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CMS Bundled Payments for Care Improvement Advanced Model

Fifth Annual Evaluation Report Executive Summary

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Table of Contents

Executive Summary

A. Introduction

Medicare beneficiaries who are admitted to the hospital or have an outpatient procedure can experience fragmented or uncoordinated care after discharge. Handoffs between unaffiliated providers, a lack of established communication channels between providers, and various other factors make it challenging to optimize a patient's recovery. Many providers have a desire to invest in practice innovation and care redesign but may not have the information or support needed to do so. Value-based care initiatives within the Medicare fee-for-service (FFS) payment system can help motivate these changes by explicitly incentivizing coordination between inpatient and post-acute care (PAC) providers and providing data or other resources to facilitate care transformation.

The Center for Medicare and Medicaid Innovation within the Centers for Medicare & Medicaid Services (CMS) has designed and implemented voluntary and mandatory bundled payment models to improve care for Medicare FFS beneficiaries who are hospitalized or undergo an outpatient procedure and then transition to another care setting or are discharged directly home. In general, the bundled payment model makes a participant organization accountable for the quality and total cost of care for Medicare beneficiaries during an episode of care that includes hospitalizations and select hospital outpatient procedures as well as the following 90-day period, known as the post-discharge period. If the participant organization successfully reduces expenditures for its Medicare FFS patients below a "target price," it will receive a financial payment from CMS. However, if the participant cannot bring down costs under the target price, it has to submit a repayment to CMS. This financial accountability encourages physicians and hospitals to work with providers across care settings to improve care transitions for Medicare FFS beneficiaries, support successful recoveries, and reduce unnecessary PAC facility stays.

The Bundled Payments for Care Improvement Advanced (BPCI Advanced) Model is a CMS Innovation Center voluntary bundled payment model that tests whether linking payments for the multiple services beneficiaries receive during an episode of care leads to improved quality of care and lower costs for Medicare. BPCI Advanced builds on a predecessor model, the Bundled Payments for Care Improvement (BPCI) Initiative, which began in 2013 and concluded in 2018. Ultimately, the evaluation of the BPCI Initiative suggested that holding providers financially accountable for episodes of care may successfully reduce payments without compromising the quality of care. Lessons learned from BPCI were incorporated into the BPCI Advanced Model, which began in 2018 and is scheduled to conclude in 2025. BPCI Advanced is an Advanced Alternative Payment Model under the Quality Payment Program. Acute care hospitals and physician group practices (PGPs) can elect to join the model as "episode initiators," meaning they can trigger the episode of care.

The BPCI Advanced Model has two categories of participants: *convener participants* and *non-convener participants*. A non-convener participant is a hospital or PGP that bears financial risk only for its own performance. A convener participant (convener) is an organization that holds financial risk on behalf of hospitals, PGPs, or both and provides guidance or services to help its episode initiators succeed in the model. A convener participant is most commonly a health system or value-based care consultant organization. Hospitals and PGPs that participate in the model under a convener are referred to as *downstream episode initiators*.

Participants could join the model in Model Year 1 (beginning October 2018), Model Year 3 (beginning January 2020), or Model Year 7 (beginning January 2024). For the first 3 years of the model, participants were accountable for quality and spending performance based on their individual selections of one or more clinical conditions (referred to as *clinical episodes*), such as congestive heart failure or stroke. Beginning in Model Year 4, CMS grouped clinical episodes into eight broader *clinical episode service line groups* (CESLGs) and required participants to choose from among the eight CESLGs instead of selecting individual clinical episodes. Hospitals and PGPs were accountable for each clinical episode within the CESLGs they selected unless they did not meet the minimum hospital baseline volume criterion for a clinical episode.

The Innovation Center is funding an independent evaluation to determine whether the model is achieving its objective to decrease costs while maintaining or improving quality. The evaluation team produces annual evaluation reports summarizing model impacts and provider and beneficiary experience in the model. This is the fifth annual report submitted by the evaluation team and focuses on Model Year 4 (Calendar Year 2021). In this evaluation report, we provide estimates of the impact of the model on total payments, utilization, and quality of care (readmission and mortality rates) as measured using Medicare claims data, as well as estimates of Medicare program savings in Model Year 4. The report also provides estimates of the differences in patient-reported functional status, care experiences, and satisfaction with overall care between BPCI Advanced and comparison respondents in Model Year 4 and Model Year 5 (Calendar Year 2022) as reported in a beneficiary survey. In addition, we examine the reach of the model, the characteristics of model participants, and the care redesign activities that hospitals and PGPs report implementing in response to the model that may be contributing to broader care transformation in terms of beneficiary and provider experience. Finally, we describe how BPCI Advanced relates to Medicare Accountable Care Organizations (ACOs) with regard to model overlap and provider experiences participating in both programs. The chapters describing the model's reach, impacts, and patient-reported outcomes include separate analyses for beneficiaries from underserved populations, including Black or African American beneficiaries, Hispanic beneficiaries, and beneficiaries who are dually eligible for Medicare and Medicaid. Throughout the report, episodes for hospitals and PGPs are examined separately because the two providers may have different responses to the model. Understanding these differences and how they relate to outcomes has important implications for the design of future value-based care models or episode-based payment models.

