Hospital inpatient and outpatient services
Documentation and coding improvements
What are documentation and coding improvements and how large might offsetting payment adjustments be?

In 2008, CMS began a two-year phase-in of Medicare severity–diagnosis related groups (MS–DRGs), replacing DRGs as the method for grouping patients in determining per discharge payments. MS–DRGs better capture severity of illness differences among patients, improve payment accuracy, and reflect recommendations the Commission made in 2005 to refine the payment system (Medicare Payment Advisory Commission 2005).

Compared with the prior DRGs, MS–DRGs distinguish very costly cases with major complications or comorbidities. Many of the 335 base DRGs—types of conditions or procedures—are split into three MS–DRGs instead of two DRGs under the old system. In addition, CMS thoroughly revised the lists of secondary diagnoses that qualify as a complication or comorbidity (CC) or major CC (MCC). These changes created more case categories and greater differentiation in the relative weights and base payment rates among cases with and without CCs or MCCs. These changes also created financial incentives to document and code diagnoses more completely given the opportunity to receive higher payments if their cases with qualifying CCs and MCCs were reported accurately and completely.

Documentation and coding improvements result in more patients being reported with MCCs

On the basis of past experience with earlier major changes in the DRGs, CMS and the Commission anticipated that hospitals would respond to the incentives of the MS–DRG system by making documentation and coding improvements (DCI) that primarily affect secondary diagnoses reported on their claims. These changes generally would shift the assignment of some cases from lower weighted to higher weighted MS–DRGs within the same base DRG.

To see if hospitals were coding more qualifying CCs and MCCs once CMS tied detailed coding to higher payments, we examined Medicare cases discharged in 2006, 2007, and 2008. Figure 2A-A1 shows the pattern of change for all base DRGs that are split three ways. The share of cases without a CC or MCC declined more than 6 percentage points in 2008, while the share of cases with a MCC increased by more than 6 percentage points. This figure includes 152 base DRGs that accounted for 54 percent of all cases in 2008. When we looked at all 289 base DRGs that are split in some fashion based on secondary diagnoses, we found that only 128 reflect essentially the same pattern of large shifts in 2008 toward the highest severity and cost MS–DRG and away from the lowest severity or cost MS–DRG. In 124 of these base DRGs, the shift in the share of cases toward the highest weighted MS–DRG was at least 5 percentage points.

Hospitals improve documentation and coding to ensure they get full credit for the highest level of patient severity to which they are legitimately entitled under the new system. The result, however, is that hospitals report a higher case mix under the new MS–DRG system than they would have reported for the same patients under the prior system.
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DRG system. This change in reported case mix due to DCI results in an unwarranted increase in aggregate payments because there is no real overall change in patient severity or in the resources hospitals must use to furnish inpatient care.

How large an adjustment is needed to offset the effects of DCI?

On the basis of their analysis of Medicare experience with earlier major changes in the DRGs and Maryland’s recent experience in implementing all-patient refined DRGs, CMS actuaries expected hospitals’ DCI to eventually raise the national aggregate case-mix index (CMI) and inpatient prospective payment system (IPPS) payments by 4.8 percent. To offset this increase, CMS planned to reduce IPPS payment rates in 2008, 2009, and 2010 by 1.2 percent, 1.8 percent, and 1.8 percent, respectively. In the TMA, Abstinence Education, and QI Programs Extension Act of 2007 (TMA), the Congress mandated smaller reductions of 0.6 percent in 2008 and an additional 0.9 percent in 2009, or a total of 1.5 percent, potentially leaving the additional 3.3 percent increase in CMI projected by the actuaries unaccounted for.

To the extent that these scheduled reductions differ from the actual amount of DCI (based on analysis of claims for 2008 and 2009), however, the TMA also requires the Secretary of Health and Human Services to adjust hospital payments in 2010, 2011, and 2012 to ensure that adoption of MS–DRGs is budget neutral. Offsetting payment adjustments would have two distinct objectives. One (permanent) adjustment to the payment rates would prevent further overpayments (or underpayments) from continuing. A second (temporary) adjustment would recover the overpayments (or restore the underpayments), with interest, that occurred in 2008 and 2009. CMS made the scheduled payment reductions of 0.6 percent in 2008 and 0.9 percent in 2009 but did not make any further adjustment for 2010.

