



ACOs and Bundled Payment Models – Better Together or Apart?

Abstract

The Center for Medicare and Medicaid Services (CMS) is considering options for integrating bundled payment with ACO models, raising important questions about how these distinct payment models fit together. A major challenge is how to reconcile finances when the two models overlap. The approach used by the CMS's original Bundled Payment for Care Improvement (BPCI) model could change ACOs' shared savings adding a new source of financial uncertainty. Bundle models work best for high volume providers. Those with low volumes face random variation in spending that could generate large gains or losses regardless of how well episodes are managed. Much of ACO patients' specialty care is provided by non-ACO physicians and most ACOs have low volumes for most episodes, which limits the potential benefit from including ACO patients in episode models. A principal objective of the CMS's plan to integrate models is to drive collaboration between ACO primary care physicians and specialists. We worry that hospitals and specialists have insufficient incentive to collaborate with ACOs or share bundled payment savings with them. To align the two models, we believe CMS should require hospitals and specialists to enter formal relationship with ACOs before ACO patients are included in their bundle model.

Introduction

Two of the principle alternative payment models (APMs) implemented by the Centers for Medicare and Medicaid Services (CMS) are accountable care organization (ACO) models like the Medicare Shared Savings Program (MSSP) and episode payment models like Bundled Payment for Care Improvement Advanced (BPCI-A). The MSSP rewards organizations for managing the total cost of care for a population of beneficiaries over a full year while BPCI-A rewards groups that manage spending for clinical episodes of care that include an acute hospitalization or outpatient procedure plus most care provided during a 90-day post-discharge period.

Medicare ACOs and bundled payment models have existed largely independent of each other. ACO models have attracted organizations with large primary care or multi-specialty group practices while bundle models have primarily drawn hospitals and certain types of physician groups like hospitalists and orthopedic surgeons. Historically, most organizations only participated in one model although some health systems have participated in both simultaneously.

Recently, CMS, MedPAC and others have begun considering options for integrating episodic payments and ACO models, raising important questions about how these distinct payment models fit together. Historically, a major challenge has been how to reconcile the finances when the two models overlap. Research has shown that when bundled payments overlap with ACOs, medical episode costs are lower and readmissions decline for both medical and surgical episodes.[1] But when ACOs manage post-acute care more effectively than the hospitals that trigger overlapping episodes, the historical method of reconciling the two models could increase ACO costs and reduce their shared savings.[2]

Introduction (cont.)

Because of this reconciliation problem, the CMS excluded beneficiaries in Pioneer and Next Generation ACO models from the original BPCI program. However, MSSP ACO beneficiaries were allowed to trigger episodes – in part because the final list of beneficiaries retrospectively assigned to MSSP ACOs is not known until the end of the year. Beginning in 2018, the MSSP and new BPCI-A model were reconciled independently, eliminating the financial interaction between the two programs but likely creating some duplicative incentive payments.

In July 2023, CMS issued a request for information (RFI) seeking input on the design of future episode payment models. The RFI acknowledged that model overlap could negatively affect ACOs' year-end financial reconciliation and but clearly stated a preference not to exclude ACO beneficiaries from the bundle model or continue making duplicative incentive payments. Specifically, it said that "episode-based payment incentives must be aligned across model to encourage intentional overlap, promote coordination, and facilitate seamless transition back to primary care."^[3]

In this article, we analyze the extent of potential overlap between BPCI episodes and MSSP ACOs and discuss whether a policy of intentional overlap is likely to be effective in promoting coordination between specialists and ACO primary care providers.

The Potential for Combining Episodes with ACO Models

ACOs have historically focused on building high performing primary care practices and proactively managing care to reduce hospitalizations and expensive post-acute facility stays. However, specialists account for sixty-two percent of Medicare outpatient visits which often give rise to expensive diagnostic services, procedures, and drug therapies.^[i] Therefore, even successful ACOs still incur substantial specialty care costs. Developing strategies to help ACOs manage specialty care is an important policy objective.

Last year the Center for Medicare and Medicaid Innovation (CMMI) proposed a strategy to support value-based specialty care with four elements: 1) providing data on specialist performance to ACOs and primary care providers; 2) developing episode payment models to align incentives between specialists and ACOs; 3) creating new primary care models with support for e-consults and enhanced referrals; and 4) setting procedure or condition-based spending targets within ACOs overall benchmarks.^[ii]

Sharing data on specialist performance could help ACOs identify improvement opportunities for their own hospitals and specialists and identify high-performing hospitals and specialists for referral partnerships. But to be useful the data should provide visibility into medical specialists' full book of Medicare business and not just their ACO business which may be very limited.

