

**Medicare Program: Comprehensive Care for Joint Replacement Model Three-Year
Extension and Changes to Episode Definition and Pricing
CMS-5529-P**

Proposed Rule Summary

On February 24, 2020, the Centers for Medicare & Medicaid Services (CMS) published in the Federal Register a proposed rule that would make policy and technical changes to the Comprehensive Care for Joint Replacement (CJR) model (85 FR 10516-10550).

The CJR model, which began in April 2016, is an episode bundled payment model that is designed to support higher quality and more cost-effective care for beneficiaries undergoing hip and knee replacements, or other lower extremity joint replacements (LEJRs). The proposed rule would provide a three-year extension to the CJR model, through December 31, 2023, for certain participant hospitals. This extension would apply to participant hospitals in the 34 metropolitan statistical areas (MSAs) where participation is mandatory, excluding hospitals that are “low-volume”, designated as “rural”, or that had voluntarily elected to participate in performance years (PYs) 3 through 5. CMS also proposes key changes to the episode of care definition, the target price calculation, the reconciliation process, the beneficiary notice requirements, and the appeals process that would apply beginning in PY 6.

Comments are due on April 24, 2020.

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I. Highlights of the Proposed Rule

Initial evaluation results for the first and second year of the CJR model have shown a positive impact on lowering episode costs when CJR participant hospitals are compared to non-CJR hospitals. Changes to program payment policy and national care delivery patterns, however, have

occurred since the CJR model began, and evaluating the impact of these changes is one of the reasons cited by CMS for its proposal to change and extend the CJR model for an additional three years. In particular, CMS’ previous decisions to remove total knee arthroplasty (TKA) and total hip arthroplasty (THA) procedure codes from the inpatient-only (IPO) list—a annual list published in the Outpatient Prospective Payment System (OPPS) rule that contains procedure codes that Medicare will only reimburse when performed in the inpatient setting – has significant implications on treatment patterns and resulting costs of providing these services as these services can now be provided in an hospital outpatient setting.¹

Recent analysis by CMS shows that national expenditures for LEJR procedures and associated post-acute care services has been decreasing since 2014, 2 years prior to CJR’s implementation in 2016. Excluding CJR participant hospitals, for example, national per episode costs dropped by about 8 percent from 2014 to 2017, largely due to reductions in the utilization of post-acute services. The CJR model, however, was still effective in reducing these costs further – average episode payments decreased by almost \$1,000 more for CJR episodes than for control group episodes from the baseline to the intervention period. CMS notes that the downward trend in spending for these services has not been captured adequately by its target pricing methodology.

Consistent with its goal of site neutrality, CMS does not want to create separate prices for inpatient and outpatient CJR episodes. However, based on historical spending for the two episode types blended together, CMS recognizes that a single blended target price could potentially underestimate spending on some inpatient episodes and, likewise, overestimate spending on some outpatient episodes.

CMS proposes a series of policies that are intended to complement the three-year extension of the program and take into account its decision to pay for TKA and THA in the hospital outpatient setting. These proposed policies address CJR participation, episode of care definition, target price calculation, the reconciliation process, beneficiary notification requirements, quality measures, gainsharing payments, the appeals process, and waivers. These proposed policies are summarized in the table below, and discussed in more detail in subsequent sections.

Category	Proposed Policy
Extension	Extend the CJR model for an additional 3 years, PYs 6 through 8, through December 31, 2023.
Participants	Include participant hospitals located in the 34 mandatory MSAs, and exclude rural hospitals, low-volume hospitals, and those elected to voluntarily participate in PYs 3 through 5.
Episode of care definition	Modify to include outpatient procedures.
Target price calculation	Use one year of claims data instead of the current 3 years. Remove the national update factor and twice yearly fee schedule updates. Remove anchor factors and weights. Modify the high episode spending cap calculation methodology.

¹The calendar year (CY) 2018 OPPS rule (65 FR 18455) removed the TKA procedure code (27447) from the IPO list and CY 2020 OPPS rule (84 FR 61353) removed the THA procedure code (27130) from the IPO list.

Reconciliation process	<p>Move from two reconciliation periods (conducted 2 and 14 months after the close of each PY) to one reconciliation 6 months after the close of the PY.</p> <p>Add an additional episode-level risk adjustment beyond fracture status (i.e., adjust for age and number of clinical conditions).</p> <p>Modify the high episode spending cap calculation methodology.</p> <p>Add a retrospective market trend factor.</p> <p>Increase the quality discount factors applicable to participants with excellent and good quality scores.</p>
Beneficiary notification requirements	Extend notification requirements to include outpatient procedures.
Quality measures	<p>Change the dates of publicly-reported data used for quality measures and patient-reported outcomes (PRO) for the three additional years.</p> <p>Align the Complications measure and Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) performance periods.</p> <p>For PRO, align the performance periods and increase the thresholds for successful submission.</p>
Financial arrangements	Eliminate the 50 percent cap on gainsharing payments, distribution payments, and downstream distribution payments when the recipient is a physician, non-physician practitioner, physician group practice, or non-physician practitioner group practice.
Appeals process	Clarify the reconsideration review (second level appeal) process.
Waivers	<p>Extend the waiver of the skilled nursing facility (SNF) 3-day rule</p> <p>Extend the waiver of direct supervision requirements for certain post-discharge home visits to hospitals furnishing services to CJR beneficiaries in the outpatient setting.</p>

II. Provisions of the Proposed Rule

A. Episode Definition (§§510.210 and 510.300)

1. Updating for Procedures Performed in the Outpatient Setting

The CJR episode design incorporates performance of LEJR procedures on an inpatient basis. LEJR procedures included in CJR are those falling under Medicare Severity-Diagnosis Related Groups (MS-DRGs) MS-DRGs 469 and 470 of the Inpatient Prospective Payment System (IPPS).² The most commonly performed CJR LEJR procedures are total knee arthroplasty (TKA) and total hip arthroplasty (THA), with total ankle replacement (TAR) being done far less often. Episodes are triggered by acute care hospital admissions of eligible beneficiaries for LEJRs (*anchor hospitalizations*), and episode payments are linked to those for MS-DRGs 469 and 470.³ Episodes include all Medicare Part A and B items and services related to the anchor hospitalization and a 90-day post-discharge period.

² MS-DRG 469 includes LEJR procedures with complications and/or comorbidities. MS-DRG 470 includes LEJR procedures without complications and/or comorbidities.

³ Beneficiaries with Medicare eligibility based on end-stage renal disease and those enrollment in Medicare Advantage are excluded from the CJR model.

Performance of LEJR procedures has moved to the outpatient setting for properly selected patients. CMS has recognized this shift by removing TKA from the Inpatient Only (IPO) list beginning with CY 2018 episodes, and more recently removing THA from the list starting with CY 2020.⁴ As a consequence, beneficiaries undergoing outpatient TKA or THA (OP TKA or OP THA) are now excluded from CJR model episodes as currently defined.

