

its final rule that the proposed addition of paragraph (e) to § 412.101 is a codification and clarification of existing policy regarding dissimilar hospitals, and that under that policy it is proper to approve a low-volume hospital adjustment to a hospital despite its proximity to an IHS or Tribal hospital. In general, commenters pointed to one or more of the following reasons in support of their assertion that the proposed rule is a codification and clarification of existing policy rather than a new policy: (1) Published CMS and MAC guidance that commenters claim has provided for a “like hospital” standard since the implementation of the adjustment (for example, Transmittal 1347, Change Request 8627 (February 14, 2014)); (2) a hospital that is within 15 miles of an IHS hospital and also has sole community hospital status indicates that such hospitals and IHS facilities are not “like hospitals”; (3) assertions that some MACs had, at times for some cost reporting periods (or portions thereof), allowed non-IHS hospitals whose sole disqualifier was proximity to an IHS or Tribal hospital to receive a low-volume hospital adjustment; and (4) two Departmental Appeals Board decisions for cases which involved CAH designation not eligibility for a low-volume hospital adjustment (*Cibola General Hospital*, DAB No. 2387 (2011) and *La Paz Regional Hospital*, DAB CR 2883 (2013)), that commenters asserted found that “IHS facilities should be disregarded in determining a hospital’s eligibility for Medicare program classifications that are based on proximity to other Medicare hospitals.”

*Response:* We appreciate the commenters’ support of our proposal. Because we have consistently considered IHS and Tribal hospitals to be subsection (d) hospitals, as noted in the preambles of the above cited rules, we believe it is inappropriate to apply this parallel adjustment retroactively. While CMS may have in certain instances used terms such as “like” in place of “subsection (d)” when issuing subregulatory guidance for the low-volume hospital adjustment and there may have been inconsistencies in low-volume hospital adjustment determinations made by some contractors, these factors do not establish agency policy or bind the agency. Indeed, CMS’ regulations at § 412.101(b)(2) clearly refer to the proximity to the nearest subsection (d) hospital, consistent with section 1886(d)(12)(C)(i) of the Act, but neither the statutory nor the regulatory provisions that govern the low-volume

hospital adjustment refer to a “like” hospital standard. The SCH regulations at § 412.92(a), by comparison, expressly refer to proximity to a “like” hospital (as defined at § 412.92(c)(2)), consistent with section 1886(d)(5)(D)(iii) of the Act.

Moreover, the DAB decisions cited by the commenters concerned the certification of a hospital for CAH status, not the requirements for determining proximity to a subsection (d) hospital for purposes of the low-volume hospital payment adjustment. To the extent that these decisions could be interpreted to mean that the DAB has held that IHS hospitals may not, by implication, be subsection (d) hospitals, we reiterate that CMS has a longstanding policy of considering IHS and Tribal hospitals to be subsection (d) hospitals (as noted in the preambles to the rules cited above). As a result, we believe that it is necessary to amend the regulation governing the low-volume hospital payment adjustment in order to provide flexibility in determining eligibility for the adjustment. Therefore, after consideration of the public comments we received, we are finalizing this proposal, including our proposed revisions to 42 CFR 412.101, without modification.

#### *F. Indirect Medical Education (IME) Payment Adjustment Factor for FY 2018 (§ 412.105)*

Under the IPPS, an additional payment amount is made to hospitals with residents in an approved graduate medical education (GME) program in order to reflect the higher indirect patient care costs of teaching hospitals relative to nonteaching hospitals. The payment amount is determined by use of a statutorily specified adjustment factor. The regulations regarding the calculation of this additional payment, known as the IME adjustment, are located at § 412.105. We refer readers to the FY 2012 IPPS/LTCH PPS final rule (76 FR 51680) for a full discussion of the IME adjustment and IME adjustment factor. Section 1886(d)(5)(B)(ii)(XII) of the Act provides that, for discharges occurring during FY 2008 and fiscal years thereafter, the IME formula multiplier is 1.35. Accordingly, in the FY 2018 IPPS/LTH PPS proposed rule (82 FR 19940), we stated that, for discharges occurring during FY 2018, the formula multiplier is 1.35. We estimate that application of this formula multiplier for the FY 2018 IME adjustment will result in an increase in IPPS payment of 5.5 percent for every approximately 10 percent increase in the hospital’s resident-to-bed ratio.

*Comment:* One commenter stated that it appreciated that the resident-to-bed ratio is statutorily required for purposes of calculating the IME adjustment. The commenter requested that, in order to respond to physician shortages, policymakers provide additional funding to train future physicians and urged CMS to consider additional funding that would supplement the current IME adjustment factor.

*Response:* We appreciate the commenter’s comment. As noted above, the IME adjustment factor is statutory and the calculation of the IME payment is also specified in statute. Accordingly, for discharges occurring during FY 2018, the formula multiplier is 1.35.

#### *G. Payment Adjustment for Medicare Disproportionate Share Hospitals (DSHs) for FY 2018 (§ 412.106)*

##### 1. General Discussion

Section 1886(d)(5)(F) of the Act provides for additional Medicare payments to subsection (d) hospitals that serve a significantly disproportionate number of low-income patients. The Act specifies two methods by which a hospital may qualify for the Medicare disproportionate share hospital (DSH) adjustment. Under the first method, hospitals that are located in an urban area and have 100 or more beds may receive a Medicare DSH payment adjustment if the hospital can demonstrate that, during its cost reporting period, more than 30 percent of its net inpatient care revenues are derived from State and local government payments for care furnished to needy patients with low incomes. This method is commonly referred to as the “Pickle method.” The second method for qualifying for the DSH payment adjustment, which is the most common, is based on a complex statutory formula under which the DSH payment adjustment is based on the hospital’s geographic designation, the number of beds in the hospital, and the level of the hospital’s disproportionate patient percentage (DPP). A hospital’s DPP is the sum of two fractions: the “Medicare fraction” and the “Medicaid fraction.” The Medicare fraction (also known as the “SSI fraction” or “SSI ratio”) is computed by dividing the number of the hospital’s inpatient days that are furnished to patients who were entitled to both Medicare Part A and Supplemental Security Income (SSI) benefits by the hospital’s total number of patient days furnished to patients entitled to benefits under Medicare Part A. The Medicaid fraction is computed by dividing the hospital’s number of inpatient days furnished to patients

who, for such days, were eligible for Medicaid, but were not entitled to benefits under Medicare Part A, by the hospital's total number of inpatient days in the same period.

Because the DSH payment adjustment is part of the IPPS, the statutory references to "days" in section 1886(d)(5)(F) of the Act have been interpreted to apply only to hospital acute care inpatient days. Regulations located at § 412.106 govern the Medicare DSH payment adjustment and specify how the DPP is calculated as well as how beds and patient days are counted in determining the Medicare DSH payment adjustment. Under § 412.106(a)(1)(i), the number of beds for the Medicare DSH payment adjustment is determined in accordance with bed counting rules for the IME adjustment under § 412.105(b).

Section 3133 of the Patient Protection and Affordable Care Act, as amended by section 10316 of the same Act and section 1104 of the Health Care and Education Reconciliation Act (Pub. L. 111-152), added a section 1886(r) to the Act that modifies the methodology for computing the Medicare DSH payment adjustment. (For purposes of this final rule, we refer to these provisions collectively as section 3133 of the Affordable Care Act.) Beginning with discharges in FY 2014, hospitals that qualify for Medicare DSH payments under section 1886(d)(5)(F) of the Act receive 25 percent of the amount they previously would have received under the statutory formula for Medicare DSH payments. This provision applies equally to hospitals that qualify for DSH payments under section 1886(d)(5)(F)(i)(I) of the Act and those hospitals that qualify under the Pickle method under section 1886(d)(5)(F)(i)(II) of the Act.

The remaining amount, equal to an estimate of 75 percent of what otherwise would have been paid as Medicare DSH payments, reduced to reflect changes in the percentage of individuals who are uninsured, is available to make additional payments to each hospital that qualifies for Medicare DSH payments and that has uncompensated care. The payments to each hospital for a fiscal year are based on the hospital's amount of uncompensated care for a given time period relative to the total amount of uncompensated care for that same time period reported by all hospitals that receive Medicare DSH payments for that fiscal year.

As provided by section 3133 of the Affordable Care Act, section 1886(r) of the Act requires that, for FY 2014 and each subsequent fiscal year, a subsection (d) hospital that would

otherwise receive DSH payments made under section 1886(d)(5)(F) of the Act receives two separately calculated payments. Specifically, section 1886(r)(1) of the Act provides that the Secretary shall pay to such subsection (d) hospital (including a Pickle hospital) 25 percent of the amount the hospital would have received under section 1886(d)(5)(F) of the Act for DSH payments, which represents the empirically justified amount for such payment, as determined by the MedPAC in its March 2007 Report to Congress. We refer to this payment as the "empirically justified Medicare DSH payment."

In addition to this empirically justified Medicare DSH payment, section 1886(r)(2) of the Act provides that, for FY 2014 and each subsequent fiscal year, the Secretary shall pay to such subsection (d) hospital an additional amount equal to the product of three factors. The first factor is the difference between the aggregate amount of payments that would be made to subsection (d) hospitals under section 1886(d)(5)(F) of the Act if subsection (r) did not apply and the aggregate amount of payments that are made to subsection (d) hospitals under section 1886(r)(1) of the Act for such fiscal year. Therefore, this factor amounts to 75 percent of the payments that would otherwise be made under section 1886(d)(5)(F) of the Act.

The second factor is, for FYs 2014 through 2017, 1 minus the percent change in the percent of individuals under the age of 65 who are uninsured, determined by comparing the percent of such individuals who were uninsured in 2013, the last year before coverage expansion under the Affordable Care Act (as calculated by the Secretary based on the most recent estimates available from the Director of the Congressional Budget Office before a vote in either House on the Health Care and Education Reconciliation Act of 2010 that, if determined in the affirmative, would clear such Act for enrollment), and the percent of individuals who were uninsured in the most recent period for which data are available (as so calculated) minus 0.1 percentage point for FY 2014, and minus 0.2 percentage point for FYs 2015 through 2017. For FYs 2014 through 2017, the baseline for the estimate of the change in uninsurance is fixed by the most recent estimate of the Congressional Budget Office before the final vote on the Health Care and Education Reconciliation Act of 2010, which is contained in a March 20, 2010 letter from the Director of the Congressional Budget Office to the

Speaker of the House. (The March 20, 2010 letter is available for viewing on the following Web site: <https://www.cbo.gov/sites/default/files/111th-congress-2009-2010/costestimate/amendreconprop.pdf>.)

For FY 2018 and subsequent fiscal years, the second factor is 1 minus the percent change in the percent of individuals who are uninsured, as determined by comparing the percent of individuals who were uninsured in 2013 (as estimated by the Secretary, based on data from the Census Bureau or other sources the Secretary determines appropriate, and certified by the Chief Actuary of CMS), and the percent of individuals who were uninsured in the most recent period for which data are available (as so estimated and certified), minus 0.2 percentage point for FYs 2018 and 2019.

The third factor is a percent that, for each subsection (d) hospital, represents the quotient of the amount of uncompensated care for such hospital for a period selected by the Secretary (as estimated by the Secretary, based on appropriate data), including the use of alternative data where the Secretary determines that alternative data are available which are a better proxy for the costs of subsection (d) hospitals for treating the uninsured, and the aggregate amount of uncompensated care for all subsection (d) hospitals that receive a payment under section 1886(r) of the Act. Therefore, this third factor represents a hospital's uncompensated care amount for a given time period relative to the uncompensated care amount for that same time period for all hospitals that receive Medicare DSH payments in the applicable fiscal year, expressed as a percent.

For each hospital, the product of these three factors represents its additional payment for uncompensated care for the applicable fiscal year. We refer to the additional payment determined by these factors as the "uncompensated care payment."

Section 1886(r) of the Act applies to FY 2014 and each subsequent fiscal year. In the FY 2014 IPPS/LTCH PPS final rule (78 FR 50620 through 50647) and the FY 2014 IPPS interim final rule with comment period (78 FR 61191 through 61197), we set forth our policies for implementing the required changes to the Medicare DSH payment methodology made by section 3133 of the Affordable Care Act for FY 2014. In those rules, we noted that, because section 1886(r) of the Act modifies the payment required under section 1886(d)(5)(F) of the Act, it affects only the DSH payment under the operating IPPS. It does not revise or replace the

capital IPPS DSH payment provided under the regulations at 42 CFR part 412, subpart M, which were established through the exercise of the Secretary's discretion in implementing the capital IPPS under section 1886(g)(1)(A) of the Act.

Finally, section 1886(r)(3) of the Act provides that there shall be no administrative or judicial review under section 1869, section 1878, or otherwise of any estimate of the Secretary for purposes of determining the factors described in section 1886(r)(2) of the Act or of any period selected by the Secretary for the purpose of determining those factors. Therefore, there is no administrative or judicial review of the estimates developed for purposes of applying the three factors used to determine uncompensated care payments, or the periods selected in order to develop such estimates.

## 2. Eligibility for Empirically Justified Medicare DSH Payments and Uncompensated Care Payments

As indicated earlier, the payment methodology under section 3133 of the Affordable Care Act applies to "subsection (d) hospitals" that would otherwise receive a DSH payment made under section 1886(d)(5)(F) of the Act. Therefore, hospitals must receive empirically justified Medicare DSH payments in a fiscal year in order to receive an additional Medicare uncompensated care payment for that year. Specifically, section 1886(r)(2) of the Act states that, in addition to the payment made to a subsection (d) hospital under section 1886(r)(1) of the Act, the Secretary shall pay to such subsection (d) hospitals an additional amount. Because section 1886(r)(1) of the Act refers to empirically justified Medicare DSH payments, the additional payment under section 1886(r)(2) of the Act is limited to hospitals that receive empirically justified Medicare DSH payments in accordance with section 1886(r)(1) of the Act for the applicable fiscal year.

In the FY 2014 IPPS/LTCH PPS final rule (78 FR 50622) and the FY 2014 IPPS interim final rule with comment period (78 FR 61193), we provided that hospitals that are not eligible to receive empirically justified Medicare DSH payments in a fiscal year will not receive uncompensated care payments for that year. We also specified that we would make a determination concerning eligibility for interim uncompensated care payments based on each hospital's estimated DSH status for the applicable fiscal year (using the most recent data that are available). We indicated that our final determination on the hospital's

eligibility for uncompensated care payments will be based on the hospital's actual DSH status at cost report settlement for that payment year.

In the FY 2014 IPPS/LTCH PPS final rule (78 FR 50622) and the FY 2015 IPPS/LTCH PPS final rule (79 FR 50006), we specified our policies for several specific classes of hospitals within the scope of section 1886(r) of the Act. We refer readers to those two final rules for a detailed discussion of our policies. In summary, we specified the following:

- *Subsection (d) Puerto Rico hospitals* that are eligible for DSH payments also are eligible to receive empirically justified Medicare DSH payments and uncompensated care payments under the new payment methodology (78 FR 50623 and 79 FR 50006).

- *Maryland hospitals* are not eligible to receive empirically justified Medicare DSH payments and uncompensated care payments under the payment methodology of section 1886(r) of the Act because they are not paid under the IPPS. As discussed in the FY 2015 IPPS/LTCH PPS final rule (79 FR 50007), effective January 1, 2014, the State of Maryland elected to no longer have Medicare pay Maryland hospitals in accordance with section 1814(b)(3) of the Act and entered into an agreement with CMS that Maryland hospitals will be paid under the Maryland All-Payer Model. However, under the Maryland All-Payer Model, Maryland hospitals still are not paid under the IPPS. Therefore, they remain ineligible to receive empirically justified Medicare DSH payments or uncompensated care payments under section 1886(r) of the Act.

- *SCHs that are paid under their hospital-specific rate* are not eligible for Medicare DSH payments. SCHs that are paid under the IPPS Federal rate receive interim payments based on what we estimate and project their DSH status to be prior to the beginning of the Federal fiscal year (based on the best available data at that time) subject to settlement through the cost report, and if they receive interim empirically justified Medicare DSH payments in a fiscal year, they also will receive interim uncompensated care payments for that fiscal year on a per discharge basis, subject as well to settlement through the cost report. Final eligibility determinations will be made at the end of the cost reporting period at settlement, and both interim empirically justified Medicare DSH payments and uncompensated care payments will be adjusted accordingly (78 FR 50624 and 79 FR 50007).

- *MDHs* are paid based on the IPPS Federal rate or, if higher, the IPPS Federal rate plus 75 percent of the amount by which the Federal rate is exceeded by the updated hospital-specific rate from certain specified base years (76 FR 51684). The IPPS Federal rate used in the MDH payment methodology is the same IPPS Federal rate that is used in the SCH payment methodology. Section 205 of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA), Public Law 114–10, enacted April 16, 2015, extended the MDH program for discharges on or after April 1, 2015, through September 30, 2017. Because MDHs are paid based on the IPPS Federal rate, for FY 2017, MDHs continue to be eligible to receive empirically justified Medicare DSH payments and uncompensated care payments if their DPP is at least 15 percent. We apply the same process to determine MDHs' eligibility for empirically justified Medicare DSH and uncompensated care payments, as we do for all other IPPS hospitals, through September 30, 2017. We note that there has not been legislation at the time of development of this final rule that would extend the MDH program beyond September 30, 2017. However, if the MDH program were to be extended beyond its current expiration date, similar to how it was extended under MACRA, MDHs would continue to be paid based on the IPPS Federal rate or, if higher, the IPPS Federal rate plus 75 percent of the amount by which the Federal rate is exceeded by the updated hospital-specific rate from certain specified base years. Accordingly, if the MDH program were to be extended beyond its current expiration date of September 30, 2017, we would continue to make a determination concerning eligibility for interim uncompensated care payments based on each hospital's estimated DSH status for the applicable fiscal year (using the most recent data that are available). Our final determination on the hospital's eligibility for uncompensated care payments would be based on the hospital's actual DSH status at cost report settlement for that payment year. In addition, as we do for all IPPS hospitals, we would calculate a numerator for Factor 3 for all MDHs, regardless of whether they are projected to be eligible for Medicare DSH payments during the fiscal year, but the denominator for Factor 3 would be based on the uncompensated care data from the hospitals that we have projected to be eligible for Medicare DSH payments during the fiscal year.

These policies for MDHs would only apply in FY 2018 if the MDH program is extended by statute, beyond its current expiration date of September 30, 2017.

- *IPPS hospitals that have elected to participate in the Bundled Payments for Care Improvement initiative and IPPS hospitals that are participating in the mandatory Comprehensive Care for Joint Replacement Model, the Episode Payment Models, or the Cardiac Rehabilitation Incentive Payment Model* continue to be paid under the IPPS (77 FR 53342) and, therefore, are eligible to receive empirically justified Medicare DSH payments and uncompensated care payments (78 FR 50625 and 79 FR 50008).

- *Hospitals Participating in the Rural Community Hospital Demonstration Program* are not eligible to receive empirically justified Medicare DSH payments and uncompensated care payments under section 1886(r) of the Act because they are not paid under the IPPS (78 FR 50625 and 79 FR 50008). The Rural Community Hospital Demonstration Program was originally authorized for a 5-year period by section 410A of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) (Pub. L. 108–173), and extended for another 5-year period by sections 3123 and 10313 of the Affordable Care Act (Pub. L. 114–255). The period of performance for this 5-year extension period ended December 31, 2016. Section 15003 of the 21st Century Cures Act (Pub. L. 114–255), enacted December 13, 2016, again amended section 410A of Public Law 108–173 to require a 10-year extension period (in place of the 5-year extension required by the Affordable Care Act), to begin on the date immediately following the last day of the initial 5-year period. Section 15003 also requires that, no later than 120 days after enactment of Public Law 114–255, the Secretary issue a solicitation to select additional hospitals to participate in the demonstration program for the second 5 years of the 10-year extension period so long as the maximum number of 30 hospitals stipulated by the Affordable Care Act is not exceeded. (We refer readers to section V.L. of the preamble of this final rule for a full discussion of the provisions of section 15003 of Public Law 114–255 and our implementation of this provision.) As of the time of development of this final rule, the entire set of hospitals that will participate in the second 5 years of the extension period is unknown. However, we intend to apply a similar payment methodology during the remainder of the extension period. As a result, we

expect that hospitals participating in the demonstration will not receive empirically justified DSH payments, and that they will be excluded from receiving interim and final uncompensated care payments for FY 2018 and subsequent fiscal years for the duration of the second 5 years of the extension period.

### 3. Empirically Justified Medicare DSH Payments

As we have discussed earlier, section 1886(r)(1) of the Act requires the Secretary to pay 25 percent of the amount of the Medicare DSH payment that would otherwise be made under section 1886(d)(5)(F) of the Act to a subsection (d) hospital. Because section 1886(r)(1) of the Act merely requires the program to pay a designated percentage of these payments, without revising the criteria governing eligibility for DSH payments or the underlying payment methodology, we stated in the FY 2014 IPPS/LTCH PPS final rule that we did not believe that it was necessary to develop any new operational mechanisms for making such payments. Therefore, in the FY 2014 IPPS/LTCH PPS final rule (78 FR 50626), we implemented this provision by advising MACs to simply adjust the interim claim payments to the requisite 25 percent of what would have otherwise been paid. We also made corresponding changes to the hospital cost report so that these empirically justified Medicare DSH payments can be settled at the appropriate level at the time of cost report settlement. We provided more detailed operational instructions and cost report instructions following issuance of the FY 2014 IPPS/LTCH PPS final rule that are available on the CMS Web site at: <http://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/2014-Transmittals-Items/R5P240.html>.

### 4. Uncompensated Care Payments

As we discussed earlier, section 1886(r)(2) of the Act provides that, for each eligible hospital in FY 2014 and subsequent years, the uncompensated care payment is the product of three factors. These three factors represent our estimate of 75 percent of the amount of Medicare DSH payments that would otherwise have been paid, an adjustment to this amount for the percent change in the national rate of uninsurance compared to the rate of uninsurance in 2013, and each eligible hospital's estimated uncompensated care amount relative to the estimated uncompensated care amount for all eligible hospitals. Below we discuss the data sources and methodologies for

computing each of these factors, our final policies for FYs 2014 through 2017, and our proposed and final policies for FY 2018.

#### a. Calculation of Factor 1 for FY 2018

Section 1886(r)(2)(A) of the Act establishes Factor 1 in the calculation of the uncompensated care payment. Section 1886(r)(2)(A) of the Act states that this factor is equal to the difference between (1) the aggregate amount of payments that would be made to subsection (d) hospitals under section 1886(d)(5)(F) of the Act if section 1886(r) of the Act did not apply for such fiscal year (as estimated by the Secretary); and (2) the aggregate amount of payments that are made to subsection (d) hospitals under section 1886(r)(1) of the Act for such fiscal year (as so estimated). Therefore, section 1886(r)(2)(A)(i) of the Act represents the estimated Medicare DSH payments that would have been made under section 1886(d)(5)(F) of the Act if section 1886(r) of the Act did not apply for such fiscal year. Under a prospective payment system, we would not know the precise aggregate Medicare DSH payment amount that would be paid for a Federal fiscal year until cost report settlement for all IPPS hospitals is completed, which occurs several years after the end of the Federal fiscal year. Therefore, section 1886(r)(2)(A)(i) of the Act provides authority to estimate this amount, by specifying that, for each fiscal year to which the provision applies, such amount is to be estimated by the Secretary. Similarly, section 1886(r)(2)(A)(ii) of the Act represents the estimated empirically justified Medicare DSH payments to be made in a fiscal year, as prescribed under section 1886(r)(1) of the Act. Again, section 1886(r)(2)(A)(ii) of the Act provides authority to estimate this amount.

Therefore, Factor 1 is the difference between our estimates of: (1) The amount that would have been paid in Medicare DSH payments for the fiscal year, in the absence of the new payment provision; and (2) the amount of empirically justified Medicare DSH payments that are made for the fiscal year, which takes into account the requirement to pay 25 percent of what would have otherwise been paid under section 1886(d)(5)(F) of the Act. In other words, this factor represents our estimate of 75 percent (100 percent minus 25 percent) of our estimate of Medicare DSH payments that would otherwise be made, in the absence of section 1886(r) of the Act, for the fiscal year.

As we did for FY 2017, in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR

19943), in order to determine Factor 1 in the uncompensated care payment formula for FY 2018, we proposed to continue the policy established in the FY 2014 IPPS/LTCH PPS final rule (78 FR 50628 through 50630) and in the FY 2014 IPPS interim final rule with comment period (78 FR 61194) of determining Factor 1 by developing estimates of both the aggregate amount of Medicare DSH payments that would be made in the absence of section 1886(r)(1) of the Act and the aggregate amount of empirically justified Medicare DSH payments to hospitals under 1886(r)(1) of the Act. These estimates will not be revised or updated after we know the final Medicare DSH payments for FY 2018.

Therefore, in order to determine the two elements of proposed Factor 1 for FY 2018 (Medicare DSH payments *prior* to the application of section 1886(r)(1) of the Act, and empirically justified Medicare DSH payments *after* application of section 1886(r)(1) of the Act), for the proposed rule, we used the most recently available projections of Medicare DSH payments for the fiscal year, as calculated by CMS' Office of the Actuary using the most recently filed Medicare hospital cost report with Medicare DSH payment information and the most recent Medicare DSH patient percentages and Medicare DSH payment adjustments provided in the IPPS Impact File.

For purposes of calculating proposed Factor 1 and modeling the impact of the FY 2018 IPPS/LTCH PPS proposed rule, we used the Office of the Actuary's January 2017 Medicare DSH estimates, which were based on data from the December 2016 update of the Medicare Hospital Cost Report Information System (HCRIS) and the FY 2017 IPPS/LTCH PPS final rule IPPS Impact file, published in conjunction with the publication of the FY 2017 IPPS/LTCH PPS final rule. Because SCHs that are projected to be paid under their hospital-specific rate are excluded from the application of section 1886(r) of the Act, these hospitals also were excluded from the January 2017 Medicare DSH estimates. Furthermore, because section 1886(r) of the Act specifies that the uncompensated care payment is in addition to the empirically justified Medicare DSH payment (25 percent of DSH payments that would be made without regard to section 1886(r) of the Act), Maryland hospitals participating in the Maryland All-Payer Model that do not receive DSH payments were also excluded from the Office of the Actuary's January 2017 Medicare DSH estimates. Hospitals that had been participating in the Rural Community

Hospital Demonstration Program through December 31, 2016 were included in these estimates. (As discussed earlier, the Affordable Care Act authorized a 5-year extension period for the demonstration, which ended December 31, 2016.) The demonstration was extended for an additional 5 years by section 15003 of Public Law 114–255. Although the hospitals that will participate in the second 5 years of the extension period had not been determined at the time of development of the proposed rule, we stated that we intend to apply a similar payment methodology during the second 5 years of the extension period as for the earlier periods of the demonstration. Therefore, hospitals participating in the demonstration would not be eligible to receive DSH payments. We stated in the proposed rule that if the hospitals participating in the second 5 years of the extension period are known prior to the development of the Medicare DSH estimates for the FY 2018 final rule, these hospitals would be excluded from the Office of the Actuary's final Medicare DSH estimates for FY 2018.

For the proposed rule, using the data sources discussed earlier, the Office of the Actuary used the most recently submitted Medicare cost report data to identify Medicare DSH payments and the most recent Medicare DSH payment adjustments provided in the IPPS Impact File, and applied inflation updates and assumptions for future changes in utilization and case-mix to estimate Medicare DSH payments for the upcoming fiscal year. The January 2017 Office of the Actuary estimate for Medicare DSH payments for FY 2017, without regard to the application of section 1886(r)(1) of the Act, was approximately \$16,003 billion. This estimate excluded Maryland hospitals participating in the Maryland All-Payer Model and SCHs paid under their hospital-specific payment rate. Therefore, based on the January 2017 estimate, the estimate for empirically justified Medicare DSH payments for FY 2017, with the application of section 1886(r)(1) of the Act, was approximately \$4,001 billion (or 25 percent of the total amount of estimated Medicare DSH payments for FY 2018). Under § 412.106(g)(1)(i) of the regulations, Factor 1 is the difference between these two estimates of the Office of the Actuary. Therefore, in the proposed rule, we proposed that Factor 1 for FY 2018 was \$12,001,915,095.04, which is equal to 75 percent of the total amount of estimated Medicare DSH payments for FY 2017 (\$16,002,553,460.05 minus

\$4,000,638,365.01). We invited public comments on our proposed calculation of Factor 1 for FY 2018.

*Comment:* A number of commenters requested greater transparency in the methodology used by CMS and the OACT to estimate aggregate DSH payments that would have been paid absent implementation of the Affordable Care Act, particularly with respect to the calculation of estimated DSH payments for purposes of determining Factor 1. The commenters believed that CMS has not adequately explained its methodology in calculating DSH payments and urged CMS to clarify the methodology and provide additional information on the factor assumptions used to make these projections. One commenter noted that providing a table explaining the factors applied for FYs 2015–2018 to estimate Medicare DSH expenditures using a 2014 baseline is not sufficient, given that CMS does not provide more detail on the completion factor used to adjust the FY 2015 and FY 2016 claims data used for the “Discharges” column. The commenter stated that this lack of information severely limited the public's ability to comment on the projections and estimates for Factor 1. Commenters also requested that this information be provided in advance of the publication of the FY 2018 IPPS/LTCH PPS final rule and in future proposed rules each year.

The majority of comments on Factor 1 related to the “Other” and “Discharges” factors that are used to estimate Medicare DSH expenditures. Some commenters stated that there is variability in the factors and requested full disclosure of the methodology and the various components used to estimate the catch-all “Other” column. A number of commenters noted that, other than the statements in the proposed rule, CMS provided no further explanation for the specific items that make up the “Other” column or the value of each component. Specifically, one commenter expressed concern that the annual growth rate due to “other” factors projected by CMS increased from 4.9 percent in FY 2015 to 6.9 percent in FY 2017, while it decreased by 1 percent in FY 2018. Commenters requested that CMS provide a breakdown of the factors influencing these changes and their impact on FY 2018 DSH estimates to allow providers to understand and verify these projections, as well as to make meaningful comments, if warranted.

Many commenters also asked CMS to explain how Medicaid expansion is accounted for in the “Other” column used to determine the Factor 1 estimate.

A few commenters stated that the effect of Medicaid expansion on the agency's projection of the amount of traditional DSH payments that would have been paid in FY 2014, absent of the Affordable Care Act, has varied erratically in the agency's successive rulemakings for FYs 2015 through 2018. Another commenter noted that the most recent Congressional Budget Office report showed a 32-percent increase in Medicaid/CHIP enrollment as a result of Medicaid expansion, and expected that this increase in enrollment would result in a substantial increase in DSH payments that is not reflected in OACT's DSH estimate for Factor 1.

Commenters objected to CMS' statement from prior rulemaking that "the increase due to Medicaid expansion is not as large as commenters contended due to the actuarial assumption that the new enrollees are healthier than the average Medicaid recipient, and, therefore, use fewer hospital services." Some commenters asserted that there is no solid evidentiary basis for the assumption that new Medicaid enrollees are healthier, and requested that CMS reconsider and discontinue use of this assumption. In addition, the commenters argued that CMS should by now have accurate information regarding States that have expanded Medicaid, and that CMS should utilize the available enrollment and/or utilization information from Medicaid expansion programs either to support or refute the assumption that the Medicaid expansion population is healthier than the average Medicaid recipient. Many commenters also stated that the level of Medicaid expansion included in the calculation of Factor 1, including the adjustments made to Factor 1 to account for the estimated Medicaid expansion in FY 2018, is unclear. The commenters requested that CMS resolve the inconsistency with the decrease in the uninsured rate from 14 percent in 2013 to 8.15 percent in 2018 due to Medicaid expansion, and fully account for the increase in Medicaid participation in the Factor 1 calculation.

*Response:* We thank the commenters for their input. As in previous years, we would like to clarify that Factor 1 is not estimated in isolation. The Factor 1 estimates for proposed rules are generally consistent with the economic assumptions and actuarial analysis used to develop the President's Budget estimates under current law, and the Factor 1 estimates for the final rule are generally consistent with those used for the Midsession Review of the President's Budget. For additional information on the development of the

President's Budget, we refer readers to the Office of Management and Budget Web site at: <https://www.whitehouse.gov/omb/budget>. For additional information on the specific economic assumptions used in the Midsession Review of the President's FY 2018 Budget, we refer readers to the "Midsession Review of the President's FY 2018 Budget" available on the Office of Management and Budget Web site at: <https://www.whitehouse.gov/omb/budget>. For a general overview of the principal steps involved in projecting future inpatient costs and utilization, we refer readers to the "2017 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds" available on the CMS Web site at: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/index.html?redirect=/reportstrustfunds/> under "Downloads." For the OACT's memorandum describing its methodology and estimates, we refer readers to "OACT Memorandum on DSH Factor 1 for FY 2018" available on the CMS Web site at: <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/dsh.html> under "Downloads".

As we did in the FY 2017 IPPS/LTCH PPS final rule (81 FR 56950), later in this section, we provide additional information regarding the data sources, methods, and assumptions employed by the actuaries in determining the OACT's updated estimate of Factor 1 for FY 2018. We believe that this discussion addresses the methodological concerns raised by commenters regarding the various assumptions used in the estimate, including the "Other" and "Discharges" assumptions and also provides additional information regarding how we address the Medicaid and CHIP expansion. However, we note that, with regard to the commenters' questions and concerns regarding the use of completion factors to adjust preliminary data, the OACT assumed a discharge completion factor of 99 percent for FY 2015 and 98 percent for FY 2016. Similarly, the OACT assumed that case-mix for these years was stabilized at the time of the estimate and no additional completion factor adjustment was needed. These assumptions are consistent with historical patterns of completion factors that have been determined for discharge and case-mix numbers.

Regarding the commenters' assertion that Medicaid expansion is not adequately accounted for in the "Other" column and that there is no evidentiary

basis for the assumption that the newly covered Medicaid expansion population is healthier than the average Medicaid recipient, we note that, based on data from the Midsession Review of the President's Budget, the OACT assumed per capita spending for Medicaid beneficiaries who enrolled due to the expansion to be 50 percent of the average per capita spending of a pre-expansion Medicaid beneficiary due to the better health of these beneficiaries. This assumption is consistent with recent internal estimates of Medicaid per capita spending pre-expansion and post-expansion.

*Comment:* In addition to requesting that the methodology and assumptions used for Factor 1 be made public before the publication of the final rule and with the proposed rule each subsequent year, commenters requested that CMS furnish interested parties with advance opportunity to comment on new calculations based on the more recent data that CMS intends ultimately to use for the final rule. One commenter believed that CMS' rulemaking is flawed because different data and calculations are used in the final rule than were used for purposes of the proposed rule, without any opportunity for the hospitals to comment. This commenter requested that CMS make clear that it will use different or updated data to determine payments for uncompensated care in the final rule. The commenter believed that the proposal to determine the amount of hospitals' uncompensated care payments based on data first released with the final rule and on which hospitals will have no meaningful opportunity to comment violates notice-and-comment rulemaking requirements. As discussed earlier, several commenters noted the variability in the values of the "Other" column as well as in the factor applied to account for Medicaid expansion; one of the commenters called on CMS to explain why these values were allowed to change from one rulemaking to the next when the agency has otherwise taken the position that the estimates used to determine uncompensated care payments should be fixed when made and not be reconciled with data that become available later.

*Response:* We believe that stakeholders had notice and a full opportunity to comment on the methodology that would be used to determine uncompensated care payments, including the data sources that would be used. As a result, commenters had a full opportunity to raise any concerns regarding the appropriateness of the data generally, even if the actual data were not yet

available, consistent with the requirements for notice-and-comment rulemaking under the Administrative Procedure Act. With respect to concerns about the variability of the factors used to estimate Factor 1, we note that, in the FY 2014 IPPS/LTCH PPS final rule (78 FR 50630), using the discretion afforded in the statute to estimate the aggregate amount of DSH payments that would be made in the absence of section 1886(r) of the Act, we finalized a policy of defining the methodology for calculating Factor 1 using the OACT's biannual Medicare DSH payment projections, which are typically available around February of each year (based on data from December of the previous year) as part of the President's Budget, and around July (based on data from June) as part of the Midsession Review of the President's Budget.

*Comment:* One commenter requested that, in light of its concerns about the data sources and methods used to estimate Factor 1, CMS adopt a process to reconcile data for Factor 1. Commenters noted their concern that the DSH payment estimates for FY 2014 through FY 2017, as displayed in the table for factors applied to update the Medicare DSH baseline in the FY 2018 proposed rule, compared to original projections from the respective payment year from the FY 2014 through FY 2017 final rules, show that Factor 1 would have been higher, in retrospect, over that period of time. In other words, commenters noted how, based on the more recent data used in the FY 2018 proposed rule, the Factor 1 estimates are higher compared to the data available at the time of the past final rules.

*Response:* We continue to believe that applying our best estimates prospectively is most conducive to administrative efficiency, finality, and predictability in payments (78 FR 50628; 79 FR 50010; 80 FR 49518; and 81 FR 56949). We believe that, in affording the Secretary the discretion to estimate the amount of these payments and by including a prohibition against administrative and judicial review of those estimates in section 1886(r)(3) of

the Act, Congress recognized the importance of finality and predictability in payments. As a result, we do not agree with the commenter that we should establish a process for reconciling our estimate of Factor 1. However, we note that, in reviewing the OACT's prior estimates for DSH payments compared to more updated estimates and/or actual experience, from FY 2005 to FY 2017, the original estimates have been higher than either the more updated estimates and/or actual experience for 8 of the 14 years and lower than actual experience in only 6 years.

After consideration of the public comments received, we are finalizing our proposed methodology for calculating Factor 1 for FY 2018. We discuss the resulting Factor 1 amount for FY 2018 below.

To determine Factor 1 and to model the impact of this provision for FY 2018, we used the Office of the Actuary's June 2017 Medicare DSH estimates based on data from the March 2017 update of the cost report data for FY 2014 included in the HCRIS and the Impact File published in conjunction with the publication of the FY 2017 IPPS/LTCH PPS final rule. Because SCHs that are projected to be paid under their hospital-specific rate are excluded from the application of section 1886(r) of the Act, these hospitals also were excluded from the June 2017 Medicare DSH estimates. Furthermore, because Maryland hospitals participating in the Maryland All-Payer Model do not receive DSH payments, these hospitals also are excluded from the Office of the Actuary's Medicare DSH estimates. At the time of development of this final rule, the set of hospitals participating in the Rural Community Hospital Demonstration program is still unknown. As a result, it was not possible for these hospitals to be excluded from the Office of the Actuary's Medicare DSH estimates. However, we expect that hospitals participating in the demonstration will not receive empirically justified DSH payments, and that they will be

excluded from receiving interim and final uncompensated care payments for FY 2018 and subsequent fiscal years for the duration of the second 5 years of the extension period.

For this final rule, using the data sources discussed above, the Office of the Actuary used the most recently submitted Medicare cost report data for FY 2014 to identify Medicare DSH payments and the most recent Medicare DSH payment adjustments provided in the Impact File published in conjunction with the publication of the FY 2017 IPPS/LTCH PPS final rule and applied update factors and assumptions for future changes in utilization and case-mix to estimate Medicare DSH payments for the upcoming fiscal year. The June 2017 Office of the Actuary estimate for Medicare DSH payments for FY 2018, without regard to the application of section 1886(r)(1) of the Act, was approximately \$15.533 billion. This estimate excluded Maryland hospitals participating in the Maryland All-Payer Model and SCHs paid under their hospital-specific payment rate. Therefore, based on the June 2017 estimate, the estimate for empirically justified Medicare DSH payments for FY 2018, with the application of section 1886(r)(1) of the Act, is approximately \$3.888 billion (or 25 percent of the total amount of estimated Medicare DSH payments for FY 2018). Under § 412.106(g)(1)(i) of the regulations, Factor 1 is the difference between these two estimates of the Office of the Actuary. Therefore, in this final rule, Factor 1 for FY 2018 is \$11,664,704,643.27, which is equal to 75 percent of the total amount of estimated Medicare DSH payments for FY 2018 (\$15,552,939,524.36 minus \$3,888,234,881.09).

The Office of the Actuary's final estimates for FY 2018 began with a baseline of \$12.395 billion in Medicare DSH expenditures for FY 2014. The following table shows the factors applied to update this baseline through the current estimate for FY 2018:

FACTORS APPLIED FOR FY 2015 THROUGH FY 2018 TO ESTIMATE MEDICARE DSH EXPENDITURES USING 2014 BASELINE

FY	Update	Discharges	Case-mix	Other	Total	Estimated DSH payment (in billions)*
2015 .....	1.014	1.0068	1.005	1.0496	1.0769	\$13.348
2016 .....	1.009	0.9742	1.027	1.0685	1.0787	14.398
2017 .....	1.0015	0.9952	1.005	1.0535	1.0553	15.194
2018 .....	1.018088	1.0070	1.005	0.9935	1.0236	15.533

\* Rounded.

In this table, the “Discharges” column shows the increase in the number of Medicare fee-for-service (FFS) inpatient hospital discharges. The figures for FY 2015 and FY 2016 are based on Medicare claims data that have been adjusted by a completion factor. The discharge figure for FY 2017 is based on preliminary data for 2017. The discharge figure for FY 2018 is an assumption based on recent trends recovering back to the long-term trend and assumptions related to how many beneficiaries will be enrolled in Medicare Advantage (MA) plans. The case-mix column shows the increase in case-mix for IPPS hospitals. The case-mix figures for FY 2015 and FY 2016 are based on actual data adjusted by a completion factor. The FY 2017 increase is based on preliminary data.

The FY 2018 increase is based on the recommendation of the 2010–2011 Medicare Technical Review Panel. The

“Other” column shows the increase in other factors that contribute to the Medicare DSH estimates. These factors include the difference between the total inpatient hospital discharges and the IPPS discharges, and various adjustments to the payment rates that have been included over the years but are not reflected in the other columns (such as the change in rates for the 2-midnight stay policy). In addition, the “Other” column includes a factor for the Medicaid expansion due to the Affordable Care Act. The factor for Medicaid expansion was developed using public information and statements for each State regarding its intent to implement the expansion. Based on this information, it is assumed that 50 percent of all individuals who were potentially newly eligible Medicaid enrollees in 2016 resided in States that had elected to expand Medicaid

eligibility and, for 2017 and thereafter, that 55 percent of such individuals would reside in expansion States. In the future, these assumptions may change based on actual participation by States. For a discussion of general issues regarding Medicaid projections, we refer readers to the 2016 Actuarial Report on the Financial Outlook for Medicaid (<https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/ActuarialStudies/Downloads/MedicaidReport2016.pdf>). We note that, in developing their estimates of the effect of Medicaid expansion on Medicare DSH expenditures, our actuaries have assumed that the new Medicaid enrollees are healthier than the average Medicaid recipient and, therefore, use fewer hospital services.

The table below shows the factors that are included in the “Update” column of the above table:

FY	Market basket percentage	Affordable Care Act payment reductions	Multifactor productivity adjustment	Documentation and coding	Total update percentage
2015 .....	2.9	–0.2	–0.5	–0.8	1.4
2016 .....	2.4	–0.2	–0.5	–0.8	0.9
2017 .....	2.7	–0.75	–0.3	–1.5	0.15
2018 .....	2.7	–0.75	–0.6	0.4588	1.8088

**Note:** All numbers are based on Midsession Review of FY 2018 President’s Budget projections.

b. Calculation of Factor 2 for FY 2018

(1) Background

Section 1886(r)(2)(B) of the Act establishes Factor 2 in the calculation of the uncompensated care payment. Specifically, section 1886(r)(2)(B)(i) of the Act provides that, for each of FYs 2014, 2015, 2016, and 2017, a factor equal to 1 minus the percent change in the percent of individuals under the age of 65 who are uninsured, as determined by comparing the percent of such individuals (1) who were uninsured in 2013, the last year before coverage expansion under the Affordable Care Act (as calculated by the Secretary based on the most recent estimates available from the Director of the Congressional Budget Office before a vote in either House on the Health Care and Education Reconciliation Act of 2010 that, if determined in the affirmative, would clear such Act for enrollment); and (2) who are uninsured in the most recent period for which data are available (as so calculated), minus 0.1 percentage point for FY 2014 and minus 0.2 percentage point for each of FYs 2015, 2016, and 2017.

Section 1886(r)(2)(B)(i)(I) of the Act further indicates that the percent of individuals under 65 without insurance in 2013 must be the percent of such individuals who were uninsured in 2013, the last year before coverage expansion under the Affordable Care Act (as calculated by the Secretary based on the most recent estimates available from the Director of the Congressional Budget Office before a vote in either House on the Health Care and Education Reconciliation Act of 2010 that, if determined in the affirmative, would clear such Act for enrollment). The Health Care and Education Reconciliation Act (Pub. L. 111–152) was enacted on March 30, 2010. It was passed in the House of Representatives on March 21, 2010, and by the Senate on March 25, 2010. Because the House of Representatives was the first House to vote on the Health Care and Education Reconciliation Act of 2010 on March 21, 2010, we have determined that the most recent estimate available from the Director of the Congressional Budget Office “before a vote in either House on the Health Care and Education Reconciliation Act of 2010 . . .” (emphasis added)

appeared in a March 20, 2010 letter from the director of the CBO to the Speaker of the House. Therefore, we believe that only the estimates in this March 20, 2010 letter meet the statutory requirement under section 1886(r)(2)(B)(i)(I) of the Act. (To view the March 20, 2010 letter, we refer readers to the Web site at: <https://www.cbo.gov/sites/default/files/111th-congress-2009-2010/costestimate/amendreconprop.pdf>.)

In its March 20, 2010 letter to the Speaker of the House of Representatives, the CBO provided two estimates of the “post-policy uninsured population.” The first estimate is of the “Insured Share of the Nonelderly Population Including All Residents” (82 percent) and the second estimate is of the “Insured Share of the Nonelderly Population Excluding Unauthorized Immigrants” (83 percent). In the FY 2014 IPPS/LTCH PPS final rule (78 FR 50631), we used the first estimate that includes all residents, including unauthorized immigrants. We stated that we believe this estimate is most consistent with the statute, which requires us to measure “the percent of individuals under the age of 65 who are

uninsured” and provides no exclusions except for individuals over the age of 65. In addition, we stated that we believe that this estimate more fully reflects the levels of uninsurance in the United States that influence uncompensated care for hospitals than the estimate that reflects only legal residents. The March 20, 2010 CBO letter reports these figures as the estimated percentage of individuals with insurance. However, because section 1886(r)(2)(B)(i) of the Act requires that we compare the percent of individuals who are uninsured in the most recent period for which data are available with the percent of individuals who were uninsured in 2013, in the FY 2014 IPPS/LTCH PPS final rule, we used the CBO insurance rate figure and subtracted that amount from 100 percent (that is, the total population without regard to insurance status) to estimate the 2013 baseline percent of individuals without insurance. Therefore, for FYs 2014 through 2017, our estimate of the uninsurance percentage for 2013 was 18 percent.

Section 1886(r)(2)(B)(i) of the Act requires that we compare the baseline uninsurance rate to the percent of such individuals who are uninsured in the most recent period for which data are available (as so calculated). In the FY 2014, FY 2015, FY 2016, and FY 2017 IPPS/LTCH PPS final rules (78 FR 50634, 79 FR 50014, 80 FR 49522, and 81 FR 56952, respectively), we used the same data source, CBO estimates, to calculate this percent of individuals without insurance. In response to public comments, we also agreed that we should normalize the CBO estimates, which are based on the calendar year, for the Federal fiscal years for which each calculation of Factor 2 is made (78 FR 50633). Therefore, for the FY 2017 IPPS/LTCH PPS final rule (81 FR 56952), we used the most recently available estimate of the uninsurance rate, which was based on the CBO’s March 2016 estimates of the effects of the Affordable Care Act on health insurance coverage (which are available at <https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51385-HealthInsuranceBaseline.pdf>). The CBO’s March 2016 estimate of individuals under the age of 65 with insurance in CY 2016 was 90 percent. Therefore, the CBO’s most recent estimate of the rate of uninsurance in CY 2016 was 10 percent (that is, 100 percent minus 90 percent). The CBO’s March 2016 estimate of individuals under the age of 65 with insurance in CY 2017 was also 90 percent. Therefore, the CBO’s most recent estimate of the

rate of uninsurance in CY 2017 available for the FY 2017 final rule was also 10 percent (that is, 100 percent minus 90 percent).

The calculation of the final Factor 2 for FY 2017, employing a weighted average of the CBO projections for CY 2016 and CY 2017, was as follows:

- CY 2016 rate of insurance coverage (March 2016 CBO estimate): 90 percent.
- CY 2017 rate of insurance coverage (March 2016 CBO estimate): 90 percent.
- FY 2016 rate of insurance coverage: (90 percent \* .25) + (90 percent \* .75) = 90 percent.

- Percent of individuals without insurance for 2013 (March 2010 CBO estimate): 18 percent.
- Percent of individuals without insurance for FY 2017 (weighted average): 10 percent.

$$1 - \left| \frac{(0.10 - 0.18)}{0.18} \right| = 1 - 0.4444 = 0.5555 \text{ (55.56 percent)}$$

$$0.5555 \text{ (55.56 percent)} - .002 \text{ (0.2 percentage points for FY 2017 under section 1886(r)(2)(B)(i) of the Act)} = 0.5536 \text{ or } 55.36 \text{ percent}$$

$$0.5536 = \text{Factor 2}$$

Therefore, the final Factor 2 for FY 2017 was 55.36 percent.

The FY 2017 final uncompensated care amount was: \$10,797,476,782.62 × 0.5536 = \$5,977,483,146.86.

FY 2017 Uncompensated Care Total Available ...	\$5,977,483,146.86
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#### (2) Methodology for Calculation of Factor 2 for FY 2018

Section 1886(r)(2)(B)(ii) of the Act permits the use of a data source other than the CBO estimates to determine the percent change in the rate of uninsurance beginning in FY 2018. In addition, for FY 2018 and subsequent years, the statute does not require that the estimate of the percent of individuals who are uninsured be limited to individuals who are under 65. Specifically, the statute states that, for FY 2018 and subsequent fiscal years, the second factor is 1 minus the percent change in the percent of individuals who are uninsured, as determined by comparing the percent of individuals who were uninsured in 2013 (as estimated by the Secretary, based on data from the Census Bureau or other sources the Secretary determines appropriate, and certified by the Chief Actuary of CMS) and the percent of individuals who were uninsured in the most recent period for which data are available (as so estimated and certified), minus 0.2 percentage point for FYs 2018 and 2019. In the FY 2017 IPPS/LTCH PPS final rule (81 FR 56952), we indicated that we planned to address

changes to the methodology for determining Factor 2 and the viability of potential alternative data sources in the FY 2018 IPPS/LTCH PPS proposed rule.

As we discussed in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19945), in our analysis of a potential data source for the rate of uninsurance for purposes of computing Factor 2 in FY 2018, we considered the following: (a) The extent to which the source accounted for the full U.S. population; (b) the extent to which the source comprehensively accounted for both public and private health insurance coverage in deriving its estimates of the number of uninsured; (c) the extent to which the source utilized data from the Census Bureau; (d) the timeliness of the estimates; (e) the continuity of the estimates over time; (f) the accuracy of the estimates; and (g) the availability of projections (including the availability of projections using an established estimation methodology that would allow for calculation of the rate of uninsurance for the applicable Federal fiscal year). As we explained in the proposed rule, these considerations are consistent with the statutory requirement that this estimate be based on data from the Census Bureau or other sources the Secretary determines appropriate and help to ensure the data source will provide reasonable estimates for the rate of uninsurance that are available in conjunction with the IPPS rulemaking cycle.

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19946 and 19947), we explained that we have determined that the source that, on balance, best meets all of these considerations is the uninsured estimates produced by CMS’ Office of the Actuary (OACT) as part of the development of the National Health Expenditure Accounts (NHEA). The NHEA represents the government’s official estimates of economic activity (spending) within the health sector. The information contained in the NHEA has been used to study numerous topics related to the health care sector, including, but not limited to, changes in the amount and cost of health services purchased and the payers or programs that provide or purchase these services; the economic causal factors at work in the health sector; the impact of policy changes, including major health reform; and comparisons to other countries’ health spending. Of relevance to the determination of Factor 2 is that the comprehensive and integrated structure of the NHEA creates an ideal tool for evaluating changes to the health care system, such as the mix of the insured and uninsured because this mix is integral to the well-established NHEA

methodology. Below we describe some aspects of the methodology used to develop the NHEA that we believe are particularly relevant in estimating the percent change in the rate of uninsurance for FY 2018. A full description of the methodology used to develop the NHEA is available on the CMS Web site at: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/DSM-15.pdf>.

