# Activity in Acute Public Hospitals in Ireland

**ANNUAL REPORT** 

**Healthcare Pricing Office** 

December 2014





# **METADATA**

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Activity in Acute Public Hospitals in Ireland Annual Report, 2013

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Healthcare Pricing Office (HPO), Health Service Executive (HSE)

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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 2013. Discharge activity is examined by type of patient and hospital, 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. *Maternity* discharges are examined separately from other discharges. The analysis is presented at the national level and is also disaggregated by Health Service Executive (HSE) administrative areas.

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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**

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Up to the end of 2013, Professor Miriam M Wiley was head of the Health Research and Information Division at the Economic and Social Research Institute and was responsible for the management of the HIPE and NPRS systems. We would like to acknowledge the valuable contribution that Professor Miriam M Wiley made to these systems.

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# **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 1<sup>st</sup> January 2014 the Healthcare Pricing Office (HPO) has overseen the administration and management of this scheme. The HPO is now 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.

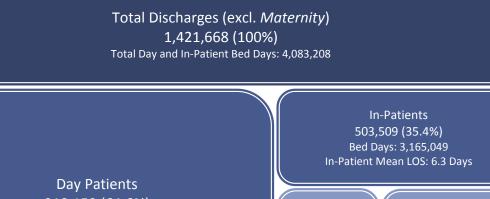
This report relates to discharges that occurred in the 2013 calendar year. The aim is to present an overview of discharge activity in acute public hospitals in Ireland. The demographic and morbidity analysis for *Maternity* discharges are presented separately in specified sections of the *Activity in Acute Public Hospitals in Ireland Annual Report 2013* to enable a comprehensive overview of trends in this area.

Total Discharges 1,554,290 (100%)

Total Discharges (excl. *Maternity*) 1,421,668 (91.5%)

Maternity 132,622 (8.5%)

# TOTAL DISCHARGES (EXCL. MATERNITY), 2013



918,159 (64.6%)

Elective 103,237 (7.3%)In-Patient Mean LOS: 6.6 Days

Emergency 400,272 (28.2%)In-Patient Mean LOS: 6.2 Days

#### **WHO**

#### Sex

Females accounted for 49.8 per cent of total discharges (excl. Maternity) with males accounting for 50.2 per cent.

### Age

The 65–74 years age group accounted for the largest proportion of both male and female discharges, 21.0 per cent and 16.8 per cent respectively.

### Marital/Civil Status

Married discharges accounted for 47.3 per cent of total discharges (excl. Maternity).

# Public/Private Status

- Almost 84 per cent of total discharges (excl. Maternity) were treated on a public basis with 16.3 per cent treated on a private basis.
- The 85 years and over age group had the largest proportion of total discharges (excl. Maternity) treated publicly (88.7 per cent) with only 11.3 per cent treated on a private basis.

# General Medical Service (GMS) Status

- Of total discharges (excl. Maternity), 57.1 per cent were GMS discharges.
- Of discharges in the 85 years and over age group 82.5 per cent were GMS discharges compared to just 17.8 per cent of the less than 1 years age group.

#### WHERE

# **HSE** Area of Hospitalisation

The largest proportion of total discharges (excl. Maternity) were hospitalised in the HSE Dublin Mid Leinster area (29.4 per cent) with the smallest proportion hospitalised in the HSE South area (22.8 per cent).

# HSE Area of Residence

A larger proportion of discharges resident in the HSE West area were aged 85 years and older (4.9 per cent) compared to 4.2 per cent in the HSE South area.

#### Admission Source

• The majority of total discharges (excl. Maternity) in all HSE areas were admitted from home, ranging from 95.2 per cent in the HSE Dublin North East area to 97.1 per cent in the HSE Dublin Mid Leinster area.

# Discharge Destination

The majority of in-patient discharges (excl. Maternity) were discharged home, ranging from 86.5 per cent in HSE West area to 87.3 per cent in the HSE South area.

#### **WHEN**

### Day of Admission

The proportion of in-patient discharges (excl. Maternity) admitted on an elective basis decreased throughout the week, with over 62 per cent of elective in-patients admitted between Monday and Wednesday, falling to 7.0 per cent at the weekend.

# Day of Discharge

The proportion of elective in-patients discharged increased throughout the week, from 10.3 per cent on Monday to 23.4 per cent on Friday, falling to 10.3 per cent on Saturday and 5.0 per cent on Sunday.

# Month of Admission

The largest number of emergency in-patients (34,889 discharges) was admitted in January.

### **MORBIDITY ANALYSIS**

# **Day Patients**

- Day patients with a principal diagnosis of care involving dialysis and those
  with a principal diagnosis of other medical care (includes chemotherapy and
  radiotherapy encounters) each accounted for 18.0 per cent of day patient
  discharges.
- At least one procedure was recorded for 94.1 per cent of day patient discharges.
- Haemodialysis was reported as a principal procedure for 19.1 per cent of day patient discharges with at least one procedure reported.

#### *In-Patients*

- In-patient discharges with a principal diagnosis of *pain in throat and chest* accounted for 4.0 per cent of in-patients.
- At least one procedure was recorded for 63.1 per cent of in-patient discharges.
- Generalised allied health interventions were reported as a principal procedure for 15.3 per cent of in-patient discharges with at least one procedure. This category includes interventions such as physiotherapy, dietetics, occupational therapy pharmacy, social work, and speech pathology.

# Maternity Discharges 132,622 (100%)

Total Day and In-Patient Bed Days: 329,667 In-Patient Mean Length of Stay (LOS): 2.7 Days

Delivery 66,098 (49.8%) In-Patient Bed Days: 229,232 In-Patient Mean LOS: 3.5 Days Non-Delivery 66,524 (50.2%) Day Patients: 13,914 In-Patients: 52,610 Total Day and In-Patient Bed Days: 100,435 In-Patient Mean LOS: 1.6 Days

#### **DELIVERY**

- Over 57 per cent of *Delivery* discharges were in the 25–34 years age group.
- Non-instrumental deliveries accounted for the largest proportion of *Delivery* discharges (56.1 per cent), followed by Caesarean section at 29.0 per cent.
   Instrumental deliveries accounted for 15.0 per cent.
- Non-instrumental deliveries accounted for 41.1 per cent of primiparous
   *Delivery* discharges compared to 65.4 per cent for multiparous discharges.
   Instrumental deliveries accounted for 28.9 per cent of primiparous *Delivery* discharges compared to 6.4 per cent for multiparous *Delivery* discharges.
- Elective Caesarean section deliveries accounted for 7.9 per cent of total primiparous *Delivery* discharges compared to 19.8 per cent for multiparous *Delivery* discharges.
- Emergency Caesarean section deliveries accounted for 22.2 per cent of total primiparous *Delivery* discharges compared to 8.5 per cent for multiparous *Delivery* discharges.
- Of Delivery discharges, 81.0 per cent were treated on a public basis and 19.0 per cent on a private basis. 26.9 per cent of Delivery discharges treated on a public basis had a Caesarean section compared to 37.8 per cent of those treated privately.
- At least one procedure was recorded for 98.2 per cent of primiparous *Delivery* discharges and 91.8 per cent of multiparous *Delivery* discharges.

# Total Discharges 1,554,290 (100%)

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 Diseases and Disorders of the Kidney and Urinary Tract (MDC 11), which accounted for 20.3 per cent of day patients
  - \* Haemodialysis (AR-DRG L61Z) accounted for 86.9 per cent of day patients within this MDC and 17.7 per cent of total day patients.
- The MDC with the largest proportion of in-patient discharges (19.0 per cent) was *Pregnancy, Childbirth and the Puerperium,* MDC 14.
  - \* Vaginal Delivery (AR-DRG O60Z) accounted for 38.8 per cent of inpatients within this MDC and 7.4 per cent of total in-patient discharges.

Overview SECTION
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# 1.1 INTRODUCTION

This report aims to present an overview of discharge activity in acute public hospitals in Ireland during 2013 using data from the Hospital In-Patient Enquiry (HIPE) scheme. HIPE collects information on day patient and in-patient activity from participating hospitals. A HIPE discharge record is created when a patient is discharged from (or dies in) hospital. This record contains administrative, demographic and clinical information for an episode of care. An episode of care begins at admission to hospital, as a day patient or an in-patient, and ends at discharge from (or death in) that hospital.

Section One provides an overview of the 2013 report. It outlines briefly the background of the HIPE scheme which is the principal data source for the report, and highlights other data sources used throughout the report. This is followed by an outline of the structure of the 2013 report. In addition, the scope of the HIPE data and the methods used in the report are outlined. Finally, an analysis of the trends in the main HIPE variables is undertaken using data from the period 2009–2013.

# 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).<sup>2</sup> 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.<sup>3</sup> 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, reporting, and responding to requests for information. <sup>4,5</sup>

Given the comprehensive coverage achieved by this information system, the data gathered by HIPE have become increasingly used by policymakers, clinical teams and researchers. Data sets of HIPE discharges are provided to a number of state agencies in order to address specific data requirements. In addition to responding to requests for HIPE information, the HPO also manages the HIPE Statistics Reporter which is available online.<sup>6</sup>

See Appendix I for a list of hospitals participating in HIPE in 2013.

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).

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.

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.

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

<sup>&</sup>lt;sup>6</sup> Available at www.hpo.ie

# 1.3 DATA SOURCES FOR ANNUAL REPORT 2013

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.  $^{7,8}$  In 2013, 54 public hospitals in Ireland

participated in HIPE (see Appendix I).9

Hospital Hospital bed data from 2009–2013 were obtained from the Business Beds: Information Unit of the HSE (see Appendix IV for 2013 bed data).

Population Population estimates for 2009–2013 are based on Census 2011 data

Estimates: published by the Central Statistics Office.

# 1.4 STRUCTURE OF ANNUAL REPORT 2013

Figure 1.1 outlines the structure of the Annual Report 2013. It presents the number of discharges included in each of the five sections of the report. The report follows the same structure as *Activity in Acute Public Hospitals in Ireland* Annual Reports 2010, 2011 and 2012.<sup>10</sup>

FIGURE 1.1 Structure of the Activity in Acute Public Hospitals in Ireland Annual Report, 2013

# **Section One**

Total Discharges – 1,554,290

# **Section Two & Section Three**

(Demographic Profile, Hospital Activity and Morbidity Analysis)

Total Discharges Excluding *Maternity* Discharges – 1,421,668

Section Four

Maternity

Discharges

132,622

# **Section Five**

(Case Mix Analysis) Total Discharges – 1,554,290

See Appendix II for details of data collected by HIPE, see also the HIPE Data Dictionary 2013 Version 5.0 available at www.hpo.ie

<sup>&</sup>lt;sup>8</sup> A copy of the HIPE data entry form for 2013 is contained in Appendix III.

For historical reasons, a small number of non-acute hospitals also reported to HIPE in 2013. Discharges from these hospitals have been included in this report.

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

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 2013. Section Two excludes Maternity discharges, which are reported separately in Section Four. 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 HSE area of hospitalisation, HSE area of residence, and county of residence to see where discharges are being hospitalised, while the temporal analysis looks at day of admission, day of discharge, and month of admission.

#### Section Three

Section Three focuses on the diagnoses and procedures recorded for discharges reported to HIPE. Section Three excludes Maternity discharges which are reported separately in Section Four. Section Three presents analysis of hospital activity by patient type with top 20 principal diagnoses and procedure blocks presented for day patients and for total, elective and emergency in-patients. Further analysis is presented for diagnoses and procedures reported for total discharges (excl. Maternity), by sex and age group. The mean length of stay for acute in-patient discharges is presented for principal diagnoses and principal procedures.

# Section Four

Section Four analyses *Maternity* discharges reported to HIPE. <sup>11</sup> Data in Section Four are disaggregated by the delivery status of the discharges, that is, whether they had a diagnosis of delivery or not. Variables presented include method of delivery, length of stay, age, marital status, public/private status, and day of admission. Analysis of principal diagnoses and procedures is also presented.

# Section Five

Section Five 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 all discharges, including Maternity. 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 Hip replacements.

Maternity discharges in HIPE are those who were admitted in relation to their obstetrical experience (from conception to 6 weeks post delivery). These discharges were allocated to Admission Type code Maternity. Maternity discharges are a large subset of the acute public hospital discharge population. All discharges are female and are within a narrow age range. Discharges in this group report a very narrow range of diagnoses and procedures and the majority have a short acute in-patient mean length of stay (2.6 days) compared to total discharges excluding Maternity (4.4 days).

# 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 estimated using the discharges returned as 'coded' as a proportion of total discharges reported within each hospital. The data available from participating hospitals for 2013 indicate that for day patient and in-patient discharges appropriate for inclusion in the HIPE data set, 99.1 per cent of the discharges reported from hospital systems were coded and returned for inclusion in the national HIPE data set. 12,13
- 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 in Beaumont and St. James's Hospitals, as well as continuing to provide services at St. Luke's Hospital, Rathgar. HIPE activity data from St. Luke's Hospital, Rathgar are returned to the HPO. For 2013, it is estimated that approximately 47,000 day cases received radiotherapy from St. Luke's Radiation Oncology Network at Beaumont and St. James's Hospitals. Data on these discharges were not returned to HIPE in 2013. 14

This method of calculating coverage does not capture the under-reporting of data in particular hospitals as it cannot make any comparison for cases that were not downloaded within the hospital. Hospitals known to have underreported data in 2013 include; Bantry Hospital (coded and returned 16.5 per cent of their discharges), Midwestern Regional Hospital, Ennis (coded and returned 90.1 per cent of their discharges), Cork University Hospital (coded and returned 96.3 per cent of their discharges) and Midwestern Regional Hospital, Dooradoyle (coded and returned 96.7 per cent of their

There is an ongoing review that aims to align the data collected by the Business Intelligence Unit in the HSE via Monthly Data Returns from hospitals with that collected through HIPE. These data systems are currently not comparable due to differences in data collection for particular activity in certain hospitals which may or may not be captured on HIPE, differences in time points for data collection, and use of different definitions for particular activity.

For 2012, the first complete year of operation, it is estimated that 39,000 day cases received radiotherapy from St. Luke's Radiation Oncology Network at Beaumont and St. James's Hospitals. Data on these discharges were not returned to HIPE in 2012. This is a revised estimate to that published in Activity in Acute Public Hospitals in Ireland, 2012 Annual Report.

#### 1.6 **METHODS AND DEFINITIONS**

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

- Maternity Discharges: 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 code Maternity. 15
- Hospital Type: Data are presented at the aggregated hospital category groupings of 'General' and 'Other' hospitals. General hospitals comprise voluntary, regional and county hospitals, while 'Other' hospitals specialise in the treatment of particular conditions or patient groupings. 16
- Derived Variables: For some of the categorical administrative variables, aggregation of categories has been necessary to ensure confidentiality. These derivations are presented in Appendix V for admission type, admission source, and discharge destination.
- Length of Stay: In addition to the in-patient mean length of stay, the in-patient median length of stay is provided to highlight the effect of outlier cases.
- Reporting of small numbers: It is policy of the Healthcare Pricing Office (HPO) not to report cells where the number of discharges reported to HIPE is 5 or fewer. The tables contained in this report have been suppressed in this manner by replacing such cells with ~. Where further suppression is necessary to ensure that cells with 5 or fewer discharges are not disclosed, the cell with the next lowest number of discharges has been replaced with \*. Where cells containing 5 or fewer discharges have been suppressed, the associated mean in-patient length of stay figures have been suppressed using ^. In Section 3, the symbol \( \frac{1}{2} \) 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.

See Appendix II for details of data collected by HIPE and the HIPE Data Dictionary 2013 Version 5.0 available at

See Appendix I for a list of hospitals and their associated categories participating in HIPE in 2013.

#### 1.7 DISCHARGES REPORTED TO HIPE, 2009-2013

In 2013, 1,554,290 discharges were reported to HIPE by participating acute public hospitals, representing a mean annual increase of 2.5 per cent over the period 2009-2013 and an increase of less than 1 per cent over the period 2012-2013.

Table 1.1 and Figures 1.2 to 1.3 show the distribution of discharges over the period 2009-2013 by selected variables.

- The number of day patients has increased from 820,234 in 2009 to 932,073 in 2013, a mean annual increase of 3.3 per cent.
- The number of in-patients has increased from 590,160 in 2009 to 622,217 in 2013, a mean annual increase of 1.4 per cent, with a decrease of less than 1 per cent between 2012 and 2013.
- Emergency in-patient discharges comprised 76.4 per cent of total in-patient discharges in 2009, which has increased to 79.5 per cent in 2013.
- Maternity discharges decreased annually by a mean of 0.5 per cent over the period 2009-2013 from 135,156 to 132,622 discharges. Between 2012 and 2013 there was a 3.6 per cent decrease in the proportion of Maternity discharges reported to HIPE.
- The male-female split in 2013 has remained consistent with previous years with a larger proportion of female discharges (54.1 per cent).
- The 65 years and over age group accounts for the largest proportion of total discharges in 2013 (34.1per cent), this represents a mean annual increase of 4.1 per cent for this age group between 2009 and 2013.
- There has been a decreasing trend in the proportion of private discharges. Between 2009 and 2013 there was a mean annual decrease of 3.1 per cent, and a 2.2 per cent decrease in the number of private discharges between 2012 and 2013.
- The number of GMS discharges increased by a mean of 3.5 per cent per year between 2009 and 2013, from 735,723 to 843,727 discharges, with an increase of 1.9 per cent between 2012 and 2013.
- Total and acute in-patient mean lengths of stay have fallen over the period 2009-2013, both reporting a mean annual decrease of over 2 per cent.
- General hospitals continued to account for the largest proportion of total discharges (89.0 per cent) in 2013 with the remainder accounted for by 'other' hospitals (11.0 per cent). Voluntary and county hospitals accounted for the largest proportions of total discharges (32.5 and 30.9 per cent, respectively) in the general hospital category in 2013 (see Figure 1.3).

 TABLE 1.1
 Acute Public Hospital Discharges in HIPE (N, %), 2009–2013

	2009	2010	2011	2012	2013	Mean	% Change
	N (%)	N (%)	N (%)	N (%)	N (%)	Annual % Change 2009–2013 <sup>a</sup>	2012–2013
Total Discharges	1,410,394	1,447,108	1,470,778	1,541,084	1,554,290	2.5	0.9
, and the second se	(100)	(100)	(100)	(100)	(100)		
Patient Type							
Day Patients	820,234	855,618	879,140	916,018	932,073	3.3	1.8
.,	(58.2)	(59.1)	(59.8)	(59.4)	(60.0)		
In-Patients	590,160	591,490	591,638	625,066	622,217	1.4	-0.5
· utieiits	(41.8)	(40.9)	(40.2)	(40.6)	(40.0)		0.0
Total Discharges	1,275,238	1,310,527	1,332,680	1,403,562	1,421,668	2.8	1.3
(excl. <i>Maternity</i> ) <sup>b</sup>	(90.4)	(90.6)	(90.6)	(91.1)	(91.5)	2.0	1.5
Day Patients	808,469	845,331	868,369	905,687	918,159	3.2	1.4
Day I dilettis	(57.3)	(58.4)	(59.0)	(58.8)	(59.1)	3.2	1.4
Dialysis/Radiotherapy/	332,452	341,722	336,788	332,360	327,249	-0.4	-1.5
Chemotherapy	(23.6)	(23.6)	(22.9)	(21.6)	(21.1)	-0.4	-1.3
Other Day Patients	476,017	503,609	531,581	573,327	590,910	5.6	3.1
Other Day Patients	(33.8)	(34.8)	(36.1)	(37.2)	(38.0)	5.0	3.1
In-Patients	466,769				503,509	2.0	1.1
III-Patients	•	465,196	464,311	497,875		2.0	1.1
el e	(33.1)	(32.1)	(31.6)	(32.3)	(32.4)	4.6	2.2
Elective	110,355	108,825	104,604	106,807	103,237	-1.6	-3.3
- cd	(7.8)	(7.5)	(7.1)	(6.9)	(6.6)		
Emergency <sup>c,d</sup>	356,414	356,371	359,707	391,068	400,272	3.0	2.4
	(25.3)	(24.6)	(24.5)	(25.4)	(25.8)		
Maternity Discharges	135,156	136,581	138,098	137,522	132,622	-0.5	-3.6
	(9.6)	(9.4)	(9.4)	(8.9)	(8.5)		
Day Patients <sup>e</sup>	11,765	10,287	10,771	10,331	13,914	5.7	34.7
	(0.8)	(0.7)	(0.7)	(0.7)	(0.9)		
In-Patients	123,391	126,294	127,327	127,191	118,708	-0.9	-6.7
	(8.7)	(8.7)	(8.7)	(8.3)	(7.6)		
Patient Characteristics							
Sex							
Males	651,525	674,978	678,845	706,179	713,652	2.3	1.1
	(46.2)	(46.6)	(46.2)	(45.8)	(45.9)		
Females	758,869	772,130	791,933	834,905	840,638	2.6	0.7
	(53.8)	(53.4)	(53.8)	(54.2)	(54.1)		
Age Group							
Under 15 years	127,264	128,551	135,221	137,766	131,439	0.9	-4.6
	(9.0)	(8.9)	(9.2)		(0.5)		
15–44 years			(3.2)	(8.9)	(8.5)		
	435,965					1.3	-0.1
	435,965 (30.9)	439,317 (30.4)	442,830 (30.1)	(8.9) 459,680 (29.8)	(8.5) 459,158 (29.5)	1.3	-0.1
45–64 years		439,317	442,830	459,680	459,158	1.3 2.3	-0.1 0.2
45–64 years	(30.9)	439,317 (30.4)	442,830 (30.1)	459,680 (29.8)	459,158 (29.5)		
45–64 years 65 years and over	(30.9) 395,924	439,317 (30.4) 406,013	442,830 (30.1) 412,461	459,680 (29.8) 432,493	459,158 (29.5) 433,535		
·	(30.9) 395,924 (28.1)	439,317 (30.4) 406,013 (28.1)	442,830 (30.1) 412,461 (28.0)	459,680 (29.8) 432,493 (28.1)	459,158 (29.5) 433,535 (27.9)	2.3	0.2
·	(30.9) 395,924 (28.1) 451,241	439,317 (30.4) 406,013 (28.1) 473,227	442,830 (30.1) 412,461 (28.0) 480,266	459,680 (29.8) 432,493 (28.1) 511,145	459,158 (29.5) 433,535 (27.9) 530,158	2.3	0.2
65 years and over	(30.9) 395,924 (28.1) 451,241	439,317 (30.4) 406,013 (28.1) 473,227	442,830 (30.1) 412,461 (28.0) 480,266	459,680 (29.8) 432,493 (28.1) 511,145	459,158 (29.5) 433,535 (27.9) 530,158	2.3	0.2
65 years and over  Public/Private Status <sup>f</sup>	(30.9) 395,924 (28.1) 451,241 (32.0) 1,123,154	439,317 (30.4) 406,013 (28.1) 473,227 (32.7) 1,171,066	442,830 (30.1) 412,461 (28.0) 480,266 (32.7)	459,680 (29.8) 432,493 (28.1) 511,145 (33.2) 1,282,656	459,158 (29.5) 433,535 (27.9) 530,158 (34.1) 1,301,481	2.3	0.2 3.7
65 years and over  Public/Private Status <sup>f</sup>	(30.9) 395,924 (28.1) 451,241 (32.0)	439,317 (30.4) 406,013 (28.1) 473,227 (32.7) 1,171,066 (80.9)	442,830 (30.1) 412,461 (28.0) 480,266 (32.7) 1,215,522 (82.6)	459,680 (29.8) 432,493 (28.1) 511,145 (33.2) 1,282,656 (83.2)	459,158 (29.5) 433,535 (27.9) 530,158 (34.1) 1,301,481 (83.7)	2.3	0.2 3.7
65 years and over  Public/Private Status  Public Discharges	(30.9) 395,924 (28.1) 451,241 (32.0) 1,123,154 (79.6) 287,240	439,317 (30.4) 406,013 (28.1) 473,227 (32.7) 1,171,066 (80.9) 276,042	442,830 (30.1) 412,461 (28.0) 480,266 (32.7) 1,215,522 (82.6) 255,256	459,680 (29.8) 432,493 (28.1) 511,145 (33.2) 1,282,656 (83.2) 258,428	459,158 (29.5) 433,535 (27.9) 530,158 (34.1) 1,301,481 (83.7) 252,809	2.3 4.1 3.8	0.2 3.7 1.5
65 years and over  Public/Private Status  Public Discharges	(30.9) 395,924 (28.1) 451,241 (32.0) 1,123,154 (79.6)	439,317 (30.4) 406,013 (28.1) 473,227 (32.7) 1,171,066 (80.9)	442,830 (30.1) 412,461 (28.0) 480,266 (32.7) 1,215,522 (82.6)	459,680 (29.8) 432,493 (28.1) 511,145 (33.2) 1,282,656 (83.2)	459,158 (29.5) 433,535 (27.9) 530,158 (34.1) 1,301,481 (83.7)	2.3 4.1 3.8	0.2 3.7 1.5
65 years and over  Public/Private Status <sup>f</sup> Public Discharges  Private Discharges	(30.9) 395,924 (28.1) 451,241 (32.0) 1,123,154 (79.6) 287,240	439,317 (30.4) 406,013 (28.1) 473,227 (32.7) 1,171,066 (80.9) 276,042 (19.1)	442,830 (30.1) 412,461 (28.0) 480,266 (32.7) 1,215,522 (82.6) 255,256 (17.4)	459,680 (29.8) 432,493 (28.1) 511,145 (33.2) 1,282,656 (83.2) 258,428 (16.8)	459,158 (29.5) 433,535 (27.9) 530,158 (34.1) 1,301,481 (83.7) 252,809 (16.3)	2.3 4.1 3.8	0.2 3.7 1.5
Public/Private Status <sup>f</sup> Public Discharges Private Discharges  GMS Status GMS (Medical card	(30.9) 395,924 (28.1) 451,241 (32.0) 1,123,154 (79.6) 287,240 (20.4)	439,317 (30.4) 406,013 (28.1) 473,227 (32.7) 1,171,066 (80.9) 276,042 (19.1)	442,830 (30.1) 412,461 (28.0) 480,266 (32.7) 1,215,522 (82.6) 255,256 (17.4)	459,680 (29.8) 432,493 (28.1) 511,145 (33.2) 1,282,656 (83.2) 258,428 (16.8)	459,158 (29.5) 433,535 (27.9) 530,158 (34.1) 1,301,481 (83.7) 252,809 (16.3)	2.3 4.1 3.8 -3.1	0.2 3.7 1.5 -2.2
Public/Private Status <sup>f</sup> Public Discharges Private Discharges  GMS Status GMS (Medical card holders)	(30.9) 395,924 (28.1) 451,241 (32.0) 1,123,154 (79.6) 287,240 (20.4) 735,723 (52.2)	439,317 (30.4) 406,013 (28.1) 473,227 (32.7) 1,171,066 (80.9) 276,042 (19.1) 773,622 (53.5)	442,830 (30.1) 412,461 (28.0) 480,266 (32.7) 1,215,522 (82.6) 255,256 (17.4) 784,021 (53.3)	459,680 (29.8) 432,493 (28.1) 511,145 (33.2) 1,282,656 (83.2) 258,428 (16.8) 827,738 (53.7)	459,158 (29.5) 433,535 (27.9) 530,158 (34.1) 1,301,481 (83.7) 252,809 (16.3) 843,727 (54.3)	2.3 4.1 3.8 -3.1	0.2 3.7 1.5 -2.2
Public/Private Status <sup>f</sup> Public Discharges Private Discharges  GMS Status GMS (Medical card holders) Non-GMS (Non-medical	(30.9) 395,924 (28.1) 451,241 (32.0) 1,123,154 (79.6) 287,240 (20.4) 735,723 (52.2) 660,812	439,317 (30.4) 406,013 (28.1) 473,227 (32.7) 1,171,066 (80.9) 276,042 (19.1) 773,622 (53.5) 657,214	442,830 (30.1) 412,461 (28.0) 480,266 (32.7) 1,215,522 (82.6) 255,256 (17.4) 784,021 (53.3) 668,332	459,680 (29.8) 432,493 (28.1) 511,145 (33.2) 1,282,656 (83.2) 258,428 (16.8) 827,738 (53.7) 692,992	459,158 (29.5) 433,535 (27.9) 530,158 (34.1) 1,301,481 (83.7) 252,809 (16.3) 843,727 (54.3) 699,003	2.3 4.1 3.8 -3.1	0.2 3.7 1.5 -2.2
Public/Private Status <sup>f</sup> Public Discharges Private Discharges  GMS Status GMS (Medical card holders) Non-GMS (Non-medical card holders)	(30.9) 395,924 (28.1) 451,241 (32.0) 1,123,154 (79.6) 287,240 (20.4) 735,723 (52.2) 660,812 (46.9)	439,317 (30.4) 406,013 (28.1) 473,227 (32.7) 1,171,066 (80.9) 276,042 (19.1) 773,622 (53.5) 657,214 (45.4)	442,830 (30.1) 412,461 (28.0) 480,266 (32.7) 1,215,522 (82.6) 255,256 (17.4) 784,021 (53.3) 668,332 (45.4)	459,680 (29.8) 432,493 (28.1) 511,145 (33.2) 1,282,656 (83.2) 258,428 (16.8) 827,738 (53.7) 692,992 (45.0)	459,158 (29.5) 433,535 (27.9) 530,158 (34.1) 1,301,481 (83.7) 252,809 (16.3) 843,727 (54.3) 699,003 (45.0)	2.3 4.1 3.8 -3.1 3.5	0.2 3.7 1.5 -2.2 1.9 0.9
Public/Private Status <sup>f</sup> Public Discharges Private Discharges  GMS Status GMS (Medical card holders) Non-GMS (Non-medical	(30.9) 395,924 (28.1) 451,241 (32.0) 1,123,154 (79.6) 287,240 (20.4) 735,723 (52.2) 660,812 (46.9) 13,859	439,317 (30.4) 406,013 (28.1) 473,227 (32.7) 1,171,066 (80.9) 276,042 (19.1) 773,622 (53.5) 657,214 (45.4) 16,272	442,830 (30.1) 412,461 (28.0) 480,266 (32.7) 1,215,522 (82.6) 255,256 (17.4) 784,021 (53.3) 668,332 (45.4) 18,425	459,680 (29.8) 432,493 (28.1) 511,145 (33.2) 1,282,656 (83.2) 258,428 (16.8) 827,738 (53.7) 692,992 (45.0) 20,354	459,158 (29.5) 433,535 (27.9) 530,158 (34.1) 1,301,481 (83.7) 252,809 (16.3) 843,727 (54.3) 699,003 (45.0) 11,560	2.3 4.1 3.8 -3.1	0.2 3.7 1.5 -2.2
Public/Private Status <sup>f</sup> Public Discharges Private Discharges  GMS Status GMS (Medical card holders) Non-GMS (Non-medical card holders) Unknown <sup>g</sup>	(30.9) 395,924 (28.1) 451,241 (32.0) 1,123,154 (79.6) 287,240 (20.4) 735,723 (52.2) 660,812 (46.9)	439,317 (30.4) 406,013 (28.1) 473,227 (32.7) 1,171,066 (80.9) 276,042 (19.1) 773,622 (53.5) 657,214 (45.4)	442,830 (30.1) 412,461 (28.0) 480,266 (32.7) 1,215,522 (82.6) 255,256 (17.4) 784,021 (53.3) 668,332 (45.4)	459,680 (29.8) 432,493 (28.1) 511,145 (33.2) 1,282,656 (83.2) 258,428 (16.8) 827,738 (53.7) 692,992 (45.0)	459,158 (29.5) 433,535 (27.9) 530,158 (34.1) 1,301,481 (83.7) 252,809 (16.3) 843,727 (54.3) 699,003 (45.0)	2.3 4.1 3.8 -3.1 3.5	0.2 3.7 1.5 -2.2 1.9 0.9
Public/Private Status <sup>f</sup> Public Discharges Private Discharges Private Discharges  GMS Status GMS (Medical card holders) Non-GMS (Non-medical card holders) Unknown <sup>g</sup> Mean Length of Stay	(30.9) 395,924 (28.1) 451,241 (32.0) 1,123,154 (79.6) 287,240 (20.4) 735,723 (52.2) 660,812 (46.9) 13,859 (1.0)	439,317 (30.4) 406,013 (28.1) 473,227 (32.7) 1,171,066 (80.9) 276,042 (19.1) 773,622 (53.5) 657,214 (45.4) 16,272 (1.1)	442,830 (30.1) 412,461 (28.0) 480,266 (32.7) 1,215,522 (82.6) 255,256 (17.4) 784,021 (53.3) 668,332 (45.4) 18,425 (1.3)	459,680 (29.8) 432,493 (28.1) 511,145 (33.2) 1,282,656 (83.2) 258,428 (16.8) 827,738 (53.7) 692,992 (45.0) 20,354 (1.3)	459,158 (29.5) 433,535 (27.9) 530,158 (34.1) 1,301,481 (83.7) 252,809 (16.3) 843,727 (54.3) 699,003 (45.0) 11,560 (0.7)	2.3 4.1 3.8 -3.1 3.5 1.4 -0.5	0.2 3.7 1.5 -2.2 1.9 0.9 -43.2
Public/Private Status <sup>f</sup> Public Discharges Private Discharges Private Discharges  GMS Status GMS (Medical card holders) Non-GMS (Non-medical card holders) Unknown <sup>g</sup> Mean Length of Stay Total In-Patients	(30.9) 395,924 (28.1) 451,241 (32.0) 1,123,154 (79.6) 287,240 (20.4) 735,723 (52.2) 660,812 (46.9) 13,859 (1.0)	439,317 (30.4) 406,013 (28.1) 473,227 (32.7) 1,171,066 (80.9) 276,042 (19.1) 773,622 (53.5) 657,214 (45.4) 16,272 (1.1)	442,830 (30.1) 412,461 (28.0) 480,266 (32.7) 1,215,522 (82.6) 255,256 (17.4) 784,021 (53.3) 668,332 (45.4) 18,425 (1.3)	459,680 (29.8) 432,493 (28.1) 511,145 (33.2) 1,282,656 (83.2) 258,428 (16.8) 827,738 (53.7) 692,992 (45.0) 20,354 (1.3)	459,158 (29.5) 433,535 (27.9) 530,158 (34.1) 1,301,481 (83.7) 252,809 (16.3) 843,727 (54.3) 699,003 (45.0) 11,560 (0.7)	2.3 4.1 3.8 -3.1 3.5 1.4 -0.5	0.2 3.7 1.5 -2.2 1.9 0.9 -43.2
Public/Private Status Public Discharges Private Discharges Private Discharges  GMS Status GMS (Medical card holders) Non-GMS (Non-medical card holders) Unknown <sup>g</sup> Mean Length of Stay Total In-Patients Acute <sup>h</sup>	(30.9) 395,924 (28.1) 451,241 (32.0) 1,123,154 (79.6) 287,240 (20.4) 735,723 (52.2) 660,812 (46.9) 13,859 (1.0) 6.1 4.5	439,317 (30.4) 406,013 (28.1) 473,227 (32.7) 1,171,066 (80.9) 276,042 (19.1) 773,622 (53.5) 657,214 (45.4) 16,272 (1.1)	442,830 (30.1) 412,461 (28.0) 480,266 (32.7) 1,215,522 (82.6) 255,256 (17.4) 784,021 (53.3) 668,332 (45.4) 18,425 (1.3)	459,680 (29.8) 432,493 (28.1) 511,145 (33.2) 1,282,656 (83.2) 258,428 (16.8) 827,738 (53.7) 692,992 (45.0) 20,354 (1.3) 5.6	459,158 (29.5) 433,535 (27.9) 530,158 (34.1) 1,301,481 (83.7) 252,809 (16.3) 843,727 (54.3) 699,003 (45.0) 11,560 (0.7)	2.3 4.1 3.8 -3.1 3.5 1.4 -0.5	0.2 3.7 1.5 -2.2 1.9 0.9 -43.2
Public/Private Status <sup>f</sup> Public Discharges Private Discharges Private Discharges  GMS Status GMS (Medical card holders) Non-GMS (Non-medical card holders) Unknown <sup>g</sup> Mean Length of Stay Total In-Patients Acute <sup>h</sup> Extended <sup>i</sup>	(30.9) 395,924 (28.1) 451,241 (32.0) 1,123,154 (79.6) 287,240 (20.4) 735,723 (52.2) 660,812 (46.9) 13,859 (1.0)	439,317 (30.4) 406,013 (28.1) 473,227 (32.7) 1,171,066 (80.9) 276,042 (19.1) 773,622 (53.5) 657,214 (45.4) 16,272 (1.1)	442,830 (30.1) 412,461 (28.0) 480,266 (32.7) 1,215,522 (82.6) 255,256 (17.4) 784,021 (53.3) 668,332 (45.4) 18,425 (1.3)	459,680 (29.8) 432,493 (28.1) 511,145 (33.2) 1,282,656 (83.2) 258,428 (16.8) 827,738 (53.7) 692,992 (45.0) 20,354 (1.3)	459,158 (29.5) 433,535 (27.9) 530,158 (34.1) 1,301,481 (83.7) 252,809 (16.3) 843,727 (54.3) 699,003 (45.0) 11,560 (0.7)	2.3 4.1 3.8 -3.1 3.5 1.4 -0.5	0.2 3.7 1.5 -2.2 1.9 0.9 -43.2
Public/Private Status Public Discharges Private Discharges Private Discharges  GMS Status GMS (Medical card holders) Non-GMS (Non-medical card holders) Unknown <sup>g</sup> Mean Length of Stay Total In-Patients Acute <sup>h</sup>	(30.9) 395,924 (28.1) 451,241 (32.0) 1,123,154 (79.6) 287,240 (20.4) 735,723 (52.2) 660,812 (46.9) 13,859 (1.0) 6.1 4.5	439,317 (30.4) 406,013 (28.1) 473,227 (32.7) 1,171,066 (80.9) 276,042 (19.1) 773,622 (53.5) 657,214 (45.4) 16,272 (1.1)	442,830 (30.1) 412,461 (28.0) 480,266 (32.7) 1,215,522 (82.6) 255,256 (17.4) 784,021 (53.3) 668,332 (45.4) 18,425 (1.3)	459,680 (29.8) 432,493 (28.1) 511,145 (33.2) 1,282,656 (83.2) 258,428 (16.8) 827,738 (53.7) 692,992 (45.0) 20,354 (1.3) 5.6	459,158 (29.5) 433,535 (27.9) 530,158 (34.1) 1,301,481 (83.7) 252,809 (16.3) 843,727 (54.3) 699,003 (45.0) 11,560 (0.7)	2.3 4.1 3.8 -3.1 3.5 1.4 -0.5	0.2 3.7 1.5 -2.2 1.9 0.9 -43.2

**TABLE 1.1** Acute Public Hospital Discharges in HIPE (N, %), 2009–2013 (contd.)

	2009 N (%)	2010 N (%)	<b>2011</b> N (%)	2012 N (%)	2013 N (%)	Mean Annual % Change 2009–2013 <sup>a</sup>	% Change 2012–2013
Hospital Type							
General Hospitals	1,225,574 (86.9)	1,252,454 (86.5)	1,278,909 (87.0)	1,355,898 (88.0)	1,383,274 (89.0)	3.1	2.0
Voluntary Hospitals	424,683 (30.1)	437,638 (30.2)	450,860 (30.7)	478,779 (31.1)	505,350 (32.5)	4.5	5.5
Regional Hospitals	369,774 (26.2)	379,846 (26.2)	383,902 (26.1)	399,049 (25.9)	397,349 (25.6)	1.8	-0.4
County Hospitals	431,117 (30.6)	434,970 (30.1)	444,147 (30.2)	478,070 (31.0)	480,575 (30.9)	2.8	0.5
'Other' Hospitals <sup>l</sup>	184,820 (13.1)	194,654 (13.5)	191,869 (13.0)	185,186 (12.0)	171,016 (11.0)	-1.8	-7.7
T . In In	4 420 002	4.400 574	4 222 542	4 205 040	4 442 075	2.1	0.4
Total Bed Days	4,428,882	4,426,574	4,339,510	4,395,949	4,412,875	-0.1	0.4
Day Patients	820,234 (18.5)	855,618 (19.3)	879,140 (20.3)	916,018 (20.8)	932,073 (21.1)	3.3	1.8
In-Patients	3,608,648 (81.5)	3,570,956 (80.7)	3,460,370 (79.7)	3,479,931 (79.2)	3,480,802 (78.9)	-0.9	0.0
Under 15 Years	301,909 (6.8)	295,262 (6.7)	302,237 (7.0)	300,415 (6.8)	294,238 (6.7)	-0.6	-2.1
15 to 44 Years	814,708 (18.4)	785,964 (17.8)	752,480 (17.3)	756,925 (17.2)	718,445 (16.3)	-3.1	-5.1
45 to 64 Years	730,938 (16.5)	714,472 (16.1)	683,008 (15.7)	678,050 (15.4)	672,759 (15.2)	-2.0	-0.8
65 Years and Over	1,761,093 (39.8)	1,775,258 (40.1)	1,722,645 (39.7)	1,744,541 (39.7)	1,795,360 (40.7)	0.5	2.9

Notes:

Percentage columns are subject to rounding.

- a The mean annual percentage change is the mean of the four annual percentage growth rates over the five years.
- b The 2009 Annual Report did not present *Maternity* discharges separately. We have presented them in this report to allow for comparability over the five-year period.
- c 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.
- d 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 Assessment 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.
- e Caution should be exercised when analysing the increase in *Maternity* day patients reported between 2012 and 2013, this increase is as a result of one hospital reclassifying activity previously reported as same-day 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.
- f 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.
- g Includes discharges for which GMS status was not known.
- h Relates to lengths of stay for in-patients between 0 and 30 days (inclusive).
- i Relates to lengths of stay of more than 30 days.
- j 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 337.6 per 1,000 population.
- k These rates are based on population estimates published by the CSO which are based on the 'usual residence' concept.
- Other' hospitals include Maternity; Cancer; Orthopaedic; Paediatric; Eye, Ear, Nose and Throat and 'Other Care' (covering a range of specialist services including infectious disease, palliative medicine, rheumatology, elderly care, and care of the young disabled). See Appendix I for the list of hospitals participating in HIPE in 2013.

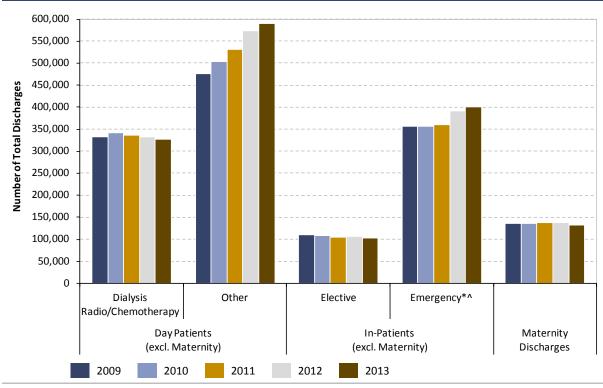
Sources:

Data on discharges and bed days for 2009–2013 were obtained from HIPE.

Population estimates for 2009–2013 were obtained from the Central Statistics Office.

(http://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=PEA11&PLanguage=0-Accessed: 23 September 2014.)

FIGURE 1.2 Total Discharges by Patient Type and Admission Type (N), 2009–2013



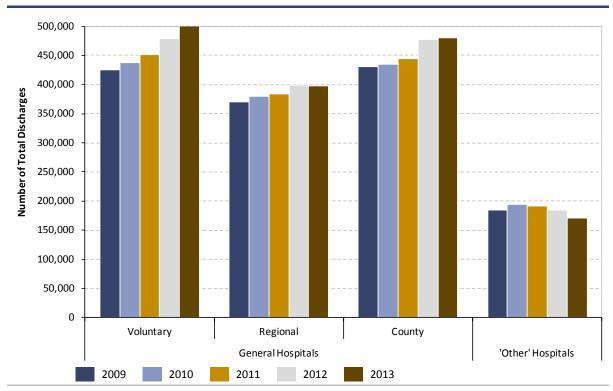
Notes:

See Appendix I for a list of hospitals that participated in HIPE in 2013.

- \* An emergency in-patient admission is unforeseen and requires urgent care. 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 d).
  Data for 2009–2013 were obtained from HIPE.

Source:

FIGURE 1.3 Total Discharges by Hospital Type (N), 2009–2013



Note:

See Appendix I for a list of hospitals that participated in HIPE in 2013.

Source:

Data for 2009–2013 were obtained from HIPE.

Discharge Overview SECTION 2013

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# **Total Discharges** 1,554,290

# Discharges excluding Maternity 1,421,668

#### 2.1 INTRODUCTION

Section Two provides an overview of the demographic, regional and temporal distribution of day patient and in-patient discharges. The discharges reported in this section relate to total discharges excluding those with Admission Type Maternity. 1 Section Two therefore provides an analysis of 1,421,668 discharges and is divided into three sections.

- Section 2.2 discusses who the discharges were (age, sex, marital/civil status, public/private status, and GMS status).
- Section 2.3 discusses where discharges were hospitalised, reside, where they were coming from, and where they were discharged to (HSE area of hospitalisation, hospital type, HSE area of residence, admission source, and discharge destination).
- Section 2.4 discusses when discharges were admitted to, and discharged from, hospital (day of admission, day of discharge, and month of admission).

Section Four of this report provides a similar analysis of activity for discharges with Admission Type Maternity.

# 2.2 WHO

Section 2.2 examines patient characteristics. Total discharges (excl. Maternity) 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 2013, day patient discharges accounted for 64.6 per cent of total discharges (excl. Maternity). In-patient discharges accounted for the remaining 35.4 per cent of total discharges (excl. Maternity) with 79.5 per cent of in-patients admitted on an emergency basis and 20.5 per cent admitted on an elective basis.

#### 2.2.1 Age

Table 2.1a disaggregates total discharges (excl. Maternity) by patient type, (day patient and in-patient) and age group. In-patient discharges are disaggregated into acute and extended stay discharges. Acute in-patient discharges are defined as those with a length of stay of 30 days or less, while extended stay in-patient discharges have a length of stay in excess of 30 days.

#### Discharges

- The largest proportion of total discharges (excl. Maternity) was in the 65–74 years age group (18.9 per cent). They accounted for the largest proportion of day patient discharges (20.9 per cent) and acute in-patient discharges (15.1 per cent).
- The 75–84 years age group accounted for the largest proportion of extended stay in-patient discharges (28.0 per cent).
- The 1–14 years age group accounted for 11.2 per cent of in-patient discharges and 4.2 per cent of in-patient bed days.
- Discharges in the older age groups accounted for a relatively large proportion of bed days; the 75-84 years age group accounted for 14.6 per cent of in-patient discharges and 23.5 per cent of in-patient bed days.

#### Length of Stay

- Apart from those aged less than one year, mean length of stay increased with age for acute in-patient discharges rising from 2.2 days for discharges aged 1-14 years to 7.8 days for discharges aged 85 years and over.
- Across all age groups median length of stay for extended stay in-patient discharges ranged from 43 to 49 days.

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

		Discharges and Bed Days														
	Day Publisher							In-Patients						Total Discharges		
	Day Patients		Acute (0–30 days)			Extended (> 30 days)		Total In-Patients				(excl. Maternity)				
	N	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%
< 1 Year	4,361	0.5	26,789	5.5	106,337	4.9	913	5.8	56,313	5.7	27,702	5.5	162,650	5.1	32,063	2.3
1–14 Years	42,958	4.7	56,240	11.5	122,887	5.7	153	1.0	8,652	0.9	56,393	11.2	131,539	4.2	99,351	7.0
15–24 Years	34,380	3.7	32,371	6.6	83,276	3.8	203	1.3	12,019	1.2	32,574	6.5	95,295	3.0	66,954	4.7
25–34 Years	71,769	7.8	37,426	7.7	106,548	4.9	378	2.4	23,936	2.4	37,804	7.5	130,484	4.1	109,573	7.7
35-44 Years	105,500	11.5	44,487	9.1	140,689	6.5	589	3.8	37,903	3.8	45,076	9.0	178,592	5.6	150,576	10.6
45-54 Years	139,446	15.2	52,608	10.8	198,158	9.1	1,002	6.4	63,724	6.4	53,610	10.6	261,882	8.3	193,056	13.6
55–64 Years	174,966	19.1	63,095	12.9	291,961	13.5	1,876	12.0	117,286	11.8	64,971	12.9	409,247	12.9	239,937	16.9
65-74 Years	192,071	20.9	73,882	15.1	407,603	18.8	3,023	19.3	185,927	18.7	76,905	15.3	593,530	18.8	268,976	18.9
75–84 Years	123,837	13.5	68,909	14.1	463,187	21.3	4,398	28.0	281,474	28.3	73,307	14.6	744,661	23.5	197,144	13.9
85 Years and Over	28,871	3.1	32,005	6.6	249,472	11.5	3,162	20.1	207,697	20.9	35,167	7.0	457,169	14.4	64,038	4.5
Total Discharges (excl. <i>Maternity</i> )	918,159	100	487,812	100	2,170,118	100	15,697	100	994,931	100	503,509	100	3,165,049	100	1,421,668	100

In-Patient Length of Stay												
	Acute (0	–30 days)		Extended	(> 30 days)		Total In	n-Patient				
	Mean	Median		Mean	Median		Mean	Median				
< 1 Year	4.0	2	< 1 Year	61.7	46	< 1 Year	5.9	2				
1-14 Years	2.2	1	1–14 Years	56.5	43	1-14 Years	2.3	1				
15-24 Years	2.6	1	15-24 Years	59.2	46	15-24 Years	2.9	1				
25-34 Years	2.8	1	25-34 Years	63.3	45	25-34 Years	3.5	1				
35-44 Years	3.2	2	35–44 Years	64.4	46	35-44 Years	4.0	2				
45-54 Years	3.8	2	45-54 Years	63.6	45	45-54 Years	4.9	2				
55–64 Years	4.6	3	55–64 Years	62.5	46	55–64 Years	6.3	3				
65-74 Years	5.5	4	65-74 Years	61.5	47	65-74 Years	7.7	4				
75-84 Years	6.7	5	75–84 Years	64.0	47	75-84 Years	10.2	5				
85 Years and Over	7.8	6	85 Years and Over	65.7	49	85 Years and Over	13.0	7				
Acute In-Patients (excl. <i>Maternity</i> )	4.4	2	Extended In-Patients (excl. <i>Maternity</i> )	63.4	47	Total In-Patients (excl. <i>Maternity</i> )	6.3	2				

Percentage columns are subject to rounding.

Note:

## 2.2.1.1 Age and Sex

The data presented in Table 2.1a is disaggregated by male and female discharges in Tables 2.1b and 2.1c respectively. In 2013, females accounted for 49.8 per cent of total discharges (excl. Maternity).

# **Discharges**

- The 65–74 years age group accounted for the largest proportion of both male and female discharges, 21.0 per cent and 16.8 per cent respectively.
- Discharges aged 65 years and over accounted for 36.0 per cent of male inpatient discharges and 54.1 per cent of male in-patient bed days, while for females this group accounted for 37.6 per cent of female in-patient discharges and 59.4 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 (22.9 per cent) and females (24.2 per cent).

# Length of Stay

- Female acute in-patient discharges had a slightly longer mean length of stay (4.5 days) compared to male acute in-patients (4.4 days). As displayed in Figure 2.1, acute mean length of stay generally increased with age for both sexes.
- Mean length of stay for extended stay in-patient discharges was similar across the age groups for both males and females (see Figure 2.2). Median length of stay ranged between 42 days and 49 days for male discharges and between 43 days and 50 days for female discharges. Median length of stay was generally longest in the older age categories for both sexes.

**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 Bati	o m t o	In-Patients												Total Male		
	Day Patients		Acute (0-30 days)				Extended (> 30 days)				Total In-Patients				Discharges		
	N	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%	
< 1 Year	2,371	0.5	15,175	6.2	60,189	5.5	465	6.0	30,252	6.1	15,640	6.2	90,441	5.7	18,011	2.5	
1–14 Years	24,915	5.4	30,840	12.5	65,346	6.0	71	0.9	4,095	0.8	30,911	12.2	69,441	4.4	55,826	7.8	
15–24 Years	16,973	3.7	15,372	6.3	40,558	3.7	108	1.4	6,840	1.4	15,480	6.1	47,398	3.0	32,453	4.5	
25-34 Years	30,067	6.5	17,060	6.9	50,646	4.6	210	2.7	12,772	2.6	17,270	6.8	63,418	4.0	47,337	6.6	
35–44 Years	45,020	9.8	21,098	8.6	68,839	6.3	325	4.2	21,733	4.4	21,423	8.4	90,572	5.7	66,443	9.3	
45-54 Years	60,091	13.1	26,214	10.7	101,616	9.3	562	7.2	35,547	7.2	26,776	10.6	137,163	8.6	86,867	12.2	
55–64 Years	91,358	19.9	33,633	13.7	160,153	14.7	1,106	14.2	70,743	14.3	34,739	13.7	230,896	14.5	126,097	17.7	
65-74 Years	108,196	23.5	40,060	16.3	224,817	20.6	1,742	22.4	106,646	21.5	41,802	16.5	331,463	20.9	149,998	21.0	
75–84 Years	66,166	14.4	34,144	13.9	227,527	20.8	2,102	27.0	135,564	27.4	36,246	14.3	363,091	22.9	102,412	14.4	
85 Years and Over	14,853	3.2	12,266	5.0	93,007	8.5	1,089	14.0	70,687	14.3	13,355	5.3	163,694	10.3	28,208	4.0	
Total Male Discharges	460,010	100	245,862	100	1,092,698	100	7,780	100	494,879	100	253,642	100	1,587,577	100	713,652	100	

In-Patient Length of Stay												
	Acute (0	–30 days)		Extended	(> 30 days)		Total In	n-Patient				
	Mean	Median		Mean	Median		Mean	Median				
< 1 Year	4.0	2	< 1 Year	65.1	46	< 1 Year	5.8	2				
1-14 Years	2.1	1	1–14 Years	57.7	42	1–14 Years	2.2	1				
15-24 Years	2.6	1	15–24 Years	63.3	48	15–24 Years	3.1	1				
25-34 Years	3.0	1	25-34 Years	60.8	47	25-34 Years	3.7	1				
35-44 Years	3.3	2	35–44 Years	66.9	49	35–44 Years	4.2	2				
45-54 Years	3.9	2	45-54 Years	63.3	45	45-54 Years	5.1	2				
55-64 Years	4.8	3	55–64 Years	64.0	47	55–64 Years	6.6	3				
65-74 Years	5.6	4	65-74 Years	61.2	47	65-74 Years	7.9	4				
75-84 Years	6.7	5	75–84 Years	64.5	48	75–84 Years	10.0	5				
85 Years and Over	7.6	6	85 Years and Over	64.9	47	85 Years and Over	12.3	6				
Acute Male In-Patients	4.4	2	Extended Male In-Patients	63.6	47	Total Male In-Patients	6.3	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															
		In-Patients									Total Female					
	Day Patients		Acute (0–30 days)			Extended (>30 days)				Total In-Patients				Discharges (excl. <i>Maternity</i> )		
	N	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%
< 1 Year	1,990	0.4	11,614	4.8	46,148	4.3	448	5.7	26,061	5.2	12,062	4.8	72,209	4.6	14,052	2.0
1–14 Years	18,043	3.9	25,400	10.5	57,541	5.3	82	1.0	4,557	0.9	25,482	10.2	62,098	3.9	43,525	6.1
15–24 Years	17,407	3.8	16,999	7.0	42,718	4.0	95	1.2	5,179	1.0	17,094	6.8	47,897	3.0	34,501	4.9
25–34 Years	41,702	9.1	20,366	8.4	55,902	5.2	168	2.1	11,164	2.2	20,534	8.2	67,066	4.3	62,236	8.8
35–44 Years	60,480	13.2	23,389	9.7	71,850	6.7	264	3.3	16,170	3.2	23,653	9.5	88,020	5.6	84,133	11.9
45–54 Years	79,355	17.3	26,394	10.9	96,542	9.0	440	5.6	28,177	5.6	26,834	10.7	124,719	7.9	106,189	15.0
55–64 Years	83,608	18.2	29,462	12.2	131,808	12.2	770	9.7	46,543	9.3	30,232	12.1	178,351	11.3	113,840	16.1
65–74 Years	83,875	18.3	33,822	14.0	182,786	17.0	1,281	16.2	79,281	15.9	35,103	14.0	262,067	16.6	118,978	16.8
75–84 Years	57,671	12.6	34,765	14.4	235,660	21.9	2,296	29.0	145,910	29.2	37,061	14.8	381,570	24.2	94,732	13.4
85 Years and Over	14,018	3.1	19,739	8.2	156,465	14.5	2,073	26.2	137,010	27.4	21,812	8.7	293,475	18.6	35,830	5.1
Total Female Discharges (excl. <i>Maternity</i> )	458,149	100	241,950	100	1,077,420	100	7,917	100	500,052	100	249,867	100	1,577,472	100	708,016	100

In-Patient Length of Stay												
	Acute (0	–30 days)		Extended (	(> 30 days)		Total In	n-Patient				
	Mean	Median		Mean	Median		Mean	Median				
< 1 Year	4.0	2	< 1 Year	58.2	45	< 1 Year	6.0	2				
1–14 Years	2.3	1	1–14 Years	55.6	44	1–14 Years	2.4	1				
15–24 Years	2.5	1	15–24 Years	54.5	44	15–24 Years	2.8	1				
25–34 Years	2.7	1	25–34 Years	66.5	45	25–34 Years	3.3	1				
35–44 Years	3.1	2	35–44 Years	61.3	43	35–44 Years	3.7	2				
45-54 Years	3.7	2	45–54 Years	64.0	45	45-54 Years	4.6	2				
55–64 Years	4.5	3	55–64 Years	60.4	45	55–64 Years	5.9	3				
65–74 Years	5.4	4	65-74 Years	61.9	46	65–74 Years	7.5	4				
75-84 Years	6.8	5	75–84 Years	63.5	46	75–84 Years	10.3	5				
85 Years and Over	7.9	6	85 Years and Over	66.1	50	85 Years and Over	13.5	7				
Acute Female In-Patients (excl. <i>Maternity</i> )	4.5	2	Extended Female In-Patients (excl. <i>Maternity</i> )	63.2	47	Total Female In-Patients (excl. <i>Maternity</i> )	6.3	2				

Note: Percentage columns are subject to rounding.

