



Medicare Shared Savings Program  
**USES AND LIMITATIONS OF THE  
CLAIM AND CLAIM LINE FEED  
(CCLF)**

**User Guide**

March 2019  
Version #4



MEDICARE  
SHARED SAVINGS  
PROGRAM

## Revision History (from version 3 to version 4)

VERSION	DATE	REVISION/ CHANGE DESCRIPTION	AFFECTED AREA
4	March 2019	<p>Revised to reflect Shared Savings Program and CCLF file changes (through CCLF IP v25).</p> <p>Added notes to reflect program changes since original analysis and changes based on December 2018 Final Rule (<a href="#">83 FR 67816</a>).</p>	<p>Section 2 Section 3</p> <p><a href="#">Appendix A</a> <a href="#">Appendix B</a> <a href="#">Appendix C</a></p>

## Table of Contents

<b>List of Tables .....</b>	<b>iv</b>
<b>List of Figures .....</b>	<b>v</b>
<b>Executive Summary .....</b>	<b>1</b>
<b>1 Uses of the CCLF Data Files to Improve Care and Care Processes .....</b>	<b>1</b>
<b>2 Limitations in Using CCLF Data to Validate a Beneficiary’s Assignment .....</b>	<b>2</b>
<b>3 Limitations in Using CCLF Data for Comparison with Expenditure/Utilization Data in Program Reports.....</b>	<b>2</b>
<b>4 Limitations in Using CCLF Data for Shared Savings Program Quality Reporting.....</b>	<b>3</b>
<b>Appendix A: Comparing CCLFs to the Quarterly Expenditure/Utilization Report.....</b>	<b>4</b>
Questions to Be Addressed .....	4
Data Sources.....	5
2016 Quarter 1 QEXPU Report.....	5
CCLF Files Delivered to ACOs Between February 2016 and May 2016.....	6
ACO Differences Regarding the CCLFs.....	6
Phase 1: Identification of Claims Analyzed.....	7
Question to Be Analyzed in Phase 1.....	7
Analytical Approach for Phase 1 .....	7
Results of Phase 1: Identification of Claims Within the Scope of the 2016 Q1 QEXPU.....	8
Phase 2: Reconciliation of CCLF and QEXPU Beneficiaries.....	10
Question to Be Analyzed in Phase 2.....	10
Analytical Approach for Phase 2 .....	10
Results of Phase 2: Reconciliation of CCLF and QEXPU Beneficiaries.....	12
Phase 3: Reconciliation of CCLF and QEXPU Beneficiary-Level Expenditures.....	15
Question to Be Analyzed in Phase 3.....	15
Analytical Approach for Phase 3 .....	15
Results of Phase 3: Reconciliation of CCLF and QEXPU Beneficiary-Level Expenditures.....	15

Phase 4: Accounting for Differences in Claims in CCLF and QEXPU for Assigned Beneficiaries .....	20
Question to Be Analyzed in Phase 4 .....	20
Analytical Approach for Phase 4 .....	20
Results of Phase 4: Accounting for Difference in Claims in CCLF and QEXPU for Assigned Beneficiaries .....	21
Phase 5: Comparison of CCLF Data to QEXPU .....	28
Question to Be Analyzed in Phase 5 .....	28
Analytical Approach for and Results of Phase 5 .....	28
Example of Creating Weighted Truncated Annualized Expenditures .....	28
Approaches Used to Adjust Raw Expenditures to Arrive at QEXPU Expenditures .....	29
Conclusion .....	40
<b>Appendix B: Analysis of Enrollment Category Differences Between Assignment List Report and CCLF .....</b>	<b>42</b>
Analysis Purpose .....	42
Question for Analysis .....	42
Methodology for Identifying Monthly Enrollment Status .....	42
Data Sources .....	43
Understanding Differences Between CCLF and ALR .....	46
Results of the Enrollment Status Reconciliation .....	48
Differences Between Months 10 and 11 .....	55
Data Sharing Requirements .....	57
Conclusion .....	58
CMS Support and Resources .....	58
Resources on the SSP ACO Portal .....	58
Support .....	58
References Used for this Analysis .....	58
Presentation Appendix—Monthly Cross Tab of Assignment List Enrollment Categories vs. the CCLF Enrollment Categories .....	59
<b>Appendix C: Acronyms .....</b>	<b>64</b>

## List of Tables

Table 1.	Phase 1 Identification of Claims Within Scope of 2016 Q1 QEXPU—ACO 1 Example (Track 1) .....	9
Table 2.	Phase 1 Identification of Claims Within Scope of 2016 Q1 QEXPU—ACO 2 Example (Track 3) .....	9
Table 3.	Phase 2 Reconciliation of CCLF and QEXPU Beneficiaries—ACO 1 Example (Track 1) .....	13
Table 4.	Phase 2 Reconciliation of CCLF and QEXPU Beneficiaries—ACO 2 Example (Track 3) .....	13
Table 5.	Phase 3 Comparison of Claims for Beneficiaries in CCLF and QEXPU—ACO 1 Example (Track 1) .....	18
Table 6.	Phase 3 Comparison of Claims for Beneficiaries in CCLF and QEXPU—ACO 2 Example (Track 3) .....	19
Table 7.	Phase 4 Accounting for Difference in Claims in CCLF and QEXPU for Assigned Beneficiaries—ACO 1 Example (Track 1) .....	22
Table 8.	Phase 4 Accounting for Difference in Claims in CCLF and QEXPU for Assigned Beneficiaries—ACO 2 Example (Track 3) .....	26
Table 9.	Process for Creating Weighted Truncated Annualized Expenditures at the Beneficiary Level .....	28
Table 10.	Phase 5—Steps to Adjust Expenditures for Quarterly Reports—ACO 1 Example (Track 1) .....	32
Table 11.	Phase 5—Steps to Adjust Expenditures for Quarterly Reports—ACO 2 Example (Track 3) .....	37
Table 12.	Analysis ALR Information .....	43
Table 13.	Enrollment Category Coding for ALR .....	43
Table 14.	CCLF Information Used for Analysis .....	44
Table 15.	Medicare Status Code Details .....	44
Table 16.	Dual Status Code Details .....	45
Table 17.	Beneficiary Match Rate Across the 12 Analysis Months .....	47
Table 18.	Not Eligible Match Rate Across the 12 Analysis Months .....	48
Table 19.	ESRD Match Rate Across the 12 Analysis Months .....	50
Table 20.	Disabled Match Rate Across the 12 Analysis Months .....	52
Table 21.	Aged/Dual Match Rate Across the 12 Analysis Months .....	53
Table 22.	Aged/Non-Dual Match Rate Across the 12 Analysis Months .....	54
Table 23.	Month 1 Cross Tab of Two Versions of Enrollment Categories .....	59
Table 24.	Month 2 Cross Tab of Two Versions of Enrollment Categories .....	59
Table 25.	Month 3 Cross Tab of Two Versions of Enrollment Categories .....	60
Table 26.	Month 4 Cross Tab of Two Versions of Enrollment Categories .....	60
Table 27.	Month 5 Cross Tab of Two Versions of Enrollment Categories .....	60
Table 28.	Month 6 Cross Tab of Two Versions of Enrollment Categories .....	61
Table 29.	Month 7 Cross Tab of Two Versions of Enrollment Categories .....	61
Table 30.	Month 8 Cross Tab of Two Versions of Enrollment Categories .....	61
Table 31.	Month 9 Cross Tab of Two Versions of Enrollment Categories .....	62
Table 32.	Month 10 Cross Tab of Two Versions of Enrollment Categories .....	62
Table 33.	Month 11 Cross Tab of Two Versions of Enrollment Categories .....	62
Table 34.	Month 12 Cross Tab of Two Versions of Enrollment Categories .....	63

## List of Figures

Figure 1.	Assignment to CCLF comparison—Not eligible .....	49
Figure 2.	Assignment to CCLF Comparison—ESRD .....	51
Figure 3.	Assignment to CCLF Comparison—Disabled .....	52
Figure 4.	Assignment to CCLF Comparison—Aged/Dual.....	54
Figure 5.	Assignment to CCLF Comparison—Aged/Non-Dual .....	55
Figure 6.	Month 10 Cross Tabulation of Enrollment Categories Between the ALR and CCLF.....	56
Figure 7.	Month 11 Cross Tabulation of Enrollment Categories between the ALR and CCLF.....	57

## Executive Summary

The purpose of this document is to suggest ways that ACOs can use the claim and claim line feed (CCLF) data files to help better coordinate patient care.<sup>1</sup> CMS also cautions ACOs on why these data files are generally not useful for replicating or validating ACOs' assigned beneficiaries and expenditure/utilization calculations in aggregate reports produced by CMS. [Appendix A](#) guides the reader through a detailed analysis of aggregating CCLFs and the comparability of these aggregate figures to the total expenditures specified on the Aggregate Expenditure/Utilization Report. [Appendix B](#) provides an analysis of enrollment category differences found between the Assignment List Report and the CCLF. [Appendix C](#) is a glossary of acronyms and other terms included in this document.

## 1 Uses of the CCLF Data Files to Improve Care and Care Processes

### ***Observe the Picture of a Beneficiary's Utilization Across Care Settings***

The CCLF data can be an important supplement to each ACO's own data files because the CCLF contains claims data for services billed by both the ACO participants and providers that are not participating in the ACO. This gives ACOs a broader picture of the services that each beneficiary in the CCLF files has received from Medicare providers.

### ***Anticipate Interventions or Treatments that Beneficiaries May Need in the Future***

ACOs may choose to analyze CCLF data to develop a predictive model that would help identify beneficiaries who have a high probability of using a particular medical service in the future, such as going to the emergency room (ER). ACOs can then develop a care plan in the hope of avoiding future predicted ER visits.

### ***Track a Beneficiary's Care and Identify Gaps***

Recognizing that the CCLF data has a time lag, ACOs may decide to use the CCLF to track the care received by a sub-population of beneficiaries over time and to identify beneficiaries who may need follow-up care and/or care management, such as those who had recent or frequent hospitalizations.

---

<sup>1</sup> As indicated in the Medicare Shared Savings Program (Shared Savings Program) Final Rule, CMS provides ACOs the opportunity to receive beneficiary-identifiable claims data, to assist ACOs in the overall redesign of care processes and coordination of care for their beneficiary populations, and enable practitioners in an ACO to better coordinate and target care strategies towards the individual beneficiaries who may ultimately be assigned to them (76 Federal Register 67846 - 67851).

### **Analyze Utilization Rates**

ACOs may choose to calculate utilization rates and compare the results to regional or national benchmarks. This information may allow an ACO to identify areas where the local beneficiary population experiences different utilization patterns than the larger population and help the ACO develop care processes that target a unique patient population.

## **2 Limitations in Using CCLF Data to Validate a Beneficiary's Assignment**

Please review the Medicare Shared Savings Program: Shared Savings and Losses and Assignment Methodology Specifications, which is available on the [Program Guidance & Specifications webpage](#).

In performing assignment, CMS determines whether the ACO as a whole (as opposed to an individual ACO participant taxpayer identification number (TIN)) has provided the plurality of primary care services to a beneficiary. CMS also considers other ACOs as a whole and not their individual participants. Without a complete, current list of ACO participant TINs that comprise another ACO in your area, you may not be able to determine whether a given beneficiary should have been assigned to a specific ACO based on a primary care service observed for that beneficiary at individual TINs.

## **3 Limitations in Using CCLF Data for Comparison with Expenditure/Utilization Data in Program Reports**

It is important to note that although the CCLF does not include the claims for beneficiaries who declined to share their data with ACOs, CMS still uses these beneficiaries' claims for assignment and to produce the Aggregate Expenditure/Utilization Report, the Historical Benchmark Report, and the Financial Reconciliation Report. Additionally, as described in 42 CFR § 425.706, the CCLF data is limited to the minimum data necessary for an ACO to effectively coordinate care for its patient population.

### **Additional limitations include:**

- The CCLF data files do not include any claims that identify alcohol and substance abuse treatment information (e.g., diagnosis, DRG, or procedure codes), whereas CMS does include these claims in the calculation of expenditures/utilization in the various reports. The codes that are used to exclude claims from the CCLF data files due to the alcohol and substance abuse treatment exclusion can be found in

Appendix A of the CCLF Information Packet (IP) available under the Resources section of the [SSP ACO Portal](#).

- The CCLF files provide an ACO with historical claims data three years prior to the start of its agreement period for its beneficiary cohort and claims data for each beneficiary from the previous month. An ACO's program reports on the benchmark period are based on data for beneficiaries who would have been assigned to the ACO in each of the three calendar years prior to the start of the agreement period.

*Note: This historical claims data timeframe was changed from one year to three years starting with January 2019 CCLF files.*

- Expenditures in the program reports are annualized, truncated, and weighted by the proportion of the year each beneficiary is assigned in each Medicare enrollment type.
- CMS uses beneficiary risk scores to update the historical benchmark and to perform financial reconciliation. These risk scores are not available in the CCLF.
- Certain reports determine monthly End Stage Renal Disease (ESRD) status using information found in CMS risk score files (which are not available in the CCLF).

[Appendix A](#) further details the limitations in using CCLF data for comparison with Aggregate Expenditure/Utilization Report data. [Appendix B](#) further details the limitations in using the CCLF data in defining the four enrollment types used within the Shared Savings Program's reports.

## 4 Limitations in Using CCLF Data for Shared Savings Program Quality Reporting

CCLF data alone is not an information source to be used for quality reporting purposes. CMS expects ACOs to report on quality measures for assigned patients in their quality samples from providers' medical records. For example, CCLF data alone cannot be used to confirm a diagnosis (e.g., DM, HF, CAD etc.), as claims are the original source of the diagnoses used in sampling. ACOs must use what is available to providers at the point of care and must be able to provide medical record documentation that supports the quality action that was performed, if audited. In other words, in the event of an audit (i.e., quality measure validation), claims data alone would not meet the documentation requirements.

## Appendix A: Comparing CCLFs to the Quarterly Expenditure/Utilization Report

This appendix is meant to guide the reader through the content presented during the November 2, 2016 webinar. Note that the November 2, 2016 webinar is a revision/update of the webinar presented on May 8, 2014, with the main revisions being 1) use of more recent data and 2) the inclusion of a Track 3 ACO example. The content of the slides is available, although reformatted and revised to include additional explanatory notes. A recording of the presentation can be accessed on the [SSP ACO Portal](#).

*Note: In the time since this analysis and webinar were presented, changes to CCLF files and to the Shared Savings Program have occurred. These relevant changes are noted within the text and are based on the CCLF IP Version 25.0 (10/17/2018) available under the Resources section of the [SSP ACO Portal](#); and the December 2018 Final Rule ([83 FR 67816](#)).*

### QUESTIONS TO BE ADDRESSED

CMS performed a tie-out analysis: aggregating data contained in the CCLFs and comparing these aggregate CCLF figures to expenditure data specified in the quarterly Expenditure/Utilization Report (herein “QEXPU”). There were five (5) phases of the tie-out analysis. The following list provides an outline of these phases of analysis and the major questions addressed in each phase.

#### Phase 1: Identification of claims

- What percentage of claims in the CCLF are “used” in the QEXPU?

#### Phase 2: Reconciliation of CCLF and QEXPU beneficiaries

- Which beneficiaries are in both the CCLF and the QEXPU?
- What are reasons a beneficiary is in the QEXPU but not the CCLF?

#### Phase 3: Reconciliation of CCLF and QEXPU beneficiary-level expenditures

- For beneficiaries who are in the CCLF and the QEXPU, how do the expenditures compare?

#### Phase 4: Accounting for differences in claims in CCLF and QEXPU for assigned beneficiaries

- How much does removal of substance abuse claims and declining to share data affect aggregate expenditure amounts found in the CCLF?

## Phase 5: Comparison of CCLF data to QEXPU

- What are the steps in going from claims data to expenditure amounts in the QEXPU?

One of the main purposes of sharing this analysis with ACOs is to be transparent about the steps involved in creating the data that go into Shared Savings Program ACOs' program reports and, ultimately, financial settlement for each performance year.

## DATA SOURCES

Two Shared Savings Program ACOs were chosen for this analysis. To compare/contrast the differences between Tracks 1 and 2 versus Track 3, this analysis chose two ACO examples to work with: One Track 1 ACO and one Track 3 ACO. These tracks use different beneficiary assignment methodologies that impact how the quarterly reports are calculated. Track 1 ACOs use preliminary prospective beneficiary assignment for the quarterly reports (retrospective assignment is used at the end of the performance year) and the assignment window for the Q1 report was April 1, 2015 through March 31, 2016. Track 3 ACOs use prospective assignment with an assignment window of October 1, 2014 through September 30, 2015.