The NHEA estimates of U.S. population reflect the Census Bureau's definition of the resident-based population, which includes all people who usually reside in the 50 States or the District of Columbia, but excludes residents living in Puerto Rico and areas under U.S. sovereignty, members of the U.S. Armed Forces overseas, and U.S. citizens whose usual place of residence is outside of the United States, plus a small (typically less than 0.2 percent of population) adjustment to reflect Census undercounts. In past years, the estimates for Factor 2 were made using the CBO's uninsured population estimates for the under 65 population. For FY 2018 and subsequent years, the statute does not restrict the estimate to the measurement of the percent of individuals under the age of 65 who are uninsured. Accordingly, as we explained in the proposed rule, we believe it is appropriate to use an estimate that reflects the rate of uninsurance in the United States across all age groups. In addition, we continue to believe that a resident-based population estimate more fully reflects the levels of uninsurance in the United States that influence uncompensated care for hospitals than an estimate that reflects only legal residents. The NHEA estimates of uninsurance are for the total U.S. population (all ages) and not by specific age cohort, such as the population under the age of 65.

The NHEA includes comprehensive enrollment estimates for total private health insurance (PHI) (including direct and employer-sponsored plans), Medicare, Medicaid, the Children's Health Insurance Program (CHIP), and other public programs, and estimates of the number of individuals who are uninsured. Estimates of total PHI enrollment are available for 1960 through 2015, estimates of Medicaid, Medicare, and CHIP enrollment are available for the length of the respective programs, and all other estimates (including the more detailed estimates of direct-purchased and employer-sponsored insurance) are available for 1987 through 2015. The NHEA data are publicly available on the CMS Web site

at: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/index.html>. In order to compute Factor 2, the first metric that is needed is the proportion of the total U.S. population that was uninsured in 2013. In developing the estimates for the NHEA, OACT's methodology included using the number of uninsured individuals for 1987 through 2009 based on the enhanced Current Population Survey (CPS) from the State Health Access Data Assistance Center (SHADAC). The CPS, sponsored jointly by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics (BLS), is the primary source of labor force statistics for the population of the United States. (We refer readers to the Web site at: <http://www.census.gov/programs-surveys/cps.html>.) The enhanced CPS, available from SHADAC (available at <http://datacenter.shadac.org>) accounts for changes in the CPS methodology over time. OACT further adjusts the enhanced CPS for an estimated undercount of Medicaid enrollees (a population that is often not fully captured in surveys that include Medicaid enrollees due to a perceived stigma associated with being enrolled in the Medicaid program or confusion about the source of their health insurance).

To estimate the number of uninsured individuals for 2010 through 2014, OACT extrapolates from the 2009 CPS data using data from the National Health Interview Survey (NHIS). The NHIS is one of the major data collection programs of the National Center for Health Statistics (NCHS), which is part of the Centers for Disease Control and Prevention (CDC). The U.S. Census Bureau is the data collection agent for the NHIS.

The NHIS results have been instrumental over the years in providing data to track health status, health care access, and progress toward achieving national health objectives. For further information regarding the NHIS, we refer readers to the CDC Web site at: <https://www.cdc.gov/nchs/nhis/index.htm>. For 2015, the estimate of the rate of uninsurance in the NHEA matches with the estimate from the NHIS.

The next metrics needed to compute Factor 2 are projections of the rate of uninsurance in both calendar years 2017 and 2018. On an annual basis, the OACT projects enrollment and spending trends for the coming 10-year period. Those projections (currently for years 2016 through 2025) use the latest NHEA historical data, which presently run

through 2015. The NHEA projection methodology accounts for expected changes in enrollment across all of the categories of insurance coverage previously listed. The sources for projected growth rates in enrollment for Medicare, Medicaid, and CHIP include the latest Medicare Trustees Report, the Medicaid Actuarial Report, or other updated estimates as produced by the OACT. Projected rates of growth in enrollment for private health insurance and the uninsured are based largely on OACT's econometric models, which rely on the set of macroeconomic assumptions underlying the latest Medicare Trustees Report. Greater detail can be found in OACT's report titled "Projections of National Health Expenditure: Methodology and Model Specification," which is available on the CMS Web site at: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/ProjectionsMethodology.pdf>. As discussed in the proposed rule, the use of data from the NHEA to estimate the rate of uninsurance is consistent with the statute and meets the criteria we have identified for determining the appropriate data source. Section 1886(r)(2)(B)(ii) of the Act instructs the Secretary to estimate the rate of uninsurance for purposes of Factor 2 based on data from the Census Bureau or other sources the Secretary determines appropriate. The NHEA utilizes data from the Census Bureau; the estimates are available in time for the IPPS rulemaking cycle; the estimates are produced by OACT on an annual basis and are expected to continue to be produced for the foreseeable future; and projections are available for calendar year time periods that span the upcoming fiscal year. Timeliness and continuity are important considerations because of our need to be able to update this estimate annually. Accuracy is also a very important consideration and, all things being equal, we would choose the most accurate data source that sufficiently meets our other criteria.

Using these data sources and the methodologies described above, OACT estimates that the uninsured rate for the historical, baseline year of 2013 was 14 percent and for CYs 2017 and 2018 is 8.3 percent and 8.1 percent, respectively. As required by section 1886(r)(2)(B)(ii) of the Act, the Chief Actuary of CMS has certified these estimates. As with the CBO estimates on which we based Factor 2 in prior fiscal years, the NHEA estimates are for a calendar year. In the rulemaking for FY 2014, many commenters noted that the

uncompensated care payments are made on fiscal year and not a calendar year basis and requested that CMS normalize the CBO estimate to reflect a fiscal year basis. Specifically, commenters requested that CMS calculate a weighted average of the CBO estimate for October through December 2013 and the CBO estimate for January through September 2014 when determining Factor 2 for FY 2014. We agreed with the commenters that normalizing the estimate to cover FY 2014 rather than CY 2014 would more accurately reflect the rate of uninsurance that hospitals would experience during the FY 2014 payment year. Accordingly, we estimated the rate of uninsurance for FY 2014 by calculating a weighted average of the CBO estimates for CY 2013 and CY 2014 (78 FR 50633). We have continued this weighted average approach in each fiscal year since FY 2014.

We continue to believe that, in order to estimate the rate of uninsurance during a fiscal year more accurately, Factor 2 should reflect the estimated rate of uninsurance that hospitals will experience during the fiscal year, rather than the rate of uninsurance during only one of the calendar years that the fiscal year spans. However, we have concerns about the future potential for the uninsured rate to vary nonuniformly in the 2 calendar years that the fiscal year spans (for example, due to changes in the economy or changes in legislation). Nevertheless, for FY 2018, because OACT's current estimates of the percent of individuals without insurance in CY 2017 and CY 2018 are relatively close, we stated in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19947) that we do not believe this is a significant policy issue, and we proposed to continue with the weighted average approach used in past fiscal years in order to estimate the rate of uninsurance for FY 2018.

The calculation of the proposed Factor 2 for FY 2018 using a weighted average of OACT's projections for CY 2017 and CY 2018 was as follows:

- Percent of individuals without insurance for CY 2013: 14 percent.
- Percent of individuals without insurance for CY 2017: 8.3 percent.
- Percent of individuals without insurance for CY 2018: 8.1 percent.
- Percent of individuals without insurance for FY 2018 (0.25 times 0.083) + (0.75 times 0.081): 8.15 percent

$$1 - \left| \frac{(0.0815 - 0.14)}{0.14} \right| = 1 - 0.4179 = 0.5821 \text{ (58.21 percent)}$$

$$1 - \left| \frac{(0.0815 - 0.14)}{0.14} \right| = 1 - 0.4179 = 0.5821 \text{ (58.21 percent)}$$

0.5821 (58.21 percent) – .002 (0.2 percentage points for FY 2018

under section 1886(r)(2)(B)(ii) of the Act) = 0.5801 or 58.01 percent  
0.5801 = Factor 2

Therefore, the proposed Factor 2 for FY 2018 was 58.01 percent.

The proposed FY 2018 uncompensated care amount was:  
\$12,001,915,095.04 × 0.5801 =  
\$6,962,310,946.63.

Proposed FY 2018 Un-compensated Care Total Available .....	\$6,962,310,946.63
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We invited public comments on our proposed methodology for calculation of Factor 2 for FY 2018.

*Comment:* Several commenters supported the proposal to use the uninsured estimates produced by CMS' OACT as part of the development of the NHEA in estimating the percent change in the rate of uninsurance for FY 2018. Some of these commenters stated that, in their view, the estimates produced by OACT are timely, complete, and more accurately capture the change in the number of uninsured individuals than CBO's historical estimate of the rate of uninsurance in 2013. A few commenters noted that the data source adds greater transparency to the process as the NHEA estimates are publicly available, while other commenters urged CMS to ensure that all data are provided with complete transparency of the type of data and data collection methods that are used. One commenter requested further explanation for our assumption regarding underreporting of Medicaid coverage in the survey data and the corresponding adjustment to our estimate of the rate of uninsurance, and then contended that this assumption was applied inconsistently between Factors 1 and 2.

Commenters supported the proposed methodology for determining Factor 2 because they believed it provides a more accurate comparison when evaluating changes in the uninsured population since 2013, noting that the amount available to make uncompensated care payments in FY 2017 was lower using CBO estimates than if the NHEA data had been used. A number of commenters asked CMS to retrospectively apply the NHEA estimates when measuring the effect of changes in Medicare DSH policy across time periods prior to FY 2018. Some of these commenters recognized that CMS does not have the authority to retroactively change estimates from prior years, but suggested that CMS consider this point in its analysis of payment changes occurring from the proposal to move from the use of low-

income patient days to Worksheet S–10 data to estimate uncompensated care.

Several commenters requested that CMS use the most recent estimates available and update them in a timely manner. The commenters also requested that CMS account for any legislative or policy changes that may have an effect on the uninsurance rate during FY 2018.

Several commenters expressed concern about the sustainability of continued reductions to aggregate uncompensated care payments due to the application of Factor 2. The commenters noted that, as insurance coverage increases, the aggregate amount available for uncompensated care payments will decline and thus reduce the amount of payments to be made.

*Response:* We appreciate the commenters' support for our proposal to begin using the uninsured estimates produced by OACT in the computation of Factor 2 for FY 2018. Section 1886(r)(2)(B)(ii) of the Act permits us to use a data source other than CBO estimates to determine the percent change in the rate of uninsurance beginning in FY 2018. We believe that the NHEA data, on balance, best meet all of our considerations to ensure that the data source meets the statutory requirement that the estimate be based on data from the Census Bureau or other sources the Secretary determines appropriate and will provide reasonable estimates of the rate of uninsurance that are available in conjunction with the IPPS rulemaking cycle. In the FY 2018 IPPS/LTCH PPS proposed rule, we provided additional information regarding the data sources, methods, and assumptions employed by the actuaries in determining the OACT's updated estimate of Factor 2 for FY 2018. We believe that this discussion addresses the concerns raised by commenters regarding the various assumptions used in the estimate. Regarding the assumption of undercount for Medicaid enrollees in surveys, we refer readers to research by Michael Davern, et al. as cited by the NHEA's Methodology Paper available on the CMS Web site at: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/DSM-15.pdf>. With respect to the commenters' request to retrospectively apply the NHEA estimates when measuring the effect of changes in Medicare DSH policy, section 1886(r)(2)(B)(ii) of the Act states that, for FY 2018 and subsequent fiscal years, Factor 2 is determined by comparing the percent of individuals who were uninsured in 2013, as

estimated by the Secretary, based on data from the Census Bureau or other sources the Secretary determines appropriate, and certified by the Chief Actuary of CMS, and the percent of individuals who were uninsured in the most recent period for which data are available, as so estimated and certified. Because the statute specifies the use of these estimates only for FY 2018 and subsequent years, and section 1886(r)(2)(B)(i) of the Act expressly requires the use of CBO estimates for prior fiscal years, we do not believe that we have authority to use the NHEA data to retroactively recalculate uninsurance rates for previous years.

In response to the commenters who requested that we update the estimates and account for any legislative or policy changes that may affect the uninsurance rate in FY 2018, in the FY 2018 IPPS/LTCH PPS proposed rule, we indicated that we considered timeliness and accuracy when selecting the NHEA as the appropriate data on which to base our estimates of the rate of uninsurance. Furthermore, we continue to believe that applying our best estimate of the change in the rate of uninsurance for a fiscal year prospectively would be most conducive to administrative efficiency, finality, and predictability in payments.

Finally, in response to concerns about the decrease in the amount available to make uncompensated care payments, we believe that the intent of the statute is to reduce the amount available to make uncompensated care payments to reflect the decline in the number of uninsured individuals and the expected corresponding decrease in the amount of uncompensated care.

After consideration of the public comments we received, we are finalizing the proposed calculation of Factor 2 for this FY 2018 IPPS/LTCH PPS final rule. The estimates of the percent of uninsured individuals have been certified by the Chief Actuary of CMS as discussed in the proposed rule. The final calculation using a weighted average of OACT's projections for CY 2017 and CY 2018 is as follows:

- Percent of individuals without insurance for CY 2013: 14 percent.
- Percent of individuals without insurance for CY 2017: 8.3 percent.
- Percent of individuals without insurance for CY 2018: 8.1 percent.
- Percent of individuals without insurance for FY 2018 (0.25 times 0.083) + (0.75 times 0.081): 8.15 percent

$$1 - \left[ \frac{(0.0815 - 0.14)}{0.14} \right] = 1 - 0.4179 = 0.5821 \text{ (58.21 percent)}$$

$$0.5821 \text{ (58.21 percent)} - .002 \text{ (0.2 percentage points for FY 2018 under section 1886(r)(2)(B)(ii) of the Act)} = 0.5801$$

0.5801 = Factor 2

Therefore, the final Factor 2 for FY 2018 is 58.01 percent.

The FY 2018 final uncompensated care amount is: \$11,664,704,643.27 × 0.5801 = \$6,766,695,163.56.

FY 2018 Uncompensated Care Total Available ...	\$6,766,695,163.56
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c. Calculation of Factor 3 for FY 2018

(1) Background

Section 1886(r)(2)(C) of the Act defines Factor 3 in the calculation of the uncompensated care payment. As we have discussed earlier, section 1886(r)(2)(C) of the Act states that Factor 3 is equal to the percent, for each subsection (d) hospital, that represents the quotient of (1) the amount of uncompensated care for such hospital for a period selected by the Secretary (as estimated by the Secretary, based on appropriate data (including, in the case where the Secretary determines alternative data are available that are a better proxy for the costs of subsection (d) hospitals for treating the uninsured, the use of such alternative data)); and (2) the aggregate amount of uncompensated care for all subsection (d) hospitals that receive a payment under section 1886(r) of the Act for such period (as so estimated, based on such data).

Therefore, Factor 3 is a hospital-specific value that expresses the proportion of the estimated uncompensated care amount for each subsection (d) hospital and each subsection (d) Puerto Rico hospital with the potential to receive Medicare DSH payments relative to the estimated uncompensated care amount for all hospitals estimated to receive Medicare DSH payments in the fiscal year for which the uncompensated care payment is to be made. Factor 3 is applied to the product of Factor 1 and Factor 2 to determine the amount of the uncompensated care payment that each eligible hospital will receive for FY 2014 and subsequent fiscal years. In order to implement the statutory requirements for this factor of the uncompensated care payment formula, it was necessary to determine: (1) The definition of uncompensated care or, in other words, the specific items that are to be included in the numerator (that is, the estimated uncompensated care amount for an individual hospital) and the denominator (that is, the estimated uncompensated care amount for all hospitals estimated to receive Medicare DSH payments in the applicable fiscal year); (2) the data source(s) for the estimated uncompensated care amount;

and (3) the timing and manner of computing the quotient for each hospital estimated to receive Medicare DSH payments. The statute instructs the Secretary to estimate the amounts of uncompensated care for a period based on appropriate data. In addition, we note that the statute permits the Secretary to use alternative data in the case where the Secretary determines that such alternative data are available that are a better proxy for the costs of subsection (d) hospitals for treating individuals who are uninsured.

In the course of considering how to determine Factor 3 during the rulemaking process for FY 2014, we considered defining the amount of uncompensated care for a hospital as the uncompensated care costs of each hospital and determined that Worksheet S-10 of the Medicare cost report potentially provides the most complete data regarding uncompensated care costs for Medicare hospitals. However, because of concerns regarding variations in the data reported on Worksheet S-10 and the completeness of these data, we did not propose to use data from Worksheet S-10 to determine Factor 3 for FY 2014, the first year this provision was in effect, or for FY 2015, 2016, or 2017. When we first discussed using Worksheet S-10 to allocate hospitals' shares of uncompensated care costs in the FY 2014 IPPS/LTCH PPS final rule (78 FR 50638), we explained why we believed that it was premature to use uncompensated care costs reported on Worksheet S-10 for FY 2014.

Specifically, at that time, the most recent available cost reports would have been from FYs 2010 and 2011, which were submitted on or after May 1, 2010, when the new Worksheet S-10 went into effect. We believed that concerns about the standardization and completeness of the Worksheet S-10 data could be more acute for data collected in the first year of the Worksheet's use (78 FR 50635). In addition, we believed that it would be most appropriate to use data elements that have been historically publicly available, subject to audit, and used for payment purposes (or that the public understands will be used for payment purposes) to determine the amount of uncompensated care for purposes of Factor 3 (78 FR 50635). At the time we issued the FY 2014 IPPS/LTCH PPS final rule, we did not believe that the available data regarding uncompensated care from Worksheet S-10 met these criteria and, therefore, we believed they were not reliable enough to use for determining FY 2014 uncompensated care payments. Accordingly, for FY

2014, we concluded that utilization of insured low-income patients would be a better proxy for the costs of hospitals in treating the uninsured. For FYs 2015, 2016, and 2017, the cost reports used for calculating uncompensated care payments (that is, FYs 2011, 2012, and 2013) were also submitted prior to the time that hospitals were on notice that Worksheet S-10 could be the data source for calculating uncompensated care payments. Therefore, we believed it was also appropriate to use proxy data to calculate Factor 3 for these years.

We stated in the preamble of the FY 2017 IPPS/LTCH PPS proposed rule that we believed that, for FY 2018, many of the above concerns would no longer be relevant. That is, hospitals were on notice as of FY 2014 that Worksheet S-10 could eventually become the data source for CMS to calculate uncompensated care payments. Furthermore, hospitals' cost reports from FY 2014 had been publicly available for some time, and CMS had analyses of Worksheet S-10 conducted both internally and by stakeholders demonstrating that Worksheet S-10 accuracy had improved over time. Specifically, as discussed in the FY 2017 IPPS/LTCH PPS proposed rule (81 FR 25090), MedPAC has provided analyses that found that current Worksheet S-10 data are a better proxy for predicting audited uncompensated care costs than Medicaid/Medicare SSI days, and that the data on Worksheet S-10 would improve over time as the data are actually used to make payments. CMS has also undertaken an extensive analysis of the Worksheet S-10 data, benchmarking it against the data on uncompensated care costs reported to the Internal Revenue Service (IRS) on Form 990 by not-for-profit hospitals. (This analysis, performed by Dobson DaVanzo & Associates, LLC, under contract to CMS, was included in a report entitled "Improvements to Medicare Disproportionate Share Hospital (DSH) Payments Report: Benchmarking S-10 Data Using IRS Form 990 Data and Worksheet S-10 Trend Analyses," which is available on the CMS Web site at: <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/dsh.html> under the Downloads section.) The analysis determined a strong and converging correlation between the amounts for Factor 3 derived using the IRS Form 990 and Worksheet S-10 data, suggesting that Worksheet S-10 uncompensated care data are becoming more stable over time. As we discussed in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR

19947 through 19948), given these results and in light of the fact that hospitals have been on notice since the FY 2014 rulemaking that CMS intended eventually to use Worksheet S-10 as the data source for calculating uncompensated care payments, we believed it would be appropriate to propose to begin incorporating Worksheet S-10 data for purposes of calculating Factor 3 starting in FY 2018. In section IV.F.4.d. of the preamble of the FY 2017 IPPS/LTCH PPS proposed rule (81 FR 25090 through 25094), we proposed a methodology and timeline for incorporating Worksheet S-10 data in the calculation of Factor 3 beginning in FY 2018 and invited public comments on that proposal.

While some commenters, including MedPAC, were supportive of the proposal, many other commenters expressed concerns about a perceived lack of clarity in the Worksheet S-10 instructions and their belief in the necessity of a strict audit mechanism to capture aberrant uncompensated care costs reported on Worksheet S-10. Many commenters also cited the report from Dobson DaVanzo, which concluded that hospitals are doing a better job of reporting their uncompensated care data on Worksheet S-10 than they did a few years ago. However, these commenters disagreed with CMS about the significance of this observation. One commenter stated that even if it is true in the aggregate that hospitals are reporting data more accurately on Worksheet S-10, the zero-sum nature of the calculation of uncompensated care payments is such that the remaining inaccuracy and lack of uniformity in the data reported can have a very large impact on hospitals. The commenter asserted that if hospitals, for whatever reason, over-report their uncompensated care, they benefit financially from doing so, while those that do not aggressively report suffer financial harm. The commenter concluded that, for this reason, the possibility that some hospitals are generally "doing better" with reporting data is not good enough. All hospitals must do better, and until they do, the commenter believed that data from Worksheet S-10 are not accurate enough for public policymaking purposes. Other commenters asserted that the Dobson/DaVanzo study did not illustrate or even evaluate whether data from Worksheet S-10 are a reasonable proxy for the costs hospitals incur in providing care to the uninsured. These commenters pointed to their own analyses, which indicated that the most notable aberrations in Worksheet S-10 data reporting occur

among public hospitals, which do not file a Form 990 and are therefore missing from the Dobson/DaVanzo analysis.

On balance, after considering all of the comments, we elected not to finalize our proposal to begin to incorporate Worksheet S-10 into the calculation of Factor 3 for FY 2018 in the FY 2017 IPPS/LTCH PPS final rule. We stated that we were postponing the decision regarding when to begin incorporating data from Worksheet S-10 and proceeding with certain additional quality control and data improvement measures to the Worksheet S-10 instructions as commenters had requested. We indicated that we would consider further whether the current Worksheet S-10 data or a proxy should be used to calculate Factor 3 for FY 2018 and subsequent fiscal years. We also expressed our intention to explore whether there is an appropriate proxy for uncompensated care that could be used to calculate Factor 3 until we determine that data from the revised Worksheet S-10 can be used for this purpose. We stated that we would undertake notice-and-comment rulemaking to address the issue of the appropriate data to use to determine Factor 3 for FY 2018 and subsequent years.

## (2) Data Sources for FY 2018

Since the publication of the FY 2017 final rule and as part of our ongoing quality control and data improvement measures for Worksheet S-10, we have updated the benchmarking analysis described in the report "Improvements to Medicare Disproportionate Share Hospital (DSH) Payments Report: Benchmarking S-10 Data Using IRS Form 990 Data and Worksheet S-10 Trend Analyses" posted with the FY 2017 IPPS/LTCH PPS proposed rule. A copy of the updated analysis was made available in conjunction with the FY 2018 IPPS/LTCH PPS proposed rule on the CMS Web site at: <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Downloads/FY2018-NPRM-Update-of-Benchmarking-S-10-Data.pdf>. As discussed in the FY 2017 IPPS/LTCH PPS proposed rule, the purpose of the benchmarking analysis was to determine if Worksheet S-10 uncompensated care data are becoming more stable over time (81 FR 25090). In the report issued in conjunction with the FY 2017 rulemaking, we conducted an analysis of 2010, 2011, and 2012 Worksheet S-10 data and IRS Form 990 data from the same years. Using IRS Form 990 data for tax years 2010, 2011, and 2012 (the latest available years at

that time) as a benchmark, we compared key variables derived from Worksheet S-10 and IRS Form 990 data, such as charity care and bad debt. The analysis was completed using data from hospitals that had completed both Worksheet S-10 and IRS Form 990 across all study years, yielding a sample of 788 not-for-profit hospitals (representing 668 unique Taxpayer Identification Numbers). Because Factor 3 is used to determine the Medicare uncompensated care payment amount for each hospital, we calculated the amounts for Factor 3 for the matched hospitals using charity care and bad debt, and compared the Factor 3 distributions calculated using data from IRS Form 990 and Worksheet S-10. Key findings indicated that the amounts for Factor 3 derived using the IRS Form 990 and Worksheet S-10 data were highly correlated. In addition, the correlation coefficient between the amounts for Factor 3 calculated from the IRS Form 990 and Worksheet S-10 had increased over time, from 0.71 in 2010 to 0.77 in 2011 and 0.80 in 2012, demonstrating an increasing convergence between the data sources.

As we discussed in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19949), in the updated analysis performed for the FY 2018 rulemaking, we again compared Worksheet S-10 and IRS Form 990 data and assessed the correlation in Factor 3s derived from each of the data sources. We conducted an analysis of 2011, 2012, and 2013 Worksheet S-10 data and IRS Form 990 data from the same years. (The previous analysis used data from 2010 to 2012.) Using IRS Form 990 data for tax years 2011, 2012, and 2013 (again, the latest available years) as a benchmark, we utilized the same methodology as was used in the previous analysis, which yielded a sample of 1,061 not-for-profit hospitals (representing 918 unique Taxpayer Identification Numbers) and found that the amounts for Factor 3 derived using the IRS Form 990 and Worksheet S-10 data continue to be highly correlated and that, within the larger sample in the updated analysis, this correlation continues to increase over time, from 0.80 in 2011 to 0.85 in 2013. (The highest correlation found in the earlier analysis performed for the FY 2017 rulemaking was 0.80.)

The fact that this most recent analysis, which was performed after the issuance of the FY 2017 IPPS/LTCH PPS final rule, continues to demonstrate a high correlation between the amounts for Factor 3 derived using the IRS 990 data and the Worksheet S-10 data and that this correlation continues to increase over time leads us to believe that we

have reached a tipping point with respect to the use of the Worksheet S-10 data. Specifically, we can no longer conclude that alternative data are available for FY 2014 that are a better proxy for the costs of subsection (d) hospitals for treating individuals who are uninsured than the data on uncompensated care costs reported on the Worksheet S-10. However, we stated in the proposed rule that we continue to believe that it is appropriate to use low-income insured days as a proxy for uncompensated care costs for years prior to FY 2014. Hospitals did not have notice that the Worksheet S-10 data from these years might be used for purposes of computing uncompensated care payments and, as a result, may not have fully appreciated the importance of reporting their uncompensated care costs as completely and accurately as possible.

We found further evidence for this tipping point when we examined changes to the FY 2014 Worksheet S-10 data submitted by hospitals since the publication of the FY 2017 IPPS/LTCH PPS final rule. In the FY 2017 IPPS/LTCH PPS final rule, as part of our ongoing quality control and data improvement measures for the Worksheet S-10, we referred readers to Change Request 9648, Transmittal 1681, titled "The Supplemental Security Income (SSI)/Medicare Beneficiary Data for Fiscal Year 2014 for Inpatient Prospective Payment System (IPPS) Hospitals, Inpatient Rehabilitation Facilities (IRFs), and Long Term Care Hospitals (LTCH)," issued on July 15, 2016 (available at: <https://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/Downloads/R1681OTN.pdf>). In this transmittal, as part of the process for ensuring complete submission of Worksheet S-10 by all eligible DSH hospitals, we instructed MACs to accept amended Worksheets S-10 for FY 2014 cost reports submitted by hospitals (or initial submissions of Worksheet S-10 if none had been submitted previously) and to upload them to the Health Care Provider Cost Report Information System (HCRIS) in a timely manner. The transmittal stated that, for revisions to be considered, hospitals were required to submit their amended FY 2014 cost report containing the revised Worksheet S-10 (or a completed Worksheet S-10 if no data were included on the previously submitted cost report) to the MAC no later than September 30, 2016.

As discussed in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19949), we examined hospitals' FY 2014 cost reports to see if the Worksheet S-10 data on those cost reports have changed

as a result of the opportunity for hospitals to submit revised Worksheet S-10 data for FY 2014. Specifically, we compared hospitals' FY 2014 Worksheet S-10 data as they existed in the first quarter of CY 2016 with data from the fourth quarter of CY 2016. We found that the FY 2014 Worksheet S-10 data had changed over that time period for approximately one quarter of hospitals that receive uncompensated care payments. As we discussed in the proposed rule, the fact that the Worksheet S-10 data changed for such a significant number of hospitals following a review of the cost report data they originally submitted and that the revised Worksheet S-10 information is available to be used in determining uncompensated care costs contributes to our belief that we can no longer conclude that alternative data are available that are a better proxy than the Worksheet S-10 data for the costs of subsection (d) hospitals for treating individuals who are uninsured.

Commenters have also provided equity arguments with respect to the relationship between uncompensated care payments and the expansion of Medicaid in certain States under the authority provided by the Affordable Care Act. The commenters have made a twofold argument. First, they have argued that hospitals in States that did not expand Medicaid treat a higher number of uninsured patients compared to hospitals in States that did expand Medicaid and, as a result, provide more uncompensated care. However, since the implementation of the new DSH payment methodology under section 3133 of the Affordable Care Act in FY 2014, these hospitals have experienced reductions in the payments for uncompensated care due to the national decline in the uninsured rate driven in large part by Medicaid expansions in other States. Second, they have argued that hospitals in nonexpansion States will be penalized a second time when Medicaid utilization is used as part of the basis for determining Factor 3 because their Medicaid utilization has not grown as much relative to hospitals in expansion States. Although CMS has not yet used data affected by Medicaid expansion when determining Factor 3, commenters are concerned that they will be penalized in future calculations when these data are used.

In the FY 2014 IPPS/LTCH PPS final rule (78 FR 50639), we recognized that, in using Medicaid days as part of the proxy for uncompensated care, it would be possible for hospitals in States that choose to expand Medicaid to receive higher uncompensated care payments because they may have more Medicaid

patient days than hospitals in a State that does not choose to expand Medicaid. Because the earliest Medicaid expansions under the Affordable Care Act began in 2014, the 2011, 2012, and 2013 Medicaid days data used to determine Factor 3 for FY 2017 are the most recent available data on Medicaid utilization that do not reflect the effects of these Medicaid expansions.

Accordingly, if we were to use only low-income insured days to estimate uncompensated care in FY 2018, we would need to hold the time period of these data constant and use data on Medicaid days from 2011, 2012, and 2013 in order to avoid the risk of any redistributive effects arising from the decision to expand Medicaid in certain States. As a result, we would be using older data that may provide a less accurate proxy for the level of uncompensated care being furnished by hospitals in FY 2018, contributing to our growing concerns regarding the continued use of low-income insured days as a proxy for uncompensated care costs in FY 2018.

In the proposed rule, we also noted that when weighing the new information that has become available to us regarding the Worksheet S-10 and the low-income days proxy since the FY 2018 rulemaking, we are not considering these developments in isolation, but rather in the context of the information that we previously considered as part of our discussions of the Worksheet S-10 data in prior rulemaking. Part of this background is provided by the 2007 MedPAC analysis of data from the Government Accountability Office (GAO) and the American Hospital Association (AHA), which suggests that Medicaid days and low income Medicare days are not a good proxy for uncompensated care costs (80 FR 49525). Additional analyses performed by MedPAC showed that the correlation between audited uncompensated care data from 2009 and the data from the FY 2011 Worksheet S-10 was over 0.80, as compared to a correlation of approximately 0.50 between the audited uncompensated care data and 2011 Medicare SSI and Medicaid days. Based on this analysis, MedPAC concluded that use of Worksheet S-10 data was already better than using Medicare SSI and Medicaid days as a proxy for uncompensated care costs, and that the data on Worksheet S-10 would improve over time as the data are actually used to make payments (81 FR 25090). Furthermore, MedPAC in the past has raised concerns about the low-income days proxy we have used historically because it is an inpatient

measure and much of the uncompensated care provided by certain hospitals, including rural hospitals, occurs in the emergency room or other outpatient areas. In its comments on the FY 2017 IPPS/LTCH PPS proposed rule, MedPAC again recommended that we start using the Worksheet S-10 data with a phase-in (81 FR 56962).

In summary, as we stated in the FY 2018 IPPS/LTCH PPS proposed rule, when weighing the new information that has become available to us since the FY 2017 rulemaking in conjunction with the information regarding Worksheet S-10 data and the low-income days proxy that we have analyzed as part of our consideration of this issue in prior rulemaking, we can no longer conclude that alternative data to the Worksheet S-10 are available for FY 2014 that are a better proxy for the costs of subsection (d) hospitals for treating individuals who are uninsured.

*Comment:* Many commenters expressed disapproval that CMS “backtracked” on its decision in the FY 2017 IPPS/LTCH PPS final rule to postpone incorporating data from Worksheet S-10 into the calculation of Factor 3 and voiced their confusion and surprise over the apparent change in policy. These commenters noted that CMS’ position in the FY 2017 IPPS/LTCH PPS final rule was that additional time was needed to make certain modifications and clarifications to the cost report instructions for Worksheet S-10, as well as to explore suggestions made by commenters in previous years for ensuring the consistent submission of Worksheet S-10 by hospitals when filing their cost reports (such as software edits to flag negative, unusual, or missing data or a missing Worksheet S-10). They added that CMS stated that this postponement also allowed time for hospitals to more accurately complete and submit the form. The commenters observed that CMS’ stated intent in the FY 2017 IPPS/LTCH PPS final rule was to begin to incorporate Worksheet S-10 data into the computation of Factor 3 once these additional measures to ensure data quality and completeness are in place, and no later than FY 2021, yet CMS had reversed this decision by proposing to use Worksheet S-10 data from FY 2014 in the calculation of Factor 3 for FY 2018 in the FY 2018 IPPS/LTCH PPS proposed rule.

*Response:* We appreciate the comments regarding our proposal to begin using data from Worksheet S-10 in the calculation of Factor 3 in FY 2018. As stated in the FY 2018 IPPS/LTCH PPS proposed rule and explained in greater detail below, when weighing

the new information that has become available to us since the FY 2017 rulemaking, in conjunction with the information regarding Worksheet S-10 data and the low-income days proxy that we have analyzed as part of our consideration of this issue in prior rulemaking, we can no longer conclude that alternative data to the Worksheet S-10 are available for FY 2014 that are a better proxy for the costs of subsection (d) hospitals for treating individuals who are uninsured.

*Comment:* Several commenters approved of CMS’ proposal to begin using data from Worksheet S-10 in the calculation of Factor 3 prior to FY 2021. MedPAC stated that using Worksheet S-10 data, in conjunction with select auditing of cost reports, will lead to better estimates of uncompensated care costs than the continued use of the current proxy of Medicaid and SSI days. Other commenters echoed MedPAC’s statement, noting that the metrics from Worksheet S-10 appear to provide a better assessment of a hospital’s uncompensated care costs than the current proxy data, which assess only low-income insured days and distribute the bulk of Medicare DSH payments based on the amount of inpatient care a hospital delivers to Medicaid patients and recipients of SSI payments. One commenter cited the December 2016 article in *Health Affairs* (Stensland, *et al.*), which estimated that Medicare payments on average are reduced by \$20 for every additional uninsured patient a hospital treats, to support the argument that the distribution of uncompensated care payments according to a hospital’s proportion of low-income insured days results in payments that are poorly correlated with a hospital’s true uncompensated care burden. The commenter asserted that uncompensated care payments should compensate hospitals based on their delivery of care to the uninsured rather than based on a proxy that is poorly correlated with the costs of treating the uninsured.

As in previous years, commenters also believed that the proposed methodology for FY 2018 brings parity and equity across the States, regardless of their decision to expand Medicaid. Commenters stated that implementation of the proposal to use data from Worksheet S-10 will create more balance between Medicaid expansion and nonexpansion States, especially because hospitals in nonexpansion States are “at a significant disadvantage” under the current proxy methodology. The commenters noted that, under the current methodology used to calculate Factor 3, hospitals in

nonexpansion States bear a greater uncompensated care burden, yet are effectively penalized in Medicare DSH allocations twice: First, because they incur a reduction in the total amount available to be distributed as uncompensated care payments based on the national decline in the uninsured rate that largely reflects the experience of expansion States; and second, because their Medicaid utilization rates remain relatively flat compared to the increasing rates of hospitals in expansion States, resulting in lower uncompensated care payments. These commenters believed that FY 2018 is an appropriate time to transition to Worksheet S-10, as CMS proposed, using an average of 2 years of Medicaid and SSI days data in conjunction with 1 year of Worksheet S-10 data that eliminates the use of the low-income insured days proxy for FY 2014 when many States expanded Medicaid. Furthermore, as proposed, the amount available for uncompensated care payments would increase by approximately \$1 billion in FY 2018, which helps mitigate the financial impact of transitioning to Worksheet S-10 data for hospitals treating higher numbers of Medicaid and SSI patients and fewer uninsured patients.

In response to arguments that further refinement of Worksheet S-10 is needed, one commenter pointed to separate evaluations performed by MedPAC and the consulting firm Dobson DaVanzo, which both found a high degree of correlation between data reported on Worksheet S-10 and audited uncompensated care data, as evidence that the information currently reported on Worksheet S-10 is satisfactory for purposes of allocating uncompensated care payments. The commenter argued that while CMS should continue to refine the instructions for Worksheet S-10, the transition from the proxy of low-income insured days to Worksheet S-10 as a method of allocating uncompensated care payments will never take place if CMS postpones the transition until the Worksheet S-10 data are perfect. The commenter stated that, despite years of refinements, Medicare has yet to achieve perfection in the Medicare cost report data; nevertheless, there are various examples throughout the Medicare inpatient PPS in which payments are made based on the best available information from the Medicare cost report. This commenter was troubled that CMS had delayed the implementation of Worksheet S-10 until no later than FY 2021 in the FY 2017 IPPS/LTCH PPS final rule, and

encouraged CMS to finalize its proposal to begin incorporating Worksheet S-10 data in the calculation of Factor 3 for FY 2018.

*Response:* We appreciate the support for our proposal to begin to incorporate Worksheet S-10 data into the computation of Factor 3 for FY 2018. We agree with the commenters that FY 2018 is an appropriate time to begin using Worksheet S-10 data in the calculation of Factor 3 due to a confluence of factors, including evidence that the Worksheet S-10 data are improving over time and concerns that the proxy data for FY 2014 and subsequent years will reflect the effects of Medicaid expansion. As we stated in the FY 2018 IPPS/LTCH PPS proposed rule, we can no longer conclude that alternative data to the Worksheet S-10 are available for FY 2014 that are a better proxy for the costs of subsection (d) hospitals for treating individuals who are uninsured. We also acknowledge that the approximately \$800 million increase in the total amount available to make uncompensated care payments will help to mitigate the impact of this change on hospitals that serve a large number of Medicaid and SSI patients and fewer uninsured patients.

*Comment:* Many commenters opposed the use of Worksheet S-10 to compute Factor 3 and allocate uncompensated care costs beginning in FY 2018. Most of these commenters maintained their position from previous years that, while Worksheet S-10 has the potential to serve as a more exact measure of hospital uncompensated care costs, the data reported are not presently a reliable and accurate reflection of these uncompensated care costs. These commenters disagree with CMS that the agency has reached a “tipping point” and shared observations that they believe refute each of the factors cited in the FY 2018 IPPS/LTCH PPS proposed rule as a reason to begin using Worksheet S-10 data. Overall, commenters stated that the rationale provided by CMS for transitioning to the use of data from Worksheet S-10—that the accuracy of the data has improved over time—was not sufficient to justify the transition.

With respect to the Dobson DaVanzo report, which showed a strong correlation between Factor 3 values derived from data reported on IRS 990 Schedule H and Worksheet S-10, several commenters noted limitations that they believe should be taken into consideration when using these findings to support the use of Worksheet S-10 data. Commenters noted that a simple correlation between two data sources

that have not been reviewed for accuracy does not support the statistical validity of the uncompensated care data reported on Worksheet S-10. Furthermore, commenters noted that because the data from IRS 990 do not include for-profit and government hospitals, the sample used in the analysis is not representative of the universe of hospitals receiving Medicare DSH payments and therefore presents biased results. One commenter observed that the analysis overrepresents certain States and underrepresents other States. Another commenter noted some specific line items that illustrate inconsistencies between the IRS 990 data and the S-10 data. For example, the commenter stated that in tax year 2011, the IRS 990 Schedule H changed such that bad debt expense is no longer reported at cost, and filing organizations were no longer instructed to multiply bad debt expense by their CCR, a change that is not reflected in the Worksheet S-10 instructions and which the Dobson analysis does not take into consideration.

Commenters continued to express concerns about the lack of accurate and consistent data being reported on Worksheet S-10, primarily due to what they perceive as a lack of clear and concise line level instructions. Commenters pointed out that, in the FY 2017 IPPS/LTCH PPS final rule (81 FR 56963), CMS agreed to institute certain additional quality control and data improvement measures prior to moving forward with incorporating Worksheet S-10 data into the calculation of Factor 3. However, the commenters pointed out that, aside from a brief window in 2016 for hospitals to submit corrected data on their FY 2014 Worksheet S-10 by September 30, 2016, and the issuance of revised instructions (Transmittal 10) in November 2016 that are applicable to cost reports beginning on or after October 1, 2016, no additional quality control and data improvement measures have been implemented. Furthermore, commenters asserted that the clarifications and guidance with respect to the instructions for Worksheet S-10 issued by CMS are not sufficient to ensure consistent submission of uncompensated care data, and that the 25 percent of hospitals that either resubmitted their FY 2014 Worksheet S-10 or provided a missing FY 2014 Worksheet S-10 do not present significant evidence that the problems with Worksheet S-10 reporting have been resolved. One commenter took issue with CMS' statement in the proposed rule that it does not anticipate making any further modifications to the

instructions for completing Worksheet S-10 at this time, and asserted that hospitals should have the benefit of a final rule and instructions that can be referenced in completing Worksheet S-10 data for future cost reports, ensuring accuracy, consistency and completeness.

Because many commenters were concerned that unclear reporting instructions on Worksheet S-10 would result in inconsistent and inaccurate reporting of data, commenters requested that, after more precise instructions are provided, CMS apply a strict auditing process for information reported on the Worksheet S-10 before it is used to determine uncompensated care costs. The commenters believed that simply tying information reported on Worksheet S-10 to payment and requiring its regular use will not improve the accuracy of the data. In addition, commenters requested that CMS ensure that its contractors administer an auditing process consistently and make the instructions for such an audit public. To support their claim that auditing is needed, many commenters shared observations regarding anomalies they identified in data from Worksheet S-10 and associated concerns. A number of commenters shared their own analyses that looked at the small proportion of hospitals receiving a large share of uncompensated care payments, and the proportion of hospitals that reported aberrant data relating to uncompensated care costs. The commenters stated that the aberrant numbers reported by some hospitals illustrate some combination of misinterpretation of Worksheet S-10 instructions, lack of clarity of those instructions, and possible attempts by providers to maximize their Medicare DSH dollars.

MedPAC also commented that a hospital's charges may have errors that could result in overstating uncompensated care costs. To limit the effect of aberrant charges, MedPAC suggested that CMS could screen out Worksheet S-10 data where there were high levels of reported uncompensated care relative to total operating costs reported on the cost report (for example, 50 percent of operating costs). MedPAC expected that very few hospitals would report uncompensated care costs in excess of this threshold. For hospitals that did exceed this threshold, MedPAC suggested using 2015 Worksheet S-10 data if they were available. If the hospital insisted that the 2014 data were correct, MedPAC suggested that CMS require the hospital to provide support for the 2014 data. If the hospital did not provide audited financial statements

supporting the uncompensated care reported, MedPAC suggested that the reported uncompensated care could be reduced down to a threshold of 50 percent of operating costs. Other commenters also discussed examining the ratio of the reported uncompensated care to total operating costs to identify aberrant data. They provided additional ratio examples such as uncompensated care costs relative to total revenue, operating budget, Worksheet C total costs, or Worksheet C total charges. Some commenters suggested that CMS adopt an empirically derived upper threshold for the ratio of uncompensated care costs to operating costs, and then prioritize those hospitals that exceeded the threshold for audit purposes. One commenter's example of an empirically derived threshold was 3 standard deviations from the mean for the ratio of uncompensated care costs to total operating costs.

The majority of the commenters who opposed the use of Worksheet S-10 in FY 2018 stated that the low-income insured days proxy is more accurate than Worksheet S-10 in its current form. They suggested that CMS should continue to use this proxy on a temporary basis to distribute uncompensated care payments until the data from Worksheet S-10 are more reliable, or CMS should consider using a methodology that utilizes a permanent blend of data from Worksheet S-10 and low-income insured days. Some commenters believed that the proposed methodology for calculating Factor 3 in FY 2018, which excludes Medicaid shortfalls from the calculation of uncompensated care costs, could lead to a huge inequity, as there would be a substantial redistribution of Medicare DSH payments from Medicaid expansion States to non-expansion States. While one commenter referred to CMS' potential legal concern about continuing to use low-income insured days as a proxy for uncompensated care for FY 2014 and subsequent years, several commenters and their outside counsel concluded that CMS has the authority to "fashion an 'appropriate' calculation using proxy data as it has already been doing for three years, adjusted proxy data or blended data."

Commenters stated that using uncompensated care data from Worksheet S-10 for computing uncompensated care payments would be highly redistributive, with many hospitals experiencing significant swings in their payments. Commenters noted that using data from Worksheet S-10 to calculate Factor 3, as opposed to using the current low-income insured days proxy, has serious implications for

entire States. Many commenters noted that the States that would lose uncompensated care dollars are States that have expanded their Medicaid programs, as the current proxy captures Medicaid days and the Worksheet S-10 does not. One analysis showed that the Worksheet S-10 data would be highly redistributive to the extent that 10 percent of hospitals would receive 77 percent of total gains in uncompensated care payments among all hospitals, while other hospitals would experience significant losses. One commenter indicated that the losses it anticipates if the proposal to incorporate data from the Worksheet S-10 in FY 2018 is finalized will not only hamper its system's ability to provide care through different service lines, but will also affect its ability to participate in different types of value-based purchasing programs. Another commenter noted that the cuts CMS outlines also are far more redistributive than had been intended when the Affordable Care Act was enacted in 2010 prior to the Supreme Court ruling that rendered Medicaid expansion optional.

*Response:* We thank the commenters for their input. In previous rulemaking cycles, commenters, both in favor of and opposed to use of a proxy for calculation of Factor 3, requested that CMS provide a timeline and implementation process for when and how the Worksheet S-10 data would be used for determining uncompensated care costs (for example, we refer readers to the FY 2016 IPPS/LTCH PPS final rule (80 FR 49524)). We note that we have been receiving such requests since the rulemaking for the FY 2014 IPPS/LTCH PPS final rule, and that hospitals have been on notice since FY 2014 that Worksheet S-10 could eventually become the data source for computing Factor 3. With this in mind, and based on the growing evidence that Worksheet S-10 is improving over time, we proposed to begin incorporating Worksheet S-10 data from FY 2014 cost reports into the calculation of Factor 3 for FY 2018.

We understand the commenters' concerns about the limitations of the IRS 990 correlation analysis and the shortcomings of using the study findings to support assertions about the validity of the Worksheet S-10 data. Notwithstanding those limitations, a few commenters supported the findings and the use of Worksheet S-10 in FY 2018. Although we acknowledge that the analysis was limited to not-for-profit hospitals, we believe it is relevant to our assessment of the overall quality of the data reported on Worksheet S-10.

Because many not-for-profit hospitals are eligible for empirically justified Medicare DSH payments and, therefore, uncompensated care payments, we believe they represent a suitable standard of comparison. Furthermore, as stated in the proposed rule, we did not make the decision to propose to begin Worksheet S-10 implementation in FY 2018 based on the correlation analysis alone. MedPAC also submitted an analysis that corroborated the results of the Dobson DaVanzo report, showing a high level of correlation between audited uncompensated care data and uncompensated care costs reported on Worksheet S-10 and a lower correlation between the audited uncompensated care data and Medicaid and SSI days.

After considering the comments submitted by MedPAC and others regarding the potential for aberrant data to be reported on the Worksheet S-10, we agree that using the ratio of uncompensated care costs to total operating costs to identify potentially aberrant data when determining the Factor 3 amounts for FY 2018 has merit. We acknowledge that it is not possible to determine a perfect threshold for when this ratio reflects potentially aberrant data. However, after a review of the comments received, we do not believe that it is appropriate to have no threshold, nor do we believe that it is appropriate to delay beginning to incorporate the Worksheet S-10 data in the calculation of Factor 3 in pursuit of a perfect threshold. It is relatively straightforward to identify the extreme end of the spectrum of possible threshold values: it does not appear to us to be reasonable for a hospital to have uncompensated care costs that exceed all of its operating expenses (that is, a threshold of 100 percent or more). Using the data currently available to us, we have attempted to determine the most appropriate threshold above which it would be reasonable to believe that aberrant uncompensated care data may have been reported. While we do not want to include aberrant data in the determination of Factor 3, we also do not want to inappropriately reduce FY 2018 uncompensated care payments to a hospital with a legitimately high ratio. Weighing all of these considerations, we believe it is appropriate to adopt MedPAC's suggestion that uncompensated care costs in excess of half a hospital's total operating expenses may be potentially aberrant. In the rare situations where a hospital has a FY 2014 ratio in excess of 50 percent, we also agree with MedPAC and other commenters that it would be appropriate to utilize 2015 data in some

manner to address the potentially aberrant 2014 Worksheet S-10 data. As we have previously indicated, we do not believe it would be appropriate to use Worksheet S-10 data from years prior to FY 2014 in the determination of Factor 3. Therefore, the most widely available Worksheet S-10 data available to us if a hospital exceeds the threshold for its FY 2014 Worksheet S-10 data are the FY 2015 Worksheet S-10 data. We believe that when a hospital has reported uncompensated care costs in excess of 50 percent of operating costs, the issue is most likely its FY 2014 uncompensated care costs and not its FY 2014 total operating expenses. Accordingly, we will determine the ratio of FY 2015 uncompensated care costs to FY 2015 total operating expenses from the hospital's FY 2015 cost report and apply that ratio to the FY 2014 total operating expenses from the hospital's FY 2014 cost report to determine an adjusted amount of uncompensated care costs for FY 2014. Under this approach, if a hospital has a consistently high ratio across the 2 years, we are less likely to inappropriately reduce its uncompensated care payments.

However, if a hospital has a much lower ratio in FY 2015, we believe it is reasonable to believe that the data reported for FY 2014 were aberrant. Specifically, after considering the public comments received, for hospitals where the ratio of uncompensated care costs relative to total operating costs for the hospital's 2014 cost report (as reported on Worksheet G, Part 3, Line 4) exceeds 50 percent, we will determine the ratio of uncompensated care costs relative to total operating costs from the hospital's 2015 cost report (as of March 2017) and apply that ratio to the hospital's total operating costs from the 2014 cost report to determine an adjusted amount of uncompensated care costs for FY 2014. We will then substitute this amount for the FY 2014 Worksheet S-10 data when determining Factor 3 for FY 2018. We believe this approach, which affects the data from three hospitals, balances our desire to exclude potentially aberrant data from a small number of hospitals in the determination of Factor 3 with our concern regarding inappropriately reducing FY 2018 uncompensated care payments to a hospital that may have a legitimately high ratio. As discussed elsewhere in this section, we are developing audit protocols for the Worksheet S-10 data for use in future rulemaking. We will consider in future rulemaking whether continued use of this adjustment or an alternative

adjustment is necessary for subsequent years.

We appreciate the commenters' concerns relating to the instructions for Worksheet S-10. In November 2016, we issued Transmittal 10, which clarified and revised the instructions for the Worksheet S-10, including the instructions regarding the reporting of charity care charges. Transmittal 10 is available for download on the CMS Web site at: <https://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/2016-Transmittals-Items/R10P240.html>. In Transmittal 10, we clarified that hospitals may include discounts given to uninsured patients who meet the hospital's charity care criteria in effect for that cost reporting period. This clarification applied to cost reporting periods beginning prior to October 1, 2016, as well as cost reporting periods beginning on or after October 1, 2016. As a result, nothing prohibits a hospital from considering a patient's insurance status as a criterion in its charity care policy. A hospital determines its own financial criteria as part of its charity care policy. The instructions for the Worksheet S-10 set forth that hospitals may include discounts given to uninsured patients, including patients with coverage from an entity that does not have a contractual relationship with the provider, who meet the hospital's charity care criteria in effect for that cost reporting period. In addition, we revised the instructions for the Worksheet S-10 for cost reporting periods beginning on or after October 1, 2016, to provide that charity care charges must be determined in accordance with the hospital's charity care criteria/policy and written off in the cost reporting period, regardless of the date of service. We will continue to work with our stakeholders to address their concerns regarding the reporting of uncompensated care through provider education and refinement of the instructions to the Worksheet S-10.

We also understand the commenters' concerns regarding the effects on hospitals' payments of moving from calculating Factor 3 using a proxy based on low-income days to the use of uncompensated care data from Worksheet S-10. As discussed in prior rulemaking, in using Medicaid and Medicare SSI days as a proxy for uncompensated care, we recognize that it would be possible for hospitals in States that choose to expand Medicaid to receive higher uncompensated care payments because they may have more Medicaid patient days than hospitals in a State that does not choose to expand Medicaid. We believe that the

redistribution of payments from hospitals that serve a greater number of Medicaid patients to hospitals that serve more uninsured patients is consistent with the intent of the Affordable Care Act. However, as described below, we have proposed a methodology that would help to stabilize payments and protect hospitals from undue fluctuations by gradually incorporating Worksheet S-10 data into the calculation of Factor 3. In addition, the approximately \$800 million increase in the amount available to be distributed as uncompensated care payments will also help to offset some of the redistributive effects of moving to Worksheet S-10 in FY 2018.