FIGURE 2.1 Acute In-Patients (excl. *Maternity*): Mean Length of Stay by Sex and Age Group

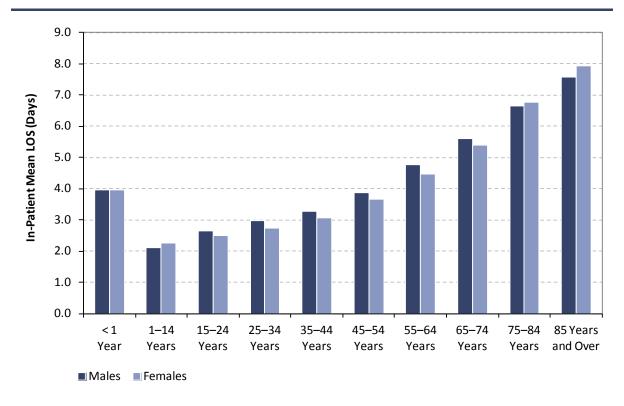
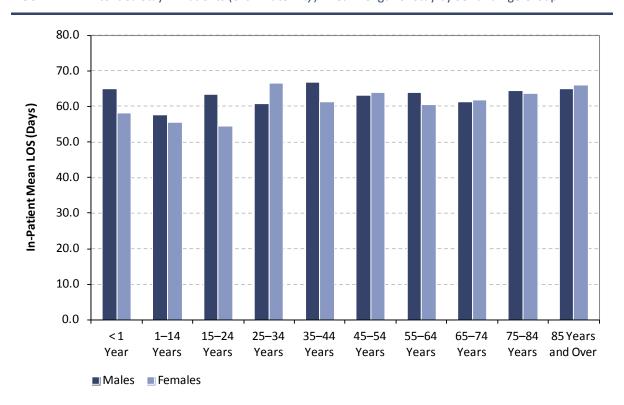


FIGURE 2.2 Extended Stay In-Patients (excl. Maternity): Mean Length of Stay by Sex and Age Group

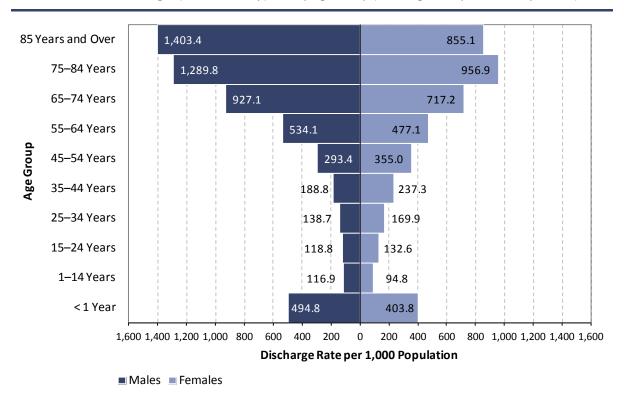


# 2.2.1.2 Discharge Rates by Age and Sex

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

- Apart from the youngest age group, for both males and females, the discharge rate generally increased with age. Males aged 85 years and over recorded the highest discharge rate (1,403.4 per 1,000 population of males) whilst the highest discharge rate for females was amongst those aged between 75 and 84 years (956.9 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 (excl. Maternity): Sex by Age Group (Discharge Rate per 1,000 Population)



Note: Population estimates for 2013 by sex and age group were obtained from the CSO. http://www.cso.ie/px/pxeirestat/Database/eirestat/Annual%20Population%20Estimates\_stat nk.asp?SP=Annual%20Population%20Estimates&Planguage=0 [accessed 28<sup>th</sup> October 2014]

#### 2.2.2 Marital/Civil Status

# 2.2.2.1 Marital/Civil Status by Patient Type

Table 2.2 disaggregates total discharges (excl. Maternity) by patient type and marital/civil status.

- Married discharges accounted for 47.3 per cent of total discharges (excl. Maternity).
- Discharges who were single accounted for the largest proportion of acute inpatient discharges (42.9 per cent), while married discharges accounted for the largest proportion of extended stay in-patient discharges (36.5 per cent).
- Discharges who were widowed accounted for 10.0 per cent of total discharges (excl. Maternity). However, they accounted for almost a quarter of extended stay in-patient discharges (24.7 per cent).

<b>TABLE 2.2</b>	Total Discharges	(excl. N	∕laternity):	Patient Type	e by	Marital/Civil	Status (N, %)
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					In-Pati	ents			Total Discharges		
	Day Pati	ients	Acute (0–30 days)		Exten (> 30 c		Tota In-Patie		(excl. <i>Mate</i>	•	
	N	%	N	%	N	%	N	%	N	%	
Single	283,307	30.9	209,418	42.9	4,801	30.6	214,219	42.5	497,526	35.0	
Married	476,988	52.0	189,267	38.8	5,723	36.5	194,990	38.7	671,978	47.3	
Widowed	83,089	9.0	55,339	11.3	3,882	24.7	59,221	11.8	142,310	10.0	
Other*	40,680	4.4	19,425	4.0	683	4.4	20,108	4.0	60,788	4.3	
Unknown	21,826	2.4	8,614	1.8	451	2.9	9,065	1.8	30,891	2.2	
Divorced	12,269	1.3	5,749	1.2	157	1.0	5,906	1.2	18,175	1.3	
Total Discharges (excl. <i>Maternity</i> )	918,159	100	487,812	487,812 100		100	503,509	100	1,421,668	100	

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 Age

Figure 2.4 shows the proportion of total discharges (excl. Maternity) by marital/civil status and age group.

- Two out of every five discharges (40.7 per cent) who were single were aged 15-44 years.
- For discharges who were widowed, 89.4 per cent were aged 65 years and over.

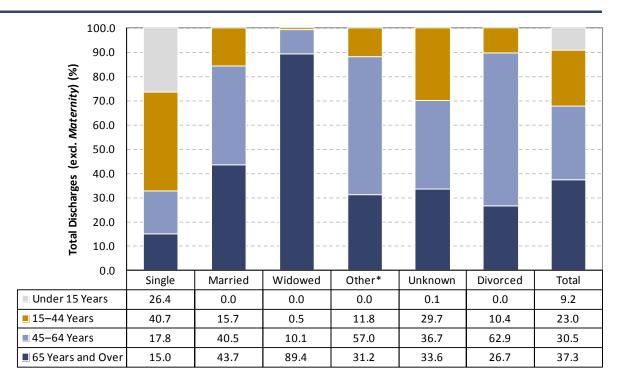


FIGURE 2.4 Total Discharges (excl. Maternity): Marital/Civil Status by Age Group (%)

Notes:

Percentage columns are subject to rounding.

# 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 disaggregates total discharges (excl. *Maternity*) by public/private status and age group.<sup>2</sup>

- Of total discharges (excl. *Maternity*), 83.7 per cent were discharged on a public basis.
- Apart from the oldest age group, the 25–34 years age group had the largest proportion of total discharges (excl. *Maternity*) treated publicly (88.3 per cent) with only 11.7 per cent treated on a private basis.
- The 1–14 years age group had the largest proportion of total discharges (excl. Maternity) that were treated on a private basis, which accounted for 23.2 per cent of all discharges in this age group.

<sup>\*</sup> Other includes Separated, Civil Partner, Formal Civil Partner, and Surviving Civil Partner

For length of stay analysis see Table 2.11.

TABLE 2.3 Total Discharges (excl. Maternity): Public/Private Status by Age Group (N, %)

	Pul	olic	Priv	ate	Total Discharges (excl. <i>Maternity</i> )		
	N	%	N	%	N	%	
< 1 Year	25,895	80.8	6,168	19.2	32,063	100	
1–14 Years	76,258	76.8	23,093	23.2	99,351	100	
15–24 Years	56,719	84.7	10,235	15.3	66,954	100	
25–34 Years	96,710	88.3	12,863	11.7	109,573	100	
35–44 Years	126,201	83.8	24,375	16.2	150,576	100	
45–54 Years	160,105	82.9	32,951	17.1	193,056	100	
55–64 Years	196,629	82.0	43,308	18.0	239,937	100	
65-74 Years	223,611	83.1	45,365	16.9	268,976	100	
75–84 Years	170,807	86.6	26,337	13.4	197,144	100	
85 Years and Over	56,791	88.7	7,247	11.3	64,038	100	
Total Discharges (excl. <i>Maternity</i> )	1,189,726	83.7	231,942	16.3	1,421,668	100	

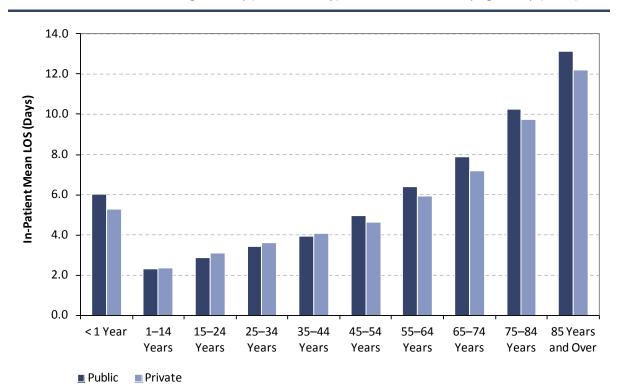
Note:

Percentage columns are subject to rounding.

Figure 2.5 disaggregates total in-patient mean length of stay (excl. Maternity) by public/private status and age group.

- Public in-patient discharges aged 45 years and over recorded a longer in-patient mean length of stay compared to private in-patient discharges. The longest inpatient mean length of stay was recorded for public in-patients aged 85 years and over (13.1 days).
- For those in the younger age groups, mean length of stay was broadly similar between public and private in-patient discharges, with the shortest mean length of stay recorded in the 1-14 years age group for both public in-patients (2.3 days) and private in-patients (2.4 days).

FIGURE 2.5 Total In-Patient Length of Stay (excl. Maternity): Public/Private Status by Age Group (Mean)



**GMS Status** 

2.2.4

GMS status refers to the medical card status of each HIPE discharge.<sup>3</sup> Eligibility for a medical card is predominately dependent on income. It should be noted that where discharges are recorded as having a medical card this does not necessarily imply that the hospital discharge was publicly funded and vice versa.

Table 2.4 disaggregates total discharges (excl. Maternity) by GMS status and age group.4

- Of total discharges (excl. *Maternity*), 57.1 per cent were GMS discharges.
- The proportion of total discharges (excl. Maternity) that were GMS discharges generally increased with age, with the largest proportion in the 85 years and over age group (82.5 per cent).

**TABLE 2.4** Total Discharges (excl. *Maternity*): GMS Status by Age Group (N, %)

	GM	ıs	Non-	GMS	Unkn	own <sup>a</sup>	Total Discharges (excl. <i>Maternity</i> )		
	N	%	N	%	N	%	N	%	
< 1 Year	5,698	17.8	26,102	81.4	263	0.8	32,063	100	
1–14 Years	48,096	48.4	50,928	51.3	327	0.3	99,351	100	
15-24 Years	31,676	47.3	34,651	51.8	627	0.9	66,954	100	
25-34 Years	50,268	45.9	58,289	53.2	1,016	0.9	109,573	100	
35–44 Years	70,884	47.1	78,765	52.3	927	0.6	150,576	100	
45-54 Years	93,233	48.3	98,468	51.0	1,355	0.7	193,056	100	
55–64 Years	126,860	52.9	111,811	46.6	1,266	0.5	239,937	100	
65-74 Years	174,781	65.0	92,066	34.2	2,129	0.8	268,976	100	
75–84 Years	157,868	80.1	37,311	18.9	1,965	1.0	197,144	100	
85 Years and Over	52,822	82.5	10,349	16.2	867	1.4	64,038	100	
Total Discharges (excl. <i>Maternity</i> )	812,186	57.1	598,740	42.1	10,742	0.8	1,421,668	100	

Notes:

Percentage columns are subject to rounding.

For length of stay analysis see Table 2.7.

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

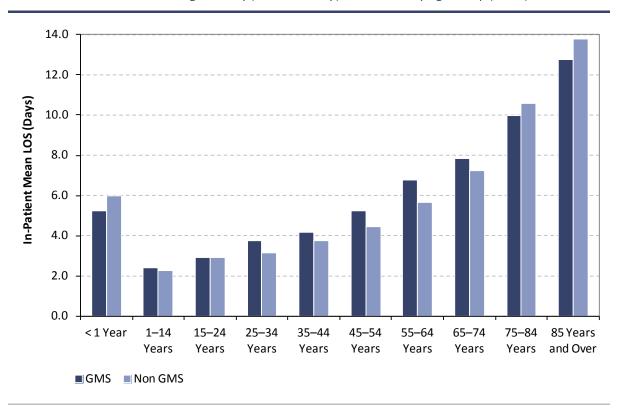
The HSE reported that 1,849,380 individuals were covered by a medical card at the end of December 2013. Using population estimates obtained from CSO in 2013, this equates to 40.3 per cent of the population.

http://www.hse.ie/eng/services/publications/corporate/performance assurance reports/dec 13 pareport.pdf (and the context of the context of

Figure 2.6 disaggregates in-patient mean length of stay (excl. Maternity) by GMS status and age group.

- GMS discharges aged between 25 and 74 years had a longer in-patient mean length of stay compared to non-GMS discharges. Within these age groups the longest in-patient mean length of stay was recorded for GMS discharges aged 65–74 years (7.8 days) compared to 7.2 days for non-GMS discharges.
- Non-GMS discharges recorded a longer in-patient mean length of stay for both the youngest and oldest age groups compared to GMS discharges. Those aged 85 years and over recorded a mean length of stay of 13.8 days for non-GMS discharges compared to 12.8 days for GMS discharges, while those aged less than 1 year recorded a mean length of stay of 6.0 days for non-GMS discharges compared to 5.2 days for GMS discharges.

FIGURE 2.6 Total In-Patient Length of Stay (excl. Maternity): GMS Status by Age Group (Mean)



Data for discharges whose GMS status was 'unknown' are not presented in this figure.

# 2.2.5 Public/Private Status by GMS Status and Patient Type

Table 2.5 and Figure 2.7 disaggregate total discharges (excl. *Maternity*) by public/private status, GMS status and patient type.

- For GMS in-patient discharges, 93.2 per cent were treated on a public basis compared to 6.8 per cent who were treated privately.
- For non-GMS in-patient discharges, 60.3 per cent were treated on a public basis with the remaining 39.7 per cent treated on a private basis.

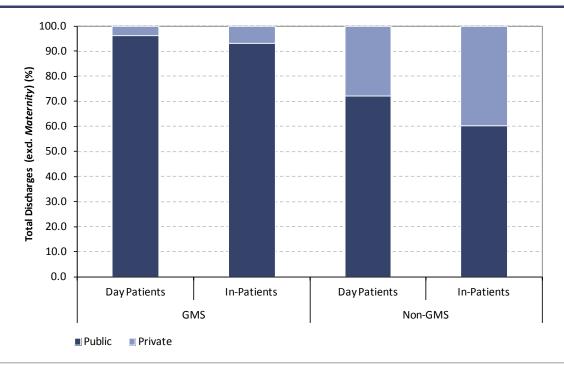
TABLE 2.5 Total Discharges (excl. Maternity): Public/Private Status by GMS Status and Patient Type (N, %)

		Pub	olic	Priv	vate	Total Discharges (excl. <i>Maternity</i> )		
		N	%	N	%	N	%	
	Day Patients	504,919	96.3	19,585	3.7	524,504	100	
gMS	In-Patients	268,156	93.2	19,526	6.8	287,682	100	
	Total GMS	773,075	95.2	39,111	4.8	812,186	100	
MS	Day Patients	279,164	72.1	108,017	27.9	387,181	100	
Non-GMS	In-Patients	127,602	60.3	83,957	39.7	211,559	100	
8	Total Non-GMS	406,766	67.9	191,974	32.1	598,740	100	
vn <sup>a</sup>	Day Patients	6,040	93.3	434	6.7	6,474	100	
Unknown	In-Patients	3,845	90.1	423	9.9	4,268	100	
Ę.	Total GMS Unknown	9,885	92.0	857	8.0	10,742	100	
	Day Patients	790,123	86.1	128,036	13.9	918,159	100	
Total	In-Patients	399,603	79.4	103,906	20.6	503,509	100	
	Total Discharges (excl. <i>Maternity</i> )	1,189,726	83.7	231,942	16.3	1,421,668	100	

Notes:

Percentage columns are subject to rounding.

FIGURE 2.7 Total Discharges (excl. Maternity): Public/Private Status, by GMS Status and Patient Type (%)



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

#### 2.3 WHERE

Section 2.3 examines where discharges were hospitalised, where they were resident, and where they were admitted from and discharged to. Data are presented in the following tables and figures by HSE area of hospitalisation, HSE area of residence, hospital type, and admission source and discharge destination.

#### **HSE Area of Hospitalisation** 2.3.1

HSE area of hospitalisation reflects the HSE administrative area in which the discharge was hospitalised (see Appendix I). Total discharges (excl. Maternity) are disaggregated by patient type and admission type across each HSE area, followed by a further breakdown by GMS status to show the distribution of medical card holders across the HSE areas.

# 2.3.1.1 Patient Type and Admission Type by HSE Area of Hospitalisation

Table 2.6 disaggregates total discharges (excl. Maternity) by HSE area of hospitalisation, patient type and admission type.

#### **Discharges**

- The largest proportion of total discharges (excl. Maternity) were hospitalised in the HSE Dublin Mid Leinster area (29.4 per cent) with the smallest proportion hospitalised in the HSE South area (22.8 per cent).
- The largest proportion of day patients were hospitalised in the HSE Dublin Mid Leinster area (30.7 per cent) while the smallest proportion of day patient discharges were hospitalised in the HSE South area (21.6 per cent).
- The HSE Dublin Mid Leinster area accounted for 30.1 per cent of total elective inpatient discharges, and 26.3 per cent of total emergency in-patient discharges, accounting for the highest proportion across all HSE areas.

# Length of Stay

- For acute emergency in-patient length of stay, the HSE Dublin Mid Leinster area recorded the longest mean length of stay of 4.8 days compared to the HSE South which recorded the lowest acute emergency in-patient length of stay at 4.0 days.
- Acute in-patient mean length of stay ranged from 4.0 days in the HSE South area to 4.8 days in the HSE Dublin Mid Leinster area.
- Extended stay in-patient mean length of stay was longest in the HSE Dublin North East and HSE Dublin Mid Leinster areas at 67.4 days which was over 14 days longer than in the HSE West area (53.1 days).

**TABLE 2.6** Total Discharges (excl. *Maternity*): HSE Area of Hospitalisation by Patient Type and Admission Type (N, % and In-Patient Length of Stay)

							Discharges					
			Dublin North	East	Dublin Mid Le	einster	South		West		Total Dischar (excl. <i>Matern</i>	_
			N	%	N	%	N	%	N	%	N	%
Day F	Patients		213,610	23.3	281,941	30.7	198,111	21.6	224,497	24.5	918,159	100
		Acute (0–30 days)	21,988	22.1	29,238	29.4	22,223	22.4	25,866	26.0	99,315	100
	Elective	Extended (> 30 days)	887	22.6	1,831	46.7	697	17.8	507	12.9	3,922	100
S		Total Elective	22,875	22.2	31,069	30.1	22,920	22.2	26,373	25.5	103,237	100
ent		Acute (0–30 days)	89,005	22.9	100,733	25.9	101,068	26.0	97,691	25.1	388,497	100
-Patients	<b>Emergency</b> <sup>a</sup>	Extended (> 30 days)	3,147	26.7	4,484	38.1	2,217	18.8	1,927	16.4	11,775	100
<u>n-</u> P		Total Emergency	92,152	23.0	105,217	26.3	103,285	25.8	99,618	24.9	400,272	100
_	Acute (0–30 days)		110,993	22.8	129,971	26.6	123,291	25.3	123,557	25.3	487,812	100
	Total Extended (> 30 days)		4,034	25.7	6,315	40.2	2,914	18.6	2,434	15.5	15,697	100
	Total In-Patients		115,027	22.8	136,286	27.1	126,205	25.1	125,991	25.0	503,509	100
Total	al Discharges (excl. Maternity)		328,637	23.1	418,227	29.4	324,316	22.8	350,488	24.7	1,421,668	100

					lr	n-Patient Le	ngth of Sta	у			
		Dul North		Dul Mid Le	olin einster	Soi	uth	West		Total In-Patients	
		Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
	Acute (0–30 days)	5.2	3	4.7	2	4.2	2	4.1	2	4.5	2
Elective	Extended (> 30 days)	62.2	47	58.6	46	62.3	47	55.1	44	59.6	46
	Total Elective	7.4	3	7.9	3	5.9	2	5.1	2	6.6	3
	Acute (0–30 days)	4.5	2	4.8	3	4.0	2	4.4	2	4.4	2
Emergency	Extended (> 30 days)	68.8	48	71.0	50	56.2	45	52.6	43	64.6	47
	Total Emergency	6.7	2	7.7	3	5.1	2	5.4	2	6.2	2
	Acute (0–30 days)	4.6	2	4.8	2	4.0	2	4.4	2	4.4	2
Total	Extended (> 30 days)	67.4	48	67.4	49	57.7	45	53.1	43	63.4	47
	Total In-Patients (excl. Maternity)	6.8	2	7.7	3	5.2	2	5.3	2	6.3	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.

Figures 2.8a and 2.8b show the cumulative distribution of length of stay for elective and emergency in-patient discharges respectively by HSE area of hospitalisation.

- 84.0 per cent of elective in-patients discharged in the HSE West and 82.6 per cent in the HSE South areas spent 7 days or less in hospital. In contrast, 75.0 per cent of elective in-patients discharged in the HSE Dublin North East area and 76.2 per cent in the HSE Dublin Mid Leinster area had a length of stay of 7 days or less.
- 83.1 per cent of emergency in-patients discharged in the HSE South and 80.8 per cent in the HSE West areas spent 7 days or less in hospital. This compared to 78.9 per cent in the HSE Dublin North East area and 76.7 in the HSE Dublin Mid Leinster area.

FIGURE 2.8a Elective In-Patient Discharges: Length of Stay by HSE Area of Hospitalisation (Cumulative Percentage)

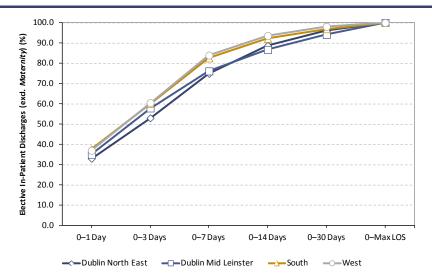
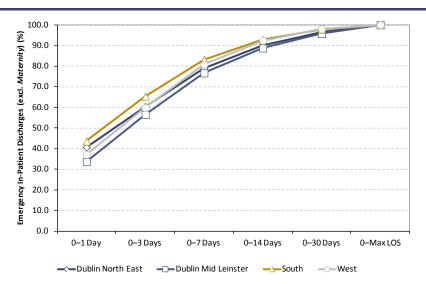


FIGURE 2.8b Emergency In-Patient Discharges<sup>a</sup>: Length of Stay by HSE Area of Hospitalisation (Cumulative Percentage)

Note:



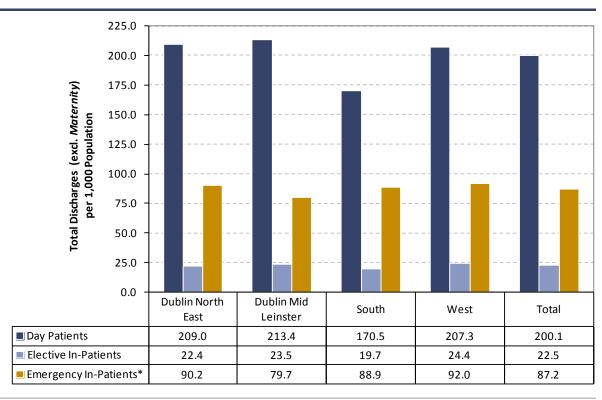
HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about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

# Discharge Rates by HSE Area of Hospitalisation

Figure 2.9 shows the discharge rates per 1,000 population for total discharges (excl. Maternity) by HSE area of hospitalisation, patient and admission type.

- The HSE Dublin Mid Leinster area recorded the highest discharge rate for day patients (213.4 per 1,000 population) compared with the lowest rate in the HSE South area (170.5 per 1,000 population).
- Elective in-patient discharges recorded a similar rate across all areas ranging from 19.7 per 1,000 population in the HSE South area to 24.4 per 1,000 population in the HSE West area.
- The HSE West area recorded the highest discharge rate for emergency in-patient discharges (92.0 per 1,000 population) compared with the lowest rate in the HSE Dublin Mid Leinster area (79.7 per 1,000 population).

Total Discharges (excl. Maternity): HSE Area of Hospitalisation by Patient Type and Admission Type (Discharge Rate per 1,000 Population)



Notes: As 2013 population estimates by HSE Region were not available, rates are based on population data obtained from Census 2011 (CSO) and rates must therefore be interpreted with caution.

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.

# 2.3.1.3 HSE Area of Hospitalisation by GMS Status

Table 2.7 disaggregates total discharges (excl. Maternity) by HSE area of hospitalisation and GMS status.

# Discharges

- The HSE West area treated the largest proportion of GMS discharges (28.8 per cent) while the HSE Dublin North East area treated the smallest proportion of GMS discharges (20.8 per cent).
- For extended stay in-patients, the HSE Dublin Mid Leinster area treated the largest proportion of both GMS discharges (37.8 per cent) and non-GMS discharges (46.4 per cent).

# Length of Stay

- GMS discharges had a mean length of stay which was 2 days longer than their non-GMS counterparts (7.1 days compared to 5.1 days). Median length of stay was 1 day longer for GMS discharges.
- The HSE West area and the HSE South area both recorded the shortest in-patient mean length of stay for GMS discharges (6.0 days) and the HSE West area recorded the shortest in-patient mean length of stay for non-GMS discharges (4.1 days).
- The HSE Dublin North East area had the longest in-patient mean length of stay for extended stay in-patients for both GMS discharges (69.8 days) and non-GMS discharges (65.1 days).

**TABLE 2.7** Total Discharges (excl. *Maternity*): HSE Area of Hospitalisation by GMS Status and Patient Type (N, Row % and In-Patient Length of Stay)

							Discha	irges				
			Dubli North E		Dubli Mid Leir		Sout	h	Wes	t	Total Disch (excl. <i>Mate</i>	
			N	%	N	%	N	%	N	%	N	%
	Da	y Patient	107,631	20.5	150,586	28.7	110,795	21.1	155,492	29.6	524,504	100
S	ents	Acute (0–30 days)	59,113	21.3	69,806	25.2	71,369	25.7	76,906	27.7	277,194	100
GMS	In-Patients	Extended (> 30 days)	2,559	24.4	3,969	37.8	2,093	20.0	1,867	17.8	10,488	100
	-	Total	61,672	21.4	73,775	25.6	73,462	25.5	78,773	27.4	287,682	100
	Tot	tal GMS	169,303	20.8	224,361	27.6	184,257	22.7	234,265	28.8	812,186	100
	Da	y Patient	105,457	27.2	129,581	33.5	85,067	22.0	67,076	17.3	387,181	100
IMS	ents	Acute (0–30 days)	49,988	24.2	59,335	28.7	51,449	24.9	45,953	22.2	206,725	100
Non-GMS	n-Patients	Extended (> 30 days)	1,227	25.4	2,245	46.4	808	16.7	554	11.5	4,834	100
	_	Total	51,215	24.2	61,580	29.1	52,257	24.7	46,507	22.0	211,559	100
	Tot	tal Non-GMS	156,672	26.2	191,161	31.9	137,324	22.9	113,583	19.0	598,740	100
	Da	y Patient	522	8.1	1,774	27.4	2,249	34.7	1,929	29.8	6,474	100
<sub>e</sub> uw	ents	Acute (0–30 days)	1,892	48.6	830	21.3	473	12.2	698	17.9	3,893	100
Unknown <sup>a</sup>	n-Patients	Extended (> 30 days)	248	66.1	101	26.9	13	3.5	13	3.5	375	100
		Total	2,140	50.1	931	21.8	486	11.4	711	16.7	4,268	100
		tal GMS Unknown	2,662	24.8	2,705	25.2	2,735	25.5	2,640	24.6	10,742	100
	Da	y Patient	213,610	23.3	281,941	30.7	198,111	21.6	224,497	24.5	918,159	100
	ents	Acute (0–30 days)	110,993	22.8	129,971	26.6	123,291	25.3	123,557	25.3	487,812	100
Total	In-Patients	Extended (> 30 days)	4,034	25.7	6,315	40.2	2,914	18.6	2,434	15.5	15,697	100
		Total	115,027	22.8	136,286	27.1	126,205	25.1	125,991	25.0	503,509	100
		tal Discharges	328,637	23.1	418,227	29.4	324,316	22.8	350,488	24.7	1,421,668	100

					In	-Patient I	Length of St	ay			
			ublin th East		ıblin .einster	Sc	outh	W	/est	est Total In-Patier	
		Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
	Acute (0–30 days)	5.1	3	5.4	3	4.5	2	4.9	3	4.9	3
GMS	Extended (> 30 days)	69.8	49	69.0	49	57.4	45	52.0	43	63.9	47
	Total GMS	7.7	3	8.8	3	6.0	2	6.0	3	7.1	3
MS	Acute (0–30 days)	3.8	2	4.1	2	3.3	2	3.5	2	3.7	2
Non-GMS	Extended (> 30 days)	65.1	47	64.6	49	58.7	45	57.0	44	62.9	47
Š	Total Non-GMS	5.3	2	6.3	2	4.2	2	4.1	2	5.1	2
«n <sub>a</sub>	Acute (0-30 days)	12.4	13	6.3	3	4.2	2	4.6	3	8.7	7
Unknown <sup>a</sup>	Extended (> 30 days)	53.5	45	67.4	54	50.8	46	38.6	37	56.6	46
Š	Total GMS Unknown	17.2	14	12.9	4	5.4	2	5.2	3	12.9	8
	Acute (0-30 days)	4.6	2	4.8	2	4.0	2	4.4	2	4.4	2
Total	Extended (> 30 days)	67.4	48	67.4	49	57.7	45	53.1	43	63.4	47
_5	Total In-Patients (excl. <i>Maternity</i> )	6.8	2	7.7	3	5.2	2	5.3	2	6.3	2

Notes:

Percentage columns are subject to rounding.

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

Figures 2.10a and 2.10b show the cumulative distribution of length of stay for GMS and non-GMS in-patient discharges respectively by HSE area of hospitalisation.

- 79.5 per cent of GMS in-patient discharges in the HSE South area and 77.7 per cent in the HSE West area spent 7 days or less in hospital. This compared to 72.3 per cent in the HSE Dublin Mid Leinster area and 74.9 per cent in HSE Dublin North East area.
- Approximately 88 per cent of non-GMS discharges in both the HSE South and HSE West areas spent 7 days or less in hospital. This compared to 84.4 per cent in the HSE Dublin North East area and 81.8 per cent in HSE Dublin Mid Leinster area.

FIGURE 2.10a GMS In-Patient Discharges (excl. Maternity): Length of Stay by HSE Area of Hospitalisation (Cumulative Percentage)

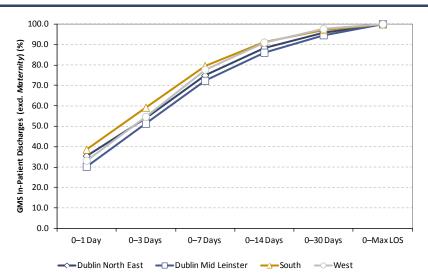
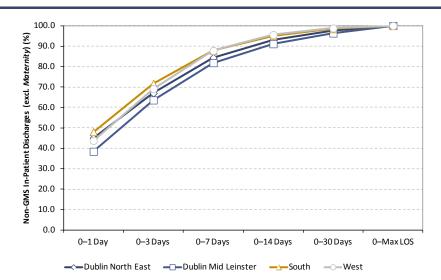


FIGURE 2.10b Non-GMS In-Patient Discharges (excl. Maternity): Length of Stay by HSE Area of Hospitalisation (Cumulative Percentage)



#### 2.3.2 **HSE Area of Residence**

HSE area of residence reflects the HSE administrative area in which the discharge was resident. Total discharges (excl. Maternity) are disaggregated by age group across each HSE administrative area.

#### HSE Area of Residence by Age Group 2.3.2.1

Table 2.8 disaggregates total discharges (excl. Maternity) by HSE area of residence and age group.

- A larger proportion of discharges resident in the HSE West area were aged 85 years and older (4.9 per cent) compared to 4.2 per cent in the HSE South area, and 4.5 per cent in both the HSE Dublin North East and HSE Dublin Mid Leinster areas.
- Compared to the other HSE areas, a larger proportion of discharges in the two youngest age categories were resident in the HSE South.

TABLE 2.8 Total Discharges (excl. Maternity): HSE Area of Residence and Age Group (N, %)

	Dubli North E		Dubl Mid Lei		South		West		Total Discharges (excl. <i>Maternity</i> )	
	N	%	N	%	N	%	N	%	N	%
< 1 Year	7,100	2.2	8,247	2.1	8,575	2.5	8,045	2.2	31,967	2.3
1–14 Years	20,625	6.5	26,432	6.8	25,219	7.4	26,723	7.3	98,999	7.0
15-24 Years	15,081	4.8	19,283	4.9	15,995	4.7	16,340	4.4	66,699	4.7
25-34 Years	26,567	8.4	32,723	8.4	24,463	7.1	25,491	6.9	109,244	7.7
35-44 Years	36,637	11.5	43,758	11.2	35,068	10.2	34,757	9.4	150,220	10.6
45-54 Years	44,317	14.0	54,414	14.0	46,841	13.7	47,019	12.8	192,591	13.6
55-64 Years	52,134	16.4	63,922	16.4	58,306	17.0	65,037	17.7	239,399	16.9
65-74 Years	57,319	18.1	71,081	18.2	67,285	19.7	72,645	19.7	268,330	18.9
75–84 Years	43,429	13.7	52,568	13.5	46,363	13.5	54,359	14.8	196,719	13.9
85 Years and Over	14,262	4.5	17,540	4.5	14,218	4.2	17,905	4.9	63,925	4.5
Total Discharges (excl. <i>Maternity</i> )	317,471	100	389,968	100	342,333	100	368,321	100	1,418,093	100

Notes: Percentage columns are subject to rounding.

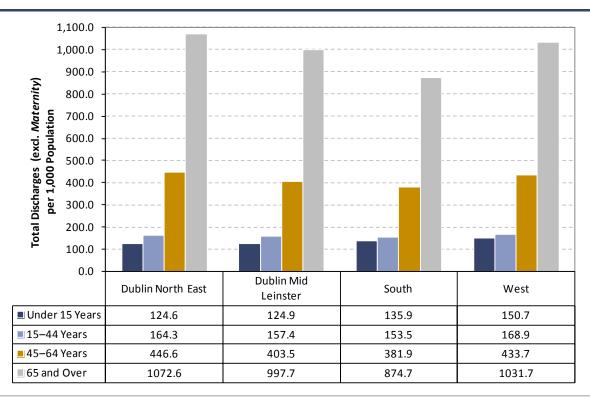
A small number of discharges have no HSE area of residence (including discharges resident outside the Republic of Ireland and those with no fixed abode). This table excludes discharges for whom HSE area of residence was unknown or not applicable.

#### 2.3.2.2 Discharge Rates by HSE Area of Residence and Age Group

Figure 2.11 shows the discharge rates per 1,000 population for total discharges (excl. Maternity) by HSE area of residence and age group.

- For the 65 years and over age group the HSE Dublin North East area recorded the highest discharge rate of 1,072.6 per 1,000 population compared to the lowest rate recorded for this age group in the HSE South area of 874.7per 1,000 population.
- The highest discharge rate for the youngest age group, aged under 15 years, was recorded for residents of the HSE West area (150.7 per 1,000 population) compared to a much lower rate in the HSE Dublin North East area (124.6 per 1,000 population).

FIGURE 2.11 Total Discharges (excl. Maternity): HSE Area of Residence by Age (Discharge Rate per 1,000 Population)



Notes: As 2013 population estimates by HSE Region were not available, rates are based on population data obtained from Census 2011 (CSO) and rates must therefore be interpreted with caution.

A small number of discharges have no HSE area of residence (including discharges resident outside the Republic of Ireland and those with no fixed abode). This figure excludes discharges for whom HSE area of residence was unknown or not applicable.

#### **Inter-Regional Flows** 2.3.3

Where a patient is hospitalised may be influenced by many factors including services required and proximity to local hospital, which may result in a flow of patients across HSE areas. To illustrate patient flows across HSE areas, the following section examines inter-regional flows by HSE area and by county of residence.

# HSE Area of Residence by HSE Area of Hospitalisation

Table 2.9 disaggregates total discharges (excl. Maternity) by HSE area of hospitalisation, HSE area of residence, patient type and admission type.

- Inter-regional flows are evident for elective in-patient discharges. For example, 83.0 per cent of elective in-patient discharges residing in the HSE West area were hospitalised in this area compared to 92.2 per cent of emergency inpatient discharges and 92.5 per cent of day patient discharges.
- Crossover between HSE regions was most evident between the HSE Dublin North East and HSE Dublin Mid Leinster areas. For example, for total discharges (excl. Maternity), of the 11.1 per cent of HSE Dublin North East area residents who were hospitalised outside their HSE area of residence, 10.7 per cent were hospitalised in the HSE Dublin Mid Leinster area.

TABLE 2.9 Total Discharges (excl. Maternity): HSE Area of Hospitalisation by HSE Area of Residence, Patient Type and Admission Type (%)

			HSE	Area of Hospital	isation	
		Dublin North East	Dublin Mid Leinster	South	West	Total Discharges (excl. <i>Maternity</i> )
		%	%	%	%	%
	Day Patients					
	Dublin North East	88.0	11.7	0.0	0.2	100
	Dublin Mid Leinster	8.4	89.3	0.2	2.0	100
	South	1.6	7.1	90.5	0.7	100
	West	1.8	3.8	1.9	92.5	100
	Elective In-Patients					
e	Dublin North East	82.6	17.0	0.1	0.3	100
Residence	Dublin Mid Leinster	14.4	83.3	0.3	2.0	100
sic	South	4.5	12.2	81.6	1.8	100
of R	West	5.0	8.9	3.0	83.0	100
a	Emergency In-Patients <sup>a</sup>					
Area	Dublin North East	92.4	6.9	0.3	0.3	100
HSE /	Dublin Mid Leinster	6.4	90.2	1.0	2.4	100
Ï	South	0.9	2.8	95.6	0.7	100
	West	1.7	2.8	3.3	92.2	100
	Total Discharges (excl. Mo	aternity)				
	Dublin North East	88.9	10.7	0.1	0.3	100
	Dublin Mid Leinster	8.3	89.2	0.4	2.1	100
	South	1.7	6.2	91.3	0.8	100
	West	2.1	3.9	2.4	91.6	100

Notes: Percentage columns are subject to rounding.

> A small number of discharges have no HSE area of residence (including discharges resident outside the Republic of Ireland and those with no fixed abode). This table excludes discharges for whom HSE area of residence was unknown or not applicable. 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.

#### 2.3.3.2 County of Residence by HSE Area of Hospitalisation

Figures 2.12a–2.12d present county level inter-regional flows for total discharges (excl. Maternity), day patients, elective in-patients, and emergency in-patients.<sup>5</sup>

- Over 95 per cent of discharges in Cork, Galway, Mayo, and Kerry were hospitalised within their HSE area of residence for total discharges (excl. Maternity), day patients, and emergency in-patients.
- For elective in-patient discharges only Cork had over 90 per cent of discharges hospitalised within their HSE area of residence.
- Carlow (part of HSE South area) had the smallest proportion of total discharges (excl. Maternity) hospitalised within its own HSE area of residence (65.0 per cent). This was also the case for both day patients (49.8 per cent) and elective inpatients (47.2 per cent).

The reference table containing the data for these figures is in Appendix VI.

FIGURE 2.12a Total Discharges (excl. *Maternity*):

Proportion of Discharges Hospitalised within their HSE Area of Residence (%)

FIGURE 2.12b Day Patient Discharges (excl. *Maternity*):
Proportion of Discharges Hospitalised
within their HSE Area of Residence (%)

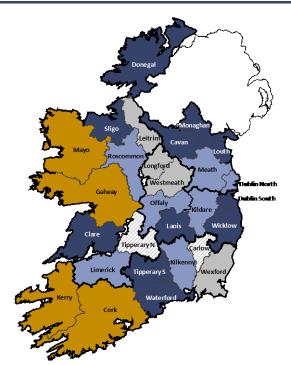


FIGURE 2.12c Elective In-Patient Discharges:
Proportion of Discharges Hospitalised
within their HSE Area of Residence (%)

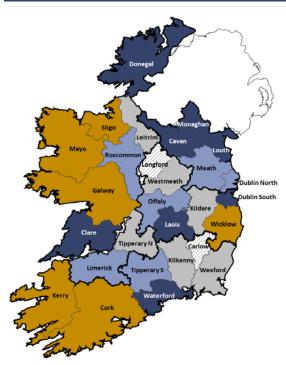
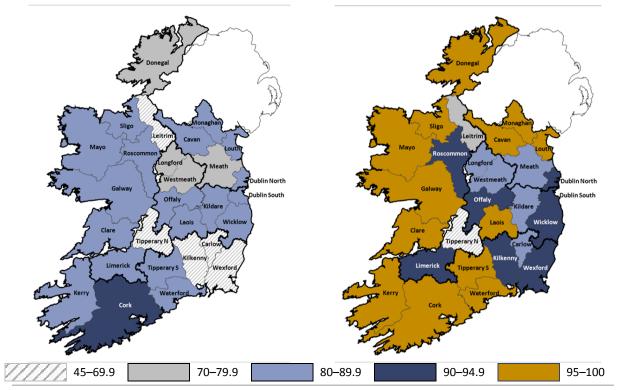


FIGURE 2.12d Emergency In-Patient Discharges<sup>a</sup>:
Proportion of Discharges Hospitalised
within their HSE Area of Residence (%)



Notes: The reference table containing the data for these figures is in Appendix VI.

The heavy black lines demarcate the four HSE regions.

A small number of discharges have no HSE area of residence (including discharges resident outside the Republic of Ireland and those with no fixed abode). These figures exclude discharges for whom HSE area of residence was unknown or not applicable. 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.

#### 2.3.4 **Hospital Type**

Hospital types are broadly categorised into general hospitals and 'other' hospitals. General hospitals comprise voluntary, regional and county hospitals, and treated the largest volume of total discharges (excl. Maternity) (91.9 per cent), while the remainder were discharged from 'other' hospitals that specialise in the treatment of particular conditions or patient groupings. 6

#### 2.3.4.1 Hospital Type by Admission Type

Table 2.10 and Figure 2.13 disaggregate total discharges (excl. Maternity) by hospital type, patient type and admission type.

#### **Discharges**

- Across all hospital types day patient discharges comprised the largest proportion of discharges. This was largest in voluntary hospitals which treated 73.3 per cent of their discharges as day patients and smallest in county hospitals which treated only 53.1 per cent as day patients.
- Across the general hospital groupings, county hospitals treated the largest proportion of total in-patient discharges as emergency in-patients (89.5 per cent) compared to voluntary hospitals which treated 74.5 per cent of their inpatients on an emergency basis.
- 'Other' hospitals treated 63.5 per cent of their discharges as day patients and the remaining 36.5 per cent as in-patients. Of these in-patient discharges, 53.3 per cent were treated on an elective basis.

#### Length of Stay

- The acute in-patient mean length of stay for elective in-patient discharges was 3.7 days in regional hospitals compared to 5.7 days in 'other' hospitals.
- Across the general hospital groupings, the acute in-patient mean length of stay for emergency in-patient discharges was 3.9 days in county hospitals compared to 5.5 days in voluntary hospitals.
- Voluntary hospitals recorded the longest acute in-patient mean length of stay (5.3 days) compared to county hospitals (3.9 days).
- Voluntary hospitals recorded the longest extended stay in-patient mean length of stay (71.2 days) compared to regional hospitals (55.5 days).

<sup>&#</sup>x27;Other' hospitals include Maternity; Cancer; Orthopaedic; Paediatric; Eye, Ear, Nose and Throat and 'Other Care' (covering a range of specialist services including palliative medicine, rheumatology, elderly care, and care of the young disabled). See Appendix I for the list of hospitals participating in HIPE in 2013.

**TABLE 2.10** Total Discharges (excl. *Maternity*): Hospital Type by Patient Type and Admission Type (N, % and In-Patient Length of Stay)

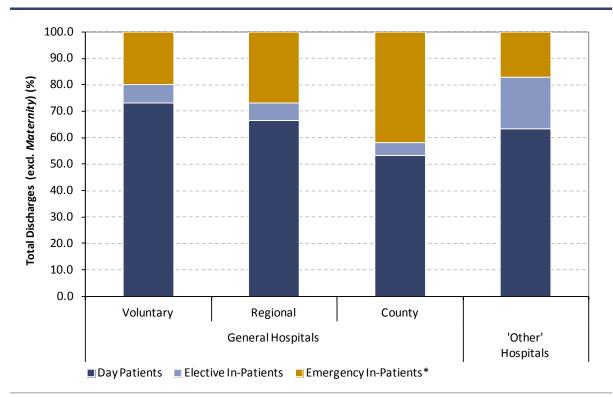
									ischarges					•
						Genera	al Hospitals				'Oth	orl	Total Discharges	
			Volun	tary	Regio	nal	Cour	nty	Total G	eneral	Otti	ei	(excl. Maternity)	
			N	%	N	%	N	%	N	%	N	%	N	%
Day Patient 370,005 40.3 247,013 26.9 228,235 24.9 845,253 92.1 72,9												7.9	918,159	100
		Acute (0–30 days)	33,518	33.7	24,797	25.0	20,403	20.5	78,718	79.3	20,597	20.7	99,315	100
	Elective	Extended (> 30 days)	963	24.6	430	11.0	757	19.3	2,150	54.8	1,772	45.2	3,922	100
S		Total	34,481	33.4	25,227	24.4	21,160	20.5	80,868	78.3	22,369	21.7	103,237	100
ent		Acute (0–30 days)	95,032	24.5	97,536	25.1	176,951	45.5	369,519	95.1	18,978	4.9	388,497	100
-Patients	Emergency	Extended (> 30 days)	5,479	46.5	2,422	20.6	3,253	27.6	11,154	94.7	621	5.3	11,775	100
<u></u>		Total	100,511	25.1	99,958	25.0	180,204	45.0	380,673	95.1	19,599	4.9	400,272	100
_	Acute (0–30 days)		128,550	26.4	122,333	25.1	197,354	40.5	448,237	91.9	39,575	8.1	487,812	100
	Total Extended (> 30 d		6,442	41.0	2,852	18.2	4,010	25.5	13,304	84.8	2,393	15.2	15,697	100
		Total	134,992	26.8	125,185	24.9	201,364	40.0	461,541	91.7	41,968	8.3	503,509	100
To	tal Discharges (	(excl. Maternity)	504,997	35.5	372,198	26.2	429,599	30.2	1,306,794	91.9	114,874	8.1	1,421,668	100

						lı	n-Patient Le	ngth of Stay	,				
					General I	lospitals				'Otl	or!	Total In-	Patients
		Voluntary		Regi	onal	Cou	nty	Total G	eneral	Oti	ici	Total III-	raticitis
		Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
	Acute (0–30 days)	4.6	2	3.7	2	4.2	2	4.2	2	5.7	3	4.5	2
Elective	Extended (> 30 days)	61.4	45	58.0	43	63.1	48	61.3	45	57.5	46	59.6	46
	Total	6.2	3	4.7	2	6.3	2	5.7	2	9.8	4	6.6	3
	Acute (0–30 days)	5.5	3	4.4	2	3.9	2	4.4	2	4.0	2	4.4	2
Emergency	Extended (> 30 days)	73.0	51	55.0	44	57.9	45	64.7	47	64.0	47	64.6	47
	Total	9.2	3	5.6	2	4.9	2	6.2	2	5.9	2	6.2	2
	Acute (0–30 days)	5.3	3	4.2	2	3.9	2	4.4	2	4.9	3	4.4	2
Total	Extended (> 30 days)	71.2	50	55.5	44	58.9	46	64.1	47	59.2	47	63.4	47
Total	Total In-Patients (excl. <i>Maternity</i> )	8.4	3	5.4	2	5.0	2	6.1	2	8.0	3	6.3	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.

Total Discharges (excl. Maternity): Patient Type and Admission Type by Hospital Type (%) **FIGURE 2.13** 

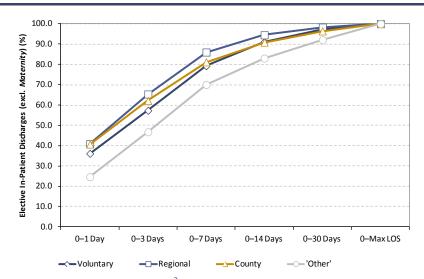


HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about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

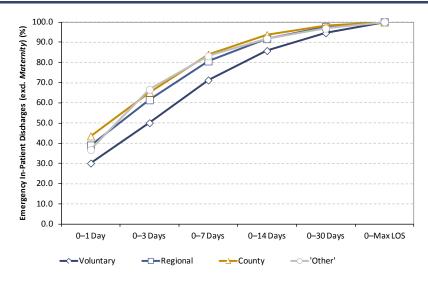
Figures 2.14a and 2.14b show the cumulative lengths of stay for elective and emergency discharges by hospital type.

- 70.0 per cent of elective in-patients discharged from 'other' hospitals spent 7 days or less in hospital. This was a smaller cumulative proportion than for voluntary (79.3 per cent), regional (86.0 per cent) and county (81.2 per cent) hospitals.
- 71.2 per cent of emergency in-patients discharged from voluntary hospitals spent 7 days or less in hospital. This was a smaller cumulative proportion than for regional (80.6 per cent), county (83.9 per cent) and 'other' hospitals (83.2 per cent).

FIGURE 2.14a Elective In-Patient Discharges: Length of Stay by Hospital Type (Cumulative Percentage)



**FIGURE 2.14b** Emergency In-Patient Discharges<sup>a</sup>: Length of Stay by Hospital Type (Cumulative Percentage)



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.

#### 2.3.4.2 Hospital Type by Public/Private Status

Table 2.11 disaggregates total discharges (excl. Maternity) by hospital type, public/private status and patient type.

# Discharges

- County hospitals treated the largest proportion of total discharges (excl. Maternity) on a public basis (84.9 per cent) compared to the smallest proportion in 'other' hospitals (75.8 per cent).
- 'Other' hospitals had the largest proportion of public discharges as extended stay in-patients (1.8 per cent) which ranged from 0.6 per cent to 1.0 per cent across the general hospitals groups.
- In contrast to all other hospital types where the majority of private discharges were treated as day patients, county hospitals treated a slightly larger proportion of their private discharges as in-patients (7.7 per cent) compared to day patients (7.5 per cent).

#### Length of Stay

- Total mean in-patient length of stay was 6.4 days for public discharges compared to 5.9 days for private discharges.
- Voluntary hospitals recorded the longest acute in-patient mean length of stay for public discharges (5.2 days), almost a day longer than regional hospitals which recorded an acute in-patient mean length of stay of 4.3 days. This difference was greater for private discharges, with voluntary hospitals recording an acute in-patient mean length of stay of 5.6 days compared to 4.2 days in regional hospitals.
- County hospitals recorded the shortest acute in-patient mean length of stay for both public discharges (3.9 days) and private discharges (4.0 days).
- For 'other' hospitals, acute in-patient mean length of stay for public discharges was 5.0 days compared to 4.5 days for private discharges.

**TABLE 2.11** Total Discharges (excl. *Maternity*): Hospital Type by Public/Private Status and Patient Type (N, % and In-Patient Length of Stay)

								Disc	charges					
						General	Hospitals				'Othe	pl I	Total Discha	irges
			Volunta	ıry	Region	al	Count	y	Total Gene	eral	Otile		(excl. Maternity)	
			N	%	N	%	N	%	N	%	N	%	N	%
	Day Patient		323,356	64.0	214,550	57.6	196,182	45.7	734,088	56.2	56,035	48.8	790,123	55.6
<u>:</u>		Acute (0–30 days)	99,375	19.7	93,342	25.1	164,842	38.4	357,559	27.4	29,016	25.3	386,575	27.2
Public	In-Patient	Extended (> 30 days)	5,183	1.0	2,290	0.6	3,517	0.8	10,990	0.8	2,038	1.8	13,028	0.9
۵		Total	104,558	20.7	95,632	25.7	168,359	39.2	368,549	28.2	31,054	27.0	399,603	28.1
	Total		427,914	84.7	310,182	83.3	364,541	84.9	1,102,637	84.4	87,089	75.8	1,189,726	83.7
	Day Patient		46,649	9.2	32,463	8.7	32,053	7.5	111,165	8.5	16,871	14.7	128,036	9.0
te		Acute (0–30 days)	29,175	5.8	28,991	7.8	32,512	7.6	90,678	6.9	10,559	9.2	101,237	7.1
Private	In-Patient	Extended (> 30 days)	1,259	0.2	562	0.2	493	0.1	2,314	0.2	355	0.3	2,669	0.2
P		Total	30,434	6.0	29,553	7.9	33,005	7.7	92,992	7.1	10,914	9.5	103,906	7.3
	Total		77,083	15.3	62,016	16.7	65,058	15.1	204,157	15.6	27,785	24.2	231,942	16.3
	Day Patient		370,005	73.3	247,013	66.4	228,235	53.1	845,253	64.7	72,906	63.5	918,159	64.6
		Acute (0–30 days)	128,550	25.5	122,333	32.9	197,354	45.9	448,237	34.3	39,575	34.5	487,812	34.3
Total	In-Patient	Extended (> 30 days)	6,442	1.3	2,852	0.8	4,010	0.9	13,304	1.0	2,393	2.1	15,697	1.1
<b>1</b> 0		Total	134,992	26.7	125,185	33.6	201,364	46.9	461,541	35.3	41,968	36.5	503,509	35.4
	Total Discha (excl. Mater	· ·	504,997	100.0	372,198	100.0	429,599	100.0	1,306,794	100.0	114,874	100.0	1,421,668	100.0

			In-Patient Length of Stay												
					General I	Hospitals				'0	ther'	Total In	Patients		
		Volu	ıntary	Reg	gional	Co	unty	Total	General	U	uiei	I Otal III	Patients		
		Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median		
<u>:</u>	Acute (0-30 days)	5.2	3	4.3	2	3.9	2	4.4	2	5.0	3	4.4	2		
Public	Extended (> 30 days)	74.7	52	55.8	44	59.5	46	65.9	48	60.3	47	65.0	48		
<u>~</u>	Total	8.6	3	5.5	2	5.1	2	6.2	2	8.6	3	6.4	2		
te e	Acute (0-30 days)	5.6	3	4.2	2	4.0	2	4.6	3	4.5	3	4.6	3		
Private	Extended (> 30 days)	56.9	44	54.2	44	54.8	44	55.8	44	53.0	44	55.4	44		
P	Total	7.7	4	5.2	2	4.8	2	5.9	3	6.1	3	5.9	3		
	Acute (0-30 days)	5.3	3	4.2	2	3.9	2	4.4	2	4.9	3	4.4	2		
Total	Extended (> 30 days)	71.2	50	55.5	44	58.9	46	64.1	47	59.2	47	63.4	47		
To	Total In-Patients (excl. <i>Maternity</i> )	8.4	3	5.4	2	5.0	2	6.1	2	8.0	3	6.3	2		

Figures 2.15a and 2.15b show the cumulative distribution of length of stay for public and private in-patient discharges by hospital type.

- 81.5 per cent and 83.5 per cent of public in-patients discharged from regional and county hospitals, respectively, spent less than 7 days in hospital. In contrast, 73.5 per cent and 74.4 per cent of public in-patients discharged from voluntary and 'other' hospitals, respectively, had a length of stay of 7 days or less.
- 72.6 per cent of private in-patients discharged from voluntary hospitals spent 7 days or less in hospital. This was a smaller cumulative proportion than for regional (82.6 per cent), county (84.3 per cent) and 'other' (81.2 per cent) hospitals.

FIGURE 2.15a Public In-Patient Discharges (excl. Maternity): Length of Stay by Hospital Type (Cumulative Percentage)

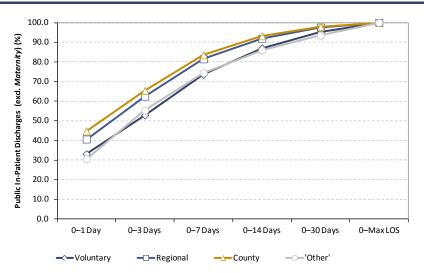
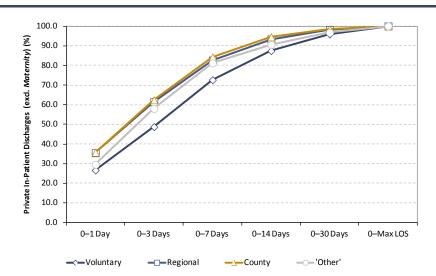


FIGURE 2.15b Private In-Patient Discharges (excl. Maternity): Length of Stay by Hospital Type (Cumulative Percentage)



#### 2.3.5 Admission Source

Admission source describes where the patient was admitted from. It does not refer to where an emergency or accident occurred. Table 2.12 disaggregates total discharges (excl. *Maternity*) by HSE area of hospitalisation and admission source.