ACOs already have the option to participate in CMS bundled payment models and in the past some health system ACOs did so. In these cases, savings or losses from both programs are absorbed by the same organization, although there may be substantial internal disputes about how to distribute savings. CMS now appears to be considering a mandatory bundled payment model that overlaps with ACOs in the hope that this will force collaboration with episode initiators.

The Potential for Combining Episodes with ACO Models (cont.)

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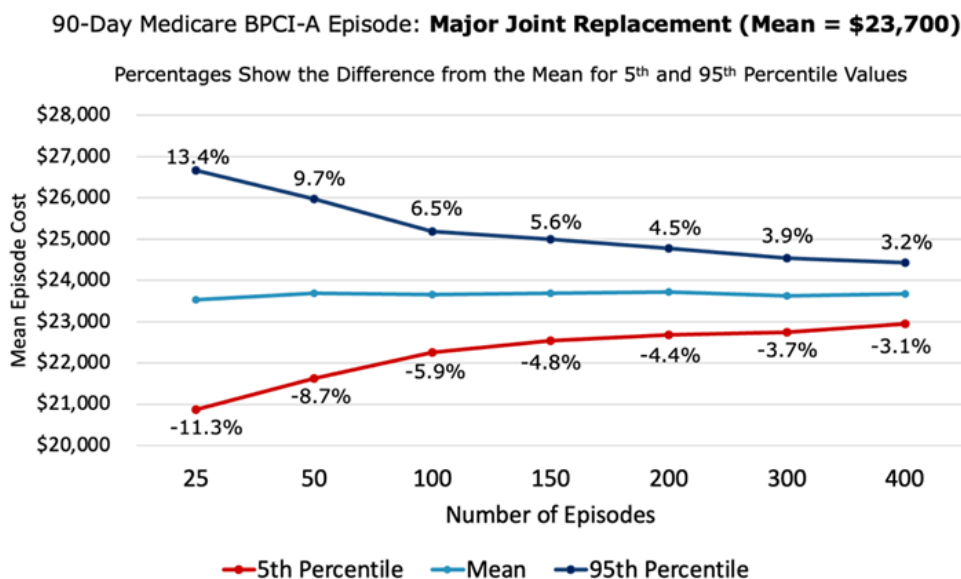
The Challenge of Low Episode Volume

Episode payment can create strong incentives for efficiency but may be counterproductive when organizations lack enough episode volume to generate reliable spending estimates. Even if prices are set using multiple years of data or market-wide averages, low-volume groups that take risk for bundled payment can generate large annual gains or losses due to random variation in patient complexity unrelated to their performance managing episodes of care. This is true whether the entity is a hospital, physician group, or an ACO.

To illustrate the problem of random variation we analyzed 90-day Medicare episodes of care for major joint replacement and congestive heart failure (CHF). We selected a large metropolitan area, identified all 2021 cases that could have qualified as BPCI-A episodes and constructed 90-day risk-standardized episodes based on BPCI-A specifications. We then conducted a simulation to test the variation in mean episode costs that would occur under different volume scenarios. For each scenario (e.g., 25, 50, 100, 400 episodes) we drew 1,000 random samples from the pool of episodes and graphed the 95th and 5th percentiles of observed spending relative to the mean across the scenarios.