This report presents results for the first year after significant changes to the BPCI Advanced Model were implemented. In addition to requiring participants to select CESLGs instead of individual clinical episodes, CMS made notable changes to the BPCI Advanced pricing methodology, including adding a retrospective trend adjustment. Starting in Model Year 4, a retrospective trend adjustment is applied to final target prices to account for unanticipated, systematic factors occurring during the performance period that cannot be predicted using a prospective pricing methodology. The changes to clinical episode selection and the pricing methodology were made to strengthen the model, including its likelihood of achieving Medicare program savings. This report focuses on how participants responded to these Model Year 4 changes and whether the model achieved its desired savings target. It is important to note that the COVID-19 public health emergency (PHE) was in effect in Model Year 4. We include controls for COVID-19 in the regressions that estimate the results presented in this report, but the COVID-19 PHE had large, geographically varied effects on the health care system that may not be adequately captured, including impacts on quality measurement, PAC provider access, and telehealth.

B. Summary of Results

1. What Are the Characteristics of BPCI Advanced Providers and Organizations That Chose to Participate in the Model in Model Year 4?

- The number of unique participants declined 37.2% from Model Year 3 (2020) to Model Year 4 (2021), but the average number of clinical episodes in which a given episode initiator was actively participating nearly doubled for hospitals and more than doubled for physician group practices.
- The distribution of participants in terms of geographic, organizational, and patient characteristics remained stable from Model Year 3 to Model Year 4.

In Model Year 4 (2021), the BPCI Advanced Model had 438 unique participants, a 37.2% decrease from Model Year 3 (2020). The decline in model participation coincided with the significant changes to the model implemented by CMS in Model Year 4. An analysis of reconciliation payments showed that participants that exited the model had lower average reconciliation payments from CMS compared with participants that chose to remain in the model, indicating that the inability to earn reconciliation payments was associated with model attrition. According to participants, the most concerning model design changes in Model Year 4 were the shift to CESLGs and the retrospective trend adjustment, which made it harder to predict financial performance in the model but increased the accuracy of target prices. Hospitals and PGPs were concerned with having to take on clinical episodes that they would not have otherwise selected, some of which were urgent episodes whose outcomes were harder to control compared with planned episodes. Despite these significant model design changes, approximately two-thirds of model participants decided to continue to participate in BPCI Advanced in Model Year 4, and they took on accountability for an expanded patient population, effectively doubling the number of clinical episodes for which they were responsible. Participants elected to remain in the model, even if they were not financially successful, to obtain experience with bundled payments in anticipation of a future mandatory bundled payment model. Anticipation of a mandatory model may have mitigated a larger decline in participation after the Model Year 4 changes.

The distribution of participants in terms of geographic, organizational, and patient characteristics remained stable from Model Year 3 to Model Year 4. When participants selected CESLGs in Model Year 4, PGPs were more likely than hospitals to select surgical CESLGs, a similar trend to prior years, when hospitals and PGPs selected individual clinical episodes. Most episode initiators (about 69%) participated under a convener, similar to Model Year 3. Many episode initiators relied on conveners, consultants, and other organizations for support with participation decisions and care redesign efforts. Although the number of organizations participating in Model Year 4 declined, with the shift to CESLGs, the average number of clinical episodes in which a given episode initiator was actively participating nearly doubled for hospitals and more than doubled for PGPs. Therefore, hospitals and PGPs that stayed in the model were ultimately accountable for more clinical episodes than they were in previous model years.

2. What Is the Reach of BPCI Advanced in Model Year 4?

- In Model Year 4 (2021), about one in five eligible U.S. hospitals participated in BPCI Advanced, more than one in four eligible U.S. clinicians triggered a BPCI Advanced episode, and about one in five hospitalizations or outpatient procedures were under BPCI Advanced.
- The BPCI Advanced Model's reach to underserved populations was greater in medical episodes than surgical episodes, reflecting differences in representation among hospital discharges and outpatient procedures nationwide.