*Note: The Track 1+ Model began in the 2018 performance year and incorporates the prospective assignment methodology. As finalized in the December 2018 Final Rule ([83 FR 67816](#)), two tracks are available to ACOs entering a new agreement period on or after July 1, 2019: the BASIC track and the ENHANCED track. ACOs in both the BASIC and ENHANCED tracks have the flexibility to annually elect, prior to the start of each performance year, either prospective assignment or preliminary prospective assignment with retrospective reconciliation.*

## 2016 QUARTER 1 QEXPU REPORT

In general, the purpose of the quarterly reports is to provide some idea, throughout the year, of the ACO's performance on select expenditure and utilization measures. The quarterly reports are informational only. There are significant differences between the calculation of expenditures for the QEXPU and the calculation of expenditures for the historical benchmark and for determining shared savings and shared losses.

For Track 1 ACOs, the 2016 Q1 QEXPU report is based on a full year's worth of data, namely data from April 1, 2015 through March 31, 2016, with run-out through April 1, 2016. This period matches exactly to the Track 1 assignment window. For Track 3, the quarterly reports use a calendar year-to-date period, or for Q1 a period of January 1, 2016 to March 31, 2016, again with a run-out through April 1, 2016. Because of the prospective nature of Track 3 assignment, this window does not match the assignment window.

The sources of the data for the QEXPU are the Medicare fee-for-service (FFS) claims stored in the CMS Data Repository (referenced in this document as debit/credit or DBCR). The original claims for the Q1 2016 QEXPU report were pulled in April 2016, while the claims used for this analysis were pulled again in September 2016.

## CCLF FILES DELIVERED TO ACOS BETWEEN FEBRUARY 2016 AND MAY 2016

For this analysis, CMS used claims incurred (using the through date) during the respective track-specific report window described above (i.e., April 1, 2015-March 31, 2016 for the Track 1 ACO and January 1, 2016-March 31, 2016 for the Track 3 ACO) and paid by April 1, 2016.

The CCLF data files are also sourced from the Integrated Data Repository (IDR). CMS used claim records from the CCLF Part A Header, Part B Physician, and Part B DME files, as well as the Beneficiary XREF file. For this analysis, CMS uses the Part A Header file of the CCLF, and not the Part A Revenue Center file. This is because the payment field in the Part A Header file is always reported, whereas the payment field in the Part A Revenue Center file is not required to be reported on all claims types (e.g., inpatient claims are not paid at the revenue center level and as a result the payment field in the revenue center file is not populated for this claim type). The CCLF data files are pulled and delivered monthly to the ACOs, and normally contain claims paid in the previous month. The February 2016 CCLF included a historical pull of beneficiary claims data for all ACOs which went back one year prior to the start of the performance year.

The National Claims History (NCH) is the underlying source for the claims-related data that is in the IDR and is thus the underlying data source for both the CCLF and the QEXPU. The NCH is the definitive record of all claims that Medicare has ever paid, for any beneficiary.

## ACO DIFFERENCES REGARDING THE CCLFS

For this analysis, CMS used data for two Shared Savings Program ACOs, one from Track 1 and one from Track 3. The Track 1 example is a 2016 starter and only had CCLF files from February 2016 through May 2016. The Track 3 ACO is a 2016 renewal and had more months of CCLF files available but because it was Track 3, CMS only needs the February to May 2016 CCLF files. For Track 1 (and Track 2) ACOs, the CCLF files include beneficiaries who had a qualifying primary care visit with the specific ACO within the previous 12 months regardless of whether that beneficiary was assigned to that ACO (i.e., the CCLF files contain more beneficiaries than those that are eventually assigned). For Track 3 ACOs, CCLF files include only those beneficiaries present on the ACO's current prospective assignment list. For all these reasons, the results for each ACO are presented separately.

## PHASE 1: IDENTIFICATION OF CLAIMS ANALYZED

### QUESTION TO BE ANALYZED IN PHASE 1

Phase 1 of the tie-out analysis seeks to answer the question: What percentage of claims in the CCLF are used in the 2016 Q1 QEXPU report?

### ANALYTICAL APPROACH FOR PHASE 1

Phase 1 accounts for, and removes, duplicate claims, invalid claims, and claims that are incurred/paid outside of the analysis period. Duplicate claims are defined as those claims that have the same Current Claim Unique Identifier (CUR\_CLM\_UNIQ\_ID) and, for claims in Part B Physician or DME files, the same Claim Line Number (CLM\_LINE\_NUM).

Invalid claims are claims that were denied for payment by Medicare. The following are valid claims:

- Claim type [clm\_type\_cd] = 20 (SNF), 30 (SNF), 50 (Hospice), or 60 (Inpatient)
  - Non-payment reason code [clm\_mdcr\_npmt\_rsn\_cd] is blank
- Claim type [clm\_type\_cd] = 10 (HHA), or 40 (Outpatient)
  - Facility type code [clm\_bill\_fac\_type\_cd] is not '4' or '5' (RNHCI)
  - Non-payment reason code [clm\_mdcr\_npmt\_rsn\_cd] is blank
- Claim type [clm\_type\_cd] = 71 or 72 (Physician), or 81 or 82 (DME)
  - Claim processing indicator [clm\_prcsg\_ind\_cd] = 'A', 'R' or 'S'
  - Payment denial code [clm\_carr\_pmy\_dnl\_cd] = 'A', 'B', '1', '2', '3', '4', '5', '6', '7', '8', or '9'

To identify claims incurred/paid outside of the analysis period, CMS examined both the claim through date (when the claim was incurred or the service date) and the claim effective date (when the claim was paid). To remain in the analysis (i.e., not be excluded), the through date must be within the respective report period for the ACO and the effective date must be on or before the claim run-out date for the report.

As an aside, the CMS Certification Number (CCN) can be used to distinguish between various types of facilities such as Federally Qualified Health Centers (FQHCs), long-term care hospitals, Critical Access Hospitals, etc. The last 4 digits of the CCN determine the type of facility. For more information on CCNs, please refer to Chapter 2 of the [CMS State Operations Manual](#) (Pub 100-07).

## RESULTS OF PHASE 1: IDENTIFICATION OF CLAIMS WITHIN THE SCOPE OF THE 2016 Q1 QEXPU

Table 1 and Table 2 below, for ACO 1 and ACO 2 respectively, show the sums of claims excluded from the analysis (e.g., duplicate claims, invalid claims, and claims that are incurred/paid outside of the analysis period), to arrive at total claims used in the analysis. Corresponding notes, describing the rows of the table, are also provided.

At the conclusion of Phase 1 of the analysis, CMS determined that the percentage of claim rows in the CCLF that are used in the 2016 Q1 QEXPU report are 59 percent and 6 percent, for the Track 1 ACO and Track 3 ACO respectively. The big difference between tracks revolves around the shortened report period for Q1 for Track 3 ACOs, as evidenced by the large proportion (58 percent) of claim rows excluded for the Track 3 ACO due to “claims not incurred/paid in the report period” (relative to only 20 percent of the Track 1 ACO claim records being excluded for this reason).

Table 1. Phase 1 Identification of Claims Within Scope of 2016 Q1 QEXPU—ACO 1 Example (Track 1)

REF	DESCRIPTION	CLAIM RECORDS	PERCENT OF TOTAL	TOTAL CLAIM AMOUNT (\$)	PERCENT OF TOTAL
1.	Total CCLF claims/claim lines	1,223,720	–	\$209,654,919	–
2.	Duplicate claims	0	0.0%	\$0	0.0%
3.	Invalid claims	-260,638	-21.3%	-\$49,565	0.0%
4.	Claims not incurred/paid in report period	-241,190	-19.7%	-\$48,420,384	-23.1%
5.	Claims incurred prior to report period	-193,284	-15.8%	-\$37,830,446	-18.0%
6.	Claims incurred after report period	-14,701	-1.2%	-\$2,342,197	-1.1%
7.	In-period claims paid after run-out period	-33,205	-2.7%	-\$8,247,740	-3.9%
8.	Claims used in analysis	721,892	59.0%	\$161,184,971	76.9%

Table 2. Phase 1 Identification of Claims Within Scope of 2016 Q1 QEXPU—ACO 2 Example (Track 3)

REF	DESCRIPTION	CLAIM RECORDS	PERCENT OF TOTAL	TOTAL CLAIM AMOUNT (\$)	PERCENT OF TOTAL
1.	Total CCLF claims/claim lines	2,439,882	–	\$294,356,757	–
2.	Duplicate claims	-524,168	-21.5%	-\$59,541,853	-20.2%
3.	Invalid claims	-367,485	-15.1%	-\$102,122	0.0%
4.	Claims not incurred/paid in report period	-1,410,295	-57.8%	-\$213,453,551	-72.5%
5.	Claims incurred prior to report period	-1,365,735	-56.0%	-\$206,393,705	-70.1%
6.	Claims incurred after report period	-15,330	-0.6%	-\$1,812,083	-0.6%
7.	In-period claims paid after run-out period	-29,230	-1.2%	-\$5,247,764	-1.8%
8.	Claims used in analysis	137,934	5.7%	\$21,259,230	7.2%

**Notes for Tables 1 and 2:**

- Row 1 shows the total number of claims in the ACO’s CCLF data files, as well as total associated expenditures.
- Row 2 identifies duplicate claims/records. A pair of duplicate claims in the Part A Header file are identified by two claims with the same value for the field CUR\_CLM\_UNIQ\_ID (i.e., the current claim unique ID). The Part B file (physician or

DME) also uses the field CUR\_CLM\_UNIQ\_ID in the identification of duplicate records. However, since the Part B file contains line-item level records (as opposed to claim-level records), it is also necessary to make use of the field CLM\_LINE\_NUM in order to identify duplicate records (i.e., duplicate line-items).

- Row 3 identifies invalid claims using the methodology provided earlier.
- Row 4 identifies claims that are incurred outside of the analysis period.
- Row 5 identifies claims that were incurred prior to the payment period (i.e., claims with a through date prior to 04/01/2015 for Track 1 and prior to 01/01/2016 for Track 3).
- Row 6 identifies claims incurred after the payment period (i.e., claims with a thru date after 03/31/2016).
- Row 7 identifies in-period claims paid after the run-out period (i.e., claims with a thru date within the respective report period that were paid after 04/01/2016).
- Row 8 contains the claims remaining and used in the remainder of the analysis.

## **PHASE 2: RECONCILIATION OF CCLF AND QEXPU BENEFICIARIES**

### QUESTION TO BE ANALYZED IN PHASE 2

Phase 2 of the analysis identifies which beneficiaries are in the CCLF, the QEXPU, or both, and asks why beneficiaries are in one and not the other. Phase 2 seeks to answer the following questions:

- How many beneficiaries are in the QEXPU and not the CCLF and what are the reasons for this?
- How many beneficiaries are in the CCLF and not the QEXPU and what are the reasons for this?

Note: When CMS states that beneficiaries are not in the CCLF, this means they were not found in the claim portion of the CCLF (i.e., the four Part A related files (header, revenue center, diagnosis, and procedure) and the two Part B related files (physician and DME)), they may or may not be in the demographic or cross reference files of the CCLF.

### ANALYTICAL APPROACH FOR PHASE 2

The CCLF XREF file is used in this phase to identify unique beneficiaries in the CCLF. The 2016 Q1 assignment data was used to identify beneficiaries in the QEXPU. The health insurance claim number (HICN) is a beneficiary's unique identifier, and CMS uses HICNs throughout this analysis. Also, this phase of the analysis will account for

any changes in HICNs between the creation of the CCLF files and the creation of the QEXPU (denoted by “XREF/Q”). Lastly, this phase identifies beneficiaries who declined to share their data with ACOs. Note, ACOs can use the Monthly Beneficiary Data Sharing Status file to determine the most recent data sharing preferences for a beneficiary.

*Note: Beginning with the CCLF files distributed in April 2018, CMS also provides the beneficiary’s Medicare Beneficiary Identifier (MBI) along with the HICN. This identifier was added in conjunction with the New Medicare Card initiative. Both identifiers will be provided through the transition period which ends December 2019. Generally, when using the CCLF files these two fields are interchangeable during the transition but the HICN will be removed after December 2019. The CCLF XREF file will identify changes when either identifier has changed during this time.*

In this phase of the analysis, CMS performs the following four steps:

- Use the beneficiaries that have claims during the Q1 report period.
- Use the CCLF XREF file and the 2016 assignment data (2016 Q1 assignment for the Track 1 ACO and 2016 prospective assignment for the Track 3 ACO) to identify unique beneficiaries within the CCLF and beneficiaries in both the CCLF and QEXPU. Note that in the following tables “XREF/C” refers to the HICN cross-reference file that is found in the CCLF.
- Account for changes in HICNs between creation of the CCLF file and the QEXPU (refer to “XREF/Q” in following tables).
  - Note: A beneficiary’s HICN can change over time for a variety of reasons (e.g., death of a spouse, marriage, divorce, etc.). As a result, a given beneficiary may have multiple HICNs. The CCLF XREF file contains a complete historical record of all the HICNs a beneficiary has ever had, as of the time of creation of the CCLF XREF file. Each monthly CCLF data file contains a complete replacement of the CCLF XREF file.
  - The HICN found in the claims related files (i.e., Part A, Part B, and Part D) in a given set of monthly CCLF files will always be the most recent HICN for that beneficiary, even if that is not the HICN used at the time the claim was processed.
- Identify beneficiaries who declined to share data with ACOs (partial or full opt-out).
  - Note: In the context of this analysis, partial and full opt-out are terms indicating the timing of when CMS was notified of the beneficiary’s data sharing preference relative to providing an ACO with CCLFs. Partial opt-out indicates that a beneficiary declined to share his/her data with ACOs after having allowed ACOs

to receive his/her data through the CCLFs for a period of time. Full opt-out indicates that an ACO never received data on a beneficiary through the CCLFs.

## RESULTS OF PHASE 2: RECONCILIATION OF CCLF AND QEXPU BENEFICIARIES

Table 3 and Table 4 below, for ACO1 and ACO2 respectively, show the categorization of beneficiaries in the CCLF, the QEXPU, or both. Corresponding notes, describing the rows of the table, are also provided.

At the conclusion of Phase 2 of the analysis, CMS determined the following answers.

- How many beneficiaries are in the QEXPU and not the CCLF?
  - **Answer:**
    - For the Track 1 ACO, roughly 2 percent of the beneficiaries in the QEXPU do not have claims in the CCLF.
    - For the Track 3 ACO, around 13 percent of the beneficiaries in the QEXPU do not have claims in the CCLF.
- What are the reasons why a beneficiary has claims in the QEXPU, but not in the CCLF?
  - **Answer:**
    - Beneficiary data sharing opt-outs;
    - Suppression of substance abuse claims; and
    - Track 3 has the possibility that beneficiaries may not have claims in the 3-month year-to-date report period of Q1.
- How many beneficiaries are in the CCLF and not the QEXPU?
  - **Answer:**
    - In the Track 1 example, around 28 percent of the beneficiaries in the CCLF, with claims in the report period, are not in the QEXPU.
    - In the Track 3 example, around 3 percent of the beneficiaries in the CCLF, with claims in the report period, are not in the QEXPU.
- What are the reasons why a beneficiary has claims in the CCLF, but not in the QEXPU?
  - **Answer:**
    - For Track 1 and Track 2 ACOs, the CCLFs will contain all beneficiaries that have a qualifying visit with a participant in the ACO (“assignables”),

regardless of whether they are ultimately assigned to the ACO. There could also be differences in beneficiary exclusions.

- Track 3 ACOs will only observe differences because of differences in timing of beneficiary exclusions.

