Prospective and retrospective assignment in MSSP and beyond

Sam Shellabarger, FSA, MAAA Charlie Mills, FSA, MAAA Lance Anderson, ASA, MAAA

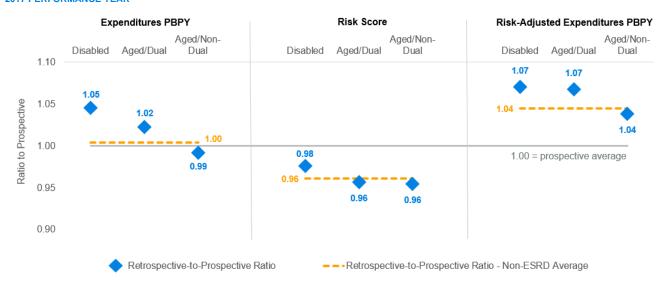


At the end of 2018 the Centers for Medicare and Medicaid Services (CMS) published the Pathways to Success final rule¹ for the Medicare Shared Savings Program (MSSP) giving accountable care organizations (ACOs) renewing July 1, 2019, or later the option to select between prospective and retrospective assignment of patients. This brief explores the potential effects of prospective and retrospective assignment on key ACO metrics under the MSSP.

How can assignment choice affect key ACO metrics?

Under prospective assignment, beneficiaries are assigned to an ACO based on services occurring prior to the performance year. Under retrospective assignment, beneficiaries are assigned to an ACO based on services occurring during the performance year. The effect of prospective versus retrospective assignment on key ACO metrics will differ by ACO. However, averages for assignment-eligible Medicare fee-for-service (FFS) beneficiaries can help provide understanding of how the two assignment methodologies affect results. Expenditures per beneficiary per year (PBPY), risk scores, and risk-adjusted expenditures PBPY are key metrics used in the calculation of an MSSP ACO's financial settlement. Figure 1 shows the difference in these key MSSP ACO metrics for the 2017 performance year, based upon our analysis of the Medicare 5% Sample data set.

FIGURE 1: DIFFERENCE IN KEY MSSP ACO METRICS UNDER RETROSPECTIVE VS. PROSPECTIVE ASSIGNMENT 2017 PERFORMANCE YEAR



Note: Values are calculated as retrospective / prospective for each metric. Dashed lines represent the average across all three included beneficiary types. Results for the ESRD population are excluded due to a lack of risk score data for these beneficiaries.

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¹ The full text of the Pathways to Success final rule is available at https://s3.amazonaws.com/public-inspection.federalregister.gov/2018-27981.pdf.

The relationship between average expenditures PBPY across non-End-Stage Renal Disease (ESRD) beneficiaries under the two assignment approaches varies by beneficiary type. However, the average risk scores under retrospective assignment are lower than under prospective assignment for all three types, resulting in higher risk-adjusted expenditures under retrospective assignment for all three non-ESRD beneficiary types. Specifically, Figure 1 shows the following:

- **Expenditures:** On average, retrospectively assigned beneficiaries had PBPY expenditures roughly equal to those of the prospectively assigned beneficiaries. However, this relationship varied by beneficiary type.
- Risk scores: Retrospectively assigned beneficiaries had risk scores that were approximately 4% lower than the prospectively assigned beneficiaries. This is likely because CMS-Hierarchical Condition Categories (HCC) risk scores are calculated using a prospective model, so the prospective assignment period overlaps closely with the diagnosis capture period, meaning prospectively assigned beneficiaries were likely to have at least one visit during the diagnosis capture period used to calculate their risk scores.
- **Risk-adjusted expenditures:** Overall, the risk score decrease combined with the roughly equal PBPY expenditures results in approximately 4% higher average risk-adjusted expenditures PBPY for the retrospectively assigned beneficiaries.

While there is some variance in the relationship of expenditures PBPY between retrospectively and prospectively assigned beneficiaries across the disabled, aged/dual, and aged/non-dual cohorts, the relationships of risk scores and risk-adjusted expenditures PBPY are directionally consistent. For all three cohorts, average risk scores are lower and average risk-adjusted expenditures PBPY are higher for retrospectively assigned beneficiaries than for prospectively assigned beneficiaries.

Figure 2 shows the time periods for retrospective assignment, prospective assignment, and diagnosis collection for risk adjustment. The overlapping time periods shown in Figure 2 help explain the relationships between retrospectively and prospectively assigned beneficiary populations. As demonstrated in Figure 2, the diagnosis code capture period overlaps with nine months of the prospective assignment period but is prior to the retrospective assignment period.

