Overview of AR-DRG V7.0

The National Casemix and Classification Centre (NCCC) at the University of Wollongong has finalised AR-DRG Version 7.0. Its development has been guided by extensive clinical consultation and data analysis, combined with advice from the DRG Technical Group (DTG).

AR-DRG Version 7.0 incorporates the Eighth Edition of ICD-10-AM/ACHI within the basic structure of Version 6.0. In addition to changes made in response to public submissions during the development of Version 7.0 from Version 6.0, special attention was given to some clinical focus areas. These included:

- Paediatrics
- Neonates
- Bariatrics

Version 7.0 of the classification comprises 771 DRGs in 406 Adjacent DRGs (ADRGs). This compares with 698 DRGs in Version 6.0, 708 in Version 6.0X and 399 ADRGs in both these versions. Reflecting changes in clinical practices, the majority of new DRGs are for same day episodes.

Every ADRG was analysed and potential DRG splits assessed. These were presented to the DTG as options for each ADRG. The NCCC adopted the option supported by the majority of the DTG members in all but 8 ADRGs (see below). For two ADRGs, the preferences of DTG members were equally divided between two options. In these two cases, the NCCC had to decide between the two options.

The NCCC adopted a different approach in 8 of the 406 ADRGs as follows:

- For two ADRGs, a modification to the preferred option that out-performed those presented to the DTG was found after the meeting. In both cases, this involved adding a sameday split to the preferred patient complication and comorbidity level (PCCL) split. This was consistent with suggestions that were made by DTG members for other ADRGs. In these cases, further analysis had been circulated after the meeting and the suggested modification accepted by the members.
- For six ADRGs, a review of the options indicated that the statistical criteria for splitting were not adequately satisfied in the preferred option. In addition, their inclusion would not be consistent with decisions made about other ADRGs across the classification. It should be noted that, for two of these ADRGs, the vote was very nearly equally divided between two options.

Across the 2009/10 national morbidity data, these 8 ADRGs account for 1.2% of all separations.

Consistency with Version 6.0X

Version 6.0X was implemented while Version 7.0 was being developed. This saw the re-introduction of some DRGs for obstetrics, mental health and breast malignancies that had been removed in Version 6.0.

These classes have been maintained in Version 7.0 with one minor exception. One obstetrics change in Version 6.0X was not adopted because of another change introduced for Version 7.0. The DTG voted unanimously to combine two ADRGs (O64 was incorporated into O66). This meant that the V6.0X split in O64 was no longer relevant. However, the expanded O66 was given a sameday split, consistent with V6.0X, as well as an additional split on PCCL for the overnight episodes. The net effect was a small statistical improvement on Version 6.0X.

New DRG variables

Variables that were used to partition ADRGs into DRGs in previous versions have been included in Version 7.0. In the majority of cases, the PCCL is used to split the ADRGs. Reflecting the increasing number of episodes that are treated on a same day basis, the "sameday" field is used more extensively than in previous versions.

In a small number of cases, some additional splitting variables were introduced, or re-introduced. These were:

- Age (10 DRGs)
- Gestational age (12 neonatal DRGs)
- Urgency of admission (2 burns DRGs)
- Stay of <2 days (3 DRGs)

Summary of changes and performance

Version 7.0 comprises 771 DRGs, an increase of 73 DRGs from Version 6.0 and 63 from Version 6.0X. The significant majority of these new classes are same day DRGs. This is consistent with changes in clinical practice. There are also 27 DRGs that are defined by the new variables listed above and some DRGs where a different split on PCCL has been adopted.

The Reduction in Deviance (RID) statistic is used to measure the performance of casemix classifications. The cost RID of AR-DRG improved by 4.3% between versions, from 65.1 for Version 6.0 to 69.4 for Version 7.0.