*Table 3. Phase 2 Reconciliation of CCLF and QEXPU Beneficiaries—ACO 1 Example (Track 1)*

REF	DESCRIPTION	ACO 1 BENEFICIARY COUNT	
		CCLF	QEXPU
1.	CCLF without XREF	10,102	–
2.	CCLF after XREF/C	10,090	–
3.	QEXPU	–	7,353
4.	In CCLF but not QEXPU without XREF/Q	2,870	–
5.	In BOTH without XREF/Q	7,220	7,220
6.	In QEXPU but not in CCLF	–	133
7.	XREF/Q beneficiaries in QEXPU	7	7
8.	In CCLF but not QEXPU after XREF/Q	2,863	–
9.	In BOTH after XREF/Q	7,227	7,227
10.	In QEXPU but not in CCLF after XREF/Q	–	126
11.	In QEXPU but not in CCLF after XREF/Q	–	126
12.	Opt-out covers entire report period	–	113
13.	Opt-out partially covers report period	–	4
14.	No opt-out but all SSAD claims	–	0
15.	Issue with FQHC/RHC assignment for 2016	–	9

*Note: Not in CCLF refers to not being in the CCLF files that contain claims for the report period. The beneficiary may (or may not) be in the non-claims files (e.g., demographics file).*

*Table 4. Phase 2 Reconciliation of CCLF and QEXPU Beneficiaries—ACO 2 Example (Track 3)*

REF	DESCRIPTION	ACO 2 BENEFICIARY COUNT	
		COUNT	QEXPU
1.	CCLF without XREF	8,649	–
2.	CCLF after XREF/C	8,642	–
3.	QEXPU	–	9,948
4.	In CCLF but not QEXPU without XREF/Q	220	–
5.	In BOTH without XREF/Q	8,422	8,422
6.	In QEXPU but not in CCLF	–	1,527
7.	XREF/Q beneficiaries in QEXPU	1	1
8.	In CCLF but not QEXPU after XREF/Q	219	–
9.	In BOTH after XREF/Q	8,423	8,423
10.	In QEXPU but not in CCLF after XREF/Q	–	1,525
11.	In QEXPU but not in CCLF after XREF/Q	–	1,525
12.	Opt-out covers entire report period	–	233
13.	Opt-out partially covers report period	–	0
14.	No opt-out but all SSAD claims	–	1

REF	DESCRIPTION	ACO 2 BENEFICIARY COUNT	
		COUNT	QEXPU
15.	Track 3—Assigned but no claims in report period	–	1,291

*Note: Not in CCLF refers to not being in the CCLF files that contain claims for the report period. The beneficiary may (or may not) be in the non-claims files (e.g., demographics file).*

**Notes for Tables 3 and 4:**

- Row 1 shows the number of HICNs found in the CCLF data files.
- Row 2 shows the number of unique HICNs found in the CCLF data files, after accounting for beneficiary’s multiple HICNs (using the CCLF XREF file).
- Row 3 shows number of beneficiaries in the QEXPU report (i.e., the HICNs that the ACO receives in their quarterly assignment list).
- Rows 4–6 state the number of beneficiaries who are in the CCLF but not the QEXPU report, the number of beneficiaries in both, and the number of beneficiaries in the QEXPU report but not the CCLF, respectively.
- Row 7 shows the beneficiaries who had a change in their HICN between the creation of the last CCLF file (i.e., the January 2014 CCLF file) and the creation of the QEXPU report.
- Rows 8–10 repeat the information in rows 4–6, after accounting for the beneficiaries identified in row 7.
- Rows 11–15 focus on beneficiaries who are in the QEXPU report but not the CCLF (i.e., these beneficiaries had no claims in the CCLF data files).
- Row 12 identifies beneficiaries who opted-out of data sharing for the entire time period of this analysis.
- Row 13 identifies beneficiaries who opted-out of data sharing for part of the time period used in this analysis. The ACO may have some CCLF data, or no CCLF data at all, for these beneficiaries. As an example of a beneficiary that would be in row 13, consider a beneficiary who agreed to data sharing in months 1–4, but who received no services in those months (and thus had no Medicare claims from those months). Suppose then that this beneficiary declines to share data in month 5 and does not reverse this data sharing preference. In this example, the beneficiary also happens to have no claims during the time period before he/she declined to share his/her data with ACOs, and as a result the ACO receives zero claims for this beneficiary in the CCLF data files.
- Row 14 identifies beneficiaries who did not opt-out of data sharing but only had substance abuse claims (and thus would not have any claims in the CCLF).

- Row 15 lists two separate track specific situations. For Track 1, row 15 refers to an issue that was present with FQHC/RHC assignment that had a tiny effect on who was assigned for 2016 Q1. For Track 3, row 15 represents the beneficiaries that are known to be assigned but do not have claims during the shorter report period of the Q1 report for Track 3.

When present, a dash (–) indicates that a value was not calculated for that cell.

## **PHASE 3: RECONCILIATION OF CCLF AND QEXPU BENEFICIARY-LEVEL EXPENDITURES**

### **QUESTION TO BE ANALYZED IN PHASE 3**

Phase 3 of the analysis identifies expenditures for a variety of groups of beneficiaries and then compares these expenditures between the groups. Phase 3 seeks to answer the following questions:

- How do the expenditures for beneficiaries that are in both the CCLF and the QEXPU compare?
- For beneficiaries that are in the CCLF but not the QEXPU, how do the expenditures compare to those of beneficiaries that are in both?
- For beneficiaries that are in the QEXPU but not the CCLF, how do expenditures compare to those of beneficiaries that are in both?

### **ANALYTICAL APPROACH FOR PHASE 3**

In Phase 3 of the analysis, CMS identifies expenditures (both total and per beneficiary) for a variety of groups, specifically:

- Beneficiaries in both the CCLF and QEXPU
- Beneficiaries who declined to share their data with ACOs.

CMS focuses on beneficiaries who have at least some claims in the CCLF, and determine whether their CCLF expenditures are less than, equal to, or greater than their DBCR expenditures. Of interest will be beneficiaries who have at least some claims in the CCLF, but for which their CCLF expenditures are less than their DBCR table expenditures.

## **RESULTS OF PHASE 3: RECONCILIATION OF CCLF AND QEXPU BENEFICIARY-LEVEL EXPENDITURES**

Table 5 and Table 6 below, for ACO 1 and ACO 2 respectively, show the sum expenditures for beneficiaries who fall into various categories, including beneficiaries in both the CCLF and QEXPU, and beneficiaries who declined to share their data with

ACOs. It repeats much of the information from the previous phases. Corresponding notes, describing the rows of the table, are also provided.

At the conclusion of Phase 3 of the analysis, CMS determined the following answers.

- How do the expenditures for beneficiaries that are in both the CCLF and the QEXPU compare?
  - **Answer:**
    - For beneficiaries in both the CCLF and the QEXPU, roughly 1–5 percent of beneficiaries have CCLF expenditures that are lower than QEXPU expenditures (about 25 percent lower on average between the two ACO examples).
    - Track 1:
      - Beneficiaries: 385 [row 13] / 7,227 [row 11] = 5.3 percent
      - Expenditures: \$1,678,551 [row 13] / \$9,815,142 [row 13] = 17.1 percent
    - Track 3:
      - Beneficiaries: 98 [row 13] / 8,423 [row 11] = 1.2 percent
      - Expenditures: \$315,232 [row 13] / \$886,761 [row 13] = 35.5 percent
- For beneficiaries that are in the CCLF but not the QEXPU, how do the expenditures compare to those of beneficiaries that are in both?
  - **Answer:**
    - This varies widely by ACO population and track. The Track 1 ACO saw expenditures that were over 60 percent higher for beneficiaries that are in the CCLF but not the QEXPU compared to beneficiaries that are in both the CCLF and QEXPU. Track 3 ACO saw expenditures over 70 percent lower in the same comparison.
    - Track 1:  $(\$22,168 \text{ [row 2]} - \$13,521 \text{ [row 3]}) / \$13,521 \text{ [row 3]} = 64.0 \text{ percent}$
    - Track 3:  $(\$682 \text{ [row 2]} - \$2,506 \text{ [row 3]}) / \$2,506 \text{ [row 3]} = -72.8 \text{ percent}$
- For beneficiaries that are in the QEXPU but not the CCLF, how do the expenditures compare to those of beneficiaries that are in both?

- **Answer:**
  - Beneficiaries that are in the QEXPU but not the CCLF have expenditures that are lower than beneficiaries that are in both the QEXPU and CCLF, although that magnitude of the difference varies substantially across the two ACOs.
  - Track 1:  $(\$11,368 \text{ [row 6]} - \$13,753 \text{ [row 11]}) / \$13,753 \text{ [row 11]} = -17.3$  percent
  - Track 3:  $(\$316 \text{ [row 6]} - \$2,544 \text{ [row 11]}) / \$2,544 \text{ [row 11]} = -87.6$  percent

Table 5. Phase 3 Comparison of Claims for Beneficiaries in CCLF and QEXPU—ACO 1 Example (Track 1)

REF	DESCRIPTION	BENEFICIARY COUNT		EXPENDITURES			EXPENDITURES PER BENEFICIARY		
		CCLF	QEXPU	CCLF	DBCR	DIFFERENCE	CCLF	DBCR	DIFFERENCE
1.	In CCLF after XREF/Q	10,090	–	\$161,184,971	–	–	\$15,975	–	–
2.	In CCLF but not QEXPU after XREF/Q	2,863	–	\$63,468,331	–	–	\$22,168	–	–
3.	In BOTH after XREF/Q	7,227	7,227	\$97,716,640	\$99,395,191	\$1,678,551	\$13,521	\$13,753	\$232
4.	In QEXPU but not in CCLF after XREF/Q	–	126	–	\$1,432,330	–	–	\$11,368	–
5.	In QEXPU	–	7,353	–	\$100,827,521	–	–	\$13,712	–
6.	In QEXPU but not in CCLF after XREF/Q	–	126	–	\$1,432,330	–	–	\$11,368	–
7.	Opt-out covers entire report period	–	113	–	\$1,333,168	–	–	\$11,798	–
8.	Opt-out partially covers report period	–	4	–	\$33,696	–	–	\$8,424	–
9.	No opt-out but all SSAD claims	–	0	–	\$0	–	–	\$0	–
10.	Issue in FQHC/RHC assignment for 2016	–	9	–	\$65,466	–	–	\$7,274	–
11.	In both after XREF/Q	7,227	7,227	\$97,716,640	\$99,395,191	\$1,678,551	\$13,521	\$13,753	\$232
12.	CCLF = DBCR	6,842	6,842	\$89,580,049	\$89,580,049	\$0	\$13,093	\$13,093	\$0
13.	CCLF < DBCR	385	385	\$8,136,591	\$9,815,142	\$1,678,551	\$21,134	\$25,494	\$4,360
14.	CCLF > DBCR	0	0	\$0	\$0	\$0	\$0	\$0	\$0

Table 6. Phase 3 Comparison of Claims for Beneficiaries in CCLF and QEXPU—ACO 2 Example (Track 3)

REF	DESCRIPTION	BENEFICIARY COUNT		EXPENDITURES			EXPENDITURES PER BENEFICIARY		
		CCLF	QEXPU	CCLF	DBCR	DIFFERENCE	CCLF	DBCR	DIFFERENCE
1.	In CCLF after XREF/Q	8,642	–	\$21,259,230	–	–	\$2,460	–	–
2.	In CCLF but not QEXPU after XREF/Q	219	–	\$149,318	–	–	\$682	–	–
3.	In BOTH after XREF/Q	8,423	8,423	\$21,109,912	\$21,424,696	\$314,784	\$2,506	\$2,544	\$37
4.	In QEXPU but not in CCLF after XREF/Q	–	1,525	–	\$482,323	–	–	\$316	–
5.	In QEXPU	–	9,948	–	\$21,907,019	–	–	\$2,202	–
6.	In QEXPU but not in CCLF after XREF/Q	–	1,525	–	\$482,323	–	–	\$316	–
7.	Opt-out covers entire report period	–	233	–	\$482,018	–	–	\$2,069	–
8.	Opt-out partially covers report period	–	0	–	\$0	–	–	\$0	–
9.	No opt-out but all SSAD claims	–	1	–	\$305	–	–	\$305	–
10.	Track 3—Assigned but no claims in report period	–	1,291	–	\$0	–	–	\$0	–
11.	In both after XREF/Q	8,423	8,423	\$21,109,912	\$21,424,696	\$314,784	\$2,506	\$2,544	\$37
12.	CCLF = DBCR	8,324	8,324	\$20,537,936	\$20,537,936	\$0	\$2,467	\$2,467	\$0
13.	CCLF < DBCR	98	98	\$571,529	\$886,761	\$315,232	\$5,832	\$9,049	\$3,217
14.	CCLF > DBCR	1	1	\$448	\$0	–\$448	\$448	\$0	–\$448

### **Notes for Tables 5 and 6:**

The columns labeled “Beneficiary Count” contain a count of the HICNs associated with various groups, as found in the CCLF or the QEXPU report. The columns labeled “Expenditures” contain aggregate expenditures. The last set of columns contain expenditures per beneficiary.

- Rows 1–10 contain the same groups as in the previous phase.
- Row 11 contains the beneficiaries who are in both the CCLF and QEXPU report. Rows 12–14 contain a breakdown of the beneficiaries in row 11.
- Row 12 contains beneficiaries for which their CCLF expenditure matches their expenditures from the DBCR table. Note that the DBCR table in the IDR is the source of the expenditure calculations in the QEXPU report.
- Row 13 contains beneficiaries who have at least some claims in the CCLF, but for which their total expenditures found in the CCLF are less than their expenditures from the DBCR table. This group of beneficiaries will be investigated further in Phase 4.
- Row 14 contains beneficiaries for which their CCLF expenditure is larger than their DBCR expenditure (this group of beneficiaries is an anomaly).

When present, a dash (–) indicates that a value was not calculated for that cell.

## **PHASE 4: ACCOUNTING FOR DIFFERENCES IN CLAIMS IN CCLF AND QEXPU FOR ASSIGNED BENEFICIARIES**

### QUESTION TO BE ANALYZED IN PHASE 4

Phase 4 examines beneficiaries whose CCLF expenditures are less than their DBCR expenditures and identifies how much of this discrepancy is accounted for by (i) substance abuse claims or (ii) beneficiaries who decline to share data with ACOs.

### ANALYTICAL APPROACH FOR PHASE 4

Phase 4 further investigates beneficiaries for which the CCLF expenditures are smaller than the debit/credit expenditures. Three beneficiary categorizations are the focus of Phase 4. Specifically, beneficiaries are identified for which  $CCLF < DBCR$ , and who have the following expenditure patterns:

- Substance abuse fully explains the discrepancy between CCLF and DBCR.

$$CCLF + \text{Substance Abuse} = DBCR$$

- For beneficiaries without substance abuse claims, it is assumed that the residual category of beneficiary data sharing (OPTOUT) fully explains the discrepancy.

$$\text{CCLF} + \text{OPTOUT} = \text{DBCR}$$

- Accounting for substance abuse claims does not fully explain the discrepancy, so the combination of substance abuse claims and the residual category of OPTOUT fully explain the discrepancy.

$$\text{CCLF} + \text{Substance Abuse} + \text{OPTOUT} = \text{DBCR}$$

## RESULTS OF PHASE 4: ACCOUNTING FOR DIFFERENCE IN CLAIMS IN CCLF AND QEXPU FOR ASSIGNED BENEFICIARIES

Table 7 and Table 8 below, for ACO 1 and ACO 2 respectively, show the aggregation of expenditures for different groups of expenditures to understand the likely source of data that could explain the difference between the CCLFs and the DBCR. The tables repeat some of the information from the previous phases. Corresponding notes, describing the rows of the table, are provided for Table 7 (ACO 1). These notes are relevant to Table 8 (ACO 2), although the figures are specific to ACO 1.

Through the analysis in Phase 4, CMS determined:

- For beneficiaries whose CCLF expenditure is less than their DBCR expenditure, substance abuse claims explain about 92 to 97 percent of the discrepancy.
- For beneficiaries whose CCLF expenditure is less than their DBCR expenditure, beneficiaries declining to share data with ACOs explain about 3 to 8 percent of the discrepancy.

CMS observed that substance abuse and data sharing opt-outs together accounted for less than 2 percent of total QEXPU expenditures for the two ACOs.

