## First look at MS-DRG statistics for FY2008

Changes to the Medicare inpatient prospective payment system (IPPS) by the Centers for Medicare and Medicaid Services (CMS) have significantly changed the way in which hospitals are reimbursed for FY 2008. Major changes include the continued phase-in of relative weights based on hospital-specific costs and new Medicare severity-adjusted DRGs (MS-DRGs). Other changes include the way in which outliers and certain transfers are reimbursed.

This analysis is based on an early release of the FY 2008 MedPAR for discharges during the first three quarters. This release gives us a preliminary look at FY 2008 utilization statistics under the new MS-DRGs. There are 3,593 short term acute care hospitals included representing more than 9 million discharges and more than \$91 billion in IPPS reimbursement for the first 9 months of FY2008.

Statistics shown in Table 1 are ranked according to the number of discharges with the "top 25" MS-DRGs representing more than one-third of the total for FY2008. Comparative statistics for FY2007 are provided in Table 2. It is difficult to compare individual MS-DRGs in FY2008 with the prior DRG definitions used in FY2007. There are more MS-DRGs due to the increased levels of severity defined and there are significant differences in many of the clinical definitions. As a result, the top 25 MS-DRGs represent 37.7% of the total for FY2008 while the top 25 DRGs represent 47.9% for FY2007. Additionally, there are often different classifications and numbers of MS-DRGs/DRGs for a particular diagnosis between the two systems.

Examples of differences between MS-DRG and DRG definitions.

| MS- | s of differences between MB BRO and B |     |                            |
|-----|---------------------------------------|-----|----------------------------|
| DRG | MS-DRG Description                    | DRG | DRG Description            |
| 291 | Heart failure & shock w MCC           | 127 | Heart failure & shock      |
| 292 | Heart failure & shock w CC            |     |                            |
| 293 | Heart failure & shock w/o CC/MCC      |     |                            |
|     |                                       |     |                            |
| 294 | Deep vein thrombophlebitis w CC/MCC   | 128 | Deep vein thrombophlebitis |
| 295 | Deep vein thrombophlebitis w/o CC/MCC |     |                            |
|     |                                       |     |                            |
| 302 | Atherosclerosis w MCC                 | 132 | Atherosclerosis w CC       |
| 303 | Atherosclerosis w/o MCC               | 133 | Atherosclerosis w/o CC     |
|     |                                       |     |                            |
| 311 | Angina pectoris                       | 140 | Angina pectoris            |

Various techniques can be used to aggregate DRGs/MS-DRGs for comparison. For example, base DRGs/MS-DRGs can be used that combine all patients for a particular condition regardless of whether CCs or MCCs are present. Another technique combines DRGs into Major Diagnostic Categories (MDCs) or medical services for gross comparison.

It is hoped that hospitals will find these preliminary statistics useful for comparing their individual experiences under the new MS-DRGs with the national experience.

