

3 Hospitalisation

Introduction

The AIHW National Hospital Morbidity Database contains diagnosis and treatment information for separations of admitted patients from almost all public and private hospitals in Australia from 1993–94. This section presents trend data for admitted patients with a principal diagnosis of cancer for the 5-year period from 2000–01 to 2004–05 inclusive.

The principal diagnosis is defined as the diagnosis established, after study, to be chiefly responsible for occasioning the admitted patient's episode of care in hospital.

Principal diagnoses for 2000–01 and 2001–02 were classified, coded and reported to the National Hospital Morbidity Database using the second edition of the Australian Version of the International Classification of Diseases, 10th Revision, Australian Modification (ICD-10-AM) (NCCH 2000). Principal diagnoses for 2002–03 and 2003–04 were coded using the third edition of ICD-10-AM (NCCH 2002). Principal diagnoses for 2004–05 were coded using the fourth edition of ICD-10-AM (NCCH 2004).

Table 3.1 gives the ICD-10-AM groupings for principal diagnoses of cancer (ICD-10-AM codes C00–C97 malignant neoplasms). ICD-10-AM includes diagnosis codes covering other reasons for hospitalisation (such as Z51.1 chemotherapy session). All codes primarily related to cancer are included in tables 3.1 and 3.2.

In tables 3.1 and 3.2, the term 'all cancer-related separations' is used to describe hospital separations with a principal diagnosis of cancer or with another reason for hospitalisation that is primarily related to cancer. These exclude hospital separations where the patient has cancer but was admitted for a reason unrelated to cancer.

Main findings

- In 2004–05, there were 703,576 principal diagnosis and other cancer-related separations, 10.0% of all hospital separations in that year. From 2000–01 to 2004–05 the total for all cancer-related separations increased on average by 4.5% per annum.
- In 2004–05, there were 334,330 hospital separations with a principal diagnosis of cancer, 4.8% of all hospital separations in that year. In the period 2000–01 to 2004–05, separations with a principal diagnosis of cancer increased on average by 2.5% per annum.
- For the eight NHPA cancers in the period 2000–01 to 2004–05, the average annual increase in separations was 15.1% for prostate cancer, 4.0% for non-Hodgkin lymphoma, 2.9% for colorectal cancer, 2.8% for skin cancers other than melanoma, 2.5% for melanoma, 1.8% for breast cancer and 1.1% for lung cancer. Separations for cancer of the cervix decreased on average by 1.3% per annum in the same period.
- The average length of stay for a person in hospital with a principal diagnosis of cancer declined slightly between 2000–01 and 2004–05, from 5.2 to 5.0 days. Excluding same-day separations, the average stay was virtually unchanged over this period at around 8.3 days.

- For the eight National Health Priority Area cancers in the period 2000-01 to 2004-05, the average length of stay (including same-day separations):
 - increased slightly for patients suffering from lung cancer from 7.7 to 7.9 days
 - remained around the same for patients suffering from melanoma at 2.5 days, for non-Hodgkin lymphoma at about 5.2 days, and skin cancers other than melanoma at 1.6 days
 - decreased for patients suffering from prostate cancer (from 5.9 to 4.4 days), colorectal cancer (from 8.6 to 7.8 days), cervical cancer (from 5.8 to 5.2 days), and breast cancer (from 4.2 to 3.8 days).

Table 3.1: Cancer-related hospital separations and average annual rate of change, Australia, 2000–01 to 2004–05

