New DRG System for IPPS: CMS Proposes Severity-Adjusted DRG System Based on APR DRGs

by Sue Bowman, RHIA, CCS

In the April 25, 2006, issue of the *Federal Register*, the Centers for Medicare and Medicaid Services (CMS) proposed a consolidated severity-adjusted DRG system for fiscal year 2008 in proposed rule changes to the hospital inpatient prospective payment system (IPPS) for fiscal year 2007. CMS believes that accounting more appropriately for severity of illness may significantly improve the effectiveness of the IPPS. This article outlines the differences in the DRG systems and what the new system means for healthcare providers.

CMS DRG versus APR DRG

The CMS DRG (the DRG system currently used under the IPPS) and the All-Patient Refined DRG (APR DRG) systems have similar structures. There are 25 major diagnostic categories (MDCs) in both systems. In version 23 of the CMS DRG system, there are 367 base DRGs and 526 total DRGs. In version 23 of the APR DRG system, there are 314 base DRGs and 1,258 total APR DRGs. Some base DRGs in the two systems are virtually identical.

The APR DRG system breaks down the base DRGs into four severity of illness subclasses. The subclasses are numbered 1 to 4, indicating minor (1), moderate (2), major (3), and extreme (4). The determination of the severity subclass is based on an 18-step process that takes into account secondary diagnoses, principal diagnosis, age, and procedures. The severity of illness determination is disease-specific. High severity of illness is primarily determined by multiple disease interactions. Patients with multiple comorbid conditions involving multiple organ systems are assigned to the higher severity of illness subclasses.

The APR DRG structure does not currently accommodate distinctions based on complexity. Technologies that represent increased complexity, but not necessarily greater severity of illness, are not explicitly recognized in the APR DRG system. The secretary of Health and Human Services adjusts the classifications and weighting factors annually to reflect changes in treatment patterns, technology, and other factors that may change the relative use of hospital resources.

CMS believes a method of recognizing technologies that represent increased complexity, but not necessarily greater severity of illness, should be included in the system. It plans on developing criteria for determining when it is appropriate to recognize increased complexity in the structure of the DRG system and how these criteria interact with the existing statutory provisions for new technology add-on payments.

Since APR DRGs were developed to encompass all-payer patient populations, CMS found that for the Medicare population some APR DRGs are used infrequently. Therefore, CMS consolidated the APR DRGs by combining the base DRGs and the severity of illness subclasses within a base DRG. For consolidation across base DRGs, CMS considered patient volume, similarity of hospital charges across all four severity of illness subclasses, and clinical similarity of the base APR DRGs. For consolidation of severity of illness subclasses within a base DRG, CMS considered patient volume and the similarity of hospital charges between severity of illness subclasses.

APR DRG Consolidation

As a result of the APR DRG consolidation process, CMS reduced 1,258 APR DRGs to 861, known as consolidated severity-adjusted DRGs. All MDCs in severity of illness subclass 4 were consolidated, except for MDCs 15 (Newborn and Other Neonates with Conditions Originating in the Perinatal Period), 19 (Mental Diseases and Disorders), and 20 (Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders). In the MDCs that were consolidated, the number of separate severity of illness subclass 4 groups was reduced from 262 to 69.

For MDC 15 (Newborn and Other Neonates with Conditions Originating in the Perinatal Period), 28 base APR DRGs were consolidated into seven base consolidated severity-adjusted DRGs. For each of the seven base DRGs, severity of illness subclasses 1 and 2 were combined into one DRG, and subclasses 3 and 4 were combined into another DRG. This reduced the total number of DRGs in MDC 15 from 112 in the APR DRG system to 14 consolidated severity-adjusted DRGs.

In MDC 19 (Mental Diseases and Disorders), 12 base APR DRGs were consolidated into four base DRGs. The four severity of illness subclasses were retained for each of the base DRGs. In MDC 20 (Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders), severity of illness subclasses 1 and 2 were combined, along with subclasses 3 and 4, for the base APR DRG for patients who left against medical advice. The remaining four base DRGs were consolidated into one base DRG, with four severity of illness subclasses.

