

Overview

The Centers for Medicare and Medicaid Services' (CMS) Center for Medicare and Medicaid Innovation (Innovation Center) was established by section 1115A of the Social Security Act with the purpose of testing innovative payment and service delivery models to reduce program expenditures while preserving or enhancing the quality of care furnished to beneficiaries. Since 2013, the Innovation Center has tested seven models in the category of episode payment initiatives. These model tests include the four Bundled Payments for Care Improvement (BPCI) Models (referred to in combination as the BPCI Initiative or BPCI Classic), the Comprehensive Care for Joint Replacement (CJR) Model, the Oncology Care Model (OCM), and the BPCI Advanced Model. In general, providers involved in these episode payment models (except BPCI Model 4) continue to receive standard Medicare fee-for-service (FFS) rates for services furnished to beneficiaries during episodes of care. Payments received during the episode of care are retrospectively compared to target prices set by CMS. Participantsⁱ may receive additional payments if the actual costs of an episode are less than the prospectively determined target price (assuming quality thresholds are met). These pre-determined target prices bundle the items and services furnished to the beneficiary across settings of care (e.g., inpatient and outpatient) and across types of Medicare (e.g. A and B). Additionally, participants may be responsible for a repayment to Medicare in models with downside risk (see below for definitions of risk).

CMS has conducted a synthesis of nine available evaluation reportsⁱⁱ that look at results for these seven episode payment models to identify common themes, determine lessons learned, and highlight best practices. Of the episode payment model results reviewed, some results have shown reductions in utilization and episode costsⁱⁱⁱ without compromising quality, measured by factors such as functional status in joint-focused models.^{iv} However, despite decreased utilization and lower expenditures in some of these episode payment models, to date, model evaluations have not found net savings to Medicare. These model evaluations draw conclusions by leveraging comparison groups as the counterfactual to best identify and understand impacts including the role of target prices, discounts, and risk-sharing arrangements.

Target prices in episode payment models are set prospectively and must be clear, understandable to participants, and accurate, which requires extrapolating from historical data. Some models also leverage risk adjustment and have the flexibility to rebase to account for market trends and new policies that may change underlying costs. Episode payment model bundles that have shown the most promising results use simple attribution methods and focus on easily identifiable beneficiaries (e.g., those with a hospitalization) with predictable care needs.

Background

One of the most important goals at CMS is fostering a health care system that puts patients first. Episode payment models incentivize participants to look across settings at the beneficiary's treatment needs – to improve coordination, reduce expenditures, and maintain or improve quality by thoughtfully determining optimal treatment processes and opportunities to deliver care more efficiently. To date, CMS episode payment models have mainly focused on the Medicare FFS population, although Innovation Center models have also informed the creation of similar episode payment models by other payers.^v

Target prices are prospectively calculated based on the expected costs of items and services furnished to a beneficiary during an episode of care. Depending on the model, the expected costs could be based on the health care provider's historical performance, local or regional spending, or a combination thereof. To date, episodes have been as short as the duration of an inpatient hospitalization and as long as six months. Episode-based payments are structured to provide a discounted payment or set a pre-determined price against which actual payments are retrospectively reconciled, that is specific to conditions for a discrete timeframe (referred to as a target price). Episodes are initiated by combinations of diagnoses, procedures, and drugs furnished to a beneficiary. Episode payment models may include either a one-sided or two-sided risk sharing arrangement. In one-sided risk arrangements (also known as upside-only risk), participants are eligible to receive a payment from Medicare if the actual FFS Medicare expenditures are less than the target price that has been pre-established as a goal for Medicare expenditures. Under two-sided risk (which also includes the participant taking on downside risk in addition to upside risk), the participant may also be required to pay Medicare if actual Medicare FFS expenditures are greater than the pre-determined episode target price. To date, the target prices have included a Medicare discount, which is set by CMS, in order to achieve net savings.