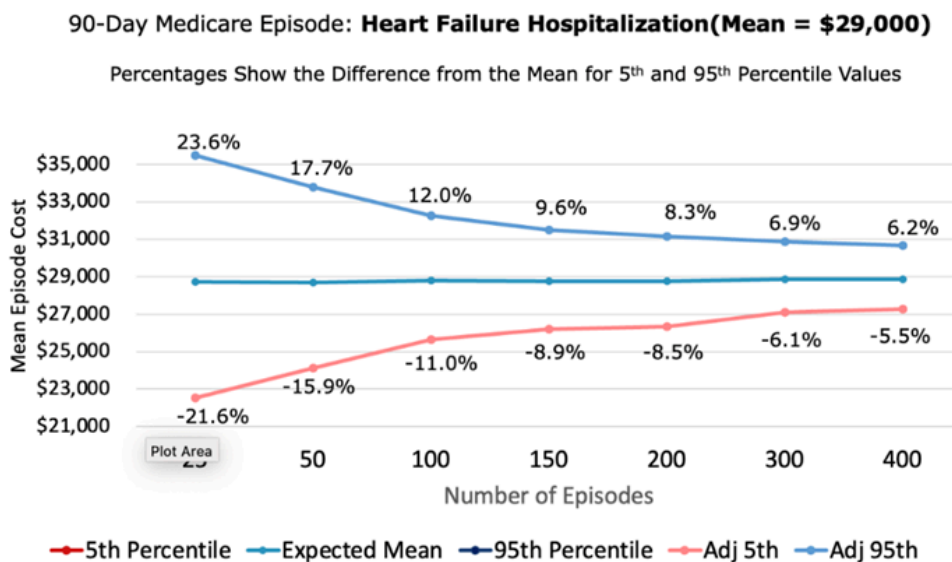
Exhibit 1 shows that average risk adjusted spending for a provider group with 25 joint replacement episodes would range from 13.4% above the expected mean to 11.3% below it with 90% confidence prior to any change in clinical practice. In contrast, a group with 400 joint replacement episodes would see average spending ranging from 3% above and below the mean. Acute medical episodes generally have more random variation (Exhibit 2). A group responsible for 25 heart failure episodes could experience random spending variation from about 24% above the expected mean to 22% below it. For a group with 400 episodes the range narrows from positive 6% to negative 6%.

Exhibit 1: Distribution of Major Joint Replacement Episode Spending by Volume



Source: Institute for Accountable Care analysis of 2021 Medicare claims data using BPCI-Advanced episodes.

Exhibit 2: Distribution of congestive heart failure episode spending by volume



Source: Institute for Accountable Care analysis of 2021 Medicare claims data using BPCI-Advanced episodes.

This analysis shows that an organization with low episode volume can make or lose a lot of money because of random variation. To avoid losing money bundled payment participants need to be confident that they can reduce the mean cost of the episodes they manage by at least the percentage shown at the outside of the distribution (i.e., 95th percentile). For low-volume providers this is a high bar. Policymakers should be circumspect about requiring low volume entities to take financial risk for episodes.

Exhibit 3: Number and percent of 2021 Accountable Care Organizations with at least 100 cases of selected BPCI-Advanced episodes

BPCI-Advanced Episode	Number of ACOs	Percent of ACOs
Pneumonia and respiratory infections	391	82.30%
Major joint replacement (lower)	386	81.30%
Sepsis	363	76.40%
Congestive heart failure	225	47.40%
Stroke	141	29.70%
Cardiac arrhythmia	130	27.40%
PCI (outpatient)	114	24.00%
Gastrointestinal hemorrhage	112	23.60%
Urinary tract infection	117	24.60%
Renal failure	109	22.90%
Spinal fusion	87	18.30%
Hip & femur repair expect for major joint	94	19.80%
Acute myocardial infarction	84	17.70%
PCI (inpatient)	89	18.70%
Major bowel procedure	69	14.50%
COPD, bronchitis and asthma	72	15.20%

Taking risk for episode payment can be practical for ACOs that have hospitals or large employed specialty groups. But specialty care is often highly fragmented and most of the specialty care ACO beneficiaries receive is from clinicians outside of the ACO. Even if an ACO is big enough to have a high volume of a particular episode, the care could potentially be provided by dozens of unrelated specialists.

One approach to increasing episode volume would be to follow the BPCI-A approach of requiring participants to select from eight clinical episode groups rather than individual episodes. For example, participants would have to select all episodes in the Cardiac Care group which includes acute myocardial infarction (AMI), cardiac arrhythmia and CHF. Requiring participation in a portfolio of episodes reduces the risk of random variation at the risk-bearing entity level (e.g., hospital or ACO) but does put more spending at risk. However, requiring participants to bear risk for entire service lines could be politically controversial in a mandatory episode model.

Advancing Policy to Improve the Cost and Quality of Specialty Care in ACOs

Creating episode-payment models that can be integrated into total-cost-of-care models is a worthy goal, but there is no clearly effective approach. One incremental strategy is to shorten episodes from 90- to 30-days to reduce the dollars at risk. Shorter bundles are probably sensible with respect to holding hospitals accountable since an important aspect of managing episodes of care is active engagement by hospital discharge planners to coordinate the transition from hospital to post-acute care or home, which mostly takes place in the first 30 days after discharge.