Proposed Changes for FY2008

CMS proposed implementing the consolidated severity-adjusted DRGs or alternative severity adjustment methods for fiscal year 2008 because they believe that accounting more appropriately for severity of illness may significantly improve the effectiveness of the IPPS. CMS felt that the large number of DRGs will allow hospitals to more accurately document and code information in medical records. Under the current DRG system, coding that has no effect on payment may cause a case to be assigned to a higher paid DRG under the consolidated severity-adjusted system, thus resulting in more accurate and complete documentation and coding. The secretary of Health and Human Services has the authority to adjust the standardized payment amounts to account for the effect of coding or classification changes that do not reflect real changes in case mix.

In the proposed rule, CMS solicited comments both on the proposal to implement consolidated severity-adjusted DRGs in fiscal year 2008 as well as alternative severity adjustment methods. For example, CMS could consider implementing the consolidated severity-adjusted DRG system for fiscal year 2007, instead of waiting until fiscal year 2008. However, the implementation of consolidated severity-adjusted DRGs represents a major change to how hospitals are paid for Medicare inpatient services. Given the number of new DRGs and logic for assigning cases in a consolidated severity-adjusted DRG system, hospitals may need additional time to plan for these changes. But CMS reserves the option to adopt the new system in fiscal year 2007, based on the comments received in response to the proposed rule.

CMS could also consider partially implementing the new DRG system in fiscal year 2007 and completing the implementation in fiscal year 2008. However, there are practical difficulties associated with partial implementation of consolidated severity-adjusted DRGs because cases in a single DRG under the current CMS DRG system may group to multiple DRGs and MDCs under a consolidated severity-adjusted DRG system. Conversely, cases that group to multiple MDCs and DRGs under the current system may group to a single MDC and DRG under the new system.

CMS indicated that while it has considered only one alternative DRG system to better recognize severity of illness, the public comment process could present compelling evidence that there are potential alternatives to the consolidated severity-adjusted DRG system that could also better recognize severity of illness.

CMS is considering whether it should make limited changes to the current DRG system to better recognize severity of illness in fiscal year 2007 as an intermediate step toward implementation of consolidated severity-adjusted DRGs in fiscal year 2008. For example, the changes that were made in fiscal year 2006 to the cardiac DRGs significantly improved recognition of severity between patients by distinguishing between more and less severe cases based on the presence or absence of a major cardiovascular condition. CMS is considering whether a similar approach applied to other DRGs would improve payment.

The final rule regarding changes to the IPPS for fiscal year 2007 is expected to be published in the *Federal Register* around August 1. This regulation will address CMS's final decision, based on the public comments received regarding implementation of the consolidated severity-adjusted DRG system or an alternative system that better recognizes severity of illness. If CMS adopts a severity-adjusted DRG system under the IPPS, it will also need to consider whether to propose revisions to the patient classification system under other Medicare PPS systems that use the IPPS DRGs, such as long-term care hospitals and psychiatric facilities.

AHIMA will report on CMS's plans for implementation of a severity-adjusted DRG system once they have been finalized and announced in the *Federal Register*. AHIMA's letter and comments to CMS on the proposed rule are available online at

www.ahima.org/dc. For information on the evolution of DRG systems over time, see the practice brief in this issue titled "The Evolution of DRGs."

APR DRGs in Use

APR DRGs have been used successfully as the basis of Belgium's hospital prospective global budgeting system since 2002. Maryland began using APR DRGs as the basis of its all-payer hospital payment system in July 2005. More than a third of US hospitals are already using APR DRG software to analyze comparative hospital performance. Several state agencies use APR DRGs to publicly disseminate comparative hospital performance reports. APR DRGs have been widely applied in policy and health services research. APR DRGs also contain a separate measure for mortality risk that is used in the quality indicators of the Agency for Healthcare Research and Quality, the Premier Hospital Quality Incentive Demonstration, and the Joint Commission on Accreditation of Healthcare Organizations hospital accreditation survey process.

Reference

Centers for Medicare and Medicaid Services. "Medicare Program: Proposed Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2007 Rates." Available online at www.cms.hhs.gov/AcuteInpatientPPS/IPPS/list.asp.

Sue Bowman *(sue.bowman@ahima.org) is director of coding policy and compliance at AHIMA.*

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