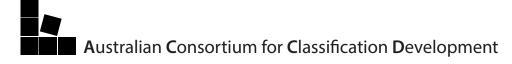


AUSTRALIAN REFINED DIAGNOSIS RELATED GROUPS

Version 9.0

Document of changes, rationale for changes and consultations undertaken

1 JULY 2017



ACCD consortium partners







3.3 Classification soundness

- statistically robust
- · reasonably balanced branches
- sufficient volume and cost variances in new splitting
- stable over time, with changes only made in response to significant clinical changes (often caused by technology advancement) or cost variations

3.4 Operationally acceptable and robust

- · understandable by and acceptable to a wide range of users involved in the planning and delivery of care
- reasonably robust with respect to changes in management and organisational arrangements of the health system
- not encouraging inappropriate behaviours in patient treatment and management practices within the health system.

4. AR-DRG Version 9.0

4.1 Changes in Version 9.0

The changes in V9.0 are primarily at the ADRG level, with some ADRGs being revised or removed, and several new ADRGs being created. There has also been a reduction from three to two in the number of partitions that subdivide the Major Diagnostic Categories (MDCs), with the creation of an Intervention partition to replace the Surgical and Other partitions (the Medical partition has been retained). Minor terminology changes have been made in order to better describe the grouping logic applied for the Intervention partition, as in Table 2 (refer Glossary for definitions).

TABLE 2: Changes in terminology between AR-DRG V8.0 and V9.0

AR-DRG Version 8.0	AR-DRG Version 9.0
Operating room (OR) procedure	General Intervention (GI)
Non-operating room (NonOR) procedure	Specific Intervention (SI)

It should be noted that in AR-DRG V9.0 the term "intervention(s)" has replaced the term "procedure(s)" in ADRG descriptors where the previously used terminology included "operating room procedure(s)". All other instances where the term "procedure(s)" still appears in ADRG descriptors has been highlighted as an editorial task to be undertaken in a future version of the AR-DRG classification.

The MDC names and ADRG numbering convention are the same as for V8.0 (for further detail see Section 4.2).

This structural level review follows the implementation of the ECC model in V8.0, where the structure of the classification was left unchanged. In accordance with the principles of construction of AR-DRGs, the changes have been made in consideration of the most appropriate clinical definition for the group of episodes, including whether the episodes should be defined by the principal diagnosis (PDx) or an intervention.

V9.0 also incorporates the Tenth Edition of ICD-10-AM/ACHI, as well as a number of modifications that were proposed through the public submission process and endorsed by ACCD's technical and clinical advisory groups, and IHPA.

4.1.1 Changes to ADRGs

The major ADRG changes between AR-DRG V8.0 to V9.0 are summarised below.

Pre MDC ADRGs

- A06 Tracheostomy and/or Ventilation >=96 Hours has been replaced with three new ADRGs:
 - A13 Ventilation >= 336 hours (2 DRGS)
 - A14 Ventilation >=96 and <336 hours (3 DRGs)
 - A15 Tracheostomy (3 DRGs).

- Seven Pre MDC ADRGs have been replaced by newly created ADRGs in the relevant MDCs where the PDx are predominately located, as follows:
 - E03 Lung or Heart-Lung Transplant in MDC 04 (replaces A03 Lung or Heart-Lung Transplant)
 - F22 Insertion of Artificial Heart Device in MDC 05 (replaces A10 Insertion of Ventricular Assist Device)
 - F23 Heart Transplant in MDC 05 (replaces A05 Heart Transplant)
 - H09 Liver Transplant in MDC 07 (replaces A01 Liver Transplant)
 - L10 Kidney Transplant in MDC 11 (replaces A09 Kidney Transplant)
 - R05 Allogeneic Bone Marrow Transplant in MDC 17 (replaces A07 Allogeneic Bone Marrow Transplant)
 - R06 Autologous Bone Marrow Transplant in MDC 17 (replaces A08 Autologous Bone Marrow Transplant).
- All *Insertion of Implantable Spinal Infusion Device* and Al2 *Insertion of Neurostimulator Device* have been deleted with episodes now distributed to an MDC according to the PDx.

ADRGs using Pre MDC processing changes

Human Immunodeficiency Virus (HIV)

- S65 Human Immunodeficiency Virus has been deleted (removing MDC 18 Infectious and Parasitic Diseases: HIV), with episodes (including those with a PDx of HIV, or an HIV related PDx and an additional diagnosis of HIV) now allocated to an MDC according to the PDx (i.e. HIV diagnosis does not override the PDx).
- Episodes with a PDx of HIV disease will be assigned to T64 Other Infectious and Parasitic Diseases.