We analyzed the impact of shortening BPCI episodes from 90 days to 30 days for congestive heart failure (CHF) and major joint replacement episodes (Exhibit 4). Moving from 90- to 30-day bundles reduces the mean cost of CHF episodes by 33 percent from \$29,705 to \$19,781 and the mean cost of joint replacement bundles by 13% from \$24,749 to \$21,357. However, 30-day episodes have only modestly lower coefficients of variation than 90-day episodes. So shorter episodes will lessen the magnitude of bundled payment overlap with ACOs but will not solve the problem of random variation.

Exhibit 4: Comparison of 2022 Medicare 30-day and 90-day BPCI-Advanced episode costs

Episode Name	Episode length	Cases	Mean Cost per Case	Standard Deviation	Coefficient of Variation
Congestive Heart Failure	90-day episode	172,234	\$29,919	\$23,919	0.8
	30-day episode	228,841	\$19,781	\$14,079	0.71
Major Joint Replacement	90-day episode	420,690	\$24,749	\$20,226	0.82
	30-day episode	439,800	\$21,357	\$15,363	0.72

If CMS wants to create incentives for better coordination between ACOs and specialists, we don't think that mandatory bundled payment programs that overlap with ACOs is the right strategy. This is because hospitals and specialists have little incentive to collaborate with or share savings with an ACO. The best way to align the two models is to require an explicit relationship between the hospital or specialist initiating the episode and the ACO. That would mean that any hospital or specialist that wants to include ACO beneficiaries in their bundles would need a formal agreement where the parties agree on how to share the risk, coordinate care, and distribute bonuses. Otherwise ACOs should have an option to have their beneficiaries excluded from bundled payment models.

The benefit of this approach is that it creates strong incentives for specialists and hospitals to develop relationships with ACOs. Under current CMS policy the responsibility for establishing those relationships lies primarily with the ACO. While many ACOs want to build stronger alignment, hospitals and specialists' control most of the health systems' resources and are still primarily paid fee-for-service, making it easy for them to ignore ACOs. The concept of placing bundled payments under a total cost of care umbrella is attractive since it would create incentives for managing episode volume in addition to increasing episode efficiency.

Unfortunately, our analysis suggests that taking risk on episodes isn't practical for many ACOs, and creating mandatory overlap will inject financial uncertainty in a program that has struggled to grow since 2018. Requiring formal relationships between ACOs and bundle participants would spur new partnerships although it would create some new administrative effort and result in fewer total Medicare beneficiaries enrolled in bundles. But that is a small price to pay for a policy that creates real incentives for specialists to collaborate with ACOs.

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[1] Navathe AS, Liao JM, Wang E, et al. Association of Patient Outcomes with Bundled Payments Among Hospitalized Patients Attributed to Accountable Care Organizations. *JAMA Health Forum*. 2021;2(8):e212131. doi:10.1001/jamahealthforum.2021.2131

[2] Mechanic RE. When New Medicare Payment Systems Collide. *N Engl J Med* 2016; 374:1706-1709.

[3] Center for Medicare and Medicaid Services. Request for Information: Episode-based Payment Model. 88 Federal Register 45872 (July 17, 2023). Accessed at <https://www.federalregister.gov/documents/2023/07/18/2023-15169/request-for-information-episode-based-payment-model> on October 10, 2023.

[4] Barnett ML, Bitton A, Souza J, Landon BE. Trends in Outpatient Care for Medicare Beneficiaries and Implications for Primary Care, 2000–19. *Ann Intern Med*. 2021 Dec; 174(12): 1658–1665. DOI:10.7326/M21-1523

[5] Fowler L, Rawal P, Fogler S, Waldersen B, O'Connell M, Quinton J. The Innovation Center's Strategy to Support Person-centered, Value-based Specialty Care. Center for Medicare and Medicaid Services: Baltimore MD. November 2022. Accessed at <https://www.cms.gov/blog/cms-innovation-centers-strategy-support-person-centered-value-based-specialty-care> on October 17, 2023.

[6] Center for Medicare and Medicaid Services. Medicare Shared Savings Program Performance Year 2022 Financial and Quality Results. Accessed at <https://data.cms.gov/medicare-shared-savings-program/performance-year-financial-and-quality-results> on October 3, 2023.

[7] Barnett ML, McWilliams JM. Changes in Specialty Care Use and Leakage in Medicare Accountable Care Organizations. *Am J Manag Care*. 2018;24(5):e141-e149.