FIGURE 2: TIME PERIODS FOR PERFORMANCE YEAR 2017



PROVIDER SPECIALTY

The MSSP assignment methodology has two phases. The first phase assigns beneficiaries based on primary care services from primary care physicians (PCPs). If a beneficiary is not assigned in the first phase, then the beneficiary can be assigned based on primary care services performed by certain specialists.² In other words, primary care physicians receive priority over specialists in the MSSP assignment methodology. About 90% of assignment-eligible beneficiaries are assigned in the first phase to PCPs, and 10% are assigned to specialists.

Retrospective and prospective assignment have significantly different effects on the characteristics of the assigned populations for beneficiaries assigned to PCPs and specialists. Figure 3 shows these results.

² MSSP (February 2019). Shared Savings and Losses and Assignment Methodology. Retrieved January 15, 2020, from https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/Shared-Savings-Losses-Assignment-Spec-V7.pdf.

Table 9 (beginning on page 48) lists the primary care codes and services used in beneficiary assignment.

⁻ Table 10 (beginning on page 50) lists provider specialty codes that are considered primary care physicians (phase 1 of assignment) and specialists (phase 2 of assignment).

FIGURE 3: DIFFERENCE IN KEY MSSP ACO METRICS UNDER RETROSPECTIVE VS. PROSPECTIVE ASSIGNMENT

Beneficiary Type	Beneficiaries Assigned to PCPs			Beneficiaries Assigned to Specialists		
	Expenditures PBPY	Risk Score	Risk-Adjusted Expenditures PBPY	Expenditures PBPY	Risk Score	Risk-Adjusted Expenditures PBPY
Disabled	5%	-3%	8%	-7%	-2%	-5%
Aged/Dual	4%	-4%	8%	-20%	-5%	-16%
Aged/Non-Dual	0%	-5%	5%	-16%	-2%	-15%
Subtotal - Non-ESRD	1%	-4%	6%	-16%	-2%	-14%

Note: Values calculated as retrospective / prospective – 1. Values are rounded. The subtotal row is weighted by the overall distribution of beneficiary types, including beneficiaries assigned to both PCPs and specialists. Results for the ESRD population are excluded due to a lack of risk score data for these beneficiaries. "Beneficiaries Assigned to PCPs/Specialists" represent assignment-eligible beneficiaries who would have been assigned to a PCP (described as the "first phase" of assignment above) or a specialist (the "second phase").

As shown in Figure 3, the PCP results were largely consistent with the overall results from Figure 1 above, with retrospectively assigned beneficiaries having slightly higher expenditures PBPY, lower risk scores, and higher risk-adjusted expenditures PBPY. However, beneficiaries assigned to specialists had significantly different results. Under retrospective assignment, beneficiaries had PBPY expenditures that averaged 16% lower than those who were prospectively assigned. While prospectively assigned beneficiaries continued to have higher risk scores (by 2% on average), risk-adjusted expenditures were still 14% lower for beneficiaries assigned retrospectively to specialists.

Some potential reasons for beneficiaries retrospectively assigned to specialists having lower expenditures PBPY than beneficiaries prospectively assigned to specialists include:

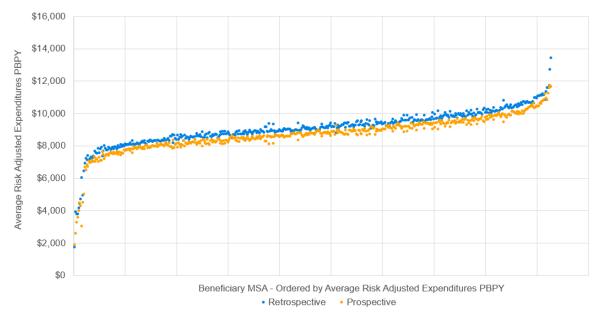
- Beneficiaries visiting a specialist (and not a PCP) may have greater future care needs, and therefore higher costs in the year after their assignment.
- Beneficiaries seeing specialists may have chronic conditions, which may cause costs to increase as they age.

In our analysis, we used the Medicare 5% Sample data set for performance years 2015, 2016, and 2017. We found the relationships described above to be consistent in all three years.

BENEFICIARY AREA

Figure 4 shows the risk-adjusted expenditures PBPY by beneficiary metropolitan statistical area (MSA) under retrospective and prospective assignment, sorted low to high by average risk-adjusted expenditures PBPY. Overall, we see a consistent pattern of risk-adjusted expenditures PBPY being higher under retrospective assignment than under prospective assignment.