In Model Year 4, about one in five (21.7%) eligible hospitals participated in BPCI Advanced. This was a decrease from the first 3 years of the model, when about one in three (33.4%) hospitals participated in at least one clinical episode in BPCI Advanced. This drop reflects the overall decrease in participation in the model between Model Year 3 and Model Year 4. Similarly, the percentage of hospitalizations or outpatient procedures covered by the model decreased slightly from earlier model years, dropping from 23.3% in Model Years 1 and 2 to 18.9% in Model Year 4. The model reached about one in four eligible medical discharges and one in 10 eligible surgical discharges in Model Year 4, which reflects the higher participation in medical clinical episodes among participants compared with surgical clinical episodes. One in four (28.5%) clinicians with eligible discharges triggered a BPCI Advanced episode in Model Year 4, which was slightly higher than in earlier model years.

The reach of BPCI Advanced to underserved populations did not substantially change in Model Year 4 compared with prior model years. Similar to previous years, the representation of Black or African American beneficiaries, Hispanic beneficiaries, and dually eligible beneficiaries was greater across medical episodes than across surgical episodes. On a broader level, the representation of Black or African American beneficiaries and dually eligible beneficiaries decreased in the overall Medicare FFS population between Model Years 1 through 3 and Model Year 4. The share of Black or African American beneficiaries in the overall Medicare FFS populations declined from 9.3% in Model Years 1 through 3 to 8.6% in Model Year 4. The share of dually eligible beneficiaries in the overall Medicare FFS population declined from 17.6% to 16.4%. There was no change in the share of Hispanic beneficiaries.

3. How Do BPCI Advanced Participants Approach Care Transformation?

- Hospitals and physician group practices implemented care redesign activities that transformed care across four domains: culture, structure, process, and relationships.
- Participants reported that negative outcomes could be avoided more easily for planned procedures, compared with urgent episodes, which may help explain why participants could achieve more reductions in expenditures with surgical episodes than medical episodes.

To receive a reconciliation payment in BPCI Advanced, participants need to keep episode expenditures below the target price while maintaining or improving the quality of care. The BPCI Advanced Model does not prescribe ways to reduce expenditures or improve care; thus, participants have the flexibility to redesign care as they see fit. As mentioned in prior annual evaluation reports, BPCI Advanced participants have achieved savings by reducing discharges to

PAC facilities and discharging patients directly home when medically appropriate. Most participants focused their care redesign efforts on the PAC period because that is where they saw the biggest opportunity to reduce costs. There was qualitative evidence that BPCI Advanced care redesign resulted in care transformation, which can be defined as substantive changes to culture, structure, processes, and relationships. Care transformation occurs when care redesign activities implemented for one patient population become engrained culturally and operationally as best practices and are applied to all patients.

Interviews with conveners, hospitals, and PGPs suggest that the most significant ways in which the BPCI Advanced Model contributed to care transformation were by changing patient and provider expectations about discharge destination and fostering new relationships between providers in the inpatient, outpatient, and PAC settings. According to participants, the model has resulted in enhanced provider awareness of costs, utilization, and quality of care in the acute care and PAC settings. Process changes made in response to the model include regularly reviewing data, standardizing care pathways, screening for and addressing medical and social risk factors that could impede recovery, monitoring patients in the post-discharge period, and increasing attention to connecting patients to primary care providers. Although participants reported that BPCI Advanced was not the only driver for changes to patient care and coordination in recent years, they said that participation in the model was accelerating care transformation by giving providers actionable performance data and encouraging partnerships between providers in the acute and post-acute settings.

Participants reported that negative outcomes could be avoided more easily for planned procedures, such as joint replacements, compared with urgent medical and surgical episodes, such as sepsis, renal failure, or urinary tract infection, when patients can be more medically complex and cannot be stratified based on risk level or optimized prior to admission. These findings may help explain why participants achieved more reductions in expenditures with surgical episodes than medical episodes.

4. What Was the Impact of BPCI Advanced on Per-Episode Payments, Utilization, and Quality During Model Year 4 (January 1, 2021, Through December 31, 2021)?

- The BPCI Advanced Model reduced total episode payments relative to the comparison group by $930 per episode, or 3.5% of the baseline mean, in Model Year 4 (2021). Reductions in total episode payments were driven by changes in post-acute care use and spending.
- Overall, quality of care was varied in Model Year 4.