- The majority of total discharges (excl. *Maternity*) in all HSE areas were admitted from home, ranging from 95.2 per cent in the HSE Dublin North East area to 97.1 per cent in the HSE Dublin Mid Leinster area.
- The HSE Dublin North East area had the largest proportion of in-patient discharges who were transferred from another hospital (7.6 per cent) compared to 3.8 per cent in the HSE South area.
- The HSE South area had the largest proportion of in-patient discharges admitted from long stay accommodation (2.3 per cent) compared to only 1.4 per cent of in-patients in the HSE Dublin North East area.

TABLE 2.12 Total Discharges (excl. Maternity): HSE Area of Hospitalisation by Patient Type, Admission Type and Admission Source (N, %)

						Discha	irges				
				H	ISE Area of H	ospitalisation				Total Disc	harges
		Dubl North I		Dub Mid Lei		Sou	th	We	st	(excl. Ma	
		N	%	N	%	N	%	N	%	N	%
ts	Home	210,847	98.7	281,440	99.8	196,863	99.4	223,603	99.6	912,753	99.4
ien	Long stay accommodation	383	0.2	231	0.1	493	0.2	220	0.1	1,327	0.1
Pat	Transfer from other Hospital	2,373	1.1	198	0.1	716	0.4	652	0.3	3,939	0.4
Day Patients	Other	7	0.0	72	0.0	39	0.0	22	0.0	140	0.0
۵	Total Day Patients	213,610	100	281,941	100	198,111	100	224,497	100	918,159	100
	Home	19,352	84.6	28,583	92.0	20,384	88.9	22,573	85.6	90,892	88.0
٨	Long stay accommodation	*	0.1	90	0.3	148	0.6	*	0.4	372	0.4
Flective	Transfer from other Hospital	3,488	15.2	2,377	7.7	2,376	10.4	3,691	14.0	11,932	11.6
<del> </del> =	Other	~	0.0	19	0.1	12	0.1	*	0.0	41	0.0
	Total Elective In-Patients	22,875	100	31,069	100	22,920	100	26,373	100	103,237	100
S a	Home	82,552	89.6	96,059	91.3	94,918	91.9	93,212	93.6	366,741	91.6
In-Patients Fmergency <sup>a</sup>	Long stay accommodation	1,531	1.7	1,921	1.8	2,763	2.7	2,613	2.6	8,828	2.2
ati	Transfer from other Hospital	5,237	5.7	4,277	4.1	2,380	2.3	1,507	1.5	13,401	3.3
7 E	Other	2,832	3.1	2,960	2.8	3,224	3.1	2,286	2.3	11,302	2.8
	Total Emergency In-Patients	92,152	100	105,217	100	103,285	100	99,618	100	400,272	100
	Home	101,904	88.6	124,642	91.5	115,302	91.4	115,785	91.9	457,633	90.9
-	Long stay accommodation	1,562	1.4	2,011	1.5	2,911	2.3	2,716	2.2	9,200	1.8
otal		8,725	7.6	6,654	4.9	4,756	3.8	5,198	4.1	25,333	5.0
	Other	2,836	2.5	2,979	2.2	3,236	2.6	2,292	1.8	11,343	2.3
	Total In-Patients	115,027	100	136,286	100	126,205	100	125,991	100	503,509	100
	Home	312,751	95.2	406,082	97.1	312,165	96.3	339,388	96.8	1,370,386	96.4
<del>-</del>	Long stay accommodation	1,945	0.6	2,242	0.5	3,404	1.0	2,936	0.8	10,527	0.7
Total	Transfer from other Hospital	11,098	3.4	6,852	1.6	5,472	1.7	5,850	1.7	29,272	2.1
	Other	2,843	0.9	3,051	0.7	3,275	1.0	2,314	0.7	11,483	0.8
	Total Discharges (excl. Maternity)	328,637	100	418,227	100	324,316	100	350,488	100	1,421,668	100

Notes:

Percentage columns are subject to rounding. ~ Denotes five or less discharges reported to HIPE.\* Further suppression required to prevent disclosure of five or less discharges. See Appendix V 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.

#### 2.3.6 **Discharge Destination**

Discharge destination identifies the destination of the discharge upon completion of their episode of care. Table 2.13 disaggregates total discharges (excl. Maternity) by HSE area of hospitalisation and discharge destination.

- The majority of in-patient discharges were discharged home, ranging from 86.5 per cent in the HSE West area to 87.3 per cent in the HSE South area.
- The proportion of in-patient discharges discharged to long stay accommodation ranged from 4.0 per cent in the HSE Dublin Mid Leinster area to 6.2 per cent in the HSE West area.
- For emergency in-patient discharges, the proportion of discharges transferred to another hospital ranged from 4.9 per cent in the HSE West area to 5.6 per cent in the HSE Dublin Mid Leinster area.

**TABLE 2.13** Total Discharges (excl. *Maternity*): HSE Area of Hospitalisation by Patient Type, Admission Type and Discharge Destination (N, %)

							Discha	irges				
						HSE Area of Ho	ospitalisation				Total Disc	charges
			Dublin No	rth East	Dublin Mic	d Leinster	Sou	th	We	est	(excl. Ma	ternity)
			N	%	N	%	N	%	N	%	N	%
		Home	210,980	98.8	281,243	99.8	196,882	99.4	223,690	99.6	912,795	99.4
-	LIS	Long stay accommodation	482	0.2	281	0.1	546	0.3	280	0.1	1,589	0.2
	<u> </u>	Transfer to other Hospital	2,129	1.0	331	0.1	654	0.3	488	0.2	3,602	0.4
•	7	Died <sup>a</sup>	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
ď	Day Patients	Other	19	0.0	86	0.0	29	0.0	39	0.0	173	0.0
		Total Day Patients	213,610	100	281,941	100	198,111	100	224,497	100	918,159	100
		Home	20,908	91.4	28,499	91.7	21,204	92.5	24,067	91.3	94,678	91.7
	(I)	Long stay accommodation	898	3.9	558	1.8	766	3.3	1,012	3.8	3,234	3.1
	ţį	Transfer to other Hospital	764	3.3	1,272	4.1	640	2.8	1,001	3.8	3,677	3.6
	Elective	Died	159	0.7	620	2.0	213	0.9	207	0.8	1,199	1.2
		Other	146	0.6	120	0.4	97	0.4	86	0.3	449	0.4
		Total Elective In-patients	22,875	100	31,069	100	22,920	100	26,373	100	103,237	100
		Home	78,990	85.7	90,288	85.8	88,951	86.1	84,861	85.2	343,090	85.7
ıts	رک <sub>ہ</sub>	Transfer to long stay accommodation	4,519	4.9	4,844	4.6	4,816	4.7	6,774	6.8	20,953	5.2
tier	gen	Transfer to other Hospital	4,892	5.3	5,941	5.6	5,459	5.3	4,899	4.9	21,191	5.3
In-Patients	Emergency	Died	2,420	2.6	2,870	2.7	2,545	2.5	2,168	2.2	10,003	2.5
≐	E	Other	1,331	1.4	1,274	1.2	1,514	1.5	916	0.9	5,035	1.3
		Total Emergency In-Patients	92,152	100	105,217	100	103,285	100	99,618	100	400,272	100
		Home	99,898	86.8	118,787	87.2	110,155	87.3	108,928	86.5	437,768	86.9
		Long stay accommodation	5,417	4.7	5,402	4.0	5,582	4.4	7,786	6.2	24,187	4.8
	Total	Transfer to other Hospital	5,656	4.9	7,213	5.3	6,099	4.8	5,900	4.7	24,868	4.9
	2	Died	2,579	2.2	3,490	2.6	2,758	2.2	2,375	1.9	11,202	2.2
		Other	1,477	1.3	1,394	1.0	1,611	1.3	1,002	0.8	5,484	1.1
		Total In-Patients	115,027	100	136,286	100	126,205	100	125,991	100	503,509	100
		Home	310,878	94.6	400,030	95.6	307,037	94.7	332,618	94.9	1,350,563	95.0
		Long stay accommodation	5,899	1.8	5,683	1.4	6,128	1.9	8,066	2.3	25,776	1.8
3	Otal	Transfer to other Hospital	7,785	2.4	7,544	1.8	6,753	2.1	6,388	1.8	28,470	2.0
ŀ	-	Died	2,579	0.8	3,490	0.8	2,758	0.9	2,375	0.7	11,202	0.8
		Other	1,496	0.5	1,480	0.4	1,640	0.5	1,041	0.3	5,657	0.4
		Total Discharges (excl. Maternity)	328,637	100	418,227	100	324,316	100	350,488	100	1,421,668	100

Notes:

Percentage columns are subject to rounding.

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

a 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.

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.

# 2.3.7 Admission Source by Discharge Destination

Table 2.14 disaggregates in-patient discharges (excl. *Maternity*) by discharge destination and admission source.

- Of in-patients who were admitted from home, 90.0 per cent were discharged home.
- In-patients admitted from long stay accommodation were primarily discharged back to a long stay accommodation (83.8 per cent).
- Almost a quarter of in-patients (24.9 per cent) who were admitted from another hospital were transferred to another hospital, while almost two-thirds were discharged home (63.5 per cent).

TABLE 2.14 In-Patient Discharges (excl. Maternity): Discharge Destination by Admission Source (N, %)

	Discharges  Discharge Destination												
	Home	•	Long S	Stay	Transfo other Ho	er to	Die	d	Othe	r	(excl	Discharges (excl. Maternity)	
Admission Source	N	%	N	%	N	%	N	%	N	%	N	%	
Home	411,748	90.0	14,881	3.3	17,451	3.8	8,910	1.9	4,643	1.0	457,633	100	
Long Stay Accommodation	158	1.7	7,706	83.8	327	3.6	1,002	10.9	7	0.1	9,200	100	
Transfer from other Hospital	16,093	63.5	1,589	6.3	6,313	24.9	1,180	4.7	158	0.6	25,333	100	
Other	9,769	86.1	11	0.1	777	6.9	110	1.0	676	6.0	11,343	100	
Total In-Patient Discharges (excl. Maternity)	437,768	86.9	24,187	4.8	24,868	4.9	11,202	2.2	5,484	1.1	503,509	100	

Notes:

Percentage columns are subject to rounding.

See Appendix V for information on how the HIPE variables 'Discharge Destination' and 'Admission Source' were grouped for this report.

# **2.4 WHEN**

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

#### 2.4.1 **Day of Admission**

Table 2.15 disaggregates total discharges (excl. Maternity) by patient type, admission type, and day of admission (see also Figure 2.16).

# Discharges

- The proportion of in-patient discharges (excl. Maternity) admitted on an elective basis decreased throughout the week, with over 62 per cent admitted between Monday and Wednesday, falling to 7.0 per cent at the weekend.
- The proportion of in-patient discharges (excl. Maternity) admitted on an emergency basis 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 20.4 per cent on both Tuesday and Wednesday to only 2.8 per cent on Saturday and 1.0 per cent on Sunday.

# Length of Stay

- Mean length of stay for elective in-patients ranged from 6.2 days for those admitted on a Tuesday to 9.0 days for those admitted on a Saturday.
- Mean length of stay for emergency in-patients ranged from 5.8 days for those admitted on a Monday to 6.6 days for those admitted on a Friday or a Saturday.

**TABLE 2.15** Total Discharges (excl. *Maternity*): Patient Type and Admission Type by Day of Admission (N, % and In-Patient Length of Stay)

					Dischar	ges				
	Day Bati	omto			In-Patie	nts			Total Disch	arges
	Day Pati	Day Patients		ve	<b>Emergency</b> <sup>a</sup>		Total		(excl. Mate	rnity)
	N	%	N	%	N	%	N	%	N	%
Monday	166,133	18.1	22,681	22.0	62,416	15.6	85,097	16.9	251,230	17.7
Tuesday	187,127	20.4	21,250	20.6	66,643	16.6	87,893	17.5	275,020	19.3
Wednesday	187,472	20.4	20,828	20.2	64,676	16.2	85,504	17.0	272,976	19.2
Thursday	179,840	19.6	18,849	18.3	62,804	15.7	81,653	16.2	261,493	18.4
Friday	162,658	17.7	12,395	12.0	63,478	15.9	75,873	15.1	238,531	16.8
Saturday	25,614	2.8	1,858	1.8	42,401	10.6	44,259	8.8	69,873	4.9
Sunday	9,315	1.0	5,376	5.2	37,854	9.5	43,230	8.6	52,545	3.7
Total Discharges	918,159	100	103,237	100	400,272	100	503,509	100	1,421,668	100
(excl. Maternity)	310,133		100,207		.00,272	_00	303,303		_,,	

		In-l	Patient Lo	ength of St	ay		
	Ele	ctive	Emer	gency	Total		
	Mean	Median	Mean	Median	Mean	Median	
Monday	6.3	3	5.8	2	5.9	2	
Tuesday	6.2	3	6.0	2	6.1	2	
Wednesday	6.6	2	6.2	2	6.3	2	
Thursday	6.5	2	6.2	2	6.3	2	
Friday	7.8	3	6.6	3	6.8	3	
Saturday	9.0	5	6.6	3	6.7	3	
Sunday	7.2	4	6.1	2	6.2	3	
In-Patient Discharges (excl. <i>Maternity</i> )	6.6	3	6.2	2	6.3	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.

#### 2.4.2 **Day of Discharge**

Table 2.16 disaggregates total discharges (excl. *Maternity*) by patient type, admission type and day of discharge (see also Figure 2.17).

# Discharges

- The proportion of elective in-patients discharged increased throughout the week, from 10.3 per cent on Monday to 23.4 per cent on Friday, falling to 10.3 per cent on Saturday and 5.0 per cent on Sunday.
- The largest proportion of emergency in-patients was discharged on Friday (20.2 per cent), with the smallest proportion discharged on Sunday (6.3 per cent).

# Length of Stay

- Elective in-patients discharged on a Monday had the longest mean length of stay (9.5 days).
- Emergency in-patient mean length of stay fell throughout the week from 6.8 days for those discharged on a Monday to 4.1 days for those discharged on a Sunday.

TABLE 2.16 Total Discharges (excl. Maternity): Patient Type and Admission Type by Day of Discharge (N, % and In-Patient Length of Stay)

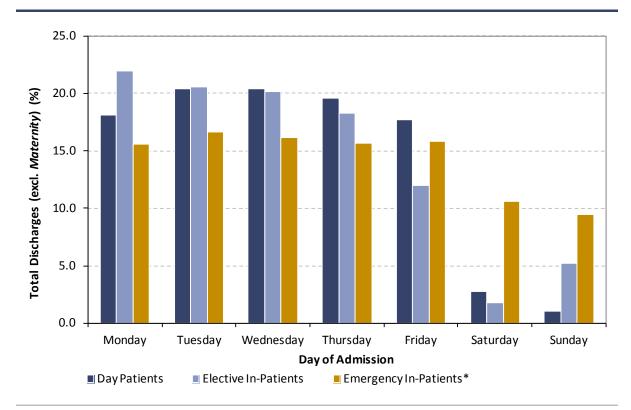
					Discha	arges				
	Day Bat	ionto			In-Patie	nts			Total Disch	arges
	Day Pat	ients	Elective		Emergency		Total		(excl. Maternity	
	N	%	N	%	N	%	N	%	N	%
Monday	166,133	18.1	10,662	10.3	61,744	15.4	72,406	14.4	238,539	16.8
Tuesday	187,127	20.4	16,531	16.0	67,694	16.9	84,225	16.7	271,352	19.1
Wednesday	187,472	20.4	17,853	17.3	67,460	16.9	85,313	16.9	272,785	19.2
Thursday	179,840	19.6	18,202	17.6	65,697	16.4	83,899	16.7	263,739	18.6
Friday	162,658	17.7	24,116	23.4	80,762	20.2	104,878	20.8	267,536	18.8
Saturday	25,614	2.8	10,672	10.3	31,537	7.9	42,209	8.4	67,823	4.8
Sunday	9,315	1.0	5,201	5.0	25,378	6.3	30,579	6.1	39,894	2.8
Total Discharges (excl. Maternity)	918,159	100	103,237	100	400,272	100	503,509	100	1,421,668	100

		In	-Patient Le	ength of Sta	y		
	Elec	tive	Emerg	gency <sup>a</sup>	Total		
	Mean	Median	Mean	Median	Mean	Median	
Monday	9.5	5	6.8	3	7.2	3	
Tuesday	7.0	2	6.6	3	6.7	3	
Wednesday	6.8	2	6.5	2	6.6	2	
Thursday	5.9	2	6.5	2	6.3	2	
Friday	6.7	3	6.2	3	6.3	3	
Saturday	4.3	2	4.5	2	4.5	2	
Sunday	6.0	4	4.1	2	4.5	2	
In-Patient Discharges (excl. <i>Maternity</i> )	6.6	3	6.2	2	6.3	2	

Notes: Percentage columns are subject to rounding.

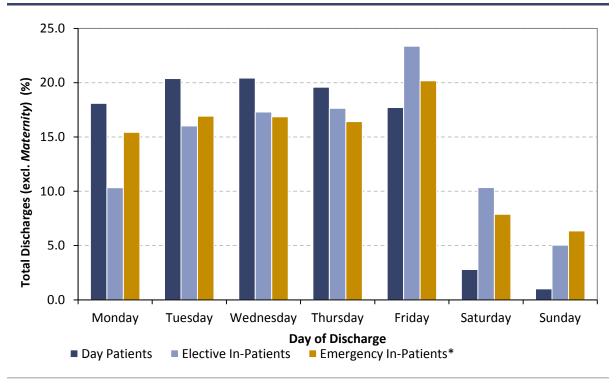
HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about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

FIGURE 2.16 Total Discharges (excl. Maternity): Patient Type and Admission Type by Day of Admission (%)



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.

FIGURE 2.17 Total Discharges (excl. Maternity): Patient Type and Admission Type by Day of Discharge (%)



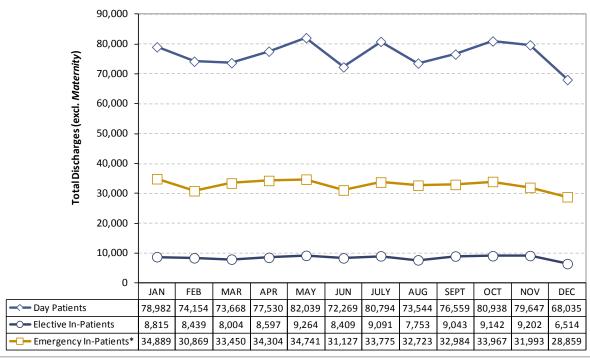
Note: \* HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions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

#### 2.4.3 **Month of Admission**

Figure 2.18 shows total discharges (excl. Maternity) by month of admission disaggregated by patient type and admission type. The data presented here are based on discharges admitted and discharged in 2013.

- The largest number of day patients was treated in May with 82,039 discharges, while December recorded the smallest number of day patients (68,035 discharges).
- Admissions were lowest in December for both elective and emergency inpatients. Monthly trends over the rest of the year showed that:
  - hospital admissions peaked in May for elective in-patients (9,264 discharges), while August recorded the smallest number of elective inpatient admissions with only 7,753 in-patient discharges admitted in this month.
  - hospital admissions peaked in January for emergency in-patients (34,889 discharges), while the smallest number of emergency inpatients was admitted in February with 30,869 discharges.

**FIGURE 2.18** Total Discharges (excl. Maternity): Month of Admission by Patient Type and Admission Type (N)



This does not include 7,555 discharges that were admitted prior to 2013 but were discharged in 2013.

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.

Morbidity Analysis SEC

2013

SECTION



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## **Total Discharges** 1,554,290

## Discharges excluding *Maternity* 1,421,668

#### 3.1 INTRODUCTION

Section Three focuses on the diagnoses and procedures recorded for total discharges (excl. Maternity) reported to HIPE by acute public hospitals. This section excludes Maternity discharges which are reported separately in Section Four.<sup>2</sup>

- 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 (excl. Maternity).
- Section 3.3 provides a summary of related hospital activity (excl. Maternity). Top 20 diagnoses and procedure blocks, along with Top 10 Australian Refined Diagnosis Related Groups (AR-DRGs), are provided for day patient and in-patient discharges (total, elective and emergency). Demographic data, including sex and age group, and administrative analyses including admission source, mode of emergency admission (for emergency in-patients only), and discharge destination are also presented.
- Section 3.4 provides details of the diagnoses and procedures reported for total discharges (excl. Maternity), by sex and age group. The mean length of stay for acute in-patient discharges (with a length of stay of 30 days or less and excluding day patients) is presented for principal diagnoses and principal procedures.

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

A small number of obstetric diagnoses and/or procedures are reported in this section as the admission of the patient was not related to their obstetrical experience and therefore they were not allocated to Admission Type Maternity; these are not included in the discussion of this section. See Section Four for details of Maternity activity reported.

#### 3.2 **CODING OF DIAGNOSES AND PROCEDURES**

Coding of HIPE hospital activity is performed by the HIPE Clinical Coder who translates medical terminology into code; the Coder performs an essential function in providing high quality, accurate, standardised medical information. The source document for coding for the HIPE system is the medical record or chart. Documentation within the medical record includes the discharge summary or letter, nursing notes, consultation reports, progress notes, operative reports, pre- and postoperative reports, and pathology reports. The Coder uses the whole chart to extract the diagnoses and procedures that are critical to representing the essential features of the patient and their hospital stay in accordance with international and national coding standards. Appendix III contains the HIPE Data Entry Form for 2013, 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.3

Discharges are coded using 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<sup>th</sup> Edition and Irish Coding Standards (ICS). 4, 5, 6, 7, 8 Details of the diagnosis and 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. 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 system. ICS are developed to complement the ACS and are revised regularly to reflect changing clinical practice.

The Healthcare Pricing Office (HPO) is responsible for training coders. For further information see www.hpo.ie

For further information on the selection of ICD-10-AM as the clinical coding scheme for Ireland, see Murphy, D., Wiley, MM., Clifton, A., McDonagh, D., 2004, Updating Clinical Coding in Ireland: Options and Opportunities. Dublin: The Economic and Social Research Institute.

National Centre for Classification in Health (NCCH), 2008: The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (6<sup>th</sup> Ed): NCCH, Faculty of Health Sciences, The University of Sydney.

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

Ireland changed from ICD-10-AM 4<sup>th</sup> Edition to ICD-10-AM 6<sup>th</sup> Edition in 2009. For further information on changes in coding, see previous HIPE national reports, available at www.hpo.ie

Irish Coding Standards provide guidelines for the collection of HIPE data for all discharges and are to be used in conjunction with 6<sup>th</sup> Edition ICD-10-AM/ACHI/ACS and the relevant HIPE Instruction Manual. For further information, see www.hpo.ie

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**

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.

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.

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 Neoplasms and Chapter 3 Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism, and the letter H, which is used in both Chapter 7 Diseases of the eye and adnexa and Chapter 8 Diseases of the ear and mastoid process. Four chapters (Chapters 1, 2, 19 and 20) use more than one letter in the first position of their

WHO intends the codes U00-U99 to be used for provisional assignment of new diseases of uncertain aetiology and for specific research purposes. U50-U71 are used in ICD-10-AM to classify sporting activities previously classified to Y93.0 Activity, While engaged in sports.

Chapter and Title		Code Prefix	Chapter and Title		Code Prefix
1	Certain infectious and parasitic diseases	А, В	12	Diseases of the skin and subcutaneous tissue	L
2	Neoplasms	C, D	13	Diseases of the musculoskeletal system and connective tissue	М
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	0
5	Mental and behavioural disorders	F	16	Certain conditions originating in the perinatal period	Р
6	Diseases of the nervous system	G	17	Congenital malformations, deformations and chromosomal abnormalities	Q
7	Diseases of the eye and adnexa	Н	18	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	R
8	Diseases of the ear and mastoid process	Н	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), 2008: The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (6<sup>th</sup> Ed): Australian Coding Standards. Sydney: NCCH, Faculty of Health Sciences, The University of Sydney. p. 2.

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 developed by the NCCH and is generally based on the Commonwealth Medicare Benefits Schedule (MBS).

The main features of the classification are:

- 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.<sup>9</sup>
- 2) The procedure classification is based on the Commonwealth Medicare Benefits Schedule (MBS) and consists of a seven character code in the format xxxxx-xx. Generally, the first five characters represent the MBS item number. A two character extension number has been attached to each MBS item number to represent individual procedural concepts (e.g., 36564-00). The two character extensions are also used in anaesthetic procedure codes to indicate ASA, while in pharmacotherapy they are used to indicate drug type.
  - Other ACHI interventions which are not represented in MBS are allocated a code number from the 90000 series. Note: 97000 codes 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:
  - 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.

Chapt	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), 2008: The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (6<sup>th</sup> Ed): Australian Coding Standards. Sydney: NCCH, Faculty of Health Sciences, The University of Sydney, p. 3.

National Centre for Classification in Health (NCCH), 2008: The Australian Classification of Health Interventions (ACHI) Tabular List of Interventions. Sydney: NCCH, Faculty of Health Sciences, The University of Sydney. p. iii.

#### 3.2.1 **Definition of a Diagnosis**

In 2013, 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 attendance at the healthcare establishment, as represented by a code'. $^{10}$ 

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. 11

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, inpatient, and total discharges (excl. Maternity), by sex and age group.

- The mean number of diagnoses recorded for total discharges (excl. *Maternity*) was 2.6.
- 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 was slightly higher for male discharges (2.7) compared with female discharges (2.5).

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

	Day Patients	In-Patients	Total Discharges (excl. <i>Maternity</i> )
Total	2.0	3.7	2.6
Sex			
Male	2.0	3.8	2.7
Female	2.0	3.5	2.5
Age Group			
< 15 Years	1.8	2.6	2.3
15–44 Years	1.7	2.8	2.1
45–64 Years	2.0	3.6	2.5
65 Years and Over	2.2	4.9	3.1

National Centre for Classification in Health (NCCH), 2008: The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (6<sup>th</sup> Ed): Australian Coding Standards. Sydney: NCCH, Faculty of Health Sciences, The University of Sydney. p. 10.

National Centre for Classification in Health (NCCH), op. cit., p. 13.

#### **Definition of a Procedure** 3.2.2

In 2013, 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). 12 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 additional diagnoses for the episode of care. 13

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. <sup>14</sup> 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. 15

#### 3.2.2.1 Discharges with a Procedure

Table 3.4 provides details of the number and percentage of discharges (excl. Maternity) that had a principal procedure recorded by patient type and admission type. Section 4 provides details of procedures reported for Maternity discharges.

- Of the 1,421,668 total discharges (excl. Maternity), principal procedures were recorded for 1,181,817 discharges (83.1 per cent).
- Over 94 per cent of day patient discharges had a principal procedure recorded.
- Over 63 per cent of in-patient discharges had a principal procedure recorded, with 89.9 per cent of elective in-patients and 56.2 per cent of emergency inpatients undergoing a principal procedure.

National Centre for Classification in Health (NCCH) 2008, The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (6<sup>th</sup> Ed): Australian Coding Standards. Sydney: NCCH, Faculty of Health Sciences, The University of Sydney.

National Centre for Classification in Health (NCCH), 2008, The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (6<sup>th</sup> Ed): Australian Coding Standards. Sydney: NCCH, Faculty of Health Sciences, The University of Sydney. p. 32.

National Centre for Classification in Health (NCCH), 2008, Australian Classification of Health Interventions (ACHI) Tabular List of Interventions. Sydney: NCCH, Faculty of Health Sciences, The University of Sydney. p. viii.

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 VII).

<b>TABLE 3.4</b>	Total Discharges (excl. <i>Maternity</i> ): Number and Percentage of Discharges with a Principal Procedure
	by Patient Type and Admission Type

	Total Discharges (excl. <i>Maternity</i> )	Total Discharges (excl. <i>Maternity</i> ) with a Principal Procedure	
	N	N	%
Total Discharges (excl. Maternity)	1,421,668	1,181,817	83.1
Day Patients	918,159	864,178	94.1
In-Patients	503,509	317,639	63.1
Elective In-Patients	103,237	92,822	89.9
Emergency In-Patients	400,272	224,817	56.2

## 3.2.2.2 Mean Number of Procedures Reported

Table 3.5 outlines the mean number of procedures reported for day patients, inpatients, and total discharges (excl. Maternity), by sex and age group. The calculation of mean procedures is based on discharges with at least one procedure reported to HIPE.<sup>16</sup>

- For those discharges who underwent at least one procedure, in-patient discharges had a mean number of 2.9 procedures recorded, compared to a mean of 1.4 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 (excl. Maternity): Mean Number of All-Listed Procedures by Patient Type, Sex and Age Group

	Day Patients	In-Patients	Total Discharges (excl. <i>Maternity</i> )
Total (excl. Maternity)	1.4	2.9	1.8
Sex			
Male	1.4	2.9	1.8
Female	1.4	2.8	1.8
Age Group			
< 15 Years	1.9	2.5	2.2
15–44 Years	1.5	2.5	1.7
45-64 Years	1.4	3.0	1.7
65 Years and Over	1.3	3.1	1.8

Includes all anaesthesia except local. See ACS 0031 Anaesthesia in National Centre for Classification in Health (NCCH), 2008, The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (6<sup>th</sup> Ed): Australian Coding Standards. Sydney: NCCH, Faculty of Health Sciences, The University of Sydney. p.

## 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. 17 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 (excl. Maternity)

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). 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 64.6 per cent of total discharges (excl. Maternity).
- Day patients aged 65–74 years accounted for 20.9 per cent of day patient discharges.

#### Day Patients - Top 20 Principal Diagnoses

Day patients with a principal diagnosis of care involving dialysis and those with a principal diagnosis of other medical care (includes chemotherapy and radiotherapy encounters) each accounted for 18.0 per cent of day patient discharges. 18

#### Day Patients - Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 94.1 per cent of day patient discharges (see Table 3.4).
- Procedures from the block haemodialysis were reported as a principal procedure for 19.1 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 over 35 per cent of day patient discharges reported to HIPE when analysed by diagnosis related group. 19
- Haemodialysis accounted for 17.9 per cent, and chemotherapy and radiotherapy accounted for 10.4 and 7.2 per cent respectively of day patient discharges.

See Section Four for details of *Maternity* activity reported.

Activity from the St. Luke's Radiation Oncology Network centres in Beaumont and St. James's Hospitals, estimated at 47,000 day cases, are not included in this report as these data were not submitted to HIPE.

See Section Five for details of the case mix classification.

**TABLE 3.6** Day Patient Activity (excl. *Maternity*) (N, %)

Top 20	Principal Diagnoses <sup>a</sup>	N	%
Z49	Care involving dialysis	164,989	18.0
Z51	Other medical care <sup>c,d</sup>	164,831	18.0
E83	Disorders of mineral metabolism	23,358	2.5
L40	Psoriasis	17,026	1.9
K29	Gastritis and duodenitis	13,652	1.5
H35	Other retinal disorders	12,349	1.3
M54	Dorsalgia	11,169	1.2
M25	Other joint disorders, not elsewhere classified	9,421	1.0
Z09	Follow-up examination after treatment for conditions other than malignant neoplasms	9,160	1.0
C44	Other malignant neoplasms of skin	8,947	1.0
184	Haemorrhoids	8,716	0.9
K57	Diverticular disease of intestine	8,330	0.9
K44	Diaphragmatic hernia	7,801	0.8
Z08	Follow-up examination after treatment for malignant neoplasms	7,708	0.8
Z45	Adjustment and management of implanted device	7,308	0.8
E11	Type 2 diabetes mellitus	7,041	0.8
R10	Abdominal and pelvic pain	7,024	0.8
Z13	Special screening examination for other diseases and disorders	6,067	0.7
H26	Other cataract	6,015	0.7
K21	Gastro-oesophageal reflux disease	5,988	0.7

Day Patients
918,159

Sex	N	%
Male	460,010	50.1
Female	458,149	49.9

N	%
4,361	0.5
42,958	4.7
34,380	3.7
71,769	7.8
105,500	11.5
139,446	15.2
174,966	19.1
192,071	20.9
123,837	13.5
28,871	3.1
	4,361 42,958 34,380 71,769 105,500 139,446 174,966 192,071 123,837

Top 20 Principal Procedure Blocks <sup>b</sup>		N	%
1060	Haemodialysis	164,869	19.1
1920	Administration of pharmacotherapy	126,966	14.7
1788	Megavoltage radiation treatment <sup>d</sup>	62,615	7.2
1008	Panendoscopy with excision	44,034	5.1
1620	Excision of lesion of skin and subcutaneous tissue	35,345	4.1
0905	Fibreoptic colonoscopy	27,525	3.2
0911	Fibreoptic colonoscopy with excision	26,137	3.0
0725	Other incision procedures on veins	23,492	2.7
1552	Administration of agent into other musculoskeletal sites	18,917	2.2
1610	Ultraviolet B [UVB] light therapy of skin	15,802	1.8
0209	Application, insertion or removal procedures on retina, choroid or posterior chamber	15,166	1.8
1893	Administration of blood and blood products	14,524	1.7
1089	Examination procedures on bladder	13,622	1.6
0668	Coronary angiography	9,802	1.1
1005	Panendoscopy	9,293	1.1
0197	Extracapsular crystalline lens extraction by phacoemulsification	9,038	1.0
0544	Bronchoscopy with biopsy or removal of foreign body	5,661	0.7
1601	Dressing of other wound	5,185	0.6
1259	Examination procedures on uterus	4,828	0.6
1279	Examination procedures on vagina	4,773	0.6

Admission Source	N	%
Home	912,753	99.4
Long stay accommodation	1,327	0.1
Transfer from other hospital	3,939	0.4
Other	140	0.0
Discharge Destination	N	%

Discharge Destination	N	%
Home	912,795	99.4
Long stay accommodation	1,589	0.2
Transfer to other hospital	3,602	0.4
Other	173	0.0

Top 10 A	R-DRGs	N	%
L61Z	Haemodialysis	164,619	17.9
R63Z	Chemotherapy	95,774	10.4
R64Z	Radiotherapy <sup>d</sup>	65,999	7.2
G48C	Colonoscopy, sameday	41,661	4.5
G47C	Other Gastroscopy, sameday	39,350	4.3
J11Z	Other Skin, subcutaneous tissue and breast procedures	38,137	4.2
Q61B	Red blood cell disorders w/o catastrophic or severe cc	32,127	3.5
Z64B	Other factors influencing health status, sameday	26,740	2.9
J68C	Major skin disorders, sameday	19,973	2.2
C03Z	Retinal procedures	17,273	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 Activity from the St. Luke's Radiation Oncology Network centres in Beaumont and St. James's Hospitals, estimated at over 47,000 day cases, are not included in this report as these data were not submitted to HIPE.

#### 3.3.2 In-Patient Activity (excl. *Maternity*)

An in-patient is admitted to hospital for treatment or investigation on an elective or emergency basis (Department of Health and Children, 2001). An elective in-patient would stay for at least one night (unlike emergency admissions, where the date of admission and discharge may be the same). Table 3.7 presents a summary of inpatient activity reported to HIPE.

#### In-Patients - Profile

- In-patient discharges accounted for 35.4 per cent of total discharges (excl. Maternity).
- Over 96 per cent (487,812) of in-patients were acute in-patient discharges (i.e., those with a length of stay of 30 days or less); they used 68.6 per cent of inpatient bed days (excl. *Maternity*). Extended stay in-patients accounted for 3.1 per cent of in-patient discharges and 31.4 per cent of in-patient bed days.

## In-Patients – Top 20 Principal Diagnoses

- In-patient discharges with a principal diagnosis of *pain in throat and chest* accounted for 4.0 per cent of in-patient discharges.
- In-patient discharges with a principal diagnosis of other chronic obstructive pulmonary disease and those with a principal diagnosis of unspecified acute lower respiratory infection each accounted for 2.7 and 2.6 per cent of in-patients respectively.

### In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 63.1 per cent of total in-patient discharges (Table 3.4).
- Procedures from the block generalised allied health interventions were reported
  for 15.3 per cent of in-patient discharges with at least one procedure reported.
  This block includes interventions such as physiotherapy, dietetics, occupational
  therapy, pharmacy, social work, and speech pathology. Together, these six
  interventions accounted for close to 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 8.1 per cent of in-patient discharges when analysed by diagnosis related group. 20
- Chest pain accounted for 3.8 per cent of in-patient discharges. Abdominal pain or mesenteric adenitis and chronic obstructive airways disease w/o catastrophic cc each accounted for 2.2 and 2.1 per cent of in-patient discharges respectively.

 TABLE 3.7
 In-Patient Activity (excl. Maternity) (N, %, and Length of Stay)

Top 20	Principal Diagnoses <sup>a</sup>	N	%	Total Mean LOS <sup>c</sup>	Acute Mean LOS <sup>d</sup>
R07	Pain in throat and chest	20,318	4.0	1.8	1.7
J44	Other chronic obstructive pulmonary disease	13,616	2.7	8.1	6.4
J22	Unspecified acute lower respiratory infection	12,971	2.6	6.4	5.0
R10	Abdominal and pelvic pain	11,802	2.3	2.2	2.2
N39	Other disorders of urinary system	10,902	2.2	8.0	5.5
J18	Pneumonia, organism unspecified	10,166	2.0	9.8	7.2
R55	Syncope and collapse	9,198	1.8	4.7	3.6
A09	Other gastroenteritis and colitis of infectious and unspecified origin	6,513	1.3	3.5	3.0
148	Atrial fibrillation and flutter	6,404	1.3	4.2	3.7
121	Acute myocardial infarction	6,155	1.2	7.2	5.7
R51	Headache	6,143	1.2	2.0	1.9
150	Heart failure	5,968	1.2	10.8	8.0
K80	Cholelithiasis	5,967	1.2	4.6	4.1
K35	Acute appendicitis	5,924	1.2	3.3	3.3
L03	Cellulitis	5,607	1.1	6.9	5.3
Z50	Care involving use of rehabilitation procedures	5,216	1.0	27.4	13.6
S52	Fracture of forearm	4,927	1.0	2.5	2.0
125	Chronic ischaemic heart disease	4,798	1.0	5.3	4.2
J35	Chronic diseases of tonsils and adenoids	4,668	0.9	1.3	1.3
R06	Abnormalities of breathing	4,367	0.9	2.2	2.1

In-Patients				
503,509				
Discharges	N	%		
Total	503,509	100.0		
Acute	487,812	96.9		
Extended	15,697	3.1		

Bed Days	N	%
Total	3,165,049	100.0
Acute	2,170,118	68.6
Extended	994,931	31.4
Length of Stay	/	Mean
Total		6.3
Acute		4.4
Extended		63.4

Top 20 P	rincipal Procedure Blocks <sup>b</sup>	N	%	Total Mean LOS <sup>c</sup>	Acute Mean LOS <sup>d</sup>
1916	Generalised allied health interventions	48,555	15.3	11.9	8.0
1952	Computerised tomography of brain	33,267	10.5	9.1	5.2
1920	Administration of pharmacotherapy	10,752	3.4	7.2	5.4
1963	Computerised tomography of abdomen and pelvis	8,543	2.7	6.1	5.1
2015	Magnetic resonance imaging	8,196	2.6	9.3	6.8
1966	Other computerised tomography	7,165	2.3	7.4	5.9
1008	Panendoscopy with excision	7,073	2.2	9.1	6.5
1893	Administration of blood and blood products	6,474	2.0	8.2	6.2
0926	Appendicectomy	6,408	2.0	3.2	3.1
0668	Coronary angiography	6,136	1.9	5.2	4.6
1489	Arthroplasty of hip	5,220	1.6	10.6	7.6
0412	Tonsillectomy or adenoidectomy	4,554	1.4	1.3	1.3
0570	Noninvasive ventilatory support	3,606	1.1	14.2	9.2
0965	Cholecystectomy	3,507	1.1	3.5	3.3
1961	Computerised tomography of chest, abdomen and pelvis	3,273	1.0	10.0	7.8
0569	Ventilatory support	3,247	1.0	23.9	9.0
1960	Computerised tomography of chest	3,089	1.0	9.0	7.3
0671	Transluminal coronary angioplasty with stenting	3,062	1.0	3.9	3.3
0030	Lumbar puncture	2,924	0.9	7.3	5.2
1962	Computerised tomography of abdomen	2,794	0.9	6.9	5.2

Admission Source	N	%
Home	457,633	90.9
Long stay accommodation	9,200	1.8
Transfer from other hospital	25,333	5.0
Other	11,343	2.3

Discharge Destination	N	%
Home	437,768	86.9
Long stay accommodation	24,187	4.8
Transfer to other hospital	24,868	4.9
Died	11,202	2.2
Other	5,484	1.1

Sex	N	%
Male	253,642	50.4
Female	249,867	49.6

Age Group	N	%
< 1 Year	27,702	5.5
1-14 Years	56,393	11.2
15-24 Years	32,574	6.5
25-34 Years	37,804	7.5
35-44 Years	45,076	9.0
45-54 Years	53,610	10.6
55-64 Years	64,971	12.9
65-74 Years	76,905	15.3
75-84 Years	73,307	14.6
85 Years	35,167	7.0
and Over		

Top 10 A	AR-DRGs	N	%	Total	Acute
				Mean	Mean
				LOS <sup>c</sup>	LOS <sup>d</sup>
F74Z	Chest pain	19,131	3.8	1.7	1.7
G66Z	Abdominal pain or mesenteric adenitis	10,879	2.2	2.0	2.0
E65B	Chronic obstructive airways disease	10,646	2.1	6.1	5.4
	w/o catastrophic cc				
G67B	Oesophagitis and gastroenteritis w/o	10,279	2.0	2.3	2.2
	cat/sev cc				
B77Z	Headache	9,352	1.9	2.0	1.9
G70B	Other digestive system diagnoses	9,271	1.8	3.0	2.9
	w/o catastrophic or severe cc				
D63Z	Otitis media and URI	8,513	1.7	2.0	2.0
F73B	Syncope and collapse w/o	7,919	1.6	3.0	2.7
	catastrophic or severe cc				
L36B	Kidney and urinary tract infections	7,702	1.5	5.1	4.4
	w/o catastrophic or severe cc				
E75C	Other respiratory system diagnosis	7,134	1.4	2.9	2.8
	w/o cc				

Notes: 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 in-patients with principal d procedure reported.

#### 3.3.2.1 Elective In-Patient Activity

An elective in-patient is an admission that has been arranged in advance (Department of Health and Children, 2001). Table 3.8 presents a summary of elective in-patient activity reported to HIPE.

#### Elective In-Patients – Profile

- Elective in-patient discharges accounted for 7.3 per cent of total discharges (excl. *Maternity*) and 20.5 per cent of in-patients.
- Elective in-patient discharges accounted for 684,382 bed days, or 21.6 per cent of total in-patient bed days (see Table 3.7).
- Eighty-eight per cent of elective in-patient discharges were admitted from home and a further 11.6 per cent were admitted by transfer from another hospital.
- Over 91 per cent of elective in-patient discharges were discharged home.

#### Elective In-Patients – Top 20 Principal Diagnoses

- Elective in-patients with a principal diagnosis of *care involving use of rehabilitation procedures* accounted for 5.0 per cent of elective in-patient discharges and reported the longest acute mean length of stay of the top 20 principal diagnoses for elective in-patient discharges, at 13.7 days.
- *Chronic diseases of tonsils and adenoids* accounted for 4.4 per cent of elective in-patient discharges.

#### Elective In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 89.9 per cent of elective in-patient discharges (see Table 3.4).
- The procedure block *generalised allied health interventions* was reported for 10.4 per cent of elective in-patients who had a principal procedure reported.
- Almost five per cent of elective in-patient discharges with a principal procedure reported had a principal procedure from the block tonsillectomy or adenoidectomy reported, with an acute mean length of stay of 1.3 days.

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

- The top three AR-DRGs accounted for 11.9 per cent of elective in-patient discharges reported to HIPE when analysed by diagnosis related group.<sup>21</sup>
- Tonsillectomy and/or adenoidectomy accounted for 4.4 per cent, rehabilitation
  w/o catastrophic cc accounted for 4.1 per cent, and hip replacement w/o
  catastrophic cc accounted for 3.3 per cent of elective in-patient discharges.

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

Top 20	Principal Diagnoses <sup>a</sup>	N	%	Total Mean LOS <sup>c</sup>	Acute Mean LOS <sup>d</sup>
Z50	Care involving use of rehabilitation procedures	5,156	5.0	27.6	13.7
J35	Chronic diseases of tonsils and adenoids	4,522	4.4	1.2	1.2
M16	Coxarthrosis [arthrosis of hip]	3,535	3.4	5.5	5.4
G47	Sleep disorders	2,509	2.4	1.3	1.2
M17	Gonarthrosis [arthrosis of knee]	2,468	2.4	5.2	5.1
K80	Cholelithiasis	2,311	2.2	2.3	2.1
125	Chronic ischaemic heart disease	2,092	2.0	3.7	3.0
Z48	Other surgical follow-up care	2,064	2.0	11.4	7.1
C50	Malignant neoplasm of breast	1,945	1.9	6.2	4.3
N81	Female genital prolapse	1,592	1.5	4.0	4.0
K40	Inguinal hernia	1,425	1.4	1.7	1.7
C34	Malignant neoplasm of bronchus and lung	1,228	1.2	12.4	8.0
N39	Other disorders of urinary system	1,003	1.0	3.9	3.1
C18	Malignant neoplasm of colon	993	1.0	10.6	8.3
C67	Malignant neoplasm of bladder	922	0.9	5.8	4.7
J44	Other chronic obstructive pulmonary disease	847	0.8	10.8	7.8
Z51	Other medical care	822	0.8	14.7	11.3
C61	Malignant neoplasm of prostate	815	0.8	11.0	5.5
R06	Abnormalities of breathing	762	0.7	1.9	1.8
D25	Leiomyoma of uterus	746	0.7	4.2	4.1

Admission Source	N	%
Home	90,892	88.0
Long stay accommodation	372	0.4
Transfer from other hospital	11,932	11.6
Other	41	0.0

Discharge Destination	N	%
Home	94,678	91.7
Long stay accommodation	3,234	3.1
Transfer to other hospital	3,677	3.6
Died	1,199	1.2
Other	449	0.4

Elective In-Patients
103,237

Discharges	N	%
Total	103,237	100.0
Acute	99,315	96.2
Extended	3,922	3.8

Bed Days	N	%	
Total	684,382	100.0	
Acute	450,610	65.8	
Extended	233,772	34.2	

Length of Stay	Mean
Total	6.6
Acute	4.5
Extended	59.6

Sex	N	%
Male	50691	49.1
Female	52546	50.9
Female	52546	5

Age Group	N	%
< 1 Year	1,734	1.7
1-14 Years	10,424	10.1
15-24 Years	5,155	5.0
25-34 Years	6,636	6.4
35-44 Years	9,954	9.6
45-54 Years	13,521	13.1
55-64 Years	17,699	17.1
65-74 Years	20,180	19.5
75-84 Years	13,924	13.5
85 Years	4,010	3.9
and Over		

Top 20 P	rincipal Procedure Blocks <sup>b</sup>	N	%	Total Mean LOS <sup>c</sup>	Acute Mean LOS <sup>d</sup>
1916	Generalised allied health interventions	9,639	10.4	20.0	11.1
0412	Tonsillectomy or adenoidectomy	4,517	4.9	1.3	1.3
1489	Arthroplasty of hip	3,579	3.9	5.9	5.6
1920	Administration of pharmacotherapy	3,356	3.6	7.8	5.1
1828	Sleep study	2,698	2.9	1.2	1.2
0965	Cholecystectomy	2,667	2.9	2.3	2.2
1518	Arthroplasty of knee	2,261	2.4	5.6	5.5
1268	Abdominal hysterectomy	1,552	1.7	6.0	5.7
0990	Repair of inguinal hernia	1,401	1.5	1.7	1.6
1893	Administration of blood and blood products	1,364	1.5	5.3	4.1
0668	Coronary angiography	1,312	1.4	2.8	2.6
0671	Transluminal coronary angioplasty with stenting	1,025	1.1	1.6	1.6
1620	Excision of lesion of skin and subcutaneous tissue	951	1.0	3.4	2.7
2015	Magnetic resonance imaging	906	1.0	7.7	5.3
0913	Colectomy	906	1.0	12.8	9.8
1269	Vaginal Hysterectomy	855	0.9	4.4	4.4
1748	Simple mastectomy	840	0.9	4.5	4.5
1744	Excision of lesion of breast	838	0.9	1.9	1.9
1008	Panendoscopy with excision	812	0.9	6.1	4.9
1283	Repair of prolapse of uterus, pelvic floor or enterocele	795	0.9	3.8	3.8

Top 10 A	R-DRGs	N	%	Total Mean	Acute Mean
				LOS <sup>c</sup>	LOS <sup>d</sup>
D11Z	Tonsillectomy and/or adenoidectomy	4,559	4.4	1.3	1.2
Z60B	Rehabilitation w/o catastrophic cc	4,282	4.1	23.2	13.5
103B	Hip replacement w/o catastrophic cc	3,443	3.3	5.4	5.4
Z63B	Other surgical follow up and medical care w/o catastrophic cc	2,404	2.3	11.1	8.2
H08B	Laparoscopic cholecystectomy w/o closed CDE w/o cat or sev cc	2,273	2.2	1.6	1.6
E63Z	Sleep apnoea	2,037	2.0	1.3	1.2
104B	Knee replacement w/o catastrophic or severe cc	1,986	1.9	5.1	5.1
G10B	Hernia procedures w/o cc	1,925	1.9	1.8	1.8
J06Z	Major procedures for breast conditions	1,775	1.7	2.9	2.9
N04B	Hysterectomy for non-malignancy w/o catastrophic or severe cc	1,754	1.7	4.7	4.7

Percentage columns are subject to rounding. Notes:

- ICD-10-AM diagnosis codes are analysed at three-digit level.
- ACHI Procedure codes are analysed at block level. The percentage (%) is based on elective in- patients with d Includes mean length of stay for acute in-patients only. principal procedure reported.
- c Includes mean length of stay for acute in-patients (length of stay of 30 days or less) and extended stay in-patients (length of stay greater than 30 days).

#### 3.3.2.2 Emergency In-Patient Activity

An emergency in-patient admission is unforeseen and requires urgent care (Department of Health and Children, 2001).<sup>22</sup> Table 3.9 presents a summary of emergency in-patient activity reported to HIPE.<sup>23</sup>

#### Emergency In-Patients - Profile

- Emergency in-patient discharges accounted for 28.2 per cent of total discharges (excl. *Maternity*) and 79.5 per cent of in-patients.
- Emergency in-patient discharges accounted for 78.4 per cent of in-patient bed days (see Table 3.7).
- Over 68 per cent of emergency in-patient discharges were admitted from an Emergency Department, with 8.1 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 4.9 per cent of emergency in-patients.
- Emergency in-patient discharges with a principal diagnosis of other chronic obstructive pulmonary disease and those with a principal diagnosis of unspecified acute lower respiratory infection each accounted for over 3 per cent of emergency in-patients.

#### Emergency In-Patients - Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 56.2 per cent of emergency in-patient discharges (see Table 3.4).
- Procedures from the block *generalised allied health interventions* were reported for 17.3 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 9.9 per cent of emergency in-patient discharges reported to HIPE when analysed by diagnosis related group.<sup>24</sup>
- Chest pain accounted for 4.7 per cent of emergency in-patient discharges.
   Abdominal pain or mesenteric adenitis and oesophagitis and gastroenteritis w/o cat/sev cc each accounted for 2.7 and 2.5 per cent of emergency in-patient discharges respectively.

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.

See Sections 1.5 and 1.7 for notes on emergency in-patients.

<sup>&</sup>lt;sup>24</sup> See Section Five for details of the case mix classification.

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

R07         Pain in throat and chest         19,812         4.9         1.8           J44         Other chronic obstructive pulmonary disease         12,769         3.2         7.9           J22         Unspecified acute lower respiratory infection         12,664         3.2         6.3           R10         Abdominal and pelvic pain         11,393         2.8         2.2           J18         Pneumonia, organism unspecified         9,957         2.5         9.7           N39         Other disorders of urinary system         9,899         2.5         8.4           R55         Syncope and collapse         9,055         2.3         4.7           A09         Other gastroenteritis and colitis of infectious and unspecified origin         6,364         1.6         3.5           R51         Headache         6,027         1.5         2.0           K35         Acute appendicitis         5,884         1.5         3.3           I48         Atrial fibrillation and flutter         5,772         1.4         4.4           I21         Acute myocardial infarction         5,651         1.4         10.8           I30         Heart failure         5,651         1.4         10.8	1.7 6.3 5.0 2.2 7.1 5.7 3.6 3.0
J22         Unspecified acute lower respiratory infection         12,664         3.2         6.3           R10         Abdominal and pelvic pain         11,393         2.8         2.2           J18         Pneumonia, organism unspecified         9,957         2.5         9.7           N39         Other disorders of urinary system         9,899         2.5         8.4           R55         Syncope and collapse         9,055         2.3         4.7           A09         Other gastroenteritis and colitis of infectious and unspecified origin         6,364         1.6         3.5           R51         Headache         6,027         1.5         2.0           K35         Acute appendicitis         5,884         1.5         3.3           I48         Atrial fibrillation and flutter         5,772         1.4         4.4           I21         Acute myocardial infarction         5,690         1.4         7.4           I50         Heart failure         5,651         1.4         10.8	5.0 2.2 7.1 5.7 3.6
R10         Abdominal and pelvic pain         11,393         2.8         2.2           J18         Pneumonia, organism unspecified         9,957         2.5         9.7           N39         Other disorders of urinary system         9,899         2.5         8.4           R55         Syncope and collapse         9,055         2.3         4.7           A09         Other gastroenteritis and colitis of infectious and unspecified origin         6,364         1.6         3.5           R51         Headache         6,027         1.5         2.0           K35         Acute appendicitis         5,884         1.5         3.3           I48         Atrial fibrillation and flutter         5,772         1.4         4.4           I21         Acute myocardial infarction         5,690         1.4         7.4           I50         Heart failure         5,651         1.4         10.8	2.2 7.1 5.7 3.6
J18         Pneumonia, organism unspecified         9,957         2.5         9.7           N39         Other disorders of urinary system         9,899         2.5         8.4           R55         Syncope and collapse         9,055         2.3         4.7           A09         Other gastroenteritis and colitis of infectious and unspecified origin         6,364         1.6         3.5           R51         Headache         6,027         1.5         2.0           K35         Acute appendicitis         5,884         1.5         3.3           I48         Atrial fibrillation and flutter         5,772         1.4         4.4           I21         Acute myocardial infarction         5,690         1.4         7.4           I50         Heart failure         5,651         1.4         10.8	7.1 5.7 3.6
N39         Other disorders of urinary system         9,899         2.5         8.4           R55         Syncope and collapse         9,055         2.3         4.7           A09         Other gastroenteritis and colitis of infectious and unspecified origin         6,364         1.6         3.5           R51         Headache         6,027         1.5         2.0           K35         Acute appendicitis         5,884         1.5         3.3           I48         Atrial fibrillation and flutter         5,772         1.4         4.4           I21         Acute myocardial infarction         5,690         1.4         7.4           I50         Heart failure         5,651         1.4         10.8	5.7
R55         Syncope and collapse         9,055         2.3         4.7           A09         Other gastroenteritis and colitis of infectious and unspecified origin         6,364         1.6         3.5           R51         Headache         6,027         1.5         2.0           K35         Acute appendicitis         5,884         1.5         3.3           I48         Atrial fibrillation and flutter         5,772         1.4         4.4           I21         Acute myocardial infarction         5,690         1.4         7.4           I50         Heart failure         5,651         1.4         10.8	3.6
A09         Other gastroenteritis and colitis of infectious and unspecified origin         6,364         1.6         3.5           R51         Headache         6,027         1.5         2.0           K35         Acute appendicitis         5,884         1.5         3.3           I48         Atrial fibrillation and flutter         5,772         1.4         4.4           I21         Acute myocardial infarction         5,690         1.4         7.4           I50         Heart failure         5,651         1.4         10.8	
and unspecified origin       R51     Headache     6,027     1.5     2.0       K35     Acute appendicitis     5,884     1.5     3.3       I48     Atrial fibrillation and flutter     5,772     1.4     4.4       I21     Acute myocardial infarction     5,690     1.4     7.4       I50     Heart failure     5,651     1.4     10.8	3.0
K35         Acute appendicitis         5,884         1.5         3.3           I48         Atrial fibrillation and flutter         5,772         1.4         4.4           I21         Acute myocardial infarction         5,690         1.4         7.4           I50         Heart failure         5,651         1.4         10.8	
I48     Atrial fibrillation and flutter     5,772     1.4     4.4       I21     Acute myocardial infarction     5,690     1.4     7.4       I50     Heart failure     5,651     1.4     10.8	1.9
I21         Acute myocardial infarction         5,690         1.4         7.4           I50         Heart failure         5,651         1.4         10.8	3.3
I50 Heart failure 5,651 1.4 10.8	3.9
5,000	5.8
103 C-III-II-I	8.0
LO3 Cellulitis 5,451 1.4 6.8	5.3
S52 Fracture of forearm 4,593 1.1 2.5	2.1
B34 Viral infection of unspecified site 4,262 1.1 1.8	1.8
163 Cerebral infarction 4,246 1.1 19.6	9.6
S72 Fracture of femur 4,111 1.0 18.3	11.4
R56 Convulsions, not elsewhere classified 4,022 1.0 3.3	2.8
K80 Cholelithiasis 3,656 0.9 6.0	5.4

	nergency -Patients	
40	0,272	
Discharges	N	%
Total	400,272	100.0
Acute	388,497	97.1
Extended	11,775	2.9
Bed Days	N	%
Total	2,480,667	100.0
Acute	1,719,508	69.3
Extended	761,159	30.7
Length of Sta	У	Mean
Total		6.2
Acute		4.4
Extended		64.6

Top 20 P	rincipal Procedure Blocks <sup>b</sup>	N	%	Total Mean LOS <sup>c</sup>	Acute Mean LOS <sup>d</sup>
1916	Generalised allied health interventions	38,916	17.3	9.9	7.3
1952	Computerised tomography of brain	32,704	14.5	9.0	5.2
1963	Computerised tomography of abdomen and pelvis	8,298	3.7	6.0	5.1
1920	Administration of pharmacotherapy	7,396	3.3	6.9	5.6
2015	Magnetic resonance imaging	7,290	3.2	9.5	7.0
1966	Other computerised tomography	6,911	3.1	7.4	5.9
1008	Panendoscopy with excision	6,261	2.8	9.5	6.7
0926	Appendicectomy	6,254	2.8	3.2	3.2
1893	Administration of blood and blood	5,110	2.3	9.0	6.7
	products				
0668	Coronary angiography	4,824	2.1	5.8	5.2
0569	Ventilatory support	3,162	1.4	23.7	9.0
0570	Noninvasive ventilatory support	3,057	1.4	15.5	10.4
1961	Computerised tomography of chest,	2,962	1.3	10.0	7.8
	abdomen and pelvis				
1960	Computerised tomography of chest	2,852	1.3	9.1	7.3
0030	Lumbar puncture	2,736	1.2	7.3	5.2
1962	Computerised tomography of abdomen	2,692	1.2	6.9	5.2
1005	Panendoscopy	2,387	1.1	10.0	7.3
1427	Closed reduction of fracture of radius	2,095	0.9	1.7	1.6
0671	Transluminal coronary angioplasty with stenting	2,037	0.9	5.0	4.2
0911	Fibreoptic colonoscopy with excision	1,996	0.9	10.8	8.2

Admission Source	N	%
Home	366,741	91.6
Long stay accommodation	8,828	2.2
Transfer from other hospital	13,401	3.3
Other	11,302	2.8

N	%
343,090	85.7
20,953	5.2
21,191	5.3
10,003	2.5
5,035	1.3
	343,090 20,953 21,191 10,003

N	%
274,101	68.5
32,594	8.1
47,466	11.9
46,021	11.5
90	0.0
	274,101 32,594 47,466 46,021

Sex	N	%
Male	202,951	50.7
Female	197,321	49.3
Age Group	N	%
< 1 Year	25,968	6.5
1–14 Years	45,969	11.5
15-24 Years	27,419	6.9
25-34 Years	31,168	7.8
35-44 Years	35,122	8.8
45-54 Years	40,089	10.0
55-64 Years	47,272	11.8
65-74 Years	56,725	14.2
75-84 Years	59,383	14.8
85 Years	31,157	7.8
and Over		

Top 10 AR	t-DRGs	N	%	Total Mean LOS <sup>c</sup>	Acute Mean LOS <sup>d</sup>
F74Z	Chest pain	18,783	4.7	1.7	1.7
G66Z	Abdominal pain or mesenteric adenitis	10,668	2.7	2.0	2.0
G67B	Oesophagitis and gastroenteritis w/o cat/sev cc	10,097	2.5	2.2	2.2
E65B	Chronic obstructive airways disease w/o catastrophic cc	9,866	2.5	5.8	5.3
B77Z	Headache	9,192	2.3	1.9	1.9
G70B	Other Digestive system diagnoses w/o catastrophic or severe cc	8,651	2.2	2.9	2.8
D63Z	Otitis media and URI	8,267	2.1	2.0	2.0
F73B	Syncope and collapse w/o catastrophic or severe cc	7,810	2.0	2.9	2.7
L63B	Kidney and urinary tract infections w/o catastrophic or severe cc	7,552	1.9	5.1	4.3
E75C	Other respiratory system diagnosis w/o cc	7,008	1.8	2.9	2.8

Notes: Percentage columns are subject to rounding.

