

framework for the PPS for operating costs, we adjust the update upwards to allow for real case-mix change, but remove the effects of coding changes on the case-mix index. We also remove the effect on total payments of prior year changes to the DRG classifications and relative weights, in order to retain budget neutrality for all case-mix index-related changes other than patient severity. (For example, we adjusted for the effects of the FY 2002 DRG reclassification and recalibration as part of our update for FY 2004.) We have adopted this case-mix index adjustment in the capital update framework as well.

For FY 2004, we are projecting a 1.0 percent total increase in the case-mix index. We estimate that real case-mix increase will equal 1.0 percent in FY 2004. Therefore, the net adjustment for case-mix change in FY 2004 is 0.0 percentage points.

We estimate that FY 2002 DRG reclassification and recalibration will result in a 0.0 percent change in the case-mix when compared with the case-mix index that would have resulted if we had not made the reclassification and recalibration changes to the DRGs. Therefore, we are making a 0.0 percent adjustment for DRG reclassification and recalibration in the update for FY 2004 to maintain budget neutrality.

The capital update framework contains an adjustment for forecast error. The input price index forecast is based on historical trends and relationships ascertainable at the time the update factor is established for the upcoming year. In any given year, there may be unanticipated price fluctuations that may result in differences between the actual increase in prices and the forecast used in calculating the update factors. In setting a prospective payment rate under the framework, we make an adjustment for forecast error only if our estimate of the change in the capital input price index for any year is off by 0.25 percentage points or more. There is a 2-year lag between the forecast and the measurement of the forecast error. A forecast error of 0.2 percentage points was calculated for the FY 2002 update. That is, current historical data indicate that the forecasted FY 2002 CIPI used in calculating the FY 2002 update factor (0.7 percent) overstated the actual realized price increases (0.5 percent) by 0.2 percentage points. This slight overprediction was mostly due to an underestimation of the interest rate cuts by the Federal Reserve Board in 2002, which impacted the interest component of the CIPI. However, since this estimation of the change in the CIPI is less than 0.25 percentage points, it is not reflected in the update recommended under this framework. Therefore, we are making a 0.0

percent adjustment for forecast error in the update for FY 2004.

Under the capital PPS system framework, we also make an adjustment for changes in intensity. We calculate this adjustment using the same methodology and data that are used in the framework for the operating PPS. The intensity factor for the operating update framework reflects how hospital services are utilized to produce the final product, that is, the discharge. This component accounts for changes in the use of quality-enhancing services, for changes in within-DRG severity, and for expected modification of practice patterns to remove noncost-effective services.

We calculate case-mix constant intensity as the change in total charges per admission, adjusted for price level changes (the CPI for hospital and related services) and changes in real case-mix. The use of total charges in the calculation of the intensity factor makes it a total intensity factor, that is, charges for capital services are already built into the calculation of the factor. Therefore, we have incorporated the intensity adjustment from the operating update framework into the capital update framework. Without reliable estimates of the proportions of the overall annual intensity increases that are due, respectively, to ineffective practice patterns and to the combination of quality-enhancing new technologies and within-DRG complexity, we assume, as in the operating update framework, that one-half of the annual increase is due to each of these factors. The capital update framework thus provides an add-on to the input price index rate of increase of one-half of the estimated annual increase in intensity, to allow for within-DRG severity increases and the adoption of quality-enhancing technology.

As we discussed in the May 9, 2002 proposed rule (67 FR 51514), we have developed a Medicare-specific intensity measure based on a 5-year average. Past studies of case-mix change by the RAND Corporation ("Has DRG Creep Crept Up? Decomposing the Case Mix Index Change Between 1987 and 1988" by G. M. Carter, J. P. Newhouse, and D. A. Relles, R-4098-HCFA/ProPAC (1991)) suggest that real case-mix change was not dependent on total change, but was usually a fairly steady 1.0 to 1.4 percent per year. We use 1.4 percent as the upper bound because the RAND study did not take into account that hospitals may have induced doctors to document medical records more completely in order to improve payment.

We calculate case-mix constant intensity as the change in total charges per admission, adjusted for price level changes (the CPI for hospital and related services), and changes in real case-mix. As we noted above, in

accordance with § 412.308(c)(1)(ii), we began updating the standard Federal capital rate in FY 1996 using an update framework that takes into account, among other things, allowable changes in the intensity of hospital services. For FYs 1996 through 2001, we found that case-mix constant intensity was declining and we established a 0.0 percent adjustment for intensity in each of those years. For FYs 2001 and 2002, we found that case-mix constant intensity was increasing and we established a 0.3 percent adjustment and 1.0 percent adjustment for intensity, respectively.

Using the methodology described above, for FY 2004 we examined the change in total charges per admission, adjusted for price level changes (the CPI for hospital and related services), and changes in real case-mix for FYs 1998 through 2002. We found that, over this period and in particular the last 3 years of this period (FYs 2000 through 2002), the charge data appear to be skewed. More specifically, we found a dramatic increase in hospital charges for FYs 2000 through 2002 without a corresponding increase in hospital case-mix index. If hospitals were treating new or different types of cases, which would result in an appropriate increase in charges per discharge, then we would expect hospitals' case-mix to increase proportionally.

The timing of this increase in charge growth is consistent with the dramatic increase in charges that we discussed in the March 5, 2003 high-cost outlier proposed rule (68 FR 10420 through 14029). As we discussed in that proposed rule, because hospitals have the ability to increase their outlier payments through dramatic charge increases, we proposed several changes in our high-cost outlier policy at §§ 412.84(i) and (m) in order to prevent hospitals from taking advantage of our current outlier policy.

As discussed above, because our intensity calculation relies heavily upon charge data and we believe that this charge data may be inappropriately skewed, we are proposing a 0.0 percent adjustment for intensity in FY 2004. In past FYs (1996 through 2000) when we found intensity to be declining, we believed a zero (rather than negative) intensity adjustment was appropriate. Similarly, we believe that it is appropriate to propose a zero intensity adjustment for FY 2004 until we believe that any increase in charges can be tied to intensity rather than to attempts to maximize outlier payments.

Above we described the basis of the components used to develop the proposed 0.7 percent capital update factor for FY 2004 as shown in the table below.

CMS'S PROPOSED FY 2004 UPDATE FACTOR TO THE CAPITAL FEDERAL RATE

Capital Input Price Index	0.7
Intensity	0.0
Case-Mix Adjustment Factors:	
Projected Case-Mix Change	-1.0
Real Across DRG Change	1.0
Subtotal	0.0
Effect of FY 2002 Reclassification and Recalibration	0.0
Forecast Error Correction	0.0