

Activity in Acute Public Hospitals in Ireland

2015
ANNUAL REPORT

Healthcare Pricing Office
December 2016



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Summary Description

This is a report on in-patient and day patient discharges from acute public hospitals participating in the Hospital In-Patient Enquiry (HIPE) scheme in 2015. Discharge activity is examined by patient type, admission type, hospital group, and by demographic parameters (such as age and sex). Particular issues of relevance to the Irish health care system covered in the report relate to the composition of discharges by medical card and public/private status. Discharges are also analysed by diagnoses, procedures, major diagnostic categories, and diagnosis related groups. The analysis is presented at the national level.

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Please note that there is the potential for minor revisions to the data set analysed in this report. Please check online at www.hpo.ie for information on updates.

ACKNOWLEDGEMENTS

The production of this annual report requires commitment and hard work from many individuals. Responsibility for collecting, coding, inputting, and validating data for the Hospital In-Patient Enquiry (HIPE) scheme rests with colleagues in acute hospitals throughout Ireland. Ensuring the continued operation of the HIPE scheme requires willing contributions from clinicians, clinical coders, HIPE/casemix coordinators, medical records staff, IT personnel, and administrative departments, together with hospital managers. We are greatly indebted to these individuals for their support and efforts.

The HIPE team within the Healthcare Pricing Office (HPO) oversees a wide range of tasks related to the management of this system, including software development and support, personnel training, data quality and audit, data management and analysis, and information dissemination. We acknowledge gratefully the dedication, skill and expertise that all the members of this team bring to their work on this scheme.

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Inevitably, a number of individuals have to carry most of the responsibility for producing a report of this type. In this case, Karen Kearns, Laura Metcalfe and Sinead O'Hara were to the fore in the preparation of the report for publication. We wish to express our sincere thanks to these colleagues for all of their hard work on the report. Their commitment, enthusiasm, and professionalism are gratefully acknowledged and sincerely appreciated.

Table of Contents

LIST OF TABLES	ii
LIST OF FIGURES	iv
EXECUTIVE SUMMARY	v
SECTION ONE	
Overview	1
1.1 Introduction	3
1.2 Background	3
1.3 Data Sources for Annual Report 2015	4
1.4 Structure of Annual Report 2015	5
1.5 Scope of HIPE Data	7
1.6 Methods and Definitions	8
1.7 Discharges Reported to HIPE, 2011 – 2015	10
SECTION TWO	
Discharge Overview 2015	15
2.1 Introduction	17
2.2 Who	18
2.3 Where	32
2.4 When	41
SECTION THREE	
Morbidity Analysis 2015	47
3.1 Introduction	49
3.2 Coding of Diagnoses and Procedures	49
3.3 Morbidity Analysis: Summary of Day Patient and In-Patient Activity	56
3.4 Morbidity Analysis: Total Discharge Activity	66
SECTION FOUR	
Case Mix Analysis 2015	85
4.1 Introduction	87
4.2 Overview	87
4.3 Analysis of HIPE Data by Case Mix	90
ANNEX	115
Profile of Discharges Aged 0–16 Years	117
GLOSSARY AND ABBREVIATIONS	127
APPENDICES	135
Appendix I: HIPE Hospitals	137
Appendix II: HIPE Data Collected	139
Appendix III: HIPE Data Entry Form	141
Appendix IV: Derived Variables	142
Appendix V: Australian Coding Standard 0042	143
Appendix VI: Further Information on HIPE Scheme	145
Appendix VII: Overview of Changes from 6 th Edition to 8 th Edition ICD-10-AM/ACHI/ACS	146

List of Tables

TABLE 1.1	Acute Public Hospital Discharges in HIPE (N,%), 2011 – 2015	12
TABLE 2.1a	Total Discharges: Patient Type by Age Group (N, %, Bed Days, %, and In-Patient Length of Stay)	19
TABLE 2.1b	Total Male Discharges: Patient Type by Age Group (N, %, Bed Days, % and In-Patient Length of Stay)	22
TABLE 2.1c	Total Female Discharges (excl. Maternity): Patient Type by Age Group (N, %, Bed Days, % and In-Patient Length of Stay)	23
TABLE 2.1d	Total Female Discharges (Maternity): Patient Type by Age Group (N, %, Bed Days, % and In-Patient Length of Stay)	23
TABLE 2.2	Total Discharges: Patient Type by Marital/Civil Status (N, %, and In-Patient Length of Stay)	26
TABLE 2.3	Total Discharges: Public/Private Status by Patient Type and Age Group (N, Row %, In-Patient Length of Stay)	28
TABLE 2.4	Total Discharges : GMS Status by Age Group (N, %)	30
TABLE 2.5	Total Discharges: Hospital Group by Patient Type (N, %, Bed Days, %, and In-Patient Length of Stay)	32
TABLE 2.6	Total Discharges: Hospital Group by Admission Type (N, %, Bed Days, %)	34
TABLE 2.7	Total Discharges: Hospital Group by Public/Private Status and Patient Type (N, % and In-Patient Length of Stay)	37
TABLE 2.8	Total Discharges: Admission Source by Patient Type and Admission Type (N, %)	38
TABLE 2.9	Total Discharges: Discharge Destination by Patient Type and Admission Type (N, %)	39
TABLE 2.10	Total Discharges: Patient Type and Admission Type by Day of Admission (N, % and In-Patient Length of Stay)	42
TABLE 2.11	Total Discharges: Patient Type and Admission Type by Day of Discharge (N, % and In-Patient Length of Stay)	43
TABLE 3.1	ICD-10-AM Diagnosis Codes, Chapter and Title	51
TABLE 3.2	Australian Classification of Health Interventions (ACHI), Chapter and Title	52
TABLE 3.3	Total Discharges: Mean Number of All-Listed Diagnoses by Patient Type, Sex and Age Group	53
TABLE 3.4	Total Discharges: Number and Percentage of Discharges with a Principal Procedure by Patient Type and Admission Type	55
TABLE 3.5	Total Discharges: Mean Number of All-Listed Procedures by Patient Type, Sex and Age Group	55
TABLE 3.6	Day Patient Activity (N, %)	57
TABLE 3.7	In-Patient Activity (N, %, Mean and Median Length of Stay)	59
TABLE 3.8	Elective In-Patient Activity (N, %, Mean and Median Length of Stay)	61
TABLE 3.9	Emergency In-Patient Activity (N, %, Mean and Median Length of Stay)	63
TABLE 3.10	Maternity In-Patient Activity (N, %, Mean and Median Length of Stay)	65
TABLE 3.11	Total Discharges: Principal Diagnosis by Sex and Age Group (N)	68
TABLE 3.12	In-Patient Discharges: Mean and Median Length of Stay (Days) by Principal Diagnosis, Sex and Age Group	70
TABLE 3.13	Total Discharges: All-Listed Diagnoses by Sex and Age Group (N)	74
TABLE 3.14	Total Discharges: Principal Procedure by Sex and Age Group (N)	78
TABLE 3.15	In-Patient Discharges: Mean and Median Length of Stay (Days) by Principal Procedure, Sex and Age Group	80
TABLE 3.16	Total Discharges: All-Listed Procedures by Sex and Age Group (N)	83
TABLE 4.1	Total Discharges: AR-DRG Complexity Split by Patient Type (N, %)	89
TABLE 4.2	Total Discharges: MDC by Patient Type (N, %)	92
TABLE 4.3	Total Discharges: MDC 1 Diseases and Disorders of the Nervous System: AR-DRG by Patient Type (N, In-Patient Length of Stay)	95
TABLE 4.4	Total Discharges: MDC 2 Diseases and Disorders of the Eye: AR-DRG by Patient Type (N, In-Patient Length of Stay)	96
TABLE 4.5	Total Discharges: MDC 3 Diseases and Disorders of the Ear, Nose, Mouth and Throat: AR-DRG by Patient Type (N, In-Patient Length of Stay)	97
TABLE 4.6	Total Discharges: MDC 4 Diseases and Disorders of the Respiratory System: AR-DRG by Patient Type (N, In-Patient Length of Stay)	98
TABLE 4.7	Total Discharges: MDC 5 Diseases and Disorders of the Circulatory System: AR-DRG by Patient Type (N, In-Patient Length of Stay)	99
TABLE 4.8	Total Discharges: MDC 6 Diseases and Disorders of the Digestive System: AR-DRG by Patient Type (N, In-Patient Length of Stay)	101
TABLE 4.9	Total Discharges: MDC 7 Diseases and Disorders of the Hepatobiliary System and Pancreas: AR-DRG by Patient Type (N, In-Patient Length of Stay)	102
TABLE 4.10	Total Discharges: MDC 8 Diseases and Disorders of the Musculoskeletal System and Connective Tissue: AR-DRG by Patient Type (N, In-Patient Length of Stay)	103

TABLE 4.11	Total Discharges: MDC 9 Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast: AR-DRG by Patient Type (N, In-Patient Length of Stay)	105
TABLE 4.12	Total Discharges: MDC 10 Endocrine, Nutritional and Metabolic Diseases and Disorders: AR-DRG by Patient Type (N, In-Patient Length of Stay)	106
TABLE 4.13	Total Discharges: MDC 11 Diseases and Disorders of the Kidney and Urinary Tract: AR-DRG by Patient Type (N, In-Patient Length of Stay)	107
TABLE 4.14	Total Discharges: MDC 12 Diseases and Disorders of the Male Reproductive System: AR-DRG by Patient Type (N, In-Patient Length of Stay)	108
TABLE 4.15	Total Discharges: MDC 13 Diseases and Disorders of the Female Reproductive System: AR-DRG by Patient Type (N, In-Patient Length of Stay)	108
TABLE 4.16	Total Discharges: MDC 14 Pregnancy, Childbirth and the Puerperium: AR-DRG by Patient Type (N, In-Patient Length of Stay)	109
TABLE 4.17	Total Discharges: MDC 15 Newborns and Other Neonates: AR-DRG by Patient Type (N, In-Patient Length of Stay)	109
TABLE 4.18	Total Discharges: MDC 16 Diseases and Disorders of Blood, Blood Forming Organs, Immunological Disorders: AR-DRG by Patient Type (N, In-Patient Length of Stay)	110
TABLE 4.19	Total Discharges: MDC 17 Neoplastic Disorders (Haematological and Solid Neoplasms): AR-DRG by Patient Type (N, In-Patient Length of Stay)	110
TABLE 4.20	Total Discharges: MDC 18 Infectious and Parasitic Diseases, Systemic or Unspecified Sites: AR-DRG by Patient Type (N, In-Patient Length of Stay)	111
TABLE 4.21	Total Discharges: MDC 19 Mental Diseases and Disorders: AR-DRG by Patient Type (N, In-Patient Length of Stay)	111
TABLE 4.22	Total Discharges: MDC 20 Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders: AR-DRG by Patient Type (N, In-Patient Length of Stay)	112
TABLE 4.23	Total Discharges: MDC 21 Injuries, Poisonings and Toxic Effects of Drugs: AR-DRG by Patient Type (N, In-Patient Length of Stay)	112
TABLE 4.24	Total Discharges: MDC 22 Burns: AR-DRG by Patient Type (N, In-Patient Length of Stay)	113
TABLE 4.25	Total Discharges: MDC 23 Factors Influencing Health Status and Other Contacts with Health Services: AR-DRG by Patient Type (N, In-Patient Length of Stay)	113
TABLE 4.26	Total Discharges: Unassignable to MDC: AR-DRG by Patient Type (N, In-Patient Length of Stay)	114
TABLE 4.27	Total Discharges: Pre-MDC: AR-DRG by Patient Type (N, In-Patient Length of Stay)	114

List of Figures

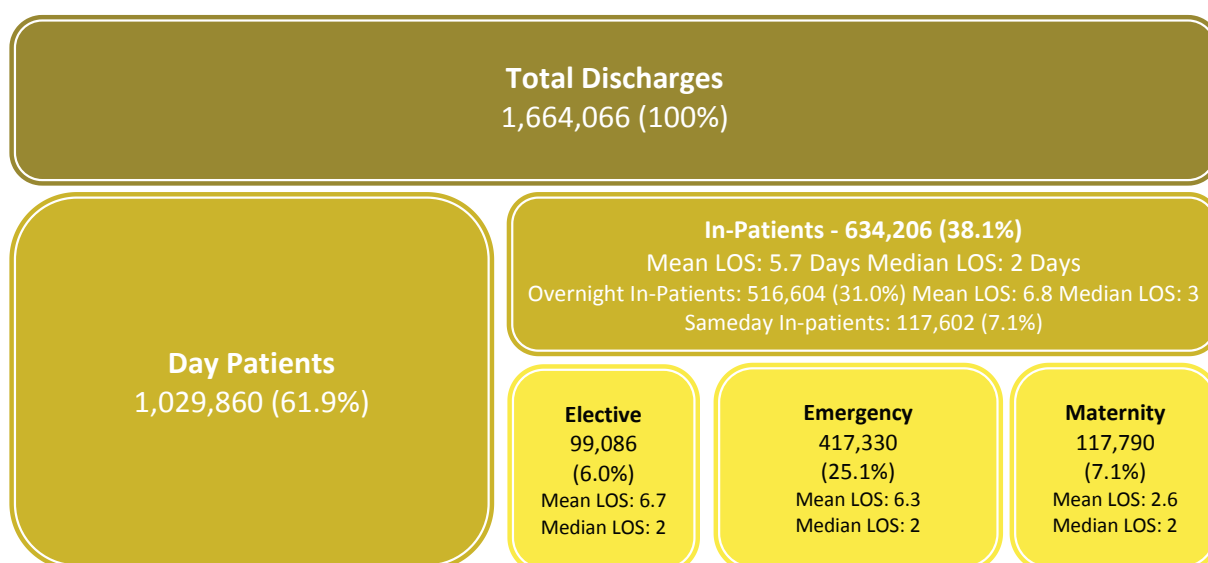
FIGURE 1.1	Changes to structure of the Activity in Acute Public Hospitals in Ireland Annual Report, 2015	5
FIGURE 1.2	Total Discharges by Patient Type and Admission Type (N), 2011 – 2015	14
FIGURE 1.3	Total Discharges by Age Group (N), 2011 – 2015	14
FIGURE 2.1	Overnight In-Patients: Discharges and Mean Length of Stay (Days) by Age group	20
FIGURE 2.2	Overnight In-Patients: Mean Length of Stay (Days) by Age Group and Sex: Males, Females (excl. Maternity), Females (Maternity)	24
FIGURE 2.3	Total Discharges: Sex by Age Group (Discharge Rate per 1,000 Population)	25
FIGURE 2.4	Total Discharges: Marital/Civil Status by Admission Type (%)	27
FIGURE 2.5	Total Discharges: Public/Private Status by Age Group (%)	29
FIGURE 2.6	Overnight In-Patient Length of Stay: Public/Private Status by Age Group (Mean)	29
FIGURE 2.7	Total Discharges: GMS Status by Age Group (%)	31
FIGURE 2.8	Overnight In-patients: Discharges (N) and Length of Stay (Mean) by Hospital Group	33
FIGURE 2.9	Total Discharges: Hospital Group by Admission Type (%)	35
FIGURE 2.10	In-Patient Discharges: Discharge Destination by Admission Source(%)	40
FIGURE 2.11	Total Discharges: Patient Type and Admission Type by Day of Admission (%)	42
FIGURE 2.12	Total Discharges: Patient Type and Admission Type by Day of Discharge (%)	44
FIGURE 2.13	Total Discharges: Month of Discharge by Patient Type and Admission Type (N)	45
FIGURE 4.1	Steps in AR-DRG Assignment	88
FIGURE 4.2	Total Discharges: Major Diagnostic Category (MDC) (%)	93
FIGURE 4.3	Total Discharges: Major Diagnostic Category (MDC) by Patient Type (%)	94

EXECUTIVE SUMMARY

The Hospital In-Patient Enquiry (HIPE) scheme, established in 1971, is a health information system designed to collect clinical and administrative data on discharges from, and deaths in, acute hospitals in Ireland. Since the 1st of January 2014, the Healthcare Pricing Office (HPO) has overseen the administration and management of this scheme. The HPO is responsible for overseeing all functions associated with the operation of this database, including the development and support of the data collection and reporting software, training of coders and data quality audit, reporting, and responding to requests for information.

This report relates to discharges that occurred in the 2015 calendar year. The aim is to present an overview of discharge activity in acute public hospitals in Ireland.

TOTAL DISCHARGES, 2015



Discharge Overview

- Over 1.66 million discharges were reported by participating hospitals compared to 1.59 million discharges in 2014 – an increase of 4.5 per cent.
- Day patients accounted for 61.9 per cent of total discharges, an increase of 7.2 per cent since 2014. The majority of this increase was accounted for by the collection of radiotherapy data from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's hospitals, which was not reported to HIPE prior to 2015 – See Table 1.1.
- In-patients accounted for 38.1 per cent of total discharges, an increase of 0.4 per cent since 2014 and an increase of 7.1 per cent from 2011–2015.

- Over the period 2011–2015, the number of elective in-patient discharges decreased by 5.2 per cent, maternity in-patients decreased by 7.5 per cent, while emergency in-patients increased by 15.9 per cent.

Length of Stay

- In-patient average length of stay was 5.7 days in 2015 compared to 5.9 days in 2011, a decrease of 3.4 per cent.
- Since 2011, average length of stay remained relatively stable for elective and maternity in-patients at 6.7 days and 2.6 days respectively. The average length of stay for emergency in-patients showed a decrease of 7.4 per cent from 6.8 days to 6.3 days between 2011 and 2015.

Sex

- Similar to previous years, females accounted for 54.1 per cent of total discharges with males accounting for 45.9 per cent.

Age

- Discharges aged 65 years and over accounted for 35.8 per cent of total discharges, representing an increase of 7.9 per cent since 2014 and an increase of 23.9 per cent since 2011.
- Discharges aged 65 years and over accounted for 53.0 per cent of total in-patient bed days, an increase of 4.0 per cent since 2014 and an increase of 11.1 per cent since 2011.

Marital/Civil Status

- Married discharges accounted for 48.3 per cent of total discharges.

Public/Private Status

- Over 84 per cent of total discharges were treated on a public basis, representing a 4.7 per cent increase since 2014 and a 14.9 per cent increase since 2011. Private patients accounted for 15.9 per cent of total discharges, representing a 3.6 per cent increase from 2011–2015.
- The 25–34 years age group had the largest proportion of total discharges treated publicly (88.8 per cent) with only 11.2 per cent treated on a private basis.

General Medical Service (GMS) Status

- Of total discharges, 53.6 per cent were GMS discharges – an increase of 4.5 per cent since 2014 and an increase of 13.7 per cent since 2011.
- Of discharges in the 85 years and over age group, 85.0 per cent were GMS discharges compared to just 17.5 per cent of the less than 1 year age group (this excludes discharges where GMS status was ‘unknown’).

Hospital Group

- The largest proportion of total discharges were hospitalised in the South/South West Hospital Group (19.7 per cent).
- The Ireland East and South/South West Hospital Groups each treated approximately a fifth of total emergency in-patients (20.6 per cent and 19.4 per cent respectively).

Admission Source

- The majority of total discharges were admitted from home (96.7 per cent).

Discharge Destination

- The majority of total discharges were discharged home (95.3 per cent).
- Of total emergency in-patients, 5.7 per cent were transferred to long stay accommodation, and 5.5 per cent were transferred to another hospital.

Day of Admission

- The proportion of in-patient discharges admitted on an elective basis decreased throughout the week, with 62.3 per cent of elective in-patients admitted between Monday and Wednesday, falling to 6.4 per cent at the weekend.

Day of Discharge

- The proportion of elective in-patients discharged increased throughout the week, from 10.7 per cent on Monday to 22.3 per cent on Friday, falling to 10.4 per cent on Saturday and 4.8 per cent on Sunday.

Month of Discharge

- The largest numbers of emergency in-patients were discharged in December (36,663 discharges).

MORBIDITY ANALYSIS

Day Patients

- Day patients with a principal diagnosis of *Other medical care* (includes *Chemotherapy* and *Radiotherapy* encounters) and day patients with a principal diagnosis of *Care involving dialysis* accounted for 21.8 and 16.6 per cent of day patient discharges respectively.¹
- At least one procedure was recorded for 93.3 per cent of day patient discharges.
- Procedures from the block *Haemodialysis* were reported as a principal procedure for 17.8 per cent of day patients with at least one procedure.

In-Patients

- In-patient discharges with a principal diagnosis of *Single spontaneous delivery* accounted for 5.0 per cent of in-patients.
- At least one procedure was recorded for 56.6 per cent of in-patient discharges.
- Procedures from the block *Generalised allied health interventions* were reported as the principal procedure for 24.5 per cent of in-patient discharges with at least one procedure. This category includes interventions such as physiotherapy, pharmacy, dietetics, occupational therapy, speech pathology and social work.

Elective In-Patients

- Elective in-patients with a principal diagnosis of *Chronic diseases of tonsils and adenoids* accounted for 3.9 per cent of elective in-patient discharges.
- At least one procedure was recorded for 89.3 per cent of elective in-patient discharges.
- The procedure block *Generalised allied health interventions* was reported for 11.2 per cent of elective in-patients who had a principal procedure reported.

¹ From 2015 this includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

Emergency In-Patients

- Emergency in-patients with a principal diagnosis of *Pain in throat and chest* accounted for 4.4 per cent of emergency in-patient discharges.
- At least one procedure was recorded for 48.3 per cent of emergency in-patient discharges.
- The procedure block *Generalised allied health interventions* was reported for 37.8 per cent of emergency in-patient discharges who had a principal procedure reported.

Maternity In-Patients – by Delivery Status²

- Delivery discharges with a principal diagnosis of *Single spontaneous delivery* accounted for 49.2 per cent of delivery in-patient discharges.
- Non-delivery discharges with a principal diagnosis of *Other maternal diseases classifiable elsewhere but complicating pregnancy; childbirth and the puerperium* accounted for 24.7 per cent of non-delivery in-patient discharges.
- The procedure block *Caesarean section* was reported for 32.6 per cent of delivery discharges who had a principal procedure reported.
- The procedure block *Curettage and evacuation of uterus* was reported for 34.3 per cent of non-delivery discharges who had a principal procedure reported.

² Delivery discharges include discharges with a diagnosis of *outcome of delivery* (ICD-10-AM: Z37). Non-delivery discharges are maternity discharges where admission was related to their obstetrical experience but they did not deliver during that episode of care.

CASE MIX ANALYSIS

The case mix classification presents analysis of patients who undergo similar treatment processes and incur similar levels of resource use.

- The MDC with the largest proportion of day patients reported was *Neoplastic disorders (haematological and solid neoplasms)* (MDC 17), which accounted for 246,699 discharges or 24.0 per cent of day patients.
 - * *Chemotherapy* (AR-DRG R63Z) and *Radiotherapy* (AR-DRG R64Z) accounted for 43.9 and 46.3 per cent respectively of day patients within this MDC; they accounted for 10.5 per cent and 11.1 per cent respectively of total day patients.
- The MDC with the largest proportion of in-patient discharges was *Pregnancy, Childbirth and the Puerperium* (MDC 14), which accounted for 18.5 per cent of in-patients.
 - * *Vaginal Delivery* (AR-DRG O60Z) accounted for 36.9 per cent of in-patients within this MDC and 6.8 per cent of total in-patient discharges.

Overview SECTION

ONE

Table of Contents

1.1	Introduction	3
1.2	Background	3
1.3	Data Sources for Annual Report 2015	4
1.4	Structure of annual report 2015	5
1.5	Scope of HIPE Data	7
1.6	Methods and Definitions	8
1.7	Discharges Reported to HIPE, 2011-2015	10

1.1 INTRODUCTION

This report aims to present an overview of discharge activity in acute public hospitals in Ireland during 2015 using data from the Hospital In-Patient Enquiry (HIPE) scheme. HIPE collects information on day patient and in-patient activity from participating hospitals.¹

Section One provides an overview of the 2015 report. It outlines briefly the background of the HIPE scheme, and highlights other data sources used throughout the report. The scope of the HIPE data and the methods used in the report are discussed. Finally, an analysis of the trends in the main HIPE variables is undertaken using data from the period 2011–2015.

1.2 BACKGROUND

From 1st January 2014 the Health Research and Information Division at the ESRI and the National Casemix Programme (HSE) became the Healthcare Pricing Office (HPO).² While the HPO has initially been established on an administrative basis, attached to the HSE, it is planned that this Office will ultimately be established on a statutory basis.³ Part of the remit of the HPO is to oversee all functions associated with the operation of the HIPE database, including the development and support of the data collection and reporting software, training of coders, data quality, audit, data analysis and reporting, and responding to requests for information.^{4,5,6}

At the start of 2015, the classification to code clinical information was updated from the 6th Edition to the 8th Edition of the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM), Australian Classification of Health interventions (ACHI), Australian Coding Standards (ACS).^{7,8} Ireland updates the clinical classification every four to five years to ensure the classifications remain current for national and international use. Extensive training of all HIPE staff was undertaken in 2014 and 2015 to ensure understanding of the changes in the new classification. Use of

¹ See Appendix I for a list of hospitals participating in HIPE in 2015.

² From 1990 until 2013 the Economic and Social Research Institute (ESRI) oversaw the administration and management of the HIPE scheme on behalf of the Health Service Executive (HSE) and the Department of Health (DoH).

³ This development is in line with the proposals in the 'Money Follows the Patient' policy paper published by the Department of Health in February 2013.

⁴ The HIPE Portal is a web-based software application designed and developed at the HPO for the collection and reporting of HIPE data within public hospitals.

⁵ For further information on the role of the coder, see Section 3.2.

⁶ The Healthcare Pricing Office also oversees the administration and management of the National Perinatal Reporting System (NPRS).

⁷ National Centre for Classification in Health (NCCH), 2013: *The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (8th Ed)*: NCCH, Australian Health Services Research Institute, The University of Wollongong.

⁸ The spelling conventions of ICD-10-AM comply with the Macquarie Dictionary, as recommended by the Australian government style manual.

ICD-10-AM/ACHI/ACS is complemented by the Irish Coding Standards (ICS).⁹ The ICS are developed for use with the Australian Classifications and Coding Standards (ACS) and are revised regularly to reflect changing clinical practice and to ensure that the classification and its application are relevant to the Irish healthcare system. Due to the update in the classification, caution must be exercised when comparing procedure and diagnosis categories presented in this report compared to previous reports, due to changes in sequencing of codes, addition of new codes, deletion of codes, and updates to ACS and ICS.¹⁰

Given the comprehensive coverage achieved by this information system, the data gathered by HIPE are used by policymakers, clinical teams and researchers. In addition to responding to requests for HIPE information, the HPO also manages the HIPE Statistics Reporter which is available online.¹¹

1.3 DATA SOURCES FOR ANNUAL REPORT 2015

HIPE: The Hospital In-Patient Enquiry (HIPE) scheme, established in 1971, is a health information system designed to collect clinical and administrative data on discharges from, and deaths in, acute hospitals in Ireland.^{12,13} In 2015, 54 public hospitals in Ireland participated in HIPE (see Appendix I).^{14,15}

Population Estimates: Population estimates for 2011–2015 are based on Census 2011 data published by the Central Statistics Office.

⁹ Irish Coding Standards (ICS) provide guidelines for the collection of HIPE data for all discharges and are to be used in conjunction with 8th Edition ICD-10-AM/ACHI/ACS and the relevant HIPE Instruction Manual. For further information, see www.hpo.ie

¹⁰ See Appendix VII for an overview of changes from ICD-10-AM/ACHI/ACS 6th edition (in use from 2009–2014) to 8th Edition (in use from 1st January 2015).

¹¹ Available at www.hpo.ie

¹² See Appendix II for details of data collected by HIPE, see also the HIPE Data Dictionary 2015 Version 7.0 available at www.hpo.ie

¹³ A copy of the HIPE data entry form for 2015 is contained in Appendix III.

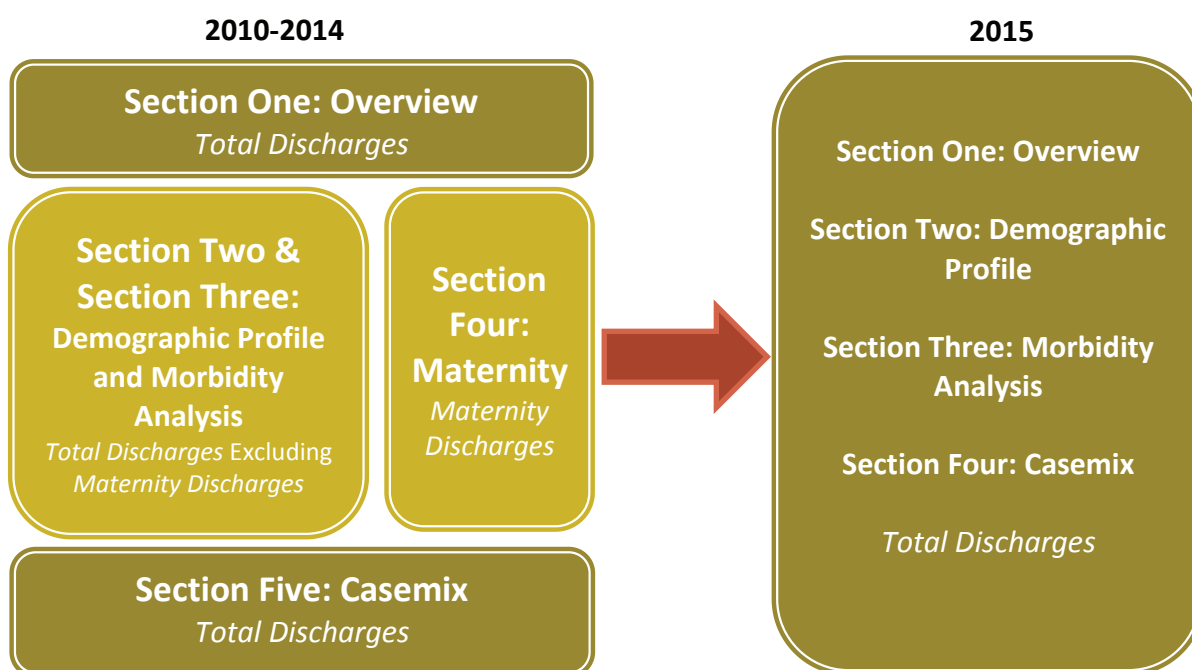
¹⁴ For historical reasons, a small number of non-acute hospitals also reported to HIPE in 2015. Discharges from these hospitals have been included in this report.

¹⁵ Blackrock Hospice ceased reporting hospital activity to HIPE in early 2015.

1.4 STRUCTURE OF ANNUAL REPORT 2015

Figure 1.1 outlines the structure of the Annual Report 2015. As shown in Figure 1.1, it differs from the structure of recent *Activity in Acute Public Hospitals in Ireland* Annual Reports 2010–2014.¹⁶ In contrast to these earlier reports, discharges with admission type ‘Maternity’ are no longer presented separately in Section Four. In lieu of this, maternity discharges are separated out in selected tables in Section Two and Section Three (see Section 1.6 for more detail).

FIGURE 1.1 Changes to structure of the Activity in Acute Public Hospitals in Ireland Annual Report, 2015



The remainder of the report is structured as follows:

Section Two

In Section Two the report is concerned with providing a demographic (**WHO**), regional (**WHERE**) and temporal (**WHEN**) profile of discharges reported to HIPE in 2015. Section Two includes many of the administrative variables reported to HIPE, including age, sex, marital/civil status, GMS status, and discharge status. The regional analysis uses Hospital Group to see where discharges are being hospitalised, while the temporal analysis looks at day of admission, day of discharge, and month of discharge.

Section Three

Section Three focuses on the diagnoses and procedures recorded for discharges reported to HIPE. Section Three presents analysis of hospital activity by patient type with top 20 principal diagnoses and procedure blocks presented for day

¹⁶ See www.hpo.ie for the latest versions of these reports.

patients and for total, elective and emergency in-patients. The top 10 principal diagnoses and procedure blocks are presented by delivery status for maternity in-patients. Further analysis is presented for diagnoses and procedures reported for total discharges by sex and age group. The mean and median length of stay for in-patient discharges is presented by principal diagnoses and principal procedures.

Section Four

Section Four provides analysis of all HIPE data by case mix. Each Major Diagnostic Category (MDC) is presented with its associated Australian Refined Diagnosis Related Groups (AR-DRGs) for total discharges. The analyses provide a breakdown of MDCs and AR-DRGs by patient type, with in-patient mean and median length of stay also provided.

Annex

The annex is designed to highlight particular topics of interest that merit further analysis. This year's topic of interest is discharges aged 0–16 years.

Glossary and Abbreviations

This section provides definitions of the terminology used in this report along with explanations of the abbreviations.

1.5 SCOPE OF HIPE DATA

- *Each HIPE discharge record represents one episode of care.* Patients may be admitted to hospital more than once in any given time period with the same or different diagnoses. In the absence of a unique health identifier, therefore, the data reported to HIPE facilitate analysis of hospital discharge activity but do not permit analysis of certain parameters, such as the number of hospital encounters per patient; or estimate the incidence or prevalence of a particular disease.
- *Emergency In-Patient Admissions:* HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.
- *Coverage of data:* Coverage of the HIPE system is calculated using the discharges returned as 'coded' as a proportion of total discharges reported within each hospital. The data available from participating hospitals for 2015 indicate that for day patient and in-patient discharges appropriate for inclusion in the HIPE data set, 99.96 per cent of the discharges reported from hospital systems were coded and returned for inclusion in the national HIPE data set.¹⁷
- *Hospital factors:* Restructuring of the hospital system is reflected in the analysis presented in this report. From April 2011 St. Luke's Radiation Oncology Network commenced providing services at centres located in Beaumont and St. James's Hospitals, as well as continuing to provide services at St. Luke's Hospital, Rathgar. For 2011–2014 these data were not included in the HIPE national file, and 2015 is the first year these data have been returned to HIPE. As a result there has been an increase in day case activity of approximately 49,000 day patients receiving radiotherapy treatment (See Table 1.1).

¹⁷

Blackrock Hospice ceased reporting hospital activity to HIPE in early 2015.

1.6 METHODS AND DEFINITIONS

Some of the methods and definitions used to present data in the report are detailed below.

Patient Type: HIPE collects data on day patients and in-patients.

- A day patient is admitted to hospital for treatment on an elective (rather than an emergency) basis and is discharged alive, as scheduled, on the same day.¹⁸ Births are not included.
- An in-patient is admitted to hospital for treatment or investigation on an elective or emergency basis. Sameday in-patients are admitted as in-patients and discharged on the same day, while overnight in-patients stay at least one night in hospital.

Unlike previous reports, sameday in-patients and overnight in-patients are presented separately for selected tables in this report. The HSE and Department of Health have developed a number of initiatives in recent years to improve patient flow throughout the system. One such initiative has been the introduction of Acute Medical Units.¹⁹ This has led to an increase in discharges recorded as sameday in-patients (in-patients admitted and discharged on the same day) who accounted for 7.1 per cent of total discharges in 2015. To allow for monitoring of this particular group and to distinguish them from overnight in-patients, sameday in-patients are presented separately for particular tables throughout the report.

In-Patient Length of Stay: The presentation of in-patient length of stay underwent review prior to the publication of this report. Previously, the HIPE annual report presented data for discharges with an 'acute' or 'extended' length of stay (0–30 days for acute in-patients and 31 days and over for extended stay in-patients). This split of in-patient discharges based on their length of stay was used in previous reports as HIPE collects data from a small number of non-acute hospitals, resulting in longer lengths of stays. As these hospitals now account for only 0.8 per cent of total in-patient activity, this split is no longer applied.

The OECD defines an in-patient discharge as *"the release of a patient who was formally admitted into a hospital for treatment and/or care and who stayed for a minimum of one night"*.²⁰ In HIPE, as discharges who do not meet the definition of a day patient are classified as in-patients, there are discharges who did not stay overnight that are classified as in-patients. This results in the inclusion of sameday in-patients in the calculation of in-patient average length of stay. In this report one bed day is assigned to in-patients discharged on the same day (sameday in-patients) and one bed day is assigned to in-patients who stayed one night in hospital.

¹⁸ Definition is based on: Department of Health and Children, 2001. Quality and Fairness A Health System for You: Health Strategy, Department of Health and Children, 2001.

¹⁹ For more information see www.hse.ie/eng/about/Who/clinical/natclinprog/acutemedicineprogramme/about/

²⁰ Source: <http://stats.oecd.org/>

For comparability with international reporting, overnight in-patient length of stay is presented alongside the total in-patient length of stay.²¹ The former will result in a higher average length of stay as it excludes sameday in-patients. Median length of stay is also provided for both groups of in-patients to highlight the effect of outlier cases.

*Maternity Discharges: Maternity Discharges are no longer presented separately in Section 4 of the report.*²² Maternity discharges in HIPE are those who were admitted in relation to their obstetrical experience (from conception to 6 weeks post-delivery); that is, they were allocated to Admission Type 'Maternity'.²³ In lieu of reporting this group separately, certain tables in Section Two are disaggregated to include a split for maternity discharges. In the morbidity section, Table 3.10 presents the clinical characteristics of this group and Tables 3.11–3.16 have been expanded to include diagnoses and procedure categories for discharges with 'Maternity' admission type.

Hospital Groups: Increased reporting of Hospital Groups. In May 2013, the Government approved the report on *The Establishment of Hospital Groups as a Transition to Independent Hospital Trusts*.²⁴ This resulted in the reorganisation of hospitals into seven groups. These hospital groups were reported on in the 2014 report, and additional tables by hospital group have been added to this report.²⁵

Hospital Type: As hospitals continue to operate within their groups and are reconfiguring their services based on the needs within these groups, the tables reporting data by hospital type (whereby hospitals were grouped as county, regional, voluntary and special) are no longer included.

Derived Variables: For some of the categorical administrative variables, aggregation of categories has been necessary to ensure confidentiality. These derivations are presented in Appendix IV for admission type, admission source, and discharge destination.

Reporting of small numbers: The HPO does not report cells where the number of discharges reported to HIPE is five or fewer. The tables contained in this report have been suppressed in this manner by replacing such cells with the symbol ~. Where further suppression is necessary to ensure that cells with five or fewer discharges are not disclosed, the cell with the next lowest number of discharges has been replaced with the symbol *. Where cells containing five or fewer discharges have been suppressed, the associated mean and median in-patient

²¹ This method of presenting both overnight and total length of stay is primarily in Section Two of the report. As it was not practicable to present this for all tables, Section Three and Section Four continue to present total in-patient length of stay.

²² It was decided that these discharges could be represented adequately in Section Two and Section Three. The National Perinatal Reporting System provides more detailed analysis of activity in Maternity hospitals (www.hpo.ie)

²³ See Appendix II for details of data collected by HIPE and the HIPE Data Dictionary 2015 Version 7.0 available at www.hpo.ie

²⁴ <http://health.gov.ie/wp-content/uploads/2014/03/IndHospTrusts.pdf>

²⁵ See Appendix I for a list of hospitals and their associated groups participating in HIPE in 2015. There are a small number of HIPE hospitals that do not belong to a group which are categorised as 'No Group'.

length of stay figures have been suppressed using the symbol \wedge . In Section Three, the symbol \ddagger is used to denote where the sex and/or age group breakdown for a particular diagnosis or procedure has not been provided, as the numbers reported would result in suppression across the majority of categories.

1.7 DISCHARGES REPORTED TO HIPE, 2011-2015

In 2015, 1,664,066 discharges were reported to HIPE by participating acute public hospitals,²⁶ representing an increase of 13.0 per cent over the period 2011–2015 and an increase of 4.5 per cent over the period 2014–2015.

Table 1.1 and Figures 1.2 to 1.3 show the distribution of discharges over the period 2011–2015 by selected variables. The following points provide a summary of changes over the period 2011–2015:

- The male-female split in 2015 has remained consistent with previous years, with a larger proportion of female discharges (54.1 per cent).
- The 65 years and over age group accounted for the largest proportion of total discharges in 2015 (35.8 per cent), representing an increase of 23.9 per cent for this age group from 2011–2015.
- Over the period 2011–2015 there was an increase of 14.9 per cent for public discharges and an increase of 3.6 per cent for private discharges.
- The number of GMS discharges increased by 13.7 per cent between 2011 and 2015, from 785,190 to 892,584 discharges.
- The proportion of total discharges treated by each Hospital Group remained similar between 2014 and 2015. The South/South West and Ireland East Hospital Groups each treated approximately a fifth of total discharges in 2014 and 2015.
- The number of day patient discharges has increased from 880,974 in 2011 to 1,029,860 in 2015, an increase of 16.9 per cent, with an increase of 7.2 per cent between 2014 and 2015.²⁷
- The number of in-patient discharges has increased from 591,971 in 2011 to 634,206 in 2015, an increase of 7.1 per cent, with an increase of 0.4 per cent between 2014 and 2015.

²⁶ In 2015 there were <5 cases with sex recorded as 'unknown'. These cases were verified with the hospitals. For reasons of confidentiality these cases are not included in this report.

²⁷ From 2015 this includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

- Emergency in-patient discharges comprised 60.8 per cent of total in-patient discharges in 2011, which has increased to 65.8 per cent in 2015, while elective in-patients have declined as a proportion of total in-patients from 17.7 per cent in 2011 to 15.6 per cent in 2015.
- Maternity in-patient discharges decreased by 7.5 per cent over the period 2011–2015 from 127,347 to 117,790 discharges. Between 2014 and 2015 there was a 1.2 per cent decrease in the proportion of maternity in-patient discharges reported to HIPE.
- Sameday in-patient discharges have increased by 47.2 per cent over the period 2011–2015 from 79,883 to 117,602 discharges.
- The average length of stay has remained relatively constant for elective and maternity in-patients over the period 2011–2015, while the average length of stay for emergency in-patients has decreased from 6.8 days to 6.3 days over the period.
- Overnight in-patient discharges stayed on average 6.6 days in 2011 which has increased to 6.8 days in 2015, an increase of 3.0 per cent. The median has remained constant at 3 days over the period.

TABLE 1.1 Acute Public Hospital Discharges in HIPE (N, %), 2011-2015

	2011	2012	2013	2014	2015	% Change	% Change
	N (%)	N (%)	N (%)	N (%)	N (%)	2011-2015	2014-2015
Total Discharges^a	1,472,945	1,544,734	1,554,290	1,592,672	1,664,066	13.0	4.5
	100	100	100	100	100		
Discharge Rate^b	322.0	336.9	338.4	345.5	359.0	11.5	3.9
Sex							
Males	679,971	708,061	713,652	730,361	763,844	12.3	4.6
	46.2	45.8	45.9	45.9	45.9		
Females	792,974	836,673	840,638	862,311	900,222	13.5	4.4
	53.8	54.2	54.1	54.1	54.1		
Age Group							
Under 15 years	135,415	137,154	131,439	132,608	133,638	-1.3	0.8
	9.2	8.9	8.5	8.3	8.0		
15-44 years	443,266	460,598	459,158	465,626	464,203	4.7	-0.3
	30.1	29.8	29.5	29.2	27.9		
45-64 years	413,173	433,761	433,535	442,054	470,145	13.8	6.4
	28.1	28.1	27.9	27.8	28.3		
65 years and over	481,091	513,221	530,158	552,384	596,080	23.9	7.9
	32.7	33.2	34.1	34.7	35.8		
Public/Private Status^c							
Public Discharges	1,217,012	1,286,418	1,301,481	1,336,317	1,398,932	14.9	4.7
	82.6	83.3	83.7	83.9	84.1		
Private Discharges	255,933	258,316	252,809	256,355	265,134	3.6	3.4
	17.4	16.7	16.3	16.1	15.9		
GMS Status							
GMS	785,190	829,989	843,727	854,249	892,584	13.7	4.5
	53.3	53.7	54.3	53.6	53.6		
Non-GMS	669,319	694,470	699,003	726,530	748,461	11.8	3.0
	45.4	45.0	45.0	45.6	45.0		
Unknown	18,436	20,275	11,560	11,893	23,021	24.9	93.6
	1.3	1.3	0.7	0.8	1.4		
Hospital Group^d							
Ireland East	-	-	-	314,334	320,647	-	2.0
				19.7	19.3		
RCSI	-	-	-	245,979	244,242	-	-0.7
				15.4	14.7		
Dublin Midlands ^e	-	-	-	267,077	310,649	-	16.3
				16.8	18.7		
South/South West	-	-	-	320,534	327,700	-	2.2
				20.1	19.7		
UL	-	-	-	97,738	102,762	-	5.1
				6.1	6.2		
Saolta	-	-	-	287,774	299,245	-	4.0
				18.1	18		
Children's	-	-	-	53,038	52,841	-	-0.4
				3.3	3.2		
No Group	-	-	-	6,198	5,980	-	-3.5
				0.4	0.4		
Day Patients^e	880,974	918,118	932,073	960,786	1,029,860	16.9	7.2
	100	100	100	100	100		
Dialysis/Radiotherapy ^e / Chemotherapy ^f	337,199	333,432	327,249	339,480	393,868	16.8	16.0
	38.3	36.3	35.1	35.3	38.2		
Maternity ^g	10,772	10,348	13,914	19,043	19,838	84.2	4.2
	1.2	1.1	1.5	2.0	1.9		
Other Day Patients	533,003	574,338	590,910	602,263	616,154	15.6	2.3
	60.5	62.6	63.4	62.7	59.8		
In-Patients	591,971	626,616	622,217	631,886	634,206	7.1	0.4
	100	100	100	100	100		
Elective	104,512	107,245	103,237	100,287	99,086	-5.2	-1.2
	17.7	17.1	16.6	15.9	15.6		
Emergency ^{h,i}	360,112	392,149	400,272	412,394	417,330	15.9	1.2
	60.8	62.6	64.3	65.3	65.8		
Maternity	127,347	127,222	118,708	119,205	117,790	-7.5	-1.2
	21.5	20.3	19.1	18.9	18.6		

Contd. overleaf

TABLE 1.1 Acute Public Hospital Discharges in HIPE (N, %), 2011–2015 (contd.)

		2011	2012	2013	2014	2015	% Change	% Change
		N (%)	N (%)	N (%)	N (%)	N (%)	2011–2015	2014–2015
Overnight In-Patients		512,088 86.5	526,740 84.1	515,330 82.8	515,619 81.6	516,604 81.5	0.9	0.2
Sameday In-Patients		79,883 13.5	99,876 15.9	106,887 17.2	116,267 18.4	117,602 18.5	47.2	1.1
In-Patient Length of Stay								
In-Patients	Mean	5.9	5.6	5.6	5.6	5.7	-3.4	1.8
	Median	2	2	2	2	2		
Elective	Mean	6.7	6.8	6.6	6.7	6.7	0.0	0.0
	Median	3	3	3	2	2		
Emergency ⁱ	Mean	6.8	6.3	6.2	6.2	6.3	-7.4	1.6
	Median	3	2	2	2	2		
Maternity	Mean	2.6	2.6	2.7	2.6	2.6	0.0	0.0
	Median	2	2	2	2	2		
Overnight In-Patients	Mean	6.6	6.5	6.5	6.6	6.8	3.0	3.0
	Median	3	3	3	3	3		
In-Patient Bed Days^j								
Total In-Patients		3,470,389 100	3,525,693 100	3,480,802 100	3,531,563 100	3,622,860 100	4.4	2.6
Under 15 Years		302,602 8.7	300,800 8.5	294,238 8.5	293,387 8.3	292,948 8.1	-3.2	-0.1
15 to 44 Years		756,039 21.8	760,922 21.6	718,445 20.6	722,104 20.4	713,848 19.7	-5.6	-1.1
45 to 64 Years		684,841 19.7	684,444 19.4	672,759 19.3	672,162 19.0	697,640 19.3	1.9	3.8
65 Years and Over		1,726,907 49.8	1,779,527 50.5	1,795,360 51.6	1,843,910 52.2	1,918,424 53.0	11.1	4.0
Overnight In-Patients		3,390,506 97.7	3,425,817 97.2	3,373,915 96.9	3,415,296 96.7	3,505,258 96.8	3.4	2.6

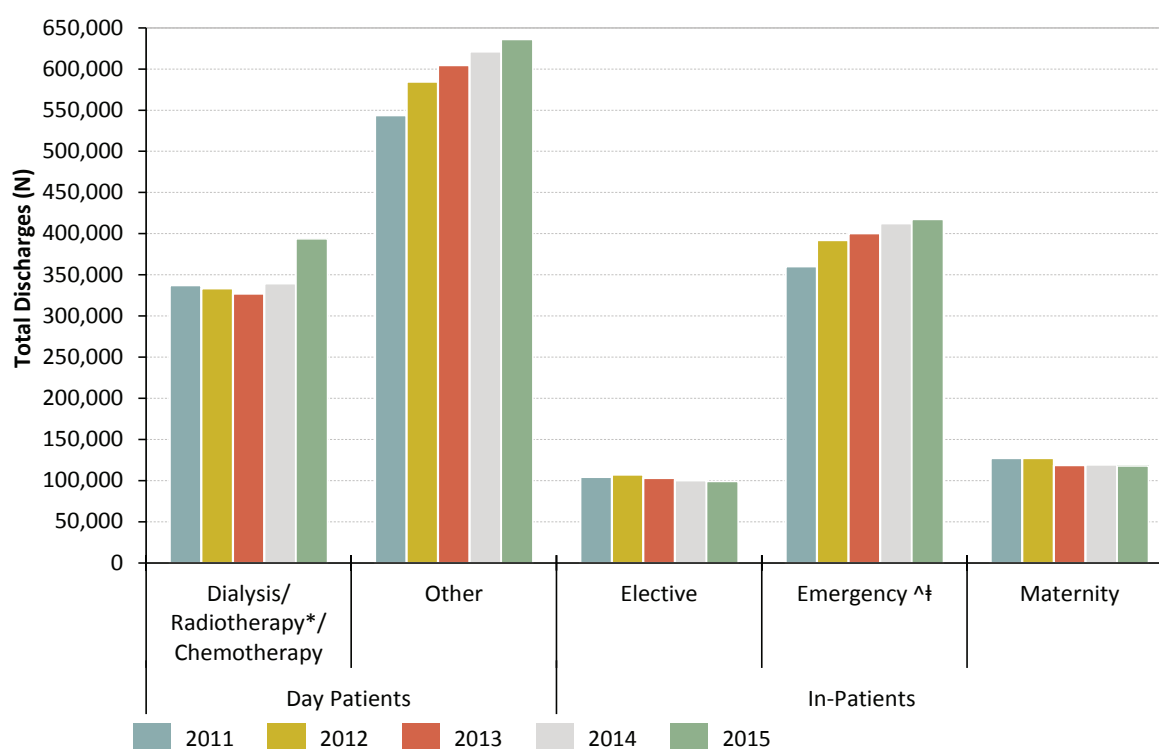
Notes: Percentage columns are subject to rounding.

- a Total discharges for 2011 and 2012 differ from that in previous reports as they are based on the most recent HIPE files.
- b These rates are based on population estimates published by the CSO which are based on the 'usual residence' concept. Crude discharge rate is calculated as the ratio of total discharges to the population of Ireland, multiplied by 1,000. When those discharges with no fixed abode and who were living outside Ireland are excluded, the crude discharge rate is 358.0 per 1,000 population.
- c Public/Private status refers to whether the patient saw the consultant on a private or public basis. It does not relate to the type of bed occupied nor is it an indicator of private health insurance.
- d Hospital Groups were established during 2013. Data is reported for 2014 and 2015 as they were the first two complete years that the groups were operational. See Appendix I for the list of hospitals by Group in 2015.
- e Includes approximately 49,000 additional day patients for radiotherapy in 2015 that were collected from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.
- f The Dialysis category includes day patient discharges with a principal procedure of *haemodialysis* (ACHI procedure block 1060), the Chemotherapy category includes day patient discharges with a principal diagnosis of *pharmacotherapy session for neoplasm* (ICD-10-AM diagnosis code Z51.1), the Radiotherapy category includes day patient discharges with a principal diagnosis of *radiotherapy session* (ICD-10-AM diagnosis code Z51.0).
- g Caution should be exercised when analysing the increase in Maternity day patients reported between 2012 and 2014. The increase from 2012 to 2013 is as a result of one hospital reclassifying activity previously reported as sameday in-patient activity to day patient activity in 2013; this reclassification is in line with how other hospitals would report this activity for Maternity discharges. A large proportion of the increase from 2013 to 2014 can be attributed to a reorganisation of beds in one hospital, with a number of in-patient beds being converted to day beds.
- h HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.
- i HIPE collects Mode of Emergency Admission to indicate where the emergency in-patient was treated prior to being admitted, for example in an Emergency Department or in a registered Acute Medical Unit (AMU/AMAU/MAU). In 2012, the National Clinical Programme for Acute Medicine released national guidelines for AMU/AMAU/MAU's. There was a subsequent increase in the number of these units operating between 2011 and 2012 and this has led to an increase in the number of emergency in-patient admissions from 2012 onwards.
- j Bed Days are presented as a proportion of total in-patient bed days. This assigns one bed day to in-patients discharged on the same day (sameday in-patients) and one bed day to in-patients who stayed one night in hospital.

Sources: Data on discharges, length of stay and bed days for 2011–2015 were obtained from HIPE.

Population estimates for 2011–2015 were obtained from the Central Statistics Office.

www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=PEA01&PLanguage=0 [Accessed 1st September 2016].

FIGURE 1.2 Total Discharges by Patient Type and Admission Type (N), 2011–2015**Notes:**

See Appendix I for a list of hospitals that participated in HIPE in 2015.