Participant Experiences

Participants in Innovation Center episode payment models include acute care hospitals, physician group practices, skilled nursing facilities, home health agencies, inpatient rehabilitation hospitals, and long-term acute care hospitals. The exact composition of participants depends on the model. Model participants have reported using coordination across settings and patient engagement, to attempt to improve patient experiences and utilization outcomes. For example, in OCM, participants report leveraging enhanced service payments to deliver more patient-centered care, develop care plans, coordinate care, and improve survivorship planning and end of life care. Many participants see Innovation Center episode payment models as opportunities to prepare for potential future payment changes.

Participation gives providers a reason to re-examine care processes, identify best practices, redesign care, and seek opportunities for increased efficiency. In line with the goal of episode payment models, providers report participating in an episode-based payment model incentivized them to coordinate across settings in a way that was not previously done.

Participants value the data they receive from the Innovation Center. Many participants receive national and individual clinical and cost data which can be used to better understand their patients' care trajectories and perform financial calculations to estimate their financial performance under the model. While some participants have reported that they do not have the analytic skills required to understand the data, the Innovation Center leverages resources such as office hours, work groups, and learning networks to attempt to assist participants in using the data provided. Many participants also sought to develop standardized care protocols as a result of participation in episode payment models. Providers found that standardized protocols were more straightforward to develop for healthier populations.

Model Results

Each evaluation provides information on model impacts on health care expenditures, quality of care, and utilization. The Innovation Center continues to learn from model tests and refine its approach to implementing episode payment models. BPCI Models 2 and 3 had the highest participation and demonstrated the most promising results in reducing Medicare FFS expenditures. Episode costs were reduced for the majority of the clinical episodes evaluated (50 of 67), where 27 were statistically significant with an average decline of about \$1,630 per clinical episode (6.1%).^{vi} The results from performance years 1 and 2 of the CJR Model indicate that there has been a 3.7% reduction in gross Medicare payments of \$997 per episode.^{vii} Reduced Medicare expenditures in BPCI Models 2 and 3, and CJR appear to be coming from efficiency gains as care is shifted from institutional post-acute care towards less intensive post-acute care services (home health and outpatient therapy). Only one performance period of data is currently available for OCM and does not show statistically significant impacts on Medicare expenditures.^{viii}

Despite the lower Medicare FFS payments noted above for BPCI Models 2 and 3 and CJR, after taking into account reconciliation payments to participants, there were no significant net savings to Medicare. CMS eliminated downside risk during parts of the model to accommodate start-up challenges experienced by the Innovation Center and participants. In BPCI Models 2 and 3, there was no impact on claims-based quality outcomes (all-cause readmissions, emergency department visits, incidence of complications, and all-cause mortality rates). It does not appear that participants are selecting healthier patients.^{ix}

Lessons Learned

Across the episode payment models, common lessons have emerged around themes including target price setting, beneficiary attribution, and overlap. Setting precise target prices is integral for both engaging potential participants and for achieving savings. Engaging participants in the context of a voluntary model requires that CMS provide appropriate incentives and an appropriate level of potential risk and reward. The Innovation Center continues to strive to design models that achieve this balance.

Target Price Setting: Determining target prices requires extrapolating from available data. If available data has a substantial amount of variability, it is more difficult to set an accurate prospective price. A procedure such as an elective joint surgery has far less variability in

treatment and associated cost as compared to the costs associated with providing chemotherapy and related care. CMS also incorporates a discount in order to increase the likelihood of achieving savings. If target prices are not accurate and are set too high, than model participants will earn more than anticipated in reconciliation payments and the model will not result in net savings to Medicare. Conversely, if target prices are set too low or includes too large of a discount, health care providers in voluntary models are unlikely to choose to participate or may exit the model. The target prices, including the discount, need to be low enough to result in savings while still being financially advantageous to providers. If discounts and target prices are not set accurately and precisely, the model may be unable to achieve savings for Medicare. Conversely, if target prices are set too low or are lowered to ensure savings to Medicare, health care providers in voluntary models may choose not to participate or may exit the model when it is no longer financially advantageous.