Regarding some commenters' recommendation that we continue to use low-income insured days to calculate Factor 3, either on their own or in a permanent blend with Worksheet S-10 data, we note that the earliest Medicaid expansions under the Affordable Care Act began in 2014. Therefore, in order to insulate the calculation of Factor 3 from the effects of Medicaid expansion, Medicaid days must be drawn from cost reporting periods prior to FY 2014. This prohibits the use of low-income insured days on a permanent basis, as the data will become too old to ensure accuracy. However, the methodology of using 3 years of data to estimate uncompensated care that we first adopted for FY 2017 and that we again proposed for FY 2018 would help to protect hospitals from undue payment fluctuations by using a blend of low-income insured days data and Worksheet S-10 data on a temporary basis.

When all of these factors are taken into consideration, we maintain that we can no longer conclude that alternative data to the Worksheet S-10 are available for FY 2014 that are a better proxy for the costs of subsection (d) hospitals for treating individuals who are uninsured. We believe that continued use of Worksheet S-10 will improve the accuracy and consistency of the reported data, especially in light of our concerted efforts to allow hospitals to review and resubmit their Worksheet S-10 data for past years and the use of select audit protocols to trim aberrant uncompensated care costs and replace them with more reasonable amounts.

*Comment:* Many commenters, whether supporting or opposing the eventual use of Worksheet S-10, believed that it was premature to use its data in the calculation of Factor 3 for FY 2018. The commenters noted that, given that data elements used for the distribution of uncompensated care payments must be "historically publicly

available, subject to audit, and used for payment purposes," CMS has not met its own criteria for using Worksheet S-10 data to determine the distribution of uncompensated care payments. They stated that this is particularly troublesome because CMS has stated that it does not anticipate completing desk audits of data from Worksheet S-10 until FY 2020.

Most commenters recommended that CMS delay the use of data from Worksheet S-10 for at least 1 year, and up to 3 years, or until CMS has put processes in place to ensure consistent submissions by all hospitals as discussed in the FY 2017 IPPS/LTCH PPS final rule. Specifically, the majority of commenters stated that before Worksheet S-10 data are used, CMS must improve and clarify the instructions for Worksheet S-10 to ensure consistent reporting, and also implement audits of the data from Worksheet S-10.

One commenter suggested that these audits be conducted outside of the regular cost report audit for FY 2014 cost reports to ensure consistency with the Worksheet S-10's cost reporting instructions. The commenter also indicated that CMS may need to develop separate audit protocols for different cost reporting periods, as there are differences between the Worksheet S-10 instructions for cost reporting periods beginning before October 1, 2016 and those beginning on or after that date. The commenter urged CMS to make proposed audit instructions to the MACs available in advance and to gather additional stakeholder input before finalizing an audit approach, and noted that making the instructions available in advance would help the agency to identify issues that need additional refinement. Several commenters suggested that the data be audited in a rigorous manner, similar to wage index data. One commenter provided a list of metrics for CMS to consider including in a guide for MACs for their audits of the Worksheet S-10 data. Several other commenters disagreed with CMS' decision not to share the audit criteria with hospitals, and asked that CMS also release the audit criteria for charity care and non-Medicare bad debt. Similarly, commenters asked that before data from Worksheet S-10 are used, CMS implement additional steps to eliminate outliers, including data that represent unreasonable uncompensated care costs. However, the commenters also noted that CMS must allow hospitals a way to appeal any adjustments made to their data, and that CMS needs to allow a grace period similar to the Medicaid

DSH audits before the results of the audit have financial consequences.

Many commenters who urged CMS to delay the use of data from Worksheet S-10 also provided recommendations for CMS to address during the intervening time. Commenters requested that, before Worksheet S-10 data are put to use, CMS further educate hospitals about how to complete the Worksheet S-10 accurately and consistently and allow them to correct their data retroactively. This would include providing hospitals the opportunity to amend previously submitted worksheets for FY 2014 and FY 2015. The commenters emphasized the importance of providing this opportunity because the previous September 30, 2016 deadline for amending 2014 cost reports meant that the revised instructions for the Worksheet S-10 published in November 2016 could not be used because the deadline for resubmission had already passed. In addition, commenters recommended that CMS convene a stakeholder technical advisory group to make Worksheet S-10 data recommendations.

*Response:* We acknowledge the concerns raised by commenters regarding the use of data from Worksheet S-10 in the calculation of Factor 3 for FY 2018. However, as we stated in the FY 2018 IPPS/LTCH PPS proposed rule, when weighing the new information that has become available to us since the FY 2017 rulemaking in conjunction with the information regarding Worksheet S-10 data and the low-income days proxy that we have analyzed as part of our consideration of this issue in prior rulemaking, we can no longer conclude that alternative data to the Worksheet S-10 are available for FY 2014 that are a better proxy for the costs of subsection (d) hospitals for treating individuals who are uninsured. We also note that, as part of our ongoing quality control and data improvement measures to continue to improve the Worksheet S-10 data over time, we have revised the cost report instructions and are currently developing an audit process. With respect to the cost reporting instructions, on November 18, 2016, we issued Transmittal 10 which updated the instructions for Form 2552-10. Specifically, we updated the instructions in Section 4012 of Chapter 40 of the Provider Reimbursement Manual, Part II. The instructions clarify the reporting of charity care charges. Transmittal 10 is available for download on the CMS Web site at: <https://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/2016-Transmittals-Items/R10P240.html>.

With respect to the audit process, in the FY 2017 IPPS/LTCH PPS final rule (81 FR 56964), we stated that we intended to provide standardized instructions to the MACs to guide them in determining when and how often a hospital's Worksheet S-10 should be reviewed. We indicated that we would not make the MACs' review protocol public, as all CMS desk review and audit protocols are confidential and are for CMS and MAC use only. The instructions for the MACs are still under development and will be provided to the MACs as soon as possible and in advance of any audit. We refer readers to the FY 2017 IPPS/LTCH PPS final rule (81 FR 56964) for a complete discussion concerning the issues that we are considering in developing the instructions that will be provided to the MACs.

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19955), we stated our belief that cost reports beginning in FY 2017 will be the first cost reports for which the Worksheet S-10 data will be subject to a desk review. In addition, due to the overwhelming feedback from commenters emphasizing the importance of audits in ensuring the accuracy and consistency of the Worksheet S-10 data, we expect cost reports beginning in FY 2014, FY 2015, and FY 2016 to be subject to further scrutiny after submission.

We will continue to work with our stakeholders to address their concerns through provider education and further refinement of the instructions to the Worksheet S-10 as appropriate.

In reference to allowing hospitals to amend or submit new data for Worksheet S-10 for FYs 2014 and 2015, we note that, as discussed in the FY 2017 IPPS/LTCH PPS final rule, hospitals were given the opportunity to revise and resubmit their data for FY 2014. For revisions to be considered, hospitals were required to submit their amended FY 2014 cost report containing the revised Worksheet S-10 (or a completed Worksheet S-10 if no data were included on the previously submitted cost report) to the MAC no later than September 30, 2016. Although commenters asserted that the September 30, 2016 deadline for amending 2014 cost reports meant that the revised instructions for Worksheet S-10 published in November 2016 could not be used because the deadline had already passed, the changes to the instructions for Worksheet S-10 did not apply to FY 2014 cost reports as they were limited to cost reporting periods beginning on or after October 1, 2016. However, we note that the clarification that only the charges of uninsured

patients who do not meet the hospital's charity care criteria for a full or partial discount must be excluded from charity care could affect hospitals who provided discounts to uninsured patients who met the hospital's charity care policy in FY 2014. Accordingly, we are allowing hospitals another opportunity to resubmit data for FY 2014 Worksheets S-10, and they may include these charges if they were previously omitted. For revisions to be considered, hospitals must submit their amended FY 2014 cost report containing the revised Worksheet S-10 (or a completed Worksheet S-10 if no data were included on the previously submitted cost report) to the MAC no later than September 30, 2017. We note that these revised data will not be used to calculate Factor 3 for FY 2018, but will be available for use in future years if we propose and finalize a methodology for determining Factor 3 that uses FY 2014 Worksheet S-10 data.

We will provide hospitals with a similar opportunity for FY 2015 cost reports. We refer readers to Change Request 10026, Transmittal 1863, titled "The Supplemental Security Income (SSI)/Medicare Beneficiary Data for Fiscal Year 2015 for Inpatient Prospective Payment System (IPPS) Hospitals, Inpatient Rehabilitation Facilities (IRFs), and Long Term Care Hospitals (LTCH)," issued on June 30, 2017 (available at <https://www.cms.gov/Regulations-and-Guidance/Guidance/Transmittals/2017-Transmittals-Items/R1863OTN.html>). In this transmittal, as a step in the process of ensuring complete submission of Worksheet S-10 by all DSH-eligible hospitals, we instruct MACs to accept amended Worksheets S-10 of FY 2015 cost reports submitted by hospitals (or initial submissions of Worksheet S-10 if none have been submitted previously) and to upload them to the Health Care Provider Cost Report Information System (HCRIS) in a timely manner. The transmittal states that, for revisions to be considered, hospitals must submit their amended FY 2015 cost report containing the revised Worksheet S-10 (or a completed Worksheet S-10 if no data were included on the previously submitted cost report) to the MAC no later than September 30, 2017.

After consideration of the public comments received, we are finalizing our proposal to begin incorporating Worksheet S-10 into the calculation of Factor 3 beginning in FY 2018. We discuss below our proposed methodology for how we would begin to incorporate Worksheet S-10 data into the calculation of Factor 3 of the

uncompensated care payment methodology.

(3) Time Period for Calculating Factor 3 for FY 2018, Including Methodology for Incorporating Worksheet S-10 Data

Section 1886(r)(2)(C) of the Act not only governs the selection of the data to be used in calculating Factor 3, but also allows the Secretary the discretion to determine the time periods from which we will derive the data to estimate the numerator and the denominator of the Factor 3 quotient. Specifically, section 1886(r)(2)(C)(i) of the Act defines the numerator of the quotient as the amount of uncompensated care for such hospital *for a period selected by the Secretary*. Section 1886(r)(2)(C)(ii) of the Act defines the denominator as the aggregate amount of uncompensated care for all subsection (d) hospitals that receive a payment under section 1886(r) of the Act *for such period*. In the FY 2014 IPPS/LTCH PPS final rule (78 FR 50638), we adopted a process of making interim payments with final cost report settlement for both the empirically justified Medicare DSH payments and the uncompensated care payments required by section 3133 of the Affordable Care Act. Consistent with that process, we also determined the time period from which to calculate the numerator and denominator of the Factor 3 quotient in a way that would be consistent with making interim and final payments. Specifically, we must have Factor 3 values available for hospitals that we estimate will qualify for Medicare DSH payments and for those hospitals that we do not estimate will qualify for Medicare DSH payments but that may ultimately qualify for Medicare DSH payments at the time of cost report settlement.

In the FY 2017 IPPS/LTCH PPS final rule, in order to mitigate undue fluctuations in the amount of uncompensated care payments to hospitals from year to year and smooth over anomalies between cost reporting periods, we finalized a policy of calculating a hospital's share of uncompensated care based an average of data derived from three cost reporting periods instead of one cost reporting period. As explained in the preamble to the FY 2017 IPPS/LTCH PPS final rule (81 FR 56957 through 56959), instead of determining Factor 3 using Medicaid days from a single cost reporting period and the most recent available data on Medicare SSI utilization, as we did in FY 2014, FY 2015, and FY 2016, we used Medicaid days from *three* cost reporting periods (FYs 2011, 2012, and 2013) and SSI days from the *three* most recent available years of SSI utilization

data (FYs 2012, 2013, and 2014) to compute Factor 3 for FY 2017. We continued to extract Medicaid days data from the most recent update of HCRIS, which for FY 2017 was the March 2016 update. Furthermore, instead of determining a single Factor 3 as we have done since the first year of the uncompensated care payment in FY 2014, we calculated an individual Factor 3 for each of the three cost reporting periods, which we then averaged by the number of cost reporting years with data to compute the final Factor 3 for a hospital. Under this policy, if a hospital had merged, we would combine data from both hospitals for the cost reporting periods in which the merger was not reflected in the surviving hospital's cost report data to compute Factor 3 for the surviving hospital.

Moreover, to further reduce undue fluctuations in a hospital's uncompensated care payments, if a hospital filed multiple cost reports beginning in the same fiscal year, we combined data from the multiple cost reports so that a hospital could have a Factor 3 calculated using more than one cost report within a cost reporting period. We codified these changes for FY 2017 by amending the regulations at § 412.106(g)(1)(iii)(C).

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19951), we proposed to continue to use the methodology finalized in FY 2017 and to compute Factor 3 for FY 2018 using an average of data from three cost reporting periods instead of one cost reporting period. Consistent with the methodology used to calculate Factor 3 for FY 2017, we proposed to advance the time period of the data used in the calculation of Factor 3 forward by 1 year and use data from FY 2012, FY 2013, and FY 2014 cost reports. For the reasons we described earlier, we explained our belief that it would not be appropriate to use Worksheet S-10 data for periods prior to FY 2014. Rather, for cost reporting periods prior to FY 2014, we indicated that we believe it would be appropriate to continue to use low-income insured days. Accordingly, with a time period that includes 3 cost reporting years consisting of FY 2014, FY 2013, and FY 2012, we proposed to use Worksheet S-10 data for the FY 2014 cost reporting period and the low-income insured days proxy data for the two earlier cost reporting periods. In order to perform this calculation, we will draw three sets of data (2 years of Medicaid utilization data and 1 year of Worksheet S-10 data) from the most recent available HCRIS extract, which was the December 2016 update of

HCRIS for the FY 2018 IPPS/LTCH PPS proposed rule and is the March 2017 update of HCRIS for this final rule. Accordingly, for FY 2018, in addition to the Worksheet S-10 data for FY 2014, we proposed to use Medicaid days from FY 2012 and FY 2013 cost reports and FY 2014 and FY 2015 SSI ratios. We also proposed to continue to use FY 2012 cost report data submitted to CMS by IHS and Tribal hospitals to determine Medicaid days for those hospitals. (Cost report data from IHS and Tribal hospitals are included in HCRIS beginning in FY 2013, and are no longer submitted separately.) We also proposed to continue the policies that were finalized in the FY 2015 IPPS/LTCH PPS final rule (79 FR 50020) to address several specific issues concerning the process and data to be employed in determining Factor 3 in the case of hospital mergers as well as the policies finalized in the FY 2017 IPPS/LTCH PPS final rule concerning multiple cost reports beginning in the same fiscal year (81 FR 56957).

We stated in the proposed rule that we believe this approach, if we were to propose to continue it for FY 2019 and FY 2020, would have the effect of transitioning the incorporation of data from Worksheet S-10 into the calculation of Factor 3. Starting with 1 year of Worksheet S-10 data in FY 2018, an additional year of Worksheet S-10 data would be incorporated into the calculation of Factor 3 in FY 2019, and the use of low-income insured days would be phased out by FY 2020.

In addition, in the proposed rule we acknowledged the concerns regarding IHS/Tribal hospitals and subsection (d) Puerto Rico hospitals that some commenters expressed in response to the FY 2017 proposal to begin using Worksheet S-10 data to determine Factor 3 in FY 2018. According to some of these commenters, the use of data from Worksheet S-10 to calculate uncompensated care may jeopardize all of the IHS/Tribal hospitals' uncompensated care payments due to their unique funding structure. With respect to Puerto Rico, other commenters asserted that the use of Worksheet S-10 data may not be appropriate, given the historical treatment of subsection (d) Puerto Rico hospitals under the statutory provisions governing payments under Medicaid and Medicare Part A and its impact on the reporting of uncompensated care payments by these hospitals. After consideration of the concerns, we indicated that we believe the uncompensated care data reported by Puerto Rico and IHS/Tribal hospitals needs to be further examined and

should not be used for FY 2018. For the reasons described earlier related to the impact of the Medicaid expansion beginning in FY 2014, we also stated that we do not believe it would be appropriate to calculate a Factor 3 for these hospitals using FY 2014 low-income insured days. Because we do not believe it is appropriate to use the FY 2014 uncompensated care data for these hospitals and we also do not believe it is appropriate to use the FY 2014 low-income insured days, we stated that we believe the best proxy for the costs of Puerto Rico and IHS/Tribal hospitals for treating the uninsured is the low income-insured days data for FY 2012 and FY 2013. Accordingly, in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19951), we proposed for these hospitals that when we compute the individual Factor 3s for each of the three cost reporting periods that are used to determine Factor 3, rather than computing a Factor 3 using Worksheet S-10 data from the hospital's FY 2014 cost report, we would substitute the Factor 3 calculated using the hospital's FY 2013 low-income insured days. That is, in order to determine the Factor 3 for FY 2018, we would calculate an average of three individual Factor 3s using the Factor 3 calculated using FY 2013 cost report data twice and the Factor 3 calculated using FY 2012 cost report data once. We indicated that we believe it is appropriate to double-weight the Factor 3 calculated using FY 2013 data as it reflects the most recent available information regarding the hospital's low-income insured days before any expansion of Medicaid. We also noted that, as we were not making any proposals with respect to the calculation of Factor 3 for FY 2019 in the FY 2018 IPPS/LTCH PPS proposed rule, we would reexamine the use of the Worksheet S-10 data for Puerto Rico and IHS/Tribal hospitals as part of the FY 2019 rulemaking. In addition, we proposed to continue to use a proxy for SSI days consisting of 14 percent of a hospital's Medicaid days for Puerto Rico hospitals, as finalized in the FY 2017 IPPS/LTCH PPS final rule (81 FR 56953 through 56956).

Therefore, for FY 2018, we proposed to compute Factor 3 for each hospital by—

- *Step 1:* Calculating Factor 3 using the low-income insured days proxy based on FY 2012 cost report data and the FY 2014 SSI ratio;
- *Step 2:* Calculating Factor 3 using the insured low-income days proxy based on FY 2013 cost report data and the FY 2015 SSI ratio;
- *Step 3:* Calculating Factor 3 based on the FY 2014 Worksheet S-10 data (or

using the Factor 3 calculated in Step 2 for Puerto Rico and IHS/Tribal hospitals); and

- *Step 4:* Averaging the Factor 3 values from Steps 1, 2, and 3; that is, adding the Factor 3 values from FY 2012, FY 2013, and FY 2014 for each hospital, and dividing that amount by the number of cost reporting periods with data to compute an average Factor 3.

We invited public comments on our proposed methodology for calculating Factor 3 for FY 2018. We also noted that if this proposed methodology was adopted for FY 2018, we would expect to propose to use a similar methodology for calculating Factor 3 for subsequent years, meaning that for FY 2019 we would expect to incorporate data from the FY 2015 Worksheet S–10 into the methodology and drop the FY 2012 low-income insured day proxy data. However, we did not make any proposals with respect to the calculation of Factor 3 for FY 2019 in the FY 2018 IPPS/LTCH PPS proposed rule.

*Comment:* While many commenters supported CMS' proposal to use a 3-year average to calculate Factor 3 for FY 2018, some commenters also provided suggestions for modified or alternative methodologies to calculate Factor 3 in FY 2018 and beyond. Many of these commenters opposed the use of Worksheet S–10 data beginning in FY 2018 and recommended a delay of at least 1 year to allow for further refinement of the Worksheet S–10 instructions and audit protocols to identify and remove aberrant uncompensated care costs. Several commenters requested that, instead of adding Factor 3 values from FY 2012, FY 2013, and FY 2014 for each hospital, and dividing that amount by the number of cost reporting periods with data, CMS continue to use the same data that was used to calculate uncompensated care payments in FY 2017 (Medicaid days from FYs 2011, 2012, and 2013 cost reports and SSI days from FY 2012, FY 2013, and FY 2014 SSI ratios) for purposes of calculating uncompensated care payments to hospitals in FY 2018. The commenters noted that using these data during a 1-year delay in incorporating Worksheet S–10 data would avoid including post-Medicaid expansion data for FY 2014 in the Factor 3 calculation.

Many commenters asked that CMS implement a stop-loss policy to protect hospitals that lose more than 5 to 10 percent in DSH payments in any given year as a result of transitioning to use of Worksheet S–10 data. These commenters suggested that this stop-loss should extend beyond the

transition to help hospitals with decreasing uncompensated care payments adjust to their new payment levels. However, other commenters noted that a permanent stop-loss would not be warranted, given that a 3-year phase-in is an appropriate way to temporarily reduce the impact of new provisions.

One commenter recommended that any measure of uncompensated care should account for the different sources of uncompensated care burden hospitals incur as they treat low income patients in a changing coverage landscape. The commenter suggested that CMS use a permanent hybrid methodology that includes both a hospital's low-income insured days and uncompensated care costs from Worksheet S–10 to calculate its Factor 3. This commenter recommended that instead of transitioning entirely to Worksheet S–10 data (presumably in FY 2020), CMS use a weighted average of low-income insured days and uncompensated care costs from Worksheet S–10, with low-income insured days weighted 25 percent and Worksheet S–10 data weighted 75 percent.

Another commenter suggested an alternative 5-year phase-in, beginning in FY 2019. This commenter recommended that the weight accorded to data from Worksheet S–10 from FY 2014 be limited in the first year to 10 percent, with the remaining 90 percent determined using data on low-income insured days for FYs 2012 and 2013. In the second year, the commenter suggested that 2 years of data from Worksheet S–10 (FY 2014 and FY 2015) would be averaged and would equal 20 percent, with the remaining 80 percent weight accorded to the data on low-income insured days from FYs 2012 and 2013. In the third year, the commenter suggested that Worksheet S–10 data from FYs 2016 and 2017 would be averaged and weighted at 40 percent, with 60 percent weight accorded to the data on low income insured days. The commenter added that the phase-in process would continue in Year 4, FY 2022, with the use of averaged FY 2017 and FY 2018 Worksheet S–10 data with 80 percent weight, the remainder accorded to the data on low-income insured days. According to the commenter, Year 5 of the phase-in would utilize Worksheet S–10 as the sole data source, with an average of audited data from FYs 2017 through 2019.

While many commenters expressed approval of the proposed 3-year phase-in approach to using data from Worksheet S–10, there were other varying opinions expressed regarding

the length of the phase-in period. Many commenters agreed with the proposed 3-year phase-in following a period of delay, as outlined above. However, other commenters encouraged CMS to expedite the transition to Worksheet S–10 data with potentially no phase-in. Commenters who recommended no phase-in noted that Worksheet S–10 uses the most accurate information available on uncompensated care costs, and while it is not perfect, no cost report schedule or other source of information provided by individual hospitals will ever achieve perfection. Conversely, other commenters requested that CMS consider a longer phase-in period. These commenters recommended a minimum 5-year transition period to gradually phase-in the use of Worksheet S–10 data once the data have been audited. According to the commenters, this longer phase-in would mitigate the effect on hospitals of the redistribution in uncompensated care payments resulting from the inclusion of data from the Worksheet S–10.

One commenter did not agree with the use of a 3-year average in the computation of Factor 3 because it would result in the use of dated information and is not a reasonable solution to solve data anomalies. This commenter requested that CMS use both Medicaid and Medicare SSI days from the most recent available full year of cost report data to compute Factor 3 for FY 2018. However, most commenters supported the use of 3 years of data in the calculation of Factor 3 in FY 2018, regardless of whether they supported a 1-year delay prior to implementing the use of Worksheet S–10 data or the implementation of the use of Worksheet S–10 data in FY 2018, as proposed.

*Response:* We appreciate the commenters' support for the use of a 3-year average in the calculation of Factor 3 for FY 2018. We also appreciate the comments regarding alternative timelines for incorporating Worksheet S–10 data into the calculation of Factor 3 and alternative methods for computing proxies for uncompensated care costs. As we stated in the FY 2018 IPPS/LTCH PPS proposed rule, when weighing the new information that has become available to us since the FY 2017 rulemaking in conjunction with the information regarding Worksheet S–10 data and the low-income days proxy that we have analyzed as part of our consideration of this issue in prior rulemaking, we can no longer conclude that alternative data to the Worksheet S–10 are available for FY 2014 that are a better proxy for the costs of subsection (d) hospitals for treating individuals

who are uninsured. For these reasons, we believe that it is appropriate to begin to incorporate the Worksheet S–10 data in the calculation of Factor 3 starting in FY 2018. We note that the proposals in the FY 2018 IPPS/LTCH PPS proposed rule were limited to FY 2018, and that we did not make any proposals with respect to the data that would be used to calculate Factor 3 for subsequent years. As a result, it would be premature for CMS to establish policies for future years in this final rule. We will consider the commenters' suggestions for further incorporating Worksheet S–10 into the calculation of Factor 3, or computing proxies for uncompensated care costs using a blend of Worksheet S–10 data, low-income insured days, or other data sources, in future rulemaking.

With respect to the stop-loss policy that one commenter suggested, we believe that the use of 3 years of data instead of 1 year of data already provides assurance that hospitals' uncompensated care payments will remain reasonably stable and predictable, and would not be subject to unpredictable swings and anomalies in a hospital's low-income insured days or reported uncompensated care costs. As a result, because there is already a mechanism for smoothing the transition from the use of low-income insured days to the use of Worksheet S–10 data in place, we do not believe a stop-loss policy is necessary at this time.

*Comment:* One commenter requested that CMS consider using a proxy for Puerto Rico hospitals' SSI days in computing the empirically justified DSH payment amount, or 25 percent of the amount that would have been paid for Medicare DSH prior to implementation of section 3133 of the Affordable Care Act.

*Response:* In the FY 2018 IPPS/LTCH PPS proposed rule, we did not propose any changes to the methodology used to calculate empirically justified Medicare DSH payments. Therefore, we consider this comment to be outside the scope of the proposed rule. However, we note that while section 1886(r)(2)(C)(i) of the Act allows for the use of alternative data as a proxy to determine the costs of subsection (d) hospitals for treating the uninsured for purposes of determining uncompensated care payments, section 1886(r)(1) of the Act requires the Secretary to pay an empirically justified DSH payment that is equal to 25 percent of the amount of the Medicare DSH payment that would otherwise be made under section 1886(d)(5)(F) of the Act to a subsection (d) hospital for the fiscal year. Because section 1886(d)(5)(F)(vi) of the Act, which prescribes the disproportionate patient percentage

used to determine empirically justified Medicare DSH payments, specifically calls for the use of SSI days in the Medicare fraction and does not allow the use of alternative data, we do not believe there is any legal basis for CMS to use a proxy for Puerto Rico hospitals' SSI days in the calculation of the empirically justified Medicare DSH payment under section 1886(r)(1) of the Act.

*Comment:* Several commenters supported the proposal to use 14 percent of Medicaid days as a proxy for Medicare SSI days when determining Factor 3 for Puerto Rico hospitals. These commenters stated that they appreciated the attention and effort by CMS to develop a fair and appropriate method to estimate SSI days for Puerto Rico hospitals, as the SSI program is statutorily unavailable to U.S. citizens residing in the Territories.

One commenter recommended that CMS examine data to evaluate future proxy alternatives for Puerto Rico hospitals, such as using data for Medicare beneficiaries with Medicaid eligibility (dual eligible beneficiaries). The commenter proposed that CMS initiate a plan to work with hospitals in Puerto Rico to formally review and define cost report data for recent years in relation to the documentation of hospital inpatient days for dual eligible beneficiaries. As a second step, the commenter recommended that CMS allow hospitals in Puerto Rico to resubmit the pertinent worksheets of the cost reports for past years, to appropriately document the inpatient days for dual-eligible beneficiaries.

*Response:* We appreciate the support for our continued use of 14 percent of a Puerto Rico hospital's Medicaid days as a proxy for SSI days. Because we are continuing to use insured low-income patient days as a proxy for uncompensated care as part of the Factor 3 calculation in FY 2018 and residents of Puerto Rico are not eligible for SSI benefits, we believe it is important to create a proxy for SSI days for Puerto Rico hospitals.

Regarding the comment recommending that we use inpatient days for Medicare beneficiaries receiving Medicaid as this proxy, we have examined this concept and have been unable to identify a systematic source for these data for Puerto Rico hospitals. Specifically, we note that inpatient utilization for Medicare beneficiaries entitled to Medicaid is not reported by hospitals on the Medicare cost report, either within or outside Puerto Rico. We expect to further address issues related to estimating the amount of uncompensated care for

hospitals in Puerto Rico as part of the FY 2019 rulemaking.

*Comment:* A few commenters expressed concern that the use of data from Worksheet S–10 to calculate uncompensated care costs does not take into account the IHS's unique funding structure and therefore may jeopardize all uncompensated care payments for IHS hospitals. The commenters stated that, due to their unique funding structure, Indian Health Care Providers (IHCPs) do not have uncompensated care costs under Worksheet S–10. They indicated that because funding for the costs of patient care is provided through congressional appropriations, all care is considered compensated, even though appropriations fund only approximately 59 percent of the health care needs for American Indians/Alaska Natives. The commenters also stated that many Tribes and Tribal organizations invest non-Federal resources in their health care programs to furnish care that could easily be classified as uncompensated care because IHCPs may not charge beneficiaries to receive care and, thus, may not have the accounting methods to track these costs. As a result, the commenters stated that IHCP hospitals are currently unable to report charity care and non-Medicare bad debt consistent with the proposed definition of uncompensated care in the proposed rule. Therefore, the commenters requested that CMS consult with IHS and Tribal stakeholders to estimate the amount of uncompensated care furnished in IHCP hospitals. The commenters also stated that the opportunity to submit comments on the rulemaking process is not considered meaningful consultation in accordance with Executive Order 13175 or the CMS Tribal consultation policy approved December 5, 2015, and that additional Tribal consultation is necessary.

*Response:* We appreciate these comments and acknowledge that the use of data from Worksheet S–10 to calculate uncompensated care costs does not take into account the unique funding structure of IHS hospitals and therefore using these data to determine Factor 3 may have an unintended impact on the uncompensated care payments to these hospitals. Through consultation and communication with IHS and Tribal hospitals, including an All Tribes' Call on May 22, 2017, to discuss the FY 2018 IPPS/LTCH PPS proposed rule, we have confirmed that it would not be appropriate to use FY 2014 uncompensated care cost data from Worksheet S–10 to calculate Factor 3 for IHS and Tribal hospitals.

In the FY 2018 IPPS/LTCH PPS proposed rule, we proposed for IHS

hospitals that when we compute the individual Factor 3s for each of the three cost reporting periods that are used to determine Factor 3, rather than computing a Factor 3 using Worksheet S-10 data from the hospital's FY 2014 cost report, we would substitute the Factor 3 calculated using the hospital's FY 2013 low-income insured days. That is, in order to determine the Factor 3 for FY 2018, we would calculate an average of three individual Factor 3s using the Factor 3 calculated using FY 2013 cost report data twice and the Factor 3 calculated using FY 2012 cost report data once. We believe it is appropriate to double-weight the Factor 3 calculated using FY 2013 data as it reflects the most recent available information regarding the hospital's low-income insured days before any expansion of Medicaid. We note that we did not make any proposals with respect to the calculation of Factor 3 for FY 2019 in the FY 2018 proposed rule. We will reexamine the use of the Worksheet S-10 data for IHS/Tribal hospitals as part of the FY 2019 rulemaking.

*Comment:* Many commenters asked CMS to change, rescind, or otherwise edit methodologies with respect to all-inclusive rate providers, which several commenters called "inappropriate" and "erroneous." Several commenters suggested a separate audit protocol to address the unique circumstances of all-inclusive billers, and to ensure that their uncompensated care is accurately captured. They observed that because all-inclusive rate providers do not use charges, the CCR on the Worksheet S-10 would be inaccurate. One commenter suggested the use of an audit protocol akin to the one that is used to audit charity care reported by CAHs for purposes of the meaningful use program.

One suggestion to ameliorate the issues regarding all-inclusive rate providers was to add a line to the Worksheet S-10 that asks hospitals "Are you an all-inclusive biller?" that would provide an alternative methodology for those hospitals to calculate their CCRs. Another suggestion was to allow all-inclusive rate providers to submit their own CCRs, so they could explain or correct their data prior to CMS substitution of the hospital-reported CCR with the statewide average. A third suggestion was to use the uncompensated care costs as reported by all-inclusive rate providers on Line 30 of Worksheet S-10 (as opposed to converting charges to costs using the CCR reported on Line 1 of Worksheet S-10 or a statewide average CCR as CMS proposed) or to use low-income days as a proxy for uncompensated care when

calculating Factor 3 either for all all-inclusive rate providers or for public all-inclusive rate providers.

*Response:* We appreciate the concerns and suggestions raised by commenters with respect to the CCRs that will be used in determining the uncompensated care costs of all-inclusive rate providers. Given the unique charge structure of all-inclusive rate providers, we have determined that it would not be appropriate to use FY 2014 uncompensated care cost data from Worksheet S-10 to calculate Factor 3 for these hospitals, and we will instead use an alternate methodology that is consistent with the methodology that we proposed for IHS/Tribal hospitals and Puerto Rico hospitals, which also experience special circumstances that could potentially affect the validity of their Worksheet S-10 data. We note that we did not make any proposals with respect to the calculation of Factor 3 for FY 2019 or subsequent years in the FY 2018 proposed rule; we will reexamine the use of the Worksheet S-10 data for all-inclusive rate providers as part of the FY 2019 rulemaking.

After consideration of the public comments we received, we are finalizing our proposal to incorporate 1 year of Worksheet S-10 data into the calculation of Factor 3 in FY 2018 in conjunction with data on low-income insured days for FYs 2012 and 2013. We will continue to use data from three cost reports, which will gradually incorporate data from Worksheet S-10 into the calculation of Factor 3.

We also are finalizing our proposal not to incorporate Worksheet S-10 data for Puerto Rico hospitals and IHS and Tribal hospitals, but will double-weight the 2013 Factor 3 calculated for these hospitals. In addition, we will not use Worksheet S-10 data for all-inclusive rate providers, but will also double-weight the 2013 Factor 3 calculated for these hospitals. We believe that the uncompensated care data reported by Puerto Rico hospitals, IHS/Tribal hospitals, and all-inclusive rate providers on Worksheet S-10 need to be further examined and should not be used in determining Factor 3 for FY 2018. Because we do not believe it is appropriate to use the FY 2014 uncompensated care data for these hospitals and we also do not believe it is appropriate to use the FY 2014 low-income insured days due to the effects of Medicaid expansion, we believe that the best proxy for the costs of Puerto Rico hospitals, IHS/Tribal hospitals, and all-inclusive rate providers for treating the uninsured is the low-income insured days data for FY 2012 and FY 2013.

In addition, we are finalizing the proposed amendment to the regulation at § 412.106(g)(1)(iii)(C) to reflect the data that will be used to calculate Factor 3 for FY 2018. We have made a minor modification to the proposed text of the regulation in order to clarify that data on uncompensated care costs will not be used to determine Factor 3 for Puerto Rico hospitals, IHS and Tribal hospitals, and all-inclusive rate providers.

For new hospitals that do not have data for any of the three cost reporting periods used in the Factor 3 calculation, we will continue to apply the new hospital policy finalized in the FY 2014 IPPS/LTCH PPS final rule (78 FR 50643). That is, the hospital will not receive either interim empirically justified Medicare DSH payments or interim uncompensated care payments. However, if the hospital is later determined to be eligible to receive empirically justified Medicare DSH payments based on its FY 2018 cost report, the hospital will also receive an uncompensated care payment calculated using a Factor 3, where the numerator is the uncompensated care costs reported on Worksheet S-10 of the hospital's FY 2018 cost report, and the denominator is the sum of uncompensated care costs reported on Worksheet S-10 of all DSH eligible hospitals' FY 2014 cost reports as prospectively determined during rulemaking. We note that, given the selected time period of the data used to calculate Factor 3, any hospitals with a CCN established after October 1, 2014 will be considered new and subject to this policy.

As we have done for each proposed and final rule beginning in FY 2014, in conjunction with this final rule, we will publish on the CMS Web site a table listing Factor 3 for all hospitals that we estimate will receive empirically justified Medicare DSH payments in FY 2018 (that is, those hospitals that will receive interim uncompensated care payments during the fiscal year), and for the remaining subsection (d) hospitals and subsection (d) Puerto Rico hospitals that have the potential of receiving a Medicare DSH payment in the event that they receive an empirically justified Medicare DSH payment for the fiscal year as determined at cost report settlement.

In conjunction with the proposed rule, we published a supplemental data file containing a list of the mergers that we were aware of and the computed uncompensated care payment for each merged hospital. Hospitals had 60 days from the date of public display of the FY 2018 IPPS/LTCH PPS proposed rule to review the table and supplemental data

file published on the CMS Web site and to notify CMS in writing of any inaccuracies. We stated in the proposed rule that we would address these comments as appropriate in the table and the supplemental data file that we publish on the CMS Web site in conjunction with the publication of this FY 2018 IPPS/LTCH PPS final rule. Hospitals will have until August 31, 2017, to review and submit comments on the accuracy of the table and supplemental data file published in conjunction with this final rule. Comments may be submitted to the CMS inbox at [Section3133DSH@cms.hhs.gov](mailto:Section3133DSH@cms.hhs.gov) through August 31, 2017, and any changes to Factor 3 will be posted on the CMS Web site prior to October 1, 2017.

*Comment:* Some commenters provided specific information regarding merger situations involving their hospitals and requested that CMS consider these mergers in determining Factor 3 for FY 2018 payments. A few commenters also pointed out that specific data for the calculation of Factor 3, such as Medicaid days, were incorrect due to missing cost report data in the HCRIS extract for the applicable year. In addition, a few commenters noted inaccuracies in the FY 2018 Proposed Rule Supplemental Data File, which, in some cases, had not been updated to reflect the most recent FY 2014 cost report filed in accordance with CMS Transmittal 1681. CMS Transmittal 1681 instructed MACs to accept amended Worksheets S–10 for FY 2014 cost reports submitted by hospitals (or initial submissions of Worksheet S–10 if none had been submitted previously) and to upload them to the Health Care Provider Cost Report Information System (HCRIS) in a timely manner if received no later than September 30, 2016.

*Response:* We thank the commenters for their input. We have updated our list of mergers based on information submitted by the MACs as of June 2017. In addition, we have reviewed the commenters' submissions of mergers not previously identified in the proposed rule and have updated our list accordingly. We also have reviewed the commenters' submissions regarding missing or incorrect Worksheet S–10 data from FY 2014 cost reports in the FY 2018 Proposed Rule Supplemental Data File and included those data that were submitted timely and inadvertently excluded from the March 2017 HCRIS extract due to MAC or CMS error. We will continue to pay diligent attention to data inaccuracies and work internally and with our contractors to resolve these issues in a timely manner.

(4) Methodological Considerations for Calculating Factor 3

• *Annualizing short cost reports.* As we explained in the FY 2017 IPPS/LTCH PPS final rule (81 FR 56957 through 56959) and in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19953), we believe that for hospitals that file multiple cost reports beginning in the same year, combining the data from these cost reports has the benefit of supplementing the data of hospitals that filed cost reports that are less than 12 months, such that the basis of their uncompensated care payments and those of hospitals that filed full-year 12-month cost reports would be more equitable. In response to our original proposal in the FY 2017 IPPS/LTCH PPS proposed rule to combine data from multiple cost reports, many hospitals stated that while they were appreciative of CMS' efforts to provide a more equitable playing field for hospitals that filed short cost reports, they believed that expanding the time period of the data used to calculate Factor 3 as well as combining data across multiple cost reports would not remedy the fact that some hospitals are still disadvantaged by having less than 36 months of data in their Factor 3 calculation (81 FR 56959). Other commenters opposed the use of multiple cost reporting periods if it would result in a hospital having more than 12 months of data in the Factor 3 calculation for a year, and recommended that CMS prorate the data to a 12-month period. Similarly, other commenters recommended that CMS annualize cost report data for any cost reporting period that is less than 12 months. In the FY 2017 IPPS/LTCH PPS final rule, we acknowledged that, although we had not made any proposal in the FY 2017 IPPS/LTCH PPS proposed rule to annualize the cost reports used to calculate Factor 3, the situations presented by commenters, including both long and short cost reporting periods, pose unique challenges in the context of estimating Factor 3. We stated that we intended to consider the issue further and might address the issue in future rulemaking.

For the FY 2018 IPPS/LTCH PPS proposed rule, taking into consideration the feedback from hospitals that have been disadvantaged in the Factor 3 calculation due to cost reports that do not span a full year, we proposed to annualize Medicaid data if a hospital's cost report does not equal 12 months of data. We did not propose to annualize SSI days because we do not obtain these data from hospital cost reports in HCRIS. Rather, we obtain these data from the latest available SSI ratios

posted on the Medicare DSH homepage (<https://www.cms.gov/medicare/medicare-fee-for-service-payment/AcuteInpatientPPS/dsh.html>), which are aggregated at the hospital level and do not have the information needed to determine if the data should be annualized.

Under this proposal, if the time between the start date of a hospital's cost reporting year and the end date of its cost reporting year is less than 12 months, we proposed that we would annualize the Medicaid days so that the hospital has 12 months of data included in its Factor 3 calculation. Conversely, if the time between the aforementioned start date and the end date is *greater* than 12 months, we would annualize the Medicaid days to achieve 12 months of Medicaid days data. If a hospital files more than one cost report beginning in the same fiscal year, we would first combine the data across the multiple cost reports before determining the difference between the start date and the end date to see if annualization is needed.

To annualize the Medicaid days for a long or short cost reporting year, we proposed that we would divide the length of a full year (365 or 366 calendar days, as applicable) by the length of the cost reporting year (the number of calendar days in the cost reporting year) and then multiply the quotient by the number of Medicaid days in the cost reporting year.

For instance, a cost reporting year that is 285 calendar days long with 1,200 Medicaid days would be annualized as follows:  $(365/285) * 1,200 = 1,537$  days.

A cost reporting year that is 385 calendar days long with 1,200 Medicaid days would be annualized using the same formula:  $(365/385) * 1,200 = 1,137$  days.

Likewise, because long and short cost reporting periods pose the same challenges in the context of estimating Factor 3 using hospital uncompensated care costs, we proposed to annualize the uncompensated care cost data reported on Worksheet S–10 for cost reports that do not equal 12 months of data, by dividing the length of a full year (365 or 366 calendar days, as applicable) by the length of the cost reporting year (number of calendar days in the cost reporting year) and then multiplying the quotient by the total reported uncompensated care costs for the cost reporting year.

For instance, a cost reporting year that is 285 calendar days long reporting \$10,500,000 in uncompensated care costs would be annualized as follows:  $(365/285) * \$10,500,000 = \$13,447,368$ .

A cost reporting year that is 385 calendar days long reporting \$10,500,000 in uncompensated care costs would be annualized using the same formula:  $(365/385) * \$10,500,000 = \$9,954,545$ .

If a hospital files more than one cost report beginning in the same fiscal year, we proposed that we would first combine the data across the multiple cost reports before determining the length of the cost reporting year to see if annualization is needed.

We invited public comment on our proposal to annualize the cost reports used to calculate Factor 3 for FY 2018. In addition, as noted earlier, our proposal to continue calculating a hospital's share of uncompensated care payments using a time period that includes 3 cost reporting years was also designed to mitigate undue fluctuations in the amount of uncompensated care payments to hospitals from year to year and smooth over anomalies between cost reporting periods. Given that our proposal to annualize the cost reports used to calculate Factor 3 for FY 2018 would also mitigate fluctuations in the amount of uncompensated care payments from year to year, we also sought public comment on the degree to which the use of three cost reporting years would still be necessary if we were to adopt our proposal to annualize the cost reports used to calculate Factor 3, or if instead the use of a single cost reporting year or two cost reporting years would be appropriate. In order to facilitate public comments, we indicated that we intend to post on our Web site a data file containing information similar to the information provided in section I.H.5., "Effects of the Proposed Changes to Medicare DSH and Uncompensated Care Payments for FY 2018" of Appendix A of the proposed rule. However, instead of reflecting our proposed approach of calculating Factor 3 using a time period that includes 3 cost reporting years, it would reflect an alternative approach of calculating Factor 3 using only the most recent year (FY 2014) of our proposed 3-year average. In all other respects, the calculation of Factor 3 would remain the same.

**Comment:** Many commenters supported CMS' proposal to annualize cost reports that do not reflect 12 months of data (short and long periods). One commenter specifically supported the proposal to annualize Medicare SSI days for the Factor 3 calculation, while another commenter supported the proposal to combine data from multiple cost reports beginning in the same fiscal year before annualization.

**Response:** We appreciate the support for the proposal to annualize cost reports that do not meet the 12-month threshold. However, we reiterate that the proposal did not apply to Medicare SSI days as these data are not obtained directly from cost reports in HCRIS (unlike Medicaid days and uncompensated care cost data), but rather from a file posted on the CMS Web site: <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/dsh.html>, where the data are aggregated at the hospital level and without the information to determine if annualization is needed. Therefore, we are unable to annualize Medicare SSI days as we proposed for Medicaid days from Worksheet S-2 and uncompensated care cost data from Worksheet S-10 of the Medicare cost report.

After consideration of the comments we received, we are finalizing our proposal to annualize cost reports that do not have 12 months of data. As stated in the FY 2018 IPPS/LTCH PPS proposed rule, if the time between the start date of a hospital's cost reporting year and the end date of its cost reporting year is less than 12 months, we will annualize the Medicaid days so that the hospital has 12 months of data included in its Factor 3 calculation. Conversely, if the time between the aforementioned start date and the end date is *greater* than 12 months, we will annualize the Medicaid days to achieve 12 months of Medicaid days data. If a hospital files more than one cost report beginning in the same fiscal year, we will first combine the data across the multiple cost reports before determining the difference between the start date and the end date to see if annualization is needed.

- **Scaling Factor.** Under the methodology adopted in the FY 2017 IPPS/LTCH PPS final rule and as we proposed to apply in FY 2018, if a hospital does not have data for one or more of the three cost reporting periods, we would compute Factor 3 for the periods available and average those. In other words, we would divide the sum of the individual Factor 3s by the number of cost reporting periods with data so as not to disadvantage hospitals that are missing data for one or more cost reporting periods. Following the publication of the FY 2017 IPPS/LTCH PPS final rule, several hospitals noted that this aspect of the methodology resulted in the Factor 3 values of DSH eligible hospitals in Table 18 and the Medicare DSH Supplemental Data File adding up to slightly greater than one, which resulted in total uncompensated

care payments somewhat exceeding the estimate published in the FY 2017 final rule. Specifically, for hospitals that have fewer than 3 cost reporting years with data, dividing the individual Factor 3s by the number of cost reporting years with data (that is, 2 cost reporting years or 1 cost reporting year) results in a higher average Factor 3 than if the individual Factor 3s were divided by the number of cost reporting years, regardless of whether or not there is data (that is, 3 cost reporting years). For example, a hospital with no data for FY 2011 and a Factor 3 of 0.000051762 for FY 2012 and 0.000049852 for FY 2013 will have an average Factor 3 of 0.000050807 if divided by 2 but an average Factor 3 of only 0.000033871 if divided by 3. After reviewing the data in Table 18 and the Medicare DSH Supplemental Data File, which were published in conjunction with the FY 2017 IPPS/LTCH PPS final rule, we concluded that the hospitals' observations are correct and that an adjustment is needed so that total uncompensated care payments do not exceed the estimated amount available to make uncompensated care payments as discussed in section V.G.4.b of the preamble of this final rule.

Accordingly, to address the effects of averaging Factor 3s calculated for three separate fiscal years, we proposed to apply a scaling factor to the Factor 3 values of all DSH eligible hospitals so that total uncompensated care payments are consistent with the estimated amount available to make uncompensated care payments for FY 2018. We proposed to first compute Factor 3 and the uncompensated care payments for all hospitals that we anticipate qualifying for Medicare DSH payments in FY 2018. We proposed to then divide 1 (the *expected* sum of all eligible hospitals' Factor 3 values) by the *actual* sum of all eligible hospitals' Factor 3 values and multiply the quotient by each hospital's total uncompensated care payment to obtain scaled uncompensated care payment amounts whose sum is consistent with the estimate of the total amount available to make uncompensated care payments. The hospital-specific uncompensated care amount would then be divided by a 3-year claims average to obtain the amount of the interim uncompensated care payment the hospital will receive for each claim. As an illustration of the calculation of the scaling factor, applying this proposal to the FY 2017 uncompensated care payments would have resulted in a scaling factor of 0.9992 (1/1.0008). We noted that the FY 2017 uncompensated

care payments as calculated for the FY 2017 IPPS final rule exceeded the estimated amount by approximately \$5 million due to the lack of a scaling factor.

We invited public comments on our proposal to apply a scaling factor to all DSH eligible hospitals' Factor 3 values for FY 2018.

*Comment:* One commenter supported applying a scaling factor to Factor 3 and noted that it would prevent artificial inflation of a hospital's amount of uncompensated care in the absence of 3 years of cost report data.

*Response:* We appreciate the commenter's support for the proposed scaling factor.

After consideration of the comments we received, we are finalizing our proposal to implement a scaling factor to all DSH eligible hospitals' Factor 3 values for FY 2018.

#### (5) Methodological Considerations for Incorporating Worksheet S–10 Data

• *Definition of uncompensated care.* In the FY 2014 IPPS/LTCH PPS rulemaking, we considered three potential definitions of uncompensated care: Charity care; charity care + bad debt; and charity care + bad debt + Medicaid shortfalls. As we explained in the FY 2014 IPPS/LTCH PPS final rule (78 FR 50634), we considered proposing to define the amount of uncompensated care for a hospital as the uncompensated care costs of that hospital and considered potential data sources for those costs. We examined the literature on uncompensated care and the concepts of uncompensated care used in various public and private programs, and considered input from stakeholders and public comments in various forums, including the national provider call that we held in January 2013. Our review of the information from these sources indicated that there is some variation in how different States, provider organizations, and Federal programs define "uncompensated care." However, a common theme of almost all these definitions is that they include both "charity care" and "bad debt" as components of "uncompensated care." Therefore, a definition that incorporates the most commonly used factors within uncompensated care as reported by stakeholders would include charity care costs and bad debt costs. Worksheet S–10 employs the definition of charity care plus non-Medicare bad debt.

Specifically:

Cost of Charity Care (Line 23)  
+ Cost of non-Medicare bad debt  
expense (Line 29)

Cost of non-Medicare uncompensated care (Line 30)

Where:

- Cost of charity care = Cost of initial obligation of patients approved for charity care (line 21) minus partial payment by patients approved for charity care (line 22).
- Cost of non-Medicare bad debt expense = Cost to charge ratio (line 1) times non-Medicare and nonreimbursable bad debt expense (line 28).

In the FY 2017 IPPS/LTCH PPS proposed rule (81 FR 25092), we proposed to adopt a definition of uncompensated care costs that included charity care and non-Medicare bad debt. We explained that we believe there are compelling arguments for excluding Medicaid shortfalls from the definition of uncompensated care, including the fact that several government agencies and key stakeholders do not consider Medicaid shortfalls in their definition of uncompensated care and that excluding Medicaid shortfalls from the uncompensated care definition allows Medicare uncompensated care payments to target hospitals that have a disproportionate share of uncompensated care for patients with no insurance coverage. Although we did not finalize the proposed definition of uncompensated care costs as part of the FY 2017 rulemaking, we continue to believe a definition of uncompensated care that incorporates the most commonly used factors within uncompensated care as reported by stakeholders would include charity care costs and non-Medicare bad debt costs, which correlates to Line 30 of Worksheet S–10. Therefore, in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19954), we again proposed that, for purposes of calculating Factor 3 and uncompensated care costs beginning in FY 2018, "uncompensated care" would be defined as the amount on line 30 of Worksheet S–10, which is the cost of charity care (Line 23) and the cost of non-Medicare bad debt (Line 29). We invited public comments on this proposal.

*Comment:* Several commenters supported the proposed definition of uncompensated care as charity care plus non-Medicare bad debt. However, a common concern expressed by these commenters, as well as those commenters who disagreed with the proposed definition, was the inclusion of Medicaid shortfalls in the definition of uncompensated care as captured by Worksheet S–10. Commenters stated that excluding Medicaid shortfalls from the definition of uncompensated care severely penalizes hospitals that care for a large number of Medicaid patients

because, while uninsured costs have declined as people have gained coverage through Medicaid, hospitals continue to lose money on Medicaid patients as the Medicaid payment rates are often below the cost of providing health care services. The commenters also stated that including Medicaid losses in the definition of uncompensated care would align with the Medicaid DSH program and the IRS method of calculating the community benefit provided by nonprofit hospitals. Some commenters also requested that shortfalls from CHIP and State and local indigent care programs be included in uncompensated care costs along with charity care and non-Medicare bad debt.