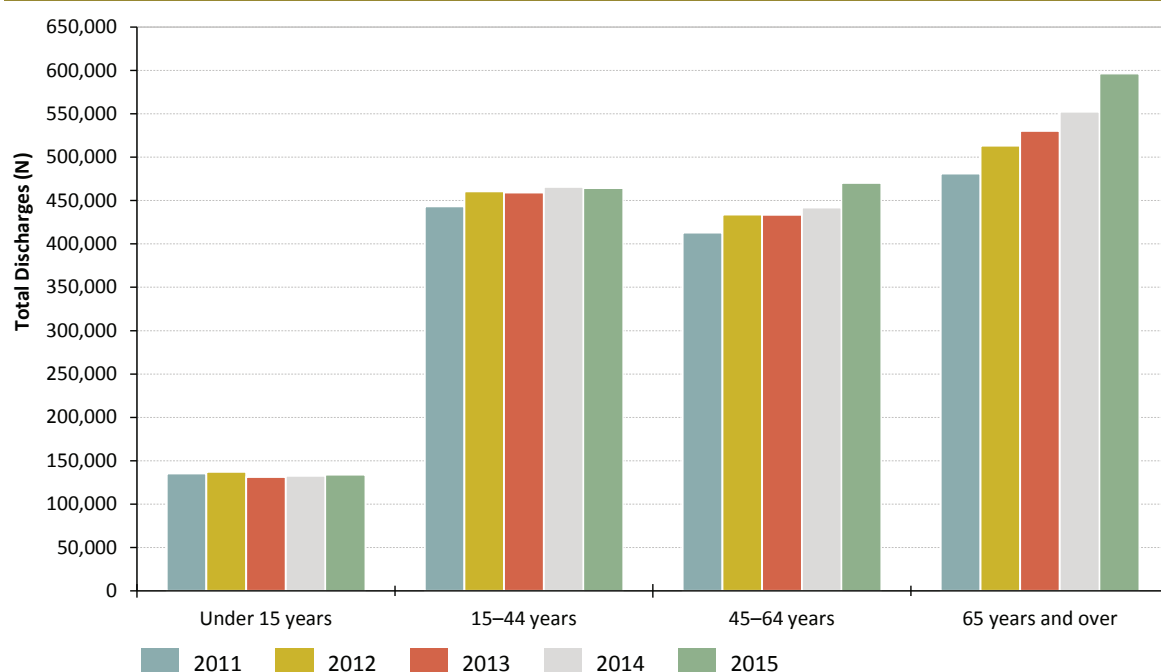
* From 2015 this includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

† Emergency admissions do not capture patients who attended the Emergency Department but were not subsequently admitted to hospital. For this reason, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the volume of activity in Emergency Departments.

^ A factor contributing to the increase in the number of emergency in-patient admissions from 2012 onwards is the increase in the number of AMU/AMAU/MAU's authorised for reporting to HIPE (see Table 1.1 Note i).

Source:

Data for 2011–2015 were obtained from HIPE.

FIGURE 1.3 Total Discharges by Age Group (N), 2011–2015**Source:**

Data for 2011–2015 were obtained from HIPE.

Discharge Overview SECTION
2015

TWO

Table of Contents

2.1 INTRODUCTION	17
2.2 WHO	18
2.2.1 Age	18
2.2.2 Marital/Civil Status	26
2.2.3 Public/Private Status	27
2.2.4 GMS Status	30
2.3 WHERE	32
2.3.1 Hospital Group	32
2.3.2 Admission Source	38
2.3.3 Discharge Destination	39
2.3.4 Admission Source by Discharge Destination	40
2.4 WHEN	41
2.4.1 Day of Admission	41
2.4.2 Day of Discharge	43
2.4.1 Month of Discharge	44

2.1 INTRODUCTION

Section Two provides an overview of the demographic and temporal distribution of day patient and in-patient discharges.¹ Section Two is divided into three main sections.

- **Section 2.2** reports on *who* the discharges were (age, sex, marital/civil status, public/private status, and GMS status).
- **Section 2.3** reports on *where* discharges were hospitalised, where they were coming from, and where they were discharged to (Hospital Group, admission source, and discharge destination).
- **Section 2.4** reports on *when* discharges were admitted to, and discharged from, hospital (day of admission, day of discharge, and month of discharge).

¹ The presentation of length of stay differs from previous reports which presented acute and total in-patient mean length of stay. This report presents mean and median total in-patient length of stay only (see Section 1.6).

2.2 WHO

Section 2.2 examines patient characteristics. Total discharges are disaggregated in the following tables and figures by age, sex, marital/civil status, public/private status, and GMS status.

A day patient is admitted to hospital for treatment on an elective (rather than an emergency) basis and is discharged alive, as scheduled, on the same day. In 2015, day patient discharges accounted for 61.9 per cent of total discharges. In-patient discharges accounted for the remaining 38.1 per cent of total discharges with 65.8 per cent of in-patients admitted on an emergency basis, 15.6 per cent admitted on an elective basis and 18.6 per cent admitted as maternity in-patients.

2.2.1 Age

Table 2.1a disaggregates total discharges by patient type, (day patient and in-patient) and age group. For the length of stay analysis, in-patient discharges are disaggregated into sameday and overnight in-patient discharges. Sameday in-patients are admitted as in-patients and discharged on the same day, while overnight in-patients stay at least one night in hospital. Overnight in-patient discharges and their associated length of stay are displayed in Figure 2.1.

Discharges

- The largest proportion of total discharges were in the 65–74 years age group (18.4 per cent). They accounted for the largest proportion of day patient discharges (21.7 per cent).
- Discharges in the older age groups accounted for a relatively large proportion of bed days; those aged 65 years and over accounted for 31.1 per cent of in-patient discharges and 53.0 per cent of in-patient bed days.
- The 1–14 years age group accounted for 9.0 per cent of in-patient discharges and 3.7 per cent of in-patient bed days.

Length of Stay

- Discharges aged 25–34 years accounted for almost one-fifth of total sameday in-patients, the largest amongst all age groups.
- Apart from those aged less than one year, mean length of stay increased with age for overnight in-patient discharges rising from 2.6 days for discharges aged 1–14 years to 14.1 days for discharges aged 85 years and over. Median length of stay ranged between 2 to 7 days across all age groups.

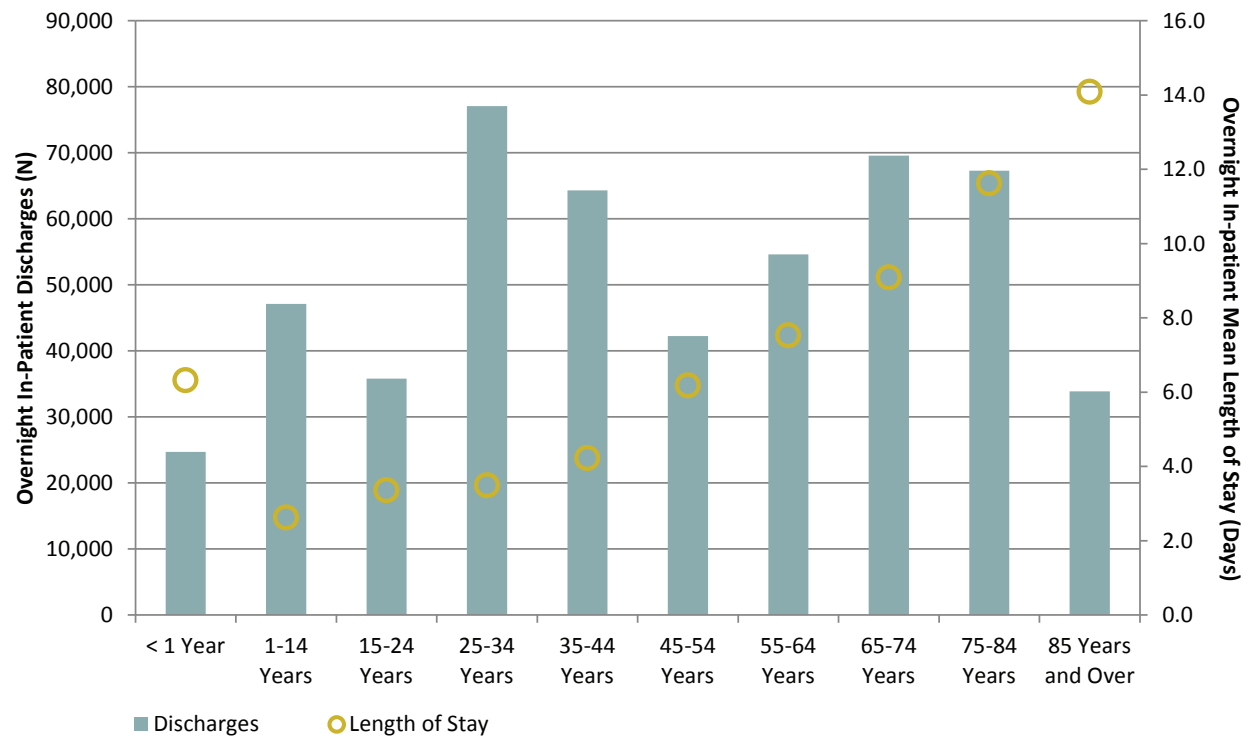
TABLE 2.1a Total Discharges: Patient Type by Age Group (N, %, Bed Days, %, and In-Patient Length of Stay)

	Discharges and Bed Days							
	Day Patients		In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
< 1 Year	4,359	0.4	27,630	4.4	159,137	4.4	31,989	1.9
1–14 Years	44,416	4.3	57,233	9.0	133,811	3.7	101,649	6.1
15–24 Years	36,432	3.5	47,923	7.6	132,406	3.7	84,355	5.1
25–34 Years	79,649	7.7	99,476	15.7	291,549	8.0	179,125	10.8
35–44 Years	118,156	11.5	82,567	13.0	289,893	8.0	200,723	12.1
45–54 Years	153,809	14.9	54,668	8.6	273,615	7.6	208,477	12.5
55–64 Years	194,252	18.9	67,416	10.6	424,025	11.7	261,668	15.7
65–74 Years	223,843	21.7	82,512	13.0	645,213	17.8	306,355	18.4
75–84 Years	143,021	13.9	77,226	12.2	792,309	21.9	220,247	13.2
85 Years and Over	31,923	3.1	37,555	5.9	480,902	13.3	69,478	4.2
Total Discharges	1,029,860	100	634,206	100	3,622,860	100	1,664,066	100

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
< 1 Year	2,925	24,705	6.3	3	27,630	5.8	2
1–14 Years	10,132	47,101	2.6	2	57,233	2.3	1
15–24 Years	12,121	35,802	3.4	2	47,923	2.8	1
25–34 Years	22,379	77,097	3.5	2	99,476	2.9	2
35–44 Years	18,254	64,313	4.2	3	82,567	3.5	2
45–54 Years	12,426	42,242	6.2	3	54,668	5.0	2
55–64 Years	12,815	54,601	7.5	4	67,416	6.3	3
65–74 Years	12,948	69,564	9.1	5	82,512	7.8	4
75–84 Years	9,927	67,299	11.6	6	77,226	10.3	5
85 Years and Over	3,675	33,880	14.1	7	37,555	12.8	7
Total Discharges	117,602	516,604	6.8	3	634,206	5.7	2

Note: Percentage columns are subject to rounding.

FIGURE 2.1 Overnight In-Patients: Discharges and Mean Length of Stay (Days) by Age group



2.2.1.1 Age and Sex

The data presented in Table 2.1a are disaggregated by sex in Table 2.1b–Table 2.1d. Table 2.1b presents male discharges, while Table 2.1c presents female discharges (excl. maternity) and Table 2.1d presents female discharges (maternity). In 2015, there were 900,222 female discharges, and of these 15.3 per cent were maternity discharges.

Discharges

- The 65–74 years age group accounted for the largest proportion of both male and female (excl. maternity) discharges, 22.5 per cent and 17.7 per cent respectively.
- Discharges aged 65 years and over accounted for 37.6 per cent of male in-patient discharges and 55.7 per cent of male in-patient bed days, while for females (excl. maternity) this group accounted for 38.8 per cent of female in-patient discharges and 60.1 per cent of female in-patient bed days.
- The 75–84 years age group accounted for the largest proportion of in-patient bed days for both males (23.3 per cent) and females (excl. maternity) (24.5 per cent).
- Females aged between 25 and 34 years accounted for over half of maternity in-patient discharges (54.5 per cent).

Length of Stay

- Both male and female (excl. maternity) overnight in-patient discharges had a mean length of stay of 7.6 days. As displayed in Figure 2.2, overnight in-patient mean length of stay generally increased with age for both sexes.
- For all age groups aged between 15 and 74 years, females (excl. maternity) had a lower overnight in-patient mean length of stay compared to males, however median length of stay was similar across all age groups, ranging between 1 to 7 days for males and 2 to 8 days for females.
- For maternity discharges, total overnight in-patient mean length of stay was 3.0 days, increasing with age, from 2.7 days for females aged less than 25 years to 4.1 days for those aged 45 years and over.

TABLE 2.1b Total Male Discharges: Patient Type by Age Group (N, %, Bed Days, % and In-Patient Length of Stay)

	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
< 1 Year	2,358	0.5	15,450	5.9	91,094	5.4	17,808	2.3
1–14 Years	24,883	4.9	31,286	12.0	71,136	4.2	56,169	7.4
15–24 Years	17,684	3.5	14,862	5.7	46,965	2.8	32,546	4.3
25–34 Years	28,664	5.7	16,084	6.2	63,212	3.8	44,748	5.9
35–44 Years	44,610	8.9	21,298	8.2	92,091	5.5	65,908	8.6
45–54 Years	64,992	12.9	27,183	10.4	146,570	8.7	92,175	12.1
55–64 Years	99,079	19.7	36,110	13.9	234,703	13.9	135,189	17.7
65–74 Years	126,918	25.2	44,591	17.1	360,388	21.4	171,509	22.5
75–84 Years	78,755	15.6	38,593	14.8	393,319	23.3	117,348	15.4
85 Years and Over	15,705	3.1	14,739	5.7	185,623	11.0	30,444	4.0
Total Discharges	503,648	100	260,196	100	1,685,101	100	763,844	100

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
< 1 Year	1,618	13,832	6.5	3	15,450	5.9	2
1–14 Years	5,855	25,431	2.6	1	31,286	2.3	1
15–24 Years	3,677	11,185	3.9	2	14,862	3.2	1
25–34 Years	4,091	11,993	4.9	2	16,084	3.9	1
35–44 Years	5,310	15,988	5.4	2	21,298	4.3	2
45–54 Years	5,962	21,221	6.6	3	27,183	5.4	2
55–64 Years	6,593	29,517	7.7	4	36,110	6.5	3
65–74 Years	6,554	38,037	9.3	5	44,591	8.1	4
75–84 Years	4,657	33,936	11.5	6	38,593	10.2	5
85 Years and Over	1,419	13,320	13.8	7	14,739	12.6	6
Total Discharges	45,736	214,460	7.6	3	260,196	6.5	2

Note: Percentage columns are subject to rounding.

TABLE 2.1c Total Female Discharges (excl. Maternity): Patient Type by Age Group (N, %, Bed Days, % and In-Patient Length of Stay)

	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
< 1 Year	2,001	0.4	12,180	4.8	68,043	4.2	14,181	1.9
1–14 Years	19,530	3.9	25,929	10.1	62,633	3.8	45,459	6.0
15–24 Years	17,098	3.4	17,196	6.7	49,188	3.0	34,294	4.5
25–34 Years	40,779	8.1	19,166	7.5	63,534	3.9	59,945	7.9
35–44 Years	65,733	13.0	24,015	9.4	91,395	5.6	89,748	11.8
45–54 Years	88,651	17.5	27,058	10.6	125,555	7.7	115,709	15.2
55–64 Years	95,173	18.8	31,306	12.2	189,322	11.6	126,479	16.6
65–74 Years	96,925	19.1	37,921	14.8	284,825	17.5	134,846	17.7
75–84 Years	64,266	12.7	38,633	15.1	398,990	24.5	102,899	13.5
85 Years and Over	16,218	3.2	22,816	8.9	295,279	18.1	39,034	5.1
Total Discharges	506,374	100	256,220	100	1,628,764	100	762,594	100

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
< 1 Year	1,307	10,873	6.1	3	12,180	5.6	2
1–14 Years	4,270	21,659	2.7	2	25,929	2.4	1
15–24 Years	4,345	12,851	3.5	2	17,196	2.9	1
25–34 Years	5,403	13,763	4.2	2	19,166	3.3	1
35–44 Years	6,380	17,635	4.8	2	24,015	3.8	1
45–54 Years	6,380	20,678	5.8	3	27,058	4.6	2
55–64 Years	6,222	25,084	7.3	4	31,306	6.0	3
65–74 Years	6,394	31,527	8.8	5	37,921	7.5	4
75–84 Years	5,270	33,363	11.8	6	38,633	10.3	5
85 Years and Over	2,256	20,560	14.3	8	22,816	12.9	7
Total Discharges	48,227	207,993	7.6	3	256,220	6.4	2

Note: Percentage columns are subject to rounding.

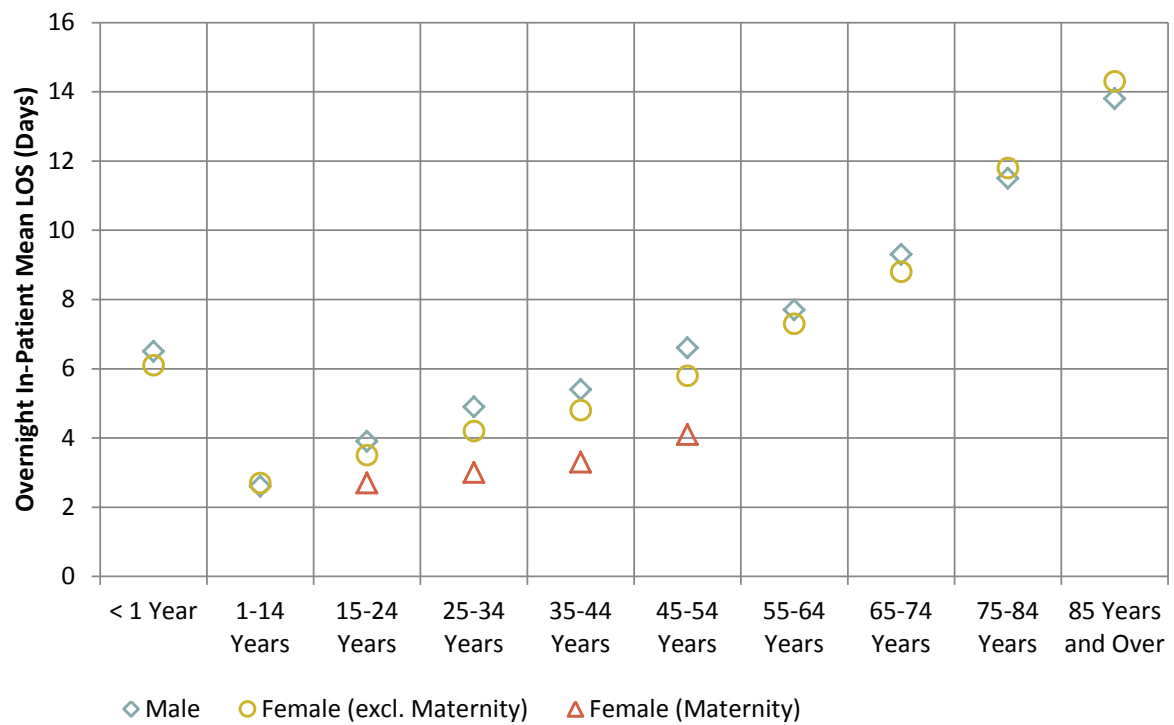
TABLE 2.1d Total Female Discharges (Maternity): Patient Type by Age Group (N, %, Bed Days, % and In-Patient Length of Stay)

	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
<25 Years	1,653	8.3	15,883	13.5	36,295	11.7	17,536	12.7
25–34 Years	10,206	51.4	64,226	54.5	164,803	53.3	74,432	54.1
35–44 Years	7,813	39.4	37,254	31.6	106,407	34.4	45,067	32.7
45 Years and Over	166	0.8	427	0.4	1,490	0.5	593	0.4
Total Discharges	19,838	100	117,790	100	308,995	100	137,628	100

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
<25 Years	4,106	11,777	2.7	2	15,883	2.3	2
25–34 Years	12,885	51,341	3.0	2	64,226	2.6	2
35–44 Years	6,564	30,690	3.3	3	37,254	2.9	2
45 Years and Over	84	343	4.1	3	427	3.5	3
Total Discharges	23,639	94,151	3.0	2	117,790	2.6	2

Note: Percentage columns are subject to rounding.

FIGURE 2.2 Overnight In-Patients: Mean Length of Stay (Days) by Age Group and Sex: Males, Females (excl. Maternity), Females (Maternity)



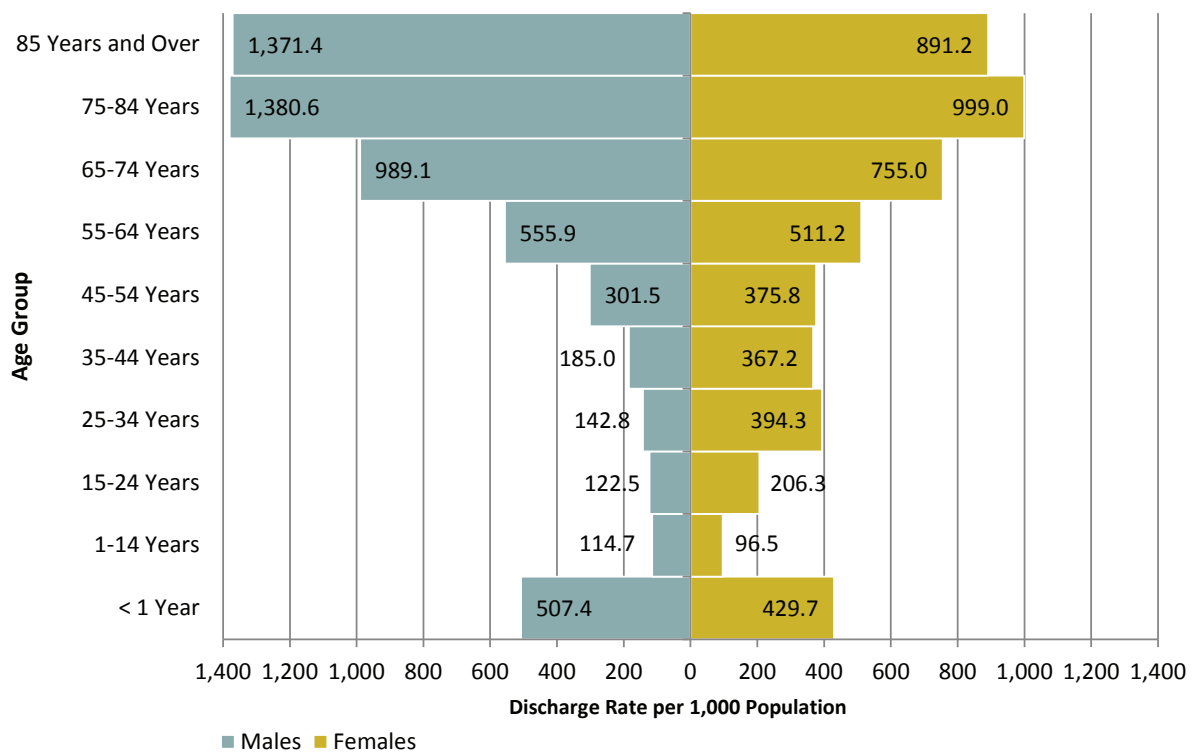
Note: Length of stay is not presented for female maternity discharges where there were a small number of discharges reported within a particular age group.

2.2.1.2 Discharge Rates by Age and Sex

Figure 2.3 shows the discharge rates per 1,000 population by sex and age group for total discharges.

- Apart from the youngest age group, for both males and females, the discharge rate generally increased with age. Those aged 75 to 84 years recorded the highest discharge rate for both males and females (1,380.6 per 1,000 population of males and 999.0 per 1,000 population of females).
- Females aged between 15 and 54 years had a higher discharge rate per 1,000 population than males; males had a higher discharge rate for all other age groups.

FIGURE 2.3 Total Discharges: Sex by Age Group (Discharge Rate per 1,000 Population)



Note: Population estimates for 2015 by sex and age group were obtained from the CSO.
<http://www.cso.ie/px/pxeirestat/statire/SelectVarVal/Define.asp?Maintable=PEA01&PLanguage=0> [accessed 1st September 2016]

2.2.2 Marital/Civil Status

2.2.2.1 Marital/Civil Status by Patient Type

Table 2.2 disaggregates total discharges by patient type and marital/civil status.

- Married discharges accounted for 48.3 per cent of total discharges.
- Discharges who were widowed accounted for 9.4 per cent of total in-patient discharges, and 17.4 per cent of in-patient bed days. Separate analysis showed that for in-patient discharges who were widowed, 89.4 per cent were aged 65 years and over.
- Overnight in-patient discharges with a marital status of single had the lowest mean length of stay of 5.4 days, compared to 11.9 days for discharges who were widowed. Separate analysis showed that the majority of total discharges with a marital status of single were aged between 15 and 44 years (45.1 per cent).

TABLE 2.2 Total Discharges: Patient Type by Marital/Civil Status (N, %, and In-Patient Length of Stay)

	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
Single	310,365	30.1	264,423	41.7	1,199,799	33.1	574,788	34.5
Married	536,090	52.1	266,926	42.1	1,487,710	41.1	803,016	48.3
Widowed	89,510	8.7	59,895	9.4	631,942	17.4	149,405	9.0
Other*	47,414	4.6	22,031	3.5	154,818	4.3	69,445	4.2
Unknown	30,489	3.0	13,544	2.1	100,056	2.8	44,033	2.6
Divorced	15,992	1.6	7,387	1.2	48,535	1.3	23,379	1.4
Total Discharges	1,029,860	100	634,206	100	3,622,860	100	1,664,066	100

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
Single	50,954	213,469	5.4	2	264,423	4.5	2
Married	50,495	216,431	6.6	3	266,926	5.6	2
Widowed	7,472	52,423	11.9	6	59,895	10.6	5
Other*	4,037	17,994	8.4	4	22,031	7.0	3
Unknown	3,189	10,355	9.4	4	13,544	7.4	2
Divorced	1,455	5,932	7.9	4	7,387	6.6	3
Total Discharges	117,602	516,604	6.8	3	634,206	5.7	2

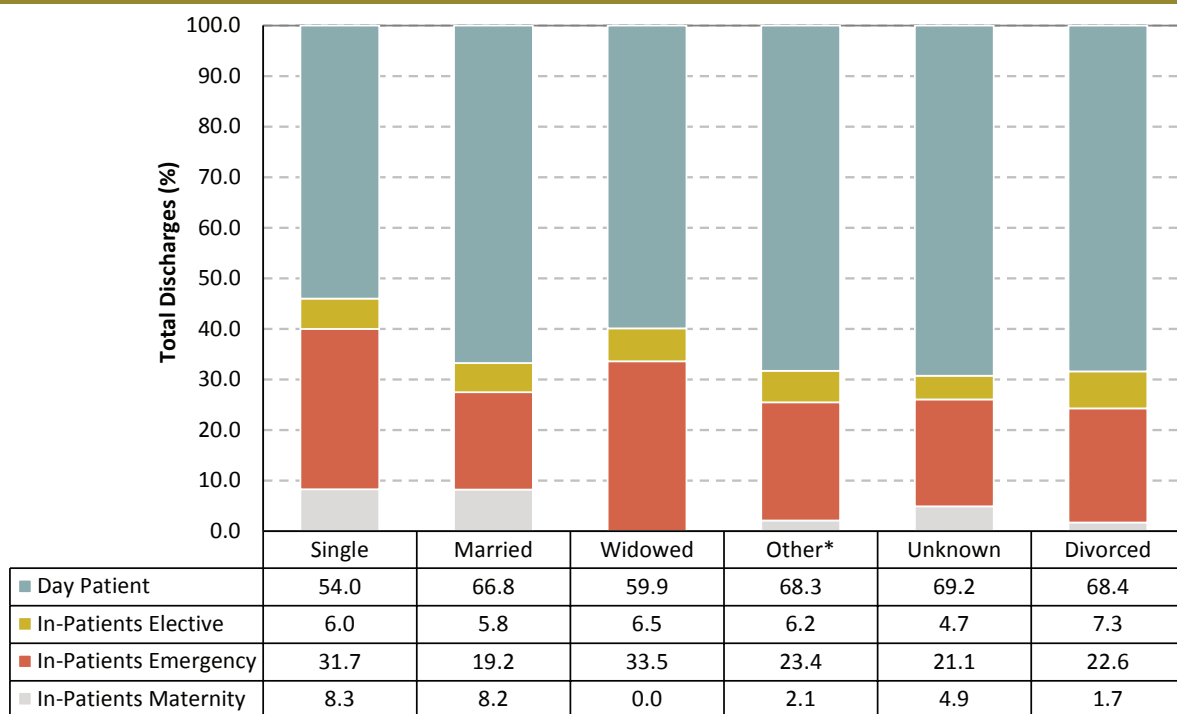
Notes: Percentage columns are subject to rounding.

* Other includes Separated, Civil Partner, Formal Civil Partner, and Surviving Civil Partner

2.2.2.2 Marital/Civil Status by Admission Type

Figure 2.4 shows the proportion of total discharges by marital/civil status and admission type.

- Approximately a third of total discharges with a marital/civil status of widowed or single were admitted as emergency in-patients.
- Just over eight per cent of total discharges with a marital/civil status of single or married were admitted as maternity in-patients.

FIGURE 2.4 Total Discharges: Marital/Civil Status by Admission Type (%)

Notes: Percentages are subject to rounding.

* Other includes Separated, Civil Partner, Formal Civil Partner, and Surviving Civil Partner

2.2.3 Public/Private Status

In HIPE, public/private status relates to whether the patient saw the consultant on a private or public basis. It does not relate to the type of bed occupied nor is it an indicator of possession of private health insurance.

Table 2.3 and Figure 2.5 disaggregate total discharges by public/private status and age group. Of total discharges, 84.1 per cent were discharged on a public basis.

- The 25–34 years age group had the largest proportion of total discharges treated publicly (88.8 per cent) with only 11.2 per cent treated on a private basis.
- The 1–14 years age group had the largest proportion of total discharges that were treated on a private basis, accounting for 22.4 per cent of all discharges in this age group.

Length of Stay

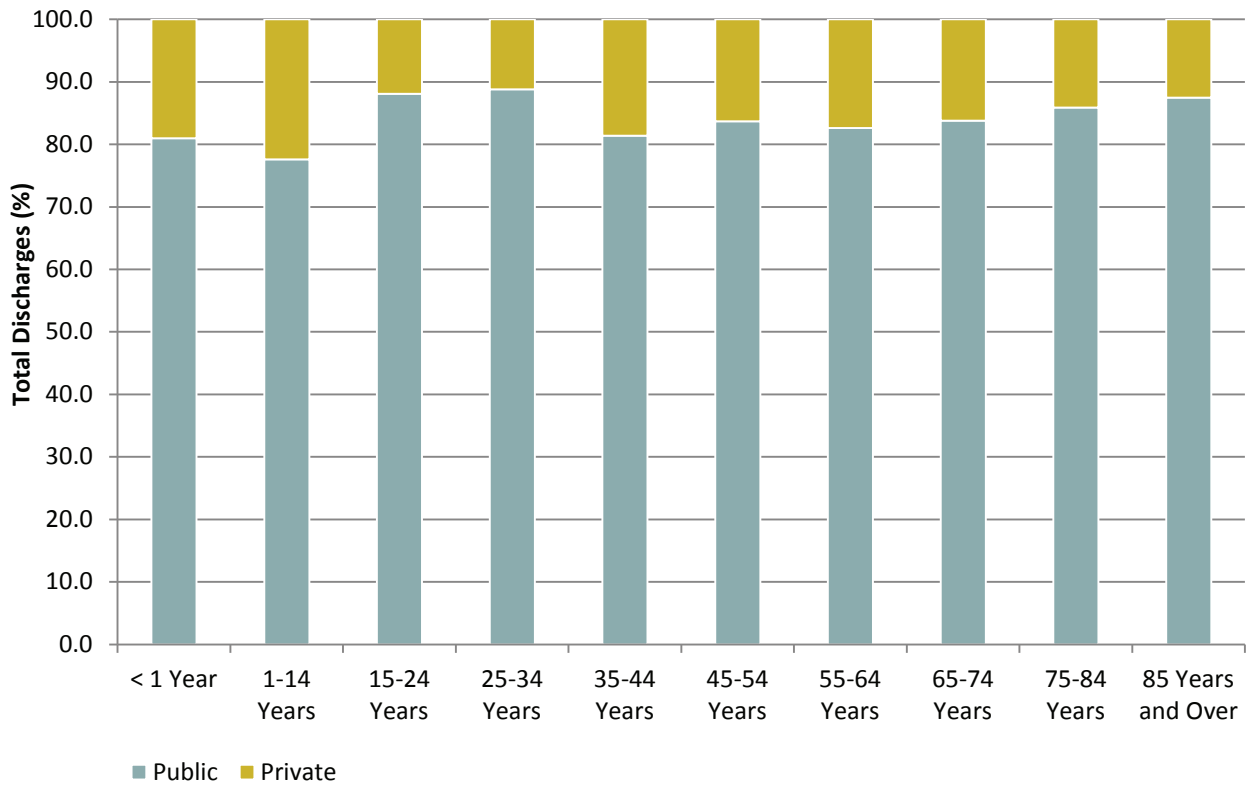
- For the majority of age groups, the public overnight in-patient mean length of stay exceeds the private overnight in-patient mean length of stay. The difference is largest for discharges aged 75–84 years, where public discharges stayed on average 1.8 days longer than their private counterparts (see Table 2.3 and Figure 2.6). Median length of stay for overnight in-patients is 6 days for public and private discharges aged 75–84 years.

TABLE 2.3 Total Discharges: Public/Private Status by Patient Type and Age Group (N, Row %, In-Patient Length of Stay)

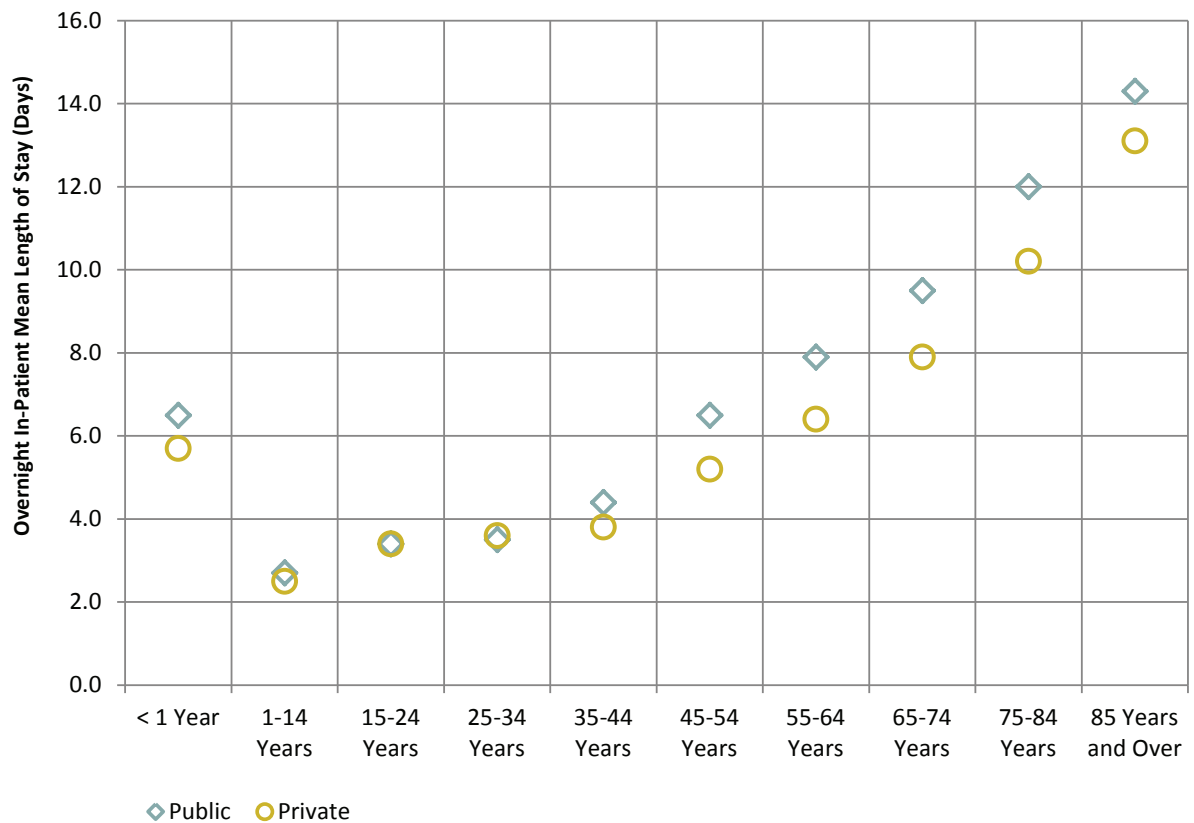
	Day Patients						Discharges					
	Public			Private			Total In-Patients			Total Discharges		
	N	%		N	%		N	%		N	%	
< 1 Year	3,650	83.7		709	16.3		22,257	80.6	5,373	19.4	25,907	81.0
1–14 Years	36,402	82.0		8,014	18.0		42,505	74.3	14,728	25.7	78,907	77.6
15–24 Years	31,893	87.5		4,539	12.5		42,402	88.5	5,521	11.5	74,295	88.1
25–34 Years	71,596	89.9		8,053	10.1		87,411	87.9	12,065	12.1	159,007	88.8
35–44 Years	99,556	84.3		18,600	15.7		63,887	77.4	18,680	22.6	163,443	81.4
45–54 Years	130,543	84.9		23,266	15.1		43,880	80.3	10,788	19.7	174,423	83.7
55–64 Years	163,648	84.2		30,604	15.8		52,541	77.9	14,875	22.1	216,189	82.6
65–74 Years	192,508	86.0		31,335	14.0		64,221	77.8	18,291	22.2	256,729	83.8
75–84 Years	127,532	89.2		15,489	10.8		61,709	79.9	15,517	20.1	189,241	85.9
85 Years and Over	29,186	91.4		2,737	8.6		31,605	84.2	5,950	15.8	60,791	87.5
Total Discharges	886,514	86.1		143,346	13.9		512,418	80.8	121,788	19.2	1,398,932	84.1

	Sameday In-Patients						In-Patient Length of Stay					
	Public			Private			Overnight In-Patients			Total In-Patients		
	N	%		N	%		N	%		N	%	
< 1 Year	2,517		408	19,740	6.5		3		4,965	5.7	2	5.3
1–14 Years	7,963		2,169	34,542	2.7		2		12,559	2.5	2	2.4
15–24 Years	11,327		794	31,075	3.4		2		4,727	3.4	2	2.7
25–34 Years	20,707		1,672	66,704	3.5		2		10,393	3.6	3	2.9
35–44 Years	15,831		2,423	48,056	4.4		2		16,257	3.8	3	3.5
45–54 Years	11,062		1,364	32,818	6.5		3		9,424	5.2	3	5.1
55–64 Years	11,172		1,643	41,369	7.9		4		13,232	6.4	3	6.4
65–74 Years	11,365		1,583	52,856	9.5		5		16,708	7.9	4	8.0
75–84 Years	8,856		1,071	52,853	12.0		6		14,446	10.2	6	10.4
85 Years and Over	3,392		283	28,213	14.3		7		5,667	13.1	8	12.9
Total Discharges	104,192		13,410	408,226	7.0		3		108,378	6.1	3	5.8

Note: Percentage columns are subject to rounding.

FIGURE 2.5 Total Discharges: Public/Private Status by Age Group (%)


Notes: Percentages are subject to rounding.

FIGURE 2.6 Overnight In-Patient Length of Stay: Public/Private Status by Age Group (Mean)


2.2.4 GMS Status

GMS status refers to the medical card status of each HIPE discharge. Eligibility for a medical card is predominately dependent on income. It should be noted that where a discharge is recorded as having a medical card, this does not necessarily imply that the hospital discharge was publicly funded and vice versa.

2.2.4.1 GMS Status by Age Group

Table 2.4 disaggregates total discharges by GMS status and age group.

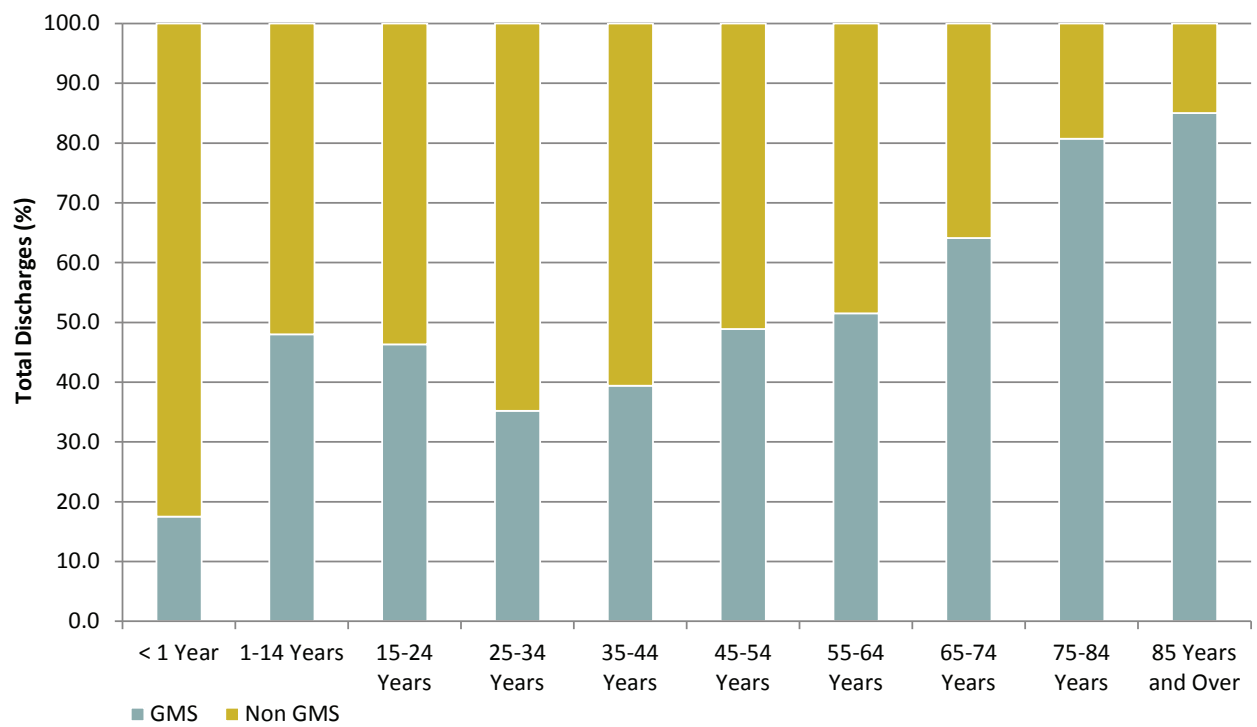
- Of total discharges, those aged 65–74 years accounted for the largest proportion of GMS discharges (21.6 per cent).
- The proportion of total discharges that were GMS discharges generally increased with age, with the largest proportion in the 85 years and over age group (85.0 per cent) – see Figure 2.7.

TABLE 2.4 Total Discharges: GMS Status by Age Group (N, %)

	GMS		Non-GMS		Unknown ^a		Total Discharges	
	N	%	N	%	N	%	N	%
< 1 Year	5,532	0.6	26,110	3.5	347	1.5	31,989	1.9
1–14 Years	48,682	5.5	52,641	7.0	326	1.4	101,649	6.1
15–24 Years	38,614	4.3	44,715	6.0	1,026	4.5	84,355	5.1
25–34 Years	62,227	7.0	114,433	15.3	2,465	10.7	179,125	10.8
35–44 Years	78,021	8.7	119,812	16.0	2,890	12.6	200,723	12.1
45–54 Years	100,202	11.2	104,812	14.0	3,463	15.0	208,477	12.5
55–64 Years	133,153	14.9	125,369	16.8	3,146	13.7	261,668	15.7
65–74 Years	193,138	21.6	108,383	14.5	4,834	21.0	306,355	18.4
75–84 Years	174,905	19.6	41,931	5.6	3,411	14.8	220,247	13.2
85 Years and Over	58,110	6.5	10,255	1.4	1,113	4.8	69,478	4.2
Total Discharges	892,584	100	748,461	100	23,021	100	1,664,066	100

Notes: Percentage columns are subject to rounding.

a Relates to discharges for whom GMS status was not known.

FIGURE 2.7 Total Discharges: GMS Status by Age Group (%)

Note: Data for discharges whose GMS status was 'unknown' are not included in the calculations for this figure. Percentages are subject to rounding.

2.3 WHERE

Section 2.3 examines where discharges were hospitalised, and where they were admitted from and discharged to. Data are presented in the following tables and figures by hospital group, admission source and discharge destination.

2.3.1 Hospital Group

Hospitals in Ireland are organised into seven hospital groups (see Appendix I). HIPE data is collected for all of the hospitals in these groups, along with a small number of non-acute hospitals that are not assigned to a group and are presented together as 'No group'. Table 2.5 disaggregates total discharges by hospital group and patient type.

Discharges

- The largest proportion of total discharges were hospitalised in the South/South West Hospital Group (19.7 per cent).
- Total in-patient discharges were highest in the Ireland East Hospital Group where 20.9 per cent of discharges were hospitalised, while the Dublin Midlands Hospital Group accounted for the highest proportion of day patients (21.0 per cent).

Length of Stay

- The overnight in-patient mean length of stay ranged from 4.6 days (Children's) to 7.8 days (Dublin Midlands) – see Figure 2.8.

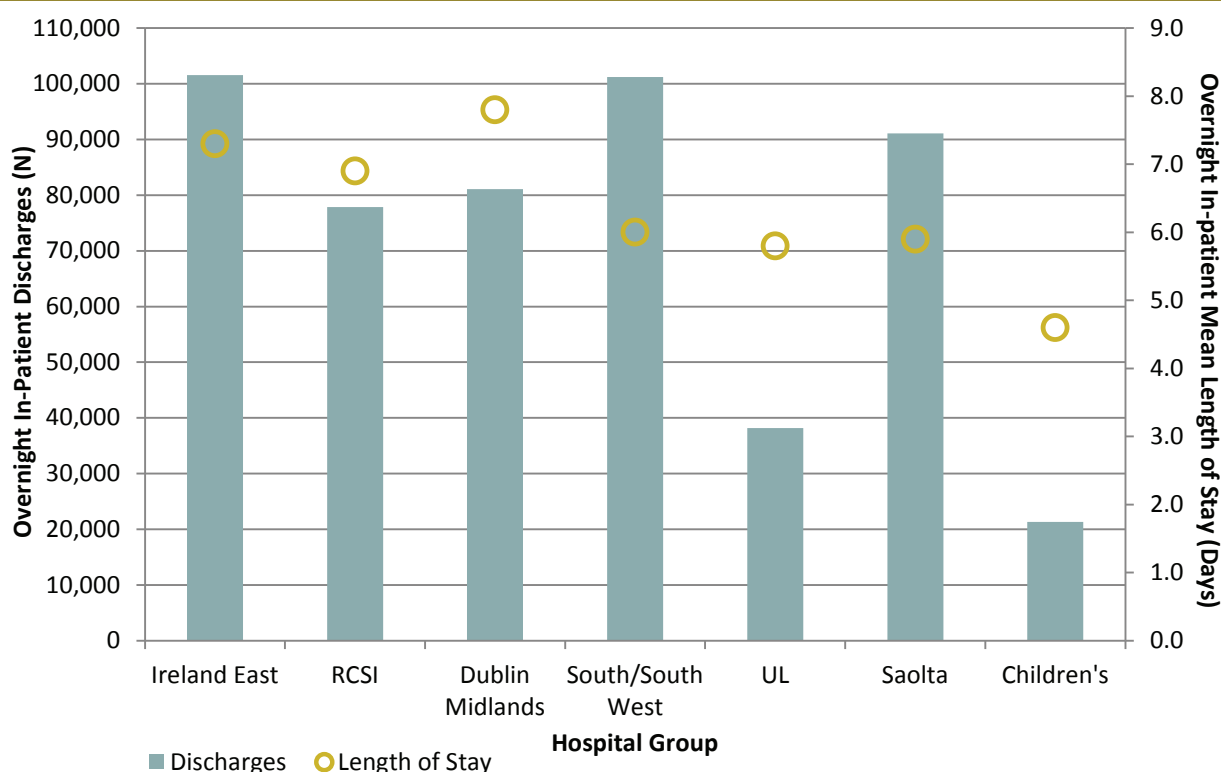
TABLE 2.5 Total Discharges: Hospital Group by Patient Type (N, %, Bed Days, %, and In-Patient Length of Stay)

	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
Ireland East	187,958	18.3	132,689	20.9	767,646	21.2	320,647	19.3
RCSI	146,644	14.2	97,598	15.4	560,830	15.5	244,242	14.7
Dublin Midlands	215,915	21.0	94,734	14.9	646,258	17.8	310,649	18.7
South/South West	206,051	20.0	121,649	19.2	632,535	17.5	327,700	19.7
UL	56,713	5.5	46,049	7.3	228,495	6.3	102,762	6.2
Saolta	187,030	18.2	112,215	17.7	557,166	15.4	299,245	18.0
Children's	27,870	2.7	24,971	3.9	102,080	2.8	52,841	3.2
No group [^]	1,679	0.2	4,301	0.7	127,850	3.5	5,980	0.4
Total Discharges	1,029,860	100	634,206	100	3,622,860	100	1,664,066	100

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
Ireland East	31,126	101,563	7.3	3	132,689	5.8	2
RCSI	19,736	77,862	6.9	3	97,598	5.7	2
Dublin Midlands	13,637	81,097	7.8	3	94,734	6.8	3
South/South West	20,457	101,192	6.0	3	121,649	5.2	2
UL	7,874	38,175	5.8	3	46,049	5.0	3
Saolta	21,122	91,093	5.9	3	112,215	5.0	2
Children's	3,641	21,330	4.6	2	24,971	4.1	2
No group [^]	9	4,292	29.8	19	4,301	29.7	19
Total Discharges	117,602	516,604	6.8	3	634,206	5.7	2

Notes: Percentage columns are subject to rounding.

[^] Discharges allocated to 'No group' are not referred to in the text of this report as they refer to the small group of discharges in non-acute hospitals and would not be considered to be comparable to other groups. See Appendix I for the list of hospitals by Group in 2015.

FIGURE 2.8 Overnight In-Patients: Discharges (N) and Length of Stay (Mean) by Hospital Group

Note: Data for discharges hospitalised in 'No group' are not displayed in this figure.

2.3.1.1 Hospital Group by Admission Type

Table 2.6 disaggregates total discharges by hospital group and admission type.

Discharges

- The largest proportion of elective in-patients were treated in the South/South West Hospital Group (21.3 per cent), accounting for 15.5 per cent of total elective in-patient bed days.
- The Ireland East and South/South West Hospital Groups each treated approximately a fifth of total emergency in-patients (20.6 per cent and 19.4 per cent respectively).
- The Ireland East Hospital Group treated the largest proportion of maternity in-patients (24.0 per cent) compared to other groups.

TABLE 2.6 Total Discharges: Hospital Group by Admission Type (N, %, Bed Days, %)

Discharges and Bed Days																	
Day Patients			In-Patients												Total Discharges		
			Elective						Emergency ^a								
N	%		N	%	Bed Days	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%	
Ireland East	18.3		18,397	18.6	119,851	18.0	86,059	20.6	582,220	22.0	28,233	24.0	65,575	21.2	320,647	19.3	
RCSI	14.2		9,903	10.0	61,884	9.3	65,189	15.6	439,169	16.6	22,506	19.1	59,777	19.3	244,242	14.7	
Dublin Midlands	21.0		13,559	13.7	99,954	15.0	59,149	14.2	494,613	18.7	22,026	18.7	51,691	16.7	310,649	18.7	
South/South West	20.0		21,132	21.3	103,350	15.5	81,031	19.4	467,812	17.7	19,486	16.5	61,373	19.9	327,700	19.7	
UL	5.5		8,325	8.4	40,087	6.0	30,530	7.3	164,198	6.2	7,194	6.1	24,210	7.8	102,762	6.2	
Saolta	18.2		16,639	16.8	86,357	12.9	77,231	18.5	424,440	16.0	18,345	15.6	46,369	15.0	299,245	18.0	
Children's	2.7		6,836	6.9	28,119	4.2	18,135	4.3	73,961	2.8	—	—	—	—	52,841	3.2	
No group ^a	0.2		4,295	4.3	127,784	19.1	6	0.0	66	0.0	—	—	—	—	5,980	0.4	
Total Discharges	100		99,086	100	667,386	100	417,330	100	2,646,479	100	117,790	100	308,995	100	1,664,066	100	

Notes:

Percentage columns are subject to rounding

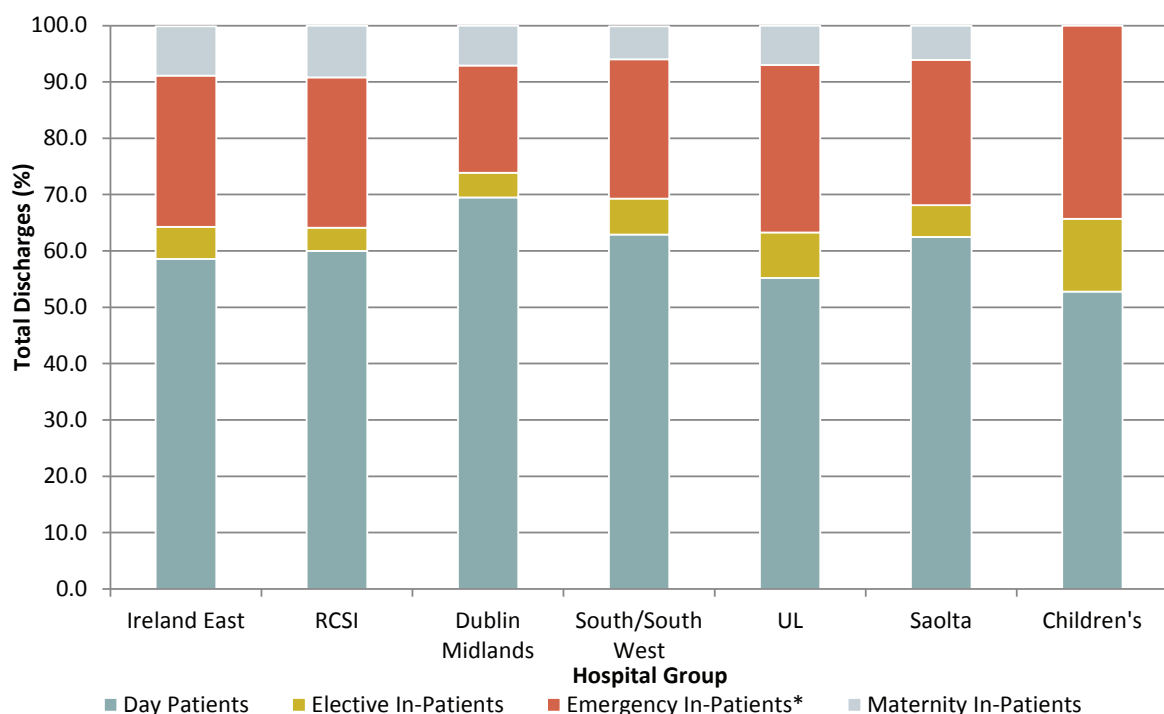
^a HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

[^] Discharges allocated to 'No group' are not referred to in the text as they refer to the small group of discharges in non-acute hospitals and would not be considered to be comparable to other groups. See Appendix I for the list of hospitals by Group in 2015.