- ICD-10-AM diagnosis codes are analysed at three-digit level.
- ACHI Procedure codes are analysed at block level. The percentage (%) is based on emergency in-patients with d
  principal procedure reported.
- Includes mean length of stay for acute in-patients (length of stay of 30 days or less) and extended stay in-patients (length of stay greater than 30 days).
  - Includes mean length of stay for acute in-patients only.

## 3.4 MORBIDITY ANALYSIS: TOTAL DISCHARGE ACTIVITY (EXCL. **MATERNITY**)

The analysis presented in Section 3.4 is based on total discharges (excl. *Maternity*). <sup>25</sup> 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 will be limited to chapter level. Diagnosis and procedure tables are cross tabulated by sex and age group.

#### 3.4.1 Total Discharges (excl. Maternity) by Principal Diagnosis, Sex and Age Group

Table 3.10 presents the distribution of total discharges (excl. *Maternity*) by sex, age group and principal diagnosis.

- Over 28 per cent of total discharges (excl. Maternity) 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). 26
- The chapter diseases of the digestive system had the second largest number of principal diagnoses, with 10.0 per cent of total discharges (excl. Maternity).
- For discharges aged less than 15 years (including discharges < 1 year), the most common principal diagnosis came from the chapter diseases of the respiratory system, which accounted for 13.1 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 the remaining age categories.

## 3.4.2 Acute In-Patient Mean Length of Stay by Principal Diagnosis, Sex and Age

Table 3.11 presents the acute in-patient mean length of stay for principal diagnosis by sex and age group. The analysis presented here is limited to the mean length of stay for acute in-patient discharges (excl. Maternity) with a length of stay of 30 days or less, and excluding day patients. It should also be noted that the analysis by mean 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

See Section Four for details of the diagnoses and procedures reported for Maternity discharges.

Activity from the St. Luke's Radiation Oncology Network centres in Beaumont and St. James's Hospitals, estimated at over 47,000 day cases, are not included in this report as these data were not submitted to HIPE.

ischaemic heart disease may be transferred to another facility on discharge. Care must be taken, therefore, in interpreting the data on mean length of stay presented in Table 3.11, in the absence of information on discharge destination.<sup>27</sup> Discussion of acute in-patient mean length of stay is limited to ICD-10-AM chapter level.

- The longest acute in-patient mean length of stay was recorded for acute inpatient discharges with a principal diagnosis of factors influencing health status and contact with health services (7.1 days). When this diagnosis is analysed by sex, male discharges reported 6.3 days and females reported 7.9 days.
- For discharges aged less than 15 years, those with a principal diagnosis of congenital malformations, deformations and chromosomal abnormalities recorded an acute in-patient mean length of stay of 4.5 days.
- The longest acute in-patient mean length of stay for discharges aged 15-44 years was reported for those with a principal diagnosis of endocrine, nutritional and metabolic diseases, at 5.3 days.
- The shortest acute in-patient mean length of stay for all ages was recorded for acute in-patient discharges with a principal diagnosis from the chapter diseases of the ear and mastoid process (2.3 days). When analysed by age group, 1.7 days was reported for discharges aged less than 15 years and 3.6 days for discharges aged 65 years and older.

#### 3.4.3 All-Listed Diagnoses by Sex and Age Group

Table 3.12 provides details of all-listed diagnoses reported by sex and age group. Over 3.6 million diagnoses were recorded for total discharges (excl. Maternity) 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.

- The chapter factors influencing health status and contact with health services was the most frequently reported diagnosis across both sexes and all age groups for total discharges (excl. Maternity). It accounted for 820,602 diagnoses, or 22.3 per cent of all-listed diagnoses (excl. Maternity) reported.
- Neoplasms accounted for 460,984 diagnoses or 12.5 per cent of all-listed diagnoses reported for total discharges (excl. Maternity).
- For total discharges (excl. Maternity) aged less than 15 years, external causes of morbidity and mortality, accounted for 12.5 per cent of all-listed diagnoses reported for this age group.<sup>28</sup>

See Section Two for details of discharge destination.

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 2008, External Causes.

 TABLE 3.10
 Total Discharges (excl. Maternity): Principal Diagnosis by Sex and Age Group (N)

	ICD-10-AM			Male				Femal	e (excl. <i>Mate</i>	ernity)		Total Discharges (excl. Maternity)					
Principal Diagnosis	Code	< 15	15-44	45–64	≥65	Total	< 15	15-44	45–64	≥65	Total	< 15	15-44	45–64	≥65	Total	
Total Discharges (excl. Maternity)	_	73.837	146.233	212.964	280.618	713.652	57.577	180.870	220.029	249,540	708.016	131.414	327.103	432.993	530.158	1,421,668	
Certain infectious and parasitic diseases	A00-B99	5.982	3.276	1.915	2.070	13.243	5.141	3,308	2.088	2.736	13.273	11.123	6.584	4.003	4.806	26.516	
Intestinal infectious diseases including diarrhoea	A00-A09	3,488	1,145	854	1,006	6,493	3,104	1,500	1,116	1,560	7,280	6,592	2,645	1,970	2,566	13,773	
Tuberculosis	A15-A19	8	120	69	39	236	6	113	28	16	163	14	233	97	55	399	
Septicaemia	A40-A41	100	119	238	627	1,084	75	91	199	663	1,028	175	210	437	1,290	2,112	
Human immunodeficiency virus [HIV] disease	B20-B24	+	#	+	+	+	+	+	+	+	+	ŧ	ŧ	+	+	60	
Neoplasms	C00-D48	2,677	7.663	19,619	30.490	60,449	2,948	15.147	21,194	23.423	62,712	5,625	22,810	40,813	53,913	123,161	
Malignant neoplasms	C00-C96	1,906	3,913	14,730	23,266	43,815	2,068	4,768	14,261	17,524	38,621	3,974	8,681	28,991	40,790	82,436	
Malignant neoplasm of colon, rectum and anus (primary)	C18-C21	~	*	1,622	2,714	4,554	~	*	1,028	1,483	2,689	~	*	2,650	4,197	7,243	
Malignant neoplasm of trachea, bronchus and lung	C33-C34	0	51	1,077	1,947	3,075	0	70	1,058	1,581	2,709	0	121	2,135	3,528	5,784	
(primary)	C42 C44	~	*	1 404	4 577	C 4C0	~	*	1.156	2.020	4.622	~	*	2.650	7.616	11.003	
Malignant neoplasm of skin (primary)	C43-C44	0	~	1,494	4,577 31	6,460			1,156	3,039	4,622		*	2,650	7,616	11,082	
Malignant neoplasm of breast (primary)	C50			- 0	-	46	0	1,311	3,824	2,844	7,979	0		1 402	2,875	8,025	
Malignant neoplasms of female genital organs (primary)	C51-C58	0	0	0	0	0	44	544	1,493	1,119	3,200	44	544	1,493	1,119	3,200	
Malignant neoplasm of prostate (primary)	C61	0	21	1,723	2,583	4,327	0	0	~	0	~	0	21	*	2,583	*	
Malignant neoplasm of bladder (primary)	C67	24	55	328	1,218	1,625	0	27	164	458	649	24	82	492	1,676	2,274	
Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81-C96	907	1,598	3,834	4,835	11,174	912	1,210	2,364	3,627	8,113	1,819	2,808	6,198	8,462	19,287	
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10-D48	771	3,700	4,596	6,343	15,410	878	7,973	6,009	4,763	19,623	1,649	11,673	10,605	11,106	35,033	
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	D50-D89	2,332	2,018	2,228	3,825	10,403	1,517	3,145	2,833	4,248	11,743	3,849	5,163	5,061	8,073	22,146	
Endocrine, nutritional and metabolic diseases	E00-E89	1,564	7,452	12,625	8,823	30,464	1,372	4,225	5,769	6,824	18,190	2,936	11,677	18,394	15,647	48,654	
Diabetes mellitus	E10-E14	325	1,149	2,893	4,151	8,518	317	924	1,394	3,161	5,796	642	2,073	4,287	7,312	14,314	
Cystic fibrosis	E84	434	1,016	69	0	1,519	375	1,040	59	0	1,474	809	2,056	128	0	2,993	
Mental and behavioural disorders	F00-F99	316	1,300	1,048	797	3,461	241	946	757	933	2,877	557	2,246	1,805	1,730	6,338	
Mental and behavioural disorders due to alcohol	F10	23	653	666	240	1,582	27	258	295	91	671	50	911	961	331	2,253	
Mental and behavioural disorders due to use of other psychoactive substance	F11-F19	~	140	20	~	163	~	70	9	*	89	~	210	29	10	252	
Diseases of nervous system	G00-G99	1.646	4.231	4,757	4,036	14,670	1,368	6.787	5.492	4,223	17,870	3.014	11,018	10,249	8.259	32,540	
Multiple sclerosis	G35	0	1,103	519	55	1,677	0	2,331	1,098	86	3,515	0	3,434	1,617	141	5,192	
Epilepsy	G40, G41	674	865	503	299	2,341	589	750	347	303	1,989	1,263	1,615	850	602	4,330	
Transient cerebral ischaemic attacks and related syndromes	G45	0	69	484	1,035	1,588	0	84	389	1,237	1,710	0	153	873	2,272	3,298	
Diseases of the eye and adnexa	H00-H59	707	1,688	4,017	10,952	17,364	714	1,733	3,576	15,344	21,367	1,421	3,421	7,593	26,296	38,731	
Diseases of the ear and mastoid process	H60-H95	2,394	1,329	1,095	743	5,561	1,670	1,333	1,107	775	4,885	4,064	2,662	2,202	1,518	10,446	
Diseases of the circulatory system	100-199	576	5,728	16,023	22,936	45,263	560	5,597	8,935	17,638	32,730	1,136	11,325	24,958	40,574	77,993	
Hypertensive diseases	I10-I15	26	259	408	282	975	35	245	416	516	1,212	61	504	824	798	2,187	
Angina pectoris	120	0	130	1,339	1,745	3,214	0	55	484	939	1,478	0	185	1,823	2,684	4,692	
Acute myocardial infarction	121-122	0	248	1,878	2,437	4,563	0	55	450	1,430	1,935	0	303	2,328	3,867	6,498	
Other ischaemic heart disease	123-125	0	263	3,187	3,851	7,301	~	*	973	1,790	2,845	~	*	4,160	5,641	10,146	
Pulmonary heart disease and diseases of pulmonary circulation	126–128	~	*	275	411	844	*	*	219	582	1,027	17	367	494	993	1,871	
Conduction disorders and cardiac arrhythmias	144-149	98	653	2,512	4,026	7,289	63	336	1,029	3,192	4,620	161	989	3,541	7,218	11.909	
Heart failure	150	~	*	451	2,938	3,428	0	21	205	2,477	2,703	~	*	656	5,415	6,131	
Cerebrovascular disease	160–169	35	235	1,028	2,473	3,771	28	212	718	2,476	3,434	63	447	1,746	4,949	7,205	
Atherosclerosis (non-coronary)	170	0	27	415	784	1,226	~	*	156	506	691	~	*	571	1,290	1,917	
Diseases of the respiratory system	J00-J99	9,679	5,900	7,236	16,439	39,254	7,478	7,386	7,950	16,119	38,933	17,157	13,286	15,186	32,558	78,187	
Acute upper respiratory infections and influenza	J00-J11	3,168	848	269	146	4,431	2,376	1,418	328	204	4,326	5,544	2,266	597	350	8,757	
Pneumonia	J12-J18	692	508	933	3,421	5,554	628	506	851	3,370	5,355	1,320	1,014	1,784	6,791	10,909	
					-,	- /				- /	- ,	,	,:			-,- 55	

 TABLE 3.10
 Total Discharges (excl. Maternity): Principal Diagnosis by Sex and Age Group (N) (contd.)

Delevined Discussion	ICD-10-AM Male						_	Femal	e (excl. <i>Mate</i>	rnity)	Total Discharges (excl. Maternity)					
Principal Diagnosis	Code	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Tota
Chronic obstructive pulmonary disease and bronchiectasis	J40–J44, J47	45	313	1,940	5,968	8,266	18	411	2,473	5,761	8,663	63	724	4,413	11,729	16,9
Asthma	J45-J46	980	515	710	315	2,520	588	1.081	1,203	457	3,329	1,568	1,596	1.913	772	5,8
Diseases of the digestive system	K00-K93	6,182	22,000	23,012	19,377	70,571	5,076	24,496	23,002	19,503	72,077	11,258	46,496	46,014	38,880	142,6
Diseases of oesophagus, stomach and duodenum	K20-K31	747	5,955	7,522	5,494	19,718	619	6,215	7,606	5,728	20,168	1,366	12.170	15,128	11,222	39,8
Diseases of appendix	K35-K38	1,068	1,895	346	115	3,424	850	1,843	295	115	3,103	1,918	3,738	641	230	6,5
Inguinal hernia	K40	426	772	1.174	1,190	3,562	108	54	62	106	330	534	826	1,236	1.296	3,8
Noninfective enteritis and colitis	K50-K52	322	3,988	1,757	758	6,825	243	3,727	1,724	824	6,518	565	7,715	3,481	1,582	13,3
Alcoholic liver disease	K70	0	162	469	124	755	0	100	186	58	344	0	262	655	182	1,0
Cholelithiasis	K80	24	463	869	1,310	2,666	22	2,419	1,594	1,467	5,502	46	2,882	2,463	2,777	8,1
Diseases of the skin and subcutaneous tissue	L00-L99	1.779	13,226	8,504	7,018	30,527	1,356	11,566	8,482	7,174	28,578	3,135	24,792	16,986	14,192	59,1
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02-L03	401	1,211	1,184	1,261	4,057	350	684	658	1,484	3,176	751	1,895	1,842	2,745	7,2
Diseases of the musculoskeletal system and connective tissue	M00-M99	1,735	8,947	12,013	9,290	31,985	1,776	9,423	16,557	15,230	42,986	3,511	18,370	28,570	24,520	74,9
	1405 1406		200	4 024	600	2.004	~	*	2.240	4 544	4 5 45	~	*	2.240	2 404	
Rheumatoid arthritis	M05-M06	0 ~	380	1,021	683	2,084	~	*	2,219	1,511	4,545			3,240	2,194	6,6
Coxarthrosis and Gonarthrosis	M16-M17	~		1,871	2,336	4,549	~		1,994	3,398 *	5,680	6	624	3,865	5,734	10,2
Intervertebral disc disorders	M50-M51		603	526		1,348		630	678		1,668	9	1,233	1,204	570	3,0
Dorsalgia (back pain)	M54	67	1,755	2,131	1,207	5,160	82	2,242	3,223	2,453	8,000	149	3,997	5,354	3,660	13,1 <b>73,</b> 1
Diseases of the genitourinary system	N00-N99	4,077	<b>4,784</b> 217	<b>6,650</b> 374	<b>9,292</b> 489	<b>24,803</b> 1.233	<b>2,055</b> 103	<b>21,383</b> 225	<b>15,510</b> 223	<b>10,000</b> 298	<b>48,948</b> 849	<b>6,132</b> 256	<b>26,167</b> 442	<b>22,160</b> 597	19,292	2.0
Chronic kidney disease Urolithiasis	N18	153 78	1,466	1,629	701	3,874	24	872	893	298	2,064	102	2,338	2,522	787 976	5,9
	N20-N23	0	79						0	0	2,064	0	79			3,9
Hyperplasia of prostate	N40	~		1,253	2,568	3,900	0	0				*		1,253	2,568	
Disorders of breast	N60-N64 N70-N77		104 0	32 0	0	162 0	17 22	1,443	1,350 388	307 80	3,117 1,722		1,547 1,232	1,382 388		3,2 1,7
Inflammatory diseases of female pelvic organs	N80-N98	0	0	0	0	0	185	1,232 14,132	9,013	2,357	25,687	22 185	1,232	9,013	80 2,357	25,6
Noninflammatory disorders of female genital tract  Pregnancy, childbirth and the puerperium <sup>a</sup>	000-099	0	0	0	0	<b>0</b>	185	14,132	9,013	2,357	25,687 <b>40</b>	185	14,132	9,013	2,357	25,0
Certain conditions originating in the perinatal period	P00-P96	+	· · ·	+	+	5,706		+			4,361					10,0
							-			-						
Congenital malformations, deformations and chromosomal abnormalities	Q00-Q99	5,420	684	198	93	6,395	3,583	815	281	102	4,781	9,003	1,499	479	195	11,1
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	R00-R99	6,272	15,281	18,481	19,657	59,691	5,587	24,241	20,144	19,310	69,282	11,859	39,522	38,625	38,967	128,9
Abdominal and pelvic pain	R10	924	2,403	1,668	1,040	6,035	1,198	7,103	2,999	1,491	12,791	2,122	9,506	4,667	2,531	18,8
Injury, poisoning and certain other consequences of	S00-T98	7,141	13,010	6,026	5,637	31,814	4,846	6,263	5,058	8,592	24,759	11,987	19,273	11,084	14,229	56,5
external causes																
Intracranial injury	S06	152	590	314	379	1,435	83	185	156	334	758	235	775	470	713	2,1
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	2,188	2,428	620	585	5,821	1,388	695	300	730	3,113	3,576	3,123	920	1,315	8,9
Fracture of femur	S72	130	133	194	930	1,387	55	42	257	2,408	2,762	185	175	451	3,338	4,1
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36–T65	225	1,094	387	116	1,822	278	1,276	516	155	2,225	503	2,370	903	271	4,0
Factors influencing health status and contact with health services <sup>b</sup>	U00–U49, Z00–Z99	7,654	27,714	67,517	109,143	212,028	5,929	33,035	71,294	77,366	187,624	13,583	60,749	138,811	186,509	399,6
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	2,701	5,149	27,201	42,774	77,825	2,654	11,594	43,052	30,601	87,901	5,355	16,743	70,253	73,375	165,7

- Notes: ~ Denotes five or fewer discharges reported to HIPE.
  - \* Further suppression required to prevent disclosure of five or fewer discharges.
  - <sup>‡</sup> Denotes that no breakdown is provided.
  - a Discharges reported within this chapter were not assigned admission type of Maternity. Their admission was for reasons other than their obstetric condition, but they received obstetric care during this episode of care. See Section Four for details of morbidity analysis for *Maternity* discharges.
  - b This category includes discharges in the code range U00–U49 'codes for special purposes'.

 TABLE 3.11
 Acute In-Patient Discharges (excl. Maternity): Mean Length of Stay (Days) by Principal Diagnosis, Sex and Age Group<sup>a</sup>

	ICD 10 AM	1		Na la	_	_		Famul	- / 0 <del>4</del> -			Tatal	to In Dath	us Diaghau	<i>l</i>	out a war it. A
Principal Diagnosis	ICD-10-AM Code	< 15	15–44	Male 45–64	≥65	Total	< 15	15–44	e (excl. <i>Mat</i> 45–64	ernity) ≥65	Total	< 15	15–44	45–64	es (excl. <i>Ma</i> ≥65	Total
Acute In-Patient Discharges	-	2.7	3.0	4.4	6.3	4.4	2.8	2.8	4.1	6.5	4.5	2.8	2.9	4.2	6.4	4.4
Certain infectious and parasitic diseases	A00-B99	2.0	3.9	5.5	7.7	3.5	2.0	3.4	4.9	7.1	3.6	2.0	3.6	5.2	7.4	3.6
Intestinal infectious diseases including diarrhoea	A00-A09	1.8	2.9	4.5	6.1	2.8	1.8	2.8	3.9	6.2	3.1	1.8	2.9	4.2	6.2	2.9
Tuberculosis	A15-A19	1.3	9.7	9.7	12.2	9.6	2.0	10.0	7.6	11.6	9.3	1.6	9.8	9.0	12.0	9.4
Septicaemia	A40-A41	5.6	8.3	8.7	10.2	9.2	4.1	7.4	8.9	9.5	8.8	4.9	7.9	8.8	9.8	9.0
Human immunodeficiency virus [HIV] disease	B20-B24	\$.0 †	\$ ‡	ŧ	#	\$1.E	#	+	ŧ	\$.5 ‡	#	#	+	#	\$.0 ‡	8.9
Neoplasms	C00-D48	4.2	5.9	7.5	8.1	7.5	3.7	4.8	6.3	7.7	6.5	3.9	5.2	6.8	7.9	7.0
Malignant neoplasms	C00-C96	4.2	6.3	7.7	8.4	7.8	3.8	5.8	6.9	8.1	7.2	4.0	6.0	7.3	8.3	7.5
Malignant neoplasm of colon, rectum and anus (primary)	C18-C21	^	8.4	8.8	9.6	9.3	٨	7.2	7.6	10.0	9.0	۸	7.8	8.3	9.7	9.2
Malignant neoplasm of trachea, bronchus and lung (primary)	C33-C34	-	9.6	7.7	9.9	9.1	-	7.5	7.6	9.0	8.5	-	8.2	7.6	9.5	8.8
Malignant neoplasm of skin (primary)	C43-C44	^	3.6	5.5	5.1	5.1	_	3.2	3.5	4.7	4.3	٨	3.4	4.8	5.0	4.8
Malignant neoplasm of breast (primary)	C50	-	۸	۸	5.8	5.8	-	4.4	4.7	5.6	5.0	-	4.4	4.7	5.6	5.0
Malignant neoplasms of female genital organs (primary)	C51-C58	-	-	-	-	-	2.7	5.3	6.9	7.8	7.0	2.7	5.3	6.9	7.8	7.0
Malignant neoplasm of prostate (primary)	C61	-	6.7	5.6	7.2	6.5	-	-	-	-	-	-	6.7	5.6	7.2	6.5
Malignant neoplasm of bladder (primary)	C67	4.6	6.9	6.1	6.0	6.0	_	٨	6.3	5.6	5.8	4.6	6.7	6.2	5.9	5.9
Malignant neoplasms of lymphoid, haematopoietic and related	C81-C96	4.3	7.2	8.1	7.8	7.5	4.2	7.8	9.2	7.8	7.7	4.3	7.5	8.5	7.8	7.6
tissue												3				
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10-D48	4.0	3.7	4.5	5.5	4.8	3.5	3.6	4.3	5.3	4.2	3.7	3.6	4.4	5.4	4.4
Diseases of the blood and blood-forming organs and certain	D50-D89	2.8	4.0	4.7	5.1	4.3	3.6	3.6	4.7	5.4	4.6	3.1	3.8	4.7	5.3	4.5
disorders involving the immune mechanism	D30 D03	2.0	4.0	4.7	3.1	7.5	3.0	3.0	4.7	3.4	7.0	3.1	3.0	7.7	3.3	4.5
Endocrine, nutritional and metabolic diseases	E00-E89	4.1	6.0	5.4	7.2	6.0	4.5	4.7	4.3	6.4	5.3	4.3	5.3	4.9	6.8	5.6
Diabetes mellitus	E10-E14	3.7	3.4	5.7	7.6	5.8	4.0	3.3	4.8	6.9	5.2	3.8	3.3	5.4	7.3	5.6
Cystic fibrosis	E84	7.8	12.3	13.2	7.0	11.0	9.0	11.2	14.7	-	10.6	8.4	11.8	14.0	7.3	10.8
Mental and behavioural disorders	F00-F99	2.4	3.6	4.1	7.1	4.4	4.4	4.1	4.7	7.8	5.4	3.5	3.8	4.3	7.5	4.8
Mental and behavioural disorders due to alcohol	F10	1.3	2.6	3.9	6.0	3.6	1.1	2.7	4.5	5.5	3.8	1.2	2.6	4.1	5.9	3.7
Mental and behavioural disorders due to use of other psychoactive	F11-F19	۸.5	8.7	13.2	۸.0	9.1	۸.1	11.5	11.7	7.9	11.1	۸	9.6	12.8	8.0	9.8
substance	111 115		0.7	13.2		5.1		11.5	11.7	7.5	11.1		5.0	12.0	0.0	5.0
Diseases of nervous system	G00-G99	3.1	2.9	3.4	5.5	3.8	2.9	2.9	3.7	5.3	3.8	3.0	2.9	3.6	5.4	3.8
Multiple sclerosis	G35	-	4.4	6.1	7.8	5.5	-	5.0	6.2	8.1	5.7	-	4.9	6.2	8.0	5.6
Epilepsy	G40, G41	2.9	3.1	3.8	5.7	3.6	3.1	3.0	4.2	6.4	3.8	3.0	3.1	4.0	6.0	3.7
Transient cerebral ischaemic attacks and related syndromes	G45	-	3.1	3.5	4.4	4.1	-	3.1	3.5	4.5	4.2	-	3.1	3.5	4.5	4.1
Diseases of the eye and adnexa	H00-H59	2.5	2.9	3.3	3.4	3.2	2.3	2.8	2.8	3.1	2.9	2.4	2.8	3.1	3.2	3.0
Diseases of the ear and mastoid process	H60-H95	1.7	2.1	2.5	4.1	2.3	1.6	2.1	2.6	3.1	2.3	1.7	2.1	2.5	3.6	2.3
Diseases of the circulatory system	100-199	2.9	3.8	4.7	6.3	5.5	2.6	3.6	4.5	6.5	5.7	2.8	3.7	4.6	6.4	5.6
Hypertensive diseases	I10-I15	1.9	2.2	2.2	2.6	2.3	3.2	2.1	2.0	2.7	2.4	2.6	2.2	2.1	2.7	2.4
Angina pectoris	120	-	3.1	4.2	4.7	4.4	-	2.2	3.5	4.4	4.0	-	2.9	4.0	4.6	4.3
Acute myocardial infarction	121-122	-	3.9	4.5	6.4	5.5	-	3.8	4.4	6.7	6.1	-	3.9	4.5	6.5	5.7
Other ischaemic heart disease	123-125	-	3.2	3.9	4.7	4.3	-	3.4	3.6	4.3	4.1	-	3.2	3.9	4.6	4.2
Pulmonary heart disease and diseases of pulmonary circulation	126-128	^	6.0	6.5	8.2	7.2	٨	5.3	7.0	8.5	7.5	4.3	5.6	6.7	8.3	7.4
Conduction disorders and cardiac arrhythmias	144-149	3.7	2.6	3.2	4.3	3.8	4.0	2.6	3.2	4.6	4.1	3.8	2.6	3.2	4.4	3.9
Heart failure	150	^	8.1	7.5	7.9	7.9	-	7.1	6.9	8.2	8.1	^	7.7	7.3	8.0	8.0
Cerebrovascular disease	160-169	7.4	7.2	8.0	8.9	8.5	5.7	6.8	7.6	9.4	8.8	6.6	7.0	7.8	9.1	8.7
Atherosclerosis (non-coronary)	170	-	6.3	6.1	8.8	7.8	٨	3.4	6.6	7.6	7.3	^	5.0	6.2	8.3	7.6
Diseases of the respiratory system	J00-J99	2.2	3.0	5.0	7.1	4.9	2.2	2.5	4.8	7.3	4.9	2.2	2.7	4.9	7.2	4.9
Acute upper respiratory infections and influenza	J00-J11	1.7	2.1	2.5	4.1	1.9	1.8	2.0	2.3	4.2	2.0	1.7	2.0	2.4	4.2	1.9
Pneumonia	J12-J18	3.6	5.3	6.5	8.4	7.1	3.5	4.7	6.5	8.7	7.4	3.6	5.0	6.5	8.5	7.3
Chronic diseases of tonsils and adenoids	J35	1.2	1.3	2.0	۸	1.3	1.2	1.3	1.7	٨	1.3	1.2	1.3	1.8	2.4	1.3
Chronic obstructive pulmonary disease and bronchiectasis	J40-J44, J47	3.8	4.5	5.3	6.6	6.2	2.8	3.6	5.4	6.9	6.4	3.5	3.9	5.3	6.7	6.3
Asthma	J45-J46	1.8	2.3	3.2	4.1	2.2	1.9	2.5	3.5	4.9	2.9	1.8	2.4	3.4	4.7	2.6
Diseases of the digestive system	K00-K93	2.7	3.6	4.8	5.7	4.5	2.8	3.5	4.5	6.2	4.5	2.8	3.5	4.7	5.9	4.5
Diseases of oesophagus, stomach and duodenum	K20-K31	2.3	2.7	3.8	5.2	3.7	2.0	2.7	3.2	5.4	3.7	2.2	2.7	3.5	5.3	3.7
Diseases of appendix	K35-K38	3.3	2.9	4.1	6.8	3.3	3.4	3.0	4.3	6.5	3.3	3.3	2.9	4.2	6.6	3.3

 TABLE 3.11
 Acute In-Patient Discharges (excl. Maternity): Mean Length of Stay (Days) by Principal Diagnosis, Sex and Age Group<sup>a</sup> (contd.)

	ICD-10-AM			Male				Female	e (excl. <i>Mate</i>	ernity)		Total Ac	ute In-Patie	ent Discharg	es (excl. M	aternity)
Principal Diagnosis	Code	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total
Inguinal hernia	K40	1.8	1.4	1.7	2.5	2.0	1.5	2.0	1.9	3.5	2.6	1.8	1.5	1.7	2.6	2.1
Noninfective enteritis and colitis	K50-K52	2.8	5.8	6.2	6.1	5.7	3.6	5.8	5.8	7.0	5.9	3.2	5.8	6.0	6.6	5.8
Alcoholic liver disease	K70	-	7.5	9.0	9.0	8.7	-	8.4	9.1	10.6	9.1	-	7.8	9.0	9.5	8.8
Cholelithiasis	K80	2.9	3.5	4.2	5.8	4.8	3.2	2.9	3.4	5.8	3.8	3.0	3.0	3.7	5.8	4.1
Diseases of the skin and subcutaneous tissue	L00-L99	2.8	3.1	4.8	6.3	4.3	3.0	2.8	4.3	7.0	4.7	2.9	3.0	4.6	6.7	4.5
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02-L03	3.1	3.5	5.0	6.4	4.8	3.3	3.0	4.7	7.0	5.2	3.2	3.3	4.9	6.7	5.0
Diseases of the musculoskeletal system and connective tissue	M00-M99	3.1	2.6	3.7	5.4	4.0	3.2	2.6	3.3	5.2	4.0	3.2	2.6	3.5	5.3	4.0
Rheumatoid arthritis	M05-M06	-	4.9	3.2	7.1	5.2	۸	2.1	4.1	5.2	4.2	۸	3.3	3.8	5.9	4.6
Coxarthrosis and Gonarthrosis	M16-M17	٨	3.7	4.6	5.7	5.2	^	4.2	4.7	5.8	5.4	^	3.9	4.6	5.8	5.3
Intervertebral disc disorders	M50-M51	٨	3.0	3.7	6.6	3.9	۸	3.5	3.7	6.4	4.0	7.4	3.2	3.7	6.5	4.0
Dorsalgia (back pain)	M54	2.4	2.2	3.1	4.9	3.3	2.7	2.5	3.1	5.2	3.5	2.6	2.4	3.1	5.1	3.4
Diseases of the genitourinary system	N00-N99	2.4	2.7	4.2	6.6	4.6	2.8	2.7	3.7	6.6	4.2	2.6	2.7	3.9	6.6	4.4
Chronic kidney disease	N18	3.3	5.3	7.2	7.2	6.2	4.1	5.5	5.8	7.3	6.0	3.6	5.4	6.6	7.2	6.1
Urolithiasis	N20-N23	3.1	2.2	2.7	3.8	2.7	1.4	2.6	3.2	4.2	3.0	2.5	2.3	2.9	3.9	2.8
Hyperplasia of prostate	N40	-	^	4.5	5.0	4.9	-	-	-	-	-	-	٨	4.5	5.0	4.9
Disorders of breast	N60-N64	٨	1.4	1.8	٨	1.7	2.7	2.5	2.5	3.8	2.6	2.7	2.4	2.5	3.7	2.5
Inflammatory diseases of female pelvic organs	N70-N77	-	-	-	-	-	1.8	2.4	3.3	5.3	2.7	1.8	2.4	3.3	5.3	2.7
Noninflammatory disorders of female genital tract	N80-N98	-	-	-	-	-	2.1	2.4	3.2	4.2	2.9	2.1	2.4	3.2	4.2	2.9
Pregnancy, childbirth and the puerperium <sup>b</sup>	000-099	-	-	-	-	-	ŧ	ŧ	ŧ	ŧ	2.0	ŧ	+	ŧ	ŧ	2.0
Certain conditions originating in the perinatal period	P00-P96	+	ŧ	ŧ	+	5.9	ŧ	ŧ	ŧ	ŧ	5.8	ŧ	+	ŧ	ŧ	5.9
Congenital malformations, deformations and chromosomal abnormalities	Q00-Q99	4.4	3.4	5.1	5.8	4.3	4.6	3.5	4.3	5.3	4.5	4.5	3.4	4.6	5.5	4.4
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	R00-R99	1.8	1.8	2.3	4.0	2.6	2.0	1.8	2.3	3.9	2.6	1.9	1.8	2.3	3.9	2.6
Abdominal and pelvic pain	R10	1.6	1.9	2.5	3.4	2.2	1.7	1.9	2.7	3.6	2.2	1.6	1.9	2.6	3.5	2.2
Injury, poisoning and certain other consequences of external causes	S00-T98	1.5	2.6	4.2	7.2	3.5	1.6	2.5	3.9	8.0	4.5	1.6	2.6	4.1	7.7	3.9
Intracranial injury	S06	2.4	3.4	5.1	7.0	4.6	2.2	2.7	4.9	7.2	5.0	2.3	3.3	5.0	7.1	4.7
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	1.3	2.0	2.4	4.6	2.1	1.2	1.7	2.4	4.9	2.3	1.2	2.0	2.4	4.8	2.2
Fracture of femur	S72	3.7	5.9	9.2	12.8	10.6	2.8	6.3	8.8	12.4	11.7	3.5	6.0	8.9	12.5	11.4
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36-T65	1.3	2.3	3.4	4.1	2.5	1.6	1.9	2.7	4.1	2.2	1.5	2.1	3.0	4.1	2.3
Factors influencing health status and contact with health services <sup>c</sup>	U00–U49, Z00–Z99	2.4	4.4	6.3	9.2	6.3	2.6	3.7	6.9	12.0	7.9	2.5	4.0	6.6	10.8	7.1
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	3.6	3.5	8.5	11.3	9.5	6.3	2.0	9.3	12.7	11.5	5.0	2.7	8.8	12.2	10.6

Notes:

- ^ Denotes that length of stay calculation was based on five or fewer discharges.
- Mean length of stay cannot be calculated as no acute in-patients (length of stay of 30 days or less) are reported.
- <sup>‡</sup> Denotes that no breakdown is provided.
- a Includes mean length of stay for acute in-patients (length of stay of 30 days or less) only. Excludes extended stay in-patients and day patients.
- b Discharges reported within this chapter were not assigned admission type of *Maternity*. Their admission was for reasons other than their obstetric condition, but they received obstetric care during this episode of care. See Section Four for details of morbidity analysis for *Maternity* discharges.
- c This category includes discharges in the code range U00–U49 'codes for special purposes'.

 TABLE 3.12 Total Discharges (excl. Maternity): All-Listed Diagnoses by Sex and Age Group (N)

Collections   Collection   Co	Diagnosis	ICD-10-AM			Male				Femal	le (excl. <i>Mate</i>	rnitv)			Total Dis	charges (excl.	Maternity)	
Contribution   1,74,077   1,74,	Diagnosis		< 15	15–44		>65	Total	< 15				Total	< 15				Total
Containing	Total Discharges (eyel Maternity)	Couc															
Certamin infections and parametic cleases   A00-999   8,949   8,949   8,949   1,979   1,974   1,972   8,940   7,972   8,940   7,970   1,971   7,971			-/		,		-,	- /-	/		-,	/				,	
International melational discoses including of August 2, 1979 (2, 1979) (2,				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		/	, ,	-/					/-				
Control   Cont																	
Internations	9	A00-A03	4,130	1,031	1,022	2,033	10,500	3,023	2,473	2,210	3,363	12,237	7,703	4,330	4,032	0,078	22,003
Septiment   Sept		A15_A10	٥	150	106	Ω1	3/16	7	166	16	20	2/18	16	316	152	110	594
Second column   Second colum								•									
Neglepanie recolaires   CoG-6-66   5,488   31,736   5,786   112,699   7,786   112,69			150	430	1,078	2,363 ±	4,301	144	302	651	2,303	3,700	334	812	1,505	4,540	705
Muligrant respirator of colon, rectum and anu. CLB-CLZ	, . ,		6.445	17 626	72 926	112 660	210 586	6 504	20 822	112 770	01 202	250 208	12 0/10	57.458	186 615	203 063	
Malignant recoplasm of clarks benchus and control franchs benchus and control franchs benchus and sequence of the control franchs and sequence of the control franch	•																
Internal   Contemps of fraches, bronchus and   Contemps of fraches   Contemps of f			J,466 ~	*					27,203	,				**			
Integromeroplasm of skin (primary)  Allignant neceplasm of skin (primary)  Allignant neceplasm of skin (primary)  CSO 0 0 6 62 186 224 0, 224 0, 30.613 15,734 35,279 0 8,236 30,677 11,052 34,836 11,053 12,054 11,055 12,	(primary)				·	·	·			·	,	,					
Malignant recologiant of least in primary) Malignant recologians of least in primary) Malignant recologians of free interiments Malignant recologians of fre		C33-C34	~	*	4,347	6,174	10,710	0	*	4,063	4,782	9,167	~	510	8,410	10,956	19,877
Malignant necepism of femous period provided growth of the control	0.11																
Malignant neoplasms of female gential organs (C51-C58 0 0 0 0 0 0 0 7 2,328 6,783 4,005 13,793 77 2,328 6,783 4,005 13,793 (girmany)  Malignant neoplasm of prostate (primary) C67 36 128 81.8 2,530 3,512 0 51 31 31 1,023 1,333 36 179 1,137 3,553 4,00 Malignant neoplasms of whiteholds (primary) C67 36 128 8,289 13,718 2,853 2,462 2,668 6,224 5,664 5,624																	
Mailgnant neoplasm of prostate (primary)   G61																	54,833
Malignant neoplasm of protestes (primary) Malignant neoplasm of badder (primary) Malignant neoplasm of badder (primary) Malignant neoplasm of hydroxy (primary) Malignant neoplasms of uncertain Malignant neoplas		C51-C58	0	0	0	0	0	77	2,328	6,783	4,605	13,793	77	2,328	6,783	4,605	13,793
Malignam reoplasm of bludder (primary)  C67  36  128  818  82,50  3,512  0  510,602  2,564  3,592  13,182  8,893  13,183  10,002  12,511  10,002  12,511  10,009  9,642  10,648  10,563  10,563  10,563  10,611  15,663  10,601  10,601  15,663  10,601  10,																	
Malignari neoplasms of lymphoid, heart and related itsisue Benign and related itsisue Benign neoplasms and reoplasms of uncertain O10-D48 957 4,406 6,546 10,602 22,511 1,099 9,442 8,088 7,545 26,494 2,056 14,048 14,754 18,147 45,000 Diseases of the blood and blood-forming organs and records related itsisue Benign neoplasms and reoplasms of uncertain O10-D48 957 4,406 6,546 115,695 31,026 2,619 5,603 8,572 15,263 32,057 6,561 10,081 15,483 30,958 63,088 and certain distories risvolving the limmune mechanism Call-Core 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	0 1 1 1 17				-,		-,		-		-				*	-,	*
Deceases of the blood and blood-offerming organs and ecolephsms of uncertain or unknown behaviour						,	-,-				,	,				-,	4,905
Berign peoplasms and neoplasms of uncertain of perhativor or unknown behavior or unk		C81-C96	2,604	3,592	8,939	13,718	28,853	2,442	2,648	6,234	9,644	20,968	5,046	6,240	15,173	23,362	49,821
Or unknown behavioural closed and blood-forming organs and certain disorders involving the immune mechanism embedanism of the control of the																	
Diseases of the blood and blood-forming organ and certain disorders involving the immune mechanism    Food-rine, purity the immune mechanism   Food-rine purity the immune mechanism   Food-rine, purity	Benign neoplasms and neoplasms of uncertain	D10-D48	957	4,406	6,546	10,602	22,511	1,099	9,642	8,208	7,545	26,494	2,056	14,048	14,754	18,147	49,005
## Endocrine, nutritional and metabolic diseases   E00-E89   5,632   15,013   40,160   66,571   127,376   4,331   11,493   23,054   55,081   33,959   9,683   26,506   63,214   121,652   221,332	or unknown behaviour																
methanism Endocrine, nutritional and metabolic diseases	Diseases of the blood and blood-forming organs	D50-D89	3,942	4,478	6,911	15,695	31,026	2,619	5,603	8,572	15,263	32,057	6,561	10,081	15,483	30,958	63,083
Endocrine, nutritional and metabolic diseases	and certain disorders involving the immune																
Diabetes mellitus   E10-E14   515   4,225   18,400   40,388   63,528   519   3,503   9,557   27,029   40,708   1,034   7,728   28,057   67,47   3,73   7,728   28,057   67,47   3,73   7,728   28,057   67,47   3,73   7,728   28,057   67,47   3,73   7,228   28,057   67,47   3,73   7,228   28,057   67,47   3,73   7,228   28,057   7,47   1,47   3,14   4	mechanism																
Cyste fibrosis   EA	Endocrine, nutritional and metabolic diseases	E00-E89						4,331	11,493		55,081	93,959	9,963		63,214		221,335
Mental and behavioural disorders   F00-P99   1,71   8,192   8,346   10,452   28,761   919   5,500   5,770   12,861   25,050   2,690   13,692   14,116   23,313   33,813   33,814   33,010   3,010	Diabetes mellitus	E10-E14	515	4,225	18,400	40,388	63,528	519	3,503	9,657	27,029	40,708	1,034	7,728	28,057	67,417	104,236
Mental and behavioural disorders due to alcohol Mental and behavioural disorders due to use of part of the psychosctive substance of the psychosctive substance of part of the psychosctive substance of part of the psychosctive substance of part of psychosctive substance of psychoscological psychoscol	Cystic fibrosis		516	1,327	90	0	1,933	438		*	~	1,858	954	2,671	*	~	3,791
According Mental and behavioural disorders due to use of other psychoactive substance  Mental and behavioural disorders due to use of other psychoactive substance  Diseases of nervous system  GOO-G99  3,998  7,388  8,946  12,842  33,174  2,942  9,531  9,125  12,309  33,907  6,940  16,6,919  18,071  25,151  67,08  Multiple selerosis  G35  1,218  831  228  2,277  0 2,554  1,687  368  4,609  0 3,772  2,518  596  6,88  Epilepsy  G40, 641  1,270  1,467  1,089  1,071  1,487  1,091  1,280  918  924  4,213  2,361  2,747  2,007  1,995  9,11  7ransient cerebral ischaemic attacks and related syndromes  Diseases of the ear and mastoid process  H00-H59  1,544  3,158  6,958  17,451  2,9111  1,297  3,021  5,068  2,3195  33,001  2,841  6,179  13,046  40,646  62,71  Diseases of the ear and mastoid process  H00-H95  1,568  13,819  5,337  1,478  1,480  1,325  8,251  2,472  1,770  1,509  1,377  7,128  6,107  3,849  3,046  2,510  8,2196  2,18,878  3,949  2,702  1,878  3,940  1,941  1,942  1,942  1,942  1,944  1,944  1,944  1,944  1,944  1,944  1,944  1,944  1,945  1,945  1,945																	53,811
Obseaves of nervous system  OB—G89  3,998  7,388  8,946  12,842  33,174  2,942  9,531  9,125  12,309  33,907  6,940  16,919  18,071  25,151  57,08  Multiple sclerosis  G35  C40, G41  1,270  1,687  1,089  1,071  1,089  1,071  1,487  1,091  1,280  1,288  391  1,482  1,288  391  1,480  1,288  1,487  1,991  1,280  1,288  1,288  2,277  0  2,554  1,687  368  4,609  0  3,772  2,518  596  6,88  2,747  2,007  1,995  9,111  1,297  3,021  1,688  1,218  1,228  1,277  1,209  1,280  1,281  1,281  1,274  2,201  1,297  1,288  1,211  1,227  1,209  1,219  1,210  1,280  1,218  1,21		F10	26	3,351	4,584	2,569	10,530	41	1,336	1,759	837	3,973	67	4,687	6,343	3,406	14,503
Diseases of nervous system   G00-G99   3,998   7,388   8,946   12,842   33,174   2,942   9,531   9,125   12,309   33,907   6,940   16,919   18,071   25,151   67,08   Multiple sclerosis   G35   1,218   831   228   2,277   0   2,554   1,687   368   4,609   0   3,772   2,518   596   6,88   Epilepsy   G40, G41   1,270   1,467   1,089   1,071   4,897   1,091   1,280   918   924   4,213   2,361   2,747   2,007   1,995   9,11   7,138   7,148   7,1		F11-F19	*	1,979	381	*	2,407	~	808	163	*	1,058	18	2,787	544	116	3,465
Multiple sclerosis   G35   G40, G41   1,270   1,467   1,089   1,071   4,897   1,091   1,280   918   924   4,213   2,361   2,747   2,518   596   6,88   Epilepsy   G40, G41   1,270   1,467   1,089   1,071   4,897   1,091   1,280   918   924   4,213   2,361   2,747   2,007   1,995   9,11   1,19		G00-G99	3,998	7,388	8,946	12,842	33,174	2,942	9,531	9,125	12,309	33,907	6,940	16,919	18,071	25,151	67,081
Transient cerebral ischaemic attacks and related syndromes  Diseases of the eye and adnexa  H00-H59  1,544  3,158  6,958  17,451  Diseases of the eye and adnexa  H00-H59  1,544  3,158  6,958  17,451  Diseases of the eye and adnexa  H00-H59  1,544  3,158  1,811  1,480  1,325  8,251  2,472  1,770  1,509  1,507  1,285  1,917  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,507  1,128  1,170  1,509  1,509  1,509  1,507  1,128  1,170  1,509  1,509  1,509  1,509  1,509  1,509  1,500  1,171  1,277  1,100  1,508  1,111  1,277  1,100  1,509	· · · · · · · · · · · · · · · · · · ·	G35		1,218	831	228	2,277	0	2,554	1,687	368		0	3,772	2,518	596	6,886
related syndromes Diseases of the eye and adnexa Diseases of the eye and adnexa H00-H59 1,544 3,158 6,958 1,811 1,480 1,325 8,251 2,472 1,770 1,509 1,377 7,128 6,107 3,581 2,989 2,702 15,37 Diseases of the ear and mastoid process H60-H95 1,568 13,839 53,337 120,633 189,377 1,478 11,267 28,859 98,245 139,849 3,046 25,106 82,196 218,678 329,22 Hypertensive diseases 110-H15 304 4,262 17,032 38,017 59,615 212 2,741 10,568 35,112 48,633 516 7,003 27,600 7,5129 108,24 Angina pectoris 120 0 150 1,717 2,679 4,546 0 66 655 6,569 2,381 0 216 2,373 4,338 6,928 Acute myocardial infarction 121-H22 0 294 2,248 3,285 5,827 0 68 551 2,128 2,757 0 362 2,809 5,413 8,58  Other ischaemic heart disease 123-H25  Conduction disorders and cardiac arrhythmias 144-H49 187 1,472 6,086 22,801 30,546 126 660 2,454 18,376 21,616 313 2,132 8,540 41,177 52,16 Heart failure 150 26 131 1,460 10,191 11,808 31 78 691 8,924 9,724 57 209 2,151 19,115 21,537 Acute upper respiratory system 100-H99 12,714 10,568 3,612 1,782 1,780 1,782 1,783 1,785 1,120 1,497 1,497 1,497 1,590 1,590 1,590 1,590 1,598 1,201 1,590 1,598 2,416 1,517 1,718 1,046 6,777 1,109 1,509 1,377 7,128 6,610 7,712 1,509 1,377 7,128 6,610 7,712 1,599 1,377 7,128 6,610 1,597 7,128 6,610 1,597 1,598 1,298 2,702 15,377 1,478 1,297 1,478 1,120 1,489 1,377 1,481 1,491 1,591 1,306 1,598 1,244 1,306 1,599 1,241 1,306 1,499 1,499 1,490 1,490 1,490 1,490 1,490 1,590 1,298 1,310 1,406 1,404 1,590 1,404 1,590 1,404 1,590 1,404 1,590 1,404 1,590 1,544 1,540 1,	Epilepsy	G40, G41	1,270	1,467	1,089	1,071	4,897	1,091	1,280	918	924	4,213	2,361	2,747	2,007	1,995	9,110
Diseases of the eye and adnexa H00-H59 1,544 3,158 6,958 17,451 29,111 1,297 3,021 6,088 23,195 33,601 2,841 6,179 13,046 40,646 62,71 Diseases of the ear and mastoid process H60-H95 3,635 1,811 1,480 1,325 8,251 2,472 1,770 1,509 1,377 7,128 6,107 3,581 2,989 2,702 15,37 Diseases of the circulatory system 100-H99 1,568 13,839 53,337 120,633 189,377 1,478 11,267 28,859 98,245 139,849 3,046 25,106 82,196 218,678 329,22 Hypertensive diseases 110-H15 304 4,262 17,032 38,017 59,615 212 2,741 10,568 35,112 48,633 516 7,003 27,600 73,129 100,824 4,0614 6,009 66 656 656 1,659 2,381 0 216 2,373 4,338 6,92 Acute myocardial infarction 121-H22 0 8,294 2,248 3,285 5,827 0 68 561 2,128 2,757 0 362 2,809 5,413 8,58 Other ischaemic heart disease 123-H25 ~ * 10,085 19,050 29,809 ~ * 2,961 9,657 12,846 ~ * 13,046 28,707 42,659 Pulmonary circulation				*						439	1,432					2,677	3,842
Diseases of the ear and mastoid process   H60-H95   3,635   1,811   1,480   1,325   8,251   2,472   1,770   1,509   1,377   7,128   6,107   3,581   2,989   2,702   15,37   Diseases of the circulatory system   100-H99   1,568   13,839   53,337   120,633   189,377   1,478   11,267   28,859   98,245   139,849   3,046   25,106   82,196   218,878   329,925   Hypertensive diseases   110-H15   304   4,262   17,032   38,017   59,615   212   2,741   10,568   35,112   48,633   516   7,003   27,600   73,129   Angina pectoris   120   0   150   1,717   2,679   4,546   0   66   656   1,659   2,381   0   216   2,373   4,338   6,92   Acute myocardial infarction   121-H22   0   294   2,248   3,285   5,827   0   68   561   2,128   2,757   0   362   2,809   5,413   8,565   Pulmonary heart disease   123-H25   2   2   660   1,194   2,217   105   310   713   1,493   2,621   196   582   1,373   2,687   4,83   pulmonary circulation   144-H9   187   1,472   6,086   2,2801   30,546   126   660   2,454   18,376   21,616   313   2,132   8,540   41,177   52,164   Heart failure   150   26   131   1,460   10,191   11,808   31   78   691   8,924   9,724   57   209   2,151   19,115   21,53   Cerebrovascular disease   160-H69   85   566   2,279   5,506   8,436   70   421   1,362   5,468   7,321   155   987   3,641   10,974   15,75   Atherosclerosis (non-coronary)   170   0   72   1,025   2,535   3,632   2   * * * * * * * * * * 353   1,365   1,765   * * * * * * * 1,378   3,900   727   11,776   Influenza   Pneumonia   J12-J18   835   1,178   1,815   6,310   10,138   755   1,120   1,497   6,032   9,404   1,590   2,298   3,312   12,342   19,544   10,5	related syndromes					Ť						,				ŕ	
Diseases of the circulatory system  100–199  1,568  13,839  53,337  120,633  189,377  1,478  11,267  28,859  98,245  139,849  3,046  25,106  82,196  218,878  329,22  Hypertensive diseases  110–115  304  4,262  17,032  38,017  59,615  212  2,741  10,568  35,112  48,633  516  7,003  27,600  73,129  108,2381  0  216  2,381  2,385  3,285  5,827  0  68  561  2,128  2,757  0  362  2,809  5,413  8,58  Cher ischaemic heart disease  123–125  ~ ** * * * * * * * * * * * * * * * *	Diseases of the eye and adnexa	H00-H59	1,544	3,158	6,958	17,451	29,111	1,297	3,021	6,088	23,195	33,601	2,841	6,179	13,046	40,646	62,712
Hypertensive diseases   110-I15   304   4,262   17,032   38,017   59,615   212   2,741   10,568   35,112   48,633   516   7,003   27,600   73,129   108,24   Angina pectoris   120	Diseases of the ear and mastoid process	H60-H95	3,635	1,811	1,480	1,325	8,251	2,472	1,770	1,509	1,377	7,128	6,107	3,581	2,989	2,702	15,379
Angina pectoris   120	Diseases of the circulatory system	100-199	1,568	13,839	53,337	120,633	189,377	1,478	11,267	28,859	98,245	139,849	3,046	25,106	82,196	218,878	329,226
Acute myocardial infarction   121–122   0   294   2,248   3,285   5,827   0   68   561   2,128   2,757   0   362   2,809   5,413   8,58   Other ischaemic heart disease   123–125   ~ * * 10,085   19,050   29,809   ~ * * 2,961   9,657   12,846   ~ * * 13,046   28,707   42,65   Pulmonary heart disease and diseases of pulmonary circulation   1,472   6,086   2,801   30,546   126   660   2,454   18,376   21,616   313   2,132   8,540   41,177   52,16   Heart failure   150   26   131   1,460   10,191   11,808   31   78   691   8,924   9,724   57   209   2,151   19,115   21,53   Cerebrovascular disease   160–169   85   566   2,279   5,506   8,436   70   421   1,362   5,468   7,321   155   987   3,641   10,974   Atherosclerosis (non-coronary)   170   0   72   1,025   2,535   3,632   ~ * 353   1,365   1,765   ~ * * 1,378   3,900   5,39   Diseases of the respiratory system   100–199   12,914   10,362   16,190   40,059   79,525   10,046   11,818   15,892   38,258   76,014   22,960   22,180   32,082   78,317   155,538   Pheumonia   121–118   835   1,178   1,815   6,310   10,138   755   1,120   1,497   6,032   9,404   1,590   2,298   3,312   12,342   19,544   10,544   1	Hypertensive diseases	I10-I15	304	4,262	17,032	38,017	59,615	212	2,741	10,568	35,112	48,633	516	7,003	27,600	73,129	108,248
Other ischaemic heart disease   123-125	Angina pectoris	120	0	150	1,717	2,679	4,546	0	66	656	1,659	2,381	0	216	2,373	4,338	6,927
Pulmonary heart disease and diseases of pulmonary circulation  Conduction disorders and cardiac arrhythmias   144–149   187   1,472   6,086   22,801   30,546   126   660   2,454   18,376   21,616   313   2,132   8,540   41,177   52,1616   52,1616   52,1616   52,1616   53,177   52,177   52,	Acute myocardial infarction	121-122	0	294	2,248	3,285	5,827	0	68	561	2,128	2,757	0	362	2,809	5,413	8,584
Pulmonary heart disease and diseases of pulmonary circulation  Conduction disorders and cardiac arrhythmias   144–149   187   1,472   6,086   22,801   30,546   126   660   2,454   18,376   21,616   313   2,132   8,540   41,177   52,1616   52,1616   52,1616   52,1616   53,177   52,177   52,		123-125	~	*									~	*			42,655
pulmonary circulation  Conduction disorders and cardiac arrhythmias I44–I49 187 1,472 6,086 22,801 30,546 126 660 2,454 18,376 21,616 313 2,132 8,540 41,177 52,16  Heart failure I50 26 131 1,460 10,191 11,808 31 78 691 8,924 9,724 57 209 2,151 19,117 52,153  Cerebrovascular disease I60–I69 85 566 2,279 5,506 8,436 70 421 1,362 5,468 7,321 155 987 3,641 10,194 15,75  Atherosclerosis (non-coronary) I70 0 72 1,025 2,535 3,632 ~ * 353 1,365 1,765 ~ * 1,378 3,900 5,39  Diseases of the respiratory system J00–J99 12,914 10,362 16,190 40,059 79,525 10,046 11,818 15,892 38,258 76,014 22,960 22,180 32,082 78,317 155,533  Acute upper respiratory infections and influenza  Pneumonia J12–J18 835 1,178 1,815 6,310 10,138 755 1,120 1,497 6,032 9,404 1,590 2,298 3,312 12,342 19,544			91	272				105	310				196	582			4,838
Conduction disorders and cardiac arrhythmias   144–149   187   1,472   6,086   22,801   30,546   126   660   2,454   18,376   21,616   313   2,132   8,540   41,177   52,16   Heart failure   150   26   131   1,460   10,191   11,808   31   78   691   8,924   9,724   57   209   2,151   19,115   21,53   Cerebrovascular disease   160–169   85   566   2,279   5,506   8,436   70   421   1,362   5,468   7,321   155   987   3,614   10,974   15,75   Atherosclerosis (non-coronary)   170   0   72   1,025   2,535   3,632   ~ * * 353   1,365   1,765   ~ * * 1,378   3,900   5,39   Diseases of the respiratory system   100–199   12,914   10,362   16,190   40,059   79,525   10,046   11,818   15,892   38,258   76,014   22,960   22,180   32,082   78,317   155,538   Acute upper respiratory infections and influenza   100–111   4,093   1,109   426   337   5,965   3,132   1,785   504   390   5,811   7,225   2,894   930   727   11,776   Pneumonia   12–118   835   1,178   1,815   6,310   10,138   755   1,120   1,497   6,032   9,404   1,590   2,298   3,312   12,342   19,543    **The condition of the control of						·											
Heart failure   150   26   131   1,460   10,191   11,808   31   78   691   8,924   9,724   57   209   2,151   19,115   21,53   Cerebrovascular disease   160-169   85   566   2,279   5,506   8,436   70   421   1,362   5,468   7,321   155   987   3,641   10,974   15,75   Atherosclerosis (non-coronary)   170   0   72   1,025   2,535   3,632   ~ * * 353   1,365   1,765   ~ * * 1,378   3,900   5,39   Diseases of the respiratory system   J00-J99   12,914   10,362   16,190   40,059   79,525   10,046   11,818   15,892   38,258   76,014   22,960   22,180   32,082   78,317   155,533   Acute upper respiratory infections and influenza   J00-J11   4,093   1,109   426   337   5,965   3,132   1,785   504   390   5,811   7,225   2,894   930   727   11,776   Pneumonia   J12-J18   835   1,178   1,815   6,310   10,138   755   1,120   1,497   6,032   9,404   1,590   2,298   3,312   12,342   19,543      Pneumonia   J12-J18   337   1,815   6,310   10,138   755   1,120   1,497   6,032   9,404   1,590   2,298   3,312   12,342   19,543     Pneumonia   J12-J18   J13-J18   J13	, ,	144-149	187	1,472	6,086	22,801	30,546	126	660	2,454	18,376	21,616	313	2,132	8,540	41,177	52,162
Cerebrovascular disease         I60–I69         85         566         2,279         5,506         8,436         70         421         1,362         5,468         7,321         155         987         3,641         10,974         15,75           Atherosclerosis (non-coronary)         170         0         72         1,025         2,535         3,632         ~         *         353         1,365         1,765         ~         *         1,378         3,900         5,39           Diseases of the respiratory system         J00–J99         12,914         10,362         16,190         40,059         79,525         10,046         11,818         15,892         38,258         76,014         22,960         22,180         32,082         78,317         155,533           Acute upper respiratory infections and influenza         J00–J11         4,093         1,109         426         337         5,965         3,132         1,785         504         390         5,811         7,225         2,894         930         727         11,776           Pneumonia         J12–J18         835         1,178         1,815         6,310         10,138         755         1,120         1,497         6,032         9,404         1,590																	21,532
Atherosclerosis (non-coronary)	Cerebrovascular disease	160-169	85	566	2,279		8,436	70	421	1,362	5,468		155	987	3,641		15,757
Diseases of the respiratory system  J00-J99  12,914  10,362  16,190  40,059  79,525  10,046  11,818  15,892  38,258  76,014  22,960  22,180  32,082  78,317  155,533  Acute upper respiratory infections and influenza  Pneumonia  J12-J18  835  1,178  1,815  6,310  10,138  755  1,120  1,497  6,032  9,404  1,590  2,298  3,312  12,342  19,543																	5,397
Acute upper respiratory infections and influenza Incompanies Incom								10,046	11,818				22,960	22,180			155,539
Pneumonia J12–J18 835 1,178 1,815 6,310 10,138 755 1,120 1,497 6,032 9,404 1,590 2,298 3,312 12,342 19,543	Acute upper respiratory infections and																11,776
		112-118	835	1 178	1 815	6 310	10 138	755	1 120	1 497	6.032	9 404	1 590	2 298	3 312	12 342	19 542
			2,257	624	66	11	2,958	2,048	1,120	77	14	3,406	4,305	1,891	143	25	6,364

TABLE 3.12 Total Discharges (excl. *Maternity*): All-Listed Diagnoses by Sex and Age Group (N) (contd.)