Other commenters supported the exclusion of Medicaid shortfalls from the definition of uncompensated care. One of these commenters pointed out that the current use of low-income insured days as a proxy for uncompensated care already penalizes hospitals in nonexpansion States as their Medicaid ratio is lower than hospitals in expansion States. The commenter believed that including Medicaid shortfalls in the definition of uncompensated care would exacerbate this impact. In addition, the commenter supported the exclusion of Medicaid shortfalls from the definition of uncompensated care because it believed that Medicaid programs vary by State, making the data on shortfalls less reliable. Commenters added that excluding Medicaid unreimbursed costs from non-Medicare uncompensated care will result in a more equitable distribution of uncompensated care payments. Another commenter believed that continuing to exclude Medicaid shortfalls from Factor 3 calculations will improve the accuracy and consistency of the data reported on Worksheet S–10. In addition, commenters noted that computing losses on Medicaid patients is operationally problematic because it is unclear how much Medicaid shortfalls are left after the Medicare DSH payment is made. That is, commenters noted that Medicare DSH payments may already be covering the Medicaid shortfalls.

In addition to comments about the Medicaid shortfalls, commenters observed that States differ in how they define uncompensated care costs, and that not all costs incurred by hospitals in treating the uninsured are categorized as charity care and bad debt, such as in the case of discounts to the uninsured who are unable to pay or unwilling to provide means-tested information. Specifically, commenters pointed out that Worksheet S–10 does not capture all of the information relevant to the

purposes of section 3133 of the Affordable Care Act. To this end, one commenter noticed definitional discrepancies in Worksheet S-10 that failed to recognize the requirement under section 3133 of the Affordable Care Act that the amount of uncompensated care costs of subsection (d) hospitals reflect the costs of treating the uninsured, which should include costs incurred through non-means tested uninsured discount programs. Commenters expressed concern for the disregard of uninsured discounts, which, according to them, results in uncompensated care being undercounted.

Several commenters stated that the uncompensated care definition should be expanded to include discounts to the uninsured and underinsured as well as those who self-pay. According to one commenter, such discounts should include “self-pay imposed charge discounts,” “state mandated self-pay charge discounts,” and “means tested” charge discounts. The same commenter stated that, despite CMS’ concerns that adding self-pay discounts into uncompensated care may result in situations where payments exceed costs, overall self-pay patient payments are immaterial in the aggregate and would not be a significant factor in such a calculation.

Some commenters also argued that adopting a policy that excludes discounts would inappropriately penalize hospitals that offer uninsured discounts and disincentivize hospitals from offering this financial help to the uninsured. To this end, commenters noted that Worksheet S-10 does not adequately reflect discounts to the uninsured and expressed concern that hospitals that attempt to collect on a full debt with no discount receive the same or a higher uncompensated care total as hospitals that do provide discounts. Specifically, one commenter noted that the current policy for uninsured discounts is irrational because it gives special treatment to those hospitals unwilling to discount care for the uninsured. Another commenter argued that discounts offered to the uninsured are costs that hospitals incur in providing care for such patients; therefore, regardless of whether they are called “discounts” or some other term, they should be incorporated in the definition of uncompensated care in Worksheet S-10. One commenter also noted that it applies discounts according to its charity patients’ liability, which includes both coinsurance and deductible for covered services, and the costs of services provided but not covered by the

patient’s insurance, stating that this practice is “industry standard” as well as allowable under IRS Form 990. Echoing calls from others, the commenter suggested that CMS revise the definitions for uncompensated care to reflect the entirety of costs to hospitals for providing charity care, including uninsured discounts.

In contrast to the support for the inclusion of discounts to the uninsured in the definition of uncompensated care, one commenter believed that expansion of the definition of uncompensated care to include discounts to the uninsured is flawed because these discounts are nonlegitimate “costs” for community health reporting. The commenter stated that hospitals in its State have a long history of discounts to the uninsured through an Attorney General’s agreement, and that the State tends to have a higher-than-normal adoption rate of high-deductible health plans. Therefore, the commenter has come to this conclusion regarding these discounts based on its own significant experience.

*Response:* In general, we will attempt to address commenters’ concerns in future cost report clarifications to ensure that Worksheet S-10 is an appropriate instrument to collect the information necessary to implement section 3133 of the Affordable Care Act. With regard to the comments regarding Medicaid shortfalls, we recognize commenters’ concerns but continue to believe there are other compelling arguments for excluding Medicaid shortfalls from the definition of uncompensated care, including the fact that several key stakeholders do not consider Medicaid shortfalls in their definition of uncompensated care, and that it is most consistent with section 3133 of the Affordable Care Act for Medicare uncompensated care payments to target hospitals that incur a disproportionate share of uncompensated care for patients with no insurance coverage. Conceptual issues aside, we note that even if we were to adjust the definition of uncompensated care to include Medicaid shortfalls, this would not be a feasible option at this time due to computational limitations. Specifically, computing such losses is operationally problematic because Medicaid pays hospitals a single DSH payment that in part covers the hospital’s costs in providing care to the uninsured and in part covers estimates of the Medicaid “shortfalls.” Therefore, it is not clear how CMS would determine how much of the “shortfalls” is left after the Medicaid DSH payment is made. In addition, in some States, hospitals

return a portion of their Medicaid revenues to the State via provider taxes, making the computation of “shortfalls” even more complex. Accordingly, we continue to believe it is appropriate to apply a definition of uncompensated care costs that includes charity care and non-Medicare bad debt for FY 2018.

With regard to the comments that States differ in how they define uncompensated care costs, and that hospitals’ costs of treating the uninsured are not always categorized as charity care and bad debt, such as in the case of discounts to the uninsured who are unable to pay or unwilling to provide income information, we believe the commenters are referring to the Worksheet S-10 instructions for Line 20, which state, in part, “Do not include charges for either uninsured patients given discounts without meeting the hospital’s charity care criteria or patients given courtesy discounts.” We believe that hospitals have the discretion to design their charity care policies as appropriate, and may include discounts offered to uninsured patients as “charity care.” However, we will also further consider the concern raised by the commenter as to whether CMS’ current instructions are inadvertently creating a disincentive to offer such discounts, and we may consider revisions to the instructions on Line 20 of Worksheet S-10 to further clarify when patient discounts would be considered charity care versus bad debt.

*Comment:* Many commenters expressed concerns relating to, and provided suggestions for, calculating charity care and bad debt as captured on Worksheet S-10:

- Commenters expressed confusion about what is identified as an indigent care program, and when charity care and Medicaid noncovered charges are components of charity care, pointing out that there are several areas of confusion and areas that might encourage individual interpretation. In addition, commenters believed that government providers are misreporting data related to charity care by including all charges for their indigent care/general relief patient populations as charity care while not accounting for offsetting payments. The commenters expressed their view that services furnished under these programs are not uncompensated, but are funded through State and local tax assessments. Therefore, the commenters requested that CMS require that patient charges cannot be included in the cost of charity care unless the related services are not covered by an indigent care program. More generally, commenters stated that hospitals have difficulty in identifying where to report

nonpatient-specific payments that are received to offset charity care and bad debt.

- Commenters raised a similar concern about Line 20 of Worksheet S–10 regarding a possible discrepancy between considering noncovered charges for Medicaid patients as eligible for charity care, but not allowing noncovered charges for patients that have some commercial coverage to be considered charity care. In particular, according to commenters, the current methodology used to calculate the cost of charity care for insured patients is incorrect because it asks hospitals to apply a CCR to deductibles and coinsurance in order to arrive at the cost, which will significantly understate the cost of charity care because coinsurance and deductibles are typically a function of the payment rate rather than the hospital's charges for the service. To this end, one commenter noted that waived deductibles and coinsurance for charity care insured patients would always be expected to be less than, and only a fraction of, full charges for charity care for uninsured patients. Commenters suggested that CMS develop a separate CCR applicable to deductible and coinsurance amounts to calculate the cost of charity care.

- One commenter requested that instructions for the Worksheet S–10 ensure that the dollar amount reported for Line 22, Column 2 represents payments from both patients and insurers for specific patient accounts that were granted charity care during the cost reporting period.

- A few commenters stated that any further revision to the instructions for Line 20 of Worksheet S–10 should reference a hospital's "financial assistance policy" for consistency with the terminology used in the regulations implementing section 501(r) of the Internal Revenue Code, which require hospitals to establish financial assistance policies and to reduce charges for services furnished to individuals who qualify for assistance under those policies. In addition, commenters suggested that CMS clarify that Federal law does not mandate eligibility criteria for a hospital's financial assistance policy.

- Commenters stated that hospitals report charity care amounts for patients that qualify for partial charity inconsistently, and requested that CMS clarify how amounts should be reported for patients that qualify for partial charity care, including both uninsured individuals as well as patients with financial responsibility after their insurance pays. In addition, one commenter asked CMS to provide

guidance that protects facilities that expanded their tiered partial charity care programs in order to cover more individuals falling within a broader income scale.

- Many commenters believed that the definition of bad debt is unclear and that the methodology CMS uses to arrive at the cost of bad debt significantly understates the uncompensated care expense that hospitals incur as a result of uncollectable amounts. Commenters also asked for clarification on whether or not non-Medicare bad debt claimed on Line 26 of Worksheet S–10 should be netted of recoveries received during the cost report period.

- Commenters also expressed concern in regard to patients who have some form of insurance but are not able to meet their cost sharing responsibility, in particular coinsurance and deductibles. These commenters believed that applying the hospital's CCR to the amount on Line 26 of Worksheet S–10 understates the costs associated with deductibles and coinsurance for insured patients written off as bad debt. The commenters recommended that CMS revise Worksheet S–10 to require separate reporting for bad debt written off for the uninsured and for those who are insured but cannot afford their cost sharing, similar to the instructions for Line 20.

- Several commenters observed that the current Worksheet S–10 methodology may provide an incentive to hospitals to overstate charity care, compromising the fidelity of the information collected.

- One commenter stated that bad debt and charity care should be considered reductions to expected hospital payment and thus should not be treated as hospital charges and adjusted by the CCR.

- One commenter believed that charity care and bad debt are not valid measures of a hospital's uncompensated care burden, as charity care may be offset with direct taxes, appropriations, and/or uncompensated care payments.

*Response:* We intend to consider the various issues raised by the commenters that directly relate to reporting of charity care and bad debt costs on Worksheet S–10 as we continue to review Worksheet S–10. We will continue to work with our stakeholders to address their concerns through provider education and further refinement of the instructions to the Worksheet S–10 as appropriate. We also clarify that the bad debt claimed on Line 26 of Worksheet S–10 must be net of bad debt recoveries received during the cost report period.

- *Trims to apply to CCRs on Line 1 of Worksheet S–10.* As we noted in the FY 2017 IPPS/LTCH PPS proposed and final rules (81 FR 25093 and 81 FR 56971), commenters have suggested that uncompensated care costs reported on Worksheet S–10 should be audited due to extremely high values consistently reported by some hospitals. In response to these comments, we reviewed the Worksheet S–10 data and identified approximately 10 to 20 hospitals that have anomalous uncompensated care costs. We note that many of these hospitals are public hospitals, which can have charging practices that are distinct from other hospital types. We believe that, just as we apply trims to hospitals' CCRs to eliminate anomalies when calculating outlier payments for extraordinarily high cost cases (§ 412.84(h)(3)(ii)), it is appropriate to apply statistical trims to the CCRs on Worksheet S–10, Line 1 that are considered anomalies. Specifically, § 412.84(h)(3)(ii) states that the Medicare contractor may use a statewide CCR for hospitals whose operating or capital CCR is in excess of 3 standard deviations above the corresponding national geometric mean (that is, the CCR "ceiling"). This mean is recalculated annually by CMS and published in the proposed and final IPPS rules each year. To control for data anomalies, in the FY 2017 rulemaking, we considered approaches that would trim hospitals' CCRs to ensure reasonable CCRs are used to convert charges to costs for purposes of determining uncompensated care costs.

After considering the comments received in response to the FY 2017 IPPS/LTCH PPS proposed rule, which were discussed in the FY 2017 IPPS/LTCH PPS final rule (81 FR 56971 through 56973), in the FY 2018 IPPS/LTH PPS proposed rule (82 FR 19954 and 19955), for FY 2018, we proposed the following alternative methodology for trimming CCRs:

*Step 1:* Remove Maryland hospitals. In addition, we will remove all-inclusive rate providers, as they have charge structures that differ from other IPPS hospitals, and providers that did not report a CCR on Worksheet S–10, Line 1, and assign them the statewide average CCR in step 5 below.

*Step 2:* For hospitals with multiple cost reports included in the 2014 HCRIS data, (a) combine the amounts from Worksheet C, Part I, Line 202, Column 3 from each cost report to calculate total costs, (b) combine the amounts from Worksheet C, Part I, Line 202, Column 8 from each cost report to calculate total charges, and (c) divide the total costs by

the total charges to arrive at a recalculated CCR.

*Step 3:* Calculate a CCR “ceiling” using the CCRs reported on Worksheet S–10, Line 1, from all IPPS hospitals that were not removed in Step 1 (including non-DSH eligible hospitals), or the recalculated CCR described in Step 2. The ceiling is calculated as 3 standard deviations above the national geometric mean CCR. This approach is consistent with our calculation of the CCR ceiling used for high-cost outliers. Remove all hospitals that exceed the ceiling so that these aberrant CCRs do not skew the calculation of the statewide average CCR. Based on the information currently available to us during the development of this final rule, this trim would remove 9 hospitals that have CCRs above the calculated ceiling of 0.932.

*Step 4:* Using the CCRs for the remaining hospitals in Step 3, determine the urban and rural statewide average CCRs using Line 1 of Worksheet S–10 for hospitals within each State (including non-DSH eligible hospitals), weighted by the sum of total inpatient discharges and outpatient visits from Worksheet S–3, Part I, Line 14, Column 14.

*Step 5:* Assign the appropriate statewide average CCR (urban or rural) calculated in Step 4 to all hospitals with a CCR greater than 3 standard deviations above the corresponding national geometric mean (that is, the CCR “ceiling”), as well as to providers that did not report a CCR on Worksheet S–10, Line 1. The statewide average CCR would therefore be applied to 27 hospitals, of which 18 did not report a CCR on Worksheet S–10, Line 1 and 9 had a CCR that exceeded the calculated ceiling of 0.932. (We note that the number of hospitals that are assigned the statewide average CCR has changed significantly from the estimates included in the proposed rule due to our decision not to incorporate Worksheet S–10 data into the calculation of Factor 3 for all-inclusive rate providers, as discussed above.)

After applying the applicable trims to a hospital’s CCR as appropriate, we proposed to calculate a hospital’s uncompensated care costs as being equal to Line 30, which is the sum of Line 23 and Line 29, as follows:

Hospital Uncompensated Care Costs = Line 30 (Line 23 + Line 29), which is equal to—

[(Line 1 CCR (as adjusted, if applicable) × charity care line 20) – (Payments received for charity care Line 22)]

+

[(Line 1 CCR (as adjusted, if applicable) × Non-Medicare and non-reimbursable Bad Debt Line 28)].

We invited public comments on our proposed trim methodology for FY 2018.

*Comment:* Many commenters expressed concern that the proposed trim methodology would improve neither the accuracy nor consistency of uncompensated care data. The commenters recommended that CMS further review the trim methodology or delay its application until an audit of the Worksheet S–10 is complete.

Several commenters suggested that high-cost outliers be entirely removed to avoid skewing the data instead of setting their CCRs as the statewide average. The commenters contended that automatically setting CCRs to the statewide average would be “inappropriate,” especially when performed without opportunities for explanation. One commenter stated that hospitals that have been identified as potential outliers should have the opportunity to explain their data and correct errors before the trim methodology is applied, which would facilitate data validity.

A few commenters requested that the trimming methodology should not be finalized until an audit of the data has been conducted, and that hospitals with extremely high CCRs should be audited and an appropriate CCR determined instead of applying an arbitrary trim to a statewide average. One commenter suggested that CMS develop a separate audit protocol for all-inclusive billers before application of the trimming methodology. Another commenter believed that it would be inappropriate to assume that reported amounts are incorrect and thus change State averages or other DSH calculations, especially without an auditing process in place. Others identified “anomalies” in data that would not be addressed by the proposed trims, such as a hospital with uncompensated care that equaled to four times total hospital charges. Another commenter requested that instead of applying the statewide average CCR, CMS instruct MACs to use 2015 Worksheet S–10 data if the 2014 data were incomplete or unusually high.

As noted above, several commenters expressed concern over the proposed trim methodology because hospitals that are considered “all-inclusive rate providers” are not required to complete Worksheet C, Part I, which is used for reporting the CCR on Line 1 of the Worksheet S–10. Commenters noted that, as a result, the proposed trim methodology inappropriately modifies

their uncompensated care costs, and that a high CCR could be accurate if the hospital’s charges are close to costs, as is usually the case for all-inclusive rate hospitals. One commenter suggested that, instead of applying a trim, CMS evaluate CCRs on cost reports to identify misreported, erroneous values and not penalize hospitals that are accurately reporting information under a CMS-sanctioned methodology.

*Response:* We appreciate the additional information provided by the commenters related to applying trims to the CCRs. We intend to further explore which trims are appropriate to apply to the CCRs on Line 1 of Worksheet S–10, including whether it is appropriate to apply a unique trim to certain subsets of hospitals, such as all-inclusive rate providers. We note that all-inclusive rate providers have the ability to compute and enter their appropriate CCR on Worksheet S–10, Line 1, by answering Yes to the question on Worksheet S–2, Part I, Line 115, and not have it computed using information from Worksheet C, Part I. We will give more consideration to the utilization of statewide averages in substituting outlier CCRs, and in future rulemaking, we intend to consider other approaches that would ensure validity of the trim methodology and not penalize hospitals that use alternative methods of cost apportionment. However, as we previously discussed, because all-inclusive rate providers have charge structures that differ from other IPPS hospitals, we will not use data from the Worksheet S–10 to determine Factor 3 for these hospitals for FY 2018. Instead, we will determine Factor 3 for these hospitals using an average of three individual Factor 3s, using the Factor 3 calculated using low-income insured days for FY 2013 twice and the Factor 3 calculated using low-income insured days for FY 2012 once.

*Comment:* Many commenters requested that the cost of graduate medical education (GME) be included within the CCR calculation to account for the costs associated with the training of interns and residents. One commenter stated that hospitals charges are based on “all costs” acquired in the provision of medical services, which would “naturally” include GME. The commenter indicated that exclusion of costs associated with GME would result in inaccurate reporting of costs and lower CCRs.

Several commenters observed that GME is included in the denominator but not the numerator of the Worksheet S–10 CCR and that this discrepancy should be rectified. One commenter observed that this inconsistency occurs

because Line 1 uses data from Worksheet C, Column 3 (“costs,” which do not include GME) and Worksheet C, Column 8 (“charges,” which do include GME). The commenter recommended using the “costs” definition from Worksheet B, Column 24, Line 118 to reconcile the discrepancy. One commenter noted that inclusion of GME costs in the numerator would ensure “fairness” in the calculation. Another commenter stated that modification of the calculation to include GME costs within the CCR should occur on Line 1 of the Worksheet S–10.

*Response:* As we have stated previously in response to this issue, we believe that the purpose of uncompensated care payments is to provide additional payment to hospitals for treating the uninsured, not for the costs incurred in training residents. In addition, because the CCR on Line 1 of Worksheet S–10 is pulled from Worksheet C, Part I, and is also used in other IPPS ratesetting contexts (such as high-cost outliers and the calculation of the MS–DRG relative weights) from which it is appropriate to exclude GME because GME is paid separately from the IPPS, we hesitate to adjust the CCRs in the narrower context of calculating uncompensated care costs. Therefore, we continue to believe that it is not appropriate to modify the calculation of the CCR on Line 1 of Worksheet S–10 to include GME costs in the numerator.

After consideration of the comments we received, we are finalizing our proposal to apply statistical trims to the CCRs on Worksheet S–10, Line 1 that are considered anomalies using the methodology outlined earlier, but are not applying the statewide average to all-inclusive rate providers as described earlier.

- *Cost report revisions and Worksheet S–10 audits.* While not directly relevant to our proposal to use FY 2014 Worksheet S–10 data beginning in FY 2018, in the proposed rule, we noted that, as part of our ongoing quality control and data improvement measures to continue to improve the Worksheet S–10 data over time, we have made revisions to the cost report instructions and developed an audit process.

With respect to the cost reporting instructions, on November 18, 2016, we issued Transmittal 10 which updated the instructions for Form 2552–10. Specifically, we updated the instructions in Section 4012 of Chapter 40 of the Provider Reimbursement Manual, Part II. The instructions clarify the reporting of charges for charity care. Transmittal 10 is available for download at the CMS Web site at: <https://www.cms.gov/Regulations-and->

[Guidance/Guidance/Transmittals/2016-Transmittals-Items/R10P240.html](https://www.cms.gov/Regulations-and-).

With respect to the audit process, in the FY 2017 IPPS/LTCH PPS final rule (81 FR 56964), we stated that we intended to provide standardized instructions to the MACs to guide them in determining when and how often a hospital’s Worksheet S–10 should be reviewed. We indicated that we would not make the MACs’ review protocol public, as all CMS desk review and audit protocols are confidential and are for CMS and MAC use only. The instructions for the MACs are still under development and will be provided to the MACs as soon as possible. We refer readers to the FY 2017 IPPS/LTCH PPS final rule for a complete discussion concerning the issues that we are considering in developing the instructions that will be provided to the MACs. We note that, in addition to our stated belief in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19955) that cost reports beginning in FY 2017 will be the first cost reports for which the Worksheet S–10 data will be subject to a desk review, we expect cost reports beginning in FY 2014, FY 2015, and FY 2016, to be subject to further scrutiny after submission. We will continue to work with our stakeholders to address their concerns through provider education and further refinement of the instructions to the Worksheet S–10, as appropriate.

*Comment:* Many commenters expressed concern about confusing or unclear instructions in the Worksheet S–10, especially with regard to the definition of “uncompensated care.” The commenters expressed a general concern toward “inconsistent reporting” and “inadequate and unreliable data” abounded as a result of current Worksheet S–10 instructions. One commenter requested that CMS clarify the definition of “uncompensated care” specifically within the general instructions of the Worksheet S–10. Another commenter observed that issues with flawed data may be the result of inconsistent reporting that could be ameliorated by clarification of the Worksheet S–10 instructions, such as on Lines 20 and 21.

Several commenters expressed concern that, despite the clarifications discussed in the FY 2017 IPPS/LTCH PPS final rule, MACs lacked “guidance, instruction, and training” for the “uniform and even application” of the reporting requirements for the Worksheet S–10. One commenter recommended that CMS provide additional guidance and documentation to MACs and instruct them to accept amended and/or corrected cost reports.

Another commenter expressed discontent that CMS allowed hospitals to amend data from FY 2014 in late FY 2016 but provided “no education,” guidance, or other “insight” that may have facilitated accurate and/or consistent hospital reporting. Many commenters provided a broad range of detailed suggestions related to reporting requirements for specific lines of Worksheet S–10. Commenters suggested the following general modifications to the manner in which uncompensated care costs are captured on Worksheet S–10:

- Commenters observed that the instructions for Worksheet S–10 are inconsistent with generally accepted accounting principles (GAAP) and differ from the accounting practices of the majority of hospitals. Therefore, the commenters requested that CMS amend the cost reporting instructions to require hospitals to report amounts based on GAAP. One commenter believed that using GAAP would make every hospital be under the same rules. Commenters also suggested that the Worksheet S–10 instructions be amended to require hospitals to report the same bad debt and charity care amounts they report on their financial statements, which are GAAP appropriate. In particular, one commenter asked that CMS clarify whether the 35 percent residual of Medicare bad debts recorded as bad debt expense should be included in the determination of uncompensated care costs (currently, based on GAAP, a hospital will record 100 percent of the unpaid Medicare deductible and coinsurance as bad debt; however, only 65 percent is reimbursed by Medicare).

- Commenters noted that because Worksheet S–10 data is derived from data reported on the Medicare cost report, charges and payments for physician services are currently excluded. However, the commenters stated that hospitals provide physician services to patients with little or no access to private physicians. They noted that safety-net hospitals in low-income communities particularly provide these services. As a result, several commenters argued the Worksheet S–10 should include uncompensated care costs related to employed physician services.

- Commenters requested clarification of whether charity care charges should be reported for inpatient hospital services, outpatient hospital services, or both. The commenters requested the ability to report these charges on separate lines and to apply separate CCRs to these separate sets of costs. One commenter noted that because “aggregate outpatient CCRs are usually

higher than aggregate inpatient CCRs, application of an overall CCR to uncompensated care charges will generally underestimate UC costs.”

- Commenters noted that the instructions for Line 26 include Medicare bad debts for services provided beyond the inpatient and outpatient setting, and interpreted this to mean that hospitals should include non-Medicare bad debts for services provided in the following settings for which expenses are included on the hospital cost report: Skilled nursing beds (both swing beds and distinct part facilities); distinct part inpatient rehabilitation units; distinct part LTCHs; distinct part psychiatric units; dialysis centers; CMHCs; RHCs; and FQHCs. The commenters asked CMS to confirm in the final rule that this interpretation is correct. Similarly, commenters requested that CMS define any additional distinct part units or services that are not listed in the instructions for Line 26 but should be included in that line when reporting non-Medicare bad debt.

- Commenters advised requiring Medicaid DSH payments and Medicaid supplemental payment information to be reported on separate lines, and to offset all of these payments against Medicaid costs reported on Worksheet S–10. In addition, according to one commenter, the current Worksheet S–10 provides an incomplete picture of Medicaid shortfall and should be revised to allow hospitals to deduct intergovernmental transfers, certified public expenditures, and provider taxes from their Medicaid revenues. Specifically, some commenters also requested separate reporting of a number of such payments, including direct payments to hospitals, Medicaid DSH, and supplementary payments including upper payment limits, intergovernmental transfers, certified government expenditures, provider taxes, other government payments, and payments for local or state indigent care.

- One commenter suggested that CMS integrate payer mix into Worksheet S–10, as providers with a substantial commercial payer mix often have operating margins that help offset uncompensated care costs. The commenter recommended that CMS examine methods to adjust the uncompensated care amount for payer mix.

- One commenter noted that CCRs in Worksheet S–10 are reported with Reasonable Compensation Equivalency (RCE) limits applied. The commenter cited the discussion in the FY 2015 IPPS/LTCH PPS final rule (79 FR 50161), which states that RCE limits

have no effect on IPPS provider payments. Therefore, the commenter believed that if the CCR in Worksheet S–10 is used, IPPS hospitals’ payments would be affected by RCE limits, and RCE disallowances should therefore be removed from the CCR on Line 1 of Worksheet S–10.

- Commenters observed that CCRs for “parts of hospitals” such as facility-based skilled nursing facilities and inpatient rehabilitation facilities are very different from the CCRs for acute care hospitals paid under the IPPS. The commenters questioned the appropriateness of including parts of hospitals in the CCR in Worksheet S–10. In particular, one commenter noted that the initial instructions on the Worksheet S–10 ask hospitals to report costs “incurred by the hospital for providing inpatient and outpatient hospital services.” However, later instructions for Line 20 ask hospitals to report gross charity care costs for the “entire facility,” which could lead to IPPS and OPSS payments to parts of the hospital that should not have been covered, such as skilled nursing facilities and rehabilitation facilities. The commenter recommended that CMS either use consistent language or list the subparts of hospitals that should be included.

*Response:* Some of the commenters express concerns and raise questions that have not been raised before, while others have been raised in previous rulemaking. We believe that a number of these questions and concerns are addressed by the updated instructions for the Worksheet S–10 that were issued in November 2016, which clarify the reporting of charges for charity care. We will continue to work with our stakeholders to address their concerns through provider education and further refinement of the instructions to the Worksheet S–10, as appropriate.

With regard to the comments asking for clarification of which inpatient and outpatient services should be included in the uncompensated care costs reported on the Worksheet S–10, we note that the cost report instructions at Section 4012 of CMS Pub. 15–2, state: “Worksheet S–10—Hospital Uncompensated and Indigent Care Data—Section 112(b) of the Balanced Budget Refinement Act (BBRA) requires that short-term acute care hospitals (§ 1886(d) of the Act) submit cost reports containing data on the cost incurred by the hospital for providing *inpatient and outpatient hospital services for which the hospital is not compensated*” (emphasis added). In a similar vein, the CCR used on Worksheet S–10, Line 1 is from Worksheet C, Part I, Line 202. This CCR

reflects costs and charges of all hospital inpatient departments and outpatient department and clinics. Thus, Worksheet S–10 is designed to capture uncompensated care costs associated with the hospital under all of the hospital’s Medicare provider agreements, including provider-based facilities. However, Worksheet S–10 is not intended to capture uncompensated care costs related to physician services. We note that at various points on Worksheet S–10, the instructions state, “Include payments for all covered services except *physician or other professional services*” (emphasis added).

Finally, with regard to the comment that the CCRs on Worksheet S–10 are reported with the RCE limits applied, we believe the commenter is mistaken. Line 1 of Worksheet S–10 instructs hospitals to compute the CCR by dividing the costs from Worksheet C, Part I, Line 202, Column 3, by the charges on Worksheet C, Part I, Line 202, Column 8. The RCE limits are applied in Column 4, not in Column 3; thus, the RCE limits do not affect the CCR on Line 1 of Worksheet S–10.

#### *H. Medicare-Dependent, Small Rural Hospital (MDH) Program (§ 412.108)*

##### 1. Background for the MDH Program

Section 1886(d)(5)(G) of the Act provides special payment protections, under the IPPS, to a Medicare-dependent, small rural hospital (MDH). (For additional information on the MDH program and the payment methodology, we refer readers to the FY 2012 IPPS/LTCH PPS final rule (76 FR 51683 through 51684).) As discussed in section V.B.1. of the preamble of the FY 2018 IPPS/LTCH PPS proposed rule and this final rule, the MDH program provisions at section 1886(d)(5)(G) of the Act will expire at the end of FY 2017. Beginning with discharges occurring on or after October 1, 2017, all hospitals that previously qualified for MDH status will be paid based on the Federal rate.

Since the extension of the MDH program through FY 2012 provided by section 3124 of the Affordable Care Act, the MDH program had been extended by subsequent legislation as follows: Section 606 of the ATRA (Pub. L. 112–240) extended the MDH program through FY 2013 (that is, for discharges occurring before October 1, 2013). Section 1106 of the Pathway for SGR Reform Act of 2013 (Pub. L. 113–67) extended the MDH program through the first half of FY 2014 (that is, for discharges occurring before April 1, 2014). Section 106 of the PAMA (Pub. L. 113–93) extended the MDH program

through the first half of FY 2015 (that is, for discharges occurring before April 1, 2015). Section 205 of the MACRA (Pub. L. 114–10) extended the MDH program through FY 2017 (that is, for discharges occurring before October 1, 2017). For additional information on the extensions of the MDH program after FY 2012, we refer readers to the following **Federal Register** documents: The FY 2013 IPPS/LTCH PPS final rule (77 FR 53404 through 53405 and 53413 through 53414); the FY 2013 IPPS notice (78 FR 14689); the FY 2014 IPPS/LTCH PPS final rule (78 FR 50647 through 50649); the FY 2014 interim final rule with comment period (79 FR 15025 through 15027); the FY 2014 notice (79 FR 34446 through 34449); the FY 2015 IPPS/LTCH PPS final rule (79 FR 50022 through 50024); the August 2015 interim final rule with comment period (80 FR 49596); and the FY 2017 IPPS/LTCH PPS final rule (81 FR 57054 through 57057).

#### b. Expiration of the MDH Program

Because section 205 of the MACRA extended the MDH program through FY 2017 only, beginning October 1, 2017, the MDH program will no longer be in effect. Because the MDH program is not authorized by statute beyond September 30, 2017, beginning October 1, 2017, all hospitals that previously qualified for MDH status under section 1886(d)(5)(G) of the Act will no longer have MDH status and will be paid based on the IPPS Federal rate.

When the MDH program was set to expire at the end of FY 2012, in the FY 2013 IPPS/LTCH PPS final rule (77 FR 53404 through 53405), we revised our sole community hospital (SCH) policies to allow MDHs to apply for SCH status in advance of the expiration of the MDH program and be paid as such under certain conditions. We codified these changes in the regulations at §§ 412.92(b)(2)(i) and (b)(2)(v). Specifically, the existing regulations at §§ 412.92(b)(2)(i) and (b)(2)(v) allow for an effective date of an approval of SCH status that is the day following the expiration date of the MDH program. We note that these same conditions apply to MDHs that intend to apply for SCH status with the expiration of the MDH program on September 30, 2017. Therefore, in order for an MDH to receive SCH status effective October 1, 2017, the MDH must apply for SCH status at least 30 days before the expiration of the MDH program; that is, the MDH must apply for SCH status by September 1, 2017. The MDH also must request that, if approved as an SCH, the SCH status be effective with the expiration of the MDH program; that is,

the MDH must request that the SCH status, if approved, be effective October 1, 2017, immediately after its MDH status expires with the expiration of the MDH program on September 30, 2017. We emphasize that an MDH that applies for SCH status in anticipation of the expiration of the MDH program would not qualify for the October 1, 2017 effective date for SCH status if it does not apply by the September 1, 2017 deadline. If the MDH does not apply by the September 1, 2017 deadline, the hospital would instead be subject to the usual effective date for SCH classification; that is, 30 days after the date of CMS' written notification of approval as specified at § 412.92(b)(2)(i).

We note that the regulations governing the MDH program are found at § 412.108 and the MDH program is also cited in the general payment rules in the regulations at § 412.90. As stated earlier, under current law, the MDH program will expire at the end of FY 2017, which is already reflected in § 412.108. As such, we did not propose to make specific amendments to the regulations at § 412.108 to reflect the expiration of the MDH program. However, it has come to our attention that, with the various extensions of the MDH program as noted earlier, we neglected to make conforming changes to the regulation text at § 412.90. Therefore, we proposed to revise the general payment rules under § 412.90 to reflect the expiration of the MDH program. We did not receive any public comments on our proposed conforming changes to the regulation text at § 412.90 and are finalizing these changes as proposed. However, we also proposed that if the MDH program were to be extended by law, similar to how it was extended through legislation set forth above, including most recently through FY 2017, by the MACRA (Pub. L. 114–10), we would make conforming changes to the regulations governing the MDH program at § 412.108(a)(1) and (c)(2)(iii) and the general payment rules at § 412.90(j) to reflect such an extension of the MDH program. We stated that these conforming changes would only be made if the MDH program were to be extended by statute beyond September 30, 2017. As of the time of the development of this final rule, there has been no change in law to extend the MDH program beyond FY 2017. Therefore, in this final rule, we are not making any additional changes to the regulations governing the MDH program at § 412.108, and, as stated above, the revisions we are finalizing to the general payment rules under § 412.90 reflect the current expiration of

the MDH program on September 30, 2017.

*Comment:* Several commenters indicated that hospitals in their States would experience payment decreases as a result of the expiration of the MDH program. One commenter urged CMS to work with Congress to permanently extend the MDH program. Another commenter indicated that it would continue supporting congressional efforts to protect the MDH program.

*Response:* We appreciate the commenters' concerns about the expiration of the MDH program. However, CMS does not have the authority under current law to continue the MDH program beyond the September 30, 2017 statutory expiration date. These comments are similar to comments we received previously, prior to the statutory extensions of the MDH program for FYs 2013 and 2014 provided by subsequent legislation, and discussed in both the FY 2013 IPPS/LTCH PPS final rule (77 FR 53413 through 53414) and the FY 2014 IPPS/LTCH PPS final rule (78 FR 50647 through 50649). Therefore, under current law, beginning October 1, 2017, all hospitals that previously qualified for MDH status will no longer have MDH status.

#### *I. Hospital Readmissions Reduction Program: Updates and Changes (§§ 412.150 Through 412.154)*

##### 1. Statutory Basis for the Hospital Readmissions Reduction Program

Section 3025 of the Patient Protection and Affordable Care Act, as amended by section 10309 of the Patient Protection and Affordable Care Act, added section 1886(q) to the Act, which establishes the "Hospital Readmissions Reduction Program" effective for discharges from "applicable hospitals" beginning on or after October 1, 2012. Under the Hospital Readmissions Reduction Program, payments to applicable hospitals may be reduced to account for certain excess readmissions. We refer readers to section IV.E.1. of the FY 2016 IPPS/LTCH PPS final rule (80 FR 49530 through 49531) for a detailed discussion and additional information on the statutory history of the Hospital Readmissions Reduction Program.

On December 13, 2016, the 21st Century Cures Act (Pub. L. 114–255) was enacted. Section 15002 of Public Law 114–255 added subparagraphs (D) and (E) to section 1886(q)(3) of the Act. These subparagraphs direct the Secretary to assign hospitals to peer groups, develop a methodology that allows for separate comparisons for hospitals within these groups, and

allows for changes in the risk adjustment methodology. Section 15002 of Public Law 114–255 also directs MedPAC to conduct a review of overall hospital readmissions and whether such readmissions are related to any changes in outpatient and emergency services furnished. A report on the study is required to be submitted in the MedPAC's Report to Congress no later than June 2018.

Section 1886(q)(3)(D) of the Act directs the Secretary to develop a transitional methodology that accounts for the percentage of full-benefit dual-eligible patients treated by a hospital to determine a hospital's payment adjustment factor. Section 1886(q)(3)(D)(i) of the Act sets forth the requirement that the Secretary assign hospitals to groups and apply a methodology "that allows for separate comparison of hospitals within each such group." This applies to discharges that occur during and after FY 2019 and before the application of section 1886(q)(3)(E)(i) of the Act, which allows the Secretary to take into account the recommendations in the reports required by the IMPACT Act (Pub. L. 113–185) related to risk adjustment and social risk factors. The first of two reports required in the IMPACT Act was released in December 2016 (available at: <https://aspe.hhs.gov/system/files/pdf/253971/ASPESESRTCfull.pdf>), and the second report is required to be completed by October 2019.

The hospital groups in section 1886(q)(3)(D)(ii) of the Act are described as being based on their overall proportion of the inpatients who are entitled to, or enrolled for, benefits under Medicare Part A and who are full-benefit dual-eligible individuals (as defined in section 1935(c)(6) of the Act). The Secretary is further required to consult with MedPAC when defining groups and may consider analysis done by MedPAC in preparation for its June 2013 report submitted to Congress. Section 1886(q)(3)(D)(iii) of the Act prevents the imposition of additional reporting requirements in order to carry out subparagraph (D). Section 1886(q)(3)(D)(iv) of the Act requires that the estimated total amount of reductions in payments using the methodology should equal the estimated total amount of reductions in payments if subparagraph (D) did not apply.

Section 1886(q)(3)(E) of the Act outlines the considerations the Secretary may take into account with respect to the risk adjustment methodology. Section 1886(q)(3)(E)(i) of the Act allows the Secretary to take into account studies conducted and recommendations made by the Secretary

under section 2(d)(1) of the IMPACT Act in the application of risk adjustment methodologies. This does not preclude the consideration of the use of groupings of hospitals. The Secretary is also allowed under section 1886(q)(3)(E)(ii) of the Act to consider the use of "V" or other ICD-related codes for removal of a readmission with respect to discharges occurring after FY 2018. Section 1886(q)(3)(E)(iii) of the Act outlines the considerations the Secretary may make in the removal of certain readmissions. For discharges occurring after FY 2018, the Secretary may consider the removal as a readmission of an admission that is classified within one or more of the following: Transplants; end-stage renal disease; burns, trauma; psychosis; or substance abuse.

## 2. Regulatory Background

We refer readers to the following past final rules for detailed discussions of the regulatory background and descriptions of the current policies for the Hospital Readmissions Reduction Program: The FY 2012 IPPS/LTCH PPS final rule (76 FR 51660 through 51676); the FY 2013 IPPS/LTCH PPS final rule (77 FR 53374 through 53401); the FY 2014 IPPS/LTCH PPS final rule (78 FR 50649 through 50676); the FY 2015 IPPS/LTCH PPS final rule (79 FR 50024 through 50048); the FY 2016 IPPS/LTCH PPS final rule (80 FR 49530 through 49543); and the FY 2017 IPPS/LTCH PPS final rule (81 FR 56973 through 56979). These policies describe the general framework for the implementation of the Hospital Readmissions Reduction Program, including: (1) The selection of and measures for the applicable conditions; (2) the calculation of the excess readmission ratio, which is used, in part, to calculate the readmissions adjustment factor; (3) the current calculation of the hospital readmission payment adjustment factor, specifically addressing the base operating DRG payment amount, aggregate payments for excess readmissions, and aggregate payments for all discharges; (4) the opportunity for hospitals to review and submit corrections using a process similar to what is currently used for posting results on *Hospital Compare*; (5) the adoption of an extraordinary circumstances exception policy to address hospitals that experience a disaster or other extraordinary circumstance; (6) the clarification that the public reporting of excess readmission ratios will be posted on an annual basis to the *Hospital Compare* Web site as soon as is feasible following the preview period; and (7) the

specification that the definition of "applicable hospital" does not include hospitals and hospital units excluded from the IPPS, such as LTCHs, cancer hospitals, children's hospitals, IRFs, IPFs, CAHs, and hospitals in Puerto Rico.

We also have codified certain requirements of the Hospital Readmissions Reduction Program at 42 CFR 412.152 through 412.154.

CMS strives to put patients first, ensuring that they are empowered to make decisions about their own healthcare along with their clinicians, using information from data-driven insights that are increasingly aligned with meaningful quality measures. We support technology that reduces burden and allows clinicians to focus on providing high-quality health care for their patients. We also support innovative approaches to improve quality, accessibility, and affordability of care while paying particular attention to improving clinicians' and beneficiaries' experience when interacting with CMS programs. We believe the Hospital Readmissions Reduction Program in combination with other efforts across the Department of Health and Human Services encourages hospitals to improve health care quality and value, while giving patients and providers the tools and information needed to make the best decisions for them. We recognize that the Hospital Readmissions Reduction Program represents a key component of the way that we bring quality measurement and improvement together with payment, we have taken efforts to review existing policies to identify how to move the program forward in the least burdensome manner possible while continuing to encourage improvement in the quality of care provided to patients.

## 3. Maintenance of Technical Specifications for Quality Measures

We refer readers to the FY 2015 IPPS/LTCH PPS final rule (79 FR 50039) for a discussion of the maintenance of technical specifications for quality measures for the Hospital Readmissions Reduction Program. Technical specifications of the readmission measures are provided on our Web site in the Measure Methodology Reports at: <http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html>. Additional resources about the Hospital Readmissions Reduction Program and measure technical specifications are on the QualityNet Web site on the Resources page at: <http://>

[www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1228772412995](http://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier3&cid=1228772412995).

#### 4. Policies for the Hospital Readmissions Reduction Program

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19957 through 19967), we proposed the following policies for the Hospital Readmissions Reduction Program: (1) The applicable time period for FY 2018; (2) the calculation of aggregate payments for excess readmissions for FY 2018; (3) changes to the payment adjustment factor in accordance with section 15002 of Public Law 114–255 for FY 2019; and (4) updates to the Extraordinary Circumstance Exception policy beginning in FY 2018 as related to extraordinary circumstances that occur on or after October 1, 2017. These proposals are described in more detail below.

#### 5. Applicable Period for FY 2018

Under section 1886(q)(5)(D) of the Act, the Secretary has the authority to specify the applicable period with respect to a fiscal year under the Hospital Readmissions Reduction Program. In the FY 2012 IPPS/LTCH PPS final rule (76 FR 51671), we finalized our policy to use 3 years of claims data to calculate the readmission measures. In the FY 2013 IPPS/LTCH PPS final rule (77 FR 53675), we codified the definition of “applicable period” in the regulations at 42 CFR 412.152 as the 3-year period from which data is collected in order to calculate excess readmissions ratios and adjustments for the fiscal year, which includes aggregate payments for excess readmissions and aggregate payments for all discharges used in the calculation of the payment adjustment.

In the FY 2017 IPPS/LTCH PPS final rule (81 FR 56974 through 56975), for FY 2017, consistent with the definition specified at § 412.152, we established an “applicable period” for the Hospital Readmissions Reduction Program to be the 3-year period from July 1, 2012 through June 30, 2015. In other words, the excess readmissions ratios and the payment adjustment (including aggregate payments for excess readmissions and aggregate payments for all discharges) for FY 2017 are calculated using data from the 3-year time period of July 1, 2012 through June 30, 2015.

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19957), for FY 2018, consistent with the definition specified at § 412.152, we proposed that the “applicable period” for the Hospital

Readmissions Reduction Program would be the 3-year period from July 1, 2013 through June 30, 2016. In other words, we proposed that the excess readmissions ratios and the payment adjustment (including aggregate payments for excess readmissions and aggregate payments for all discharges) for FY 2018 would be calculated using data from the 3-year time period of July 1, 2013 through June 30, 2016. We invited public comment on this proposal.

*Comment:* Many commenters expressed concern about the proposed Hospital Readmissions Reduction Program performance period for FY 2018 because it combines data collected under both ICD–9 and ICD–10. Commenters requested that CMS provide further empirical analysis in the final rule to show that measure reliability and validity are not compromised by using two different coding systems and ensure that the ICD–10 versions of the measures in the Hospital Readmissions Reduction Program are endorsed by the National Quality Forum (NQF). One commenter also recommended that CMS analyze performance differences resulting from the transition to ICD–10 for all the measures used in all its public reporting and pay-for-performance programs to determine if there are any unintended biases and measure performance changes because of the change. One commenter disagreed with the use of the three-year performance period for FY 2018 because commenter believes it is too long and combines data from ICD–9 and ICD–10. The commenter suggested that a one-year performance period would be more appropriate.

*Response:* The readmission measures in the Hospital Readmissions Reduction Program all completed “maintenance of endorsement,” a periodic evaluation of measures to assess impact and potential unintended consequences, in December 2016 and are NQF-endorsed. The NQF requires developers to submit all ICD–9 and ICD–10 diagnosis and procedure codes used to define the measure cohorts. We identified all ICD–10 codes that corresponded with ICD–9 codes used in the measure cohort definitions using the General Equivalence Mappings tool (GEMs). The ICD–10 codes identified using GEMs were reviewed by measure and clinical experts and made public as a part of the maintenance of endorsement process. However, because the ICD–10 code system was implemented in October 2015, there were insufficient claims coded with ICD–10 to provide any testing results to NQF during the endorsement maintenance process. We

will submit testing results in claims data coded with ICD–10 in future cycles of NQF endorsement maintenance.

In addition to identifying ICD–10 codes used to define the measures’ cohorts using the GEMs tool and completing a review of those codes by clinical and measure experts, we also examined the frequency of the use of these codes in the first 6-months of ICD–10 coded claims for Medicare fee-for-service (FFS) patients who were 65 years and older. As a part of calculating measure results that will be made public in July 2017, we completed extensive testing of measure specifications and of measure performance. For the most recent measurement period from July 2013 through June 2016, there are 9 months, from October 2015 through June 2016, of ICD–10 coded claims. Results of some of this testing is described in the publicly available 2017 Annual Updates and Specifications reports for all readmission measures, including a description of the ICD–10 measure specifications, a description of measure cohort sizes, the number of acute care hospitals included in the measure, risk-standardized readmission rates in the national sample, risk variable frequencies and risk model coefficients, as well as overall model performance for each year and for the 3-year measurement period with the combined ICD–9 and ICD–10 codes. The results of these analyses demonstrate stability in the measure cohort, in the number of hospitals included in the measure, in the performance of the measure risk model, and in trends of modest reductions in risk-standardized readmission rates across the country.

We have decided to continue to use a three-year measurement period rather than a one-year measurement period despite the implementation of ICD–10. We use a 3-year measurement period because some small and rural hospitals do not have at least 25 admissions for Medicare FFS patients who are 65 years and older for each of the measure conditions in a single year or even over the course of two years. The three-year period allows us to include the maximum possible number of hospitals in public reporting.

In addition, we have examined the average change in risk-standardized readmission rates at the hospital-level and the distribution of changes in rates for all readmission measures comparing the results of the 2015, 2016, and 2017 reporting periods. We found that differences in average hospital-level performance comparing the 2016 performance year, which included only ICD–9 claims, and the 2017 performance year, which included 9 months of ICD–

10 claims, were similar to differences in performance observed between the 2015 and 2016 performance years. We are currently evaluating and considering the feasibility of publicly releasing these analyses. We believe the results show that our conversion process is maintaining a high level of accuracy.

After consideration of the public comments we received, we are finalizing as proposed, without modification, the applicable period of the 3-year time period of July 1, 2013 through June 30, 2016 to calculate readmission payment adjustment factor for FY 2018 under the Hospital Readmissions Reduction Program.

#### 6. Calculation of Aggregate Payments for Excess Readmissions for FY 2018

Section 1886(q)(3)(B) of the Act specifies the ratio used to calculate the adjustment factor under the Hospital Readmissions Reduction Program. It states that the ratio is equal to 1 minus the ratio of—(i) the aggregate payments for excess readmissions and (ii) the aggregate payments for all discharges. For a detailed discussion on the methodology for the calculation of aggregate payments for excess readmissions, we refer readers to the FY 2013 IPPS/LTCH PPS final rule (77 FR 53387 through 53397). We also have codified the definition of “aggregate payments for excess readmissions” and “aggregate payments for all discharges,” as well as a current methodology for calculating the numerator of the ratio (aggregate payments for excess readmissions) and the denominator of the ratio (aggregate payments for all discharges) at 42 CFR 412.152 through 412.154.

The Hospital Readmissions Reduction Program currently includes the following six applicable conditions: Acute myocardial infarction (AMI); heart failure (HF); pneumonia (PN); total hip arthroplasty/total knee arthroplasty (THA/TKA); chronic obstructive pulmonary disease (COPD); and Coronary Artery Bypass Graft (CABG) Surgery.

In the FY 2017 IPPS/LTCH PPS final rule (81 FR 56975 through 56977), we adopted the methodology to include CABG in the calculation of the readmissions payment adjustment for FY 2017. Specifically, we discussed how the addition of CABG applicable conditions would be included in the calculation of the aggregate payments for excess readmissions (the numerator of the readmissions payment adjustment). We note that this policy did not alter our established methodology for calculating aggregate

payments for all discharges (that is, the denominator of the ratio).

When calculating the numerator (aggregate payments for excess readmissions), we determine the base operating DRG payments for the applicable period. To determine the base operating DRG payment amount for an individual hospital for such applicable period for such condition, we use Medicare inpatient claims from the MedPAR file with discharge dates that are within the same applicable period to calculate the excess readmissions ratio. We use MedPAR claims data as our data source for determining aggregate payments for excess readmissions and aggregate payments for all discharges, as this data source is consistent with the claims data source used in IPPS rulemaking to determine IPPS rates.

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19957 through 19959), for FY 2018, we proposed to use MedPAR claims with discharge dates that are on or after July 1, 2013, and no later than June 30, 2016, consistent with our historical use of a 3-year applicable period. Under our established methodology, we use the update of the MedPAR file for each Federal fiscal year, which is updated 6 months after the end of each Federal fiscal year within the applicable period, as our data source (that is, the March updates of the respective Federal fiscal year MedPAR files) for the final rules.

In the proposed rule, for FY 2018, we proposed to determine aggregate payments for excess readmissions and aggregate payments for all discharges using data from MedPAR claims with discharge dates that are on or after July 1, 2013, and no later than June 30, 2016. However, we noted that, for the purpose of modeling the proposed FY 2018 readmissions payment adjustment factors for the proposed rule, we used excess readmissions ratios for applicable hospitals from the FY 2017 Hospital Readmissions Reduction Program applicable period. For the FY 2018 IPPS/LTCH PPS final rule, applicable hospitals will have had the opportunity to review and correct data from the proposed FY 2018 applicable period of July 1, 2013 to June 30, 2016, before they are made public under our policy regarding the preview and reporting of hospital-specific information, which we discussed in the FY 2013 IPPS/LTCH PPS final rule (77 FR 53374 through 53401).

In the proposed rule, for FY 2018, we proposed to use MedPAR data from July 1, 2013 through June 30, 2016. Specifically, for the proposed rule, we used the following MedPAR files:

- March 2014 update of the FY 2013 MedPAR file to identify claims within FY 2013 with discharge dates that are on or after July 1, 2013;
- March 2015 update of the FY 2014 MedPAR file to identify claims within FY 2014;
- March 2016 update of the FY 2015 MedPAR file to identify claims within FY 2015;
- December 2016 update of the FY 2016 MedPAR file to identify claims within FY 2016 with discharge dates no later than June 30, 2016.

For the final rule, we proposed to use the same MedPAR files as listed above for claims within FY 2013, FY 2014 and FY 2015, and for claims within FY 2016, we proposed to use the March 2017 update of the FY 2016 MedPAR file.

For a discussion of how we identified the applicable conditions to calculate the aggregate payments for excess readmissions for FY 2017, we refer readers to the FY 2017 IPPS/LTCH PPS final rule (81 FR 56975 through 56977).

Under our current methodology, in identifying the applicable conditions to calculate the aggregate payments for excess readmissions, we apply the same exclusions to the claims in the MedPAR file as are applied in the measure methodology for each of the applicable conditions. In the proposed rule, for FY 2018, we proposed to continue to apply the same exclusions to the claims in the MedPAR file as we applied for FY 2017 for the AMI, HF, PN, THA/TKA, CABG and COPD applicable conditions. We refer readers to the FY 2016 IPPS/LTCH PPS and FY 2017 IPPS/LTCH PPS final rules (80 FR 49539; 81 FR 56976) for a list of these exclusions. Updates to these exclusions will be posted on the QualityNet Web site at: <http://www.QualityNet.org> > Hospital-Inpatient > Claims-Based Measures > Readmission Measures > Measure Methodology.