Table 7. Phase 4 Accounting for Difference in Claims in CCLF and QEXPU for Assigned Beneficiaries—ACO 1 Example (Track 1)

REF	DESCRIPTION	BENEFICIARY COUNT		EXPENDITURE (\$)			EXPENDITURE EXCLUDED FROM CCLF			EXPENDITURES PER BENEFICIARY (\$)			
		CCLF	QEXPU	CCLF	DBCR	DIFFEREN CE	SSAD CLAIMS	OPT-OUT	RESIDUAL	DBCR	DIFFERENCE	SSAD	OPT-OUT
1.	In QEXPU but not in CCLF after XREF	–	126	–	1,432,330	–	2,911	1,363,953	65,466	11,368	0	23	10,825
2.	In QEXPU and CCLF after XREF/Q	7,227	7,227	97,716,640	99,395,191	1,678,551	1,547,665	130,886	0	13,753	232	214	18
3.	In QEXPU	–	7,353	–	100,827,521	–	1,550,576	1,494,839	65,466	13,712	0	211	203
4.	In QEXPU but not in CCLF after XREF/Q	–	126	–	1,432,330	–	2,911	1,363,953	65,466	11,368	0	23	10,825
5.	Opt-out covers entire report period	–	113	–	1,333,168	–	0	1,333,168	0	11,798	0	0	11,798
6.	Opt-out partially covers report period	–	4	–	33,696	–	2,911	30,785	0	8,424	0	728	7,696
7.	No opt-out but all SSAD claims	–	0	–	0	–	0	0	0	0	0	0	0
8.	Issue in FQHC/RHC assignment for 2016	–	9	–	65,466	–	0	0	65,466	7,274	0	0	0
9.	In QEXPU and CCLF after XREF/Q	–	7,227	97,716,640	99,395,191	1,678,551	1,547,665	130,886	0	13,753	232	214	18
10.	CCLF = DBCR	–	6,842	89,580,049	89,580,049	0	0	0	0	13,093	0	0	0
11.	CCLF < DBCR	–	385	8,136,591	9,815,142	1,678,551	1,547,665	130,886	0	25,494	4,360	4,020	340
12.	CCLF + SSAD = DBCR	–	89	2,959,372	3,888,869	929,497	929,497	0	0	43,695	10,444	10,444	0



REF	DESCRIPTION	BENEFICIARY COUNT		EXPENDITURE (\$)			EXPENDITURE EXCLUDED FROM CCLF			EXPENDITURES PER BENEFICIARY (\$)			
		CCLF	QEXPU	CCLF	DBCR	DIFFEREN CE	SSAD CLAIMS	OPT-OUT	RESIDUAL	DBCR	DIFFERENCE	SSAD	OPT-OUT
13.	CCLF + OPTOUT = DBCR	–	189	2,828,250	2,917,316	89,066	0	89,066	0	15,436	471	0	471
14.	CCLF + SSAD + OPTOUT = DBCR	–	107	2,348,969	3,008,957	659,987	618,167	41,820	0	28,121	6,168	5,777	391
15.	CCLF > DBCR	0	0	0	0	0	0	0	0	0	0	0	0

### **Notes for Table 7:**

The columns under the header “Expenditure (\$)” contain, respectively, CCLF expenditures, DBCR expenditures, and the difference between the DBCR and CCLF expenditures.

- Row 11 contains beneficiaries who have at least some claims in the CCLF, but for which their CCLF expenditures are less than the DBCR expenditures. In row 11, under “Expenditure (\$)” these beneficiaries have about \$8.1 million in expenditures in the CCLF and \$9.8 million in expenditures in the DBCR, yielding a difference of about \$1.7 million. The purpose of the remaining rows in the column “Expenditure (\$)” is to explain how much of this \$1.7 million is attributable to substance abuse claims and how much is attributable to other causes (i.e., OPTOUT).
- Rows 12–14 contain a breakdown of the beneficiaries identified in row 11. Row 12 contains beneficiaries for which substance abuse claims entirely explain the discrepancy between the CCLF and DBCR expenditures. For these beneficiaries, in row 12 under “Expenditure (\$)” there is about \$3.0 million in expenditures in the CCLF and \$3.9 million in the DBCR table, yielding a difference of \$929,497 that is entirely due to omission of substance abuse claims from the CCLF.
- Row 13 identifies beneficiaries who do not have any substance abuse claims, meaning that the discrepancy is entirely attributable to the residual category of “OPTOUT.” Note that for these beneficiaries, there is about \$2.8 million in claims in the CCLF, whereas there is about \$2.9 million in claims in the DBCR table, yielding a difference of about \$89,066.
- Row 14 identifies beneficiaries who have at least some substance abuse claims, but for which the discrepancy between the CCLF and DBCR expenditures is not entirely explained by the substance abuse claims. For these beneficiaries, there is about \$2.3 million in the CCLF and \$3.0 million in the DBCR table, yielding a difference of about \$659,987.

When present, a dash (–) indicates that a value was not calculated for that cell.

The column heading “Expenditure Excluded from the CCLF” is subdivided into substance abuse claims (SSAD claims), opt-outs, and residuals. Note, the Residual column holds little significance; it was used to validate calculations in the analysis.

The column heading “Expenditures per beneficiary” contains four sub-columns. The first, labeled “DBCR,” contains the expenditures, per beneficiary, that are found in the DBCR table during the report period. The second column, labeled “Difference,” contains the difference between the expenditures found in the DBCR table versus the CCLF files. The third and fourth columns, labeled “SSAD” and “Opt-out” respectively, show how much of the expenditure found in the “Difference” column is attributable to substance abuse claims and the residual “OPTOUT” category, respectively.

***Important points from this part of the table:***

- Row 9 contains information on beneficiaries who are in both the QEXPU report and the CCLF data files. For these beneficiaries, there is a total of \$1.5 million in substance abuse claims removed from the CCLF data files, and another \$130,886 in expenditures missing from the CCLF data files due to OPTOUT. These beneficiaries have an average expenditure of \$13,753 in the DBCR table, which is about \$232 higher than the expenditures found in the CCLF. About \$214 of this difference is due to substance abuse claims and \$18 due to OPTOUT category.
- Row 10 contains expenditures of beneficiaries whose CCLF expenditure is identical to their DBCR expenditure. These beneficiaries have an average expenditure of \$13,093.
- Row 11 contains information on beneficiaries whose CCLF expenditure is less than their DBCR expenditure. These beneficiaries have about \$1.5 million in substance abuse claims and \$130,886 in OPTOUT claims that are in the DBCR table but not in the CCLF. These beneficiaries have an average expenditure of \$25,494 in the DBCR table, which is about \$4,360 higher than the expenditures found in the CCLF data files. About \$4,020 of this difference is attributable to substance abuse claims missing from the CCLF and the rest is due to OPTOUT.
- Row 12 contains information on beneficiaries whose CCLF expenditures plus expenditures from substance abuse claims add exactly to the expenditures in the DBCR table (i.e., substance abuse claims perfectly explain the discrepancy between the CCLF and DBCR expenditures).
- Row 13 contains information on beneficiaries who have no substance abuse claims and the discrepancy is thus entirely attributable to OPTOUT category. Note that there are expenditures in the CCLF for some of these beneficiaries. As an example, this could occur when the beneficiary agrees to share their data in the beginning months of the report period (and is therefore in the CCLF) and then is in opt-out status for one or more of the later months in the report period and as a result there are some claims missing from the CCLFs.
- Row 14 contains information on beneficiaries who have substance abuse claims, but for which the substance abuse claims do not entirely explain the discrepancy between the CCLF and DBCR expenditures.
- Row 15 contains information on beneficiaries whose CCLF expenditures are greater than their DBCR expenditures. This group of beneficiaries is an anomaly.

Table 8. Phase 4 Accounting for Difference in Claims in CCLF and QEXPU for Assigned Beneficiaries—ACO 2 Example (Track 3)

REF	DESCRIPTION	BENEFICIARY COUNT		EXPENDITURE (\$)			EXPENDITURE EXCLUDED FROM CCLF (\$)			EXPENDITURES PER BENEFICIARY (\$)			
		CCLF	QEXPU	CCLF	DBCR	DIFFERENCE	SSAD CLAIMS	OPT-OUT	RESIDUAL	DBCR	DIFFERENCE	SSAD	OPT-OUT
1.	In QEXPU but not in CCLF after XREF/Q	–	1,525	–	482,323	–	305	482,018	0	316	0	0	316
2.	In QEXPU and CCLF after XREF/Q	8,423	8,423	21,109,912	21,424,696	314,784	306,161	9,071	–448	2,544	37	36	1
3.	In QEXPU	–	9,948	–	21,907,019	–	306,466	491,089	–448	2,202	0	31	49
4.	In QEXPU but not in CCLF after XREF/Q	–	1,525	–	482,323	–	305	482,018	0	316	0	0	316
5.	Opt-out covers entire report period	–	233	–	482,018	–	0	482,018	0	2,069	0	0	2,069
6.	Opt-out partially covers report period	–	0	–	0	–	0	0	0	0	0	0	0
7.	No opt-out but all SSAD claims	–	1	–	305	–	305	0	0	305	0	305	0
8.	Track 3—Assigned but no claims in report period	–	1,291	–	0	–	0	0	0	0	0	0	0
9.	In QEXPU and CCLF after XREF/Q	–	8,423	21,109,912	21,424,696	314,784	306,161	9,071	–448	2,544	37	36	1
10.	CCLF = DBCR	–	8,324	20,537,936	20,537,936	0	0	0	0	2,467	0	0	0
11.	CCLF < DBCR	–	98	571,529	886,761	315,232	306,161	9,071	0	9,049	3,217	3,124	93
12.	CCLF + SSAD = DBCR	–	46	329,401	552,740	223,339	223,339	0	0	12,016	4,855	4,855	0



REF	DESCRIPTION	BENEFICIARY COUNT		EXPENDITURE (\$)			EXPENDITURE EXCLUDED FROM CCLF (\$)			EXPENDITURES PER BENEFICIARY (\$)			
		CCLF	QEXPU	CCLF	DBCR	DIFFERENCE	SSAD CLAIMS	OPT-OUT	RESIDUAL	DBCR	DIFFERENCE	SSAD	OPT-OUT
13.	CCLF + OPTOUT = DBCR	-	29	171,229	174,950	3,721	0	3,721	0	6,033	128	0	128
14.	CCLF + SSAD + OPTOUT = DBCR	-	23	70,899	159,071	88,172	82,822	5,350	0	6,916	3,834	3,601	233
15.	CCLF > DBCR	-	1	448	0	-448	0	0	-448	0	-448	0	0

## PHASE 5: COMPARISON OF CCLF DATA TO QEXPU

### QUESTION TO BE ANALYZED IN PHASE 5

Phase 5 of the tie-out analysis addresses the question: What are the steps in going from expenditures found in the claims data to expenditure amounts in the QEXPU?

### ANALYTICAL APPROACH FOR AND RESULTS OF PHASE 5

The following steps outline the analytical approach to Phase 5, and therefore also answer the question posed in this phase of the analysis. Also outlined is an example of how the weighted truncated annualized expenditures are created.

### EXAMPLE OF CREATING WEIGHTED TRUNCATED ANNUALIZED EXPENDITURES

Beneficiaries can be in multiple enrollment categories (ESRD, Disabled, Aged/Dual, Aged/Non-Dual) during the report period. This category is determined for each beneficiary for each month in the report period. Suppose a beneficiary has 3 months of Aged/Dual status with \$30,000 in spending and 9 months of Aged/Non-Dual status with \$12,000 in spending. And for simplicity, suppose that both the Aged/Dual and the Aged/Non-Dual truncation thresholds are \$100,000. Table 9 below shows the process to get to both the beneficiary's expenditure and person year contribution.

*Table 9. Process for Creating Weighted Truncated Annualized Expenditures at the Beneficiary Level*

REF	DESCRIPTION	AGED/DUAL	AGED/NON-DUAL
1.	Annualized expenditures	$\$30,000 / (3/12) = \$120,000$	$\$12,000 / (9/12) = \$16,000$
2.	Truncated annualized expenditures	\$120,000 is greater than \$100,000; amount truncated at \$100,000	\$16,000 is less than \$100,000, amount not truncated, remains at \$16,000
3.	Weighted truncated annualized expenditures	$(3/12) * \$100,000 = \$25,000$	$(9/12) * \$16,000 = \$12,000$
4.	Beneficiary's expenditure contribution	\$25,000	\$12,000
5.	Beneficiary's person year contribution	0.25 person years	0.75 person years

## APPROACHES USED TO ADJUST RAW EXPENDITURES TO ARRIVE AT QEXPU EXPENDITURES

This section presents the approach used to adjust raw expenditures for the QEXPU. Some pieces are not available to the ACOs at all while some pieces would have to be imputed or gathered from sources other than the CCLF files. These pieces have been identified in the respective steps below. The approach is different for Track 1 and Track 2 ACOs than for Track 3 ACOs, so each approach is presented separately.

*Note: New tracks have been introduced since this analysis was presented. The Track 1+ Model features prospective assignment, (i.e., the same methodology as used for Track 3 ACOs). The BASIC and ENHANCED tracks that were created as part of the December 2018 Final Rule are not tied to a specific assignment methodology. Rather, ACOs in both tracks have the flexibility to annually elect their assignment methodology prior to the start of each performance year. Refer to the note under the “Data Sources” section in this appendix for more information.*

*Track 1 and Track 2 ACOs and BASIC and ENHANCED ACOs that Chose Preliminary Prospective Assignment with Retrospective Reconciliation:*

Start with the total expenditures for the beneficiaries in the QEXPU, from the Debit/Credit table by enrollment type. The ACO will not be able to completely replicate this step, as they will not have data regarding substance abuse claims, claims for beneficiaries who opted-out of data sharing, or for beneficiaries CMS has excluded for other reasons.

1. Add in sequestration. Sequestration amounts for each claim are not directly available in the CCLF files. Sequestration policy removes 2 percent of paid amount on claims.
2. Remove Indirect Medical Education (IME)/Disproportionate Share Hospital (DSH)/Uncompensated Care (UCC) payments.

*Note: As of January 2019, new fields were added to the January 2019 CCLF Part A Claims Header File (CCLF1) to allow ACOs to identify IME/DSH/UCC amounts on the claims. These fields include:*

- a. Claim Capital Indirect Medical Education Amount*
- b. Claim Operational Indirect Medical Education Amount*
- c. Claim Capital Disproportionate Amount*
- d. Claim Operational Disproportionate Amount*
- e. Claim Health Insurance Prospective Payment System Uncompensated Care Amount*

3. Add in non-claims based payments (NCBP). These are beneficiary-identifiable payments, such as care management fees, made from the Medicare Trust Funds for beneficiaries under a demonstration, pilot, or time limited program. These values are not directly available in the CCLF files, but information is provided in the QEXPU report section “Assigned Beneficiaries with Non-Claims Based Payments.” This section provides both person years and payment information associated with non-claims based payments.

*Note: Starting with the Q1 2018 quarterly report package, the Shared Savings Program provides ACOs with data files that contain their beneficiary population’s NCBPs each quarter. So, while not available in the CCLF files, this payment information is available to ACOs through the quarterly report package.*

4. Annualize expenditures (by beneficiary enrollment type). Divide by the beneficiary’s eligibility fraction which can be calculated from the monthly eligibility flags on the ACO’s quarterly Assignment List Report Table 1-1.
5. Truncate the annualized expenditures at the beneficiary enrollment type based on the truncation thresholds. The truncation thresholds can be found in the parameters section of the QEXPU report.
6. Apply eligibility fraction weights to the “truncated annualized expenditures.” By enrollment type: Multiply the truncated expenditures by the beneficiary’s eligibility fraction.
7. Apply the completion factor to get “completed expenditures.” The completion factor used for the report can be found in the report parameters section.
8. Aggregate the completed expenditures across all beneficiaries.
9. Divide the aggregated expenditures by total beneficiary person years, yielding average expenditures per person year. This can be found in the section labeled “Total Expenditures per Assigned Beneficiary Medicare Enrollment Type” from the QEXPU.

*Track 1+ Model and BASIC and ENHANCED (including Track 3) ACOs that Chose Prospective Assignment:*

Start with the total expenditures for the beneficiaries in the QEXPU, from the Debit/Credit table by enrollment type. The ACO will not be able to completely replicate this step, as they will not have data regarding substance abuse claims, claims for beneficiaries who opted-out of data sharing, or for beneficiaries CMS has excluded for other reasons.

1. Add in sequestration. Sequestration amounts for each claim are not directly available in the CCLF files. Sequestration policy removes 2 percent of the paid amount on claims.

2. Remove IME/DSH/UCC payments. Note that the payment fields in the CCLF indirectly include IME/DSH/UCC amounts, but that these amounts are not directly available in the CCLF.

*Note: As of January 2019, new fields were added to the CCLF Part A Claims Header File (CCLF1) to allow ACOs to identify IME/DSH/UCC amounts on the claims. For additional information, refer to the IME/DSH/UCC note under the **Track 1, Track 2, and BASIC Track ACOs section.***

3. Add in non-claims based payments. These are beneficiary-identifiable payments, such as care management fees, made from the Medicare Trust Funds for beneficiaries under a demonstration, pilot, or time limited program. These values are not directly available in the CCLF files, but information is provided in the QEXPU report section “Assigned Beneficiaries with Non-Claims Based Payments.” This section provides both person years and payment information associated with non-claims based payments.

*Note: Starting with the Q1 2018 quarterly report package, the Shared Savings Program provides ACOs with data files that contain their beneficiary population’s NCBPs each quarter. So, while not available in the CCLF files, this payment information is available to ACOs through the quarterly report package.*

4. Aggregate the expenditure by enrollment type for the ACO.
5. Apply at the ACO level the specific Truncation Factors by enrollment type. The truncation factors can be found in the parameters section of the QEXPU report.
6. Apply the completion factor to get “completed expenditures.” The completion factor used for the report can be found in the report parameters section.
7. Divide the aggregated expenditures by total beneficiary person years, yielding average expenditures per person year. This can be found in the section labeled “Total Expenditures by Assigned Beneficiary Medicare Enrollment Type” from the QEXPU.