Diagnosis	ICD-10-AM			Male				Fema	le (excl. <i>Mater</i>	nity)			Total Disc	harges (excl. 1	Лaternity)	
	Code	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total
Chronic obstructive pulmonary disease and bronchiectasis	J40-J44, J47	95	538	4,001	13,508	18,142	77	647	4,583	12,249	17,556	172	1,185	8,584	25,757	35,69
Asthma	J45-J46	1,531	1,325	1,340	972	5,168	943	2,113	2,232	1,731	7,019	2,474	3,438	3,572	2,703	12,18
Diseases of the digestive system	K00-K93	8,192	35,460	45,073	45,240	133,965	6,719	37,828	43,129	45,600	133,276	14,911	73,288	88,202	90,840	267,24
Diseases of oesophagus, stomach and duodenum	K20-K31	1,336	11,797	16,269	14,158	43,560	1,058	11,138	15,490	14,223	41,909	2,394	22,935	31,759	28,381	85,46
Diseases of appendix	K35-K38	1,083	1,927	374	141	3,525	872	1,896	314	131	3,213	1,955	3,823	688	272	6,73
Inguinal hernia	K40	532	794	1,229	1.407	3,962	120	58	67	137	382	652	852	1.296	1.544	4,3
Noninfective enteritis and colitis	K50-K52	372	4,818	2,474	1,388	9,052	295	4,659	2,547	1,673	9,174	667	9,477	5,021	3,061	18,2
Alcoholic liver disease	K70	0	448	1,462	477	2,387	0	243	552	200	995	0	691	2,014	677	3,3
Cholelithiasis	K80	33	600	1,121	1,971	3,725	30	2,735	1,920	2,288	6,973	63	3,335	3,041	4,259	10,6
Diseases of the skin and subcutaneous tissue	L00-L99	2.609	14.700	11.019	12.278	40.606	2.019	12.932	10.451	12.268	37.670	4.628	27.632	21.470	24.546	78.2
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02-L03	540	1,668	1,920	2,907	7,035	471	956	1,135	3,067	5,629	1,011	2,624	3,055	5,974	12,6
Diseases of the musculoskeletal system and	M00-M99	2,781	11,633	16,985	17,999	49,398	2,697	12,979	23,175	30,371	69,222	5,478	24,612	40,160	48,370	118,6
connective tissue		·	·	·		ŕ	·		,	·	, i		·	·	·	
Rheumatoid arthritis	M05-M06	0	424	1,250	1,172	2,846	~	*	2,708	2,521	6,296	~	*	3,958	3,693	9,1
Coxarthrosis and Gonarthrosis	M16-M17	~	*	2,157	3,223	5,790	~	*	2,295	4,735	7,365	6	739	4,452	7,958	13,1
Intervertebral disc disorders	M50-M51	7	722	774	583	2,086	7	784	969	854	2,614	14	1,506	1,743	1,437	4,7
Dorsalgia (back pain)	M54	123	2,057	2,656	1,776	6,612	129	2,832	3,893	3,617	10,471	252	4,889	6,549	5,393	17,0
Diseases of the genitourinary system	N00-N99	7,168	17,467	32,714	69,720	127,069	3,418	36,953	35,633	56,005	132,009	10,586	54,420	68,347	125,725	259,0
Chronic kidney disease	N18	1.217	9,672	21,382	44,518	76,789	323	6,988	11,572	30.925	49,808	1,540	16,660	32,954	75,443	126,5
Urolithiasis	N20-N23	114	1,600	1,817	988	4,519	38	994	1,039	445	2,516	152	2,594	2,856	1,433	7,0
Hyperplasia of prostate	N40	0	113	1,740	5,313	7,166	0	0	0	0	0	0	113	1,740	5,313	7,1
Disorders of breast	N60-N64	9	113	41	40	203	20	1.717	1.706	519	3,962	29	1,830	1.747	559	4,1
Inflammatory diseases of female pelvic organs	N70-N77	0	0	0	0	0	51	2,208	822	287	3,368	51	2,208	822	287	3,3
Noninflammatory disorders of female genital tract	N80-N98	0	0	0	0	0	276	18,582	13,109	4,170	36,137	276	18,582	13,109	4,170	36,1
Pregnancy, childbirth and the puerperium <sup>a</sup>	000-099	0	0	0	0	0	+	+	+	+	264	+	ŧ	+	+	2
Certain conditions originating in the perinatal period	P00-P96	+	+	ŧ	+	15,422	+	+	+	+	11,739	ŧ	ŧ	+	+	27,1
Congenital malformations, deformations and chromosomal abnormalities	Q00-Q99	16,036	2,327	1,246	551	20,160	10,955	2,527	1,816	1,107	16,405	26,991	4,854	3,062	1,658	36,5
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	R00-R99	13,491	25,916	34,400	49,578	123,385	11,187	38,555	35,526	50,133	135,401	24,678	64,471	69,926	99,711	258,7
Abdominal and pelvic pain	R10	1,133	3,112	2,365	1,674	8,284	1,477	8,741	4,056	2,345	16,619	2,610	11,853	6,421	4,019	24,9
njury, poisoning and certain other consequences of external causes	S00-T98	8,819	21,483	11,363	11,521	53,186	6,054	9,894	8,323	15,338	39,609	14,873	31,377	19,686	26,859	92,7
Intracranial injury	S06	251	1,090	648	673	2,662	125	324	290	588	1,327	376	1,414	938	1,261	3,9
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	2,523	3,828	1,330	1,428	9,109	1,605	1,090	544	1,662	4,901	4,128	4,918	1,874	3,090	14,0
Fracture of femur	S72	148	183	268	1,259	1,858	62	59	340	3,207	3,668	210	242	608	4,466	5,5
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36-T65	278	1,962	697	219	3,156	351	2,198	957	300	3,806	629	4,160	1,654	519	6,9
External causes of morbidity and mortality	U50-Y98	22,383	44,544	23,863	28,834	119,624	15,319	22,628	19,914	40,123	97,984	37,702	67,172	43,777	68,957	217,6
Transport accidents	V01-V99	610	1,698	614	313	3,235	395	796	337	261	1,789	1,005	2,494	951	574	5,0
Factors influencing health status and contact with health services b	U00–U49, Z00–Z99	24,729	58,590	136,878	220,718	440,915	19,305	68,388	130,149	161,845	379,687	44,034	126,978	267,027	382,563	820,6
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	2,813	5,419	28,950	47,035	84,217	2,781	11,993	44,641	34,485	93,900	5,594	17,412	73,591	81,520	178,11

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 Discharges reported within this chapter were not assigned admission type of *Maternity*. Their admission was for reasons other than their obstetric condition, but they received obstetric care during this episode of care. See Section Four for details of morbidity analysis for *Maternity* discharges.

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

# 3.4.4 Total Discharges (excl. *Maternity*) by Principal Procedure, Sex and Age Group

In 2013, over 83 per cent of total discharges (excl. *Maternity*) had a principal procedure recorded (see Table 3.4). Discussion of procedures is confined to ACHI chapter level.

Table 3.13 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 22.2 per cent of total discharges (excl. Maternity) with a principal procedure reported. Over 31 per cent of discharges aged less than 15 years, 22.4 per cent aged between 45–64 years and 23.3 percent aged 65 years and older had a procedure from this chapter recorded as a principal procedure. For the 15–44 year age group, the most common principal procedure was from the chapter procedures on digestive system, at 19.1 per cent.
- The chapter *non-invasive, cognitive and other interventions, not elsewhere classified* accounted for 20.4 per cent of all principal procedures for male discharges and 24.1 percent of all principal procedures for female discharges.
- Over 65 per cent of total discharges (excl. *Maternity*) with a principal procedure from the chapter *procedures on cardiovascular system* were male discharges.
- Over 74 per cent of total discharges (excl. Maternity) with a principal procedure from the chapter procedures on endocrine system were female discharges (excl. Maternity).
- Over 67 per cent of total discharges (excl. *Maternity*) with a principal procedure from the chapter *procedures on eye and adnexa* were aged 65 years and over.

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

Table 3.14 presents the acute in-patient mean length of stay for principal procedure by sex and age group. The analysis presented here is limited to the mean length of stay for acute in-patient discharges (excl. *Maternity*), with a length of stay of 30 days or less and excluding day patients. This measure includes pre-operative and post-operative length of stay. It should also be noted that this analysis by mean 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 mean length of stay presented in Table 3.14, in the absence of information on discharge destination.<sup>29</sup>

• At chapter level, the longest acute in-patient mean length of stay was reported for *radiation oncology procedures* at 10.0 days, with male and female discharges

reporting at 9.8 and 10.1 days respectively for this chapter. It should be noted that the majority of discharges with radiation oncology recorded as a principal procedure were day patients.<sup>30</sup>

- The longest acute in-patient mean length of stay for those less aged than 15 years was reported for the chapter procedures on respiratory system at 9.3 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 2.0 days for total discharges (excl. Maternity); when analysed by age group the length of stay increased as discharges got older for both chapters.

#### 3.4.6 All-Listed Procedures by Sex and Age Group

Table 3.15 provides details of all-listed procedures reported by sex and age group for total discharges (excl. Maternity). 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 (excl. Maternity).

- Over 2 million procedures were reported for total discharges (excl. *Maternity*).
- Procedures within the chapter non-invasive, cognitive and other interventions, not elsewhere classified accounted for 895,061 of all-listed procedures or 42.2 per cent of all procedures reported for total discharges (excl. Maternity).
- Total discharges (excl. Maternity) aged 65 years and older accounted for over 65 per cent of procedures from the chapter procedures on eye and adnexa.
- Total discharges (excl. Maternity) aged less than 15 years accounted for over 47 per cent of procedures from the chapter procedures on ear and mastoid process.

Activity from the St. Luke's Radiation Oncology Network centres in Beaumont and St. James's Hospitals, estimated at over 47,000 day cases, are not included in this report as these data were not submitted to HIPE.

 TABLE 3.13 Total Discharges (excl. Maternity): Principal Procedure by Sex and Age Group (N)

District Description									- /				- · · · · ·			
Principal Procedure	Procedure			Male					e (excl. <i>Mate</i>					charges (excl.		
	Block	< 15	15–44	45–64	≥65	Total	< 15	15-44	45–64	≥65	Total	< 15	15–44	45-64	≥65	Total
Total Discharges (excl. Maternity)	-	73,837	146,233	212,964	280,618	713,652	57,577	180,870	220,029	249,540	708,016	131,414	327,103	432,993	530,158	1,421,668
All Principal Procedures	0001–2016	45,069	120,768	184,148	244,408	594,393	33,393	147,377	192,735	213,919	587,424	78,462	268,145	376,883	458,327	1,181,817
Procedures on nervous system	0001-0086	828	3,335	3,718	2,350	10,231	667	4,206	5,368	3,661	13,902	1,495	7,541	9,086	6,011	24,133
Lumbar puncture	0030	621	495	292	202	1,610	487	915	416	202	2,020	1,108	1,410	708	404	3,630
Procedures on endocrine system	0110-0129	24	143	204	119	490	36	512	577	315	1,440	60	655	781	434	1,930
Procedures on eye and adnexa	0160-0256	777	1,672	4,689	11,360	18,498	737	1,390	3,462	15,124	20,713	1,514	3,062	8,151	26,484	39,211
Lens extraction	0195-0202	46	134	812	3,615	4,607	35	104	834	5,231	6,204	81	238	1,646	8,846	10,811
Procedures on ear and mastoid process	0300-0333	2,186	1,181	832	570	4,769	1,575	1,099	806	515	3,995	3,761	2,280	1,638	1,085	8,764
Myringotomy	0309	1,470	201	143	101	1,915	979	149	133	85	1,346	2,449	350	276	186	3,261
Procedures on nose, mouth and pharynx	0370-0422	2,809	3,022	2,187	1,519	9,537	2,298	3,307	1,969	1,364	8,938	5,107	6,329	4,156	2,883	18,475
Tonsillectomy or adenoidectomy	0412	1,692	512	47	8	2,259	1,583	1,087	43	6	2,719	3,275	1,599	90	14	4,978
Dental services	0450-0490	2,126	744	186	64	3,120	1,967	1,054	152	59	3,232	4,093	1,798	338	123	6,352
Procedures on respiratory system	0520-0570	1,987	1,941	3,661	4,938	12,527	1,429	1,514	3,355	4,148	10,446	3,416	3,455	7,016	9,086	22,973
Bronchoscopy with/without biopsy	0543-0544, 41892-01[0545]	241	740	1,519	2,063	4,563	175	636	1,603	1,722	4,136	416	1,376	3,122	3,785	8,699
Procedures on cardiovascular system	0600-0777	731	7,177	18,309	14,124	40,341	755	3,840	8,763	8,130	21,488	1,486	11,017	27,072	22,254	61,829
Coronary angiography	0668	156	745	4,511	4,613	10,025	157	359	2,348	3,049	5,913	313	1,104	6,859	7,662	15,938
Transluminal coronary angioplasty with/without stenting	0670-0671	0	130	1,476	1,361	2,967	0	22	314	580	916	0	152	1,790	1,941	3,883
CABG	0672-0679	0	*	*	388	708	0	~	*	83	119	0	19	337	471	827
Leg varicose vein ligation	0727-0728	~	343	525	*	1,038	0	924	856	293	2,073	~	1,267	1,381	*	3,111
Procedures on blood and blood-forming	0800-0817	147	476	826	995	2,444	109	575	787	827	2,298	256	1,051	1,613	1,822	4,742
organs			., •	0_0	332	<b>-</b> ,	-05	5.5	, , ,	027	_,		_,00_	2,020	_,0	.,,
Procedures on digestive system	0850-1011	2,838	22,795	29,743	26,901	82,277	2,064	28,368	29,870	24,973	85,275	4,902	51,163	59,613	51,874	167,552
Fibreoptic colonoscopy with/without excision	0905, 0911	48	7,148	10,964	10,398	28,558	44	8,528	11,635	9,626	29,833	92	15,676	22,599	20,024	58,391
Appendicectomy	0926	1,066	1,876	305	86	3,333	846	1,921	274	78	3,119	1,912	3,797	579	164	6,452
Procedures for haemorrhoids	0941	~	985	923	*	2,188	~	932	723	*	1,946	~	1,917	1,646	*	4,134
Cholecystectomy	0965	6	353	542	358	1,259	15	1,773	1,135	427	3,350	21	2,126	1,677	785	4,609
Division of abdominal adhesions	0986	9	46	41	70	166	10	352	111	75	548	19	398	152	145	714
Repair of inguinal and obstructed hernia	0990, 0997	408	764	1.174	1,133	3,479	103	71	87	144	405	511	835	1,261	1,277	3.884
Panendoscopy with/without excision	1005-1008	365	8.576	11.134	9,691	29,766	345	10.571	12.299	10.484	33,699	710	19,147	23,433	20.175	63,465
Procedures on urinary system	1040-1129	1,459	17,948	36,504	64,916	120,827	451	14,169	21,890	40,797	77,307	1,910	32,117	58,394	105,713	198,134
Examination procedures on bladder (includes cystoscopy)	1089	69	1,160	2,711	5,215	9,155	45	1,300	1,894	2,254	5,493	114	2,460	4,605	7,469	14,648
Procedures on male genital organs	1160-1203	+	+	+	+	+	+	+	+	+	+	3,535	1,553	2,987	2,702	10,777
Prostatectomy	1165–1167	0	12	486	735	1,233	0	0	0	0	0	0	12	486	735	1,233
Circumcision	30653-00[1196]	1,721	514	242	111	2,588	0	0	0	0	0	1,721	514	242	111	2,588
Gynaecological procedures	1240-1299	Ó	0	0	0	0	95	19.448	11,656	2,579	33.778	95	19.448	11,656	2.579	33,778
Oophorectomy and salpingo-oophorectomy	1243, 1252	0	0	0	0	0	13	307	332	103	755	13	307	332	103	755
Salpingectomy	1251	0	0	0	0	0	~	95	*	0	118	~	95	*	0	118
Examination procedures on uterus	1259	0	0	0	0	0	~	2,058	2,815	*	5,421	~	2,058	2,815	*	5,421
Curettage and evacuation of uterus	1265	0	0	0	0	0	0	1,381	1,900	355	3,636	0	1.381	1,900	355	3,636
Hysterectomy	1268–1269	0	0	0	0	0	~	*	1,409	560	2,493	~	*	1,409	560	2,493
Repair of prolapse of uterus, pelvic floor or	1283	0	0	0	0	0	0	78	416	307	801	0	78	416	307	801
enterocele					_	-		,,,		307				.20	•	
Obstetric procedures	1330-1347	2 000	11.043	0 100	7.200	22.257		C 440	11 240	12 561	22.460	C 000	10 201			9 CF 42C
Procedures on musculoskeletal system	1360–1579	3,886	11,843	9,160	7,368	32,257	2,917	6,448	11,240	12,564	33,169	6,803 *	18,291	20,400	19,932	65,426
Arthroplasty of hip	1489	0	121	791	1,479	2,391	~		653	2,091	2,830			1,444	3,570	5,221
Arthroplasty of knee	1518–1519	0	24	374	545	943	0	24	453	882	1,359	0	48	827	1,427	2,302
Dermatological and plastic procedures	1600-1718	3,731	16,705	11,499	12,640	44,575	2,943	16,520	12,009	11,226	42,698	6,674	33,225	23,508	23,866	87,273
Excision of lesion(s) of skin and subcutaneous tissue	1620	609	5,359	5,009	6,680	17,657	558	6,973	5,564	5,777	18,872	1,167	12,332	10,573	12,457	36,529

TABLE 3.13 Total Discharges (excl. Maternity): Principal Procedure by Sex and Age Group (N) (contd.)

Principal Procedure	Procedure			Male				Femal	e (excl. <i>Mate</i>	ernity)			Total Discl	narges (excl.	Maternity)	
	Block	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total
Other debridement of skin and subcutaneous tissue	1628	203	495	320	258	1,276	137	143	148	216	644	340	638	468	474	1,92
Skin graft	1640-1650	22	66	48	66	202	18	27	27	56	128	40	93	75	122	330
Procedures on breast	1740-1759	~	81	*	45	170	15	3,584	4,165	1,749	9,513	*	3,665	4,207	*	9,683
Breast biopsy	1743-1744	0	26	27	32	85	11	2,488	2,704	1,270	6,473	11	2,514	2,731	1,302	6,558
Mastectomy	1747-1748	0	20	~	*	36	0	184	415	268	867	0	204	*	*	903
Radiation oncology procedures <sup>b</sup>	1786-1799	385	1,379	12,323	22,000	36,087	356	4,086	16,772	10,537	31,751	741	5,465	29,095	32,537	67,838
Non-invasive, cognitive and other	1820-1922	13,425	20,006	35,459	52,519	121,409	11,370	27,209	48,788	54,163	141,530	24,795	47,215	84,247	106,682	262,939
interventions, not elsewhere classified																
Administration of blood and blood products	1893	1,777	1,144	2,310	6,124	11,355	1,147	1,157	2,420	4,919	9,643	2,924	2,301	4,730	11,043	20,998
Conduction anaesthesia	1909	*	19	18	*	50	~	10	20	*	39	8	29	38	14	89
Cerebral anaesthesia	1910	*	*	14	19	65	~	*	24	23	73	17	41	38	42	138
Imaging services	1940-2016	4,195	8,767	11,819	19,278	44,059	3,606	10,041	11,105	21,188	45,940	7,801	18,808	22,924	40,466	89,999
Computerised tomography scan	1952-1966	1,024	6,907	8,996	15,671	32,598	753	7,400	8,629	17,510	34,292	1,777	14,307	17,625	33,181	66,890
Magnetic resonance imaging	2015	1,843	959	1,153	1,395	5,350	1,502	1,636	1,232	1,441	5,811	3,345	2,595	2,385	2,836	11,161

#### 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 Discharges reported within this chapter were not assigned admission type of *Maternity*. Their admission was for reasons other than their obstetric condition, but they received obstetric care during this episode of care. See Section Four for details of morbidity analysis for *Maternity* discharges.
- b Activity from the St. Luke's Radiation Oncology Network centres in Beaumont and St. James's Hospitals, estimated at over 47,000 day cases, are not included in this report as these data were not submitted to HIPE.

 TABLE 3.14
 Acute In-Patient Discharges (excl. Maternity): Mean Length of Stay (Days) by Principal Procedure, Sex and Age Group<sup>a</sup>

Principal Procedure	Procedure			Male				Femal	e (excl. <i>Mate</i>	rnity)		Total 4	cute In-Patie	nt Discharge	s (excl. Mate	ernity)
	Block	< 15	15-44	45-64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Acute In-Patient Discharges	-	2.7	3.0	4.4	6.3	4.4	2.8	2.8	4.1	6.5	4.5	2.8	2.9	4.2	6.4	4.4
All Principal Procedures	0001–2016	3.8	3.7	5.4	7.6	5.7	3.9	3.7	5.1	7.9	5.8	3.8	3.7	5.3	7.8	5.7
Procedures on nervous system	0001-0086	4.8	4.6	6.0	8.6	5.7	5.1	4.5	5.9	7.8	5.6	4.9	4.6	5.9	8.2	5.6
Lumbar puncture	0030	4.6	4.5	6.5	10.6	5.6	4.6	4.0	5.5	9.9	5.0	4.6	4.2	5.9	10.3	5.2
Procedures on endocrine system	0110-0129	3.9	3.6	4.2	5.5	4.3	2.0	3.2	3.3	4.6	3.5	2.7	3.3	3.6	4.8	3.7
Procedures on eye and adnexa	0160-0256	2.2	2.6	3.0	3.0	2.9	2.1	2.6	2.8	2.9	2.8	2.2	2.6	3.0	3.0	2.8
Lens extraction	0195-0202	2.2	2.7	2.7	2.3	2.4	2.0	2.8	2.4	2.2	2.3	2.1	2.7	2.5	2.2	2.3
Procedures on ear and mastoid process	0300-0333	1.5	2.2	2.2	3.6	2.0	1.4	2.0	2.6	2.8	1.9	1.4	2.1	2.4	3.3	2.0
Myringotomy	0309	1.3	2.6	^	۸.	1.5	1.4	2.5	3.6	^	1.7	1.3	2.6	3.2	^	1.6
Procedures on nose, mouth and pharynx	0370-0422	1.3	1.9	3.3	4.8	2.2	1.3	1.7	2.9	4.3	1.9	1.3	1.8	3.2	4.6	2.0
Tonsillectomy or adenoidectomy	0412	1.2	1.3	2.9	4.7	1.3	1.2	1.3	1.8	2.3	1.3	1.2	1.3	2.4	3.5	1.3
Dental services	0450-0490	1.7	2.3	2.6	2.6	2.0	1.4	2.6	4.3	Σ.5	2.4	1.5	2.5	3.3	5.2	2.2
Procedures on respiratory system	0520-0570	9.3	7.2	8.4	10.0	9.0	9.3	7.7	8.6	9.8	9.1	9.3	7.4	8.5	9.9	9.1
Bronchoscopy with/without biopsy	0543-0544,	7.1	8.4	9.5	10.7	9.7	6.6	8.6	9.4	10.6	9.6	6.9	8.5	9.4	10.6	9.6
Brotterioscopy with, without bropsy	41892-1 [0545]	7.1	0.4	5.5	10.7	5.7	0.0	0.0	5.4	10.0	5.0	0.5	6.5	J. <del>4</del>	10.0	5.0
Procedures on cardiovascular system	0600-0777	7.6	6.4	5.2	6.6	6.1	7.5	5.6	5.1	6.7	6.1	7.6	6.1	5.2	6.6	6.1
Coronary angiography	0668	2.9	3.5	4.2	5.3	4.6	2.6	4.2	3.8	5.5	4.6	2.8	3.7	4.1	5.3	4.6
Transluminal coronary angioplasty with/without	0670-0671	-	2.8	2.9	3.6	3.2	-	3.2	3.2	3.8	3.6	-	2.9	3.0	3.7	3.3
stenting																
CABG	0672-0679	-	10.2	12.1	13.7	12.9	-	~	13.0	13.5	13.3	-	10.2	12.2	13.6	13.0
Leg varicose vein ligation	0727-0728	-	1.2	1.0	1.7	1.2	-	1.1	1.1	1.4	1.1	-	1.1	1.1	1.5	1.2
Procedures on blood and blood-forming organs	0800-0817	7.5	7.8	10.6	9.5	9.3	8.0	5.5	7.8	8.7	7.6	7.7	6.6	9.2	9.2	8.5
Procedures on digestive system	0850-1011	3.9	4.0	6.0	7.8	5.9	3.9	3.9	5.8	8.3	5.8	3.9	3.9	5.9	8.1	5.9
Fibreoptic colonoscopy with/without excision	0905, 0911	5.9	5.7	6.3	7.0	6.5	8.9	5.5	6.1	7.5	6.7	7.6	5.6	6.2	7.2	6.6
Appendicectomy	0926	3.2	2.8	3.7	6.9	3.1	3.2	2.9	4.3	6.2	3.2	3.2	2.9	4.0	6.5	3.1
Procedures for haemorrhoids	0941	-	2.2	2.0	3.8	2.4	~	1.8	2.0	3.4	2.1	~	2.0	2.0	3.6	2.3
Cholecystectomy	0965	^	3.3	3.6	5.3	4.1	4.3	2.7	2.7	4.5	3.0	3.9	2.8	3.0	4.9	3.3
Division of abdominal adhesions	0986	9.2	5.9	10.0	12.4	9.8	6.6	3.8	6.4	11.2	5.8	8.0	4.1	7.5	11.7	6.9
Repair of inguinal and obstructed hernia	0990, 0997	1.8	1.6	1.9	2.8	2.2	1.5	2.2	3.1	5.5	4.0	1.8	1.7	2.0	3.1	2.5
Panendoscopy with/without excision	1005-1008	2.7	4.0	6.0	8.2	6.6	2.7	4.6	5.7	8.3	6.7	2.7	4.3	5.8	8.2	6.6
Procedures on urinary system	1040-1129	4.5	4.1	5.4	6.7	5.8	5.3	4.2	4.6	7.0	5.3	4.8	4.1	5.0	6.8	5.6
Examination procedures on bladder (includes cystoscopy)	1089	2.5	3.6	5.0	6.6	5.9	3.8	3.9	4.2	7.0	5.5	2.9	3.7	4.7	6.7	5.7
Procedures on male genital organs	1160-1203	+	+	+	+	+	+	+	+	+	+	1.3	2.2	4.8	5.6	3.8
Prostatectomy	1165-1167	-	6.4	5.4	5.8	5.6	-	-	-	-	-	-	6.4	5.4	5.8	5.6
Circumcision	30653-00 [1196]	1.2	1.4	1.9	2.9	1.6	-	-	-	-	-	1.2	1.4	1.9	2.9	1.6
Gynaecological procedures	1240-1299	-	-	-	-	-	2.7	2.9	4.1	4.8	3.8	2.7	2.9	4.1	4.8	3.8
Oophorectomy and salpingo-oophorectomy	1243, 1252	-	-	-	-	-	3.0	3.7	3.1	5.2	3.7	3.0	3.7	3.1	5.2	3.7
Salpingectomy	1251	-	-	-	-	-	٨	2.2	2.7	-	2.3	٨	2.2	2.7	-	2.3
Examination procedures on uterus	1259	-	-	-	-	-	-	1.9	1.9	3.5	2.3	-	1.9	1.9	3.5	2.3
Curettage and evacuation of uterus	1265	-	-	-	-	-	-	1.4	1.9	2.8	1.9	-	1.4	1.9	2.8	1.9
Hysterectomy	1268-1269	-	-	-	-	-	٨	5.0	5.4	6.0	5.4	~	5.0	5.4	6.0	5.4
Repair of prolapse of uterus, pelvic floor or enterocele	1283	-	-	-	-	-	-	3.3	3.7	3.9	3.8	-	3.3	3.7	3.9	3.8
Obstetric procedures <sup>b</sup>	1330-1347	-	-	-	-	-	ŧ	+	+	ŧ	ŧ	+	+	ŧ	ŧ	ŧ
Procedures on musculoskeletal system	1360-1579	1.9	2.6	4.5	7.7	4.2	1.9	2.7	4.0	7.7	5.2	1.9	2.6	4.3	7.7	4.7
Arthroplasty of hip	1489	-	4.6	5.0	8.1	6.9	٨	4.6	5.5	9.4	8.3	٨	4.6	5.3	8.8	7.6
Arthroplasty of knee	1518-1519	-	4.6	4.9	5.7	5.3	-	5.2	5.0	5.9	5.6	-	4.9	4.9	5.8	5.5

**TABLE 3.14** Acute In-Patient Discharges (excl. *Maternity*): Mean Length of Stay (Days) by Principal Procedure, Sex and Age Group<sup>a</sup> (contd.)

Principal Procedure	Procedure			Male				Female	e (excl. <i>Mate</i> i	rnity)		Total A	Acute In-Patio	ent Discharge	s (excl. Mate	ernity)
	Block	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total
Dermatological and plastic procedures	1600-1718	2.7	2.7	4.5	5.6	3.4	2.7	2.7	4.2	7.2	3.8	2.7	2.7	4.4	6.3	3.6
Excision of lesion(s) of skin and subcutaneous tissue	1620	2.0	1.5	3.0	3.5	3.0	1.1	1.6	2.4	4.0	3.1	1.7	1.6	2.8	3.7	3.0
Other debridement of skin and subcutaneous tissue	1628	1.5	3.7	6.0	9.5	5.0	1.5	4.2	7.5	11.1	6.5	1.5	3.8	6.5	10.2	5.5
Skin graft	1640-1650	7.8	5.7	5.9	7.2	6.3	11.6	6.1	9.4	10.2	9.3	9.4	5.8	7.0	9.0	7.6
Procedures on breast	1740-1759	٨	1.8	1.8	4.0	2.4	2.8	3.0	3.2	3.4	3.2	2.4	3.0	3.2	3.4	3.2
Breast biopsy	1743-1744	-	٨	^	^	1.6	^	2.1	2.0	2.5	2.2	^	2.1	2.0	2.5	2.2
Mastectomy	1747-1748	-	2.6	^	5.3	3.8	-	4.4	4.6	4.5	4.5	-	4.4	4.6	4.6	4.5
Radiation oncology procedures <sup>c</sup>	1786-1799	-	7.7	8.7	10.8	9.8	-	6.2	9.5	12.7	10.1	-	6.5	9.1	11.7	10.0
Non-invasive, cognitive and other interventions, not elsewhere classified	1820–1922	4.3	4.8	5.8	8.1	6.5	4.5	4.7	6.2	8.9	7.2	4.4	4.8	6.0	8.5	6.8
Administration of blood and blood products	1893	3.3	5.1	6.3	6.8	6.2	3.9	3.6	5.6	7.1	6.1	3.6	4.1	5.9	7.0	6.2
Conduction anaesthesia	1909	-	^	^	٨	2.3	-	^	٨	^	5.7	-	٨	^	^	3.7
Cerebral anaesthesia	1910	^	3.9	^	6.7	5.8	~	^	^	6.8	5.9	٨	3.9	6.4	6.7	5.8
Imaging services	1940-2016	3.6	3.6	5.1	7.5	5.7	3.7	3.4	4.8	7.5	5.7	3.6	3.5	4.9	7.5	5.7
Computerised tomography scan	1952-1966	2.7	3.2	4.8	7.3	5.5	2.8	3.1	4.5	7.3	5.5	2.7	3.1	4.6	7.3	5.5
Magnetic resonance imaging	2015	3.9	5.6	7.0	9.2	7.0	4.1	5.0	6.5	9.3	6.6	4.0	5.2	6.7	9.3	6.8

- Notes: ^ Denotes that length of stay calculation was based on five or fewer discharges.
  - † Denotes that no breakdown is provided.
  - Mean length of stay cannot be calculated as no acute in-patients (length of stay of 30 days or less) are reported.
  - a Includes mean length of stay for acute in-patients (length of stay of 30 days or less) only. Excludes extended stay in-patients and day patients.
  - b Discharges reported within this chapter were not assigned admission type of Maternity. Their admission was for reasons other than their obstetric condition, but they received obstetric care during this episode of care. See Section Four for details of morbidity analysis for Maternity discharges.
  - c Activity from the St. Luke's Radiation Oncology Network centres in Beaumont and St. James's Hospitals, estimated at over 47,000 day cases, are not included in this report as these data were not submitted to HIPE.

 TABLE 3.15
 Total Discharges (excl. Maternity): All-Listed Procedures by Sex and Age Group (N)

All Procedures	Procedure			Male				Fomal	e (excl. <i>Mat</i>	ernity)			Total Diccl	harges (excl.	Maternity	
All Procedures	Block	< 15	15-44	45–64	≥65	Total	< 15	15–44	45–64	ernity) ≥65	Total	< 15	15–44	45–64	<u>Muternity)</u> ≥65	Total
Total Discharges (excl. Maternity)	DIOCK	73,837	146,233	212,964	280,618	713,652	57,577	180,870	220,029	249,540	708,016	131,414	327,103	432,993	530,158	1,421,668
All Procedures	0001–2016	98.448	209,475	318,607	432,527	1,059,057	73,190	257,221	331,112	398,568	1,060,091	171,638	466,696	649,719	831,095	2.119.148
Procedures on nervous system	0001-0086	1,819	4,507	5,068	3,328	14,722	1,447	5,619	6,916	5,004	18,986	3,266	10,126	11,984	8,332	33,708
Lumbar puncture	0030	1,407	929	594	451	3.381	1.128	1.503	768	450	3.849	2,535	2,432	1.362	901	7.230
Procedures on endocrine system	0110-0129	28	158	231	155	572	39	524	612	343	1,518	2,333 <b>67</b>	682	843	498	2,090
Procedures on eye and adnexa	0160-0256	1,032	1,960	5,200	12,084	20,276	937	1,596	3,832	15,807	22,172	1,969	3,556	9,032	27,891	42,448
Lens extraction	0195-0202	55	137	830	3,653	4,675	37	109	845	5,275	6.266	92	246	1,675	8,928	10.941
Procedures on ear and mastoid process	0300-0333	2,979	1,318	930	651	5,878	2,125	1,222	888	5,273 <b>570</b>	4,805	5,104	2,540	1,818	1,221	10,683
Myringotomy	0309	1,925	224	161	111	2,421	1,302	173	148	94	1,717	3,227	397	309	205	4,138
, , ,	0370-0422	3,348	3,753	2,863	1,897	11,861	2,653	3,852	2,461	1,678	10,644	6,001	7,605	5,324	3,575	22,505
Procedures on nose, mouth and pharynx	0412	1.834	516	<b>2,863</b> 54	1,897	2,415	1.679	1.092	<b>2,461</b> 45	6	2.822	3.513	1,608	99	<b>3,373</b> 17	5,237
Tonsillectomy or adenoidectomy		1,634 <b>4,447</b>	1,264	321	105	6,137	3,751	1,092 1,411	216	81	5,459	8,198	2,675	537	186	11,596
Dental services	0450-0490	•	•			•					•		•			
Procedures on respiratory system	0520-0570	3,282	2,932	5,906	8,103	20,223	2,362	2,125	4,742	6,170	15,399	5,644	5,057	10,648	14,273	35,622
Bronchoscopy with/without biopsy	0543–0544, 41892-01[0545]	357	859	1,817	2,497	5,530	239	709	1,826	1,972	4,746	596	1,568	3,643	4,469	10,276
Procedures on cardiovascular system	0600-0777	2,394	8,888	25,207	22,737	59,226	2,068	4,946	11,822	12,746	31,582	4,462	13,834	37,029	35,483	90,808
Coronary angiography	0668	189	897	5,910	6,007	13,003	186	399	2,693	3,659	6,937	375	1,296	8,603	9,666	19,940
Transluminal coronary angioplasty with/without stenting	0670-0671	~	*	2,015	1,906	4,113	~	*	413	792	1,247	~	*	2,428	2,698	5,360
CABG	0672-0679	0	37	676	846	1,559	~	*	72	188	268	~	*	748	1,034	1,827
Leg varicose vein ligation	0727-0728	~	345	529	*	1,046	0	945	864	*	2,106	~	1,290	1,393	*	3,152
Procedures on blood and blood-forming organs	0800-0817	330	684	1,312	1,571	3,897	281	1,223	2,471	1,974	5,949	611	1,907	3,783	3,545	9,846
Procedures on digestive system	0850-1011	3,309	27,804	38,039	35,970	105,122	2,388	35,164	38,073	33,134	108,759	5,697	62,968	76,112	69,104	213,881
Fibreoptic colonoscopy with/without excision	0905, 0911	169	9,069	14,031	13,593	36,862	140	11,096	14,987	12,728	38,951	309	20,165	29,018	26,321	75,813
Appendicectomy	0926	1,090	1,907	337	111	3,445	863	2,027	391	146	3,427	1,953	3,934	728	257	6,872
Procedures for haemorrhoids	0941	~	1,815	1,774	*	4,201	~	1,684	1,424	*	3,723	~	3,499	3,198	*	7,924
Cholecystectomy	0965	7	373	604	412	1,396	15	1,790	1,186	456	3,447	22	2,163	1,790	868	4,843
Division of abdominal adhesions	0986	23	194	239	267	723	24	901	442	337	1,704	47	1,095	681	604	2,427
Repair of inguinal and obstructed hernia	0990, 0997	423	777	1,192	1,150	3,542	105	75	91	151	422	528	852	1,283	1,301	3,964
Panendoscopy with/without excision	1005-1008	388	9,315	12,537	11,927	34,167	360	11,499	13,691	12,407	37,957	748	20,814	26,228	24,334	72,124
Procedures on urinary system	1040-1129	1,655	18,835	38,486	68,932	127,908	570	14,989	23,303	42,334	81,196	2,225	33,824	61,789	111,266	209,104
Examination procedures on bladder (includes cystoscopy)	1089	84	1,235	2,868	5,562	9,749	59	1,481	2,225	2,471	6,236	143	2,716	5,093	8,033	15,985
Procedures on male genital organs	1160-1203	+	+	+	ŧ	+	ŧ	+	+	+	+	3,865	1,690	3,228	2,944	11,727
Prostatectomy	1165-1167	0	14	507	790	1,311	0	0	0	0	0	0	14	507	790	1,311
Circumcision	30653-00[1196]	1,796	522	253	121	2,692	0	0	0	0	0	1,796	522	253	121	2,692
Gynaecological procedures	1240–1299	0	0	0	0	0	129	33,232	20,260	4,093	57,714	129	33,232	20,260	4,093	57,714
Oophorectomy and salpingo-oophorectomy	1243, 1252	0	0	0	0	0	14	363	396	144	917	14	363	396	144	917
Salpingectomy	1251	0	0	0	0	0	*	140	38	~	188	*	140	38	~	188
Examination procedures on uterus	1259	0	0	0	0	0	~	3,799	4,426	*	9,048	~	3,799	4,426	*	9,048
Curettage and evacuation of uterus	1265	0	0	0	0	0	0	3,395	4,430	853	8,678	0	3,395	4,430	853	8,678
Hysterectomy	1268–1269	0	0	0	0	0	~	*	1,452	589	2,577	~	*	1,452	589	2,577
Repair of prolapse of uterus, pelvic floor or enterocele	1283	0	0	0	0	0	~	*	795	592	1,528	~	*	795	592	1,528
Obstetric procedures <sup>a</sup>	1330-1347	0	0	0	0	0	+	+	+	+	+	+	+	+	+	10
Procedures on musculoskeletal system	1360-1579	4,987	14,671	11,410	9,066	40,134	3,915	8,120	13,880	14,987	40,902	8,902	22,791	25,290	24,053	81,036
Arthroplasty of hip	1489	0	122	796	1,498	2,416	~	*	662	2,123	2,872	~	*	1,458	3,621	5,288
Arthroplasty of knee	1518–1519	0	24	375	547	946	0	24	453	884	1,361	0	48	828	1,431	2,307
Dermatological and plastic procedures	1600-1718	5,470	19,282	13,950	15,987	54,689	4,262	18,281	13,831	13,823	50,197	9,732	37,563	27,781	29,810	104,886

 TABLE 3.15
 Total Discharges (excl. Maternity): All-Listed Procedures by Sex and Age Group (N) (contd.)

All Procedures	Procedure			Male				Femal	le (excl. <i>Mate</i>	ernity)			Total Disch	narges (excl.	Maternity)	
	Block	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total
Excision of lesion(s) of skin and subcutaneous tissue	1620	655	5,883	5,673	7,717	19,928	601	7,721	6,266	6,590	21,178	1,256	13,604	11,939	14,307	41,106
Other debridement of skin and subcutaneous tissue	1628	501	1,411	953	783	3,648	379	420	448	603	1,850	880	1,831	1,401	1,386	5,498
Skin graft	1640-1650	63	187	242	539	1,031	56	95	144	460	755	119	282	386	999	1,786
Procedures on breast	1740-1759	~	88	*	49	185	16	4,086	5,319	2,115	11,536	*	4,174	5,365	*	11,721
Breast biopsy	1743-1744	0	27	29	34	90	11	2,585	2,849	1,358	6,803	11	2,612	2,878	1,392	6,893
Mastectomy	1747-1748	0	20	~	*	36	0	184	*	*	876	0	204	426	282	912
Radiation oncology procedures <sup>b</sup>	1786-1799	494	1,748	15,662	25,345	43,249	412	4,853	18,627	11,902	35,794	906	6,601	34,289	37,247	79,043
Non-invasive, cognitive and other interventions, not elsewhere classified	1820–1922	51,449	82,019	121,671	179,299	434,438	39,255	95,753	137,637	187,978	460,623	90,704	177,772	259,308	367,277	895,061
Administration of blood and blood products	1893	3,144	2,137	4,861	11,015	21,157	2,293	2,054	4,308	9,414	18,069	5,437	4,191	9,169	20,429	39,226
Conduction anaesthesia	1909	234	1,580	3,244	5,346	10,404	76	1,118	3,359	6,747	11,300	310	2,698	6,603	12,093	21,704
Cerebral anaesthesia	1910	24,312	41,949	48,723	46,985	161,969	16,969	50,589	55,626	44,187	167,371	41,281	92,538	104,349	91,172	329,340
Imaging services	1940-2016	7,560	17,874	29,077	44,304	98,815	6,577	20,217	26,221	43,829	96,844	14,137	38,091	55,298	88,133	195,659
Computerised tomography scan	1952-1966	1,481	11,937	17,649	30,603	61,670	1,092	11,646	15,806	31,859	60,403	2,573	23,583	33,455	62,462	122,073
Magnetic resonance imaging	2015	2,441	2,416	3,440	4,151	12,448	2,057	3,474	3,255	3,945	12,731	4,498	5,890	6,695	8,096	25,179

#### Notes:

- Denotes five or fewer discharges reported to HIPE.
- \* Further suppression required to prevent disclosure of five or fewer discharges.
- <sup>‡</sup> Denotes that no breakdown is provided.
- a Discharges reported within this chapter were not assigned admission type of *Maternity*. Their admission was for reasons other than their obstetric condition, but they received obstetric care during this episode of care. See Section Four for details of morbidity analysis for *Maternity* discharges.
- b Activity from the St. Luke's Radiation Oncology Network centres in Beaumont and St. James's Hospitals, estimated at over 47,000 day cases, are not included in this report as these data were not submitted to HIPE.

Maternity Discharges

2013

SECTION

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# **Total Discharges** 1,554,290

Discharges excluding Maternity 1,421,668

Maternity 132.622

#### 4.1 **INTRODUCTION**

Section Four examines Maternity discharges only. In 2013, 8.5 per cent of total discharges were categorised as Maternity discharges. 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 code Maternity.1

The Healthcare Pricing Office also publish the annual series Perinatal Statistics Reports using data from the National Perinatal Reporting System (NPRS) which presents national statistics on perinatal events in Ireland. <sup>2</sup> The analysis of *Deliveries* here is intended to complement these publications by reporting on variables which are currently not available in the NPRS. These variables include public/private status and detailed data on maternal diagnoses and procedures, including the elective or emergency nature of Caesarean section. It must be emphasised that the Delivery section here reports on women with a diagnosis of outcome of delivery (ICD-10-AM – Z37) in acute public hospitals with an allocated admission type of *Maternity* only.<sup>3</sup> There are a number of key differences between the number of deliveries reported here and the number published by the NPRS which means, on balance, that the number of deliveries reported by NPRS will be more comprehensive due to a number of factors including:

- The NPRS includes all deliveries in Ireland including those in public and private hospitals and domiciliary births. HIPE does not currently collect data from private hospitals or domiciliary births.
- Delivery data in the NPRS is reported based on date of delivery, HIPE data is reported on the date of discharge of the mother. For example, a delivery that occurs on 27 December 2012 and the mother is discharged on 1 January 2013 will be recorded as a 2012 delivery in NPRS and a 2013 delivery in HIPE.
- In accordance with the World Health Organization (WHO) guidelines the NPRS does not include births weighing less than 500 grams; these deliveries would be reported by HIPE.

Hospital In-Patient Enquiry Scheme (HIPE) Data Dictionary 2013 Version 5.0 available at www.hpo.ie

See www.hpo.ie

There were a small number of women who were admitted for reasons other than their obstetric condition, but received obstetric care and, in some cases (< 5 cases), delivered during this episode. These women are not included here.

The remainder of Section Four is divided into three sections:

- Section 4.2 provides an overview of Maternity discharges, disaggregated according to whether they delivered during this episode of care.
- Section 4.3 examines *Delivery* discharges. Method of delivery is analysed by selected demographic and administrative variables, including maternal parity.<sup>4,5</sup> Top 10 diagnoses and Top 10 procedure blocks are provided, along with further details on Caesarean section deliveries.
- Section 4.4 provides a summary of Non-Delivery discharges and reports on age, marital/civil status and public/private status for day patients and in-patients. Top 10 principal diagnoses and procedure blocks are also presented.

#### 4.2 MATERNITY DISCHARGES – TOTAL

This section provides an overview of the 132,622 Maternity discharges reported to HIPE. Of those discharges recorded as *Maternity*, there were 66,098 (49.8 per cent) Delivery discharges and 66,524 (50.2 per cent) Non-Delivery discharges.

#### **Maternity Discharges: Profile** 4.2.1

Table 4.1 disaggregates Maternity discharges and bed days by patient type (day patient and in-patient) and delivery status. 6 Mean and median lengths of stay for inpatient discharges are also presented.

### **Discharges**

- Day patients accounted for 13,914 (10.5 per cent) of Maternity discharges. The remaining 118,708 (89.5 per cent) of Maternity discharges were in-patients.
- 56.0 per cent of *Maternity* discharges were aged 25–34 years (see Figure 4.1).
- Single women accounted for 38.7 per cent of Maternity discharges while married women accounted for 58.4 per cent (see Figure 4.2).
- Over 15 per cent of *Maternity* discharges were discharged on a private basis and 84.3 per cent on a public basis (see Figure 4.3).

### Length of Stay

The cumulative proportion of discharges and bed days differ for *Delivery* and Non-Delivery discharges (see Figures 4.4a-4.4c). For example, 62.4 per cent of Delivery discharges stayed 3 days or less, accounting for 39.1 per cent of the total bed days. A higher proportion of Non-Delivery discharges (93.1 per cent) were discharged in the same time period using a higher proportion of the total bed days (73.7 per cent).

Maternal parity is the number of previous live births and number of previous stillbirths (>500g).

<sup>2012</sup> provided the first complete year that parity data were available for analysis. A review identified quality issues in the recording of the parity variable in some hospitals for 2012. The relevant hospitals were contacted and have reviewed procedures for recording this data. It is therefore not advised to compare parity data reported in Activity in Acute Public Hospitals in Ireland Annual Report 2012 with that presented in this report.

Non-Delivery discharges are Maternity discharges where admission was related to their obstetrical experience but who did not deliver during that episode of care.

By definition, Maternity discharges with a diagnosis of delivery are in-patients.

TABLE 4.1 Maternity Discharges: Patient Type by Delivery Status (N, %, Bed Days, %, and In-Patient Length of Stay)

									Discharges	and Bed	Days							
	Day							In	-Patients						Total	Materr	nity Discharg	es
	Patier	nts		0-7	Days			> 1	7 Days		Tota	l Mater	nity In-Patien	t				
	N	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%	Bed Days	%
Delivery <sup>a,b</sup>	-	-	63,674	55.1	195,291	71.4	2,424	79.2	33,941	80.4	66,098	55.7	229,232	72.6	66,098	49.8	229,232	69.5
Non-Delivery	13,914	100	51,973	44.9	78,243	28.6	637	20.8	8,278	19.6	52,610	44.3	86,521	27.4	66,524	50.2	100,435	30.5
Total Maternity	13,914	100	115,647	100	273,534	100	3,061	100	42,219	100	118,708	100	315,753	100	132,622	100	329,667	100

			In-Pati	ient Length	of Stay			
	0-7	Days		>71	Days		Total Matern	ity In-Patient
	Mean	Median		Mean	Median		Mean	Median
Delivery	3.1	3	Delivery	14	10	Delivery	3.5	3
Non-Delivery	1.5	1	Non-Delivery	13	10	Non-Delivery	1.6	1
Total Maternity	2.4	2	Total Maternity	13.8	10	Total Maternity	2.7	2

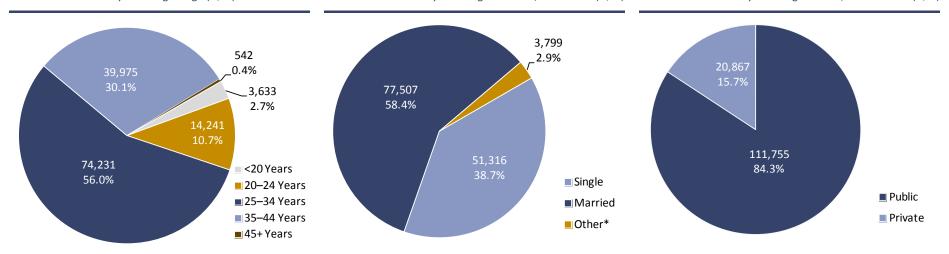
Notes:

Percentage columns are subject to rounding.

- a Delivery discharges are all in-patients.
- b Data represent *Delivery* discharges in acute public hospitals reporting to HIPE which have been allocated an admission type *Maternity*. For national statistics on perinatal events in Ireland see the *National Perinatal Reporting System* (www.hpo.ie).

