

**Subpart D—Pricing and Payment****§512.300 Determination of episode quality-adjusted target prices and actual episode payments.**

(a) *General.* CMS establishes episode quality-adjusted target prices and calculates actual episode payments for EPM participants for each performance year of the EPMS as specified in this section.

(b) *Calculating episode quality-adjusted target prices.* Episode quality-adjusted target prices and actual episode payments are calculated for episodes according to the following:

(1) For episodes involving AMI, MS-DRGs.

(i) 280 (Acute myocardial infarction, discharged alive with MCC).

(ii) 281 (Acute myocardial infarction, discharged alive with CC).

(iii) 282 (Acute myocardial infarction, discharged alive without CC/MCC).

(iv) 246 (Perc cardiovasc proc with drug-eluting stent with MCC or 4+ vessels/stents).

(v) 247 (Perc cardiovasc proc with drug-eluting stent without MCC).

(vi) 248 (Perc cardiovasc proc with non-drug-eluting stent with MCC or 4+ vessels/stents).

(vii) 249 (Perc cardiovasc proc with non-drug-eluting stent without MCC).

(viii) 250 (Perc cardiovasc proc without coronary artery stent with MCC).

(ix) 251 (Perc cardiovasc proc without coronary artery stent without MCC).

(2) For episodes involving CABG, MS-DRGs.

(i) 231 (Coronary bypass with PTCA with MCC).

(ii) 232 (Coronary bypass with PTCA without MCC).

(iii) 233 (Coronary bypass with cardiac cath with MCC).

(iv) 234 (Coronary bypass with cardiac cath without MCC).

(v) 235 (Coronary bypass without cardiac cath with MCC).

(vi) 236 (Coronary bypass without cardiac cath without MCC).

(3) For episodes involving SHFFT, MS-DRGs.

(i) 480 (Hip and femur procedures except major joint with MCC).

(ii) 481 (Hip and femur procedures except major joint with CC).

(iii) 482 (Hip and femur procedures except major joint without CC or MCC).

(c) *Calculating quality-adjusted target prices.* CMS calculates quality adjusted target prices as specified in §512.300(c)(1) through (13).

(1) *Calculation of the historical expenditures.* CMS calculates historical expenditure calculations based on the following calendar years:

(i) Episodes beginning in 2013 through 2015 for performance years 1 and 2.

(ii) Episodes beginning in 2015 through 2017 for performance years 3 and 4.

(iii) Episodes beginning in 2017 through 2019 for performance year 5.

(2) *Calculation of the quality-adjusted target prices.* CMS calculates quality-adjusted target prices based on a blend of each EPM-participant hospital-specific and regional historical episode expenditures.

(i) The region corresponds to the U.S. Census Division associated with the primary address of the CCN of the EPM participant and the regional component is based on episodes occurring at all acute care hospitals in said region, except as follows.

(ii) In cases where an MSA selected for participation in an EPM spans more than one U.S. Census Division, the entire MSA is grouped into the U.S. Census Division where the largest city by population in the MSA is located for quality-adjusted target price and episode payment calculations.

(3) *Calculation of the quality-adjusted target price blend.* The quality-adjusted target price blend consists of the following:

(i) Two-thirds of the EPM participant's own historical episode payments and one-third of the regional historical episode payments for performance years 1 and 2.

(ii) One-third of the EPM participant's own historical episode payments and two-thirds of the regional historical episode payments for performance year 3.

(iii) Regional historical episode payments for performance years 4 and 5.

(4) *Exception for low-volume hospitals.* (i) For the SHFFT model, quality-adjusted target prices for participants

with fewer than 50 SHFFT model episodes in total across the 3 historical years of data used to calculate the quality-adjusted target price are based on 100 percent regional historical episode payments.

(ii) For the AMI model, quality-adjusted target prices for anchor MS-DRGs 280-282 for participants with fewer than 75 AMI model episodes with anchor MS-DRGs 280-282 in total across the 3 historical years of data used to calculate the quality-adjusted target price are based on 100 percent regional historical episode payments.

(iii) For the AMI model, quality-adjusted target prices for anchor MS-DRGs 246-251 for participants with fewer than 125 AMI model episodes with anchor MS-DRGs 246-251 in total across the 3 historical years of data used to calculate the quality-adjusted target price are based on 100 percent regional historical episode payments.

