## Refining Medicare FFS expenditure projections in ACO REACH: Seasonality and completion

Tyler Edwards, ASA, MAAA Scott Jones, FSA, MAAA Chris Smith, FSA, MAAA



Accountable care organizations (ACOs) participating in the ACO Realizing Equity, Access, and Community Health (ACO REACH) model frequently monitor and project the total cost of care of their assigned beneficiaries. Incorporating refined claims seasonality and completion assumptions is critical for ACOs to accurately project financial performance.

## ACO REACH Reference Population

The ACO REACH Reference Population consists of approximately 27 million Medicare fee-for-service (FFS) beneficiaries who meet the eligibility criteria for the REACH program (approximately 90% of the total FFS population), outlined in Appendix 1. The Reference Population is refreshed by the Centers for Medicare and Medicaid Services (CMS) on a monthly basis and includes newly eligible Medicare age-ins of that month. For this reason, the Reference Population is considered an "open" cohort. Because it is a large subset of the total traditional Medicare FFS population, broad insights can be gained by reviewing the claim processing speeds and monthly seasonality patterns of the Reference Population.

The Reference Population serves as the basis for risk score normalization in ACO REACH, as well as the population upon which the retrospective trend adjustment (RTA) is calculated.<sup>1</sup> CMS releases a monthly file with emerging enrollment and claims experience of the Reference Population, which is a rich source of data for understanding claims seasonality (as well as the emerging RTA calculation). While the Reference Population is related to the ACO REACH *aligned* population (i.e., the beneficiaries who are actually aligned to an ACO),<sup>2</sup> it is distinct. Understanding the differences between these populations is needed to help ACOs monitor and project financial performance.

## Claims seasonality

In this paper we define "claims seasonality" as the relationship between (a) the incurred claims per beneficiary per month (PBPM) in each month of a calendar year (CY), and (b) the annual average incurred claims PBPM. There are a number of factors influencing claims seasonality, such as population risk, working days, external factors, etc. Figure 1 illustrates the raw seasonality of the Reference Population, while Figure 2 illustrates how controlling for simply the number of working days in a month explains much of the observed seasonality in the REACH Reference Population.

<sup>1.</sup> For more Milliman publications on the RTA, see Appendix 2.

<sup>2.</sup> See the "ACO REACH Aligned Population" section for more details, in the Milliman white paper "ACO REACH Risk Scores: Performance Year Development," available at https://www.milliman.com/en/insight/aco-reach-risk-scores-performance-year-development.

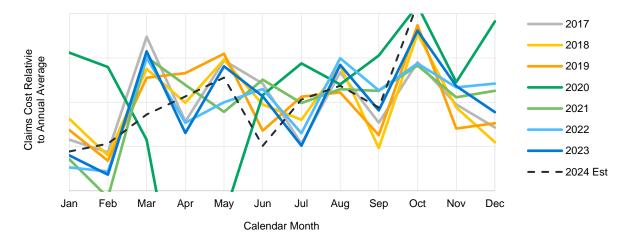
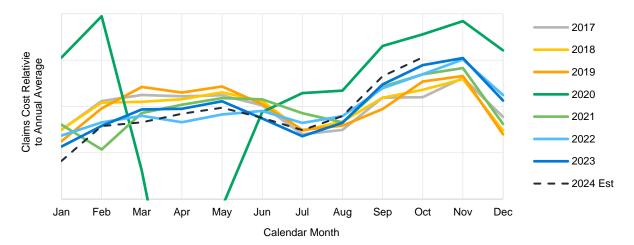


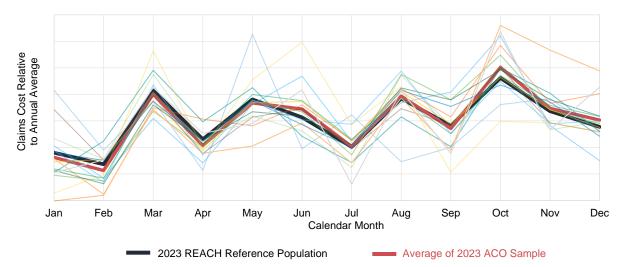
FIGURE 1: MONTHLY SEASONALITY, AGED/DISABLED REFERENCE POPULATION

FIGURE 2: MONTHLY SEASONALITY, AGED/DISABLED REFERENCE POPULATION (ADJUSTED FOR WORKING DAYS)



Adjusting for monthly working days is one refinement we make when helping ACO clients project claims expenditures. Another adjustment accounts for the number of payment days each month (which affects claims runout). Without accounting for this, ultimate incurred claims in a given month can fluctuate materially from CMS reported "completed" claims, based on incurred but not reported (IBNR) factors in the quarterly benchmark reports. All these adjustments can help create more stable, predictable expenditure projections, which in turn help ACOs identify true patterns in their populations' experience.

