# Activity in Acute Public Hospitals in Ireland

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Health Research and Information Division

2010





# **METADATA**

#### Title

Activity in Acute Public Hospitals in Ireland Annual Report, 2010

#### Creator

Health Research and Information Division (HRID), The Economic and Social Research Institute (ESRI)

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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 2010. 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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Inevitably, a small number of individuals have to carry most of the responsibility of producing a report of this type. In this case Sheelagh Bonham, Aoife Brick, Eoin Feeney, Conor Keegan, Aisling Mulligan and Sinéad O'Hara were to the fore in the preparation of the report for publication. We wish to express our sincere thanks to these colleagues for all of their hard work on the report. Their commitment, enthusiasm, and professionalism are gratefully acknowledged and sincerely appreciated.

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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. The Economic and Social Research Institute (ESRI) oversees the administration and management of this scheme on behalf of the Health Service Executive. Within the ESRI, the Health Research and Information Division (HRID) is responsible for overseeing all functions associated with the operation of this database, including the development and support of the data collection and reporting software, training of coders and data quality audit, reporting, and responding to requests for data.

This report relates to discharges that occurred in the 2010 calendar year. The aim is to present an overview of discharge activity in acute public hospitals in Ireland. Marking a change to previous reports, the demographic and morbidity analysis for *Maternity* discharges are analysed separately for specified sections of the *Activity in Acute Public Hospitals in Ireland Annual Report, 2010* to enable a more comprehensive overview of trends in this area.

Total Discharges 1,447,108 (100%)

Discharges excluding *Maternity* 1,310,527 (90.6%)

Maternity 136,581 (9.4%)

# Total Discharges (excl. *Maternity*) 1,310,527 (100%)

Total Day and In-Patient Bed Days: 4,081,847 In-Patient Mean Length of Stay (LOS): 7.0 Days

Day Patients 845,331 (64.5%)

In-Patients
465,196 (35.5%)
Bed Days: 3,236,516
Acute (0-30 Days) In-Patient Mean
LOS: 4.9 Days

Elective 108,825 (8.3%) Acute (0-30 Days) In-Patient Mean LOS: 4.8 Days

Emergency 356,371 (27.2%) Acute (0-30 Days) In-Patient Mean LOS: 4.9 Days

#### **WHO**

#### Sex

• Females accounted for 48.5 per cent of total discharges (excl. *Maternity*) with males accounting for 51.5 per cent.

#### Age

 The 65–74 years age group accounted for the largest proportion of male discharges (20.0 per cent) whereas the 55–64 years age group accounted for the largest proportion of female discharges (excl. *Maternity*) (16.9 per cent).

## **Marital Status**

 Married discharges accounted for 47.5 per cent of total discharges (excl. Maternity).

#### Public/Private Status

- Over 81 per cent of total discharges (excl. Maternity) were treated on a public basis with 18.9 per cent treated on a private basis.
- The 85 years and over age group had the highest proportion of total discharges (excl. *Maternity*) treated publicly (89.7 per cent) with only 10.3 per cent treated on a private basis.

# General Medical Service (GMS) Status

- Of total discharges (excl. Maternity), 56.9 per cent were GMS discharges.
- The highest proportion of GMS discharges were in the 85 years and over age group (87.8 per cent).

#### WHERE

# **HSE** Area of Hospitalisation

The highest proportion of total discharges (excl. Maternity) were hospitalised in the HSE Dublin Mid Leinster area (30.7 per cent) with the lowest proportion hospitalised in the HSE Dublin North East area (21.5 per cent).

# HSE Area of Residence

• The HSE South area had the highest proportion of residents aged 65–74 years (19.1 per cent) compared to the HSE Dublin North East area and HSE Dublin Mid Leinster area who both had 17.6 per cent of residents in this age group.

#### **Admission Source**

• The majority of total discharges (excl. Maternity) in all HSE areas were admitted from home, ranging from 95.1 per cent in the HSE Dublin North East area to 97.0 per cent in the HSE West area.

# Discharge Destination

The majority of in-patient discharges (excl. *Maternity*) were discharged home, ranging from 85.7 per cent in HSE West area to 87.0 per cent in the HSE Dublin Mid Leinster area.