ICD-10-AM	Principal diagnosis	2000–01	2001–02	2002–03	2003–04	2004–05	Average annual change (per cent)
C00–C97	All cancers (including C44)	307,268	316,643	332,484	344,090	334,330	2.5
C00	Lip	591	685	730	698	658	2.2
C01–C02	Tongue	1,099	1,209	1,348	1,332	1,305	4.4
C03–C06	Mouth	992	950	901	972	1,032	1.1
C07–C08	Parotid & other salivary glands	485	491	487	464	497	–0.1
C09–C10	Tonsil & other oropharynx	804	760	874	877	983	5.7
C11	Nasopharynx	528	464	441	511	546	1.7
C12–C13	Hypopharynx	518	485	497	505	480	–1.1
C14	Other lip, oral cavity & pharynx	282	234	323	228	205	–6.1
C15	Oesophagus	4,505	4,362	4,628	4,687	4,769	1.9
C16	Stomach	5,638	5,429	5,523	5,499	5,432	–0.6
C17	Small intestine	639	593	644	758	686	4.0
C18	Colon	15,229	15,614	16,612	16,565	16,918	2.7
C19–C21	Rectum & anus	10,073	10,124	10,777	11,036	11,320	3.2
C18–C21	Colorectal (including anus)	25,302	25,738	27,389	27,601	28,238	2.9
C22	Liver & intrahepatic bile ducts	2,030	2,081	2,346	2,595	2,739	8.6
C23–C24	Gallbladder & other biliary tract	1,145	1,140	1,108	1,076	953	–4.1
C25	Pancreas	3,979	3,982	4,199	4,358	4,766	4.7
C30–C31	Nasal cavity & accessory sinuses	388	369	406	390	409	1.6
C32	Larynx	1,467	1,472	1,441	1,475	1,562	1.3
C33–C34	Trachea, bronchus & lung	17,144	17,322	17,360	17,716	17,911	1.1
C37–C38	Other thoracic organs	470	411	517	453	398	–2.2
C40–C41	Bone and articular cartilage	1,386	1,532	1,610	1,769	1,809	7.0
C43	Skin—melanoma	7,715	7,918	8,425	8,680	8,330	2.5
C44	Skin—other than melanoma	65,693	69,135	74,282	74,660	72,634	2.8
C45	Mesothelioma	1,501	1,620	1,785	1,989	1,950	7.5
C46	Kaposi sarcoma	37	37	52	35	52	6.8
C47–C49	Connective & soft tissue	2,052	2,374	2,246	2,275	2,440	3.0
C50	Breast	20,587	21,151	22,701	23,748	21,190	1.8
C53	Cervix uteri	1,925	1,798	1,921	1,782	1,812	–1.3
C54	Corpus uteri	2,506	2,523	2,584	2,795	2,886	4.0
C55	Uterus unspecified	469	573	629	640	697	9.2
C56	Ovary	3,490	3,638	3,217	3,323	3,239	–2.4
C57–C58, C51–C52	Placenta & other female genital	1,012	926	843	1,011	1,038	1.4
C61	Prostate	13,715	15,109	17,153	20,547	23,343	15.1
C62	Testis	1,181	1,104	1,127	1,246	1,195	1.5
C63, C60	Penis & other male genital	196	212	196	165	218	–0.2
C64	Kidney, except renal pelvis	3,402	3,374	3,306	3,538	3,675	2.1
C65	Renal pelvis	377	414	411	404	416	1.7
C66	Ureter	321	379	334	295	363	0.0
C67	Bladder	16,416	16,558	15,672	15,256	14,848	–2.8
C68	Other urinary organs	138	136	115	107	139	–2.1
C69	Eye and adnexa	590	608	608	698	680	4.3
C71	Brain	4,436	4,611	4,566	4,384	4,603	0.2
C72, C70	Meninges & other CNS	320	250	240	320	286	0.1
C73	Thyroid gland	2,272	2,523	2,570	2,972	3,101	8.2
C74	Adrenal gland	383	215	243	338	290	–2.1
C75	Other endocrine glands	163	123	113	86	102	–13.0
C81	Hodgkin disease	1,375	1,580	1,510	1,675	1,802	6.2
C82–C85, C96	Non-Hodgkin lymphoma	16,110	17,358	19,174	18,901	18,841	4.0
C81–C85, C96	All lymphomas	17,485	18,938	20,684	20,576	20,643	4.1

(continued)

Table 3.1 continued: Cancer-related hospital separations and average annual rate of change, Australia, 2000-01 to 2004-05