Furthermore, under our current methodology we only identify Medicare FFS claims that meet the criteria described above for each applicable condition to calculate the aggregate payments for excess readmissions (that is, claims paid for under Medicare Part C or Medicare Advantage, are not included in this calculation). This policy is consistent with the methodology to calculate excess readmissions ratios based solely on admissions and readmissions for Medicare FFS patients. Therefore, consistent with our established methodology, for FY 2018, we proposed to continue to exclude admissions for patients enrolled in Medicare Advantage as identified in the Medicare Enrollment Database.

Under our existing policy, we identify eligible hospitalizations and readmissions of Medicare patients discharged from an applicable hospital having a principal diagnosis for the measured condition in an applicable period (76 FR 51669). As described above, the proposed 3-year applicable period for FY 2018 of July 1, 2013 through June 30, 2016 includes discharges occurring in four Federal FYs (FY 2013, FY 2014, FY 2015, and FY 2016). Diagnoses and procedure codes for discharges occurring prior to October 1, 2015 were reported under the ICD-9-CM code set. Effective with discharges occurring on or after October 1, 2015 (FY 2016), diagnoses and procedure codes are reported under the ICD-10-CM and ICD-10-PCS code sets. Thus, for the proposed FY 2018 applicable period, the discharge diagnoses for each applicable condition would be based on a list of specific ICD-9-CM or ICD-10-CM and ICD-10-PCS code sets, as applicable, for that condition.

In the proposed rule, to identify the discharges for each applicable condition for FY 2018 to calculate the aggregate payments for excess readmissions for an individual hospital, we proposed to identify each applicable condition, using, for FY 2013, FY 2014 and FY 2015, the appropriate ICD-9-CM codes, and for FY 2016, the appropriate ICD-10-CM and ICD-10-PCS code sets. This proposal is consistent with our established policy for identifying the discharges for each applicable condition to calculate the aggregate payments for excess readmissions (76 FR 51673 through 51676). The ICD-9-CM codes for the AMI, HF, PN, THA/TKA, COPD, and CABG applicable conditions can be found on the QualityNet Web site at: <http://www.QualityNet.org> > Hospital-Inpatient > Claims-Based Measures > Readmission Measures > Measure Methodology. For a complete list of the ICD-9-CM codes we proposed to use to identify the applicable conditions, we refer readers to the following tables of the measure methodology reports on the QualityNet Web site:

- 2016 Measure Updates: AMI, HF, Pneumonia, COPD, Stroke Readmission (*AMI-Version 8.0, HF-Version 8.0, Pneumonia-Version 8.0, COPD-Version 4.0, and Stroke-Version 4.0: 2016 Condition-Specific Readmission Measures Updates and Specifications Report*)—

- ++ Table D.1.1—ICD-9-CM Codes for AMI Cohort (page 79).

- ++ Table D.2.1—ICD-9-CM Codes for COPD Cohort (page 83).

- ++ Table D.3.1—ICD-9-CM Codes for Inclusion in HF Cohort (page 89).

- ++ Table D.4.1—ICD-9-CM Codes for Pneumonia Cohort (page 94).

- 2016 Measure Updates: THA/TKA and CABG Readmission (*THA and/or TKA-Version 4.0, CABG-Version 2.0: 2016 Procedure-Specific Readmission Measures Updates and Specifications Report*)—

- ++ Table D.1.1—ICD-9-CM Codes Used to Identify Eligible CABG Procedures (page 49).

- ++ Table D.2.1—ICD-9-CM Codes Used to Identify Eligible THA/TKA Procedures (page 58).

The ICD-10-CM codes for the AMI, HF, PN, THA/TKA, COPD, and CABG applicable conditions for the period from October 1, 2015 to June 30, 2016 can be found on the QualityNet Web site at: <http://www.QualityNet.org> > Hospital-Inpatient > Claims-Based Measures > Readmission Measures > Measure Methodology. For a complete list of the ICD-10-CM codes we are proposing to use to identify the applicable conditions, we refer readers to the following tables of the measure methodology reports on the QualityNet Web site:

- 2017 Measure Updates: AMI, HF, Pneumonia, COPD, Stroke Readmission (*AMI-Version 10.0, HF-Version 10.0, Pneumonia-Version 10.0, COPD-Version 6.0, and Stroke-Version 6.0: 2017 Condition-Specific Readmission Measures Updates and Specifications Report*)—

- ++ Table D.1.1—ICD-10-CM Codes for AMI Cohort (page 77).

- ++ Table D.2.1—ICD-10-CM Codes for COPD Cohort (page 81).

- ++ Table D.3.1—ICD-10-CM Codes for Inclusion in HF Cohort (page 87).

- ++ Table D.4.1—ICD-9-CM Codes for Pneumonia Cohort (page 93).

- 2016 Measure Updates: THA/TKA and CABG Readmission (*THA and/or TKA-Version 6.0, CABG-Version 4.0: 2016 Procedure-Specific Readmission Measures Updates and Specifications Report*)—

- ++ Table D.1.1—ICD-10-CM Codes Used to Identify Eligible CABG Procedures (page 49).

- ++ Table D.2.1—ICD-10-CM Codes Used to Identify Eligible THA/TKA Procedures (page 63).

In summary, for FY 2018, we proposed to calculate aggregate payments for excess readmissions, using MedPAR claims from July 1, 2013 through June 30, 2016, to identify applicable conditions based on the same ICD-9-CM codes or ICD-10-CM and ICD-10-PCS code sets, as applicable, used to identify the conditions for the readmissions measures, and to apply the proposed exclusions for the types of admissions (as previously discussed).

We did not propose any changes to our existing methodology for calculating “aggregate payments for excess readmissions” for each hospital (the numerator of the ratio). Specifically, to calculate aggregate payments for excess readmissions for each hospital, we proposed to calculate the base operating DRG payment amounts for all claims in the 3-year applicable period for each applicable condition (AMI, HF, PN, COPD, THA/TKA, and CABG) based on the claims we have identified as described above. Once we have calculated the base operating DRG amounts for all the claims for the six applicable conditions, we proposed to sum the base operating DRG payments amounts by each condition, resulting in six summed amounts, one amount for each of the six applicable conditions. We proposed to then multiply the amount for each condition by the respective excess readmissions ratio minus 1 when that excess readmissions ratio is greater than 1, which indicates that a hospital has performed, with respect to readmissions for that applicable condition, worse than the average hospital with similar patients. Each product in this computation represents the payments for excess readmissions for that condition. We proposed to then sum the resulting products which represent a hospital’s proposed “aggregate payments for excess readmissions” (the numerator of the ratio). Because this calculation is performed separately for each of the six conditions, a hospital’s excess readmissions ratio must be less than or equal to 1 on each measure to avoid CMS’ determination that there were payments made by CMS for excess readmissions (resulting in a payment reduction under the Hospital Readmissions Reduction Program). In other words, in order to avoid a payment reduction a hospital’s excess readmissions ratio must be less than or equal to 1 on each measure. We note that we did not propose any changes to our existing methodology to calculate “aggregate payments for all discharges” (the denominator of the ratio).

Section 1886(q)(3)(A) of the Act defines the “adjustment factor” for an applicable hospital for a fiscal year as equal to the greater of: (i) The ratio described in subparagraph (B) for the hospital for the applicable period (as defined in paragraph (5)(D)) for such fiscal year; or (ii) the floor adjustment factor specified in subparagraph (C).

Section 1886(q)(3)(B) of the Act, in turn, describes the ratio used to calculate the adjustment factor. Specifically, it states that the ratio is equal to 1 minus the ratio of—(i) the

aggregate payments for excess readmissions and (ii) the aggregate payments for all discharges. The calculation of this ratio is codified at § 412.154(c)(1) of the regulations and the floor adjustment factor is codified at § 412.154(c)(2) of the regulations. Section 1886(q)(3)(C) of the Act specifies the floor adjustment factor at 0.97 for FY 2015 and subsequent fiscal years.

Consistent with section 1886(q)(3) of the Act, codified at § 412.154(c)(2), for FY 2018, the adjustment factor is either the greater of the ratio or the floor adjustment factor of 0.97. Under our established policy, the ratio is rounded to the fourth decimal place. In other words, for FY 2018, a hospital subject to the Hospital Readmissions Reduction Program would have an adjustment factor that is between 1.0 (no reduction) and 0.9700 (greatest possible reduction).

We did not receive public comments related to this proposal. Therefore, we are finalizing as proposed, without modification, the calculation of aggregate payments for excess readmissions for FY 2018.

## 7. Background and Current Payment Adjustment Methodology

### a. Background

As described above, section 1886(q)(3)(D) of the Act requires the Secretary to group hospitals and apply a methodology that allows for separate comparisons of hospitals within groups in determining a hospital's adjustment factor for payments applied to discharges beginning in FY 2019.

### b. Current Payment Adjustment Methodology

In the FY 2013 IPPS/LTCH PPS final rule (77 FR 53374 through 53401), we finalized policies that relate to the portions of section 1886(q) of the Act that at that time addressed the calculation of the hospital readmissions payment adjustment factor. Section 1886(q)(3)(A) of the Act defines the "adjustment factor" for an applicable hospital for a fiscal year as equal to the greater of: (i) The ratio described in subparagraph (B) for the hospital for the applicable period (as defined in paragraph (5)(D)) for such fiscal year; or (ii) the floor adjustment factor specified in subparagraph (C). Section 1886(q)(3)(B) of the Act, in turn, describes the ratio used to calculate the adjustment factor. Specifically, it states that the ratio is equal to 1 minus the ratio of—(i) the aggregate payments for excess readmissions and (ii) the aggregate payments for all discharges.

Consistent with section 1886(q)(3)(C) of the Act, codified at § 412.154(c)(2),

for FY 2015 and subsequent years, the adjustment factor is either the greater of the ratio or the floor adjustment factor of 0.9700. In other words, a hospital subject to the Hospital Readmissions Reduction Program will have an adjustment factor that is between 1.0000 (no reduction) and 0.9700 (greatest possible reduction). Under our established policy, the ratio is rounded to the fourth decimal place.

## 8. Provisions for the Payment Adjustment Methodology for FY 2019: Methodology for Calculating the Proportion of Dual-Eligible Patients

### a. Background

As described above, section 1886(q)(3)(D) of the Act requires the Secretary to group hospitals and apply a methodology that allows for separate comparisons of hospitals within groups in determining a hospital's adjustment factor for payments of discharges beginning in FY 2019. Furthermore, section 1886(q)(3)(D)(ii) of the Act directs the Secretary to define groups of hospitals, based on their overall proportion, of the inpatients who are entitled to, or enrolled for, benefits under part A, and who are full-benefit dual-eligible individuals (as defined in section 1935(c)(6) of the Act).<sup>23</sup> Under these statutory requirements, hospitals are grouped based on the proportion or ratio of full-benefit dual-eligible patients (numerator) to the hospital's Medicare inpatient stays (denominator). The Act specifies that in defining groups, the Secretary shall consult the MedPAC and may consider the analysis done by MedPAC in preparing the portion of its report submitted to Congress in June 2013 relating to readmissions.

### b. Data Sources Used To Determine Dual Eligibility

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19960), we proposed to identify full-benefit dual status (numerator) using dual eligibility status data, where the original data source is the State Medicare Modernization Act (MMA) file of dual eligibility, which States submit to CMS monthly. The State MMA file is considered the most current and most

<sup>23</sup> Section 1935(c)(6)(A) of the Act defines "full-benefit dual-eligible individual" as, "for a State for a month, an individual who—(i) has coverage for the month for covered part D drugs under a prescription drug plan under part D of title XVIII, or under an MA–PD plan under part C of such title; and (ii) is determined eligible by the State for medical assistance for full benefits under this title for such month under section 1902(a)(10)(A) or 1902(a)(10)(C) [of the Act], by reason of section 1902(f) [of the Act], or under any other category of eligibility for medical assistance for full benefits under this title, as determined by the Secretary."

accurate source of data for identifying dual-eligible beneficiaries since it is also used for operational purposes related to the administration of Part D benefits. Under our proposal, an individual would be counted as a full-benefit dual patient if the beneficiary was identified as full-benefit dual status in the State MMA files for the month he/she was discharged from the hospital.

We invited public comment on this proposal.

*Comment:* Many commenters supported the preferred approach of using the State Medicare Modernization Act (MMA) files as the source to identify full-benefit dual-eligible individuals, noting this approach adheres to the statutory requirement and does not impose any additional reporting burden on providers.

*Response:* We thank commenters for their support and agree with commenters.

*Comment:* A few commenters expressed support for comparing hospitals based on their proportion of patients who are dual-eligible patients. One commenter believed that this approach helps hospitals that have a disproportionate number of dual-eligible patients and specifically cited safety net hospitals as key beneficiaries.

*Response:* We thank commenters for their support and agree with commenters. We proposed to finalize approaches to implement policy options that change the payment formula to reduce the financial burden on safety-net hospitals without disproportionately increasing the penalty for non-safety-net hospitals to address stakeholder concerns and meet the implementation requirement of Public Law 114–255, which included grouping hospitals based on their proportion of dual-eligible beneficiaries.

*Comment:* A few commenters expressed concern with using the proportion of dual-eligible beneficiaries because it is an inappropriate mechanism for determining socioeconomic status. One commenter cautioned that dual-eligible peer groups exclude several at-risk and socioeconomically stressed patients that are not part of the data set. One commenter suggested that CMS should use the community distress index for the community where a hospital is located or a patient resides. One commenter expressed concern that dual eligibility was insufficient to identify socio-demographic risk. Another commenter suggested that CMS consider whether it should continue to use dual-eligibility as the adjustment variable, and whether to move from the current peer grouping approach to one that

incorporates one or more socioeconomic variables into the readmission measures risk-adjustment models of the Hospital Readmissions Reduction Program measures (that is, direct risk adjustment of the readmission measures). One commenter cautioned CMS against stating on *Hospital Compare* that dual eligibility denotes poverty.

*Response:* We thank commenters for their input and agree that we should be cautious in not stating on *Hospital Compare* that dual-eligibility denotes poverty. While we agree that many socioeconomically stressed patients are not dual eligible and therefore not accounted for when stratifying hospitals based on dual proportion, Public Law 114–255 requires that we use the proportion of dual-eligible beneficiaries to stratify hospitals into peer groups for the purpose of determining payments. Section 15002 of Public Law 114–255 added subparagraphs (D) and (E) to section 1886(q)(3) of the Act, which directs the Secretary to assign hospitals to peer groups, develop a methodology that allows for separate comparisons for hospitals within these groups, and allows for changes in the risk adjustment methodology. Specifically, section 1886(q)(3)(D) of the Act directs the Secretary to develop a transitional methodology that accounts for the percentage of full-benefit dual-eligible patients treated by a hospital to determine a hospital's payment adjustment factor. Section 1886(q)(3)(D)(i) of the Act sets forth the requirement that the Secretary assign hospitals to groups and apply a methodology that allows for separate comparison of hospitals within each such group.

Section 1886(q)(3)(E)(i) of the Act does not preclude the inclusion of additional risk factors. We will continue to monitor the impact of accounting for dual-eligible beneficiaries in the Hospital Readmissions Reduction Program and assess the appropriateness and feasibility of future changes to include other variables or adjustments.

*Comment:* One commenter expressed concern over the impact of risk adjustment for non-safety net facilities, arguing that facilities should be rewarded for outreach to at-risk populations instead of penalized with risk adjustment which may not reflect their actual readmission rates or patient's risk for readmissions at the facility, and which has the potential to reduce transparency.

*Response:* As required by Public Law 114–255, we are stratifying hospitals based on dual-eligible proportion and modifying the payment adjustment factor formula to assess a hospital's

performance relative to other hospitals in its peer group. To clarify, we are not changing the measure methodology for calculating of the excess readmission ratios, rather we are stratifying hospitals based on the proportion of dual-eligible beneficiaries to set the threshold used to assess hospital performance. Because quality assessment is determined based on a hospital's performance relative to all other Hospital Readmissions Reduction Program eligible hospitals, and therefore allows for comparison between peer groups of hospitals, this approach is transparent. At the same time, by stratifying hospitals and determining the payment adjustment factors based on performance relative to the peer group median, we can reduce the penalty for safety-net hospitals, hence avoiding a reduction in the resources available to safety-net hospitals to provide high quality care for their at-risk patients. Because peer groups are based on proportion of dual-eligible patients served, the same would also be true for non-safety net facilities that do outreach to at-risk patients and thus have a higher proportion of dual-eligible patients than other non-safety net facilities.

We believe the proposed approach achieves both the goal of holding all hospitals to a high standard while also ensuring we are not disproportionately penalizing hospitals serving an at-risk population. Section 1886(q)(3)(E)(i) of the Act allows the Secretary to consider studies conducted and recommendations made by the Secretary under section 2(d)(1) of the IMPACT Act in the application of risk adjustment methodologies. We will continue to monitor the progress and findings of research the Assistant Secretary for Planning and Evaluation (ASPE) is conducting as part of its IMPACT Act study and the National Quality Forum's trial period and will consider their recommendations. We will continue to monitor the impact of accounting for dual-eligible patients in the Hospital Readmissions Reduction Program and evaluate if future changes to include other variables or adjustments are needed.

*Comment:* One commenter requested that CMS develop an adjustment for the variability in Medicaid eligibility across states for the calculations of the proportion of dual-eligible patients, citing its belief that the variation distorts the population measure of poverty that in fact may be representative of patients under treatment. The commenter also stated that Medicare Advantage data should only be included in the denominator if it is included in State reporting.

Another commenter expressed concern with using quintiles based on the proportion of Medicare FFS and Medicare Advantage patients that are full-benefit, dual-eligible patients because it does not consider differences in States' health care program eligibility and if a State has expanded Medicaid under the Patient Protection and Affordable Care Act.

*Response:* We acknowledge the commenter's concern about using the proportion of Medicare FFS and Medicare Advantage patients that are full-benefit, dual-eligible patients when there is variability in Medicaid eligibility across states. However, Public Law 114–255 requires hospitals be stratified based on the proportion of Medicare patients who are eligible for full-benefit Medicaid. Although Medicaid eligibility is defined on a State-by-State basis, it varies much less across States for the over 65 and people with disabilities populations, the population covered under Medicare.<sup>24 25</sup> In addition, the Patient Protection and Affordable Care Act did not expand Medicaid eligibility to patients enrolled in Medicare Part A or Part B. Because the dual proportion is calculated among Medicare beneficiaries only, there is much less variability in dual proportion than if it was calculated as the percentage of all hospital patients who were eligible for Medicaid. We will continue to monitor the impact of changes to Medicaid eligibility for the Medicare population and evaluate if future changes to include other variables or adjustments are needed.

*Comment:* Commenters supported the inclusion of a socioeconomic adjustment in the readmissions reduction program but recommended that the Secretary expand the conditions excluded from the readmission measures used in the Hospital Readmissions Reduction Program. Commenters also asked CMS to continue to find ways to adjust for social risk factors that capture variation

<sup>24</sup> For over-65 and people with disabilities populations in 40 States plus the District of Columbia, Medicaid eligibility in the Medicare population is connected to receipt of SSI, which sets an income standard for eligibility at roughly 75 percent of the Federal Poverty Level (FPL). However, about one third of States set their eligibility levels at 100 percent FPL or higher. There are also ten States, known as 209(b) States, in which eligibility rules for dually eligible populations can be set lower than the SSI standards.

<sup>25</sup> United States Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation. "Social Risk Factors and Performance Under Medicare's Value-Based Purchasing Programs: A Report Required by the Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014". Washington, DC: December, 2016.

in the complexity of patients across hospitals.

*Response:* We thank the commenters for their input and plan to investigate the impact on the readmission measures and appropriateness of categorizing additional diagnoses as planned readmissions as directed by Public Law 114–255. We will also continue to monitor the work being done by the Assistant Secretary for Planning and Evaluation (ASPE) as part of its study required by the IMPACT Act. The first of two reports on the study was released in December of 2016 and the second report is required to be completed by October 2019. The study analyzed the effects of certain social risk factors in Medicare beneficiaries on quality measures and measures of resource use used in one or more of nine Medicare value-based purchasing programs. The report also included considerations for strategies to account for social risk factors in these programs. We will continue to consider the analyses and recommendations from this report.

*Comment:* Numerous commenters expressed concern that they were unable to comment on the proposals due to the lack of publicly available data. To evaluate proposals and confirm estimates, commenters requested that CMS publicly provide a summary file providing hospital-level data consistent with the data used by CMS to derive the results reported in the tables and Readmission Proposal Supplemental files for each of the alternative approaches providing the data necessary to duplicate the CMS estimates that are reported in the tables.

Commenters further requested that dual-eligible summary files be released publicly since they reside with the States. Commenters also requested that CMS release patient population lists, quarterly, to identify this population for improvement activities and to allow for replication. Commenters asked CMS to make more data available on the proposed payment adjustment methodology to ensure full transparency on the various aspects of the agency's determinations. In addition, commenters recommended that CMS prepare a dry-run using this year's data so that hospitals can familiarize themselves with the new methodology. Commenters also suggested that CMS include hospital peer group assignments in future proposed rules, allow for review and corrections and asked CMS to continually evaluate its adjustment approach, and to engage with the field on ensuring its adjustment approach keeps up with the science.

*Response:* We thank commenters for their input and we agree with the need

for transparency and providing stakeholders with data to confirm their dual proportion assignment. However, we also have a responsibility to safeguard patient information and comply with the federal regulations governing data. To ensure CMS upholds data security standards, we established the CMS Data Request Center through the Research Data Assistance Center (ResDAC) to review requests for data. To obtain the full MBSF data file a request can be submitted to ResDAC at: <https://www.resdac.org/cms-data/request/cms-data-request-center>. Such a request will be reviewed and approved based on ResDAC's established criteria. We are considering methods for publicly releasing this data. We are also considering different options to provide hospitals with early individualized feedback regarding their peer grouping and payment adjustment.

After consideration of the public comments we received, we are finalizing, without modification, our proposal that an individual would be counted as a full benefit dual-eligible patient if the beneficiary was identified as full-benefit dual status in the State MMA files for the month he/she was discharged from the hospital.

In the proposed rule, we considered two alternative definitions of total number of Medicare patients (denominator) that could be used to calculate each hospital's proportion of dual-eligible patients. We proposed to define the proportion of full-benefit dual-eligible beneficiaries as the proportion of dual-eligible patients among all Medicare FFS and Medicare Advantage stays. This is our preferred approach because using the proportion of dual-eligible patients calculated among all Medicare FFS and managed care patients more accurately represents the proportion of dual-eligible patients served by the hospital, particularly for hospitals in States with high managed care penetration rates. For example, Hospital A located in Arizona has a high managed care penetration rate. When stratified based on the proportion of dual-eligible patients, calculated among Medicare FFS and managed care patients, Hospital A was assigned to the top quintile of proportion of dual-eligible patients and its payment adjustment calculated based on its ERR relative to the threshold for the top quintile. When stratified based on the proportion of dual-eligible patients among only Medicare FFS patients, Hospital A was assigned to the second quintile and its payment adjustment calculated relative to the threshold of the second quintile. Its classification when managed care patients are

included more accurately identifies the social risk of the patients Hospital A serves, compared to its classification if only the FFS population is included.

However, because the Hospital Readmissions Reduction Program payment adjustment is only applied to Medicare FFS payments, and is based on excess readmissions among Medicare FFS patients only, we included an alternative to define the proportion of full-benefit dual-eligible beneficiaries as only Medicare FFS stays. Under both approaches, we proposed to use the MedPAR files, the same data source used to calculate the payment adjustment factors, to identify total hospital stays as this is the best available claims data that are readily publicly available. However, in developing our proposal, we also considered using other data sources such as the CMS integrated data repository (IDR), which may incorporate managed care claims more consistently to calculate total hospital stays, but it is currently not readily available to the public. We invited stakeholder input on the most appropriate data source to identify total hospital stays and whether such stays should include all Medicare FFS and Medicare Advantage stays or only Medicare FFS stays.

We invited public comment on our preferred proposals and alternative considerations.

*Comment:* Many commenters supported using both Medicare Advantage and Medicare FFS patients to determine the total number of Medicare stays as the denominator because it accurately represents the proportion of dual-eligible patients a hospital serves. One commenter recommended including Medicaid enrollees under 100 percent of federal poverty level in addition to dual-eligibility status to improve accuracy. One commenter requested that CMS should monitor for any unintended consequences among hospitals in states with high managed care penetration, compared with those that have low penetration, and modify the methodology to adjust for future growth in managed care.

*Response:* We thank commenters for their support and we will continue to monitor the impact of stratifying hospitals based on the proportion of full-benefit dual-eligible beneficiaries in the Hospital Readmissions Reduction Program and evaluate if future changes to include other variables or adjustments are needed.

*Comment:* Several commenters recommended stratifying hospitals based on the share of full-benefit Medicaid patients among Medicare FFS patients only and not all FFS and MA

patients. One commenter stated that the share of Medicare FFS patients that are full dual-eligible beneficiaries should be used because penalties will not apply to MA readmissions. Another commenter expressed concern that because penalties will not apply to MA readmissions, MA patients would distort the risk profiles of hospitals because their income characteristics may differ from FFS patients in certain hospitals.

*Response:* We thank the commenters for the input. In selecting a proposal, we considered calculating the proportion of dual-eligible patients (dual proportion) among Medicare FFS and managed care patients as well as Medicare FFS patients only. We agree that determining this proportion among Medicare FFS beneficiaries instead of all Medicare beneficiaries more accurately reflects the incidence of these factors among patients eligible for inclusion in the Hospital Readmissions Reduction Program measures. However, calculating the dual proportion among all Medicare FFS and managed care patients more accurately represents the dual status of the hospital, particularly for hospitals in States with high managed care penetration rates. This approach enables more accurate and complete risk profiles for hospitals. There is a strong relationship between dual proportion and penalties under both the current methodology and proposed approaches whether hospitals are stratified based on Medicare FFS patients only or based on both Medicare FFS and managed care patients. In general, this relationship is similarly positive; hospitals with higher dual proportions by either definition incur larger penalties on average. However, the relationship between the penalty share of payments and dual proportion among FFS and managed care patients exhibits a slightly stronger upward trend.

*Comment:* One commenter supported using both the Medicare Advantage and Medicare FFS patients identified through the CMS Integrated Data Repository (IDR) to determine the dual-eligible population, and supported calculating the dual proportion among both MA and FFS beneficiaries because it provides an accurate representation of a hospital's dual-eligible population.

*Response:* We thank the commenter for the support of calculating the dual proportion among both MA and FFS beneficiaries. Both the IDR and the Master Beneficiary Summary File (MBSF) are sourced from the State Medicare Modernization Act (MMA) file. Many commenters supported using data sourced from the State MMA file as it is considered the most current and

most accurate source of data for identifying dual-eligible beneficiaries since it is also used for operational purposes related to the administration of Part D benefits. We will assess the feasibility of different datasets with dual status information sourced from the State MMA files as part of implementation.

After consideration of the public comments we received, we are finalizing, without modification, our proposal to define the proportion of full benefit dual-eligible beneficiaries as the proportion of dual-eligible patients among all Medicare FFS and Medicare Advantage stays.

#### c. Data Period Used To Define Dual Eligibility

Consistent with the requirement of the statute, we proposed to group or stratify hospitals based on the proportion of full-benefit dual-eligible patients determined under the proposals discussed above and proposed to define the proportion of full-benefit dual-eligible beneficiaries as the number of dual-eligible patients discharged during the 3-year applicable period under the Hospital Readmissions Reduction Program. In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19960), we considered two alternatives for the data period used to define dual eligibility, a 3-year period corresponding to the performance period, and a 1-year period, which would be calculated over the most recent year for which complete data is available.

While both data periods would include the most recently available data to define dual eligibility, our proposal to use a 3-year period accounts for the influence of social risk factors on the excess readmissions ratio (ERR) because the proportion of dual-eligible patients is measured over the full period when they influenced the likelihood of excess readmissions. However, the most recent 1-year period would capture the most recent population served by the hospital and may enable a more accurate stratification to calibrate the impact of payment adjustments to the proportion of dual-eligible patients that the hospital currently serves.

We invited public comment on our preferred proposal and alternative considerations.

*Comment:* Many commenters supported using the 3-year data period because it aligns the adjustment for the proportion of dual-eligible patients with the established measurement period. Commenters stated that using a 3-year period will guard against the effects of recent shifts in year-to-year patient population changes. One commenter

noted that both the 3-year data period and the 1-year data period provide similar information about the current patient population because both programs rely on data that will not be current at the time that payment penalty adjustment is applied.

*Response:* We thank commenters for their support and agree that the proposed 3-year data period is appropriate.

*Comment:* A few commenters supported the use of the 1-year data period. Commenters stated that a 1-year data period would provide the most recent population served by the hospitals and enable a more accurate stratification by proportion of dual-eligible patients for payment adjustments.

*Response:* While we understand commenters' support of using a 1-year data period, we agree with the many commenters who supported using the 3-year data period because it accounts for the influence of social risk factors on the excess readmission ratios (ERR) since the proportion of dual-eligible patients is measured over the full period when they influenced excess readmissions. We recognize that the 1-year data period may better represent a hospital's current patient population. However, the 3-year data period corresponds to the performance period; therefore, it more accurately reflects the influence of social risk factors on the ERRs and payment adjustments. We will continue to monitor the impact of accounting for dual-eligible patients in the Hospital Readmissions Reduction Program and evaluate if future changes to include other variables or other adjustments are needed.

After consideration of the public comments we received, we are finalizing the 3-year data period corresponding to the performance period as the data period used to define dual eligibility.

#### 9. Provisions for the Payment Adjustment Methodology for FY 2019: Methodology for Assigning Hospitals to Peer Groups

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19960 through 19961), we considered three alternative methodologies for assigning hospitals to peer groups. For the reasons discussed below, our preferred approach is to stratify hospitals into quintiles (five peer groups). However, we also sought public comment on stratifying hospitals into two and 10 peer groups.

To understand the impact on payment adjustments of stratifying hospitals into different numbers of peer groups, we conducted an analysis that estimated

payment adjustments when stratifying hospitals into 2, 5 (quintiles), or 10 (deciles) peer groups. Two and 10 peer groups were considered to align with previous research conducted by MedPAC and ASPE that assessed impacts from stratifying hospitals into 2 or 10 groups. MedPAC's analysis stratified hospitals into 10 peer groups when setting the target rate used to compare hospital performance. ASPE's analysis stratified hospitals into 2 and 10 peer groups to calculate payment adjustments. Our analysis showed that using five peer groups allows for more precisely defined peer groups than is possible with a grouping of two, while ensuring that the number of hospitals is sufficient to represent a peer group, even for measures, like CABG, in which only a minority of hospitals are subject to a payment adjustment.

We note, as the number of groupings increase, hospitals became more similar within their peer groups with respect to proportion of dual-eligible patients in their patient population. Hence, payment adjustments are more closely related to the proportion of dual-eligible patients, and to the possible influence on the likelihood of readmission resulting from small variations in patient populations. We also observed that increasing the number of peer groups also increases the likelihood that hospitals with similar exposure to dual-eligible patients will be compared to different thresholds in the payment adjustment formula. Deciles cover a narrow range of dual-eligible patient proportions in each peer group; therefore, small differences in proportion are likely to result in differences in peer group assignment and corresponding comparison thresholds used in the payment adjustment formula. This problem is compounded by the small number of hospitals in deciles. When the number of hospitals is small, peer group thresholds or distributions and the resulting payment adjustments are less predictable.

Stratifying hospitals into two peer groups is a simpler method and reduces the likelihood that similar hospitals are assigned different payment adjustments. However, this approach yields peer groups with a more heterogeneous mix of hospitals assigned to each group and weakens the relationship between the payment adjustment and the hospital's patient population. When the impact on payments of different peer group definitions was tested using the various methods of incorporating stratification into the payment formula, we found a substantial reduction in penalties (measured as the share of payment

adjustments as a percentage of total payments) to safety-net hospitals, defined as hospitals in the highest quintile for disproportionate share hospital (DSH) patient percentage, from stratification into quintiles compared to stratification into two groups. Furthermore, our analysis found a similar impact on the share of total payments borne as payment adjustments by safety-net hospitals from stratifying hospitals into quintiles and deciles, suggesting that the benefit to safety-net hospitals from increasing the number of strata would be small. For example, using the preferred modified payment formula, proposed below, across the current set of six conditions, we found that for safety-net hospitals, payment adjustment as a proportion of total payments decreased from a baseline of 0.64 percent to 0.59 percent with two groups, 0.55 percent with quintiles and 0.54 percent with deciles.

Based on the analysis described above, we proposed to stratify hospitals into quintiles (five peer groups) because it creates peer groups that accurately reflect the relationship between the proportion of dual-eligible patients in the hospital's population without the disadvantage of establishing a larger number of peer groups.

We invited public comment on our preferred proposal and alternative considerations.

*Comment:* Many commenters supported using quintiles because it creates peer groups that more accurately reflect the relationship between the proportion of dual-eligible patients in the hospital's population, while mitigating the disadvantages of establishing a larger number of peer groups. One commenter, using its data, found that 2 groups did not adequately differentiate among hospitals and 10 groups resulted in too many nonmonotonic excess readmission ratios. However, commenters urged CMS to be mindful of unintended consequences and be open to future changes if issues do arise.

*Response:* We thank commenters for their support.

*Comment:* One commenter stated that, while using quintiles is reasonable, there was no compelling reason for having the groups all have the same number of hospitals in them. One commenter suggested that many hospitals with relatively low proportions of "duals" could be grouped together, with the peer-grouping done to create several smaller groups at the high end of the distribution. Some commenters agreed that neither 2 nor 10 peer groups are adequate. However, commenters

believed that the ideal number of groups could be improved. Commenters cited the use of continuous data, the introduction of additional covariates, and the use of statistical modeling as ways to produce a better method of grouping hospitals. One commenter also provided an example of a method it previously used to determine cut points (that is, performance thresholds or peer groupings).

*Response:* As the commenter noted, the upper part of the distribution is where the choice of peer groups has the greatest impact. This means the choice of the number of peer groups is most strongly influenced by hospitals with high dual proportions. Thus, the benefits of smaller peer groups among these hospitals were considered in establishing the number of peer groups. In our proposal, we considered how different numbers of peer groups influenced the yearly variation in peer group assignment. This is one of the reasons we proposed quintiles. The quintile-based approach is based on larger peer groups, thereby producing less arbitrary variation and yearly fluctuation in hospital assignments.

We considered many factors in developing peer groups to calculate payment adjustments for the Hospital Readmissions Reduction Program. These factors included: (1) The legislative requirements of Public Law 114–255, such as stratification by the proportion of dual-eligible beneficiaries in the patient census, budget neutrality, and the need for immediate implementation; (2) constructing peer groups that are consistent across six current measures and future additional measures, and are defined consistently over time; (3) the intent of the program to encourage efficient, high quality care; and (4) the impact of peer group definitions on the distribution of payments to hospital groups, such as safety-net or rural hospitals. The goodness of fit of the readmission measure models with hospitals' dual proportion is a contributory factor among these others factors. Preselecting peer groups of equal size and choosing the size that best meets these objectives is transparent and effective. In the future, more flexible methods for peer group formation may be considered for implementation. Any approach must be evaluated based on multiple criteria including those described above and proposed through the rulemaking process.

We need to consider both hospital performance on multiple measures and the program's impact on the distribution of payments. The most salient criterion for evaluating approaches is the impact

of stratification on the penalty share of payments in groups defined both by the stratifying variable and other relevant hospital characteristics. Preselecting peer groups of equal size and choosing the size that best meets these objectives is transparent and effective. Our use of cut-point evaluation techniques within the context described above helps to establish the relative benefit of choosing quintile or decile peer groups. In the future, a more flexible method for peer group formation may be developed and considered for implementation. However, this approach must still be evaluated based on multiple criteria, including those described above, and proposed through the rulemaking process.

*Comment:* One commenter discouraged the use of two peer groups because it does not adequately differentiate between hospitals' payer mixes and will continue to unfairly penalize urban safety net hospitals. The commenter noted the use of two peer groups would overgeneralize hospital SDS groupings.

*Response:* We agree with commenter that the use of two peer groups does not allow for meaningful comparison of hospitals.

*Comment:* One commenter recommended CMS use deciles rather than quintiles because hospitals in the highest decile of low-income shares tended to have higher readmissions than those in the eighth or ninth decile. Therefore, the commenter believed deciles would do a better job of acknowledging the challenges of the hospitals with the highest share of low-income patients.

*Response:* Our analyses found the relationship between hospital dual proportion decile and ERR is not consistent among the six readmission measures included in the Hospital Readmissions Reduction Program. However, the median ERR for the top decile is higher than that of the ninth decile for all six measures. When considering a final policy option, we assessed the strengths and weaknesses of both quintiles and deciles. While we agree that, compared to quintiles, stratification into deciles more completely accounts for the challenges faced by hospitals with the highest share of dually-eligible patients, both deciles and quintiles substantially reduce the share of penalties paid by safety-net hospitals (defined as the top DSH quintile), to a level below that paid by non-safety-net hospitals. The quintile-based approach is also based on

larger peer groups and produces less arbitrary variation in hospital assignments and penalty changes from year to year. Using deciles causes hospitals to face more uncertainty in the standard from year to year.

*Comment:* One commenter expressed concern that the individual penalty amount for hospitals may be increased in a way that disproportionately shifts to a small group of outlier providers, citing its own analysis of the proposed methodology for quintile assignment.

*Response:* When considering the different approaches for adjusting the payment factor formula, one of our goals was to avoid disproportionately increasing the penalty for any hospital. Compared to other approaches, the use of the peer group median as the threshold for payment adjustment calculation results in smaller changes for individual hospitals. Our analysis found the proportion of hospitals estimated to have an increased penalty under the proposed approach slightly exceeds the proportion with decreased penalties. Because Public Law 114–255 requires total Medicare savings under the stratified methodology be equivalent to total Medicare savings under the current methodology (that is, budget neutrality), the mean penalty increase for hospitals with an increased penalty will be smaller than the mean penalty decrease for hospitals with a decreased penalty. The largest penalty increase projected under the preferred approach compared to the current methodology is substantially less than projected by the commenter, perhaps due to differences in the peer groups formed by DSH and dual proportions. We will continue to monitor the impact of these program changes on hospital penalties, including their impact on individual hospitals and consider changes to mitigate undesirable effects.

*Comment:* One commenter recommended that the peer groups account for academic status, citing studies that have shown a strong correlation between provider academic status and readmissions rates. In addition, one commenter recommended hospital groupings per other features, with special consideration for designated safety net hospitals, Level 1 Trauma centers, hospitals affiliated with schools of medicine and nursing, hospitals with in-house neonatal and pediatric intensive care units, and hospitals with solid organ transplant programs that include liver transplantation.

*Response:* We thank commenters for their recommendations, and we will continue to monitor the impact of accounting for dual-eligible beneficiaries in the Hospital Readmissions Reduction Program and evaluate if future changes to include other variables or adjustments are needed.

*Comment:* One commenter supported the development of peer groups for the purposes of payment but disagreed with accounting for social risk factors for the purposes of calculating readmission rates for public reporting.

*Response:* We will take this commenter's input into consideration as we continue to assess the appropriateness and feasibility of publicly and/or confidentially reporting information related to certain social risk factors, such as a hospital's proportion of dual-eligible beneficiaries. Public Law 114–255 requires the development of peer groups based on the number of dual-eligible patients served by each hospital for the purposes of scoring performance. In addition, as we are required under 1886(q)(6)(A) of the Act, we will continue to report the readmission rate data on *Hospital Compare* as we always have.

After consideration of the public comments we received, we are finalizing our proposal to stratify hospitals into quintiles.

## 10. Provisions for the Payment Adjustment Methodology for FY 2019: Payment Adjustment Formula Calculation Methodology

### a. Background

As described above, section 1886(q)(3)(D)(iv) of the Act requires the Secretary to design the methodology to implement this subparagraph so that the estimated total amount of Medicare savings under this subsection (stratified methodology) equals the estimated total amount of Medicare savings that would otherwise occur under this subsection (current methodology) if this subparagraph did not apply (that is, maintain budget neutrality).

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19961 through 19966), we analyzed several modifications of the payment adjustment formula to assess payment reductions based on a hospital's performance compared to performance of other hospitals in its peer group. The current readmissions payment adjustment can be written as

<sup>26</sup> "Payment" refers to the base operating DRG payment.

$$1 - \min\{.03, \sum_{dx} \frac{Payment(dx) * \max\{(ERR(dx) - 1.0000), 0\}}{All\ payments}\}^{26}$$

where dx is AMI, HF, pneumonia, COPD, THA/TKA or CABG. In our analyses, we modified the payment adjustment formula by replacing the current threshold ERR of 1.0000 with a peer group specific threshold.

In adopting a methodology for achieving budget neutrality, our priority is to adopt a simplified and well-known metric that allows us to be more transparent in our methodology and reduces the penalty on safety-net hospitals, while not disproportionality increasing the penalty to non-safety-net hospitals. In developing policy options to implement the budget neutrality requirement, we analyzed the following alternatives to evaluate the financial impacts:

- Using the median ERR for the hospital's peer group in place of 1.0000 in the payment adjustment formula and applying a uniform modifier to maintain budget neutrality;
- Using the mean ERR for the hospital's peer group in place of 1.0000

in the payment adjustment formula and applying a uniform modifier to maintain budget neutrality;

- Using the "budget neutralizing" ERR for each peer group in place of 1.0000 in the payment adjustment formula. The budget neutralizing ERR is defined as the ERR corresponding to the percentile (for example, 52nd) of the peer group distributions that would maintain budget neutrality for each peer group; and
- Using a standardized ERR for each individual hospital's ERR in place of the hospital's current calculated ERR and applying a uniform modifier to maintain budget neutrality. Each hospital's ERR is transformed to create a distribution of ERRs within each stratum with the same mean and standard deviation as the original mean and standard deviation across all hospitals.

b. Proposals

In the proposed rule, we discussed four alternative budget neutral methodologies for calculating the

payment adjustment factor. Our preferred approach is assessing performance compared to the peer group median ERR, rather than the current threshold of 1.0000, and scaling hospital payment adjustments by a neutrality modifier. However, we are seeking public comment on three additional approaches—using the mean ERR plus a neutrality modifier, a budget neutralizing ERR, and a standardized ERR plus a neutrality modifier.

(1) Median ERR Plus a Neutrality Modifier

As we stated in the proposed rule, our preferred approach is using the median ERR plus a neutrality modifier. We would use the median ERR for the hospital's peer group in place of 1.0000, which is the approximate mean and median of the baseline distribution, in the current payment adjustment formula. The payment adjustment formula would then be:

$$P = 1 - \min\{.03, \sum_{dx} \frac{NM_M * Payment(dx) * \max\{(ERR(dx) - Median\ peer\ group\ ERR(dx)), 0\}}{All\ payments}\}$$

The payment reduction (1 - P) resulting from use of the median ERR for the peer group is scaled by a neutrality modifier (NM<sub>M</sub>) to achieve budget neutrality. To calculate the neutrality modifier, we estimate total Medicare savings across all hospitals under the current method and under the proposed stratified method, in the absence of a modifier. We then calculate a multiplicative factor that, when applied to each hospital's adjustment calculated using the stratified method, would equate total Medicare savings from that method to total Medicare savings under the current method. Total

Medicare savings and the neutrality modifier will be calculated using the same payment data. These data will consist of the most recently available full year of MedPAR data. For example, if the payment reduction for a hospital (1 - P) equals 0.00748 when using the median threshold, then under the median plus neutrality modifier method it would equal NM \* 0.00748 = 0.9545 \* 0.00748 = 0.00714, where the neutrality modifier was equal to 0.9545. Thus, the hospital's payment adjustment factor (P) would equal 0.9925 (1 - 0.00748) in the absence of the neutrality modifier, and 0.9929

(1 - 0.00714) when the modifier is added.

(2) Mean ERR Plus a Neutrality Modifier

We also analyzed the use of the mean ERR plus a neutrality modifier to calculate the readmissions adjustment factor. Just like the median ERR plus neutrality modifier approach mentioned above, the mean ERR for the hospital's peer group would be used in place of 1.0000 in the payment adjustment formula. The payment adjustment formula would then be:

$$P = 1 - \min\{.03, \sum_{dx} \frac{K_{\mu} * Payment(dx) * \max\{(ERR(dx) - Mean\ peer\ group\ ERR(dx)), 0\}}{All\ payments}\}$$

(3) Budget Neutralizing ERR

We also analyzed using a budget neutralizing ERR in which penalties are

assessed based on the difference between the hospital's ERR and the

budget neutralizing ERR. The payment adjustment formula would be:

$$P = 1 - \min\{.03, \sum_{dx} \frac{Payment(dx) * \max\{(ERR(dx) - budget\ neutralizing\ ERR(dx)), 0\}}{All\ payments}\}$$

(4) Standardized ERR Plus a Neutrality Modifier

We also analyzed using a standardized ERR in which penalties are assessed by determining the mean and

standard deviation of the ERRs across all hospitals. The payment adjustment formula would be calculated by dividing hospitals into strata based on a hospital's proportion of dual-eligible patients. The current ERRs would then

be transformed to create a new standardized distribution of ERRs within each stratum with the same mean and standard deviation as the original mean and standard deviation across all hospitals.

$$P = 1 - \min\{.03, \sum_{dx} \frac{NM_S * Payment(dx) * \max(S_B(dx) / S_p(dx) \{ERR(dx) + \mu_B(dx) - \mu_p(dx)\} - 1.0000, 0)}{All\ payments}\}$$

where  $S_B(dx)$  and  $\mu_B(dx)$  are the standard deviation and mean of the current ERR distribution for a condition (dx), and  $S_p(dx)$  and  $\mu_p(dx)$  are the standard deviation and mean of the peer group ERR distribution for that dx. The standardized ERRs has a mean of 1 and a standard deviation equal to the standard deviation of ERRs across all hospitals in the peer group for that condition. The standardized ERRs are compared to 1.0000 in the payment adjustment formula to determine excess readmissions. The payment reduction (1 - P) resulting from use of the standardized ERR is then scaled by a neutrality modifier (NM<sub>S</sub>) to achieve budget neutrality.

c. Analysis

As mentioned above, in adopting a methodology for achieving budget neutrality, our priority is to adopt a simplified and well-known metric that allows us to be more transparent in our methodology and reduces the penalty on safety-net hospitals, while not disproportionality increasing the penalty to non-safety-net hospitals. To

assess the expected impact on hospital payment adjustments resulting from the changes to the formula, we simulated hospitals' readmission adjustment factors under different stratified thresholds. Readmissions adjustment factors were calculated using total base operating DRG payment amounts for each hospital as well as total base DRG payment amounts for each of the six measure cohorts (AMI, HF, pneumonia, COPD, CABG, THA/TKA) included in the FY 2018 program. We used DRG payment information for the period July 1, 2012 through June 30, 2015. Furthermore, to estimate the dollar amount of the penalty and the share of payments the penalty represents, we used total base operating DRG payments among Medicare FFS claims from the FY 2015 MedPAR data file.

All four methods support the agency's efforts to reduce the payment adjustment for safety-net hospitals. We proposed to use the median ERR plus a neutrality modifier because it creates a standard where a hospital's ERR is subject to payment reduction when a hospital's performance as measured by

the ERR is worse than that of half the other hospitals in its peer group. The median ERR plus neutrality modifier is preferred to the mean ERR plus neutrality modifier because the median represents a consistent standard (that is, 50th percentile) for the hospital's rank within its peer group, while the rank corresponding to the mean changes between years, cohorts and peer groups. The median ERR plus neutrality modifier substantially reduces the penalty as a share of total payments (from 0.64 percent to 0.55 percent with quintile peer groups) and penalty per discharge (from \$157 to \$135) for safety-net hospitals while not disproportionately increasing the payment reduction amount for non-safety-net hospitals (from 0.61 percent to 0.63 percent as share of total payments). The median ERR plus neutrality modifier is also preferred because it achieves more precise budget neutrality than the budget neutralizing ERR. Below we show the estimated total Medicare savings under the current and stratified methodology used to assess budget neutrality.

Method	Estimated total medicare savings	Difference between stratified and current methodology	Percentage difference between stratified and current methodology
Current methodology .....	\$532,948,318	N/A	N/A
Mean plus neutrality modifier (neutrality modifier=1.0135 when using quintiles) .....	532,949,006	688	<0.00
Median plus neutrality modifier (neutrality modifier=0.9546 when using quintiles) .....	532,946,272	(\$2,046)	<0.00
Budget neutralizing ERR .....	533,199,304	250,985	0.05
Standardized ERR plus neutrality modifier (neutrality modifier=0.9710 when using quintiles) .....	532,948,288	(\$30)	<0.00

**Source:** FY 2017 Hospital Readmissions Reduction Program Final Rule Results. Results are based on July 1, 2012, through June 30, 2015, discharges among subsection (d) and Maryland hospitals only. Although data from all subsection (d) and Maryland hospitals are used in calculations of each hospital's Excess Readmission Ratio (ERR), this table does not include results for Maryland hospitals. Hospital Characteristics are based on the FY 2017 final rule Impact File. Hospitals are stratified into quintiles based on the proportion of dual-eligible beneficiaries among Medicare FFS and managed care patients discharged between July 1, 2012, through June 30, 2015.

When we analyzed the other options, we found that the mean threshold permits a higher standard to be set if hospitals in the peer group have performance well above the midpoint but not far below, or a lower standard if hospitals are more likely to have very high rates. In our testing, the mean plus

modifier resulted in lower penalties for safety-net hospitals (0.52 percent as a share of total payments compared to 0.55 percent for the median plus modifier). However, our preferred approach of the median is based on the judgment that the standard reflected by the threshold should not be affected by

hospitals with unusually strong or weak performance in the peer group. Like the median, the budget neutralizing ERR threshold approach imposes a consistent rank-based standard across peer groups. However, this method is not preferred since it is more complex, less intuitive and results in greater

divergence between total payment adjustments under the stratified and current methodologies than approaches using a neutrality modifier (differing from the current methodology by approximately 0.05 percent of total payments when simulated with quintile peer groups). The median uses the original distribution of hospital ERR estimates, based on their relationship to a national standard, and represents the most precise possible measures of their performance under that standard. Using a standardized ERR within each peer group compares a hospital's performance to other hospitals in the peer group. In contrast, using the mean or median threshold adjusts penalties based on a hospital's relative performance within the peer group, but the performance indicator of the ERR retains the comparison to the mean performance of all hospitals across all peer groups. However, comparing the ERR to the mean or median for each peer group is a more straightforward methodology than re-standardizing ERRs. The median is preferred to the

standardized ERR because, as with the budget neutralizing ERR, the median is less complex and more intuitive. Using a less complex and well-known metric, will create a more transparent methodology since it will be easier for hospitals and other stakeholders to replicate the calculation of the median ERRs.

The impact of the proposed changes to the payment adjustment formula for the budget neutral considered methods, by peer group options, for safety-net and non-safety-net hospitals is shown in the table below. The table includes three penalty metrics: average payment reduction, total Medicare savings, and share of payment adjustments as a percentage of total payments. The average payment reduction shows the average reduction in Medicare DRG payments for safety-net and non-safety-net hospitals. The total Medicare savings column shows the total estimated penalties borne by safety-net and non-safety-net hospitals under each approach. Because the payment reduction is applied to hospitals' base

DRG payments, hospitals with more discharges will contribute a larger amount of Medicare savings to the group total of Medicare savings.

Furthermore, because there are fewer safety-net than non-safety-net hospitals, as safety-net is defined as hospitals in the top quintile of DSH patient percentage, the total Medicare savings for non-safety-net hospitals are inherently much larger than for safety-net hospitals. Therefore, to compare the financial impact of the program on hospitals in each group, we calculated the payment adjustment as a proportion of DRG payments. Using this metric allows comparison across the different methodologies where the total base operating DRG payments are different between different groups of hospitals and is a more accurate indication of the financial impact on the group. For example, under the current methodology, the payment adjustment as a proportion of all DRG payments among safety-net hospitals is 0.64 percent.