CMS notes that commenters on the IPO list removals worried about effects on CJR pricing accuracy, postulating that a shift of healthier, less costly LEJR patients to the outpatient setting would result in insufficient payment for the sicker, more costly patients that would remain in inpatient episodes. CMS deferred responding to this concern until claims data for OP LEJR procedures became available. Data, including claims runout, now are available for a full year of OP TKA episodes (CY 2018).

CMS discusses their data analysis and uses it to support redefining CJR episodes to include OP TKA and OP THA. OP TKAs constituted about 25 percent of all Medicare TKAs performed in 2018. CMS emphasizes that decision-making about LEJR procedure setting is multifactorial, is best made by the treating physician, and is not explicitly captured in claims data. For analytic purposes, however, CMS used MS-DRG 470 as a proxy to identify beneficiaries undergoing inpatient TKAs who were most likely to have been candidates for OP TKAs. Their TKA episode spending patterns were compared to those for simulated CJR OP TKA episodes.⁵ To mitigate the inherent difference between higher IPPS TKA procedure payments and lower OPSPS payments, CMS extracted only the post-acute spending from the episodes for comparison.⁶ Post-acute spending was found to be “highly similar” for the uncomplicated inpatient and simulated outpatient episodes, and CMS was persuaded that the CJR episode definition should be revised to include outpatient LEJR procedures. CMS further states that failure to include outpatient procedures in CJR would present new concerns:

- The decision to perform an LEJR procedure in the inpatient setting could become driven by payment reasons rather than medical necessity, since IPPS payments exceed OPSPS rates.
- Evaluation of the CJR model and the generalizability of its results would be compromised by excluding OP TKA and OP THA beneficiaries, because comparison of CJR participant hospital experiences to those of non-CJR hospitals would no longer be valid.
- Perpetuation of dissimilar payments for similar services based on service setting differences would be inconsistent with CMS’ goal for site neutrality and with the Bundled Payment for Care Improvement (BPCI) Advanced model’s site-neutral LEJR episode that became available starting on January 1, 2020.⁷

⁴ TKA was removed from the IPO list in the CY 2018 OPSPS final rule (82 FR 59385) and THA was removed in the CY 2020 OPSPS final rule (84 FR 61355). TAR remains on the IPO list.

⁵ The simulated episodes were created from outpatient claims data using current CJR episode criteria but with Current Procedural Terminology (CPT) code 27447 (total knee arthroplasty) as the episode trigger.

⁶ For payment, OP TKA is assigned to the comprehensive ambulatory payment classification C-APC 5115 (Level 5 Musculoskeletal Procedure),

⁷ Information about BPCI Advanced episodes is available at <https://innovation.cms.gov/initiatives/bpci-advanced>.

Therefore, CMS proposes to revise the CJR model’s episode definition for model performance year 6 and future years to include TKA and THA *anchor procedures* – newly defined as TKAs and THAs that are permitted and reimbursable by Medicare when performed in the outpatient setting and billed through the OPSS. For proposed performance year 6 and subsequently, episodes would be triggered by either a TKA or THA anchor procedure (outpatient) or an anchor hospitalization (inpatient), and would include, respectively, a 90-day post-procedure or post-discharge period. Performance year 6 would start on January 1, 2021, making the revised definition applicable to episodes starting on or after October 4, 2020, so as to include all episodes ending in performance year 6. Although claims data are not yet available for OP THA episodes, CMS states that their inclusion in the revised episode definition is appropriate since Medicare’s costs for TKA and THA previously have been found to be similar and the procedures already are grouped together under the same MS-DRGs and Comprehensive Ambulatory Payment Classification (C-APC-5115) for IPPS and OPSS payment purposes, respectively.

CMS further proposes that:

- An ongoing CJR episode triggered by an acute hospital admission for MS-DRGs 469 or 470 would be canceled by a subsequent inpatient or outpatient LEJR procedure performed during the first episode.
 - A new episode would be started by the second LEJR procedure.
- An ongoing CJR episode triggered by an outpatient THA or TKA anchor procedure would be canceled by a subsequent inpatient or outpatient LEJR procedure performed during the first episode.
 - A new episode would be started by the second LEJR procedure.

Finally, CMS proposes to create a CJR episode category that would blend OP TKA and OP THA episodes with inpatient TKA and THA episodes, all without hip fractures, to create a single target price. CMS refers to this as a “site-neutral” MS-DRG 470 price. OP THAs performed for hip fracture treatment would be grouped with MS-DRG 470 with inpatient THA with hip fracture episodes for target price setting. CMS notes that beneficiaries with hip fractures typically are admitted urgently as inpatients but wishes to allow for future changes in care delivery site patterns. Current approaches to price setting would remain unchanged for episode categories based on MS-DRGs 469 with or without hip fracture and MS-DRG 470 with hip fracture.

2. Freezing Hip Fracture and Episode Exclusion Code Lists

CMS uses International Classification of Diseases-Clinical Modification (ICD-CM) diagnosis codes during certain CJR model financial calculations: risk adjustment for hip fractures and exclusion of expenditures from episode spending totals for services and items considered unrelated to LEJR procedures and their postoperative care. Currently the CJR model includes a sub-regulatory process for annual updates to the hip fracture and episode exclusion code lists, and CMS proposes to discontinue that process.

Hip fracture list. THA may be performed urgently for hip fracture treatment. The presence of a hip fracture tracks with increased beneficiary morbidity and mortality as well as increased episode costs compared to THAs performed on a discretionary basis in the absence of hip

fracture (e.g., for osteoarthritis). CMS adjusts for the increased clinical and financial risks of urgent THAs by setting separate target prices based on MS-DRG (469 versus 470) and whether or not a hip fracture is present. Higher target prices for MS-DRG 469 and fractures are applied during calculations for CJR baseline and performance period episodes. A hip fracture is considered present when claims include an ICD-CM found on the CJR hip fracture code list.

Exclusion list. CJR episode spending, used during target pricing and episode reconciliation, includes all Part A and B services and items not present on CJR exclusion lists. Exclusions are considered to be unrelated to CJR care (e.g., hemophilia drugs) and are not included in spending calculations for baseline and performance period episodes. Exclusions are identified by their associated ICD-CM codes.