ICD-10-AM	Principal diagnosis	2000-01	2001-02	2002-03	2003-04	2004-05	Average annual change (per cent)
C88	Immunoproliferative neoplasms	665	648	663	783	779	5.3
C90	Multiple myeloma	12,691	12,953	13,833	15,244	9,167	-3.7
C91, C95	Lymphoid & unspecified leukaemia	7,776	8,273	8,976	9,567	9,534	5.6
C92-C94	Myeloid & other specified leukaemia	9,016	9,583	9,937	10,156	10,146	2.9
C97, C76-C80, C26, C39	Unknown and multiple primary site	39,346	39,230	40,280	42,506	39,156	0.7
Other cancer-related separations^(a)							
Z80, Z85, Z92.3	Personal and family history	28,144	25,821	14,229	12,156	11,203	-25.0
Z03.1	Observation for suspected cancer	555	500	412	450	429	-6.3
Z12	Special screening examination	608	8,125	23,010	25,319	29,229	^(b)
Z40	Prophylactic surgery	232	309	299	397	452	17.6
Z51.0	Radiotherapy session	733	799	849	561	605	-6.8
Z51.1	Chemotherapy session	220,026	232,806	256,226	265,616	285,701	6.8
Z54.1, Z08.1	Follow-up after radiotherapy	641	598	509	482	420	-10.1
Z54.2, Z08.2	Follow-up after chemotherapy	1,122	1,291	1,047	1,096	977	-4.3
Z08.0	Follow-up after surgery for cancer	29,158	30,730	32,177	32,913	33,635	3.6
Z08.7-Z08.9	Follow-up after multiple treatment	3,714	4,410	5,758	6,317	6,595	15.9
All cancer related separations		592,201	622,032	667,000	689,397	703,576	4.5

(a) Separations for specific procedures, usually related to another separation for a principal diagnosis of cancer, but excluding any procedures conducted as part of that other separation.

(b) Average annual rate of change not calculated due to extreme volatility of the time series.

Source: AIHW National Hospital Morbidity Database.

Table 3.2: Average length of stay for cancer-related hospital separations, Australia, 2000–01 to 2004–05