Figure 2.9 disaggregates total discharges in each hospital group by admission type.

- Across all hospital groups, the largest proportion of total discharges were treated as day patients, ranging from 52.7 per cent in the Children's Hospital Group to 69.5 per cent in the Dublin Midlands Hospital Group.
- The RCSI Hospital Group treated 9.2 per cent of total discharges as maternity in-patients, the highest amongst all hospital groups.
- A high proportion of in-patient discharges in the Children's Hospital Group and University of Limerick Hospital Group were treated as emergency in-patients, at 34.3 per cent and 29.7 per cent respectively.

FIGURE 2.9 Total Discharges: Hospital Group by Admission Type (%)



Notes: * HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.
Data for discharges hospitalised in 'No group' are not displayed in this figure.

2.3.1.2 Hospital Group by Public/Private Status

Table 2.7 disaggregates total discharges by hospital group, public/private status and patient type.

Discharges

- The RCSI Hospital Group treated the largest proportion of total discharges on a public basis (88.7 per cent) compared to the smallest proportion treated on a public basis in the University of Limerick Hospital Group (72.4 per cent).
- A larger proportion of total day patients were treated as public day patients, exceeding 90 per cent in both the Ireland East and RCSI Hospital Groups. The smallest proportion was in the University of Limerick Hospital Group where 72.9 per cent of total day patients were treated on a public basis.
- The proportion of total in-patients treated on a public basis exceeded 80 per cent in the Ireland East, RCSI and Saolta Hospital Groups.

Length of Stay

- Overnight in-patient mean length of stay was 7.0 days for public discharges compared to 6.1 days for private discharges.
- The Dublin Midlands Hospital Group recorded the longest overnight in-patient mean length of stay for public discharges (7.9 days), two days longer than the Saolta Hospital Group. This difference was similar for private discharges where Dublin Midlands Hospital Group recorded the longest mean length of stay for overnight in-patients (7.5 days).
- The Children's Hospital Group recorded the shortest overnight in-patient mean length of stay; 4.8 days for public discharges and 4.0 days for private discharges.

TABLE 2.7 Total Discharges: Hospital Group by Public/Private Status and Patient Type (N, % and In-Patient Length of Stay)

	Day Patients						Discharges					
	Public			Private			Total In-Patients			Total Discharges		
	N	%	N	%	N	%	N	%	N	%	N	%
Ireland East	172,934	92.0	15,024	8.0	107,962	81.4	24,727	18.6	280,896	87.6	39,751	12.4
RCSI	132,550	90.4	14,094	9.6	84,038	86.1	13,560	13.9	216,588	88.7	27,654	11.3
Dublin Midlands	179,789	83.3	36,126	16.7	75,490	79.7	19,244	20.3	255,279	82.2	55,370	17.8
South/South West	169,621	82.3	36,430	17.7	93,918	77.2	27,731	22.8	263,539	80.4	64,161	19.6
UL	41,362	72.9	15,351	27.1	33,000	71.7	13,049	28.3	74,362	72.4	28,400	27.6
Saolta	165,918	88.7	21,112	11.3	95,186	84.8	17,029	15.2	261,104	87.3	38,141	12.7
Children's	22,661	81.3	5,209	18.7	18,914	75.7	6,057	24.3	41,575	78.7	11,266	21.3
No group^	1,679	100.0	0	0.0	3,910	90.9	391	9.1	5,589	93.5	391	6.5
Total Discharges	886,514	86.1	143,346	13.9	512,418	80.8	121,788	19.2	1,398,932	84.1	265,134	15.9

	In-Patient Length of Stay						Total In-Patients					
	Sameday In-Patients			Overnight In-Patients			Public			Private		
	N	Private	N	Mean	Median	N	Mean	Median	Mean	Median	Mean	Median
Ireland East	27,711	3,415	80,251	7.5	3	21,312	6.4	3	5.8	2	5.6	3
RCSI	18,302	1,434	65,736	7.0	3	12,126	6.8	4	5.7	2	6.2	3
Dublin Midlands	11,874	1,763	63,616	7.9	3	17,481	7.5	4	6.8	3	6.9	3
South/South West	17,350	3,107	76,568	6.2	3	24,624	5.7	3	5.2	2	5.1	3
UL	7,117	757	25,883	6.1	3	12,292	5.2	3	5.0	2	4.9	3
Saolta	18,904	2,218	76,282	5.9	3	14,811	5.6	3	5.0	2	5.0	2
Children's	2,926	*	15,988	4.8	2	*	-	-	4.2	2	3.7	2
No group^	8	~	3,902	31.4	21	*	-	-	31.3	21	13.9	7
Total Discharges	104,192	13,410	408,226	7.0	3	108,378	6.1	3	5.8	2	5.5	3

Notes:

Percentage columns are subject to rounding.

~ Denotes five or fewer discharges reported to HIPE.

* Further suppression required to prevent disclosure of five or fewer discharges.

- Denotes that length of stay is suppressed where the number of discharges is not reported.

^ Discharges allocated to 'No group' are not referred to in the text of this report as they refer to the small group of discharges in non-acute hospitals and would not be considered to be comparable to other groups. See Appendix I for the list of hospitals by Group in 2015.

2.3.2 Admission Source

Admission source describes where the patient was admitted from. It does not refer to where an emergency or accident occurred. Table 2.8 disaggregates total discharges by admission source.

- The majority of total discharges were admitted from home (96.7 per cent).
- Of total emergency in-patients, 2.3 per cent were transferred in from long stay accommodation.
- Almost 12 per cent of elective in-patients were transferred from another hospital.

TABLE 2.8 Total Discharges: Admission Source by Patient Type and Admission Type (N, %)

	Day Patients		In-Patients						Total Discharges	
			Elective		Emergency ^a		Maternity			
	N	%	N	%	N	%	N	%	N	%
Home	1,024,552	99.5	87,140	87.9	380,381	91.1	116,962	99.3	1,609,035	96.7
Long stay accommodation	1,828	0.2	319	0.3	9,682	2.3	0	0.0	11,829	0.7
Transfer from other hospital	3,411	0.3	11,590	11.7	15,812	3.8	745	0.6	31,558	1.9
Other	69	0.0	37	0.0	11,455	2.7	83	0.1	11,644	0.7
Total	1,029,860	100	99,086	100	417,330	100	117,790	100	1,664,066	100

Notes: Percentage columns are subject to rounding.

See Appendix IV for information on how the HIPE variable 'Admission Source' was grouped for this report.

- a HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

2.3.3 Discharge Destination

Discharge destination identifies the destination of the discharge upon completion of their episode of care. Table 2.9 disaggregates total discharges by discharge destination.

- The majority of total discharges were discharged home (95.3 per cent).
- Of total emergency in-patients, 5.7 per cent were transferred to long stay accommodation, and 5.5 per cent were transferred to another hospital.

TABLE 2.9 Total Discharges: Discharge Destination by Patient Type and Admission Type (N, %)

	Day Patients		In-Patients						Total Discharges	
			Elective		Emergency ^a		Maternity			
	N	%	N	%	N	%	N	%	N	%
Home	1,023,759	99.4	90,866	91.7	354,469	84.9	116,413	98.8	1,585,507	95.3
Long stay accommodation	2,206	0.2	*	–	23,957	5.7	*	–	29,209	1.8
Transfer to other hospital	3,789	0.4	4,063	4.1	23,055	5.5	640	0.5	31,547	1.9
Died	0	0.0	*	–	10,249	2.5	~	–	10,960	0.7
Other	106	0.0	408	0.4	5,600	1.3	729	0.6	6,843	0.4
Total Discharges	1,029,860	100	99,086	100	417,330	100	117,790	100	1,664,066	100

Notes: Percentage columns are subject to rounding.

See Appendix IV for information on how the HIPE variable 'Discharge Destination' was grouped for this report.

a HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

~ Denotes five or fewer discharges reported to HIPE.

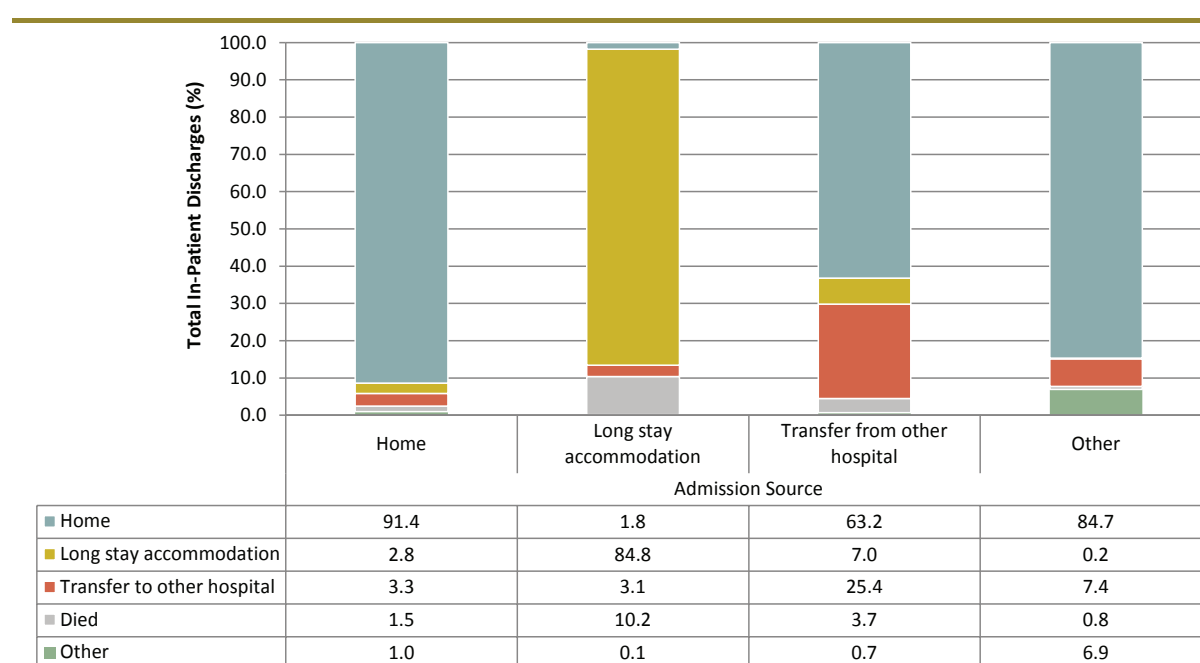
* Further suppression required to prevent disclosure of five or fewer discharges.

2.3.4 Admission Source by Discharge Destination

Figure 2.10 disaggregates the proportion of in-patient discharges by discharge destination and admission source.

- Of in-patients who were admitted from home, 91.4 per cent were discharged home.
- In-patients admitted from long stay accommodation were primarily discharged back to long stay accommodation (84.8 per cent).
- Over a quarter of in-patients (25.4 per cent) who were admitted from another hospital were transferred to another hospital, while 63.2 per cent were discharged home.

FIGURE 2.10 In-Patient Discharges: Discharge Destination by Admission Source (%)



Notes: See Appendix IV for information on how the HIPE variables 'Discharge Destination' and 'Admission Source' were grouped for this report.
Percentages are subject to rounding.

2.4 WHEN

Section 2.4 profiles when discharges were admitted to and discharged from hospital. Activity is presented by day of admission, day of discharge, and month of discharge for total discharges.

2.4.1 Day of Admission

Table 2.10 disaggregates total discharges by patient type, admission type, and day of admission (see also Figure 2.11).

Discharges

- The proportion of in-patient discharges admitted on an elective basis decreased throughout the week, with 62.3 per cent admitted between Monday and Wednesday, falling to 6.4 per cent at the weekend.
- The proportion of in-patient discharges admitted as emergency in-patients remained relatively constant throughout the week at approximately 16 per cent per day, but fell at weekends when approximately 10 per cent were admitted per day.
- The majority of day patients were admitted mid-week, ranging from 21.0 per cent on Wednesday to only 2.6 per cent on Saturday and 0.9 per cent on Sunday.

Length of Stay²

- Mean length of stay for elective in-patients ranged from 6.4 days for those admitted on a Tuesday or Wednesday to 10.1 days for those admitted on a Saturday.
- Mean length of stay for emergency in-patients ranged from 6.1 days for those admitted on a Monday to 6.7 days for those admitted on a Friday or Saturday.

² Where length of stay is analysed by admission type, a breakdown of same-day and overnight in-patient length of stay is not provided.

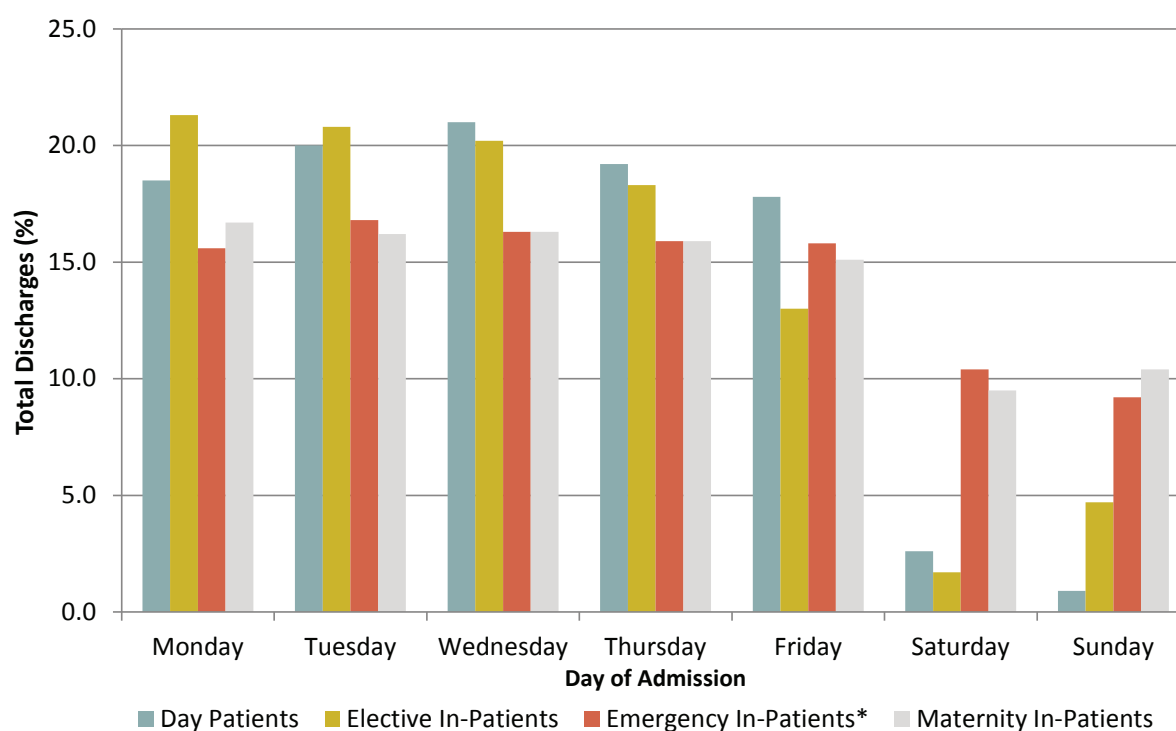
TABLE 2.10 Total Discharges: Patient Type and Admission Type by Day of Admission (N, % and In-Patient Length of Stay)

	Discharges									
	Day Patients		In-Patients						Total Discharges	
			Elective		Emergency ^a		Maternity			
	N	%	N	%	N	%	N	%	N	%
Monday	190,767	18.5	21,079	21.3	65,031	15.6	19,707	16.7	296,584	17.8
Tuesday	205,727	20.0	20,591	20.8	69,935	16.8	19,038	16.2	315,291	18.9
Wednesday	216,020	21.0	20,055	20.2	68,160	16.3	19,185	16.3	323,420	19.4
Thursday	197,763	19.2	18,146	18.3	66,411	15.9	18,716	15.9	301,036	18.1
Friday	183,635	17.8	12,866	13.0	66,146	15.8	17,730	15.1	280,377	16.8
Saturday	26,444	2.6	1,685	1.7	43,449	10.4	11,187	9.5	82,765	5.0
Sunday	9,504	0.9	4,664	4.7	38,198	9.2	12,227	10.4	64,593	3.9
Total Discharges	1,029,860	100	99,086	100	417,330	100	117,790	100	1,664,066	100

	In-Patient Length of Stay								
	Elective		Emergency ^a		Maternity		Total In-Patients		
	Mean	Median	Mean	Median	Mean	Median	N	Mean	Median
Monday	6.6	3	6.1	2	2.7	2	105,817	5.5	2
Tuesday	6.4	2	6.2	2	2.7	2	109,564	5.7	2
Wednesday	6.4	2	6.2	2	2.6	2	107,400	5.6	2
Thursday	6.5	2	6.3	2	2.7	2	103,273	5.7	2
Friday	7.5	3	6.7	3	2.5	2	96,742	6.0	3
Saturday	10.1	4	6.7	3	2.4	2	56,321	6.0	3
Sunday	7.9	4	6.3	3	2.5	2	55,089	5.6	3
In-Patient Discharges	6.7	2	6.3	2	2.6	2	634,206	5.7	2

Notes: Percentage columns are subject to rounding.

- a HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

FIGURE 2.11 Total Discharges: Patient Type and Admission Type by Day of Admission (%)

Note: * See note under Table 2.10

2.4.2 Day of Discharge

Table 2.11 disaggregates total discharges by admission type and day of discharge (see also Figure 2.12).

Discharges

- The proportion of elective in-patients discharged increased throughout the week, from 10.7 per cent on Monday to 22.3 per cent on Friday, falling to 10.4 per cent on Saturday and 4.8 per cent on Sunday.
- The largest proportion of emergency in-patients were discharged on Friday (19.9 per cent), with the smallest proportion discharged on Sunday (6.0 per cent).

Length of Stay

- Elective in-patients discharged on a Monday had the longest in-patient mean length of stay (10.5 days).
- Emergency in-patient mean length of stay fell throughout the week from 7.0 days for those discharged on a Monday to 4.2 days for those discharged on a Sunday.

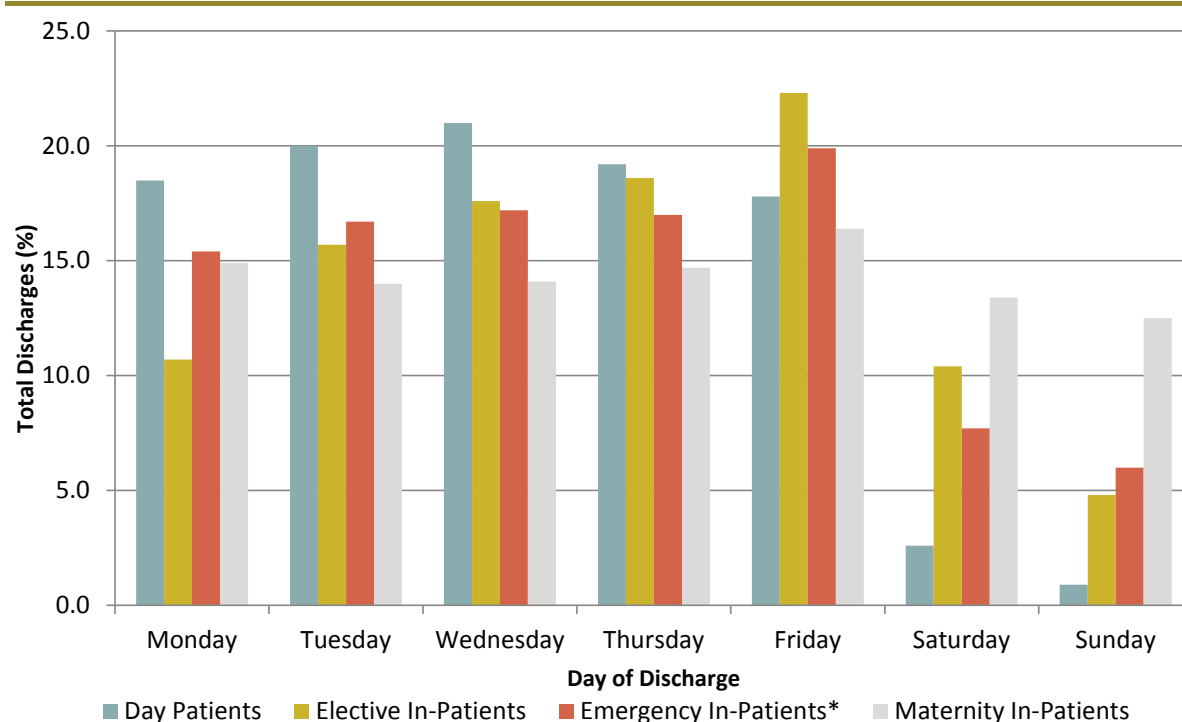
TABLE 2.11 Total Discharges: Patient Type and Admission Type by Day of Discharge (N, % and In-Patient Length of Stay)

	Discharges									
	Day Patients		In-Patients						Total Discharges	
			Elective		Emergency ^a		Maternity			
	N	%	N	%	N	%	N	%	N	%
Monday	190,767	18.5	10,554	10.7	64,476	15.4	17,592	14.9	283,389	17.0
Tuesday	205,727	20.0	15,542	15.7	69,687	16.7	16,469	14.0	307,425	18.5
Wednesday	216,020	21.0	17,448	17.6	71,866	17.2	16,573	14.1	321,907	19.3
Thursday	197,763	19.2	18,436	18.6	70,833	17.0	17,366	14.7	304,398	18.3
Friday	183,635	17.8	22,047	22.3	83,239	19.9	19,330	16.4	308,251	18.5
Saturday	26,444	2.6	10,346	10.4	32,012	7.7	15,791	13.4	84,593	5.1
Sunday	9,504	0.9	4,713	4.8	25,217	6.0	14,669	12.5	54,103	3.3
Total Discharges	1,029,860	100	99,086	100	417,330	100	117,790	100	1,664,066	100

	In-Patient Length of Stay								
	Elective		Emergency ^a		Maternity		Total In-Patients		
	Mean	Median	Mean	Median	Mean	Median	N	Mean	Median
Monday	10.5	5	7.0	3	2.9	2	92,622	6.6	3
Tuesday	7.0	2	6.8	3	2.7	2	101,698	6.1	2
Wednesday	7.1	2	6.7	2	2.4	2	105,887	6.1	2
Thursday	6.1	2	6.5	2	2.4	2	106,635	5.8	2
Friday	6.5	2	6.3	3	2.5	2	124,616	5.8	2
Saturday	3.9	2	4.7	2	2.7	2	58,149	4.0	2
Sunday	6.0	4	4.2	2	2.8	2	44,599	4.0	2
In-Patient Discharges	6.7	2	6.3	2	2.6	2	634,206	5.7	2

Notes: Percentage columns are subject to rounding.

- ^a HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

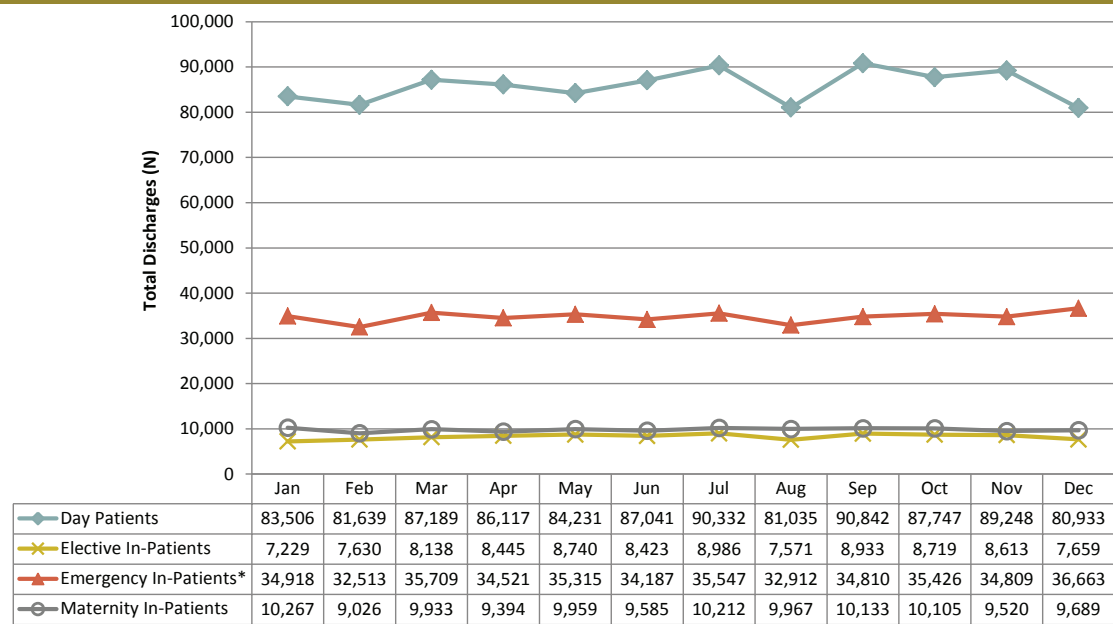
FIGURE 2.12 Total Discharges: Patient Type and Admission Type by Day of Discharge (%)

Note: * HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

2.4.1 Month of Discharge

Figure 2.13 shows total discharges by month of discharge disaggregated by patient type and admission type.

- Hospital discharges peaked in September for elective in-patients (8,933 discharges), while January recorded the smallest number of elective in-patients with only 7,229 elective in-patients discharged in this month.
- Emergency in-patient hospital discharges peaked in December (36,663 discharges), while the smallest number of emergency in-patients were discharged in February with 32,513 discharges.
- Maternity in-patient discharges were highest in January (10,267 discharges) and lowest in February (9,026 discharges).

FIGURE 2.13 Total Discharges: Month of Discharge by Patient Type and Admission Type (N)

Notes: * HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

Includes 8,633 discharges admitted prior to 2015 and discharged in 2015.

Morbidity Analysis
2015

SECTION

Three

Table of Contents

3.1	INTRODUCTION	49
3.2	CODING OF DIAGNOSES AND PROCEDURES	49
3.2.1	Definition of a Diagnosis	53
3.2.2	Definition of a Procedure	54
3.3	MORBIDITY ANALYSIS: SUMMARY OF DAY PATIENT AND IN-PATIENT ACTIVITY	56
3.3.1	Day Patient Activity	56
3.3.2	In-Patient Activity	58
3.4	MORBIDITY ANALYSIS: TOTAL DISCHARGE ACTIVITY	66
3.4.1	Total Discharges by Principal Diagnosis, Sex and Age Group	66
3.4.2	In-Patient Mean and Median Length of Stay by Principal Diagnosis, Sex and Age Group	66
3.4.3	All-Listed Diagnoses by Sex and Age Group	67
3.4.4	Total Discharges by Principal Procedure, Sex and Age Group	76
3.4.5	In-Patient Mean and Median Length of Stay by Principal Procedure, Sex and Age Group	76
3.4.6	All-Listed Procedures by Sex and Age Group	77

3.1 INTRODUCTION

Section Three focuses on the diagnoses and procedures recorded for total discharges reported to HIPE by acute public hospitals.^{1,2}

- **Section 3.2** outlines the clinical coding process, the classification and definitions used in the assignment of diagnosis and procedure codes to a discharge, and analysis of the mean number of diagnoses and procedures reported for discharges.
- **Section 3.3** provides a summary of related hospital activity. Top 20 diagnoses and procedure blocks, along with Top 10 Australian Refined Diagnosis Related Groups (AR-DRGs), are provided for day patient discharges and in-patient discharges (total, elective, emergency and maternity). Demographic data, including sex and age group, and administrative analyses including mode of emergency admission (for emergency in-patients only) are also presented.
- **Section 3.4** provides details of the diagnoses and procedures reported for total discharges, by sex and age group. The mean and median length of stay for total in-patient discharges is presented for principal diagnoses and principal procedures.

3.2 CODING OF DIAGNOSES AND PROCEDURES

Coding of HIPE hospital activity is performed by the HIPE Clinical Coder who translates medical terminology into alpha-numeric code. The Coder performs an essential function in providing high quality, accurate, and uniform medical information and greatly contributes to the continuous growth of medical knowledge. The HPO is responsible for the training of all HIPE coders nationally.^{3,4} In 2014 the HPO delivered the first certification course for HIPE coders in collaboration with the School of Computing in the Dublin Institute of Technology (DIT).

The source document for coding for the HIPE system is the medical record or chart. The clinical coder uses the entire chart to extract the conditions and procedures to provide a complete record of the patient and their hospital stay. In addition to the discharge summary or letter, additional documentation referenced for coding a case include; nursing notes, consultation reports, progress notes, operative reports, pre- and post-operative reports, pathology reports and more recently the sepsis form. Appendix III contains the HIPE Data

¹ The National Psychiatric In-Patient Reporting System, supported by the Health Research Board, reports information on all admissions to psychiatric hospitals and units nationally.

² The presentation of length of stay differs from previous reports which presented acute and total in-patient mean length of stay. This report presents mean and median total in-patient length of stay only (see Section 1.6).

³ There are currently approximately 250 coders working full time and part time across all HIPE hospitals.

⁴ For further information on training programmes see www.hpo.ie

Entry Form for 2015, which details the information coded for each hospital discharge. No interpretation of test results may be presumed by the Coder and all diagnoses recorded must be documented by a clinician in the chart.

All HIPE data are keyed in at the hospital using the HIPE Portal data entry system which runs an extensive number of validation edit checks to ensure the quality of the data. Other data quality activities and data quality tools are in use at local and national HPO level.⁵

At the start of 2015, the classification to code clinical information was updated from the 6th Edition to the 8th Edition of the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM), Australian Classification of Health interventions (ACHI), Australian Coding Standards (ACS).^{6,7} Details of the ICD-10-AM diagnosis and ACHI procedure coding scheme are provided in Tables 3.1 and 3.2. ACS are developed to provide guidance in the application of ICD-10-AM and ACHI codes. Standards are categorised by site and/or body system according to the clinical specialty to which a disease or procedure relates. Use of ICD-10-AM/ACHI/ACS is complemented by the Irish Coding Standards (ICS); these are revised regularly to reflect changing clinical practice and to ensure the classification and its application are relevant to the Irish Healthcare system.⁸

Due to the update in the classification, caution must be exercised when comparing procedure and diagnosis categories presented in this report compared to previous reports, due to changes in sequencing of codes, addition of new codes, deletion of codes, and updates to ACS and ICS.⁹

⁵ In 2015 the HSE engaged Pavilion Health Australia Pty Ltd., by competitive tender, to undertake a review of the quality of HIPE data, to assess whether the quality of the data was sufficient to support the introduction of Activity Based Funding (ABF). Available at www.hpo.ie

⁶ National Centre for Classification in Health (NCCH), 2013: *The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (8th Ed)*: NCCH, Australian Health Services Research Institute, The University of Wollongong.

⁷ The spelling conventions of ICD-10-AM comply with the Macquarie Dictionary, as recommended by the Australian government style manual.

⁸ Irish Coding Standards (ICS) provide guidelines for the collection of HIPE data for all discharges and are to be used in conjunction with 8th Edition ICD-10-AM/ACHI/ACS and the relevant HIPE Instruction Manual. For further information, see www.hpo.ie

⁹ See Appendix VII for an overview of changes from ICD-10-AM/ACHI/ACS 6th edition (in use from 2009–2014) to 8th Edition (in use from 1st January 2015).

Table 3.1 provides details of the structure of ICD-10-AM diagnosis codes and presents the chapter structure of ICD-10-AM diagnosis codes.

TABLE 3.1 ICD-10-AM Diagnosis Codes, Chapter and Title

ICD-10-AM Diagnosis Codes					
<p>The 'core' disease classification of ICD-10-AM is the three character code, which is the mandatory level of coding for international reporting to the World Health Organization (WHO) for general international comparisons. This core set of codes has been expanded to four and five character codes so that important specific disease entities can be identified, while also maintaining the ability to present data in broad groups to enable useful and understandable information to be obtained.</p> <p>The ICD-10-AM is a variable-axis classification. Its structure is designed principally to facilitate epidemiological analysis. Diseases are organised in the following groups: epidemic diseases; constitutional or general diseases; local disease arranged by site; developmental diseases; and injuries.</p> <p>Most of the tabular is taken up with the main disease classification composed of 22 chapters. The first character of the ICD-10-AM code is a letter, and each letter is associated with a particular chapter, except for the letter D, which spans both Chapter 2 <i>Neoplasms</i> and Chapter 3 <i>Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism</i>, and the letter H, which is used in both Chapter 7 <i>Diseases of the eye and adnexa</i> and Chapter 8 <i>Diseases of the ear and mastoid process</i>. Four chapters (Chapters 1, 2, 19 and 20) use more than one letter in the first position of their codes.</p> <p>WHO intends the codes U00–U99 to be used for provisional assignment of new diseases of uncertain aetiology, for emergency use and for specific research purposes. U50–U73 are used in ICD-10-AM to classify activity and U90 classifies healthcare associated infections.</p>					
Chapter and Title		Code Prefix	Chapter and Title		Code Prefix
1	Certain infectious and parasitic diseases	A, B	12	Diseases of the skin and subcutaneous tissue	L
2	Neoplasms	C, D	13	Diseases of the musculoskeletal system and connective tissue	M
3	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	D	14	Diseases of the genitourinary system	N
4	Endocrine, nutritional and metabolic diseases	E	15	Pregnancy, childbirth and the puerperium	O
5	Mental and behavioural disorders	F	16	Certain conditions originating in the perinatal period	P
6	Diseases of the nervous system	G	17	Congenital malformations, deformations and chromosomal abnormalities	Q
7	Diseases of the eye and adnexa	H	18	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	R
8	Diseases of the ear and mastoid process	H	19	Injury, poisoning and certain other consequences of external causes	S, T
9	Diseases of the circulatory system	I	20	External causes of morbidity and mortality	U, V, W, X, Y
10	Diseases of the respiratory system	J	21	Factors influencing health status and contact with health services	Z
11	Diseases of the digestive system	K	22	Codes for special purposes	U

Source: National Centre for Classification in Health (NCCH), 2013: *The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (8th Ed): Australian Coding Standards*. Sydney: NCCH, Australian Health Services Research Institute, The University of Wollongong. p. xv-xvi.

Table 3.2 provides details of the structure of ACHI procedure codes and presents the chapter structure for these ACHI procedure codes.

TABLE 3.2 Australian Classification of Health Interventions (ACHI), Chapter and Title

Australian Classification of Health Interventions (ACHI)			
The Australian Classification of Health Interventions (ACHI) was first developed by the NCCH (the previous custodians of ICD-10-AM/ACHI/ACS) and is generally based on the Commonwealth Medicare Benefits Schedule (MBS).			
The main features of the classification are:			
<ol style="list-style-type: none"> 1) The procedure classification captures procedures and interventions performed in public and private hospitals, day centres and ambulatory settings. Allied health interventions, dental services and procedures performed outside the operating theatre are included.¹⁰ 2) The intervention classification has been based on the Commonwealth Medicare Benefits Schedule (MBS) (with some exceptions). A two digit extension number has been attached to each MBS item number to represent individual procedural concepts (e.g., 36564-00). Other ACHI procedures and interventions which are not represented in MBS are allocated a code number from the 90000 series. Note: 97000 code numbers are reserved for dental services. 3) The structure of the procedure classification is based on anatomy rather than surgical specialty. Chapters closely follow the chapter headings of the WHO ICD-10 to maintain parity with the disease classification. 4) Nonsurgical procedures are listed separately from the surgical procedures, whenever feasible. 5) A hierarchical structure with the following axes: <ul style="list-style-type: none"> • First level – anatomical site axis • Second level – procedure type axis • Third level – block axis 6) Inclusion of many more procedures which can be utilised in non-institutional settings, such as community based health and ambulatory care. 7) The interventions in the procedure classification are provider neutral. That is, the same code should be assigned for a specific intervention regardless of which health professional performs the intervention. 			
Chapter and Title		Chapter and Title	
1	Procedures on nervous system	11	Procedures on urinary system
2	Procedures on endocrine system	12	Procedures on male genital organs
3	Procedures on eye and adnexa	13	Gynaecological procedures
4	Procedures on ear and mastoid process	14	Obstetric procedures
5	Procedures on nose, mouth and pharynx	15	Procedures on musculoskeletal system
6	Dental services	16	Dermatological and plastic procedures
7	Procedures on respiratory system	17	Procedures on breast
8	Procedures on cardiovascular system	18	Radiation oncology procedures
9	Procedures on blood and blood-forming organs	19	Non-invasive, cognitive and other interventions, not elsewhere classified
10	Procedures on digestive system	20	Imaging services

Sources: National Centre for Classification in Health (NCCH), 2013: *The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (8th Ed): Australian Coding Standards*. Sydney: NCCH, Australian Health Services Research Institute, The University of Wollongong. p. xvii.
National Centre for Classification in Health (NCCH), 2013: *The Australian Classification of Health Interventions (ACHI) Tabular List of Interventions*. Sydney: NCCH, Australian Health Services Research Institute, The University of Wollongong. p. iii.

¹⁰ HIPE collects data on discharges from, and deaths in, acute public hospitals.

3.2.1 Definition of a Diagnosis

In 2015, HIPE collected a principal diagnosis for each discharge, together with up to 29 additional diagnosis codes.

DIAGNOSES

A **principal diagnosis** is defined as, 'the diagnosis established after study to be chiefly responsible for occasioning an episode of admitted patient care, an episode of residential care or an attendance at the healthcare establishment, as represented by a code'.¹¹

An **additional diagnosis** is defined as, 'a condition or complaint either coexisting with the principal diagnosis or arising during the episode of admitted patient care, episode of residential care or attendance at a health care establishment, as represented by a code' and may be used as an indication of the level of comorbidity.¹²

Additional diagnoses are interpreted as conditions that affect patient management in terms of requiring commencement, alteration or adjustment of therapeutic treatment, diagnostic procedures, increased clinical care, and/or monitoring.

3.2.1.1 Mean Number of Diagnoses Reported

Table 3.3 outlines the mean number of diagnoses collected for day patient, in-patient, and total discharges, by sex and age group.

- The mean number of diagnoses recorded for total discharges was 2.7.
- The mean number of diagnoses recorded for in-patient discharges was 3.7, compared to 2.0 for day patients.
- The mean number of diagnoses recorded for both male and female discharges was 2.7. For females, the mean number of diagnoses recorded was higher for maternity discharges (3.2) compared with non-maternity discharges (2.5).

TABLE 3.3 Total Discharges: Mean Number of All-Listed Diagnoses by Patient Type, Sex and Age Group

	Day Patients	In-Patients	Total Discharges
Total	2.0	3.7	2.7
Sex			
Male	2.1	4.0	2.7
Female	2.0	3.6	2.7
Maternity	1.9	3.5	3.2
Non-Maternity	2.0	3.6	2.5
Age Group			
< 15 Years	1.9	2.6	2.3
15–44 Years	1.7	3.2	2.5
45–64 Years	2.1	3.7	2.5
65 Years and Over	2.1	4.9	3.1

¹¹ National Centre for Classification in Health (NCCH), 2013: *The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (8th Ed): Australian Coding Standards*. Sydney: NCCH, Australian Health Services Research Institute, The University of Wollongong. p. 1.

¹² National Centre for Classification in Health (NCCH), op. cit., p. 4.

3.2.2 Definition of a Procedure

In 2015, a principal procedure and up to 19 additional procedure codes for each discharge could be reported to HIPE where appropriate.

PROCEDURES

The classification of procedures in ICD-10-AM uses the Australian Classification of Health Interventions (ACHI).¹³ Procedures are coded in HIPE in accordance with the following hierarchy:

- procedure performed for treatment of the principal diagnosis
- procedure performed for treatment of an additional diagnosis
- diagnostic/exploratory procedure related to the principal diagnosis
- diagnostic/exploratory procedure related to an additional diagnosis for the episode of care.¹⁴

A key feature of the ACHI procedure classification is a seven-character code in the format xxxxx-xx. The structure is organised on an anatomical basis and thus does not always appear in numerical order. Procedure blocks were introduced to provide a sequential framework for both coding and reporting purposes. The blocks represent homogenous groups of procedures, while the seven-digit codes allow for greater detail.¹⁵ For example, procedure block 0732 represents 'direct closure of vein', containing the procedures 'direct closure of renal vein' (33833-04) and 'direct closure of vena cava' (90215-02). In this report, tables have been produced using the block framework.¹⁶

3.2.2.1 Discharges with a Procedure

Table 3.4 provides details of the number and percentage of discharges that had a principal procedure recorded by patient type and admission type.

- Of the 1,664,066 total discharges, principal procedures were recorded for 1,320,185 discharges (79.3 per cent).
- Over 93 per cent of day patient discharges had a principal procedure recorded.
- Over 56 per cent of in-patient discharges had a principal procedure recorded, with 89.3 per cent of elective in-patients, 48.3 per cent of emergency in-patients, and 58.5 per cent of maternity in-patients undergoing a principal procedure.

¹³ National Centre for Classification in Health (NCCH) 2013, *The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (8th Ed): Australian Coding Standards*. Sydney: NCCH, Australian Health Services Research Institute, The University of Wollongong.

¹⁴ National Centre for Classification in Health (NCCH), 2013, *The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (8th Ed): Australian Coding Standards*. Sydney: NCCH, Australian Health Services Research Institute, The University of Wollongong. p. 21.

¹⁵ National Centre for Classification in Health (NCCH), 2013, *Australian Classification of Health Interventions (ACHI) Tabular List of Interventions*. Sydney: NCCH, Australian Health Services Research Institute, The University of Wollongong. p. viii.

¹⁶ The move to the ACHI introduced significant changes to the collection of procedures from 2005, including the use of Australian Coding Standard (ACS) number 0042 (see Appendix V).

TABLE 3.4 Total Discharges: Number and Percentage of Discharges with a Principal Procedure by Patient Type and Admission Type

	Total Discharges	Total Discharges with a Principal Procedure	
	N	N	%
Total Discharges	1,664,066	1,320,185	79.3
Day Patients	1,029,860	961,047	93.3
In-Patients	634,206	359,138	56.6
Elective In-Patients	99,086	88,451	89.3
Emergency In-Patients	417,330	201,721	48.3
Maternity In-Patients	117,790	68,966	58.5

3.2.2.2 Mean Number of Procedures Reported

Table 3.5 outlines the mean number of procedures reported for day patients, in-patients, and total discharges, by sex and age group. The calculation of mean procedures is based on discharges with at least one procedure reported to HIPE.¹⁷

- For those discharges who underwent at least one procedure, in-patient discharges had a mean number of 2.8 procedures recorded, compared to a mean of 1.5 procedures for day patients.
- While the mean number of procedures increased with age for in-patient discharges, the day patient pattern differed. For those undergoing a procedure, day patient discharges aged less than 15 years recorded a mean of 1.9 procedures, which was larger than that reported for older age groups.

TABLE 3.5 Total Discharges: Mean Number of All-Listed Procedures by Patient Type, Sex and Age Group

	Day Patients	In-Patients	Total Discharges
Total	1.5	2.8	1.8
Sex			
Male	1.4	2.8	1.8
Female	1.5	2.7	1.9
Maternity	1.6	2.7	2.6
Non-Maternity	1.5	2.7	1.8
Age Group			
< 15 Years	1.9	2.5	2.2
15–44 Years	1.5	2.6	1.9
45–64 Years	1.5	2.9	1.7
65 Years and Over	1.4	2.9	1.8

¹⁷ Includes all anaesthesia except local. See ACS 0031 *Anaesthesia* in National Centre for Classification in Health (NCCH), 2013, *The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (8th Ed): Australian Coding Standards*. Sydney: NCCH, Australian Health Services Research Institute, The University of Wollongong. p. 29.

3.3 MORBIDITY ANALYSIS: SUMMARY OF DAY PATIENT AND IN-PATIENT ACTIVITY

Section 3.3 provides a summary of the day patient and in-patient hospital activity reported to HIPE. This analysis reports on the most commonly recorded diagnoses, procedure blocks and diagnosis related groups, as well as providing demographic and administrative information for these discharges.

3.3.1 Day Patient Activity

A day patient is admitted to hospital for treatment on an elective (rather than an emergency) basis and is discharged alive, as scheduled, on the same day. Deliveries are not included. Table 3.6 presents a summary of day patient activity reported to HIPE.

Day Patients – Profile

- Day patient discharges accounted for 61.9 per cent of total discharges.
- Day patients aged 65–74 years accounted for 21.7 per cent of day patient discharges.

Day Patients – Top 20 Principal Diagnoses

- Day patients with a principal diagnosis of *Other medical care* (includes *Chemotherapy* and *Radiotherapy* encounters)¹⁸ and those with a principal diagnosis of *Care involving dialysis* accounted for 21.8 and 16.6 per cent of day patient discharges respectively.

Day Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 93.3 per cent of day patient discharges (see Table 3.4).
- Procedures from the block *Haemodialysis* were reported as a principal procedure for 17.8 per cent of day patients with at least one procedure.

Day Patients – Top 10 Australian Refined Diagnosis Related Groups (AR-DRGs)

- The top three AR-DRGs accounted for 38.2 per cent of day patient discharges reported to HIPE when analysed by diagnosis related group.¹⁹
- *Haemodialysis* accounted for 16.6 per cent, while *Radiotherapy* and *Chemotherapy* accounted for 11.1 and 10.5 per cent of day patient discharges respectively.

¹⁸ From 2015 this data includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

¹⁹ See Section Four for details of the case mix classification.

TABLE 3.6 Day Patient Activity (N, %)

Top 20 Principal Diagnoses ^a				Day Patients				Top 20 Principal Procedure Blocks ^b			
		N	%							N	%
Z51	Other medical care ^{c,d}	224,974	21.8	1,029,860				1060	Haemodialysis	170,795	17.8
Z49	Care involving dialysis	171,005	16.6					1920	Administration of pharmacotherapy	143,098	14.9
E83	Disorders of mineral metabolism	20,994	2.0					1788	Megavoltage radiation treatment ^d	109,931	11.4
L40	Psoriasis	16,799	1.6					1008	Panendoscopy with excision	43,885	4.6
H35	Other retinal disorders	16,003	1.6	Sex	N	%		1620	Excision of lesion(s) of skin and subcutaneous tissue	35,051	3.6
K29	Gastritis and duodenitis	14,829	1.4	Male	503,648	48.9		0911	Fibreoptic colonoscopy with excision	30,912	3.2
Z13	Special screening examination for other diseases and disorders	13,856	1.3	Female	526,212	51.1		0905	Fibreoptic colonoscopy	27,295	2.8
M54	Dorsalgia	11,198	1.1					1552	Administration of agent into other musculoskeletal sites	22,150	2.3
C44	Other malignant neoplasms of skin	10,229	1.0	Age Group	N	%		0725	Other incision procedures on veins	20,841	2.2
M25	Other joint disorders, not elsewhere classified	9,826	1.0	< 1 Year	4,359	0.4		0209	Application, insertion or removal procedures on retina, choroid or posterior chamber	20,418	2.1
K64	Haemorrhoids and perianal venous thrombosis	8,536	0.8	1–14 Years	44,416	4.3		1610	Ultraviolet B [UVB] light therapy of skin	16,446	1.7
K57	Diverticular disease of intestine	8,488	0.8	15–24 Years	36,432	3.5		1089	Examination procedures on bladder	14,588	1.5
R10	Abdominal and pelvic pain	7,844	0.8	25–34 Years	79,649	7.7		1893	Administration of blood and blood products	14,551	1.5
Z48	Other surgical follow-up care	7,775	0.8	35–44 Years	118,156	11.5		0668	Coronary angiography	9,879	1.0
Z45	Adjustment and management of drug delivery or implanted device	7,674	0.7	45–54 Years	153,809	14.9		0197	Extracapsular crystalline lens extraction by phacoemulsification	9,645	1.0
D12	Benign neoplasm of colon, rectum, anus and anal canal	7,343	0.7	55–64 Years	194,252	18.9		1005	Panendoscopy	9,535	1.0
H26	Other cataract	7,278	0.7	65–74 Years	223,843	21.7		1822	Assessment of personal care and other activities of daily/independent living	7,234	0.8
K44	Diaphragmatic hernia	7,155	0.7	75–84 Years	143,021	13.9		1601	Dressing of other wound	6,470	0.7
Z08	Follow-up examination after treatment for malignant neoplasms	6,941	0.7	85 Years and Over	31,923	3.1		1618	Biopsy of skin and subcutaneous tissue	5,995	0.6
Z09	Follow-up examination after treatment for conditions other than malignant neoplasms	6,690	0.6					1824	Other assessment, consultation, interview, examination or evaluation	5,323	0.6
Hospital Group				Top 10 AR-DRGs							
		N	%							N	%
Ireland East		187,958	18.3	L61Z	Haemodialysis			L61Z	Haemodialysis	170,675	16.6
RCSI		146,644	14.2	R64Z	Radiotherapy ^d			R64Z	Radiotherapy ^d	114,260	11.1
Dublin Midlands		215,915	21.0	R63Z	Chemotherapy			R63Z	Chemotherapy	108,181	10.5
South/South West		206,051	20.0	G48C	Colonoscopy, Sameday			G48C	Colonoscopy, Sameday	45,087	4.4
UL		56,713	5.5	G47C	Other Gastroscopy, Sameday			G47C	Other Gastroscopy, Sameday	38,807	3.8
Saolta		187,030	18.2	J11Z	Other Skin, Subcutaneous Tissue and Breast Procedures			J11Z	Other Skin, Subcutaneous Tissue and Breast Procedures	37,639	3.7
Children's		27,870	2.7	Z64B	Other factors influencing health status, sameday			Z64B	Other factors influencing health status, sameday	36,402	3.5
No group		1,679	0.2	Q61B	Red blood cell disorders w/o catastrophic or severe cc			Q61B	Red blood cell disorders w/o catastrophic or severe cc	31,419	3.1
				C03Z	Retinal procedures			C03Z	Retinal procedures	22,373	2.2
				J68C	Major skin disorders, sameday			J68C	Major skin disorders, sameday	19,701	1.9

Notes: Percentage columns are subject to rounding.

a ICD-10-AM diagnosis codes are analysed at three-digit level.

b ACHI Procedure codes are analysed at block level. The percentage (%) is based on day patients with principal procedure reported.

c Other medical care includes chemotherapy and radiotherapy encounters.

d From 2015, this data includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

3.3.2 In-Patient Activity

An in-patient is admitted to hospital for treatment or investigation on an elective or emergency basis. Sameday in-patients are admitted as in-patients and discharged on the same day, while overnight in-patients stay at least one night in hospital. Table 3.7 presents a summary of in-patient activity reported to HIPE.

In-Patients – Profile

- In-patient discharges accounted for 38.1 per cent of total discharges.
- Overnight in-patient discharges accounted for 81.5 per cent (516,604) of in-patient discharges and had a mean length of stay of 6.8 days.

In-Patients – Top 20 Principal Diagnoses

- In-patient discharges with a principal diagnosis of *Single spontaneous delivery* accounted for 5.0 per cent of in-patient discharges.
- In-patient discharges with a principal diagnosis of *Pain in throat and chest* accounted for 2.9 per cent of in-patient discharges while those with a principal diagnosis of *Single delivery by caesarean section* accounted for 2.7 per cent of in-patient discharges.

In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 56.6 per cent of total in-patient discharges (Table 3.4).
- Procedures from the block *Generalised allied health interventions* were reported for 24.5 per cent of in-patient discharges with at least one procedure reported. This block includes interventions such as physiotherapy, pharmacy, dietetics, occupational therapy, speech pathology and social work. Together, these six interventions accounted for over 92 per cent of cases within this procedure block.

In-Patients – Top 10 Australian Refined Diagnosis Related Groups (AR-DRGs)

- The top three AR-DRGs accounted for 15.4 per cent of in-patient discharges when analysed by diagnosis related group.²⁰
- *Vaginal Delivery* accounted for 6.8 per cent of in-patient discharges. *Antenatal and Other Obstetric Admission* and *Chest Pain* accounted for 5.8 per cent and 2.8 per cent of in-patient discharges respectively.

²⁰ See Section Four for details of the case mix classification.

