EXECUTIVE SUMMARY: Medicare Hospital Outlier Payments Warrant Increased Scrutiny
OEI-06-10-00520

WHY WE DID THIS STUDY

Medicare makes supplemental payments to hospitals, known as outlier payments, which are designed to protect hospitals from significant financial losses resulting from patient-care cases that are extraordinarily costly. Unlike predetermined payment amounts for most Medicare hospital claims, outlier payments are directly influenced by hospital charges. Responding to problems caused by some hospitals aggressively increasing charges, the Centers for Medicare & Medicaid Services (CMS) made policy changes in 2003 to ensure the accuracy of outlier payments. This report describes a more recent distribution of such payments.

HOW WE DID THIS STUDY

We examined all hospital claims processed through Medicare's Inpatient Prospective Payment System (IPPS) during calendar years 2008–2011. We calculated the amount and volume of outlier payments and calculated each hospital’s outlier payments as a percentage of its total IPPS payments. We also identified hospitals that received a substantially higher percentage of Medicare IPPS reimbursements in outlier payments than all other hospitals.

WHAT WE FOUND

Nearly all hospitals received outlier payments and some received a much higher proportion of Medicare IPPS reimbursements from outlier payments. Specifically, outlier payments to 158 hospitals averaged 12.8 percent of their Medicare IPPS reimbursements, compared to an average of only 2.2 percent for all other hospitals. These high-outlier hospitals charged Medicare substantially more for the same Medical Severity Diagnostic Related Groups (MS-DRG), even though their patients had similar lengths of stay as those in all other hospitals. Some MS-DRGs triggered outlier payments frequently, and 16 MS-DRGs accounted for over 41 percent of such payments.

WHAT WE RECOMMEND

In some cases, high charges could be the result of high costs because hospitals attract a disproportionate share of exceptionally costly patients or apply costly technologies and treatments. Still, the routine receipt of outlier payments for certain MS-DRGs at high-outlier hospitals raises concerns about why charges for similar patient-care cases vary substantially across hospitals. CMS agreed with our three recommendations to: (1) instruct CMS contractors to increase monitoring of outlier payments; (2) include information about the distribution of outlier payments with other publicly reported hospital data; and (3) examine whether MS-DRGs associated with high rates of outlier payments warrant coding changes or other adjustments.
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OBJECTIVES

1. To describe the distribution of Medicare outlier payments to hospitals.
2. To identify hospitals that received high-outlier payments.
3. To compare Medicare billing patterns between hospitals that received high-outlier payments and all other hospitals.
4. To identify diagnoses commonly associated with Medicare outlier payments.

BACKGROUND

Medicare reimburses most acute care hospitals for hospital inpatient services through the Inpatient Prospective Payment System (IPPS). The IPPS classifies each hospital discharge into 1 of approximately 746 Medicare Severity Diagnosis Related Groups (MS-DRG) on the basis of the average cost of care for patients with similar diagnoses, paying a predetermined base payment amount on each MS-DRG. Medicare adjusts the payment amount to account for certain hospital-specific factors, such as the hospital’s geographic area wage level and whether the hospital provides education and training to medical residents (i.e., Indirect Medical Education). Medicare also makes supplemental payments, known as outlier payments, to compensate hospitals for “cases involving extraordinarily high costs.” The purpose of Medicare IPPS outlier payments, hereafter referred to as outlier payments, is to protect hospitals from “large financial losses because of unusually expensive cases.”

Outlier Payments

CMS uses a formula to determine the amount of outlier payments, if any, provided for each IPPS claim. When Medicare makes an outlier payment, a case must have estimated costs greater than the “fixed-loss cost threshold.” The fixed-loss cost threshold is the sum of the MS-DRG payment, the “outlier threshold” adjusted to reflect costs in a hospital’s local market, and any add-on payments, which may include payments for treating a high percentage of low-income patients (i.e., a disproportionate share hospital adjustment), for being an approved teaching hospital (i.e.,

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1 Social Security Act (SSA) § 1886(d); 42 U.S.C. 1395ww.
2 Medicare outlier payments can take two forms: “operating” outlier payments and “capital” outlier payments. For purposes this report, and in consultation with CMS officials at the outset of this study, we focus only on operating outlier payments, which are known to account for a large majority of all Medicare outlier payments.
an indirect medical education adjustment), and for cases involving new technology. Medicare determines the amount of the outlier threshold each year and publishes it in its annual IPPS Final Rule. For FY 2011, the outlier threshold was $23,075. The estimated costs per case are determined by multiplying a hospital's covered charges on a claim by the hospital's operating cost-to-charge ratio (CCR). Generally, a hospital's CCR is calculated by dividing its aggregate operating costs by its aggregate charges, with the CCR changing over time on the basis of updated cost report data. Medicare makes outlier payments on the basis of a marginal cost factor, which is equal to 80 percent of the estimated costs above the fixed-cost loss threshold.