Similar to prior years, in Model Year 4, participants reduced total episode payments relative to the comparison group. For the clinical episodes evaluated, the BPCI Advanced Model reduced average standardized episode payments by $930 per episode, or 3.5% of the baseline mean, relative to the comparison group. As in past years, reductions in per-episode payments were twice as large for surgical episodes compared with medical episodes. The BPCI Advanced Model reduced average standardized payments by $680 per episode (or 2.7% of the baseline mean) for medical episodes and by $1,939 per episode (or 6.3% of the baseline mean) for surgical episodes. Both hospitals and PGPs reduced per-episode payments for medical and surgical episodes relative to comparison hospitals and PGPs. Hospitals reduced spending on medical episodes by $670 per episode, or 2.6%, while PGPs reduced per-episode payments for medical episodes by $747, or 3.0%. Hospitals

reduced spending on surgical episodes by $1,736 per episode, or 5.3%, while PGPs reduced per-episode payments by $2,112, or 7.6%. Below, we summarize results for net Medicare savings, which account for reconciliation payments made and received by CMS.

As in prior years, reductions in payments to PAC providers during the 90-day post-discharge period were a large driver of the declines in total episode payments, especially among surgical episodes. During Model Year 4, the BPCI Advanced Model reduced per-episode skilled nursing facility (SNF) payments by $481, or 9.9% of the baseline mean SNF payment. The BPCI Advanced Model reduced per-episode inpatient rehabilitation facility (IRF) payments by $258, or 25.4% of the baseline mean IRF payment, relative to the comparison group. The decrease in medical episode spending was driven by reductions in SNF payments, whereas the decrease in surgical episode spending was driven by reductions in IRF payments, similar to prior years. Both hospitals and PGPs reduced the share of episodes first discharged into an institutional PAC setting and the number of SNF days among beneficiaries with at least 1 day in a SNF.

We also report the impact of the model on two claims-based quality measures: hospital readmission rate and mortality rate. We did not detect an effect on the readmission rate during the 90-day post-discharge period for beneficiaries with surgical episodes in Model Year 4. For medical episodes, however, there was an increase in the readmission rate for BPCI Advanced beneficiaries relative to the comparison group in Model Year 4, although it was not statistically significant at the 10% level ($p = 0.13$). This finding was notably different from Model Year 3 results. In Model Year 3, the estimated impact of BPCI Advanced on the readmission rate was negative and statistically significant, suggesting the model reduced the readmission rate. The COVID-19 public health emergency may have affected quality measures in both Model Year 3 and Model Year 4. Model Year 4 mortality rate findings were similar to those in Model Year 3 in that we found no consistent evidence that BPCI Advanced affected the mortality rate.

The model did have statistically significant impacts on quality for certain subpopulations in Model Year 4, although some of these results differed from Model Year 3. Model Year 4 results indicated there was a statistically significant increase in the readmission rate for Hispanic beneficiaries (this finding was also observed in Model Year 3). For dually eligible beneficiaries with medical episodes, there was also a statistically significant increase in the readmission rate during Model Year 4, as well as a statistically significant decline in the mortality rate (these findings were not observed in Model Year 3). In the BPCI Advanced Model, participants may discharge more patients directly home when medically feasible, and increased readmission rates could indicate that some beneficiaries are having more difficulty recovering at home. Alternatively, the reduced inpatient mortality rate suggests that more beneficiaries survived during the anchor stay than if the model had not existed. If the surviving beneficiaries had higher patient acuity, they may have been more likely to be readmitted. If the risk adjustment did not adequately capture changes in patient acuity, it may appear as if BPCI Advanced was associated with a higher readmission rate.

5. Were There Differences in Patient-Reported Functional Status, Care Experiences, and Overall Satisfaction With Care Under BPCI Advanced in Model Years 4 and 5 (January 1, 2021, Through December 31, 2022)?

- We did not find a consistent relationship between BPCI Advanced and patients' functional status, care experiences, and satisfaction with care in Model Years 4 (2021) and 5 (2022).
- In subgroup analyses, findings were varied, with favorable and unfavorable results for beneficiaries with dual eligibility, Black or African American beneficiaries, and Hispanic beneficiaries.