(iv) For the CABG model, quality-adjusted target prices for participants with fewer than 50 CABG model episodes in total across the 3 historical years of data used to calculate the quality-adjusted target price are based on 100 percent regional historical episode payments.

(5) *Exception for recently merged or split hospitals.* EPM-participant hospital-specific historical episode payments for EPM participants that have undergone a merger, consolidation, spin off or other reorganization that results in a new hospital entity without 3 full years of historical claims data are determined using the historical episode payments attributed to their predecessor(s).

(6) *Episodes that straddle performance years or payment updates.* Where an episode straddles performance years or payment updates, the quality-adjusted target price is based on the quality-adjusted target price for the type of episode as of the date of admission for the anchor hospitalization.

(7) *Adjustments for certain hospitalizations under the AMI and CABG models—*  
(i) *Adjustments for CABG model episodes with anchor MS-DRGs 231-236.* The episode benchmark price for an episode with CABG anchor MS-DRG 231-236 is set based on the sum of expenditures during the anchor hospitalization por-

tion and post-anchor hospitalization portion of the episode as follows:

(A) The anchor hospitalization portion of the episode benchmark price is set based on the CABG anchor MS-DRG at discharge.

(B) The post-anchor hospitalization portion of the episode benchmark price is set separately for episodes:

(1) With AMI ICD-CM diagnosis code on the anchor inpatient claim and CABG anchor MS-DRG with major complication or comorbidity (231, 233, or 235).

(2) With AMI ICD-CM diagnosis code on the anchor inpatient claim and CABG anchor MS-DRG without major complication or comorbidity (232, 234, or 236).

(3) Without AMI ICD-CM diagnosis code on the anchor inpatient claim and CABG anchor MS-DRG with major complication or comorbidity (231, 233, or 235).

(4) Without AMI ICD-CM diagnosis code on the anchor inpatient claim and CABG anchor MS-DRG without major complication or comorbidity (232, 234, or 236).

(ii) *Adjustments for Certain AMI Model Episodes with CABG Readmissions.* The episode benchmark price for an AMI model episode with AMI anchor MS-DRG 280-282 or PCI anchor MS-DRG 246-251 with a readmission to any of CABG anchor MS-DRGs 231-236 is the sum of the anchor hospitalization portion of the CABG episode benchmark price corresponding to the MS-DRG of the CABG readmission and the episode benchmark price for the corresponding anchor MS-DRG that would be applied to the episode if it did not include a CABG readmission.

(8) *Inclusion of reconciliation payments and Medicare repayments.* CMS will include certain reconciliation payments and Medicare repayments when updating quality adjusted target prices.

(i) *Inclusion of reconciliation payments and Medicare repayments in BPCI initiative.* Reconciliation payments and Medicare repayments under § 512.305(d)(2) and (3) and those from episodes in the BPCI initiative are included when updating quality-adjusted target prices for performance years 3 through 5, subject to the adjustment

for CABG model episodes in paragraph (c)(8)(ii) of this section.

(ii) *Inclusion of reconciliation payments and Medicare repayments in CABG model episodes.* When updating prices for CABG episodes, reconciliation payments and Medicare repayments under §512.305(d)(2) and (d)(3) and from episodes included in the BPCI initiative will be apportioned proportionally to the anchor hospitalization and post-anchor hospitalization portions of historical CABG episodes. The proportions will be based on regional average historical episode payments that occurred during the anchor hospitalization portion of CABG model episodes and regional average historical episode payments that occurred during the post-anchor hospitalization portion of CABG model episodes that were initiated during the 3 historical years.

(9) *Communication of quality-adjusted target prices.* CMS communicates quality-adjusted target prices to EPM participants prior to the beginning of the performance period in which they apply.

(10) *Applicable time period for updating quality-adjusted target prices.* In general quality-adjusted target prices are updated to account for Medicare payment updates no less than 2 times per year, for updated quality-adjusted target prices effective October 1 and January 1, and at other intervals if necessary as determined by CMS.

(i) For CABG model episodes, quality-adjusted target prices are updated by separately updating the anchor hospitalization portion of the episode benchmark price and the post-anchor hospitalization portion of the episode benchmark price and then applying the effective discount factor.

(ii) [Reserved].