To illustrate these calculations, consider a hospital that has a 0.7 CCR, no add-on payments, and a $23,075 outlier threshold. Assume that the hospital submits a claim to Medicare with covered charges of $100,000 for an extraordinarily costly Medicare inpatient stay with a MS-DRG payment amount of $10,000. In this case, the claim’s estimated cost is $70,000 ($100,000 x 0.7 CCR). The fixed-loss cost threshold is $33,075 (the sum of the MS-DRG payment amount ($10,000) and the outlier threshold ($23,075)). The amount subject to an outlier payment is $36,925, calculated by subtracting fixed-loss cost threshold ($33,075) from the estimated cost ($70,000). The outlier payment for the claim would be $29,540 (80 percent of the $36,925 subject to an outlier payment). The total payment from Medicare would be $39,540 – the MS-DRG payment amount ($10,000) and the outlier payment amount ($29,540).

**IPPS Outlier Payment Policy Changes**

In the 2003 IPPS Final Rule, CMS made changes to its outlier payment methodology to improve accuracy in determining whether cases are high cost and to ensure that outlier payments are made only for truly expensive cases. Before 2003, Medicare contractors used data from a hospital’s most recent final-settled cost report when calculating a hospital’s CCR. After a Medicare contractor accepts and tentatively settles a hospital’s cost report, a hospital’s CCR is frozen for the remainder of the fiscal year. This means that claims made after the settlement date are subject to the CCR that was in place at the time of settlement. This methodology can lead to incorrect outlier payments for cases that incurred costs that were not included in the settled cost report. To address this issue, CMS changed its methodology to use the most recent data available when calculating a hospital’s CCR. This change ensures that outlier payments are made only for truly expensive cases.

6 Consistent with this report examining only “operating” outlier payments, we refer only to the “operating” CCR in this example and throughout the report.
9 The formula used by CMS is more complex because CMS divides the outlier threshold into an operating portion and a capital portion. In this example, CMS would use the operating portion of the outlier threshold, which it would calculate by dividing the operating CCR by the sum of the operating CCR and the capital CCR.
report, it can take 1–2 years before a cost report is final settled. CMS indicated that some hospitals took advantage of this lag time to maximize outlier payments by increasing their charges before their cost reports were settled. These hospitals received excessive outlier payments because Medicare calculated the payments using outdated CCRs that did not reflect the hospitals’ higher charges. CMS indicated that this caused hospitals that did “not aggressively increase their charges” to “not receive outlier payments or receive reduced outlier payments for truly costly cases.” Recognizing the vulnerability, CMS changed the outlier methodology to improve the accuracy of CCRs used to calculate outlier payments. With the 2003 IPPS Final Rule, CMS required Medicare contractors to begin using the most recently available cost reports to calculate CCRs. Instead of relying solely on a hospital’s final-settled cost report, CMS required contractors to update CCRs using the most recent tentatively settled cost report or the most recent final-settled cost report, whichever is from the most recent cost-reporting period.

Hospital Charges
Although hospital charges do not affect the Medicare payment amount on most IPPS claims, hospital charges directly affect whether a hospital receives an outlier payment and, if so, the amount of payment. In May 2013, CMS released data showing each IPPS hospital’s average charges for the 100 procedures most frequently billed to Medicare. The data show that charges vary substantially among the hospitals.

METHODOLOGY

Data Collection
This report outlines Medicare hospital operating outlier payments (hereafter referred to as outlier payments), based on analysis of IPPS claims in the Standard Analytic File (SAF) for services during calendar years 2008–2011. We excluded claims paid through managed care organizations and all hospitals exempt from IPPS (i.e., designated cancer hospitals and hospitals in Maryland and the U.S. territories, which are not paid under IPPS). We also excluded hospitals that did not have at least 100 covered IPPS claims in each of the 4 years reviewed. We identified

14 We excluded 11 cancer research hospitals, 46 hospitals in Maryland, and 56 hospitals in U.S. Territories.
15 Critical access hospitals are not included in the IPPS.
hospitals that received high-outlier payments by first calculating each hospital's percentage of IPPS payments received from outlier payments.\textsuperscript{16} We then identified hospitals with outlier payment percentages greater than the 75\textsuperscript{th} percentile plus 1.5 times the interquartile range.\textsuperscript{17} We hereafter refer to these as high-outlier hospitals.

