The DRG, or Diagnosis Related Groups, system for payment purposes was initially created for Medicare. This statistical system determines reimbursement for hospital admissions based on the patient’s diagnosis and the hospital resources necessary to treat the condition.

To meet the evolving needs of the healthcare system, this system had to expand. In 1987, legislation was passed instituting DRG-based payments for all non-Medicare patients. Today, there are several DRG systems that have been developed in the U.S. There are systems based on Medicare, All Patients, by Severity, and International.

The DRG classification system begins by dividing possible diagnoses into major body systems, called Major Diagnostic Categories, or MDCs, and then subdivides these categories into approximately 800 diagnosis groups. The MDC codes, like DRG codes, are primarily a claims and administrative data element unique to the United States medical care reimbursement system.

There are 25 MDCs. The diagnoses in each MDC correspond to a single organ system or etiology and, in general, are associated with a particular medical specialty. MDC 01 to MDC 23 are grouped according to principal organ system. Patients with at least two significant trauma diagnoses from different body site categories are assigned to MDC 24: Multiple Significant Trauma. Patients assigned to MDC 25 must have a principal diagnosis of an HIV Infection or a principal diagnosis of a significant HIV-related condition and a secondary diagnosis of an HIV infection.

Hospitals are paid a fixed rate for inpatient services corresponding to the DRG group assigned to any given patient. DRGs are assigned by a computer program and are based on the patient’s diagnoses, any procedures performed, the patient’s age and gender, and the presence of complications.

Initially, the DRG groups included the diagnoses, and the diagnoses with CC, or “complications and / or comorbidities.” In 2007, Medicare overhauled the DRG system with the...
development of “severity-adjusted DRGs,” that included a third category: MCC, or “major complications and / or comorbidities.”

Comorbidity is the presence of one or more additional disorders or diseases co-occurring with primary disease or disorder. This additional condition can exist simultaneously but independently, or it can indicate a related medical condition.

As an example: a patient who is admitted requires a cervical fusion procedure would be classified as MDC 08: “diseases and disorders of the musculoskeletal system and connective tissue,” with any of the following three DRGs:

- **DRG 471** Cervical fusion, with MCC (major complications / comorbidities)
- **DRG 472** Cervical fusion, with CC (complications / comorbidities)
- **DRG 473** Cervical fusion, without MCC or CC

A patient that has a diagnosis of acute congestive heart failure and acute pancreatitis would be classified in DRG 471. A patient with chronic congestive heart failure and chronic pancreatitis would be assigned to DRG 472. The specific complicating or co-morbid disease states have been defined by Medicare.

Reimbursement for DRGs is made based on a predetermined, fixed payment amount. Each DRG has a payment weight assigned to it, based on the average resources used to treat the patients in a specific DRG relative to the average resources used to treat patients in all DRGs. The weights are intended to account for cost variations between different types of treatments. More costly conditions are assigned a higher DRG weight. For example, in 2015, the weights ranged from 0.4057 for DRG 782, antepartum without medical complications, to 25.392, DRG 001, heart transplant or implant of heart assist system, with major complications and/or comorbidities. The methodology for calculating the DRG weights has been refined over time, but the core process remains the same.

There are several factors that affect the DRG reimbursement rates. The DRG weight assigned to a diagnosis is multiplied by each individual hospital’s payment rate for the diagnosis. All hospitals are reimbursed on the basis of two Federal rates: urban or other. These rates are adjusted to reflect differences in prevailing wages where the hospital is located.

If the hospital treats a high percentage of low-income patients, it receives a percentage add-on payment applied to the DRG base payment rate. This add-on, known as the Disproportionate Share Hospital (DSH) adjustment, provides for a percentage increase in payment for hospitals that qualify and provide services to a disproportionate share of low-income patients. For particular cases that are unusually costly, known as cost outliers, the DRG payment is increased by yet another weight. This additional payment is designed to protect the hospital from large financial losses due to unusually expensive cases.

A simplified example of a DRG calculation: The hospital base rate for a procedure is $5,128.92. The DRG weight multiplier for that procedure is 1.8128; the reimbursement rate is now $9,297.71. The hospital is in a large city, and the adjustment for that city is 1.4193; the payment becomes $13,196.24 for the diagnosis. The hospital qualifies for the DSH adjustment of 1.1413, increasing the reimbursement to $15,060.87.

DRG calculations are complicated. The United States Congress gave the Department of Health and Human Services primary responsibility for setting and updating the Medicare DRG-based hospital rates, and the updating processes have experienced continual modifications.

Using Medicare DRG reimbursement provides uniform reimbursement rates nationwide; hospital-specific Medicare DRG reimbursement rates that include the base rate and all of the applicable weights can be found at www.cms.gov.