(11) *Trending of historical expenditure data.* CMS trends historical expenditure data by applying separate national trend factors to episode payments. A trend factor is calculated for each of the first 2 years in the historical period based on the ratio of national average episode payments in the third year of the historical period to national average episode payments in each of the first 2 years in the historical period, for the following scenarios:

(i) Separately for each SHFFT anchor MS-DRGs 480 through 482.

(ii) Separately for each AMI anchor MS-DRGs 280 through 282 and PCI anchor MS-DRGs 246 through 251 for AMI model episodes without CABG readmissions.

(iii) For CABG model episodes, separately for the anchor hospitalization portion and post-anchor hospitalization portion as follows:

(A) For the anchor hospitalization portion of CABG model episodes, separately for each CABG anchor MS-DRGs 231 through 236.

(B) For the post-anchor hospitalization portion of CABG model episodes, separately for episodes:

(1) With AMI ICD-CM diagnosis code on the anchor inpatient claim and CABG anchor MS-DRG with major complication or comorbidity (231, 233, or 235).

(2) With AMI ICD-CM diagnosis code on the anchor inpatient claim and CABG anchor MS-DRG without major complication or comorbidity (232, 234, or 236).

(3) Without AMI ICD-CM diagnosis code on the anchor inpatient claim and CABG anchor MS-DRG with major complication or comorbidity (231, 233, or 235).

(4) Without AMI ICD-CM diagnosis code on the anchor inpatient claim and CABG anchor MS-DRG without major complication or comorbidity (232, 234, or 236).

(12) *Normalizing for wage variation.* CMS applies the CMS Price (Payment) Standardization Detailed Methodology to remove wage level differences in calculating EPM-episode benchmark prices and actual EPM-episode payments. CMS reintroduces wage index variations by multiplying the blended and updated historical payments by a wage normalization factor of  $0.7 * IPPS \text{ wage index} + 0.3$ .

(13) *Combining episodes to set stable benchmark and quality-adjusted target prices.* For purposes of having sufficient episode volume to set stable EPM episode benchmark and quality-adjusted target prices, where applicable, CMS aggregates EPM episodes and portions of EPM episodes across dimensions that include anchor MS-DRGs, the presence of an AMI ICD-CM diagnosis

code on the anchor inpatient claim, and the presence of a major complication or comorbidity for anchor CABG MS-DRGs.

(i) For each EPM, CMS combines episodes for anchor MS-DRGs adjusted for severity and hospital-specific and region-specific weights both for EPM participants and IPPS hospitals within each region for the purposes of blending EPM-participant hospital-specific components of the episode benchmark price and region-specific components of the episode benchmark price as follows:

(A) For SHFFT model episodes, CMS combines episodes with anchor MS-DRGs 480 through 482.

(B) For AMI model episodes with AMI anchor MS-DRGs in 280 through 282 or PCI anchor MS-DRGs 246 through 251 and without readmissions for CABG MS-DRGs, episodes with AMI anchor MS-DRGs 280 through 282 are grouped separately from episodes with PCI anchor MS-DRGs 246 through 251.

(C) For CABG model episodes with CABG anchor MS-DRGs in 231 through 236, CMS separately groups the anchor hospitalization portion and the post-anchor hospitalization portion.

(1) For the anchor hospitalization portion of CABG model episodes, the anchor hospitalization portion is grouped by the CABG anchor MS-DRG.

(2) For the post-anchor hospitalization portion of CABG model episodes, the post-anchor hospitalization portion is grouped by episodes:

(i) With AMI ICD-CM diagnosis code on the anchor inpatient claim and anchor MS-DRG with major complication or comorbidity (231, 233, or 235).

(ii) With AMI ICD-CM diagnosis code on the anchor inpatient claim and anchor MS-DRG without major complication or comorbidity (232, 234, or 236).

(iii) Without AMI ICD-CM diagnosis code on the anchor inpatient claim and anchor MS-DRG with major complication or comorbidity (231, 233, or 235).

(iv) Without AMI ICD-CM diagnosis code on the anchor inpatient claim and anchor MS-DRG without major complication or comorbidity (232, 234, or 236).

(ii) After blending EPM-participant hospital-specific and regional-specific components of the combined episodes,

CMS separates episodes to calculate episode benchmark prices according to the episode anchor MS-DRG, subject to adjustments described in § 512.300(c)(7).