For Model Years 4 and 5, we did not find consistent differences in patient-reported functional status, care experience, or satisfaction between BPCI Advanced survey respondents and the comparison group when examined in aggregate. In analyses conducted by type of episode initiator (hospital or PGP) and type of episode (medical or surgical), there were some favorable and some unfavorable results. In analyses focused on underserved populations, we found that dually eligible BPCI Advanced respondents with hospital-initiated episodes were less likely to report favorable changes in functional status relative to dually eligible comparison respondents. The cross-sectional design of the survey limits the interpretation of this finding as causal; however, it raises a concern that the model may have an unfavorable impact on functional recovery for beneficiaries with dual eligibility. Additional considerations limit interpretation of the findings, including the wide variety of clinical episodes that are measured with a single survey instrument and the substantial heterogeneity of patient acuity within clinical episodes, which is difficult to adequately account for with the data available.

6. Did BPCI Advanced Result in Savings to Medicare During Model Year 4 (January 1, 2021, Through December 31, 2021)?

- During Model Year 4 (2021), the BPCI Advanced Model resulted in an estimated net savings to the Medicare program for the first time since the model's inception.
- The net savings in Model Year 4 ($464.7 million) offset the combined losses in the first 3 model years ($179.5 million).

Net savings to Medicare were estimated by using the total reduction in payments, highlighted above, and accounting for reconciliation payments made and received by CMS. To improve the model's ability to achieve savings, CMS made significant changes to the design of the model in Model Year 4 that affected target prices and thus reconciliation payments. These changes resulted in BPCI Advanced achieving Medicare program savings for the first time since the model began in 2018. In Model Year 4, BPCI Advanced resulted in net savings of an estimated $464.7 million, which may have ranged from $376.6 million to $552.8 million based on a 90% confidence interval. Net savings to Medicare represented 3.4% of Medicare payments under the counterfactual (what Medicare payments would have been if the BPCI Advanced Model had not occurred). Medical episodes comprised the majority of episodes and, thus, accounted for most of the net savings due to the model. The model resulted in an estimated net savings of $306.0 million for medical episodes and $147.1 million for surgical episodes. Per-episode net savings were larger for surgical episodes than medical

episodes ($1,624 vs. $762 per-episode net savings). Both hospital- and PGP-initiated episodes had net savings.

BPCI Advanced net savings in Model Year 4 ($464.7 million in savings) were larger than the losses in Model Years 1 through 3 combined ($179.5 million in losses). The net savings in Model Year 4 imply that, with the retrospective adjustment of peer group trends, the BPCI Advanced Model can set target prices that financially incentivize hospitals and PGPs to invest in meaningful changes to care delivery to improve transitions of care. This is important because if target prices are set too high, participants can be financially successful in the model even without making changes and may not invest in new structures and processes. If target prices are set too low, and the model is voluntary, participants may leave the model or choose not to participate. We will continue to estimate Medicare savings to identify whether savings shift as participation changes over time.

7. What Is the Nature of the Overlap Between BPCI Advanced and CMS Accountable Care Organization Models?

- About one in five BPCI Advanced episode initiators participated in a Medicare Shared Savings Program Accountable Care Organization (ACO) in Model Year 4 (2021).
- About two in three beneficiaries who received care under the BPCI Advanced Model were not attributed to a Medicare ACO in Model Year 4.

Medicare Accountable Care Organization (ACO) initiatives are widely adopted Alternative Payment Models serving Medicare FFS beneficiaries. Both BPCI Advanced and Medicare ACO initiatives aim to reduce expenditures while maintaining or improving the quality of care and health outcomes for Medicare beneficiaries. Whereas the BPCI Advanced Model motivates participants to reduce expenditures and improve quality during a patient's hospital stay and the 90-day post-discharge period, Medicare ACO initiatives are population based and motivate participants to reduce the total cost of care for attributed beneficiaries over an annual timeframe. Thus, ACOs have a broader focus than BPCI Advanced in that ACOs aim to keep patients healthy over the course of a year. Hospital or PGP participation in both value-based care initiatives could create the potential for an additive effect on beneficiary outcomes from the increased focus on the full continuum of care for the patient across multiple care settings.

As the Innovation Center seeks to better integrate primary and specialty care, understanding the overlap between BPCI Advanced and Medicare ACO initiatives could inform the potential integration of bundles within Medicare ACO initiatives. About 18% of BPCI Advanced episode initiators participated in a Medicare Shared Savings Program ACO in Model Year 4.[1] In key informant interviews, some hospitals and PGPs reported advantages to being part of both BPCI Advanced and a Medicare ACO. However, others felt that the initiatives did not align and expressed frustration that BPCI Advanced excludes episodes for beneficiaries attributed to certain Medicare ACOs from reconciliation. When asked about a future landscape where these value-based care initiatives might be merged, most PGPs were open to bundles being incorporated within

[1] For the descriptive analysis of provider overlap between BPCI Advanced and ACO initiatives, this report presents findings for overlap with the Medicare Shared Savings Program and Next Generation ACO Model only, with a focus on the Shared Savings Program.