FIGURE 4.1 Maternity Discharges: Age (N, %)

FIGURE 4.2 Maternity Discharges: Marital/Civil Status (N, %) FIGURE 4.3 Maternity Discharges: Public/Private Status (N, %)

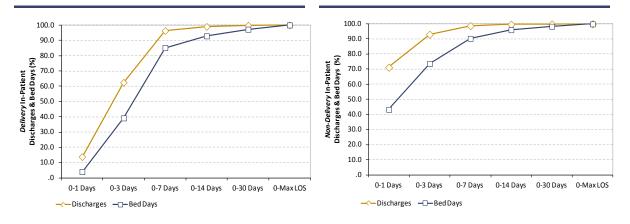


Notes: Data represent Delivery discharges in acute public hospitals reporting to HIPE which have been allocated an admission type Maternity. For national statistics on perinatal events in Ireland see the National Perinatal Reporting System (www.hpo.ie).

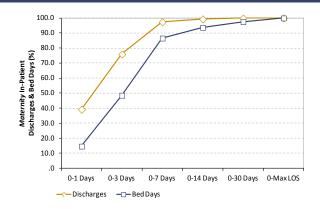
<sup>\*</sup> Other includes widowed, separated, divorced, civil partner, former civil partner, surviving civil partner and unknown.

**FIGURE 4.4a** *Delivery* Discharges: In-Patient Length of Stay by Discharges and Bed Days (Cumulative Percentage)<sup>a,b</sup>

FIGURE 4.4b Non-Delivery Discharges: In-Patient
Length of Stay by Discharges and Bed
Days (Cumulative Percentage)



**FIGURE 4.4c** *Maternity* Discharges: In-Patient Length of Stay by Discharges and Bed Days (Cumulative Percentage)



Notes: a Data represent Delivery discharges in acute public hospitals reporting to HIPE which have been allocated an admission type Maternity. For national statistics on perinatal events in Ireland see the National Perinatal Reporting System (www.hpo.ie).

b Delivery discharges are all in-patients.

#### 4.3 MATERNITY DISCHARGES - DELIVERY

There were 66,098 Maternity discharges with a diagnosis of outcome of delivery reported to HIPE (49.8 per cent of Maternity discharges and 4.3 per cent of total HIPE discharges).8,9

#### 4.3.1 **Delivery Discharges: Outcome of Delivery**

Table 4.2 disaggregates *Delivery* discharges by outcome of delivery. <sup>10</sup>

- Single deliveries accounted for 98.1 per cent of total Delivery discharges while multiple deliveries accounted for 1.9 per cent.
- The in-patient mean length of stay for a single delivery was 3.4 days compared to 6.7 days for a multiple delivery.

**TABLE 4.2** *Delivery* Discharges: Outcome of Delivery (N, % and Length of Stay)

		<i>Delivery</i> D	ischarges <sup>a</sup>	In-Patient Le	ngth of Stay <sup>b</sup>
		N	%	Mean	Median
Z37.0-Z37.1	Single Deliveries	64,811	98.1	3.4	3
Z37.2-Z37.7	Multiple Deliveries	1,273	1.9	6.7	5
Z37.9	Z37.9 Unspecified		0.0	3.6	4
Total Delivery	Discharges	66,098	100	3.5	3

Notes:

Percentage columns are subject to rounding.

Data represent Delivery discharges in acute public hospitals reporting to HIPE which have been allocated an admission type Maternity. For national statistics on perinatal events in Ireland see the National Perinatal Reporting System (www.hpo.ie).

ICD-10-AM (any) diagnosis codes are analysed at four-digit level and include live births and stillbirths.

b Delivery discharges are all in-patients.

See Section Three for details of clinical coding and classification.

ICD-10-AM Diagnosis Code Z37 Outcome of Delivery (Extracted from NCCH eBook, July 2008: Factors Affecting Health

As a delivery can result in either single or multiple outcomes, the number of deliveries will not equal the number of births. For national statistics on perinatal events in Ireland see the National Perinatal Reporting System (www.hpo.ie).

### 4.3.2 Delivery Discharges: Method of Delivery

Method of delivery is derived from delivery procedure codes which for the purposes of this report are grouped into non-instrumental, instrumental and elective or emergency Caesarean section. <sup>11,12,13,14,15</sup> Figures 4.5a and 4.5b show the proportion of *Delivery* discharges by method of delivery and maternal parity. Table 4.3 disaggregates *Delivery* discharges by method of delivery and outcome of delivery. Figure 4.6 shows the proportion of *Delivery* discharges by method of delivery and inpatient length of stay.

#### **Discharges**

#### **Maternal Parity**

- Figures 4.5a and 4.5b show that primiparous *Delivery* discharges recorded lower proportions of both non-instrumental (41.1 per cent) and elective Caesarean section deliveries (7.9 per cent) than multiparous *Delivery* discharges (65.4 per cent and 19.8 per cent respectively).
- Instrumental deliveries accounted for 28.9 per cent of primiparous *Delivery* discharges and 6.4 per cent of multiparous *Delivery* discharges.
- Emergency Caesarean section deliveries accounted for 22.2 per cent of primiparous and 8.5 per cent of multiparous *Delivery* discharges.

### Single and Multiple Deliveries

- Non-instrumental deliveries accounted for 56.7 per cent of single deliveries and
   23.2 per cent of multiple deliveries.
- Caesarean section accounted for 28.2 per cent of single deliveries and 67.6 per cent of multiple deliveries.

The method of delivery categories reported here are not directly comparable with those published in the *Perinatal Statistics Reports*.

Non-instrumental deliveries *exclude* forceps delivery, vacuum extraction with delivery, breech with forceps to aftercoming head or Caesarean section.

Instrumental deliveries include deliveries with one or a combination of forceps (ACHI Procedure Block 1337 – excluding failed forceps) or vacuum extraction (ACHI Procedure Block 1338 – excluding failed vacuum extraction), and breech with forceps to after-coming head (ACHI Procedure Codes 90470-02, 90470-04) [Extracted from NCCH eBook, July 2008, Obstetric Procedures].

The term 'elective' is not an indication of maternal choice.

<sup>&</sup>lt;sup>15</sup> An **elective** Caesarean (ACHI Procedure Codes 16520-00, 16520-02) is defined as a Caesarean section carried out as a planned procedure before the onset of labour or following the onset of labour, when the decision was made before labour.

An emergency Caesarean (ACHI Procedure Codes 16520-01, 16520-03) is defined as a Caesarean required because of an emergency situation (e.g. obstructed labour, fetal distress). It is best described as 'when the Caesarean section is performed having not been considered necessary previously'. Caesarean section after failed trial of scar would be an emergency Caesarean section.

Source: Australian Coding Standard 1541 [Extracted from NCCH eBook, July 2008, Pregnancy, Childbirth and the Puerperium]

Primiparous *Delivery* discharges are deliveries to women who have had no previous pregnancy resulting in a live birth or stillbirth (>500g).

Multiparous *Delivery* discharges are deliveries to women who have had at least one previous pregnancy resulting in a live birth or stillbirth (>500g).

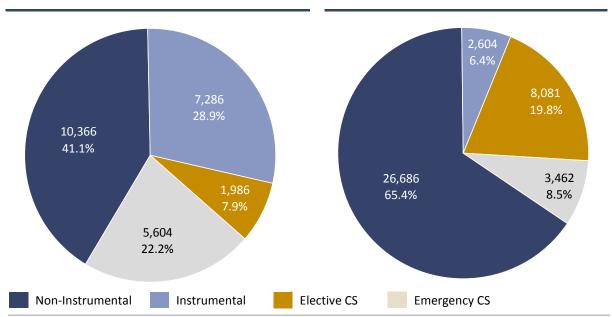
The proportions of elective and emergency Caesarean sections were similar for singleton deliveries, but varied for multiple deliveries (36.5 per cent for elective Caesarean sections and 31.0 per cent for emergency Caesarean Sections).

## Length of Stay

- The in-patient mean length of stay was 2.6 days for non-instrumental, 3.4 days for instrumental, and 5.3 days for Caesarean section deliveries.
- In-patient mean length of stay was shorter for single deliveries compared to multiple deliveries for all methods of delivery.
- For singleton and multiple deliveries, in-patient mean length of stay was shorter for elective than emergency Caesarean section deliveries.
- Only 3.7 per cent of total Delivery discharges had an in-patient mean length of stay of more than 7 days (see Figure 4.6).

**FIGURE 4.5a** Primiparous *Delivery* Discharges: Method of Delivery (%)

FIGURE 4.5b Multiparous Delivery Discharges: Method of Delivery (%)



Notes: Percentage values are subject to rounding.

> Data represent Delivery discharges in acute public hospitals reporting to HIPE which have been allocated an admission type Maternity. For national statistics on perinatal events in Ireland see the National Perinatal Reporting System (www.hpo.ie). There were 23 discharges with 'unknown' parity; these were excluded from these figures.

**TABLE 4.3** *Delivery* Discharges: Method of Delivery by Outcome of Delivery (N, Row % and Length of Stay)

							Delivery D	ischarges					
		Non-Instr	antal	Instrun	e o u to l			Caesarea	n Section			Total De	elivery
		Non-instr	umentai	mstrun	nentai	Electiv	ve CS	Emerge	ency CS	Tota	I CS	Discha	rges <sup>a</sup>
		N	%	N	%	N	%	N	%	N	%	N	%
<u>o</u>	0–7 Days	36,262	57.9	9,597	15.3	9,042	14.4	7,738	12.4	16,780	26.8	62,639	100
Single	> 7 Days	495	22.8	176	8.1	564	26.0	937	43.1	1,501	69.1	2,172	100
	Total Single	36,757	56.7	9,773	15.1	9,606	14.8	8,675	13.4	18,281	28.2	64,811	100
e e	0–7 Days	270	26.4	108	10.6	374	36.6	270	26.4	644	63.0	1,022	100
Multiple	> 7 Days	25	10.0	10	4.0	91	36.3	125	49.8	216	86.1	251	100
Ž	Total Multiple	295	23.2	118	9.3	465	36.5	395	31.0	860	67.6	1,273	100
	0–7 Days	36,532	57.4	9,705	15.2	9,416	14.8	8,008	12.6	17,424	27.4	63,661	100
Total	> 7 Days	520	21.5	186	7.7	655	27.0	1,062	43.8	1,717	70.9	2,423	100
10	Total <i>Delivery</i>	37,052	56.1	9,891	15.0	10,071	15.2	9,070	13.7	19,141	29.0	66,084	100
	Discharges	37,032	30.1	3,631	15.0	10,071	15.2	3,070	13.7	13,141	25.0	00,084	100

						Deli	very In-Patien	nt Length of S	tay <sup>b</sup>				
		Non Inst	rumental	Instrui	montal			Caesarea	n Section			Total D	· · · · · · · · · · · · · · · · · · ·
		Non-mst	Turrieritai	mstrui	Hentai	Elect	ive CS	Emerge	ency CS	Tota	al CS	Disch	arges
		Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
<u>ه</u>	0–7 Days	2.4	2	3.2	3	4.0	4	4.7	5	4.3	4	3.0	3
Single	> 7 Days	12.7	10	10.6	9	15.7	12	13.8	10	14.5	11	13.8	10
S	Total Single	2.5	2	3.3	3	4.7	4	5.6	5	5.2	4	3.4	3
e	0–7 Days	3.4	3	4.1	4	4.9	5	5.0	5	4.9	5	4.4	4
Multiple	> 7 Days	11.2	10	13.0	11	16.5	13	17.0	13	16.8	13	16.1	12
Ž	Total Multiple	4.1	4	4.9	4	7.1	5	8.8	6	7.9	5	6.7	5
	0–7 Days	2.4	2	3.2	3	4.1	4	4.7	5	4.3	4	3.1	3
Total	> 7 Days	12.6	10	10.7	9	15.8	12	14.1	10	14.8	11	14.0	10
Ī	Total <i>Delivery</i>	2.6	2	3.4	3	4.8	4	5.8	5	5.3	4	3.5	3
	Discharges	2.0	- 2	5.4	3	4.8	4	5.8	3	5.5	4	3.5	3

Notes: Percentage columns are subject to rounding.

Data represent *Delivery* discharges in acute public hospitals reporting to HIPE which have been allocated an admission type *Maternity*. For national statistics on perinatal events in Ireland see the *National Perinatal Reporting System* (www.hpo.ie).

a There were 14 discharges with 'unspecified' outcome of delivery; these were excluded from this table.

b *Delivery* discharges are all in-patients.

100.0 90.0 80.0 70.0 Delivery Discharges (%) 60.0 50.0 40.0 30.0 20.0 10.0 0.0 Elective CS Emergency CS **Total CS** Non-Instrumental Caesarean Section Total Instrumental >7 Days 11.7 1.4 1.9 6.5 9.0 3.7 15.3 ■ 4-7 Days 35.7 64.1 74.4 69.0 33.9 ■ 0-3 Days 83.3 62.4 29.4 13.9 22.0 62.4

FIGURE 4.6 Delivery Discharges: Method of Delivery by In-Patient Length of Stay (%)

Notes:

Percentage columns are subject to rounding.

Data represent Delivery discharges in acute public hospitals reporting to HIPE which have been allocated an admission type Maternity. For national statistics on perinatal events in Ireland see the National Perinatal Reporting System (www.hpo.ie).

#### 4.3.3 **Delivery Discharges: Age**

Table 4.4 disaggregates *Delivery* discharges by method of delivery and mother's age. Figure 4.7 shows the proportion of Delivery discharges by method of delivery, mother's age and parity.

#### **Discharges**

- The majority of mothers aged less than 45 years had non-instrumental deliveries.
- For mothers aged 45 years and over, 67.0 per cent delivered by Caesarean section and 25.7 per cent had non-instrumental deliveries.
- With the exception of mothers aged 45 years and over, a similar proportion of mothers delivered by emergency Caesarean section in all age groups.
- A larger proportion of mothers aged 35-44 delivered by elective Caesarean section (22.5 per cent) compared to 13.1 per cent for mothers aged 25–34.
- Seven per cent of primiparous Delivery discharges aged 25-34 years had an elective Caesarean section compared to 17.2 per cent of multiparous Delivery discharges in the same age group.
- Almost 22 per cent of primiparous *Delivery* discharges aged 25–34 years had an emergency Caesarean section compared to 8.3 per cent of multiparous Delivery discharges in the same age group.

## Length of Stay

- In-patient mean length of stay was shortest for non-instrumental deliveries for all age groups, this ranged from 2.5 days to 3.0 days.
- In-patient mean length of stay was longest for emergency Caesarean section deliveries for all age groups, this ranged from 5.5 days to 10.8 days.
- In-patient mean length of stay varied from 3.2 days for mothers aged 20–24 years to 6.1 days for mothers aged 45 years and over for total *Delivery* discharges.

TABLE 4.4 Delivery Discharges: Method of Delivery by Mother's Age (N, % and Length of Stay)

					De	elivery I	Discharge	es				
	Nor	Non- Instrumental Caesarean S									Total De	livery
	Instrum	ental			Electiv	e CS	Emerge	ncy CS	Total CS		Discharges	
	N	%	N	%	N	%	N	%	N	%	N	%
<20 Years	858	62.5	291	21.2	47	3.4	176	12.8	223	16.3	1,372	100
20-24 Years	3,995	63.1	1,055	16.7	409	6.5	872	13.8	1,281	20.2	6,331	100
25-34 Years	21,543	56.9	6,160	16.3	4,951	13.1	5,229	13.8	10,180	26.9	37,883	100
35-44 Years	10,616	52.2	2,374	11.7	4,570	22.5	2,761	13.6	7,331	36.1	20,321	100
45 Years and Over	49	25.7	14	7.3	94	49.2	34	17.8	128	67.0	191	100
Total <i>Delivery</i> Discharges	37,061	56.1	9,894	15.0	10,071	15.2	9,072	13.7	19,143	29.0	66,098	100

					Deliver	y In-Patie	nt Lengi	th of Stay				
	N	on-	Instru	strumental Caesarean Section						Total <i>L</i>	Delivery	
	Instru	ımental		Elective CS Emergency CS Total CS						Discharges		
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
<20 Years	3.0	3	3.5	3	4.4	4	5.8	5	5.5	5	3.5	3
20-24 Years	2.6	2	3.2	3	4.5	4	5.5	5	5.2	4	3.2	3
25-34 Years	2.5	2	3.3	3	4.7	4	5.6	5	5.2	4	3.4	3
35-44 Years	2.6	2	3.4	3	5.0	4	6.2	5	5.4	4	3.7	3
45 Years and Over	2.5	2	4.4	4	6.6	5	10.8	7	7.7	5	6.1	4
Total <i>Delivery</i> Discharges	2.6	2	3.4	3	4.8	4	5.8	5	5.3	4	3.5	3

Notes:

Percentage columns are subject to rounding.

Data represent *Delivery* discharges in acute public hospitals reporting to HIPE which have been allocated an admission type *Maternity*. For national statistics on perinatal events in Ireland see the *National Perinatal Reporting System* (www.hpo.ie).

a Delivery discharges are all in-patients.

100.0 90.0 80.0 Delivery Discharges (%) 70.0 60.0 50.0 40.0 30.0 20.0 10.0 0.0 20-24 35-44 20-24 35-44 45 Years <20 25-34 45 Years <20 25-34 and Over and Over Years Years Years Years Years Years Years Years Primiparous Women Multiparous Women ■ Non-Instrumental Instrumental ■ Elective CS ■ Emergency CS

Delivery Discharges: Method of Delivery by Mother's Age and Parity (%)

Notes: Data represent Delivery discharges in acute public hospitals reporting to HIPE which have been allocated an admission type Maternity. For national statistics on perinatal events in Ireland see the National Perinatal Reporting System (www.hpo.ie). There were 23 discharges with 'unknown' parity; these were excluded from these figures.

#### **Delivery Discharges: Marital/Civil Status** 4.3.4

Marital/Civil status for *Delivery* discharges is presented in Figure 4.8 and shows that 61.7 per cent of *Delivery* discharges were married while 36.1 per cent were single.

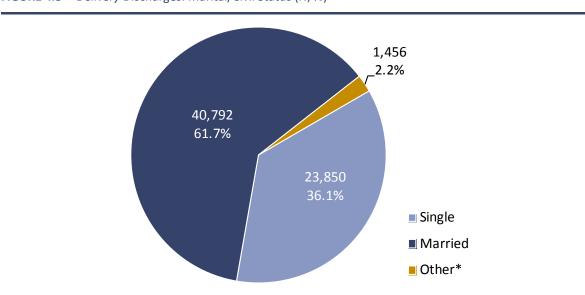


FIGURE 4.8 Delivery Discharges: Marital/Civil Status (N, %)

Notes:

Data represent Delivery discharges in acute public hospitals reporting to HIPE which have been allocated an admission type Maternity. For national statistics on perinatal events in Ireland see the National Perinatal Reporting System (www.hpo.ie).

Other includes widowed, separated, divorced, civil partner, former civil partner, surviving civil partner and unknown.

### 4.3.5 Delivery Discharges: Public/Private Status<sup>17</sup>

Table 4.5 and Figure 4.9 disaggregate *Delivery* discharges by method of delivery and public/private status.

### Discharges

- 81 per cent of *Delivery* discharges were treated on a public basis (see Figure 4.9).
- Of *Delivery* discharges treated on a public basis, 58.2 per cent had a non-instrumental delivery, 14.9 per cent had an instrumental delivery, while the remaining 26.9 per cent delivered by Caesarean Section.
- Of *Delivery* discharges treated on a private basis, 46.8 per cent had a non-instrumental delivery, 15.4 per cent had an instrumental delivery, while the remaining 37.8 per cent delivered by Caesarean Section.
- Over 24 per cent of *Delivery* discharges treated on a private basis had an elective Caesarean section compared to 13.1 per cent of discharges who were treated publicly. Similar proportions of public (13.8 per cent) and private (13.4 per cent) *Delivery* discharges had an emergency Caesarean section.

#### Length of Stay

- *Delivery* discharges treated on a private basis had a longer in-patient mean length of stay than those treated on a public basis for all methods of delivery.
- In-patient mean length of stay recorded for total Caesarean section deliveries was slightly higher for discharges treated on a private basis (5.4 days) compared to those treated on a public basis (5.2 days).

**TABLE 4.5** Delivery Discharges: Method of Delivery by Public/Private Status (N, % and Length of Stay)

					De	livery Di	scharges					
	Non	-	Inchuse	ontol		C	aesarean	Section			Total Del	ivery
	Instrum	ental	Instrum	ientai	Electiv	ve CS	Emerge	ncy CS	Total	CS	Dischar	ges
	N	%	N	%	N	%	N	%	N	%	N	%
Public	31,195	58.2	7,965	14.9	7,009	13.1	7,391	13.8	14,400	26.9	53,560	100
Private	5,866	46.8	1,929	15.4	3,062	24.4	1,681	13.4	4,743	37.8	12,538	100
Total <i>Delivery</i> Discharges	37,061	56.1	9,894	15.0	10,071	15.2	9,072	13.7	19,143	29.0	66,098	100

					Delivery	/ In-Patie	nt Lengt	h of Stay <sup>a</sup>					
	N	on-	Inches	Strumental Caesarean Section							Total I	Delivery	
	Instru	mental	instru	imentai	Elect	Elective CS Emergency CS Total CS					Discharges		
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	
Public	2.5	2	3.3	3	4.8	4	5.7	5	5.2	4	3.4	3	
Private	2.9	3	3.5	3	5.0	4	6.3	5	5.4	5	4.0	3	
Total <i>Delivery</i> Discharges	2.6	2	3.4	3	4.8	4	5.8	5	5.3	4	3.5	3	

Notes:

Percentage columns are subject to rounding.

Data represent *Delivery* discharges in acute public hospitals reporting to HIPE which have been allocated an admission type *Maternity*. For national statistics on perinatal events in Ireland see the *National Perinatal Reporting System* (www.hpo.ie).

a Delivery discharges are all in-patients.

100.0 90.0 80.0 70.0 Delivery Discharges (%) 60.0 50.0 40.0 30.0 20.0 10.0 0.0 Elective CS Emergency CS Total CS Non-Instrumental Caesarean Section Total Instrumental Private 15.8 19.5 30.4 18.5 24.8 19.0 Public 84.2 80.5 69.6 81.5 75.2 81.0

FIGURE 4.9 Delivery Discharges: Method of Delivery by Public/Private Status (%)

Notes:

Percentage columns are subject to rounding.

Data represent Delivery discharges in acute public hospitals reporting to HIPE which have been allocated an admission type Maternity. For national statistics on perinatal events in Ireland see the National Perinatal Reporting System (www.hpo.ie).

### **Delivery Discharges: Day of Admission**

Table 4.6 disaggregates Delivery discharges by method of delivery and day of admission.

- Admissions were most frequent from Mondays to Thursdays with approximately 16 per cent of Delivery discharges admitted per day.
- Caesarean section admissions were most frequent on Mondays (18.3 per cent). The highest proportion of emergency Caesarean sections were admitted on Tuesdays (17.0 per cent).
- Almost 93 per cent of elective Caesarean sections were admitted on a weekday compared to 79.4 per cent of emergency Caesarean sections.

**TABLE 4.6** Delivery Discharges: Method of Delivery by Day of Admission (N, %)

	Nor	1-	Instrum	nental		(	Caesarea	n Section	ı		Total De	livery
	Instrum	ental			Electiv	re CS	Emerge	ency CS	Total	CS	Discha	rges
	N	%	N	%	N	%	N	%	N	%	N	%
Monday	5,677	15.3	1,656	16.7	1,990	19.8	1,517	16.7	3,507	18.3	10,840	16.4
Tuesday	5,742	15.5	1,572	15.9	1,854	18.4	1,540	17.0	3,394	17.7	10,708	16.2
Wednesday	5,689	15.4	1,539	15.6	2,025	20.1	1,437	15.8	3,462	18.1	10,690	16.2
Thursday	5,843	15.8	1,526	15.4	1,962	19.5	1,510	16.6	3,472	18.1	10,841	16.4
Friday	5,308	14.3	1,340	13.5	1,513	15.0	1,200	13.2	2,713	14.2	9,361	14.2
Saturday	4,304	11.6	1,012	10.2	202	2.0	791	8.7	993	5.2	6,309	9.5
Sunday	4,498	12.1	1,249	12.6	525	5.2	1,077	11.9	1,602	8.4	7,349	11.1
Total <i>Delivery</i> Discharges	37,061	100	9,894	100	10,071	100	9,072	100	19,143	100	66,098	100

Notes:

Percentage columns are subject to rounding.

Data represent Delivery discharges in acute public hospitals reporting to HIPE which have been allocated an admission type Maternity. For national statistics on perinatal events in Ireland see the National Perinatal Reporting System (www.hpo.ie).

### 4.3.7 Delivery Discharges: Morbidity Analysis

Section 4.3.7 focuses on the diagnoses and procedures recorded for *Delivery* discharges reported to HIPE by acute public hospitals.

### 4.3.7.1 Top 10 Principal Diagnoses

The mean number of all diagnoses recorded was 3.4 for total *Delivery* discharges, 3.7 for primiparous *Delivery* discharges, and 3.3 for multiparous *Delivery* discharges. Table 4.7 outlines the top 10 principal diagnoses recorded for *Delivery* discharges by parity.

- Just over 80 per cent of primiparous *Delivery* discharges record one of the top 10 principal diagnoses compared to almost 83 per cent for multiparous *Delivery* discharges.<sup>18</sup>
- A principal diagnosis of labour and delivery complicated by fetal stress [distress]
  was recorded for 20.1 per cent of primiparous Delivery discharges. This was
  followed by perineal laceration during delivery (14.7 per cent).
- A principal diagnosis of perineal laceration during delivery was recorded for 22.1
  per cent of multiparous Delivery discharges. This was followed by single
  spontaneous delivery (17.3 per cent).
- For Delivery in-patient discharges staying seven days or less, mean length of stay
  for primiparous Delivery discharges was 3.6 days compared to 2.8 days for
  multiparous Delivery discharges.

	ICD-10-AM Code	Principal Diagnosis	N	% of Total Deliveries	In-Patient Mean LOS <sup>a</sup> (0–7 Days)
	O68	Labour and delivery complicated by fetal stress [distress]	5,073	20.1	3.5
	070	Perineal laceration during delivery	3,723	14.7	2.7
	O48	Prolonged pregnancy	2,305	9.1	4.1
<u>s</u>	O42	Premature rupture of membranes	2,275	9.0	3.7
rou	O80	Single spontaneous delivery <sup>b</sup>	1,457	5.8	2.5
Primiparous	O36	Maternal care for other known or suspected fetal problems	1,282	5.1	4.0
Ë	O62	Abnormalities of forces of labour	1,259	5.0	3.7
₫	O63	Long labour	1,151	4.6	3.7
	O32	Maternal care for known or suspected malpresentation of fetus	960	3.8	4.2
	013	Gestational [pregnancy-induced] hypertension without significant proteinuria	811	3.2	4.5
Top:	10 Principal Dia	agnoses for Primiparous <i>Delivery</i> Discharges	20,296	80.4	-
Prim	iparous <i>Delive</i>	ry Discharges – Total	25,242	100	3.6
	070	Perineal laceration during delivery	9,004	22.1	2.1
	O80	Single spontaneous delivery <sup>b</sup>	7,051	17.3	1.9
	034	Maternal care for known or suspected abnormality of pelvic organs	6,235	15.3	3.9
2	O68	Labour and delivery complicated by fetal stress [distress]	3,129	7.7	2.7
Multiparous	O48	Prolonged pregnancy	2,143	5.2	2.6
ipa	O42	Premature rupture of membranes	1,655	4.1	3.2
풀	O36	Maternal care for other known or suspected fetal problems	1,615	4.0	3.3
2	O32	Maternal care for known or suspected malpresentation of fetus	1,048	2.6	4.1
	O24	Diabetes mellitus in pregnancy	983	2.4	3.0
	O99	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium	894	2.2	3.2
Top :	10 Principal Dia	agnoses for Multiparous <i>Delivery</i> Discharges	33,757	82.7	_
Mult	iparous <i>Delive</i>	ry Discharges – Total	40,833	100	2.8

Notes:

Percentage columns are subject to rounding.

Data represent *Delivery* discharges in acute public hospitals reporting to HIPE which have been allocated an admission type *Maternity*. For national statistics on perinatal events in Ireland see the *National Perinatal Reporting System* (www.hpo.ie). There were 23 discharges with 'unknown' parity; these were excluded from this table.

- a Delivery discharges are all in-patients.
- b O80 Single spontaneous delivery is intended for single spontaneous vaginal deliveries: without abnormality/complication classifiable elsewhere in Chapter 15 Pregnancy, childbirth and the puerperium and without manipulation or instrumentation. [Extracted from NCCH eBook, July 2008, Pregnancy, Childbirth and the Puerperium.]

#### 4.3.7.2 Top 10 Principal Procedure Blocks

In 2013, 98.2 per cent of primiparous *Delivery* discharges and 91.8 per cent of multiparous *Delivery* discharges had a principal procedure reported. For those discharges that underwent at least one procedure, the mean number of procedures recorded was 2.7 for total *Delivery* discharges, 3.3 for primiparous *Delivery* discharges and 2.4 for multiparous *Delivery* discharges. <sup>19</sup>

 Caesarean section was the top principal procedure block for both primiparous (29.0 per cent) and multiparous (30.4 per cent) Delivery discharges with a principal procedure.<sup>20</sup>

**TABLE 4.8** Delivery Discharges: Top 10 Principal Procedure Blocks by parity (N, % and Length of Stay)

	Principa	al Procedure Block <sup>a</sup>	N	%	In-Patient Mean LOS <sup>b</sup> (0–7 Days)
	1340	Caesarean section <sup>c</sup>	7,183	29.0	4.7
	1344	Postpartum suture	5,318	21.5	2.9
	1338	Vacuum extraction	4,234	17.1	3.3
Primiparous	1343	Other procedures associated with delivery <sup>d</sup>	2,463	9.9	3.1
oarc	1334	Medical or surgical induction of labour	1,857	7.5	4.0
Ë	1337	Forceps delivery	1,729	7.0	3.4
P.	1333	Analgesia and anaesthesia during labour and delivery procedure	724	2.9	3.0
	1335	Medical or surgical augmentation of labour	697	2.8	2.9
	1345	Postpartum evacuation of uterus	155	0.6	3.3
	1336	Spontaneous vertex delivery <sup>e</sup>	151	0.6	2.5
Top	10 Princi	pal Procedure Blocks for Primiparous Delivery Discharges	24,511	98.9	_
Prim	iparous <i>L</i>	Delivery Discharges with a Principal Procedure – Total	24,787	100	3.6
		Delivery Discharges – Total	25,242	-	3.6
(incl	uding tho	se with and without a Principal Procedure)			
	1340	Caesarean section <sup>c</sup>	11,399	30.4	4.1
	1344	Postpartum suture	11,257	30.0	2.2
	1334	Medical or surgical induction of labour	3,839	10.2	2.9
snc	1335	Medical or surgical augmentation of labour	2,782	7.4	2.0
Multiparous	1333	Analgesia and anaesthesia during labour and delivery procedure	2,489	6.6	2.2
葦	1338	Vacuum extraction	1,749	4.7	2.6
Σ	1343	Other procedures associated with delivery <sup>d</sup>	1,391	3.7	2.4
	1336	Spontaneous vertex delivery <sup>e</sup>	796	2.1	1.9
	1337	Forceps delivery	365	1.0	2.9
	1345	Postpartum evacuation of uterus	334	0.9	2.8
Тор	10 Princip	pal Procedure Blocks for Multiparous <i>Delivery</i> Discharges	36,401	97.1	_
Mult	tiparous <i>L</i>	Delivery Discharges with a Principal Procedure – Total	37,483	100	2.9
		Delivery Discharges – Total	40,833	-	2.8
(incl	uding tho	se with and without a Principal Procedure)			

Notes:

Percentage columns are subject to rounding.

Data represent *Delivery* discharges in acute public hospitals reporting to HIPE which have been allocated an admission type *Maternity*. For national statistics on perinatal events in Ireland see the *National Perinatal Reporting System* (www.hpo.ie). There were 23 discharges with 'unknown' parity; these were excluded from this table.

- a ACHI Procedure codes are analysed at block level. The percentage (%) is based on *Delivery* discharges with a principal procedure reported.
- b Delivery discharges are all in-patients.
- c As one principal procedure and up to 19 secondary procedures may be collected as applicable for each discharge, the number of principal procedure Caesarean sections may not equal the number of total Caesarean sections.
- d Includes episiotomy.
- e This code is not required for all spontaneous vertex deliveries as the delivery can be assumed to be normal when there is an absence of procedure codes for interventions such as Caesarean, forceps delivery, etc. [Coding Matters Newsletter, NCCH, Volume 5 Number 3, January 1999]

<sup>&</sup>lt;sup>19</sup> See Section Three for details of clinical coding and classification.

See Section 4.3.8 for more information on Caesarean section deliveries.

#### 4.3.8 **Delivery Discharges: Caesarean Section Deliveries**

A Caesarean section was reported for 19,143 (29.0 per cent) *Delivery* discharges. <sup>21</sup> Section 4.3.8 presents additional information on discharges who underwent a Caesarean section procedure.

#### Caesarean Section by Hospital<sup>22</sup> 4.3.8.1

Figure 4.10 presents the proportion of *Delivery* discharges with an emergency or an elective Caesarean section procedure by (anonymised) hospital. It shows that the proportion ranged from 21.2 per cent to 35.6 per cent, compared to the national proportion of 29.0 per cent.

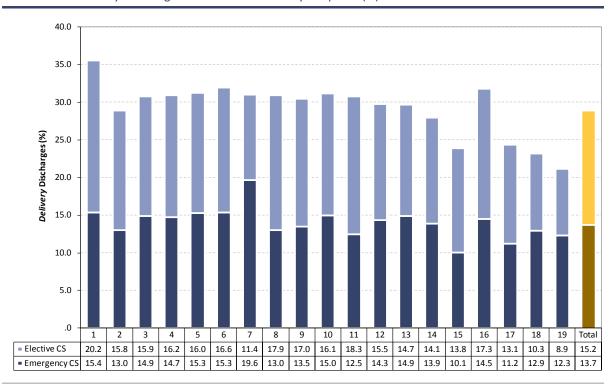


FIGURE 4.10 Delivery Discharges: Caesarean Section by Hospital\* (%)

Notes:

Percentage columns are subject to rounding.

The hospital numbering presented here is comparable to that presented in Activity in Acute Public Hospitals in Ireland, Annual Reports, 2011 and 2012. See www.hpo.ie for the latest versions of these reports.

Data represent Delivery discharges in acute public hospitals reporting to HIPE which have been allocated an admission type Maternity. For national statistics on perinatal events in Ireland see the National Perinatal Reporting System (www.hpo.ie).

This figure presents the proportions from maternity hospitals or hospitals with dedicated maternity units, it does not include the four hospitals that reported <12 deliveries.

As one principal procedure and up to 19 secondary procedures may be collected as applicable for each discharge, the total number of Caesarean sections may not equal the number of principal procedure Caesarean sections as presented in Table

The national Caesarean section rate, which is based on total number of maternities or births occurring in Ireland, is reported in the Perinatal Statistics Reports. See www.hpo.ie

### 4.3.8.2 Caesarean Section Deliveries: Top 10 Principal Diagnoses

Table 4.9 presents the top 10 principal diagnoses for *Delivery* discharges with a Caesarean section procedure by parity.

- Almost 20 per cent of Caesarean section primiparous *Delivery* discharges had a principal diagnosis of *labour and delivery complicated by fetal stress* [distress].
   Of these, 97.0 per cent were emergency Caesarean sections.
- Over 52 per cent of Caesarean section multiparous Delivery discharges had a
  principal diagnosis of maternal care for known or suspected abnormality of
  pelvic organs. Of these, 94.2 per cent were elective Caesarean sections.

**TABLE 4.9** Delivery Discharges: Top 10 Principal Diagnoses for Discharges with a Caesarean Section Procedure by Parity (N, Col % and Row %)

						Caesa	rean Se	ction				
			Ele	ective C	s	Emergency CS			Caesar	Total Caesarean Section <i>Delivery</i> Discharges		
			N	Col %	Row %	N	Col %	Row %	N	Col %	Row %	
	068	Labour and delivery complicated by fetal stress [distress]	44	2.2	3.0	1,417	25.3	97.0	1,461	19.2	100	
	032	Maternal care for known or suspected malpresentation of fetus	846	42.6	90.4	90	1.6	9.6	936	12.3	100	
	048	Prolonged pregnancy	25	1.3	3.3	743	13.3	96.7	768	10.1	100	
	042	Premature rupture of membranes	26	1.3	4.9	510	9.1	95.1	536	7.1	100	
S	036	Maternal care for other known or suspected fetal problems	170	8.6	33.9	331	5.9	66.1	501	6.6	100	
rou	062	Abnormalities of forces of labour	9	0.5	1.9	454	8.1	98.1	463	6.1	100	
Primiparous	013	Gestational [pregnancy-induced] hypertension without significant proteinuria	55	2.8	16.9	271	4.8	83.1	326	4.3	100	
<u>-</u>	063	Long labour	11	0.6	3.5	306	5.5	96.5	317	4.2	100	
	064	Labour and delivery affected by malposition and malpresentation of fetus	92	4.6	33.0	187	3.3	67.0	279	3.7	100	
	014	Gestational [pregnancy-induced] hypertension with significant proteinuria	36	1.8	13.2	236	4.2	86.8	272	3.6	100	
	All Ot	her Diagnoses	672	33.8	38.8	1,059	18.9	61.2	1,731	22.8	100	
	Total	Caesarean Section	1,986	100	26.2	5,604	100	73.8	7,590	100	100	
	Primi	parous <i>Delivery</i> Discharges	1,500	100	20.2	3,004	100	/5.0	7,590	100	100	
	034	Maternal care for known or suspected abnormality of pelvic organs <sup>a</sup>	5,733	70.9	94.2	356	10.3	5.8	6,089	52.8	100	
	032	Maternal care for known or suspected malpresentation of fetus	740	9.2	83.6	145	4.2	16.4	885	7.7	100	
	068	Labour and delivery complicated by fetal stress [distress]	46	0.6	6.3	686	19.8	93.7	732	6.3	100	
sno	O36	Maternal care for other known or suspected fetal problems	194	2.4	46.6	222	6.4	53.4	416	3.6	100	
arc	082	Single delivery by caesarean section	289	3.6	94.8	16	0.5	5.2	305	2.6	100	
Multiparous	042	Premature rupture of membranes	50	0.6	16.4	254	7.3	83.6	304	2.6	100	
Σ	064	Labour and delivery affected by malposition and malpresentation of fetus	95	1.2	31.3	209	6.0	68.8	304	2.6	100	
	062	Abnormalities of forces of labour	4	0.0	1.7	233	6.7	98.3	237	2.1	100	
	048	Prolonged pregnancy	51	0.6	24.2	160	4.6	75.8	211	1.8	100	
	044	Placenta praevia	114	1.4	57.3	85	2.5	42.7	199	1.7	100	
	All Ot	her Diagnoses	765	9.5	41.1	1,096	31.7	58.9	1,861	16.1	100	
		Caesarean Section parous <i>Delivery</i> Discharges	8,081	100	70	3,462	100	30	11,543	100	100	

Notes:

Percentage columns are subject to rounding.

Data represent *Delivery* discharges in acute public hospitals reporting to HIPE which have been allocated an admission type *Maternity*. For national statistics on perinatal events in Ireland see the *National Perinatal Reporting System* (www.hpo.ie). There were 10 discharges who had a caesarean section procedure with 'unknown' parity; these were excluded from this table. Includes *Maternal care due to uterine scar from previous surgery* (O34.2).

#### 4.4 MATERNITY DISCHARGES - NON-DELIVERIES

Non-Delivery discharges are Maternity discharges where admission was related to their obstetrical experience but they did not deliver during that episode of care. In 2013 there were 66,524 Non-Delivery discharges reported to HIPE (50.2 per cent of total Maternity discharges and 4.3 per cent of total HIPE discharges). Non-Delivery discharges are examined by day patient activity in Tables 4.10-4.11 and Figures 4.11-4.13 and in-patient activity in Tables 4.12-4.13 and Figures 4.14-4.16.

#### 4.4.1 **Non-Delivery Discharges: Day Patient Activity**

Day patients accounted for 20.9 per cent (13,914) of Non-Delivery discharges.<sup>23</sup>

- The top two principal diagnoses for Non-Delivery day patient discharges were; special screening examination for other diseases and disorders (42.1 per cent), followed by other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium (10.2 per cent).
- Non-Delivery day patient discharges recorded a principal procedure for 23.1 per cent of discharges. Of these, the top two principal procedure blocks were; curettage and evacuation of uterus (53.6 per cent), and administration of pharmacotherapy (18.2 per cent).

#### 4.4.2 Non-Delivery Discharges: In-Patient Activity

In-patients accounted for 79.1 per cent (52,610) of Non-Delivery discharges.

- The top two principal diagnoses for Non-Delivery in-patient discharges were; other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium (23.7 per cent), followed by false labour (12.0 per cent).
- At 2.0 days, the longest mean length of stay, for Non-Delivery in-patient discharges staying seven days or less in the top 10 principal diagnoses, was recorded for infections of genitourinary tract in pregnancy.
- Non-Delivery in-patient discharges recorded a principal procedure for 19.9 per cent of discharges. Of these the top two principal procedures were; curettage and evacuation of uterus (28.9 per cent), and administration of pharmacotherapy (20.3 per cent).
- In the top 10 principal procedure blocks for Non-Delivery in-patient discharges staying seven days or less, mean length of stay ranged from 1.3 days for curettage and evacuation of uterus and application, insertion or removal procedures on cervix to 2.4 days for generalised allied health interventions.

Caution should be exercised when analysing the increase in Maternity day patients reported between 2012 and 2013, this increase is as a result of one hospital reclassifying activity previously reported as same-day 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.

**TABLE 4.10** Non-Delivery Discharges: Day Patient Top 10 Principal Diagnoses (N, %)

Top 1	0 Principal Diagnoses <sup>a</sup>	N	%
Z13	Special screening examination for other diseases and disorders	5,856	42.1
099	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium	1,423	10.2
002	Other abnormal products of conception	1,252	9.0
Z36	Antenatal screening	1,174	8.4
013	Gestational [pregnancy-induced] hypertension without significant proteinuria	951	6.8
003	Spontaneous abortion	895	6.4
016	Unspecified maternal hypertension	342	2.5
024	Diabetes mellitus in pregnancy	324	2.3
010	Pre-existing hypertension complicating pregnancy, childbirth and the puerperium	199	1.4
Z34	Supervision of normal pregnancy	198	1.4
Top 10 Total	Top 10 Principal Diagnoses for Day Patients –		90.7
Day Pa	atients – Total	13,914	100

Note:

Percentage column is subject to rounding.

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

**TABLE 4.11** Non-Delivery Discharges: Day Patient Top 10 Principal Procedure Blocks (N, %)

Top 10 F	Principal Procedure Blocks <sup>a</sup>	N	%
1265	Curettage and evacuation of uterus	1,721	53.6
1920	Administration of pharmacotherapy	585	18.2
1857	Other cardiovascular diagnostic tests, measures or investigations	357	11.1
1821	Preoperative anaesthesia assessment	142	4.4
1916	Generalised allied health interventions	79	2.5
1893	Administration of blood and blood products	75	2.3
1274	Application, insertion or removal procedures on cervix	57	1.8
1256	Procedures for management of ectopic pregnancy	50	1.6
1884	Immunisation	19	0.6
0063	Administration of anaesthetic agent around other peripheral nerve	16	0.5
	Principal Procedure Blocks for Day s – Total	3,101	96.6
Day Pat	ients with a Principal Procedure – Total	3,210	100
	ients – Total (including those with and	13,914	-

Note:

Percentage column is subject to rounding.

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

FIGURE 4.11 Non-Delivery Discharges: Day Patient Age (N, %)

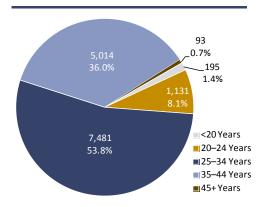


FIGURE 4.12 Non-Delivery Discharges:

Day Patient Marital/Civil Status
(N, %)

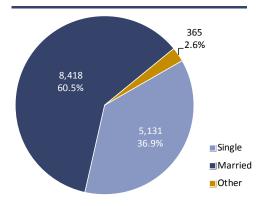
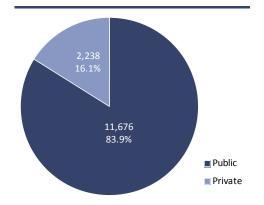


FIGURE 4.13 Non-Delivery Discharges: Day Patient Public/Private Status (N, %)



**TABLE 4.12** Non-Delivery Discharges: In-Patient Top 10 Principal Diagnoses (N, %, and Length of Stay)

Top 1	LO Principal Diagnoses <sup>a</sup>	N	%	Mean LOS (0–7 Days)
099	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium	12,487	23.7	1.5
047	False labour	6,305	12.0	1.3
003	Spontaneous abortion	3,625	6.9	1.3
021	Excessive vomiting in pregnancy	3,013	5.7	1.9
Z36	Antenatal screening	2,788	5.3	1.1
002	Other abnormal products of conception	2,541	4.8	1.2
O46	Antepartum haemorrhage, not elsewhere classified	2,534	4.8	1.5
O20	Haemorrhage in early pregnancy	2,474	4.7	1.2
013	Gestational [pregnancy-induced] hypertension without significant proteinuria	2,088	4.0	1.6
023	Infections of genitourinary tract in pregnancy	1,558	3.0	2.0
Top 1	O Principal Diagnoses for In-Patients al	39,413	74.9	-
In-Pa	tients – Total	52,610	100	1.5

Note:

Percentage column is subject to rounding.

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

**TABLE 4.13** Non-Delivery Discharges: In-Patient Top 10 Principal Procedure Blocks (N, %, and Length of Stay)

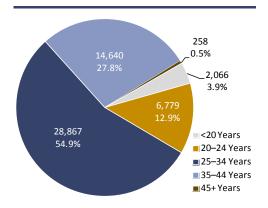
Top 10 F	Principal Procedure Blocks <sup>a</sup>	N	%	Mean LOS (0–7 Days)
1265	Curettage and evacuation of uterus	3,030	28.9	1.3
1920	Administration of pharmacotherapy	2,131	20.3	1.7
1916	Generalised allied health interventions	1,197	11.4	2.4
1884	Immunisation	775	7.4	1.5
1256	Procedures for management of ectopic pregnancy	746	7.1	2.2
1330	Antepartum application, insertion or removal procedures	417	4.0	1.7
1274	Application, insertion or removal procedures on cervix	215	2.1	1.3
1344	Postpartum suture	205	2.0	2.3
1345	Postpartum evacuation of uterus	191	1.8	2.3
1334	Medical or surgical induction of labour	177	1.7	1.9
Patient	Principal Procedure Blocks for In- s – Total	9,084	86.7	_
In-Patie Total	nts with a Principal Procedure –	10,478	100	1.8
	nts – Total (including those with hout a procedure	52,610	-	1.5

Note:

Percentage column is subject to rounding.

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

FIGURE 4.14 Non-Delivery Discharges: In-Patient Age (N, %)



**FIGURE 4.15** *Non-Delivery* Discharges: In-Patient Marital/Civil Status (N, %)

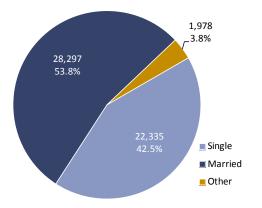
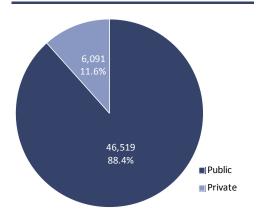


FIGURE 4.16 Non-Delivery Discharges: In-Patient Public/Private Status (N, %)



Case Mix Analysis SECTION

2013

# **118** | Activity in Acute Public Hospitals 2013

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# **Total Discharges** 1,554,290

#### 5.1 **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 2013. Hospital case mix may be defined as 'the proportion of cases of each disease and health problem treated in the hospital'.1

- Section 5.1 presents background to the case mix classification applied and details of the assignment of discharges to Major Diagnostic Categories (MDC) and Australian Refined Diagnosis Related Groups (AR-DRG).
- Section 5.2 presents analysis of HIPE data by case mix for day patients and inpatients.

#### **Case Mix Classification** 5.1.1

- 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.<sup>2</sup> 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 was the coding system used for AR-DRG grouping in 2013.3 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 directly assigned to the AR-DRG system from this database. AR-DRG version 6.0 has been in use in Ireland since 2009.4

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

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.

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

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.

### 5.1.2 Assignment of Discharges to MDC and AR-DRG

Figure 5.1 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.<sup>5</sup>
- 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 5.1 Steps in AR-DRG Assignment



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

- '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).<sup>6</sup>
- 'DD' identifies the partition to which the adjacent DRG belongs. Both characters are numbers whose values indicate whether the code is surgical, medical or other. Discharges with a surgical procedure performed are 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.

<sup>&#</sup>x27;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.

<sup>&</sup>lt;sup>6</sup> '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.

<sup>&#</sup>x27;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.

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.

'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.<sup>9, 10</sup> 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.<sup>11</sup>

### 5.1.2.1 AR-DRG Complexity Split

The AR-DRG complexity split for total discharges is presented in Table 5.1, close to half of total discharges had no complexity split. While only 11.9 percent of acute inpatients were assigned to complexity group A 'Highest consumption of resources', they accounted for 82.1 per cent of discharges within this AR-DRG complexity level.

**TABLE 5.1** Total Discharges: AR-DRG Complexity Split by Patient Type (N, %)

					Dischar	ges					
	Day	In-Patients				Total					
	Patier		Acut (0–30 D	_		Extended Total (>30 Days)		al	Dischar		
	N	%	N	%	N	%	N	%	N	%	
A Highest consumption of resources	7,338	0.8	71,866	11.9	8,365	52.7	80,231	12.9	87,569	5.6	
B Second highest consumption of resources	225,935	24.2	284,189	46.9	5,267	33.2	289,456	46.5	515,391	33.2	
C Third highest consumption of resources	170,934	18.3	33,208	5.5	477	3.0	33,685	5.4	204,619	13.2	
B Second highest consumption of resources C Third highest consumption of resources D Fourth highest consumption of resources	416	0.0	5,099	0.8	69	0.4	5,168	0.8	5,584	0.4	
<b>Z</b> No complexity split	527,450	56.6	211,990	35.0	1,687	10.6	213,677	34.3	741,127	47.7	
Total Discharges	932,073	100	606,352	100	15,865	100	622,217	100	1,554,290	100	

Note: Percentage columns are subject to rounding.

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.

Aisbett, C., Wiley, M.M., McCarthy, B., and Mulligan, A., 2007. *Measuring Hospital Case Mix: Evaluation of Alternative Approaches for the Irish Hospital System, Working Paper No. 192*, Dublin: The Economic and Social Research Institute. pp.9–10.

<sup>&</sup>lt;sup>11</sup> Complications may arise during the hospital stay, while comorbidities are assumed to be prior existing conditions which were present at the time of admission.

### 5.2 Analysis of HIPE Data by Case Mix

This section includes all discharges reported to HIPE (including *Maternity*).

- Analysis of 2013 HIPE data by MDC is presented in Table 5.2 and Figures 5.2 and 5.3.
- Tables 5.3 to 5.27 represent each MDC (including unassignable to MDC and pre-MDC) and their associated AR-DRGs.<sup>12</sup>

### 5.2.1 Analysis of Day Patients by MDC and AR-DRG

- The MDC with the largest proportion of day patients reported was *Diseases and Disorders of the Kidney and Urinary Tract* (MDC 11), which accounted for 189,526 discharges or 20.3 per cent of day patients (see Tables 5.2 and 5.13 and Figure 5.3)
  - \* Haemodialysis (AR-DRG L61Z) accounted for 86.9 per cent of day patients within this MDC and 17.7 per cent of total day patients.
- Neoplastic Disorders (Haematological and Solid Neoplasms) (MDC 17), with 184,418 discharges accounted for 19.8 per cent of day patients (see Tables 5.2 and 5.19 and Figure 5.3).
  - \* Chemotherapy (AR-DRG R63Z) and Radiotherapy (AR-DRG R64Z) accounted for 51.9 per cent and 35.8 per cent respectively of day patients within this MDC; they accounted for 10.3 per cent and 7.1 per cent respectively of total day patients. <sup>13</sup>

#### 5.2.2 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 117,983 discharges, which accounted for 19.0 per cent of in-patients (see Tables 5.2 and 5.16 and Figure 5.3).
  - \* Vaginal Delivery (AR-DRG O60Z) accounted for 38.8 per cent of inpatients within this MDC and 7.4 per cent of total in-patient discharges.
  - \* Antenatal and Other Obstetric Admission (AR-DRG O66Z) accounted for 30.1 per cent of in-patients within this MDC and 5.7 per cent of total inpatients.

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

Activity from the St. Luke's Radiation Oncology Network centres in Beaumont and St. James's Hospitals, estimated at 47,000 day cases, are not included in this report as these data were not submitted to HIPE.

- Caesarean Delivery without Catastrophic or Severe Complication and/or Comorbidity (AR-DRG 001B) accounted for 13.2 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 4.5 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 76,638 in-patients or 12.3 per cent of total in-patients (see Tables 5.2 and 5.7 and Figure 5.3).
  - \* Chest Pain (AR-DRG F74Z) accounted for 25.0 per cent of in-patients within MDC 5 and 3.1 per cent of total in-patients.
  - The mean length of stay for Chest Pain (AR-DRG F74Z) was 1.7 days.

**TABLE 5.2** Total Discharges: MDC by Patient Type (N, %)

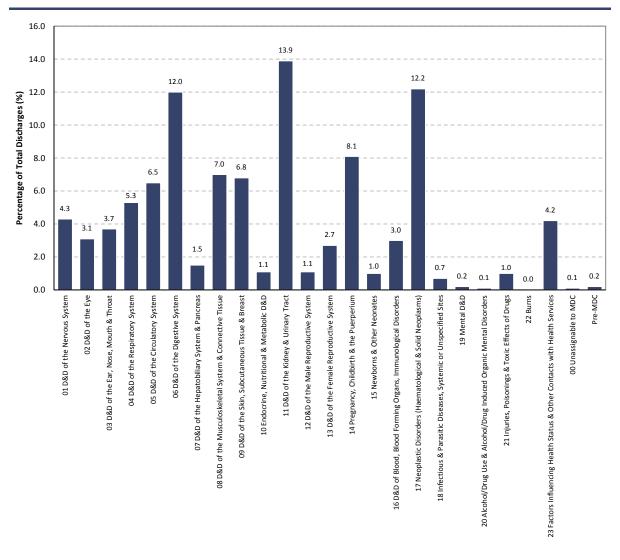
Major Diagnostia Catagoni	Day Patio	ents	In-Patie	nts	Total Discharges	
Major Diagnostic Category	N	%	N	%	N	%
01 Diseases and disorders of the nervous system	20,070	2.2	46,622	7.5	66,692	4.3
02 Diseases and disorders of the eye	43,369	4.7	5,429	0.9	48,798	3.1
03 Diseases and disorders of the ear, nose, mouth and throat	28,891	3.1	28,196	4.5	57,087	3.7
04 Diseases and disorders of the respiratory system	16,757	1.8	65,851	10.6	82,608	5.3
05 Diseases and disorders of the circulatory system	24,686	2.6	76,638	12.3	101,324	6.5
06 Diseases and disorders of the digestive system	119,081	12.8	67,624	10.9	186,705	12.0
07 Diseases and disorders of the hepatobiliary system and pancreas	7,345	0.8	15,633	2.5	22,978	1.5
08 Diseases and disorders of the musculoskeletal system and connective tissue	58,561	6.3	50,332	8.1	108,893	7.0
09 Diseases and disorders of the skin, subcutaneous tissue and breast	87,288	9.4	18,282	2.9	105,570	6.8
10 Endocrine, nutritional and metabolic diseases and disorders	5,442	0.6	11,584	1.9	17,026	1.1
11 Diseases and disorders of the kidney and urinary tract	189,526	20.3	25,744	4.1	215,270	13.9
12 Diseases and disorders of the male reproductive system	12,814	1.4	4,785	0.8	17,599	1.1
13 Diseases and disorders of the female reproductive system	29,378	3.2	12,964	2.1	42,342	2.7
14 Pregnancy, childbirth and the puerperium	8,006	0.9	117,983	19.0	125,989	8.1
15 Newborns and other neonates	546	0.1	14,540	2.3	15,086	1.0
16 Diseases and disorders of blood, blood forming organs, immunological disorders	40,282	4.3	6,277	1.0	46,559	3.0
17 Neoplastic disorders (haematological and solid neoplasms) <sup>a</sup>	184,418	19.8	5,451	0.9	189,869	12.2
18 Infectious and parasitic diseases, systemic or unspecified sites	1,733	0.2	9,903	1.6	11,636	0.7
19 Mental diseases and disorders	715	0.1	2,817	0.5	3,532	0.2
20 Alcohol/drug use and alcohol/drug induced organic mental disorders	~	0.0	*	0.4	2,215	0.1
21 Injuries, poisonings and toxic effects of drugs	1107	0.1	15,036	2.4	16,143	1.0
22 Burns	*	0.0	*	0.1	682	0.0
23 Factors influencing health status and other contacts with health services	51,418	5.5	13,439	2.2	64,857	4.2
00 Unassignable to MDC	436	0.0	1,276	0.2	1,712	0.1
Pre-MDC	124	0.0	2,994	0.5	3,118	0.2
Total Discharges	932,073	100	622,217	100	1,554,290	100

Notes:

Percentage columns are subject to rounding.