TABLE 3.7 In-Patient Activity (N, %, Mean and Median Length of Stay)

Top 20 Principal Diagnoses ^a						In-Patients				Top 20 Principal Procedure Blocks ^b									
		N	%	Mean LOS	Med LOS	634,206								N	%	Mean LOS	Med LOS		
O80	Single spontaneous delivery	31,520	5.0	2.4	2	Discharges	N	634,206	%	100	18.5	Sameday	Overnight	1916	Generalised allied health interventions	87,933	24.5	12.4	7
R07	Pain in throat and chest	18,594	2.9	1.8	1									1340	Caesarean section	19,743	5.5	5.2	4
O82	Single delivery by caesarean section	17,196	2.7	4.5	4									1344	Postpartum suture	16,536	4.6	2.5	2
J22	Unspecified acute lower respiratory infection	14,973	2.4	6.7	4									1920	Administration of pharmacotherapy	9,908	2.8	7.3	3
J44	Other chronic obstructive pulmonary disease	14,277	2.3	8.1	5									1893	Administration of blood and blood products	8,419	2.3	9.6	5
O99	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium	13,484	2.1	1.6	1								1008	Panendoscopy with excision	7,346	2.0	9.8	5	
N39	Other disorders of urinary system	11,990	1.9	8.2	4								1338	Vacuum extraction	6,742	1.9	3.2	3	
R10	Abdominal and pelvic pain	11,026	1.7	2.3	1								0926	Appendicectomy	6,631	1.8	3.3	2	
J18	Pneumonia, organism unspecified	10,596	1.7	10.1	6								0668	Coronary angiography	6,133	1.7	5.6	3	
R55	Syncope and collapse	9,364	1.5	5.0	2								1489	Arthroplasty of hip	5,587	1.6	10.7	5	
O81	Single delivery by forceps and vacuum extractor	9,154	1.4	3.2	3								0030	Lumbar puncture	4,196	1.2	8.1	4	
I48	Atrial fibrillation and flutter	6,771	1.1	4.0	2								0570	Noninvasive ventilatory support	4,041	1.1	16.3	10	
I21	Acute myocardial infarction	6,504	1.0	6.9	4								0412	Tonsilectomy or adenoidectomy	3,903	1.1	1.2	1	
O47	False labour	6,239	1.0	1.3	1								1334	Medical or surgical induction of labour	3,896	1.1	3.3	3	
A09	Other gastroenteritis and colitis of infectious and unspecified origin	6,186	1.0	3.5	2								1828	Sleep study	3,433	1.0	1.5	1	
I50	Heart failure	6,159	1.0	10.7	6								0671	Transluminal coronary angioplasty with stenting	3,424	1.0	4.0	2	
R51	Headache	6,151	1.0	2.0	1								0569	Ventilatory support	3,419	1.0	22.5	10	
K80	Cholelithiasis	6,096	1.0	4.8	3								1343	Other procedures associated with delivery	3,375	0.9	3.0	3	
L03	Cellulitis	5,993	0.9	7.0	4								1265	Curettage and evacuation of uterus	3,239	0.9	1.5	1	
K35	Acute appendicitis	5,901	0.9	3.4	2								0965	Cholecystectomy	3,238	0.9	3.7	1	
Hospital Group		N	%																
Ireland East		132,689	20.9																
RCSI		97,598	15.4																
Dublin Midlands		94,734	14.9																
South/South West		121,649	19.2																
UL		46,049	7.3																
Saolta		112,215	17.7																
Children's		24,971	3.9																
No group		4,301	0.7																
Sex		N	%																
Male		260,196	41.0																
Female		374,010	59.0																
Age Group		N	%																
< 1 Year		27,630	4.4																
1–14 Years		57,233	9.0																
15–24 Years		47,923	7.6																
25–34 Years		99,476	15.7																
35–44 Years		82,567	13.0																
45–54 Years		54,668	8.6																
55–64 Years		67,416	10.6																
65–74 Years		82,512	13.0																
75–84 Years		77,226	12.2																
85 Years and Over		37,555	5.9																
Top 10 AR-DRGs		N	%	Mean LOS	Med LOS														
O60Z		Vaginal Delivery	43,219	6.8	2.7	2													
O66Z		Antenatal and Other Obstetric Admission	37,014	5.8	1.6	1													
F74Z		Chest Pain	17,522	2.8	1.8	1													
O01B		Caesarean Delivery W/O Catastrophic or Severe CC	15,816	2.5	4.4	4													
E65B		Chronic Obstructive Airways Disease W/O Catastrophic CC	11,550	1.8	6.2	4													
G67B		Oesophagitis and Gastroenteritis W/O Cat/Sev CC	11,081	1.7	2.2	1													
G66Z		Abdominal Pain or Mesenteric Adenitis	10,638	1.7	2.0	1													
G70B		Other Digestive System Diagnoses W/O Catastrophic or Severe CC	9,747	1.5	3.0	2													
B77Z		Headache	9,651	1.5	2.0	1													
D63Z		Otitis Media and URI	9,234	1.5	2.0	1													

Notes: Percentage columns are subject to rounding.

a ICD-10-AM diagnosis codes are analysed at three-digit level.

b ACHI Procedure codes are analysed at block level. The percentage (%) is based on in-patients with principal procedure reported.

3.3.2.1 Elective In-Patient Activity

An elective in-patient is an in-patient admission that has been arranged in advance. Table 3.8 presents a summary of elective in-patient activity reported to HIPE.

Elective In-Patients – Profile

- Elective in-patient discharges accounted for 6.0 per cent of total discharges and 15.6 per cent of in-patients.
- Elective in-patient bed days accounted for 667,386 total in-patient bed days, or 18.4 per cent of total in-patient bed days (see Table 3.7).
- Elective overnight in-patient discharges accounted for 95.8 per cent of total elective in-patient discharges and had a mean length of stay of 7.0 days.

Elective In-Patients – Top 20 Principal Diagnoses

- Elective in-patients with a principal diagnosis of *Chronic diseases of tonsils and adenoids* accounted for 3.9 per cent of elective in-patient discharges.
- *Care involving use of rehabilitation procedures* accounted for 3.7 per cent of elective in-patient discharges.

Elective In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 89.3 per cent of elective in-patient discharges (see Table 3.4).
- The procedure block *Generalised allied health interventions* was reported for 11.2 per cent of elective in-patients who had a principal procedure reported.
- The procedure blocks *Tonsillectomy or adenoidectomy* and *Arthroplasty of hip* were reported for 4.4 per cent and 4.2 per cent of elective in-patient discharges with a principal procedure reported respectively.

Elective In-Patients – Top 10 Australian Refined Diagnosis Related Groups (AR-DRGs)

- The top three AR-DRGs accounted for 10.5 per cent of elective in-patient discharges reported to HIPE when analysed by diagnosis related group.²¹
- *Tonsillectomy and/or Adenoidectomy* accounted for 3.9 per cent and *Hip Replacement Without Catastrophic Complication and/or Comorbidity* accounted for 3.6 per cent of elective in-patient discharges. *Other Surgical Follow Up and Medical Care Without Catastrophic Complication and/or Comorbidity* accounted for 2.9 per cent of elective in-patient discharges.

²¹ See Section Four for details of the case mix classification.

TABLE 3.8 Elective In-Patient Activity (N, %, Mean and Median Length of Stay)

Top 20 Principal Diagnoses ^a						Elective In-Patients					
		N	%	Mean LOS	Med LOS	99,086					
J35	Chronic diseases of tonsils and adenoids	3,841	3.9	1.2	1						
Z50	Care involving use of rehabilitation procedures	3,696	3.7	36.3	23						
M16	Coxarthrosis [arthrosis of hip]	3,608	3.6	5.2	4						
G47	Sleep disorders	2,812	2.8	1.2	1						
M17	Gonarthrosis [arthrosis of knee]	2,573	2.6	5.1	5						
I25	Chronic ischaemic heart disease	2,510	2.5	3.6	1						
Z48	Other surgical follow-up care	2,464	2.5	15.8	6						
K80	Cholelithiasis	2,241	2.3	2.3	1						
C50	Malignant neoplasm of breast	1,862	1.9	5.7	3						
N81	Female genital prolapse	1,468	1.5	3.5	3						
K40	Inguinal hernia	1,350	1.4	1.6	1						
Z51	Other medical care ^c	1,245	1.3	20.6	13						
N39	Other disorders of urinary system	1,108	1.1	4.1	2						
C34	Malignant neoplasm of bronchus and lung	1,101	1.1	10.3	7						
C18	Malignant neoplasm of colon	989	1.0	10.2	7						
R06	Abnormalities of breathing	944	1.0	1.6	1						
C67	Malignant neoplasm of bladder	823	0.8	5.7	2						
I48	Atrial fibrillation and flutter	772	0.8	2.2	1						
J44	Other chronic obstructive pulmonary disease	767	0.8	10.3	6						
M25	Other joint disorders, not elsewhere classified	709	0.7	3.3	1						
Hospital Group		N	%								
Ireland East		18,397	18.6								
RCSI		9,903	10.0								
Dublin Midlands		13,559	13.7								
South/South West		21,132	21.3								
UL		8,325	8.4								
Saolta		16,639	16.8								
Children's		6,836	6.9								
No group		4,295	4.3								
Sex		N	%								
Male		48,845	49.3								
Female		50,241	50.7								
Age Group		N	%								
< 1 Year		1,594	1.6								
1–14 Years		9,880	10.0								
15–24 Years		4,622	4.7								
25–34 Years		5,764	5.8								
35–44 Years		9,426	9.5								
45–54 Years		12,938	13.1								
55–64 Years		17,449	17.6								
65–74 Years		20,091	20.3								
75–84 Years		13,491	13.6								
85 Years and Over		3,831	3.9								

Top 20 Principal Procedure Blocks ^a						Med LOS					
		N	%	Mean LOS	Med LOS						
1916	Generalised allied health interventions	9,867	11.2	22.9	13						
0412	Tonsillectomy or adenoidectomy	3,868	4.4	1.2	1						
1489	Arthroplasty of hip	3,720	4.2	5.8	4						
1828	Sleep study	3,298	3.7	1.2	1						
1920	Administration of pharmacotherapy	2,981	3.4	8.7	4						
0965	Cholecystectomy	2,461	2.8	2.2	1						
1518	Arthroplasty of knee	2,437	2.8	5.4	5						
1893	Administration of blood and blood products	1,569	1.8	6.2	2						
1268	Abdominal hysterectomy	1,562	1.8	5.6	5						
0668	Coronary angiography	1,318	1.5	2.6	1						
0990	Repair of inguinal hernia	1,308	1.5	1.6	1						
0671	Transluminal coronary angioplasty with stenting	1,095	1.2	1.8	1						
0913	Colectomy	1,055	1.2	11.6	8						
1620	Excision of lesion(s) of skin and subcutaneous tissue	906	1.0	3.0	1						
1748	Simple mastectomy	857	1.0	4.3	3						
1744	Excision of lesion of breast	828	0.9	1.9	1						
1283	Repair of prolapse of uterus, pelvic floor or enterocele	807	0.9	3.3	3						
1269	Vaginal hysterectomy	776	0.9	3.9	4						
1110	Procedures for female stress incontinence	767	0.9	1.9	1						
0114	Thyroidectomy	751	0.8	2.8	2						
Top 10 AR-DRGs		N	%	Mean LOS	Med LOS						
D11Z	Tonsillectomy and/or Adenoidectomy	3,902	3.9	1.2	1						
I03B	Hip Replacement W/O Catastrophic CC	3,548	3.6	5.1	4						
Z63B	Other Surgical Follow Up and Medical Care W/O Catastrophic CC	2,911	2.9	15.3	7						
Z60B	Rehabilitation W/O Catastrophic CC	2,908	2.9	30.8	20						
I04B	Knee Replacement W/O Catastrophic or Severe CC	2,154	2.2	5.0	5						
H08B	Laparoscopic Cholecystectomy W/O Closed CDE W/O Cat or Sev CC	2,107	2.1	1.5	1						
E63Z	Sleep Apnoea	1,929	1.9	1.3	1						
G10B	Hernia Procedures W/O CC	1,875	1.9	1.8	1						
J06Z	Major Procedures for Breast Conditions	1,772	1.8	2.8	2						
N04B	Hysterectomy for Non-Malignancy W/O Catastrophic or Severe CC	1,599	1.6	4.3	4						

Notes: Percentage columns are subject to rounding.

a ICD-10-AM diagnosis codes are analysed at three-digit level.

c Other medical care includes chemotherapy and radiotherapy encounters.

b ACHI Procedure codes are analysed at block level. The percentage (%) is based on elective in-patients with principal procedure reported.

3.3.2.2 Emergency In-Patient Activity

An emergency in-patient admission is unforeseen and requires urgent care. Table 3.9 presents a summary of emergency in-patient activity reported to HIPE.²²

Emergency In-Patients – Profile

- Emergency in-patient discharges accounted for 25.1 per cent of total discharges and 65.8 per cent of in-patients.
- Emergency in-patient bed days accounted for 73.0 per cent of total in-patient bed days (see Table 3.7).
- Over 63 per cent of emergency in-patient discharges were admitted from an Emergency Department, with 9.3 per cent admitted via a medical assessment unit (where they were treated as an in-patient).

Emergency In-Patients – Top 20 Principal Diagnoses

- Emergency in-patient discharges with a principal diagnosis of *Pain in throat and chest* accounted for 4.4 per cent of emergency in-patients.
- Emergency in-patient discharges with a principal diagnosis of *Unspecified acute lower respiratory infection* and those with a principal diagnosis of *Other chronic obstructive pulmonary disease* accounted for 3.5 and 3.2 per cent of emergency in-patient discharges respectively.

Emergency In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 48.3 per cent of emergency in-patient discharges (see Table 3.4).
- Procedures from the block *Generalised allied health interventions* were reported for 37.8 per cent of emergency in-patient discharges with a procedure recorded.

Emergency In-Patient – Top 10 Australian Refined Diagnosis Related Groups (AR-DRGs)

- The top three AR-DRGs accounted for 9.4 per cent of emergency in-patient discharges reported to HIPE when analysed by diagnosis related group.²³
- *Chest Pain* accounted for 4.2 per cent of emergency in-patient discharges. *Oesophagitis and Gastroenteritis Without Catastrophic Complication and/or Comorbidity* and *Chronic Obstructive Airways Disease Without Catastrophic Complication and/or Comorbidity* each accounted for 2.6 per cent of emergency in-patient discharges.

²² HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

²³ See Section Four for details of the case mix classification.

TABLE 3.9 Emergency In-Patient Activity (N, %, Mean and Median Length of Stay)

Top 20 Principal Diagnoses ^a					Emergency In-Patients				
		N	%	Mean LOS	Med LOS	417,330			
R07	Pain in throat and chest	18,288	4.4	1.8	1				
J22	Unspecified acute lower respiratory infection	14,659	3.5	6.7	4				
J44	Other chronic obstructive pulmonary disease	13,510	3.2	8.0	5				
N39	Other disorders of urinary system	10,873	2.6	8.6	4				
R10	Abdominal and pelvic pain	10,648	2.6	2.3	1				
J18	Pneumonia, organism unspecified	10,387	2.5	10.0	6				
R55	Syncope and collapse	9,202	2.2	5.0	2				
A09	Other gastroenteritis and colitis of infectious and unspecified origin	6,058	1.5	3.5	2				
R51	Headache	6,018	1.4	2.0	1				
I21	Acute myocardial infarction	6,009	1.4	7.1	4				
I48	Atrial fibrillation and flutter	5,999	1.4	4.2	2				
I50	Heart failure	5,939	1.4	10.7	7				
L03	Cellulitis	5,864	1.4	6.9	4				
K35	Acute appendicitis	5,825	1.4	3.4	2				
S52	Fracture of forearm	4,677	1.1	2.6	1				
A08	Viral and other specified intestinal infections	4,579	1.1	2.3	1				
I63	Cerebral infarction	4,463	1.1	20.3	10				
S72	Fracture of femur	4,424	1.1	17.7	11				
R56	Convulsions, not elsewhere classified	4,208	1.0	3.7	1				
R06	Abnormalities of breathing	4,122	1.0	2.3	1				
						</			

3.3.2.3 Maternity In-Patient Activity

Maternity discharges are those who were admitted in relation to their obstetrical experience (from conception to six weeks post-delivery); that is they were allocated to Admission Type 'Maternity'.²⁴ Table 3.10 presents a summary of maternity in-patient activity reported to HIPE; and presents diagnoses and procedures by delivery status. Delivery discharges include discharges with a diagnosis of outcome of delivery (ICD-10-AM: Z37). Non-delivery discharges are maternity discharges where admission was related to their obstetrical experience but they did not deliver during that episode of care.

Maternity In-Patients – Profile

- Maternity in-patient discharges accounted for 7.1 per cent of total discharges and 18.6 per cent of in-patients.
- Of maternity in-patient discharges, 54.4 per cent reported a diagnosis of *outcome of delivery* i.e. delivery discharges; while 45.6 per cent were non-delivery discharges.
- Single deliveries accounted for 98.1 per cent of delivery discharges.
- Of delivery discharges, 61.9 per cent were multiparous deliveries.²⁵
- Over 36 per cent of delivery discharges were aged between 30–34 years.

Maternity In-Patients – Top 10 Principal Diagnoses by Delivery Status

- Delivery discharges with a principal diagnosis of *Single spontaneous delivery* accounted for 49.2 per cent of delivery in-patient discharges.
- Non-delivery discharges with a principal diagnosis of *Other maternal diseases classifiable elsewhere but complicating pregnancy; childbirth and the puerperium* accounted for 24.7 per cent of non-delivery in-patient discharges.

Maternity In-Patients – Top 10 Principal Procedure Blocks by Delivery Status

- The procedure block *Caesarean section* was reported for 32.6 per cent of delivery discharges who had a principal procedure reported.
- The procedure block *Curettage and evacuation of uterus* was reported for 34.3 per cent of non-delivery discharges who had a principal procedure reported.

Maternity In-Patient – Top 10 Australian Refined Diagnosis Related Groups (AR-DRGs)

- The top three AR-DRGs accounted for 81.5 per cent of maternity in-patient discharges reported to HIPE when analysed by diagnosis related group.²⁶
- *Vaginal Delivery* accounted for 36.7 per cent and *Antenatal and Other Obstetric Admission* accounted for 31.4 per cent of maternity in-patient discharges. *Caesarean Delivery Without Catastrophic or Severe Complication and/or Comorbidity* accounted for 13.4 per cent of maternity in-patient discharges.

²⁴ Hospital In-Patient Enquiry Scheme (HIPE) Data Dictionary 2015 Version 7.0 available at www.hpo.ie.

²⁵ See Table 3.10 notes for definition of multiparous deliveries.

²⁶ See Section Four for details of the case mix classification.

3.4 MORBIDITY ANALYSIS: TOTAL DISCHARGE ACTIVITY

The analysis presented in Section 3.4 is based on total discharges. Morbidity data are presented by chapter within the ICD-10-AM diagnosis coding scheme, with certain specific conditions within these chapters reported separately. Procedures are generally reported by block at chapter level with certain specific procedures reported separately. Discussion of morbidity analysis is limited to chapter level. Diagnosis and procedure tables are cross tabulated by sex and age group.

3.4.1 Total Discharges by Principal Diagnosis, Sex and Age Group

Table 3.11 presents the distribution of total discharges by sex, age group and principal diagnosis.

- Over 29 per cent of total discharges had a principal diagnosis of *Factors influencing health status and contact with health services*; this includes persons encountering health services for examination and investigation or for specific procedures and health care (e.g., *Chemotherapy, Radiotherapy and Dialysis*).²⁷
- The chapter *Diseases of the digestive system* had the second largest number of principal diagnoses, with 9.5 per cent of total discharges.
- For discharges aged less than 15 years (including discharges aged less than 1 year), the most common principal diagnosis came from the chapter *Diseases of the respiratory system*, which accounted for 13.2 per cent of total discharges within this age category.
- Diagnoses from the chapter *Factors influencing health status and contact with health services* were the most common principal diagnoses for discharges in the 45-64 years and 65 years and over age groups.

3.4.2 In-Patient Mean and Median Length of Stay by Principal Diagnosis, Sex and Age Group

Table 3.12 presents the total in-patient mean and median length of stay for principal diagnosis by sex and age group. The analysis presented here includes total in-patient (sameday and overnight) discharges,²⁸ and excludes day patients. It should also be noted that the analysis by length of stay does not take into account the status of the patient on discharge. For example, a patient with a length of stay of one day for a diagnosis of chronic ischaemic heart disease may be transferred to another facility on discharge.

²⁷ From 2015 this data includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

²⁸ This differs from previous reports where the analysis was limited to the mean length of stay for acute in-patients (length of stay of 30 days or less). Median length of stay is also provided alongside the mean length of stay.

Care must be taken, therefore, in interpreting the data on length of stay presented in Table 3.12, in the absence of information on discharge destination.²⁹ Discussion of total in-patient mean length of stay is limited to ICD-10-AM chapter level.

- The longest in-patient mean length of stay was recorded for in-patient discharges with a principal diagnosis from the chapter *Mental and behavioural disorders* (12.3 days). When this diagnosis is analysed by sex, male discharges reported 10.7 days and females reported 14.2 days. Median length of stay was 3 days for both males and females.
- For discharges aged less than 15 years, those with a principal diagnosis from the chapter *Congenital malformations, deformations and chromosomal abnormalities* recorded an in-patient mean length of stay of 7.8 days.
- The longest in-patient mean length of stay for discharges aged 15–44 years was reported for those with a principal diagnosis from the chapter *Mental and behavioural disorders*, at 7.1 days.
- The shortest in-patient mean length of stay for all ages was recorded for in-patient discharges with a principal diagnosis from the chapter *Diseases of the ear and mastoid process* (2.3 days).

3.4.3 All-Listed Diagnoses by Sex and Age Group

Table 3.13 provides details of all-listed diagnoses reported by sex and age group. Over 4.4 million diagnoses were recorded for total discharges reported to HIPE. As one principal diagnosis and up to 29 secondary diagnoses may be collected per discharge, the number of diagnoses will not equal the number of discharges.

- Excluding females aged 15–44 years, the chapter *Factors influencing health status and contact with health services* had the most frequently reported diagnoses across both sexes and all remaining age groups for total discharges. It accounted for 1,086,762 diagnoses, or 24.4 per cent of all-listed diagnoses reported.
- *Neoplasms* accounted for 563,913 diagnoses or 12.7 per cent of all-listed diagnoses reported for total discharges. For total discharges aged less than 15 years, *External causes of morbidity and mortality* accounted for 12.3 per cent of all-listed diagnoses reported for this age group.³⁰

²⁹ See Section Two for details of discharge destination.

³⁰ The codes in this chapter [chapter 20] allow the classification of “environmental events and circumstances as the cause of injury, poisoning and other adverse effects. Where a code from this section is applicable, it is intended that it shall be used in addition to a code from another chapter of the Classification indicating the nature of the condition.” Extracted from NCCH eBook, July 2013, External Causes.

TABLE 3.11 Total Discharges: Principal Diagnosis by Sex and Age Group (N)

Principal Diagnosis	ICD-10-AM Code	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
		73,977	143,202	227,364	319,301	763,844	59,661	321,001	242,781	276,779	900,222	133,638	464,203	470,145	596,080	1,664,066
Total Discharges	–	73,977	143,202	227,364	319,301	763,844	59,661	321,001	242,781	276,779	900,222	133,638	464,203	470,145	596,080	1,664,066
Certain infectious and parasitic diseases	A00–B99	6,089	2,936	1,825	2,330	13,180	5,426	3,071	2,012	2,913	13,422	11,515	6,007	3,837	5,243	26,602
Intestinal infectious diseases (including diarrhoea)	A00–A09	3,745	1,108	792	1,016	6,661	3,580	1,440	1,060	1,608	7,688	7,325	2,548	1,852	2,624	14,349
Tuberculosis	A15–A19	~	95	53	~	182	~	39	22	~	93	13	134	75	53	275
Septicaemia	A40–A41	95	95	250	801	1,241	57	131	233	740	1,161	152	226	483	1,541	2,402
Human immunodeficiency virus (HIV) disease	B20–B24	†	†	†	†	†	†	†	†	†	†	†	†	†	†	37
Neoplasms	C00–D48	2,847	7,449	20,701	33,069	64,066	3,182	14,629	22,172	25,029	65,012	6,029	22,078	42,873	58,098	129,078
Malignant neoplasms	C00–C96	2,224	3,960	14,951	24,414	45,549	2,426	4,754	14,852	18,375	40,407	4,650	8,714	29,803	42,789	85,956
Malignant neoplasm of colon, rectum and anus	C18–C21	~	~	1,674	2,581	4,452	~	~	1,215	1,432	2,860	~	~	2,889	4,013	7,312
Malignant neoplasm of trachea, bronchus and lung	C33–C34	0	61	1,031	2,092	3,184	~	82	987	1,734	2,803	0	143	2,018	3,826	5,987
Melanoma and other malignant neoplasms of skin	C43–C44	~	~	1,691	5,255	7,361	~	~	1,315	3,334	5,153	12	907	3,006	8,589	12,514
Malignant neoplasm of breast	C50	0	0	13	39	52	0	0	1,463	4,404	3,070	8,937	0	1,463	4,417	3,109
Malignant neoplasms of female genital organs	C51–C58	0	0	0	0	0	0	6	464	1,465	1,258	6	464	1,465	1,258	3,193
Malignant neoplasm of prostate	C61	15	13	1,554	2,651	4,233	0	0	0	0	0	15	13	1,554	2,651	4,233
Malignant neoplasm of bladder	C67	~	~	359	1,179	1,581	0	15	129	395	539	~	~	488	1,574	2,120
Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81–C96	1,292	1,677	3,874	5,212	12,055	1,311	965	2,407	3,681	8,364	2,603	2,642	6,281	8,893	20,419
In situ neoplasms	D00–D09	0	50	392	991	1,433	~	2,533	~	1,274	4,810	~	2,583	~	2,265	6,243
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10–D48	623	3,439	5,358	7,664	17,084	755	7,342	6,318	5,380	19,795	1,378	10,781	11,676	13,044	36,879
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	D50–D89	2,325	1,844	2,460	4,906	11,535	1,654	3,137	2,945	5,042	12,778	3,979	4,981	5,405	9,948	24,313
Endocrine, nutritional and metabolic diseases	E00–E89	1,466	6,889	11,178	7,487	27,020	1,620	4,113	5,451	5,623	16,807	3,086	11,002	16,629	13,110	43,827
Diabetes mellitus	E10–E14	263	1,104	2,457	2,837	6,661	282	856	1,066	1,944	4,148	545	1,960	3,523	4,781	10,809
Cystic fibrosis	E84	416	1,194	~	~	1,719	486	1,021	~	~	1,576	902	2,215	~	~	3,295
Mental and behavioural disorders	F00–F99	373	1,123	1,082	820	3,398	309	927	650	907	2,793	682	2,050	1,732	1,727	6,191
Mental and behavioural disorders due to alcohol	F10	24	595	724	174	1,517	24	257	283	80	644	48	852	1,007	254	2,161
Mental and behavioural disorders due to use of other psychoactive substance	F11–F19	~	135	24	~	168	~	84	7	~	101	~	219	31	~	269
Diseases of nervous system	G00–G99	1,660	4,327	5,089	4,435	15,511	1,362	7,193	5,710	4,676	18,941	3,022	11,520	10,799	9,111	34,452
Multiple sclerosis	G35	0	1,097	579	60	1,736	~	2,408	1,149	108	3,665	0	3,505	1,728	168	5,401
Epilepsy	G40, G41	654	839	515	353	2,361	598	743	325	272	1,938	1,252	1,582	840	625	4,299
Transient cerebral ischaemic attacks and related syndromes	G45	~	~	431	1,106	1,600	~	~	358	1,327	1,752	~	~	789	2,433	3,352
Diseases of the eye and adnexa	H00–H59	722	1,565	4,827	13,720	20,834	582	1,796	4,011	17,774	24,163	1,304	3,361	8,838	31,494	44,997
Diseases of the ear and mastoid process	H60–H95	2,301	1,325	1,020	791	5,437	1,589	1,300	1,088	877	4,854	3,890	2,625	2,108	1,668	10,291
Diseases of the circulatory system	I00–I99	664	3,627	15,107	24,056	43,454	596	3,599	7,933	17,848	29,976	1,260	7,226	23,040	41,904	73,430
Hypertensive diseases	I10–I15	32	277	527	329	1,165	15	263	428	609	1,315	47	540	955	938	2,480
Angina pectoris	I20	0	120	1,309	1,710	3,139	0	52	550	948	1,550	0	172	1,859	2,658	4,689
Acute myocardial infarction	I21–I22	0	295	1,946	2,498	4,739	0	57	535	1,494	2,086	0	352	2,481	3,992	6,825
Other ischaemic heart disease	I23–I25	0	257	3,525	4,293	8,075	~	~	1,185	1,963	3,208	~	~	~	~	11,283
Pulmonary heart disease and diseases of pulmonary circulation	I26–I28	~	~	306	405	829	~	~	222	542	957	~	~	~	528	1,786
Conduction disorders and cardiac arrhythmias	I44–I49	92	670	2,675	4,220	7,657	86	331	1,036	3,278	4,731	178	1,001	3,711	7,498	12,388
Heart failure	I50	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
Cerebrovascular disease	I60–I69	26	205	1,183	2,745	4,159	13	256	655	2,390	3,314	39	461	1,838	5,540	6,261
Atherosclerosis (non-coronary)	I70	0	24	421	929	1,374	0	18	149	486	653	0	42	570	1,415	2,027
Diseases of the respiratory system	J00–J99	10,140	5,872	7,480	17,724	41,216	7,554	7,273	7,946	17,302	40,075	17,694	13,145	15,426	35,026	81,291
Acute upper respiratory infections and influenza	J00–J11	3,299	870	300	250	4,719	2,388	1,302	400	274	4,364	5,687	2,172	700	524	9,083
Pneumonia	J12–J18	677	577	1,012	3,510	5,776	638	627	902	3,457	5,624	1,315	1,204	1,914	6,967	11,400
Chronic diseases of tonsils and adenoids	J35	1,585	456	39	11	2,091	1,354	1,058	53	19	2,484	2,939	1,514	92	30	4,575
Chronic obstructive pulmonary disease and bronchiectasis	J40–J44, J47	34	236	6,178	8,160	8,160	16	305	2,324	5,822	8,467	50	541	4,036	12,000	16,627
Asthma	J45–J46	1,159	603	917	378	3,057	647	1,167	1,147	672	3,633	1,806	1,770	2,064	1,050	6,690

TABLE 3.11 Total Discharges: Principal Diagnosis by Sex and Age Group (N) (contd.)

Principal Diagnosis	ICD-10-AM Code	Male					Female					Total Discharges				
		<15	15-44	45-64	≥65	Total	<15	15-44	45-64	≥65	Total	<15	15-44	45-64	≥65	Total
Diseases of the digestive system	K00-K93	6,200	24,525	25,920	21,815	78,460	4,885	27,413	26,143	21,530	79,971	11,085	51,938	52,063	43,345	158,431
Diseases of oesophagus, stomach and duodenum	K20-K31	643	5,621	7,401	6,074	19,739	530	6,114	7,853	6,123	20,620	1,173	11,735	15,254	12,197	40,359
Diseases of appendix	K35-K38	1,167	1,983	373	111	3,634	878	1,867	310	103	3,158	2,045	3,850	683	214	6,792
Inguinal hernia	K40	413	815	1,242	1,299	3,769	76	54	82	108	320	489	869	1,324	1,407	4,089
Noninfective enteritis and colitis	K50-K52	456	5,101	2,238	943	8,738	349	4,621	2,297	1,067	8,334	805	9,722	4,535	2,010	17,072
Alcoholic liver disease	K70	0	168	467	109	744	0	79	163	52	294	0	247	630	161	1,038
Cholelithiasis	K80	9	442	931	1,326	2,708	18	2,445	1,827	1,524	5,814	27	2,887	2,758	2,850	8,522
Diseases of the skin and subcutaneous tissue	L00-L99	1,830	12,291	9,567	7,848	31,536	1,445	11,876	8,176	7,640	29,137	3,275	24,167	17,743	15,488	60,673
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02-L03	452	1,107	1,228	1,343	4,130	351	715	726	1,540	3,332	803	1,822	1,954	2,883	7,462
Decubitus ulcer and pressure area	L89	0	29	35	43	107	0	7	24	50	81	0	36	59	93	188
Diseases of the musculoskeletal system and connective tissue	M00-M99	1,840	8,696	12,818	10,385	33,739	2,159	9,461	17,053	17,393	46,066	3,999	18,157	29,871	21,778	79,805
Rheumatoid arthritis	M05-M06	0	375	891	758	2,024	0	789	1,975	1,438	4,202	0	1,164	2,866	2,196	6,226
Coxarthrosis and Gonarthrosis	M16-M17	~	~	2,096	2,604	5,062	~	~	2,185	4,010	6,461	~	~	4,281	6,614	11,523
Intervertebral disc disorders	M50-M51	~	~	570	258	1,338	~	~	678	347	1,708	8	1,185	1,248	605	3,046
Dorsalgia (back pain)	M54	73	1,674	2,207	1,300	5,254	72	2,177	3,330	2,741	8,320	145	3,851	5,537	4,041	13,574
Diseases of the genitourinary system	N00-N99	3,700	4,766	6,523	9,876	24,865	2,088	22,497	15,531	10,635	50,751	5,788	27,263	22,054	20,511	75,616
Chronic kidney disease	N18	106	292	489	421	1,308	82	194	184	287	747	188	486	673	708	2,055
Urolithiasis	N20-N23	46	1,361	1,710	721	3,838	35	825	807	418	2,085	81	2,186	2,517	1,139	5,923
Hyperplasia of prostate	N40	0	46	1,013	2,166	3,225	0	0	0	0	0	0	46	1,013	2,166	3,225
Disorders of breast	N60-N64	~	92	29	~	142	~	1,540	1,499	~	3,390	21	1,632	1,528	351	3,532
Inflammatory diseases of female pelvic organs	N70-N77	0	0	0	0	0	24	1,448	397	86	1,955	24	1,448	397	86	1,955
Noninflammatory disorders of female genital tract	N80-N98	0	0	0	0	0	194	14,801	8,808	2,622	26,425	194	14,801	8,808	2,622	26,425
Pregnancy, childbirth and the puerperium	O00-O99	0	0	0	0	0	14	120,339	504	0	120,857	14	120,339	504	0	120,857
Gestational [pregnancy induced] hypertension	O13	0	0	0	0	0	0	4,229	58	0	4,287	0	4,229	58	0	4,287
Diabetes mellitus in pregnancy	O24	0	0	0	0	0	0	1,883	21	0	1,904	0	1,883	21	0	1,904
Single spontaneous delivery	O80	0	0	0	0	0	~	31,486	~	0	31,520	~	31,486	~	0	31,520
Single delivery by forceps and vacuum extractor	O81	0	0	0	0	0	0	9,138	16	0	9,138	0	9,138	16	0	9,154
Single delivery by caesarean section	O82	0	0	0	0	0	~	17,086	~	0	17,196	~	17,086	~	0	17,196
Other assisted single delivery	O83	0	0	0	0	0	0	~	~	0	1,149	0	~	~	0	1,149
Multiple delivery	O84	0	0	0	0	0	0	983	10	0	993	0	983	10	0	993
Certain conditions originating in the perinatal period	P00-P96	~	~	~	~	~	~	~	~	~	~	~	~	~	~	~
Congenital malformations, deformations and chromosomal abnormalities	Q00-Q99	4,945	567	205	123	5,840	3,362	711	295	116	4,484	8,307	1,278	500	239	10,324
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	R00-R99	6,664	13,689	17,922	20,162	58,437	5,680	23,393	19,861	19,958	68,892	12,344	37,082	37,783	40,120	127,329
Pain in throat and chest	R07	118	3,040	5,008	3,192	11,358	96	2,695	4,371	3,110	10,272	214	5,735	9,379	6,302	21,630
Abdominal and pelvic pain	R10	993	2,222	1,769	6,113	6,113	1,267	6,878	3,123	1,489	12,757	2,260	9,100	4,892	2,618	18,870
Injury, poisoning and certain other consequences of external causes	S00-T98	6,971	12,921	6,249	6,613	32,754	4,970	6,303	5,301	9,790	26,364	11,941	19,224	11,550	16,403	59,118
Intracranial injury	S06	203	654	379	470	1,706	114	211	144	440	909	317	865	523	910	2,615
Other injuries to the head (including skull fracture)	S00-S05, S07-S09	2,076	2,366	606	760	5,808	1,432	654	331	920	3,337	3,508	3,020	937	1,680	9,145
Fracture of femur	S72	142	120	204	1,064	1,530	51	59	273	2,553	2,936	193	179	477	3,617	4,466
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36-T65	148	891	353	118	1,510	282	1,177	496	188	2,143	430	2,068	849	306	3,653
Factors influencing health status and contact with health services^a	U00-U49, Z00-Z99	7,584	28,790	77,391	133,141	246,906	6,586	51,969	89,999	91,726	240,280	14,170	80,759	167,390	224,867	487,186
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	2,663	6,616	34,900	59,429	103,608	2,631	16,673	59,537	43,812	122,653	5,294	23,289	94,437	103,241	226,261

Notes: ~ Denotes five or fewer discharges reported to HIPE.

† Denotes that no breakdown is provided.

* Further suppression required to prevent disclosure of five or fewer discharges.

a This category includes discharges in the code range U00-U49 'codes for special purposes'.

TABLE 3.12 In-Patient Discharges: Mean and Median Length of Stay (Days) by Principal Diagnosis, Sex and Age Group^a

Principal Diagnosis		ICD-10-AM Code		Male					Female					Total In-Patient Discharges				
		<15	15-44	45-64	≥65	Total	<15	15-44	45-64	≥65	Total	<15	15-44	45-64	≥65	Total		
Total In-Patient Discharges		Mean	3.5	3.9	6	9.6	6.5	3.4	2.9	5.4	9.9	5.2	3.5	3.1	5.7	9.7		
		Median	1	1	2	5	2	2	2	2	5	2	2	1	2	5		
Certain infectious and parasitic diseases		A00-B99	2.0	4.3	8.1	12.2	4.8	2.0	3.7	7.7	10.9	4.9	2.0	4.0	7.9	11.5		
Intestinal infectious diseases (including diarrhoea)		A00-A09	1.8	3.0	5.0	9.6	3.3	1.8	2.8	5.2	8.8	3.7	1.8	2	4	6		
		A15-A19	^	13.1	28.8	15.9	17.5	1.9	10.0	9.9	15.7	10.3	2.9	12.2	22.7	15.8		
Tuberculosis			^	7	14	11	10	1	9	9	12	8	1	8	13	11		
Septicaemia		A40-A41	5.5	10.8	12.9	15.4	13.9	5.0	8.9	13.1	16.2	14.3	5.3	9.7	13.0	15.8		
Human immunodeficiency virus [HIV] disease		B20-B24	†	†	†	†	†	†	†	†	†	†	†	†	†	†		
Neoplasms		C00-D48	4.8	8.6	10.2	11.9	10.7	4.9	5.9	8.3	10.9	8.8	4.8	6.9	9.2	11.4		
Malignant neoplasms		C00-C96	3	4	5	7	6	3	3	4	6	5	3	4	5	7		
Malignant neoplasm of colon, rectum and anus		C18-C21	^	8.4	10.0	14.2	12.6	^	7.9	10.4	14.6	12.7	^	8.1	10.2	14.3		
		C33-C34	-	10.6	10.3	11.4	11.1	-	8.4	10.0	12.1	11.3	-	9.4	10.1	11.7		
Melanoma and other malignant neoplasms of skin		C43-C44	^	9.2	7.0	7.3	7.3	^	3.5	4.3	5.9	5.3	^	6.1	6.0	6.8		
Malignant neoplasm of breast		C50	-	-	^	10.3	8.9	-	5.4	6.2	7.0	6.4	-	5.4	6.2	7.0		
Malignant neoplasms of female genital organs		C51-C58	-	-	-	-	6	-	3	3	3	3	-	3	3	3		
		C61	2.7	^	6.5	13.7	10.7	-	-	-	-	-	-	2.7	^	6.5		
Malignant neoplasm of bladder		C67	^	5.3	6.6	8.2	7.8	-	1.7	4.7	9.2	8.1	^	4.2	6.1	8.4		
Malignant neoplasms of lymphoid, haematopoietic and related tissue		C81-C96	5.4	14.0	12.2	11.8	11.7	6.7	13.4	14.4	13.5	12.8	6.1	13.8	13.1	12.5		
		D00-D09	-	2.3	3.4	4.2	3.9	-	3.5	4.1	5.2	4.3	-	3.3	4.0	4.7		
Benign neoplasms and neoplasms of uncertain or unknown behaviour		D10-D48	3.6	5.9	5.7	6.9	6.2	3.3	3.5	5.0	6.2	4.7	3.4	3.9	5.2	6.6		
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism		D50-D89	3.4	4.8	6.6	6.4	5.7	3.8	3.6	5.0	6.3	5.2	3.6	4.1	5.7	6.3		
		E00-E89	4.5	7.7	8.4	9.7	8.1	4.6	6.1	6.2	9.0	7.0	4.5	6.8	7.3	9.3	7.5	
Diabetes mellitus		E10-E14	4.0	5.1	9.3	11.9	8.6	3.9	4.3	8.5	11.0	7.4	3.9	4.7	9.0	11.5		
Cystic fibrosis		E84	8.6	14.4	23.2	^	13.3	8.5	13.6	21.1	^	12.6	8.5	14.0	22.1	^		
Mental and behavioural disorders		F00-F99	4.2	5.3	9.1	22.1	10.7	7.3	9.3	12.8	22.4	14.2	6.0	7.1	10.5	22.3		
Mental and behavioural disorders due to alcohol		F10	1.0	3.0	5.8	12.7	5.4	1.2	3.4	9.0	15.5	7.3	1.1	3.2	6.7	13.6		
Mental and behavioural disorders due to use of other psychoactive substance		F11-F19	^	9.5	14.0	9.7	10.1	^	12.8	9.9	4.4	11.7	^	10.7	13.0	7.1		
			^	4	6	8	5	^	11	10	3	7	^	6	6	5	6	

TABLE 3.12 In-Patient Discharges: Mean and Median Length of Stay (Days) by Principal Diagnosis, Sex and Age Group^a (contd.)

Principal Diagnosis	ICD-10-AM Code	Male					Female					Total In-Patient Discharges				
		<15	15-44	45-64	≥65	Total	<15	15-44	45-64	≥65	Total	<15	15-44	45-64	≥65	Total
Diseases of nervous system	G00-G99	4.6	3.7	6.0	9.7	6.4	4.0	3.6	5.7	8.8	5.7	4.3	3.7	5.9	9.3	6.0
		1	1	1	3	2	2	1	1	3	2	2	1	1	3	2
Multiple sclerosis	G35	-	8.7	12.0	7.7	9.9	-	7.2	9.2	13.7	8.5	-	7.6	10	11.6	8.9
		-	4	4	4	5	-	4	4	5	4	-	4	5	4	4
Epilepsy	G40, G41	4.9	3.3	5.7	9.0	5.2	3.7	3.9	6.0	9.5	5.1	4.4	3.6	5.8	9.2	5.2
		2	2	3	4	4	2	2	3	4	2	2	2	3	4	2
Transient cerebral ischaemic attacks and related syndromes	G45	^	3.1	3.4	5.1	4.6	^	3.3	3.4	5.5	5.0	^	3.2	3.4	5.3	4.8
		^	2	2	3	3	^	3	3	2	3	^	2	2	3	3
Diseases of the eye and adnexa	H00-H59	2.8	3.0	2.8	3.6	3.2	2.3	2.6	2.8	3.2	2.9	2.6	2.8	2.8	3.4	3.0
		1	2	2	2	2	1	1	2	2	1	1	1	2	2	2
Diseases of the ear and mastoid process	H60-H95	1.5	2.1	2.7	3.9	2.3	1.7	2.1	2.4	3.0	2.3	1.6	2.1	2.5	3.4	2.3
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Diseases of the circulatory system	I00-I99	4.0	5.2	5.9	9.4	7.8	3.3	5.3	6.4	9.8	8.6	3.6	5.2	6.1	9.6	8.1
		1	2	3	4	3	1	2	2	5	4	1	2	3	5	4
Hypertensive diseases	I10-I15	2.6	2.3	2.2	3.9	2.7	2.5	2.1	2.5	3.6	3.0	2.6	2.2	2.3	3.7	2.8
		2	1	1	1	1	2	1	1	1	1	2	1	1	1	1
Angina pectoris	I20	-	2.8	3.8	5.0	4.4	-	2.9	3.4	4.4	4.0	-	2.8	3.7	4.8	4.3
		-	1	2	2	2	-	1	2	2	2	-	1	2	2	2
Acute myocardial infarction	I21-I22	-	4.7	5.2	7.6	6.4	-	5.5	5.0	9.0	7.9	-	4.9	5.2	8.1	6.9
		-	3	3	4	4	-	3	3	5	4	-	3	3	5	4
Other ischaemic heart disease	I23-I25	-	3.5	4.6	6.0	5.3	-	4.1	3.5	4.6	4.2	-	3.6	4.4	5.6	5.0
		-	1	1	2	2	-	2	1	2	2	-	1	1	2	2
Pulmonary heart disease and diseases of pulmonary circulation	I26-I28	^	5.8	7.1	8.8	7.8	^	6.2	7.8	10.5	9.0	^	6.1	7.4	9.8	8.4
		^	4	5	6	6	^	5	5	7	6	^	4	5	7	6
Conduction disorders and cardiac arrhythmias	I44-I49	2.5	2.4	3.3	4.9	4.1	2.8	2.3	3.3	5.2	4.6	2.6	2.4	3.3	5.0	4.3
		1	1	1	2	2	2	1	2	3	2	1	1	1	2	2
Heart failure	I50	68.9	9.6	8.9	10.5	10.5	^	9.2	9.8	11.1	11.0	54.7	9.5	9.2	10.8	10.7
		27	7	6	6	6	^	3	5	7	7	9	6	6	7	6
Cerebrovascular disease	I60-I69	13.6	14.6	12.8	19.6	17.4	7.2	11.7	15.9	20.2	18.7	11.9	13.0	13.8	19.9	18.0
		4	8	7	9	8	8	7	7	10	9	5	7	7	9	8
Atherosclerosis (non-coronary)	I70	-	24.2	12.6	14.5	14.1	-	6.1	14.0	14.4	14.2	-	18.5	13.0	14.5	14.1
		-	6	6	8	8	-	4	6	7	7	-	5	6	8	7
Diseases of the respiratory system	J00-J99	2.5	3.4	6.5	10.0	6.6	2.4	2.7	6	10	6.5	2.4	3.0	6.2	10	6.6
		1	1	3	6	3	1	1	3	6	3	1	1	3	6	3
Acute upper respiratory infections and influenza	J00-J11	1.8	2.0	3.8	6.9	2.2	1.8	1.9	2.7	5.7	2.1	1.8	1.9	3.1	6.3	2.1
		1	1	1	3	1	1	1	1	3	1	1	1	1	3	1
Pneumonia	J12-J18	4.4	5.9	8.6	13.3	10.7	3.6	4.9	8.2	12.6	10.0	4.0	5.4	8.5	12.9	10.4
		2	4	5	7	6	3	3	5	8	6	3	3	5	7	6
Chronic diseases of tonsils and adenoids	J35	1.2	1.3	1.5	^	1.2	1.1	1.2	1.4	1.3	1.2	1.2	1.3	1.4	3.3	1.2
		1	1	1	^	1	1	1	1	1	1	1	1	1	1	1
Chronic obstructive pulmonary disease and bronchiectasis	J40-J44, J47	6.0	5.1	6.4	8.2	7.8	2.8	3.8	6.4	9.1	8.2	4.9	4.3	6.4	8.6	8.0
		7	3	4	5	5	2	2	4	6	5	3	2	4	6	5
Asthma	J45-J46	1.9	3.1	3.7	5.9	2.7	2.0	2.7	3.9	5.8	3.3	1.9	2.8	3.8	5.8	3.0
		1	1	2	3	1	2	1	3	4	2	1	1	2	3	2
Diseases of the digestive system	K00-K93	3.0	4.5	5.7	7.9	5.7	2.9	3.7	5.6	8.7	5.7	3.0	4.1	5.6	8.3	5.7
		2	2	3	4	3	2	2	3	5	3	2	2	3	4	3
Diseases of oesophagus, stomach and duodenum	K20-K31	2.5	4.7	4.0	6.8	5.0	2.5	2.9	3.9	6.7	4.5	2.5	3.8	3.9	6.8	4.7
		1	1	2	4	2	1	1	2	3	2	1	1	2	3	2
Diseases of appendix	K35-K38	3.1	3.0	4.4	7.3	3.3	3.4	2.9	4.3	12.4	3.5	3.2	3.0	4.3	9.7	3.4
		2	2	3	5	2	3	2	3	6	3	3	2	3	6	2

TABLE 3.12 In-Patient Discharges: Mean and Median Length of Stay (Days) by Principal Diagnosis, Sex and Age Group^a (contd.)

Principal Diagnosis	ICD-10-AM Code	Male					Female					Total In-Patient Discharges				
		< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total
Inguinal hernia	K40	1.6	1.6	1.7	3.5	2.5	1.3	1.4	4.2	3.9	3.4	1.6	1.6	1.9	3.5	2.6
Noninfective enteritis and colitis	K50-K52	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Alcoholic liver disease	K70	3.4	6.4	8.9	9.9	7.6	4.5	6.3	7.4	9.8	7.4	4.0	6.4	8.1	9.8	7.5
Cholelithiasis	K80	2	5	6	5	5	2	5	5	5	5	2	5	5	5	5
		-	11.0	12.4	19.7	13.0	-	11.8	17.7	19.9	16.4	-	11.3	13.8	19.8	14.0
		-	7	7	13	7	-	6	10	11	10	-	6	7	13	8
		2.6	3.6	4.2	7.5	5.7	4.1	3.0	3.8	6.9	4.3	3.6	3.1	3.9	7.2	4.8
Diseases of the skin and subcutaneous tissue	L00-L199	2	2	3	5	3	3	2	2	4	2	2	2	2	2	3
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02-L103	2.6	3.4	7.4	10.1	6.3	2.8	3.1	5.9	10.5	6.6	2.7	3.3	6.8	10.3	6.4
		2	2	3	5	3	2	2	2	5	3	2	2	3	5	3
		2.8	3.8	5.5	9.1	6.0	3.2	3.4	6.0	10.2	7.1	3.0	3.7	5.7	9.7	6.5
Decubitus ulcer and pressure area	L89	2	2	4	5	3	2	2	4	5	4	2	2	4	5	3
		-	13.0	62.7	31.8	37.8	-	28.4	23.4	34.5	31.4	-	16.5	49.9	33.3	35.1
		-	7	42	13	13	-	20	8	16	15	-	7	17	14	14
Rheumatoid arthritis	M05-M06	1	1	2	4	2	2	1	2	4	2	2	2	1	2	4
Coxarthrosis and Gonarthrosis	M16-M17	-	7.7	4.5	7.0	6.2	-	3.2	8.2	5.7	6.2	-	4.8	6.9	6.1	6.2
		-	4	3	4	4	-	2	3	4	3	-	3	3	4	4
		^	3.5	4.3	6.0	5.2	^	3.8	4.6	6.2	5.6	^	3.6	4.4	6.1	5.4
Intervertebral disc disorders	M50-M51	^	3	4	5	4	^	4	4	5	5	^	^	^	4	4
		^	3.3	4.8	15.8	6.2	^	5.3	4.6	9.8	5.8	^	4.4	4.7	12.7	6.0
		^	2	2	4	2	^	2	2	5	3	^	2	2	4	3
		1	1	1	2	1	1	1	1	3	1	1	1	1	1	1
Chronic kidney disease	N18	2	2	3	5	3	2	2	3	5	3	2	2	3	5	3
		3.6	5.8	7.5	10.4	7.8	4.0	6.8	10.0	11.8	9.4	3.7	6.2	8.3	11.0	8.4
Urolithiasis	N20-N23	3	5	4	5	4	2	5	5	7	5	2	5	5	5	4
		3.8	2.2	2.7	4.5	2.8	3.2	2.7	3.1	4.8	3.2	3.5	2.4	2.8	4.6	2.9
Hyperplasia of prostate	N40	3	2	2	2	2	2	2	2	3	2	2	2	2	3	2
		-	^	4.3	4.2	4.2	-	-	-	-	-	-	^	4.3	4.2	4.2
		-	^	3	3	3	-	-	-	-	-	-	^	^	3	3
		^	2	1	^	1	1	1	1	1	1	1	1	1	1	1
		-	-	-	-	-	1	2	2	3	2	1	2	2	3	2
		-	-	-	-	-	2	2	1	3	2	2	2	1	3	2
		-	-	-	-	-	2	2	3	-	2	2	2	3	-	2
		-	-	-	-	-	-	1	1	-	1	-	1	1	-	1
		-	-	-	-	-	-	1	^	-	2	-	1	^	-	2
		-	-	-	-	-	^	2	3	-	2	^	2	3	-	2
		-	-	-	-	-	-	3	3	-	3	-	3	3	-	3
		-	-	-	-	-	^	4	5	-	4	^	4	5	-	4
		-	-	-	-	-	-	3	^	-	3	-	3	^	-	3

TABLE 3.12 In-Patient Discharges: Mean and Median Length of Stay (Days) by Principal Diagnosis, Sex and Age Group^a (contd.)

Principal Diagnosis	ICD-10-AM Code	Male				Female				Total In-Patient Discharges						
		<15	15-44	45-64	≥65	Total	<15	15-44	45-64	≥65	Total	<15	15-44	45-64	≥65	Total
Multiple delivery	O84	-	-	-	-	-	-	5.5	8.9	-	5.6	-	5.5	8.9	-	5.6
Certain conditions originating in the perinatal period	P00-P96	†	†	†	†	8.9	†	†	†	†	9.1	†	†	†	†	9.0
	Q00-Q99	8.8	5.2	8.4	12.9	8.5	6.4	5.7	6.7	8.8	6.4	7.8	5.5	7.5	10.8	7.6
Congenital malformations, deformations and chromosomal abnormalities	R00-R99	2	2	3	5	2	2	2	3	4	2	2	2	3	4	2
		1.9	2.0	2.7	5.3	3.3	2.0	2.0	2.6	5.3	3.2	1.9	2.0	2.7	5.3	3.3
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified		1	1	1	2	1	1	1	1	2	1	1	1	1	2	1
Pain in throat and chest	R07	1.3	1.4	1.7	2.5	1.8	1.5	1.3	1.7	2.5	1.8	1.4	1.3	1.7	2.5	1.8
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Abdominal and pelvic pain	R10	1.4	1.9	3.0	3.7	2.4	1.6	2.0	2.8	3.4	2.2	1.5	2.0	2.9	3.5	2.3
		1	1	1	2	1	1	1	2	2	1	1	1	1	2	1
Injury, poisoning and certain other consequences of external causes	S00-T98	1.6	3.1	6.2	13.1	5.6	1.7	2.9	5.3	12.8	7.0	1.6	3.1	5.8	12.9	6.2
		1	1	2	6	1	1	1	1	2	7	2	1	1	2	6
Intracranial injury	S06	2.0	5.9	9.7	18.0	9.6	2.7	4.2	9.2	14.2	9.6	2.2	5.5	9.6	16.1	9.6
		1	1	2	6	2	1	1	3	6	3	1	1	2	6	2
Other injuries to the head (including skull fracture)	S00-S05, S07-S09	1.3	2.5	5.3	7.6	3.1	1.2	1.8	2.4	8.2	3.6	1.2	2.4	4.3	7.9	3.3
		1	1	1	2	1	1	1	1	2	1	1	1	1	2	1
Fracture of femur	S72	3.5	8.1	15.0	21.7	18.1	4.0	8.4	14.1	18.1	17.3	3.6	8.2	14.4	19.2	17.6
		2	5	9	13	11	2	6	8	12	11	2	5	8	12	11
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36-T65	1.5	3.0	4.8	9.2	3.7	1.7	2.4	4.2	14.5	3.8	1.6	2.7	4.4	12.5	3.8
		1	1	2	3	1	1	1	2	4	1	1	1	2	4	1
Factors influencing health status and contact with health services ^b	U00-U49, Z00-Z99	3.0	18.1	16.5	20.7	15.3	3.1	2.4	12.3	24.8	9.5	3.1	3.8	14.5	22.9	11.5
		2	2	4	10	4	2	1	4	15	1	2	1	4	13	2
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	15.8	5.0	10.2	22.6	19.4	12.7	3.9	8.9	23.9	20.7	14.8	4.3	9.6	23.3	20.1
		14	2	4	13	10	11	2	4	16	14	14	2	4	15	12

Notes: ^ Denotes that length of stay calculation was based on five or fewer discharges.