ACOs if specialists were engaged and financially rewarded for good outcomes and attribution issues were solved.

An analysis of BPCI Advanced episodes of care showed that two-thirds of beneficiaries who received care under the BPCI Advanced Model in 2021 were not attributed to any of the Medicare ACO initiatives evaluated,[2] suggesting an opportunity exists for BPCI Advanced to connect beneficiaries to ACOs. BPCI Advanced beneficiaries who were not attributed to one of the Medicare ACOs assessed were more likely to be dually eligible for Medicare and Medicaid, more likely to be Black or African American, and more likely to be Hispanic when compared with BPCI Advanced beneficiaries who were attributed to a Medicare ACO. A larger portion of BPCI Advanced beneficiaries not in an ACO lived in rural areas and had slightly higher medical complexity, as measured by rates of dementia, compared with BPCI Advanced beneficiaries with ACO attribution. These differences between beneficiaries with and without attribution to Medicare ACOs were observed across both medical and surgical episodes, but the differences were larger among medical episodes. Beneficiaries are attributed to ACOs through visits with primary care providers, whereas BPCI Advanced beneficiary episodes are triggered by an inpatient hospitalization or outpatient procedure. Our results indicate that BPCI Advanced may be reaching a higher percentage of beneficiaries who may be underserved and beneficiaries with greater medical needs compared with BPCI Advanced beneficiaries attributed to Medicare ACOs, which may reflect that beneficiaries from underserved populations may not have received services from primary care providers that are part of ACOs to the same extent as other Medicare beneficiaries.

[2] The descriptive analysis of beneficiary overlap between BPCI Advanced and Medicare ACOs includes the following ACO programs and models: the Medicare Shared Savings Program, Comprehensive End-Stage Renal Disease Care Model, Next Generation ACO Model, Vermont All-Payer ACO Model, and Global and Professional Direct Contracting Model.

C. Discussion

1. What Are the Model Year 4 Findings?

In Model Year 4, the BPCI Advanced Model resulted in Medicare program savings for the first time since the model began in 2018. Savings were achieved not only for surgical episodes but for medical episodes as well. These savings resulted from significant changes to the model in Model Year 4, including a shift from allowing participants to select individual clinical episodes to requiring them to choose broader CESLGs. There were also changes to the target price methodology, including a retrospective trend adjustment. CMS made these changes after the BPCI Advanced Model resulted in net losses to Medicare in Model Years 1 through 3, which raised concerns that target prices may have been set too high, particularly for medical episodes.

Although there was a 37.2% drop in unique participants from Model Year 3, the participants that voluntarily remained in the model assumed accountability for a broader set of clinical episodes. The average number of clinical episodes in which a given episode initiator was actively participating in Model Year 4 nearly doubled for hospitals and more than doubled for PGPs, resulting in broader participation in the model among the remaining participants. Some participants that elected to continue in the model beyond Model Year 4 despite owing reconciliation payments to CMS may have anticipated a mandatory bundled payment model and remained in the model to gain experience.

Similar to prior model years, participants lowered episode payments by reducing the share of discharges to PAC facilities and payments to these facilities. Not only were initial discharges to PAC facilities reduced, but the length of stay SNFs also decreased as participants worked with PAC partners to reduce unnecessarily long SNF stays. Hospitals and PGPs reported creating preferred SNF and home health agency networks and working closely with those providers on care protocols. Hospitals and PGPs also reported holding weekly or monthly calls to discuss patient outcomes and review performance data. These partnerships between inpatient providers and PAC facilities are one example of care transformation resulting from the model.

According to hospitals and PGPs, controlling costs is easier for planned episodes than for unplanned episodes. Many surgical procedures included in BPCI Advanced can be planned. In addition, participants reported that controlling costs for medical episodes can be difficult due to challenges managing patients' comorbidities. These factors may explain why participants could achieve greater reductions in episode spending for surgical versus medical episodes. Despite the challenges with medical episodes, participants were able to continue to reduce episode payments for medical episodes in Model Year 4. External factors that can influence the ability of hospitals and PGPs to achieve savings include the number of PAC facilities in the market, patient mix, and socioeconomic conditions in each community.