The current sub-regulatory process for annual updates to the hip fracture and episode exclusion lists was designed to address the ICD-CM code set evolution that followed the Medicare program's transition from ICD-9-CM (the 9th revision) to ICD-10-CM.⁸ The extent of coding changes relevant to both lists has declined over time, and no updates to either list were required for FY 2019. CMS now considers the ICD-10-CM code lists to be stable, and therefore believes the annual update process can be discontinued for both lists. **CMS seeks comment as to whether circumstances exist in which updates may still be needed.**

B. Target Price Calculation (§510.300)

1. Change to One Year of Baseline Data

The CJR model currently uses 3 years of baseline data to calculate initial target prices with the 3-year baseline data updated every other year. CMS chose this policy because it wanted to ensure that it had sufficient historical episode volume to reliably calculate target prices. This was particularly important in PYs 1 through 3, as CMS incorporated hospital-specific data into target prices. These concerns, however, were mitigated beginning in performance year 4 as target prices are now based entirely on aggregated regional episode spending data.

For performance years 6 through 8, CMS proposes to use the most recently available 1 year of data available prior to the start of the performance year to calculate target prices rather than the 3 years of data currently used. CMS believes that this would be the more appropriate baseline period on which to set target prices given the removal of TKA/THA from the IPO list, along with the national shift in LEJR spending. CMS lays out the following proposed schedule to set target prices:

- PY 6 target prices: episode baseline data from 2019
- PY 7 target prices: episode baseline data from 2020
- PY 8 target prices: episode baseline data from 2021

⁸ The transition to ICD-10-CM was effective for October 1, 2015 and the CJR model began April 1, 2016.

2. Removal of Anchor Factors and Weights and Removal of the Prospective Payment System Target Pricing Updates

Also for PYs 6 through 8, CMS proposes to stop using the national anchor factor calculations and the subsequent regional and hospital weighting steps in the CJR target price calculation method. Anchor weights are no longer necessary because CMS proposes to use regional episode spending data only (no hospital specific data) to calculate target prices and thus no longer has the concern that a lack of volume of data for certain participant hospitals may limit the predictability of the target price calculation. CMS also proposes to discontinue the at least twice annual updates to the target prices that account for changes in the Medicare prospective payments systems and fee schedule updates. CMS believes that this will no longer be necessary because it is proposing (in section II.C. of the summary) to add a market trend adjustment to the target prices at the time of reconciliation, which will adjust for the 2-year percent change in prices at the regional/MS-DRG/OP TKA/THA procedure/hip fracture level.

3. Changes to the Methodology for Determining the High Episode Spending Cap Amount in Initial Target Price Calculation

CMS incorporated a high episode spending cap policy as part of the CJR model to prevent participant hospitals from being held responsible for catastrophic episode spending amounts that they could not reasonably have been expected to prevent. The high cost episode cap is set at 2 standard deviations above the regional mean episode price for calculating the target price and for comparing actual episode payments during the performance year to the target prices. Episode costs exceeding the 2 standard deviation high episode spending cap are not included as actual episode payments in the calculation. For example, if the high episode cap was set at \$30,000, and an actual episode cost was \$50,000, the episode cost for purposes of the model would be reduced by \$20,000 and thus the cost of that episode would be \$30,000. When CMS established this policy it assumed that episode costs would be normally distributed, and with a normal statistical distribution, 95 percent of episodes would have costs that are within 2 standard deviations of the mean cost.

Based on its experience so far with the CJR model, CMS notes several challenges that have limited the ability of its current methodology to appropriately cap high episode spending. First, CMS observes that based on its data TKA and THA episode costs in the CJR model are not normally distributed, and more TKA and THA episodes exceed the 2 standard deviation amount than is observed with other clinical episode costs that are distributed normally. Second, given reliance on only regional data for target price calculations for PYs 4 and 5 and proposed PYs 6 through 8, a participant hospital with higher cost episodes relative to its region would benefit more from this capping method. Third, CMS states that the lack of a normal distribution is exacerbated during the reconciliation process, as episode costs at reconciliation are derived from only performance period episode costs from CJR participant hospitals.

CMS proposes to change its method of deriving the high episode amount applied to initial target prices by setting the high episode spending cap at the 99th percentile of historical costs. CMS would utilize the national summary of episode data to calculate the 99th percentile of each MS-DRG and hip fracture combination for each region. Total episode costs above the 99th percentile

would be capped at the 99th percentile amount prior to calculating target prices for each MS-DRG and hip fracture combination for each region.

C. Reconciliation (§510.301, §510.305, and §510.315)

1. Background

In the current CJR model, for each performance year, CMS reconciles payment twice: at 2 months and again at 14 months after the close of a performance period. At reconciliation, performance year episode costs are computed for each participant hospital for each MS-DRG and hip fracture combination and these costs are then capped at 2 standard deviations above the regional mean episode price. All participant hospitals in the CJR model are assigned a target price with a quality discount factor of 3 percent, which can be lowered to 2 percent if the hospital earns quality score of “good” or 1.5 percent if the hospital earns a quality score of “excellent”.⁹ CMS also applies “stop-gain limits” and “stop-loss limits”, as applicable. For example, all participant hospitals that achieved LEJR actual spending below the target price and achieved a minimum quality score were eligible up to 5 percent of the difference in PYs 1 and 2; 10 percent of the different in PY 3, and 20 percent in PYs 4 and 5. CMS implemented a parallel approach for stop-loss limits and believes that such an approach was necessary to provide similar protections to CMS and to hospital participants.

2. Changes to Frequency and Timing of Reconciliation

For each of performance years 6 through 8, CMS proposes to conduct one reconciliation 6 months following the end of the performance year. For example, for PY 6 (all CJR episodes ending on or after January 1, 2021 and on or before December 31, 2021), CMS proposes to reconcile a participant hospital’s CJR actual episode payments against the applicable target prices one time only, based on claims data available on July 1, 2022. CMS believes that reconciling payment twice at 2 and 14 months is not necessary and that, in particular, the 14 months reconciliation is not necessarily required to sufficiently capture claims run and overlap with other models. It also notes that this proposed approach would reduce the administrative burden associated with an extra reconciliation calculation on CMS and participant hospitals.

Under the proposal, the current CJR post-episode spending policy would still apply during performance years 6 through 8.¹⁰ This policy determines whether a hospital’s 30-day post-episode spending is 3 standard deviations greater than the regional average. Any spending amount exceeding this threshold is subtracted from the hospital’s net reconciliation. CMS notes the distribution of 30-day post-episode spending is more normally distributed and there have been few issues with the post-episode methodology to date.

CMS notes that under its proposed policies the final PY 5 reconciliation will be conducted slightly before it initiates the PY 6 reconciliation and thus CMS proposes to net the final PY 5

⁹ Based on results from the first 2 performance years of CJR, 18 percent of providers achieved quality scores of “Excellent”, 60 percent achieved “Good”, 12 percent “Acceptable”, and less than 10 percent were deemed “Below Acceptable”.

¹⁰The post-episode spending policy is set forth in regulatory text at §§510.305(j)(2) and 510.2

amount against the PY 6 amount prior to issuing a reconciliation payment or demanding a repayment amount.

