient, limited</td>
<td>99308</td>
</tr>
<tr>
<td>New or Established Patient, comprehensive</td>
<td>99309</td>
</tr>
<tr>
<td>New or Established Patient, extensive</td>
<td>99310</td>
</tr>
<tr>
<td><strong>Nursing Facility Discharge Services</strong></td>
<td></td>
</tr>
<tr>
<td>New or Established Patient, brief</td>
<td>99315</td>
</tr>
<tr>
<td>New or Established Patient, comprehensive</td>
<td>99316</td>
</tr>
<tr>
<td><strong>Other Nursing Facility Services</strong></td>
<td></td>
</tr>
<tr>
<td>New or Established Patient</td>
<td>99318</td>
</tr>
</tbody>
</table>
Table A-2. Evaluation and Management Service Codes Used in Beneficiary Alignment - continued

<table>
<thead>
<tr>
<th>Service Description</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domiciliary, Rest Home, or Custodial Care Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99324 New Patient, brief</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99325 New Patient, limited</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99326 New Patient, moderate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99327 New Patient, comprehensive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99328 New Patient, extensive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99334 Established Patient, brief</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99335 Established Patient, moderate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99336 Established Patient, comprehensive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99337 Established Patient, extensive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domiciliary, Rest Home, or Home Care Plan Oversight Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99339, brief</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99340, comprehensive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99341 New Patient, brief</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99342 New Patient, limited</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99343 New Patient, moderate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99344 New Patient, comprehensive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99345 New Patient, extensive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99347 Established Patient, brief</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99348 Established Patient, moderate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99349 Established Patient, comprehensive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>99350 Established Patient, extensive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wellness Visits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G0402 Welcome to Medicare visit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G0438 Annual wellness visit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G0439 Annual wellness visit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: List of E&M Codes from the Medicare Shared Savings Program [SSP]. The Pioneer RFA states that for eligibility requirements, the intent is to have the Pioneer Model be consistent with the proposed regulations of the SSP.
### Table A-3. Specialty Codes for Primary Care Physicians

<table>
<thead>
<tr>
<th>Code</th>
<th>Specialty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>general practice</td>
</tr>
<tr>
<td>8</td>
<td>family practice</td>
</tr>
<tr>
<td>11</td>
<td>internal medicine</td>
</tr>
<tr>
<td>38</td>
<td>geriatric medicine</td>
</tr>
<tr>
<td>50</td>
<td>nurse practitioner</td>
</tr>
<tr>
<td>97</td>
<td>physician assistant</td>
</tr>
</tbody>
</table>

SOURCE: MSSP proposed regulations. The Pioneer RFA states that the primary care providers will consist of the primary care providers used in the MSSP program, as well as the addition of nurse practitioners and physician assistants.

### Table A-4. Specialty Codes for Specialist Physicians

- 39 (nephrology)
- Oncology:
  - 83 (hematology/oncology)
  - 90 (medical oncology)
  - 91 (surgical oncology)
  - 92 (radiation oncology)
  - 98 (gynecological/oncology)
- 66 (rheumatology)
- 46 (endocrinology)
- 29 (pulmonology)
- 13 (neurology)
- 86 (neuropsychiatry)
- 6 (cardiology)

SOURCE: Pioneer RFA list of eligible specialties plus personal communication with CMS staff.
### Table A-5. Variables Used in Total Beneficiary Expenditure Calculations

<table>
<thead>
<tr>
<th>Claim Type</th>
<th>Payment is Equal to</th>
<th>Claim Excluded if</th>
<th>Line Item Excluded if</th>
<th>Through Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNF</td>
<td>Claim Payment Amount</td>
<td>Any value for 'Claim Medicare Non-Payment reason code '</td>
<td>No exclusion</td>
<td>Claim Through Date</td>
</tr>
<tr>
<td>Inpatient¹</td>
<td>Claim Payment Amount²</td>
<td>Any value for 'Claim Medicare Non-Payment reason code '</td>
<td>No exclusion</td>
<td>Claim Through Date</td>
</tr>
<tr>
<td>Outpatient</td>
<td>Claim Payment Amount</td>
<td>Any value for 'Claim Medicare Non-Payment reason code '</td>
<td>No exclusion</td>
<td>Claim Through Date</td>
</tr>
<tr>
<td>Home Health</td>
<td>Claim Payment Amount</td>
<td>Any value for 'Claim Medicare Non-Payment reason code '</td>
<td>No exclusion</td>
<td>Claim Through Date</td>
</tr>
<tr>
<td>Physician/Supplier Part B</td>
<td>Line NCH Payment Amount</td>
<td>'Carrier Claim Payment Denial Code' = 0 or D through Y</td>
<td>Line Processing Indicator Code ≠ A, R, or S</td>
<td>Line Through Date</td>
</tr>
<tr>
<td>DME</td>
<td>Line NCH Payment Amount</td>
<td>'Carrier Claim Payment Denial Code' = 0 or D through Y</td>
<td>Line Processing Indicator Code ≠ A, R, or S</td>
<td>Line Through Date</td>
</tr>
<tr>
<td>Hospice</td>
<td>Claim Payment Amount</td>
<td>Any value for 'Claim Medicare Non-Payment reason code'</td>
<td>No exclusion</td>
<td>Claim Through Date</td>
</tr>
</tbody>
</table>

¹ Inpatient expenditures will not include pass-through amounts.

² In PY2 and PY3, an adjustment will be made to the CY2009, CY2010, CY2011, CY2012, and CY2013 expenditure to reflect changes in DSH payment policy under the Inpatient Prospective Payment System that will be implemented beginning in federal fiscal year 2014. These changes will reduce the DSH payment that was made in CY2009 through CY2012 and will remove the uncompensated care payment that will be made for inpatient hospital services beginning in the federal fiscal year 2014. In PY3, an adjustment will be also made to the CY2014 expenditure to reflect those changes, specifically to remove the uncompensated care payment from payments for inpatient hospital services.
Table A-6. Age and Sex Categories by Entitlement Category

Note: Each age category is divided into Male and Female.

Originally Aged beneficiaries without current ESRD

- Age 65 to 69
- Age 70 to 74
- Age 75 to 79
- Age 80 to 84
- Age 85 to 89
- Age 90 to 94
- Age 95 and older

Originally Disabled beneficiaries without current ESRD

- Age 0 to 34*
- Age 35 to 44*
- Age 45 to 54*
- Age 55 to 59*
- Age 60 to 64*
- Age 65 to 69
- Age 70 to 74
- Age 75 to 79
- Age 80 to 84
- Age 85 and older

* Any beneficiary under age 65 not currently identified as having ESRD will be classified as disabled.

Current ESRD

- Age 0 to 64
- Age 65 and older