FIGURE 4: 2017 RISK-ADJUSTED EXPENDITURES PBPY BY BENEFICIARY MSA UNDER RETROSPECTIVE AND PROSPECTIVE ASSIGNMENT



Note: Results are limited to the non-ESRD population.

Prospective versus retrospective assignment

SHORT PRIMER

An ACO's choice between prospective and retrospective assignment is a choice of the time period (referred to as "assignment window") used to assign beneficiaries to the ACO. MSSP assigns patients to ACOs based on having a plurality of primary care services during the assignment window, with preference given to primary care providers, rather than specialists. Additionally, beneficiaries have the opportunity to designate a primary care provider as responsible for coordinating their overall care. This voluntary alignment occurs prospectively, and must occur by October 31 to be effective for the following performance year.

Eligibility for assignment: To be eligible for assignment, beneficiaries must meet the conditions outlined in Figure 5 during the assignment window. Additionally, for prospective assignment, beneficiaries must also meet the requirements in the performance year.

FIGURE 5: ELIGIBILITY REQUIREMENTS FOR MSSP ASSIGNMENT

- 1. Must have at least one month of Part A and Part B enrollment, and no months of Part A only or Part B only coverage
- 2. Must not have any months of Medicare group (private) health plan enrollment (e.g., Medicare Advantage plan)
- 3. Must reside in the United States or U.S. territories and possessions
- 4. Must not be assigned to any other Medicare shared savings initiatives
- 5. Must not die prior to the performance year (impacts prospective assignment only)

Prospective assignment window: The 12-month period ending September 30 prior to the performance year. If an ACO selects prospective assignment, then services performed during the 12-month period ending September 30 prior to the performance year are used for assignment. Under prospective assignment, all of an ACO's assigned beneficiaries are known at the start of the performance year, with limited exceptions (e.g., beneficiaries who sign up later for a Medicare Advantage plan will be removed from the final list of assigned beneficiaries).

Retrospective assignment window: The 12-month performance year. If an ACO selects retrospective assignment, then services performed during the performance year (i.e., January 1 to December 31 of the performance year) are used for assignment. CMS provides the ACO with ongoing snapshots of its assigned beneficiaries based on emerging experience, but the final list of assigned beneficiaries is not known until after the performance year is complete.

Advantages of each assignment methodology:

- Prospective assignment advantages:
 - Assignment is known in advance: Allows the ACO to know which patients it is managing at the start of the performance year.
 - Priority over retrospective assignment: Prospective assignment has priority over retrospective assignment, so
 prospectively assigned beneficiaries cannot be retrospectively assigned to another ACO during the performance
 year (note that voluntary alignment takes precedence over both prospective and retrospective assignment³).
- Retrospective assignment advantages:
 - Ensures that patients visit ACO providers during the performance year: Ensures that the ACO providers are seeing the
 patients assigned to the ACO during the performance year.
 - Larger pool of assigned beneficiaries: Retrospective assignment generally results in a larger number of assigned beneficiaries because beneficiaries are only required to be eligible during the performance year, while under prospective assignment beneficiaries require eligibility under both the performance year and the assignment period (i.e., the 12-month assignment period, plus the three-month gap, plus at least one month of eligibility in the performance year).

³ Under MSSP, voluntary alignment is always applied prospectively regardless of the ACO's selection of prospective or retrospective claims-based assignment. Beneficiaries' selected primary clinician as of October 31 prior to the performance year is used.

Differences in assigned populations

Retrospective assignment includes all beneficiaries in a given calendar year with the following conditions:

- 1. At least one primary care service from a primary care provider or provider whose specialty is included in the list of assignable provider types
- 2. At least one month of Part A and Part B coverage
- 3. Reside in the United States
- 4. Do not have any months of Part A only, Part B only, or Medicare Advantage enrollment.

Prospective assignment starts with the same conditions in the assignment window, but additionally requires that beneficiaries must not die until at least the start of the performance year, and must not have any months of Part A only, Part B only, or Medicare Advantage enrollment during the performance year. Hence, the total beneficiaries remaining eligible for prospective assignment in the following year are a subset of those eligible for retrospective assignment in any given year, as seen in Figure 6.