3. Additional Episode-Level Risk Adjustment

Given its proposals to incorporate outpatient hip and knee procedures into the CJR model, CMS believes that additional risk adjustment is needed in order to account for variability within the four categories of target price: MS-DRG 469 and MS-DRG 470 with/without hip fracture. It is concerned that a single blended price within these four categories could potentially underestimate spending on some inpatient episodes and likewise, could potentially overestimate spending on some outpatient episodes.

CMS proposes an additional risk adjustment methodology for performance years 6 through 8. After conducting a variety of analyses and regressions, CMS proposes to incorporate the following into its CJR pricing: CMS Hierarchical Condition Category (HCC) condition count and beneficiary age. It considered a number of factors that are not included in its proposed methodology because they were not strong predictors of cost, might result in unintended provider efficiency disincentives, were overly complex to calculate or administer, had limited credibility or quality of the underlying data sources, or conflicted with other bundled payment initiatives. The factors not chosen include: dual eligibility status, joint region (i.e., hip, knee, or ankle), gender, CMS-HCC risk scores (community and institutional), rural/urban designation of the participant hospital, clinical setting (inpatient/outpatient), rehospitalization rate, and indices of social determination of health.

CMS proposes to incorporate the total number of clinical conditions per beneficiary by assessing the count of CMS-HCC conditions. Specifically, CMS proposes to use five CMS-HCC condition count variables, representing beneficiaries with zero, one, two, three, or four or more HCC conditions. These would be incorporated into a regression model to account for differences in the average anticipated episode costs by beneficiaries with a different number of clinical conditions.

CMS also proposes four age variables for the risk adjustment methodology to represent beneficiaries aged less than 65 years, 65 to 74 years, 75 years to 84 years, and 85 years or more, based on the patient's age at the time the HCC files were created. CMS proposes that for applying the coefficient to a given reconciliation target price at reconciliation, it would select the age bracket coefficient based on the patients' age on the date of admission for the anchor hospitalization or the date of the anchor presentation.

The proposed risk adjustment model for CJR would be prospective in that it would use the most recently available data to predict the average expected adjustment in target price relative to the two risk adjustment variables for future performance years. CMS proposes using the following CMS-HCC condition count and age baseline data for use in calculating the age and HCC coefficients for the risk adjustment variables:

- Baseline of January 1, 2019 to December 31, 2019 for PY 6
- Baseline of January 1, 2020 to December 31, 2020 for PY 7

- Baseline of January 1, 2021 to December 31, 2021 for PY 8

CMS notes that for any beneficiaries with missing CMS-HCC condition count data, it would apply a CMS-HCC condition count risk adjustment coefficient of one, so that missing data would neither adjust risk up nor down based on this factor.

CMS proposes a linear regression model approach to estimate the episode cost of an average beneficiary, based on typical spending patterns for a nationwide sample of beneficiaries with a given number of CMS-HCC conditions and within a given age bracket. Specifically, CMS proposes an exponential model, with the dependent variable equal to the ratio of the individual episode cost to the regional target price. It would transform the equation to logs through logarithmic transformation; this has the added benefit of allowing for easier interpretation of the coefficients and taking into account that costs for these episodes are not normally distributed, as discussed previously. In technical terms, in transforming its proposed exponential model, the dependent variable becomes the difference in the logs of the individual episode costs and the applicable regional MS-DRG/Fracture target prices and the proportional increases or decrease for each independent variable are obtained by exponentiating the regression coefficients of the log-transformed model.

CMS describes the steps it would take to develop its analytic dataset and the dependent variable that it uses to run its regression model. Specifically, it would subtract the log transformed episode target price for a given category from each log transformed standardized episode cost. There are 36 categories based on the 36 combinations of the 9 regions and the 4 MS-DRG/permitted OP/TKA/THA/hip fracture status categories, CMS notes that it applies the high spending cap before computing the log-values of the episode costs. In other words, it replaced the actual cost amount for each episode that exceeded the applicable 99th percentile amount with that 99th percentile amount.

CMS then regresses, or determines the strength of the relationship between each risk adjustment factor and episode costs. These coefficients are calculated at the national level; it runs one model and the coefficients are applied uniformly across all regions. An example of regression output from its model is provided in Table 3 in the proposed rule (reproduced below). This model was calculated using national episode data from January 1, 2018 to December 31, 2018, for MS-DRG 469, MS-DRG 470, and the permitted OP TKA/THA HCPCS code. The age and CMS-HCC count variables are all statistically significant (have p-values less than 0.05). The “e^x” column in the table represents the anticipated marginal cost associated with each specific risk adjustment factor. For example, the 1.255 value in Table 3 for beneficiaries with four HCC clinical conditions indicates that these beneficiaries are expected to increase marginal episode costs by 12.5 percent. Dual eligibility was included in the model displayed in Table 3 for illustrative purposes to show that it is not statistically significant and does not explain episode cost variation. CMS proposes to conduct this linear regression model on updated baseline data and post the coefficients on the CMS website prior to the start of each of the performance years (6 through 8). This would take into account, for example, any spending patterns that disproportionately affects certain subgroups that changed from the prior year used.

Table 3: Regression Output from Log Linear Regression Model

Parameters	Model Estimates	Standard Error	t Value	Pr > t (p values)	E ^x
Intercept	-0.08756	0.002127	-41.17	<.0001	0.916
Age 85+	0.109515	0.002573	42.56	<.0001	1.116
Age 75 to 84	0.012587	0.00219	5.75	<.0001	1.013
Age 65 to 74	-0.05192	0.002134	-24.33	<.0001	0.949
Age Under 65					1
Dual Eligibility[*]	0.001991	0.002787	0.71	0.4748	1.002
CMS-HCC Count = 4	0.226897	0.001721	131.81	<.0001	1.255
CMS-HCC Count = 3	0.140797	0.001893	74.4	<.0001	1.151
CMS-HCC Count = 2	0.095357	0.001534	62.16	<.0001	1.100
CMS-HCC Count = 1	0.047497	0.001314	36.14	<.0001	1.049
CMS-HCC Count = 0					1

Note: While CMS does not propose to include dual eligibility status in Medicare and Medicaid as a risk adjustment factor, it is included in this table to demonstrate the criteria it used to determine appropriate factors. The regression analysis was run without the Dual Eligibility variable, with no apparent impact on the other coefficient estimates.

Table 4 in the proposed rule (reproduced below) illustrates the risk permutations for each age bracket and HCC count category that would be used by CMS to calculate an adjusted target price. These are derived from the regression coefficients displayed in Table 3.