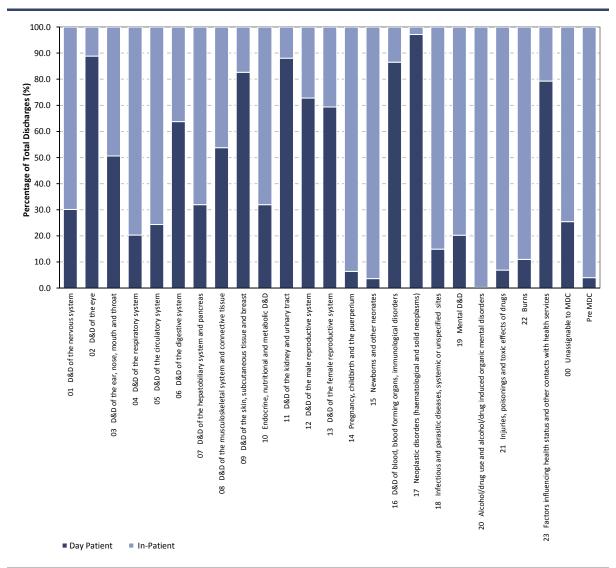
- Denotes five or fewer discharges reported to HIPE.
- \* Further suppression required to prevent disclosure of five or fewer discharges.
- a Activity from the St. Luke's Radiation Oncology Network centres in Beaumont and St. James's Hospitals, estimated at 47,000 day cases, are not included in this report as these data were not submitted to HIPE.

FIGURE 5.2 Total Discharges: Major Diagnostic Category (MDC) (%)



D&D = Diseases and disorders Note:

FIGURE 5.3 Total Discharges: Major Diagnostic Category by Day Patient and In-Patient Discharges (%)



*Note:* D&D = Diseases and disorders

 
 TABLE 5.3
 Total Discharges: MDC 1 Diseases and Disorders of the Nervous System: AR-DRG by Patient Type (N, In-Patient
 Length of Stay)

AND	Day Patients	In-Patients	In-Pa	
MDC 1 Diseases and Disorders of the Nervous System	N	N	Length of Mean	Median
B01A Ventricular Shunt Revision W Cat or Sev CC	0	43	12.9	3
B01B Ventricular Shunt Revision W/O Cat or Sev CC	0	47	3.9	3
B02A Cranial Procedures W Cat CC	0	159	23.6	16
B02B Cranial Procedures W Sev CC	~	292	14.9	10
B02C Cranial Procedures W/O Cat or Sev CC	~	979	8.7	6
BO3A Spinal Procedures W Cat or Sev CC	~	39	22.6	16
BO3B Spinal Procedures W/O Cat or Sev CC	58	162	6.8	4
B04A Extracranial Vascular Procedures W Cat CC	0	60	17.6	13
B04B Extracranial Vascular Procedures W/O Cat CC	6	277	7.6	6
B05Z Carpal Tunnel Release	1,741	64	1.8	1
B06A Procs for Cerebral Palsy, Muscular Dystrophy, Neuropathy W CC	13	73	22.1	13
B06B Procs for Cerebral Palsy, Muscular Dystrophy, Neuropathy W/O CC	158	120	5.0	2
B07A Peripheral and Cranial Nerve and Other Nervous System Procedures W CC	~	90	16.3	7
B07B Peripheral and Cranial Nerve and Other Nervous System Procedures W/O CC	75	393	2.0	1
B40Z Plasmapheresis W Neurological Disease, Sameday	28	0		-
B41Z Telemetric EEG Monitoring	6	223	5.3	4
B42A Nervous System Diagnosis W Ventilator Support W Cat CC B42B Nervous System Diagnosis W Ventilator Support W/O Cat CC	0	47 132	18.8 6.3	13
B60A Acute Paraplegia/Quadriplegia W or W/O OR Procs W Cat CC	0	21	41.2	25
B60B Acute Paraplegia/Quadriplegia W or W/O OR Procs W/O Cat CC	~	61	20.6	9
B61A Spinal Cord Conditions W or W/O OR Procedures W Cat or Sev CC	0	71	22.4	16
B61B Spinal Cord Conditions W or W/O OR Procedures W/O Cat or Sev CC	16	105	10.8	6
B62Z Apheresis	185	16	3.0	3
B63Z Dementia and Other Chronic Disturbances of Cerebral Function	169	815	32.7	13
B64A Delirium W Cat CC	0	182	36.7	13
B64B Delirium W/O Cat CC	95	1,591	10.1	4
B65Z Cerebral Palsy	248	57	7.8	2
B66A Nervous System Neoplasm W Cat or Sev CC	86	429	16.9	10
B66B Nervous System Neoplasm W/O Cat or Sev CC	1,573	729	9.4	4
B67A Degenerative Nervous System Disorders W Cat or Sev CC	10	380	27.7	13
B67B Degenerative Nervous System Disorders W Moderate CC	47	322	13.8	8
B67C Degenerative Nervous System Disorders W/O CC	967	783	8.0	4
B68A Multiple Sclerosis and Cerebellar Ataxia W CC	29	188	14.1	7
B68B Multiple Sclerosis and Cerebellar Ataxia W/O CC	4,552	682	6.1	4
B69A TIA and Precerebral Occlusion W Cat or Sev CC	~	647	8.9	5
B69B TIA and Precerebral Occlusion W/O Cat or Sev CC	52	2,473	3.9	3
B70A Stroke and Other Cerebrovascular Disorders W Cat CC B70B Stroke and Other Cerebrovascular Disorders W Sev CC	0 ~	925	43.9	26
	40	1,529 2,689	20.8 10.4	12 7
B70C Stroke and Other Cerebrovascular Disorders W/O Cat or Sev CC B70D Stroke and Other Cerebrovascular Disorders, Died or Transferred <5 Days	7	598	1.9	1
B71A Cranial and Peripheral Nerve Disorders W CC	140	355	9.8	4
B71B Cranial and Peripheral Nerve Disorders W/O CC	3,617	1,066	3.9	1
B72A Nervous System Infection Except Viral Meningitis W Cat or Sev CC	14	115	29.9	19
B72B Nervous System Infection Except Viral Meningitis W/O Cat or Sev CC	127	302	9.3	7
B73Z Viral Meningitis	~	364	5.1	4
B74A Nontraumatic Stupor and Coma W CC	9	106	8.7	3
B74B Nontraumatic Stupor and Coma W/O CC	42	85	2.9	1
B75Z Febrile Convulsions	25	827	1.7	1
B76A Seizure W Cat or Sev CC	6	1,022	10.2	5
B76B Seizure W/O Cat or Sev CC	1,402	5,770	3.0	1
B77Z Headache	1,247	9,354	2.0	1
B78A Intracranial Injury W Cat or Sev CC	0	227	35.6	11
B78B Intracranial Injury W/O Cat or Sev CC	0	624	6.3	3
B79A Skull Fractures W Cat or Sev CC	0	36	20.6	8
B79B Skull Fractures W/O Cat or Sev CC	~	289	3.7	2
B80Z Other Head Injury	9	2,620	2.4	1
B81A Other Disorders of the Nervous System W Cat or Sev CC	30	806	18.4	8
B81B Other Disorders of the Nervous System W/O Cat or Sev CC	2,868	3,500	4.4	1
B82A Chronic and Unspecified Paraplegia/Quadriplegia W or W/O OR Procs W Cat CC	11	143	45.6	19
B82B Chronic and Unspecified Paraplegia/Quadriplegia W or W/O OR Procs W Sev CC	16	159	34.2	14
B82C Chronic and Unspecified Paraplegia/Quadriplegia W or W/O OR Pr W/O Cat/Sev CC	322	359	23.4	7
Total Discharges	20,070	46,622	8.1	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.
  Length of stay (mean and median) is based on acute and extended in-patients.

**TABLE 5.4** 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		atient of Stay <sup>a</sup>
	N	N	Mean	Median
C01Z Procedures for Penetrating Eye Injury	~	82	3.6	3
C02Z Enucleations and Orbital Procedures	67	91	4.0	2
C03Z Retinal Procedures	17,273	1,195	3.1	2
CO4Z Major Corneal, Scleral and Conjunctival Procedures	17	138	2.5	2
C05Z Dacryocystorhinostomy	91	90	1.5	1
C10Z Strabismus Procedures	493	139	1.1	1
C11Z Eyelid Procedures	727	152	1.8	1
C12Z Other Corneal, Scleral and Conjunctival Procedures	267	74	3.7	2
C13Z Lacrimal Procedures	610	10	2.3	1
C14Z Other Eye Procedures	2,007	193	3.3	2
C15A Glaucoma and Complex Cataract Procedures	0	325	3.4	2
C15B Glaucoma and Complex Cataract Procedures, Sameday	478	6	1.0	1
C16Z Lens Procedures	9,860	514	2.0	2
C60A Acute and Major Eye Infections W CC	~	48	13.7	5
C60B Acute and Major Eye Infections W/O CC	47	140	5.0	4
C61A Neurological and Vascular Disorders of the Eye W CC	51	172	5.2	3
C61B Neurological and Vascular Disorders of the Eye W/O CC	876	486	3.1	2
C62Z Hyphema and Medically Managed Trauma to the Eye	140	465	4.4	1
C63Z Other Disorders of the Eye	10,358	1,109	3.0	1
Total Discharges	43,369	5,429	3.2	2

Notes: ~

<sup>~</sup> Denotes five or fewer discharges reported to HIPE.

a Length of stay (mean and median) is based on acute and extended in-patients.

**TABLE 5.5** 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		atient of Stay <sup>a</sup>
	N	N	Mean	Median
D01Z Cochlear Implant	~	97	3.4	2
D02A Head and Neck Procedures W Cat or Sev CC	~	76	19.0	12
D02B Head and Neck Procedures W Malignancy or Moderate CC	~	84	8.7	8
D02C Head and Neck Procedures W/O Malignancy W/O CC	18	100	2.6	2
D03Z Surgical Repair for Cleft Lip or Palate Diagnosis	12	158	3.4	3
D04A Maxillo Surgery W CC	~	81	4.2	3
D04B Maxillo Surgery W/O CC	81	696	2.6	2
D05Z Parotid Gland Procedures	8	207	3.3	3
D06Z Sinus and Complex Middle Ear Procedures	113	301	2.4	
D10Z Nasal Procedures	448	669	1.4	:
D11Z Tonsillectomy and/or Adenoidectomy	609	4,986	1.4	
D12Z Other Ear, Nose, Mouth and Throat Procedures	1,321	935	3.2	
D13Z Myringotomy W Tube Insertion	2,480	126	1.7	
D14Z Mouth and Salivary Gland Procedures	916	358	4.4	;
D15Z Mastoid Procedures	15	250	2.0	
D40Z Dental Extractions and Restorations	5,677	249	1.7	
D60A Ear, Nose, Mouth and Throat Malignancy W Cat or Sev CC	48	232	23.3	1.
D60B Ear, Nose, Mouth and Throat Malignancy W/O Cat or Sev CC	857	587	11.0	4
D61Z Dysequilibrium	715	3,445	2.5	
D62Z Epistaxis	564	1,019	3.5	;
D63Z Otitis Media and URI	2,660	8,515	2.0	
D64Z Laryngotracheitis and Epiglottitis	26	1,078	1.3	
D65Z Nasal Trauma and Deformity	999	411	2.8	
D66A Other Ear, Nose, Mouth and Throat Diagnoses W CC	296	301	6.1	
D66B Other Ear, Nose, Mouth and Throat Diagnoses W/O CC	9,174	1,722	1.8	
D67A Oral and Dental Disorders Except Extractions and Restorations	0	997	3.2	:
D67B Oral and Dental Disorders Except Extractions and Restorations, Sameday	1,845	516	1.0	:
Total Discharges	28,891	28,196	2.6	

<sup>~</sup> Denotes five or fewer discharges reported to HIPE.

a Length of stay (mean and median) is based on acute and extended in-patients.

**TABLE 5.6** 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		ntient of Stay <sup>a</sup>
	N	N	Mean	Median
E01A Major Chest Procedures W Cat CC	0	391	16.4	13
E01B Major Chest Procedures W/O Cat CC	25	530	10.0	8
E02A Other Respiratory System OR Procedures W Cat CC	~	191	25.2	16
E02B Other Respiratory System OR Procedures W Sev or Moderate CC	30	185	10.0	7
E02C Other Respiratory System OR Procedures W/O CC	75	184	5.3	4
E40A Respiratory System Diagnosis W Ventilator Support W Cat CC	0	140	13.9	11
E40B Respiratory System Diagnosis W Ventilator Support W/O Cat CC	0	103	12.2	8
E41Z Respiratory System Diagnosis W Non-Invasive Ventilation	0	1,222	16.4	10
E42A Bronchoscopy W Cat CC	0	307	25.3	19
E42B Bronchoscopy W/O Cat CC	0	1,167	10.5	8
E42C Bronchoscopy, Sameday	5,921	56	1.0	1
E60A Cystic Fibrosis W Cat or Sev CC	169	430	17.1	14
E60B Cystic Fibrosis W/O Cat or Sev CC	1,692	619	8.9	9
E61A Pulmonary Embolism W Cat CC	~	202	17.4	11
E61B Pulmonary Embolism W/O Cat CC	38	1,319	6.9	6
E62A Respiratory Infections/Inflammations W Cat CC	~	3,241	16.3	10
E62B Respiratory Infections/Inflammations W Sev or Moderate CC	24	4,672	9.3	6
E62C Respiratory Infections/Inflammations W/O CC	85	3,791	4.4	3
E63Z Sleep Apnoea	80	2,130	1.4	1
E64A Pulmonary Oedema and Respiratory Failure W Cat CC	~	252	11.1	7
E64B Pulmonary Oedema and Respiratory Failure W/O Cat CC	7	456	6.9	5
E65A Chronic Obstructive Airways Disease W Cat CC	20	2,566	12.3	8
E65B Chronic Obstructive Airways Disease W/O Cat CC	1,602	10,646	6.1	4
E66A Major Chest Trauma W Cat CC	0	33	23.6	13
E66B Major Chest Trauma W Sev or Moderate CC	0	175	6.9	4
E66C Major Chest Trauma W/O CC	0	204	3.3	2
E67A Respiratory Signs and Symptoms W Cat or Sev CC	92	759	4.6	3
E67B Respiratory Signs and Symptoms W/O Cat or Sev CC	1,339	4,373	1.8	1
E68A Pneumothorax W CC	1,339	252	8.9	6
E68B Pneumothorax W/O CC	6	389	4.2	3
E69A Bronchitis and Asthma W CC	29	575	5.3	4
E69B Bronchitis and Asthma W/O CC	2,010	3,436	2.3	1
·	2,010	197	6.1	4
E70A Whooping Cough and Acute Bronchiolitis W CC E70B Whooping Cough and Acute Bronchiolitis W/O CC	17	2,174	2.8	2
E71A Respiratory Neoplasms W Cat CC	161	549	13.1	10
	2,231	1,822	9.2	5
E71B Respiratory Neoplasms W/O Cat CC E72Z Respiratory Problems Arising from Neonatal Period	2,231	71	4.9	2
	9 ~	199		
E73A Pleural Effusion W Cat CC			14.9	10
E73B Pleural Effusion W Sev or Moderate CC	29	386	7.7	
E73C Pleural Effusion W/O CC	75	282	5.5	3
E74A Interstitial Lung Disease W Cat CC	11	137	13.2	9
E74B Interstitial Lung Disease W Sev or Moderate CC	59	290	9.1	6
E74C Interstitial Lung Disease W/O CC	294	401	5.0	3
E75A Other Respiratory System Diagnosis W Cat CC	~	1,697	14.4	8
E75B Other Respiratory System Diagnosis W Sev or Moderate CC	111	5,353	7.0	5
E75C Other Respiratory System Diagnosis W/O CC	440	7,134	2.9	1
E76Z Respiratory Tuberculosis	56	163	15.1	8
Total Discharges	16,757	65,851	7.1	4

Notes:  $\ ^{\sim}$  Denotes five or fewer discharges reported to HIPE.

a Length of stay (mean and median) is based on acute and extended in-patients.

 
 TABLE 5.7
 Total Discharges: MDC 5 Diseases and Disorders of the Circulatory System: AR-DRG by Patient Type (N, In Patient Length of Stay)

	Day	In-Patients		atient
MDC 5 Diseases and Disorders of the Circulatory System	Patients			of Stay <sup>a</sup>
	N	N	Mean	Median
F01A Implantation or Replacement of AICD, Total System W Cat CC	7	61	19.2	15
F01B Implantation or Replacement of AICD, Total System W/O Cat CC	166 11	212	5.6	1
FO2Z Other AICD Procedures  FO2A Cardiac Valva Brac W CRP Rump W Invasiva Cardiac Investigation W Cat CC	0	23 44	4.0 34.1	20
F03A Cardiac Valve Proc W CPB Pump W Invasive Cardiac Investigation W Cat CC F03B Cardiac Valve Proc W CPB Pump W Invasive Cardiac Investigation W/O Cat CC	0	25	15.8	30 17
F04A Cardiac Valve Proc W CPB Pump W/O Invasive Cardiac Investigation W/O Cat CC	~	205	17.1	13
F04B Cardiac Valve Proc W CPB Pump W/O Invasive Cardiac Inves W/O Cat CC	0	194	11.3	10
F05A Coronary Bypass W Invasive Cardiac Investigation W Reoperation or W Cat CC	0	77	25.8	21
F05B Coronary Bypass W Invasive Cardiac Investigation W/O Reoperation W/O Cat CC	0	78	19.7	18
F06A Coronary Bypass W/O Invasive Cardiac Inves W Reoperation or W Cat or Sev CC	~	425	12.9	10
F06B Coronary Bypass W/O Invasive Cardiac Inves W/O Reoperation W/O Cat or Sev CC	0	160	10.5	9
F07A Other Cardiothoracic/Vascular Procedures W CPB Pump W Cat CC	0	51	17.5	14
F07B Other Cardiothoracic/Vascular Procedures W CPB Pump W Sev or Moderate CC	0	54	14.1	11
F07C Other Cardiothoracic/Vascular Procedures W CPB Pump W/O CC	0	80	9.2	8
F08A Major Reconstruct Vascular Procedures W/O CPB Pump W Cat CC	~	231	27.4	16
F08B Major Reconstruct Vascular Procedures W/O CPB Pump W/O Cat CC	24	554	9.4	7
F09A Other Cardiothoracic Procedures W/O CPB Pump W Cat CC	~	71	15.1	12
F09B Other Cardiothoracic Procedures W/O CPB Pump W Sev or Moderate CC	6	55	8.6	8
F09C Other Cardiothoracic Procedures W/O CPB Pump W/O CC	34	49	5.0	4
F10A Interventional Coronary Procedures W AMI W Cat CC	0	145	15.6	12
F10B Interventional Coronary Procedures W AMI W/O Cat CC	172	1,572	3.7	3
F11A Amputation for Circ System Except Upper Limb and Toe W Cat CC	0	76	58.2	40
F11B Amputation for Circ System Except Upper Limb and Toe W/O Cat CC	0	75	26.2	19
F12A Implantation or Replacement of Pacemaker, Total System W Cat CC	~	108	17.4	12
F12B Implantation or Replacement of Pacemaker, Total System W/O Cat CC	380	664	5.6	3
F13A Upper Limb and Toe Amputation for Circulatory Sys Disorders W Cat or Sev CC	0	61	25.2	15
F13B Upper Limb and Toe Amputation for Circulatory Sys Disorders W/O Cat or Sev CC	9	68	12.0	7
F14A Vascular Procs Except Major Reconstruction W/O CPB Pump W Cat CC	~	238	15.3	11
F14B Vascular Procs Except Major Reconstruction W/O CPB Pump W Sev or Mod CC	43	364	6.5	4
F14C Vascular Procs Except Major Reconstruction W/O CPB Pump W/O CC	155	596	4.2	2
F15A Interventional Coronary Procs W/O AMI W Stent Implantation W Cat or Sev CC	24	472	5.6	3
F15B Interventional Coronary Procs W/O AMI W Stent Implantation W/O Cat or Sev CC	603	1,817	2.2	1
F16A Interventional Coronary Procedures W/O AMI W/O Stent Implantation W CC	~	33	4.2	2
F16B Interventional Coronary Procedures W/O AMI W/O Stent Implantation W/O CC	16	61	2.4	1
F17A Insertion or Replacement of Pacemaker Generator W Cat or Sev CC	15	27	10.9	6
F17B Insertion or Replacement of Pacemaker Generator W/O Cat or Sev CC	144	112	2.6	1
F18A Other Pacemaker Procedures W CC		32	9.0	4
F18B Other Pacemaker Procedures W/O CC	16 62	30	3.4	2
F19Z Trans-Vascular Percutaneous Cardiac Intervention		205	3.8	
F20Z Vein Ligation and Stripping	3,314	475	1.3	1
F21A Other Circulatory System OR Procedures W Cat CC F21B Other Circulatory System OR Procedures W/O Cat CC	0 11	58 76	30.9 9.6	18
F40A Circulatory System Diagnosis W Ventilator Support W Cat CC	0	67	11.4	6 9
F40B Circulatory System Diagnosis W Ventilator Support W/O Cat CC	0	52	7.3	4
F41A Circulatory Disorders W AMI W Invasive Cardiac Inves Proc W Cat or Sev CC	8	191	11.9	9
F41B Circulatory Disorders W AMI W Invasive Cardiac Inves Proc W Cat or Sev CC	142	601	4.2	3
F42A Circulatory Disorders W/O AMI W Invasive Cardiac Inves Proc W Cat or Sev CC	0	667	11.1	8
F42B Circulatory Disorders W/O AMI W Invasive Cardiac Inves Proc W/O Cat or Sev CC	0	2,747	4.0	3
F42C Circulatory Disorders W/O AMI W Invasive Cardiac Inves Proc, Sameday	8,905	705	1.0	1
F43Z Circulatory System Diagnosis W Non-Invasive Ventilation	0	167	18.4	12
F60A Circulatory Disorders W AMI W/O Invasive Cardiac Inves Proc W Cat CC	~	412	17.2	10
F60B Circulatory Disorders W AMI W/O Invasive Cardiac Inves Pr W/O Cat CC	18	2,820	5.7	4
F61A Infective Endocarditis W Cat CC	0	47	38.1	28
F61B Infective Endocarditis W/O Cat CC	14	89	17.4	12
F62A Heart Failure and Shock W Cat CC	6	1,343	18.6	11
F62B Heart Failure and Shock W/O Cat CC	114	4,236	7.5	5
F63A Venous Thrombosis W Cat or Sev CC	10	344	9.0	7
F63B Venous Thrombosis W/O Cat or Sev CC	308	1,483	3.1	1
F64A Skin Ulcers in Circulatory Disorders W Cat or Sev CC	~	141	23.5	13
F64B Skin Ulcers in Circulatory Disorders W/O Cat or Sev CC	84	189	9.4	7
F65A Peripheral Vascular Disorders W Cat or Sev CC	40	400	12.1	7

**TABLE 5.7** 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		atient of Stay <sup>a</sup>
	N	N	Mean	Median
F65B Peripheral Vascular Disorders W/O Cat or Sev CC	935	979	4.2	2
F66A Coronary Atherosclerosis W Cat or Sev CC	28	361	8.0	5
F66B Coronary Atherosclerosis W/O Cat or Sev CC	454	1,941	3.7	2
F67A Hypertension W Cat or Sev CC	6	148	6.7	4
F67B Hypertension W/O Cat or Sev CC	180	1,656	1.9	1
F68A Congenital Heart Disease W CC	109	67	6.7	2
F68B Congenital Heart Disease W/O CC	444	162	3.2	1
F69A Valvular Disorders W Cat or Sev CC	32	274	9.4	5
F69B Valvular Disorders W/O Cat or Sev CC	767	3,106	1.9	1
F72A Unstable Angina W Cat or Sev CC	~	283	9.2	5
F72B Unstable Angina W/O Cat or Sev CC	39	1,607	3.7	2
F73A Syncope and Collapse W Cat or Sev CC	14	2,180	10.5	5
F73B Syncope and Collapse W/O Cat or Sev CC	2,763	7,921	3.0	1
F74Z Chest Pain	1,218	19,133	1.7	1
F75A Other Circulatory System Diagnoses W Cat CC	~	203	18.3	10
F75B Other Circulatory System Diagnoses W Sev or Moderate CC	158	952	6.2	4
F75C Other Circulatory System Diagnoses W/O CC	310	964	3.0	2
F76A Arrhythmia, Cardiac Arrest and Conduction Disorders W Cat or Sev CC	65	1,453	8.8	6
F76B Arrhythmia, Cardiac Arrest and Conduction Disorders W/O Cat or Sev CC	2,284	6,533	3.1	2
Total Discharges	24,686	76,638	4.8	2

<sup>~</sup> Denotes five or fewer discharges reported to HIPE.

a Length of stay (mean and median) is based on acute and extended in-patients.

MDC & Dispasses and Dispardors of the Disparting System	Day Patients	In-Patients		Patient n of Stay <sup>a</sup>
MDC 6 Diseases and Disorders of the Digestive System	N	N	Mea	,
			n	Median
G01A Rectal Resection W Cat CC	0	239	26.7	21
G01B Rectal Resection W/O Cat CC	0	616	11.5	9
G02A Major Small and Large Bowel Procedures W Cat CC	~	789	26.9	19
G02B Major Small and Large Bowel Procedures W/O Cat CC	114	1,669	11.1	9
G03A Stomach, Oesophageal and Duodenal Procedure W Malignancy or W Cat CC	~	338	19.9	16
GO3B Stomach, Oesophageal and Duodenal Procedures W/O Malignancy W Sev or Mod CC	0	94	7.9	7
G03C Stomach, Oesophageal and Duodenal Procedures W/O Malignancy W/O CC	61	354	4.7	3
G04A Peritoneal Adhesiolysis W Cat CC	0	74	21.1	16
G04B Peritoneal Adhesiolysis W Sev or Moderate CC	~	139	11.5	8
G04C Peritoneal Adhesiolysis W/O CC	74	461	6.3	5
G05A Minor Small and Large Bowel Procedures W Cat CC	~	53	21.6	15
G05B Minor Small and Large Bowel Procedures W Sev or Moderate CC	~	107	9.0	7
G05C Minor Small and Large Bowel Procedures W/O CC	17	257	7.0	6
G06Z Pyloromyotomy Procedure	0	85	3.7	3
G07A Appendicectomy W Malignancy or Peritonitis or W Cat or Sev CC	~	1,070	5.3	4
G07B Appendicectomy W/O Malignancy or Peritonitis W/O Cat or Sev CC	39	5,173	2.7	2
G10A Hernia Procedures W CC	60	477	7.7	4
G10B Hernia Procedures W/O CC	2,805	2,413	2.1	1
G11Z Anal and Stomal Procedures	4,816	1,602	3.4	2
G12A Other Digestive System OR Procedures W Cat CC	17	153	22.7	16
G12B Other Digestive System OR Procedures W Sev or Moderate CC	90	249	11.6	9
G12C Other Digestive System OR Procedures W/O CC	474	592	5.5	3
G46A Complex Gastroscopy W Cat CC	0	220	22.4	16
G46B Complex Gastroscopy W/O Cat CC	0	1,779	7.6	5
G46C Complex Gastroscopy, Sameday	11,995	50	1.0	1
G47A Other Gastroscopy W Cat CC	0	371	18.0	11
G47B Other Gastroscopy W/O Cat CC	0	4,917	4.9	3
G47C Other Gastroscopy, Sameday	39,350	410	1.0	1
G48A Colonoscopy W Cat or Sev CC	0	543	14.5	9
G48B Colonoscopy W/O Cat or Sev CC	0	2,647	5.3	4
G48C Colonoscopy, Sameday	41,661	121	1.0	1
G60A Digestive Malignancy W Cat CC	119	343	12.5	9
G60B Digestive Malignancy W/O Cat CC	4,222	1,630	8.9	5
G61A GI Haemorrhage W Cat or Sev CC	6	404	6.9	4
G61B GI Haemorrhage W/O Cat or Sev CC	221	1,097	2.9	2
G62Z Complicated Peptic Ulcer	70	72	7.1	5
G63Z Uncomplicated Peptic Ulcer	12	61	2.7	1
G64A Inflammatory Bowel Disease W CC	82	206	8.4	6
G64B Inflammatory Bowel Disease W/O CC	5,697	848	4.1	3
G65A GI Obstruction W Cat or Sev CC	~	310	13.0	6
G65B GI Obstruction W/O Cat or Sev CC	18	907	4.3	3
G66Z Abdominal Pain or Mesenteric Adenitis	855	10,972	2.0	1
G67A Oesophagitis and Gastroenteritis W Cat/Sev CC	21	1,430	8.2	5
G67B Oesophagitis and Gastroenteritis W/O Cat/Sev CC	840	10,287	2.3	1
G70A Other Digestive System Diagnoses W Cat or Sev CC	164	1,715	7.6	4
G70B Other Digestive System Diagnoses W/O Cat or Sev CC	5,170	9,280	3.0	2
Total Discharges	119,081	67,624	4.8	2

Notes: ~ Denotes five of

Denotes five or fewer discharges reported to HIPE.

a Length of stay (mean and median) is based on acute and extended in-patients.

**TABLE 5.9** 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		atient of Stay <sup>a</sup>
	N	N	Mean	Median
H01A Pancreas, Liver and Shunt Procedures W Cat CC	~	99	23.1	15
HO1B Pancreas, Liver and Shunt Procedures W/O Cat CC	~	234	8.1	7
H02A Major Biliary Tract Procedures W Cat CC	0	89	28.8	16
H02B Major Biliary Tract Procedures W Sev CC	~	64	14.3	12
H02C Major Biliary Tract Procedures W/O Cat or Sev CC	45	150	10.3	9
H05A Hepatobiliary Diagnostic Procedures W Cat CC	~	24	19.4	14
H05B Hepatobiliary Diagnostic Procedures W/O Cat CC	78	92	9.0	7
H06A Other Hepatobiliary and Pancreas OR Procedures W Cat CC	~	74	26.0	17
H06B Other Hepatobiliary and Pancreas OR Procedures W/O Cat CC	21	183	6.5	3
H07A Open Cholecystectomy W Closed CDE or W Cat CC	0	39	19.2	16
H07B Open Cholecystectomy W/O Closed CDE W/O Cat CC	10	211	7.5	6
H08A Laparoscopic Cholecystectomy W Closed CDE or W (Cat or Sev CC)	16	291	7.4	6
H08B Laparoscopic Cholecystectomy W/O Closed CDE W/O Cat or Sev CC	1,074	2,862	2.3	1
H40A Endoscopic Procedures for Bleeding Oesophageal Varices W Cat CC	0	25	17.7	16
H40B Endoscopic Procedures for Bleeding Oesophageal Varices W/O Cat CC	10	66	8.0	6
H43A ERCP Procedures W Cat or Sev CC	17	276	14.7	11
H43B ERCP Procedures W/O Cat or Sev CC	1,461	948	5.7	5
H60A Cirrhosis and Alcoholic Hepatitis W Cat CC	9	291	20.3	13
H60B Cirrhosis and Alcoholic Hepatitis W Sev or Moderate CC	112	545	9.0	6
H60C Cirrhosis and Alcoholic Hepatitis W/O CC	294	151	5.6	4
H61A Malignancy of Hepatobiliary System, Pancreas W Cat CC	45	258	16.1	13
H61B Malignancy of Hepatobiliary System, Pancreas W/O Cat CC	1,300	1,032	8.3	5
H62A Disorders of Pancreas Except for Malignancy W Cat or Sev CC	6	323	11.2	8
H62B Disorders of Pancreas Except for Malignancy W/O Cat or Sev CC	493	1,354	5.4	4
H63A Disorders of Liver Except Malig, Cirrhosis, Alcoholic Hepatitis W Cat/Sev CC	44	410	10.3	6
H63B Disorders of Liver Excep Malig, Cirrhosis, Alcoholic Hepatitis W/O Cat/Sev CC	1,602	1,169	3.8	2
H64A Disorders of the Biliary Tract W CC	73	1,093	9.2	7
H64B Disorders of the Biliary Tract W/O CC	622	3,280	4.1	3
Total Discharges	7,345	15,633	6.6	4

Notes:  $\ \ ^{\sim}$  Denotes five or fewer discharges reported to HIPE.

a Length of stay (mean and median) is based on acute and extended in-patients.

 
 TABLE 5.10
 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)

	Day Patients	In-Patients	In-Patient	
MDC 8 Diseases and Disorders of the Musculoskeletal System and Connective Tissue			Length	of Stay <sup>a</sup>
	N	N	Mean	Median
IO1A Bilateral/Multiple Major Joint Proc of Lower Extremity W Revision or W Cat CC	0	34	67.6	33
IO1B Bilateral/Multiple Major Joint Pr of Lower Extremity W/O Revision W/O Cat CC	0	66	7.0	6
102A Microvascular Tissue Transfer or (Skin Graft W Cat or Sev CC), Excluding Hand	~	60	34.3	23
IO2B Skin Graft W/O Cat or Sev CC, Excluding Hand	16	87	7.5	3
103A Hip Replacement W Cat CC	0	441	32.6	19
IO3B Hip Replacement W/O Cat CC	0	4,677	7.9	6
IO4A Knee Replacement W Cat or Sev CC	0	288 1,999	9.6 5.2	7 5
IO4B Knee Replacement W/O Cat or Sev CC IO5A Other Joint Replacement W Cat or Sev CC	0	28	12.7	7
105B Other Joint Replacement W/O Cat or Sev CC	~	223	4.4	3
106Z Spinal Fusion W Deformity	23	159	9.4	7
107Z Amputation	0	50	29.8	17
IO8A Other Hip and Femur Procedures W Cat CC	0	455	38.5	24
IO8B Other Hip and Femur Procedures W/O Cat CC	44	2,158	12.4	9
109A Spinal Fusion W Cat CC	0	66	26.9	16
109B Spinal Fusion W/O Cat CC	~	492	6.8	5
I10A Other Back and Neck Procedures W Cat or Sev CC	6	102	11.9	6
I10B Other Back and Neck Procedures W/O Cat or Sev CC	847	1,177	3.5	2
I11Z Limb Lengthening Procedures	~	35	4.7	4
I12A Infect/Inflam of Bone and Joint W Misc Musculoskeletal Procs W Cat CC	0	76	33.8	25
I12B Infect/Inflam of Bone and Joint W Misc Musculoskeletal Procs W Sev or Mod CC	~	108	20.6	15
I12C Infect/Inflam of Bone and Joint W Misc Musculoskeletal Procs W/O CC	55	248	8.9	6
I13A Humerus, Tibia, Fibula and Ankle Procedures W CC	~	534	10.2	5
I13B Humerus, Tibia, Fibula and Ankle Procedures W/O CC	147	3,782	3.0	2
I15Z Cranio-Facial Surgery	0	68	5.4	4
I16Z Other Shoulder Procedures	212	819	1.5	1
I17A Maxillo-Facial Surgery W CC	~	14	12.6	5
I17B Maxillo-Facial Surgery W/O CC	~	43	3.4	2
I18Z Other Knee Procedures	2,418	578	2.3	1
I19A Other Elbow or Forearm Procedures W CC	6	284	6.7	3
I19B Other Elbow or Forearm Procedures W/O CC	363	2,894	1.8	1
I20Z Other Foot Procedures	436	1,343	2.3	1
I21Z Local Excision and Removal of Internal Fixation Devices of Hip and Femur	82	81	3.5	1
123Z Local Excision and Removal of Internal Fixation Devices Excl Hip and Femur	2,389	475	2.4	1
124Z Arthroscopy	881	245	1.9	1
125A Bone and Joint Diagnostic Procedures Including Biopsy W CC	22	38	16.4	10
125B Bone and Joint Diagnostic Procedures Including Biopsy W/O CC	101	54	6.1	2
127A Soft Tissue Procedures W CC	28	137	13.2	8
127B Soft Tissue Procedures W/O CC	603	530	3.0	2
128A Other Musculoskeletal Procedures W CC	17	127	17.0	9
I28B Other Musculoskeletal Procedures W/O CC	178	581	3.0	2
I29Z Knee Reconstruction or Revision I30Z Hand Procedures	15	564	1.4 1.6	1
	1,839 0	2,325 41	34.2	21
I31A Hip Revision W Cat CC	0	479		
I31B Hip Revision W/O Cat CC I32A Knee Revision W Cat CC	0	8	10.2 8.9	7 8
I32B Knee Revision W Cat CC	0	16	16.4	7
I32C Knee Revision W/O Cat or Sev CC	0	84	9.3	6
I60Z Femoral Shaft Fractures	~	92	6.4	3
I61A Distal Femoral Fractures W CC	0	24	12.3	10
I61B Distal Femoral Fractures W/O CC	~	72	4.6	2
163A Sprains, Strains and Dislocations of Hip, Pelvis and Thigh W CC	0	35	17.3	5
I63B Sprains, Strains and Dislocations of Hip, Pelvis and Thigh W/O CC	~	131	3.1	2
I64A Osteomyelitis W Cat or Sev CC	~	146	27.0	20
I64B Osteomyelitis W/O Cat or Sev CC	246	202	10.4	8
165A Musculoskeletal Malignant Neoplasms W Cat CC	15	131	16.4	12
I65B Musculoskeletal Malignant Neoplasms W/O Cat CC	849	787	6.7	4
I66A Inflammatory Musculoskeletal Disorders W Cat or Sev CC	53	201	16.4	9
I66B Inflammatory Musculoskeletal Disorders W/O Cat or Sev CC	8,618	835	4.5	3
167A Septic Arthritis W Cat or Sev CC	~	32	25.9	20
I67B Septic Arthritis W/O Cat or Sev CC	52	125	7.8	5
,			0	

**TABLE 5.10** 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		atient of Stay <sup>a</sup>
Tissue	N	N	Mean	Median
168A Non-surgical Spinal Disorders W CC	0	1,093	12.8	6
168B Non-surgical Spinal Disorders W/O CC	0	2,008	4.8	3
168C Non-surgical Spinal Disorders, Sameday	13,594	851	1.0	1
169A Bone Diseases and Arthropathies W Cat or Sev CC	23	239	12.5	7
169B Bone Diseases and Arthropathies W/O Cat or Sev CC	5,896	1,152	3.9	1
171A Other Musculotendinous Disorders W Cat or Sev CC	46	311	8.5	4
171B Other Musculotendinous Disorders W/O Cat or Sev CC	10,222	4,392	2.0	1
172A Specific Musculotendinous Disorders W Cat or Sev CC	20	89	11.2	6
172B Specific Musculotendinous Disorders W/O Cat or Sev CC	4,137	851	2.8	1
173A Aftercare of Musculoskeletal Implants/Prostheses W Cat or Sev CC	~	61	15.2	10
173B Aftercare of Musculoskeletal Implants/Prostheses W/O Cat or Sev CC	1,653	319	6.5	3
174Z Injury to Forearm, Wrist, Hand or Foot	369	2,594	2.4	1
175A Injury to Shoulder, Arm, Elbow, Knee, Leg or Ankle W CC	~	474	18.5	6
175B Injury to Shoulder, Arm, Elbow, Knee, Leg or Ankle W/O CC	262	1,671	2.6	1
176A Other Musculoskeletal Disorders W Cat or Sev CC	22	148	17.1	8
176B Other Musculoskeletal Disorders W/O Cat or Sev CC	1,703	930	3.2	1
177A Fractures of Pelvis W Cat or Sev CC	0	252	21.3	14
177B Fractures of Pelvis W/O Cat or Sev CC	0	372	10.6	7
178A Fractures of Neck of Femur W Cat or Sev CC	0	93	17.5	9
178B Fractures of Neck of Femur W/O Cat or Sev CC	0	174	7.7	3
179A Pathological Fracture W Cat CC	0	35	42.1	23
179B Pathological Fracture W/O Cat CC	17	237	10.7	7
Total Discharges	58,561	50,332	6.0	2

<sup>~</sup> Denotes five or fewer discharges reported to HIPE.

a Length of stay (mean and median) is based on acute and extended in-patients.

 
 TABLE 5.11
 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	In-Pat Length o	
	N	N	Mean	Median
JO1A Microvas Tiss Transf for Skin, Subcutaneous Tiss & Breast Disd W Cat/Sev CC	0	11	8.0	7
JO1B Microvas Tiss Transf for Skin, Subcutaneous Tiss & Breast Disd W/O Cat/Sev CC	~	37	7.8	7
J06Z Major Procedures for Breast Conditions	703	1,812	2.9	2
J07Z Minor Procedures for Breast Conditions	1,986	267	2.5	1
J08A Other Skin Graft and/or Debridement Procedures W CC	18	164	18.2	7
J08B Other Skin Graft and/or Debridement Procedures W/O CC	832	331	3.8	2
J09Z Perianal and Pilonidal Procedures	423	326	2.0	1
J10Z Skin, Subcutaneous Tissue and Breast Plastic OR Procedures	979	243	3.5	2
J11Z Other Skin, Subcutaneous Tissue and Breast Procedures	38,137	1,046	4.3	1
J12A Lower Limb Procs W Ulcer/Cellulitis W Cat CC	0	32	30.9	22
J12B Lower Limb Procs W Ulcer/Cellulitis W/O Cat CC W Skin Graft/Flap Repair	~	20	15.4	12
J12C Lower Limb Procs W Ulcer/Cellulitis W/O Cat CC W/O Skin Graft/Flap Repair	10	78	15.9	9
J13A Lower Limb Procs W/O Ulcer/Cellulitis W Cat CC or W (Skin Graft and Sev CC)	~	26	12.3	7
J13B Lower Limb Procs W/O Ulcer/Cellulitis W/O Cat CC W/O (Skin Graft and Sev CC)	113	123	4.5	2
J14Z Major Breast Reconstructions	13	225	6.0	6
J60A Skin Ulcers W Cat CC	0	80	25.3	14
J60B Skin Ulcers W/O Cat CC	0	389	10.6	7
J60C Skin Ulcers, Sameday	1,126	61	1.0	1
J62A Malignant Breast Disorders W CC	2,034	600	13.6	7
J62B Malignant Breast Disorders W/O CC	2,743	190	17.5	13
J63A Non-Malignant Breast Disorders W CC	54	33	5.7	5
J63B Non-Malignant Breast Disorders W/O CC	3,439	308	2.4	1
J64A Cellulitis W Cat or Sev CC	7	1,148	14.4	8
J64B Cellulitis W/O Cat or Sev CC	661	6,001	4.1	3
J65A Trauma to the Skin, Subcutaneous Tissue and Breast W Cat or Sev CC	0	178	13.1	7
J65B Trauma to the Skin, Subcutaneous Tissue and Breast W/O Cat or Sev CC	83	1,058	2.3	1
J67A Minor Skin Disorders	0	1,320	3.2	2
J67B Minor Skin Disorders, Sameday	12,345	782	1.0	1
J68A Major Skin Disorders W Cat or Sev CC	0	113	12.2	7
J68B Major Skin Disorders W/O Cat or Sev CC	0	754	4.4	3
J68C Major Skin Disorders, Sameday	19,973	261	1.0	1
J69A Skin Malignancy W Cat CC	0	40	14.6	8
J69B Skin Malignancy W/O Cat CC	0	216	11.4	6
J69C Skin Malignancy, Sameday	1,602	9	1.0	1
Total Discharges	87,288	18,282	5.4	2

Denotes five or fewer discharges reported to HIPE.

Length of stay (mean and median) is based on acute and extended in-patients.

**TABLE 5.12** 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		atient of Stay <sup>a</sup>
	N	N	Mean	Median
K01A OR Procedures for Diabetic Complications W Cat CC	~	130	34.7	27
K01B OR Procedures for Diabetic Complications W/O Cat CC	6	174	16.0	12
KO2A Pituitary Procedures W CC	0	34	37.1	9
KO2B Pituitary Procedures W/O CC	0	65	5.0	4
K03Z Adrenal Procedures	~	43	7.8	6
K04A Major Procedures for Obesity W CC	0	14	9.3	5
KO4B Major Procedures for Obesity W/O CC	0	42	3.3	3
K05A Parathyroid Procedures W Cat or Sev CC	~	24	18.8	7
K05B Parathyroid Procedures W/O Cat or Sev CC	33	147	3.5	2
K06A Thyroid Procedures W Cat or Sev CC	0	60	7.7	5
K06B Thyroid Procedures W/O Cat or Sev CC	12	777	2.7	2
K07Z Obesity Procedures	9	48	4.1	3
K08Z Thyroglossal Procedures	7	84	2.0	2
K09A Other Endocrine, Nutritional and Metabolic OR Procedures W Cat CC	0	35	47.0	24
K09B Other Endocrine, Nutritional and Metabolic OR Procs W Sev or Moderate CC	~	33	15.3	13
K09C Other Endocrine, Nutritional and Metabolic OR Procedures W/O CC	55	38	6.1	2
K40A Endoscopic or Investigative Proc for Metabolic Disorders W Cat CC	0	70	26.1	19
K40B Endoscopic or Investigative Proc for Metabolic Disorders W/O Cat CC	0	345	11.3	7
K40C Endoscopic or Investigative Procedure for Metabolic Disorders, Sameday	1,102	7	1.0	1
K60A Diabetes W Cat or Sev CC	10	847	12.5	7
K60B Diabetes W/O Cat or Sev CC	447	3,332	4.4	3
K61Z Sev Nutritional Disturbance	~	39	34.0	12
K62A Miscellaneous Metabolic Disorders W Cat or Sev CC	68	1,083	9.7	6
K62B Miscellaneous Metabolic Disorders W/O Cat or Sev CC	1,068	2,557	3.4	2
K63A Inborn Errors of Metabolism W CC	53	61	7.1	4
K63B Inborn Errors of Metabolism W/O CC	594	185	2.4	1
K64A Endocrine Disorders W Cat or Sev CC	42	204	11.5	7
K64B Endocrine Disorders W/O Cat or Sev CC	1,928	1,106	3.6	2
Total Discharges	5,442	11,584	6.4	3

Notes:  $\ ^{\sim}$  Denotes five or fewer discharges reported to HIPE.

a Length of stay (mean and median) is based on acute and extended in-patients.

 
 TABLE 5.13
 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 Discours and Discoulant of the Videous and Universe Treet	Day Patients	In-Patients		atient
MDC 11 Diseases and Disorders of the Kidney and Urinary Tract	N	N	Mean	of Stay <sup>a</sup> Median
LO2A Operative Insertion of Peritoneal Catheter for Dialysis W Cat or Sev CC	0	36	10.4	Nieulan 8
LO2B Operative Insertion of Peritoneal Catheter for Dialysis W/O Cat or Sev CC	~	64	5.1	2
LO3A Kidney, Ureter and Major Bladder Procedures for Neoplasm W Cat CC	~	105	19.4	14
LO3B Kidney, Ureter and Major Bladder Procedures for Neoplasm W Sev CC	0	109	12.2	9
LO3C Kidney, Ureter and Major Bladder Procedures for Neoplasm W/O Cat or Sev CC	6	337	7.6	7
LO4A Kidney, Ureter & Major Bladder Procedures for Non-Neoplasm W Cat CC	12	157	22.2	17
LO4B Kidney, Ureter and Major Bladder Procedures for Non-Neoplasm W Sev CC	21	147	9.2	8
LO4C Kidney, Ureter & Major Bladder Procedures for Non-Neoplasm W/O Cat or Sev CC	228	726	5.8	4
LO5A Transurethral Prostatectomy W Cat or Sev CC	0	26	13.3	13
LOSB Transurethral Prostatectomy W/O Cat or Sev CC	6	113	6.5	5
L06A Minor Bladder Procedures W Cat or Sev CC	25	107	19.1	11
L06B Minor Bladder Procedures W/O Cat or Sev CC	565	309	4.3	3
LO7A Transurethral Procedures Except Prostatectomy W CC	71	431	6.6	4
LO7B Transurethral Procedures Except Prostatectomy W/O CC	761	1,132	2.8	2
LOSA Urethral Procedures W CC	~	35	6.8	4
L08B Urethral Procedures W/O CC	94	120	2.6	2
L09A Other Procedures for Kidney and Urinary Tract Disorders W Cat CC	~	77	25.5	16
LO9B Other Procedures for Kidney and Urinary Tract Disorders W Sev CC	11	62	8.1	4
L09C Other Procedures for Kidney and Urinary Tract Disorders W/O Cat or Sev CC	150	169	3.3	2
L40Z Ureteroscopy	95	146	4.5	3
L41Z Cystourethroscopy, Sameday	9,473	49	1.0	1
L42Z ESW Lithotripsy for Urinary Stones	1,970	76	3.2	3
L60A Renal Failure W Cat CC	~	483	20.0	12
L60B Renal Failure W Sev CC	75	778	9.8	6
L60C Renal Failure W/O Cat or Sev CC	854	1,167	5.6	4
L61Z Haemodialysis	164,619	14	3.6	1
L62A Kidney and Urinary Tract Neoplasms W Cat or Sev CC	376	366	14.5	8
L62B Kidney and Urinary Tract Neoplasms W/O Cat or Sev CC	952	438	5.3	3
L63A Kidney and Urinary Tract Infections W Cat or Sev CC	15	3,159	14.8	8
L63B Kidney and Urinary Tract Infections W/O Cat or Sev CC	1,547	7,709	5.1	3
L64Z Urinary Stones and Obstruction	368	2,558	2.7	2
L65A Kidney and Urinary Tract Signs and Symptoms W Cat or Sev CC	17	380	9.2	5
L65B Kidney and Urinary Tract Signs and Symptoms W/O Cat or Sev CC	2,088	1,698	3.4	2
L66Z Urethral Stricture	114	111	2.5	2
L67A Other Kidney and Urinary Tract Diagnoses W Cat or Sev CC	419	643	10.4	6
L67B Other Kidney and Urinary Tract Diagnoses W/O Cat or Sev CC	4,506	1,707	3.9	2
L68Z Peritoneal Dialysis	74	0	-	-
Total Discharges	189,526	25,744	6.9	3

- 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 Length of stay (mean and median) is based on acute and extended in-patients.

**TABLE 5.14** 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		atient of Stay <sup>a</sup>
	N	N	Mean	Median
M01A Major Male Pelvic Procedures W Cat or Sev CC	0	63	10.1	7
M01B Major Male Pelvic Procedures W/O Cat or Sev CC	~	347	5.5	5
M02A Transurethral Prostatectomy W Cat or Sev CC	0	93	8.9	7
M02B Transurethral Prostatectomy W/O Cat or Sev CC	*	607	4.7	4
M03Z Penis Procedures	410	233	2.8	2
M04Z Testes Procedures	1,429	744	2.0	1
M05Z Circumcision	2,285	214	1.8	1
M06A Other Male Reproductive System OR Procedures W CC	24	46	13.4	8
M06B Other Male Reproductive System OR Procedures W/O CC	397	50	2.8	2
M40Z Cystourethroscopy, Sameday	1,645	~	٨	٨
M60A Malignancy, Male Reproductive System W Cat or Sev CC	232	295	13.6	8
M60B Malignancy, Male Reproductive System W/O Cat or Sev CC	3,073	484	14.0	5
M61Z Benign Prostatic Hypertrophy	1,574	141	4.5	3
M62Z Inflammation of the Male Reproductive System	872	885	3.1	2
M63Z Sterilisation, Male	297	~	٨	٨
M64Z Other Male Reproductive System Diagnoses	566	579	1.9	1
Total Discharges	12,814	4,785	5.2	2

- ~ Denotes five or fewer discharges reported to HIPE.
- \* Further suppression required to prevent disclosure of five or fewer discharges.
- ^ Denotes that length of stay calculation was based on five or fewer discharges.
- a Length of stay (mean and median) is based on acute and extended in-patients.

**TABLE 5.15** 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		atient of Stay <sup>a</sup>
	N	N	Mean	Median
NO1Z Pelvic Evisceration and Radical Vulvectomy	0	61	11.1	8
N04A Hysterectomy for Non-Malignancy W Cat or Sev CC	0	191	10.4	7
NO4B Hysterectomy for Non-Malignancy W/O Cat or Sev CC	6	1,794	4.8	5
N05A Oophorectomies and Complex Fallopian Tube Procs for Non-Malig W Cat or Sev CC	~	50	8.2	6
N05B Oophorectomies & Complex Fallopian Tube Procs for Non-Malig W/O Cat or Sev CC	98	544	3.3	3
N06A Female Reproductive System Reconstructive Procs W Cat or Sev CC	~	86	6.3	5
N06B Female Reproductive System Reconstructive Procs W/O Cat or Sev CC	152	1,542	2.9	3
N07Z Other Uterine and Adnexa Procedures for Non-Malignancy	2,332	1,673	2.6	2
N08Z Endoscopic and Laparoscopic Procedures for Female Reproductive System	1,402	742	2.2	1
N09Z Conisation, Vagina, Cervix and Vulva Procedures	10,362	861	4.5	1
N10Z Diagnostic Curettage or Diagnostic Hysteroscopy	7,011	713	2.3	1
N11Z Other Female Reproductive System OR Procedures	30	104	10.6	7
N12A Uterine and Adnexa Procedures for Malignancy W Cat CC	~	77	16.8	11
N12B Uterine and Adnexa Procedures for Malignancy W/O Cat CC	20	507	6.1	6
N60A Malignancy, Female Reproductive System W Cat CC	30	120	13.4	10
N60B Malignancy, Female Reproductive System W/O Cat CC	1,196	654	9.2	5
N61Z Infections, Female Reproductive System	235	363	2.6	2
N62Z Menstrual and Other Female Reproductive System Disorders	6,498	2,882	2.1	1
Total Discharges	29,378	12,964	3.9	2

Notes: ~ De

Denotes five or fewer discharges reported to HIPE.

a Length of stay (mean and median) is based on acute and extended in-patients.

**TABLE 5.16** 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		atient of Stay <sup>a</sup>
	N	N	Mean	Median
O01A Caesarean Delivery W Cat or Sev CC	0	3,581	8.5	6
O01B Caesarean Delivery W/O Cat or Sev CC	0	15,556	4.5	4
O02A Vaginal Delivery W OR Procedure W Cat or Sev CC	0	177	4.6	4
O02B Vaginal Delivery W OR Procedure W/O Cat or Sev CC	0	1,009	3.3	3
O03A Ectopic Pregnancy W CC	0	33	3.7	3
OO3B Ectopic Pregnancy W/O CC	27	719	2.3	2
OO4A Postpartum and Post Abortion W OR Procedure W Cat or Sev CC <sup>b</sup>	0	45	5.3	3
OO4B Postpartum and Post Abortion W OR Procedure W/O Cat or Sev CC <sup>b</sup>	29	227	2.8	2
O05Z Abortion W OR Procedure <sup>b</sup>	1,727	2,983	1.3	1
O60Z Vaginal Delivery	0	45,762	2.7	2
O61Z Postpartum and Post Abortion W/O OR Procedure <sup>b</sup>	495	2,853	2.3	2
O63Z Abortion W/O OR Procedure <sup>b</sup>	518	3,256	1.3	1
O64Z False Labour	28	6,304	1.3	1
O66Z Antenatal and Other Obstetric Admission	5,182	35,478	1.7	1
Total Discharges	8,006	117,983	2.7	2

- a Length of stay (mean and median) is based on acute and extended in-patients.
- b This includes spontaneous abortions and pregnancies with abortive outcome.

TABLE 5.17 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		atient of Stay <sup>a</sup>
	N	N	Mean	Median
P01Z Neonate, Died or Transferred <5 Days of Admission W Significant OR Procedure	0	31	2.3	2
P02Z Cardiothoracic/Vascular Procedures for Neonates	0	57	27.5	21
P03Z Neonate, AdmWt 1000-1499 g W Significant OR Procedure	0	240	45.9	45
P04Z Neonate, AdmWt 1500-1999 g W Significant OR Procedure	0	139	31.0	26
P05Z Neonate, AdmWt 2000-2499 g W Significant OR Procedure	0	95	31.6	20
P06A Neonate, AdmWt >2499 g W Significant OR Procedure W Multi Major Problems	0	183	46.2	21
P06B Neonate, AdmWt >2499 g W Significant OR Procedure W/O Multi Major Problems	~	155	14.0	10
P60A Neonate, Died or Transferred <5 Days of Adm, W/O Significant OR Proc, Newborn	0	471	1.3	1
P60B Neonate, Died or Transf <5 Days of Adm, W/O Significant OR Proc, Not Newborn	17	223	1.8	1
P61Z Neonate, AdmWt <750 g	~	82	73.0	79
P62Z Neonate, AdmWt 750-999 g	0	127	62.5	61
P63Z Neonate, AdmWt 1000-1249 g W/O Significant OR Procedure	0	54	34.5	34
P64Z Neonate, AdmWt 1250-1499 g W/O Significant OR Procedure	0	144	29.4	30
P65A Neonate, AdmWt 1500-1999 g W/O Significant OR Proc W Multi Major Problems	0	69	26.7	27
P65B Neonate, AdmWt 1500-1999 g W/O Significant OR Procedure W Major Problem	~	234	21.4	20
P65C Neonate, AdmWt 1500-1999 g W/O Significant OR Procedure W Other Problem	0	281	16.7	16
P65D Neonate, AdmWt 1500-1999 g W/O Significant OR Procedure W/O Problem	~	201	13.0	12
P66A Neonate, AdmWt 2000-2499 g W/O Significant OR Proc W Multi Major Problems	0	73	16.8	14
P66B Neonate, AdmWt 2000-2499 g W/O Significant OR Procedure W Major Problem	~	324	13.4	12
P66C Neonate, AdmWt 2000-2499 g W/O Significant OR Procedure W Other Problem	0	756	8.7	8
P66D Neonate, AdmWt 2000-2499 g W/O Significant OR Procedure W/O Problem	8	480	5.6	3
P67A Neonate, AdmWt >2499 g W/O Significant OR Procedure W Multi Major Problems	16	324	11.8	8
P67B Neonate, AdmWt >2499 g W/O Significant OR Procedure W Major Problem	95	1,461	7.0	5
P67C Neonate, AdmWt >2499 g W/O Significant OR Procedure W Other Problem	~	4,583	3.4	2
P67D Neonate, AdmWt >2499 g W/O Significant OR Procedure W/O Problem	397	3,753	2.3	1
Total Discharges	546	14,540	8.2	3

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

a Length of stay (mean and median) is based on acute and extended in-patients.