Table 1 - Preliminary MS-DRG statistics for 9 months ending 6/30/2008

| MS-<br>DRG | MS-DRG DESCRIPTION   | TOTAL<br>DISCH | AVG<br>LOS | AVERAGE<br>REIMB | OUTLIER<br>REIMB % | % TOT<br>DISCH | CUMM %<br>TOT DISCH |
|------------|--|----------------|------------|------------------|--------------------|----------------|---------------------|
| 470        | MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MCC | 290,648        | 3.8        | \$10,580         | 0.2%               | 3.6%           | 3.6%                |
| 871        | SEPTICEMIA W/O MV 96+ HOURS W MCC                                  | 190,626        | 7.3        | \$10,356         | 3.8%               | 2.3%           | 5.9%                |
| 392        | ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS W/O MCC             | 172,301        | 3.4        | \$3,541          | 0.3%               | 2.1%           | 8.1%                |
| 194        | SIMPLE PNEUMONIA & PLEURISY W CC                                   | 165,617        | 5.1        | \$5,263          | 0.4%               | 2.0%           | 10.1%               |
| 291        | HEART FAILURE & SHOCK W MCC  | 156,437        | 6.4        | \$7,232          | 3.0%               | 1.9%           | 12.0%               |
| 292        | HEART FAILURE & SHOCK W CC   | 148,366        | 4.7        | \$5,429          | 0.3%               | 1.8%           | 13.9%               |
| 313        | CHEST PAIN   | 134,980        | 2.1        | \$2,611          | 0.2%               | 1.7%           | 15.5%               |
| 690        | KIDNEY & URINARY TRACT INFECTIONS W/O MCC                          | 132,276        | 4.1        | \$4,082          | 0.2%               | 1.6%           | 17.1%               |
| 641        | NUTRITIONAL & MISC METABOLIC DISORDERS W/O MCC                     | 129,739        | 3.6        | \$3,688          | 0.4%               | 1.6%           | 18.7%               |
| 192        | CHRONIC OBSTRUCTIVE PULMONARY DISEASE W/O CC/MCC                   | 120,231        | 3.8        | \$3,998          | 0.1%               | 1.5%           | 20.2%               |
| 312        | SYNCOPE & COLLAPSE   | 118,614        | 3.1        | \$3,728          | 0.4%               | 1.5%           | 21.7%               |
| 247        | PERC CARDIOVASC PROC W DRUG-ELUTING STENT W/O MCC                  | 105,063        | 2.1        | \$11,999         | 0.4%               | 1.3%           | 23.0%               |
| 191        | CHRONIC OBSTRUCTIVE PULMONARY DISEASE W CC                         | 104,624        | 4.9        | \$4,835          | 0.4%               | 1.3%           | 24.3%               |
| 293        | HEART FAILURE & SHOCK W/O CC/MCC                                   | 103,145        | 3.4        | \$4,582          | 0.1%               | 1.3%           | 25.5%               |
| 287        | CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O MCC              | 100,903        | 3.1        | \$6,019          | 0.3%               | 1.2%           | 26.8%               |
| 190        | CHRONIC OBSTRUCTIVE PULMONARY DISEASE W MCC                        | 100,211        | 5.9        | \$5,949          | 1.7%               | 1.2%           | 28.0%               |
| 310        | CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC/MCC               | 98,541         | 2.6        | \$3,027          | 0.1%               | 1.2%           | 29.2%               |
| 189        | PULMONARY EDEMA & RESPIRATORY FAILURE                              | 97,588         | 6.0        | \$7,533          | 1.9%               | 1.2%           | 30.4%               |
| 193        | SIMPLE PNEUMONIA & PLEURISY W MCC                                  | 88,980         | 6.6        | \$6,918          | 2.3%               | 1.1%           | 31.5%               |
| 683        | RENAL FAILURE W CC   | 88,485         | 5.2        | \$6,484          | 0.6%               | 1.1%           | 32.6%               |
| 378        | G.I. HEMORRHAGE W CC   | 86,095         | 4.2        | \$5,374          | 0.3%               | 1.1%           | 33.7%               |
| 603        | CELLULITIS W/O MCC   | 85,477         | 4.6        | \$4,115          | 0.3%               | 1.1%           | 34.7%               |
| 195        | SIMPLE PNEUMONIA & PLEURISY W/O CC/MCC                             | 84,349         | 3.9        | \$4,074          | 0.1%               | 1.0%           | 35.8%               |
| 065        | INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W CC                | 76,994         | 5.0        | \$6,262          | 0.6%               | 0.9%           | 36.7%               |
| 682        | RENAL FAILURE W MCC  | 75,915         | 7.1        | \$8,739          | 5.0%               | 0.9%           | 37.7%               |

Source: American Hospital Directory, Inc.