Using several hospital characteristics, we compared the percentage of each characteristic in the high-outlier hospitals to the percentage of each characteristic in all other hospitals. These characteristics included bed size, total Medicare IPPS reimbursements (including outlier payments), total outlier payments, ownership type, whether the hospital taught medical residents (teaching hospital), and whether the hospital was designated as urban or rural. For ownership type, hospitals were either for-profit, nonprofit, or government. We identified a teaching hospital as any that taught medical residents during the study period. Finally, we employed CMS's urban/rural classification, which uses the Core Based Statistical Area (CBSA) to determine whether a hospital is urban or rural.

Data Analysis

Distribution of Outlier Payments. To analyze outlier payments, we totaled all outlier payments and all IPPS payments at each hospital for each calendar year. We counted the number of claims with outlier payments and the number of IPPS claims for each hospital for each year. Finally, we calculated percentages for each hospital by dividing the number and amount of outlier payments by the number of claims and amount of IPPS payments for each year and for the 4 years combined. We also determined the percentage of claims that included an outlier payment by dividing the number of claims with outlier payments by the total number of Medicare IPPS claims. We calculated the average amount of outlier payment by dividing the total amount of outlier payments by the number of claims with outlier payments.

Measures of Hospital Billing Patterns. To compare Medicare billing patterns between high-outlier hospitals and all other hospitals, we grouped each hospital’s claims by MS-DRG. We totaled each hospital’s Medicare IPPS charges, Medicare IPPS reimbursements, and number of claims by MS-DRG for each year. We also totaled each hospital’s Medicare IPPS charges, Medicare IPPS reimbursements, and number of claims with

\textsuperscript{16} We excluded 122 hospitals that did not have at least 100 claims in each year during 2008–2011 to reduce the likelihood that a hospital with only a few claims would skew certain variables (e.g., percentage of IPPS payments in outlier payments).

\textsuperscript{17} Known as Tukey’s Method, this is a standard exploratory method for identifying members of a population with high values on a given statistic compared to the rest of the population when no established benchmark exists. See J.W. Tukey, \textit{Exploratory Data Analysis}, Addison-Wesley, 1977.
outlier payments by MS-DRG for each year. We calculated these same statistics for the 4 years combined. Further, we developed an outlier payment “trigger” rate by dividing the number of claims with an outlier payment by the total number of claims by MS-DRG for each hospital for the 4 years combined. We determined the average charge amount, average reimbursement amount, and percentage and amount of change between 2008–2011 by MS-DRG at each hospital for each year and for the 4 years combined. We also calculated the patients’ average lengths of stay for each MS-DRG by subtracting the admission dates from the discharge dates plus one day.

We compared charges, charge growth rates, and lengths of stay between hospitals with high-outlier payments and other hospitals for each MS-DRG. To make the comparisons, we calculated the MS-DRG averages for high-outlier hospitals by dividing the total dollar amount of the claims by the total number of claims for each MS-DRG. We calculated the same averages for all other hospitals by MS-DRG. We then created a variable that represents the difference between the MS-DRG average at high-outlier hospitals and the MS-DRG average for all other hospitals. Finally, we calculated the average differences for each statistic between MS-DRGs at high-outlier hospitals and MS-DRGs at all other hospitals.

**Standards**

This study was conducted in accordance with the *Quality Standards for Inspection and Evaluation* issued by the Council of the Inspectors General on Integrity and Efficiency.

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18 We did not adjust dollar amounts over time for inflation.
19 We added one day to avoid instances in which the discharge date and admission date occurred on the same day, resulting in a zero day stay.
20 For these statistics, we used hospital MS-DRGs that had more than 10 claims in the year of comparison.
FINDINGS

Nearly all hospitals received outlier payments and some received a much higher proportion of Medicare IPPS reimbursements from outlier payments

During 2008–2011, Medicare paid approximately $15.8 billion in outlier payments to the 3,186 hospitals that we reviewed. Nearly all hospitals (97 percent) received at least one outlier payment during the 4-year period. Further, 88 percent of hospitals received at least one outlier payment during each of the 4 years. Medicare hospital outlier payments totaled slightly less than $4 billion in 2008, 2010, and 2011 and exceeded $4 billion in 2009. (See Figure 1.) Although the dollar amount of outlier payments varied from year to year, the percentage of outlier payments among all Medicare IPPS payments was similar during the 4-year study period, about 4 percent of total IPPS payments.