Table 4: Risk Factor Multipliers for CJR for All Age Bracket and HCC Count Combinations

Age Bracket	CMS-HCC Count = 4	CMS-HCC Count = 3	CMS-HCC Count = 2	CMS-HCC Count = 1	CMS-HCC Count = 0
Age 85+	1.401	1.285	1.228	1.171	1.116
Age 75 to 85	1.271	1.166	1.114	1.063	1.013
Age 65 to 74	1.191	1.092	1.044	0.996	0.949
Age Under 65	1.255	1.151	1.1	1.049	1

CMS provides an illustrative example to show how these factors would be used to calculate an adjusted target price: A 70-year-old beneficiary with an HCC count of 4, located in the West North Central Division, region 4, has an MS-DRG 470 no fracture episode during performance year 6. CMS assumes that the total actual cost for this episode was \$17,900 and no high cost episode cap approach was needed. In addition, CMS assumes that the beneficiary was treated at a CJR hospital with a composite quality score of ‘Good’ with a 1.5 percent withhold.

In this example, CMS assumes the target price for region 4 DRG 470 no fracture is \$17,550 (reflects a 3 percent quality withhold), the normalization factor in effect for performance year 6 is 0.95, and the market trend factor is 1.023. The computation would be as follows:

Step 1. Risk adjust the target price – Locate the appropriate risk adjustment co-efficient combination for an HCC of 4 and age of 70 (from Table 4) which is listed as 1.191 and multiply the target price of \$17,550 by that value:

$$\$17,550 * 1.191 = \$20,902.05$$

Step 2. Normalize the risk adjusted target price by multiplying it by the normalization factor (as discussed below):

$$\$20,902.05 * 0.95 = \$19,856.95$$

Step 3. Apply the market trend factor

$$\$19,856.95 * 1.023 = \$20,313.66$$

Step 4. Adjust the price to reflect the hospital’s composite quality score category – in this example ‘Good’ (1.5% withhold rather than 3%) by restoring 3% and then adjusting to withhold 1.5%:

$$\$20,313.66 * 100/97 = \$20,941.91$$

$$\$20,941.91 * 0.985 = \$20,627.79$$

Once the applicable risk adjusted, normalized, trend adjusted and quality adjusted target price is computed, the actual episode costs of \$17,900 would be compared to the target of \$20,627.79 and this episode would therefore show a savings of \$2,727.79.

CMS proposes to apply a normalization factor (as show in step 2 above) to remove the overall impact of adjusting for age and CMS-HCC condition count on the national average target price. This normalization factor would be the national mean of the target price for all episode types divided by the national mean of the risk-adjusted target price.

CMS seeks comment on its overall risk adjustment approach. It seeks comments on whether to include dual-eligibility status as a risk adjustment variable and other potential risk adjustment variables in the model to account for differences in patient characteristics or type of setting. Instead of running one “national” model to estimate these risk factor multipliers for CJR shown in Table 4, CMS considered alternative approaches of calculating coefficients separately for each region or applying risk-standardization to the regional target price prior to applying the beneficiary-specific risk score. However, CMS states it did not pursue these alternatives in an effort to minimize complication. **CMS solicits comment on whether additional calculations steps should be included in order to ensure that the average risk score in a given region and MS-DRG/permitted OP TKA/THA/hip fracture status category is equal to 1.**

CMS also seeks comment on a number of technical issues related to its regression model approach. It seeks comment on alternative methods for expressing the HCC-condition and age factors (beyond binary factors) in its exponential risk adjustment model. With respect to its

regression model chosen, it also seeks comment on specification checks that should be conducted and on revisions, such as using alternative model specifications (e.g., fixed effects model). CMS also seeks comment on adjusting the actual cost amount for each episode for the spending cap amount prior to running its model and how this impacts the model's statistical validity.

4. Changes to the Methodology for Determining the High-Episode Spending Cap Amount at Reconciliation

As discussed above with respect to setting the target price, CMS notes that the current methodology for setting the high episode spending cap amount—capping costs for those episodes at 2 standard deviations above the regional mean episode price—has not been as successful when applied to actual performance period episode spending at reconciliation. It notes that this could be partly explained by the fact that TKA and THA procedure episode costs are not distributed normally.¹¹

As a result, CMS proposes to change its methodology of calculating the high episode spending cap amount applied during reconciliation by calculating high episode spending cap amounts based on the 99th percentile of costs. Total episode costs above this 99th percentile would be capped at the 99th percentile amount, and these capped episode amounts would be used when comparing performance year costs to target prices during reconciliation. It believes that this proposed approach would more accurately represent the cost of infrequent and potential non-preventable complications for each category of episode.

Consistent with this proposal, CMS would make conforming changes to §510.200.

5. Changes to the Trend Factor Calculation

CMS notes that the absence of a trend factor calculation at reconciliation is a limitation of the current target price methodology. It did not anticipate, for example, a nationwide downward trend in the use of post-acute care services that resulted in a decrease in LEJR episode prices in both CJR and non-CJR hospitals. This has led to artificially inflated target prices for CJR episodes. CMS also notes that another major change not accounted for in the CJR target price methodology is the recent restructuring of the SNF payment systems and change in case-mix classification methodology. CMS believes a trend factor calculation would help adjust target prices, more appropriately for such changes, going forward.

CMS proposes to calculate a market trend factor at the time of reconciliation by calculating the ratio of performance period spending to baseline period spending and applying the resulting ratio to the target price. As a result, CMS would no longer apply the national update factor and biannual Medicare prospective payment and fee schedule update methodology it currently applies to historical episode spending to trend prices forward prospectively. CMS would apply this trend factor after the beneficiary-level, risk adjusted target prices are normalized.

¹¹ With a normal distribution of costs, 95 percent of episodes would have costs that are within 2 standard deviations of the mean cost.

The market trend factor would be the regional/MS-DRG/fracture mean cost for episodes occurring during the performance year divided by the regional/MS-DRG/fracture mean cost for episodes occurring during the target price base year. CMS would calculate 36 market trend factors during reconciliation, one for each MS-DRG/fracture status and region combination. The resulting target prices would be the final target prices used when reconciling performance year episode costs. For example, the performance year 6 market trend factor for MS-DRG 470 without hip fracture in Region 1 would be calculated as the Region 1 mean episode costs for MS-DRG 470 without hip fracture episodes ending between January 1, 2021 and December 31, 2021, divided by the Region 1 mean episode costs for MS-DRG 470 without hip fracture episode ending between January 1, 2019 and December 31, 2019.

CMS proposes utilizing the regional mean episode costs as a basis for the market trend factor update calculation, but it seeks comment on alternatively using the regional median episode costs for this calculation.