As mentioned previously, the ACO REACH Reference Population and ACO REACH aligned population are different but related. Their monthly seasonality patterns are strongly correlated, which is demonstrated below using a sample of 15 ACOs (making up over 20% of all 2023 REACH beneficiaries). Figure 3 shows the results of the comparison, where each thin line represents an individual ACO's claim seasonality, the thick red line represents the raw average ACO seasonality (for this sample of ACOs), and the black line represents the 2023 Reference Population's adjusted seasonality (corresponding with the 2023 line in Figure 1 above).





ACO seasonality tends to increase more than in the Reference Population throughout the year. Notice how in Figure 3 the red line (ACO sample average seasonality) has a steeper positive slope than the black line (Reference Population seasonality). This aligns with our expectation as the Reference Population is an open cohort while the aligned population is closed—as a closed group, ACO aligned beneficiaries' costs throughout the year reflect the impact of aging and mortality differently than the Reference Population.

Further, when evaluating ACOs by risk level we observed that the lower-risk ACOs' seasonality tended to increase relative to the Reference Population more than higher-risk ACOs. This also aligns with expectations because each closed group of beneficiaries is aligned prospectively and beneficiaries' risk scores are on a prospective basis (i.e., 2023 risk scores are based on 2022 diagnoses). The net impact of aging, the progression of health conditions, and the impact of mortality leads to a marginally steeper seasonality slope among lower-risk ACO populations than among higher-risk populations. This highlights yet another way that ACOs can segment their data to account for the differences between the Reference Population and their aligned beneficiaries in order to more accurately anticipate seasonality.

## Financial monitoring and projections

As ACOs monitor their financial performance, it is important to understand when month-over-month movement is expected or unexpected by controlling for the previously mentioned factors. Additionally, it is important to understand why and how claims experience will deviate from that of the Reference Population. ACOs can create stable projections of emerging experience by applying suitably calibrated completion and annualization adjustments—for example, Figure 4 shows actual 2024 year-to-date seasonality for 13 ACOs and their average versus what we estimated at the beginning of performance year (PY) 2024. The expected October spike seems abnormal initially, but it is largely due to both (a) the relatively large number of working days, plus (b) historically higher healthcare needs per day occurring in October.

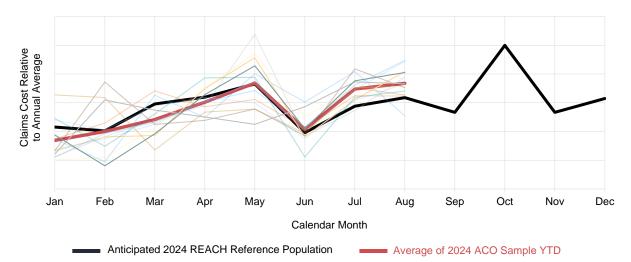


FIGURE 4: MONTHLY SEASONALITY IN 2024, AGED/DISABLED REFERENCE POPULATION AND SAMPLE ACO EXPERIENCE

Another consideration for ACOs as they monitor financial performance is claims completion (i.e., how quickly claims are paid upon submission to CMS). As seen in Figure 5, illustrating historical completion levels after five months of runout, historical completion patterns had been very stable across the 2017-2021 period. Beginning in 2022 and 2023, there was a deviation in this pattern, where there tended to be a longer runout period, and this appears to be continuing in 2024. Understanding this dynamic is important for ACOs to account for as they adjust the expenditures they see in monthly and quarterly reports from CMS because CMS relies on historical completion assumptions—for example the 2024 monthly RTA data has relied on completion estimates from 2018 and 2019.<sup>3</sup>