Although only 2 percent of Medicare IPPS claims (different from 4 percent of payments) included outlier payments, these payments often represented a substantial portion of the payments to hospitals for each individual claim with an outlier. Overall, outlier payments were 40 percent of the total reimbursement for those claims. The average outlier payment was $15,482, which does not include the MS-DRG payment; 6 percent of outlier payments exceeded $50,000. For several claims, the outlier payment exceeded $1 million; the largest during the study period was $1.4 million for a single claim.21

Figure 1: Total Medicare Hospital Outlier Payments During 2008–2011


21 This claim was for MS-DRG 003, which is a tracheostomy requiring mechanical ventilation for more than 96 hours.
One hundred-fifty eight hospitals received a high percentage of Medicare IPPS reimbursements from outlier payments

We identified 158 hospitals that received outlier payments beyond a statistically determined threshold of 8 percent of their total Medicare IPPS payments. These high-outlier hospitals received an average of 12.8 percent of their Medicare IPPS payments from outlier payments during 2008–2011. (See Table 1.) By comparison, the other 3,028 hospitals averaged only 2.2 percent of Medicare IPPS payments in outlier payments.

Table 1: Comparison of High-Outlier Hospitals and All Other Hospitals

<table>
<thead>
<tr>
<th>Measurements</th>
<th>High-Outlier Hospitals</th>
<th>All Other Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of hospitals</td>
<td>158</td>
<td>3,028</td>
</tr>
<tr>
<td>Average percentage of Medicare IPPS reimbursements from outlier payments</td>
<td>12.8%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Average percentage of Medicare claims that included an outlier payment</td>
<td>8.3%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Average amount of outlier payment on a claim with an outlier</td>
<td>$22,843</td>
<td>$13,921</td>
</tr>
<tr>
<td>Average amount of Medicare IPPS reimbursements per hospital (2008–2011)</td>
<td>$223,111,865</td>
<td>$122,192,685</td>
</tr>
<tr>
<td>Average amount of outlier payments per hospital (2008–2011)</td>
<td>$25,944,213</td>
<td>$3,891,212</td>
</tr>
<tr>
<td>Average number of certified beds (2011)</td>
<td>352</td>
<td>226</td>
</tr>
<tr>
<td>Percentage of urban hospitals23</td>
<td>95%</td>
<td>70%</td>
</tr>
<tr>
<td>Percentage of teaching hospitals</td>
<td>47%</td>
<td>31%</td>
</tr>
</tbody>
</table>


High-outlier hospitals also received larger outlier payments on a higher percentage of Medicare claims than all other hospitals. The average outlier payment on an outlier claim was $22,843 for high-outlier hospitals, compared to $13,921 for all other hospitals. Further, 8.3 percent of claims paid to high-outlier hospitals included an outlier payment, compared to only 1.7 percent of Medicare IPPS claims for all hospitals.

Generally, high-outlier hospitals were larger, more likely to be in urban areas, and had a higher percentage of teaching hospitals, compared to all other hospitals. On the basis of 2011 data, the 158 high-outlier hospitals had about 50 percent more Medicare-certified beds than all other hospitals, on average 352 beds, compared to 226 beds. High-outlier hospitals averaged $223 million in total IPPS payments during 2008–2011, compared to an average of $122 million for all other hospitals. Further, these high-outlier hospitals received an average

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22 Using the Tukey Method, we determined that hospitals receiving 8 percent or more of their IPPS payments in outliers received high-outlier payments.

23 We did not identify hospitals that applied to CMS for reclassification of their urban to rural status.
$25.9 million in outlier payments during the 4 years, compared to $3.9 million on average for all other hospitals. Nearly all high-outlier hospitals, 96 percent, were in urban areas, compared to 70 percent for all other hospitals. High-outlier hospitals also had a higher percentage of teaching hospitals (i.e., any hospital that taught any medical residents), compared to all other hospitals. Among these, larger teaching hospitals were even more likely to be in the group of high-outlier hospitals.

**Nearly all high-outlier hospitals received outlier payments routinely for certain MS-DRGs**

We found that high-outlier hospitals received outlier payments more frequently for certain MS-DRGs during 2008–2011, compared to all other hospitals. Among the 158 high-outlier hospitals, 147 received outlier payments on 50 percent or more of their claims for one or more MS-DRG. As the most extreme example, one hospital received outlier payments on more than 50 percent of its claims for 46 different MS-DRGs.

**High-outlier hospitals charged Medicare substantially more for the same MS-DRGs, yet had similar average lengths of stay and CCRs**

High-outlier hospitals charged Medicare, on average, 42 percent more for the same MS-DRGs, compared to all other hospitals, yet had only slightly longer lengths of stay (4 percent). As an extreme example, high-outlier hospitals charged almost twice as much for MS-DRG 177 (respiratory infection and inflammation), compared to all other hospitals, and the average length of stay for the same MS-DRG at high-outlier hospitals was only 10 percent longer. Further, for about one-third of MS-DRGs,

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24 For this analysis, we included any hospital in the group of teaching hospitals that taught medical students as measured by the interns-to-bed ratio in the Provider Specific File.