6. Changes to the Composite Quality Score Adjustment

CMS currently applies a 3 percentage point discount to establish the episode target price that applies to the participant hospital's episodes during that performance year. This discount serves as Medicare's portion of reduced expenditures from the episode. For PYs 1 through 5, this 3 percentage point discount factor is reduced based on the participant hospital's quality performance: one percentage point for good quality performance (a composite quality score of between 6.9 and 15) and 1.5 percentage points for excellent quality performance (a composite quality score greater than 15).

CMS proposes to increase a participant hospital's ability to reduce the 3 percentage point discount factor as a result of the composite quality score. It believes that this is appropriate because the target prices would be more accurate and that all participant hospitals would be at financial risk during PYs 6 through 8.

Specifically, CMS proposes that, for PYs 6 through 8, a 1.5 percentage point reduction be applied to the 3 percentage point discount factor for participant hospitals with good quality performance, defined as composite quality scores that are greater than or equal to 6.9 and less than or equal to 15.0. Additionally, CMS proposes that a 3 percentage point reduction be applied to the 3 percentage point discount factor for participant hospitals with excellent quality performance, defined as composite quality scores that are greater than 15.0. That is, for participant hospitals with excellent quality performance, the 3 percentage point discount factor would effectively be eliminated for the applicable performance year.

D. CJR Model Three-Year Extension (PYs 6-8), (§510.2, §510.105, and §510.200)

Revised Performance Period. To enable formal and valid evaluation of the impact of the many proposed changes (if finalized), CMS proposes to extend the CJR model for 3 additional years, performance years 6-8, that would run through December 31, 2023. Concomitantly, CMS proposes that performance year 6 episodes would start as of the later of October 4, 2020 or the

effective date of the final rule and end on or after January 1, 2021. **CMS seeks comment on the proposed start date of performance year 6.**

Participant Hospitals (§510.2). In the December 2017 CJR final rule, CMS revised the CJR model participation requirements (82 FR 57072-57082). Mandatory participation was maintained for most hospitals in 34 of the original 67 MSAs selected for CJR participation. A one-time opt-in opportunity to remain in the model through performance year 5 was offered to 1) all hospitals located in MSAs in which CJR participation was changing from mandatory to voluntary, including low-volume and rural hospitals; and 2) low-volume and rural hospitals located in MSAs in which mandatory participation was being continued.

CMS proposes to refine the CJR model participation requirements for the proposed performance years 6-8 to include, beginning January 1, 2021, only those hospitals located in a mandatory MSA that are not low-volume or rural hospitals. Low-volume or rural status would be determined as of October 4, 2020; hospitals that have applied for rural reclassification who are notified by CMS of application approval before October 4, 2020 would not be included as model participants beginning with performance year 6 episodes.¹² CMS is not proposing an opt-in opportunity for other hospitals.

CMS provides the following rationale for the proposed changes:

- A more narrowly-defined participant group will allow CMS to minimize selection bias while evaluating the impact of the changes proposed for the extended model years.
- Few of the eligible low-volume and rural hospitals opted in to remaining in the model.
- Hospitals located in voluntary MSAs are able to participate in LEJR bundled payment episodes through the voluntary BPCI Advanced model, which includes an outpatient TKA episode as of January 1, 2020.
- CMS will have accrued considerable data on LEJR bundled payment episodes by the conclusion of the CJR model as proposed and the end of the BPCI Advanced model.

E. Participant Hospital Detailed Notification and Discharge Planning Notice (§510.405)

Changes proposed to the CJR episode of care definition to include outpatient procedures would eliminate inpatient admission to a participating hospital for some beneficiaries (see section II.A above). Current notification requirements are linked to a beneficiary's hospital admission and discharge. CMS proposes changes to ensure that beneficiaries who undergo outpatient THA or TKA at a participant hospital are similarly informed.

Participant Hospital Detailed Notification. This written notice informs beneficiaries about their inclusion in the model, provides a detailed explanation of the model, and reiterates that beneficiary freedom to choose providers and suppliers continues under the model. Currently the notice must be provided when admission for a CJR procedure is scheduled or at the time of admission for procedures not scheduled in advance. Should a beneficiary's condition preclude

¹² CMS discusses several details of the rural reclassification notification timeline that would apply to required CJR participation for performance year 6 in section II.D of the rule.

notification at these times, the notification must be provided to the beneficiary or the beneficiary's representative no later than at hospital discharge.

CMS proposes that beneficiaries having CJR outpatient procedures must be similarly notified when the procedure is scheduled or on the date of the procedure when it is not scheduled in advance. CMS also proposes to clarify that the policy to allow delayed notification based on the beneficiary's condition would not apply to outpatient procedures, as these generally would not be performed emergently. CMS would update the detailed notification language on the CJR web page to reflect the proposed changes if finalized.

Discharge Planning Notice. This written notice informs beneficiaries of any potential financial liability associated with non-covered services recommended or presented as an option as part of discharge planning, including liability related to the SNF 3-day rule and the CJR model's waiver of that rule. Currently the notice must be provided during any discussion about a particular post-acute care option or at the time of hospital discharge, whichever occurs earlier. To accommodate outpatient CJR procedures, CMS proposes that beneficiaries must be similarly notified during any discussion about a particular post-acute care option or at the time the beneficiary is discharged from the outpatient anchor procedure, whichever occurs earlier.

F. Quality Measures and Reporting (§510.400)

CJR participants must submit data on two measures that are publicly reported: the total hip arthroplasty and/or total knee arthroplasty (THA/TKA) Complications measure (NQF #1550) and the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Survey measure (NQF #0166). Hospitals also may voluntarily submit data on certain patient risk variables (e.g., body mass index) and patient-reported outcome (PRO) surveys; provision of voluntary data may increase a hospital's composite quality score.

CMS proposes to advance the performance periods for both the mandatory and voluntary measures for the model's proposed performance years 6-8 to align with the performance periods established for performance years 1-5. CMS also proposes to increase the thresholds for successful submission of PRO data (outlined in Table 5 of the rule).

G. Financial Arrangements: Eliminating the 50 Percent Cap on Shared Payments (§§510.505 and 510.506)

Participant hospitals are permitted to engage in financial arrangements with a variety of providers and suppliers with whom they partner in delivering care under the CJR model and to whom a hospital may make gainsharing payments (e.g., physician and nonphysician practitioner group practices). Some gainsharing recipients may in turn have arrangements with certain other providers that allow for "distribution payments" to those providers. Finally, arrangements are allowed under which some recipients of distribution payments may share those payments with group practice members as "downstream distribution payments".

Current regulations impose a cap on gainsharing, distribution, and downstream distribution payments made to physicians, non-physician practitioners, physician group practices, and non-

physician practitioner group practices. Total payments of each type received in a single year by a practitioner or a group practice must not exceed 50 percent of the total Medicare approved amounts under the Physician Fee Schedule for items and services furnished during CJR episodes by the practitioner or group practice payment recipient during the same model performance year as that for which the payment is being made (referred to as the “50 percent cap”).