This report also evaluates the impact of the model on quality outcomes, including hospital readmission rates. In Model Year 4, BPCI Advanced did not have a statistically significant impact on the readmission rate for episodes pooled across all clinical episodes evaluated relative to the comparison group. This finding is not consistent with results from Model Year 3, when the readmission rate declined for medical and surgical episodes and the decrease was statistically significant in the overall sample.

BPCI Advanced did not have a statistically significant impact on the mortality rate for episodes relative to the comparison group when data were pooled across all clinical episodes in Model Year 4. Although the model had little to no impact on the mortality rate, we observed a pattern of reductions in mortality for PGP medical episodes, similar to Model Year 3 results.

The model did have statistically significant impacts on quality for some subpopulations in Model Year 4. For Hispanic beneficiaries with medical episodes, there was a statistically significant increase in the readmission rate. For dually eligible beneficiaries with medical episodes, there was an increase in the readmission rate and a decline in the mortality rate, both of which were statistically significant.

The beneficiary survey showed a varied relationship between the model and patient-reported outcomes for BPCI Advanced beneficiaries in Model Years 4 and 5. A notable unfavorable result was that dually eligible BPCI Advanced respondents with hospital-initiated episodes were less likely to report favorable changes in functional status relative to dually eligible comparison respondents. However, the cross-sectional survey has important limitations that limit the interpretation of this finding, and the wide variety of clinical episodes and substantial heterogeneity of patient acuity within clinical episodes means risk adjustment may not be adequate. Furthermore, if hospital participants successfully reduced inpatient mortality rates for dually eligible beneficiaries, more beneficiaries would have survived during the anchor stay than if the model had not existed, and these patients could have higher acuity. If the surviving beneficiaries had less favorable changes in functional status, and if the risk adjustment did not adequately capture patient acuity, it may appear as if BPCI Advanced was associated with unfavorable changes in functional status. It will be important to continue to monitor these patient-reported outcomes and care experiences among subgroups in future model years and under future bundled payment models.

2. What Do These Findings Mean for CMS Objectives?

Looking ahead, CMS has a goal of having 100% of traditional Medicare FFS beneficiaries in accountable care relationships by 2030. Beneficiaries will experience accountable care relationships mostly through advanced primary care and ACO models. Capturing participant experiences in both BPCI Advanced and ACO models can help inform how bundles can be incorporated into ACOs in the coming years. During interviews with model participants that were also participating in Medicare ACOs, some hospitals and PGPs reported advantages to being in both initiatives, including having data covering beneficiary care across all care settings, which could facilitate improvements in patient care. Others expressed frustration with how BPCI Advanced excludes episodes for beneficiaries attributed to certain Medicare ACOs from reconciliation and felt that CMS needed to address these overlap policies. In the April 2024 proposed rule updating Medicare payments and policies for inpatient hospitals and long-term care hospitals, CMS proposes the mandatory Transforming Episode Accountability Model (TEAM), which builds on prior bundled payment models, including BPCI Advanced and the Comprehensive

Care for Joint Replacement Model.[3,4] TEAM supports CMS goals of driving accountable care through 30-day episodes and integrating specialty and primary care by requiring hospitals to refer patients with an eligible surgery to primary care following their hospitalization or procedure. In addition, CMS indicated that beneficiaries who receive eligible care from a hospital selected to participate in TEAM may be in an episode regardless of ACO attribution.

To understand how the findings from this report relate to CMS priorities, the BPCI Advanced Model can be analyzed in terms of progress toward achieving the five strategic objectives outlined in the Innovation Center strategy refresh published in 2021. The five strategic objectives are (1) driving accountable care, (2) advancing health equity, (3) supporting innovation, (4) addressing affordability, and (5) partnering to achieve system transformation. Measuring progress toward achieving these goals will help the Innovation Center analyze the impact of BPCI Advanced on broader health system transformation.

a. Driving Accountable Care

The BPCI Advanced Model has connected millions of beneficiaries to value-based care. In Model Year 4, the model reached one in five eligible U.S. hospitals and one in four eligible clinicians across the country. Participants also reported increasingly connecting patients with primary care providers, which is another example of accountable care. In the coming year, the evaluation team plans to conduct analyses to see whether the Medicare claims data support findings from primary data collection indicating that BPCI Advanced participants are increasing referrals to primary care.

b. Advancing Health Equity

The evaluation's reach analyses show that the BPCI Advanced Model beneficiaries are generally representative of beneficiaries from underserved populations, including Black or African American beneficiaries, Hispanic beneficiaries, and dually eligible beneficiaries. The representation of underserved populations among BPCI Advanced medical episodes was higher than the representation of these populations in the overall FFS population, whereas the representation of underserved populations among BPCI Advanced surgical episodes was lower than in the overall FFS population. Because two out of three episodes in the model are medical, including medical stays as a trigger for beneficiary attribution in future value-based payment models may support CMS' goal to expand its reach to beneficiaries from underserved populations.