Table 10 and Table 11 below, for ACO 1 and ACO 2 respectively, illustrate the steps in this analysis. Corresponding notes, describing the rows of the table, are provided after each table.

Table 10. Phase 5—Steps to Adjust Expenditures for Quarterly Reports—ACO 1 Example (Track 1)

REF	DESCRIPTION	TOTAL	ESRD	DISABLED	AGED/DUAL	AGED/NON-DUAL
<b>1.</b>	<b>Adjustments to arrive at QEXPU Expenditures</b>					
2.	Total raw expenditures for QEXPU	\$100,826,721	\$11,114,095	\$10,615,539	\$15,245,643	\$63,851,444
3.	Sequestration Adjustment	\$2,028,703	\$225,300	\$213,026	\$305,762	\$1,284,616
4.	Total expenditures with sequestration (seq.) [2 + 3]	\$102,855,425	\$11,339,395	\$10,828,565	\$15,551,405	\$65,136,060
<b>5.</b>	<b>IME/DSH/UCC Removal</b>					
6.	Total IME/DSH/UCC Removal	\$3,714,875	\$426,411	\$488,513	\$569,957	\$2,229,994
7.	Total expenditures with Seq. less IME/DSH/UCC [4 - 6]	\$99,140,549	\$10,912,984	\$10,340,051	\$14,981,448	\$62,906,066
8.	Non-Claims Based Payments	-\$179,116	\$0	\$65,773	-\$23,858	-\$221,031
9.	Total Expenditures before Ann & Truncated [7 + 8]	\$98,961,433	\$10,912,984	\$10,405,824	\$14,957,590	\$62,685,035
10.	Annualization [(9 / respective Eligibility Fraction) - 9]	\$30,618,205	\$2,619,872	\$1,402,362	\$5,962,689	\$20,633,281
11.	Total Annualized Expenditures [9 + 10]	\$129,579,639	\$13,532,856	\$11,808,187	\$20,920,279	\$83,318,317
12.	Truncation (at person/eligibility level [using 11] compared to eligibility Truncation Thresholds)	\$13,553,346	\$111,057	\$736,628	\$1,700,068	\$11,005,593
13.	Total Expenditures after Ann & Truncation [11 - 12]	\$116,026,292	\$13,421,799	\$11,071,558	\$19,220,211	\$72,312,723

REF	DESCRIPTION	TOTAL	ESRD	DISABLED	AGED/DUAL	AGED/NON-DUAL
14.	Total truncated expenditure (weight applied) [13 * respective Eligibility Fraction]	\$93,659,290	\$10,894,474	\$10,035,464	\$14,331,304	\$58,398,048
15.	Completion Factor (1.072), [14 * 7.2%]	\$6,743,469	\$784,402	\$722,553	\$1,031,854	\$4,204,659
16.	Completion Expenditure [15 + 16]	\$100,402,758	\$11,678,876	\$10,758,017	\$15,363,157	\$62,602,708
17.	Person years	7,148	136	883	719	5,410
18.	Total expenditures per person year	\$14,047	\$86,138	\$12,187	\$21,367	\$11,571
<b>19.</b>	<b>Actual QEXPU Report Figures</b>					
20.	Beneficiaries	7,353	–	–	–	–
21.	Person years	7,148	136	883	719	5,410
22.	Total truncated expenditures [21 * 23]	\$100,389,418	\$11,678,876	\$10,758,012	\$15,351,455	\$62,601,074
23.	Total expenditures per person year	\$14,045	\$86,138	\$12,187	\$21,351	\$11,571
24.	Difference in claims re-pull and report numbers	–	–	–	–	–
25.	[16 - 22]	\$13,340.89	-\$0.06	\$4.55	\$11,702.15	\$1,634.24

### **Notes for Table 10:**

This table shows the steps required to arrive at the financial numbers for the example Track 1 ACO's QEXPU report. The column labeled "Total" contains total expenditures. The final four columns in the table contain information regarding beneficiaries who fall into the four different Medicare enrollment types (ESRD, Disabled, Aged/Dual, and Aged/Non-Dual). By row, the values found in the last four columns of the table sum to the value found in the column labeled "Total." A beneficiary can change Medicare enrollment type from month to month (e.g., a beneficiary could be in Aged/Dual for 7 months of the report period and then be in ESRD for 5 months of the report period). As a result, a given beneficiary's expenditures may be divided among the four Medicare enrollment types. Keep in mind that the expenditure calculations (e.g., annualization and truncation) are done at the level of the beneficiary-Medicare enrollment type.

- Row 2 shows the total expenditures associated with the beneficiaries in the QEXPU report, as found in the DBCR table. The total expenditure associated with the beneficiaries in the 2016 Q1 QEXPU report for ACO 1 is about \$100.8 million. Around \$63.9 million of these expenditures fall into the Aged/Non-Dual category.
- Row 3 shows the amount that is withheld due to sequestration. The sequestration adjustment is 2 percent. There is around \$2 million withheld from payment due to budget sequestration. Row 4 contains the pre-sequestration payment amounts (i.e., the sequestration amount in row 3 is added to the post-sequestration payment amount in row 2).
- Row 5 is a header for the section accounting for removal of Indirect Medical Education (IME), Disproportionate Share Hospital (DSH), and Uncompensated Care (UCC) payments. Row 6 contains the amount of IME/DSH/UCC that is associated with the expenditures on row 4. Out of the \$103 million in expenditures on row 4, about \$3.7 million is from IME/DSH/UCC (refer to row 6).
- Row 7 contains the expenditures from row 4, after removing the IME/DSH/UCC in row 6. Note that IME/DSH/UCC is recorded on a claim on a pre-sequestration basis and this is the reason that the sequestration amount is added before (refer to row 4) the IME/DSH/UCC is removed (refer to row 7).

An example will help demonstrate the need for adding in the sequestration amount before removing the IME/DSH/UCC amount:

$CLM\_PMT = (BASEPAY + IME + DSH + UCC) * 0.98$  (this is the post-sequestration amount that appears as the amount paid on the claim)

Note that the Shared Savings Program removes IME, DSH, and UCC amounts from total expenditures used to determine ACO benchmarks and financial performance. The amount of IME/DSH/UCC on the claim record is at 100 percent, not 98 percent.

- Therefore, the calculation of the pre-sequestration amount is:

Pre-sequestration payment (without IME/DSH/UCC) =  $(CLM\_PMT \div 0.98) - IME - DSH - UCC$

The term “CLM\_PMT/0.98” is where sequestration is “added” to the post-sequestration payment amount. The terms IME, DSH, and UCC are then subtracted from “CLM\_PMT/0.98.”

- Row 8 contains the sum of individually identifiable payments made from the Medicare Trust Funds under a CMS demonstration, pilot, or time limited program (such as care management fees) to ACO participants or ACO providers/suppliers for beneficiaries assigned to the ACO. CMS accounts for any fees that are identifiable at the beneficiary level. This fee becomes an additional expense that is added into the beneficiary’s expenditures.
- Row 9 contains the expenditures from row 7 after adding in the care management fees from row 8. There is a total of \$99 million in expenditures found in row 9.
- Row 10 contains the additional expenditures that are associated with annualizing the expenditures from line 9. That is, annualization of the expenditures in line 9 adds a total of about \$30.6 million in expenditures (refer to line 10). Row 11 contains the total annualized expenditures, which is calculated by adding the expenditures from rows 9 and 10. Next, the annualized expenditures are truncated at the truncation threshold (as documented in the QEXPU report parameters section) for each Medicare enrollment type. The total amount of expenditures removed due to truncation is found in row 12. A total of roughly \$14 million in expenditures is removed because they are above the truncation threshold (refer to row 12). Row 13 contains the total expenditures remaining after annualization and truncation. In other words, row 13 contains the expenditures from row 11 after removing the expenditures that are above the expenditure cap from row 12. There is a total of \$116 million in expenditures after annualization and application of the truncation thresholds.
- Row 14 contains the de-annualized expenditures (i.e., the expenditures from row 13 that are left over after performing de-annualization). An annualized expenditure is de-annualized by multiplying the annualized expenditure by the beneficiary’s Eligibility Fraction (the number of months in the enrollment type divided by 12) for each enrollment type.

A completion factor is used in the QEXPU report. This completion factor comes from the CMS Office of the Actuary and is documented in the report’s parameter page. A completion factor is used as an approximation of the remaining claims that were incurred during the report period, yet to be paid by the claims run-out date used for report creation. Row 15 contains the expenditures associated with a completion factor of 7.2 percent (the completion factor used for 2016 Q1 report). Row 15 is

derived by multiplying the expenditures from row 14 by .072. There is a total of about \$6.7 million in expenditures associated with the completion factor. Row 16 contains the total “completed” expenditures, which is derived by adding the expenditures from row 14 and row 15 together.

- Row 17 contains the total person years associated with the beneficiaries in the QEXPU report. For new Medicare enrollees and for decedents, the number of months in the report period for which they are enrolled in Medicare will be less than 12 months. Note that 12 months= 1 person year. For example, when analyzing a calendar year period, a beneficiary new to Medicare in March will count as 10/12 of a person year. A beneficiary who dies in September, but who was enrolled in Medicare from January through September, would contribute 9/12 of a person year. There is a total of 7,148 person years associated with the beneficiaries in the QEXPU report, as found in row 17. Row 18 contains the total expenditures per beneficiary (or more precisely per person year). Row 18 is derived by dividing the total expenditures found in line 16 by the total person years found in row 17. The total expenditures per beneficiary are \$14,047.
- Rows 19–23 contain information from the actual QEXPU report. Row 20 shows that there are 7,353 assigned beneficiaries in the QEXPU report. Row 21 contains the person years that are associated with these assigned beneficiaries. Row 22 is not found directly in the QEXPU report, but rather is derived directly from values found in the QEXPU report. Specifically, row 22 is calculated by multiplying the values found in row 21 by the amounts found in row 23 (additional precision in calculations is not shown in the tables). Lastly, row 23 contains the expenditure per beneficiary (or more correctly per person year) as found in the QEXPU report.

Total Expenditures per beneficiary found in this analysis (row 18) can now be compared to the figures from the 2016 Q1 QEXPU report found in row 23. Row 24 and 25 show the total difference in expenditures between the two results and the difference relative to total expenditures (or total expenditures for the respective enrollment category) respectively. In total, only a \$13,341 difference was found, which was less than one-person year of expenditure or 0.013 percent of this ACO’s total expenditures.

When present, a dash (–) indicates that a value was not calculated for that cell. Further details regarding the calculations in the 2016 Q1 QEXPU report can be found in the footnotes of that report.

Table 11. Phase 5—Steps to Adjust Expenditures for Quarterly Reports—ACO 2 Example (Track 3)

REF	DESCRIPTION	TOTAL	ESRD	DISABLED	AGED/DUAL	AGED/NON-DUAL
<b>1.</b>	<b>Adjustments to arrive at QEXPU Expenditures</b>					
2.	Total raw expenditures for QEXPU	\$100,826,721	\$11,114,095	\$10,615,539	\$15,245,643	\$63,851,444
<b>3.</b>	<b>Sequestration Adjustment</b>					
4.	Total expenditures with sequestration (seq.) [2 + 3]	\$102,855,425	\$11,339,395	\$10,828,565	\$15,551,405	\$65,136,060
<b>5.</b>	<b>IME/DSH/UCC Removal</b>					
6.	Total IME/DSH/UCC Removal	\$1,806,346	\$202,862	\$116,860	\$473,783	\$1,012,840
7.	Total expenditures with seq. less IME/DSH/UCC [4 - 6]	\$20,532,158	\$2,966,606	\$1,608,347	\$5,013,881	\$10,943,325
<b>8.</b>	<b>Non-Claims Based Payments</b>					
<b>9.</b>	<b>Total Expenditures before Truncation and Completion [7 + 8]</b>					
10.	Truncation Factor	–	1.22%	5.78%	2.16%	4.50%
11.	Amount Truncated [9 * 10]	\$730,117	\$36,338	\$92,918	\$108,141	\$492,720
<b>12.</b>	<b>Total Expenditures after Truncation [9 - 11]</b>					
13.	Completion Factor (1.2828), [12 * 28.3%]	\$5,602,586	\$828,605	\$428,490	\$1,388,303	\$2,957,187
<b>14.</b>	<b>Total Expenditures after Truncation and Completion [12 + 13]</b>					
<b>15.</b>	<b>Person years</b>					
<b>16.</b>	<b>Total expenditures per person year</b>					
<b>17.</b>	<b>Actual QEXPU Report Figures</b>					
18.	Beneficiaries	9,948	–	–	–	–
19.	Person years	2,479	57	288	580	1,553



REF	DESCRIPTION	TOTAL	ESRD	DISABLED	AGED/DUAL	AGED/NON-DUAL
20.	Total expenditures [19 * 21]	\$25,417,355	\$3,759,108	\$1,943,753	\$6,298,847	\$13,415,647
21.	Total expenditures per person year	\$10,254	\$65,566	\$6,743	\$10,854	\$8,639
22.	Difference in claims re-pull and report numbers [14 - 20]	-\$272.91	\$0.00	\$166.39	-\$574.12	\$134.82
23.	Difference related to QEXPU Expenditures reported	-0.001%	0.000%	0.009%	-0.009%	0.001%

### **Notes for Table 11:**

This table shows the steps required to arrive at the financial numbers found in the example Track 2 ACO's QEXPU report. Only those steps that differ for Track 3 (relative to Tracks 1 and 2) will be pointed out in this section. For rows omitted here, please refer to the Table 10 notes for similar discussion. The major differences for Track 3 (relative to Tracks 1 and 2) are a shorter report period (for Q1 2016), a truncation done at the ACO level using truncation factors (instead of the truncation thresholds used by Tracks 1 and 2 at the beneficiary level), and a different completion factor to account for the different report period used in Track 3.

- Row 9 contains the expenditures from row 7 after adding in the care management fees from row 8. There is a total of \$20.5 million in expenditures found in row 9.
- Row 10 identifies the enrollment type-specific truncation factors that are specific to Track 3 and used in the Q1 2016 QEXPU. Row 11 shows the amount calculated for truncation (row 9 multiplied by row 10), which amounts to \$730,000 for ACO 2. There is a total of \$19.8 million in expenditures after truncation (row 11 subtracted from row 9) as shown in row 12.
- Row 13 shows the application of the Track 3 specific completion factor with the total expenditures after truncation and completion shown in row 14, amounting to over \$25.4 million for ACO 2.
- Rows 15 and 16 contain the person years from the QEXPU and the calculated expenditures per person year from this analysis. In total, there was a little over \$10,000 per person year in expenditures in Q1 2016 for ACO 2.
- Rows 17–21 contain information from the actual QEXPU report. Row 18 shows that there are 9,948 assigned beneficiaries in the QEXPU report. Row 18 contains the person years that are associated with these assigned beneficiaries. Notice the large difference between the person years and the number of assigned beneficiaries. This is because the report period for the Track 3 ACO is only 3 months in the Q1 QEXPU.

Again, row 20 is not found directly in the QEXPU report, but rather is derived directly from values found in the QEXPU report. Specifically, row 20 is calculated by multiplying the values found in row 19 by the amounts found in row 21. Lastly, row 21 contains the expenditure per person year as found in the QEXPU report.

Total Expenditures per beneficiary found in this analysis (row 16) can now be compared to the figures from the 2016 Q1 QEXPU report found in row 21. Similarly, as before, rows 22 and 23 show the total difference in expenditures between the two results and the difference relative to total expenditures (or total expenditures for the respective enrollment category) respectively. In total, the report figures were only \$273 lower than those found in the analysis, which is substantially lower than one-person year of expenditures or 0.001 percent of this ACO's total expenditures.

Further details regarding the calculations in the QEXPU report can be found in the footnotes of those reports.

## CONCLUSION

The CCLF tie-out analysis shows that CCLF expenditures for beneficiaries included in the ACO's quarterly assignment list aggregate to match (within 0.013 percent) the expenditures used in producing the quarterly Expenditure/Utilization Report. ACOs attempting to aggregate CCLF data will be faced with a number of challenges, principally: the lack of data points CMS uses to produce the quarterly Expenditure/Utilization Report, and the lack of CCLF data on assigned beneficiaries (e.g., beneficiaries declining to share their data with ACOs or the exclusion of data related to treatment of substance abuse from CCLFs).