CMS intended the cap to serve as a safeguard against the potential risks of stinting, steering, and denial of medically necessary care due to the financial arrangements that are specifically allowed under CJR. The cap has been addressed repeatedly, and mostly negatively, by commenters during each CJR rulemaking cycle since the model’s inception. They have characterized the cap as arbitrary and as inhibitory to hospital-practitioner collaboration. Over the years, CMS has chosen to retain the cap and to extend its reach to additional practitioner types. CMS notes that the cap has been supported by MedPAC and that a similar cap applicable to BPCI episodes had not generated complaints from BPCI hospitals and practitioners that their collaboration was impeded by that cap.

However, CMS now states that the caps impose substantial regulatory burden and that claims data analysis does not indicate negative effects on beneficiary access to care due to the various types of CJR financial arrangements. For the proposed performance years 6-8, CMS proposes to eliminate the 50 percent cap on gainsharing payments, distribution payments, and downstream distribution payments whenever the payment recipient is a physician, non-physician practitioner, physician group practice, or non-physician practitioner group practice. **CMS seeks comment on the proposal for elimination of the 50 percent cap.**

H. Waiver of Medicare Program Rules (§§510.600 and 510.610)

The CJR model incorporates waivers of the SNF 3-day rule and the direct supervision requirements for certain post-discharge home visits, using the waiver authority given to the Secretary for testing care models (section 1115A of the Act).

SNF 3-day Rule Waiver. This waiver, applicable to CJR episodes since the beginning of performance year 2, allows a beneficiary to be discharged postoperatively from a participant hospital inpatient admission directly to a qualified SNF prior to completing a 3-day hospital stay. A qualified SNF must 1) have an overall rating of at least 3 stars for 7 of the most recent 12 months on the Nursing Home Compare website, and 2) be identified on the applicable calendar quarter list of qualified SNFs at the time of the beneficiary’s admission to the SNF. The calendar quarter SNF list is available at <https://innovation.cms.gov/initiatives/CJR>. CMS proposes to extend this waiver to permitted CJR outpatient procedures by modifying §510.610, so that in the unlikely event a beneficiary needs SNF care after an outpatient procedure, the beneficiary may be directly admitted to a qualifying SNF. CMS notes that beneficiary protection from financial liability if admitted to a non-qualifying SNF without having previously received a discharge planning notice of potential liability at §510.405(b)(3) would also apply to outpatient CJR procedures if corresponding proposed changes to §510.405 are finalized (see section II.E above).

Post-discharge Home Visits Waiver. This waiver allows up to 9 visits after discharge from an inpatient CJR admission to a beneficiary’s home by clinical staff under general rather than direct

supervision of a physician or non-physician practitioner. CMS proposes to extend this waiver to home visits provided after a beneficiary has been released following a permitted CJR outpatient procedure by revising §510.600(b)(1).

CMS seeks comment on the proposals for waiver application to outpatient CJR episodes.

I. Appeal Procedures (§510.310)

CJR regulations provide for an appeals process by which participant hospitals may dispute certain payment calculations (e.g., reconciliation and repayment amounts). A participant hospital starts the appeal process by submitting a written notice of calculation error to CMS to which CMS must respond in writing (first level of appeal). Thereafter, the hospital may request a reconsideration review of the CMS first level response by a CMS official (second level of appeal). The reconsideration review consists only of a review of briefs and evidence by the official and is termed an *on-the-record review*; it is not an in-person hearing. The written determination issued by the reconsideration official is final and binding.

CMS expresses concern that the language at §510.310(b)(4) may create confusion about 1) required attendance at the reconsideration review by the participant hospital, and 2) whether the Innovation Center's CJR model team also will be sent the Scheduling Notice containing details of the reconsideration review. CMS addresses these concerns by proposing to revise and reorganize §510.310. The changes are intended to clarify that 1) the reconsideration official must notify both CMS and the hospital of the issues in dispute, the review procedures, and the procedures for submission of briefs and evidence (via the Scheduling Notice); and 2) the parties may submit briefs and evidence in support of their positions. The second level appeal would remain an on-the-record review. **CMS seeks comment on the proposed revisions.**

J. Request for Comment: New LEJR-focused Models Including ASCs and Shared Accountability

CMS states that LEJR procedures are moving into Ambulatory Surgical Centers (ASCs) and notes having recently added TKA to the ASC covered procedures list. CMS further notes that advances in care delivery continue to enable the migration of more inpatient treatments and procedures to outpatient settings. Recognizing this trend, **CMS requests comments on the design of a bundled payment model for LEJR procedures performed in the ASC setting and how financial accountability might be expanded beyond participant hospitals to the treating clinicians.** Specific questions posed by CMS include:

- Who should participate in the model?
- Should the reconciliation payment and/or repayment obligations be shared between the facility and the rendering surgeon to better encourage collaboration? Are there any other clinicians who should share directly in the financial accountability?
- In general, would a prospective bundled payment or a retrospective target price benchmarked payment model approach work best?
- What types of quality measures would participants need to track and report?

- Should the model be specific to ASCs, or be site-neutral such that inpatient, outpatient and ASC service sites would be paid the same rate, regardless of where the procedure was performed?

III. Regulatory Impact Analysis

A. Overall Impact

Executive Orders 12866 and 13563 direct agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). A regulatory impact analysis (RIA) must be prepared for major rules with economically significant effects (\$100 million or more in any 1 year). CMS estimates that this rulemaking is "economically significant" as measured by the \$100 million threshold, and hence also a major rule under the Congressional Review Act. Accordingly, CMS prepared a Regulatory Impact Analysis to present the costs and benefits of the rulemaking.

B. Statement of Need

CMS states that this proposed rule is necessary for the Innovation Center to continue to meet its goals to reduce expenditures while preserving or enhancing quality of care for CJR episodes, as policy changes since the CJR inception have shifted how these services are provided and paid for under Medicare. CMS highlights reasons for why it believes the proposed rule is necessary. Among other reasons, this includes changes to the inpatient only list that removed the TKA and THA procedures and thus allowing these services to be provided in an hospital outpatient department. Target prices require additional adjustments to ensure they better capture spending trends and changes, by using more recent historical spending data (one year instead of three). Because of more accurate target prices, CMS believes a more generous composite quality score adjustment to the discount factor is appropriate for hospitals ranked in the good and excellent CJR quality categories. It also believes that a 3-year extension is necessary to allow for enough time and information for it to reasonably evaluate the proposed changes.

C. Anticipated Effects

CMS estimates that the proposed changes to the CJR model would result in a net Medicare program savings of about \$269 million over the 3 proposed additional performance years (2021 through 2023). Table 7 in the proposed rule (reproduced below) shows the estimated impact of these changes.