As CMS develops models to test we are focusing on finding where the “sweet spot” of incentives and cost savings lies. To date, Innovation Center models have allowed participants to exit the model as long as the participants give CMS notice of their termination. Previously, CMS has allowed participants to stay in one-sided (upside-only) risk for the majority of models, but models continue to move towards requiring two-sided risk for participants. Innovation Center evaluations have found that scaling back highly flexible participation and exit rules, incorporating downside risk sooner, and improving target pricing by including robust risk adjustment as well as adjustments for non-participating peers are expected to increase the likelihood of net savings to Medicare.^x The Innovation Center continues to use available data (claims and supplemental model data) to attempt to create more precise target prices, guard against issues of patient selection, and identify variability in payments that cannot necessarily be attributed to the intervention. For example, in OCM, the Innovation Center has improved the precision of target prices by leveraging information submitted by practices through the OCM data registry.

Many Innovation Center models build in target pricing that is able to rebase to adjust for (i.e. account for) unanticipated market trends or policies as well as address outliers and account for the fact that some participants in Innovation Center models are market leaders who have large market shares and volumes of episodes.

Beneficiary Attribution: Straightforward and simple beneficiary attribution methods, such as those that start with a specific procedure or hospitalization, help health care providers more easily identify eligible beneficiaries and determine how those beneficiaries will be attributed to participants or non-participants. The easier it is for participants to be able to identify which beneficiaries are in the model, the more effectively the participant can manage the beneficiaries’ episodes.

Overlap: Episode payment models also co-exist with broader population health-focused initiatives that focus on the development of infrastructure. The Innovation Center incorporates interactions between model tests leveraging both qualitative and quantitative data in order to appropriately understand impacts and attribute savings.

Conclusions and Implications for Future Directions

Episode payment models appear to show the most promising findings when participants are able to easily identify beneficiaries that are likely to be attributed to them, and participants are able to focus efforts on events that they perceive to be able to be controlled. These promising improvements have been shown in results for episodes from BPCI Models 2 and 3, and CJR, where evaluations have shown reductions in gross Medicare expenditures without adverse effects on beneficiaries' quality of care. Lower gross Medicare payments appear to result from efficiency gains as care is shifted from institutional post-acute care towards the home. CJR and BPCI participants have noted additional care improvement processes that are likely to be driving results, such as an increase in same day ambulation, and an increase in the use of nerve blocks instead of narcotics.^{xi}

When performance payments are included in episode costs, to date, CMS does not identify reductions in net Medicare episode costs.

While results have been promising, when performance payments are included in episode costs, the reductions in payments has not resulted in net savings thus far. This highlights the fact that setting accurate prospective target prices in the context of a rapidly shifting and unpredictable marketplace is challenging. Target price setting is also affected by strategic concerns and policy changes. In a deliberate effort to increase participation and to provide resources to invest in care redesign activities, in some models the Innovation Center has leveraged strategies such as keeping discounts small and delaying two-sided risk.

The results from the Major Joint Replacement Lower Extremity bundle in BPCI Model 2 informed the design of CJR and BPCI Advanced. Potential model participants in BPCI Advanced received preliminary target prices and were given the opportunity to assess the clinical and business cases for participating in the model prior to applying to participate. The design of BPCI Advanced aims to improve target pricing as compared to BPCI Initiative, building upon what was used in BPCI Model 2 using a participant's own historical costs and adding risk adjustment and adjustments for peer performance. Focusing on more homogenous episodes and setting more accurate target prices may increase the likelihood of model success and savings to Medicare in BPCI Advanced. BPCI Advanced incorporates the following:

- A focus on setting target prices and a discount in a manner that increases the likelihood of savings to Medicare.
- A focus on episodes with low clinical heterogeneity and sufficient episode volume.
- Only two entry windows into the model and a required minimum length of participation in the model, limiting participants' ability to exit whenever they perceive it to be financially advantageous.

In addition, the Innovation Center is considering how to incorporate strategies for better communicating the methodology used for target price setting, setting target prices for episodes with high drug costs, and include those costs in target prices as part of episode payment models.