ACOs commonly comment on the incompleteness of their datasets, due to beneficiaries declining to share their data with ACOs, or due to the exclusion of data related to substance abuse treatment. In the past, on average, CMS has observed the following among all ACOs qualified to receive CCLFs:

- 2.3 percent of the patient population has declined to share data with ACOs.
- 2.4 percent of total expenditures contained in CCLFs are withheld due to substance abuse codes each month.

In this analysis CMS found that the substance abuse exclusion and the population that has declined to share data with the ACOs together account for less than 2 percent of total QEXPU expenditures. Specifically, the substance abuse exclusion accounted for most of the expenditures excluded from the QEXPU (92 to 97 percent), whereas those that opted-out of data sharing accounted for a relatively small proportion of the excluded expenditures (3 to 8 percent).

This tie-out analysis underscores the original purpose of CCLFs: to help facilitate ACOs' overall redesign of care processes, facilitate coordination of care for their beneficiary populations, and enable practitioners in ACOs to better coordinate and target strategies towards the individual beneficiaries who may ultimately be assigned to them (76 Federal Register 67846–67851). The intention of the CCLFs is not to be the basis for ACOs' exercises in recreating or predicting beneficiary assignment, CMS' aggregate data reports, or financial reconciliation.

Please refer to the following additional resources:

- *Aggregate Expenditure and Utilization Trend Report Users Guide* and the *Assignment List and Assignment Summary Reports Users Guide*. The current versions of these guides are located on the [SSP ACO Portal](#) under Program Announcements.

- “CCLF Information Packet.” This document explains what fields are in the CCLF data files and how the various data files can be utilized. The current version of the CCLF Information Packet is located on the [SSP ACO Portal](#) under the Resources section.

## Appendix B: Analysis of Enrollment Category Differences Between Assignment List Report and CCLF

This appendix summarizes the content presented during the March 2, 2016 webinar for Shared Savings Program ACOs, which compared the enrollment information in the CCLFs against the enrollment flags that exist in the Assignment List Report (ALR) provided to the ACOs. The content of the slides is available, although reformatted into a question and answer format and revised to include additional explanatory notes. A recording of the presentation can be accessed on the [ACO CCLF User Group](#).

*Note: In the time since this analysis and webinar were presented, changes to CCLF files and to the Shared Savings Program have occurred. These relevant changes are noted within the text and are based on the CCLF IP Version 25.0 (10/17/2018) and the December 2018 Final Rule ([83 FR 67816](#)).*

### ANALYSIS PURPOSE

- Outline for ACOs the differences between enrollment information provided in ALR versus what is available through CCLFs.
- Review the approach that ACOs can use to create similar enrollment flags from the CCLFs to what is provided in the ALR.
- Provide results of the matching analysis comparing the monthly enrollment status found in the ALR with the status that can be calculated from the monthly CCLFs.

### QUESTION FOR ANALYSIS

#### METHODOLOGY FOR IDENTIFYING MONTHLY ENROLLMENT STATUS

- What are the Medicare enrollment types used in the Shared Savings Program?
  - **Answer:** The same enrollment categories are used across the Shared Savings Program in all reports and financial calculations. These same definitions are also used in other Medicare programs. The categories are hierarchically assigned in the following order:
    - ESRD beneficiaries
    - Disabled beneficiaries
    - Aged/Dual-eligible Medicare and Medicaid beneficiaries
    - Aged/Non-Dual eligible Medicare and Medicaid beneficiaries

- How is monthly enrollment status determined?
  - **Answer:** Monthly enrollment flags are created simultaneously when each respective report is produced. Since updates and corrections to the entitlement data occur over time, and the reports are created at different points in time, this can lead to slight differences in classification into enrollment categories between the CCLFs and the ALR.

## DATA SOURCES

- What data is provided in the ALR?
  - **Answer:** The following table provides the specifics about the ALR used for this analysis:

Table 12. Analysis ALR Information

NAME OF REPORT	PRELIMINARY PROSPECTIVE BENEFICIARY ASSIGNMENT LIST REPORT, REPORT YEAR 2016
Assignment Period	10/01/2014 to 09/30/2015
Types of ACOs	Three ACOs: One Track 1 ACO and two Track 2 ACOs
Data Pull	Data for the reports were pulled in 11/2015
Report Produced	Reports were produced in 12/2015
Unique Beneficiaries	40,686
Direct Data Source	Various CMS IDR tables

With the release of the Preliminary Prospective Beneficiary ALR, ACOs began receiving monthly flags that indicate the enrollment status for their currently assigned beneficiaries. These flags use the same hierarchical categories as describe above, but also includes a “Not Eligible” category to use for months that a beneficiary was not Medicare eligible. Here are the actual coding values used:

Table 13. Enrollment Category Coding for ALR

VALUE	DESCRIPTION
0	Not Eligible/Decedents
1	ESRD
2	Disabled
3	Aged/Dual Status
4	Aged/Non-Dual Status

- What CCLF files are used to identify beneficiary enrollment status?
  - **Answer:** Each monthly CCLF is a collection of 12 data files containing claims, beneficiary information, and cross reference information. During the time period of this analysis, ACOs had to request beneficiaries to include in each month’s CCLF. For more detailed information about all the files available in the CCLF, please reference the current version of the CCLF Information Packet available on the [SSP ACO Portal](#) under the Resources section. The following table provides the specifics about what was used in this analysis:

Table 14. CCLF Information Used for Analysis

INFORMATION	DESCRIPTION
CCLF Files Used	CCLF8—Beneficiary Demographics File CCLF9—Bene XREF File CCLF0—Summary Statics Data (file check)
Data Period	Monthly files from the 10/2014 to 09/2015 time period
Types of ACOs	Same ACOs as ALR
Data Pull	Claims and beneficiary information as of the run date of each monthly CCLF collection. Contains the information for the beneficiaries requested by the ACO.
Unique Beneficiaries	73,724 across the 12-monthly file for each ACO.
Direct Data Source	Various CMS IDR tables

In order to provide an analog to the enrollment flags in the ALR, two fields are used from the CCLF8—Beneficiary Demographics File: Medicare Status Code and Dual Status Code.

Medicare Status Code is used to identify the Aged, Disabled, and ESRD status of a beneficiary. It does not provide information regarding Dual Eligibility status. The following table provides the detailed codes for the field:

Table 15. Medicare Status Code Details

VALUE	DESCRIPTION
10	Aged without ESRD
11	Aged with ESRD
20	Disabled without ESRD
21	Disabled with ESRD
31	ESRD only

It is important to note that for the ESRD category, ESRD beneficiaries are identified using the Shared Savings Program process, which is also the process used in other Medicare programs. It aligns with the process used by Medicare Advantage and the CMS Office of the Actuary to define ESRD beneficiaries.

Remember:

- Diagnosis codes on Medicare claims are NOT used to identify whether a beneficiary is entitled to Medicare ESRD status.
- Beneficiaries who are on short-term dialysis are not defined as ESRD.
- Beneficiaries at greater than 3 months post-graft are not categorized as ESRD beneficiaries.

The Dual Status Code is used to identify those beneficiaries that are eligible for both Medicare and Medicaid. The category is defined in the Shared Savings Program specifications. The version 3 specifications are used for this analysis, however going forward the category will be based on the most current version specifications that include two additional codes in the definitions.

*Note: The current version of the “Shared Savings and Losses and Assignment Methodology Specifications” is available on the [Program Guidance & Specifications webpage](#).*

The codes from version 3 used for this analysis are:

- QMB-only individuals (referred to as having “partial-benefit”) or Dual Status Code 01.
- QMB-Plus individuals (referred to as having “full-benefit”) or Dual Status Code 02.

The full list of codes available in the dual status code field are in the following table:

Table 16. Dual Status Code Details

VALUE	DESCRIPTION
NA	Non-Medicaid
00	Not Medicare enrolled for the month
01	Qualified Medicare Beneficiary (QMB)-only
02	QMB and full Medicaid coverage, including prescription drugs
03	Specified Low-Income Medicare Beneficiary (SLMB)-only
04	SLMB and full Medicaid coverage, including prescription drugs
05	Qualified Disabled Working Individual (QDWI)
06	Qualifying individuals (QI)
08	Other dual-eligible (not QMB, SLMB, QDWI, or QI) with full Medicaid coverage, including prescription drugs
09	Other dual-eligible, but without Medicaid coverage
99	Unknown

Below is the hierarchical algorithm used to simulate the enrollment flags from the ALR. For each month in the CCLF, the following code logic was used to classify a beneficiary's enrollment status:

1. First, a beneficiary was checked to determine if they had a death date (BENE\_DEATH\_DT) in the previous month or before. If so, then the CCLF Enrollment = Not Eligible (0).
2. Remaining beneficiaries were checked to determine if they had a Medicare status code (BENE\_MDCR\_STUS\_CD) in 31, 21, or 11. If so, then the CCLF Enrollment = ESRD (1).
3. Remaining beneficiaries were checked to determine if they had a Medicare status code = 20. If so, then CCLF Enrollment = Disabled (2).
4. Remaining beneficiaries were checked to determine if they had a Medicare status code = 10 AND a Dual status code (BENE\_DUAL\_STUS\_CD) in 01 or 02. If so, then the CCLF Enrollment = Aged/Dual (3).
5. Remaining beneficiaries were checked to determine if they had a Medicare status code = 10 WITHOUT a Dual status code in 01 or 02. If so, then the CCLF Enrollment = Aged/NON-Dual (4).
6. For any remaining beneficiaries the CCLF Enrollment = Not Eligible (0).
  - What source data is used for enrollment status in both files?
    - **Answer:** For both files, the ultimate source of data comes from the CMS Common Medicare Environment (CME), while the direct sources are various tables in the CMS IDR.

## UNDERSTANDING DIFFERENCES BETWEEN CCLF AND ALR

- Which beneficiaries are in both the CCLF and the ALR in the data investigated?
  - **Answer:** In order to compare the enrollment statuses between the two files, CMS must first ensure that the two files contain a consistent beneficiary ID. To accomplish this, CMS used the CCLF9 file, which is the cross-reference file, to pull the current HICN for all beneficiaries in all files.
  - Overall, CMS matched 26,589 of the 40,686 beneficiaries in the ALR to the CCLF. This equates to a match rate around 65 percent. Across the three ACOs individually, this match rate ranged from 56 percent to 75 percent. The following table shows the match rate across the 12 months used in the analysis:

Table 17. Beneficiary Match Rate Across the 12 Analysis Months

MONTH YEAR	NUMBER IN BOTH FILES	PERCENT
October–2014	19,654	73.92
November–2014	19,655	73.92
December–2014	20,796	78.21
January–2015	20,790	78.19
February–2015	21,779	81.91
March–2015	21,777	81.9
April–2015	23,724	89.22
May–2015	24,770	93.16
June–2015	24,768	93.15
July–2015	24,811	93.31
August–2015	26,550	99.85
September–2015	26,551	99.86

- What are reasons a beneficiary is in one file and not the other?
- **Answer:** Beneficiaries can be missing from the CCLF for a variety of reasons, such as:
  - During the time period of the analysis, ACOs still had to request the beneficiaries to include in the CCLF. If they did not request data for the beneficiary or delayed requesting data for the beneficiary, then they would either be delayed in receiving data or they would not receive the data at all.
  - Changes in the ACO’s assignment list over a year’s time. The assignment lists can change when there are:
    - Changes in the participating provider list or
    - Changes in a beneficiary’s pattern of care.
- What are possible explanations for differences between the files?
  - **Answer:** Data is run at different points in time for the two files.
    - ALR is created at a single point in time (produced in December 2015 from data pulled in November 2015).
    - CCLF files are created at multiple points in time (monthly from November 2014 to October 2015).
    - Direct data sources are different.
      - The underlying source for all data is the CMS CME.

- The direct sources in the CMS IDR vary because of program requirements and timing.
- For example:
  - CCLF uses the **CME\_MDCR\_STUS** table for the Medicare Status Code (ESRD/Disabled categories).
  - ALR uses **V2\_MDCR\_BENE\_ESRD\_DLYS** and **V2\_MDCR\_BENE\_ESRD\_TRNSPLNT** to identify ESRD.

## RESULTS OF THE ENROLLMENT STATUS RECONCILIATION

- For those beneficiaries in both files, how does monthly enrollment status compare?
  - **Answer:** This analysis was conducted using data from three ACOs. Whether or not the patterns found below would be found for other ACOs is unknown, since other ACOs were not used in this analysis. Also, to simplify the display of the results, CMS is analyzing the results from the standpoint of the ALR enrollment category. CMS will analyze each category’s results individually, providing some overall statistics and trends as well as a graphical display of each ACO’s monthly matching trend.

### *Not Eligible*

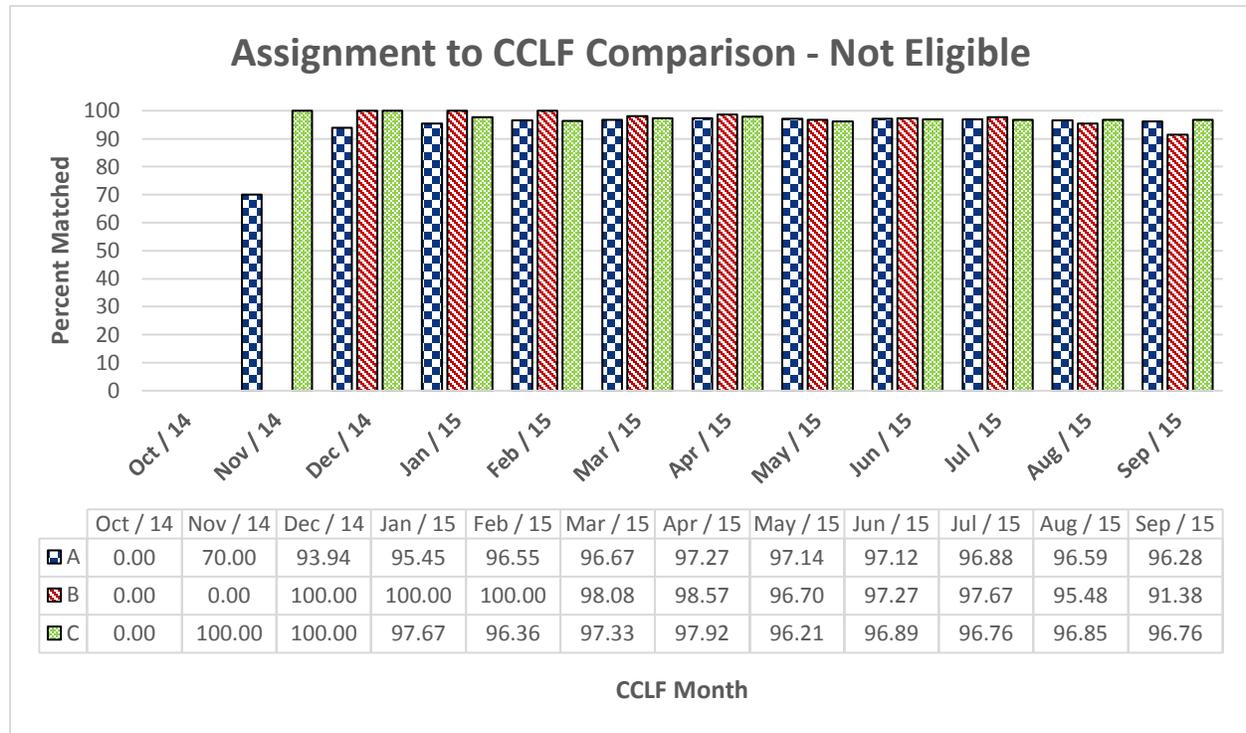
For the “Not Eligible” category, overall CMS saw an average match rate of 96.55 percent (meaning that of those considered “Not Eligible” in the ALR, 96.55 percent are identified as “Not Eligible” in the CCLF) that ranged between 0 percent and 97.67 percent. The monthly match rate is shown in the following table:

*Table 18. Not Eligible Match Rate Across the 12 Analysis Months*

MONTH YEAR	MATCHED	TOTAL	MATCH RATE
October–2014	0	2	0
November–2014	9	12	75
December–2014	61	63	96.83
January–2015	125	129	96.9
February–2015	200	206	97.09
March–2015	269	277	97.11
April–2015	377	386	97.69
May–2015	487	503	96.82
June–2015	567	584	97.09
July–2015	646	666	97
August–2015	759	787	96.44
September–2015	838	878	95.44

As noted later, many of the beneficiaries in this category are decedents, so it makes sense that the number of beneficiaries in this category increases over the 12-month period. It is important to point out that in the first month, two of the ACOs had zero beneficiaries classified to this group, so the match rate technically could not be calculated. However, the method did match 0 to 0 in these cases. The next figure displays the match rate over time for the three ACOs contained in the data.