- Length of stay cannot be calculated as no in-patients are reported.

† Denotes that no breakdown is provided.

a Includes length of stay for total in-patients (includes same-day and overnight in-patients). Excludes day patients.

b This category includes discharges in the code range U00-U49 'codes for special purposes'.

TABLE 3.13 Total Discharges: All-Listed Diagnoses by Sex and Age Group (N)

Diagnosis	ICD-10-AM Code			Male			Female			Total Discharges					
	< 15	15–44	45–64	>65	Total	< 15	15–44	45–64	>65	Total	< 15	15–44	45–64	>65	Total
Total Discharges	73,977	143,202	227,364	319,301	763,844	59,661	321,001	242,781	276,779	900,222	133,638	464,203	470,145	596,080	1,664,066
All Conditions	173,130	327,360	584,522	982,213	2,067,225	138,416	815,959	593,031	841,353	2,388,759	311,546	1,143,319	1,177,553	1,823,566	4,455,984
Certain infectious and parasitic diseases	9,599	8,902	9,047	14,323	41,871	8,549	13,403	8,071	17,102	47,125	18,148	22,305	17,118	31,425	88,996
Intestinal infectious diseases (including diarrhoea)	4,417	1,882	1,793	3,048	11,140	4,183	3,649	2,321	4,323	14,476	8,600	5,531	4,114	7,371	25,616
A00–A09															
A15–A19	~	111	76	*	245	*	68	33	*	155	14	179	109	98	400
Septicaemia	175	408	973	3,031	4,587	127	498	868	2,583	4,076	302	906	1,841	5,614	8,663
A40–A41	†	†	†	†	†	†	†	†	†	†	†	†	†	†	994
B20–B24															
Human immunodeficiency virus [HIV] disease	6,530	20,446	86,871	141,070	254,917	7,224	47,895	139,617	114,260	308,996	13,754	68,341	226,488	255,330	563,913
Neoplasms															
C00–D48	5,701	15,951	77,972	125,200	224,824	6,245	34,781	125,603	101,748	268,377	11,946	50,732	203,575	226,948	493,201
Malignant neoplasms															
Malignant neoplasm of colon, rectum and anus	~	*	8,346	12,997	22,428	~	*	6,702	14,070	36,498	~	*	15,048	19,378	36,498
C18–C21	~	322	4,793	8,463	13,578	0	381	4,822	7,012	12,215	0	703	9,615	15,475	25,793
Malignant neoplasm of trachea, bronchus and lung															
C33–C34															
Melanoma and other malignant neoplasms of skin	*	*	2,688	8,322	11,870	~	*	1,934	5,254	8,121	15	1,778	4,622	13,576	19,991
C43–C44															
C50	0	10	84	315	409	0	12,220	40,791	21,513	74,524	0	12,230	40,875	21,828	74,933
Malignant neoplasm of breast															
C51–C58	0	0	0	0	0	6	2,593	9,027	18,143	6,517	6	2,593	9,027	6,517	18,143
Malignant neoplasms of female genital organs															
G61	20	19	10,580	28,827	39,446	0	0	0	0	0	20	19	10,580	28,827	39,446
Malignant neoplasm of prostate															
C67	~	*	895	2,873	3,832	0	16	297	874	1,187	~	*	1,192	3,747	5,019
Malignant neoplasm of bladder															
C81–C96	3,291	3,970	9,485	15,033	31,779	3,098	2,709	6,409	11,106	23,322	6,389	6,679	15,894	26,139	55,101
Malignant neoplasms of lymphoid, haematopoietic and related tissue															
D00–D09	0	107	514	1,625	2,246	~	*	4,652	3,269	11,617	~	*	5,166	4,894	13,863
In situ neoplasms															
D10–D48	829	4,388	8,385	14,245	27,847	978	9,419	9,362	9,243	29,002	1,807	13,807	17,747	23,488	56,849
Benign neoplasms and neoplasms of uncertain or unknown behaviour															
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	3,711	4,362	6,668	15,842	30,583	3,050	9,848	7,120	15,211	35,229	6,761	14,210	13,788	31,053	65,812
D50–D89															
E00–E89	4,982	13,835	39,498	67,732	126,047	5,033	14,105	24,188	52,919	96,245	10,015	27,940	63,686	120,651	222,292
Endocrine, nutritional and metabolic diseases															
E10–E14	437	4,357	20,600	43,391	68,785	514	4,248	11,317	26,507	42,586	951	8,605	31,917	69,898	111,371
Diabetes mellitus															
E84	511	1,625	*	~	2,283	576	1,410	*	~	2,072	1,087	3,035	227	6	4,355
Cystic fibrosis															
F00–F99	1,971	8,438	9,262	12,818	32,489	1,324	7,031	6,160	14,068	28,583	3,295	15,469	15,422	26,886	61,072
Mental and behavioural disorders															
F10	30	3,422	5,219	2,875	11,546	27	1,346	1,994	930	4,297	57	4,768	7,213	3,805	15,843
Mental and behavioural disorders due to alcohol															
F11–F19	13	2,092	535	81	2,721	14	1,375	191	66	1,646	27	3,467	726	147	4,367
Mental and behavioural disorders due to use of other psychoactive substance															
G00–G99	4,577	7,629	10,076	14,039	36,321	3,455	10,749	9,554	12,832	36,590	8,032	18,378	19,630	26,871	72,911
Diseases of nervous system															
G35	~	1,197	948	*	2,451	0	2,651	1,732	424	4,807	~	3,848	2,680	*	7,258
Multiple sclerosis															
G40, G41	1,311	1,651	1,152	1,095	5,209	1,214	1,565	857	983	4,619	2,525	3,216	2,009	2,078	9,828
Epilepsy															
G45	~	*	481	1,307	1,856	~	*	397	1,508	1,995	~	*	878	2,815	3,851
Transient cerebral ischaemic attacks and related syndromes															
H00–H59	1,548	2,870	7,593	20,075	32,086	1,184	3,394	6,098	24,968	35,644	2,732	6,264	13,691	45,043	67,730
Diseases of the eye and adnexa															
H60–H95	3,437	1,764	1,437	1,443	8,081	2,403	1,767	1,501	1,534	7,205	5,840	3,531	2,938	2,977	15,286
Diseases of the ear and mastoid process															
I00–I99	1,697	9,924	45,847	110,352	167,820	1,622	9,002	23,000	84,531	118,155	3,319	18,926	68,847	194,883	285,975
Diseases of the circulatory system															
I10–I15	156	3,010	12,298	26,261	41,725	335	2,901	7,392	23,989	34,617	491	5,911	19,690	50,250	76,342
Hypertensive diseases															
I16–I20	~	*	1,729	2,626	4,501	0	65	698	1,587	2,350	~	*	2,427	4,213	6,851
Angina pectoris															
I21–I22	~	*	2,349	3,485	6,175	0	71	682	2,287	3,040	~	*	3,031	5,772	9,215
Acute myocardial infarction															
I23–I25	~	*	9,484	17,662	27,925	~	*	2,849	8,435	11,619	~	*	12,333	26,097	39,544
Other ischaemic heart disease															
I26–I28	46	242	596	1,317	2,201	63	353	520	1,602	2,538	109	595	1,116	2,919	4,739
Pulmonary heart disease and diseases of pulmonary circulation															
I44–I49	222	1,534	6,544	24,454	32,754	154	731	2,590	17,987	21,462	376	2,265	9,134	42,441	54,216
Conduction disorders and cardiac arrhythmias															
I50	34	148	1,644	11,034	12,860	29	84	700	9,098	9,911	63	232	2,344	20,132	22,771
Heart failure															
I60–I69	129	526	2,373	5,756	8,884	54	439	1,330	5,205	7,028	183	965	3,803	10,961	15,912
Cerebrovascular disease															
I70	~	*	996	2,477	3,648	~	*	345	1,189	1,569	~	*	1,341	3,666	5,217
Atherosclerosis (non-coronary)															
Diseases of the respiratory system															
J00–J99	13,853	10,367	16,855	43,766	84,841	10,190	12,824	15,855	40,814	79,683	24,043	23,191	32,710	84,580	164,524
Acute upper respiratory infections and influenza															
J00–J11	4,361	1,135	4,995	542	6,453	3,184	2,086	623	591	6,484	7,545	3,221	1,118	1,133	13,017
Pneumonia															
J12–J18	852	1,296	1,905	6,605	10,658	775	1,244	1,583	6,330	9,932	1,627	2,540	3,488	12,935	20,590
Chronic diseases of tonsils and adenoids															
J35	2,154	498	48	14	2,714	1,788	1,106	62	20	2,976	3,942	1,604	110	34	5,690
Chronic obstructive pulmonary disease and bronchiectasis															
J40–J44, J47	96	491	3,865	13,409	17,861	81	586	4,279	11,792	16,738	177	1,077	8,144	25,201	34,599
Asthma															
J45–J46	1,619	1,237	1,527	5,495	929	2,548	2,548	1,958	1,679	7,114	2,548	3,785	3,485	2,791	12,609
Diseases of the digestive system															
K00–K93	8,191	39,4													

TABLE 3.13 Total Discharges: All-Listed Diagnoses by Sex and Age Group (N) (contd.)

Diagnosis	ICD-10-AM Code	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Diseases of oesophagus, stomach and duodenum	K20–K31	1,146	11,373	17,021	15,820	45,360	858	11,292	16,463	15,397	44,010	2,004	22,665	33,484	31,217	89,370
Diseases of appendix	K35–K38	1,195	2,025	394	134	3,748	906	1,953	332	131	3,322	2,101	3,978	726	265	7,070
Inguinal hernia	K40	520	837	1,280	1,552	4,189	84	62	92	132	370	604	899	1,372	1,684	4,559
Noninfective enteritis and colitis	K50–K52	506	6,008	3,057	1,658	11,229	393	5,861	3,377	1,956	11,587	899	11,869	6,434	3,614	22,816
Alcoholic liver disease	K70	0	470	1,579	591	2,640	0	264	598	211	1,073	0	734	2,177	802	3,713
Cholelithiasis	K80	14	499	1,178	1,917	3,608	25	2,782	2,194	1,281	7,132	39	3,281	3,309	4,111	10,740
Diseases of the skin and subcutaneous tissue	L00–L99	2,747	14,013	12,439	14,205	43,404	2,112	14,161	10,623	13,851	40,747	4,859	28,174	33,062	28,056	84,151
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02–L03	643	1,655	2,097	2,964	7,359	468	1,127	1,257	3,244	6,096	1,111	2,782	3,354	6,208	13,455
Decubitus ulcer and pressure area	L89	8	125	227	923	1,283	13	56	174	999	1,242	21	181	401	1,922	2,525
Diseases of the musculoskeletal system and connective tissue	M00–M99	2,817	11,784	18,744	19,694	53,039	3,140	16,126	23,558	32,030	74,854	5,957	27,910	42,302	51,724	127,893
Rheumatoid arthritis	M05–M06	0	542	1,113	1,140	2,795	6	1,086	2,422	2,347	5,861	6	1,628	3,535	3,487	8,656
Coxarthrosis and Gonarthrosis	M16–M17	~	*	2,410	3,385	6,229	~	*	2,474	5,301	8,077	~	*	4,884	8,686	14,306
Intervertebral disc disorders	M50–M51	9	612	827	642	2,090	13	896	978	873	2,760	22	1,508	1,805	1,515	4,850
Dorsalgia (back pain)	M54	122	2,023	2,758	2,082	6,985	124	4,387	4,120	3,890	12,521	246	6,410	6,878	5,972	19,506
Diseases of the genitourinary system	N00–N99	5,646	15,555	34,772	77,700	133,673	3,970	40,835	38,256	57,533	140,594	9,616	56,390	73,028	135,233	274,267
Chronic kidney disease	N18	452	8,083	22,966	48,413	79,914	602	6,451	13,206	29,365	49,624	1,054	14,534	36,172	77,778	129,538
Urolithiasis	N20–N23	76	1,552	2,015	1,126	4,769	43	1,021	966	597	2,627	119	2,573	2,981	1,723	7,396
Hypertrophy of prostate	N40	0	64	1,549	5,379	6,992	0	0	0	0	0	0	64	1,549	5,379	6,992
Disorders of breast	N60–N64	14	112	41	42	209	19	2,038	2,050	651	4,758	33	2,150	2,091	693	4,967
Inflammatory diseases of female pelvic organs	N70–N77	0	0	0	0	0	55	3,009	862	352	4,278	55	3,009	862	352	4,278
Noninflammatory disorders of female genital tract	N80–N98	0	0	0	0	0	305	21,364	13,066	4,584	39,319	305	21,364	13,066	4,584	39,319
Pregnancy, childbirth and the puerperium	O00–O99	0	0	0	0	0	30	266,490	1,189	0	267,709	30	266,490	1,189	0	267,709
Gestational [pregnancy induced] hypertension	O13	0	0	0	0	0	0	6,203	71	0	6,274	0	6,203	71	0	6,274
Diabetes mellitus in pregnancy	O24	0	0	0	0	0	0	7,905	67	0	7,972	0	7,905	67	0	7,972
Single spontaneous delivery	O80	0	0	0	0	0	~	32,943	*	0	32,980	~	32,943	*	0	32,980
Single delivery by forceps and vacuum extractor	O81	0	0	0	0	0	0	9,610	17	0	9,627	0	9,610	17	0	9,627
Single delivery by caesarean section	O82	0	0	0	0	0	~	18,875	*	0	18,997	~	18,875	*	0	18,997
Other assisted single delivery	O83	0	0	0	0	0	0	*	~	0	1,259	0	*	~	0	1,259
Multiple delivery	O84	0	0	0	0	0	0	1,211	17	0	1,228	0	1,211	17	0	1,228
Certain conditions originating in the perinatal period	P00–P96	†	†	†	†	15,711	†	†	†	†	12,445	†	†	†	†	28,156
Congenital malformations, deformations and chromosomal abnormalities	Q00–Q99	15,236	2,579	1,073	970	19,858	11,467	2,451	2,242	1,006	17,166	26,703	5,030	3,315	1,976	37,024
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	R00–R99	14,886	25,295	35,583	58,384	134,148	11,856	53,177	36,522	56,849	158,404	26,742	78,472	72,105	115,233	292,552
Pain in throat and chest	R07	186	3,607	5,932	4,248	13,973	159	3,943	5,222	4,173	13,497	345	7,550	11,154	8,421	27,470
Abdominal and pelvic pain	R10	1,223	3,057	2,545	1,955	8,780	1,523	15,465	4,414	2,583	23,985	2,746	18,522	6,959	4,538	32,765
Injury, poisoning and certain other consequences of external causes	S00–T98	8,917	22,470	12,776	14,064	58,227	6,418	11,019	9,439	18,317	45,193	15,335	33,489	22,215	32,381	103,420
Intracranial injury	S06	297	1,304	784	849	3,234	164	538	303	773	1,778	461	1,842	1,087	1,622	5,012
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	2,459	4,112	1,538	1,909	10,018	1,699	1,066	740	2,204	5,709	4,158	5,178	2,278	4,113	15,727
Fracture of femur	S72	164	170	281	1,421	2,036	57	80	400	3,311	3,848	221	250	681	4,732	5,884
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36–T65	195	1,657	704	276	2,832	388	2,105	1,004	376	3,873	583	3,762	1,708	652	6,705
External causes of morbidity and mortality	U50–Y98	22,622	44,585	25,946	35,535	128,688	15,755	25,684	21,786	46,843	110,068	38,377	70,269	47,732	82,378	238,756
Transport accidents	V01–V99	569	1,723	795	371	3,458	365	991	403	303	2,062	934	2,714	1,198	674	5,520
Factors influencing health status and contact with health services ^a	U00–U49, Z00–Z99	24,453	63,100	157,376	266,829	511,758	20,434	211,861	157,846	184,863	575,004	44,887	274,961	315,222	451,692	1,086,762
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	2,750	6,965	37,169	65,447	112,331	2,740	17,203	61,871	49,149	130,963	5,490	24,168	99,040	114,596	243,294

Notes: ~ Denotes five or fewer discharges reported to HIPE. † Denotes that no breakdown is provided. * Further suppression required to prevent disclosure of five or fewer discharges. a This category includes discharges in the code range U00–U49 'codes for special purposes'.

3.4.4 Total Discharges by Principal Procedure, Sex and Age Group

In 2015, 79.3 per cent of total discharges had a principal procedure recorded (see Table 3.4). Discussion of procedures is confined to ACHI chapter level.

Table 3.14 provides a breakdown of principal procedure by sex and age group.

- Procedures from the chapter *Non-invasive, cognitive and other interventions, not elsewhere classified* accounted for 25.0 per cent of total discharges with a principal procedure reported. Over 36 per cent of discharges aged less than 15 years, 18.2 per cent aged between 15–44 years, 24.1 per cent aged between 45–64 years and 28.4 per cent aged 65 years and over had a procedure from this chapter recorded as a principal procedure.
- The chapter *Non-invasive, cognitive and other interventions, not elsewhere classified* accounted for 24.4 per cent of all principal procedures for male discharges and 25.4 per cent of all principal procedures for female discharges.
- Over 64 per cent of total discharges with a principal procedure from the chapter *Procedures on cardiovascular system* were male discharges.
- Over 74 per cent of total discharges with a principal procedure from the chapter *Procedures on endocrine system* were female discharges.
- Over 69 per cent of total discharges with a principal procedure from the chapter *Procedures on eye and adnexa* were aged 65 years and over.

3.4.5 In-Patient Mean and Median Length of Stay by Principal Procedure, Sex and Age Group

Table 3.15 presents the in-patient mean and median length of stay for principal procedure by sex and age group. The analysis presented here includes total in-patient (sameday and overnight) discharges,³¹ and excludes day patients. These measures include pre-operative and post-operative length of stay. It should also be noted that this analysis by length of stay does not take into account the status of the patient on discharge. For example, a patient may be transferred to another facility on discharge. Care must be taken, therefore, in interpreting the data on length of stay presented in Table 3.15, in the absence of information on discharge destination.³²

- At chapter level, *Procedures on respiratory system* and *Radiation oncology procedures* reported the longest in-patient mean length of stay at 17.4 days. It should be noted that the majority of discharges with *Radiation oncology*

³¹ This differs from previous reports where the analysis was limited to the mean length of stay for acute in-patients (length of stay of 30 days or less). Median length of stay is also provided alongside the mean length of stay.

³² See Section Two for details of discharge destination.

procedures recorded as a principal procedure were day patients³³ and are therefore not included in Table 3.15.

- The longest in-patient mean length of stay for those aged less than 15 years was reported for the chapter *Procedures on respiratory system* at 20.0 days.
- The shortest acute in-patient mean length of stay was reported for the chapters *Procedures on ear and mastoid process* and *Procedures on nose, mouth and pharynx* at 2.5 days each for total discharges; when analysed by age group the mean length of stay for both chapters increased as discharges got older.

3.4.6 All-Listed Procedures by Sex and Age Group

Table 3.16 provides details of all-listed procedures reported by sex and age group for total discharges. As one principal procedure and up to 19 secondary procedures may be collected as applicable per discharge, the total number of procedures will not equal the number of total discharges.

- Almost 2.4 million procedures were reported for total discharges.
- Procedures within the chapter *Non-invasive, cognitive and other interventions, not elsewhere classified* accounted for 1,028,007 of all-listed procedures or 43.1 per cent of all procedures reported for total discharges.
- Total discharges aged 65 years and over accounted for over 67 per cent of procedures from the chapter *Procedures on eye and adnexa*.
- Total discharges aged less than 15 years accounted for over 46 per cent of procedures from the chapter *Procedures on ear and mastoid process*.

³³ From 2015 this data includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

TABLE 3.14 Total Discharges: Principal Procedure by Sex and Age Group (N)

Principal Procedure	Procedure Block	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Total Discharges	-	73,977	143,202	227,364	319,301	763,844	59,661	321,001	242,781	276,779	900,222	133,638	464,203	470,145	596,080	1,664,066
All Principal Procedures	0001–2016	42,441	114,614	193,152	276,032	626,239	33,062	217,503	209,509	233,872	693,946	75,503	332,117	402,661	509,904	1,320,185
Procedures on nervous system	0001–0086	915	3,515	4,104	2,617	11,151	769	4,652	5,623	4,162	15,206	1,684	8,167	9,727	6,779	26,357
Lumbar puncture	0030	699	798	498	293	2,288	536	1,221	637	305	2,699	1,235	2,019	1,135	598	4,987
Procedures on endocrine system	0110–0129	22	125	180	128	455	21	456	574	269	1,320	43	581	754	397	1,775
Procedures on eye and adnexa	0160–0256	757	1,528	5,205	12,981	20,471	526	1,374	3,578	16,118	21,596	1,283	2,902	8,783	29,099	42,067
Lens extraction	0195–0202	45	106	918	3,911	4,980	29	98	839	5,450	6,416	74	204	204	9361	11,396
Procedures on ear and mastoid process	0300–0333	2,088	1,193	799	607	4,687	1,479	1,101	810	549	3,939	3,567	2,294	1,609	1,156	8,626
Myringotomy	0309	1,350	140	53	43	1,586	822	101	86	46	1,055	2,172	241	139	89	2,641
Procedures on nose, mouth and pharynx	0370–0422	2,484	2,776	2,044	1,452	8,756	1,904	3,028	1,844	1,222	7,998	4,388	5,804	3,888	2,674	16,754
Tonsillectomy or adenoidectomy	0412	1,542	407	33	9	1,991	1,319	970	42	12	2,343	2,861	1,377	75	21	4,334
Dental services	0450–0490	2,094	826	216	95	3,231	1,814	1,115	210	70	3,209	3,908	1,941	426	165	6,440
Procedures on respiratory system	0520–0571	1,870	1,945	3,937	5,768	13,520	1,306	1,563	3,612	4,747	11,228	3,176	3,508	7,549	10,515	24,748
Bronchoscopy with/without biopsy	0543–0544, 41892-01[0545]	185	732	1,736	2,316	4,969	119	642	1,713	1,970	4,444	304	1,374	3,449	4,286	9,413
Procedures on cardiovascular system	0600–0777	742	6,206	17,235	14,637	38,820	762	3,505	8,951	8,547	21,765	1,504	9,711	26,186	23,184	60,585
Coronary angiography	0668	187	681	4,379	4,704	9,951	184	310	2,465	3,102	6,061	371	991	6,844	7,806	16,012
Transluminal coronary angioplasty with/without stenting	0670–0671	0	182	1,801	1,881	3,864	~	*	413	803	1,247	~	*	2,214	2,684	5,111
CABG	0672–0679	0	*	*	386	712	0	~	*	97	143	0	21	351	483	855
Leg varicose vein ligation	0727–0728	~	386	603	*	1,226	0	1,027	1,050	421	2,498	~	1,413	1,653	*	3,724
Procedures on blood and blood-forming organs	0800–0817	123	430	876	1,157	2,586	121	570	901	950	2,542	244	1,000	1,777	2,107	5,128
Procedures on digestive system	0850–1011	2,801	21,853	30,725	29,506	84,885	1,973	27,695	31,193	27,028	87,889	4,774	49,548	61,918	56,534	172,774
Fibreoptic colonoscopy with/without excision	0905, 0911	51	7,000	11,917	12,092	31,060	49	8,576	12,612	10,850	32,087	100	15,576	24,529	22,942	63,147
Appendicectomy	0926	1,143	1,951	339	85	3,518	896	1,926	271	68	3,161	2,039	3,877	610	153	6,679
Procedures for haemorrhoids	0941	0	841	880	281	2,002	0	901	687	317	1,905	0	1,742	1,567	598	3,907
Cholecystectomy	0965	0	301	554	400	1,255	9	1,763	1,228	474	3,474	9	2,064	1,782	874	4,729
Division of abdominal adhesions	0986	17	41	46	59	163	11	287	134	81	513	28	328	180	140	676
Repair of inguinal and obstructed hernia	0990, 0997	384	813	1,255	1,215	3,667	74	66	102	156	398	458	879	1,357	1,371	4,065
Panendoscopy with/without excision	1005–1008	395	7,933	11,002	10,307	29,637	368	10,344	12,501	10,929	34,142	763	18,277	23,503	21,236	63,779
Procedures on urinary system	1040–1129	721	17,028	37,857	70,327	125,933	723	12,518	24,155	41,638	79,034	1,444	29,546	62,012	111,965	204,967
Examination procedures on bladder (includes cystoscopy)	1089	50	1,189	2,894	5,812	9,945	35	1,223	1,991	2,343	5,592	85	2,412	4,885	8,155	15,537
Procedures on male genital organs	1160–1203	†	†	†	†	†	†	†	†	†	†	3,203	1,445	2,699	2,683	10,030
Prostatectomy	1165–1167	0	6	369	691	1,066	0	0	0	0	0	0	6	369	691	1,066
Circumcision	30653-00[1196]	1,551	473	221	128	2,373	0	0	0	0	0	1,551	473	221	128	2,373
Gynaecological procedures	1240–1299	†	†	†	†	†	†	†	†	†	†	90	26,404	11,629	2,773	40,896
Oophorectomy and salpingo-oophorectomy	1243, 1252	0	0	0	0	0	11	377	381	103	872	11	377	381	103	872
Salpingectomy	1251	0	0	0	0	0	~	145	30	~	181	~	145	30	~	181
Examination procedures on uterus	1259	0	0	0	0	0	~	2,165	2,804	*	5,535	~	2,165	2,804	*	5,535
Curettage and evacuation of uterus	1265	0	0	0	0	0	0	5,780	1,975	344	8,099	0	5,780	1,975	344	8,099
Hysterectomy	1268–1269	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Repair of prolapse of uterus, pelvic floor or enterocele	1283	0	0	0	0	0	0	96	394	327	817	0	96	394	327	817
Obstetric procedures	1330–1347	0	0	0	0	0	~	60,562	*	0	60,766	~	60,562	*	0	60,766
Analgesia and anaesthesia during labour and delivery procedure	1333	0	0	0	0	0	0	*	~	0	2,727	0	*	~	0	2,727

TABLE 3.14 Total Discharges: Principal Procedure by Sex and Age Group (N) (contd.)

Principal Procedure	Procedure Block	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Medical or surgical induction of labour	1334	0	0	0	0	0	0	3,893	*	0	3,901	~	3,893	*	0	3,901
Medical or surgical augmentation of labour	1335	0	0	0	0	0	0	2,754	6	0	2,760	0	2,754	6	0	2,760
Forceps delivery	1337	0	0	0	0	0	0	*	~	0	1,980	0	*	~	0	1,980
Vacuum extraction	1338	0	0	0	0	0	0	6,729	13	0	6,742	0	6,729	13	0	6,742
Breech delivery and extraction	1339	0	0	0	0	0	0	123	0	0	123	0	123	0	0	123
Caesarean section	1340	0	0	0	0	0	~	19,604	*	0	19,743	~	19,604	*	0	19,743
Episiotomy associated with delivery	90472-00[1343]	0	0	0	0	0	0	*	~	0	3,328	0	*	~	0	3,328
Postpartum suture	1344	0	0	0	0	0	~	16,519	*	0	16,539	~	16,519	*	0	16,539
Procedures on musculoskeletal system	1360–1580	3,748	11,500	9,885	8,095	33,228	3,130	6,700	12,016	14,303	36,149	6,878	18,200	21,901	22,398	69,377
Arthroplasty of hip	1489	~	*	861	1,534	2,538	~	*	660	2,300	3,054	~	*	1,521	3,834	5,592
Arthroplasty of knee	1518–1519	0	15	381	593	989	0	25	466	984	1,475	0	40	847	1,577	2,464
Dermatological and plastic procedures	1600–1718	3,525	15,821	12,975	14,699	47,020	2,769	16,560	12,270	12,550	44,149	6,294	32,381	25,245	27,249	91,169
Excision of lesion(s) of skin and subcutaneous tissue	1620	532	4,848	5,089	7,306	17,775	507	6,471	5,557	5,983	18,518	1,039	11,319	10,646	13,289	36,293
Other debridement of skin and subcutaneous tissue	1628	185	498	338	257	1,278	117	156	156	192	621	302	654	494	449	1,899
Skin graft	1640–1650	27	62	46	67	202	16	27	31	84	158	43	89	77	151	360
Procedures on breast	1740–1759	~	88	35	*	162	*	3,756	4,523	*	10,134	9	3,844	4,558	1,885	10,296
Breast biopsy	1743–1744	0	34	20	24	78	~	2,539	2,970	*	6,885	~	2,573	2,990	*	6,963
Mastectomy	1747–1748	0	24	8	10	42	0	201	442	270	913	0	225	450	280	955
Radiation oncology procedures ^a	1786–1799	332	2,729	19,532	35,499	58,092	350	8,414	30,574	20,840	60,178	682	11,143	50,106	56,339	118,270
Non-invasive, cognitive and other interventions, not elsewhere classified	1820–1922	14,484	24,317	42,370	71,936	153,107	13,027	36,166	54,743	72,639	176,575	27,511	60,483	97,113	144,575	329,682
Administration of blood and blood products	1893	1,719	1,244	2,480	6,844	12,287	1,359	1,637	2,130	5,557	10,683	3,078	2,881	4,610	12,401	22,970
Conduction anaesthesia	1909	0	7	8	7	22	~	34	*	16	61	~	41	*	23	83
Cerebral anaesthesia	1910	16	27	16	13	72	10	26	28	18	82	26	53	44	31	154
Imaging services ^b	1940–2016	2,530	1,288	2,478	3,809	10,105	2,287	1,365	2,103	3,618	9,373	4,817	2,653	4,581	7,427	19,478
Computerised tomography scan	1952–1966	277	477	1,008	1,481	3,243	217	435	905	1,202	2,759	494	912	1,913	2,683	6,002
Magnetic resonance imaging	2015	1,529	149	103	99	1,880	1,238	162	110	72	1,582	2,767	311	213	171	3,462

Notes: ~ Denotes five or fewer discharges reported to HIPE.

* Further suppression required to prevent disclosure of five or fewer discharges.

† Denotes that no breakdown is provided.

a From 2015 this data includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

b See Appendix V for information on updated ACS 0042 in ICD-10-AM 8th edition.

TABLE 3.15 In-Patient Discharges: Mean and Median Length of Stay (Days) by Principal Procedure, Sex and Age Group^a

Principal Procedure		Male				Female				Total In-Patient Discharges						
		<15	15–44	45–64	≥65	Total	<15	15–44	45–64	≥65	Total	<15	15–44	45–64	≥65	Total
Total In-Patient Discharges	Mean	3.5	3.9	6	9.6	6.5	3.4	2.9	5.4	9.9	5.2	3.5	3.1	5.7	9.7	5.7
	Median	1	1	2	5	2	2	2	2	5	2	1	2	2	5	2
	0001–2016	5.6	5.5	8.5	12.7	9.4	5.5	3.9	7.6	13.3	7.5	5.6	4.2	8.1	13.0	8.3
Procedures on nervous system		2	2	4	7	4	2	3	4	7	4	2	3	4	7	4
	0001–0086	5.8	6.0	9.7	16.7	9.0	5.7	5.9	8.9	14.8	8.3	5.8	5.9	9.3	15.7	8.6
		4	3	5	7	4	4	3	5	8	4	4	3	5	7	4
Lumbar puncture		4.7	4.9	10.4	22.4	8.2	5.3	5.1	9.0	22.1	8.1	5.0	5.0	9.6	22.3	8.1
	0030	4	3	6	13	4	4	3	5	11	4	4	3	5	12	4
	0110–0129	5.6	3.7	6.0	8.1	5.9	4.4	3.3	3.3	9.9	4.6	5.0	3.4	4.0	9.3	5.0
Procedures on endocrine system		2	2	3	4	3	2	2	2	3	2	2	2	2	3	2
	0160–0256	2.7	3.9	3.2	3.8	3.5	2.5	2.4	3.0	3.2	2.9	2.6	3.3	3.1	3.4	3.3
		1	2	2	2	2	1	1	2	2	2	2	1	2	2	2
Procedures on eye and adnexa		1.8	4.5	2.4	2.9	2.9	3.2	1.5	1.8	1.9	2.0	2.6	3.2	2.1	2.4	2.4
	0195–0202	1	3	2	1	1	2	1	1	1	1	2	1	2	1	1
		1.4	2.2	2.5	8.8	2.5	1.4	2.2	2.8	8.6	2.5	1.4	2.2	2.7	8.7	2.5
Procedures on ear and mastoid process		1	1	1	3	1	1	1	1	4	1	1	1	1	4	1
	0300–0333	1	1	1	3	1	1	1	1	4	1	1	1	1	4	1
		1.5	2.5	^	8.9	1.9	1.4	3.7	3.3	^	1.8	1.4	3.0	2.8	6.7	1.9
Myringotomy	0309	1	1	^	2	1	1	2	1	^	1	1	1	1	1	1
		1.3	1.9	4.1	8.0	2.8	1.2	1.7	3.2	7.2	2.2	1.3	1.8	3.7	7.7	2.5
	0370–0422	1	1	2	3	1	1	1	2	3	1	1	1	2	3	1
Procedures on nose, mouth and pharynx		12	1.3	2.7	3.4	1.3	1.2	1.2	2.6	4.5	1.2	1.2	1.2	2.6	4.1	1.2
	0412	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1
	Tonsillectomy or adenoidectomy	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1
Dental services		1.5	7.8	8.9	2.9	4.5	1.8	2.4	2.5	10.1	2.7	1.7	4.7	5.5	6.1	3.6
	0450–0490	1	1	2	2	1	1	1	1	2	1	1	1	2	2	1
		1	1	2	2	1	1	1	1	2	1	1	1	2	2	1
Procedures on respiratory system		20.8	14.7	17.9	17.0	17.7	18.8	12.3	16.9	17.6	17.1	20.0	13.8	17.5	17.2	17.4
	0520–0571	10	7	8	10	9	11	7	8	10	9	10	7	8	10	9
		30.2	12.4	13.6	14.8	15.1	7.0	10.8	11.9	16.0	13.6	21.5	11.8	12.8	15.3	14.4
Bronchoscopy with/without biopsy	0543–0544, 41892-1 [0545]	5	8	10	10	9	3	8	8	11	9	4	8	9	10	9
		15.1	6.1	6.0	8.5	7.6	12.8	6.2	5.7	9.2	8.1	14.1	6.2	5.9	8.8	7.8
	0600–0777	7	2	3	4	3	6	2	2	4	3	7	2	3	4	3
Procedures on cardiovascular system		7.5	4.4	4.7	6.4	5.6	3.8	5.0	4.2	6.9	5.7	5.8	4.6	4.5	6.6	5.6
	0668	2	2	2	3	3	1	3	2	4	3	2	2	2	3	3
	Coronary angiography	2	2	2	3	3	1	3	2	4	3	2	2	2	3	3
Transluminal coronary angioplasty with/without stenting	0670–0671	-	4.1	3.2	4.1	3.7	-	3.0	4.4	4.4	4.4	-	4.0	3.4	4.2	3.8
		-	2	2	1	2	-	2	2	2	2	-	2	2	2	2
	CABG	-	15.8	13.9	20.2	17.3	-	-	^	14.6	17.6	16.7	-	15.8	14.0	19.7
Leg varicose vein ligation	0672–0679	-	15	10	12	12	-	^	11	12	12	-	15	10	12	12
		-	1.0	1.3	1.5	1.3	-	1.0	1.1	2.4	1.3	-	1.0	1.2	2.0	1.3
	0727–0728	-	1	1	1	1	-	1	1	1	1	-	1	1	1	1
Procedures on blood and blood-forming organs		12.5	12.2	15.4	15.9	14.8	11.9	10.8	10.6	13.5	11.7	12.2	11.5	12.9	14.8	13.3
	0800–0817	6	7	9	9	8	6	5	4	8	6	6	6	9	7	7
	Procedures on digestive system	6.4	5.1	8.2	12.8	9.1	4.9	4.4	8.6	13.7	8.8	5.8	4.7	8.4	13.2	9.0
Fibreoptic colonoscopy with/without excision	0850–1011	2	2	4	7	4	3	2	4	8	4	3	2	4	7	4
		2.4	6.3	7.6	11.1	9.3	2.4	5.9	7.4	11.7	9.4	2.4	6.1	7.5	11.4	9.3
	0905, 0911	2	4	4	6	5	1	5	5	6	5	2	4	5	6	5
Appendectomy		3.1	3.0	4.4	9.0	3.3	3.3	2.9	4.2	7.0	3.2	3.1	3.0	4.3	8.1	3.3
	0926	2	2	3	5	2	3	2	3	6	3	3	2	3	5	2
		-	2.1	2.2	6.1	3.0	-	2.5	2.3	9.1	3.6	-	2.3	2.2	7.4	3.3
Procedures for haemorrhoids	0941	-	1	1	1	1	-	1	1	1	1	-	1	1	1	1
		-	1	1	1	1	-	1	1	1	1	-	1	1	1	1
		-	1	1	1	1	-	1	1	1	1	-	1	1	1	1

TABLE 3.15 In-Patient Discharges: Mean and Median Length of Stay (Days) by Principal Procedure, Sex and Age Group^a (contd.)

Principal Procedure		Procedure Block	Male					Female					Total In-Patient Discharges				
			<15	15-44	45-64	≥65	Total	<15	15-44	45-64	≥65	Total	<15	15-44	45-64	≥65	Total
Cholecystectomy		0965	-	2.7	4.0	7.1	4.9	5.1	2.6	2.8	5.6	3.2	5.1	2.7	3.2	6.3	3.7
Division of abdominal adhesions		0986	25.3	9.9	10.7	15.3	13.8	13.1	4.3	10.0	19.3	9.5	20.6	5.3	10.2	17.6	10.8
Repair of inguinal and obstructed hernia		0990, 0997	1.7	1.9	2.2	3.4	2.7	1.3	2.1	4.4	10.1	7.0	1.7	1.9	2.5	4.4	3.2
Panendoscopy with/without excision		1005-1008	1	1	1	1	1	1	2	2	4	2	1	1	1	2	1
Procedures on urinary system		1040-1129	5.6	6.4	6.8	10.7	8.7	5.0	4.9	6.1	10.9	7.5	5.4	5.7	6.5	10.7	8.2
Examination procedures on bladder (includes cystoscopy)		1089	1.9	6.2	7.5	11.7	10.2	4	2	3	6	3	4	3	3	5	4
Procedures on male genital organs		1160-1203	2	4	3	6	4	-	2	2	6	4	2	3	2	6	4
Prostatectomy		1165-1167	†	†	†	†	†	†	†	†	†	2	1	1	3	4	2
Circumcision		30653-00 [1196]	1.5	1.2	2.1	4.8	2.0	-	-	-	-	-	1.5	1.2	2.1	4.8	2.0
Gynaecological procedures		1240-1299	†	†	†	†	†	†	†	†	†	†	3.1	2.2	3.9	5.4	3.1
Oophorectomy and salpingo-oophorectomy		1243, 1252	-	-	-	-	-	4.7	3.7	3.0	6.0	3.7	4.7	3.7	3.0	6.0	3.7
Salpingectomy		1251	-	-	-	-	-	4	3	2	5	3	4	3	2	5	3
Examination procedures on uterus		1259	-	-	-	-	-	†	2.3	2.1	†	2.3	†	2.3	2.1	†	2.3
Curettage and evacuation of uterus		1265	-	-	-	-	-	-	2.2	2.5	6.2	3.2	-	2.2	2.5	6.2	3.2
Hysterectomy		1268-1269	†	†	†	†	†	†	1.4	1.7	6.8	1.5	-	1.4	1.7	6.8	1.5
Repair of prolapse of uterus, pelvic floor or enterocele		1283	†	†	†	†	†	†	1	1	2	1	-	1	1	2	1
Obstetric procedures		1330-1347	-	-	-	-	-	†	3.6	5.4	3	3.6	†	3.6	5.4	-	3.6
Analgesia and anaesthesia during labour and delivery procedure		1333	-	-	-	-	-	-	2.6	†	-	2.6	-	2.6	†	-	2.6
Medical or surgical induction of labour		1334	-	-	-	-	-	†	3.3	3.3	-	3.3	†	3.3	3.3	-	3.3
Medical or surgical augmentation of labour		1335	-	-	-	-	-	†	3	2	-	3	†	3	2	-	3
Forceps delivery		1337	-	-	-	-	-	-	2.3	2.3	-	2.3	-	2.3	2.3	-	2.3
Vacuum extraction		1338	-	-	-	-	-	-	3.6	†	-	3.6	-	3.6	†	-	3.6
Breech delivery and extraction		1339	-	-	-	-	-	-	3.2	3.2	-	3.2	-	3.2	3.2	-	3.2
			-	-	-	-	-	-	3	3	-	3	-	3	3	-	3
			-	-	-	-	-	-	4.7	-	-	4.7	-	4.7	-	-	4.7
			-	-	-	-	-	-	3	-	-	3	-	3	-	-	3

TABLE 3.15 In-Patient Discharges: Mean and Median Length of Stay (Days) by Principal Procedure, Sex and Age Group^a (contd.)

Principal Procedure		Male				Female				Total In-Patient Discharges							
		<15	15-44	45-64	≥65	Total	<15	15-44	45-64	≥65	Total	<15	15-44	45-64	≥65	Total	
Caesarean section	1340	-	-	-	-	-	-	^	5.2	6.3	-	5.2	^	5.2	6.3	-	5.2
Episiotomy associated with delivery [1343]	90472-00	-	-	-	-	-	-	-	4	5	-	4	^	4	5	-	4
	1344	-	-	-	-	-	-	-	3.0	^	-	3.0	-	^	3.5	-	3.0
		-	-	-	-	-	-	-	3	^	-	3	-	^	4	-	3
Procedures on musculoskeletal system		1.9	3.0	6.7	13.2	6.5	2.0	3.5	5.2	11.8	7.7	2.0	3.1	5.9	12.3	7.1	
Arthroplasty of hip	1489	^	4.3	6.3	12.5	9.9	^	8.2	6.4	12.8	11.3	^	5.8	6.3	12.7	10.7	5
		^	4	4	6	5	^	4	4	4	7	^	4	4	4	7	5
Arthroplasty of knee	1518-1519	-	4.0	4.8	6.0	5.5	-	6.6	4.7	6.0	5.6	-	5.6	4.8	6.0	5.6	
		-	3	4	5	5	-	5	4	5	5	-	4	4	5	5	5
Dermatological and plastic procedures		2.8	3.4	7.0	11.0	5.3	3.5	3.3	6.1	14.4	6.3	3.1	3.4	6.7	12.6	5.7	
Excision of lesion(s) of skin and subcutaneous tissue	1620	1	2	2	3	2	1	2	2	5	2	1	2	2	4	2	
		1.6	3.3	2.2	6.0	4.6	1.3	1.6	3.5	10.2	6.9	1.5	2.5	2.7	7.8	5.6	
Other debridement of skin and subcutaneous tissue	1628	1.3	4.8	11.1	16.3	8.4	1.9	6.3	12.3	22.4	12.2	1.5	5.1	11.5	18.8	9.6	
		1	2	4	9	2	1	2	4	10	3	1	2	4	10	3	
Skin graft	1640-1650	7.5	10.0	17.2	20.3	13.6	12.6	10.9	12.8	14.2	13.0	9.4	10.3	15.6	16.4	13.3	
Procedures on breast	1740-1759	^	2.3	1.6	7.3	3.5	^	2.6	3.1	3.9	3.1	^	2.6	3.1	3.9	3.1	
		^	2	1	4	2	^	1	2	2	2	^	2	2	2	2	
Breast biopsy	1743-1744	-	^	^	^	7.5	-	1.7	2.2	3.8	2.5	-	1.7	2.2	3.9	2.6	
Mastectomy	1747-1748	-	^	^	^	1	-	1	1	1	1	-	1	1	1	1	
		-	2.5	1.5	4.3	3.0	-	4.5	4.4	4.3	4.4	-	4.4	4.4	4.3	4.4	
		-	2	2	3	2	-	4	3	3	4	-	-	4	3	3	
Radiation oncology procedures		-	15.0	18.2	18.9	18.3	-	11.7	13.9	21.1	16.5	-	12.5	15.7	19.9	17.4	
Non-invasive, cognitive and other interventions, not elsewhere classified	1786-1799	-	5	12	14	13	-	5	8	16	11	-	5	9	15	12	
	1820-1922	4.9	7.5	9.5	13.5	10.9	5.4	5.6	9.4	14.3	11.1	5.2	6.3	9.5	13.9	11.0	
		3	3	5	8	6	3	2	5	8	6	3	3	5	8	6	
Administration of blood and blood products	1893	3.7	7.4	9.4	11.1	9.8	4.7	5.0	9.0	11.3	9.4	4.2	5.8	9.2	11.2	9.6	
		2	4	5	6	5	2	3	5	6	4	2	3	5	6	5	
Conduction anaesthesia	1909	-	^	^	^	5.9	-	3.1	^	^	5.7	-	3.1	12.0	13.0	5.8	
Cerebral anaesthesia	1910	-	^	^	^	5	-	3	3	^	3	-	3	10	12	3	
		11	2	2	6	3	3	5	1	2	4	4	4	4	1	4	
Imaging services		5.3	7.5	11.9	14.3	10.6	5.9	7.3	10.1	14.5	10.2	5.6	7.4	11.2	14.3	10.4	
Computerised tomography scan	1940-2016	2	3	6	7	4	2	3	5	6	4	2	3	5	7	4	
		2	3	6	7	4	2	3	5	6	4	2	3	5	7	4	
Magnetic resonance imaging	1952-1966	4.5	4.0	15.0	8.4	8.3	9.0	3.5	3.0	8.2	6.3	6.4	3.7	10.0	8.3	7.3	
		2	1	1	1	1	2	1	2	1	1	2	1	1	1	1	
Magnetic resonance imaging	2015	5.7	3.1	8.0	7.1	5.8	6.0	4.8	10.6	13.6	7.1	5.8	4.0	9.3	10.4	6.4	
		2	1	3	3	2	1	2	5	7	2	2	2	4	5	2	

Notes: ^ Denotes that length of stay calculation was based on five or fewer discharges.

† Denotes that no breakdown is provided.

- Length of stay cannot be calculated as no in-patients are reported.

a Includes length of stay for total in-patients (includes same-day and overnight in-patients). Excludes day patients.

TABLE 3.16 Total Discharges: All-Listed Procedures by Sex and Age Group (N)

All Procedures	Procedure Block	Male					Female					Total Discharges				
		< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total
Total Discharges	-	73,977	143,202	227,364	319,301	763,844	59,661	321,001	242,781	276,779	900,222	133,638	464,203	470,145	596,080	1,664,066
All Procedures		93,162	197,304	332,269	477,763	1,100,498	70,451	442,840	356,970	415,098	1,285,309	163,613	640,144	689,189	892,861	2,385,807
Procedures on nervous system	0001-0086	1,979	4,613	5,406	3,574	15,572	1,632	5,797	7,278	5,579	20,286	3,611	10,410	12,684	9,153	35,858
Lumbar puncture	0030	1,516	994	672	444	3,626	1,199	1,352	800	426	3,777	2,715	2,346	1,472	870	7,403
Procedures on endocrine system	0110-0129	23	140	206	152	521	22	462	599	299	1,382	45	602	805	451	1,903
Procedures on eye and adnexa	0160-0256	1,059	1,839	5,786	13,819	22,503	674	1,637	3,980	16,969	23,260	1,733	3,476	9,766	30,788	45,763
Lens extraction	0195-0202	53	119	950	3,955	5,077	32	102	860	5,510	6,504	85	221	1,810	9,465	11,581
Procedures on ear and mastoid process	0300-0333	2,872	1,357	920	676	5,825	2,003	1,215	912	605	4,735	4,875	2,572	1,832	1,281	10,560
Myringotomy	0309	1,784	165	65	48	2,062	1,110	121	96	48	1,375	2,894	286	161	96	3,437
Procedures on nose, mouth and pharynx	0370-0422	3,029	3,470	2,750	1,813	11,062	2,282	3,530	2,302	1,508	9,622	5,311	7,000	5,052	3,321	20,684
Tonsillectomy or adenoidectomy	0412	1,681	417	41	10	2,149	1,414	974	44	14	2,446	3,095	1,391	85	24	4,595
Dental services	0450-0490	4,580	1,811	411	143	6,945	3,549	1,755	366	97	5,767	8,129	3,566	777	240	12,712
Procedures on respiratory system	0520-0571	3,277	2,942	6,097	8,795	21,111	2,124	2,197	4,887	6,686	15,894	5,401	5,139	10,984	15,481	37,005
Bronchoscopy with/without biopsy	0543-0544, 41892-01[0545]	295	885	2,018	2,759	5,957	174	729	1,910	2,212	5,025	469	1,614	3,928	4,971	10,982
Procedures on cardiovascular system	0600-0777	2,476	7,334	23,546	22,657	56,013	2,215	4,113	11,266	12,360	29,954	4,691	11,447	34,812	35,017	85,967
Coronary angiography	0668	216	912	6,326	6,810	14,264	208	359	2,943	4,019	7,529	424	1,271	9,269	10,829	21,793
Transluminal coronary angioplasty with/without stenting	0670-0671	~	*	2,411	2,669	5,331	~	*	573	1,128	1,741	~	*	2,984	3,797	7,072
CABG	0672-0679	0	38	723	904	1,665	~	*	89	222	319	~	*	812	1,126	1,984
Leg varicose vein ligation	0727-0728	~	391	611	*	1,242	0	1,037	1,057	425	2,519	~	1,428	1,668	*	3,761
Procedures on blood and blood-forming organs	0800-0817	319	603	1,302	1,783	4,007	299	1,273	2,736	2,232	6,540	618	1,876	4,038	4,015	10,547
Procedures on digestive system	0850-1011	3,296	26,833	39,355	39,371	108,855	2,292	34,790	39,759	35,314	112,155	5,588	61,623	79,114	74,685	221,010
Fibreoptic colonoscopy with/without excision	0905, 0911	157	8,968	15,216	15,758	40,099	116	11,122	16,161	14,019	41,418	273	20,090	31,377	29,777	81,517
Appendicectomy	0926	1,169	1,972	358	114	3,613	912	2,018	402	170	3,502	2,081	3,990	760	284	7,115
Procedures for haemorrhoids	0941	~	1,660	1,773	*	4,072	0	1,600	1,373	650	3,623	~	3,260	3,146	*	7,695
Cholecystectomy	0965	0	318	622	476	1,416	9	1,792	1,293	514	3,608	9	2,110	1,915	990	5,024
Division of abdominal adhesions	0986	51	229	309	333	922	30	1,219	618	446	2,313	81	1,448	927	779	3,235
Repair of inguinal and obstructed hernia	0990, 0997	415	828	1,264	1,253	3,760	76	69	107	174	426	491	897	1,371	1,427	4,186
Panendoscopy with/without excision	1005-1008	413	8,608	12,439	12,583	34,043	389	11,142	13,828	12,811	38,170	802	19,750	26,267	25,394	72,213
Procedures on urinary system	1040-1129	878	17,816	39,342	73,025	131,061	801	13,373	25,463	42,904	82,541	1,679	31,189	64,805	115,929	213,602
Examination procedures on bladder (includes cystoscopy)	1089	82	1,245	3,004	6,161	10,492	43	1,406	2,330	2,552	6,331	125	2,651	5,334	8,713	16,823
Procedures on male genital organs	1160-1203	†	†	†	†	†	†	†	†	†	†	†	1,601	2,885	2,950	10,945
Prostatectomy	1165-1167	0	7	388	758	1,153	0	0	0	0	0	0	7	388	758	1,153
Circumcision	30653-00[1196]	1,608	482	232	138	2,460	0	0	0	0	0	1,608	482	232	138	2,460
Gynaecological procedures	1240-1299	†	†	†	†	†	†	†	†	†	†	115	44,039	20,611	4,393	69,158
Oophorectomy and salpingo-oophorectomy	1243, 1252	0	0	0	0	0	11	443	464	145	1,063	11	443	464	145	1,063
Salpingectomy	1251	0	0	0	0	0	~	628	72	*	714	~	628	72	*	714
Examination procedures on uterus	1259	0	0	0	0	0	~	4,236	4,837	*	9,991	~	4,236	4,837	*	9,991
Curette and evacuation of uterus	1265	0	0	0	0	0	0	7,845	4,322	778	12,945	0	7,845	4,322	778	12,945
Hysterectomy	1268-1269	†	†	†	†	†	†	†	†	†	†	†	†	†	†	†
Repair of prolapse of uterus, pelvic floor or enterocele	1283	0	0	0	0	0	0	143	728	623	1,494	0	143	728	623	1,494

TABLE 3.16 Total Discharges: All-Listed Procedures by Sex and Age Group (N) (contd.)