Table 2 - DRG statistics for 9 months ending 6/30/2007

|     |   | TOTAL   | AVG | AVERAGE  | OUTLIER | % TOT | CUMM %    |
|-----|---|---------|-----|----------|---------|-------|-----------|
| DRG | DRG DESCRIPTION   | DISCH   | LOS | REIMB    | REIMB % | DISCH | TOT DISCH |
| 127 | HEART FAILURE & SHOCK   | 467,098 | 5.1 | \$5,734  | 1.4%    | 5.3%  | 5.3%      |
| 089 | SIMPLE PNEUMONIA & PLEURISY AGE >17 W CC                        | 368,648 | 5.3 | \$5,370  | 0.7%    | 4.2%  | 9.5%      |
| 544 | MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY      | 333,932 | 4.2 | \$10,639 | 0.7%    | 3.8%  | 13.2%     |
| 088 | CHRONIC OBSTRUCTIVE PULMONARY DISEASE                           | 294,662 | 4.7 | \$4,607  | 0.6%    | 3.3%  | 16.6%     |
| 576 | SEPTICEMIA W/O MV96+ HOURS AGE >17                              | 233,661 | 7.0 | \$9,145  | 3.0%    | 2.6%  | 19.2%     |
| 182 | ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W CC     | 201,245 | 4.0 | \$4,021  | 1.1%    | 2.3%  | 21.5%     |
| 316 | RENAL FAILURE   | 196,687 | 5.9 | \$7,085  | 2.6%    | 2.2%  | 23.7%     |
| 014 | INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION                  | 193,676 | 5.2 | \$6,510  | 1.9%    | 2.2%  | 25.9%     |
| 174 | G.I. HEMORRHAGE W CC  | 178,571 | 4.6 | \$5,624  | 1.7%    | 2.0%  | 27.9%     |
| 296 | NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W CC             | 173,406 | 4.4 | \$4,439  | 1.5%    | 2.0%  | 29.9%     |
| 320 | KIDNEY & URINARY TRACT INFECTIONS AGE >17 W CC                  | 169,573 | 4.9 | \$4,593  | 0.8%    | 1.9%  | 31.8%     |
| 143 | CHEST PAIN  | 161,580 | 2.1 | \$2,671  | 0.1%    | 1.8%  | 33.7%     |
| 138 | CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC                  | 159,716 | 3.8 | \$4,373  | 1.2%    | 1.8%  | 35.5%     |
| 079 | RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W CC             | 123,207 | 7.9 | \$8,830  | 2.3%    | 1.4%  | 36.9%     |
| 558 | PERCUTANEOUS CARDIOVASC PROC W DRUG-ELUTING STENT W/O MAJ CV DX | 103,016 | 1.7 | \$11,558 | 0.3%    | 1.2%  | 38.0%     |
| 121 | CIRCULATORY DISORDERS W AMI & MAJOR COMP, DISCHARGED ALIVE      | 100,567 | 6.0 | \$8,656  | 2.0%    | 1.1%  | 39.2%     |
| 210 | HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W CC          | 96,569  | 6.5 | \$10,523 | 2.3%    | 1.1%  | 40.3%     |
| 141 | SYNCOPE & COLLAPSE W CC   | 95,477  | 3.3 | \$3,994  | 0.3%    | 1.1%  | 41.3%     |
| 277 | CELLULITIS AGE >17 W CC   | 91,066  | 5.4 | \$4,695  | 1.4%    | 1.0%  | 42.4%     |
| 087 | PULMONARY EDEMA & RESPIRATORY FAILURE                           | 89,724  | 6.2 | \$7,616  | 1.8%    | 1.0%  | 43.4%     |
| 395 | RED BLOOD CELL DISORDERS AGE >17                                | 85,907  | 4.1 | \$4,198  | 2.0%    | 1.0%  | 44.4%     |
| 124 | CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH & COMPLEX DIAG    | 79,492  | 4.4 | \$7,825  | 1.9%    | 0.9%  | 45.3%     |
| 144 | OTHER CIRCULATORY SYSTEM DIAGNOSES W CC                         | 79,222  | 5.9 | \$7,793  | 4.3%    | 0.9%  | 46.2%     |
| 524 | TRANSIENT ISCHEMIA  | 77,897  | 3.0 | \$3,631  | 0.3%    | 0.9%  | 47.0%     |
| 243 | MEDICAL BACK PROBLEMS   | 72,774  | 4.4 | \$4,052  | 1.1%    | 0.8%  | 47.9%     |

Source: American Hospital Directory, Inc.

## TECHNICAL NOTES:

Data are based on the FY 2007 MedPAR (March file) and an early release of the FY2008 MedPAR for the 9 months ending 6/30/2008. In order to enable comparisons, only the first three quarters of the FY2007 MedPAR were used. There were 8,832,594 discharges for the first three quarters of FY2007 and 8,113,071 for the first three quarters of FY2008. The FY2008 discharges are understated for the first three quarters because some patients had been discharged but not billed at the time the early release file was prepared. Only short-term acute care hospitals were included in the study and claims from distinct part units were excluded. IPPS reimbursement as reported from the MedPAR files represents actual DRG/MS-DRG reimbursement (including disproportionate share (DSH) and teaching (IME) adjustments, but excluding patient deductibles and coinsurance).

--- American Hospital Directory, Inc. / December 17, 2008