Figure 1. Assignment to CCLF comparison—Not eligible



## ESRD

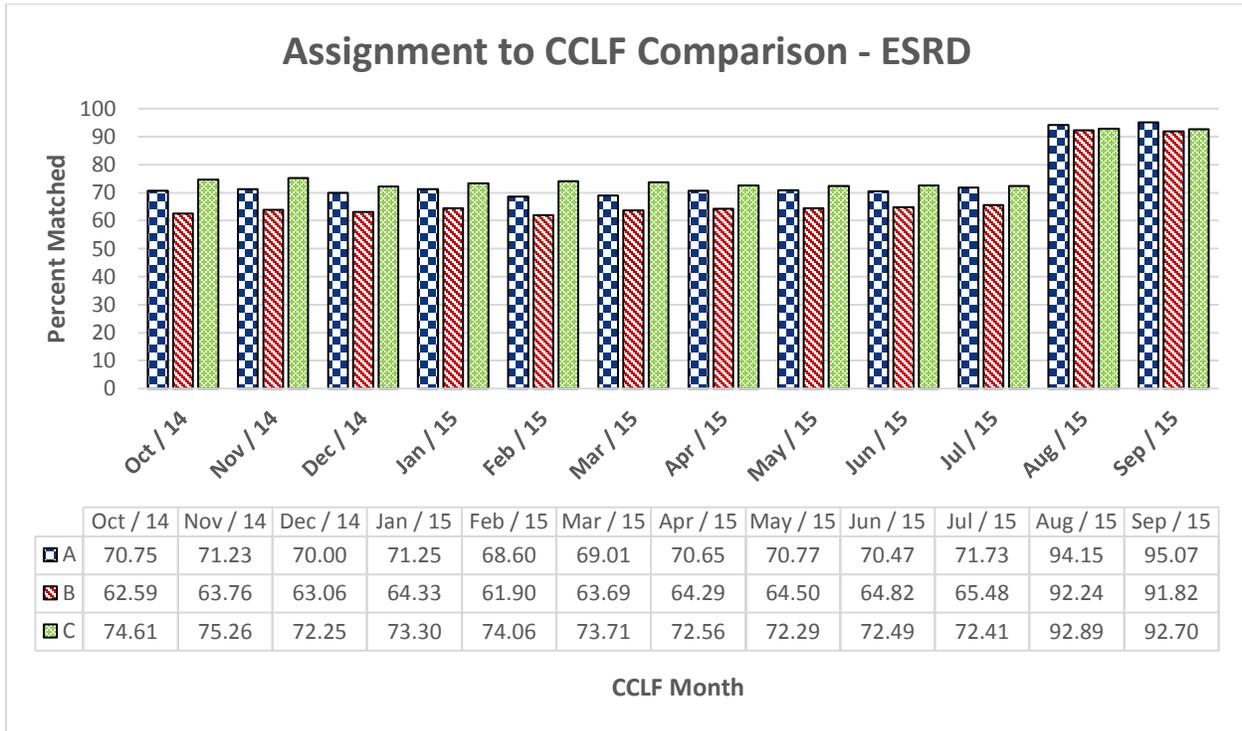
For the “ESRD” category, overall there was an average match rate of 73.99 percent which ranged between 68.66 percent and 93.14 percent. This category has the lowest overall match rate of the status categories. The monthly match rates are as follows:

*Table 19. ESRD Match Rate Across the 12 Analysis Months*

MONTH YEAR	MATCHED	TOTAL	MATCH RATE
October–2014	340	487	69.82
November–2014	345	489	70.55
December–2014	362	526	68.82
January–2015	366	523	69.98
February–2015	379	552	68.66
March–2015	382	552	69.2
April–2015	412	595	69.24
May–2015	434	626	69.33
June–2015	431	621	69.4
July–2015	434	620	70
August–2015	617	663	93.06
September–2015	611	656	93.14

Analyzing the monthly match rate over time, the match rate is stable for the first ten months and then jumps over 20 percentage points for months 11 and 12. This general trend (although of a much smaller magnitude of increase than the match rate between months 10 and 11) is repeated in some of the other categories as well, such as aged/dual and aged/non-dual. CMS does not have a full understanding of why this trend appears between months 10 and 11. CMS suspects the trend is a result of an interaction between the lag of the various data sources and differences between when the data is pulled between the ALR and CCLF. The pattern is apparent in the following individual ACO graphic:

Figure 2. Assignment to CCLF Comparison—ESRD



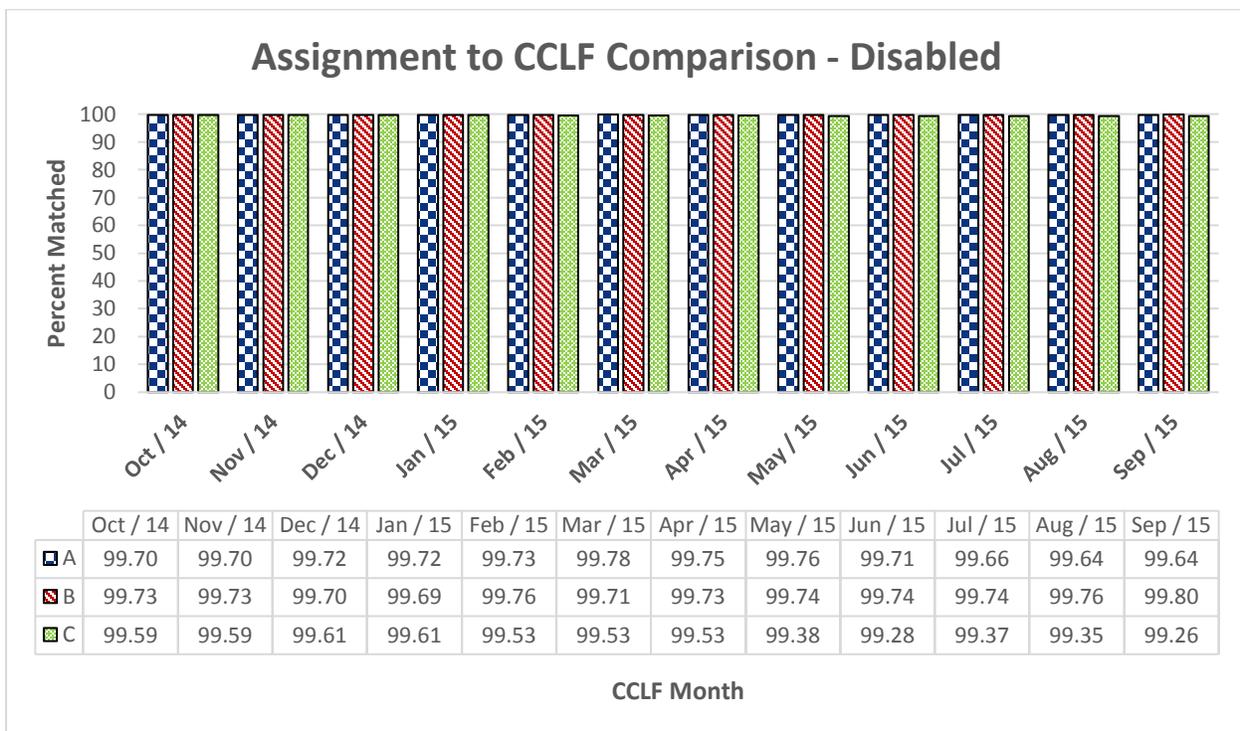
### Disabled

The highest and most stable match rate overall came from the “Disabled” enrollment status. It saw an average match rate of 99.67 percent and a range between 99.63 percent and 99.70 percent. The jump in the monthly match rate does not occur as with ESRD, and the rates are consistent even at the individual ACO level. The monthly match rates and ACO graphic are below:

Table 20. Disabled Match Rate Across the 12 Analysis Months

MONTH YEAR	MATCHED	TOTAL	MATCH RATE
October–2014	4,488	4,502	99.69
November–2014	4,474	4,488	99.69
December–2014	4,779	4,794	99.69
January–2015	4,749	4,764	99.69
February–2015	5,013	5,028	99.7
March–2015	4,985	5,000	99.7
April–2015	5,236	5,252	99.7
May–2015	5,478	5,496	99.67
June–2015	5,443	5,463	99.63
July–2015	5,428	5,448	99.63
August–2015	5,890	5,912	99.63
September–2015	5,854	5,876	99.63

Figure 3. Assignment to CCLF Comparison—Disabled



## Aged/Dual

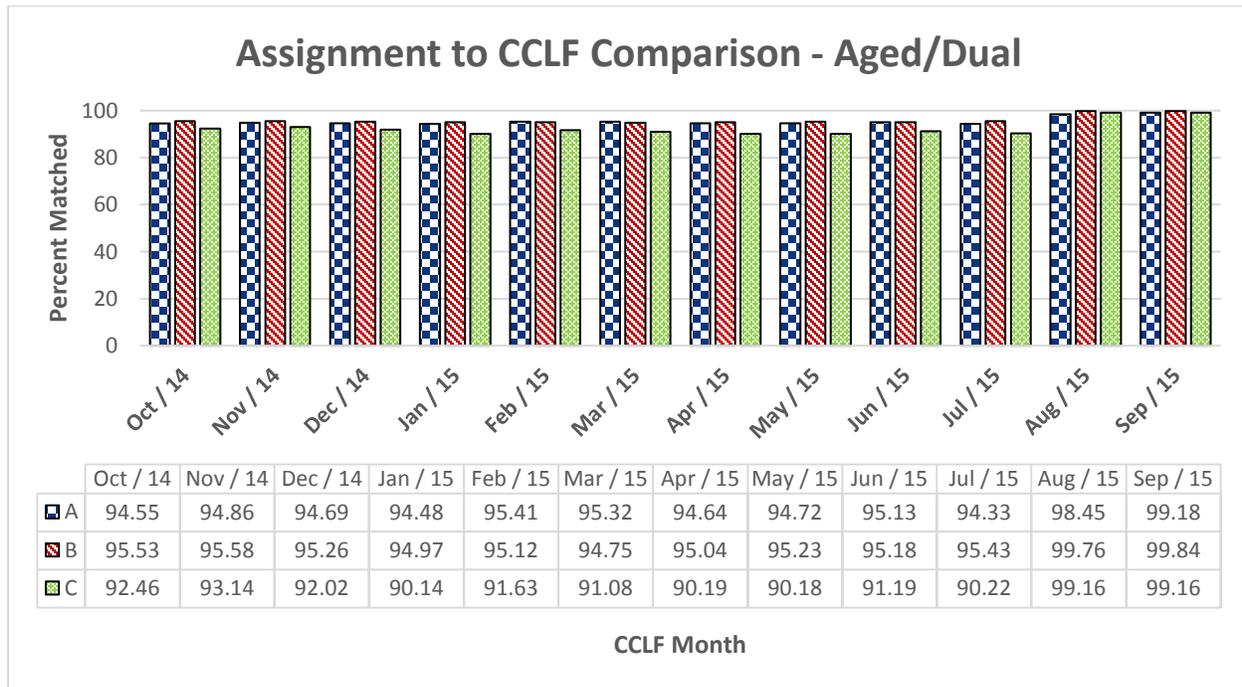
The “Aged/Dual” category saw an overall average match rate of 95.69 percent which ranged from 94.51 percent to 99.61 percent. Over time, as shown in the following table, a trend appears like that observed with ESRD. While not as pronounced as for ESRD, there is a jump in the match rate between months 10 and 11 (July and August) after being relatively stable in the preceding months.

*Table 21. Aged/Dual Match Rate Across the 12 Analysis Months*

<b>MONTH YEAR</b>	<b>MATCHED</b>	<b>TOTAL</b>	<b>MATCH RATE</b>
October–2014	2,939	3,093	95.02
November–2014	2,993	3,144	95.2
December–2014	3,129	3,298	94.88
January–2015	3,099	3,279	94.51
February–2015	3,237	3,408	94.98
March–2015	3,174	3,352	94.69
April–2015	3,312	3,500	94.63
May–2015	3,484	3,676	94.78
June–2015	3,474	3,660	94.92
July–2015	3,416	3,604	94.78
August–2015	3,823	3,848	99.35
September–2015	3,837	3,852	99.61

At the individual ACO level, the increase in the match rate between months 10 and 11 appears in the graphic below.

Figure 4. Assignment to CCLF Comparison—Aged/Dual



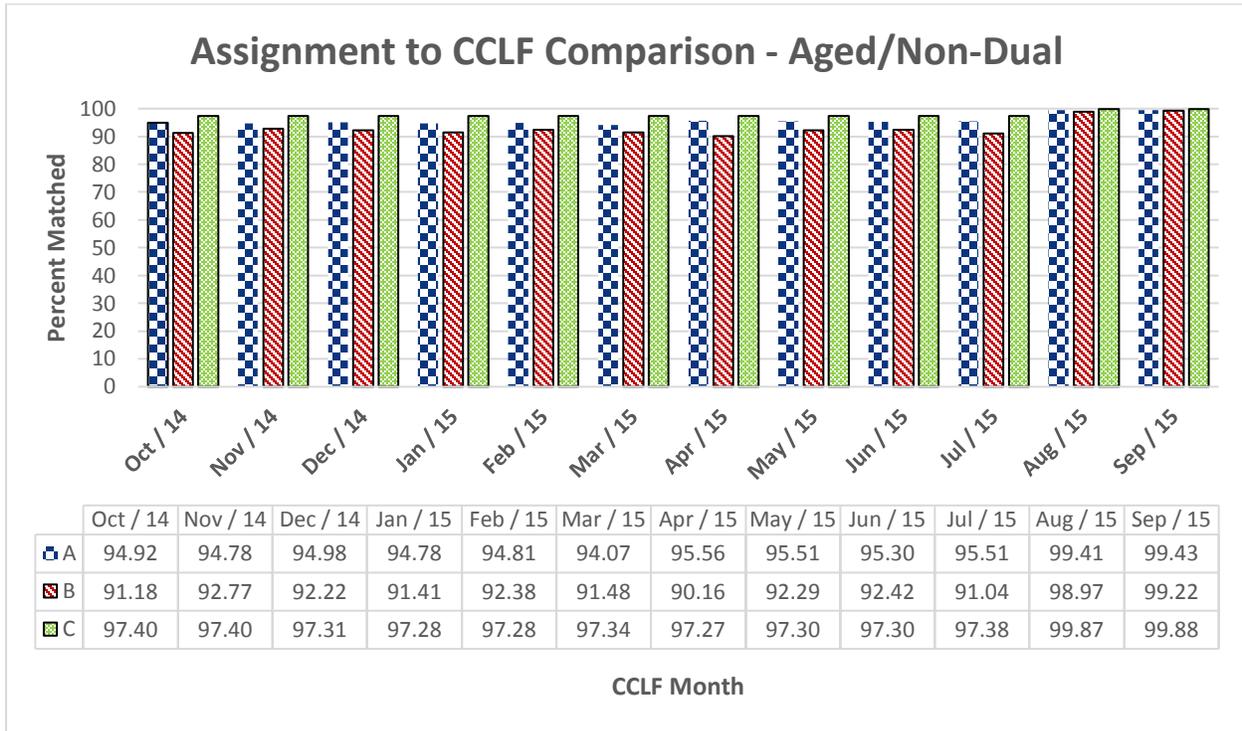
### Aged/Non-Dual

Overall, the average match rate for the “Aged/Dual” category rate is 95.47 percent, ranging from 95.39 percent to 99.63 percent. Again, a jump occurs in the match rate between July and August (i.e., months 10 and 11) that is similar in magnitude to that found for the Aged/Dual category.

Table 22. Aged/Non-Dual Match Rate Across the 12 Analysis Months

MONTH YEAR	MATCHED	TOTAL	MATCH RATE
October–2014	11,075	11,570	95.72
November–2014	11,063	11,522	96.02
December–2014	11,614	12,115	95.86
January–2015	11,568	12,095	95.64
February–2015	12,062	12,585	95.84
March–2015	12,036	12,596	95.55
April–2015	13,346	13,991	95.39
May–2015	13,869	14,469	95.85
June–2015	13,837	14,440	95.82
July–2015	13,840	14,473	95.63
August–2015	15,274	15,340	99.57
September–2015	15,233	15,289	99.63

Figure 5. Assignment to CCLF Comparison—Aged/Non-Dual



## DIFFERENCES BETWEEN MONTHS 10 AND 11

The differences in match rates between months 1 through 10 (October 2014 and July 2015) and months 11 and 12 (August 2015 and September 2015) occurred in multiple categories, which led CMS to investigate further. When comparing the months, two CCLF categories stood out as needing further explanation: “Not Eligible” and “Disabled.”