ICD-10-AM	Principal diagnosis	Year					Year				
		00–01	01–02	02–03	03–04	04–05	00–01	01–02	02–03	03–04	04–05
		Average length of stay (days)					ALOS excl. same-day separations				
C00–C97	All cancers (including C44)	5.2	5.1	5.0	4.9	5.0	8.3	8.4	8.4	8.3	8.2
C00	Lip	1.9	1.9	1.7	2.0	1.6	3.7	4.2	3.9	4.9	3.4
C01–C02	Tongue	7.3	7.9	6.7	6.4	6.0	9.0	9.8	8.8	8.4	7.7
C03–C06	Mouth	9.2	8.1	7.7	8.0	9.1	11.1	10.2	10.0	10.3	11.6
C07–C08	Parotid & other salivary glands	6.0	6.9	6.2	6.3	6.0	6.5	7.4	6.8	6.9	6.5
C09–C10	Tonsil & other oropharynx	8.3	8.0	6.8	6.7	6.0	10.6	10.0	8.5	8.7	7.5
C11	Nasopharynx	5.5	6.1	5.9	5.0	4.9	6.7	7.7	7.3	6.9	6.7
C12–C13	Hypopharynx	11.9	10.8	11.5	8.5	10.4	14.8	13.5	14.7	11.2	12.6
C14	Other lip, oral cavity & pharynx	9.5	8.9	7.6	8.4	8.0	12.0	11.2	10.4	11.1	10.0
C15	Oesophagus	7.1	6.8	7.1	6.9	6.5	10.2	10.0	10.1	9.8	9.1
C16	Stomach	7.1	7.8	7.3	7.7	7.4	9.6	10.6	10.2	10.7	10.2
C17	Small intestine	9.2	9.6	9.4	7.9	8.8	12.1	13.2	12.9	11.6	11.8
C18	Colon	8.7	8.4	8.5	8.3	8.0	11.6	11.3	11.5	11.1	10.7
C19–C21	Rectum & anus	8.4	8.3	8.1	7.9	7.6	11.9	12.0	11.8	11.4	10.9
C18–C21	Colorectal (including anus)	8.6	8.4	8.3	8.1	7.8	11.7	11.6	11.6	11.2	10.7
C22	Liver & intrahepatic bile ducts	7.0	7.3	7.9	7.3	7.4	8.3	8.9	9.3	8.8	8.9
C23–C24	Gallbladder & other biliary tract	9.6	10.5	9.5	8.9	9.5	10.9	12.2	11.1	10.6	11.1
C25	Pancreas	9.2	9.3	9.2	9.4	9.0	10.8	10.9	11.1	11.2	10.8
C30–C31	Nasal cavity & accessory sinuses	6.7	6.7	6.8	8.7	7.3	8.3	8.4	8.5	10.6	9.1
C32	Larynx	8.4	8.5	8.2	8.3	7.8	11.8	12.3	12.1	12.0	11.6
C33–C34	Trachea, bronchus & lung	7.7	7.9	8.0	7.8	7.9	9.5	9.8	10.0	9.8	9.8
C37–C38	Other thoracic organs	7.3	5.7	6.0	7.0	5.9	8.6	6.7	7.0	8.4	7.3
C40–C41	Bone and articular cartilage	5.8	5.7	5.5	6.1	5.7	6.8	7.1	6.5	7.3	6.9
C43	Skin—melanoma	2.5	2.4	2.4	2.3	2.5	5.1	5.0	5.1	5.0	5.3
C44	Skin—other than melanoma	1.7	1.6	1.6	1.6	1.6	4.2	4.1	4.3	4.3	4.4
C45	Mesothelioma	6.9	7.4	7.5	6.9	7.3	8.1	8.8	8.7	8.0	8.6
C46	Kaposi sarcoma	4.8	2.6	6.0	6.7	6.4	10.3	5.1	11.3	11.4	13.3
C47–C49	Connective & soft tissue	6.1	5.8	6.0	6.0	5.8	8.1	7.8	8.0	7.7	7.6
C50	Breast	4.2	4.0	3.8	3.8	3.8	5.2	5.0	4.8	4.9	4.6
C53	Cervix uteri	5.8	5.6	5.0	5.4	5.2	7.6	7.4	6.9	7.3	7.6
C54	Corpus uteri	5.6	5.6	5.5	5.0	5.3	7.3	7.3	7.2	6.8	7.1
C55	Uterus unspecified	5.0	5.0	5.1	5.0	5.4	6.6	6.7	6.9	7.0	7.2
C56	Ovary	6.7	6.9	7.0	7.3	7.3	7.6	8.4	8.4	8.8	8.9
C57–C58, C51–C52	Placenta & other female genital	7.4	6.6	6.9	6.5	6.7	9.2	8.1	8.9	8.4	8.4
C61	Prostate	5.9	5.6	5.3	4.7	4.4	7.3	7.5	7.4	7.1	6.6
C62	Testis	2.8	2.8	2.8	3.0	3.1	3.1	3.2	3.2	3.5	3.5
C63, C60	Penis & other male genital	6.0	5.6	4.2	4.9	5.1	7.2	7.7	5.2	6.7	6.7
C64	Kidney, except renal pelvis	7.9	8.3	8.1	7.8	7.7	9.1	9.5	9.1	9.1	8.8
C65	Renal pelvis	7.3	14.3	6.6	6.8	7.2	8.3	17.0	8.1	8.1	8.8
C66	Ureter	6.3	6.4	5.6	7.1	6.6	7.4	8.1	7.3	9.8	8.3
C67	Bladder	3.1	3.1	3.0	3.1	3.1	5.0	5.1	5.1	5.2	5.2
C68	Other urinary organs	4.4	5.3	6.0	6.3	5.6	6.1	8.3	8.6	9.4	7.7
C69	Eye and adnexa	2.6	3.1	3.2	2.7	2.7	4.4	4.7	5.0	4.6	4.3
C71	Brain	11.4	10.5	10.5	11.3	10.6	13.1	12.1	12.3	12.7	12.7
C72, C70	Meninges & other CNS	7.6	8.2	7.3	9.0	8.0	11.4	10.6	9.9	14.8	13.3
C73	Thyroid gland	3.4	3.4	3.4	3.1	3.3	3.5	3.4	3.4	3.2	3.3
C74	Adrenal gland	4.1	7.3	5.6	5.9	5.5	7.3	10.9	8.0	9.2	9.0
C75	Other endocrine glands	7.2	5.4	7.2	8.5	6.7	9.5	8.1	9.3	9.8	7.6