As the Innovation Center moves forward in the creation of new models and the refinement of existing models, it will continue to strive to achieve a balance between engaging participants and increasing the likelihood of net savings to Medicare.

Appendix: Characteristics of Models Included in Synthesis Paper

Model Name	Model Dates	Number of Participating Providers and Suppliers	Payment Structure	Types of FFS Medicare Beneficiaries Included in Model Episodes
BPCI 1	4/1/13-12/31/16	24 Acute Care Hospitals (ACH)	Retrospective acute care hospital stay only	All beneficiaries at participating hospitals
BPCI 2	10/1/13-9/30/18	422 ACHs and 277 Physician Group Practices (PGPs)	Bundled payment arrangement triggered by a hospitalization that included the inpatient stay and up to 30, 60, or 90 days post-acute with retrospective payment reconciliation	Participants could choose from 48 clinical episode types. Included beneficiaries were those discharged with episodes chosen by participants
BPCI 3	10/1/13-9/30/18	873 Skilled Nursing Facilities, 116 Home Health Agencies, 9 Inpatient Rehab Facilities, 1 Long Term Care Hospitals, and 144 PGPs	Bundled payment arrangement with retrospective payment reconciliation triggered by a hospitalization, began with admission to post-acute initiator, and continued up to 30, 60, or 90 days	Participants could choose from 48 clinical episode types. Included beneficiaries were those discharged with episodes chosen by participants
BPCI 4	10/1/13-9/30/18	23 ACHs	Prospective discounted payment included inpatient stay and all services in hospital related readmissions through 30 days post discharge	Participants could choose from 48 clinical episode types. Included beneficiaries were those discharged with episodes chosen by participants
CJR	4/1/16-12/31/21	800 ACHs in performance year 1 and year 2 465 in performance years 3-5	Bundled payment arrangement includes inpatient stay and up to 90 days post-acute with retrospective payment reconciliation	Beneficiaries with lower extremity joint replacement

Model Name	Model Dates	Number of Participating Providers and Suppliers	Payment Structure	Types of FFS Medicare Beneficiaries Included in Model Episodes
OCM	7/1/16-6/30/21	175 practices plus 10 payers as of September, 2019	Monthly enhanced service payment plus retrospective payment reconciliation for six month episodes initiating with chemotherapy	Beneficiaries receiving chemotherapy for cancer
BPCI Advanced	10/1/18-12/31/23	1299 as of September 2019	A single retrospective bundled payment and one risk track, with a 90-day Clinical Episode duration	Beneficiaries with 29 inpatient and 3 outpatient clinical episodes

ⁱ Throughout the remainder of the document, participants will refer to CMS providers and suppliers

ⁱⁱ [OCM Second Annual Evaluation Report](#), [OCM Baseline Evaluation Report](#), [CJR First Annual Evaluation Report](#), [CJR Second Annual Evaluation Report](#), [BPCI Models 2-4 First Evaluation Report](#), [BPCI Models 2-4 Year 2 Evaluation Report](#), [BPCI Models 2-4 Year 3 Evaluation Report](#), [BPCI Models 2-4 Year 4 Evaluation Report](#), [BPCI Model 2-4 Year 5 Evaluation Report](#)

ⁱⁱⁱ As measured by Medicare allowed amounts which is the amount that Medicare pays for the provision of care

^{iv} [BPCI Models 2-4 Year 5 Evaluation Report](#)

^v [OCM Second Annual Evaluation Report](#)

^{vi} [BPCI Models 2-4 Year 5 Evaluation Report](#)

^{vii} [CJR First Annual Evaluation Report](#), [CJR Second Annual Evaluation Report](#)

^{viii} [OCM Second Annual Evaluation Report](#)

^{ix} [BPCI Models 2-4 Year 5 Evaluation Report](#)

^x [BPCI Models 2-4 Year 5 Evaluation Report](#)

^{xi} [BPCI Models 2-4 Year 5 Evaluation Report](#), [CJR First Annual Evaluation Report](#)