

Exhibit

Medicare hospital inpatient payment overview (DRGs)

By Henry Dove, Ph.D.

Henry G. Dove, Ph.D.
Casemix Consulting, LLC
Lecturer, Yale University Health Mgmt. Program

Medicare established the inpatient prospective payment system (IPPS) to provide payment to hospitals for the treatment of Medicare beneficiaries in the hospital inpatient setting. Under the IPPS system, each hospital inpatient stay is assigned to a DRG based on the patient's characteristics and the procedures performed during his or her inpatient stay. Medicare then pays the hospital a prospectively determined amount that is associated with the DRG selected.

Each case is assigned to a DRG according to:

- Patient's diagnoses (identified by ICD-9-CM diagnosis codes)
- Procedures performed (identified by ICD-9-CM procedure codes)
- Complications and comorbidities that occurred during the stay (identified by ICD-9-CM diagnosis codes)
- Patient demographics (age and sex), and
- Patient discharge status (alive, deceased, discharged, or transferred for further treatment)

Beginning October 1, 2007, Medicare expanded the number of DRGs to 745 in order to better reflect the severity of cases within particular DRGs. The resulting DRGs are termed Medicare severity DRGs, or MS-DRGs. Individual cases may be assigned to a DRG reflecting greater severity on the basis of whether the patient exhibits one or more of an extensive list of complications and comorbidities (CCs) or major complications and comorbidities (MCCs).

The MS-DRG payment amount is an all-inclusive, fixed payment that is intended to cover practically all of the facility's services during the hospital stay. A hospital receives only one MS-DRG payment for all covered services; the hospital must accept this payment as payment in full. Payment for virtually all drugs, devices, and supplies is included in the MS-DRG payment amount. Exceptionally high-cost cases may qualify for outlier payments. Additionally, services of physicians are not included in the MS-DRG and are paid separately.

Private payers and some Medicaid programs may provide coverage and reimbursement for patients under DRG-like systems which provide a single bundled payment for each inpatient stay.

From DRGs to MS-DRGs

Prior to Oct. 1 the CMS DRG classification system was the most widely utilized system for classifying acute care inpatients and measuring case mix. The implementation of MS-DRGs is a major change. CMS moved to MS-DRGs in response to recommendations by the Medicare Payment Advisory Commission (MedPAC). In a 2005 report, MedPAC recommended that the Medicare DRG system be revised to take into account severity of illness. The MS-DRGs will enable CMS to provide greater reimbursement to hospitals serving more severely ill patients. Hospitals treating less severely ill patients will receive reduced reimbursement. Using the previous DRG system and their own severity DRG research as a model, CMS developed the new MS-DRG system. Development of the MS-DRGs involved a complete revision of the complication and comorbidity (CC) list. CMS performed a comprehensive review of all diagnosis codes to determine which codes should be classified as CCs when present as a secondary diagnosis. CMS then categorized these diagnosis codes into the different severity levels described below. CMS also consolidated the CMS DRGs into a new set of base DRGs and then divided each into severity subclasses or MS-DRGs.

Revisions to CC List

The CC list has been completely revised for MS-DRGs. The MS-DRG CC list is a very different list than the CMS DRG CC list. Under CMS DRGs, a CC was defined as a secondary diagnosis that increased the length of stay by at least 1 day for 75 percent of the cases. Under MS-DRGs, CMS identified those diagnoses whose presence as a secondary diagnosis leads to substantially increased hospital resource use. They then categorized this CC list into three different levels of severity as follows:

- Major complications or comorbidities (MCCs) reflect the highest level of severity. MCCs are new under MS-DRGs. Examples: 348.39, Encephalopathy, NOS, and 707.07, Decubitus ulcer, heal
- CCs represent the next level of severity. Examples: 344.1, Paraplegia, NOS, and 707.09 Decubitus ulcer, other site
- Non-CCs are at the lowest level of severity. Non-CCs are diagnosis codes that do not significantly affect severity of illness and resource use and do not affect DRG assignment. Examples: 428.0, Congestive Heart Failure, NOS; 427.31, Atrial Fibrillation; and 496, Chronic Airway Obstruction, NEC

The MS-DRG System

The MS-DRG system consists of 745 MS-DRGs compared to the previous 538 CMS DRGs. As with CMS DRGs, one MS-DRG is assigned to each inpatient stay. The CMS DRGs are assigned using the principal diagnosis and additional diagnoses, the principal procedure and additional procedures, age, sex and discharge status. MS-DRGs use the same information; however, they do not take age into consideration. There are no MS-DRGs with the terminology of "Age 0-17" or "Age Greater than 17" in their titles. The CMS DRGs with age splits were incorporated into the MS-DRGs for the related conditions. Diagnoses and procedures assigned by using ICD-9-CM codes still determine the MS-DRG assignment. Accurate and complete ICD-9-CM coding by coding professionals is even more essential for correct MS-DRG assignment and subsequent reimbursement. The Major Diagnostic Categories (MDCs) have not changed with the implementation of MS-DRGs. With some exceptions, all principal diagnoses continue to be divided into one of 25 MDCs that generally correspond to a single organ system.