

# Appendix D: Service Related Groups

## Introduction

The Service Related Group (SRG) classification categorises admitted patient episodes into groups representing clinical divisions of hospital activity, based on aggregations of AR-DRGs. SRGs are used to assist in planning services, analysing and comparing hospital activity, examining patterns of service needs and access, and projecting potential trends in services.

The AR-DRG system was not considered appropriate for this purpose as it contains too many classes. Both the Major Diagnostic Categories (MDC) and the *International statistical classification of diseases and related health problems, 10th revision, Australian modification* (ICD-10-AM) were also considered unsuitable as they generally relate to body systems rather than services.

An example illustrating the assignment of selected procedures to SRGs is shown below. These examples illustrate the differences between categorising procedures on the basis of ICD-10-AM chapters, MDCs and SRGs.

Procedure	ICD-10-AM	MDC	SRG
Extraction of wisdom teeth	Diseases of the digestive system	MDC 3: Ear, nose and throat	Dentistry
Endoscopic retrograde cholangiopancreatography (ERCP)	Diseases of the digestive system	MDC 6: digestive system	Gastroenterology
Excision of haemorrhoids	Diseases of the digestive system	MDC 6: Digestive system	Colorectal surgery

For the *Australian hospital statistics* 2001–02 to 2004–05 reports, this analysis used a method based on AR-DRG version 4.2, originally developed by the former New South Wales Department of Health and Australian Government Department of Health and Ageing.

A different methodology was used in *Australian hospital statistics* from 2005–06 to 2009–10, which assigned SRGs based on AR-DRG versions 5.0, 5.1 and 5.2 and was developed by the former New South Wales Department of Health (unpublished).

The SRG version used for the 2010–11, 2011–12 and this report assigns service related group based mostly on AR-DRGs version 6.0, also developed by the New South Wales Ministry of Health (adapted for AR-DRG version 6.0x). For more information on the methodology used to assign SRGs, see Table D6 (which accompanies this report online).

SRGs were allocated using the data in the NHMD. The method largely involves aggregations of AR-DRG information. However, the assignment of some separations to SRGs is based on other information, such as procedures, diagnoses and care types. Separations with non-acute care are allocated to separate SRG categories according to the type of care, because the main service type of these separations cannot be ascertained from their diagnoses or procedures.

For public hospitals, separations may also have been assigned to certain specialist SRGs depending on whether or not the hospital had a specialist neurosurgery, perinatology (neonatal intensive care unit) or cardiothoracic unit, as appropriate, as reported to the NPHEd (see Chapter 4). An ‘unallocated’ SRG is assigned for separations with an *Error DRG*.

The classification also incorporates non-specialist SRGs, which are used for smaller hospitals that do not have the specialist services or specialist equipment. There are 46 SRGs, and the 20 most common were presented in Chapter 4.

## How much activity in 2012–13?

Table D1 contains the number of separations and patient days in each SRG category for public and private hospitals. *Renal dialysis* (SRG 23) had the largest number of separations in public hospitals with over 1,039,000. This was followed by *Obstetrics* (SRG 72) with 329,000. In the private sector, *Diagnostic gastrointestinal endoscopy* (SRG 16) recorded the highest number of separations with over 414,000, followed by *Orthopaedics* (SRG 49) with 320,000.

For patient days, in public hospitals, *Rehabilitation* (SRG 84) recorded the highest number of patient days with 1.96 million days, followed by *Psychiatry – acute* (SRG 82) with 1.69 million. For private hospitals, *Rehabilitation* (SRG 84) recorded the highest number of patient days with 1.01 million days, followed by *Orthopaedics* (SRG 49) with 865,000.

**Table D1: Separations<sup>(a)</sup> and patient days by service related group based on AR-DRG version 6.0x, public and private hospitals, 2012–13**

Service Related Group	Public hospitals		Private hospitals	
	Separations	Patient days	Separations	Patient days
11 Cardiology	311,968	825,204	57,863	232,007
12 Interventional cardiology	69,709	233,906	78,768	179,183
13 Dermatology	22,013	48,607	4,480	11,226
14 Endocrinology	34,340	120,176	4,871	20,294
15 Gastroenterology	305,972	739,381	211,659	334,764
16 Diagnostic GI endoscopy	143,045	206,295	414,058	439,790
17 Haematology	58,244	257,995	35,394	93,758
18 Immunology and infections	53,951	117,549	11,848	22,136
19 Oncology	46,685	244,199	24,255	126,842
20 Chemotherapy	136,638	136,647	237,914	237,946
21 Neurology	201,081	632,471	37,706	142,055
22 Renal medicine	58,109	186,971	38,553	70,836
23 Renal dialysis	1,039,223	1,039,565	229,139	229,149
24 Respiratory medicine	274,579	1,145,518	91,294	324,063
25 Rheumatology	30,633	83,143	11,591	27,522
26 Pain management	33,901	53,166	34,330	48,924
27 Non subspecialty—medicine	292,794	1,199,934	91,344	334,268
41 Breast surgery	19,035	41,728	35,155	62,050
42 Cardiothoracic surgery	16,947	173,824	11,056	116,704
43 Colorectal surgery	47,443	256,458	50,131	166,027
44 Upper Gastrointestinal surgery	79,450	316,746	44,695	130,849
46 Neurosurgery	80,221	374,262	51,941	273,879
47 Dentistry	23,760	25,627	101,772	102,058
48 Ear, nose and throat; head and neck	129,768	199,359	121,943	142,083
49 Orthopaedics	307,473	1,162,946	320,386	864,879