Both CMS and the Commission separately estimated that DCI increased payments by 2.5 percent in 2008. These estimates were based primarily on a comparison of two national aggregate CMIs calculated by using all hospital inpatient claims from IPPS hospitals for fiscal year 2008. A CMI is the average relative weight per discharge for a set of discharges based on the DRG assignments and relative weights used for payment for a given year. One of the comparison CMIs was calculated based on the 2008 MS–DRGs and weights—the payment DRGs and weights in use for 2008. The other CMI was calculated by using the same claim, but based on the 2007 DRGs and weights—the DRGs and weights used for payment in the preceding year. The difference between the two CMIs is the effect of DCI. By definition, this difference in measured case mix is not real because the cases are the same; the difference occurs because the new MS–DRGs recognize more detailed coding of secondary diagnoses while the prior DRGs do not. Under MS–DRGs, more detailed documentation and coding can result in a larger increase in case mix and payments than under the prior DRG system.

In its recalibration of the relative weights for the MS–DRGs for fiscal year 2008, CMS calculated and compared the same two national CMIs (using the 2008 MS–DRGs and weights and the prior 2007 DRGs and weights) with 2006 claims. To preserve budget neutrality, CMS then adjusted the 2008 MS–DRG weights so that the two CMIs would be equal. In other words, the new MS–DRGs and weights are permitted to alter the distribution of payments among cases and hospitals, but they are not permitted to change the aggregate level of payments. If hospitals had not changed their documentation and coding of diagnoses between 2006 and 2008 in response to the new MS–DRGs, we would expect the two CMIs based on the 2008 claims to be nearly equal. Instead, in both CMS’s and the Commission’s analyses the difference was 2.8 percent. As explained below, 2.5 percentage points of the 2.8 percent is estimated DCI and 0.3 percent is the estimated non-DCI effect of recalibration.

Even without any incentives for DCI, we know that the two aggregate CMIs would differ by a small amount whenever they are calculated with a different claims data set than CMS used for recalibration. For example, the difference was 0.3 percent when we calculated the same two CMIs using claims for fiscal year 2007, which do not reflect hospitals’ DCI response to the new MS–DRGs because they preceded the policy change. To avoid attributing this difference to hospitals’ DCI, we subtracted the 0.3 percent from our 2008 DCI estimate of 2.8 percent (CMS made a similar adjustment). Thus, the net DCI estimate for fiscal year 2008 is 2.5 percent.

In addition, both CMS and the Commission estimated that DCI would increase payments a further 0.7 percent in 2009 due to fully phasing in the new cost-based MS–DRG weights, even if there were no further changes in the
distribution of reported cases. However, we do not know how much additional DCI occurred in fiscal year 2009 (adequate 2009 claims data will not be available until April 2010). Therefore, we know hospitals are required to pay back the overpayments from 2008, but we do not know the full extent of overpayments for 2009 until 2009 claims are fully evaluated.

If documentation and coding continue to improve through 2009 as the CMS actuaries projected, DCI in 2009 would be 4.8 percent. In this case, the adjustments to the IPPS base payment rates required under current law would be as follows:

- The adjustment to prevent further overpayments would be –3.3 percent—that is, 4.8 percent minus 1.5 percent for the cumulative DCI adjustment taken through 2009.
- CMS would also need to recover overpayments in 2008 and 2009, with interest. Overpayments were 1.9 percent for 2008 (2.5 − 0.6) and, given the actuaries’ projection of DCI, overpayments would be 3.3 percent for 2009 (4.8 − 1.5), for a total of about 5.2 percent. Assuming that CMS decided to split the temporary recovery adjustment (−5.2 percent) equally over 2011 and 2012, that adjustment would be −2.6 percent.
- The total adjustment required to achieve budget neutrality in 2011 would be −5.9 percent (3.3 + 2.6). In 2013, overpayments from 2008 and 2009 would be fully recovered, the temporary recovery portion of the adjustment (−2.6 percent) would end, and IPPS payments would increase by 2.6 percentage points over and above the market basket update for that year.

It is important to note, however, that overpayments of 3.3 percent per year would continue through 2010 because CMS did not make any DCI adjustment for that year. Under current law, these overpayments would not be recovered and budget neutrality would not be fully restored. Further, IPPS payments could fall in 2011 because the potential adjustment of −5.9 percent is substantially larger than the projected update (2.4 percent, as of January 2010).

Commission recommendation to correct for DCI

To avoid these two problems, the Commission adopted the following recommendation to correct for DCI in its March 2010 report:

**RECOMMENDATION 2A-2**

To restore budget neutrality, the Congress should require the Secretary to fully offset increases in inpatient payments due to hospitals’ documentation and coding improvements. To accomplish this goal, the Secretary must reduce payment rates in the inpatient prospective payment system by the same percentage (not to exceed 2 percentage points) each year in 2011, 2012, and 2013. The lower rates would remain in place until overpayments are fully recovered.