For the Not Eligible (NE) category, illustrated below in the cross tabulation of enrollment categories between the ALR and CCLF (i.e., Figure 1), CMS found many NE beneficiaries (as found in the CCLF) that were classified as ESRD in the ALR. Deeper investigation of the ALR data showed that the majority (644/646) of NE classifications in the ALR were for beneficiaries that had died. So, based on this set of data, CMS prioritizes classifying non-decedent NE beneficiaries (of which there are 118), as identified in the CCLF, as ESRD to improve the matching rate between the data sources. While not a perfect solution, as demonstrated by the figure, this method does resolve a large amount of the difference (108/118 would be correctly classified).

The Disabled category was another area where CMS felt improvements could be made. CMS found that some of those labeled Disabled in the CCLF (but Aged/Dual or Aged/Non-Dual in the ALR) are actually 65 years of age or older. With that, CMS recommends checking the patient’s age at the beginning of each month and requiring it to be under 65 to be considered Disabled. That is, for those that are considered

Disabled in the CCLF, and are 65 year of age or older, CMS recommends that their enrollment status be changed to Aged/Dual or Aged/Non-Dual (depending upon the dual status code for the beneficiary).

The contrast between Figure 1, showing month 10 results, and Figure 2, showing results for month 11, again illustrates the noticeable change in match rates between months 10 and 11 that appeared above when examining the individual enrollment categories. While CMS believes the actual source of the discrepancy lies in the timing lag of the source tables and the differing times data is pulled, CMS also believes that the strategies described directly above resolve these discrepancies to a large degree.

Figure 6. Month 10 Cross Tabulation of Enrollment Categories Between the ALR and CCLF

ALR	CCLF					
	Not Eligible	ESRD	Disabled	Aged/Dual	Aged/Non-Dual	Total
Not Eligible	646	1	18	0	1	666
ESRD	108	434	40	22	16	620
Disabled	8	12	5,428	0	0	5,448
Aged/Dual	0	2	163	3,416	23	3,604
Aged/Non-Dual	2	5	534	92	13,840	14,473
Total	764	454	6,183	3,530	13,880	24,811

- All but 2 of those identified as “Not Eligible” in the ALR are decedents (644 / 646)
- After excluding those that died it may be best to consider all other “Not Eligibles” as ESRD
- All of these are 65 or older
- Need to check age for the disabled category

Figure 7. Month 11 Cross Tabulation of Enrollment Categories between the ALR and CCLF

ALR	CCLF					
	Not Eligible	ESRD	Disabled	Aged/Dual	Aged/Non-Dual	Total
Not Eligible	759	4	23	0	1	787
ESRD	0	617	30	3	13	663
Disabled	0	22	5,890	0	0	5,912
Aged/Dual	0	3	0	3,823	22	3,848
Aged/Non-Dual	0	6	0	60	15,274	15,340
Total	759	652	5,943	3,886	15,310	26,550

- This is the next month comparison where we see how things improved
- Evidence of the lags that are inherit in the system

## DATA SHARING REQUIREMENTS

There are changes that became effective January 1, 2016, that affect the CCLFs ACOs receive going forward. The following bullets outline what the ACOs should expect:

- Effective January 1, 2016, ACOs are no longer required to submit Beneficiary Data Sharing Preference Files (BNPRF) or Request Files (DTRQT).
- Track 1 and Track 2 ACOs (or those in the BASIC or ENHANCED tracks electing the preliminary prospective assignment with retrospective reconciliation methodology) receive claims data for beneficiaries having an approved primary care service with a physician used in assignment for all their assignable beneficiaries. A beneficiary is assignable to an ACO if, during the 12-month period prior to the month to which the CCLF applies, the beneficiary had a qualifying primary care visit (as defined for purposes of assignment) with one of the ACO's participating providers. For example, the CCLF created in March 2016 contains claims with through dates from March 2015 to February 2016, based on the assignment 12-month period of February 2015 through January 2016.
- Track 1+ and Track 3 ACOs (or those in the BASIC or ENHANCED tracks electing the prospective assignment methodology) receive claims data for beneficiaries in their prospectively assigned population.
- Beneficiaries who have declined to share their data will be excluded from the CCLF claims data. Such beneficiaries can be identified on the monthly Exclusion Files (BNEXC.LIS) that ACOs receive.

## CONCLUSION

The purpose of this document is to help ACOs understand the differences between enrollment information provided in the ALR versus what is available through CCLF files. CMS reviewed an approach that ACOs can use to create similar enrollment flags from the CCLF files to what is provided in the ALR. Using the outlined approach, CMS provided the results of that matching analysis comparing the monthly enrollment status found in the ALR with the status that can be calculated from the monthly CCLF files. CMS demonstrated where issues may appear and how to overcome those issues.

## CMS SUPPORT AND RESOURCES

### RESOURCES ON THE SSP ACO PORTAL

- Uses and Limitations of the CCLF Files (this document)
- Assignment List and Assignment Summary Report Users Guide
- CCLF Information Packet (IP)
- ACO and ACO-OS Data Exchange User Guide (previously known as the Data User Guide)
- Recordings of previous CCLF User Group Sessions

### SUPPORT

- Shared Savings Program Technical Assistance
  - 1-888-734-6433 (Option 2)
  - [APOSD@cms.hhs.gov](mailto:APOSD@cms.hhs.gov)
- Shared Savings Program Operational Support
  - [SharedSavingsProgram@cms.hhs.gov](mailto:SharedSavingsProgram@cms.hhs.gov)

### REFERENCES USED FOR THIS ANALYSIS

- Accountable Care Organization—Operational System (ACO-OS) Claim and Claim Line Feed (CCLF) Information Packet (IP), Version 13.0, 12/17/2015.
- [Medicare Shared Savings Program Shared Savings and Losses and Assignment Methodology Specifications](#), Version 3, December 2014.

## PRESENTATION APPENDIX—MONTHLY CROSS TAB OF ASSIGNMENT LIST ENROLLMENT CATEGORIES VS. THE CCLF ENROLLMENT CATEGORIES

Table 23. Month 1 Cross Tab of Two Versions of Enrollment Categories

MONTH 1 (OCT/2014)						
ALR	CCLF					TOTAL
	NOT ELIGIBLE	ESRD	DISABLED	AGED/DUAL	AGED/NON-DUAL	
Not Eligible	0	0	1	0	1	2
ESRD	92	340	25	21	9	487
Disabled	7	7	4,488	0	0	4,502
Aged/Dual	0	2	133	2,939	19	3,093
Aged/Non-Dual	0	4	421	70	11,075	11,570
Total	99	353	5,068	3,030	11,104	19,654

Table 24. Month 2 Cross Tab of Two Versions of Enrollment Categories

MONTH 2 (NOV/2014)						
ALR	CCLF					TOTAL
	NOT ELIGIBLE	ESRD	DISABLED	AGED/DUAL	AGED/NON-DUAL	
Not Eligible	9	0	2	0	1	12
ESRD	92	345	25	20	7	489
Disabled	7	7	4,474	0	0	4,488
Aged/Dual	0	2	137	2,993	12	3,144
Aged/Non-Dual	0	4	423	32	11,063	11,522
Total	108	358	5,061	3,045	11,083	19,655

Table 25. Month 3 Cross Tab of Two Versions of Enrollment Categories

<b>MONTH 3 (DEC/2014)</b>						
<b>ALR</b>	<b>CCLF</b>					
	<b>NOT ELIGIBLE</b>	<b>ESRD</b>	<b>DISABLED</b>	<b>AGED/DUAL</b>	<b>AGED/NON-DUAL</b>	<b>TOTAL</b>
Not Eligible	61	0	1	0	1	63
ESRD	103	362	31	19	11	526
Disabled	8	7	4,779	0	0	4,794
Aged/Dual	0	2	150	3,129	17	3,298
Aged/Non-Dual	1	4	453	43	11,614	12,115
<b>Total</b>	<b>173</b>	<b>375</b>	<b>5,414</b>	<b>3,191</b>	<b>11,643</b>	<b>20,796</b>

Table 26. Month 4 Cross Tab of Two Versions of Enrollment Categories

<b>MONTH 4 (JAN/2015)</b>						
<b>ALR</b>	<b>CCLF</b>					
	<b>NOT ELIGIBLE</b>	<b>ESRD</b>	<b>DISABLED</b>	<b>AGED/DUAL</b>	<b>AGED/NON-DUAL</b>	<b>TOTAL</b>
Not Eligible	125	0	3	0	1	129
ESRD	99	366	31	17	10	523
Disabled	8	7	4,749	0	0	4,764
Aged/Dual	0	2	155	3,099	23	3,279
Aged/Non-Dual	1	4	460	62	11,568	12,095
<b>Total</b>	<b>233</b>	<b>379</b>	<b>5,398</b>	<b>3,178</b>	<b>11,602</b>	<b>20,790</b>

Table 27. Month 5 Cross Tab of Two Versions of Enrollment Categories

<b>MONTH 5 (FEB/2015)</b>						
<b>ALR</b>	<b>CCLF</b>					
	<b>NOT ELIGIBLE</b>	<b>ESRD</b>	<b>DISABLED</b>	<b>AGED/DUAL</b>	<b>AGED/NON-DUAL</b>	<b>TOTAL</b>
Not Eligible	200	0	5	0	1	206
ESRD	112	379	35	18	8	552
Disabled	8	7	5,013	0	0	5,028
Aged/Dual	0	2	156	3,237	13	3,408
Aged/Non-Dual	1	4	479	39	12,062	12,585
<b>Total</b>	<b>321</b>	<b>392</b>	<b>5,688</b>	<b>3,294</b>	<b>12,084</b>	<b>21,779</b>

Table 28. Month 6 Cross Tab of Two Versions of Enrollment Categories

<b>MONTH 6 (MAR/2015)</b>						
<b>ALR</b>	<b>CCLF</b>					<b>TOTAL</b>
	<b>NOT ELIGIBLE</b>	<b>ESRD</b>	<b>DISABLED</b>	<b>AGED/DUAL</b>	<b>AGED/NON-DUAL</b>	
Not Eligible	269	0	7	0	1	277
ESRD	109	382	32	21	8	552
Disabled	8	7	4,985	0	0	5,000
Aged/Dual	0	2	158	3,174	18	3,352
Aged/Non-Dual	2	4	481	73	12,036	12,596
<b>Total</b>	<b>388</b>	<b>395</b>	<b>5,663</b>	<b>3,268</b>	<b>12,063</b>	<b>21,777</b>

Table 29. Month 7 Cross Tab of Two Versions of Enrollment Categories

<b>MONTH 7 (APR/2015)</b>						
<b>ALR</b>	<b>CCLF</b>					<b>TOTAL</b>
	<b>NOT ELIGIBLE</b>	<b>ESRD</b>	<b>DISABLED</b>	<b>AGED/DUAL</b>	<b>AGED/NON-DUAL</b>	
Not Eligible	377	0	8	0	1	386
ESRD	115	412	34	22	12	595
Disabled	8	8	5,236	0	0	5,252
Aged/Dual	0	2	166	3,312	20	3,500
Aged/Non-Dual	2	5	532	106	13,346	13,991
<b>Total</b>	<b>502</b>	<b>427</b>	<b>5,976</b>	<b>3,440</b>	<b>13,379</b>	<b>23,724</b>

Table 30. Month 8 Cross Tab of Two Versions of Enrollment Categories

<b>MONTH 8 (MAY/2015)</b>						
<b>ALR</b>	<b>CCLF</b>					<b>TOTAL</b>
	<b>NOT ELIGIBLE</b>	<b>ESRD</b>	<b>DISABLED</b>	<b>AGED/DUAL</b>	<b>AGED/NON-DUAL</b>	
Not Eligible	487	0	15	0	1	503
ESRD	119	434	35	22	16	626
Disabled	8	10	5,478	0	0	5,496
Aged/Dual	0	2	176	3,484	14	3,676
Aged/Non-Dual	2	5	555	38	13,869	14,469
<b>Total</b>	<b>616</b>	<b>451</b>	<b>6,259</b>	<b>3,544</b>	<b>13,900</b>	<b>24,770</b>

Table 31. Month 9 Cross Tab of Two Versions of Enrollment Categories

<b>MONTH 9 (JUN/2015)</b>						
<b>ALR</b>	<b>CCLF</b>					
	<b>NOT ELIGIBLE</b>	<b>ESRD</b>	<b>DISABLED</b>	<b>AGED/DUAL</b>	<b>AGED/NON-DUAL</b>	<b>TOTAL</b>
Not Eligible	567	0	16	0	1	584
ESRD	115	431	36	22	17	621
Disabled	8	12	5,443	0	0	5,463
Aged/Dual	0	2	175	3,474	9	3,660
Aged/Non-Dual	2	5	553	43	13,837	14,440
<b>Total</b>	<b>692</b>	<b>450</b>	<b>6,223</b>	<b>3,539</b>	<b>13,864</b>	<b>24,768</b>

Table 32. Month 10 Cross Tab of Two Versions of Enrollment Categories

<b>MONTH 10 (JUL/2015)</b>						
<b>ALR</b>	<b>CCLF</b>					
	<b>NOT ELIGIBLE</b>	<b>ESRD</b>	<b>DISABLED</b>	<b>AGED/DUAL</b>	<b>AGED/NON-DUAL</b>	<b>TOTAL</b>
Not Eligible	646	1	18	0	1	666
ESRD	108	434	40	22	16	620
Disabled	8	12	5,428	0	0	5,448
Aged/Dual	0	2	163	3,416	23	3,604
Aged/Non-Dual	2	5	534	92	13,840	14,473
<b>Total</b>	<b>764</b>	<b>454</b>	<b>6,183</b>	<b>3,530</b>	<b>13,880</b>	<b>24,811</b>

Table 33. Month 11 Cross Tab of Two Versions of Enrollment Categories

<b>MONTH 11 (AUG/2015)</b>						
<b>ALR</b>	<b>CCLF</b>					
	<b>NOT ELIGIBLE</b>	<b>ESRD</b>	<b>DISABLED</b>	<b>AGED/DUAL</b>	<b>AGED/NON-DUAL</b>	<b>TOTAL</b>
Not Eligible	759	4	23	0	1	787
ESRD	0	617	30	3	13	663
Disabled	0	22	5,890	0	0	5,912
Aged/Dual	0	3	0	3,823	22	3,848
Aged/Non-Dual	0	6	0	60	15,274	15,340
<b>Total</b>	<b>759</b>	<b>652</b>	<b>5,943</b>	<b>3,886</b>	<b>15,310</b>	<b>26,550</b>

Table 34. Month 12 Cross Tab of Two Versions of Enrollment Categories

<b>MONTH 12 (SEP/2015)</b>						
<b>ALR</b>	<b>CCLF</b>					
	<b>NOT ELIGIBLE</b>	<b>ESRD</b>	<b>DISABLED</b>	<b>AGED/DUAL</b>	<b>AGED/NON-DUAL</b>	<b>TOTAL</b>
Not Eligible	838	6	28	1	5	878
ESRD	0	611	28	5	12	656
Disabled	0	22	5,854	0	0	5,876
Aged/Dual	0	3	0	3,837	12	3,852
Aged/Non-Dual	0	4	1	51	15,233	15,289
<b>Total</b>	<b>838</b>	<b>646</b>	<b>5,911</b>	<b>3,894</b>	<b>15,262</b>	<b>26,551</b>

## Appendix C: Acronyms

**ACO**—Accountable Care Organization

**ALR**—Assignment List Report

**CCLF**—Claim and Claim Line Feed

**CME**—Common Medicare Environment

**DBCR**—debit/credit table in the IDR (CMS data repository)

**DME**—Durable Medical Equipment

**DSH**—Disproportionate Share Hospital

**ESRD**—End Stage Renal Disease

**HHA**—Home Health Agency

**HICN**—Health insurance claim number

**IDR**—Integrated Data Repository

**IME**—Indirect Medical Education

**MBI**—Medicare Beneficiary Identifier

**NCBP**—Non-Claims Based Payments

**NE**—Not Eligible

**QEXPU**—Quarterly Expenditure/Utilization Report

**RNHCI**—Religious Non-Medical Health Care Institution

**SNF**—Skilled Nursing Facility

**SSAD**—Suppressed substance abuse data

**UCC**—Uncompensated Care

**XREF**—Beneficiary cross reference file in CCLFs (CCLF 9)

**XREF/Q**—Cross-referenced to the HICN that was used in the 2013 Q4 expenditure and utilization report.

**XREF/C**—Cross-referenced to the HICN that was used in the February 2014 CCLF cross-reference file.