**COMPARISON OF PENALTY METRICS BY THRESHOLD METHODS AND PEER GROUP OPTIONS FOR ALL HOSPITALS, SAFETY-NET, AND NON-SAFETY-NET HOSPITALS**

Stratification approach and payment formula methodology	Average payment reduction (1 - P) <sup>a</sup> (%)	Total Medicare savings	Payment adjustment as a proportion of all DRG payments (%)
<b>Current methodology:</b>			
Safety-net hospitals .....	0.62	\$109,142,525	0.64
Non-safety-net hospitals .....	0.61	\$423,805,793	0.61
<b>Approach 1: Two equal peer groups based on the proportion of dual-eligible beneficiaries</b>			
<b>Median plus neutrality modifier (neutrality modifier = 0.9558):</b>			
Safety-net hospitals .....	0.56	100,205,115	0.59
Non-safety-net hospitals .....	0.61	432,741,958	0.62
<b>Mean plus neutrality modifier (neutrality modifier = 1.0191):</b>			
Safety-net hospitals .....	0.54	97,837,278	0.57
Non-safety-net hospitals .....	0.61	435,112,491	0.63
<b>Budget neutralizing ERR:</b>			
Safety-net hospitals .....	0.55	98,208,670	0.58
Non-safety-net hospitals .....	0.61	435,216,961	0.63
<b>Standardized ERR plus neutrality modifier (neutrality modifier = 0.9796):</b>			
Safety-net hospitals .....	0.55	98,468,430	0.58
Non-safety-net hospitals .....	0.61	434,478,852	0.63
<b>Approach 2: Quintiles based on the proportion of dual-eligible beneficiaries</b>			
<b>Median plus neutrality modifier (neutrality modifier = 0.9546)</b>			
Safety-net hospitals .....	0.52	93,878,536	0.55
Non-safety-net hospitals .....	0.62	439,067,736	0.63
<b>Mean plus neutrality modifier (neutrality modifier = 1.0135)</b>			
Safety-net hospitals .....	0.49	89,182,424	0.52
Non-safety-net hospitals .....	0.62	443,766,582	0.64
<b>Budget neutralizing ERR</b>			
Safety-net hospitals .....	0.49	88,510,157	0.52
Non-safety-net hospitals .....	0.62	444,689,147	0.64
<b>Standardized ERR plus neutrality modifier (neutrality modifier = 0.9710)</b>			
Safety-net hospitals .....	0.50	91,686,964	0.54
Non-safety-net hospitals .....	0.62	441,261,324	0.64

COMPARISON OF PENALTY METRICS BY THRESHOLD METHODS AND PEER GROUP OPTIONS FOR ALL HOSPITALS, SAFETY-NET, AND NON-SAFETY-NET HOSPITALS—Continued

Stratification approach and payment formula methodology	Average payment reduction (1 - P) <sup>a</sup> (%)	Total Medicare savings	Payment adjustment as a proportion of all DRG payments (%)
<b>Approach 3: Deciles based on the proportion of dual-eligible beneficiaries</b>			
Median plus neutrality modifier (neutrality modifier = 0.9555)			
Safety-net hospitals .....	0.51	91,881,047	0.54
Non-safety-net hospitals .....	0.62	441,068,999	0.64
Mean plus neutrality modifier (neutrality modifier = 1.0148)			
Safety-net hospitals .....	0.48	87,289,962	0.51
Non-safety-net hospitals .....	0.62	445,653,065	0.64
Budget neutralizing ERR			
Safety-net hospitals .....	0.47	86,671,374	0.51
Non-safety-net hospitals .....	0.62	446,299,280	0.64
Standardized ERR plus neutrality modifier (neutrality modifier = 0.9713)			
Safety-net hospitals .....	0.49	90,058,433	0.53
Non-safety-net hospitals .....	0.62	442,888,696	0.64

**Notes:** Results based on July 1, 2012 through June 30, 2015 discharges among subsection (d) and Maryland hospitals only. Although data from all subsection (d) and Maryland hospitals are used in calculations of each hospital's ERR, this table does not include results for Maryland hospitals. Hospitals are stratified based on the proportion of duals calculated among Medicare FFS and managed care patients for the FY 2017 performance period. Safety-net hospitals are defined as hospitals in the top quintile of DSH patient percentage. DSH patient percentage was calculated among all hospitals with a positive DSH value (including hospitals not eligible for DSH payments).

<sup>a</sup> The payment reduction shows what percentage of DRG payments hospitals will lose as a result of the program. This is slightly different than the adjustment factor that CMS applies, which is 1 minus the number reported here (that is, ranges from 0.97 to 1).

<sup>b</sup> Total Medicare savings is estimated by multiplying the payment reduction by total base operating DRG payments from July 1, 2014 through June 30, 2015.

<sup>c</sup> The group share of payment adjustments as a percentage of all DRG payments is calculated as the sum of total Medicare savings for the group of hospitals (that is, safety-net hospitals or non-safety-net hospitals) divided by total base operating DRG payments from July 1, 2014 through June 30, 2015 for the group of hospitals.

Our analysis also assesses the impact of the proposed changes to the payment adjustment formula on additional groups of hospitals. Variation in the impact of the proposed changes by hospital characteristics on the share of payment adjustments as a percentage of all DRG payments for the FY 2019 Hospital Readmissions Reduction Program, is shown in the table below. The table is based on results when hospitals are stratified into quintiles based on the proportion of dual-eligible beneficiaries among Medicare FFS and managed care patients discharged between July 1, 2012, and June 30, 2015, our preferred approaches. The table shows the average share of payment

adjustments as a percentage of all DRG payments for each group of hospitals. The group average is calculated as the sum of penalties for all hospitals with that characteristic over the sum of all DRG payments for those hospitals between July 1, 2014 and June 30, 2015. For example, under the current methodology, the average share of payment adjustments as a percentage of all DRG payments for urban hospitals is 0.61 percent. This means that total penalties for all urban hospitals is 0.61 percent of total payments for urban hospitals (that is the ratio of total penalties to total DRG payments is 0.61 percent). This metric allows us to compare the financial impact of the

different methods for assessing penalties between hospitals with different number of beds even though larger hospitals tend to generate higher total Medicare savings because their payment reduction is applied to more DRG payments. Measuring the financial impact on hospitals as a proportion of total DRG payments allows us to account for differences in the amount of DRG payments for hospitals when comparing the financial impact of the program on different groups of hospitals, and allows comparison across the different methodologies between groups of hospitals with different numbers of eligible hospitals.

AVERAGE SHARE OF PAYMENT ADJUSTMENTS AS A PERCENTAGE OF ALL DRG PAYMENTS FOR CONSIDERED APPROACHES FOR THE HOSPITAL READMISSIONS REDUCTION PROGRAM, BY HOSPITAL CHARACTERISTIC

Hospital characteristics	Number of hospitals with characteristic	Current methodology (%)	Median plus neutrality modifier (neutrality modifier = 0.9546) (%)	Mean plus neutrality modifier (neutrality modifier = 1.0135) (%)	Budget neutralizing ERR (%)	Standardized ERR plus neutrality modifier (neutrality modifier = 0.9710) (%)
All Hospitals .....	3,096	0.62	0.62	0.62	0.62	0.62
Geographic Location:						
Urban .....	2,304	0.61	0.62	0.62	0.62	0.62
Rural:	792	0.65	0.62	0.60	0.60	0.60
Bed size:						
1-99 beds .....	1,113	0.57	0.57	0.56	0.56	0.57
100-199 beds .....	886	0.70	0.70	0.70	0.70	0.70

AVERAGE SHARE OF PAYMENT ADJUSTMENTS AS A PERCENTAGE OF ALL DRG PAYMENTS FOR CONSIDERED APPROACHES FOR THE HOSPITAL READMISSIONS REDUCTION PROGRAM, BY HOSPITAL CHARACTERISTIC—Continued

Hospital characteristics	Number of hospitals with characteristic	Current methodology (%)	Median plus neutrality modifier (neutrality modifier = 0.9546) (%)	Mean plus neutrality modifier (neutrality modifier = 1.0135) (%)	Budget neutralizing ERR (%)	Standardized ERR plus neutrality modifier (neutrality modifier = 0.9710) (%)
200–299 beds .....	453	0.65	0.66	0.66	0.66	0.66
300–399 beds .....	278	0.64	0.63	0.63	0.63	0.63
400–499 .....	155	0.53	0.54	0.54	0.54	0.54
500 or more beds .....	211	0.57	0.57	0.57	0.57	0.56
By DSH Payment Eligibility:						
Not eligible .....	474	0.55	0.61	0.65	0.64	0.64
DSH payment eligible .....	2,622	0.63	0.62	0.61	0.61	0.61
By Teaching Status:						
Non-teaching .....	2,076	0.66	0.67	0.67	0.67	0.67
Teaching .....	1,020	0.59	0.58	0.58	0.58	0.58
Fewer than 100 residents .....	772	0.59	0.60	0.60	0.61	0.60
100 or more residents .....	248	0.57	0.55	0.54	0.54	0.55
By Type of Ownership:						
Government .....	490	0.54	0.53	0.53	0.53	0.53
Proprietary .....	779	0.79	0.79	0.80	0.80	0.79
Voluntary .....	1,827	0.59	0.59	0.59	0.59	0.59
DSH patient percentage:						
1st .....	547	0.54	0.60	0.63	0.63	0.63
2nd .....	635	0.66	0.71	0.72	0.72	0.72
3rd .....	646	0.60	0.61	0.62	0.62	0.61
4th .....	642	0.61	0.60	0.59	0.59	0.59
5th .....	626	0.64	0.55	0.52	0.52	0.54
MCR Percent:						
0–24 .....	410	0.42	0.40	0.39	0.39	0.39
25–49 .....	2,081	0.63	0.63	0.63	0.63	0.63
50 and over .....	590	0.72	0.73	0.74	0.74	0.74
Region:						
New England .....	130	0.68	0.64	0.63	0.63	0.64
Middle Atlantic .....	354	0.86	0.83	0.83	0.83	0.83
South Atlantic .....	512	0.74	0.76	0.78	0.78	0.77
East North Central .....	482	0.63	0.63	0.63	0.63	0.63
East South Central .....	290	0.76	0.79	0.80	0.80	0.79
West North Central .....	252	0.39	0.41	0.41	0.41	0.41
West South Central .....	487	0.46	0.48	0.48	0.48	0.47
Mountain .....	223	0.36	0.39	0.40	0.40	0.39
Pacific .....	366	0.42	0.37	0.34	0.34	0.36

**Source:** FY 2017 Hospital Readmissions Reduction Program Final Rule Results. Results are based on July 1, 2012, through June 30, 2015, discharges among subsection (d) and Maryland hospitals only. Although data from all subsection (d) and Maryland hospitals are used in calculations of each hospital's Excess Readmission Ratio (ERR), this table does not include results for Maryland hospitals. This table only includes results for hospitals who are eligible for a penalty under the program on the basis of having at least 25 eligible discharges for at least one measure. Hospital Characteristics are based on the FY 2017 final rule Impact File. There were 15 hospitals that did not have MCR percentages in the FY 2017 final rule Impact File. To calculate the payment adjustment as a proportion of total base operating DRG payments, this analysis used MedPAR data to calculate the total base operating DRG payments from July 1, 2014 through June 30, 2015. The group average share of payment adjustments as a percentage of all DRG payments is calculated as the sum of all Medicare savings for the group of hospitals divided by total base operating DRG payments for all hospitals in that group.

We invited public comment on our preferred proposal and alternative considerations.

*Comment:* Many commenters supported using the median ERR plus neutrality modifier because a homogenous group of hospitals are included in each peer group, the approach is simple and accurate, it is not skewed by extreme values, and provides a more robust threshold. However, one commenter argued that budget neutrality should be done at the national level rather than using a budget-neutralizing ERR at the peer group level.

*Response:* We thank commenters for their support. We agree that the peer group median ERR is a strong threshold. To clarify, the budget neutralizing ERR is not calculated only among hospitals in the peer group. The budget neutralizing ERR is the ERR corresponding to the percentile within each peer group's distribution of ERRs that will ensure budget neutrality across all applicable hospitals.

*Comment:* One commenter asked CMS to reconsider the budget neutrality requirement for the payment adjustment methodology because it disincentivizes the overall goal of the program.

*Response:* While we understand commenters' concerns, one of the requirements of Public Law 114–255 is to maintain budget neutrality. For this reason, we have proposed using the median ERR as the threshold and scaling payment adjustments by a neutrality modifier. Many commenters expressed support for using the median ERR plus neutrality modifier. We believe that adopting the median ERR plus neutrality modifier methodology meets our priority to adopt a simplified and well-known metric that allows us to be more transparent in our methodology and reduces the penalty on safety-net

hospitals. We will continue to monitor the impact of accounting for dual-eligible patients in the Hospital Readmissions Reduction Program and evaluate if future changes to include other variables or adjustments are needed.

*Comment:* One commenter noted that, to calculate the difference between each hospital's excess readmission ratio and the quintile average, CMS must divide the former by the latter and then subtract 1 rather than simply subtracting the latter from the former. The commenter also argued that it was essential that CMS modify the quintile medians to ensure monotonicity to adhere to the intent of the statute.

*Response:* We considered many factors in developing peer groups to calculate payment adjustments for the Hospital Readmissions Reduction Program in response to Public Law 114–255. These factors included: (1) The legislative requirements of Public Law 114–255 such as stratification by dual proportion, budget neutrality, and immediate implementation; (2) constructing peer groups that were consistent across six current measures and future additional measures, and were defined consistently over time; (3) the intent of the program to encourage efficient, high quality care; and (4) the impact of peer group definitions on the distribution of payments to hospital groups, such as safety-net or rural hospitals.

The modification to the formula recommended in the proposed rule, to use the peer group median to assess hospital performance, meets these objectives. The proposed approach transforms the distribution of excess readmission ratios by subtracting from it the difference between the median of the peer group and the overall median. The commenter's proposed alternative modification, of dividing the excess readmission ratio by the peer group median, is consistent with the formulation of the payment adjustment as the proportion by which the hospital's readmission rate exceeds a standard rate multiplied by the cost of admissions. However, we do not agree that the formula modification must be performed in this way to be consistent with the requirements of the legislation and our objectives. Though monotonicity is desirable, the proposed approach, preselecting peer groups of equal size and choosing the size that best meets the objectives above with an unmodified median, is transparent and effective.

*Comment:* One commenter recommended that CMS delay implementing the payment adjustment

methodology based on proportion of dual-eligible patients while better measures are developed.

*Response:* We thank the commenter for its recommendation. However, Public Law 114–255 requires the implementation of these changes to apply to discharges that occur during and after FY 2019. Public Law 114–255 added section 1886(q)(3)(D) to the Act, which directs the Secretary to develop a transitional methodology that accounts for the percentage of full-benefit dual-eligible patients treated by a hospital to determine a hospital's payment adjustment factor. Section 1886(q)(3)(D)(i) of the Act sets forth the requirement that the Secretary assign hospitals to groups and apply a methodology that allows for separate comparison of hospitals within each such group. This applies to discharges that occur during and after FY 2019, until and unless the system is revised under the authority of section 1886(q)(3)(E)(i) of the Act.

After consideration of the public comments we received, we are finalizing, without modification, our proposal to use the median ERR plus neutrality modifier.

#### 11. Accounting for Social Risk Factors in the Hospital Readmissions Reduction Program

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19966 through 19967), we discussed the accounting for social risk factors in the Hospital Readmissions Reduction Program. Although the program has made steps to account for social risk factors in this year's rule, we understand that social risk factors such as income, education, race and ethnicity, employment, disability, community resources, and social support (certain factors of which are also sometimes referred to as socioeconomic status (SES) factors or socio-demographic status (SDS) factors) play a major role in health. One of our core objectives is to improve beneficiary outcomes, including reducing health disparities, and we want to ensure that all beneficiaries, including those with social risk factors, receive high quality care. In addition, we seek to ensure that the quality of care furnished by providers and suppliers is assessed as fairly as possible under our programs while ensuring that beneficiaries have adequate access to excellent care.

We have been reviewing reports prepared by the Office of the Assistant Secretary for Planning and Evaluation (ASPE)<sup>27</sup> and the National Academies

<sup>27</sup> [https://aspe.hhs.gov/pdf-report/report-congress-social-risk-factors-and-performance-](https://aspe.hhs.gov/pdf-report/report-congress-social-risk-factors-and-performance)

of Sciences, Engineering, and Medicine on the issue of accounting for social risk factors in CMS' quality measurement and payment programs, and considering options on how to address the issue in these programs. On December 21, 2016, ASPE submitted a report to Congress on a study it was required to conduct under section 2(d) of the Improving Medicare Post-Acute Care Transformation (IMPACT) Act of 2014. The study analyzed the effects of certain social risk factors in Medicare beneficiaries on quality measures and measures of resource use used in one or more of nine Medicare value-based purchasing programs, including the Hospital Readmissions Reduction Program.<sup>28</sup> The report also included considerations for strategies to account for social risk factors in these programs. In a January 10, 2017 report released by the National Academies of Sciences, Engineering, and Medicine, that body provided various potential methods for measuring and accounting for social risk factors, including stratified public reporting.<sup>29</sup>

As noted in the FY 2017 IPPS/LTCH PPS final rule, the NQF undertook a 2-year trial period in which certain new measures, measures undergoing maintenance review, and measures endorsed with the condition that they enter the trial period were assessed to determine whether risk adjustment for selected social risk factors is appropriate for these measures. This trial entailed temporarily allowing inclusion of social risk factors in the risk-adjustment approach for these measures. We await the recommendations of the NQF trial on risk adjustment for quality measures.

As we continue to consider the analyses and recommendations from these reports and await the results of the NQF trial on risk adjustment for quality measures, we are continuing to work with stakeholders in this process. As we have previously indicated, we are concerned about holding providers to different standards for the outcomes of their patients with social risk factors because we do not want to mask potential disparities or minimize incentives to improve the outcomes for disadvantaged populations. Keeping this concern in mind, while we sought input on this topic previously, we continue to seek public comment on

*under-medicare-value-based-purchasing-programs.*

<sup>28</sup> [https://aspe.hhs.gov/pdf-report/report-congress-social-risk-factors-and-performance-under-medicare-value-based-purchasing-programs.](https://aspe.hhs.gov/pdf-report/report-congress-social-risk-factors-and-performance-under-medicare-value-based-purchasing-programs)

<sup>29</sup> National Academies of Sciences, Engineering, and Medicine. 2017. Accounting for social risk factors in Medicare payment. Washington, DC: The National Academies Press.

whether we should account for additional social risk factors in the Hospital Readmissions Reduction Program and, if so, what method or combination of methods, in addition to the method of stratification based on proportion of dual-eligible beneficiaries in the facility that we are finalizing in this rule, would be most appropriate for accounting for social risk factors. We believe that the path forward should incentivize improvements in health outcomes for disadvantaged populations while ensuring that beneficiaries have access to excellent care. Examples of methods include: Confidential reporting of stratified measure rates to providers; public reporting of stratified measure rates; risk adjustment of a particular measure as appropriate based on data and evidence; developing readmission measures or statistical approaches that are suitable for the reporting of performance on readmissions; providing financial incentives for achievement of low readmission rates for beneficiaries with social risk factors; and using a hospital-wide readmissions measure. While we consider whether and to what extent we currently have statutory authority to implement one or more of the above-described methods, in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19966), we sought comments on whether any of these methods should be considered, and if so, which of these methods or combination of methods would best account for social risk factors in the Hospital Readmissions Reduction Program.

In addition, in the proposed rule, we sought public comment on which social risk factors might be most appropriate for stratifying measure scores and/or potential risk adjustment of a particular measure. Examples of social risk factors include, but are not limited to, dual eligibility/low-income subsidy, race and ethnicity, and geographic area of residence. We also sought comments on which of these factors, including current data sources where this information would be available, could be used alone or in combination, and whether other data should be collected to better capture the effects of social risk. We will take commenters' input into consideration as we continue to assess the appropriateness and feasibility of accounting for social risk factors in the Hospital Readmissions Reduction Program. We note that any such changes would be proposed through future notice-and-comment rulemaking.

We look forward to working with stakeholders as we consider the issue of accounting for social risk factors and reducing health disparities in CMS programs. Of note, implementing any of

the above methods would be taken into consideration in the context of how this and other CMS programs operate (for example, data submission methods, availability of data, statistical considerations relating to reliability of data calculations, among others); therefore, we also welcomed comment on operational considerations. CMS is committed to ensuring that its beneficiaries have access to and receive excellent care, and that the quality of care furnished by providers and suppliers is assessed fairly in CMS programs.

*Comment:* Numerous commenters supported adjusting for social risk factors and recommended that any methodology support equitable care delivery while not disproportionately penalizing certain hospitals. Commenters cited the importance of transparency in risk factors related to any risk adjustment methodology to meet both aims and discourages the use of unadjusted data in public reporting and pay-for-performance. Commenters agreed with CMS' approach to stratify hospitals into peer groups and recommended that CMS consider additional social risk factors in addition to the peer grouping requirements using dual-eligibility data required by Public Law 114–255. Commenters recommended that CMS closely examine the considerations provided by National Academy of Medicine (NAM) for risk adjustment, which recommend four domains of risk indicators: Income, education, and dual eligibility; race, ethnicity, language, and nativity; marital/partnership status and living alone; and neighborhood deprivation, urbanicity, and housing.

Commenters also recommended that CMS study the relationship between a hospital's readmission rates and the surrounding area's Health Professional Shortage Area (HPSA), Type II Diabetes, hypertension, arthritis, heart disease and depression to determine if these factors should be accounted for. Commenters also suggested focusing on: Continuing refinement of performance scoring and measurements to end any bias to major teaching providers; continuing development of appropriate peer groups; develop and apply appropriate socio-demographic status adjustments to all the quality risk programs; and ensuring efficiency in data reporting. Commenters requested that CMS lay out a longer-term effort for testing and refining additional variables when accounting for social risk factors due to the wide range of variables that impact a person's health outcomes. A few commenters suggested that CMS use census data on poverty rates and

education levels of patients in a hospital's service area, two key indicators of population health per Healthy People 2020, to adjust a hospital's measure score.

Some commenters recommended the use of confidential patient-reported data as self-reports offer a reasonably valid estimate of differences in utilization of health care between socioeconomic groups. Commenters requested that CMS consider providing hospitals with confidential reports of performance on accountability measures stratified by dual-eligible status or other nationally available data elements. Once hospitals have had sufficient opportunity to review and understand their performance on these stratified measures, CMS should work with stakeholders to publicly report this data in an appropriate fashion. Commenters further recommend the implementation of demonstration projects to encourage hospitals to collect data on social risk factors through their electronic health records (EHR).

Some commenters recommended that CMS start with standard patient admission information and use the information from NQF and other sources to gather additional data, provide appropriate metrics, risk models, and risk adjustment strategies. One commenter suggested that CMS should consider concurrently quality and disparities using a two-stage reimbursement strategy because it can mitigate unintended consequences while reducing disparities and improving quality.

A few commenters recommended that CMS not use social risk factors to adjust quality measures and recommended that CMS first evaluate and learn from the use of peer groups before additional adjustment to either the program or program measures. Commenters noted that adjusting for social risk factors does not address the underlying disparities that are often associated with poor health outcomes and would mask potential disparities or minimize incentives to improve the outcomes for disadvantaged populations.

Commenters expressed concern regarding the potential use of a hospital-wide readmission measure to account for social risk factors, citing the uncertainty that CMS has the legal authority to do so and government reports indicating that it would increase penalties for all hospitals and increase the disparity between safety-net and other hospitals. Commenters stated that if CMS incorporated the hospital-wide readmission measure in the Hospital Readmissions Reduction Program, it would need to remove the existing six

measures and do it in a budget-neutral manner.

One commenter believed that the readmission measures used in the Hospital Readmissions Reduction Program should be risk adjusted for social risk factors that are associated with higher readmission rates. The commenter recommended CMS undertake analysis that would directly measure those factors and make appropriate risk adjustments as part of the measure calculation.

*Response:* We thank commenters for the extensive responses to our request for public comments on whether we should account for social risk factors in the Hospital Readmissions Reduction Program, and if so, what method or combination of methods would be most appropriate for accounting for social risk factors. We recognize that social risk factors impact health, and one of our core objectives is to improve beneficiary outcomes including reducing health disparities. In addition, we seek to ensure that the quality of care furnished by providers and suppliers is assessed as fairly as possible under our programs while ensuring that beneficiaries receive high quality care. To this end, we have closely reviewed reports by the Office of the Assistant Secretary for Planning and Evaluation (ASPE) and the National Academies of Sciences, Engineering, and Medicine on the issue of accounting for social risk factors in CMS' value-based purchasing and quality reporting programs. We also await the recommendations of the recently concluded NQF trial on risk adjustment for quality measures. As we have previously stated, we are concerned about holding providers to different standards for the outcomes of their patients with social risk factors, because we do not want to mask potential disparities or minimize incentives to improve the outcomes for disadvantaged populations.

Commenters were generally supportive of how the Hospital Readmissions Reduction Program is adopting a methodology for accounting for dual-eligible patients. However, commenters also stated concerns such as the need to: Continue refinement of performance scoring and measurements to end any bias to major teaching providers; continue development of appropriate peer groups; and work to develop and apply appropriate socio-demographic status adjustments. Some recommendations, such as the use of a hospital-wide readmission measure, would require a statutory change. We will consider all suggestions as we continue to assess each measure and the

overall program. We intend to explore options including but not limited to measure stratification by social risk factors in a consistent manner across programs, informed by considerations of stratification methods described in section IX.A.13. of the preamble of this final rule. We thank commenters for this important feedback and will continue to consider options to account for social risk factors that would allow us to view disparities and potentially incentivize improvement in care for patients and beneficiaries. We will also consider providing feedback to providers on outcomes for individuals with social risk factors in confidential reports.

#### 12. Extraordinary Circumstance Exception (ECE) Policy

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19967), we noted that many of our quality reporting and value-based purchasing programs share a common process for requesting an exception from program reporting due to an extraordinary circumstance not within a provider's control. The Hospital IQR, the Hospital OQR, the IPFQR, the Ambulatory Surgical Center Quality Reporting (ASCQR), and the PCHQR Programs, as well as the HAC Reduction Program, and the Hospital Readmissions Reduction Program, share common processes for ECE requests. In reviewing the policies for these programs, we recognized that there are five areas in which these programs have variance regarding ECE requests. These are: (1) Allowing the facilities or hospitals to submit a form signed by the facility's or hospital's CEO versus CEO or designated personnel; (2) requiring the form be submitted within 30 days following the date that the extraordinary circumstance occurred versus within 90 days following the date the extraordinary circumstance occurred; (3) inconsistency regarding specification of a timeline for us to provide our formal response notifying the facility or hospital of our decision; (4) inconsistency regarding specification of our authority to grant ECEs due to CMS data system issues; and (5) referring to the program as "extraordinary extensions/exemptions" versus as "extraordinary circumstances exceptions." We believe addressing these five areas, as appropriate, can improve administrative efficiencies for affected facilities or hospitals.

In the FY 2016 IPPS/LTCH PPS final rule (80 FR 49542 through 49543), we adopted an ECE policy for the Hospital Readmissions Reduction Program beginning in FY 2016. This policy was similar to the ECE policy for the Hospital IQR Program, as finalized in

the FY 2012 IPPS/LTCH PPS final rule (76 FR 51651), modified in the FY 2014 IPPS/LTCH PPS final rule (78 FR 50836) (designation of a non-CEO hospital contact), and further modified in the FY 2015 IPPS/LTCH PPS final rule (79 FR 50277) (amended 42 CFR 412.140(c)(2) to refer to "extension or exemption" instead of the former "extension or waiver").

We proposed to update these policies by: (1) Allowing the facility to submit a form signed by the facility's CEO or designated personnel; (2) clarifying that we will strive to provide our formal response notifying the facility of our decision within 90 days of receipt of the facility's request; and (3) allowing CMS to have the authority to grant ECEs due to CMS data system issues which affect data submission. These proposed policies generally align with policies in the Hospital IQR Program (76 FR 51651 through 51652), (78 FR 50836 through 50837), and (81 FR 57181 through 57182), the Hospital OQR Program (77 FR 68489 and 81 FR 79795), as well as other quality reporting programs. We proposed that these policies would apply beginning in FY 2018 as related to extraordinary circumstances that occur on or after October 1, 2017.

We note that there may be circumstances in which it is not feasible for a facility's CEO to sign the ECE request form. In these circumstances, we believe that facilities affected by such circumstances should be able to submit ECE forms regardless of the CEO's availability to sign. This proposed change would allow hospitals to designate an appropriate, non-CEO, contact at its discretion. This individual would be responsible for the submission, and would be the one signing the form. Therefore, we proposed to accept ECE forms which have been signed by designated personnel.

We also believe that it is important for facilities to receive timely feedback regarding the status of ECE requests. We strive to complete our review of each ECE request as quickly as possible. However, we recognize that the number of requests we receive, and the complexity of the information provided impacts the actual timeframe to make ECE determinations. To improve transparency of our process, we believe it is appropriate to clarify that we will strive to complete our review of each request within 90 days of receipt.

Although we do not anticipate this situation will happen on a regular basis, there may be times where CMS experiences issues with its data systems that directly affects facilities' abilities to submit data. In these cases, we believe

it would be inequitable to require facilities to report. Therefore, we proposed to allow CMS to grant ECEs to facilities if we determine that a systemic problem with one of our data collection systems directly affected the ability of the facilities to submit data. If we make the determination to grant ECEs, we proposed to communicate this decision through routine communication channels.

We invited public comment on these proposed modifications to the Extraordinary Circumstance Exception policy.

*Comment:* Commenters supported the proposals to modify the extraordinary circumstances exceptions (ECE) policies to align across CMS quality reporting and value-based purchasing programs.

*Response:* We thank commenters for their support.

*Comment:* A few commenters noted that there currently is no ECE policy for the Indian Health Service or Tribally-operated programs, although tribal programs have requested an exception from CMS in previous fiscal years. Commenters requested an ECE specifically for IHS and tribal healthcare programs.

*Response:* We appreciate the commenters' concern. However, we note that section 1886(q)(5)(C) of the Act defines applicable hospitals and requires all subsection (d) hospitals to be included in the Hospital Readmissions Reduction Program. The ECE policy was not designed to allow a hospital to seek exclusion from the Hospital Readmissions Reduction on Program in its entirety, but to provide relief for a hospital whose ability to accurately collect quality measure data and/or to report those data in a timely manner has been negatively impacted as a direct result of experiencing a significant disaster or other extraordinary circumstance beyond the control of the hospital.

After consideration of the public comments we received, we are finalizing, without modification, our proposal to update our extraordinary circumstances exception policies to align with other quality reporting programs.

### 13. Timeline for Public Reporting of Excess Readmission Ratios on *Hospital Compare* for the FY 2018 Payment Determination

Section 1886(q)(6) of the Act requires the Secretary to make information available to the public regarding readmission rates of each subsection (d) hospital under the program, and states that such information shall be posted on the *Hospital Compare* Internet Web site

in an easily understandable format. Accordingly, in the FY 2013 IPPS/LTCH PPS final rule (77 FR 53401), we indicated that public reporting for excess readmission ratios could be available on the *Hospital Compare* Web site as early as mid-October. In the FY 2017 IPPS/LTCH PPS final rule (81 FR 56978 through 56979), we clarified that public reporting of excess readmission ratios will be posted on an annual basis to the *Hospital Compare* Web site as soon as is feasible following the review period. This may occur as early as October, but it could occur later for a particular year in order to streamline reporting and align with other hospital quality reporting and performance programs.

### J. Hospital Value-Based Purchasing (VBP) Program: Policy Changes

#### 1. Background

##### a. Statutory Background and Overview of Past Program Years

Section 1886(o) of the Act, as added by section 3001(a)(1) of the Affordable Care Act, requires the Secretary to establish a hospital value-based purchasing program (the Hospital VBP Program) under which value-based incentive payments are made in a fiscal year (FY) to hospitals that meet performance standards established for a performance period for such fiscal year. Both the performance standards and the performance period for a fiscal year are to be established by the Secretary.

For more of the statutory background and descriptions of our current policies for the Hospital VBP Program, we refer readers to the Hospital Inpatient VBP Program final rule (76 FR 26490 through 26547); the FY 2012 IPPS/LTCH PPS final rule (76 FR 51653 through 51660); the CY 2012 OPSS/ASC final rule with comment period (76 FR 74527 through 74547); the FY 2013 IPPS/LTCH PPS final rule (77 FR 53567 through 53614); the FY 2014 IPPS/LTCH PPS final rule (78 FR 50676 through 50707); the CY 2014 OPSS/ASC final rule (78 FR 75120 through 75121); the FY 2015 IPPS/LTCH PPS final rule (79 FR 50048 through 50087); the FY 2016 IPPS/LTCH PPS final rule with comment period (80 FR 49544 through 49570); the FY 2017 IPPS/LTCH PPS final rule (81 FR 56979 through 57011); and the CY 2017 OPSS/ASC final rule with comment period (81 FR 79855 through 79862).

We also have codified certain requirements for the Hospital VBP Program at 42 CFR 412.160 through 412.167.

#### b. FY 2018 Program Year Payment Details

Section 1886(o)(7)(B) of the Act instructs the Secretary to reduce the base operating DRG payment amount for a hospital for each discharge in a fiscal year by an applicable percent. Under section 1886(o)(7)(A) of the Act, the sum total of these reductions in a fiscal year must equal the total amount available for value-based incentive payments for all eligible hospitals for the fiscal year, as estimated by the Secretary. We finalized details on how we would implement these provisions in the FY 2013 IPPS/LTCH PPS final rule (77 FR 53571 through 53573) and refer readers to that rule for further details. Under section 1886(o)(7)(C)(iv) of the Act, the applicable percent for the FY 2018 program year is 2.00 percent. Using the methodology we adopted in the FY 2013 IPPS/LTCH PPS final rule (77 FR 53571 through 53573), we estimate that the total amount available for value-based incentive payments for FY 2018 is approximately \$1.9 billion, based on the March 2017 update of the FY 2016 MedPAR file.

As finalized in the FY 2013 IPPS/LTCH PPS final rule (77 FR 53573 through 53576), we will utilize a linear exchange function to translate this estimated amount available into a value-based incentive payment percentage for each hospital, based on its Total Performance Score (TPS). We will then calculate a value-based incentive payment adjustment factor that will be applied to the base operating DRG payment amount for each discharge occurring in FY 2018, on a per-claim basis. We published proxy value-based incentive payment adjustment factors in Table 16 associated with the FY 2018 IPPS/LTCH PPS proposed rule (which is available via the Internet on the CMS Web site). The proxy factors are based on the TPS from the FY 2017 program year.

These FY 2017 performance scores are the most recently available performance scores hospitals have been given the opportunity to review and correct. The updated slope of the linear exchange function used to calculate those proxy value-based incentive payment adjustment factors is 3.0693696034. This slope, along with the estimated amount available for value-based incentive payments has been updated based on the March 2017 update of the FY 2016 MedPAR file, and is published with this final rule in Table 16A (which is available via the Internet on the CMS Web site).

After hospitals have been given an opportunity to review and correct their

actual TPSs for FY 2018, we will add Table 16B (which will be available via the Internet on the CMS Web site) to display the actual value-based incentive payment adjustment factors, exchange function slope, and estimated amount available for the FY 2018 program year. We expect Table 16B will be posted on the CMS Web site in the fall of 2017.

We strive to put patients first, ensuring they are empowered to make decisions about their own healthcare along with their clinicians using information from data-driven insights that are increasingly aligned with meaningful quality measures. We support technology that reduces burden and allows clinicians to focus on providing high-quality healthcare for their patients. We also support innovative approaches to improve quality, accessibility, and affordability of care while paying particular attention to improving clinicians' and beneficiaries' experience when interacting with our programs. In combination with other efforts across the Department of Health and Human Services, we believe the Hospital VBP Program helps to incentivize hospitals to improve healthcare quality and value, while giving patients and providers the tools and information needed to make the best decisions for them. We recognize that the Hospital VBP Program represents a key component of the way that we bring quality measurement and improvement together with payment, we have taken efforts to review existing policies to identify how to move the program forward in the least burdensome manner possible while continuing to incentivize improvement in the quality of care provided to patients.

## 2. Accounting for Social Risk Factors in the Hospital VBP Program

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19968 through 19969), we discussed accounting for social risk factors in the Hospital VBP Program. We understand that social risk factors such as income, education, race and ethnicity, employment, disability, community resources, and social support (certain factors of which are also sometimes referred to as socioeconomic status (SES) factors or socio-demographic status (SDS) factors) play a major role in health. One of our core objectives is to improve beneficiary outcomes, including reducing health disparities, and we want to ensure that all beneficiaries, including those with social risk factors, receive high quality care. In addition, we seek to ensure that the quality of care furnished by providers and suppliers is assessed as

fairly as possible under our programs while ensuring that beneficiaries have adequate access to excellent care.

We have been reviewing reports prepared by the Office of the Assistant Secretary for Planning and Evaluation (ASPE)<sup>30</sup> and the National Academies of Sciences, Engineering, and Medicine on the issue of accounting for social risk factors in CMS' value-based purchasing and quality reporting programs, and considering options on how to address the issue in these programs. On December 21, 2016, ASPE submitted a Report to Congress on a study it was required to conduct under section 2(d) of the Improving Medicare Post Acute Care Transformation (IMPACT) Act of 2014. The study analyzed the effects of certain social risk factors in Medicare beneficiaries on quality measures and measures of resource use used in one or more of nine Medicare value-based purchasing programs, including the Hospital VBP Program.<sup>31</sup> The report also included considerations for strategies to account for social risk factors in these programs. In a January 10, 2017 report released by the National Academies of Sciences, Engineering, and Medicine, that body provided various potential methods for measuring and accounting for social risk factors, including stratified public reporting.<sup>32</sup>

In the ASPE report noted above, there is an analysis of and focus on the Medicare Spending Per Beneficiary (MSPB) measure, which was adopted by the Hospital VBP Program beginning with the FY 2015 program year.<sup>33</sup> We note that the MSPB measure is currently undergoing endorsement review for NQF, as part of the 2-year socioeconomic trial period described below.<sup>34</sup> ASPE's December 2016 Report to Congress did not include an analysis

<sup>30</sup> <https://aspe.hhs.gov/pdf-report/report-congress-social-risk-factors-and-performance-under-medicare-value-based-purchasing-programs>.

<sup>31</sup> <https://aspe.hhs.gov/pdf-report/report-congress-social-risk-factors-and-performance-under-medicare-value-based-purchasing-programs>.

<sup>32</sup> National Academies of Sciences, Engineering, and Medicine. 2017. Accounting for social risk factors in Medicare payment. Washington, DC: The National Academies Press.

<sup>33</sup> Office of the Assistant Secretary for Planning and Evaluation. 2016. Report to Congress: Social Risk Factors and Performance Under Medicare's Value-Based Purchasing Programs; Chapter 7: The Hospital Value-Based Purchasing Program (p. 141–176). Available at: <https://aspe.hhs.gov/pdf-report/report-congress-social-risk-factors-and-performance-under-medicare-value-based-purchasing-programs>.

<sup>34</sup> Medicare Spending Per Beneficiary (MSPB)—Hospital. See Section 2b.4.5 in National Quality Forum—Measure Testing. Accessed 2/21/17 from: <http://www.qualityforum.org/ProjectMeasures.aspx?projectID=83458>.

of the effect of social risk factors on hospital performance on any condition-specific payment measures that are currently adopted for the Hospital VBP Program beginning with the FY 2021 program year (Hospital-Level, Risk-Standardized Payment Associated with a 30-Day Episode-of-Care for Acute Myocardial Infarction (AMI Payment) measure and Hospital-Level, Risk-Standardized Payment Associated with a 30-Day Episode-of-Care for Heart Failure (HF Payment) measure) (81 FR 56986 through 56990 and 81 FR 56990 through 56992, respectively). We look forward to ASPE's continued analyses in this area, such as the role of frailty and disability in explaining variation in hospital episode spending among Medicare beneficiaries.

As noted in the FY 2017 IPPS/LTCH PPS final rule, the NQF undertook a 2-year trial period in which certain new measures, measures undergoing maintenance review, and measures endorsed with the condition that they enter the trial period were assessed to determine whether risk adjustment for selected social risk factors is appropriate for these measures. This trial entailed temporarily allowing inclusion of social risk factors in the risk-adjustment approach for these measures. We await the recommendations of the NQF trial on risk adjustment for quality measures.

We note that the AMI Payment and HF Payment measures adopted in the FY 2017 IPPS/LTCH PPS final rule (81 FR 56987 through 56990 and 81 FR 56990 through 56992, respectively), as well as the Hospital-Level, Risk-Standardized Payment Associated with a 30-Day Episode-of-Care for Pneumonia (PN Payment) measure (prior to the expansion of the measure cohort), recently underwent successful NQF re-endorsement following enrollment in the NQF's trial. Based on its review of these measures during the trial, the NQF re-endorsed these measures without modifications to their risk adjustment methodologies for social risk factors. We are finalizing our proposal to adopt the PN Payment measure beginning with the FY 2022 program year for the Hospital VBP Program (we refer readers to section V.J.4.a. of the preamble of this final rule), and we intend to submit the measure with the proposed expanded measure cohort for NQF review during the measure's next re-endorsement review.

As we continue to consider the analyses and recommendations from these reports and await the results of the NQF trial on risk adjustment for quality measures, we are continuing to work with stakeholders in this process. As we have previously communicated, we are

concerned about holding providers to different standards for the outcomes of their patients with social risk factors because we do not want to mask potential disparities or minimize incentives to improve the outcomes for disadvantaged populations. Keeping this concern in mind, while we sought input on this topic previously, we continue to seek public comment on whether we should account for social risk factors in the Hospital VBP Program, and if so, what method or combination of methods would be most appropriate for accounting for social risk factors. Examples of methods include: Adjustment of the payment adjustment methodology under the Hospital VBP Program; adjustment of provider performance scores (for instance, stratifying providers based on the proportion of their patients who are dual eligible); confidential reporting of stratified measure rates to providers; public reporting of stratified measure rates; risk adjustment of a particular measure as appropriate based on data and evidence; and redesigning payment incentives (for instance, rewarding improvement for providers caring for patients with social risk factors or incentivizing providers to achieve health equity).

We note that in section V.I.9. of the preamble of this final rule, we discuss considerations for stratifying hospitals into peer groups for purposes of assessing payment adjustments under the Hospital Readmissions Reduction Program, as required under the 21st Century Cures Act. We refer readers to that section for a detailed discussion of these alternatives; while this discussion and corresponding proposal are specific to the Hospital Readmissions Reduction Program, they reflect the level of analysis we would undertake when evaluating methods and combinations of methods for accounting for social risk factors in CMS' other value-based purchasing programs, such as the Hospital VBP Program. While we consider whether and to what extent we currently have statutory authority to implement one or more of the above-described methods, in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19969), we sought comments on whether any of these methods should be considered, and if so, which of these methods or combination of methods would best account for social risk factors in the Hospital VBP Program.

In addition, in the proposed rule, we sought public comment on which social risk factors might be most appropriate for stratifying measure scores and/or potential risk adjustment of a particular measure. Examples of social risk factors

include, but are not limited to, dual eligibility/low-income subsidy, race and ethnicity, and geographic area of residence. We also sought comments on which of these factors, including current data sources where this information would be available, could be used alone or in combination, and whether other data should be collected to better capture the effects of social risk. We also welcomed comment on operational considerations. Of note, implementing any of the above methods would be taken into consideration in the context of how this and other CMS programs operate (for example, data submission methods, availability of data, statistical considerations relating to reliability of data calculations, among others).

We received extensive comments in response to our request for public comment on whether we should account for social risk factors in the Hospital VBP Program, and if so, what method or combination of methods would be most appropriate for accounting for social risk factors.

*Comment:* Commenters were generally supportive of accounting for social risk factors at the domain and measure level for the Hospital VBP Program in order to avoid penalizing hospitals for factors beyond their control or issues with the measures themselves. These commenters further stated that because social risk factors influence health outcomes, failure to appropriately risk-adjust for these factors in outcome measures could result in inadvertent penalties for hospitals who treat large populations of socially at-risk patients, and unintended consequences, such as reduced access to care for complex patients, due to provider concern that treating high-risk patients could negatively affect their performance rating. Commenters specifically recommended that CMS look to risk-adjust for socio-demographic and socioeconomic factors—such as income, education, race, payer type, patient travel distance, homelessness, and language proficiency—as well as functional status and frailty. However, commenters also stated concerns that changing Medicare payment policies to risk adjust or stratify measure rates for social risk factors would not address the underlying disparities that are often associated with poor health outcomes, would mask potential disparities or minimize incentives to improve the outcomes for disadvantaged populations, and may create perverse incentives for poor performers to continue with the status quo and for high performers to retreat from their

efforts to address disparities in high social risk factor populations.

*Response:* We appreciate all the comments and interest in this topic. As we have previously stated, we are concerned about holding providers to different standards for the outcomes of their patients with social risk factors, because we do not want to mask potential disparities or minimize incentives to improve outcomes for disadvantaged populations. We believe that the path forward should incentivize improvements in health outcomes for disadvantaged populations while ensuring that beneficiaries have access to excellent care. We intend to consider all suggestions as we continue to assess each measure and the overall program. We appreciate that some commenters recommended risk adjustment as a strategy to account for social risk factors, while others stated a concern that risk adjustment could minimize incentives and reduce efforts to address disparities for patients with social risk factors. We intend to conduct further analyses on the impact of strategies such as measure-level risk adjustment and stratifying performance scoring to account for social risk factors including the options suggested by commenters. In addition, we appreciate the recommendations from the commenters about consideration of specific social risk factor variables and will work to determine the feasibility of collecting these patient-level variables. As we consider the feasibility of collecting patient-level data and the impact of strategies to account for social risk factors through further analysis, we will continue to evaluate the reporting burden on providers. Future proposals would be made after further research and continued stakeholder engagement.

### 3. Retention and Removal of Quality Measures for the FY 2019 Program Year

#### a. Retention of Previously Adopted Hospital VBP Program Measures

In the FY 2013 IPPS/LTCH PPS final rule (77 FR 53592), we finalized a policy to retain measures from prior program years for each successive program year, unless otherwise proposed and finalized. In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19970), we did not propose any changes to this policy.

#### b. Removal of the PSI 90 Measure

In the FY 2017 IPPS/LTCH PPS final rule (81 FR 56979 through 56981), we finalized our proposal to shorten the performance period for the current<sup>35</sup>

<sup>35</sup> The "current" PSI 90 measure refers to the version of the PSI 90 measure previously finalized

PSI 90 measure for the FY 2018 program year due to concerns associated with combining measure performance data that use both ICD-9 and ICD-10 data in calculating performance scores under the measure. In that final rule, we explained our system requires an ICD-10 risk-adjusted version of the AHRQ PSI software<sup>36</sup> in order to calculate scores using ICD-10 codes, and AHRQ needs a full year of nationally representative ICD-10 coded data before it can complete development of risk-adjusted models based on a national reference population for this software. This means the AHRQ PSI software will not be available for us to calculate scores until late CY 2017. More importantly, we noted an ICD-10 version of the current PSI 90 measure is not being developed (81 FR 56980), nor will ICD-10 AHRQ PSI software be available to calculate performance scores for the FY 2019 program year (81 FR 56981). As a result, we will not be able to calculate performance scores for the current PSI 90 measure for the FY 2019 program year because these scores would include ICD-10 data. Based on these concerns, in the FY 2017 IPPS/LTCH PPS final rule (81 FR 56981), we signaled our intent to propose to remove the current PSI 90 measure from the Hospital VBP Program beginning with the FY 2019 program year. In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19970), we proposed to remove the current PSI 90 measure from the Hospital VBP Program beginning with the FY 2019 program year.

We invited public comment on this proposal. We also refer readers to section V.J.4.b. of the preamble of this final rule where we discuss our proposal to adopt the modified version of the PSI 90 measure for the Hospital VBP Program beginning with the FY 2023 program year.

*Comment:* The vast majority of commenters supported CMS' proposal to remove the PSI 90 measure from the Hospital VBP Program beginning with the FY 2019 program year.

*Response:* We thank the commenters for their support.

*Comment:* Two commenters supported the removal of PSI 90 from the Hospital VBP Program measure set, but recommended CMS remove the measure immediately and permanently, including the FY 2018 program year. A

for use in the Hospital VBP Program in the FY 2013 IPPS/LTCH PPS final rule (78 FR 50694).

<sup>36</sup> The AHRQ PSI Software is the software used to calculate PSIs and the composite measure. More information is available at: [http://www.qualityindicators.ahrq.gov/Downloads/Resources/Publications/2015/Empirical\\_Methods\\_2015.pdf](http://www.qualityindicators.ahrq.gov/Downloads/Resources/Publications/2015/Empirical_Methods_2015.pdf).

few commenters noted the measure is unreliable and lacks appropriate exclusions based on patient social risk factors. One commenter stated that only 15 months of data will be available for the FY 2018 performance period, questioned the measure's reliability, and stated that the measure is flawed. Another commenter expressed concern that continued use of the current PSI 90 measure during the FY 2018 program year while the HAC Reduction Program implements the modified PSI 90 measure would create confusion and misalignment across the programs.

*Response:* While we understand commenters' concerns, we previously decided to retain the currently adopted version of the PSI 90 measure for the FY 2018 program year because we had the option to shorten the performance period so that performance standards can be calculated using the ICD-9 AHRQ PSI software (81 FR 56981). We also continue to believe that this measure meets the program goal of providing important information on hospital performance on patient safety and adverse events. In addition, the PSI 90 measure was developed using a scientifically rigorous process that involved the input of technical experts and stakeholders. Further, AHRQ has supported a series of validation studies, based on detailed abstraction of medical records, that have informed AHRQ's PSI development process, including making further refinements to indicators and working with others to improve coding practices. We refer commenters to the AHRQ PSI Development zip file and AHRQ Composite Measures Workgroup document available at: [http://www.qualityindicators.ahrq.gov/modules/psi\\_resources.aspx](http://www.qualityindicators.ahrq.gov/modules/psi_resources.aspx). We therefore believe that the PSI 90 measure in its current form is reliable, valid, and appropriate to retain in the Hospital VBP Program for the FY 2018 program year because it encourages robust hospital attention to patient safety. We further believe that a 15-month performance period is sufficiently reliable, particularly in light of the case minimum of three cases for any of the underlying PSI 90 indicators as finalized in the FY 2013 IPPS/LTCH PPS final rule (77 FR 53609). Because we believe the measure is sufficiently reliable with 15 months of data, we do not believe we need to suspend or remove the measure or extend the measure's performance period for the FY 2018 program year.

*Comment:* A few commenters did not support the removal of PSI 90, stating that retaining consistency in measures over time enables hospitals to focus on improvement and CMS should not

allow a 3-year lapse in public reporting of a critical safety measure. One commenter expressed particular concern that removing the current PSI 90 measure will result in a redistribution of the Safety domain score across the NHSN measures, which the commenter believed are of limited value because they allow hospitals to use different surveillance methods and have inadequate risk adjustment. Commenters therefore urged CMS to look more broadly for opportunities to accelerate the inclusion of the proposed Patient Safety and Adverse Events (Composite) measure into the Hospital VBP Program, such as suspending the current PSI 90 measure for one year and phasing in a 24-month performance period beginning in FY 2020, or continuing to include the current PSI 90 measure rather than waiting for the new measures to become available to ensure that surgical complications remain a key component of the Hospital VBP Program.

*Response:* We thank the commenters for their recommendations, but note that, as discussed in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19970), we will be unable to calculate measure scores for the current PSI 90 measure in the FY 2019 program year because ICD-10 AHRQ PSI software for the currently adopted measure will not be available. This lack of measure calculation software also precludes us from suspending the measure for one year and re-instituting the measure in FY 2020 using only ICD-10 data, because we will not be able to calculate measure scores.

Furthermore, due to certain statutory requirements in the Hospital VBP Program, we are unable to adopt the proposed Patient Safety and Adverse Events (Composite) measure earlier than proposed. Section 1886(o)(2)(A) of the Act requires the Hospital VBP Program to select measures that have been specified for the Hospital IQR Program. In addition, section 1886(o)(2)(C)(i) of the Act requires the Hospital VBP Program to refrain from beginning the performance period for a new measure until data on the measure have been posted on *Hospital Compare* for at least one year. The Hospital IQR Program finalized adoption of the modified PSI 90 measure (also known as the Patient Safety and Adverse Events (Composite) measure) in the FY 2017 IPPS/LTCH PPS final rule (81 FR 57133), and we are required to wait one full year after data has been posted before that measure's performance period may begin in the Hospital VBP Program. Because measure data for the Patient Safety and Adverse Events (Composite) measure has not

been posted on *Hospital Compare*, we are unable to adopt the measure for the FY 2019 program year. However, as discussed the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19973 through 19974), we proposed to adopt the Patient Safety and Adverse Events (Composite) measure beginning with the FY 2023 program year, which was the soonest program year possible under the Hospital VBP Program’s statutory authority.