**TABLE 5.18** 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		atient of Stay <sup>a</sup>
Distribution	N	N	Mean	Median
Q01Z Splenectomy	0	46	8.7	7
Q02A Other OR Procedure of Blood and Blood Forming Organs W Cat or Sev CC	15	68	20.1	12
Q02B Other OR Procedure of Blood and Blood Forming Organs W/O Cat or Sev CC	568	178	5.2	3
Q60A Reticuloendothelial and Immunity Disorders W Cat or Sev CC	195	635	8.2	5
Q60B Reticuloendothelial and Immunity Disorders W/O Cat or Sev CC W Malignancy	136	327	4.4	4
Q60C Reticuloendothelial and Immunity Disorders W/O Cat or Sev CC W/O Malignancy	2,905	704	3.0	2
Q61A Red Blood Cell Disorders W Cat or Sev CC	320	810	9.1	6
Q61B Red Blood Cell Disorders W/O Cat or Sev CC	32,127	2,191	3.6	2
Q62Z Coagulation Disorders	4,016	1,318	3.1	1
Total Discharges	40,282	6,277	4.9	3

Note: a Length of stay (mean and median) is based on acute and extended in-patients.

**TABLE 5.19** 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		atient of Stay <sup>a</sup>
INDC 17 Neoplastic Disorders (Haematological and Solid Neoplastis)	N	N	Mean	Median
R01A Lymphoma and Leukaemia W Major OR Procedures W Cat or Sev CC	0	57	26.0	23
R01B Lymphoma and Leukaemia W Major OR Procedures W/O Cat or Sev CC	20	78	8.0	6
R02A Other Neoplastic Disorders W Major OR Procedures W Cat CC	0	28	20.7	17
RO2B Other Neoplastic Disorders W Major OR Procedures W Sev or Moderate CC	*	46	11.8	9
R02C Other Neoplastic Disorders W Major OR Procedures W/O CC	59	159	5.3	5
R03A Lymphoma and Leukaemia W Other OR Procedures W Cat or Sev CC	~	150	28.3	20
R03B Lymphoma and Leukaemia W Other OR Procedures W/O Cat or Sev CC	176	219	7.5	4
R04A Other Neoplastic Disorders W Other OR Procedures W CC	76	82	15.4	9
RO4B Other Neoplastic Disorders W Other OR Procedures W/O CC	638	87	4.8	2
R60A Acute Leukaemia W Cat CC	69	235	28.1	27
R60B Acute Leukaemia W/O Cat CC	3,861	689	8.6	4
R61A Lymphoma and Non-Acute Leukaemia W Cat CC	0	469	20.0	14
R61B Lymphoma and Non-Acute Leukaemia W/O Cat CC	0	2,681	6.9	4
R61C Lymphoma and Non-Acute Leukaemia, Sameday	16,719	131	1.0	1
R62A Other Neoplastic Disorders W CC	328	198	16.4	9
R62B Other Neoplastic Disorders W/O CC	679	142	7.2	4
R63Z Chemotherapy	95,783	0	-	-
R64Z Radiotherapy <sup>b</sup>	65,999	0	-	-
Total Discharges	184,418	5,451	10.4	5

- Denotes five or fewer discharges reported to HIPE.
- Further suppression required to prevent disclosure of five or fewer discharges.
- Mean and median length of stay cannot be calculated as no in-patients are reported.
- Length of stay (mean and median) is based on acute and extended in-patients.
- b Activity from the St. Luke's Radiation Oncology Network centres in Beaumont and St. James's Hospitals, estimated at over 47,000 day cases, are not included in this report as these data were not submitted to HIPE.

TABLE 5.20 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		atient of Stay <sup>a</sup>
	N	N	Mean	Median
S60Z HIV, Sameday	25	8	1.0	1
S65A HIV-Related W Cat CC	0	48	21.0	14
S65B HIV-Related W Sev CC	0	68	13.3	8
S65C HIV-Related Diseases W/O Cat or Sev CC	0	68	8.4	6
T01A OR Procedures for Infectious and Parasitic Diseases W Cat CC	~	146	39.7	27
T01B OR Procedures for Infectious and Parasitic Diseases W Sev or Moderate CC	12	149	16.2	11
T01C OR Procedures for Infectious and Parasitic Diseases W/O CC	29	228	10.6	7
T40Z Infectious and Parasitic Diseases W Ventilator Support	0	40	14.6	8
T60A Septicaemia W Cat CC	0	807	18.4	12
T60B Septicaemia W/O Cat CC	45	1,129	8.5	6
T61A Postoperative and Post-Traumatic Infections W Cat or Sev CC	11	234	11.9	8
T61B Postoperative and Post-Traumatic Infections W/O Cat or Sev CC	142	956	5.3	4
T62A Fever of Unknown Origin W CC	23	323	4.6	3
T62B Fever of Unknown Origin W/O CC	42	477	2.8	1
T63Z Viral Illness	1,212	4,880	2.0	1
T64A Other Infectious and Parasitic Diseases W Cat CC	0	45	16.5	16
T64B Other Infectious and Parasitic Diseases W Sev or Moderate CC	*	94	6.4	4
T64C Other Infectious and Parasitic Diseases W/O CC	176	203	3.9	2
Total Discharges	1,733	9,903	6.2	2

- Denotes five or fewer discharges reported to HIPE.
- Further suppression required to prevent disclosure of five or fewer discharges.
- a Length of stay (mean and median) is based on acute and extended in-patients.

TABLE 5.21 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	In-Patient Length of Stay <sup>a</sup>	
	N	N	Mean	Median
U40Z Mental Health Treatment, Sameday, W ECT	115	7	1.0	1
U60Z Mental Health Treatment, Sameday, W/O ECT	600	953	1.0	1
U61Z Schizophrenia Disorders	0	165	35.5	18
U62A Paranoia & Acute Psych Disorder W Cat/Sev CC or W Mental Health Legal Status	0	15	12.1	5
U62B Paranoia & Acute Psych Disorder W/O Cat/Sev CC W/O Mental Health Legal Status	0	88	16.0	9
U63Z Major Affective Disorders	0	224	26.4	15
U64Z Other Affective and Somatoform Disorders	0	193	8.7	2
U65Z Anxiety Disorders	0	775	4.1	1
U66Z Eating and Obsessive-Compulsive Disorders	0	143	22.4	9
U67Z Personality Disorders and Acute Reactions	0	178	13.3	4
U68Z Childhood Mental Disorders	0	76	5.2	2
Total Discharges	715	2,817	8.9	1

Notes: a Length of stay (mean and median) is based on acute and extended in-patients.

**TABLE 5.22** 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		atient of Stay <sup>a</sup>
	N	N	Mean	Median
V60Z Alcohol Intoxication and Withdrawal	~	1,209	3.7	2
V61Z Drug Intoxication and Withdrawal	0	83	4.9	1
V62A Alcohol Use Disorder and Dependence	0	600	5.4	3
V62B Alcohol Use Disorder and Dependence, Sameday	~	157	1.0	1
V63Z Opioid Use Disorder and Dependence	0	87	15.0	16
V64Z Other Drug Use Disorder and Dependence	0	74	11.9	12
Total Discharges	~	2,210	4.7	2

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

a Length of stay (mean and median) is based on acute and extended in-patients.

**TABLE 5.23** Total Discharges: MDC 21 Injuries, Poisonings and Toxic Effects of Drugs: AR-DRG by Patient Type (N, In-Patient Length of Stay)

	Day Patients	In-Patients	In-Pa	atient
MDC 21 Injuries, Poisonings and Toxic Effects of Drugs			Length	of Stay <sup>a</sup>
	N	N	Mean	Median
W01Z Ventilation or Cranial Procedures for Multiple Significant Trauma	0	22	21.0	15
W02A Hip, Femur & Limb Pr for Mult Signif Trauma, Incl Implantation W Cat/Sev CC	0	33	40.2	24
W02B Hip, Femur & Limb Pr for Mult Signif Trauma, Incl Implantation W/O Cat/Sev CC	0	28	24.6	12
W03Z Abdominal Procedures for Multiple Significant Trauma	0	16	14.5	15
W04A Other OR Procs for Multiple Significant Trauma W Cat or Sev CC	0	13	40.8	29
W04B Other OR Procs for Multiple Significant Trauma W/O Cat or Sev CC	0	29	20.9	12
W60Z Multiple Trauma, Died or Transferred to Another Acute Care Facility <5 Days	0	54	2.0	2
W61A Multiple Trauma W/O Significant Procedures W Cat or Sev CC	0	41	28.8	11
W61B Multiple Trauma W/O Significant Procedures W/O Cat or Sev CC	0	76	10.1	8
X02A Microvascular Tiss Transfer or (Skin Graft W Cat/Sev CC) for Injuries to Hand	0	17	6.6	4
X02B Skin Graft for Injuries to Hand W/O Cat or Sev CC	6	87	2.8	1
X04A Other Procedures for Injuries to Lower Limb W Cat or Sev CC	0	17	27.2	14
XO4B Other Procedures for Injuries to Lower Limb W/O Cat or Sev CC	12	158	3.1	1
X05A Other Procedures for Injuries to Hand W CC	~	50	4.3	2
X05B Other Procedures for Injuries to Hand W/O CC	184	1,262	1.3	1
X06A Other Procedures for Other Injuries W Cat or Sev CC	6	235	13.3	8
X06B Other Procedures for Other Injuries W/O Cat or Sev CC	146	1,101	2.6	1
X07A Skin Graft for Injuries Ex Hand W Microvascular Tiss Tfr or W (Cat or Sev CC)	~	33	16.4	10
X07B Skin Graft for Injuries Ex Hand W/O Microvascular Tiss Tfr W/O Cat or Sev CC	6	67	8.0	6
X40Z Injuries, Poisoning and Toxic Effects of Drugs W Ventilator Support	0	73	9.9	5
X60A Injuries W Cat or Sev CC	6	516	14.5	6
X60B Injuries W/O Cat or Sev CC	288	4,207	1.9	1
X61Z Allergic Reactions	~	309	1.7	1
X62A Poisoning/Toxic Effects of Drugs and Other Substances W Cat or Sev CC	0	508	6.2	3
X62B Poisoning/Toxic Effects of Drugs and Other Substances W/O Cat or Sev CC	134	3,567	1.9	1
X63A Sequelae of Treatment W Cat or Sev CC	12	320	8.0	5
X63B Sequelae of Treatment W/O Cat or Sev CC	296	1,698	2.8	2
X64A Other Injury, Poisoning and Toxic Effect Diagnosis W Cat or Sev CC	0	62	10.1	6
X64B Other Injury, Poisoning and Toxic Effect Diagnosis W/O Cat or Sev CC	~	437	1.7	1
Total Discharges	1.107	15,036	3.4	1

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

a Length of stay (mean and median) is based on acute and extended in-patients.

TABLE 5.24 Total Discharges: MDC 22 Burns: AR-DRG by Patient Type (N, In-Patient Length of Stay)

MDC 22 Burns	Day Patients	Day Patients In-Patients In-Patien  Length of St		
	N	N	Mean	Median
Y01Z Ventilation for Burns and Sev Full Thickness Burns	0	18	46.9	37
Y02A Other Burns W Skin Graft W CC	0	41	18.8	14
Y02B Other Burns W Skin Graft W/O CC	~	84	12.2	9
Y03Z Other OR Procedures for Other Burns	15	74	9.2	4
Y60Z Burns, Transferred to Another Acute Care Facility <5 Days	0	50	1.2	1
Y61Z Severe Burns	0	49	14.4	7
Y62A Other Burns W CC	~	39	16.3	6
Y62B Other Burns W/O CC	55	252	4.2	2
Total Discharges	75	607	9.5	4

- Denotes five or fewer discharges reported to HIPE.
- a Length of stay (mean and median) is based on acute and extended in-patients.

TABLE 5.25 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		atient of Stay <sup>a</sup>
	N	N	Mean	Median
Z01A OR Procedures W Diagnoses of Other Contacts W Health Services W Cat/Sev CC	*	107	16.9	4
Z01B OR Procedures W Diagnoses of Other Contacts W Health Services W/O Cat/Sev CC	1,226	247	4.3	2
Z40Z Endoscopy W Diagnoses of Other Contacts W Health Services, Sameday	14,259	30	1.0	1
Z60A Rehabilitation W Cat CC	0	692	44.0	32
Z60B Rehabilitation W/O Cat CC	0	4,329	23.0	15
Z60C Rehabilitation, Sameday	288	9	1.0	1
Z61A Signs and Symptoms	0	1,455	7.5	4
Z61B Signs and Symptoms, Sameday	1,446	914	1.0	1
Z63A Other Surgical Follow Up and Medical Care W Cat CC	~	474	22.4	12
Z63B Other Surgical Follow Up and Medical Care W/O Cat CC	1,366	2,451	10.9	7
Z64A Other Factors Influencing Health Status	0	1,554	5.2	2
Z64B Other Factors Influencing Health Status, Sameday	32,614	1,077	1.0	1
Z65Z Congenital Anomalies and Problems Arising from Neonatal Period	116	100	5.2	1
Total Discharges	51,418	13,439	14.3	7

- ~ Denotes five or fewer discharges reported to HIPE.
- Further suppression required to prevent disclosure of five or fewer discharges.
- a Length of stay (mean and median) is based on acute and extended in-patients.

**TABLE 5.26** Total Discharges: Unassignable to MDC: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

Unassignable to MDC	Day Patients	In-Patients		atient of Stay <sup>a</sup>
	N	N	Mean	Median
801A OR Procedures Unrelated to Principal Diagnosis W Cat CC	~	521	42.2	26
801B OR Procedures Unrelated to Principal Diagnosis W Sev or Moderate CC	42	*	17.0	10
801C OR Procedures Unrelated to Principal Diagnosis W/O CC	383	452	5.4	3
963Z Neonatal Diagnosis Not Consistent W Age/Weight	*	~	٨	٨
Total Discharges	436	1,276	23.2	10

- Denotes five or fewer discharges reported to HIPE.
- \* Further suppression required to prevent disclosure of five or fewer discharges.
- ^ Denotes that length of stay calculation was based on five or fewer discharges.
- a Length of stay (mean and median) is based on acute and extended in-patients.

**TABLE 5.27** Total Discharges: Pre-MDC: AR-DRG by Patient Type (N, In-Patient Length of Stay)

Pre-MDC	Day Patients	In-Patients		atient of Stay <sup>a</sup>
	N	N	Mean	Median
A01Z Liver Transplant	0	56	27.1	18
A03Z Lung or Heart/Lung Transplant	0	29	34.4	22
A05Z Heart Transplant	0	11	185.2	44
A06A Tracheostomy W Ventilation >95 hours W Cat CC	0	509	79.1	58
A06B Trach W Vent >95 hours W/O Cat CC or Trach/Vent >95 hours W Cat CC	0	1,494	38.8	24
A06C Ventilation >95 hours W/O Cat CC	0	173	18.9	14
A06D Tracheostomy W/O Cat CC	~	136	31.8	24
A07Z Allogeneic Bone Marrow Transplant	~	75	44.2	40
A08A Autologous Bone Marrow Transplant W Cat CC	0	65	29.5	24
A08B Autologous Bone Marrow Transplant W/O Cat CC	~	71	15.2	17
A09A Renal Transplant W Pancreas Transplant or W Cat CC	0	50	19.3	19
A09B Renal Transplant W/O Pancreas Transplant W/O Cat CC	0	141	10.3	9
A10Z Insertion of Ventricular Assist Devices	0	6	87.7	41
A11A Insertion of Implantable Spinal Infusion Device W Cat CC	0	6	38.2	24
A11B Insertion of Implantable Spinal Infusion Device W/O Cat CC	0	23	11.4	5
A12Z Insertion of Neurostimulator Device	118	111	2.9	2
A40Z ECMO	0	38	44.7	40
Total Discharges	124	2,994	40.8	24

- $^{\sim}$   $\;$  Denotes five or fewer discharges reported to HIPE.
- a Length of stay (mean and median) is based on acute and extended in-patients.

Annex 2013

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#### HIP ARTHROPLASTY DISCHARGE PROFILE, 2013

#### 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 in-patient discharges with hip arthroplasty as a principal procedure. Hip arthroplasty procedures include total hip replacement, hemiarthroplasty (partial hip replacement) and hip resurfacing. The ICD-10-AM ACHI intervention codes for arthroplasty of hip are taken from procedure block [1489], see Table A 1.1.<sup>2</sup>

**TABLE A 1.1** ICD-10-AM/ACHI list of intervention codes for hip arthroplasty

Intervention code	Description
47522-00	Hemiarthroplasty of femur
49315-00	Partial arthroplasty of hip
90607-00	Resurfacing of hip, unilateral
90607-01	Resurfacing of hip, bilateral
49318-00	Total arthroplasty of hip, unilateral
49319-00	Total arthroplasty of hip, bilateral

In 2013, 5,188 discharges had a principal procedure of hip arthroplasty.<sup>3</sup> These discharges accounted for 0.4 per cent of total discharges (excl. *Maternity*) and 1.7 per cent of in-patient bed days (excl. *Maternity*).

The **principal procedure** is the procedure performed for treatment of the principal diagnosis or a diagnostic/exploratory procedure related to the principal diagnosis. A procedure is defined as a clinical intervention that is surgical in nature, carries a procedural risk and/or carried an anaesthetic risk and/or requires specialised training and/or requires special facilities or equipment only available in an acute care setting.

Source: HIPE Data Dictionary 2013 Version 5.0 available at www.hpo.ie

See Section Three for details of clinical coding and classifications.

<sup>&</sup>lt;sup>3</sup> 526 discharges had a principal procedure of *revision arthroplasty of hip [ACHI procedure block* 1492]; these are not included in the analyses.

#### A.1.2 DEMOGRAPHIC ANALYSIS

Table A 1.2 disaggregates in-patient discharges with hip arthroplasty recorded as a principal procedure by sex, age group, and admission type.<sup>4</sup>

- More than half of total in-patient discharges were aged 70 years and over, with the majority in the 70 to 74 years age group (14.8 per cent).
- Of elective in-patient discharges, 52.8 per cent were male and 47.2 per cent were female. Almost 60 per cent of total elective in-patient discharges were aged less than 70 years.
- Of emergency in-patient discharges, 30.1 per cent were male and 69.9 per cent were female. Close to 55 per cent of total emergency in-patient discharges were aged 80 years and over.

Figure A 1.1 shows discharges with hip arthroplasty recorded as a principal procedure by sex, length of stay, and admission type.

- Of in-patient discharges, 68.7 per cent were admitted as elective in-patients and 31.3 per cent as emergency in-patients.
- In-patient discharges had a mean length of stay of 10.4 days and accounted for 53,831 in-patient bed days.
- Female in-patients reported a mean length of stay of 11.8 days, while male in-patients reported a mean length of stay of 8.7 days.

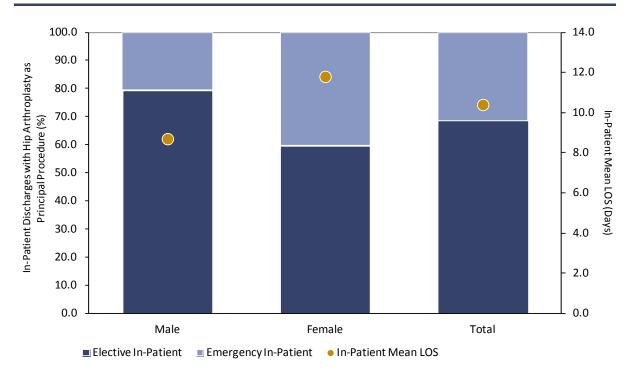
Admission type 'elective' and 'emergency' indicates the priority of admission and not the nature of the surgery.

**TABLE A 1.2** In-Patient Discharges with Hip Arthroplasty as a Principal Procedure: Admission Type by Sex and Age Group (N, % and In-Patient Length of Stay)

			Electiv	ve		Emerge	ncy		Total	
		N	%	Mean In-Patient	N	%	Mean In-Patient	N	%	Mean In-Patient
				Length of Stay			Length of Stay			Length of Stay
	<55 Years	346	9.7	4.7	23	1.4	20.7	369	7.1	5.7
	55-59 Years	228	6.4	4.8	8	0.5	17.5	236	4.5	5.3
	60-64 Years	281	7.9	4.8	15	0.9	19.0	296	5.7	5.5
ക	65-69 Years	336	9.4	5.1	53	3.3	19.7	389	7.5	7.1
Male	70-74 Years	293	8.2	5.7	61	3.8	23.1	354	6.8	8.7
_	75-79 Years	223	6.3	6.3	77	4.7	18.8	300	5.8	9.5
	80-84 Years	140	3.9	7.5	105	6.5	21.3	245	4.7	13.4
	85 Years and Over	35	1.0	8.7	147	9.1	23.0	182	3.5	20.3
	Total	1,882	52.8	5.4	489	30.1	21.3	2,371	45.7	8.7
	<55 Years	267	7.5	4.6	20	1.2	28.4	287	5.5	6.3
	55-59 Years	153	4.3	4.8	19	1.2	11.4	172	3.3	5.6
	60-64 Years	231	6.5	5.3	44	2.7	19.8	275	5.3	7.7
<u>a</u>	65-69 Years	264	7.4	5.6	88	5.4	11.5	352	6.8	7.1
Female	70-74 Years	293	8.2	5.9	122	7.5	17.6	415	8.0	9.3
æ	75-79 Years	239	6.7	8.6	203	12.5	20.7	442	8.5	14.1
	80-84 Years	166	4.7	8.4	261	16.1	18.7	427	8.2	14.7
	85 Years and Over	70	2.0	9.3	377	23.2	23.4	447	8.6	21.2
	Total	1,683	47.2	6.2	1,134	69.9	20.0	2,817	54.3	11.8
	<55 Years	613	17.2	4.6	43	2.6	24.3	656	12.6	5.9
	55-59 Years	381	10.7	4.8	27	1.7	13.2	408	7.9	5.4
	60-64 Years	512	14.4	5.0	59	3.6	19.6	571	11.0	6.5
_	65-69 Years	600	16.8	5.3	141	8.7	14.6	741	14.3	7.1
Total	70-74 Years	586	16.4	5.8	183	11.3	19.4	769	14.8	9.0
-	75-79 Years	462	13.0	7.5	280	17.3	20.2	742	14.3	12.3
	80-84 Years	306	8.6	8.0	366	22.6	19.4	672	13.0	14.2
	85 Years and Over	105	2.9	9.1	524	32.3	23.3	629	12.1	20.9
	Total In-Patients	3,565	100	5.8	1,623	100	20.4	5,188	100	10.4

Note: Percentage columns are subject to rounding.

FIGURE A 1.1 In-Patient Discharges with Hip Arthroplasty as a Principal Procedure: Admission Type by Sex (% and In-Patient Length of Stay)



Figures A 1.2A and A 1.2B disaggregate elective and emergency in-patient bed days for discharges with hip arthroplasty recorded as a principal procedure by sex and age group.

- Elective in-patient bed days were similar for males (10,226 bed days) and females (10,486 bed days).
- The largest number of elective in-patient bed days were accounted for by males aged 65 to 74 years (3,406 bed days) and by females aged 75 to 84 days (3,440 bed days).
- Overall, females accounted for more emergency in-patient bed days (22,700 bed days) compared to males (10,419 bed days).
- The largest number of emergency in-patient bed days were accounted for by those aged 75 to 84 years for both males (3,678 bed days) and females (9,077 bed days).

FIGURE A 1.2A Hip Arthroplasty Elective In-Patient Discharges: Sex by Age Group (Bed Days)

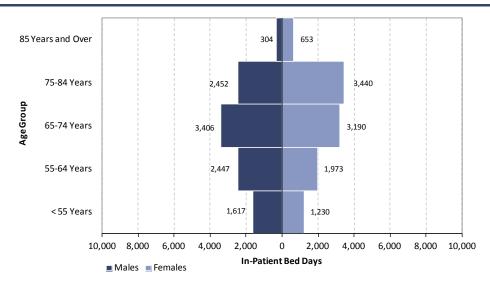


FIGURE A 1.2B Hip Arthroplasty Emergency In-Patient Discharges: Sex by Age Group (Bed Days)

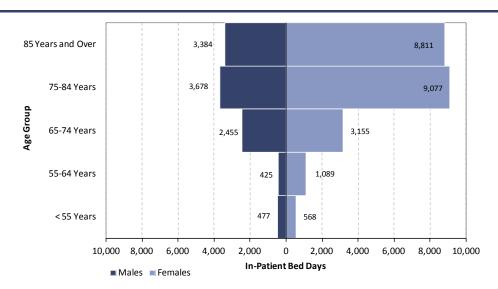


Table A 1.3 disaggregates in-patient discharges by discharge destination and admission source.

- Of in-patients who were admitted from home, 71.9 per cent were discharged home.
- In-patients admitted from long stay accommodation were primarily discharged back to a long stay accommodation (83.6 per cent).
- Just over 40 per cent of in-patients who were admitted from another hospital were transferred to another hospital, while almost a third were discharged home and 20.8 per cent were discharged to long stay accommodation.

**TABLE A 1.3** In-Patient Discharges with Hip Arthroplasty as a Principal Procedure: Discharge Destination by Admission Source (N, Row % and In-Patient Length of Stay)

		In-Patient Discharges								
		Discharge Destination								
	Home Long Stay Transfer to other Accommodation Hospital				Died/Other		Total			
Admission Source	N	%	N	%	N	%	N	%	N	%
Home	3,510	71.9	775	15.9	523	10.7	72	1.5	4,880	100
Long Stay Accommodation	~	-	102	83.6	10	8.2	*	-	122	100
Transfer from other Hospital	*	-	36	20.8	70	40.5	*	-	173	100
Total In-Patients	3,569	69.0	913	17.6	603	11.7	90	1.7	5,175	100

		In-Patient Length of Stay								
		Discharge Destination								
	Н	ome	Long Stay Transfer to other Accommodation Hospital Died/Other			To	otal			
Admission Source	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Home	7.0	5	18.3	9	14.0	10	33.2	19	10.0	6
Long Stay Accommodation	۸	٨	15.4	8	10.9	9	32.6	12	16.2	9
Transfer from other Hospital	16.3	16	27.4	18	15.6	16	16.4	11	18.4	16
Total In-Patients	7.2	5	18.4	9	14.1	11	31.3	17	10.4	6

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.
- Percentage figure not provided due to suppression.
- ^ Denotes that length of stay calculation was based on five or fewer discharges. This table excludes Admission Source 'Other'.

See Appendix V for information on how the HIPE variables 'Discharge Destination' and 'Admission Source' were grouped for this report. For the purpose of presenting Discharge Destination in this table the categories 'Died' and 'Other' are combined into the category 'Died/Other'.

#### A.1.4 PRINCIPAL DIAGNOSES

Table A 1.4 presents the top 5 principal diagnoses for discharges with hip arthroplasty recorded as a principal procedure by admission type based on the ICD-10-AM classification.<sup>5</sup>

- The top two principal diagnoses were Coxarthrosis [arthrosis of hip]
   accounting for 65.0 per cent of in-patient discharges followed by Fracture of
   femur at 28.8 per cent.
- Elective in-patients accounted for 99.0 per cent of discharges with a principal diagnosis of *Coxarthrosis [arthrosis of hip]*, while emergency in-patients accounted for 99.8 per cent of discharges with a principal diagnosis of *Fracture of Femur*.

**TABLE A 1.4** In-Patient Discharges with Hip Arthroplasty as a Principal Procedure: Top 5 Principal Diagnoses (N) by Admission Type (%)

Top 5	Principal Diagnoses	Total	Elective	Emergency
		N	%	%
M16	Coxarthrosis [arthrosis of hip]	3,372	99.0	1.0
S72	Fracture of femur	1,493	0.2	99.8
M87	Osteonecrosis	57	87.7	12.3
M17	Gonarthrosis [arthrosis of knee]	43	100.0	0.0
M13	Other arthritis	37	100.0	0.0
Top 5	Principal Diagnoses for In-Patients with a Hip Arthroplasty as a	F 003		
Princi	pal Procedure	5,002	•	-
Total I	n-Patients	5,188	68.7	31.3

Note:

Percentage columns are subject to rounding.

An analysis of additional diagnoses associated with in-patient discharges with a principal procedure of hip arthroplasty showed that

 Of discharges with a hip arthroplasty recorded as a principal procedure, the majority of emergency in-patients (86.8 per cent) had an additional diagnosis of Falls (W00-W19), compared to 0.3 per cent of elective in-patients.

<sup>5</sup> 

#### A.1.5 CASE MIX ANALYSIS

Table A 1.5 presents the top 5 AR-DRGs for discharges with hip arthroplasty recorded as a principal procedure along with in-patient length of stay.<sup>6</sup>

- The majority of in-patient discharges (99.2 per cent) were assigned to one of the top 5 AR-DRGs.
- Almost 90 per cent of in-patient discharges were assigned to Hip Replacement W/O Catastrophic CC (AR-DRG I03B), with Hip Replacement W Catastrophic CC (AR-DRG I03A) accounting for a further 8.3 per cent of inpatient discharges.
- Hip Replacement W/O Catastrophic CC (AR-DRG I03B) had a mean length of stay of 7.9 days, while Hip Replacement W Catastrophic CC (AR-DRG I03A) had a mean length of stay of 29.9 days.

**TABLE A 1.5** In-Patient Discharges with Hip Arthroplasty as a Principal Procedure: Top 5 AR-DRGs (N, % and In-Patient Length of Stay)

Top 5 A	R-DRGs	N	%	Mean In- Patient Length of Stay	Mean In- Patient Length of Stay
103B	Hip Replacement W/O Catastrophic CC	4,656	89.7	7.9	6
103A	Hip Replacement W Catastrophic CC	430	8.3	29.9	19
I01B	Bilateral/Multiple Major Joint Pr of Lower Extremity W/O Revision W/O Cat CC	28	0.5	8.0	6
801A	OR Procedures Unrelated to Principal Diagnosis W Catastrophic CC	22	0.4	69.0	39
I01A	Bilateral/Multiple Major Joint Proc of Lower Extremity W Revision or W Cat CC	13	0.3	53.6	15
•	R-DRGs for In-Patients with a Hip Arthroplasty as a all Procedure	5,149	99.2	-	-
Total In	n-Patients	5,188	100	10.4	6

Note: Percentage column is subject to rounding.

# 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

**Complications** 

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 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 who 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

Z37).

Refers to the disaggregation of maternity discharges into delivery and non-delivery status determined by the presence of a diagnosis of delivery (Z37).

**Diagnosis Related** Group (DRG)

**Delivery status** 

DRGs are clusters of cases with similar clinical attributes and resource requirements. In Ireland, the decision was made to use Australian Refined Diagnosis Related Group (AR-DRG) from 2005 onwards.

Discharge rate

Discharge rate is the ratio of discharges to the corresponding population. The formula for calculating the discharge rate is:

> Discharges in group i - x 1,000 Population of group i

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.

For HSE Areas, discharge rates are calculated as the number of discharges resident in the HSE Area divided by the population resident in the HSE Area multiplied by 1,000.

**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 (Department of Health and Children, 2001). This term is used to refer to in-patient discharges.

**General hospital** 

A general hospital provides a broad range of services, and includes voluntary and non-voluntary (county and regional) hospitals.

**GMS** status

Refers to whether a patient holds a medical card.

HSE area of hospitalisation

Refers to the HSE area in which the patient was treated.

HSE area of residence

Refers to the HSE area in which the patient resides.

Hospital In-Patient Enquiry (HIPE)

HIPE is a health information system that collates data on discharges from, and deaths in, acute hospitals in Ireland.

**Hospital type** 

Relates to health board/regional authority hospitals and voluntary hospitals. It is also used to distinguish between general and other hospitals.

In-patient

An in-patient is admitted to hospital for treatment or investigation on a planned or emergency basis (Department of Health and Children, 2001).

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 V5.0 was used in the collection of HIPE data in 2013.

Length of stay

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.

Mean and median lengths of stay are provided for in-patients only.

Mean length of stay is computed by dividing the number of days stayed by the number of discharges.

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.

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 and preferably closes at night.

Method of delivery

Refers to the method of delivery derived for delivery discharges. These are based on delivery procedure codes at any procedure code level and are grouped into Non-instrumental, Instrumental, and Elective or Emergency Caesarean section.

Maternity discharges

These discharges are admitted in relation to their obstetrical experience (from conception to 6 weeks post delivery), that is, they are allocated to Admission Type code *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.

#### Non-voluntary

A non-voluntary hospital is owned and funded by the Health Service Executive. It is also known as a HSE hospital (Citizen's Information, 2009).

#### 'Other' hospital

A hospital described as 'Other' specialises in the provision of medical and surgical services in a particular area, such as maternity hospitals, cancer hospitals or orthopaedic hospitals.

#### **Parity**

HIPE collects the number of previous live births and number of previous stillbirths (over 500g) for all cases with admission type code *Maternity*.

**Primiparous**: These are women who have had no previous pregnancy resulting in a live birth or stillbirth.

**Multiparous**: These are women who have had at least one previous pregnancy resulting in a live birth or stillbirth.

#### 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

A procedure is defined as a clinical intervention that

- 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.

The order of codes should be determined using 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 (NCCH, 2008).

### 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.

#### **Voluntary hospital**

Management authorities for this type of hospital vary widely. Some are owned and operated by religious orders, others are incorporated by charter or statute and work under lay boards of governors. These are financed to a large extent by State funds (Citizen's Information, 2009). For the purposes of this report, joint board hospitals are categorised as voluntary hospitals.

#### 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.

 $www.citizens in formation.ie/categories/health/hospital-services/hospital\_services\_introduction$ 

For further information on the definitions of diagnoses see NCCH ICD-10-AM, July 2008, General Standards for Diseases.

For further information on the definitions of procedures see NCCH ICD-10-AM, July 2008, General Standards for Procedures. 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–

#### **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

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

ENT Electroconvulsive therapy
Ent Ear, Nose and Throat

**ERCP** Endoscopic Retrograde Cholangio Pancreatography

**ESRI** Economic and Social Research Institute

**ESW** Extracorporeal Shock Waves

GI Gastro-intestinal

**g** Grams

GMS General Medical Services
GP General Practitioner

HIPE Hospital In-Patient Enquiry
HIV Human Immunodeficiency Virus

**HSE** Health Service Executive

**ICD-10-AM** Tenth Revision of the International Classification of Diseases, Australian Modification, 6<sup>th</sup> 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

Miscellaneous misc Mod Moderate n/a Not applicable

National Centre for Classification in Health NCCH

Number of Observations/Discharges Ν

Non-malig Non-malignant

**NPRS** National Perinatal Reporting System **NTPF** National Treatment Purchase Fund

OR **Operating Room** 

Pr/Proc Procedure

**PTCA** Percutaneous Transluminal Coronary Angioplasty

Sev Severe

Transient Ischaemic Attack TIA

Tiss Tissue Tfr Transfer

**Upper Respiratory Infection** URI World Health Organisation WHO

W With W/O Without

# Appendices

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## **APPENDIX I: HIPE HOSPITALS**

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

Hospital Name	County	Hospital Type	
HSE Dublin North East			
Beaumont Hospital	Dublin	Voluntary	General
The Children's University Hospital, Temple Street	Dublin	Voluntary	Paediatric
Connolly Hospital, Blanchardstown	Dublin	Non-Voluntary	County
Incorporated Orthopaedic Hospital, Clontarf	Dublin	Voluntary	Orthopaedic
Mater Misericordiae University Hospital	Dublin	Voluntary	General
Rotunda Hospital	Dublin	Voluntary	Maternity
National Orthopaedic Hospital, Cappagh	Dublin	Voluntary	Orthopaedic
St. Joseph's Hospital, Raheny	Dublin	Voluntary	General
Cavan General Hospital	Cavan	Non-Voluntary	County
Louth County Hospital, Dundalk	Louth	Non-Voluntary	County
Monaghan General Hospital	Monaghan	Non-Voluntary	County
Our Lady of Lourdes Hospital, Drogheda	Louth	Non-Voluntary	County
Our Lady's Hospital, Navan	Meath	Non-Voluntary	County
HSE Dublin Mid Leinster			
Coombe Women & Infants University Hospital	Dublin	Voluntary	Maternity
Naas General Hospital	Kildare	Non-Voluntary	County
National Maternity Hospital, Holles Street	Dublin	Voluntary	Maternity
National Rehabilitation Hospital (NRH), Dun Laoghaire	Dublin	Voluntary	Orthopaedic
Our Lady's Children's Hospital, Crumlin	Dublin	Voluntary	Paediatric
Peamount Hospital, Newcastle	Dublin	Voluntary	Other Care
Royal Victoria Eye and Ear Hospital	Dublin	Voluntary	ENT
St. Columcille's Hospital, Loughlinstown	Dublin	Non-Voluntary	County
St. James's Hospital	Dublin	Voluntary	General
St. Luke's Hospital, Rathgar	Dublin	Voluntary	Cancer
St. Michael's Hospital, Dun Laoghaire	Dublin	Voluntary	General
St. Vincent's University Hospital, Elm Park	Dublin	Voluntary	General
Adelaide and Meath Hospital, Dublin, Incorporating the	Dublin	Voluntary	General
National Children's Hospital (AMNCH), Tallaght			
Our Lady's Hospice <sup>b</sup>	Dublin	Voluntary	Other Care
Midland Regional Hospital, Mullingar	Westmeath	Non-Voluntary	County
Midland Regional Hospital, Portlaoise	Laois	Non-Voluntary	County
Midland Regional Hospital, Tullamore	Offaly	Non-Voluntary	County

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

Hospital Name	County	Hospital Type	
HSE South	Country	Поорнантурс	
Lourdes Orthopaedic Hospital, Kilcreene	Kilkenny	Non-Voluntary	Orthopaedic
St. Luke's General Hospital, Kilkenny	Kilkenny	Non-Voluntary	County
South Tipperary General Hospital, Clonmel	Tipperary	Non-Voluntary	County
Waterford Regional Hospital, Ardkeen	Waterford	Non-Voluntary	Regional
Wexford General Hospital	Wexford	Non-Voluntary	County
Cork University Hospital <sup>a</sup>	Cork	Non-Voluntary	Regional
Kerry General Hospital, Tralee	Kerry	Non-Voluntary	County
Bantry General Hospital <sup>a</sup>	Cork	Non-Voluntary	County
Mallow General Hospital	Cork	Non-Voluntary	County
Mercy University Hospital	Cork	Voluntary	General
South Infirmary Victoria Hospital	Cork	Voluntary	General
St. Finbarr's Hospital	Cork	Non-Voluntary	County
HSE West			
Midwestern Regional Hospital, Ennis <sup>a</sup>	Clare	Non-Voluntary	County
Midwestern Regional Hospital, Nenagh	Tipperary	Non-Voluntary	County
Midwestern Regional Hospital, Dooradoyle <sup>a</sup>	Limerick	Non-Voluntary	Regional
Midwestern Regional Maternity Hospital	Limerick	Non-Voluntary	Maternity
Midwestern Regional Orthopaedic Hospital, Croom	Limerick	Non-Voluntary	Orthopaedic
St. John's Hospital	Limerick	Voluntary	General
Letterkenny General Hospital	Donegal	Non-Voluntary	County
Sligo Regional Hospital	Sligo	Non-Voluntary	Regional
Mayo General Hospital, Castlebar	Mayo	Non-Voluntary	County
Portiuncula Hospital, Ballinasloe	Galway	Non-Voluntary	County
Roscommon County Hospital	Roscommon	Non-Voluntary	County
Galway University Hospitals	Galway	Non-Voluntary	Regional

Notes:

Total number of hospitals participating in 2013: 54

a There was some under reporting of data in particular hospitals in 2013. Bantry Hospital (coded and returned 16.5 per cent of their discharges), Midwestern Regional Hospital, Ennis (coded and returned 90.1 per cent of their discharges), Cork University Hospital (coded and returned 96.3 per cent of their discharges) and Midwestern Regional Hospital, Dooradoyle (coded and returned 96.7 per cent of their discharges).

 $b\quad \hbox{Our Lady's Hospice includes facilities at Harold's Cross and Blackrock Hospices}.$ 

## APPENDIX II: HIPE DATA COLLECTED

**TABLE II.1** Data Collected by HIPE\*

TABLE IIII	Data Collected by HIPE	
Type of Data	Parameters	Notes
	Date of birth Sex	Full date of birth not exported outside the hospital.
Demographic Data	Marital/Civil status	Values include single, married, widowed, other (including separated), unknown, divorced, civil partner, former civil partner or surviving civil partner.
emograp	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.
Δ	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.
	One principal diagnosis	Uses the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM), 6th Edition, July 2008.
	Twenty-nine additional diagnoses	Uses the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM), 6th Edition, July 2008.
Clinical Data	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), 6th Edition, July 2008.
J	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), 6th Edition, July 2008.
	Hospital Acquired Diagnosis	Condition not present prior to admission to hospital.
	Patient name	Is not exported outside the hospital.
	Hospital number	
	Chart number	Is unique to hospital of discharge.
	Admission and	
	discharge dates	Callested for each proceedings
	Dates of procedures  Day case indicator	Collected for each procedure.
	Day ward indicator	Indicates if a day case patient was admitted to a dedicated named day ward.
Data	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.
Administrative Data	Type of admission	Values include elective, elective readmission, emergency, emergency readmission, maternity, or newborn.
ninistr	Waiting list indicator	Indicates if an elective admission case is funded by the National Treatment Purchase Fund (NTPF).
Adm	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 residence, prison, or other.

#### Data Collected by HIPE (contd.)

Type of	Parameters	Notes	
Data			
	Discharge destination	long stay accommon transfer to hospital hospital/unit, died wother hospital (not in HIPE) as non-emerge	discharge, home, nursing home, convalescent home or adation, transfer to hospital (in HIPE) as emergency, (in HIPE) as non-emergency, transfer to psychiatric with post-mortem, died without post-mortem, transfer to in HIPE) as emergency, transfer to other hospital (not in ency, rehabilitation facility, hospice, prison, absconded, is place of residence (e.g. hotel).
	Discharge status	type of bed occupie	
	Health Insurer	Collected where dis-	charge status of the patient is private.
	General Medical	Refers to whether the	ne patient is a medical card holder.
	Service status		
	Days in an intensive		
	care environment		
	Days in a private bed		
<del>G</del>	Days in a semi- private bed		
nt	Days in a public bed		
ata (cc	Parity	Parity: Live births Parity: Still births	Mandatory for all cases with admission type maternity.
Administrative Data (contd.)	Specialty	· ·	f consultant associated with the principal diagnosis and used on a list provided by the Department of Health and
nist	Primary consultant	Encrypted.	
Ē	Anaesthetist	Encrypted. Collected	d for each procedure performed under anaesthetic.
Ad	Intensive care consultant	Encrypted. Up to te	n 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		ed to identify when a patient was transferred to a pre- r to being discharged as planned. This is an optional nce 2004
	Ward Identification		The ward to which the patient was admitted. The ward from which the patient was discharged.
	Temporary leave days		per of days the patient was absent from the hospital

Notes:

Source: HIPE Data Dictionary 2013 Version 5.0, available at www.hpo.ie

For details of all variables collected by HIPE see HIPE Data Dictionary 2013 Version 5.0.

a This was a new variable in 2007. To be consistent with previous years the calculation of mean length of stay in this report does not take temporary leave days into account.

## APPENDIX III: HIPE DATA ENTRY FORM

FIGURE III.1 HIPE Data Entry Form, 2013

Hospital In-Patient Enquiry (HIPE) Summary Sheet	
For use with HIPE on ALL DISCHARGES FROM 01.01.2013	
Patient's Hospital of Discharge Type (priority) of	7
Admission	_
Sex	
Admission Date / /	_
Admission Time : Admission Source	
Discharge Date / / Discharge Code	
Discharge Time: Date of Birth / /	
Area of Residence         Admitting Ward	Day Case
Marital /Civil Status Discharge Ward	Day Ward D Day Ward ID Day Ward Flag Days in a Private Bed Days in a Public Bed Days in a Public Bed Days (or part there of) in ICU
Medical Card Transfer from	Day Ward ID
*GMS Transfer to	Oncology Day Ward Flag
Number Temp Leave Days  Date of Transfer to	Ward Flag  Days in a Private Bed  Days in a Somi-Brivate Bed  Days in a Somi-Brivate Bed
Discharge Status Date of Transfer to / /	Days in a Semi-Private Bed
Health Insurer Infant Admit Weight	Days in a Public Bed
Still + Live (grams)	Days (or part there of) in ICU
Parity Intensive Care	
Admitting Consultant	Discharge Consultant
Primary Consultant Up to 10 Intensive Care consultants may be recorded	Specialty of Discharge Consultant
PDX = The diagnosis established after study to be chiefly responsible for oc	ccasioning the patient's episode of care in hospital (ACS 0001)
PDX = The diagnosis established after study to be chiefly responsible for on ICD-10-AM Code	Cocasioning the patient's episode of care in hospital (ACS 0001)  Hospital  Acquired Dx Consultant** Specialty
ICD-10-AM Code	Hospital
ICD-10-AM Code  1) Principal Diagnosis (PDX)	Hospital
ICD-10-AM Code  1) Principal Diagnosis (PDX)  2)	Hospital
ICD-10-AM Code	Hospital Acquired Dx Consultant**
ICD-10-AM Code	Hospital
ICD-10-AM Code	Hospital Acquired Dx Consultant** Specialty
ICD-10-AM Code  1)	Hospital Acquired Dx Consultant** Specialty
ICD-10-AM code	Hospital Acquired Dx Consultant** Specialty
ICD-10-AM code	Hospital Acquired Dx Consultant** Specialty
ICD-10-AM code	Hospital Acquired Dx Consultant** Specialty
1	Hospital Acquired Dx Consultant** Specialty
ICD-10-AM code	Hospital Acquired Dx Consultant** Specialty

Source: Health Research & Information Division, ESRI, Whitaker Square, Sir John Rogerson's Quay, Dublin 2. Tel 01-8632000

#### **APPENDIX IV: BED DATA**

The HIPE Report has historically reported on figures for the number of beds in HIPE hospitals.<sup>1</sup>

Number of Beds in HIPE Hospitals, 2009–2013

Table IV.1 shows the number of beds in HIPE hospitals over the years 2009–2013.

**TABLE IV.1** Number of Beds in HIPE Hospitals, 2009-2013

	2009 (%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)	Mean Annual % Change <sup>a</sup>	% Change
						2009-2013	2012-2013
Day Patient Beds	1,774	1,859	1,938	2,051	2,023	3.4	-1.4
	(13.1)	(14.0)	(14.8)	(16.0)	(15.7)		
In-Patient Beds	11,751	11,417	11,113	10,766	10,825	-2.0	0.5
	(86.9)	(86.0)	(85.2)	(84.0)	(84.3)		
Total Hospital Beds	13,525 (100)	13,276 (100)	13,051 (100)	12,817 (100)	12,848 (100)	-1.3	0.2

Notes: Percentages are reported in parentheses.

It should be noted when interpreting data on the number of hospital beds that the number of participating hospitals will have changed over time.

a The mean annual percentage change is the mean of the four annual percentage growth rates over the five years.

Source:

Most up to date data was provided by the Business Information Unit in the HSE (October 2014) and via personal communication from particular hospitals (October–November 2014).

The following tables indicate the volume and distribution of beds across the health system for 2013.

Number of Beds in HIPE Hospitals by HSE Region

Table IV.2 shows the number of HIPE hospital beds by HSE Region.

**TABLE IV.2** Number of Beds in HIPE Hospitals by HSE Region, 2013

	Day Patient Beds		In-Patie	ent Beds	Total HIPE Hospital Beds	
	N	%	N	%	N	%
HSE Dublin North East	493 24.4	16.8	2,444 22.6	83.2	2,937 22.9	100
HSE Dublin Mid Leinster	587 29.0	14.1	3,574 33.0	85.9	4,161 32.4	100
HSE South	447 22.1	15.7	2,405 22.2	84.3	2,852 22.2	100
HSE West	496 24.5	17.1	2,402 22.2	82.9	2,898 22.6	100
Total Hospital Beds	2,023 100	15.7	10,825 100	84.3	12,848 100	100

Notes: Percentages columns are subject to rounding.

See additional notes and Source under Table IV.1.

The Business Information Unit in the HSE estimated the number of beds as the average number of beds per day that were available throughout the year and is exclusive of bed closures.

#### Number of Beds in HIPE Hospitals by Hospital Type

Table IV.3 shows the number of HIPE hospital beds by Hospital Type.

**TABLE IV.3** Number of Beds in HIPE Hospitals by Hospital Type, 2013

	Day Patient Beds		In-Patie	nt Beds	Total Hospital Beds	
	N	%	N	%	N	%
General Hospitals	1,827	16.5	9,266	83.5	11,093	100
	90.3		85.6		86.3	
Voluntary	671	16.6	3,376	83.4	4,047	100
	33.2		31.2		31.5	
Regional	495	17.4	2,357	82.6	2,852	100
	24.5		21.8		22.2	
County	661	15.8	3,533	84.2	4,194	100
	32.7		32.6		32.6	
'Other' Hospitals <sup>a</sup>	196	11.2	1,559	88.8	1,755	100
	9.7		14.4		13.7	
Total (All Hospital Types)	2,023	15.7	10,825	84.3	12,848	100
	100		100		100	

Notes: Percentages columns are subject to rounding.
See additional notes and Source under Table IV.1.

a 'Other' hospitals include Maternity; Cancer; Orthopaedic; Paediatric; Eye, Ear, Nose and Throat and 'Other Care' (covering a range of specialist services including palliative medicine, rheumatology, elderly care, and care of the young disabled). See Appendix I for the list of hospitals participating in HIPE in 2013.

## **APPENDIX V: DERIVED VARIABLES**

For some of the categorical administrative variables, aggregation of categories has been necessary to ensure confidentiality. Table VI.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 V.1** Derived Variables

HIPE	: Variable	Derived Variable for Report			
	ission Type	Derive			
1	'Elective'	1	'Elective' (1, 2)		
2	'Elective Readmission'	2	'Emergency' (4, 5, 7)		
4	'Emergency'	3	'Maternity' (6)		
5	'Emergency Readmission'		wateriney (b)		
6	'Maternity'				
7	'New born'				
	ission Source				
1	'Home'	1	'Home' (1)		
2	'Transfer from nursing home/convalescent home or	2	Long stay accommodation (2, 5)		
	other long stay accommodation'		0 , (, ,		
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 <sup>a</sup>	'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'				
Disc	harge Destination				
00	'Self discharge'	1	'Home' (01)		
01	'Home'	2	'Long stay accommodation' (02, 11)		
02	'Nursing home, convalescent home or long stay	3	'Transfer to other hospital' (03, 04,		
	accommodation'		05,08, 09, 10)		
03	'Transfer to hospital – in HIPE Hospital Listings –	4	'Died' (06, 07)		
	Emergency '				
04	'Transfer to hospital – in HIPE Hospital Listings – Non	5	'Other' (00, 12, 13, 14, 15)		
	Emergency'				
05	'Transfer to psychiatric hospital/unit'				
06	'Died with post mortem'				
07	'Died no post mortem'				
80	'Transfer to other hospital – not in HIPE Hospital Listings – Emergency'				
09	'Transfer to other hospital – not in HIPE Hospital Listings				
03	- 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'				

Notes:

For further information on all variables collected by HIPE see HIPE Data Dictionary 2013 Version 5.0 available at www.hpo.ie

a This category has been revised to that presented in previous reports, where 'New born' was presented as a separate category.

## APPENDIX VI: REFERENCE TABLE

Table VI.1 presents the data used to produce Figures 2.12a to 2.12d in Section Two.

**TABLE VI.1** Total Discharges (excl. *Maternity*): Proportion of Discharges Hospitalised within their HSE Region of Residence by County of Residence and Patient Type (N, %)

		Da Patie	•	Elec In-Pat		Emerg In-Pat	-	Total Disc (excl. <i>Ma</i>	
		N	%	N	%	N	%	N	%
	Dublin North	106,187	87.9	9,725	85.8	39,506	91.4	155,418	88.6
HSE Dublin North East	Cavan	16,340	91.7	1,302	80.3	8,629	95.3	26,271	92.2
	Monaghan	13,044	92.3	982	81.4	5,988	96.3	20,014	92.8
	Louth	23,310	91.2	1,920	81.1	13,672	96.8	38,902	92.5
E S	Meath	24,793	81.8	2,432	74.4	14,440	88.3	41,665	83.5
	Total	183,674	88.0	16,361	82.6	82,235	92.4	282,270	88.9
	Dublin South	121,289	93.1	10,815	85.3	44,109	92.6	176,213	92.5
	Kildare	26,944	79.8	3,128	80.6	13,402	84.9	43,474	81.4
ie li	Wicklow	29,538	95.1	2,393	84.0	8,414	92.7	40,345	93.8
HSE Dublin Mid Leinster	Longford	5,999	69.1	761	75.1	3,944	87.5	10,704	75.4
	Westmeath	16,540	78.0	1,484	73.3	8,429	82.0	26,453	78.9
E E	Offaly	17,126	89.4	1,504	83.6	6,726	90.1	25,356	89.2
	Laois	15,963	93.2	1,569	89.2	7,588	95.3	25,120	93.6
	Total	233,399	89.3	21,654	83.3	92,612	90.2	347,665	89.2
	Carlow	4,376	49.8	586	47.2	6,149	86.9	11,111	65.0
	Wexford	18,773	71.2	1,607	52.5	15,345	92.2	35,725	77.6
듄	Kilkenny	7,934	77.7	946	58.5	8,692	94.3	17,572	83.5
on	Tipp South	12,203	87.4	2,025	82.7	9,413	95.8	23,641	90.1
HSE South	Waterford	18,881	93.0	1,959	81.7	9,880	97.1	30,720	93.4
¥	Cork	107,247	98.3	12,139	93.2	37,891	98.0	157,277	97.8
	Kerry	23,417	96.2	2,625	86.4	10,541	97.1	36,583	95.7
	Total	192,831	90.5	21,887	81.6	97,911	95.6	312,629	91.3
	Limerick	28,581	89.1	4,815	83.4	14,973	91.5	48,369	89.2
	Clare	16,882	94.2	2,752	87.1	8,931	96.5	28,565	94.2
	Tipp North	10,977	73.8	1,394	65.9	3,896	54.7	16,267	67.5
st	Galway	54,491	96.9	5,131	88.6	21,455	97.4	81,077	96.4
HSE West	Roscommon	12,636	89.6	1,898	86.4	5,348	90.2	19,882	89.5
SE	Mayo	33,996	96.1	4,083	89.8	13,775	97.4	51,854	95.9
Ĩ	Leitrim	5,642	79.9	535	66.0	2,227	78.2	8,404	78.4
	Sligo	19,200	95.0	1,792	83.4	7,877	96.3	28,869	94.5
	Donegal	34,596	94.1	2,872	73.6	16,740	96.3	54,208	93.4
	Total	217,001	92.5	25,272	83.0	95,222	92.2	337,495	91.6

Note: Percentage columns are subject to rounding.

### **APPENDIX VII: AUSTRALIAN CODING STANDARD 0042**

#### Australian Coding Standard 0042 Procedures not Normally Coded<sup>2</sup>

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
- 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 anaesthesia (except local) is required for the procedure (see ACS 0031 *Anaesthesia*).
- c. These procedures should be coded if they are the principal reason for admission in same-day episodes of care.
  - 1. Application of plaster
  - 2. Cardioplegia when associated with cardiac surgery
  - 3. Cardiotocography (CTG) except fetal scalp electrodes
  - 4. Dressings
  - **5.** Drug treatment

Drug treatment should not be coded except if:

- the substance is given as the principal treatment in same-day episodes
  of care
  - (e.g. chemotherapy for neoplasm or HIV, see ACS 0044 Chemotherapy)
- drug treatment is specifically addressed in a coding standard (see ACS 1316 Cement spacer/beads and ACS 1615 Specific interventions for the sick neonate)
- **6.** Echocardiogram except transoesophageal echocardiogram
- **7.** Electrocardiography (ECG) except patient-activated implantable cardiac event monitoring (loop recorder)

<sup>&</sup>lt;sup>2</sup> Extracted from NCCH eBook, July 2008, General Standards for Interventions.

- **8.** Electrodes (pacing wires) temporary: insertion of temporary transcutaneous or transvenous electrodes when associated with cardiac surgery; adjustment, repositioning, manipulation or removal of temporary electrodes
- **9.** Electromyography (EMG)
- 10. Hypothermia when associated with cardiac surgery
- **11.** Monitoring: cardiac, electroencephalography (EEG), vascular pressure except radiographic/video EEG monitoring 24 hours
- **12.** Nasogastric intubation, aspiration and feeding, except nasogastric feeding in neonates. (see ACS 1615 *Specific interventions for the sick neonate*)
- **13.** Perfusion when associated with cardiac surgery
- 14. 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)
- **15.** Procedure components
- **16.** Stress test
- 17. Traction if associated with another procedure
- 18. Ultrasound
- **19.** Urinary catheterisation except if suprapubic or if patient discharged with catheter in situ (see ACS 0016 *General procedure guidelines* and ACS 1436 *Admission for trial of void*)
- **20.** X-rays without contrast (plain)

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