FIGURE 6: BENEFICIARIES ELIGIBLE UNDER EACH ASSIGNMENT METHODOLOGY

	Prospective Assignment	Retrospective Assignment
Assignment window	Oct 2015 - Sep 2016	CY2016
Performance year	CY2017	CY2016
All beneficiaries	100.0%	100.0%
Ineligible beneficiaries ¹	-4.6%	-2.9%
Beneficiaries without eligible visit in assignment window ²	-15.9%	-16.7%
Beneficiaries not eligible during performance year ³	-6.8%	0.0%
Percent of beneficiaries meeting all assignment criteria	72.6%	80.4%

- 1 Beneficiaries not meeting eligibility requirements (see Figure 5 above) during the entire assignment window.
- 2 Without at least one primary care service with a specialty included in list of assignable provider types.
- 3 Beneficiaries not continuing to meet eligibility requirements through performance year (prospective only).

Using the Medicare 5% Sample data set, we can calculate how many beneficiaries were eligible for assignment to an ACO during a particular performance year. In the example in Figure 6, the assignment windows overlap for nine of 12 months under prospective and retrospective assignment, resulting in a similar pool of beneficiaries to start with. However, prospective assignment would have assigned approximately 8% fewer beneficiaries than retrospective assignment. This is likely because prospective assignment has a longer period of time in which beneficiaries can lose assignment eligibility (e.g., a beneficiary can be excluded for enrolling in a Medicare Advantage plan during the assignment window or during the performance year).

The relationship between retrospectively and prospectively assigned beneficiaries becomes more complicated when looking at beneficiaries assigned to a specific ACO, rather than looking at the entire assignment-eligible population. For one, prospective assignment takes precedence over retrospective assignment, so any beneficiaries assigned to different ACOs prospectively during the prior period will not be eligible for retrospective assignment to a given ACO. Additionally, beneficiaries that had the plurality of their primary care services at a given ACO in a given year may not necessarily behave the same way the following year, leading to differences between the retrospectively and prospectively assigned beneficiary lists.

FINANCIAL IMPLICATIONS

Prospective and retrospective assignment will ultimately affect the population that is assigned to an ACO, because some beneficiaries who are assigned under prospective assignment are not assigned under retrospective assignment and vice versa. The choice between these assignment methodologies can have subtle effects on the ACO's overall benchmark, risk score, and performance year costs. Note that the choice of assignment methodology not only affects the performance year, but also affects the historical baseline. For example, if an ACO decides to switch to prospective assignment for its second performance year, the historical benchmark will be restated to also use prospective assignment.

Looking ahead: Voluntary alignment

Starting with performance year 2018, voluntary alignment became part of MSSP. Additionally, CMS's latest payment model options, Primary Care First and Direct Contracting, also incorporate voluntary alignment. Voluntary alignment occurs when a beneficiary selects an ACO practitioner on MyMedicare.gov or by completing a paper-based form. Voluntary alignment can create differences in the alignment methodology between the base period used to develop an ACO's benchmark and the performance period. The effect of voluntary alignment on key metrics depends on how it is incorporated into a program and the number and characteristics of beneficiaries who voluntarily align.

Under MSSP, voluntary alignment is based on the beneficiary's selected primary clinician prior to the performance year or benchmark year, regardless of whether the ACO selects prospective or retrospective claims-based assignment. Therefore, voluntary alignment is always prospective under MSSP. Additionally, CMS first utilized voluntary alignment with the 2018 performance year and similarly for the 2018 baseline.

Under Direct Contracting, prospective alignment is paired with options around voluntary alignment:

- Prospective alignment: Prospective claims-based alignment and voluntary alignment occur prior to the start of the performance year.
- Prospective plus alignment: Direct Contracting entities (DCEs) may add beneficiaries on a quarterly basis throughout the performance year who voluntarily align to the DCE.

Direct Contracting does not allow retrospective alignment like MSSP. However, the prospective plus alignment option gives DCEs the opportunity to add beneficiaries during the performance year, one of the key features of retrospective assignment.

Conclusion

Under the Pathways to Success rule, MSSP ACOs have the choice of prospective or retrospective assignment. While in general this choice is expected to have similar effects on both the historical baseline as well as the performance years, ACOs with prospective assignment may have higher risk scores and lower risk-adjusted expenditures PBPY. However, the ultimate impact on the financial settlements of prospective and retrospective assignment will be ACO-specific, and should be evaluated in conjunction with the operational differences between the two assignment methodologies. Voluntary alignment adds a new dimension, which may have different effects on an ACO's benchmark and performance year costs, potentially adding to the uncertainty of the financial settlement.



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CONTACT
Sam Shellabarger
sam.shellabarger@milliman.com

Charlie Mills charlie.mills@milliman.com

Lance Anderson
lance.anderson@milliman.com