After consideration of the public comments we received, we are finalizing our proposal to remove the current PSI 90 measure from the Hospital VBP Program beginning with the FY 2019 program year.

c. Summary of Previously Adopted Measures and Finalized Measure for Removal for the FY 2019 and FY 2020 Program Years

In summary, for the FY 2019 and FY 2020 program years, we have finalized the following measure set, which no longer includes the current PSI 90 measure, as we are finalizing our proposal to remove the measure from the Hospital VBP Program beginning with the FY 2019 program year:

**PREVIOUSLY ADOPTED MEASURES AND FINALIZED MEASURE FOR REMOVAL FOR THE FY 2019 AND FY 2020 PROGRAM YEARS**

Measure short name	Domain/measure name	NQF #
<b>Person and Community Engagement Domain *</b>		
HCAHPS .....	Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS)** ..... (including Care Transition Measure) .....	0166 (0228)
<b>Clinical Care Domain</b>		
MORT–30–AMI .....	Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate (RSMR) Following Acute Myocardial Infarction (AMI) Hospitalization.	0230
MORT–30–HF .....	Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate (RSMR) Following Heart Failure (HF) Hospitalization.	0229
MORT–30–PN .....	Hospital 30-Day, All-Cause, Risk-Standardized Mortality Rate (RSMR) Following Pneumonia Hospitalization.	0468
THA/TKA .....	Hospital-Level Risk-Standardized Complication Rate (RSCR) Following Elective Primary Total Hip Arthroplasty (THA) and/or Total Knee Arthroplasty (TKA).	1550
<b>Safety Domain</b>		
CAUTI .....	National Healthcare Safety Network (NHSN) Catheter-Associated Urinary Tract Infection (CAUTI) Outcome Measure.	0138
CLABSI .....	National Healthcare Safety Network (NHSN) Central Line-Associated Bloodstream Infection (CLABSI) Outcome Measure.	0139
Colon and Abdominal Hysterectomy SSI.	American College of Surgeons—Centers for Disease Control and Prevention (ACS–CDC) Harmonized Procedure Specific Surgical Site Infection (SSI) Outcome Measure.	0753
MRSA Bacteremia .....	National Healthcare Safety Network (NHSN) Facility-wide Inpatient Hospital-onset Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA) Bacteremia Outcome Measure.	1716
CDI .....	National Healthcare Safety Network (NHSN) Facility-wide Inpatient Hospital-onset <i>Clostridium difficile</i> Infection (CDI) Outcome Measure.	1717
PC–01 .....	Elective Delivery .....	0469
<b>Efficiency and Cost Reduction Domain</b>		
MSPB .....	Payment-Standardized Medicare Spending Per Beneficiary (MSPB) .....	2158

\* In section IV.H.3.b. of the preamble of the FY 2017 IPPS/LTCH PPS final rule (81 FR 56984), we renamed this domain from Patient- and Caregiver-Centered Experience of Care/Care Coordination domain to Person and Community Engagement domain beginning with the FY 2019 program year.

\*\* In section XIX.B.3. of the preamble of the CY 2017 OPPI/ASC final rule with comment period (81 FR 79855 through 79862), we finalized the removal of the Pain Management dimension from the Hospital VBP Program beginning with the FY 2018 program year.

**4. New Measures for the FY 2022 Program Year, FY 2023 Program Year, and Subsequent Years**

We consider measures for adoption based on the statutory requirements, including specification under the Hospital IQR Program, posting dates on the *Hospital Compare* Web site, and our priorities for quality improvement as outlined in the current CMS Quality Strategy, available at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/>

*CMS-Quality-Strategy.html*. Due to the time necessary to adopt measures, we often adopt policies for the Hospital VBP Program well in advance of the program year for which they will be applicable.

a. New Measure for the FY 2022 Program Year and Subsequent Years: Hospital-Level, Risk-Standardized Payment Associated With a 30-Day Episode-of-Care for Pneumonia (PN Payment)

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19971 through 19973), we proposed a new measure for the FY 2022 program year and subsequent years:

Hospital-Level, Risk-Standardized Payment Associated With a 30-Day Episode-of-Care for Pneumonia (PN Payment).

(1) Measure Proposal

Hospital-Level, Risk-Standardized Payment Associated with a 30-Day Episode-of-Care for Pneumonia (PN Payment) is a measure assessing hospital risk-standardized payment associated with a 30-day episode-of-care for pneumonia. We adopted this measure in the Hospital IQR Program in the FY 2015 IPPS/LTCH PPS final rule (79 FR 50227 through 50231), and we adopted an updated version of the measure, with an expanded cohort and modified risk-adjustment model, in the FY 2017 IPPS/LTCH PPS final rule (81 FR 57125 through 57128). For purposes of describing this measure, the “cohort” is the set of hospitalizations, or “index admissions,” that meet all of the measure’s inclusion and exclusion criteria and, thus, are used to calculate the total payments Medicare makes on behalf of these Medicare beneficiaries for a 30-day episode-of-care. The cohort for the expanded version of the PN Payment measure includes Medicare FFS patients aged 65 or older with: (1) A principal hospital discharge diagnosis of pneumonia, including not only viral or bacterial pneumonia but also aspiration pneumonia; or (2) a principal discharge diagnosis of sepsis (but not severe sepsis) with a secondary diagnosis of pneumonia (including viral or bacterial pneumonia and aspiration pneumonia) coded as present on admission. The measure calculates payments for these patients over a 30-day episode-of-care, beginning with the index admission, using administrative claims data. In general, the measure uses the same approach to risk-adjustment as 30-day outcome measures previously adopted for the Hospital VBP Program, including the 30-day PN mortality measure, MORT-30-PN. Initial measure data collected under the Hospital IQR Program for the expanded PN Payment cohort and modified risk-adjustment model will be posted on *Hospital Compare* in July 2017, and the full measure specifications are available at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html>.

Promoting high-value care is an essential part of our mission to provide better health care for individuals, better health for populations, and lower costs for health care. Our aim is to encourage higher value care where there is the most opportunity for improvement, the greatest number of patients to benefit

from improvements, and the largest sample size to ensure reliability. Pneumonia is one of the leading causes of hospitalization for Americans aged 65 and over,<sup>37</sup> and pneumonia patients incur roughly \$10.2 billion in aggregate health care costs.<sup>38</sup> There is evidence of variation in payments at hospitals for pneumonia patients in the proposed PN Payment measure; median 30-day risk-standardized payment among Medicare FFS patients aged 65 or older hospitalized for pneumonia was \$15,988 and ranged from \$9,193 to \$26,546 for the July 2011 through June 2014 reporting period in the Hospital IQR Program.<sup>39</sup> This variation in payment suggests there is opportunity for improvement. We believe it is important to adopt the PN Payment measure for the Hospital VBP Program because variation in payment may reflect differences in care decision-making and resource utilization (for example, treatment, supplies, or services) for patients with pneumonia both during hospitalization and immediately post-discharge. The PN Payment measure specifically addresses the NQS priority and CMS Quality Strategy goal to make quality care more affordable.

We recognize high or low payments to hospitals are difficult to interpret in isolation. Some high payment hospitals may produce better clinical outcomes when compared with low payment hospitals, while other high payment hospitals may not produce better outcomes. For this reason, payment measure results viewed in isolation are not necessarily an indication of quality. However, by viewing such information along with quality measure results, consumers, payers, and providers would be able to better assess the value of care. In order to incentivize innovation that promotes high-quality care at high value, it is important to examine measures of payment and patient outcomes concurrently. The proposed PN Payment measure is intended to be paired with the MORT-30-PN measure

<sup>37</sup> Lindenauer PK, Lagu T, Shieh M, Pekow PS, Rothberg MB. Association of diagnostic coding with trends in hospitalizations and mortality of patients with pneumonia, 2003–2009. *JAMA*. 2012;307(13):1405–1413.

<sup>38</sup> Pfuntner, A (Truven Health Analytics), Wier, LM (Truven Health Analytics), Steiner, C (AHRQ). Costs for Hospital Stays in the United States, 2010. HCUP Statistical Brief #146. January 2013. Agency for Healthcare Research and Quality, Rockville, MD. Available at: <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb146.pdf>.

<sup>39</sup> 2016 Reevaluation and Re-Specifications Report of the Hospital-Level 30-Day Risk-Standardized Pneumonia Payment Measure. AMI, HF, PN Payment Updates (zip file). Available at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html>.

in the Hospital VBP Program,<sup>40</sup> thereby directly linking payment to quality by the alignment of comparable populations and risk-adjustment methodologies to facilitate the assessment of efficiency and value of care. We believe adopting the PN Payment measure will create stronger incentives for appropriately reducing practice pattern variation to achieve the aim of lowering the cost of care and creating better coordinated care for Medicare beneficiaries.

We proposed to adopt the PN Payment measure beginning with the FY 2022 program year. The PN Payment measure would be added to the Efficiency and Cost Reduction domain. The proposed measure fulfills all of the statutory requirements for the Hospital VBP Program based on our adoption of the measure in the Hospital IQR Program, and our anticipated posting of measure data for the refined PN Payment measure, with the expanded cohort and modified risk-adjustment model, on *Hospital Compare* beginning July 2017, which would be at least one year before the beginning of the proposed performance period of August 1, 2018. We refer readers to sections V.J.5.c.(3) through V.J.5.c.(5) of the preamble of this final rule where we discussed our proposed baseline periods and performance periods for this measure if adopted for the Hospital VBP Program.

The proposed PN Payment measure (MUC15-378) was reviewed by the MAP in December 2015 and did not receive support for adoption into the Hospital VBP Program.<sup>41</sup> The result of the MAP vote was 31 percent support, 15 percent conditional support, and 54 percent do not support. The MAP’s decision of “do not support” for the proposed PN Payment measure was based on concerns that the measure may overlap with and thereby double count services that are already captured in the MSPB measure. In addition, some MAP members expressed a desire to have more experience with the measure in the Hospital IQR Program to understand

<sup>40</sup> The Hospital VBP Program first adopted the MORT-30-PN measure for the FY 2014 program year in the Hospital Inpatient Value-Based Purchasing Program final rule (76 FR 26497 through 26511). We subsequently expanded the measure cohort beginning with the FY 2021 program year in the FY 2017 IPPS/LTCH PPS final rule (81 FR 56994 through 56996).

<sup>41</sup> “2016 Spreadsheet of Final Recommendations to HHS and CMS” available at: <http://www.qualityforum.org/ProjectMaterials.aspx?projectID=75367> and “Process and Approach for MAP Pre-Rulemaking Deliberations” found at: [http://www.qualityforum.org/Publications/2016/02/Process\\_and\\_Approach\\_for\\_MAP\\_Pre-Rulemaking\\_Deliberations.aspx](http://www.qualityforum.org/Publications/2016/02/Process_and_Approach_for_MAP_Pre-Rulemaking_Deliberations.aspx).

whether there may be unintended consequences or a need to adjust for social risk factors. We note some MAP members expressed support for the proposed PN Payment measure and other condition-specific payment measures, expressing that the increased granularity provided by condition-specific payment measures will provide valuable feedback to hospitals for targeted improvement.

With respect to MAP stakeholder concerns that treatment- or condition-specific payment measures may overlap and double count services, we note that the proposed PN Payment measure addresses a topic of critical importance to quality improvement in the inpatient hospital setting. As discussed above, we selected the PN Payment measure because we believe it is appropriate to provide stronger incentives for hospitals to provide high-value and efficient care, especially for a high-volume condition such as pneumonia. We acknowledge that hospitals that do not perform well on the PN Payment measure may also perform poorly on the MSPB measure and potentially receive a lower incentive payment, depending upon their performance on other measures. However, because admissions for pneumonia make up only a part of all admissions included in the MSPB measure, a hospital's results on the MSPB measure may not be the same as their result on the PN Payment measure. In other words, a hospital's results for one measure are not deterministic of its results of the other, so we cannot state conclusively that if a hospital performs well (or poorly) on one measure, that they will also perform well (or poorly) on the second measure. Hospitals would perform differently on the MSPB and PN Payment measures because these measures evaluate performance on different metrics. For example, some hospitals with poorer results on the MSPB measure may have better results on the PN Payment measure allowing them to improve their overall score. In addition, the overlap between the MSPB and PN Payment measures may result in some hospitals receiving an increased benefit by performing well on both measures. Furthermore, if a hospital does not perform as well on the MSPB measure relative to other hospitals but performs very well with respect to its pneumonia patients on the proposed PN Payment measure, that hospital would have the opportunity to earn a higher score in the Efficiency and Cost Reduction domain.

Regarding MAP stakeholder concerns for the need to adjust for social risk factors, we note the proposed PN Payment measure already incorporates a

risk-adjustment methodology that accounts for age and comorbidities. We understand the important role social risk factors play in the care of patients, routinely monitor the impact of social risk factors on hospitals' results on our measures, and will continue to do so. In addition, as discussed in section V.J.3. of the preamble of this final rule, the original PN Payment measure using the previous measure cohort (Hospital-level, risk-standardized payment associated with a 30-day episode-of-care for pneumonia (NQF #2579)), as well as the AMI Payment and HF Payment measures adopted in the FY 2017 IPPS/LTCH PPS final rule (81 FR 56987 through 56990 and 81 FR 56990 through 56992, respectively), which use the same measurement methodology as the proposed PN Payment measure, recently underwent successful NQF re-endorsement following enrollment in the NQF's trial. The NQF re-endorsed these measures without requesting modifications to their risk adjustment methodologies for adjustment by social risk factors. The proposed PN Payment measure includes an updated risk-adjustment model that accounts for patient comorbidities, and we intend to submit to NQF that risk adjustment model as part of the overall proposed PN Payment measure specifications during the next Cost and Resource Use project.

As noted above, some MAP members expressed support for the proposed PN Payment measure and other condition-specific payment measures, agreeing the increased granularity provided by condition-specific payment measures will provide valuable feedback to hospitals for targeted improvement. In addition, a NQF-commissioned white paper also supports the position that cost or payment measures should be interpreted in the context of quality measures and that measures which link cost and quality are the preferred method of assessing hospital efficiency.<sup>42</sup> The PN Payment measure, which directly pairs with the MORT-30-PN measure in the Hospital VBP Program, follows this recommended approach. Based on our analysis of the issues surrounding condition-specific payment measures, we believe the benefits of adopting the PN Payment measure outweigh any potential risks; however, we also remain committed to monitoring for unintended consequences.

We invited public comment on this proposal.

<sup>42</sup>Ryan AM, Tompkins CP. Efficiency and Value in Healthcare: Linking Cost and Quality Measures. Washington, DC: NQF; 2014.

*Comment:* A number of commenters supported the addition of the PN Payment measure. A few commenters supported adoption of the PN Payment measure because pneumonia is one of the leading causes of hospitalization for Americans aged 65 and over, and these hospitalizations result in high aggregate costs for patients. Two commenters expressed particular support for the measure's inclusion of patients with a principal diagnosis of aspiration pneumonia, or a principal diagnosis of sepsis with a secondary diagnosis of pneumonia, because including these patients addresses stakeholder concerns regarding variation in coding of pneumonia as a principal diagnosis in order to avoid patients being captured by the pneumonia episode of care measure. Two other commenters noted the measure's alignment with the National Quality Strategy, and that tracking of this measure will enable identification of outlier performers in managing pneumonia and thereby spur incorporation of evidence-based practices for monitoring and managing pneumonia patients. One commenter expressed support for CMS' intention to focus more strongly on cost as an element of value in the Hospital VBP Program.

*Response:* We thank the commenters for their support.

*Comment:* One commenter expressed support for CMS' goals in proposing to adopt the PN Payment measure, but urged CMS to carefully consider the risk adjustments used in this measure because not all pneumonia diagnoses are comparable and factors outside the control of hospitals, such as geographic location, can impact the disease. Another commenter strongly recommended that CMS not include the PN Payment measure in the Hospital VBP Program because the expansion of the PN Payment measure cohort to include patients with a principal discharge diagnosis of aspiration pneumonia or sepsis with a secondary diagnosis of pneumonia coded as present on admission could make hospitals that care for complex patients look worse unless there is appropriate risk adjustment for social risk factors.

*Response:* We appreciate the commenters' concerns that different types of pneumonia, such as community acquired pneumonia and aspiration pneumonia, have different causes and associated risks (for example, recurrent aspiration due to other comorbidities). While the pathological causes of aspiration pneumonia are slightly different from the causes of community acquired pneumonia, in routine clinical practice, evidence shows it can be very

challenging for physicians to differentiate aspiration syndromes, including pneumonitis and pneumonia, from other types of pneumonia included in the measure.<sup>43 44</sup> This is reflected in the tremendous variation across hospitals in the use of aspiration pneumonia diagnosis codes. This variation suggests that hospitals are not consistently distinguishing between these conditions as distinct subtypes regardless of patients' comorbid conditions. Furthermore, we note that the treatment of patients hospitalized for pneumonia, aspiration pneumonia, or sepsis due to pneumonia is very similar and involves treatment with antibiotics, IV fluids, and symptom management.<sup>45</sup> In addition, although some patients with aspiration pneumonia, such as medically frail patients, have a higher predicted mortality risk (that is, are more complex), many of the associated comorbidities are captured in the PN Payment measure's risk-adjustment methodology.

With respect to geographic variation, the incidence of fungal and mycobacterial infections are strongly associated with a patient's area of residence, and these infections would be expected to have different outcomes than typical bacterial and viral pneumonias, including higher levels of spending. They also involve different treatments than those provided to patients with typical bacterial and viral pneumonia. These considerations justify their continued exclusion from the pneumonia outcome measures. Although similar arguments might be applied to the different bacterial pathogens included in the pneumonia measure, most treatment of pneumonia remains empiric, and it is unusual to identify a specific etiologic agent. For this reason, we do not believe that is appropriate to include the specific bacterial pathogen in risk-adjustment models.

The risk adjustment model adequately accounts for the varying severity and comorbidities of patients across the modified cohort; therefore, we believe that hospitals will not be unfairly penalized for treating sicker patients. Expanding the measure cohort ensures that the measure is clinically comprehensive. Moreover, the treatment

of patients hospitalized for pneumonia, aspiration pneumonia, or sepsis due to pneumonia is very similar and involves treatment with antibiotics, IV fluids, and symptom management. In addition, although some patients with aspiration pneumonia, such as medically frail patients, have a higher predicted mortality risk, many of the associated comorbidities are captured in the MORT-30-PN (updated cohort) measure's risk-adjustment methodology. Of note, due to the increased number of patients that are included in the expanded cohort, we reselected risk-adjustment variables to ensure that the measure does not bias hospital performance as well as accounts for the differences in risk among the subgroup of patients. For example, the risk model includes clinical history of stroke, as well as conditions associated with frailty, such as neuromuscular disease, and dementia. The full PN Payment measure specifications are available at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/Measure-Methodology.html>.

*Comment:* Many commenters did not support adoption of the PN Payment measure because it will overlap with the MSPB measure in the Efficiency and Cost Reduction domain. A large subset of these commenters did not support adoption of the PN Payment measure because the MAP did not support this measure for inclusion in the Hospital VBP Program, and stated their belief that CMS has not addressed the MAP's concerns of double-counting and overlap with services already captured by the MSPB measure, which could potentially penalize hospitals twice for the same episode. A number of commenters urged CMS to reconcile this overlap before adopting the PN Payment measure by removing episodes of pneumonia payment from the MSPB measure calculation. One commenter expressed concern that the overlap between the MSPB and proposed PN Payment measures may send mixed signals to hospitals about their resource use performance. One commenter also noted that it will be possible for hospitals to score well on the MSPB measure, but poorly on the condition-specific payment measures, even though the measures will capture many of the same services.

*Response:* While we acknowledge that there may be some overlap between the MSPB and condition-specific payment measures, including the PN Payment measure, we believe that the condition-specific measures are of critical importance to improving efficiency of care. We selected the PN Payment

measure for the Hospital VBP Program because pneumonia is one of the leading causes of hospitalization for Americans aged 65 and over,<sup>46</sup> and pneumonia patients incur roughly \$10 billion in aggregate health care costs.<sup>47</sup> Including condition-specific measures alongside the MSPB measure provides hospitals with actionable feedback that will better equip them to implement targeted improvements, in comparison to an overall payment measure alone. Moreover, these condition-specific measures will allow consumers, providers, and payers to make a more fully informed assessment of value of care.

As we noted in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19972), because admissions for pneumonia make up only a part of all admissions included in the MSPB measure, a hospital's results on the MSPB measure may not be the same as their result on the PN Payment measure, and hospitals would perform differently on the MSPB and PN Payment measures because these measures evaluate performance on different metrics. In other words, a hospital's results for one measure are not deterministic of its results of the other, so we cannot state conclusively that if a hospital performs well (or poorly) on one measure, that they will also perform well (or poorly) on the second measure. We believe that even if some services were double counted, hospitals that offer quality service and maintain better results on the MSPB and condition-specific payment measures relative to other hospitals in the Hospital VBP Program could receive an increased benefit by performing well on both quality measures and payment measures. Furthermore, because hospitals would have bigger financial incentives, they would strive to perform better, which would lead to better quality.

In addition, we note that the PN Payment measure already incorporates a risk-adjustment methodology that accounts for age and comorbidities, discussed in more detail below. We understand the important role social risk factors play in the care of patients, routinely monitor the impact of social

<sup>43</sup> Lanspa MJ, Jones BE, Brown SM, Dean NC. Mortality, morbidity, and disease severity of patients with aspiration pneumonia. *J Hosp Med.* 2013 Feb;8(2):83–90. doi: 10.1002/jhm.1996. Epub 2012 Nov 26.

<sup>44</sup> Marik PE. Aspiration pneumonitis and aspiration pneumonia. *N Engl J Med.* 2001 Mar 1;344(9):665–71.

<sup>45</sup> *Ibid.*

<sup>46</sup> Lindenauer PK, Lagu T, Shieh M, Pekow PS, Rothberg MB. Association of diagnostic coding with trends in hospitalizations and mortality of patients with pneumonia, 2003–2009. *JAMA.* 2012;307(13):1405–1413.

<sup>47</sup> Pfuntner, A (Truven Health Analytics), Wier, LM (Truven Health Analytics), Steiner, C (AHRQ). Costs for Hospital Stays in the United States, 2010. HCUP Statistical Brief #146. January 2013. Agency for Healthcare Research and Quality, Rockville, MD. Available at: <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb146.pdf>.

risk factors on hospitals' results on our measures, and will continue to do so.

*Comment:* A number of commenters did not support adoption of the PN Payment measure because the measure is not risk-adjusted to account for socio-demographic status factors. Some of these commenters expressed further concern that the measure is not risk-adjusted to account for socioeconomic status factors. One commenter stated that previous testing of the measure should have included additional social risk factors, such as community characteristics. One commenter stated that it is premature to adopt the PN Payment measure without the NQF SDS trial results. Another commenter acknowledged the PN Payment measure was reviewed as part of the NQF's SDS trial and NQF's evaluation indicated that SDS adjustment was not necessary, but recommended that CMS continue to examine the impact of socioeconomic factors on measure performance under the PN Payment measure and incorporate adjustments as needed. A third commenter encouraged CMS to continue to engage with stakeholders regarding the inclusion of social risk factors for the PN Payment measure, noting that specific risk factors often lead to worse outcomes, so providing care may cost more and make it more difficult for hospitals to achieve high performance on quality measures.

*Response:* We acknowledge commenters' concerns that the proposed PN Payment measure is not properly risk-adjusted and we understand the important role that socio-demographic status plays in the care of patients; however, we continue to believe the PN Payment measure's risk-adjustment methodology is appropriate and reliable. As we noted in the FY 2018 IPPS/LTCH PPS proposed rule, the proposed measure already incorporates a risk-adjustment methodology that accounts for age and comorbidities and we intend to submit to NQF that risk adjustment model as part of the overall proposed PN Payment measure specifications during the next Cost and Resource Use project. We also continue to have concerns about holding hospitals to different standards for the outcomes of their patients of diverse socio-demographic status because we do not want to mask potential disparities or minimize incentives to improve the outcomes of disadvantaged populations.

In addition, as discussed in section V.J.3. of the preamble of this final rule, the original PN Payment measure using the previous measure cohort (Hospital-level, risk-standardized payment associated with a 30-day episode-of-care for pneumonia (NQF #2579)), as well as

the AMI Payment and HF Payment measures adopted in the FY 2017 IPPS/LTCH PPS final rule (81 FR 56987 through 56990 and 81 FR 56990 through 56992, respectively), which use the same measurement methodology as the proposed PN Payment measure, recently underwent successful NQF re-endorsement following enrollment in the NQF's trial. The NQF 2-year trial period allowed for the temporary inclusion of socio-demographic factors in the risk-adjustment approach for some performance measures. This trial period considered the analyses and interpretations as well as performance scores with and without socio-demographic factors in the risk-adjustment model. NQF's evaluation indicated that SDS adjustment was not necessary for this measure. We routinely monitor the impact of socio-demographic status on hospitals' results on our measures and, as noted in section V.J.2. of the preamble of this final rule where we discuss accounting for social risk factors in the Hospital VBP Program, we will conduct further research and continue engaging stakeholders as we assess the appropriateness of any specific strategies such as measure-level risk adjustment or stratified performance scoring.

We also thank commenters for their recommendation that we engage with stakeholders regarding risk adjustments for the PN Payment measure, and note we routinely solicit public comment on our payment measures and other measures under development. For current and future opportunities, we encourage the commenter to visit the CMS Quality Measures Public Comment page at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/MMS/CallforPublicComment.html>. In addition, there are opportunities for stakeholders to serve on Technical Expert Panels and provide technical input to CMS and the measure contractors on the development, selection, and maintenance of measures. We refer the commenter to the following Web site for more information: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/MMS/TechnicalExpertPanels.html>.

*Comment:* Some commenters did not support the addition of condition-specific payment measures because the commenters believed the measures inappropriately assign costs to the hospitals. A few commenters noted that variations in Medicare payments are due primarily to readmission rates and post-acute care. One commenter further noted that post-acute care use varies due

to wide-ranging differences in local market availability of these services and patterns of care, which are not within the hospital's control. Two commenters recommended that CMS work with the hospital community to develop and implement efficiency metrics of spending that hospitals directly influence because the current and proposed condition-specific payment measures include physician spending and preferences, which are beyond the control of the hospital. One commenter recommended limiting inclusion of payments used in the calculation of the measures to only payment directly related to the condition-specific index admission, because the commenter believed this would be a more accurate proxy for factors within a hospital's control than all spending over a 30-day period.

*Response:* We continue to believe that hospitals that provide quality inpatient care and conduct appropriate discharge planning can work with providers and suppliers in coordinating efficient follow-up care. When examining variation in payments, consideration of the episode-of-care triggered by admissions is meaningful for several reasons. First, hospitalizations represent a brief period of a patient's illness that require ongoing management post discharge, and decisions made at the admitting hospital affect payments for care in the immediate post discharge period. Second, attributing payments for a continuous episode-of-care to admitting hospitals may reveal practice variations in the full care of the patient's illness that can result in increased payments. Third, a 30-day preset window provides a standard observation period by which to compare all hospitals. Lastly, we note the PN Payment measure is intended to be paired with the MORT-30-PN measure to capture payments for Medicare fee-for-service patients age 65 and older across all care settings, services, and supplies (that is, inpatient, outpatient, skilled nursing facility, home health, hospice, physician/clinical laboratory/ambulance services, durable medical equipment, prosthetics/orthotics, and supplies).

We thank commenters for the recommendations and note that we have developed, and will continue to develop, efficiency measures in consultation with clinical and measurement experts, key stakeholders (including the hospital and patient communities), and the public. We disagree with commenters that all payment measures should be limited to only payments directly related to the index admission because, as noted

above, we continue to believe that inclusion of payments on a broad range of services incentivizes quality care and care coordination. The intensity of services needed for patients after an inpatient stay may be the result of quality failures during the stay that led to poor clinical outcomes.

*Comment:* A few commenters did not support adoption of the proposed PN Payment measure due to concerns about the measure's validity and reliability. One commenter asserted that because not all hospitals will have sufficient volume to be scored on each condition-specific payment measure, the statistical reliability of those measures' scores will likely be lower than the MSPB measure and, as a result, provide a less useful picture of hospital performance. Another commenter recommended that CMS not adopt the PN Payment measure because the measure's population is too small to be stable, reliable, or meaningful for many smaller facilities. A third commenter cautioned against implementation of the PN Payment measure without conclusive evidence that the measure is clinically and statistically fair and meaningful. One commenter recommended that if CMS chooses to finalize the PN Payment measure, it use the years leading up to FY 2022 to ensure the validity of the measure and resolve MAP stakeholder concerns about incorporating social risk factors into the measure to improve quality of care while not unduly penalizing essential hospitals.

*Response:* We disagree with the commenter that hospitals will not be able to report statistically reliable information on the condition-specific payment measures because, as discussed in section V.J.7.c.(5) below, hospitals must report a minimum number of 25 cases to receive a payment measure score. We believe the case minimum will ensure that each hospital's payment measure rate is sufficiently reliable to generate a score that meaningfully distinguishes hospital performance on the measures. We also disagree with the commenter's assertion that the statistical reliability of the condition-specific payment measures is likely to be weaker than the MSPB measure. The statistical model that we use to calculate the payment measures allows for the inclusion of hospitals with relatively few cases by taking into account the uncertainty associated with sample size. In addition, we note the PN Payment measure uses longer baseline and performance periods than the MSPB measure (three years instead of a single year) in order to increase the measure's sample size and ensure sufficiently reliable measure results.

*Comment:* A number of commenters expressed concern that the PN Payment measure, without a linkage to a quality measure, is purely focused on payment for pneumonia episodes of care and therefore does not reflect appropriateness of care. A few commenters expressed concern that the PN Payment measure is not an indicator of value because it does not capture the quality of care provided and is not paired with measures that do so. Other commenters expressed concern about the inclusion of additional payment measures in the Hospital VBP Program and stated their belief that condition-specific payment measures themselves do not provide insight into where improvements need to be made in the delivery of care across the continuum of care. Three commenters further stated these measures do not give beneficiaries a sense of their financial obligation. A few commenters agreed with CMS' stated intent to interpret the condition-specific payment measures alongside corresponding quality measures, but asserted that adopting the payment and quality measures separately instead of directly linking the information from each measure will not provide an assessment of value. One commenter acknowledged CMS' intent to link the PN Payment and MORT-30-PN measures, but stated there are outcomes other than mortality relevant to understanding the quality and cost of care that pneumonia patients receive in the hospital.

*Response:* We disagree with the commenters who believed that the PN Payment measure, and condition-specific payment measures more generally, will not provide hospitals with actionable data for quality improvement efforts. By adopting condition-specific payment measures and viewing results alongside quality measure results, we believe that consumers, payers, and providers will be able to better assess the overall value of care provided at a hospital. We also believe that adopting condition-specific payment measures for the Hospital VBP Program that are directly paired with clinical outcome measures, aligned by comparable populations, performance periods, or risk-adjustment methodologies, helps move toward achievement of this goal. We also believe that adopting condition-specific payment measures (for example, the MORT-30-PN measure) will create stronger incentives for appropriately reducing practice pattern variation to achieve the aim of lowering the cost of care and creating better coordinated care for Medicare beneficiaries.

*Comment:* Two commenters expressed concern that the PN Payment measure's focus on reducing cost will not necessarily lead to or provide measurable proof of improved patient care and outcomes. One commenter expressed concern that focusing on cost-effectiveness will overshadow patients' needs during a care episode. One commenter expressed concern that measures focusing solely on the cost of care without consideration of overall quality create incentives for hospitals to cut costs without consideration of patients' unique needs. The commenter recommended that CMS work with hospitals and other stakeholders to ensure that existing and future episode-based measures align with the objectives of creating efficiency and economy in the Medicare program and to appropriately tailor measures in the Hospital VBP Program to support these objectives.

*Response:* We understand commenter's concern that condition-specific payment measures, viewed in isolation, may create an incentive for hospitals to focus on reducing costs without accounting for potential impacts on the quality of care provided. We also agree the PN Payment measure as a standalone measure is not designed to assess improvements in patient care or outcomes. However, we note that the Hospital VBP Program explicitly proposed to adopt the PN Payment measure for interpretation alongside the previously finalized MORT-30-PN measure, thereby linking the condition-specific payment measure with a measure of quality of care. We believe that adding the PN Payment measure, paired with the MORT-30-PN measure, will provide actionable feedback to hospitals on the overall value of their services to beneficiaries. In addition, we note that the Hospital VBP Program scoring methodology takes into account both quality and cost of care by weighting the quality domains at 75 percent of a hospital's TPS and the Efficiency and Cost Reduction domain at 25 percent of a hospital's TPS. We thank commenters for the recommendations and note that we have developed, and will continue to develop, efficiency measures in consultation with clinical and measurement experts, key stakeholders (including the hospital community), and the public.

*Comment:* A few commenters strongly recommended that CMS not include the PN Payment measure because hospital performance on the measure will not be publicly reported until after the public comment period for the FY 2018 IPPS/LTCH PPS proposed rule has ended.

Commenters noted that publicly reporting measures provides transparency on provider performance, allows hospitals to gain experience submitting data for the measure, and allows time to identify errors, unintended consequences, or other concerns with the measure methodology. One commenter asserted that stakeholders are unable to provide sufficient feedback on the PN Payment measure without access to publicly reported data on this measure. One commenter stated that all measures should be publicly reported under the Hospital IQR Program for one year before being considered for inclusion in the Hospital VBP Program.

*Response:* While we understand stakeholders' desire to see performance data from the PN Payment measure before deciding whether to adopt this measure for the Hospital VBP Program, we note that, as discussed in the FY 2018 IPPS/LTCH PPS proposed rule, the measure has undergone extensive testing and has been determined to be both reliable and valid. Furthermore, we note that the proposed adoption of this measure before its public reporting on *Hospital Compare* did not preclude hospitals from submitting questions and comments on the measure to CMS. Publicly reported PN Payment measure data became available on July 26, 2017, and we encourage hospitals, providers, patients, and other stakeholders to review these data. We further note the PN Payment measure is not proposed for implementation in the Hospital VBP Program until the FY 2022 program year with a performance period of August 1, 2018 through June 30, 2020; we believe the time period before implementation provides hospitals with sufficient time to become familiar with the measure's specifications and reporting requirements before performance on the PN Payment measure is reflected in hospitals' TPSs.

We further disagree that, absent publicly reported performance data, hospitals lack sufficient information to comment on the proposed adoption of the PN Payment measure. In proposing to adopt this measure, CMS provided a full description of the measure's specifications and its development history, explained how the proposal satisfied the requirements of the statute, and provided links to additional sources of in-depth information regarding the detailed specifications for this measure. In addition, performance data for the PN Payment measure using the original cohort has been publicly available for hospitals' review on *Hospital Compare* since July 2015. We therefore believe commenters had sufficient information

to use in reviewing the PN Payment measure, allowing them to comment meaningfully on its proposed adoption.

*Comment:* One commenter did not support CMS' proposal to adopt the PN Payment measure because the commenter believed CMS lacks a mechanism to provide claims data to hospitals in a timely manner for use in performance improvement activities under the condition-specific payment measure. The commenter further stated that risk-standardized measures are difficult to track using hospitals' internal data due to a lack of insight into care and payments provided outside of the hospital. Another commenter requested that CMS make the claims data for the measure available to hospitals on a more timely basis to allow hospitals to review the current spending per episode and make the necessary changes in improving processes.

*Response:* We acknowledge the commenter's concern that hospitals' internal data only include care provided at their hospital and the payments made on behalf of the patient for that care, whereas the PN Payment measure is designed to capture the full spectrum of care provided during and for 30 days following the index hospitalization. We therefore provide confidential, hospital-specific reports to each hospital on this and other claims-based outcome measures, which for the payment measures provides hospitals with additional information about care their patients received following discharge. The type of follow-up care patients receive is often influenced by the discharging hospital (for example, discharge to a skilled nursing facility or provision of home health care) which will then impact the cost of care for the 30 days captured by the measure.

We recognize that there is a delay in reporting the claims data because this measure reports hospitals' results on a yearly basis, but we believe using the available annual data would enable hospitals to improve their performance year-over-year. We note that we previously addressed this concern in the FY 2013 IPPS/LTCH PPS final rule (77 FR 53380) in the context of the Hospital Readmissions Reduction Program. In addition, we note that the Hospital VBP Program uses a 90 day "run-out" period following the last date of discharge used in the performance period for purposes of calculating claims-based measure rates (77 FR 53579 through 53580). This "run-out" period balances our desire to provide hospitals with timely quality data for the purpose of quality improvement and the need to have as complete a data set as possible for

measure calculations. After we run the data and create the data extract for purposes of calculating the measure rate for a claims-based measure, it takes several months to incorporate other data needed to complete the rate calculation; generate and check the rate calculations; and program, populate, and deliver the confidential reports and accompanying data to hospitals. As a result, we cannot provide the PN Payment hospital-specific reports earlier than the spring following the end of the performance period.

*Comment:* One commenter recommended that instead of adding the PN Payment measure to the Hospital VBP Program now, CMS should first examine methods of pairing cost and payment measures so that they signal value to beneficiaries.

*Response:* We believe that adding the PN Payment measure now will provide actionable feedback to hospitals on the overall value of their services to pneumonia patients as both payment data and mortality data would be made available through the Hospital VBP Program. We note that we solicited comments on methods of accounting for value of care in the Hospital VBP Program scoring methodology in the FY 2017 IPPS/LTCH PPS proposed rule (81 FR 25105 through 25106), and discussed comments received in the FY 2017 IPPS/LTCH PPS final rule (81 FR 56993 through 56994). We are continuing to evaluate the feasibility of incorporating condition- or procedure-specific assessments of value in the Hospital VBP Program scoring methodology. We also note currently for public reporting purposes our *Hospital Compare* Web site shows individual hospital's results for the payment (AMI, HF, and PN Payment) measures and corresponding mortality measures together to assess the value of care.<sup>48</sup>

*Comment:* One commenter recommended that CMS develop a plan for incorporating additional measures of efficiency and either focus on condition-specific payment measures or global efficiency measures, without overlapping.

*Response:* We thank the commenter for this recommendation, and will take this into consideration in future years of the program.

## (2) Scoring Methodology for the PN Payment Measure

We proposed to calculate the PN Payment measure using the same methodology we use to score the MSPB measure and, as finalized in the FY

<sup>48</sup> <https://www.medicare.gov/hospitalcompare/Data/Value-of-care.html>.

2017 IPPS/LTCH PPS final rule (81 FR 56992 through 56993), the AMI Payment and HF Payment measures so that all measures in the Efficiency and Cost Reduction domain are scored in the same manner. We note for these measures that lower values represent better performance.

For achievement points, we proposed to calculate a spending ratio of PN spending for each hospital to the median PN spending across all hospitals during the performance period. We would then use each hospital's PN spending ratio to calculate between 0 and 10 achievement points. We proposed to set the achievement threshold at the median PN spending ratio across all hospitals during the performance period. Because lower values represent better performance under the proposed PN Payment measure, we proposed to set the benchmark at the mean of the lowest decile of the PN spending ratios during the performance period. Therefore, if a hospital's individual PN spending ratio falls above the achievement threshold, the hospital would score 0 achievement points on the measure. If a hospital's individual PN spending ratio falls at or below the benchmark, the hospital would score the maximum 10 achievement points on the measure. If a hospital's individual PN spending ratio falls at or below the achievement threshold but above the benchmark, the hospital would score between 1 and 9 points according to the following formula:

$$[9 * ((\text{achievement threshold} - \text{Hospital's performance period ratio}) / (\text{achievement threshold} - \text{benchmark}))] + 0.5$$

For improvement points, we proposed to calculate a spending ratio of PN spending for each hospital to the median PN spending across all hospitals during the performance period. We would then use each hospital's PN spending ratio to calculate between 0 and 9 improvement points by comparing each hospital's ratio to its own performance during the baseline period. Again, because lower values represent better performance under the proposed PN Payment measure, we proposed to set the benchmark as the mean of the lowest decile of PN spending ratios across all hospitals. Therefore, if a hospital's PN spending ratio is equal to or higher than its baseline period ratio, the hospital would score 0 improvement points on the measure. If a hospital's score on the measure during the performance period is less than its baseline period score but above the benchmark, the hospital

would receive a score of 0 to 9 according to the following formula:

$$[10 * ((\text{Hospital baseline period ratio} - \text{Hospital performance period ratio}) / (\text{Hospital baseline period ratio} - \text{benchmark}))] - 0.5$$

We note that if a hospital scores at or below the benchmark on the achievement scoring methodology, that hospital will receive the maximum 10 points for this measure. As a result, the hospital would not receive an improvement score for this measure.

For more information about the proposed scoring methodology for the proposed PN Payment measure, we refer readers to section IV.B.3.b. of the preamble of the FY 2012 IPPS/LTCH PPS final rule (76 FR 51654 through 51656) where we discuss the MSPB measure's identical scoring methodology in detail.

We invited public comment on the proposed scoring methodology for the proposed PN Payment measure.

We did not receive any public comments specific to the proposed scoring methodology for the proposed PN Payment measure. After considering all of the comments received regarding the proposed adoption of the PN Payment measure in the Hospital VBP Program as discussed above, we are finalizing our proposal to adopt the PN Payment measure beginning with the FY 2022 program year as proposed.

**b. New Measure for the FY 2023 Program Year and Subsequent Years: Patient Safety and Adverse Events (Composite) (NQF #0531)**

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19973 through 19974), we proposed a new measure for the FY 2023 program year and subsequent years: Patient Safety and Adverse Events (Composite) (NQF #0531).

The current PSI 90 measure previously adopted for the Hospital VBP Program underwent NQF maintenance review and re-endorsement in 2015, leading to several substantive measure changes.<sup>49</sup> Due to statutory requirements in the Hospital VBP Program,<sup>50</sup> we were unable to adopt the

<sup>49</sup> National Quality Forum QPS Measure Description for "Patient Safety for Selected Indicators (modified version of PSI 90) (Composite Measure)" found at: <https://www.qualityforum.org/QPS/MeasureDetails.aspx?standardID=321&print=0&entityTypeID=3>; and PSI 90 Fact Sheet found at: [http://www.qualityindicators.ahrq.gov/News/PSI90\\_Factsheet\\_FAQ\\_v2.pdf](http://www.qualityindicators.ahrq.gov/News/PSI90_Factsheet_FAQ_v2.pdf) (we note that this fact sheet is written from an all-payer perspective, and is therefore not limited to the measure as used in the Medicare FFS population).

<sup>50</sup> First, section 1886(o)(2)(A) of the Act requires the Hospital VBP Program to select measures that have been specified for the Hospital IQR Program.

newly re-endorsed version of the PSI 90 measure in the FY 2017 IPPS/LTCH PPS final rule (81 FR 56981), but stated our intent to propose to adopt the modified version of the PSI 90 measure in future rulemaking. In section V.J.3.b. of the preamble of this final rule, we discuss our proposal to remove the current PSI 90 measure from the Hospital VBP Program beginning with the FY 2019 program year due to the operational constraints associated with calculating measure scores for the current measure for FY 2019 and subsequent years. Because of the priority of improving patient safety and reducing adverse events during inpatient stays, and with substantive refinements made to the measure in response to feedback as further described below, in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19973 through 19974), we proposed to adopt a modified version of the current PSI 90 measure, entitled Patient Safety and Adverse Events (Composite) (NQF #0531), for the Hospital VBP Program for the FY 2023 program year and subsequent years.

The Hospital IQR Program adopted this measure in the FY 2017 IPPS/LTCH PPS final rule (81 FR 57128 through 57133),<sup>51</sup> beginning with the FY 2018 payment determination, and we intend to publicly report initial measure data on the measure on *Hospital Compare* in the fall of 2017. The full measure specifications are available at: [https://www.qualityindicators.ahrq.gov/Modules/PSI\\_TechSpec\\_ICD09\\_v60.aspx](https://www.qualityindicators.ahrq.gov/Modules/PSI_TechSpec_ICD09_v60.aspx).

The Patient Safety and Adverse Events (Composite) measure is a weighted average of the reliability-adjusted, indirectly standardized, observed-to-expected ratios for the following 10 individual PSI component indicators:

- PSI 03 Pressure Ulcer Rate;
- PSI 06 Iatrogenic Pneumothorax Rate;
- PSI 08 In-Hospital Fall with Hip Fracture Rate;<sup>52</sup>
- PSI 09 Perioperative Hemorrhage or Hematoma Rate; \*

Second, section 1886(o)(2)(C)(i) of the Act requires the Hospital VBP Program to refrain from beginning the performance period for a new measure until data on the measure have been posted on *Hospital Compare* for at least one year. Finally, section 1886(o)(3)(C) of the Act requires that the Hospital VBP Program establish performance standards for each measure not later than 60 days prior to the beginning of the performance period.

<sup>51</sup> We note that the HAC Reduction Program also adopted this measure in the FY 2017 IPPS/LTCH PPS final rule (81 FR 57013 through 57030).

<sup>52</sup> Previously titled "Postoperative Hip Fracture" prior to v6.0.

- PSI 10 Postoperative Acute Kidney Injury Requiring Dialysis Rate;<sup>53</sup>
- PSI 11 Postoperative Respiratory Failure Rate; \*
- PSI 12 Perioperative Pulmonary Embolism (PE) or Deep Vein Thrombosis (DVT) Rate;
- PSI 13 Postoperative Sepsis Rate;
- PSI 14 Postoperative Wound Dehiscence Rate; and
- PSI 15 Unrecognized Abdominopelvic Accidental Puncture/Laceration Rate.<sup>54 55</sup>

(\* Denotes new component for the Patient Safety and Adverse Events (Composite) measure)

The Patient Safety and Adverse Events (Composite) measure no longer includes PSI 07 Central Venous Catheter-Related Blood Stream Infection Rate, because of potential overlap with the CLABSI measure (NQF #0139), which has been included in the Hospital VBP Program since the FY 2013 IPPS/LTCH PPS final rule (77 FR 53597 through 53598).

The measure is calculated using administrative claims data. Like the previously adopted PSI 90 measure, under the Patient Safety and Adverse Events (Composite) measure, the predicted value for each case is computed using a Generalized Estimating Equation hierarchical modeling approach that adjusts for demographic and clinical characteristics. The expected rate for each of the indicators is computed as the sum of the predicted value for each case divided by the number of cases for the unit of analysis of interest (that is, the hospital). The risk-adjusted rate for each of the indicators is computed using indirect standardization as the observed rate divided by the expected rate, multiplied by the reference population rate.<sup>56</sup>

As stated above, the previously adopted eight-indicator version of the PSI 90 measure underwent an extended NQF maintenance re-endorsement in the 2014 NQF Patient Safety Committee. In its final report, the NQF Patient Safety Committee deferred their final decision for the PSI 90 measure until the following measure evaluation

<sup>53</sup> Previously titled "Postoperative Physiologic and Metabolic Derangement" prior to v6.0.

<sup>54</sup> Previously titled "Accidental Puncture or Laceration Rate" prior to v6.0.

<sup>55</sup> Available at: <http://www.qualityforum.org/QPS/0531>.

<sup>56</sup> For more information regarding the Patient Safety and Adverse Events (Composite) measure's risk adjustment methodology, we refer readers to: [http://www.qualityindicators.ahrq.gov/Downloads/Resources/Publications/2015/Empirical\\_Methods\\_2015.pdf](http://www.qualityindicators.ahrq.gov/Downloads/Resources/Publications/2015/Empirical_Methods_2015.pdf).

cycle.<sup>57</sup> Following this report, AHRQ worked to address many of the NQF stakeholders' concerns about the PSI 90 measure, and subsequently completed NQF maintenance re-review and received re-endorsement on December 10, 2015. As a result of this process, the current PSI 90 measure's NQF maintenance re-endorsement led to several changes to the measure, specifically: A change to the measure name; the addition of three indicators; the removal of one indicator; the re-specification of two indicators; and a revision to the weighting of component indicators.<sup>58</sup> For more information on the proposed Patient Safety and Adverse Events (Composite) measure and component indicators, we refer readers to the AHRQ Quality Indicators Web site available at: [www.qualityindicators.ahrq.gov](http://www.qualityindicators.ahrq.gov).

We continue to believe the PSI 90 measure is an important measure of patient safety, addressing the NQS priority and CMS Quality Strategy goal to make care safer, and that these modifications help broaden and strengthen the measure. We expect inclusion of the Patient Safety and Adverse Events (Composite) measure in the Hospital VBP Program will encourage improvement in patient safety over the long-term for all hospitals. Conditions such as perioperative hemorrhage, postoperative respiratory failure, pressure ulcers, and other complications or conditions that arise after a patient was admitted to the hospital for the treatment of another condition are often preventable, and cost Medicare and the private sector billions of dollars each year and take a significant toll on patients and families. In most cases, hospitals can prevent these conditions when they follow protocols, procedures, and evidence-based guidelines. We anticipate the Patient Safety and Adverse Events (Composite) measure will provide actionable information and specific direction for prevention of patient safety events, because hospitals can track and monitor individual PSI rates and develop targeted improvements to patient safety using this measure data.<sup>59</sup>

<sup>57</sup> National Quality Forum. NQF-Endorsed Measures for Patient Safety, Final Report. Available at: [http://www.qualityforum.org/Publications/2015/01/NQF-Endorsed\\_Measures\\_for\\_Patient\\_Safety\\_Final\\_Report.aspx](http://www.qualityforum.org/Publications/2015/01/NQF-Endorsed_Measures_for_Patient_Safety_Final_Report.aspx).

<sup>58</sup> National Quality Forum QPS Measure Description for "Patient Safety for Selected Indicators (modified version of PSI 90) (Composite Measure)" found at: <https://www.qualityforum.org/QPS/MeasureDetails.aspx?standardID=321&print=0&entityTypeID=3>.

<sup>59</sup> For further guidance on PSI monitoring and strategies for applying quality improvements to PSI data, we refer readers to the Toolkit for Using the

We proposed to adopt the Patient Safety and Adverse Events (Composite) measure for the Hospital VBP Program beginning with the FY 2023 program year because we believe the measure would continue to create strong incentives for hospitals to ensure that patients are not harmed by the medical care they receive, which is a critical consideration in quality improvement. We also proposed that the measure would be added to the Safety domain, like the previously adopted PSI 90 measure that we proposed to remove in section V.J.3.b. of the preamble of the proposed rule. The Patient Safety and Adverse Events (Composite) measure fulfills all statutory requirements for the Hospital VBP Program based on our adoption of that measure in the Hospital IQR Program and the anticipated posting of measure data on *Hospital Compare* at least 1 year prior to the start of the proposed measure performance period. The Patient Safety and Adverse Events (Composite) measure (MUC15-604) was included on the "List of Measures Under Consideration for December 1, 2015"<sup>60</sup> and received support from the MAP, which noted the importance of safety measures for the Hospital VBP Program.<sup>61</sup> Therefore, we proposed to add the Patient Safety and Adverse Events (Composite) measure to the Safety domain for the FY 2023 program year and subsequent years.

We invited public comment on this proposal.

*Comment:* A number of commenters supported CMS' proposal to adopt the Patient Safety and Adverse Events (Composite) measure because it was updated using the NQF maintenance re-endorsement process; the measure aligns with CMS' priority to improve patient safety and reduce adverse events during patient stays; and the measure is used in other programs and adopting it for the Hospital VBP Program would align quality measures across programs. Some commenters strongly supported adoption of the Patient Safety and Adverse Events (Composite) measure, but expressed concern that the Hospital VBP Program will lack a patient safety composite measure between the FY

AHRQ quality indicators available at: <http://www.ahrq.gov/professionals/systems/hospital/qitoolkit/index.html>.

<sup>60</sup> "List of Measures Under Consideration for December 1, 2015." Available at: <http://www.qualityforum.org/ProjectMaterials.aspx?projectID=75367>.

<sup>61</sup> National Quality Forum, Measure Applications Partnership, "MAP 2016 Considerations for Implementing Measures in Federal Programs: Hospitals" Final Report, (February 2016). Available at: [http://www.qualityforum.org/Publications/2016/02/MAP\\_2016\\_Considerations\\_for\\_Implementing\\_Measures\\_in\\_Federal\\_Programs\\_-\\_Hospitals.aspx](http://www.qualityforum.org/Publications/2016/02/MAP_2016_Considerations_for_Implementing_Measures_in_Federal_Programs_-_Hospitals.aspx).

2019 and FY 2023 program years. Commenter urged CMS to look for opportunities to advance use of this measure in the Hospital VBP Program prior to the FY 2023 program year, or look to include other available measures to ensure that surgical complications remain a key component of the Hospital VBP Program.

*Response:* We thank the commenters for their support. As discussed in section V.J.3.b. of the preamble of this final rule, above, we will be unable to calculate measure scores for the current PSI 90 measure in the FY 2019 program year or a subsequent year because ICD-10 AHRQ PSI software for the currently adopted measure will not be available. Furthermore, due to certain statutory requirements in the Hospital VBP Program, we are unable to adopt the proposed Patient Safety and Adverse Events (Composite) measure earlier than the FY 2023 program year. Section 1886(o)(2)(A) of the Act requires the Hospital VBP Program to select measures that have been specified for the Hospital IQR Program. In addition, section 1886(o)(2)(C)(i) of the Act requires the Hospital VBP Program to refrain from beginning the performance period for a new measure until data on the measure have been posted on *Hospital Compare* for at least one year. The Hospital IQR Program finalized adoption of the modified PSI 90 measure (also known as the Patient Safety and Adverse Events (Composite) measure) in the FY 2017 IPPS/LTCH PPS final rule (81 FR 57133), and we are required to wait one full year after data has been posted before that measure's performance period may begin in the Hospital VBP Program. Because measure data for the Patient Safety and Adverse Events (Composite) measure has not been posted on *Hospital Compare*, and because AHRQ requires sufficient time to develop for the ICD-10 AHRQ PSI software for a given year, we are unable to adopt the measure before the FY 2023 program year.