All Procedures		Procedure Block	Male					Female					Total Discharges					
			< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	
Obstetric procedures	Analgesia and anaesthesia during labour and delivery procedure	1330–1347	0	0	0	0	0	0	7	131,128	323	0	131,458	7	131,128	323	0	131,458
		1333	0	0	0	0	0	0	~	25,595	*	0	25,638	~	25,595	*	0	25,638
1334	Medical or surgical induction of labour	0	0	0	0	0	0	~	18,547	*	0	18,596	~	18,547	*	0	18,596	
1335	Medical or surgical augmentation of labour	0	0	0	0	0	0	0	12,250	12	0	12,262	0	12,250	12	0	12,262	
1337	Forceps delivery	0	0	0	0	0	0	0	*	~	0	2,517	0	*	~	0	2,517	
1338	Vacuum extraction	0	0	0	0	0	0	0	8,317	16	0	8,333	0	8,317	16	0	8,333	
1339	Breech delivery and extraction	0	0	0	0	0	0	0	*	~	0	188	0	*	~	0	188	
1340	Caesarean section	0	0	0	0	0	0	~	19,735	*	0	19,874	~	19,735	*	0	19,874	
Episiotomy associated with delivery		90472-00[1343]	0	0	0	0	0	0	0	10,542	11	0	10,553	0	10,542	11	0	10,553
Postpartum suture		1344	0	0	0	0	0	~	20,980	*	0	21,005	~	20,980	*	0	21,005	0
Procedures on musculoskeletal system		1360–1579	4,803	14,482	12,554	10,102	41,941	4,328	8,756	15,350	17,611	46,045	9,131	23,238	27,904	27,713	87,986	0
1489	Arthroplasty of hip	~	~	864	1,551	2,560	~	~	*	668	2,333	3,097	~	*	1,532	3,884	5,657	0
1518–1519	Arthroplasty of knee	0	15	383	594	992	0	25	466	986	1,477	0	40	849	1,580	2,469	0	0
Dermatological and plastic procedures		1600–1718	5,149	19,347	16,542	20,053	61,091	4,045	19,567	15,204	16,508	55,324	9,194	38,914	31,746	36,561	116,415	0
Excision of lesion(s) of skin and subcutaneous tissue		1620	601	6,119	6,535	9,588	22,843	555	8,342	6,999	7,654	23,550	1,156	14,461	13,534	17,242	46,393	0
Other debridement of skin and subcutaneous tissue		1628	438	1,452	1,078	808	3,776	339	444	496	616	1,895	777	1,896	1,574	1,424	5,671	0
Skin graft		1640–1650	79	227	274	674	1,254	47	88	158	567	860	126	315	432	1,241	2,114	0
Procedures on breast		1740–1759	~	91	36	*	166	*	4,341	5,731	*	12,267	10	4,432	5,767	2,224	12,433	0
Breast biopsy		1743–1744	0	34	21	24	79	~	2,697	3,165	*	7,347	~	2,731	3,186	*	7,426	0
Mastectomy		1747–1748	0	24	8	10	42	0	202	446	270	918	0	226	454	280	960	0
Radiation oncology procedures ^a		1786–1799	415	5,292	36,941	62,303	104,951	350	14,498	48,766	32,028	95,642	765	19,790	85,707	94,331	200,593	0
Non-invasive, cognitive and other interventions, not elsewhere classified		1820–1922	51,782	85,708	132,953	209,302	479,745	40,470	147,847	147,569	212,376	548,262	92,252	233,555	280,522	421,678	1,028,007	0
Administration of blood and blood products		1893	3,012	2,431	5,147	12,127	22,717	2,476	4,218	4,181	9,915	20,790	5,488	6,649	9,328	22,042	43,507	0
Conduction anaesthesia		1909	372	1,497	3,172	5,490	10,531	85	17,076	3,596	7,412	28,169	457	18,573	6,768	12,902	38,700	0
Cerebral anaesthesia		1910	23,251	40,610	50,085	50,559	164,505	15,762	56,186	57,104	46,679	175,731	39,013	96,796	107,189	97,238	340,236	0
Imaging services ^b		1940–2016	3,712	2,024	5,237	7,209	18,182	3,237	2,523	3,818	5,441	15,019	6,949	4,547	9,055	12,650	33,201	0
Computerised tomography scan		1952–1966	369	608	1,274	1,776	4,027	290	547	1,162	1,496	3,495	659	1,155	2,436	3,272	7,522	0
Magnetic resonance imaging		2015	1,880	194	138	135	2,347	1,515	218	139	107	1,979	3,395	412	277	242	4,326	0

Notes: ~ Denotes five or fewer discharges reported to HIPE.

* Further suppression required to prevent disclosure of five or fewer discharges.

† Denotes that no breakdown is provided.

a From 2015 this data includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

b See Appendix V for information on updated ACS 0042 in ICD-10-AM 8th edition.

Case Mix Analysis SECTION
2015

FOUR

Table of Contents

4.1	INTRODUCTION	87
4.2	OVERVIEW	87
4.2.1	Case Mix Classification	87
4.2.2	Assignment of Discharges to MDC and AR-DRG	88
4.3	ANALYSIS OF HIPE DATA BY CASE MIX	90
4.3.1	Analysis of Day Patients by MDC and AR-DRG	90
4.3.2	Analysis of In-Patients by MDC and AR-DRG	90

4.1 INTRODUCTION

The analysis in this Section focuses on the case mix classification for all discharges reported to the Hospital In-Patient Enquiry (HIPE) scheme in 2015.¹ Hospital case mix may be defined as 'the proportion of cases of each disease and health problem treated in the hospital'.²

- Section 4.2 presents background to the applied case mix classification and details of the assignment of discharges to Major Diagnostic Categories (MDC) and Australian Refined Diagnosis Related Groups (AR-DRG).
- Section 4.3 presents analysis of HIPE data by case mix for day patients and in-patients.

4.2 OVERVIEW

4.2.1 Case Mix Classification

- The Diagnosis Related Group (DRG) scheme enables the disaggregation of patients into homogeneous groups, which undergo similar treatment processes and incur similar levels of resource use.
- The data required for DRG assignment include principal and secondary diagnoses, procedures performed, age, sex and patient destination on discharge from hospital.
- Since the inception of the national case mix programme, the DRG classification scheme has been adopted as the national standard for Ireland.³ One of the key features of this methodology is the classification of cases into different levels of complexity within AR-DRGs. ICD-10-AM/ACHI/ACS 8th Edition was the coding system used for AR-DRG grouping in 2015.⁴ As all of the data required for AR-DRG classification are available on the HIPE system, and since diagnoses and procedures are coded with ICD-10-AM/ACHI/ACS, discharges are assigned to the AR-DRG system from this database. AR-DRG version 6.0 has been in use in Ireland since 2009.⁵

¹ For information on how the DRG system is used in Activity Based Funding see http://health.gov.ie/wp-content/uploads/2015/07/ABF_Implementation_Plan_20_05_2015.pdf

² Hornbrook, M.C., 1985. Techniques for Assessing Hospital Case Mix', *Annual Review of Public Health*, Vol. 6. pp. 295–324.

³ Wiley, M.M., 2005. 'Diagnosis Related Groups (DRGs): Measuring Hospital Case Mix', in P. Armitage and T. Colton (eds.) *Encyclopaedia of Biostatistics*. Chichester: Wiley and Sons. See also Department of Health and Children, 2004, *The Modernisation of the National Case Mix Programme in Ireland*. Dublin: Department of Health and Children, for information on development of case mix in Ireland.

⁴ See Section Three for further details on ICD-10-AM/ACHI/ACS.

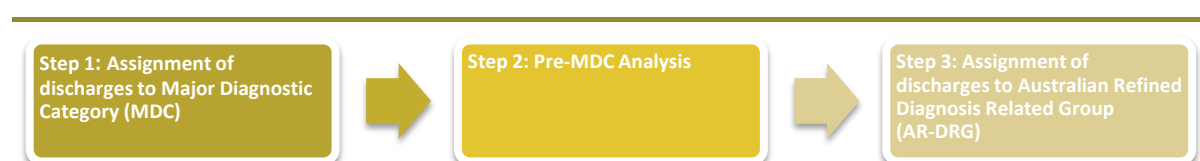
⁵ For a more detailed description of case mix and its application in Ireland see O'Reilly J., McCarthy B., Wiley, M. M., 'Ireland: A review of Casemix applications within the acute public hospital system' in R. Busse, A. Geissler, W. Quentin & M. M. Wiley (eds), *Diagnosis-Related Groups in Europe: Moving Towards Transparency, Efficiency and Quality in Hospitals*. Maidenhead: Open University Press and WHO Regional Office for Europe, 2011.

4.2.2 Assignment of Discharges to MDC and AR-DRG

Figure 4.1 shows the steps in AR-DRG assignment;

- The first step in assignment is the classification of discharges by Major Diagnostic Category (MDC). There are 23 MDCs which are essentially primary diagnostic groupings based on the systems of the body, for example nervous system (MDC 1), eye (MDC 2), circulatory system (MDC 5), etc. As not all discharges can be assigned directly to a MDC, there is a category entitled 'unassignable to MDC'.
- To deal with certain categories of high cost discharges, the second step involves a Pre-MDC analysis which can override the initial MDC assignment. Examples of discharges affected include transplants, human immunodeficiency virus (HIV) disease, and multiple significant trauma.⁶
- After assignment to the appropriate MDCs, discharges are assigned to an AR-DRG. In total, there are 698 AR-DRGs in version 6.0 of the AR-DRG classification.

FIGURE 4.1 Steps in AR-DRG Assignment



An AR-DRG consists of four alphanumeric characters in the form of 'ADD5':

- 'A' is either a letter (indicating the broad group of the DRG) or an '8' or a '9' (indicating an unrelated operating room procedure DRG or an error DRG, respectively).⁷
- 'DD' identifies the partition to which the adjacent DRG belongs.⁸ Both characters are numbers whose values indicate whether the code is surgical, medical or other.⁹ Discharges with a surgical procedure performed are

⁶ 'Some episodes involving procedures that are particularly resource-intensive may be assigned to the *Pre-MDC* category (AR-DRGs A01Z–A41B), irrespective of the MDC that would have been assigned on the basis of the principal diagnosis.' Australian Institute of Health and Welfare (2009) *Australian Hospital Statistics 2007–08*. Canberra: Australian Institute of Health and Welfare. p. 276.

⁷ 'Episodes that contain clinically atypical or invalid information are assigned Error DRGs.' Australian Institute of Health and Welfare (2009) *Australian hospital statistics 2007–08*. Canberra: Australian Institute of Health and Welfare. p. 276.

⁸ 'An adjacent DRG (ADRG) consists of one or more DRGs generally defined by the same diagnosis or procedure code list. DRGs within an ADRG have differing levels of resource consumption, and are partitioned on the basis of several factors, including complicating diagnoses/procedures, age, and level of comorbid disease and/or clinical complication.' Commonwealth of Australia (Department of Health and Ageing) 2008, *Australian Refined Diagnosis Related Groups, Version 6.0, Definitions Manual*, Volume 1. Canberra: Commonwealth Department of Health and Ageing. p. 9.

⁹ 'The separate ranges - 01 to 39, 40 to 59 and 60 to 99 - are used to indicate the surgical, other and medical partitions respectively.' Commonwealth of Australia (Department of Health and Ageing) 2008, *Australian Refined Diagnosis Related Groups, Version 6.0, Definitions Manual*, Volume 1. Canberra: Commonwealth Department of Health and Ageing. p. 10.

assigned to the surgical AR-DRGs where classification is based on the most resource intensive procedure performed. Medical discharges are assigned to an AR-DRG on the basis of principal diagnosis.

- 'S' is a complexity split indicator that ranks DRGs within adjacent DRGs on the basis of their level of complexity/resource use. It is either 'A', 'B', 'C', 'D' or 'Z' with 'A' being the most complex or 'Z' indicating that there is no complexity split.¹⁰ The complexity of the case is determined by particular variables, such as the presence of complications and/or comorbidities (cc), age, or discharge status, which influence the treatment process and/or the pattern of resource utilisation.¹¹

4.2.2.1 AR-DRG Complexity Split

The AR-DRG complexity split for total discharges is presented in Table 4.1. Almost half of total discharges had no complexity split. Over 13 per cent of in-patient discharges were assigned to complexity group A '*Highest consumption of resources*', while 47.0 per cent were assigned to complexity group B '*Second highest consumption of resources*'.

TABLE 4.1 Total Discharges: AR-DRG Complexity Split by Patient Type (N, %)

	Discharges									
	Day Patients		In-Patients ^a						Total Discharges	
			Sameday In-Patients		Overnight In-Patients		Total In-Patients			
	N	%	N	%	N	%	N	%	N	%
A Highest consumption of resources	7,394	0.7	2,882	2.5	81,121	15.7	84,003	13.2	91,397	5.5
B Second highest consumption of resources	238,173	23.1	49,128	41.8	248,814	48.2	297,942	47.0	536,115	32.2
C Third highest consumption of resources	178,687	17.4	8,543	7.3	28,217	5.5	36,760	5.8	215,447	12.9
D Fourth highest consumption of resources	408	0.0	871	0.7	4,225	0.8	5,096	0.8	5,504	0.3
Z No complexity split	605,198	58.8	56,178	47.8	154,227	29.9	210,405	33.2	815,603	49.0
Total Discharges	1,029,860	100	117,602	100	516,604	100	634,206	100	1,664,066	100

Notes: Percentage columns are subject to rounding.

- a The sameday and overnight in-patient split is provided in this table for information purposes, this split is not provided in Tables 4.2 to 4.27.

¹⁰ For a more detailed description of how AR-DRGs are numbered see Commonwealth Department of Health and Aged Care, 2008. *Australian Refined Diagnosis Related Groups Version 6.0 Definitions Manual*, Volume 1. Canberra: Commonwealth Department of Health and Ageing. pp. 4–15.

¹¹ Complications may arise during the hospital stay, while comorbidities are assumed to be prior existing conditions which were present at the time of admission.

4.3 ANALYSIS OF HIPE DATA BY CASE MIX

The analysis presented in this section includes all discharges reported to HIPE. Analysis of 2015 HIPE data by MDC is presented in Table 4.2 and Figures 4.2 and 4.3. Tables 4.3 to 4.27 represent each MDC (including unassignable to MDC and pre-MDC) and their associated AR-DRGs.¹²

4.3.1 Analysis of Day Patients by MDC and AR-DRG

- The MDC with the largest proportion of day patients reported was *Neoplastic disorders (haematological and solid neoplasms)* (MDC 17), which accounted for 246,699 discharges or 24.0 per cent of day patients (see Tables 4.2 and 4.19 and Figure 4.3).
 - * *Radiotherapy* (AR-DRG R64Z)¹³ and *Chemotherapy* (AR-DRG R63Z) and accounted for 46.3 and 43.9 per cent respectively of day patients within this MDC; they accounted for 11.1 per cent and 10.5 per cent respectively of total day patients.
- *Diseases and disorders of the kidney and urinary tract* (MDC 11), with 196,663 discharges, accounted for 19.1 per cent of day patients (see Tables 4.2 and 4.13 and Figure 4.3).
 - * *Haemodialysis* (AR-DRG L61Z) accounted for 86.8 per cent of day patients within this MDC and 16.6 per cent of total day patients.

4.3.2 Analysis of In-Patients by MDC and AR-DRG

- The MDC with the largest proportion of in-patient discharges was *Pregnancy, Childbirth and the Puerperium* (MDC 14), with 117,024 discharges, which accounted for 18.5 per cent of in-patients (see Tables 4.2 and 4.16 and Figure 4.3).
 - * *Vaginal Delivery* (AR-DRG O60Z) accounted for 36.9 per cent of in-patients within this MDC and 6.8 per cent of total in-patient discharges.
 - * *Antenatal and Other Obstetric Admission* (AR-DRG O66Z) accounted for 31.6 per cent of in-patients within this MDC and 5.8 per cent of total in-patient discharges.

¹² See Glossary & Abbreviations for details of the abbreviations used in this section.

¹³ From 2015 this data includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

- * *Caesarean Delivery without Catastrophic or Severe Complication and/or Comorbidity* (AR-DRG O01B) accounted for 13.5 per cent of in-patients within this MDC and 2.5 per cent of total in-patients.
 - * The mean length of stay for *Vaginal Delivery* (AR-DRG O60Z) was 2.7 days and 4.4 days for *Caesarean Delivery without Catastrophic or Severe Complication and/or Comorbidity* (AR-DRG O01B).
- *Diseases and Disorders of the Circulatory System* (MDC 5) accounted for 77,753 in-patients or 12.3 per cent of total in-patients (see Tables 4.2 and 4.7 and Figure 4.3).
 - * *Chest Pain* (AR-DRG F74Z) accounted for 22.5 per cent of in-patients within MDC 5 and 2.8 per cent of total in-patients.
 - * The mean length of stay for in-patient discharges with *Chest Pain* (AR-DRG F74Z) was 1.8 days.

TABLE 4.2 Total Discharges: MDC by Patient Type (N, %)

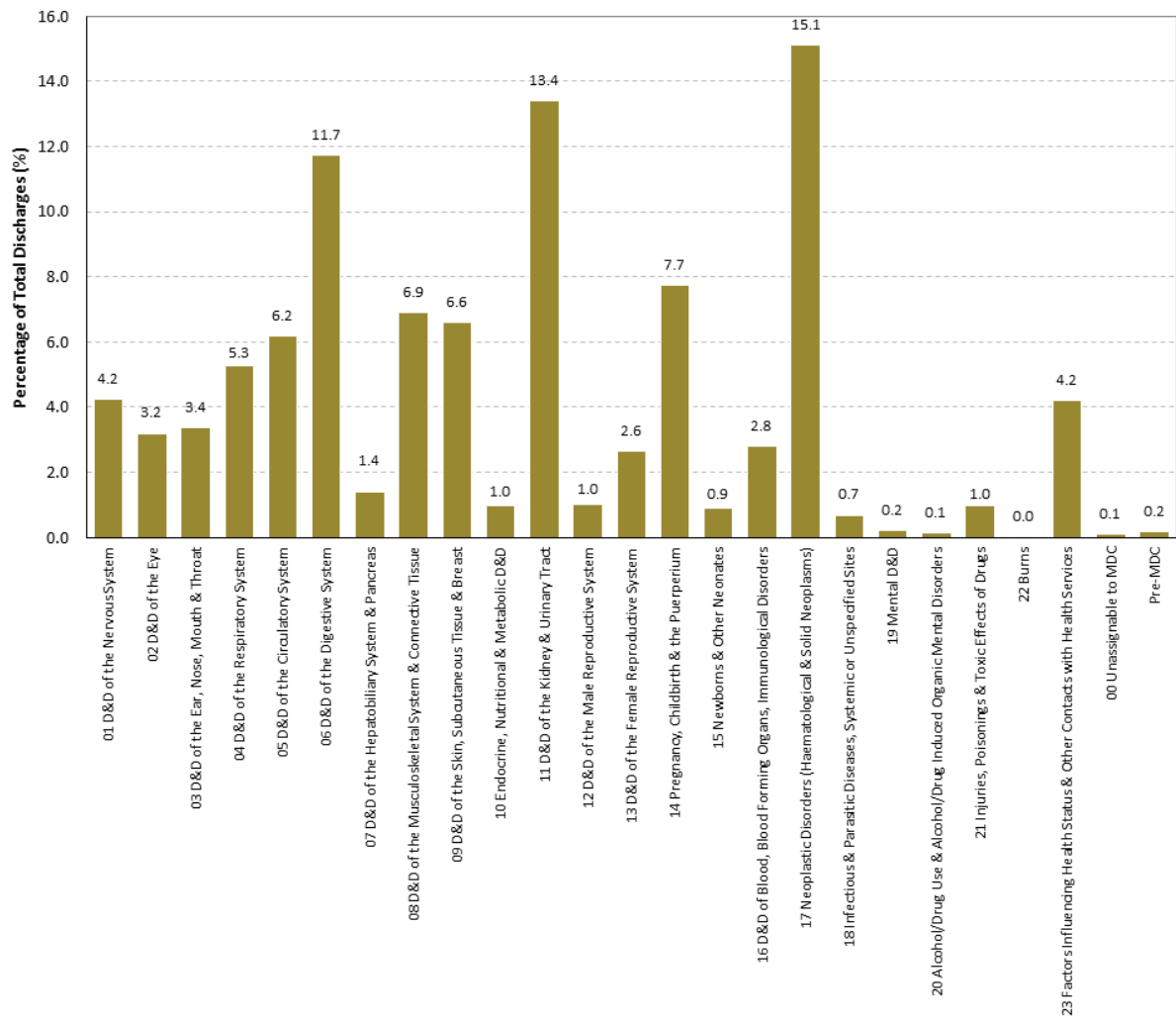
Major Diagnostic Category	Day Patients		In-Patients		Total Discharges	
	N	%	N	%	N	%
01 Diseases and disorders of the nervous system	21,745	2.1	48,648	7.7	70,393	4.2
02 Diseases and disorders of the eye	47,903	4.7	5,329	0.8	53,232	3.2
03 Diseases and disorders of the ear, nose, mouth and throat	27,297	2.7	28,505	4.5	55,802	3.4
04 Diseases and disorders of the respiratory system	17,367	1.7	70,112	11.1	87,479	5.3
05 Diseases and disorders of the circulatory system	24,911	2.4	77,753	12.3	102,664	6.2
06 Diseases and disorders of the digestive system	126,075	12.2	68,975	10.9	195,050	11.7
07 Diseases and disorders of the hepatobiliary system and pancreas	7,569	0.7	15,647	2.5	23,216	1.4
08 Diseases and disorders of the musculoskeletal system and connective tissue	61,874	6.0	52,848	8.3	114,722	6.9
09 Diseases and disorders of the skin, subcutaneous tissue and breast	90,488	8.8	19,316	3.0	109,804	6.6
10 Endocrine, nutritional and metabolic diseases and disorders	5,506	0.5	10,924	1.7	16,430	1.0
11 Diseases and disorders of the kidney and urinary tract	196,663	19.1	26,640	4.2	223,303	13.4
12 Diseases and disorders of the male reproductive system	12,248	1.2	4,491	0.7	16,739	1.0
13 Diseases and disorders of the female reproductive system	31,961	3.1	12,015	1.9	43,976	2.6
14 Pregnancy, childbirth and the puerperium	11,940	1.2	117,024	18.5	128,964	7.7
15 Newborns and other neonates	583	0.1	14,590	2.3	15,173	0.9
16 Diseases and disorders of blood, blood forming organs, immunological disorders	38,698	3.8	7,725	1.2	46,423	2.8
17 Neoplastic disorders (haematological and solid neoplasms) ^a	246,699	24.0	4,965	0.8	251,664	15.1
18 Infectious and parasitic diseases, systemic or unspecified sites	1,268	0.1	10,169	1.6	11,437	0.7
19 Mental diseases and disorders	555	0.1	3,149	0.5	3,704	0.2
20 Alcohol/drug use and alcohol/drug induced organic mental disorders	~	0.0	*	0.3	2,174	0.1
21 Injuries, poisonings and toxic effects of drugs	1,244	0.1	15,061	2.4	16,305	1.0
22 Burns	*	0.0	*	0.1	594	0.0
23 Factors influencing health status and other contacts with health services	56,641	5.5	13,306	2.1	69,947	4.2
00 Unassignable to MDC	417	0.0	1,400	0.2	1,817	0.1
Pre-MDC	118	0.0	2,936	0.5	3,054	0.2
Total Discharges	1,029,860	100	634,206	100	1,664,066	100

Notes: Percentage columns are subject to rounding.

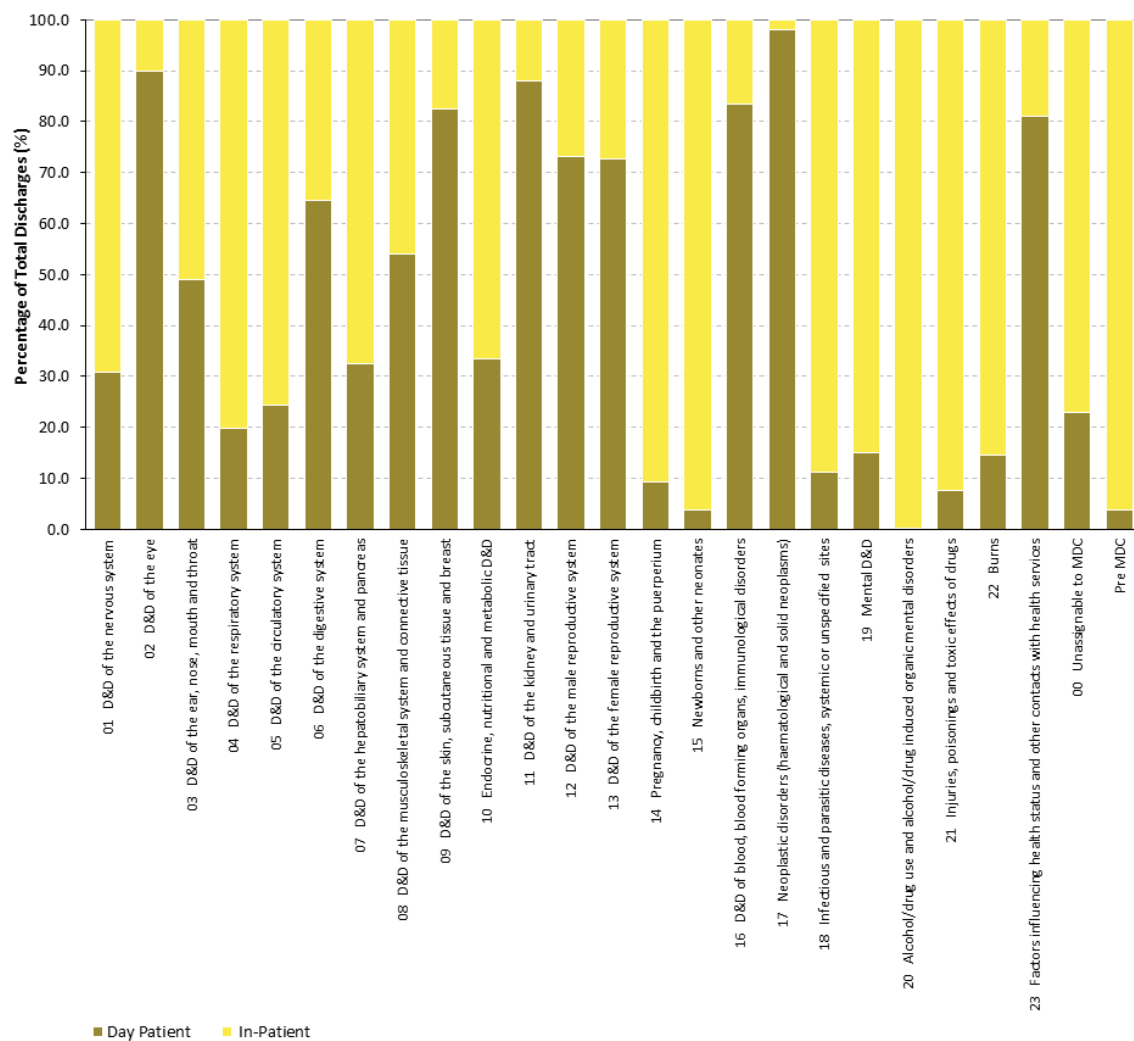
~ Denotes five or fewer discharges reported to HIPE.

* Further suppression required to prevent disclosure of five or fewer discharges.

a From 2015 this data includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

FIGURE 4.2 Total Discharges: Major Diagnostic Category (MDC) (%)

Note: D&D = Diseases and disorders

FIGURE 4.3 Total Discharges: Major Diagnostic Category by Patient Type (%)

Note: D&D = Diseases and disorders

TABLE 4.3 Total Discharges: MDC 1 Diseases and Disorders of the Nervous System: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 1 Diseases and Disorders of the Nervous System	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
B01A Ventricular Shunt Revision W Cat or Sev CC	0	39	4.7	3
B01B Ventricular Shunt Revision W/O Cat or Sev CC	0	64	4.0	3
B02A Cranial Procedures W Cat CC	0	199	25.8	14
B02B Cranial Procedures W Sev CC	0	325	11.2	8
B02C Cranial Procedures W/O Cat or Sev CC	6	1,106	8.0	6
B03A Spinal Procedures W Cat or Sev CC	~	23	24.7	19
B03B Spinal Procedures W/O Cat or Sev CC	27	185	6.7	3
B04A Extracranial Vascular Procedures W Cat CC	0	53	25.5	17
B04B Extracranial Vascular Procedures W/O Cat CC	~	315	7.3	5
B05Z Carpal Tunnel Release	1,801	52	1.5	1
B06A Procs for Cerebral Palsy, Muscular Dystrophy, Neuropathy W CC	10	61	27.9	15
B06B Procs for Cerebral Palsy, Muscular Dystrophy, Neuropathy W/O CC	188	109	3.9	2
B07A Peripheral and Cranial Nerve and Other Nervous System Procedures W CC	~	77	16.8	4
B07B Peripheral and Cranial Nerve and Other Nervous System Procedures W/O CC	108	352	2.0	1
B40Z Plasmapheresis W Neurological Disease, Sameday	57	0	-	-
B41Z Telemetric EEG Monitoring	12	265	7.9	6
B42A Nervous System Diagnosis W Ventilator Support W Cat CC	0	58	27.2	9
B42B Nervous System Diagnosis W Ventilator Support W/O Cat CC	0	149	7.3	3
B60A Acute Paraplegia/Quadriplegia W or W/O OR Procs W Cat CC	0	14	47.5	33
B60B Acute Paraplegia/Quadriplegia W or W/O OR Procs W/O Cat CC	6	60	16.9	7
B61A Spinal Cord Conditions W or W/O OR Procedures W Cat or Sev CC	~	82	27.8	19
B61B Spinal Cord Conditions W or W/O OR Procedures W/O Cat or Sev CC	9	142	10.7	5
B62Z Apheresis	203	12	2.3	2
B63Z Dementia and Other Chronic Disturbances of Cerebral Function	214	776	34.4	14
B64A Delirium W Cat CC	0	205	31.7	15
B64B Delirium W/O Cat CC	75	1,709	9.6	4
B65Z Cerebral Palsy	283	39	6.2	2
B66A Nervous System Neoplasm W Cat or Sev CC	105	402	14.8	10
B66B Nervous System Neoplasm W/O Cat or Sev CC	1,895	729	8.5	4
B67A Degenerative Nervous System Disorders W Cat or Sev CC	10	348	30.3	15
B67B Degenerative Nervous System Disorders W Moderate CC	45	377	15.4	7
B67C Degenerative Nervous System Disorders W/O CC	897	817	8.4	4
B68A Multiple Sclerosis and Cerebellar Ataxia W CC	30	159	21.8	10
B68B Multiple Sclerosis and Cerebellar Ataxia W/O CC	4,884	596	6.2	4
B69A TIA and Precerebral Occlusion W Cat or Sev CC	~	666	9.7	6
B69B TIA and Precerebral Occlusion W/O Cat or Sev CC	93	2,420	3.8	2
B70A Stroke and Other Cerebrovascular Disorders W Cat CC	0	1,198	40.6	24
B70B Stroke and Other Cerebrovascular Disorders W Sev CC	0	1,619	20.0	11
B70C Stroke and Other Cerebrovascular Disorders W/O Cat or Sev CC	23	2,614	10.1	7
B70D Stroke and Other Cerebrovascular Disorders, Died or Transferred <5 Days	~	584	1.7	1
B71A Cranial and Peripheral Nerve Disorders W CC	89	362	12.3	5
B71B Cranial and Peripheral Nerve Disorders W/O CC	4,050	1,064	3.5	1
B72A Nervous System Infection Except Viral Meningitis W Cat or Sev CC	22	135	23.7	15
B72B Nervous System Infection Except Viral Meningitis W/O Cat or Sev CC	110	369	8.3	6
B73Z Viral Meningitis	8	321	5.2	4
B74A Nontraumatic Stupor and Coma W CC	~	110	9.7	3
B74B Nontraumatic Stupor and Coma W/O CC	30	87	2.6	1
B75Z Febrile Convulsions	25	786	1.8	1
B76A Seizure W Cat or Sev CC	~	1,099	10.0	5
B76B Seizure W/O Cat or Sev CC	948	5,957	3.1	2
B77Z Headache	1,508	9,651	2.0	1
B78A Intracranial Injury W Cat or Sev CC	0	321	31.7	13
B78B Intracranial Injury W/O Cat or Sev CC	~	715	6.4	3
B79A Skull Fractures W Cat or Sev CC	0	37	18.3	5
B79B Skull Fractures W/O Cat or Sev CC	~	287	3.4	2
B80Z Other Head Injury	12	3,189	2.1	1
B81A Other Disorders of the Nervous System W Cat or Sev CC	24	852	18.2	9
B81B Other Disorders of the Nervous System W/O Cat or Sev CC	3,491	3,597	4.6	1
B82A Chronic and Unspecified Paraplegia/Quadriplegia W or W/O OR Procs W Cat CC	32	158	77.1	25
B82B Chronic and Unspecified Paraplegia/Quadriplegia W or W/O OR Procs W Sev CC	10	186	33.6	12
B82C Chronic and Unspecified Paraplegia/Quadriplegia W or W/O OR Pr W/O Cat/Sev CC	373	365	18.8	5
Total Discharges	21,745	48,648	8.3	2

Notes: ~ Denotes five or fewer discharges reported to HIPE.

- Mean and median length of stay cannot be calculated as no in-patients are reported.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.4 Total Discharges: MDC 2 Diseases and Disorders of the Eye: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 2 Diseases and Disorders of the Eye	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
C01Z Procedures for Penetrating Eye Injury	10	100	7.1	4
C02Z Enucleations and Orbital Procedures	50	105	4.0	2
C03Z Retinal Procedures	22,373	1,177	3.0	2
C04Z Major Corneal, Scleral and Conjunctival Procedures	13	126	3.0	2
C05Z Dacryocystorhinostomy	72	112	1.5	1
C10Z Strabismus Procedures	574	136	1.1	1
C11Z Eyelid Procedures	753	109	1.7	1
C12Z Other Corneal, Scleral and Conjunctival Procedures	282	92	5.3	5
C13Z Lacrimal Procedures	440	18	2.5	1
C14Z Other Eye Procedures	1,614	170	3.6	2
C15A Glaucoma and Complex Cataract Procedures	0	319	2.7	1
C15B Glaucoma and Complex Cataract Procedures, Sameday	635	22	1.0	1
C16Z Lens Procedures	10,729	354	1.9	1
C60A Acute and Major Eye Infections W CC	0	54	10.3	6
C60B Acute and Major Eye Infections W/O CC	36	133	5.4	4
C61A Neurological and Vascular Disorders of the Eye W CC	99	189	5.8	4
C61B Neurological and Vascular Disorders of the Eye W/O CC	784	512	2.8	2
C62Z Hyphema and Medically Managed Trauma to the Eye	151	480	3.9	1
C63Z Other Disorders of the Eye	9,288	1,121	2.8	1
Total Discharges	47,903	5,329	3.2	1

Note: a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.5 Total Discharges: MDC 3 Diseases and Disorders of the Ear, Nose, Mouth and Throat: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 3 Diseases and Disorders of the Ear, Nose, Mouth and Throat	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
D01Z Cochlear Implant	~	170	2.6	1
D02A Head and Neck Procedures W Cat or Sev CC	0	71	21.6	11
D02B Head and Neck Procedures W Malignancy or Moderate CC	~	72	11.2	7
D02C Head and Neck Procedures W/O Malignancy W/O CC	21	131	2.5	2
D03Z Surgical Repair for Cleft Lip or Palate Diagnosis	18	137	3.1	2
D04A Maxillo Surgery W CC	~	129	3.7	3
D04B Maxillo Surgery W/O CC	61	611	2.3	2
D05Z Parotid Gland Procedures	~	202	2.9	2
D06Z Sinus and Complex Middle Ear Procedures	134	350	1.8	1
D10Z Nasal Procedures	492	591	1.3	1
D11Z Tonsillectomy and/or Adenoidectomy	574	4,363	1.3	1
D12Z Other Ear, Nose, Mouth and Throat Procedures	1,258	840	3.1	1
D13Z Myringotomy W Tube Insertion	2,186	135	2.2	1
D14Z Mouth and Salivary Gland Procedures	855	372	3.5	2
D15Z Mastoid Procedures	18	284	2.5	2
D40Z Dental Extractions and Restorations	5,684	293	1.7	1
D60A Ear, Nose, Mouth and Throat Malignancy W Cat or Sev CC	44	226	28.4	22
D60B Ear, Nose, Mouth and Throat Malignancy W/O Cat or Sev CC	939	463	13.4	5
D61Z Dysequilibrium	352	4,085	2.4	1
D62Z Epistaxis	470	1,006	3.7	3
D63Z Otitis Media and URI	2,333	9,234	2.0	1
D64Z Laryngotracheitis and Epiglottitis	17	844	1.4	1
D65Z Nasal Trauma and Deformity	1,097	443	2.8	1
D66A Other Ear, Nose, Mouth and Throat Diagnoses W CC	245	269	4.7	2
D66B Other Ear, Nose, Mouth and Throat Diagnoses W/O CC	8,892	1,848	1.9	1
D67A Oral and Dental Disorders Except Extractions and Restorations	0	959	3.4	2
D67B Oral and Dental Disorders Except Extractions and Restorations, Sameday	1,594	377	1.0	1
Total Discharges	27,297	28,505	2.6	1

Notes: ~ Denotes five or fewer discharges reported to HIPE.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.6 Total Discharges: MDC 4 Diseases and Disorders of the Respiratory System: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 4 Diseases and Disorders of the Respiratory System	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
E01A Major Chest Procedures W Cat CC	~	393	15.9	12
E01B Major Chest Procedures W/O Cat CC	190	641	9.6	8
E02A Other Respiratory System OR Procedures W Cat CC	~	146	24.4	18
E02B Other Respiratory System OR Procedures W Sev or Moderate CC	26	120	9.4	7
E02C Other Respiratory System OR Procedures W/O CC	112	187	4.8	3
E40A Respiratory System Diagnosis W Ventilator Support W Cat CC	0	160	17.4	12
E40B Respiratory System Diagnosis W Ventilator Support W/O Cat CC	0	98	9.3	7
E41Z Respiratory System Diagnosis W Non-Invasive Ventilation	0	1,192	18.5	11
E42A Bronchoscopy W Cat CC	0	319	23.0	18
E42B Bronchoscopy W/O Cat CC	0	1,245	10.5	8
E42C Bronchoscopy, Sameday	6,387	52	1.0	1
E60A Cystic Fibrosis W Cat or Sev CC	266	457	15.5	14
E60B Cystic Fibrosis W/O Cat or Sev CC	1,834	617	9.4	9
E61A Pulmonary Embolism W Cat CC	~	183	14.9	11
E61B Pulmonary Embolism W/O Cat CC	23	1,248	6.6	5
E62A Respiratory Infections/Inflammations W Cat CC	~	3,607	17.2	10
E62B Respiratory Infections/Inflammations W Sev or Moderate CC	28	4,665	9.1	6
E62C Respiratory Infections/Inflammations W/O CC	61	3,992	4.4	3
E63Z Sleep Apnoea	51	2,046	1.4	1
E64A Pulmonary Oedema and Respiratory Failure W Cat CC	~	218	14.0	9
E64B Pulmonary Oedema and Respiratory Failure W/O Cat CC	~	386	7.1	5
E65A Chronic Obstructive Airways Disease W Cat CC	9	2,334	13.3	9
E65B Chronic Obstructive Airways Disease W/O Cat CC	624	11,550	6.2	4
E66A Major Chest Trauma W Cat CC	0	57	20.3	12
E66B Major Chest Trauma W Sev or Moderate CC	0	192	7.1	5
E66C Major Chest Trauma W/O CC	~	217	3.6	2
E67A Respiratory Signs and Symptoms W Cat or Sev CC	49	671	5.6	3
E67B Respiratory Signs and Symptoms W/O Cat or Sev CC	1,157	5,107	1.8	1
E68A Pneumothorax W CC	~	285	8.6	6
E68B Pneumothorax W/O CC	9	423	4.2	3
E69A Bronchitis and Asthma W CC	65	626	5.8	4
E69B Bronchitis and Asthma W/O CC	2,337	3,847	2.3	1
E70A Whooping Cough and Acute Bronchiolitis W CC	~	230	6.0	5
E70B Whooping Cough and Acute Bronchiolitis W/O CC	17	2,543	2.8	2
E71A Respiratory Neoplasms W Cat CC	113	413	14.6	11
E71B Respiratory Neoplasms W/O Cat CC	2,998	1,595	7.9	5
E72Z Respiratory Problems Arising from Neonatal Period	10	97	5.7	2
E73A Pleural Effusion W Cat CC	~	195	15.4	11
E73B Pleural Effusion W Sev or Moderate CC	34	422	9.1	6
E73C Pleural Effusion W/O CC	66	264	4.8	2
E74A Interstitial Lung Disease W Cat CC	0	97	14.8	8
E74B Interstitial Lung Disease W Sev or Moderate CC	42	259	8.8	6
E74C Interstitial Lung Disease W/O CC	252	383	4.8	2
E75A Other Respiratory System Diagnosis W Cat CC	~	2,182	15.1	9
E75B Other Respiratory System Diagnosis W Sev or Moderate CC	83	5,708	7.5	5
E75C Other Respiratory System Diagnosis W/O CC	493	8,347	3.1	1
E76Z Respiratory Tuberculosis	8	96	15.8	8
Total Discharges	17,367	70,112	7.1	4

Notes: ~ Denotes five or fewer discharges reported to HIPE.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.7 Total Discharges: MDC 5 Diseases and Disorders of the Circulatory System: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 5 Diseases and Disorders of the Circulatory System	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
F01A Implantation or Replacement of AICD, Total System W Cat CC	7	76	18.0	14
F01B Implantation or Replacement of AICD, Total System W/O Cat CC	192	271	5.1	2
F02Z Other AICD Procedures	11	37	7.1	1
F03A Cardiac Valve Proc W CPB Pump W Invasive Cardiac Investigation W Cat CC	0	76	25.1	24
F03B Cardiac Valve Proc W CPB Pump W Invasive Cardiac Investigation W/O Cat CC	0	39	15.9	14
F04A Cardiac Valve Proc W CPB Pump W/O Invasive Cardiac Inves W Cat CC	0	258	18.5	13
F04B Cardiac Valve Proc W CPB Pump W/O Invasive Cardiac Inves W/O Cat CC	~	278	11.3	9
F05A Coronary Bypass W Invasive Cardiac Investigation W Reoperation or W Cat CC	0	72	25.5	24
F05B Coronary Bypass W Invasive Cardiac Investigation W/O Reoperation W/O Cat CC	0	98	20.1	19
F06A Coronary Bypass W/O Invasive Cardiac Inves W Reoperation or W Cat or Sev CC	0	446	13.3	10
F06B Coronary Bypass W/O Invasive Cardiac Inves W/O Reoperation W/O Cat or Sev CC	0	195	10.5	9
F07A Other Cardiothoracic/Vascular Procedures W CPB Pump W Cat CC	0	47	17.2	11
F07B Other Cardiothoracic/Vascular Procedures W CPB Pump W Sev or Moderate CC	0	37	16.4	11
F07C Other Cardiothoracic/Vascular Procedures W CPB Pump W/O CC	0	58	10.2	9
F08A Major Reconstruct Vascular Procedures W/O CPB Pump W Cat CC	0	264	24.6	17
F08B Major Reconstruct Vascular Procedures W/O CPB Pump W/O Cat CC	20	534	10.2	8
F09A Other Cardiothoracic Procedures W/O CPB Pump W Cat CC	0	67	13.9	11
F09B Other Cardiothoracic Procedures W/O CPB Pump W Sev or Moderate CC	~	60	7.2	5
F09C Other Cardiothoracic Procedures W/O CPB Pump W/O CC	18	77	5.2	2
F10A Interventional Coronary Procedures W AMI W Cat CC	~	200	11.6	8
F10B Interventional Coronary Procedures W AMI W/O Cat CC	170	2,029	3.5	3
F11A Amputation for Circ System Except Upper Limb and Toe W Cat CC	0	98	52.5	37
F11B Amputation for Circ System Except Upper Limb and Toe W/O Cat CC	0	100	25.3	17
F12A Implantation or Replacement of Pacemaker, Total System W Cat CC	6	94	16.0	11
F12B Implantation or Replacement of Pacemaker, Total System W/O Cat CC	411	634	4.8	3
F13A Upper Limb and Toe Amputation for Circulatory Sys Disorders W Cat or Sev CC	~	90	21.6	15
F13B Upper Limb and Toe Amputation for Circulatory Sys Disorders W/O Cat or Sev CC	7	45	9.9	8
F14A Vascular Procs Except Major Reconstruction W/O CPB Pump W Cat CC	~	261	19.9	11
F14B Vascular Procs Except Major Reconstruction W/O CPB Pump W Sev or Mod CC	63	320	6.3	4
F14C Vascular Procs Except Major Reconstruction W/O CPB Pump W/O CC	172	550	4.2	2
F15A Interventional Coronary Procs W/O AMI W Stent Implantation W Cat or Sev CC	45	473	6.3	3
F15B Interventional Coronary Procs W/O AMI W Stent Implantation W/O Cat or Sev CC	611	2,145	2.4	1
F16A Interventional Coronary Procedures W/O AMI W/O Stent Implantation W CC	8	72	3.1	1
F16B Interventional Coronary Procedures W/O AMI W/O Stent Implantation W/O CC	50	155	2.0	1
F17A Insertion or Replacement of Pacemaker Generator W Cat or Sev CC	18	29	11.9	8
F17B Insertion or Replacement of Pacemaker Generator W/O Cat or Sev CC	233	98	2.7	1
F18A Other Pacemaker Procedures W CC	6	36	7.7	4
F18B Other Pacemaker Procedures W/O CC	17	35	5.1	2
F19Z Trans-Vascular Percutaneous Cardiac Intervention	148	152	4.1	1
F20Z Vein Ligation and Stripping	4,282	369	1.4	1
F21A Other Circulatory System OR Procedures W Cat CC	~	48	31.9	17
F21B Other Circulatory System OR Procedures W/O Cat CC	20	105	6.6	3
F40A Circulatory System Diagnosis W Ventilator Support W Cat CC	0	44	17.8	4
F40B Circulatory System Diagnosis W Ventilator Support W/O Cat CC	0	44	4.5	3
F41A Circulatory Disorders W AMI W Invasive Cardiac Inves Proc W Cat or Sev CC	8	168	11.2	7
F41B Circulatory Disorders W AMI W Invasive Cardiac Inves Proc W/O Cat or Sev CC	112	573	4.0	3
F42A Circulatory Disorders W/O AMI W Invasive Cardiac Inves Proc W Cat or Sev CC	0	591	11.5	8
F42B Circulatory Disorders W/O AMI W Invasive Cardiac Inves Proc W/O Cat or Sev CC	0	2,706	4.3	3
F42C Circulatory Disorders W/O AMI W Invasive Cardiac Inves Proc, Sameday	9,179	887	1.0	1
F43Z Circulatory System Diagnosis W Non-Invasive Ventilation	0	169	20.8	12
F60A Circulatory Disorders W AMI W/O Invasive Cardiac Inves Proc W Cat CC	0	463	16.0	9
F60B Circulatory Disorders W AMI W/O Invasive Cardiac Inves Pr W/O Cat CC	19	2,720	5.8	4
F61A Infective Endocarditis W Cat CC	0	52	32.3	29
F61B Infective Endocarditis W/O Cat CC	22	82	17.2	13
F62A Heart Failure and Shock W Cat CC	~	1,395	18.7	12
F62B Heart Failure and Shock W/O Cat CC	47	4,338	7.1	5
F63A Venous Thrombosis W Cat or Sev CC	7	302	10.0	6
F63B Venous Thrombosis W/O Cat or Sev CC	50	1,538	2.9	1
F64A Skin Ulcers in Circulatory Disorders W Cat or Sev CC	~	180	16.8	11
F64B Skin Ulcers in Circulatory Disorders W/O Cat or Sev CC	81	269	9.7	6
F65A Peripheral Vascular Disorders W Cat or Sev CC	45	380	12.1	7

TABLE 4.7 Total Discharges: MDC 5 Diseases and Disorders of the Circulatory System: AR-DRG by Patient Type (N, In-Patient Length of Stay) (contd.)