(continued)

**Table D1 (continued): Separations<sup>(a)</sup> and patient days by service related group based on AR-DRG version 6.0, public and private hospitals, 2012–13**

Service Related Group	Public hospitals		Private hospitals	
	Separations	Patient days	Separations	Patient days
50 Ophthalmology	103,155	128,230	244,428	248,176
51 Plastic and reconstructive surgery	90,357	205,249	147,749	216,050
52 Urology	160,192	305,209	158,386	268,052
53 Vascular surgery	48,081	289,151	35,827	133,459
54 Non subspecialty—surgery	300,952	760,598	133,788	303,670
61 Transplantation	1,390	24,710	17	150
62 Extensive burns	2,070	21,417	55	389
63 Tracheostomy	9,709	290,317	1,086	37,904
71 Gynaecology	149,211	228,450	224,669	300,173
72 Obstetrics	329,093	849,256	101,317	421,082
73 Qualified neonate	63,273	230,232	18,886	120,816
74 Unqualified neonate	166,742	0	48,138	0
75 Perinatology	22,875	345,377	n.a.	n.a.
81 Drug and alcohol	64,305	138,256	10,099	33,871
82 Psychiatry—acute	161,847	1,687,238	148,160	768,667
83 Psychiatry—non acute	4,096	495,653	470	483
84 Rehabilitation	135,090	1,957,460	241,160	1,097,036
85 Psychogeriatric care	2,485	115,022	6,321	44,349
86 Palliative care	33,266	340,592	6,006	68,482
87 Maintenance	23,748	523,469	2,027	45,723
99 Unallocated	8,018	65,260	10,734	31,122
<b>Total</b>	<b>5,696,937</b>	<b>18,822,823</b>	<b>3,891,469</b>	<b>8,872,946</b>

(a) Separations excludes records for *Hospital boarders* and *Posthumous organ procurement*. Newborns without qualified days are included, and are allocated to SRG 74 *Unqualified neonate*.

Source: National Hospital Morbidity Database.

Tables D.S1 to D.S5 (which accompany this report online) present more detailed SRG information by state and territory.

Table D.S1 contains the number of public hospitals establishments that, in 2012–13, reported more than 50 separations or more than 360 patient days in each SRG by state and territory and by remoteness area. This has been included as an indicative measure of the number of specialty units.

The best indicative measure of the number of units varies between SRGs and between uses of the measure. For example, for *Maintenance* (SRG 87), 104 hospitals provided more than 50 separations per year and 241 hospitals provided more than 360 patient days (reflecting the longer lengths of stay associated with maintenance care), while for *Gastroenterology* (SRG 15) these measures were 379 and 224 hospitals respectively. *Cardiothoracic surgery* (SRG 42) showed very little difference between the two different measures, with 39 hospitals providing more than 50 separations per year and 44 hospitals providing more than 360 patient days.

*Non subspecialty – medicine* (SRG 27) had the greatest number of establishments, with 410 hospitals with more than 50 separations per year and 362 hospitals with more than 360 patient days per year.

## **Additional information online**

Table D.S1: Number of hospitals with more than 50 separations and with more than 360 patient days in each SRG, by SRG and remoteness area, public hospitals, 2012–13

Table D.S2: Separations by service related group based on AR-DRG version 6.0, public hospitals, states and territories, 2012–13

Table D.S3: Separations by service related groups based on AR-DRG version 6.0, private hospitals, states and territories, 2012–13

Table D.S4: Patient days by service related group based on AR-DRG version 6.0, public hospitals, states and territories, 2012–13

Table D.S5: Patient days by service related group based on AR-DRG version 6.0, private hospitals, states and territories, 2012–13

Table D.S6: Service Related Groups (SRG) to Diagnosis Related Groups (DRG) conversion table, based on AR-DRG version 6.0