We agree with commenters that surgical complications remain a key concern to address within our quality programs, including the Hospital VBP Program, and note that the NHSN measures will continue in the Safety domain of the Hospital VBP Program. We note that information on hospital performance on the Patient Safety and Adverse Events (Composite) measure will be publicly available through the Hospital IQR Program beginning in the fall of 2017. In addition, the HAC Reduction Program, which is not subject to the same statutory requirements as the Hospital VBP Program, will use this measure beginning with the FY 2018

program year. We believe earlier inclusion of this measure in the HAC Reduction Program will help incentivize hospitals to reduce patient safety events until the measure can be implemented in the Hospital VBP Program.

*Comment:* Many commenters strongly recommended that CMS not include the Patient Safety and Adverse Events (Composite) measure because hospital performance on the measure will not be publicly reported until after the comment period has ended. A number of these commenters noted that publicly reporting measures: Provides transparency on provider performance; allows hospitals to gain experience submitting data and become familiar with the measure's refinements and use of ICD-10 codes; allows time to identify errors and unintended consequences; and informs CMS and the measure developer of any implementation concerns. Some commenters further asserted that all measures should be publicly reported under the Hospital IQR Program for one year before being considered for inclusion in the Hospital VBP Program. One commenter asserted that stakeholders are unable to provide sufficient feedback on the proposed Patient Safety and Adverse Events measure without access to publicly reported measure data from the Hospital IQR Program. For these reasons, commenters urged CMS to postpone finalizing this measure for the Hospital VBP Program until stakeholders have sufficient data to review this measure to determine the appropriateness of the Patient Safety and Adverse Events (Composite) measure in the Hospital VBP Program.

*Response:* While we understand stakeholders' desire to see performance data from the Patient Safety and Adverse Events (Composite) measure before commenting on whether this measure should be adopted for the Hospital VBP Program, we note that, as discussed in the FY 2018 IPPS/LTCH PPS proposed rule, the measure has undergone extensive testing and found to be both reliable and valid. Furthermore, we note that adoption of this measure before its public reporting on *Hospital Compare* does not preclude hospitals from submitting questions and comments on the measure to CMS. Publicly reported Patient Safety and Adverse Events (Composite) measure data will be available in the fall of 2017, and we encourage hospitals, providers, patients, and other stakeholders to review these data and contact CMS with any questions regarding their measure scores. We further note the Patient Safety and Adverse Events (Composite) measure is being finalized for

implementation in the Hospital VBP Program for the FY 2023 program year with a performance period of July 1, 2019 through June 30, 2021; we believe the time period before implementation provides hospitals with sufficient time to become familiar with the measure's specifications and reporting requirements before performance on the Patient Safety and Adverse Events (Composite) measure is reflected in hospitals' TPSs.

We further disagree that, absent publicly reported performance data, hospitals lack sufficient information to sufficiently comment on the proposed adoption of the Patient Safety and Adverse Events (Composite) measure. In proposing to adopt this measure, CMS provided a full description of the measure's specifications and its development history, explained the satisfaction of all statutorily-required actions, and provided links to additional sources of in-depth information regarding the detailed specifications for this measure. In addition, seven of the ten Patient Safety and Adverse Event (Composite) component indicators were also included in the previously adopted PSI 90 measure. We therefore believe commenters had ample information to use in reviewing the Patient Safety and Adverse Events (Composite) measure, allowing them to comment meaningfully on its proposed adoption.

*Comment:* A number of commenters did not support CMS' proposal to adopt the Patient Safety and Adverse Events (Composite) measure because the measure is subject to reliability and accuracy concerns; commenters believe the measure will not provide accurate, meaningful, actionable data on hospital safety performance; and commenters believe the measure is not sufficiently risk-adjusted for patient characteristics. Two commenters asserted that the proposed Patient Safety and Adverse Events (Composite) measure is flawed, stating that, according to the developer, the measure was not meant to be used in pay-for-performance programs. One commenter expressed concern regarding CMS' proposal to use a composite measure of patient safety, because the commenter believes composite measures limit the ability of a hospital to identify the specific component of the composite measure causing them to fall out of compliance. Another commenter believed it was likely that the PSI 90 measure will undergo additional updates before the FY 2023 program year, which would render this measure proposal outdated before the measure's implementation.

*Response:* We disagree with commenters that the Patient Safety and Adverse Events (Composite) measure has not demonstrated that it is an accurate, reliable, and valid indicator of quality and safety of care that is adequately risk-adjusted. Over the past decade, AHRQ has supported a series of validation studies based on detailed abstraction of medical records.<sup>62</sup> These studies informed AHRQ's PSI development process, including further refinements to the indicators, working with others to improve coding practices, and retirement of a few indicators. Furthermore, many of these claims-based indicators have been endorsed by the NQF, which includes a review process that assesses reliability and validity.<sup>63</sup> We note that NQF endorsed the Patient Safety and Adverse Events (Composite) measure (NQF #0531), including the risk-adjustment methodology of the component indicators, as reliable and valid. Further, we believe this measure does provide actionable information and specific direction for prevention of patient safety events, because hospitals can track and monitor individual PSI rates and develop targeted improvements to improve patient safety. For further guidance on PSI monitoring and strategies for applying quality improvements to PSI data, we refer readers to the Toolkit for Using the AHRQ quality indicators available at: <http://www.ahrq.gov/professionals/systems/hospital/qitoolkit/index.html>.

While we do not anticipate any further updates to the Patient Safety and Adverse Events (Composite) measure at this time, we acknowledge that the measure may undergo additional updates in the future as part of measure maintenance. Depending on the nature of these updates and their applicability to the Hospital VBP Program's aims, we will determine how best to address them in future years of the program.

*Comment:* Several commenters did not support adoption of the Patient Safety and Adverse Events (Composite) measure because it is susceptible to surveillance bias; measures components that occur infrequently or may not be preventable through evidence-based

practices; lacks appropriate and necessary exclusions associated primarily with large academic centers; and is based on administrative claims data that does not fully reflect a patient's history, course of care, and clinical risk factors and therefore impacts the measure's ability to draw meaningful conclusions about hospital performance on safety issues. Some commenters also believe that it may disproportionately impact teaching hospitals because they tend to have robust infection control programs and are therefore more likely to identify patient safety events.

*Response:* While we acknowledge commenters' concerns, administrative claims data are valid for quality measurement and significantly less burdensome on hospitals for quality reporting. We note that there are previously conducted studies that validate the relationship between administrative claims data and medical records.<sup>64</sup> These studies demonstrate that administrative claims data can provide sufficient clinical information to assess patient safety. We refer readers to the FY 2015 IPPS/LTCH PPS final rule (79 FR 50091) for a further discussion of this issue in the context of the HAC Reduction Program.

We also acknowledge commenters' concern regarding the impact of surveillance bias, but note that there is little evidence that hospitals that may have a less robust surveillance program or underreport diagnoses for the PSI 90 indicators. Further, the measure exhibits a high degree of sensitivity (true positives, or the proportion of positives that are correctively identified as such) with respect to indicator diagnoses among hospitals. In addition, we note that many teaching hospitals do as well or better on the measure than non-teaching hospitals, and many of the patient safety indicator components are preventable through evidence-based practices. We have previously addressed commenters' concerns regarding the use of administrative claims, coding issues, and the impact on academic hospitals. We refer readers to the FY 2014 IPPS/LTCH PPS final rule (78 FR 50684) and the FY 2015 IPPS/LTCH PPS final rule (79 FR 50064) for this discussion.

*Comment:* One commenter expressed particular concern about the vulnerability of PSI 12 (Perioperative PE or DVT Rate) to surveillance bias, because hospitals with more

sophisticated tools to identify and track venous thromboembolism (VTE) show higher rates of VTE and may therefore be penalized for doing a better job at detection. Commenter stated that performance on PSI 12 may reflect differences in VTE imaging use rather than differences in the quality of care, and the inclusion of PSI 12 in the Patient Safety and Adverse Events (Composite) measure could unfairly penalize hospitals with increased vigilance in VTE detection.

*Response:* CMS and AHRQ recognize the commenter's concerns about surveillance bias for PSI 12, and note this issue was addressed in the NQF Patient Safety Steering Committee in 2015. Several research teams have examined DVT and PE rates and surveillance bias.<sup>65</sup> However, studies have not specifically examined whether the observed rates reflect underdiagnosis of DVT or PE at low-testing hospitals, or the underlying true incidence of symptomatic DVT or PE, and there is no evidence currently available to support the hypothesis that increased vigilance in DVT or PE detection is desirable from the perspective of patients and their families. Thus, while we acknowledge commenter's concerns regarding surveillance bias, we believe the PSI 12 is an important component indicator of the Patient Safety and Adverse Events (Composite) measure because it encourages hospitals not only to prevent DVT or PE, but also to appropriately assess a patient's risk for DVT and PE to prevent over-diagnosis and underdiagnosis.

*Comment:* Several commenters expressed concern that the timing and operational difficulties associated with procuring the AHRQ software hospitals need in order to calculate their own scores makes it impossible for hospitals to use this measure for internal quality improvement activities. Two commenters recommended that CMS delay adoption of the Patient Safety and Adverse Events (Composite) measure until the measure and associated software have been developed and validated in order to provide hospitals time to acquire the AHRQ software required to assess hospital performance on an ongoing basis and inform intervention strategies.

<sup>62</sup> AHRQ, "AHRQ PSI Development," available at: [https://www.qualityindicators.ahrq.gov/Modules/psi\\_resources.aspx](https://www.qualityindicators.ahrq.gov/Modules/psi_resources.aspx). AHRQ, "Quality Indicator Measure Development, Implementation, Maintenance, and Retirement," available at: [https://www.qualityindicators.ahrq.gov/Downloads/Resources/Publications/2011/QI\\_Measure\\_Development\\_Implementation\\_Maintenance\\_Retirement\\_Full\\_5-3-11.pdf](https://www.qualityindicators.ahrq.gov/Downloads/Resources/Publications/2011/QI_Measure_Development_Implementation_Maintenance_Retirement_Full_5-3-11.pdf).

<sup>63</sup> [http://www.qualityforum.org/Publications/2013/10/Review\\_and\\_Update\\_of\\_Guidance\\_for\\_Evaluating\\_Evidence\\_and\\_Measure\\_Testing\\_-\\_Technical\\_Report.aspx](http://www.qualityforum.org/Publications/2013/10/Review_and_Update_of_Guidance_for_Evaluating_Evidence_and_Measure_Testing_-_Technical_Report.aspx).

<sup>64</sup> Zrelak PA, Romano PS, Tancredi DJ, Geppert JJ, Utter GH. Validity of the AHRQ Patient Safety Indicator for Postoperative Physiologic and Metabolic Derangement based on a national sample of medical records. *Medical Care* 2013; 51(9):806-11.

<sup>65</sup> Bilimoria Y, Chun J, Ju MH, et al. Evaluation of surveillance bias and the validity of venous thromboembolism quality measure. *JAMA*. 2013;310(14):1482-1489; Holcomb CN, DeRussy A, Richman JS, Hawn MT. Association between inpatient surveillance and venous thromboembolism rates after hospital discharge. *JAMA Surg*. 2015;150(6):520-527.

*Response:* We appreciate commenters' commitment to continuous monitoring of performance. We understand that it is imperative for hospitals to monitor performance in an ongoing manner, and we are working with AHRQ to have the risk-adjusted software available as soon as possible. For more information on the release plan for ICD-10 risk adjusted software, we refer commenters to the AHRQ Quality Indicators Software page available at: <http://www.qualityindicators.ahrq.gov/Software/Default.aspx>.

*Comment:* Two commenters did not support CMS' proposal to adopt the Patient Safety and Adverse Events (Composite) measure beginning with the FY 2023 program year because this measure has already been adopted for the HAC Reduction Program, and adopting this measure for Hospital VBP would result in double counting of measure scores across programs.

*Response:* While we acknowledge that there is some overlap in quality measures between the Hospital VBP Program and the HAC Reduction Program, we note that these measures cover topics of critical importance to quality improvement and patient safety in the inpatient hospital setting. We selected these quality measures because we believe that hospital acquired condition measures comprise some of the most critical patient safety areas. These measures track infections and adverse events that could cause significant health risks to Medicare beneficiaries, and we believe it is appropriate to provide incentives for hospitals to avoid them under more than one program.

We further stress that the HAC Reduction Program and the Hospital VBP Program are separate programs with different purposes and policy goals. The HAC Reduction Program reduces payments to hospitals for excess hospital acquired conditions to increase patient safety in hospitals. On the other hand, the Hospital VBP Program is an incentive program that redistributes a portion of the Medicare payments made to hospitals based on their performance on a variety of measures, including safety measures, in order to provide a more holistic assessment of hospitals' quality of care. Accordingly, we believe that the critical importance of these measures to patient safety warrants their inclusion in both programs. We will, in the future, continue to monitor the HAC Reduction Program and Hospital VBP Program and analyze the impact of our measures selection, including any unintended consequences with having a measure in more than one program, and

will revise the measure set in one or both programs if needed.

*Comment:* A few commenters did not support adoption of the Patient Safety and Adverse Events (Composite) measure because the first performance periods for the Patient Safety and Adverse Event (Composite) measure data that involve the use of ICD-10-CM data in the Hospital IQR Program did not end until June 30, 2017, and hospitals will see initial performance scores once CMS performs those calculations for FY 2019. Commenters noted the transition from ICD-9-CM to ICD-10-CM resulted in a number of issues with the previous PSI 90 measure, and therefore recommended CMS delay finalizing adoption of the measure in order to allow hospitals time to review their performance data and identify any issues with the Patient Safety and Adverse Events (Composite) measure's specifications.

*Response:* We thank the commenter for their recommendation, but note that one of the factors in our decision to delay the use of ICD-10 claims data for this measure in the Hospital IQR Program until the FY 2019 payment determination was to allow for the necessary time for AHRQ to create a risk-adjusted software version. While we are not aware that the transition to ICD-10-CM/PCS codes has currently caused inaccuracies in PSI reporting and evaluation, we are actively monitoring for any potential issues related to ICD-10 conversion. We note that all measure specifications for the Patient Safety and Adverse Events (Composite) measure have been translated to and updated for corresponding ICD-10 code specifications; these changes for ICD-10-CM/PCS conversion of AHRQ's patient safety indicators are available at: [http://www.qualityindicators.ahrq.gov/FAQs\\_Support/FAQ\\_QI.aspx#](http://www.qualityindicators.ahrq.gov/FAQs_Support/FAQ_QI.aspx#).

We further note that AHRQ welcomes input from the user community on the AHRQ PSI ICD-10-CM/PCS software. Please provide suggestions and comments directly to: [QISupport@ahrq.hhs.gov](mailto:QISupport@ahrq.hhs.gov).

*Comment:* One commenter requested additional information about how performance for selected indicators under the Patient Safety and Adverse Events (Composite) measure will be assessed for conditions where a hospital's expected rate of a given safety event is less than 1.0. A second commenter strongly recommended CMS revisit the scoring methodology for the Patient Safety and Adverse Events (Composite) measure because hospitals that have been effective in driving down infection rates to below 1.0 are, in effect,

penalized by the measure not being scored, rather than being rewarded for their work.

*Response:* The Patient Safety and Adverse Events (Composite) measure does not use minimum criteria as described in commenters' comments; we therefore interpret commenters' reference to expected rates of safety events less than 1.0 to refer to the minimum precision criteria for the NHSN HAI measures, that is, at least one predicted infection for a reporting period for the measure result to be reported. We would note the Patient Safety and Adverse Events (Composite) measure requires that hospitals have a minimum of three eligible cases on any one underlying indicator during the baseline period in order to receive an improvement score and three eligible cases on any one underlying indicator during performance period in order to receive an improvement or achievement score. For the purposes of the Patient Safety and Adverse Events (Composite) measure, a case is "eligible" for a given indicator if it meets the criterion for inclusion in the indicator measure population. This minimum number of cases is based on AHRQ's methodology for scoring performance on the Patient Safety and Adverse Events (Composite) measure. Under this methodology, all hospitals that meet the case minimum will be scored based on their performance on this measure, and those that do not meet the case minimum will not receive a score for that component indicator. In addition, a hospital will be eligible to receive a score on the Patient Safety and Adverse Events (Composite) measure if they meet the case minimum criteria for at least one component indicator. We note that this case minimum applies to all hospitals, including those that experience zero numerator events during the performance period. Therefore, a hospital that meets the case minimum for a given component indicator but experiences zero numerator events will still receive a score on that component indicator.

*Comment:* Two commenters recommended that CMS consider replacing the current PSI 90 measure with objective, clinical outcome measures from the CDC's National Healthcare Safety Network.

*Response:* We thank the commenters for their recommendation, and we will take this into consideration in the future. We note that the Hospital VBP Program has adopted a number of NHSN-based measures in previous years, including the CLABSI, CAUTI, CDI, Colon and the Abdominal

Hysterectomy SSI, and MRSA Bacteremia measures.

*Comment:* A few commenters urged CMS to remove PSI 03 (Pressure Ulcer Rate) from the Patient Safety and Adverse Events (Composite) measure because pressure ulcers are complex and may not be appropriately captured under the composite measure. In the alternative, commenters recommended that CMS adopt the Percent of Residents or Patients with Pressure Ulcers that are New or Worsened (NQF #0678) measure for the Hospital VBP Program.

*Response:* We thank the commenters for their recommendation; however, we believe it is appropriate to use the PSI 03 indicator in the Patient Safety and Adverse Events (Composite) measure for the Hospital VBP Program because none of the measures previously adopted for the program capture pressure ulcer or injury data. The recommended measure, Percent of Residents or Patients with Pressure Ulcers that are New or Worsened (NQF #0678), is not currently specified for use in the acute, inpatient hospital setting of care.<sup>66</sup> In addition, this measure is also collected via chart abstraction, and we believe the additional reporting burden on hospitals for this measure currently outweighs the benefit of collecting this data in the inpatient hospital setting when the PSI 03 indicator in the Patient Safety and Adverse Events (Composite) measure is available for use and hospitals are familiar with this indicator. Furthermore, due to the statutory requirements of the Hospital VBP Program, we are unable to adopt the recommended measure at this time. However, if the same or similar measure that is specified for the acute, inpatient hospital setting becomes available, we will consider the measure for future program years.

After consideration of the public comments we received, we are finalizing our proposal to adopt the Patient Safety and Adverse Events (Composite) measure beginning with the FY 2023 program year.

## 5. Previously Adopted and Newly Finalized Baseline and Performance Periods

### a. Background

Section 1886(o)(4) of the Act requires the Secretary to establish a performance period for the Hospital VBP Program that begins and ends prior to the beginning of such fiscal year. We refer

<sup>66</sup> National Quality Forum. "0678: Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short-Stay)." Available at: <https://www.qualityforum.org/QPS/QPSTool.aspx> after searching "0678."

readers to the FY 2016 IPPS/LTCH PPS final rule (80 FR 49561 through 49562) for the baseline and performance periods for the Clinical Care, Person and Community Engagement, Safety, and Efficiency and Cost Reduction domains that we have adopted for the FY 2018 program year. We refer readers to the FY 2017 IPPS/LTCH PPS final rule (81 FR 56998 through 57003) for additional baseline and performance periods that we have adopted for the FY 2018, FY 2019, FY 2020, FY 2021 and FY 2022 program years. Although in past rulemaking we have proposed and adopted a new baseline and performance period for each program year for each measure in each final rule, in the FY 2017 IPPS/LTCH PPS final rule, we finalized a schedule for all future baseline and performance periods.

### b. Person and Community Engagement Domain

Since the FY 2015 program year, we have adopted a 12-month baseline period and 12-month performance period for measures in the Person and Community Engagement domain (previously referred to as the Patient- and Caregiver-Centered Experience of Care/Care Coordination domain) (77 FR 53598; 78 FR 50692; 79 FR 50072; 80 FR 49561). In the FY 2017 IPPS/LTCH PPS final rule (81 FR 56998), we finalized our proposal to adopt a 12-month performance period for the Person and Community Engagement domain that runs on the calendar year two years prior to the applicable program year and a 12-month baseline period that runs on the calendar year four years prior to the applicable program year, for the FY 2019 program year and subsequent years.

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19974 through 19975), we did not propose any changes to these policies.

### c. Efficiency and Cost Reduction Domain

#### (1) MSPB Measure

Since the FY 2016 program year, we have adopted a 12-month baseline period and 12-month performance period for the MSPB measure in the Efficiency and Cost Reduction domain (78 FR 50692; 79 FR 50072; 80 FR 49562). In the FY 2017 IPPS/LTCH PPS final rule, we finalized our proposal to adopt a 12-month performance period for the MSPB measure that runs on the calendar year two years prior to the applicable program year and a 12-month baseline period that runs on the calendar year four years prior to the

applicable program year for the FY 2019 program year and subsequent years (81 FR 56998).

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19975), we did not propose any changes to these policies.

#### (2) AMI Payment and HF Payment Measures

In the FY 2017 IPPS/LTCH PPS final rule (81 FR 56999), we adopted a 24-month performance period and a 36-month baseline period for the AMI Payment and HF Payment measures for the FY 2021 program year. We did so in order to adopt the measures as early as feasible into the Hospital VBP Program, and stated our belief that using a 24-month performance period rather than a 36-month performance period for the first program year of these measures would still enable us to accurately assess the quality of care provided by hospitals and would not substantially change a hospital's performance on the measure (81 FR 56998 through 56999). In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19975), we did not propose any changes to the length of these performance or baseline periods for the FY 2021 program year.

In the FY 2017 IPPS/LTCH PPS final rule, we also adopted a 36-month performance period and 36-month baseline period for the AMI Payment and HF Payment measures for the FY 2022 program year (81 FR 57000). In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19975), we did not propose any changes to the length of these performance or baseline periods for the FY 2022 program year.

For the FY 2023 program year and subsequent years, we proposed it would be appropriate to use a 36-month performance period and 36-month baseline period for the AMI Payment and HF Payment measures as we have adopted for the FY 2022 program year. Therefore, in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19975), for the FY 2023 program year and subsequent years, we proposed to adopt a 36-month performance period that runs from July 1st five years prior to the applicable fiscal program year to June 30th two years prior to the applicable fiscal program year. We also proposed to adopt a 36-month baseline period that runs from July 1, 10 years prior to the applicable fiscal program year, to June 30, 7 years prior to the applicable fiscal program year.

We invited public comment on these proposals.

*Comment:* One commenter supported CMS' proposal to adopt 36-month performance and baseline periods for the AMI and HF Payment measures.

*Response:* We thank the commenter for their support.

*Comment:* Two commenters urged CMS to reevaluate the length of time between the baseline period, performance period, and payment implications of the AMI and HF Payment measures because commenters believed using a baseline period that begins 10 years prior to the program year would fail to provide relevant data to CMS on hospital performance.

*Response:* We use a three-year period of index admissions for the PN Payment measure in order to increase the number of cases per hospital used for measure calculation, which improves the precision of each hospital's measure rate. As a result, the baseline and performance periods cover a much longer period of time than used in other measures, and are further in time from the payment impacts for a given program year. Although this approach utilizes older data, it also identifies more variation in hospital performance and still allows for improvement from one year of reporting to the next. We decided to use the proposed timeframe because it balances the need for the most recent claims and sufficient time to process the claims data and calculate the measures to meet the program's timelines.

After consideration of the public comments we received, we are finalizing the baseline and performance periods for the AMI and HF Payment measures as proposed.

### (3) PN Payment Measure in the FY 2022 Program Year

As discussed in section V.J.4.a. of the preamble of this final rule, in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19971 through 19973), we proposed a new PN Payment measure for the FY 2022 program year and subsequent years. In order to adopt this measure as early as feasible into the Hospital VBP Program, in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19975 through 19976), we proposed to adopt a 36-month baseline period and a 23-month performance period. We proposed to adopt a 23-month performance period because we anticipate that the refined measure will not be posted on *Hospital Compare* for one year until July 2017. Therefore, for the FY 2022 program year, we proposed to adopt a 23-month performance period that runs from August 1, 2018 to June 30, 2020 and a baseline period that runs from July 1, 2013 to June 30, 2016.

We believe that using a 23-month performance period for the proposed PN Payment measure, rather than a 36-month performance period, in the FY

2022 program year would accurately assess the quality of care provided by hospitals and would not substantially change hospitals' performance on the measure. To determine the viability of using a 23-month performance period to calculate the proposed PN Payment measure's scores, we compared the measure score reliability for a 24-month and 36-month performance period. We calculated the Intraclass Correlation Coefficient (ICC) to determine the extent to which assessment of a hospital using different but randomly selected subsets of patients produces similar measures of hospital performance.<sup>67</sup> We calculated the risk-standardized payment (RSP) using a random split-sample of a 36-month performance period (we used July 1, 2013 through June 30, 2016) and a random split-sample of a 24-month performance period (we used July 1, 2013 through June 30, 2015).

For both the 36-month and 24-month performance period, we obtained two RSPs for each hospital, using an entirely distinct set of patients from the same time period. If the RSPs for both the 36-month and 24-month performance periods agree, we can demonstrate that the measure assesses the quality of the hospital rather than the types of patients treated. To calculate agreement between these measure subsets, we calculated the ICC (2,1)<sup>68</sup> for both the 36-month and 24-month performance periods.

For the proposed PN Payment measure, there were 1,170,762 index admissions and 3,242 hospitals that met the minimum case threshold for reporting a measure result (at least 25 cases) in the 36-month performance period. There were 787,817 index admissions and 3,218 hospitals that met the minimum case threshold for reporting a measure result in the 24-month performance period.

For the 36-month performance period, the ICC for the two independent assessments of each hospital was 0.868. For the 24-month performance period, the ICC for the two independent assessments of each hospital was 0.834. Therefore, the data subsets showcase "substantial" agreement of hospital performance, and we can demonstrate that, even with a shortened performance period, the proposed PN Payment measure assesses the quality of care provided at a hospital rather than the

<sup>67</sup> Shrout P, Fleiss J. Intraclass Correlations: Uses in Assessing Rater Reliability. *Psychol. Bull.* Mar 1979;86(2):420-428.

<sup>68</sup> Shrout P, Fleiss J. Intraclass Correlations: Uses in Assessing Rater Reliability. *Psychol. Bull.* Mar 1979;86(2):420-428.

types of patients that these hospitals treat.<sup>69</sup>

To assess whether using fewer than 36 months of data change the performance in the same hospital, we compared the percent change in a hospital's predicted/expected (P/E) ratio using 24 months of data. For hospitals that met the minimum case threshold in the 24-month performance period, the median percent change was 0.11 percent (with an interquartile range of -1.5 percent to 0.07 percent). These results suggest minimal difference in same-hospital performance when using a 24-month measurement period. Based on these analyses, we are confident that using a 23-month performance period will result in reliable measure scores because our analysis demonstrates strong reliability at 24 months and we believe the change in available data due to a one month difference in the performance period is insufficient to substantially impact the measure's reliability.

In summary, based on the analysis described above, we are confident that using a 23-month performance period, rather than 36-month performance period, for the initial performance period for this measure would accurately assess the quality of care provided by that hospital and would not substantially change the hospital's performance on that measure.

We invited public comment on these proposals.

*Comment:* One commenter requested that CMS consider reducing the performance period for the PN Payment measure from three years to one year.

*Response:* As noted above, our goal is to use a three-year period of index admissions for the PN Payment measure in order to increase the number of cases per hospital used for measure calculation, which improves the precision of each hospital's measure rate. Although this approach utilizes older data, it also identifies more variation in hospital performance and still allows for improvement from one year of reporting to the next.

*Comment:* One commenter recommended that, if CMS finalizes adoption of the PN Payment measure, CMS delay implementation of the measure until a 36-month performance period can be adopted for this measure because the commenter believes that having a performance period that is different from the performance period used for other condition-specific measures is confusing for providers and patients.

<sup>69</sup> Landis J, Joch G. The Measurement of Observer Agreement for Categorical Data. *Biometrics.* Mar 1997;33(1):159-174.

*Response:* We continue to believe that the 23-month performance period for the FY 2022 program year and 35-month performance period for the FY 2023 program year are sufficiently reliable to accurately assess the resource use by hospitals and would not substantially change hospitals' performance on the measure. We note that the PN Payment measure will only have an abbreviated performance period in the FY 2022 and FY 2023 program years, the first two years this measure is in the program, but we are adopting a 36-month performance period for the FY 2024 program year and subsequent years, as detailed in the next section below.

After consideration of the public comments we received, we are finalizing the baseline and performance periods for the PN Payment measure for the FY 2022 program year as proposed.

#### (4) PN Payment Measure in the FY 2023 Program Year

We have stated in past rules that we would strive to adopt 36-month performance periods and baseline periods when possible to accommodate the time needed to process measure data and to ensure that we collect enough measure data for reliable performance scoring for all mortality measures (78 FR 50074; 79 FR 50057; and 80 FR 49588). While we cannot adopt a 36-month performance period for the FY 2023 program year because we anticipate that the refined measure will not be posted on *Hospital Compare* for 1 year until July 2017, we could lengthen the PN Payment measure performance period from 23 months to 35 months. As demonstrated above, our analysis of the proposed PN Payment measure indicates that the measure would produce reliable measure scores using 24 months of data as well as 36 months of data. As such, we are confident they will also be reliable when calculated using 35 months of data for the performance period for the FY 2023 program year. Therefore, for the FY 2023 program year, in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19776), we proposed to adopt a 35-month performance period that runs from August 1, 2018 to June 30, 2021 and a 36-month baseline period that runs from July 1, 2013 to June 30, 2016.

We invited public comment on these proposals. We did not receive public comments on the proposed baseline and performance periods for the PN Payment measure for the FY 2023 program year and subsequent years. We are finalizing the baseline and performance periods for the PN Payment measure for the FY 2023 program year as proposed.

#### (5) PN Payment Measure in the FY 2024 Program Year and Subsequent Years

For the FY 2024 program year and subsequent years, we believe it would be appropriate to use a 36-month performance period and 36-month baseline period for the PN Payment measure. Therefore, in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19976), for the FY 2024 program year and subsequent years, we proposed to adopt a 36-month baseline period and a 36-month performance period for the proposed PN Payment measure. Specifically, we proposed to adopt a 36-month performance period that runs from July 1, 5 years prior to the applicable fiscal program year, to June 30, 2 years prior to the applicable fiscal program year and a 36-month baseline period that runs from July 1, 10 years prior to the applicable fiscal program year, to June 30, 7 years prior to the applicable fiscal program year.

We invited public comment on these proposals. We did not receive public comments on the proposed baseline and performance periods for the PN Payment measure for the FY 2024 program year and subsequent years. We are finalizing the baseline and performance periods for FY 2024 and subsequent years as proposed.

#### d. Safety Domain

##### (1) Previously Adopted Measures in the Safety Domain

Since the FY 2016 program year, we have adopted a 12-month baseline period and 12-month performance period for all measures in the Safety domain, with the exception of the PSI 90 measure (78 FR 50692; 79 FR 50071; 80 FR 49562). In the FY 2017 IPPS/LTCH PPS final rule, we finalized our proposal to adopt a performance period for all measures in the Safety domain—with the exception of the PSI 90 measure, as discussed in more detail below—that runs on the calendar year 2 years prior to the applicable program year and a baseline period that runs on the calendar year 4 years prior to the applicable program year for the FY 2019 program year and subsequent program years (81 FR 57000).

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19976), we did not propose any changes to these policies.

##### (2) Patient Safety and Adverse Events (Composite) Measure in the FY 2023 Program Year

As discussed above in section V.J.3.b. of the preamble of this final rule, in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19970), we proposed to remove the currently adopted PSI 90 measure

beginning with the FY 2019 program year, and in section V.J.4.b. of the preamble of this final rule, we discuss our proposal to adopt the Patient Safety and Adverse Events (Composite) measure beginning with the FY 2023 program year. In order to adopt the Patient Safety and Adverse Events (Composite) measure as early as feasible into the Hospital VBP Program, we proposed to adopt a 21-month baseline period and 24-month performance period for the measure for the FY 2023 program year. Specifically, we proposed to adopt a performance period that runs from July 1, 2019 to June 30, 2021, and a baseline period that runs from October 1, 2015 to June 30, 2017. The 21-month baseline period would only apply to the FY 2023 program year and would only use ICD-10 data.

Prior to deciding to propose an abbreviated baseline period for the FY 2023 program year, we took several factors into consideration, including the recommendations of the measure steward, the feasibility of using a combination of ICD-9 and ICD-10 data without the availability of the appropriate measure software, minimizing provider burden, program implementation timelines, and the reliability of using a shortened baseline period. We believe using a 21-month baseline period for the Patient Safety and Adverse Events (Composite) measure for the FY 2023 program year best serves the need to provide important information on hospital patient safety and adverse events by allowing sufficient time to process the claims data and calculate measure scores, while minimizing the reporting burden and program disruption. We also believe that measure scores would continue to be reliable for the above proposed baseline period because the NQF, which re-endorsed the modified version of the measure that we proposed, found it to be reliable using 12 months of data.<sup>70</sup>

We invited public comment on these proposals. We did not receive public comments on the proposed baseline and performance periods for the Patient Safety and Adverse Events (Composite) measure for the FY 2023 program year. We are finalizing the baseline and performance period as proposed.

##### (3) Patient Safety and Adverse Events (Composite) Measure in the FY 2024 Program Year and Subsequent Years

For the FY 2024 program year and subsequent years, in the FY 2018 IPPS/

<sup>70</sup> "Patient Safety 2015 Final Report" is available at: [http://www.qualityforum.org/Publications/2016/02/Patient\\_Safety\\_2015\\_Final\\_Report.aspx](http://www.qualityforum.org/Publications/2016/02/Patient_Safety_2015_Final_Report.aspx).

LTCH PPS proposed rule (82 FR 19976), we proposed to lengthen the Patient Safety and Adverse Events (Composite) measure baseline period to 24 months and continue to adopt a 24-month performance period because we believe the measure is most reliable with a 24-month baseline period. For the FY 2024 program year, the baseline period would run from July 1, 2016 to June 30, 2018. Therefore, we proposed to adopt a performance period that runs from July 1, 4 years prior to the applicable fiscal program year, to June 0, 2 years prior to the applicable fiscal program year, and a baseline period that runs from July 1, 8 years prior to the applicable program year, to June 30, 6 years prior to the applicable program year.

We invited public comment on these proposals. We did not receive public comments on the proposed baseline and performance periods for the Patient Safety and Adverse Events (Composite) measure for the FY 2024 program year and subsequent years. We are finalizing the baseline and performance periods for the FY 2024 program year and subsequent years as proposed.

e. Clinical Care Domain

(1) Previously Adopted Measures in the Clinical Care Domain

For the FY 2019, FY 2020, and FY 2021 program years, we adopted a 36-month baseline period and 36-month performance period for measures in the Clinical Care domain (78 FR 50692 through 50694; 79 FR 50073; 80 FR 49563).<sup>71</sup> In the FY 2017 IPPS/LTCH PPS final rule (81 FR 57000), we finalized our proposal to adopt a 36-month performance period and 36-month baseline period for the FY 2022 program year for each of the previously finalized measures in the Clinical Care domain—that is, the MORT-30-AMI, MORT-30-HF, MORT-30-COPD, THA/TKA, and MORT-30-CABG measures.

In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19977), we proposed to adopt a 36-month performance period and 36-month baseline period for these measures for the FY 2023 program year and subsequent years.

Specifically, for the mortality measures (MORT-30-AMI, MORT-30-HF, MORT-30-COPD, and MORT-30-CABG), the performance period would run for 36 months from July 1, 5 years prior to the applicable fiscal program year, to June 30, 2 years prior to the applicable fiscal program year, and the baseline period would run for 36 months from July 1, 10 years prior to the applicable fiscal program year, to June 30, 7 years prior to the applicable fiscal program year. For the THA/TKA measure, the performance period would run for 36 months from April 1, 5 years prior to the applicable fiscal program year, to March 31, 2 years prior to the applicable fiscal program year, and the baseline period would run for 36 months from April 1, 10 years prior to the applicable fiscal program year, to March 31, 7 years prior to the applicable fiscal program year.

We invited public comment on these proposals. We did not receive any public comments on these proposals; we are finalizing our proposals to set the baseline and performance periods for the MORT-30-AMI, MORT-30-HF, MORT-30-COPD, THA/TKA, and MORT-30-CABG measures for FY 2023 program year and subsequent years as proposed.

(2) MORT-30-PN (Updated Cohort) Measure

In the FY 2017 IPPS/LTCH PPS final rule (81 FR 57001), we adopted a 22-month performance period for the MORT-30-PN (updated cohort) measure and a 36-month baseline period for the FY 2021 program year. In the

same final rule, we adopted a 34-month performance period and 36-month baseline period for the MORT-30-PN (updated cohort) measure for the FY 2022 program year. In the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19977), we did not propose any changes to the length of these performance or baseline periods for the FY 2021 and FY 2022 program years.

In the FY 2017 IPPS/LTCH PPS final rule (81 FR 57001), we also stated our intent to lengthen the MORT-30-PN (updated cohort) measure performance period to a full 36-month performance period beginning in July, instead of September. Therefore, in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19977), we proposed to adopt a 36-month performance period that would run from July 1, 5 years prior to the applicable fiscal program year, to June 30, 2 years prior to the applicable fiscal program year, and a 36-month baseline period that would run from July 1, 10 years prior to the applicable fiscal program year, to June 30, 7 years prior to the applicable fiscal program year for the MORT-30-PN (updated cohort) measure for the FY 2023 program year and subsequent years.

We invited public comment on these proposals. We did not receive any public comments on this proposal; we are finalizing our proposal to set the baseline and performance periods for the MORT-30-PN (updated cohort) measure for the FY 2023 program year and subsequent years as proposed.

f. Summary of Previously Adopted and Newly Finalized Baseline and Performance Periods for the FY 2019 Through FY 2023 Program Years

The tables below summarize the baseline and performance periods that we have previously adopted and are finalizing in this final rule.

PREVIOUSLY ADOPTED BASELINE AND PERFORMANCE PERIODS FOR THE FY 2019 PROGRAM YEAR

Domain	Baseline period	Performance period
Person and Community Engagement:		
• HCAHPS Survey .....	• January 1, 2015–December 31, 2015	• January 1, 2017–December 31, 2017.
Clinical Care:		
• Mortality (MORT-30-AMI, MORT-30-HF, MORT-30-PN).	• July 1, 2009–June 30, 2012 .....	• July 1, 2014–June 30, 2017.
• THA/TKA .....	• July 1, 2010–June 30, 2013 .....	• January 1, 2015–June 30, 2017.
Safety:*		
• PC-01 and NHSN measures (CAUTI, CLABSI, SSI, CDI, MRSA).	• January 1, 2015–December 31, 2015	• January 1, 2017–December 31, 2017.
Efficiency and Cost Reduction:		

<sup>71</sup> The THA/TKA measure was added for the FY 2019 program year with a 36-month baseline period and a 24-month performance period (79 FR 50072),

but we have since adopted 36-month baseline and performance periods for the FY 2021 program year (80 FR 49563). We intend to continue having 36-

month baseline periods and 36-month performance periods in the future for all measures in the Clinical Care domain.

PREVIOUSLY ADOPTED BASELINE AND PERFORMANCE PERIODS FOR THE FY 2019 PROGRAM YEAR—Continued

Domain	Baseline period	Performance period
<ul style="list-style-type: none"> <li>MSPB .....</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2015–December 31, 2015</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2017–December 31, 2017.</li> </ul>

\* In section V.J.3.b. of the preamble of this final rule, we discuss our decision to finalize the removal of the current PSI 90 measure beginning with the FY 2019 program year. As a result, the previously finalized performance and baseline periods for this measure were not included in this table.

PREVIOUSLY ADOPTED BASELINE AND PERFORMANCE PERIODS FOR THE FY 2020 PROGRAM YEAR

Domain	Baseline period	Performance period
Person and Community Engagement: <ul style="list-style-type: none"> <li>HCAHPS Survey .....</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2016–December 31, 2016.</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2018–December 31, 2018.</li> </ul>
Clinical Care: <ul style="list-style-type: none"> <li>Mortality (MORT–30–AMI, MORT–30–HF, MORT–30–PN).</li> <li>THA/TKA .....</li> </ul>	<ul style="list-style-type: none"> <li>July 1, 2010–June 30, 2013</li> <li>July 1, 2010–June 30, 2013</li> </ul>	<ul style="list-style-type: none"> <li>July 1, 2015–June 30, 2018.</li> <li>July 1, 2015–June 30, 2018.</li> </ul>
Safety: * <ul style="list-style-type: none"> <li>PC–01 and NHSN measures (CAUTI, CLABSI, SSI, CDI, MRSA).</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2016–December 31, 2016.</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2018–December 31, 2018.</li> </ul>
Efficiency and Cost Reduction: <ul style="list-style-type: none"> <li>MSPB .....</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2016–December 31, 2016.</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2018–December 31, 2018.</li> </ul>

\* In section V.J.3.b. of the preamble of this final rule, we discuss our decision to finalize the removal of the current PSI 90 measure beginning with the FY 2019 program year. As a result, the previously finalized performance and baseline periods for this measure were not included in this table.

PREVIOUSLY ADOPTED BASELINE AND PERFORMANCE PERIODS FOR THE FY 2021 PROGRAM YEAR

Domain	Baseline period	Performance period
Person and Community Engagement: <ul style="list-style-type: none"> <li>HCAHPS Survey.</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2017–December 31, 2017</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2019–December 31, 2019.</li> </ul>
Clinical Care: <ul style="list-style-type: none"> <li>Mortality (MORT–30–AMI, MORT–30–HF, MORT–30–COPD).</li> <li>MORT–30–PN (updated cohort) .....</li> <li>THA/TKA .....</li> </ul>	<ul style="list-style-type: none"> <li>July 1, 2011–June 30, 2014 .....</li> <li>July 1, 2012–June 30, 2015 .....</li> <li>April 1, 2011–March 31, 2014 .....</li> </ul>	<ul style="list-style-type: none"> <li>July 1, 2016–June 30, 2019.</li> <li>September 1, 2017–June 30, 2019.</li> <li>April 1, 2016–March 31, 2019.</li> </ul>
Safety: * <ul style="list-style-type: none"> <li>PC–01 and NHSN measures (CAUTI, CLABSI, SSI, CDI, MRSA).</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2017–December 31, 2017</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2019–December 31, 2019.</li> </ul>
Efficiency and Cost Reduction: <ul style="list-style-type: none"> <li>MSPB .....</li> <li>Payment (AMI Payment and HF Payment) .....</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2017–December 31, 2017</li> <li>July 1, 2012–June 30, 2015 .....</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2019–December 31, 2019.</li> <li>July 1, 2017–June 30, 2019.</li> </ul>

\* In section V.J.3.b. of the preamble of this final rule, we discuss our decision to finalize the removal of the current PSI 90 measure beginning with the FY 2019 program year. As a result, the previously finalized performance and baseline periods for this measure were not included in this table.

PREVIOUSLY ADOPTED AND NEWLY FINALIZED BASELINE AND PERFORMANCE PERIODS FOR THE FY 2022 PROGRAM YEAR

Domain	Baseline period	Performance period
Person and Community Engagement: <ul style="list-style-type: none"> <li>HCAHPS Survey .....</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2018–December 31, 2018</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2020–December 31, 2020.</li> </ul>
Clinical Care: <ul style="list-style-type: none"> <li>Mortality (MORT–30–AMI, MORT–30–HF, MORT–30–COPD, MORT–30–CABG).</li> <li>MORT–30–PN (updated cohort) .....</li> <li>THA/TKA .....</li> </ul>	<ul style="list-style-type: none"> <li>July 1, 2012–June 30, 2015 .....</li> <li>July 1, 2012–June 30, 2015 .....</li> <li>April 1, 2012–March 31, 2015 .....</li> </ul>	<ul style="list-style-type: none"> <li>July 1, 2017–June 30, 2020.</li> <li>September 1, 2017–June 30, 2020.</li> <li>April 1, 2017–March 31, 2020.</li> </ul>
Safety: * <ul style="list-style-type: none"> <li>PC–01 and NHSN measures (CAUTI, CLABSI, SSI, CDI, MRSA).</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2018–December 31, 2018</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2020–December 31, 2020.</li> </ul>
Efficiency and Cost Reduction: <ul style="list-style-type: none"> <li>MSPB .....</li> <li>Payment (AMI Payment, HF Payment) .....</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2018–December 31, 2018</li> <li>July 1, 2012–June 30, 2015 .....</li> </ul>	<ul style="list-style-type: none"> <li>January 1, 2020–December 31, 2020.</li> <li>July 1, 2017–June 30, 2020.</li> </ul>

PREVIOUSLY ADOPTED AND NEWLY FINALIZED BASELINE AND PERFORMANCE PERIODS FOR THE FY 2022 PROGRAM YEAR—Continued

Domain	Baseline period	Performance period
• PN Payment** .....	• July 1, 2013–June 30, 2016 .....	• August 1, 2018–June 30, 2020.

\* In section V.J.3.b. of the preamble of this final rule, we discuss our decision to finalize the removal of the current PSI 90 measure beginning with the FY 2019 program year. As a result, the previously finalized performance and baseline periods for this measure are not included in this table.

\*\* In section V.J.4.a. of the preamble of this final rule, we discuss our decision to adopt the PN Payment measure beginning with the FY 2022 program year.

PREVIOUSLY ADOPTED AND NEWLY FINALIZED BASELINE AND PERFORMANCE PERIODS FOR THE FY 2023 PROGRAM YEAR

Domain	Baseline period	Performance period
Person and Community Engagement: • HCAHPS Survey .....	• January 1, 2019–December 31, 2019.	• January 1, 2021–December 31, 2021.
Clinical Care: • Mortality (MORT-30-AMI, MORT-30-HF, MORT-30-COPD, MORT-30-CABG, MORT-30-PN (updated cohort). • THA/TKA .....	• July 1, 2013–June 30, 2016  • April 1, 2013–March 31, 2016.	• July 1, 2018–June 30, 2021.  • April 1, 2018–March 31, 2021.
Safety: • PC-01 and NHSN measures (CAUTI, CLABSI, SSI, CDI, MRSA). • Patient Safety and Adverse Events (Composite)*.	• January 1, 2019–December 31, 2019. • October 1, 2015–June 30, 2017.	• January 1, 2021–December 31, 2021. • July 1, 2019–June 30, 2021.
Efficiency and Cost Reduction: • MSPB .....	• January 1, 2019–December 31, 2019.	• January 1, 2021–December 31, 2021.
• Payment (AMI Payment, HF Payment) .. • PN Payment** .....	• July 1, 2013–June 30, 2016 • July 1, 2013–June 30, 2016	• July 1, 2018–June 30, 2021. • August 1, 2018–June 30, 2021.

\* In section V.J.4.b. of the preamble of this final rule, we discuss our decision to adopt the Patient Safety and Adverse Events (Composite) measure beginning with the FY 2023 program year.

\*\* In section V.J.4.a. of the preamble of this final rule, we discuss our decision to adopt the PN Payment measure beginning with the FY 2022 program year.

6. Performance Standards for the Hospital VBP Program

a. Background

Section 1886(o)(3)(A) of the Act requires the Secretary to establish performance standards for the measures selected under the Hospital VBP Program for a performance period for the applicable fiscal year. The performance standards must include levels of achievement and improvement, as required by section 1886(o)(3)(B) of the Act, and must be established no later than 60 days before the beginning of the performance period for the fiscal year involved, as required by section 1886(o)(3)(C) of the Act. We refer readers to the Hospital Inpatient VBP Program final rule (76 FR 26511 through 26513) for further discussion of achievement and improvement standards under the Hospital VBP Program.

In addition, when establishing the performance standards, section 1886(o)(3)(D) of the Act requires the Secretary to consider appropriate factors, such as: (1) Practical experience with the measures, including whether a

significant proportion of hospitals failed to meet the performance standard during previous performance periods; (2) historical performance standards; (3) improvement rates; and (4) the opportunity for continued improvement.

We refer readers to the FY 2013, FY 2014, and FY 2015 IPPS/LTCH PPS final rules (77 FR 53604 through 53605; 78 FR 50694 through 50698; and 79 FR 50077 through 50079, respectively) for a more detailed discussion of the general scoring methodology used in the Hospital VBP Program.

We note that the performance standards for the following measures are calculated with lower values representing better performance:

- The NHSN measures (the CLABSI, CAUTI, CDI, Colon and the Abdominal Hysterectomy SSI, and MRSA Bacteremia measures);
- The THA/TKA measure;
- The PC-01 measure;
- The MSPB measure;
- The HF, AMI, and PN Payment measures; and
- The Patient Safety and Adverse Events (Composite) measure.

This distinction is made in contrast to other measures for which higher values indicate better performance.<sup>72</sup> As discussed further in the FY 2014 IPPS/LTCH PPS final rule (78 FR 50684), the performance standards for the Colon and Abdominal Hysterectomy SSI measure are computed separately for each procedure stratum, and we first award achievement and improvement points to each stratum separately, then compute a weighted average of the points awarded to each stratum by predicted infections.

b. Previously Adopted and Newly Finalized Performance Standards for the FY 2020 Program Year

In accordance with our finalized methodology for calculating performance standards (discussed more fully in the Hospital Inpatient VBP Program final rule (76 FR 26511 through 26513)), in the FY 2018 IPPS/LTCH PPS proposed rule (82 FR 19979 through 19980), we proposed to adopt additional

<sup>72</sup> We note that the mortality measures in the Hospital VBP Program use survival rates rather than mortality rates; as a result, higher values indicate better performance on these measures.

performance standards for the FY 2020 program year. We noted that the numerical values for the performance standards displayed in the proposed rule represented estimates based on the most recently available data, and we stated our intention to update the numerical values in this FY 2018 IPPS/

LTCH PPS final rule. We noted further that the MSPB measure’s performance standards are based on performance period data; therefore, we are unable to provide numerical equivalents for the standards at this time. We invited public comment on the proposed performance standards. We did not receive any public comments on

the proposed performance standards for the FY 2020 program year. We are adopting the performance standards listed in the table below. These performance standards have been updated from the FY 2018 IPPS/LTCH PPS proposed rule and represent the most recently available data.

PREVIOUSLY ADOPTED AND NEWLY FINALIZED PERFORMANCE STANDARDS FOR THE FY 2020 PROGRAM YEAR: SAFETY, CLINICAL CARE, AND EFFICIENCY AND COST REDUCTION DOMAINS #

Measure short name	Achievement threshold	Benchmark
<b>Safety Domain ♦</b>		
CAUTI *†	0.828	0.000.
CLABSI *†	0.784	0.000.
CDI *†	0.852	0.091.
MRSA Bacteremia *†	0.815	0.000.
Colon and Abdominal Hysterectomy SSI *†	• 0.781 • 0.722	• 0.000. • 0.000.
PC-01 *	0.000000	0.000000.
<b>Clinical Care Domain</b>		
MORT-30-AMI ±	0.853715	0.875869.
MORT-30-HF ±	0.881090	0.906068.
MORT-30-PN ±	0.882266	0.909532.
THA/TKA *±	0.032229	0.023178.
<b>Efficiency and Cost Reduction Domain</b>		
MSPB *±	Median Medicare Spending Per Beneficiary ratio across all hospitals during the performance period.	Mean of the lowest decile Medicare Spending Per Beneficiary ratios across all hospitals during the performance period.

# In section V.J.3.b. of the preamble of this final rule, we are removing the current PSI 90 measure beginning with the FY 2019 program year. As a result, the previously finalized performance standards for this measure are not included in this table.

♦ The performance standards displayed in this table for the Safety domain measures are updated using four quarters of CY 2016 data in this final rule.

† In section III.F.2.e. of preamble of the FY 2016 IPPS/LTCH PPS final rule (80 FR 49554 through 49555), we finalized our proposal to use the CDC’s new standard population data to calculate performance standards for the NHSN measures beginning with the FY 2019 program year. We refer readers to that final rule for additional information regarding the NHSN measures’ standard population data. In addition, we note that a technical update was released for these measures for the FY 2019 program year in order to ensure that hospitals have the correct performance standards for the applicable performance period.

\* Lower values represent better performance.  
± Previously adopted performance standards.

In the CY 2017 OPPI/ASC final rule with comment period (81 FR 79857), we discussed how the removal of the Pain Management dimension of the HCAHPS Survey, beginning with the FY 2018 program year, affects the scoring of the Person and Community Engagement domain. The eight dimensions of the HCAHPS measure are calculated to generate the HCAHPS Base Score. For each of the eight dimensions, Achievement Points (0–10 points) and Improvement Points (0–9 points) are calculated, the larger of which is then summed across the eight dimensions to

create the HCAHPS Base Score (0–80 points). Each of the eight dimensions is of equal weight, thus the HCAHPS Base Score ranges from 0 to 80 points. HCAHPS Consistency Points are then calculated, which range from 0 to 20 points. The Consistency Points take into consideration the scores of all eight Person and Community Engagement dimensions; as noted above, the Pain Management dimension is not included in the scoring of this Domain. The final element of the scoring formula is the summation of the HCAHPS Base Score and the HCAHPS Consistency Points,

which results in the Person and Community Engagement Domain score that ranges from 0 to 100 points.

We invited public comment on the proposed performance standards for the eight HCAHPS survey dimensions. We did not receive any public comments on these proposed performance standards, and are adopting the performance standards listed in the table below. These HCAHPS survey dimension performance standards have been updated from the FY 2018 IPPS/LTCH PPS proposed rule and represent the most recently available data.