(d) *Effective discount factor.* An EPM participant's quality-adjusted target prices incorporate an effective discount factor to reflect Medicare's portion of reduced expenditures from the EPM as described in this section.

(1) *Effective discount factor for reconciliation payments.* The effective discount factor for reconciliation payment in all performance years is determined by the EPM participant's quality category as provided in § 512.315(b)(5), (c)(5), and (d)(5).

(2) *Applicable discount factor for repayment amounts.* The applicable discount factor for repayment amounts is—

(i) Not applicable in performance year 1, as the requirement for EPM participant repayment is waived.

(ii) Not applicable in performance year 2 as the requirement for EPM participant repayment is waived except for an EPM participant that has elected downside risk for that performance year.

(iii) In performance year 2 for an EPM participant that has elected downside risk and performance years 3 and 4 when partial EPM participant repayment applies, as determined by the EPM participant's quality category as provided in § 512.315(b)(5), (c)(5), and (d)(5).

(iv) Not applicable in performance year 5 when full EPM participant repayment applies, as determined by the effective discount factor that applies to repayment amounts as specified in paragraph (d)(1) of this section.

(e) *Exceptions that apply to both quality-adjusted target prices and actual episode payments—*(1) *Exception for high episode payment.* For each EPM, actual episode payments and historical episode payments are capped at 2 standard deviations above the mean regional episode payment for the EPM-participant hospital-specific and regional components of the quality-adjusted target price under the EPM, as well as for calculating actual episode payments under the EPM during a performance year, subject to the exceptions noted in paragraphs (e)(1)(i) through (iii) of this section.

§ 512.300

42 CFR Ch. IV (10–1–17 Edition)

(i) For AMI model episodes with anchor MS-DRGs 280–282 or PCI anchor MS-DRGs 246 through 251 without readmission for CABG MS-DRGs 231 through 236, payments are capped separately based on the anchor MS-DRG.

(ii) For CABG model episodes with CABG MS-DRGs 231 through 236, episode payments during the anchor hospitalization portion are capped separately from episode payments during the post-anchor hospitalization portion as follows.

(A) Payments during the anchor hospitalization portion are capped based on the CABG anchor MS-DRGs 231 through 236.

(B) Payments during the post-anchor hospitalization portion are capped separately for episodes:

(1) With an AMI ICD-CM diagnosis code on the anchor inpatient claim and CABG anchor MS-DRG with major complication or comorbidity (231, 233, or 235).

(2) With an AMI ICD-CM diagnosis code on the anchor inpatient claim and CABG anchor MS-DRG without major complication or comorbidity (232, 234, or 236).

(3) Without an AMI ICD-CM diagnosis code on the anchor inpatient claim and CABG anchor MS-DRG with major complication or comorbidity (231, 233, or 235).

(4) Without an AMI ICD-CM diagnosis code on the anchor inpatient claim and CABG anchor MS-DRG without major complication or comorbidity (232, 234, or 236).

(iii) For AMI episodes with either AMI anchor MS-DRGs 280 through 282 or PCI anchor MS-DRGs 246 through 251 and with readmission for a CABG MS-DRG 231–236, the cap is applied separately to the payments during the CABG readmission and all other payments during the episode.

(A) For payments during the CABG readmission portion of the episode, the cap is applied for the anchor hospitalization portion of a CABG episode for the corresponding CABG readmission MS-DRG.

(B) For all other payments during the episode, the cap is applied to the AMI model episodes with AMI anchor MS-DRGs 280 through 282 or PCI anchor MS-DRGs 246 through 251 and

without readmission for CABG MS-DRGs corresponding to the AMI anchor MS-DRG.

(2) *Exclusion of incentive programs and add-on payments under existing Medicare payment systems.* Certain incentive programs and add-on payments are excluded by CMS' application of the CMS Price (Payment) Standardization Detailed Methodology used for the Medicare spending per beneficiary measure in the Hospital Value-Based Purchasing Program and Physician Value-Based Payment Modifier Program as specified in § 414.1235(a)(6) and (c)(1) of this chapter.

(f) *Allocation of payments for services that straddle the episode—(1) General.* Services included in the episode that begin before the start of or continue beyond the end of an EPM episode are prorated so that only the portion attributable to care furnished during the episode are included in the calculation of actual episode payments.