**Timing of recoveries under Recommendation 2A-2**

Under the Commission’s Recommendation 2A-2, the exact timing and magnitude of the DCI adjustments will depend on the amount of DCI that is found when examining 2009 Medicare claims data. If the actuaries’ estimates are on target and the Commission recommendation was adopted, CMS could reduce payments by 2.0 percent per year for three years for a total of a 6 percent reduction in payment rates. Of the maximum of 6 percentage points in reductions, 3.3 percentage points would be a permanent adjustment needed to prevent future overpayments. The remaining 2.7 percentage points (6 − 3.3) would be a temporary adjustment that would remain in place until past overpayments are recovered. Because the expected overpayment in 2011 is 3.3 percent and the adjustment is limited to 2 percent, we expect overpayments to continue in 2011. The temporary reduction would be expected to last through 2015 under the actuaries’ projection of 4.8 percent DCI. After all overpayments (including those in 2010, 2011, and 2012) were recovered, payments would be expected to rise by 2.7 percentage points (above the market basket update) in 2016, as the temporary reduction used to recover past overpayments ends. If the actual effect of hospitals’ DCI in 2009 turns out to be smaller or larger than the actuaries’ projection, the Secretary would have the flexibility to change either the level of the annual adjustments—subject to the 2 percentage point upper limit—or the length of time the adjustments remain in place to achieve budget neutrality.
Medicare Select
Medicare Select: Another indicator of access

One indicator of hospitals’ desire to expand their volume of Medicare services is the degree to which they are willing to discount patients’ deductibles to increase their volume of patients. A certain type of medigap plan, called Medicare Select, negotiates waived or reduced inpatient deductibles for their members. While Medicare Select enrollment is concentrated in a limited number of states, a material number of hospitals have demonstrated their willingness to negotiate discounts to Medicare patients’ deductibles. Those hospitals could be willing to take lower rates to increase (or at least maintain) their volume of Medicare patients. While not all hospitals are willing to take discounts off Medicare rates, the fact that some hospitals do accept Medicare Select discounts suggests that those hospitals accepting Select patients continue to see increases in Medicare patient volumes as desirable, which is a positive sign for patients’ access to care.

Like other medigap policies, Medicare Select provides beneficiaries with standardized benefits—identified by a letter (A–L). Each type of medigap policy provides benefits such as covering deductibles for hospital admissions and coinsurance for physician visits. However, a Medicare Select plan charges a lower premium than a comparable medigap policy, provided that the beneficiary uses “in-network” hospitals. To be included in a Medicare Select plan’s preferred provider network, a hospital must agree to waive all or part of the Part A inpatient deductible ($1,068 for 2009). Some hospitals waive the full deductible, while others waive $500 of the deductible. For perspective, the Part A inpatient deductible is roughly 10 percent of the $10,000 average total IPPS payment per discharge.

In 2008, 106 Medicare Select carriers provided coverage to slightly more than 1 million beneficiaries. Medicare Select plans were available in 45 states, but beneficiaries’ participation rates varied tremendously. We analyzed Select plans in six states (Florida, Alabama, Louisiana, Kentucky, Illinois, and California) that account for more than half of all Medicare beneficiaries enrolled in a Select plan nationwide.

Several caveats apply when considering differences in the characteristics and performance of hospitals participating and not participating in Medicare Select plans. First, the states we investigated were chosen because Medicare Select policies are common in these states; the sample is not meant to be nationally representative. Second, the hospital payment rates negotiated by Select plans may be significantly lower than the rates negotiated by Medicare Advantage plans that have larger networks. In addition, the negotiation process may be affected by the Select plan’s enrollment and the medigap insurers’ market share.

Comparison of Medicare Select and non-Medicare Select hospitals

The share of a state’s IPPS hospitals participating in Medicare Select plans varied across the six states we examined, ranging from 14 percent to 97 percent. On average, hospitals that participate in Medicare Select networks tended to be larger and have a lower 2007 standardized cost per discharge ($5,981) than non-network hospitals ($6,595) in those six states. The lower costs resulted in higher Medicare inpatient margins at Medicare Select hospitals than other hospitals. This finding may in part explain the desire to expand their volume of Medicare patients. To test for quality differences at these facilities, we examined the Hospital Compare measures of mortality and readmissions and found that participating Medicare Select hospitals performed generally at the same level as their non-Medicare Select counterparts on these quality metrics.