Table 7: Financial Impact for the Proposed Changes and Three-Year Extension of CJR

[Figures are in \$ millions, negative values represent savings]

Year	2021	2022	2023	Total
Episode Spending with Model	\$1,505	\$1,582	\$1,661	\$4,748
Episode Spending without Model	1,533	1,623	1,703	4,859
Reconciliation	-50	-53	-55	-158
Total Impact	-78	-94	-97	-269

Note: Totals do not necessarily equal the sums of rounded components.

CMS estimates that the number of providers participating in the CJR model would decline from 470 providers (as of October 2019) to 350 for the proposed 3-year extension. As discussed above, CMS proposes to limit participation to the non-rural, non-low-volume providers physically located in the 34 mandatory MSAs. This would remove about 75 providers located in these MSAs that were changed to voluntary and about 45 providers for rural reclassification status. For purposes of modeling the impact for Table 7, CMS used 2018 Medicare claims data, and limited the analysis to non-rural, non-low volume provider located in the 34 mandatory MSAs or about 330 eligible providers with CJR episode data. CMS also assumed that participants would reduce episode spending by 1 percent in 2021 compared to their respective regions and episode spending would grow at the same rate as their respective regions in 2022 and 2023. It believes that participant hospitals will have more difficulty producing additional savings over time. CMS did not make any assumptions about behavioral changes in the post-acute care space that may result from recent changes to Medicare skilled nursing facility payment and home health payment.

CMS also summarizes the anticipated qualitative impact on program costs or savings of each of the discrete provisions of this proposed rule (Table 6 in the proposed rule), and states it will provide a more detailed cost-benefit impact analysis for these provisions in the final rule. The table below highlights the qualitative impact by proposed provision relative to original CJR model policies.

Extract of Table 6: Qualitative Anticipated Impacts by Proposed Provision Relative to Original CJR Model Policies, 2021-2023

Provision	Cost or Savings	Notes
Changes to episode definition to include OP TKA/THA	Cost	If CMS were to make no changes to the current CJR target price methodology and were only to add OP TKA/THA procedures to the CJR episode definition, targets would be based on inpatient hospitalization costs and subsequent post-acute care and would likely be inappropriately high relative to OPPS episode costs.
Freezing hip fracture list and episode exclusions list	Zero Impact	List has not been updated to any significance in last 5 years, and no anticipated change in next 3 years, so CMS assumes this will have a zero impact.

Capping high episode spending at the 99 th percentile (rather than two standard deviation methodology)	Savings	The 99 th percentile high episode cap will be higher than the 2 standard deviations of mean episode cost such that more costs per episode will be considered relative to the target and reconciliation payments may decrease slightly while reconciliation obligations may increase slightly.
Use of the most recently available one year of data to calculate target prices (rather than most recent three years of data), removal of regional and hospital anchor weighting factor(s) from target price calculation, and discontinuing twice annual updates to the target prices to account for changes in the Medicare prospective payment systems and fee schedule rates	Savings	Updating the target price data set to use a time period closer to the model, removing anchor weighting and discontinuing the FFS updating (in favor of a trend update at reconciliation) should ensure the targets are better aligned to actual expected episode spending.
Applying a market trend factor (that is., the regional MS- DRG/fracture mean cost of episodes occurring during the performance year divided by the regional MS-DRG/fracture mean cost for episodes occurring during the target price base year)	Cost or Savings Trend Ratio	The trend factor will incorporate all differences in average episode costs between year used for target price and actual model so to the extent FFS payment updates have increased, the trend could be greater than 1 which could increase targets and the model cost; if, despite FFS increases overall ,episode spending decreases then targets will decrease and savings will results.
Incorporating a risk adjustment for beneficiary specific CMS- HCC condition count and age bracket	Zero Impact	This risk adjustment is designed to increase target prices somewhat for beneficiaries with increasing age and/or HCCs; it will lower targets somewhat for younger beneficiaries with fewer or no HCCs. The presumption is that episode costs for older, more complex beneficiaries should be higher than average and for younger, less complex beneficiaries they should be lower than average, so CMS anticipates a net impact of zero for this provision.
Increasing hospital quality incentive payments (that is, a 1.5 percentage point reduction to the applicable discount factor for participant hospitals with “good” quality performance and a 3-percentage point reduction to the applicable discount factor for participant hospitals with “excellent” quality performance)	Zero Impact	CMS believes this provision will be redistributive among participants but that it will not have an overall impact on the model given the other changes it proposes to the pricing methodology.
Excluding opt-in low-volume and rural hospitals with a CCN primary address in a mandatory MSA and excluding opt-in hospitals with a CCN primary address in a voluntary MSA	Savings	CMS assumes that those participants who voluntarily opted to continue in CJR as of PY3 were doing well in the CJR model and that removing them from the model will likely result in a smaller reconciliation payout which will create some savings relative to current CJR reconciliation spending.

CMS believes that burden reductions should result from three other proposals it is making in this proposed rule. Its proposal to move from two to one reconciliations should effectively half the level of effort participants and the agency need to expend on reconciliation. CMS estimates that moving to only one report for each performance year should reduce that cost to \$240,958 from \$481,916. Likewise, CMS’ proposal to remove the 50 percent cap should result in a burden

reduction on participants of \$1.1 million as accounting hours necessary to ensure that no physician received more than 50 percent of his or her total billing for Medicare-approved amounts under the PFS will no longer be necessary if its proposal is finalized. CMS' estimate is based on assumptions that each participant could have spent about \$6,778 on the reviews for a total of \$1.1 million across all 159 participants with CJR collaborators. CMS also believes that its proposals to modify beneficiary notice requirements for model inclusion, discharge planning notices, and its extension of waivers of Medicare program rules will streamline the administrative procedures and reduce the effort needed for participants to comply with CJR requirements.

CMS does not believe that proposed changes to the CJR model would materially affect the potential effect of the model on beneficiaries nor have an impact on small rural hospitals and other small entities.

D. Analysis of Regulatory Alternatives

CMS considered a number of alternatives to its proposals, many of which it is seeking comments on in other sections of the proposed rule. These include:

- Broadening or modifying the types of entities that may convene an episode under the CJR model;
- Calculating coefficients separately for each region or applying risk-standardization to the regional target price prior to applying the beneficiary-specific risk score (as noted earlier in section II.C.3. of this summary "Additional Episode-Level Risk Adjustment"); and
- Utilizing the regional median episode costs as a basis for the market trend factor update calculation, rather than the regional mean episode costs for this calculation (as noted earlier in section II.C.5. of this summary "Changes to Trend Factor Calculation")

CMS notes that although it considered broadening and modifying the types of entities that could initiate an episode under the CJR model, this would have required more lead time, and complicated the evaluation and the generalizability of the results.