25 We found no difference between the two groups regarding case mix and whether the hospital was for-profit, nonprofit, or government.

26 Twenty-nine percent of high-outlier hospitals were “larger teaching hospitals” (i.e., teaching hospitals with greater than a 15 percent ratio of medical students-to-beds), compared to only 11 percent for all other hospitals. Larger teaching hospitals are known to attract some of the most difficult and expensive cases.

27 We calculated this statistic using the combined number of claims during 2008–2010.

28 We excluded MS-DRGs at hospitals with fewer than 10 claims in a year to reduce the likelihood that a small number of claims would skew the MS-DRG average.

29 For MS-DRG 177, respiratory infection and inflammation, charges at high-outlier hospitals averaged $77,076, compared to $42,697 at all other hospitals. The average length of stay was 10.7 days at high-outlier hospitals, compared to 9.6 at all other hospitals.
high-outlier hospitals had higher average charges and shorter lengths of stay when compared to all other hospitals. This suggests that high charges are not necessarily associated with more care for patients, as measured by average length of stay.

High-outlier hospitals had similar average CCRs, compared to all other hospitals, which means that the higher charges by the hospitals directly resulted in larger and more frequent outlier payments. As mentioned, Medicare applies a hospital’s CCR to the covered charges on a claim to determine the estimated cost of services covered by the claim. The amount of the estimated cost determines whether Medicare makes an outlier payment and the amount received. In 2008, the average CCR at high-outlier hospitals was the same as the average CCR for all other hospitals, 0.35. CCRs declined, on average, during 2008–2011, to 0.30 at high-outlier hospitals and to 0.33 at all other hospitals. Although the high-outlier hospitals’ had higher charges, their CCR (i.e., .30) was not significantly lower than the CCR of all other hospitals (i.e., .33). Therefore, the higher charges led Medicare to calculate higher estimated costs for the high-outlier hospitals, and paying larger, more frequent outlier payments.

An example in Appendix A illustrates how the charges and CCRs affected outlier payments for a single MS-DRG at one high-outlier hospital.

**Some MS-DRGs triggered outlier payments frequently**

Thirteen MS-DRGs triggered outlier payments on at least 25 percent of each MS-DRG’s claims during 2008–2011. (See Table 3.) Combined, this group of MS-DRGs triggered outlier payments on 29 percent of the claims that included one of these MS-DRGs. MS-DRG 215 triggered the highest percentage of outlier payments – 37 percent. High-outlier hospitals triggered outlier payments on 58 percent of claims from this group of MS-DRGs, compared to 32 percent for all other hospitals.
Table 2: MS-DRGs with the Highest Outlier Trigger Rates During 2008-2011

<table>
<thead>
<tr>
<th>MS-DRG Description</th>
<th>MS-DRG</th>
<th>Number of Claims 2008-2011</th>
<th>Number of Outlier Claims</th>
<th>Trigger Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other heart assist system implant</td>
<td>215</td>
<td>660</td>
<td>245</td>
<td>37.1%</td>
</tr>
<tr>
<td>Heart transplant or implant of heart assist system with major complication/comorbidity (MCC)</td>
<td>001</td>
<td>4,697</td>
<td>1,709</td>
<td>36.4%</td>
</tr>
<tr>
<td>Heart transplant or implant of heart assist system without MCC</td>
<td>002</td>
<td>1,077</td>
<td>370</td>
<td>34.4%</td>
</tr>
<tr>
<td>Pancreas transplant</td>
<td>010</td>
<td>426</td>
<td>138</td>
<td>32.4%</td>
</tr>
<tr>
<td>Lung transplant</td>
<td>007</td>
<td>1,892</td>
<td>602</td>
<td>31.8%</td>
</tr>
<tr>
<td>Extensive burns or full thickness burns with mechanical ventilation 96+ hours (hrs) with skin graft</td>
<td>927</td>
<td>715</td>
<td>226</td>
<td>31.6%</td>
</tr>
<tr>
<td>Liver transplant with MCC or intestinal transplant</td>
<td>005</td>
<td>3,788</td>
<td>1,181</td>
<td>31.2%</td>
</tr>
<tr>
<td>Intracranial vascular procedures with primary diagnosis (PDX) hemorrhage with MCC</td>
<td>020</td>
<td>4,718</td>
<td>1,417</td>
<td>30.0%</td>
</tr>
<tr>
<td>Tracheostomy with mechanical ventilation 96+ hrs or PDX except face, mouth, and neck with major operating room (OR) procedure</td>
<td>003</td>
<td>86,321</td>
<td>24,757</td>
<td>28.7%</td>
</tr>
<tr>
<td>Combined anterior/posterior spinal fusion with MCC</td>
<td>453</td>
<td>5,268</td>
<td>1,431</td>
<td>27.2%</td>
</tr>
<tr>
<td>Spinal fusion except cervical with spinal curvature, malignancy, infection or 9 or more fusions without complication or comorbidity (CC) or MCC</td>
<td>456</td>
<td>4,973</td>
<td>1,325</td>
<td>26.6%</td>
</tr>
<tr>
<td>Allogeneic bone marrow transplant</td>
<td>014</td>
<td>639</td>
<td>162</td>
<td>25.4%</td>
</tr>
<tr>
<td>Chemo with acute leukemia as secondary diagnosis or with high-dose chemotherapy agent with MCC</td>
<td>837</td>
<td>5,684</td>
<td>1,431</td>
<td>25.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>120,858</strong></td>
<td><strong>34,994</strong></td>
<td><strong>29.0%</strong></td>
</tr>
</tbody>
</table>