Paraplegia/Quadriplegia

- Episodes with a diagnosis of paraplegia/quadriplegia that include a GI will be allocated to an MDC according to the PDx (i.e. paraplegia/quadriplegia diagnosis does not override the PDx). For further details see Section 5.2.3).
- B82 Chronic and Unspecified Paraplegia/Quadriplegia W or W/O OR Procedures has been renamed Chronic and Unspecified Paraplegia/Quadriplegia.
- B60 Acute Paraplegia and Quadriplegia W or W/O OR Procedures and B61 Spinal Cord Conditions W or W/O OR Procedures have been combined into a new ADRG B83 Acute Paraplegia and Quadriplegia and Spinal Cord Conditions.

Other ADRG changes

The following ADRGs have been removed:

- H43 ERCP Procedures
- I40 Infusions for Musculoskeletal Disorders, Sameday
- I81 Musculoskeletal Injuries, Sameday
- I82 Other Sameday Treatment for Musculoskeletal Disorders
- V65 Treatment for Alcohol Disorders, Sameday
- V66 Treatment for Drug Disorders, Sameday

The following ADRGs have been revised/replaced:

- E65 Chronic Obstructive Airways Disease episodes with a PDx of bronchiectasis have moved into a newly created ADRG E77 Bronchiectasis
- F15 Interventional Coronary Procedures, Not Admitted for AMI W Stent Implantation and F16 Interventional Coronary Procedures, Not Admitted for AMI W/O Stent Implantation have been combined into a new ADRG F24 Interventional Coronary Procedures, Not Admitted for AMI (thereby removing the with/without stent variable)
- F41 Circulatory Disorders, Admitted for AMI W Invasive Cardiac Investigative Procs the three ACHI codes for ablation have been relocated to F10 Interventional Coronary Procedures, Admitted for AMI
- F42 Circulatory Disorders, Not Admitted for AMI W Invasive Cardiac Procs the three ACHI codes for ablation have been relocated to the newly created F24 Interventional Coronary Procedures, Not Admitted for AMI
- H40 Endoscopic Procedures for Bleeding Oesophageal Varices a new ADRG H65 Bleeding Oesophageal Varices has been created (in the Medical partition)

- I03 Hip Replacement episodes with a non-trauma PDx have moved into a newly created ADRG I33 Hip Replacement for Non-trauma, and I03 has been renamed Hip Replacement for Trauma
- W60 Multiple Significant Trauma, Died or Transferred to Acute Facility <5 days the 'died' variable has been removed from the definition
- Z40 Other Contact W Health Services W Endoscopy, Sameday the 'sameday' variable has been removed from the
 definition

4.1.2 Other changes in V9.0

A number of changes were made to the placement of ICD-10-AM and ACHI codes within the AR-DRG classification, in response to issues highlighted in public submissions and also a review of episodes grouping to ADRG 801 *GIs Unrelated to Principal Diagnosis*. These changes include:

• ICD-10-AM codes:

- M50.1 Cervical disc disorder with radiculopathy was moved to MDC 08 Diseases and Disorders of the Musculoskeletal System and Connective Tissue from MDC 01 Diseases and Disorders of the Nervous System
- Q32.0 Q32.4 Congenital malformations of trachea and bronchus moved to MDC 03 Diseases and Disorders of the Ear, Nose, Mouth and Throat from MDC 04 Diseases and Disorders of the Respiratory System
- R57.1 Hypovolaemic shock moved to MDC 05 Diseases and Disorders of the Respiratory System from MDC 18
 Infectious and Parasitic Diseases
- Codes for pressure injuries of heel, toe and lower extremity were included in J12 Lower Limb Procedures W
 Ulcer Or Cellulitis in MDC 09 Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast
- The following codes were moved to MDC 17 Neoplastic Disorders:
 - D17.5 Benign lipomatous neoplasm of intra-abdominal organs from MDC 06 Diseases and Disorders of the Digestive System
 - D17.7 Benign lipomatous neoplasm of other sites and D17.9 Benign lipomatous neoplasm, unspecified from MDC 09 Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast
 - related ACHI codes were included in R02 Other Neoplastic Disorders W Major GIs

ACHI codes:

- 13839-01 Petrosal sampling was included in K09 Other Endocrine, Nutritional and Metabolic GIs in MDC 10 Endocrine, Nutritional and Metabolic Diseases and Disorders
- 30023-00 Excisional debridement of soft tissue was included in C11 Eyelid Procedures in MDC 02 Diseases and Disorders of the Eye and M06 Other Male Reproductive System GIs in MDC 12 Diseases and Disorders of the Male Reproductive System
- 30300-00 Sentinel lymph node biopsy of axilla was moved from J06 Major Procedures for Breast Disorders to J07
 Minor Procedures for Breast Disorders in MDC 09 Diseases and Disorders of the Skin, Subcutaneous Tissue and
 Breast
- 30511-11 Laparoscopic revision of gastric band and 30511-12 Revision of gastric band were included in X06 Other Procedures for Other Injuries in MDC21 Injuries, Poisoning and Toxic Effects of Drugs
- 35321-05 Transcatheter embolisation of blood vessels, abdomen was included in W03 Abdominal Procedures for Multiple Significant Trauma, X04 Other Procedures for Injuries to Lower Limb, X05 Other Procedures for Injuries to Hand and X06 Other Procedures for Other Injuries in MDC 21 Injuries, Poisoning and Toxic Effects of Drugs
- 35330-00 Percutaneous insertion of inferior vena cava filter was removed from the list of GI codes
- 41787-00, 41787-01, 41787-02, 41804-00, 41810-01, 45675-01, 45761-00, 45761-01 and 90143-01 were included in E02 Other Respiratory System GIs in MDC 04 Diseases and Disorders of the Respiratory System
- 43969-00 Total repair of persistent cloaca via perineal approach and 43969-01 Total repair of persistent cloaca via laparotomy were included in G02 Major Small and Large Bowel Procedures in MDC 06 Diseases and Disorders of the Digestive System
- 45018-02 Fat graft and 45018-04 Procurement of fat for graft via separate incision were removed from the list of GI codes

- 45025-01 CO2 laser resurfacing to 1 aesthetic area of face, 45025-02 CO2 laser resurfacing to other site and 45026-00 CO2 laser resurfacing to >=2 aesthetic areas of face were included in ADRG Y01 Ventilation or Tracheostomy for Burns or GIs for Severe Full Thickness Burns and Y03 Other GIs for Other Burns in MDC 22 Burns
- 90209-01 Direct closure of innominate artery was included in E01 Major Chest Procedures in MDC 04 Diseases
 and Disorders of the Respiratory System, and 90209-01, 90213-00, 90213-01 and 90216-01 were removed from
 G03 Stomach, Oesophageal and Duodenal Procedures in MDC 06 Diseases and Disorders of the Digestive System
- 90284-00 Percutaneous removal of lymphocele, 90284-01 Laparoscopic removal of lymphocele and 90284-02 Removal of lymphocele were included in F21 Other circulatory system GIs in MDC 05 Diseases and Disorders of the Circulatory System
- Intervention codes for digestive polypectomies were included in Z40 Other Contacts W Health Services W Endoscopy in MDC 23 Factors Influencing Health Status and Other Contacts with Health Services

All ADRG splits have been revised for V9.0 using a recalibrated Diagnosis Complexity Level (DCL) matrix. As a result, some ADRGs may now have a different number of DRGs and/or ECC score (ECCS) splitting values. Table 3 provides the number of DRGs by MDC for V9.0 and the most recent versions for comparison.

TABLE 3: Number of Diagnosis Related Groups by Major Diagnostic Category in the AR-DRG classification Versions 7.0, 8.0 and 9.0

Major Diagnostic Category		Number of DRGs		
		V7.0	V8.0	V9.0
Pre	Pre MDC – Major procedures with a principal diagnosis associated with any MDC	18	18	9
01	Diseases and Disorders of the Nervous System	68	69	69
02	Diseases and Disorders of the Eye	20	25	26
03	Diseases and Disorders of the Ear, Nose, Mouth and Throat	35	34	34
04	Diseases and Disorders of the Respiratory System	49	46	50
05	Diseases and Disorders of the Circulatory System	82	87	86
06	Diseases and Disorders of the Digestive System	46	45	46
07	Diseases and Disorders of the Hepatobiliary System and Pancreas	31	33	34
80	Diseases and Disorders of the Musculoskeletal System and Connective Tissue	88	97	99
09	Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast	38	37	35
10	Endocrine, Nutritional and Metabolic Diseases and Disorders	34	33	29
11	Diseases and Disorders of the Kidney and Urinary Tract	40	40	43
12	Diseases and Disorders of the Male Reproductive System	18	20	20
13	Diseases and Disorders of the Female Reproductive System	19	24	24
14	Pregnancy, Childbirth and the Puerperium	19	19	19
15	Newborns and Other Neonates	36	37	37
16	Diseases and Disorders of the Blood and Blood Forming Organs and Immunological Disorders	12	11	10
17	Neoplastic Disorders (Haematological and Solid Neoplasms)	19	18	24
18	Infectious and Parasitic Diseases	19	19	16
19	Mental Diseases and Disorders	13	19	19
20	Alcohol /Drug Use and Alcohol /Drug Induced Organic Mental Disorders	8	10	9
21	Injuries, Poisoning and Toxic Effects of Drugs	31	36	36
22	Burns	10	10	10
23	Factors Influencing Health Status and Other Contacts with Health Services	12	14	13
	Gls Unrelated to Principal Diagnosis (Unrelated OR Procedures)	3	3	3
	Error DRGs	3	3	3
	Total	771	807	803