MDC 5 Diseases and Disorders of the Circulatory System	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
F65B Peripheral Vascular Disorders W/O Cat or Sev CC	981	1,002	4.6	2
F66A Coronary Atherosclerosis W Cat or Sev CC	37	349	8.3	6
F66B Coronary Atherosclerosis W/O Cat or Sev CC	486	2,199	3.3	1
F67A Hypertension W Cat or Sev CC	14	195	6.8	3
F67B Hypertension W/O Cat or Sev CC	130	2,004	2.0	1
F68A Congenital Heart Disease W CC	149	57	5.7	2
F68B Congenital Heart Disease W/O CC	539	142	3.0	1
F69A Valvular Disorders W Cat or Sev CC	37	292	9.2	5
F69B Valvular Disorders W/O Cat or Sev CC	799	3,147	1.9	1
F72A Unstable Angina W Cat or Sev CC	~	216	9.7	6
F72B Unstable Angina W/O Cat or Sev CC	37	1,432	3.8	2
F73A Syncope and Collapse W Cat or Sev CC	8	2,304	11.6	6
F73B Syncope and Collapse W/O Cat or Sev CC	2,269	8,030	2.9	1
F74Z Chest Pain	747	17,522	1.8	1
F75A Other Circulatory System Diagnoses W Cat CC	~	226	15.6	10
F75B Other Circulatory System Diagnoses W Sev or Moderate CC	115	943	5.9	4
F75C Other Circulatory System Diagnoses W/O CC	338	1,152	3.3	1
F76A Arrhythmia, Cardiac Arrest and Conduction Disorders W Cat or Sev CC	41	1,376	8.8	5
F76B Arrhythmia, Cardiac Arrest and Conduction Disorders W/O Cat or Sev CC	2,086	7,136	3.0	1
Total Discharges	24,911	77,753	4.9	2

Notes: ~ Denotes five or fewer discharges reported to HIPE.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.8 Total Discharges: MDC 6 Diseases and Disorders of the Digestive System: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 6 Diseases and Disorders of the Digestive System	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
G01A Rectal Resection W Cat CC	0	267	26.7	19
G01B Rectal Resection W/O Cat CC	~	740	10.2	8
G02A Major Small and Large Bowel Procedures W Cat CC	~	766	27.1	20
G02B Major Small and Large Bowel Procedures W/O Cat CC	61	1,934	10.6	8
G03A Stomach, Oesophageal and Duodenal Procedure W Malignancy or W Cat CC	~	339	20.5	15
G03B Stomach, Oesophageal and Duodenal Procedures W/O Malignancy W Sev or Mod CC	~	71	11.2	9
G03C Stomach, Oesophageal and Duodenal Procedures W/O Malignancy W/O CC	34	277	4.9	3
G04A Peritoneal Adhesiolysis W Cat CC	0	100	20.3	17
G04B Peritoneal Adhesiolysis W Sev or Moderate CC	7	178	10.1	7
G04C Peritoneal Adhesiolysis W/O CC	88	543	5.1	4
G05A Minor Small and Large Bowel Procedures W Cat CC	0	51	20.8	16
G05B Minor Small and Large Bowel Procedures W Sev or Moderate CC	~	88	9.7	8
G05C Minor Small and Large Bowel Procedures W/O CC	20	246	6.2	5
G06Z Pyloromyotomy Procedure	0	76	3.3	3
G07A Appendectomy W Malignancy or Peritonitis or W Cat or Sev CC	7	971	6.0	5
G07B Appendectomy W/O Malignancy or Peritonitis W/O Cat or Sev CC	37	5,368	2.7	2
G10A Hernia Procedures W CC	34	412	7.3	4
G10B Hernia Procedures W/O CC	3,096	2,390	2.2	1
G11Z Anal and Stomal Procedures	5,292	1,609	3.4	2
G12A Other Digestive System OR Procedures W Cat CC	15	167	25.3	15
G12B Other Digestive System OR Procedures W Sev or Moderate CC	94	229	10.6	7
G12C Other Digestive System OR Procedures W/O CC	469	499	6.1	4
G46A Complex Gastroscopy W Cat CC	0	263	27.5	15
G46B Complex Gastroscopy W/O Cat CC	0	1,732	7.7	5
G46C Complex Gastroscopy, Sameday	12,171	40	1.0	1
G47A Other Gastroscopy W Cat CC	0	409	18.7	11
G47B Other Gastroscopy W/O Cat CC	0	4,764	5.1	3
G47C Other Gastroscopy, Sameday	38,807	503	1.0	1
G48A Colonoscopy W Cat or Sev CC	0	535	14.4	9
G48B Colonoscopy W/O Cat or Sev CC	0	2,609	5.4	4
G48C Colonoscopy, Sameday	45,087	179	1.0	1
G60A Digestive Malignancy W Cat CC	150	252	14.6	10
G60B Digestive Malignancy W/O Cat CC	4,898	1,159	8.3	4
G61A GI Haemorrhage W Cat or Sev CC	~	438	7.2	4
G61B GI Haemorrhage W/O Cat or Sev CC	279	1,267	3.0	2
G62Z Complicated Peptic Ulcer	74	61	9.6	4
G63Z Uncomplicated Peptic Ulcer	15	37	3.2	1
G64A Inflammatory Bowel Disease W CC	76	203	7.9	5
G64B Inflammatory Bowel Disease W/O CC	8,844	872	4.1	3
G65A GI Obstruction W Cat or Sev CC	0	373	11.1	7
G65B GI Obstruction W/O Cat or Sev CC	18	952	4.0	3
G66Z Abdominal Pain or Mesenteric Adenitis	1,168	10,638	2.0	1
G67A Oesophagitis and Gastroenteritis W Cat/Sev CC	20	1,591	8.8	5
G67B Oesophagitis and Gastroenteritis W/O Cat/Sev CC	889	11,081	2.2	1
G70A Other Digestive System Diagnoses W Cat or Sev CC	74	1,949	8.6	5
G70B Other Digestive System Diagnoses W/O Cat or Sev CC	4,237	9,747	3.0	2
Total Discharges	126,075	68,975	4.8	2

Notes: ~ Denotes five or fewer discharges reported to HIPE.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.9 Total Discharges: MDC 7 Diseases and Disorders of the Hepatobiliary System and Pancreas: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 7 Diseases and Disorders of the Hepatobiliary System and Pancreas	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
H01A Pancreas, Liver and Shunt Procedures W Cat CC	0	127	20.7	12
H01B Pancreas, Liver and Shunt Procedures W/O Cat CC	19	246	8.7	7
H02A Major Biliary Tract Procedures W Cat CC	0	75	24.6	20
H02B Major Biliary Tract Procedures W Sev CC	6	60	13.7	12
H02C Major Biliary Tract Procedures W/O Cat or Sev CC	34	132	10.2	8
H05A Hepatobiliary Diagnostic Procedures W Cat CC	~	26	24.5	18
H05B Hepatobiliary Diagnostic Procedures W/O Cat CC	62	82	8.0	4
H06A Other Hepatobiliary and Pancreas OR Procedures W Cat CC	0	62	21.8	20
H06B Other Hepatobiliary and Pancreas OR Procedures W/O Cat CC	27	220	5.3	2
H07A Open Cholecystectomy W Closed CDE or W Cat CC	0	48	26.0	15
H07B Open Cholecystectomy W/O Closed CDE W/O Cat CC	24	150	6.2	5
H08A Laparoscopic Cholecystectomy W Closed CDE or W (Cat or Sev CC)	38	338	7.8	5
H08B Laparoscopic Cholecystectomy W/O Closed CDE W/O Cat or Sev CC	1,419	2,631	2.2	1
H40A Endoscopic Procedures for Bleeding Oesophageal Varices W Cat CC	0	29	19.7	15
H40B Endoscopic Procedures for Bleeding Oesophageal Varices W/O Cat CC	14	80	7.9	7
H43A ERCP Procedures W Cat or Sev CC	18	283	16.9	11
H43B ERCP Procedures W/O Cat or Sev CC	1,425	1,098	5.9	4
H60A Cirrhosis and Alcoholic Hepatitis W Cat CC	~	300	19.7	13
H60B Cirrhosis and Alcoholic Hepatitis W Sev or Moderate CC	115	569	9.7	6
H60C Cirrhosis and Alcoholic Hepatitis W/O CC	349	121	5.4	2
H61A Malignancy of Hepatobiliary System, Pancreas W Cat CC	32	220	16.9	13
H61B Malignancy of Hepatobiliary System, Pancreas W/O Cat CC	1,346	924	8.1	5
H62A Disorders of Pancreas Except for Malignancy W Cat or Sev CC	~	338	13.8	9
H62B Disorders of Pancreas Except for Malignancy W/O Cat or Sev CC	480	1,323	5.3	4
H63A Disorders of Liver Except Malig, Cirrhosis, Alcoholic Hepatitis W Cat/Sev CC	38	461	13.9	8
H63B Disorders of Liver Except Malig, Cirrhosis, Alcoholic Hepatitis W/O Cat/Sev CC	1,387	1,145	3.7	1
H64A Disorders of the Biliary Tract W CC	87	1,197	9.3	7
H64B Disorders of the Biliary Tract W/O CC	641	3,362	4.2	3
Total Discharges	7,569	15,647	6.8	4

Notes: ~ Denotes five or fewer discharges reported to HIPE.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.10 Total Discharges: MDC 8 Diseases and Disorders of the Musculoskeletal System and Connective Tissue: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 8 Diseases and Disorders of the Musculoskeletal System and Connective Tissue	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
I01A Bilateral/Multiple Major Joint Proc of Lower Extremity W Revision or W Cat CC	0	38	54.1	45
I01B Bilateral/Multiple Major Joint Pr of Lower Extremity W/O Revision W/O Cat CC	0	54	6.7	5
I02A Microvascular Tissue Transfer or (Skin Graft W Cat or Sev CC), Excluding Hand	0	64	45.7	34
I02B Skin Graft W/O Cat or Sev CC, Excluding Hand	18	77	8.8	6
I03A Hip Replacement W Cat CC	0	546	29.7	18
I03B Hip Replacement W/O Cat CC	~	4,915	7.6	5
I04A Knee Replacement W Cat or Sev CC	0	292	9.3	7
I04B Knee Replacement W/O Cat or Sev CC	~	2,163	5.0	5
I05A Other Joint Replacement W Cat or Sev CC	0	29	16.4	10
I05B Other Joint Replacement W/O Cat or Sev CC	6	235	3.8	3
I06Z Spinal Fusion W Deformity	40	152	7.7	6
I07Z Amputation	0	43	32.7	19
I08A Other Hip and Femur Procedures W Cat CC	0	507	35.3	24
I08B Other Hip and Femur Procedures W/O Cat CC	38	2,294	11.3	8
I09A Spinal Fusion W Cat CC	0	58	22.2	14
I09B Spinal Fusion W/O Cat CC	~	431	6.5	4
I10A Other Back and Neck Procedures W Cat or Sev CC	6	90	14.3	6
I10B Other Back and Neck Procedures W/O Cat or Sev CC	630	1,125	3.0	2
I11Z Limb Lengthening Procedures	~	24	4.2	3
I12A Infect/Inflam of Bone and Joint W Misc Musculoskeletal Procs W Cat CC	~	120	33.9	22
I12B Infect/Inflam of Bone and Joint W Misc Musculoskeletal Procs W Sev or Mod CC	~	101	18.1	15
I12C Infect/Inflam of Bone and Joint W Misc Musculoskeletal Procs W/O CC	75	304	10.3	6
I13A Humerus, Tibia, Fibula and Ankle Procedures W CC	9	545	12.4	7
I13B Humerus, Tibia, Fibula and Ankle Procedures W/O CC	216	3,954	3.0	2
I15Z Cranio-Facial Surgery	~	45	4.4	4
I16Z Other Shoulder Procedures	358	748	1.5	1
I17A Maxillo-Facial Surgery W CC	~	24	6.0	4
I17B Maxillo-Facial Surgery W/O CC	~	54	2.8	2
I18Z Other Knee Procedures	2,242	615	3.1	1
I19A Other Elbow or Forearm Procedures W CC	13	273	5.6	3
I19B Other Elbow or Forearm Procedures W/O CC	434	2,993	1.8	1
I20Z Other Foot Procedures	446	1,348	2.0	1
I21Z Local Excision and Removal of Internal Fixation Devices of Hip and Femur	74	52	2.4	1
I23Z Local Excision and Removal of Internal Fixation Devices Excl Hip and Femur	2,432	418	2.3	1
I24Z Arthroscopy	769	229	2.6	1
I25A Bone and Joint Diagnostic Procedures Including Biopsy W CC	11	43	12.7	13
I25B Bone and Joint Diagnostic Procedures Including Biopsy W/O CC	84	57	5.3	2
I27A Soft Tissue Procedures W CC	37	129	14.7	7
I27B Soft Tissue Procedures W/O CC	606	476	3.1	1
I28A Other Musculoskeletal Procedures W CC	~	143	15.9	8
I28B Other Musculoskeletal Procedures W/O CC	197	623	2.6	1
I29Z Knee Reconstruction or Revision	30	498	1.3	1
I30Z Hand Procedures	1,985	2,201	1.5	1
I31A Hip Revision W Cat CC	0	48	44.7	26
I31B Hip Revision W/O Cat CC	0	407	11.3	7
I32A Knee Revision W Cat CC	0	10	37.0	36
I32B Knee Revision W Sev CC	0	16	20.9	12
I32C Knee Revision W/O Cat or Sev CC	0	100	9.4	6
I60Z Femoral Shaft Fractures	0	67	6.6	2
I61A Distal Femoral Fractures W CC	0	31	12.9	9
I61B Distal Femoral Fractures W/O CC	~	73	4.0	2
I63A Sprains, Strains and Dislocations of Hip, Pelvis and Thigh W CC	0	37	10.8	6
I63B Sprains, Strains and Dislocations of Hip, Pelvis and Thigh W/O CC	~	154	3.0	1
I64A Osteomyelitis W Cat or Sev CC	~	163	20.7	14
I64B Osteomyelitis W/O Cat or Sev CC	220	232	9.4	7
I65A Musculoskeletal Malignant Neoplasms W Cat CC	~	105	20.0	12
I65B Musculoskeletal Malignant Neoplasms W/O Cat CC	996	767	7.7	4
I66A Inflammatory Musculoskeletal Disorders W Cat or Sev CC	51	187	13.6	9
I66B Inflammatory Musculoskeletal Disorders W/O Cat or Sev CC	8,746	901	4.7	3
I67A Septic Arthritis W Cat or Sev CC	~	44	23.8	13
I67B Septic Arthritis W/O Cat or Sev CC	29	131	9.2	6

TABLE 4.10 Total Discharges: MDC 8 Diseases and Disorders of the Musculoskeletal System and Connective Tissue: AR-DRG by Patient Type (N, In-Patient Length of Stay) (contd.)

MDC 8 Diseases and Disorders of the Musculoskeletal System and Connective Tissue	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
I68A Non-surgical Spinal Disorders W CC	0	1,180	14.9	8
I68B Non-surgical Spinal Disorders W/O CC	0	2,247	5.2	3
I68C Non-surgical Spinal Disorders, Sameday	14,734	1,151	1.0	1
I69A Bone Diseases and Arthropathies W Cat or Sev CC	18	289	12.1	7
I69B Bone Diseases and Arthropathies W/O Cat or Sev CC	7,367	1,175	3.6	1
I71A Other Musculotendinous Disorders W Cat or Sev CC	28	382	8.9	4
I71B Other Musculotendinous Disorders W/O Cat or Sev CC	10,577	4,989	2.0	1
I72A Specific Musculotendinous Disorders W Cat or Sev CC	17	111	18.8	10
I72B Specific Musculotendinous Disorders W/O Cat or Sev CC	4,349	972	3.4	1
I73A Aftercare of Musculoskeletal Implants/Prostheses W Cat or Sev CC	0	84	29.5	20
I73B Aftercare of Musculoskeletal Implants/Prostheses W/O Cat or Sev CC	1,399	316	6.7	3
I74Z Injury to Forearm, Wrist, Hand or Foot	497	2,668	2.6	1
I75A Injury to Shoulder, Arm, Elbow, Knee, Leg or Ankle W CC	6	529	16.7	7
I75B Injury to Shoulder, Arm, Elbow, Knee, Leg or Ankle W/O CC	290	1,722	2.6	1
I76A Other Musculoskeletal Disorders W Cat or Sev CC	38	193	15.7	8
I76B Other Musculoskeletal Disorders W/O Cat or Sev CC	1,676	906	3.6	1
I77A Fractures of Pelvis W Cat or Sev CC	0	296	21.6	15
I77B Fractures of Pelvis W/O Cat or Sev CC	~	459	9.7	6
I78A Fractures of Neck of Femur W Cat or Sev CC	0	91	12.7	7
I78B Fractures of Neck of Femur W/O Cat or Sev CC	0	177	5.1	2
I79A Pathological Fracture W Cat CC	0	40	31.2	26
I79B Pathological Fracture W/O Cat CC	28	268	12.2	8
Total Discharges	61,874	52,848	6.1	2

Notes: ~ Denotes five or fewer discharges reported to HIPE.

* Further suppression required to prevent disclosure of five or fewer discharges.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.11 Total Discharges: MDC 9 Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 9 Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
J01A Microvas Tiss Transf for Skin, Subcutaneous Tiss & Breast Disd W Cat/Sev CC	0	13	20.6	13
J01B Microvas Tiss Transf for Skin, Subcutaneous Tiss & Breast Disd W/O Cat/Sev CC	~	41	10.9	8
J06Z Major Procedures for Breast Conditions	974	1,847	2.8	2
J07Z Minor Procedures for Breast Conditions	1,905	314	2.0	1
J08A Other Skin Graft and/or Debridement Procedures W CC	15	152	23.7	9
J08B Other Skin Graft and/or Debridement Procedures W/O CC	1,362	315	3.5	2
J09Z Perianal and Pilonidal Procedures	451	252	1.9	1
J10Z Skin, Subcutaneous Tissue and Breast Plastic OR Procedures	1,147	271	2.8	1
J11Z Other Skin, Subcutaneous Tissue and Breast Procedures	37,639	1,025	3.6	1
J12A Lower Limb Procs W Ulcer/Cellulitis W Cat CC	0	40	56.7	27
J12B Lower Limb Procs W Ulcer/Cellulitis W/O Cat CC W Skin Graft/Flap Repair	9	16	12.9	7
J12C Lower Limb Procs W Ulcer/Cellulitis W/O Cat CC W/O Skin Graft/Flap Repair	13	99	11.8	8
J13A Lower Limb Procs W/O Ulcer/Cellulitis W Cat CC or W (Skin Graft and Sev CC)	0	20	9.6	7
J13B Lower Limb Procs W/O Ulcer/Cellulitis W/O Cat CC W/O (Skin Graft and Sev CC)	154	95	3.7	2
J14Z Major Breast Reconstructions	13	230	6.5	6
J60A Skin Ulcers W Cat CC	0	104	31.3	16
J60B Skin Ulcers W/O Cat CC	0	404	13.0	7
J60C Skin Ulcers, Sameday	860	82	1.0	1
J62A Malignant Breast Disorders W CC	2,508	454	14.6	10
J62B Malignant Breast Disorders W/O CC	3,135	269	11.5	3
J63A Non-Malignant Breast Disorders W CC	33	46	6.5	5
J63B Non-Malignant Breast Disorders W/O CC	3,353	668	1.6	1
J64A Cellulitis W Cat or Sev CC	~	1,344	14.4	9
J64B Cellulitis W/O Cat or Sev CC	508	6,227	4.0	3
J65A Trauma to the Skin, Subcutaneous Tissue and Breast W Cat or Sev CC	~	257	15.7	7
J65B Trauma to the Skin, Subcutaneous Tissue and Breast W/O Cat or Sev CC	52	1,193	2.8	1
J67A Minor Skin Disorders	0	1,314	3.9	2
J67B Minor Skin Disorders, Sameday	14,505	882	1.0	1
J68A Major Skin Disorders W Cat or Sev CC	0	114	13.1	8
J68B Major Skin Disorders W/O Cat or Sev CC	0	747	4.2	3
J68C Major Skin Disorders, Sameday	19,701	265	1.0	1
J69A Skin Malignancy W Cat CC	0	39	20.9	13
J69B Skin Malignancy W/O Cat CC	0	153	12.7	10
J69C Skin Malignancy, Sameday	2,144	24	1.0	1
Total Discharges	90,488	19,316	5.5	2

Notes: ~ Denotes five or fewer discharges reported to HIPE.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.12 Total Discharges: MDC 10 Endocrine, Nutritional and Metabolic Diseases and Disorders: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 10 Endocrine, Nutritional and Metabolic Diseases and Disorders	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
K01A OR Procedures for Diabetic Complications W Cat CC	0	59	36.0	24
K01B OR Procedures for Diabetic Complications W/O Cat CC	~	116	16.1	11
K02A Pituitary Procedures W CC	0	29	14.8	12
K02B Pituitary Procedures W/O CC	~	49	7.4	5
K03Z Adrenal Procedures	~	74	7.0	5
K04A Major Procedures for Obesity W CC	0	20	3.8	3
K04B Major Procedures for Obesity W/O CC	~	35	3.1	3
K05A Parathyroid Procedures W Cat or Sev CC	0	*	^	^
K05B Parathyroid Procedures W/O Cat or Sev CC	19	177	2.2	2
K06A Thyroid Procedures W Cat or Sev CC	0	49	8.0	5
K06B Thyroid Procedures W/O Cat or Sev CC	8	718	2.7	2
K07Z Obesity Procedures	19	47	2.9	2
K08Z Thyroglossal Procedures	10	45	1.8	1
K09A Other Endocrine, Nutritional and Metabolic OR Procedures W Cat CC	0	20	47.3	19
K09B Other Endocrine, Nutritional and Metabolic OR Procs W Sev or Moderate CC	~	27	12.4	8
K09C Other Endocrine, Nutritional and Metabolic OR Procedures W/O CC	38	42	5.4	3
K40A Endoscopic or Investigative Proc for Metabolic Disorders W Cat CC	0	71	31.1	18
K40B Endoscopic or Investigative Proc for Metabolic Disorders W/O Cat CC	0	329	11.0	8
K40C Endoscopic or Investigative Procedure for Metabolic Disorders, Sameday	830	~	^	^
K60A Diabetes W Cat or Sev CC	7	694	15.5	7
K60B Diabetes W/O Cat or Sev CC	189	2,871	4.2	3
K61Z Sev Nutritional Disturbance	0	52	24.1	10
K62A Miscellaneous Metabolic Disorders W Cat or Sev CC	43	1,148	10.0	6
K62B Miscellaneous Metabolic Disorders W/O Cat or Sev CC	1,250	2,606	3.5	2
K63A Inborn Errors of Metabolism W CC	98	72	11.1	5
K63B Inborn Errors of Metabolism W/O CC	743	197	2.9	1
K64A Endocrine Disorders W Cat or Sev CC	119	198	10.0	6
K64B Endocrine Disorders W/O Cat or Sev CC	2,120	1,157	3.5	2
Total Discharges	5,506	10,924	6.2	3

Notes: ~ Denotes five or fewer discharges reported to HIPE.

* Further suppression required to prevent disclosure of five or fewer discharges.

^ Denotes that length of stay is suppressed where the number of discharges is not reported.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.13 Total Discharges: MDC 11 Diseases and Disorders of the Kidney and Urinary Tract: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 11 Diseases and Disorders of the Kidney and Urinary Tract	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
L02A Operative Insertion of Peritoneal Catheter for Dialysis W Cat or Sev CC	0	22	20.9	11
L02B Operative Insertion of Peritoneal Catheter for Dialysis W/O Cat or Sev CC	28	61	3.9	3
L03A Kidney, Ureter and Major Bladder Procedures for Neoplasm W Cat CC	0	102	27.9	18
L03B Kidney, Ureter and Major Bladder Procedures for Neoplasm W Sev CC	~	85	12.5	9
L03C Kidney, Ureter and Major Bladder Procedures for Neoplasm W/O Cat or Sev CC	9	380	7.6	6
L04A Kidney, Ureter & Major Bladder Procedures for Non-Neoplasm W Cat CC	12	186	22.3	17
L04B Kidney, Ureter and Major Bladder Procedures for Non-Neoplasm W Sev CC	29	183	11.9	7
L04C Kidney, Ureter & Major Bladder Procedures for Non-Neoplasm W/O Cat or Sev CC	416	1,309	4.8	3
L05A Transurethral Prostatectomy W Cat or Sev CC	0	24	12.6	10
L05B Transurethral Prostatectomy W/O Cat or Sev CC	~	111	5.0	4
L06A Minor Bladder Procedures W Cat or Sev CC	~	101	19.3	10
L06B Minor Bladder Procedures W/O Cat or Sev CC	72	295	4.7	3
L07A Transurethral Procedures Except Prostatectomy W CC	61	318	8.5	4
L07B Transurethral Procedures Except Prostatectomy W/O CC	624	797	2.8	2
L08A Urethral Procedures W CC	9	40	6.4	3
L08B Urethral Procedures W/O CC	87	175	3.1	3
L09A Other Procedures for Kidney and Urinary Tract Disorders W Cat CC	0	59	28.2	19
L09B Other Procedures for Kidney and Urinary Tract Disorders W Sev CC	19	38	12.8	6
L09C Other Procedures for Kidney and Urinary Tract Disorders W/O Cat or Sev CC	206	147	3.5	1
L40Z Ureteroscopy	97	139	3.0	2
L41Z Cystourethroscopy, Sameday	10,402	91	1.0	1
L42Z ESW Lithotripsy for Urinary Stones	2,140	58	2.8	2
L60A Renal Failure W Cat CC	0	587	20.2	12
L60B Renal Failure W Sev CC	56	826	9.1	6
L60C Renal Failure W/O Cat or Sev CC	799	1,193	5.7	4
L61Z Haemodialysis	170,675	20	3.6	1
L62A Kidney and Urinary Tract Neoplasms W Cat or Sev CC	353	224	13.4	9
L62B Kidney and Urinary Tract Neoplasms W/O Cat or Sev CC	977	298	5.5	3
L63A Kidney and Urinary Tract Infections W Cat or Sev CC	8	3,625	14.8	8
L63B Kidney and Urinary Tract Infections W/O Cat or Sev CC	1,518	8,517	5.3	3
L64Z Urinary Stones and Obstruction	361	2,359	2.9	2
L65A Kidney and Urinary Tract Signs and Symptoms W Cat or Sev CC	17	436	9.5	6
L65B Kidney and Urinary Tract Signs and Symptoms W/O Cat or Sev CC	1,853	1,776	3.8	2
L66Z Urethral Stricture	112	91	2.7	2
L67A Other Kidney and Urinary Tract Diagnoses W Cat or Sev CC	295	480	11.4	6
L67B Other Kidney and Urinary Tract Diagnoses W/O Cat or Sev CC	5,329	1,487	3.7	2
L68Z Peritoneal Dialysis	88	0	-	-
Total Discharges	196,663	26,640	7.2	4

Notes: ~ Denotes five or fewer discharges reported to HIPE.

- Mean and median length of stay cannot be calculated as no in-patients are reported.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.14 Total Discharges: MDC 12 Diseases and Disorders of the Male Reproductive System: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 12 Diseases and Disorders of the Male Reproductive System	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
M01A Major Male Pelvic Procedures W Cat or Sev CC	0	34	8.4	6
M01B Major Male Pelvic Procedures W/O Cat or Sev CC	0	255	5.3	5
M02A Transurethral Prostatectomy W Cat or Sev CC	0	75	9.4	6
M02B Transurethral Prostatectomy W/O Cat or Sev CC	~	583	4.1	3
M03Z Penis Procedures	393	180	2.8	1
M04Z Testes Procedures	1,269	777	1.9	1
M05Z Circumcision	2,062	206	1.5	1
M06A Other Male Reproductive System OR Procedures W CC	*	31	13.5	8
M06B Other Male Reproductive System OR Procedures W/O CC	124	39	1.8	1
M40Z Cystourethroscopy, Sameday	1,556	*	^	^
M60A Malignancy, Male Reproductive System W Cat or Sev CC	217	215	14.7	8
M60B Malignancy, Male Reproductive System W/O Cat or Sev CC	3,340	432	10.7	4
M61Z Benign Prostatic Hypertrophy	1,334	127	3.6	2
M62Z Inflammation of the Male Reproductive System	799	943	3.5	2
M63Z Sterilisation, Male	237	~	^	^
M64Z Other Male Reproductive System Diagnoses	901	586	2.0	1
Total Discharges	12,248	4,491	4.5	2

Notes: ~ Denotes five or fewer discharges reported to HIPE.

* Further suppression required to prevent disclosure of five or fewer discharges.

^ Denotes that length of stay is suppressed where the number of discharges is not reported.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.15 Total Discharges: MDC 13 Diseases and Disorders of the Female Reproductive System: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 13 Diseases and Disorders of the Female Reproductive System	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
N01Z Pelvic Evisceration and Radical Vulvectomy	0	228	9.6	7
N04A Hysterectomy for Non-Malignancy W Cat or Sev CC	0	180	7.9	6
N04B Hysterectomy for Non-Malignancy W/O Cat or Sev CC	~	1,660	4.4	4
N05A Oophorectomies and Complex Fallopian Tube Procs for Non-Malig W Cat or Sev CC	0	50	7.6	6
N05B Oophorectomies & Complex Fallopian Tube Procs for Non-Malig W/O Cat or Sev CC	139	602	3.0	2
N06A Female Reproductive System Reconstructive Procs W Cat or Sev CC	0	100	4.2	3
N06B Female Reproductive System Reconstructive Procs W/O Cat or Sev CC	192	1,534	2.6	2
N07Z Other Uterine and Adnexa Procedures for Non-Malignancy	2,635	1,493	2.4	2
N08Z Endoscopic and Laparoscopic Procedures for Female Reproductive System	1,185	535	2.2	1
N09Z Conisation, Vagina, Cervix and Vulva Procedures	12,525	735	4.4	1
N10Z Diagnostic Curettage or Diagnostic Hysteroscopy	7,517	593	2.3	1
N11Z Other Female Reproductive System OR Procedures	49	107	11.9	8
N12A Uterine and Adnexa Procedures for Malignancy W Cat CC	~	75	12.1	9
N12B Uterine and Adnexa Procedures for Malignancy W/O Cat CC	32	499	5.5	5
N60A Malignancy, Female Reproductive System W Cat CC	19	110	19.2	16
N60B Malignancy, Female Reproductive System W/O Cat CC	1,332	554	8.2	4
N61Z Infections, Female Reproductive System	217	345	3.2	2
N62Z Menstrual and Other Female Reproductive System Disorders	6,114	2,615	2.2	1
Total Discharges	31,961	12,015	3.8	2

Notes: ~ Denotes five or fewer discharges reported to HIPE.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.16 Total Discharges: MDC 14 Pregnancy, Childbirth and the Puerperium: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 14 Pregnancy, Childbirth and the Puerperium	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
O01A Cesarean Delivery W Cat or Sev CC	0	4,052	8.2	6
O01B Cesarean Delivery W/O Cat or Sev CC	0	15,816	4.4	4
O02A Vaginal Delivery W OR Procedure W Cat or Sev CC	0	195	4.7	4
O02B Vaginal Delivery W OR Procedure W/O Cat or Sev CC	0	826	3.3	3
O03A Ectopic Pregnancy W CC	0	33	3.8	3
O03B Ectopic Pregnancy W/O CC	31	648	2.2	2
O04A Postpartum and Post Abortion W OR Procedure W Cat or Sev CC ^b	0	35	5.7	5
O04B Postpartum and Post Abortion W OR Procedure W/O Cat or Sev CC ^b	21	179	3.0	2
O05Z Abortion W OR Procedure ^b	1,720	2,869	1.3	1
O60Z Vaginal Delivery	0	43,219	2.7	2
O61Z Postpartum and Post Abortion W/O OR Procedure ^b	1,068	2,999	2.2	2
O63Z Abortion W/O OR Procedure ^b	396	2,913	1.3	1
O64Z False Labour	25	6,226	1.2	1
O66Z Antenatal and Other Obstetric Admission	8,679	37,014	1.6	1
Total Discharges	11,940	117,024	2.6	2

Notes: a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

b This includes spontaneous abortions and pregnancies with abortive outcome.

TABLE 4.17 Total Discharges: MDC 15 Newborns and Other Neonates: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 15 Newborns and Other Neonates	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
P01Z Neonate, Died or Transferred <5 Days of Admission W Significant OR Procedure	0	32	2.7	3
P02Z Cardiothoracic/Vascular Procedures for Neonates	0	57	20.0	15
P03Z Neonate, AdmWt 1000-1499 g W Significant OR Procedure	0	196	48.0	48
P04Z Neonate, AdmWt 1500-1999 g W Significant OR Procedure	0	130	34.4	30
P05Z Neonate, AdmWt 2000-2499 g W Significant OR Procedure	0	84	32.7	23
P06A Neonate, AdmWt >2499 g W Significant OR Procedure W Multi Major Problems	0	143	40.4	21
P06B Neonate, AdmWt >2499 g W Significant OR Procedure W/O Multi Major Problems	~	143	13.3	10
P60A Neonate, Died or Transferred <5 Days of Adm, W/O Significant OR Proc, Newborn	0	521	1.4	1
P60B Neonate, Died or Transf <5 Days of Adm, W/O Significant OR Proc, Not Newborn	50	208	1.7	1
P61Z Neonate, AdmWt <750 g	0	76	66.1	69
P62Z Neonate, AdmWt 750-999 g	0	106	56.7	59
P63Z Neonate, AdmWt 1000-1249 g W/O Significant OR Procedure	~	47	39.1	37
P64Z Neonate, AdmWt 1250-1499 g W/O Significant OR Procedure	0	161	31.0	30
P65A Neonate, AdmWt 1500-1999 g W/O Significant OR Proc W Multi Major Problems	0	65	26.6	25
P65B Neonate, AdmWt 1500-1999 g W/O Significant OR Procedure W Major Problem	0	276	22.9	21
P65C Neonate, AdmWt 1500-1999 g W/O Significant OR Procedure W Other Problem	0	258	18.0	17
P65D Neonate, AdmWt 1500-1999 g W/O Significant OR Procedure W/O Problem	~	197	13.0	12
P66A Neonate, AdmWt 2000-2499 g W/O Significant OR Proc W Multi Major Problems	~	60	20.9	15
P66B Neonate, AdmWt 2000-2499 g W/O Significant OR Procedure W Major Problem	~	327	14.7	14
P66C Neonate, AdmWt 2000-2499 g W/O Significant OR Procedure W Other Problem	~	819	8.3	6
P66D Neonate, AdmWt 2000-2499 g W/O Significant OR Procedure W/O Problem	15	531	5.1	3
P67A Neonate, AdmWt >2499 g W/O Significant OR Procedure W Multi Major Problems	10	342	12.1	8
P67B Neonate, AdmWt >2499 g W/O Significant OR Procedure W Major Problem	90	1,536	6.8	5
P67C Neonate, AdmWt >2499 g W/O Significant OR Procedure W Other Problem	10	4,607	3.4	2
P67D Neonate, AdmWt >2499 g W/O Significant OR Procedure W/O Problem	389	3,668	2.3	1
Total Discharges	583	14,590	7.8	3

Notes: ~ Denotes five or fewer discharges reported to HIPE.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.18 Total Discharges: MDC 16 Diseases and Disorders of Blood, Blood Forming Organs, Immunological Disorders: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 16 Diseases and Disorders of Blood, Blood Forming Organs, Immunological Disorders	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
Q01Z Splenectomy	0	36	13.4	7
Q02A Other OR Procedure of Blood and Blood Forming Organs W Cat or Sev CC	20	83	18.1	12
Q02B Other OR Procedure of Blood and Blood Forming Organs W/O Cat or Sev CC	554	202	5.7	2
Q60A Reticuloendothelial and Immunity Disorders W Cat or Sev CC	131	600	8.7	6
Q60B Reticuloendothelial and Immunity Disorders W/O Cat or Sev CC W Malignancy	78	275	5.1	4
Q60C Reticuloendothelial and Immunity Disorders W/O Cat or Sev CC W/O Malignancy	3,014	748	3.0	2
Q61A Red Blood Cell Disorders W Cat or Sev CC	331	1,267	9.6	6
Q61B Red Blood Cell Disorders W/O Cat or Sev CC	31,419	3,098	3.2	2
Q62Z Coagulation Disorders	3,151	1,416	3.7	1
Total Discharges	38,698	7,725	5.1	2

Note: a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.19 Total Discharges: MDC 17 Neoplastic Disorders (Haematological and Solid Neoplasms): AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 17 Neoplastic Disorders (Haematological and Solid Neoplasms)	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
R01A Lymphoma and Leukaemia W Major OR Procedures W Cat or Sev CC	~	39	41.4	24
R01B Lymphoma and Leukaemia W Major OR Procedures W/O Cat or Sev CC	15	73	8.0	3
R02A Other Neoplastic Disorders W Major OR Procedures W Cat CC	0	22	25.0	22
R02B Other Neoplastic Disorders W Major OR Procedures W Sev or Moderate CC	~	43	11.3	9
R02C Other Neoplastic Disorders W Major OR Procedures W/O CC	55	180	5.0	4
R03A Lymphoma and Leukaemia W Other OR Procedures W Cat or Sev CC	~	111	43.1	27
R03B Lymphoma and Leukaemia W Other OR Procedures W/O Cat or Sev CC	189	210	8.2	4
R04A Other Neoplastic Disorders W Other OR Procedures W CC	88	63	14.6	11
R04B Other Neoplastic Disorders W Other OR Procedures W/O CC	718	80	4.5	2
R60A Acute Leukaemia W Cat CC	0	192	34.9	29
R60B Acute Leukaemia W/O Cat CC	4,064	755	7.8	4
R61A Lymphoma and Non-Acute Leukaemia W Cat CC	0	331	24.6	18
R61B Lymphoma and Non-Acute Leukaemia W/O Cat CC	0	2,414	6.9	4
R61C Lymphoma and Non-Acute Leukaemia, Sameday	18,224	132	1.0	1
R62A Other Neoplastic Disorders W CC	272	192	12.4	8
R62B Other Neoplastic Disorders W/O CC	623	128	7.2	4
R63Z Chemotherapy	108,181	0	-	-
R64Z Radiotherapy ^b	114,260	0	-	-
Total Discharges	246,699	4,965	10.6	5

Notes: ~ Denotes five or fewer discharges reported to HIPE.

- Mean and median length of stay cannot be calculated as no in-patients are reported.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

b From 2015 this data includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

TABLE 4.20 Total Discharges: MDC 18 Infectious and Parasitic Diseases, Systemic or Unspecified Sites: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 18 Infectious and Parasitic Diseases, Systemic or Unspecified Sites	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
S60Z HIV, Sameday	44	10	1.0	1
S65A HIV-Related W Cat CC	0	57	26.3	13
S65B HIV-Related W Sev CC	0	53	11.4	5
S65C HIV-Related Diseases W/O Cat or Sev CC	0	63	9.4	5
T01A OR Procedures for Infectious and Parasitic Diseases W Cat CC	0	148	33.5	26
T01B OR Procedures for Infectious and Parasitic Diseases W Sev or Moderate CC	*	150	15.8	10
T01C OR Procedures for Infectious and Parasitic Diseases W/O CC	34	224	11.7	7
T40Z Infectious and Parasitic Diseases W Ventilator Support	0	30	17.6	11
T60A Septicaemia W Cat CC	0	927	17.6	11
T60B Septicaemia W/O Cat CC	31	1,323	9.2	6
T61A Postoperative and Post-Traumatic Infections W Cat or Sev CC	~	234	10.5	7
T61B Postoperative and Post-Traumatic Infections W/O Cat or Sev CC	66	894	5.3	4
T62A Fever of Unknown Origin W CC	17	366	4.5	3
T62B Fever of Unknown Origin W/O CC	22	559	2.8	2
T63Z Viral Illness	953	4,715	2.0	1
T64A Other Infectious and Parasitic Diseases W Cat CC	0	44	22.9	10
T64B Other Infectious and Parasitic Diseases W Sev or Moderate CC	15	119	9.0	6
T64C Other Infectious and Parasitic Diseases W/O CC	78	253	3.9	2
Total Discharges	1,268	10,169	6.3	2

Notes: ~ Denotes five or fewer discharges reported to HIPE.

* Further suppression required to prevent disclosure of five or fewer discharges.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.21 Total Discharges: MDC 19 Mental Diseases and Disorders: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 19 Mental Diseases and Disorders	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
U40Z Mental Health Treatment, Sameday, W ECT	50	~	^	^
U60Z Mental Health Treatment, Sameday, W/O ECT	505	791	1.0	1
U61Z Schizophrenia Disorders	0	141	52.6	24
U62A Paranoia & Acute Psych Disorder W Cat/Sev CC or W Mental Health Legal Status	0	*	^	^
U62B Paranoia & Acute Psych Disorder W/O Cat/Sev CC W/O Mental Health Legal Status	0	96	13.9	7
U63Z Major Affective Disorders	0	189	26.1	15
U64Z Other Affective and Somatoform Disorders	0	204	12.0	4
U65Z Anxiety Disorders	0	1,257	3.0	1
U66Z Eating and Obsessive-Compulsive Disorders	0	164	24.2	8
U67Z Personality Disorders and Acute Reactions	0	223	12.1	5
U68Z Childhood Mental Disorders	0	67	3.5	2
Total Discharges	555	3,149	8.9	1

Notes: ~ Denotes five or fewer discharges reported to HIPE.

* Further suppression required to prevent disclosure of five or fewer discharges.

^ Denotes that length of stay is suppressed where the number of discharges is not reported.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.22 Total Discharges: MDC 20 Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 20 Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
V60Z Alcohol Intoxication and Withdrawal	~	1,415	3.5	2
V61Z Drug Intoxication and Withdrawal	0	111	4.7	2
V62A Alcohol Use Disorder and Dependence	0	412	6.1	3
V62B Alcohol Use Disorder and Dependence, Sameday	~	81	1.0	1
V63Z Opioid Use Disorder and Dependence	0	86	17.7	21
V64Z Other Drug Use Disorder and Dependence	~	65	14.9	7
Total Discharges	~	2,170	4.9	2

Notes: ~ Denotes five or fewer discharges reported to HIPE.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.23 Total Discharges: MDC 21 Injuries, Poisonings and Toxic Effects of Drugs: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 21 Injuries, Poisonings and Toxic Effects of Drugs	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
W01Z Ventilation or Cranial Procedures for Multiple Significant Trauma	0	34	20.3	14
W02A Hip, Femur & Limb Pr for Mult Signif Trauma, Incl Implantation W Cat/Sev CC	0	42	36.2	22
W02B Hip, Femur & Limb Pr for Mult Signif Trauma, Incl Implantation W/O Cat/Sev CC	0	39	15.9	13
W03Z Abdominal Procedures for Multiple Significant Trauma	0	20	18.7	15
W04A Other OR Procs for Multiple Significant Trauma W Cat or Sev CC	0	25	32.3	13
W04B Other OR Procs for Multiple Significant Trauma W/O Cat or Sev CC	0	29	11.5	10
W60Z Multiple Trauma, Died or Transferred to Another Acute Care Facility <5 Days	0	71	1.9	2
W61A Multiple Trauma W/O Significant Procedures W Cat or Sev CC	0	55	23.8	15
W61B Multiple Trauma W/O Significant Procedures W/O Cat or Sev CC	0	90	9.7	6
X02A Microvascular Tiss Transfer or (Skin Graft W Cat/Sev CC) for Injuries to Hand	0	23	4.8	4
X02B Skin Graft for Injuries to Hand W/O Cat or Sev CC	10	75	2.0	1
X04A Other Procedures for Injuries to Lower Limb W Cat or Sev CC	0	30	28.0	12
X04B Other Procedures for Injuries to Lower Limb W/O Cat or Sev CC	12	140	3.1	1
X05A Other Procedures for Injuries to Hand W CC	0	58	3.7	2
X05B Other Procedures for Injuries to Hand W/O CC	236	1,047	1.3	1
X06A Other Procedures for Other Injuries W Cat or Sev CC	11	240	12.9	8
X06B Other Procedures for Other Injuries W/O Cat or Sev CC	213	1,050	2.9	2
X07A Skin Graft for Injuries Ex Hand W Microvascular Tiss Tfr or W (Cat or Sev CC)	~	44	24.5	14
X07B Skin Graft for Injuries Ex Hand W/O Microvascular Tiss Tfr W/O Cat or Sev CC	13	90	7.3	5
X40Z Injuries, Poisoning and Toxic Effects of Drugs W Ventilator Support	0	80	11.7	4
X60A Injuries W Cat or Sev CC	0	569	14.3	6
X60B Injuries W/O Cat or Sev CC	404	4,120	2.1	1
X61Z Allergic Reactions	~	403	1.6	1
X62A Poisoning/Toxic Effects of Drugs and Other Substances W Cat or Sev CC	~	608	7.6	3
X62B Poisoning/Toxic Effects of Drugs and Other Substances W/O Cat or Sev CC	94	3,193	2.3	1
X63A Sequelae of Treatment W Cat or Sev CC	14	394	8.4	5
X63B Sequelae of Treatment W/O Cat or Sev CC	223	1,927	3.0	2
X64A Other Injury, Poisoning and Toxic Effect Diagnosis W Cat or Sev CC	0	69	16.8	5
X64B Other Injury, Poisoning and Toxic Effect Diagnosis W/O Cat or Sev CC	8	496	1.9	1
Total Discharges	1,244	15,061	3.9	1

Notes: ~ Denotes five or fewer discharges reported to HIPE.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.24 Total Discharges: MDC 22 Burns: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 22 Burns	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
Y01Z Ventilation for Burns and Sev Full Thickness Burns	0	13	70.8	60
Y02A Other Burns W Skin Graft W CC	~	52	20.4	14
Y02B Other Burns W Skin Graft W/O CC	6	79	8.6	7
Y03Z Other OR Procedures for Other Burns	18	53	6.5	3
Y60Z Burns, Transferred to Another Acute Care Facility <5 Days	0	45	1.4	1
Y61Z Severe Burns	~	42	12.0	6
Y62A Other Burns W CC	0	43	14.2	5
Y62B Other Burns W/O CC	60	181	4.2	2
Total Discharges	86	508	9.8	4

Notes: ~ Denotes five or fewer discharges reported to HIPE.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.25 Total Discharges: MDC 23 Factors Influencing Health Status and Other Contacts with Health Services: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 23 Factors Influencing Health Status and Other Contacts with Health Services	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
Z01A OR Procedures W Diagnoses of Other Contacts W Health Services W Cat/Sev CC	79	106	33.6	13
Z01B OR Procedures W Diagnoses of Other Contacts W Health Services W/O Cat/Sev CC	1,283	244	4.1	2
Z40Z Endoscopy W Diagnoses of Other Contacts W Health Services, Sameday	14,463	*	^	^
Z60A Rehabilitation W Cat CC	0	652	49.1	37
Z60B Rehabilitation W/O Cat CC	0	3,350	27.9	17
Z60C Rehabilitation, Sameday	1,609	~	^	^
Z61A Signs and Symptoms	0	1,578	7.1	3
Z61B Signs and Symptoms, Sameday	1,277	1,086	1.0	1
Z63A Other Surgical Follow Up and Medical Care W Cat CC	10	889	24.0	12
Z63B Other Surgical Follow Up and Medical Care W/O Cat CC	1,433	3,005	15.0	7
Z64A Other Factors Influencing Health Status	0	1,448	6.6	2
Z64B Other Factors Influencing Health Status, Sameday	36,402	839	1.0	1
Z65Z Congenital Anomalies and Problems Arising from Neonatal Period	85	62	4.8	1
Total Discharges	56,641	13,306	16.5	6

Note: ~ Denotes five or fewer discharges reported to HIPE.

* Further suppression required to prevent disclosure of five or fewer discharges.

^ Denotes that length of stay is suppressed where the number of discharges is not reported.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.26 Total Discharges: Unassignable to MDC: AR-DRG by Patient Type (N, In-Patient Length of Stay)

Unassignable to MDC ^b	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
801A OR Procedures Unrelated to Principal Diagnosis W Cat CC	6	566	44.3	24
801B OR Procedures Unrelated to Principal Diagnosis W Sev or Moderate CC	35	338	14.8	9
801C OR Procedures Unrelated to Principal Diagnosis W/O CC	376	496	5.4	2
963Z Neonatal Diagnosis Not Consistent W Age/Weight	0	0	-	-
Total Discharges	417	1,400	23.4	10

Notes: - Mean and median length of stay cannot be calculated as no in-patients are reported.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

b As not all discharges can be assigned directly to a MDC, there is a category entitled 'unassignable to MDC'. These cases are always queried by the HPO.

Unrelated OR DRGs: Patients whose OR procedures are unrelated to the patient's principal diagnosis are assigned to one of three OR DRGs: 801A *OR Procedures Unrelated to Principal Diagnosis W Cat CC*, 801B *OR Procedures Unrelated to Principal Diagnosis W Sev or Moderate CC* or 801C *OR Procedures Unrelated to Principal Diagnosis W/O CC*. Typically, these are patients admitted for a medical treatment; they develop a complication unrelated to the principal diagnosis and later have an OR procedure performed for the secondary diagnoses associated with the complication.

Error DRGs: Hospital records that contain clinically atypical or invalid information are assigned to one of three error DRGs: 960Z *Ungroupable*, 961Z *Unacceptable Principal Diagnosis* or 963Z *Neonatal Diagnosis Not Consistent W Age/Weight*.

Commonwealth of Australia (Department of Health and Ageing) 2008, Australian Refined Diagnosis Related Groups, Version 6.0, Definitions Manual, Volume 1. Canberra: Commonwealth Department of Health and Ageing. Pages 14 and 15.

TABLE 4.27 Total Discharges: Pre-MDC: AR-DRG by Patient Type (N, In-Patient Length of Stay)

Pre-MDC	Day Patients	In-Patients ^a	In-Patient Length of Stay ^a	
	N	N	Mean	Median
A01Z Liver Transplant	0	59	22.0	16
A03Z Lung or Heart/Lung Transplant	0	41	73.8	23
A05Z Heart Transplant	0	17	84.5	57
A06A Tracheostomy W Ventilation >95 hours W Cat CC	0	457	85.8	58
A06B Trach W Vent >95 hours W/O Cat CC or Trach/Vent >95 hours W Cat CC	0	1,580	39.1	24
A06C Ventilation >95 hours W/O Cat CC	0	135	19.1	14
A06D Tracheostomy W/O Cat CC	0	116	27.0	22
A07Z Allogeneic Bone Marrow Transplant	0	84	38.1	35
A08A Autologous Bone Marrow Transplant W Cat CC	0	77	25.1	24
A08B Autologous Bone Marrow Transplant W/O Cat CC	0	55	15.1	18
A09A Renal Transplant W Pancreas Transplant or W Cat CC	0	24	15.1	13
A09B Renal Transplant W/O Pancreas Transplant W/O Cat CC	0	127	10.3	9
A10Z Insertion of Ventricular Assist Devices	~	~	^	^
A11A Insertion of Implantable Spinal Infusion Device W Cat CC	~	~	^	^
A11B Insertion of Implantable Spinal Infusion Device W/O Cat CC	~	16	11.7	7
A12Z Insertion of Neurostimulator Device	114	112	1.9	1
A40Z ECMO	0	33	40.8	23
Total Discharges	118	2,936	41.5	24

Notes: ~ Denotes five or fewer discharges reported to HIPE.

^ Denotes that length of stay is suppressed where the number of discharges is not reported.

a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

Annex 2015

Table of Contents

A.1.1	INTRODUCTION	117
A.1.2	DISCHARGE OVERVIEW	117
A.1.3	DAY PATIENT ACTIVITY	120
A.1.4	ELECTIVE IN-PATIENT ACTIVITY	122
A.1.5	EMERGENCY IN-PATIENT ACTIVITY	124

Tables

TABLE A 1.1	Total Discharges aged 0–16 years by Patient Type, Sex and Age Group (N, %)	117
TABLE A 1.2	In-Patient Discharges aged 0–16 years by Admission Type and Age Group (N, In-Patient Length of Stay)	118
TABLE A 1.3	Day Patient Activity for discharges aged 0–16 years (N, %)	121
TABLE A 1.4	Elective In-Patient Activity for discharges aged 0–16 years (N, %, Mean and Median Length of Stay)	123
TABLE A 1.5	Emergency In-Patient Activity for in-patients aged 0–16 years (N, %, Mean and Median Length of Stay)	125

Figures

FIGURE A 1.1	Overnight In-Patient Discharges aged 0-16 years by Age Group (N, In-Patient Length of Stay)	118
FIGURE A 1.2	Overnight In-Patient Discharges aged 0–16 Years by Admission Type and Age Group: Bed Days	119

PROFILE OF DISCHARGES AGED 0-16 YEARS

A.1.1 INTRODUCTION

As noted in Section One, this Annex is designed to highlight particular topics of interest that merit more focused supplementary analysis. The focus of this year's Annex is discharges aged between 0–16 years (excluding discharges with admission type 'Maternity').

In 2015, 146,625 discharges were aged between 0–16 years, accounting for 9.5 per cent of total discharges (excluding Maternity).¹

A.1.2 DISCHARGE OVERVIEW

Discharges

Table A 1.1 disaggregates discharges aged 0–16 years by patient type, admission type and sex.

- In-patients aged less than one year accounted for 30.2 per cent of total in-patients, while the 1–4 years age group accounted for 29.2 per cent of total day patients aged 0–16 years.
- Male discharges accounted for 55.1 per cent of total discharges aged 0–16 years.

TABLE A 1.1 Total Discharges aged 0–16 years by Patient Type, Sex and Age Group (N, %)

		Day Patients		In-Patients		Total Discharges	
		N	%	N	%	N	%
Total	<1 Year	4,359	7.9	27,630	30.2	31,989	21.8
	1-4 Years	16,083	29.2	25,874	28.2	41,957	28.6
	5-8 Years	13,549	24.6	13,976	15.3	27,525	18.8
	9-12 Years	9,673	17.6	10,951	12.0	20,624	14.1
	13-16 Years	11,326	20.6	13,204	14.4	24,530	16.7
	Total Discharges	54,990	100	91,635	100	146,625	100
Male	<1 Year	2,358	4.3	15,450	16.9	17,808	12.1
	1-4 Years	9,562	17.4	14,454	15.8	24,016	16.4
	5-8 Years	7,675	14.0	7,651	8.3	15,326	10.5
	9-12 Years	4,908	8.9	5,978	6.5	10,886	7.4
	13-16 Years	6,388	11.6	6,313	6.9	12,701	8.7
	Total Male Discharges	30,891	56.2	49,846	54.4	80,737	55.1
Female	<1 Year	2,001	3.6	12,180	13.3	14,181	9.7
	1-4 Years	6,521	11.9	11,420	12.5	17,941	12.2
	5-8 Years	5,874	10.7	6,325	6.9	12,199	8.3
	9-12 Years	4,765	8.7	4,973	5.4	9,738	6.6
	13-16 Years	4,938	9.0	6,891	7.5	11,829	8.1
	Total Female Discharges	24,099	43.8	41,789	45.6	65,888	44.9

Notes: Percentage columns are subject to rounding.

- a HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

¹ There were 296 discharges aged 0-16 years with Admission Type 'Maternity'. Figures presented in the Annex are based on total discharges (excluding Maternity).

Length of Stay

Overnight in-patient discharges aged 0–16 years had a mean length of stay of 3.9 days. Table A 1.2 disaggregates in-patient discharges by admission type and age group.

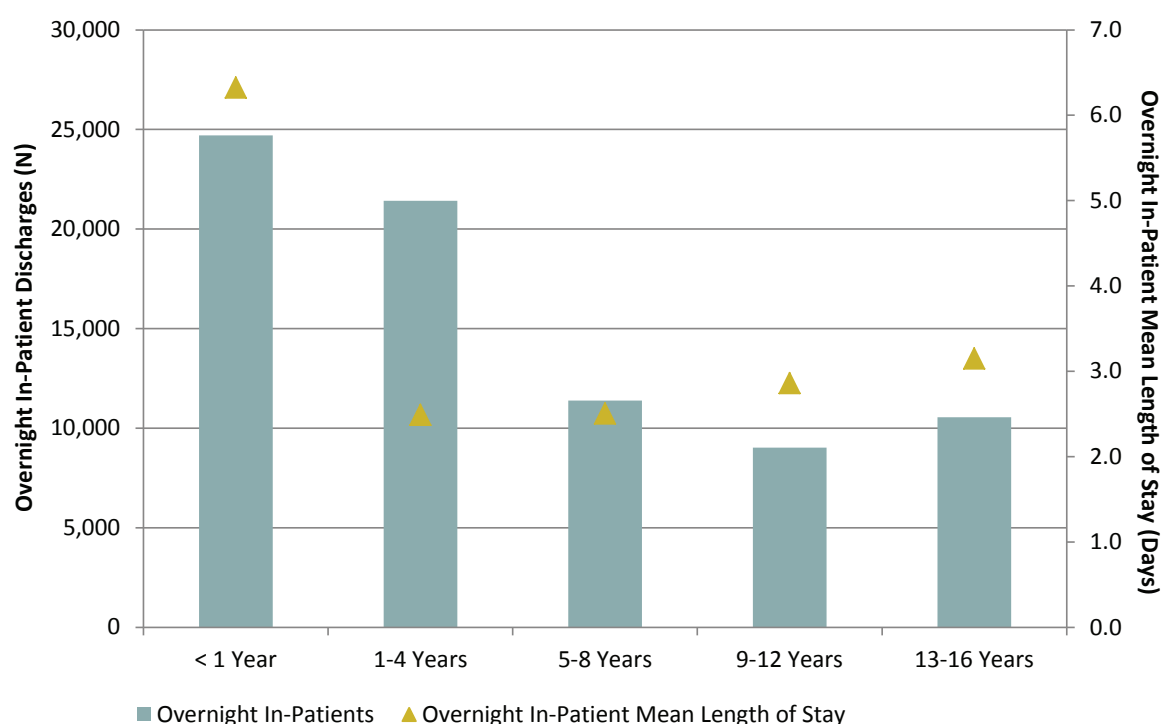
- Overnight in-patients aged less than one year had the longest mean length of stay for both elective (8.8 days) and emergency (6.2 days) in-patient discharges.
- The shortest overnight in-patient mean length of stay was in the 1–4 years and 5–8 years age groups, with each age group staying on average 2.5 days (see also Figure A1.1).

TABLE A 1.2 In-Patient Discharges aged 0–16 years by Admission Type and Age Group (N, In-Patient Length of Stay)

	Sameday In-Patients	Overnight In-Patients								
	N	Elective			Emergency ^a			Total		
		N	Mean	Median	N	Mean	Median	N	Mean	Median
<1 Year	2,895	1,564	8.8	3	23,141	6.2	2	24,705	6.3	3
1-4 Years	4,275	3,453	2.8	1	17,970	2.4	2	21,423	2.5	2
5-8 Years	2,451	2,890	2.4	1	8,494	2.5	2	11,384	2.5	1
9-12 Years	1,843	2,004	3.0	1	7,019	2.8	2	9,023	2.9	2
13-16 Years	2,590	2,150	3.6	2	8,394	3.0	2	10,544	3.2	2
Total In-Patient Discharges	14,054	12,061	3.7	1	65,018	3.9	2	77,079	3.9	2

Note: a HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

FIGURE A 1.1 Overnight In-Patient Discharges aged 0-16 years by Age Group (N, In-Patient Length of Stay)

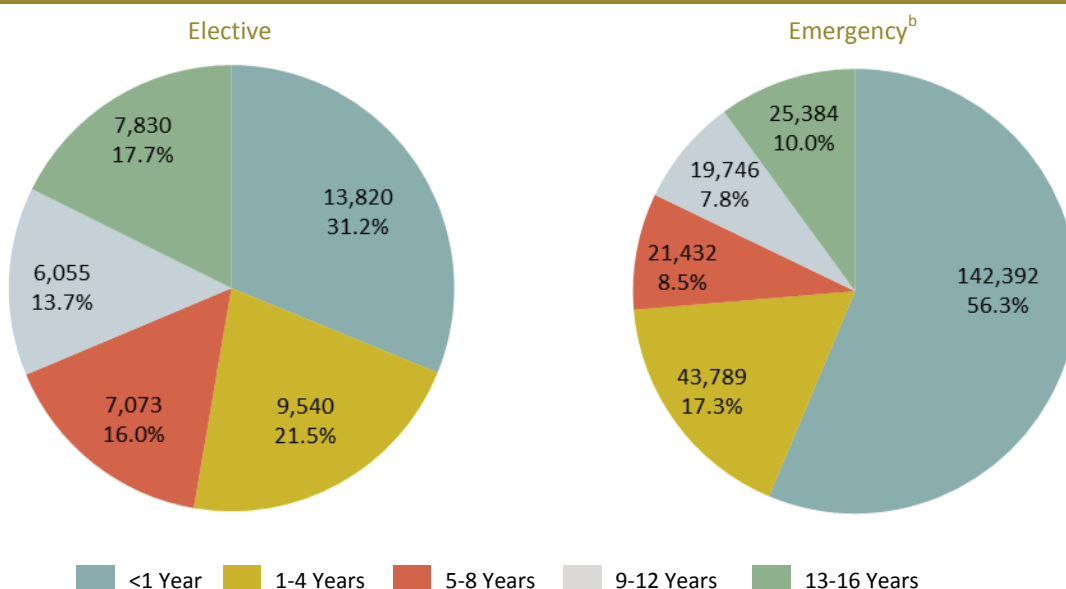


Bed Days

Figure A 1.2 disaggregates elective and emergency in-patient bed days by age group.