**Sixteen MS-DRGs accounted for over 41 percent of outlier payments**

Medicare made over 41 percent of its outlier payments during 2008–2011 for claims categorized in 16 of the 746 MS-DRGs. (See Table 2.) Outlier payments for these 16 MS-DRGs totaled $6.5 billion during the study period. The single MS-DRG associated with the most outlier payments was MS-DRG 003 (Tracheostomy with required ventilation), which accounted for $1.3 billion (8.3 percent) in outlier payments during 2008–2011.
<table>
<thead>
<tr>
<th>MS-DRG Description</th>
<th>MS-DRG</th>
<th>Total Medicare IPPS Reimbursements</th>
<th>Total Amount of Outlier Payments</th>
<th>Percentage of All Outlier Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tracheostomy with mechanical ventilation 96+ hrs or PDX except face, mouth, and neck with major OR procedure</td>
<td>003</td>
<td>$10,500,931,816</td>
<td>$1,329,228,265</td>
<td>8.3</td>
</tr>
<tr>
<td>Major small and large bowel procedures with MCC</td>
<td>329</td>
<td>$6,190,669,762</td>
<td>$627,430,445</td>
<td>3.9</td>
</tr>
<tr>
<td>Tracheostomy with mechanical ventilation 96+ hrs or PDX except face, mouth, and neck without major OR procedure</td>
<td>004</td>
<td>$6,136,675,668</td>
<td>$607,071,314</td>
<td>3.8</td>
</tr>
<tr>
<td>Infectious and parasitic diseases with OR procedure with MCC</td>
<td>853</td>
<td>$6,117,496,303</td>
<td>$611,833,593</td>
<td>3.8</td>
</tr>
<tr>
<td>Septicemia or severe sepsis without mechanical ventilation 96+ hrs with MCC</td>
<td>871</td>
<td>$13,440,016,369</td>
<td>$505,857,309</td>
<td>3.1</td>
</tr>
<tr>
<td>Major cardiovascular procedures with MCC</td>
<td>237</td>
<td>$3,276,436,385</td>
<td>$347,006,348</td>
<td>2.1</td>
</tr>
<tr>
<td>Respiratory system diagnosis with ventilator support</td>
<td>207</td>
<td>$4,666,072,631</td>
<td>$324,024,478</td>
<td>2.0</td>
</tr>
<tr>
<td>Septicemia or severe sepsis with mechanical ventilation 96+ hrs</td>
<td>870</td>
<td>$4,276,595,714</td>
<td>$306,382,518</td>
<td>1.9</td>
</tr>
<tr>
<td>Extensive OR procedure unrelated to PDX with MCC</td>
<td>981</td>
<td>$3,376,069,830</td>
<td>$296,071,879</td>
<td>1.8</td>
</tr>
<tr>
<td>Cardiac valve and other major cardiothoracic procedure with cardiac catheter with MCC</td>
<td>219</td>
<td>$3,150,583,161</td>
<td>$272,145,846</td>
<td>1.7</td>
</tr>
<tr>
<td>Other vascular procedures with MCC</td>
<td>252</td>
<td>$3,372,929,090</td>
<td>$243,139,762</td>
<td>1.5</td>
</tr>
<tr>
<td>Cardiac valve and other major cardiothoracic procedure with cardiac catheter with MCC</td>
<td>216</td>
<td>$2,709,864,558</td>
<td>$215,418,403</td>
<td>1.3</td>
</tr>
<tr>
<td>Heart failure and shock with MCC</td>
<td>291</td>
<td>$7,282,187,658</td>
<td>$205,765,403</td>
<td>1.3</td>
</tr>
<tr>
<td>Stomach, esophageal and duodenal procedures with MCC</td>
<td>326</td>
<td>$1,747,150,159</td>
<td>$197,323,546</td>
<td>1.3</td>
</tr>
<tr>
<td>Spinal fusion except cervical without MCC</td>
<td>460</td>
<td>$5,454,603,905</td>
<td>$197,877,498</td>
<td>1.2</td>
</tr>
<tr>
<td>Coronary bypass with cardiac catheter with MCC</td>
<td>233</td>
<td>$2,715,961,405</td>
<td>$182,008,343</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>$84,414,244,413</td>
<td>$6,468,584,949</td>
<td>40.6%</td>
</tr>
</tbody>
</table>