During interviews and site visits with model participants, hospitals and PGPs reported connecting patients with health-related social needs, such as food insecurity or lack of transportation, with social workers and community resources. Some hospitals and PGPs said the model provided the incentives and the funding (through reconciliation payments) to directly address beneficiary social needs. To the extent that hospitals and PGPs are increasing screenings

[3] Centers for Medicare & Medicaid Services. (2024). *CMS Proposes New Policies to Support Underserved Communities, Ease Drug Shortages, and Promote Patient Safety.* https://www.hhs.gov/about/news/2024/04/10/cms-proposes-new-policies-support-underserved-communities-ease-drug-shortages-promote-patient-safety.html

[4] Centers for Medicare & Medicaid Services. (2024). *Transforming Episode Accountability Model (TEAM).* https://www.cms.gov/priorities/innovation/innovation-models/team-model

for health-related social risk factors and connecting underserved patients with resources, BPCI Advanced helps further health equity.

An examination of model outcomes suggests the model may have had favorable and unfavorable impacts on underserved populations. For example, in Model Year 4, we found a statistically significant decline in the mortality rate among medical episodes for dually eligible beneficiaries relative to the comparison group. However, we observed larger increases in the readmission rate for dually eligible beneficiaries and Hispanic beneficiaries with medical episodes relative to comparison beneficiaries. The beneficiary survey also found that dually eligible BPCI Advanced respondents with hospital-initiated episodes were less likely to report favorable changes in functional status relative to dually eligible comparison group respondents. These findings indicate that the BPCI Advanced Model may have been more beneficial for dually eligible beneficiaries with medical episodes in terms of mortality rates. Results from other measures of quality, including readmission rates and functional status, indicate that the model was associated with unfavorable outcomes. However, these apparent unfavorable findings may be due to higher patient acuity among BPCI Advanced beneficiaries as participants reduced mortality rates, resulting in more beneficiaries surviving the inpatient hospitalization. If this higher patient acuity was not adequately controlled for in the risk adjustment, it may appear that BPCI Advanced was associated with unfavorable outcomes.

The results of our analysis of overlap between BPCI Advanced and ACO initiatives also have health equity implications. Our findings suggest that the BPCI Advanced Model reached beneficiaries from underserved populations who were beyond the reach of ACOs, potentially due to differences in underlying patterns of utilization of hospital and primary care services among subpopulations. We found that BPCI Advanced beneficiaries who were not attributed to one of the Medicare ACOs examined were more likely to be from an underserved population than BPCI Advanced beneficiaries who were attributed to a Medicare ACO. These differences in attribution to different initiatives may be important to consider as CMS continues to prioritize health equity in its models.

c. Supporting Innovation

The model supports innovation by encouraging new investments in technology, including enhancements to electronic medical records, care management tools and platforms, and remote patient monitoring technology. Participants also reported making care more patient centered and increasing conversations with patients, families, and caregivers about care plans and end-of-life care when necessary. However, distilling care transformation activities that have resulted directly from the model is difficult when multiple models coexist. The evaluation team is planning interviews with non-participant providers to understand the care redesign initiatives that may be unique to BPCI Advanced participants. We will include the results in future evaluation reports.

d. Addressing Affordability

The model has successfully reduced total episode payments year over year as well as reduced discharges to PAC facilities and shortened stays. The model has also enhanced provider awareness of costs, utilization, and quality of care in acute and PAC settings.

e. Partnering to Achieve System Transformation

The BPCI Advanced Model has contributed to new partnerships between providers across care settings. The increased coordination between inpatient providers and PAC providers is a notable example of care transformation achieved under the model. Hospitals and PGPs collaborated with PAC providers on steps such as care protocols and discharge planning to limit length of stay and frequency of services. However, if patients are recovering more at home instead of PAC facilities, the burden on families and caregivers may increase. It is important to continue to assess beneficiary outcomes and to consider feedback from patients, caregivers, and families.