(continued)

Table 3.2 (continued): Average length of stay for cancer-related hospital separations, Australia, 2000–01 to 2004–05

ICD-10-AM	Principal diagnosis	Year					Year				
		00–01	01–02	02–03	03–04	04–05	00–01	01–02	02–03	03–04	04–05
		Average length of stay (days)					ALOS excl. same-day separations				
C81	Hodgkin disease	3.7	3.7	4.1	4.1	3.9	5.9	6.3	6.8	7.2	6.6
C82–C85, C96	Non-Hodgkin lymphoma	5.3	5.1	5.1	4.9	5.2	8.3	8.2	8.3	8.2	8.3
C81–C85, C96	All lymphomas	5.2	5.0	5.0	4.9	5.1	8.1	8.1	8.2	8.1	8.2
C88	Immunoproliferative neoplasms	2.8	2.8	3.1	2.7	3.0	6.1	6.9	8.0	7.6	7.3
C90	Multiple myeloma	3.3	3.3	3.4	3.2	4.9	8.5	8.6	9.6	9.3	9.8
C91, C95	Lymphoid & unspecified leukaemia	3.9	3.9	3.8	3.7	3.9	7.2	7.7	7.7	7.4	7.9
C92–C94	Myeloid & other specified leukaemia	6.0	6.0	5.8	5.8	6.0	13.6	14.8	14.2	14.1	14.8
C97, C76–C80, C26, C39	Unknown and multiple primary site	7.5	7.6	7.2	7.0	7.7	9.5	9.8	9.6	9.6	9.4
Other cancer related separations^(a)											
Z80, Z85, Z92.3	Personal and family history	1.0	1.0	1.0	1.0	1.0	1.9	1.9	2.0	1.7	2.2
Z03.1	Observation for suspected cancer	1.2	1.1	1.2	1.1	1.1	3.6	2.1	2.7	2.6	3.0
Z12	Special screening examination	1.0	1.0	1.0	1.0	1.0	1.3	1.5	1.6	1.5	1.4
Z40	Prophylactic surgery	3.6	3.4	3.2	3.6	3.0	3.9	3.6	3.4	3.8	3.3
Z51.0	Radiotherapy session	1.2	1.7	1.2	1.1	1.1	4.8	6.6	4.9	5.6	8.4
Z51.1	Chemotherapy session	1.0	1.0	1.0	1.0	1.0	2.3	2.8	2.2	2.4	1.7
Z54.1, Z08.1	Follow-up after radiotherapy	2.9	3.2	2.4	3.1	3.8	7.6	9.0	7.0	9.2	10.9
Z54.2, Z08.2	Follow-up after chemotherapy	1.7	1.7	1.4	1.7	1.4	2.9	3.0	2.6	3.0	2.6
Z08.0	Follow-up after surgery for cancer	1.0	1.0	1.0	1.0	1.0	1.6	1.6	1.6	1.6	1.6
Z08.7–Z08.9	Follow-up after multiple treatment	1.1	1.0	1.0	1.0	1.0	2.2	1.6	1.7	1.7	1.8
All cancer-related separations		3.2	3.1	3.0	2.9	2.9	8.2	8.3	8.3	8.2	8.1

(a) Separations for specific procedures, usually related to another separation for a principal diagnosis of cancer, but excluding any procedures conducted as part of that other separation.

Source: AIHW National Hospital Morbidity Database.