High-outlier hospitals had a similar percentage (8.6 percent) of their MS-DRGs coming from the 16 high MS-DRGs, compared to all other hospitals (8.5 percent). However, despite similar percentages of claims from these 16 high MS-DRGs, high-outlier hospitals received outlier payments about 3 times as frequently (22 percent), compared to all other hospitals (7 percent).
CONCLUSION AND RECOMMENDATIONS

Outlier payments are intended to protect hospitals from financial losses resulting from extraordinarily costly cases. Unlike predetermined payment amounts for most Medicare hospital claims, outlier payments are directly influenced by hospital charges. Although nearly all hospitals received outlier payments during 2008–2011, we found that some received such payments routinely and that a small number of MS-DRGs accounts for a large proportion of outlier payments. High-outlier hospitals charged Medicare substantially more for the same MS-DRGs, yet had similar average lengths of stay and CCRs. This finding is consistent with data released by CMS in May 2013 showing substantial differences in hospital charges for the 100 most common inpatient claims. It was beyond the scope of this evaluation to determine why certain hospitals routinely charged Medicare more than other hospitals for the same MS-DRGs or how their submitted charges related to the actual cost of patient care. In some cases, high charges could be the result of high costs because some hospitals attract a disproportionate share of exceptionally costly patients or apply costly technologies and treatments. Still, the routine receipt of outlier payments for certain MS-DRGs at high-outlier hospitals raises concerns about why charges and estimated costs for similar patient-care cases vary substantially across hospitals.

Therefore, we recommend that CMS:

**Instruct Medicare Contractors To Increase Monitoring of Outlier Payments**

CMS could develop thresholds that prompt further review by Medicare contractors of hospitals with claims exceeding the specified thresholds. These thresholds could include charges, estimated costs, percentage of MS-DRGs that result in outlier payments, and the ratio of outlier payments to all IPPS payments.

**Include Information About the Distribution of Outlier Payments with Other Publicly Reported Hospital Data**

CMS publicly reports information about hospital charges to Medicare for common procedures, as well as measures of hospital quality, such as information contained in the Hospital Compare Web site. CMS should supplement its public reporting with information about hospital outlier payments, including the distribution of outlier payments across hospitals. Such public reporting would provide greater transparency regarding Medicare payments to hospitals, further inform the public and stakeholders about how Medicare distributes limited outlier payment dollars, and demonstrate the direct effect increased charges can have on
overall Medicare payments to hospitals. CMS could also consider including information about outlier payments in reports it issues to individual hospitals, such as in its Program for Evaluating Payment Patterns Electronic Reports (PEPPER), which uses Medicare data to provide comparisons of individual hospitals to all other hospitals on various statistics.

**Examine Whether MS-DRGs Associated With High Rates of Outlier Payments Warrant Coding Changes or Other Adjustments**

Although outlier payments are designed to compensate hospitals for extraordinarily costly cases, we found that 16 of the 746 MS-DRGs accounted for over 40 percent of outlier payments. Further, 13 MS-DRGs had outlier payments on at least 25 percent of each MS-DRG’s claims, one of which had outlier payments on 37 percent of the claims. This suggests that certain MS-DRGs may result in outlier payments for reasons inherent to the MS-DRG, rather than for extraordinarily costly cases. CMS should consider whether any changes are needed for such MS-DRGs.

**AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE**

In its comments on the draft report, CMS concurred with our recommendations and described current and future activities to improve scrutiny of outlier payments.
APPENDIX A

Example of the Effect of Charges and Cost-To-Charge Ratios (CCR) On Estimated Costs and Outlier Payments

Table A1 shows how high charges and a CCR similar to the national average increased the amount of outlier payments at one high-outlier hospital. The table compares the national average to one high-outlier hospital for Medical Severity-Diagnostic Related Group (MS-DRG) 003 (tracheostomy requiring mechanical ventilation for over 96 hours).