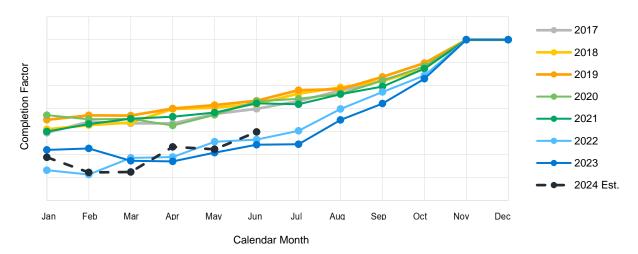


FIGURE 5: PERCENTAGE COMPLETE AFTER FIVE MONTHS OF RUNOUT, COMPARED TO FULL RUNOUT THROUGH MARCH OF THE NEXT YEAR, BY CALENDAR MONTH AND YEAR

In ACO REACH, claims expenditures are truncated after March following the performance year, so November/December experience each year is considered fully "complete" after five months. The "2024 Est." line in Figure 5 shows the estimated levels so far in CY 2024, reflecting known claims paid through December and forecasted runout from January to March.

See the "CMS Interim RTA Estimates" section in the Milliman white paper "PY2025 ACO REACH RTA Tailwind," available at https://www.milliman.com/en/insight/py2025-aco%20reach%20rta%20tailwind.

### Conclusion

ACOs that seek to monitor and project financial performance in ACO REACH more accurately should develop a deeper understanding of how their beneficiaries' claims experience is correlated with that of the ACO REACH Reference Population and other factors. Understanding this as well as performance year considerations (e.g., claims completion) is necessary for ACOs to monitor and better project financial performance. Please contact your Milliman consultant if you would like to learn more about how this modeling can help your ACO.

## Solutions for a world at risk<sup>™</sup>

Milliman leverages deep expertise, actuarial rigor, and advanced technology to develop solutions for a world at risk. We help clients in the public and private sectors navigate urgent, complex challenges—from extreme weather and market volatility to financial insecurity and rising health costs—so they can meet their business, financial, and social objectives. Our solutions encompass insurance, financial services, healthcare, life sciences, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

milliman.com

#### CONTACT

Tyler Edwards tyler.edwards@milliman.com

Scott Jones scott.jones@milliman.com

Chris Smith chris.v.smith@milliman.com



© 2025 Milliman, Inc. All Rights Reserved. The materials in this document represent the opinion of the authors and are not representative of the views of Milliman, Inc. Milliman does not certify the information, nor does it guarantee the accuracy and completeness of such information. Use of such information is voluntary and should not be relied upon unless an independent review of its accuracy and completeness has been performed. Materials may not be reproduced without the express consent of Milliman.

# Appendix 1: Eligibility Criteria for the ACO REACH National Reference Population<sup>4</sup>

- The beneficiary is alive on the first day of the month.
- The beneficiary is enrolled in Part A and Part B.
- The beneficiary is enrolled in traditional FFS Medicare (e.g., not enrolled in Medicare Advantage or a Medicare managed care plan).
- The beneficiary has Medicare listed as the primary payer.
- The beneficiary is a U.S. resident.

## Appendix 2: Prior Milliman Publications Related to the ACO REACH RTA

- Emma Kramer and David Byron; The retrospective trend adjustment in Direct Contracting and ACO REACH: A brief explanation; December 2022; https://www.milliman.com/en/insight/retrospective-trend-adjustment-direct-contracting-aco-reach
- Anushka Desai and Caroline Li; The retrospective trend adjustment in ACO REACH: What's new in PY 2024?; May 2024; https://www.milliman.com/en/insight/rta-aco-reach-whats-new-py-2024
- Scott Jones, Chris Smith, and Tabish Shaikh; The retrospective trend adjustment: Looking back, looking forward; April 2024; https://www.milliman.com/en/insight/retrospective-trend-adjustment-looking-back-looking-forward
- Caroline Li, Scott Jones, and Chris Smith; PY2025 ACO REACH RTA tailwind; January 2025; https://www.milliman.com/en/insight/py2025-aco-reach-rta-tailwind

<sup>4.</sup> CMS. FAQs: Benchmarking. Retrieved February 12, 2025, from https://app1.innovation.cms.gov/s/model-faq/a9Bt00000004CBgEAM/benchmarkingfinancial-methodology.