- Of total overnight in-patient bed days for discharges aged 0–16 years, emergency in-patient accounted for 252,743 bed days, while elective in-patients who stayed overnight accounted for 44,318 bed days.
- The largest number of elective overnight in-patient bed days were accounted for by the less than one year age group (31.2 per cent). Similarly, the largest number of emergency overnight in-patient bed days were accounted for by discharges aged less than one year (56.3 per cent).

FIGURE A 1.2 Overnight In-Patient Discharges aged 0–16 Years by Admission Type and Age Group: Bed Days^a



Notes: Percentages are subject to rounding.

a In-patient bed days are based on overnight in-patients (excludes sameday in-patients).

b HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

A.1.3 DAY PATIENT ACTIVITY

Table A 1.3 presents a summary of day patient activity for discharges aged 0-16 years reported to HIPE.

Day Patients – Profile

- Day patient discharges aged 0–16 years accounted for 37.5 per cent of total discharges in this age group.
- Day patient discharges in the 1–4 years age group accounted for 29.2 per cent of discharges aged 0–16 years.

Day Patients – Top 20 Principal Diagnoses

- Day patients with a principal diagnosis of *Other medical care* (includes *Chemotherapy* and *Radiotherapy* encounters) and those with a principal diagnosis of *Dental caries* accounted for 10.4 and 5.8 per cent of day patient discharges aged 0–16 years respectively.

Day Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 45,510 (82.8 per cent) of total day patient discharges aged 0–16 years.
- Procedures from the block *Administration of pharmacotherapy* were reported as a principal procedure for 15.3 per cent of day patients with at least one procedure.

Day Patients – Top 10 Australian Refined Diagnosis Related Groups (AR-DRGs)

- The top three AR-DRGs accounted for 19.0 per cent of day patient discharges aged 0–16 years when analysed by diagnosis related group.²
- *Chemotherapy* accounted for 7.2 per cent of in-patient discharges aged 0–16 years. *Dental Extractions and Restorations* and *Other Factors Influencing Health Status, Sameday* accounted for 6.7 per cent and 5.1 per cent of day patient discharges aged 0–16 years respectively.

² See Section Four for details of the case mix classification.

TABLE A 1.3 Day Patient Activity for discharges aged 0–16 years (N, %)

Top 20 Principal Diagnoses ^a				Day Patients				Top 20 Principal Procedure Blocks ^b			
		N	%			N	%			N	%
Z51	Other medical care ^{c,d}	5,724	10.4	54,990				1920	Administration of pharmacotherapy	6,964	15.3
K02	Dental caries	3,182	5.8					0457	Nonsurgical removal of tooth	3,026	6.6
H65	Nonsuppurative otitis media	1,551	2.8					2015	Magnetic resonance imaging	2,540	5.6
C91	Lymphoid leukaemia	1,479	2.7					1893	Administration of blood and blood products	2,471	5.4
N47	Redundant prepuce, phimosis and paraphimosis	1,249	2.3					0309	Myringotomy	1,999	4.4
Z49	Care involving dialysis	1,245	2.3					1858	Diagnostic tests, measures or investigations, blood and blood-forming organs	1,890	4.2
Z47	Other orthopaedic follow-up care	1,166	2.1					1196	Excision procedures on penis	1,485	3.3
D57	Sickle-cell disorders	1,049	1.9					1620	Excision of lesion(s) of skin and subcutaneous tissue	1,265	2.8
L60	Nail disorders	1,019	1.9					1060	Haemodialysis	1,253	2.8
Z13	Special screening examination for other diseases and disorders	989	1.8					1632	Excision of toenail	971	2.1
Q53	Undescended testicle	779	1.4	1554	Other application, insertion or removal procedures on other musculoskeletal sites	859	1.9				
K50	Crohn's disease [regional enteritis]	743	1.4	1008	Panendoscopy with excision	848	1.9				
E84	Cystic fibrosis	733	1.3	1788	Megavoltage radiation treatment ^d	786	1.7				
M08	Juvenile arthritis	659	1.2	1870	Interventions involving assistive or adaptive device, aid or equipment	771	1.7				
Z50	Care involving use of rehabilitation procedures	562	1.0	1610	Ultraviolet B [UVB] light therapy of skin	757	1.7				
H61	Other disorders of external ear	528	1.0	0308	Application, insertion or removal procedures on eardrum or middle ear	711	1.6				
D66	Hereditary factor VIII deficiency	524	1.0	1916	Generalised allied health interventions	705	1.5				
L40	Psoriasis	497	0.9	1552	Administration of agent into other musculoskeletal sites	684	1.5				
Z03	Medical observation and evaluation for suspected diseases and conditions	496	0.9	2008	Renal nuclear medicine imaging study	667	1.5				
Z50	Other strabismus	492	0.9	1186	Orchiopexy for undescended testis	643	1.4				

Discharge Status				Top 10 AR-DRGs			
		N	%			N	%
Public		45,211	82.2	R63Z	Chemotherapy	3,966	7.2
Private		9,779	17.8	D40Z	Dental Extractions and Restorations	3,682	6.7
				Z64B	Other Factors Influencing Health Status, Sameday	2,807	5.1
				Q61B	Red Blood Cell Disorders W/O Catastrophic or Severe CC	1,961	3.6
				R60B	Acute Leukaemia W/O Catastrophic CC	1,864	3.4
				D13Z	Myringotomy W Tube Insertion	1,847	3.4
				J67B	Minor Skin Disorders, Sameday	1,681	3.1
				D66B	Other Ear, Nose, Mouth and Throat Diagnoses W/O CC	1,568	2.9
				J11Z	Other Skin, Subcutaneous Tissue and Breast Procedures	1,540	2.8
				M05Z	Circumcision	1,436	2.6

Notes: Percentage columns are subject to rounding.

a ICD-10-AM diagnosis codes are analysed at three-digit level.

b ACHI Procedure codes are analysed at block level. The percentage (%) is based on day patients with principal procedure reported.

c Other medical care includes chemotherapy and radiotherapy encounters.

d From 2015, this data includes activity from St. Luke's Radiation Oncology Network centres in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

A.1.4 ELECTIVE IN-PATIENT ACTIVITY

Table A 1.4 presents a summary of elective in-patient activity for discharges aged 0–16 years reported to HIPE.

Elective In-Patients – Profile

- Elective in-patient discharges accounted for 12,563 (13.7 per cent) of total in-patient discharges aged 0–16 years and 44,820 (14.4 per cent) of total in-patient bed days for this age group.
- Elective overnight in-patient discharges accounted for 96.0 per cent of total elective in-patient discharges aged 0–16 years and had a mean length of stay of 3.7 days.

Elective In-Patients – Top 20 Principal Diagnoses

- *Chronic diseases of tonsils and adenoids* accounted for 22.1 per cent of elective in-patient discharges aged 0–16 years.

Elective In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 10,771 (85.7 per cent) of elective in-patient discharges aged 0–16 years.
- The procedure block *Tonsillectomy or adenoidectomy* was reported for 25.8 per cent of elective in-patients aged 0–16 years who had a principal procedure reported.

Elective In-Patients – Top 10 Australian Refined Diagnosis Related Groups (AR-DRGs)

- The top three AR-DRGs accounted for 27.2 per cent of elective in-patient discharges aged 0–16 years reported to HIPE when analysed by diagnosis related group.³
- *Tonsillectomy and/or Adenoidectomy* accounted for 22.5 per cent of elective in-patient discharges aged 0–16 years. *Sleep Apnoea* accounted for 2.6 per cent and *Other Factors Influencing Health Status* accounted for 2.1 per cent of elective in-patient discharges aged 0–16 years.

³ See Section Four for details of the case mix classification.

TABLE A 1.4 Elective In-Patient Activity for discharges aged 0–16 years (N, %, Mean and Median Length of Stay)

Top 20 Principal Diagnoses ^a					Elective In-Patients					Top 20 Principal Procedure Blocks ^b														
		N	%	Mean	Med	12,563					N	%	Mean	Med										
J35	Chronic diseases of tonsils and adenoids	2,773	22.1	1.1	1										0412	Tonsillectomy or adenoidectomy	2,780	25.8	1.2	1				
G47	Sleep disorders	427	3.4	1.6	1																			
Q65	Congenital deformities of hip	261	2.1	1.9	1																			
E84	Cystic fibrosis	207	1.6	9.0	8																			
Q21	Congenital malformations of cardiac septa	188	1.5	6.6	5																			
G40	Epilepsy	178	1.4	5.1	3																			
Z13	Special screening examination for other diseases and disorders	173	1.4	1.2	1																			
C91	Lymphoid leukaemia	164	1.3	5.4	3																			
K59	Other functional intestinal disorders	152	1.2	3.9	3										2015	Magnetic resonance imaging	191	1.8	3.0	1				
R06	Abnormalities of breathing	147	1.2	1.7	1																			
Q35	Cleft palate	146	1.2	2.8	2																			
M41	Scoliosis	142	1.1	6.4	6																			
R62	Lack of expected normal physiological development	140	1.1	4.8	3																			
E16	Other disorders of pancreatic internal secretion	136	1.1	2.0	2																			
H65	Nonsuppurative otitis media	135	1.1	1.1	1																			
K40	Inguinal hernia	130	1.0	1.6	1																			
C40	Malignant neoplasm of bone and articular cartilage of limbs	123	1.0	3.6	4										1198	Repair of hypospadias	89	0.8	1.4	1				
C71	Malignant neoplasm of brain	116	0.9	4.0	3																			
H90	Conductive and sensorineural hearing loss	114	0.9	1.1	1																			
Q54	Hypospadias	93	0.7	1.4	1																			
															1554	Other application, insertion or removal procedures on other musculoskeletal sites	82	0.8	1.8	1				
															0926	Appendicectomy	80	0.7	1.9	1				
															1389	Spinal fusion	78	0.7	10.2	8				
															1825	Electroencephalography [EEG]	73	0.7	5.2	3				
										1186	Orchidopexy for undescended testis	62	0.6	1.3	1									
Discharge Status										Top 10 AR-DRGs														
Public		N		%							N					%								
Private		9,550		76.0							2,821					22.5								
		3,013		24.0							E63Z Sleep Apnoea					329 2.6 1.5 1								
										Z64A Other Factors Influencing Health Status					266 2.1 1.6 1									
										I08B Other Hip and Femur Procedures W/O Catastrophic CC					260 2.1 2.0 1									
										G70B Other Digestive System Diagnoses W/O Catastrophic or Severe CC					221 1.8 3.8 3									
										D66B Other Ear, Nose, Mouth and Throat Diagnoses W/O CC					212 1.7 2.3 1									
										R60B Acute Leukaemia W/O Catastrophic CC					209 1.7 4.7 3									
										K64B Endocrine Disorders W/O Catastrophic or Severe CC					184 1.5 2.1 2									
										K62B Miscellaneous Metabolic Disorders W/O Catastrophic or Severe CC					176 1.4 3.6 2									
										E60B Cystic Fibrosis W/O Catastrophic or Severe CC					174 1.4 9.0 10									

Top 20 Principal Diagnoses ^a					Elective In-Patients					Top 20 Principal Procedure Blocks ^b														
		N	%	Mean	Med	12,563					N	%	Mean	Med										
J35	Chronic diseases of tonsils and adenoids	2,773	22.1	1.1	1										0412	Tonsillectomy or adenoidectomy	2,780	25.8	1.2	1				
G47	Sleep disorders	427	3.4	1.6	1																			
Q65	Congenital deformities of hip	261	2.1	1.9	1																			
E84	Cystic fibrosis	207	1.6	9.0	8																			
Q21	Congenital malformations of cardiac septa	188	1.5	6.6	5																			
G40	Epilepsy	178	1.4	5.1	3																			
Z13	Special screening examination for other diseases and disorders	173	1.4	1.2	1																			
C91	Lymphoid leukaemia	164	1.3	5.4	3																			
K59	Other functional intestinal disorders	152	1.2	3.9	3										2015	Magnetic resonance imaging	191	1.8	3.0	1				
R06	Abnormalities of breathing	147	1.2	1.7	1																			
Q35	Cleft palate	146	1.2	2.8	2																			
M41	Scoliosis	142	1.1	6.4	6																			
R62	Lack of expected normal physiological development	140	1.1	4.8	3																			
E16	Other disorders of pancreatic internal secretion	136	1.1	2.0	2																			
H65	Nonsuppurative otitis media	135	1.1	1.1	1																			
K40	Inguinal hernia	130	1.0	1.6	1																			
C40	Malignant neoplasm of bone and articular cartilage of limbs	123	1.0	3.6	4										1198	Repair of hypospadias	89	0.8	1.4	1				
C71	Malignant neoplasm of brain	116	0.9	4.0	3																			
H90	Conductive and sensorineural hearing loss	114	0.9	1.1	1																			
Q54	Hypospadias	93	0.7	1.4	1																			
															1554	Other application, insertion or removal procedures on other musculoskeletal sites	82	0.8	1.8	1				
															0926	Appendicectomy	80	0.7	1.9	1				
															1389	Spinal fusion	78	0.7	10.2	8				
															1825	Electroencephalography [EEG]	73	0.7	5.2	3				
										1186	Orchidopexy for undescended testis	62	0.6	1.3	1									
Discharge Status										Top 10 AR-DRGs														
Public		N		%							N					%								
Private		9,550		76.0							2,821					22.5								
		3,013		24.0							E63Z Sleep Apnoea					329 2.6 1.5 1								
										Z64A Other Factors Influencing Health Status					266 2.1 1.6 1									
										I08B Other Hip and Femur Procedures W/O Catastrophic CC					260 2.1 2.0 1									
										G70B Other Digestive System Diagnoses W/O Catastrophic or Severe CC					221 1.8 3.8 3									
										D66B Other Ear, Nose, Mouth and Throat Diagnoses W/O CC					212 1.7 2.3 1									
										R60B Acute Leukaemia W/O Catastrophic CC					209 1.7 4.7 3									
										K64B Endocrine Disorders W/O Catastrophic or Severe CC					184 1.5 2.1 2									
										K62B Miscellaneous Metabolic Disorders W/O Catastrophic or Severe CC					176 1.4 3.6 2									
										E60B Cystic Fibrosis W/O Catastrophic or Severe CC					174 1.4 9.0 10									

Notes: a Percentage columns are subject to rounding. ICD-10-AM diagnosis codes are analysed at three-digit level.

b ACHI Procedure codes are analysed at block level. The percentage (%) is based on elective in-patients with principal procedure reported.

A.1.5 EMERGENCY IN-PATIENT ACTIVITY

Table A 1.5 presents a summary of emergency in-patient activity for discharges aged 0–16 years reported to HIPE.

Emergency In-Patients – Profile

- Emergency in-patient discharges accounted for 86.3 per cent of total in-patient discharges aged 0–16 years, and accounted for 266,797 (85.6 per cent) of total in-patient bed days for this age group.
- Emergency overnight in-patient discharges accounted for 82.2 per cent of total emergency in-patient discharges aged 0–16 years and had a mean length of stay of 3.9 days.

Emergency In-Patients – Top 20 Principal Diagnoses

- Emergency in-patient discharges with a principal diagnosis of *Viral and other specified intestinal infections* accounted for 5.2 per cent of emergency in-patients aged 0–16 years.
- Emergency in-patient discharges with a principal diagnosis of *Disorders related to short gestation and low birth weight, not elsewhere classified* accounted for 3.9 per cent of emergency in-patient discharges aged 0–16 years.

Emergency In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 28,003 (35.4 per cent) of emergency in-patient discharges aged 0–16 years.
- Procedures from the blocks *Generalised allied health interventions* and *Administration of pharmacotherapy* were each reported for 17.6 per cent of emergency in-patient discharges aged 0–16 years with a procedure recorded.

Emergency In-Patient – Top 10 Australian Refined Diagnosis Related Groups (AR-DRGs)

- The top three AR-DRGs accounted for 21.7 per cent of emergency in-patient discharges aged 0–16 years reported to HIPE when analysed by diagnosis related group.⁴
- *Oesophagitis and Gastroenteritis Without Catastrophic or Severe Complication and/or Comorbidity* accounted for 9.3 per cent of emergency in-patient discharges aged 0–16 years. *Otitis Media and URI* and *Neonate, admwt >2499g Without Significant OR Procedure With Other Problem* accounted for 6.7 and 5.8 per cent of emergency in-patient discharges aged 0–16 years respectively.

TABLE A 1.5 Emergency In-Patient Activity for in-patients aged 0–16 years (N, %, Mean and Median Length of Stay)

Emergency In-Patients					
79,072					
Discharges		N	%		
Total		79,072	100		
Sameday		14,054	17.8		
Overnight		65,018	82.2		
Length of Stay		Mean	Median		
Total		3.4	1		
Overnight		3.9	2		
Bed Days				N	
Total				266,797	
Overnight				252,743	

Top 20 Principal Diagnoses ^a				Emergency In-Patients				Top 20 Principal Procedure Blocks ^b				
		N	%	Mean	Med			N	%	Mean	Med	
A08	Viral and other specified intestinal infections	4,081	5.2	1.9	1	1916	Generalised allied health interventions	4,938	17.6	4.7	3	
P07	Disorders related to short gestation and low birth weight, not elsewhere classified	3,082	3.9	18.6	13	1920	Administration of pharmacotherapy	4,926	17.6	5.7	3	
J21	Acute bronchiolitis	3,039	3.8	3.4	2	0926	Appendectomy	2,477	8.8	3.1	3	
A09	Other gastroenteritis and colitis of infectious and unspecified origin	2,943	3.7	1.6	1	0570	Noninvasive ventilatory support	1,384	4.9	19.1	14	
B34	Viral infection of unspecified site	2,794	3.5	1.7	1	0030	Lumbar puncture	1,196	4.3	4.8	4	
J06	Acute upper respiratory infections of multiple and unspecified sites	2,611	3.3	1.7	1	1611	Other phototherapy of skin	1,179	4.2	4.8	2	
R10	Abdominal and pelvic pain	2,522	3.2	1.6	1	0569	Ventilatory support	969	3.5	21.6	8	
K35	Acute appendicitis	2,192	2.8	3.2	2	1427	Closed reduction of fracture of radius	934	3.3	1.1	1	
Z03	Medical observation and evaluation for suspected diseases and conditions	2,078	2.6	2.6	2	1889	Other therapeutic interventions on respiratory system	870	3.1	4.9	3	
J03	Acute tonsillitis	1,974	2.5	1.9	1	1893	Administration of blood and blood products	665	2.4	4.0	2	
J22	Unspecified acute lower respiratory infection	1,884	2.4	2.9	2	1635	Repair of wound of skin and subcutaneous tissue	558	2.0	1.1	1	
S09	Other and unspecified injuries of head	1,823	2.3	1.1	1	1636	Repair of nail	430	1.5	1.0	1	
J45	Asthma	1,713	2.2	1.9	1	1413	Closed reduction of fracture of humerus or elbow	412	1.5	1.3	1	
N39	Other disorders of urinary system	1,681	2.1	2.9	3	1431	Reduction of fracture of shaft of radius and ulna	327	1.2	1.1	1	
R06	Abnormalities of breathing	1,673	2.1	1.8	1	1628	Other debridement of skin and subcutaneous tissue	233	0.8	1.5	1	
R56	Convulsions, not elsewhere classified	1,618	2.0	2.0	1	1414	Open reduction of fracture of humerus or elbow	213	0.8	1.4	1	
S52	Fracture of forearm	1,573	2.0	1.1	1	1454	Closed reduction of phalanx of hand	206	0.7	1.1	1	
P22	Respiratory distress of newborn	1,406	1.8	5.3	3	1823	Mental, behavioural or psychosocial assessment	180	0.6	4.6	1	
J18	Pneumonia, organism unspecified	1,157	1.5	3.4	2	0738	Venous catheterisation	169	0.6	16.1	13	
P59	Neonatal jaundice from other and unspecified causes	906	1.1	2.4	2	1606	Incision and drainage of skin and subcutaneous tissue	154	0.5	3.8	2	
Discharge Status		N	%			Top 10 AR-DRGs		N	%	Mean	Med	
Public		60,537	76.6			G67B		Oesophagitis and Gastroenteritis W/O Cat/Sev CC	7,316	9.3	1.7	1
Private		18,535	23.4			D63Z		Otitis Media and URI	5,279	6.7	1.8	1
GMS Status		N	%			P67C		Neonate, AdmWt >2499 g W/O Significant OR Procedure W Other Problem	4,584	5.8	3.4	2
GMS		27,971	35.4			P67D		Neonate, AdmWt >2499 g W/O Significant OR Procedure W/O Problem	3,612	4.6	2.3	1
Non GMS		50,545	63.9			T63Z		Viral Illness	3,144	4.0	1.8	1
Unknown		556	0.7			G66Z		Abdominal Pain or Mesenteric Adenitis	2,967	3.8	1.5	1
						E70B		Whooping Cough and Acute Bronchiolitis W/O CC	2,500	3.2	2.8	2
Mode of Emergency Admission		N	%			G07B		Appendectomy W/O Malignancy or Peritonitis W/O Cat or Sev CC	2,102	2.7	2.7	2
Emergency Department		56,021	70.8			G70B		Other Digestive System Diagnoses W/O Catastrophic or Severe CC	1,978	2.5	2.1	1
Medical assessment unit - admitted as in-patient		231	0.3			E67B		Respiratory Signs and Symptoms W/O Catastrophic or Severe CC	1,751	2.2	1.6	1
Medical assessment unit only		1,040	1.3									
Other ^c		21,772	27.5									
Unknown		8	0.0									

Notes:

Percentage columns are subject to rounding.

^a ICD-10-AM diagnosis codes are analysed at three-digit level.^b ACHI Procedure codes are analysed at block level. The percentage (%) is based on emergency in-patients with principal procedure reported.^c 'Other' includes emergency in-patients who were treated in locations other than an Emergency Department, for example, in a Local Injury Unit, prior to admission to hospital.

Glossary & Abbreviations

GLOSSARY

Acute hospital	An acute hospital provides medical and surgical treatment of relatively short duration (Department of Health and Children, 2001).
Additional diagnosis	This is a condition or complaint either coexisting with the principal diagnosis or arising during the episode of admitted patient care, episode of residential care or attendance at a health care establishment, as represented by a code (Health Data Standards Committee (2006), National Health Data Dictionary, Version 13, AIHW).
Admission type	The type of admission may generally be classified as a planned or emergency admission. Unlike emergency admissions, planned admissions are arranged in advance by the patient and/or service provider.
Australian Coding Standards	Australian Coding Standards (ACS) is a document developed to provide guidance in the application of ICD-10-AM and ACHI codes. Standards are categorised by site and or body system according to the clinical specialty to which a disease or procedure relates.
Case mix	Case mix is a method of quantifying hospital workload taking account of the complexity and resource-intensity of the services provided.
Complications	Complications may arise during the hospital stay.
Comorbidities	Comorbidities are assumed to be prior existing conditions, which were present at the time of admission.
Day patient	A day patient is admitted to hospital for treatment on an elective (rather than an emergency) basis and is discharged alive, as scheduled, on the same day (Department of Health and Children, 2001). Births are not included.
Delivery discharges	Refers to Maternity discharges where the woman had a diagnosis of delivery (ICD-10-AM diagnosis code Z37 <i>Outcome of delivery</i>).
Delivery status	Refers to the disaggregation of Maternity discharges into delivery and non-delivery status determined by the presence of a diagnosis of delivery (ICD-10-AM diagnosis code Z37 <i>Outcome of delivery</i>).
Diagnosis Related Group (DRG)	DRGs are clusters of cases with similar clinical attributes and resource requirements. In Ireland, Australian Refined Diagnosis Related Group (AR-DRG) have been in use in Ireland since 2005.
Discharge rate	<p>Discharge rate is the ratio of discharges to the corresponding population. The formula for calculating the discharge rate is:</p> $\frac{\text{Discharges in group } i}{\text{Population of group } i} \times 1,000$ <p>Age-specific discharge rates are calculated as the number of discharges within a particular age group divided by the population within that particular age group multiplied by 1,000. Sex-specific discharge rates are calculated as the number of male (female) discharges divided by the male (female) population multiplied by 1,000. Age- and sex-specific discharge rates are calculated as the number of male (female) discharges within a particular age group divided by the number of males (females) in the population within that particular age group multiplied by 1,000.</p>
Elective admission	This is an admission or procedure that has been arranged in advance (Department of Health and Children, 2001). This term is generally used to refer to in-patient discharges. The term planned admission may also be used.

Emergency admission	An emergency admission is unforeseen and requires urgent care. This term is used to refer to in-patient discharges.
GMS status	Refers to whether a patient holds a medical card.
Hospital Groups	The organisational structure of public hospitals was revised in 2013 with the establishment of hospital groups on a non-statutory administrative basis.
Hospital In-Patient Enquiry (HIPE)	HIPE is a health information system that collates data on discharges from, and deaths in, acute hospitals in Ireland.
In-Patient	<p>An in-patient is admitted to hospital for treatment or investigation on a planned or emergency basis.</p> <p>Overnight In-Patient: These discharges are in-patient discharges who stayed at least one night in hospital.</p> <p>Sameday In-Patient: These discharges admitted as in-patients and discharged on the same day. They do not meet the criteria to be classified as a day patient.</p>
Irish Coding Standards	Irish Coding Standards (ICS) is a document which provides guidance and instruction on all aspects of HIPE data collection by addressing issues specific to the Irish hospital setting. It is revised regularly to reflect changing clinical practice. ICS is designed to complement the Australian Coding Standards. ICS V7.0 was used in the collection of HIPE data in 2015.
Length of stay	<p>Length of stay refers to the time, expressed in days, between admission to and discharge from hospital. For day patients or where the dates of admission and discharge are the same, length of stay is set equal to one day.</p> <p>Mean and median lengths of stay are provided for in-patients only.</p> <p>Mean length of stay is computed by dividing the number of days stayed by the number of discharges.</p> <p>The median length of stay is the middle value among the ordered lengths of stay, such that half of the values for length of stay are below the median and half the values for length of stay are above the median.</p>
Major Diagnostic Category (MDC)	The MDC is a category generally based on a single body system or aetiology that is associated with a particular medical specialty. However, records assigned to MDCs 01, 15, 18 and 21 may have principal diagnoses associated with other categories. In AR-DRG Version 6.0, there are 23 MDCs.
Medical Assessment Unit	A medical assessment unit (MAU) also referred to as an Acute Medical Assessment Unit (AMAU) or an Acute Medical Unit (AMU), is a consultant led unit that accepts direct referrals from GPs. It offers priority access to diagnostic facilities.
Maternity discharges	These discharges are admitted in relation to their obstetrical experience (from conception to six weeks post-delivery), that is, they are allocated to Admission Type Maternity.
Non-delivery	Non-delivery discharges are Maternity discharges where the admission was related to their obstetrical experience but who did not deliver during that episode of care.
Parity	<p>HIPE collects the number of previous live births and number of previous stillbirths (over 500g) for all cases with admission type code Maternity.</p> <p>Primiparous: These are women who have had no previous pregnancy resulting in a live birth or stillbirth.</p> <p>Multiparous: These are women who have had at least one previous pregnancy resulting in a live birth or stillbirth.</p>

Patient type	A patient may be admitted to hospital as a day patient (which is planned and does not involve an overnight stay), or an in-patient.
Principal diagnosis	This is the diagnosis established after study to be chiefly responsible for occasioning an episode of admitted patient care, an episode of residential care, or an attendance at the health care establishment, as represented by a code (Health Data Standards Committee (2006), National Health Data Dictionary, Version 13, AIHW).
Principal and additional procedure	<p>A procedure is defined as a clinical intervention that</p> <ul style="list-style-type: none"> • is surgical in nature, and/or • carries a procedural risk, and/or • carries an anaesthetic risk, and/or • requires specialised training, and/or • requires special facilities or equipment only available in an acute care setting. <p>The order of codes should be determined using the following hierarchy:</p> <ul style="list-style-type: none"> • procedure performed for treatment of the principal diagnosis • procedure performed for treatment of an additional diagnosis • diagnostic/exploratory procedure related to the principal diagnosis • diagnostic/exploratory procedure related to an additional diagnosis for the episode of care (NCCH, 2013).
Public/private status	Refers to whether the patient is a public or private patient of the consultant. It does not relate to the type of bed occupied nor is it an indicator of possession of private health insurance.

Sources: The above definitions are taken directly from, or based on, those provided in the following:
 Department of Health and Children, 2001. Quality and Fairness a Health System for You: Health Strategy. Dublin: The Stationery Office.
 'Hospital Services – Introduction': Citizen's Information; date consulted: 9 December 2011.
www.citizensinformation.ie/categories/health/hospital-services/hospital_services_introduction
 For further information on the definitions of diagnoses see NCCH ICD-10-AM, July 2013, General Standards for Diseases.
 For further information on the definitions of procedures see NCCH ICD-10-AM, July 2013, General Standards for Interventions.
 For further information on AR-DRGs see Commonwealth Department of Health and Aged Care, 2008. Australian Refined Diagnosis Related Groups Version 6.0 Definitions Manual. Canberra: Commonwealth Department of Health and Ageing. pp. 4–15.

ABBREVIATIONS

Adm	Admission
Admwt	Admission Weight
ACHI	Australian Classification of Health Interventions
ACS	Australian Coding Standards
AICD	Automatic Implantable Cardioverter-Defibrillator
AMI	Acute Myocardial Infarction
AR-DRG	Australian Refined Diagnosis Related Group
BIU	Business Intelligence Unit
CABG	Coronary Artery Bypass Graft
Cat	Catastrophic
CC	Complication and/or Comorbidity
CDE	Common Bile Duct Exploration
Circ	Circulatory
CPB	Cardiopulmonary Bypass
CSO	Central Statistics Office
D&C	Dilation and Curettage
D&D	Diseases and Disorders
CPB pump	Cardiopulmonary bypass pump
DoH	Department of Health
DRG	Diagnosis Related Group
EEG	Electroencephalography
ECMO	Extra corporeal membrane oxygenation
ECT	Electroconvulsive therapy
ENT	Ear, Nose and Throat
ERCP	Endoscopic Retrograde Cholangio Pancreatography
ESRI	Economic and Social Research Institute
ESW	Extracorporeal Shock Waves
excl	Excluding
GI	Gastro-intestinal
g	Grams
GMS	General Medical Services
GP	General Practitioner
HIPE	Hospital In-Patient Enquiry
HIV	Human Immunodeficiency Virus
HPO	Healthcare Pricing Office
HSE	Health Service Executive
ICD-10-AM	Tenth Revision of the International Classification of Diseases, Australian Modification, 8 th Edition
ICS	Irish Coding Standards
Incl	Including
IHD	Ischaemic Heart Disease
Infect/inflam	Infection/inflammation

Inhal	Inhalation
Inves	Investigative
IT	Information Technology
LOS	Length of Stay
MDC	Major Diagnostic Category
Med	Median
misc	Miscellaneous
Mod	Moderate
n/a	Not applicable
NCCH	National Centre for Classification in Health
N	Number of Observations/Discharges
Non-malig	Non-malignant
NPRS	National Perinatal Reporting System
NTPF	National Treatment Purchase Fund
OR	Operating Room
Pr/Proc	Procedure
Psych	Psychiatric
RCSI	Royal College of Surgeons in Ireland
Sev	Severe
TIA	Transient Ischaemic Attack
Tiss	Tissue
Tfr/Transf	Transfer
UL	University of Limerick Hospital Group
URI	Upper Respiratory Infection
WHO	World Health Organisation
W	With
W/O	Without

Appendices

Table of Contents

Appendix I:	HIPE Hospitals	137
Appendix II:	HIPE Data Collected	139
Appendix III:	HIPE Data Entry Form	141
Appendix IV:	Derived Variables	142
Appendix V:	Australian Coding Standard 0042	143
Appendix VI:	Further Information on HIPE Scheme	145
Appendix VII:	Overview of changes from 6th Edition to 8th Edition ICD-10-AM/ACHI/ACS	146

APPENDIX I: HIPE HOSPITALS

TABLE I.1 Listing of Hospitals Participating in the HIPE Scheme by Hospital Group

Hospital Name	County	Hospital Type
Ireland East Hospital Group		
St. Columcille's Hospital	Dublin	Non-Voluntary
Mater Misericordiae University Hospital	Dublin	Voluntary
St. Vincent's University Hospital	Dublin	Voluntary
Cappagh National Orthopaedic Hospital	Dublin	Voluntary
St. Michael's Hospital, Dun Laoghaire	Dublin	Voluntary
Royal Victoria Eye and Ear Hospital, Dublin	Dublin	Voluntary
National Maternity Hospital, Holles St, Dublin	Dublin	Voluntary
St. Luke's General Hospital, Kilkenny	Kilkenny	Non-Voluntary
Wexford General Hospital	Wexford	Non-Voluntary
Midland Regional Hospital, Mullingar	Westmeath	Non-Voluntary
Our Lady's Hospital, Navan	Meath	Non-Voluntary
RCSI Hospital Group		
Connolly Hospital, Blanchardstown	Dublin	Non-Voluntary
Beaumont Hospital, Dublin	Dublin	Voluntary
Rotunda Hospital, Dublin	Dublin	Voluntary
St. Joseph's Hospital, Raheny	Dublin	Voluntary
Our Lady of Lourdes Hospital, Drogheda	Louth	Non-Voluntary
Cavan General Hospital	Cavan	Non-Voluntary
Louth County Hospital, Dundalk	Louth	Non-Voluntary
Monaghan Hospital	Monaghan	Non-Voluntary
Dublin Midlands Hospital Group		
Naas General Hospital	Kildare	Non-Voluntary
St. Luke's Hospital, Rathgar	Dublin	Voluntary
St. James's Hospital, Dublin	Dublin	Voluntary
Coombe Women & Infants University Hospital	Dublin	Voluntary
Tallaght Hospital ^a	Dublin	Voluntary
Midland Regional Hospital, Tullamore	Offaly	Non-Voluntary
Midland Regional Hospital, Portlaoise	Laois	Non-Voluntary
South/South West Hospital Group		
University Hospital Waterford	Waterford	Non-Voluntary
Kilcreene Orthopaedic Hospital	Kilkenny	Non-Voluntary
South Tipperary General Hospital, Clonmel	Tipperary	Non-Voluntary
Bantry General Hospital	Cork	Non-Voluntary
Mercy University Hospital, Cork	Cork	Voluntary
South Infirmary Victoria University Hospital	Cork	Voluntary
Mallow General Hospital	Cork	Non-Voluntary
Cork University Hospital	Cork	Non-Voluntary
University Hospital Kerry	Kerry	Non-Voluntary

TABLE I.1 Listing of Hospitals Participating in the HIPE Scheme by Hospital Group (contd.)

Hospital Name	County	Hospital Type
University of Limerick Hospital Group		
University Maternity Hospital Limerick	Limerick	Non-Voluntary
University Hospital Limerick	Limerick	Non-Voluntary
Croom Orthopaedic Hospital, Limerick	Limerick	Non-Voluntary
St. John's Hospital, Limerick	Limerick	Voluntary
UL Hospitals, Ennis Hospital	Clare	Non-Voluntary
UL Hospitals, Nenagh Hospital	Tipperary	Non-Voluntary
Saolta Hospital Group		
Roscommon County Hospital	Roscommon	Non-Voluntary
Portiuncula Hospital, Ballinasloe	Galway	Non-Voluntary
Galway University Hospitals	Galway	Non-Voluntary
Mayo University Hospital	Mayo	Non-Voluntary
Letterkenny University Hospital	Donegal	Non-Voluntary
Sligo University Hospital	Sligo	Non-Voluntary
Children's Hospital Group		
Our Lady's Children's Hospital, Crumlin	Dublin	Voluntary
Temple Street Children's University Hospital	Dublin	Voluntary
Tallaght Hospital ^a	Dublin	Voluntary
No group		
Peamount Hospital	Dublin	Voluntary
National Rehabilitation Hospital (NRH), Dun Laoghaire	Dublin	Voluntary
Incorporated Orthopaedic Hospital, Clontarf	Dublin	Voluntary
St. Finbarr's Hospital	Cork	Non-Voluntary
Blackrock Hospice ^b	Dublin	Voluntary

Notes: Total number of hospitals participating in 2015: 54

- a For reporting purposes, discharges aged 17 years and older from Tallaght Hospital are included in the Dublin Midlands Hospital Group, while discharges aged less than 17 years from Tallaght Hospital are included in the Children's Hospital Group.
- b Blackrock Hospice ceased reporting in early 2015.

APPENDIX II: HIPE DATA COLLECTED

TABLE II.1 Data Collected by HIPE*

Type of Data	Parameters	Notes
Demographic Data	Date of birth	Full date of birth not exported outside the hospital.
	Sex	
	Marital/Civil status	Values include single, married, widowed, other (including separated), unknown, divorced, civil partner, former civil partner or surviving civil partner.
	Infant admission weight	Weight in whole grams on admission is collected for neonates (0–27 days old) and infants up to 1 year of age with admission weight of less than 2,500 grams.
	Area of residence by county or country	If resident in Ireland but outside Dublin, captures county of residence. If resident in Dublin, captures postal code. If usually resident outside Ireland, captures country of residence.
Clinical Data	One principal diagnosis	Uses the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM), 8th Edition, July 2013.
	Twenty-nine additional diagnoses	Uses the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM), 8th Edition, July 2013.
	One principal procedure	Uses the Australian Classification of Health Interventions (ACHI) of the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM), 8th Edition, July 2013.
	Nineteen additional procedures	Uses the Australian Classification of Health Interventions (ACHI) of the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM), 8th Edition, July 2013.
	Hospital Acquired Diagnosis	Condition not present prior to admission to hospital.
Administrative Data	Patient name	Is not exported outside the hospital.
	Hospital number	
	Chart number	Is unique to hospital of discharge.
	Admission and discharge dates	
	Dates of procedures	Collected for each procedure.
	Day case indicator	
	Day ward indicator	Indicates if a day case patient was admitted to a dedicated named day ward.
	Day ward identifier	If the answer to day ward indicator is 'Yes', the day ward identifier must be entered to identify where the patient was treated.
	Type of admission	Values include elective, elective readmission, emergency, emergency readmission, maternity, or newborn.
	Waiting list indicator	Indicates if an elective admission case is funded by the National Treatment Purchase Fund (NTPF).
	Mode of emergency admission	Indicates where the patient with admission codes emergency, emergency readmission, or newborn was treated prior to being admitted to the hospital as an in-patient, or when the patient was treated only in a registered Medical Assessment Unit (MAU). Values include Emergency Department, MAU-Admitted as In-Patient, other, unknown, and MAU – Day Only.
	Source of admission	Values include home, transfer from nursing home/convalescent home or other long stay accommodation, transfer from hospital (in HIPE), transfer from other hospital (not in HIPE), transfer from hospice (not in HIPE), transfer from psychiatric hospital/unit, newborn, temporary place of

Data Collected by HIPE (contd.)

Type of Data	Parameters	Notes
		residence, prison, or other.
Administrative Data (contd.)	Discharge destination	Values include self discharge, home, nursing home, convalescent home or long stay accommodation, transfer to hospital (in HIPE) as emergency, transfer to hospital (in HIPE) as non-emergency, transfer to psychiatric hospital/unit, died with post-mortem, died without post-mortem, transfer to other hospital (not in HIPE) as emergency, transfer to other hospital (not in HIPE) as non-emergency, rehabilitation facility, hospice, prison, absconded, other, or temporary place of residence (e.g. hotel).
	Discharge status	Refers to the public/private status of the patient on discharge and not to the type of bed occupied.
	Health Insurer	Collected where discharge status of the patient is private.
	General Medical Service status	Refers to whether the patient is a medical card holder.
	Days in an intensive care environment	
	Days in a private bed	Single Occupancy Multiple Occupancy
	Days in a semi-private bed	Single Occupancy Multiple Occupancy
	Days in a public bed	Single Occupancy Multiple Occupancy
	Parity	Parity: Live births Parity: Still births Mandatory for all cases with admission type maternity.
	Specialty	Refers to specialty of consultant associated with the principal diagnosis and is assigned locally based on a list provided by the Department of Health and Children.
	Primary consultant	Encrypted.
	Anaesthetist	Encrypted. Collected for each procedure performed under anaesthetic.
	Intensive care consultant	Encrypted. Up to ten may be recorded.
	Admitting consultant	Encrypted.
	Discharge consultant	Encrypted.
	Consultant responsible for each diagnosis	Encrypted.
	Consultant responsible for each procedure	Encrypted.
	Date of transfer to a pre-discharge unit	Date may be collected to identify when a patient was transferred to a pre-discharge unit prior to being discharged as planned. This is an optional variable collected since 2004
	Ward Identification	Admitting ward: The ward to which the patient was admitted. Discharge ward: The ward from which the patient was discharged.
	Temporary leave days	Refers to the number of days the patient was absent from the hospital during an episode of care.

Note: * For details of all variables collected by HIPE see HIPE Data Dictionary 2015 Version 7.0.

Source: HIPE Data Dictionary 2015 Version 7.0, available at www.hpo.ie

APPENDIX III: HIPE DATA ENTRY FORM

FIGURE III.1 HIPE Data Entry Form, 2015

Hospital In-Patient Enquiry (HIPE) Summary Sheet

For use with HIPE on ALL DISCHARGES FROM 01.01.2015

Patient's Hospital of Discharge		Type (priority) of Admission		FOR LOCAL COLLECTION ONLY * Name: _____ * Address: _____ Affix Label		
MRN		W/List If=1-2	Type of Elective Adm If=1-2			Mode If=4,5,7
Sex						
Admission Date		Admission Source				
Admission Time		Discharge Code				
Discharge Date		Date of Birth				
Discharge Time						
Area of Residence		Admitting Ward		Day Case		
Marital/Civil Status		Discharge Ward		Day Ward		
Medical Card		Transfer from		Day Ward ID		
*GMS Number		Transfer to		Oncology Day Ward Flag		
Discharge Status		Temp Leave Days		Total		
Health Insurer		Date of Transfer to rehab/PDU		Single		
Parity		Infant Admit Weight (grams)		Multiple		
		Days in a Critical Care Bed		Days in a Private Bed		
Admitting Consultant		Intensive Care Consultant		Days in a Semi-Private Bed		
Primary Consultant		Up to 10 Intensive Care consultants may be recorded		Days in a Public Bed		
				Days (or part there of) in ICU		
				Discharge Consultant		
				Specialty of Discharge Consultant		

PDX = The diagnosis established after study to be chiefly responsible for occasioning the patient's episode of care in hospital (ACS 0001)

ICD-10-AM Code	Principal Diagnosis (PDX)	Hospital Acquired Dx	Consultant #	Specialty
(1)				
(2)				
(3)				
(4)				
(5)				
(6)				
(7)				
(8)				
(9)				
(10)				

Up to 30 diagnoses codes may be entered.

Procedure/Intervention Codes	Block No.	Principal Procedure	Consultant #	Consultant Anaesthetist #	Date of Procedure
(1)					
(2)					
(3)					
(4)					
(5)					

Up to 20 procedure codes may be entered.

Case entered on HIPE:

Hospital Ref No. For HPO Use:

* Patient Name, Address, full DOB, and GMS number are currently not exported to the HPO. Collected only at hospital level.

More than one consultant can be recorded.

^ HADx flag can be assigned for PDX in Neonates on the birth episode only.

Source: Healthcare Pricing Office

APPENDIX IV: DERIVED VARIABLES

For some of the categorical administrative variables, aggregation of categories has been necessary to ensure confidentiality. Table IV.1 shows how the categories for these variables have been aggregated. For example, the admission type variables have been reduced from six categories to three categories.

TABLE IV.1 Derived Variables

HIPE Variable		Derived Variable for Report	
Admission Type			
1	'Elective'	1	'Elective' (1, 2)
2	'Elective Readmission'	2	'Emergency' (4, 5, 7)
4	'Emergency'	3	'Maternity' (6)
5	'Emergency Readmission'		
6	'Maternity'		
7	'New born'		
Admission Source			
1	'Home'	1	'Home' (1)
2	'Transfer from nursing home/convalescent home or other long stay accommodation'	2	Long stay accommodation (2, 5)
3	'Transfer from hospital - in HIPE listing'	3	'Transfer from other hospital' (3,4,6)
4	'Transfer from other hospital - not in HIPE listing'	4	'Other' (7, 8, 9, 0)
5	'Transfer from hospice - not in HIPE listing'		
6	'Transfer from psychiatric hospital/unit'		
7	'New born'		
8	'Temporary place of residence'		
9	'Prison'		
0	'Other'		
Discharge Destination			
00	'Self discharge'	1	'Home' (01)
01	'Home'	2	'Long stay accommodation' (02, 11)
02	'Nursing home, convalescent home or long stay accommodation'	3	'Transfer to other hospital' (03, 04, 05,08, 09, 10)
03	'Transfer to hospital – in HIPE Hospital Listings – Emergency '	4	'Died' (06, 07)
04	'Transfer to hospital – in HIPE Hospital Listings – Non Emergency'	5	'Other' (00, 12, 13, 14, 15)
05	'Transfer to psychiatric hospital/unit'		
06	'Died with post mortem'		
07	'Died no post mortem'		
08	'Transfer to other hospital – not in HIPE Hospital Listings – Emergency'		
09	'Transfer to other hospital – not in HIPE Hospital Listings – Non Emergency'		
10	'To rehabilitation facility – not in HIPE Hospital Listings'		
11	'Hospice – not in HIPE Hospital Listings'		
12	'Prison'		
13	'Absconded'		
14	'Other – example Foster care'		
15	'Temporary Place of Residence'		

Note: For further information on all variables collected by HIPE see HIPE Data Dictionary 2015 Version 7.0 available at www.hpo.ie

APPENDIX V: AUSTRALIAN CODING STANDARD 0042

Australian Coding Standard 0042 Procedures not Normally Coded¹

These procedures are normally not coded because they are usually routine in nature, performed for most patients and/or can occur multiple times during an episode. Most importantly, the resources used to perform these procedures are often reflected in the diagnosis or in an associated procedure. For example:

- X-ray and application of plaster is expected with a diagnosis of Colles' fracture
- Intravenous antibiotics are expected with a diagnosis of septicaemia/sepsis
- Cardioplegia in cardiac surgery

Note:

- a. Some codes on this list may be required in certain standards elsewhere in the Australian Coding Standards. In such cases, the standard overrides this list and the stated code should therefore be assigned as described in the relevant standard.
 - b. The listed procedures should be coded if cerebral anaesthesia is required in order for the procedure to be performed (see ACS 0031 *Anaesthesia*).
 - c. These procedures should be coded if they are the principal reason for admission in same-day episodes of care. This includes patients who are admitted the day before or discharged on the day after a procedure because a same-day admission is not possible or practicable for them (eg elderly patients, those who live in remote locations).
1. Application of plaster
 2. Bladder washout via indwelling catheter
 3. Cardioplegia when associated with cardiac surgery
 4. Cardiotocography (CTG) except fetal scalp electrodes
 5. Catheterisation:
 - arterial or venous (such as Hickman's, PICC, CVC, Swan Ganz) except cardiac catheterisation (blocks [667] and [668]), surgical catheterisation (block [741]) or catheterisation in neonates (see ACS 1615 *Specific interventions for the sick neonate*)
 - urinary except if suprapubic
 6. Doppler recordings

¹ Extracted from NCCH eBook, July 2013, General Standards for Interventions.

7. Dressings
8. Drug treatment/pharmacotherapy
Drug treatment should not be coded except if:
 - the substance is given as the principal treatment in same-day episodes of care
 - drug treatment is specifically addressed in a coding standard (see ACS 0044 *Chemotherapy*, ACS 1316 *Cement spacer/beads* and ACS 1615 *Specific interventions for the sick neonate*)
9. Electrocardiography (ECG) except patient-activated implantable cardiac event monitoring (loop recorder)
10. Electrodes (pacing wires) – temporary: insertion of temporary transcutaneous or transvenous electrodes when associated with cardiac surgery; adjustment, repositioning, manipulation or removal of temporary electrodes
11. Electromyography (EMG)
12. Hypothermia when associated with cardiac surgery
13. Imaging services – all codes in ACHI Chapter 20 *Imaging services* and block [451] *Dental radiological examination and interpretation* except:
 - transoesophageal echocardiogram (TOE) (55118-00 [1942])
 - when instructed to do so
14. Monitoring: cardiac, electroencephalography (EEG), vascular pressure except radiographic/video EEG monitoring ≥ 24 hours
15. Nasogastric intubation, aspiration and feeding, except nasogastric feeding in neonates (see ACS 1615 *Specific interventions for the sick neonate*)
16. Perfusion when associated with cardiac surgery
17. Primary suture of surgical and traumatic wounds
Code only for traumatic wounds which are not associated with an underlying injury (e.g. suture of lacerated forearm would be coded if there is no other associated injury repair) (see ACS 1217 *Repair of wound of skin and subcutaneous tissue*)
18. Procedure components (see also ACS 0016 *General procedure guidelines*)
19. Stress test
20. Traction if associated with another procedure

APPENDIX VI: FURTHER INFORMATION ON HIPE SCHEME

Previously published reports can be downloaded at www.hpo.ie.

Documentation relating to the operation of the HIPE scheme is available online at www.hpo.ie.

- *Coding Notes:* This quarterly bulletin is distributed to all coders nationally. It contains important updates on coding queries, changes in coding practice and any other relevant information including the scheduling of training courses.
- *HIPE Data Dictionary:* This dictionary provides definitions and codes for data collected within HIPE as of a specified year (e.g. 2015 relates to discharges reported for 2015). It provides standard definitions for variables with the objective of ensuring that consistency and data quality are maintained.
- *HIPE Instruction Manual:* This manual provides instruction on the capture of administrative and demographic data for each HIPE discharge record. Clinical data are captured in accordance with the classification and associated standards.
- *Irish Coding Standards:* Irish Coding Standards (ICS) apply to activity coded in HIPE and provide guidance and instruction on all aspects of HIPE data collection by addressing issues relevant to the Irish hospital setting. ICS are developed to complement the Australian Coding Standards (ACS) and are revised regularly to reflect changing clinical practice.

APPENDIX VII: OVERVIEW OF CHANGES FROM 6TH EDITION TO 8TH EDITION ICD-10-AM/ACHI/ACS

Ireland updated to the 8th edition of ICD-10-AM/ACHI/ACS for all discharges from 1st January 2015. For practical reasons Ireland does not update each time the classification is updated in Australia therefore on this occasion Ireland has adopted updates from both the 7th and the 8th Edition of ICD-10-AM/ACHI/ACS. Extensive training was held for all HIPE staff throughout all hospitals in a series of training sessions in 2014 and 2015 to ensure understanding of and compliance with the update.

In summary in the 8th Edition there were diagnosis codes (ICD-10-AM) and procedure codes (ACHI) added and there was a general review of grammar to ensure consistency throughout the classification. Sixty-three Australian Coding Standards were deleted and the information from these has been replaced with index entries or tabular instructional notes in the classifications. Two new ACS were created; ACS 0742 *Orbital and periorbital cellulitis* and ACS 2114 *Prophylactic surgery*.

There were changes to the ACS 0001 *Principal Diagnosis*, particularly with regard to the dagger and asterisk (Aetiology and Manifestation) sequencing rules. There were also major enhancements to the coding of Obstetrics and Diabetes Mellitus. The following lists include the areas in the classifications and standards where the main changes occurred with some detail provided for illustration. Further details are available on application to the HPO.

ICD-10-AM Diagnoses

- Obstetrics
- Diabetes
- Cystic Fibrosis
- Sepsis
- Sunburn
- MRSA
- Appendicitis
- Respiratory Failure Types
- Anaemia in chronic diseases
- Neoplasm update – cancer of unknown primary

New codes

- C79.9 *Secondary malignant neoplasm, unspecified site*
- C80.0 *Malignant neoplasm, primary site unknown, so stated*
- C80.9 *Malignant neoplasm, unspecified*

- Appendicitis
- Respiratory Failure Types
- Anaemia in chronic diseases
- Neoplasm update – leukaemia & lymphoma
- Respiratory failure, type I and type II
- Sunburn
- Atrial fibrillation
- Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)
- Duration of pregnancy
- Haemorrhoids
- Hernia
- Resistance to antimicrobial and antineoplastic drugs
- Viral Hepatitis

ACHI Procedures

- Minimally invasive procedures proceeding to open procedure

New generic codes

90343-00 [1011] *Endoscopic procedure proceeding to open procedure*

90343-01 [1011] *Laparoscopic procedure proceeding to open procedure*

90613-00 [1579] *Arthroscopic procedure proceeding to open procedure*

ACS 0019 *Procedures not completed or interrupted* expanded to provide guidelines

- Change in Standard: ACS 0020 *Bilateral/Multiple Procedures*
- Change in Standard: ACS 0042 *Procedures normally not coded*

A major review of ACS 0042 *Procedures normally not coded* was undertaken due to the many queries received as to what components should or should not be coded in major surgeries. As a result the following instruction has been added to ACS 0042

Imaging services – all codes in ACHI Chapter 20 *Imaging services* and block [451] *Dental radiological examination and interpretation* **except:**

- transoesophageal echocardiogram (TOE) (55118-00 [1942])
- when instructed to do so

- Appendicitis
- Respiratory Failure Types
- Insertion of seeds/fiducial markers into prostate
- Percutaneous heart valve replacement
- Laparoscopic colectomy & ileocolic resection
- Coronary artery procedures
- Transcatheter thrombectomy of intracranial arteries
- Endoluminal fundoplication (ELF)
- Procedures for obesity - New ACHI Block 889 with 27 new procedure codes for treatment of obesity
- Sacral nerve stimulation (SNS)
- Sentinel lymph node biopsy (SLNB)

Australian Coding Standards (ACS)

- Conventions
- ACS 0001 *Principal diagnosis* – dagger/asterisk
- ACS 0001 *Principal diagnosis* – obstetrics
- ACS 0401 *Diabetes mellitus and intermediate hyperglycaemia*
- ACS 0402 *Cystic fibrosis*
- ACS 1615 *Specific interventions for the sick neonate*
- ACS 0042 *Procedures normally not coded*
- ACS 0020 *Bilateral/multiple procedures* – skin lesions
- ACS 0104 *Viral hepatitis*
- ACS 0110 *Sepsis, severe sepsis and septic shock*
- ACS 0111 *Healthcare associated Staphylococcus Aureus bacteraemia*
- ACS 2114 *Prophylactic surgery* (New)

Irish Coding Standards (ICS) (V8.0 January 2016)

- New standard ICS 01X0 *Zika virus* provides guidance on the WHO alert on the coding of Zika virus and the use of U06.9 *Emergency use of U06.9* for same.

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