- The hospital charged Medicare about 3.4 times the national average for MS-DRG-003 in 2008 and 2011.
- The hospital had CCRs about the same as the national average during both 2008 and 2011.
- Medicare estimated the hospital’s cost for MS-DRG-003 was about 3.4 times greater than the national average in both 2008 and 2011.\(^{30}\)
- Medicare paid the hospital an average outlier payment about 4.5 times greater than the national average for providing services related to MS-DRG-003 during 2008–2011.
- Medicare paid outlier payments to the hospital for 96 percent of MS-DRG-003 claims during 2008–2011, compared to the national average for all hospitals of 29 percent.

Table A1: Comparison of One Hospital From the 158 High-outlier Hospitals and the National Average

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Hospital</th>
<th>Average of All Hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average charge, 2008</td>
<td>$1,456,647</td>
<td>$430,641</td>
</tr>
<tr>
<td>Average charge, 2011</td>
<td>$1,631,441</td>
<td>$475,323</td>
</tr>
<tr>
<td>CCR (2008/2011)</td>
<td>0.35/0.33</td>
<td>0.35/0.33</td>
</tr>
<tr>
<td>Average estimated costs, 2008</td>
<td>$509,826</td>
<td>$150,724</td>
</tr>
<tr>
<td>Average estimated costs, 2011</td>
<td>$538,375</td>
<td>$156,856</td>
</tr>
<tr>
<td>Average outlier payment per claim, 2008–2011</td>
<td>$242,072</td>
<td>$53,691</td>
</tr>
<tr>
<td>Percentage of claims with outlier payment for MS-DRG 003, 2008–2011</td>
<td>96%</td>
<td>29%</td>
</tr>
</tbody>
</table>


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\(^{30}\) Estimated costs are the product of the charges on a claim and the hospital CCR. Estimated costs at the hospital were $509,826 ($1,456,647 X 0.35) in 2008, compared to the national average $150,724. In 2011, estimated costs increased to $538,375 at the hospital, compared to $156,856 for the national average.
DATE: SEP 2 3 2013

TO: Daniel R. Levinson
Inspector General

FROM: Marilyn Tavenner /S/
Administrator


The Centers for Medicare & Medicaid Services (CMS) appreciates the opportunity to review and comment on the above subject OIG Draft Report. OIG’s objectives for this study are to—(1) Describe the distribution of Medicare outlier payments to Inpatient Prospective Payment System (IPPS) hospitals; (2) Identify hospitals that received high-outlier payments; (3) Compare Medicare billing patterns between hospitals that received high-outlier payments and all other hospitals; and (4) Identify diagnoses commonly associated with Medicare outlier payments. The OIG recommendations and CMS’s responses to those recommendations are discussed below.

OIG Recommendation
The OIG recommends that CMS instruct its contractors to increase monitoring of outlier payments.

CMS Response
The CMS concurs and believes that our current guidelines to Medicare contractors provide sufficient monitoring of outlier payments.

OIG Recommendation
The OIG recommends that CMS include information about the distribution of outlier payments with other publicly reported hospital data.

CMS Response
The CMS concurs with this recommendation. This information is already publicly available through the Medicare Provider Analysis and review file.
OIG Recommendation

The OIG recommends that CMS examine whether Medicare Severity Diagnosis Related Groups (MS-DRGs) associated with high rates of outlier payments warrant coding changes or other adjustments.

CMS Response

The CMS concurs with this recommendation. The CMS annually examines the MS-DRGs and code assignments. During this annual review, we solicit public input and review clinical and cost data to determine if ICD-9-CM codes are assigned to appropriate MS-DRGs as well as recalibrate the MS-DRG weights based on the most recent claims data available.

The CMS thanks OIG for their efforts on this issue and looks forward to working with OIG on this and other issues in the future.
ACKNOWLEDGMENTS

This report was prepared under the direction of Kevin Golladay, Regional Inspector General for Evaluation and Inspections in Dallas; Blaine Collins, Deputy Regional Inspector General; and Ruth Ann Dorrill, Deputy Regional Inspector General.

Amy Ashcraft served as team leader for this study, and Ben Gaddis served as lead analyst. Other Office of Evaluation and Inspections staff from the Dallas regional office who conducted the study include Leah K. Bostick and Nathan Dong. Central office staff who provided support include Talisha Searcy and Christine Moritz.
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