(2) *Proration of services.* Payments for services that straddle the episode are prorated using the following methodology:

(i) *Non-IPPS inpatient services and other inpatient services.* Non-IPPS inpatient services, and services furnished by other inpatient providers that extend beyond the end of the episode are prorated according to the percentage of the actual length of stay (in days) that falls within the episode.

(ii) *Home health agency services.* Home health services paid under the prospective payment system in part 484, subpart E of this chapter are prorated according to the percentage of days, starting with the first billable service date (start of care date) and through and including the last billable service date, that occur during the episode. This methodology is applied in the same way if the home health services begin (the start of care date) prior to the start of the episode.

(3) *IPPS services.* IPPS claim amounts that extend beyond the end of the episode are prorated according to the geometric mean length of stay, using the following methodology:

(i) The first day of the IPPS stay is counted as 2 days.

(ii) If the actual length of stay that occurred during the episode is equal to

or greater than the MS-DRG geometric mean, the normal MS-DRG payment is fully allocated to the episode.

(iii) If the actual length of stay that occurred during the episode is less than the geometric mean, the normal MS-DRG payment amount is allocated to the episode based on the number of inpatient days that fall within the episode.

(iv) If the full amount is not allocated to the episode, any remainder amount is allocated to the post-episode spending calculation (determined in § 512.307(c)).

**§ 512.305 Determination of the NPRA and reconciliation process.**

(a) *General.* Providers and suppliers furnishing items and services included in the EPM episode bill for such items and services in accordance with existing rules and as if this part were not in effect.

(b) *Annual reconciliation.* CMS annually performs the processes described in paragraphs (c) and (d) of this section to determine actual episode payments for each EPM episode for the performance year (except for episodes that have been canceled in accordance with § 512.240(a)(2), (b)(2), and (c)(2)) and determines the amount of a reconciliation payment to or Medicare repayment amount from EPM participants, if any, for that performance year.

(c) *Annual reconciliation to establish NPRA.* (1) Beginning 2 months after the end of each performance year and using the most recent claims data and non-claims-based payment data available, CMS performs a reconciliation calculation to establish an NPRA for each EPM participant based on the following process.

(2) CMS—

(i) Assesses whether EPM participants are in an acceptable or better quality category under § 512.315; and

(ii) Calculates the NPRA for each EPM participant for each performance year by comparing the quality-adjusted target prices and the EPM participant's actual episode payments for the performance year or portion of that performance year as described in § 512.300 as follows:

(A) Determines actual EPM episode payments for each EPM episode in-

cluded in the performance year or portion of that performance year.

(B) Multiplies the quality-adjusted target price by the number of non-canceled EPM episodes included in the performance year or portion of that performance year to which that episode quality-adjusted price applies and aggregates these amounts.

(C) Subtracts the amount determined under paragraph (c)(2)(ii)(A) of this section from the amount determined under paragraph (c)(2)(ii)(B) of this section.

(iii) Applies the following:

(A) *Limitation on loss.* Except as provided in paragraphs (c)(2)(iii)(C) and (D) of this section, the total amount of the NPRA and subsequent reconciliation calculation for a performance year or portion of that performance year cannot exceed the following:

(1) For performance year 2—

(i) Five percent of the amount calculated in paragraph (c)(2)(ii)(B) of this section for the performance year if the EPM participant elected downside risk for that year.

(ii) Zero percent of the amount calculated in paragraph (c)(2)(ii)(B) of this section for the performance year for all other EPM participants.

(2) For performance year 3, 5 percent of the amount calculated in paragraph (c)(2)(ii)(B) of this section for the performance year.

(3) For performance year 4, 10 percent of the amount calculated in paragraph (c)(2)(ii)(B) of this section for the performance year.

(4) For performance year 5, 20 percent of the amount calculated in paragraph (c)(2)(ii)(B) of this section for the performance year.

(B) *Limitation on gain.* The total amount of the NPRA and subsequent reconciliation calculation for a performance year cannot exceed the following:

(1) For performance years 1, 2, and 3, 5 percent of the amount calculated in paragraph (c)(2)(ii)(B) of this section for the performance year.

(2) For performance year 4, 10 percent of the amount calculated in paragraph (c)(2)(ii)(B) of this section for the performance year.

(3) For performance year 5, 20 percent of the amount calculated in paragraph