# **WHEN**

#### Day of Admission

The proportion of in-patient discharges (excl. Maternity) admitted on an elective basis decreased throughout the week, with the over 63 per cent admitted from Monday to Wednesday, falling to 10.9 per cent at the weekend.

#### Day of Discharge

The proportion of elective in-patients discharged rose throughout the week, going from 10.6 per cent on Monday to 22.8 per cent on Friday, falling to 5.0 per cent on Sunday.

## Month of Admission

May recorded the highest number of emergency in-patient admissions (30,712 discharges).

#### **MORBIDITY ANALYSIS**

# Day Patients

- The principal diagnosis of other medical care, which includes chemotherapy and radiotherapy encounters, accounted for the largest proportion of total day patient discharges (21.0 per cent).
- At least one procedure was recorded for 93.9 per cent of day patient discharges.
- Haemodialysis was reported as a principal procedure for 21.2 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 3.4 per cent of in-patients.
- At least one procedure was recorded for 66.2 per cent of in-patient discharges.
- Generalised allied health interventions were reported as a principal procedure for 13.9 per cent of in-patient discharges with at least one procedure. This category includes interventions such as physiotherapy, dietetics, pharmacy, social work, and occupational therapy.

# Maternity Discharges 136,581 (100%)

Total Day and In-Patient Bed Days: 344,727 In-Patient Mean Length of Stay (LOS): 2.6 Days

Delivery
72,675 (53.2%)
In-Patient Bed Days: 247,095
In-Patient Mean LOS (<7 Days): 3.0 Days

63,906 (46.8%)
Day Patients: 10,287 In-Patients: 53,619

Total Day and In-Patient Bed Days: 97,632 In-Patient Mean LOS (≤7 Days): 1.5 Days

#### **DELIVERY**

- Almost 59 per cent of *Delivery* discharges were in the 25–34 years age group.
- Non-instrumental deliveries accounted for the largest proportion of *Delivery* discharges (57.3 per cent), followed by Caesarean section at 26.4 per cent. Instrumental deliveries accounted for 16.3 per cent.
- Of *Delivery* discharges 75.8 per cent were treated on a public basis and 24.2 per cent on a private basis.
- Almost 24 per cent of *Delivery* discharges who were treated on a public basis had a Caesarean section compared to 34.7 per cent of those treated privately.
- Over 23 per cent of *Delivery* discharges had a principal diagnosis of *perineal* laceration during delivery.
- At least one procedure was recorded for 93.1 per cent of *Delivery* discharges.

# **NON-DELIVERY**

#### Day Patients

- The principal diagnosis of *special screening examination for other diseases* and disorders accounted for the largest proportion of *Non-Delivery* day patient discharges (17.4 per cent).
- At least one procedure was recorded for 29.7 per cent of Non-Delivery day patient discharges.
- Curettage and evacuation of uterus was reported as a principal procedure for 54.3 per cent of Non-Delivery day patient discharges with at least one procedure.

#### **In-Patients**

- Almost 24 per cent of Non-Delivery in-patient discharges had a principal diagnosis of other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium while false labour accounted for a further 14.4 per cent.
- At least one procedure was recorded for 19.0 per cent of *Non-Delivery* inpatient discharges.
- Curettage and evacuation of uterus was reported as a principal procedure for 34.1 per cent of Non-Delivery in-patient discharges with at least one procedure.

# CASE MIX ANALYSIS

# **Total Discharges** 1,447,108 (100%)

- The MDC with the highest volume of total discharges (14.5 per cent) was Diseases and Disorders of the Kidney and Urinary Tract, MDC 11. Day patient discharges accounted for over 89 per cent of activity within this MDC.
  - Within this MDC, Haemodialysis (AR-DRG L61Z) accounted for 167,963 discharges or 11.6 per cent total discharges. Haemodialysis was the highest ranked AR-DRG for day patients accounting for 19.6 per cent of total day patients.
- The MDC with the largest number of day patient discharges reported was MDC 17 Neoplastic Disorders (Haematological and Solid Neoplasms), at 22.9 per cent.
  - Radiotherapy (AR-DRG R64Z), accounted for 47.3 per cent of day patients within this MDC and 10.9 per cent total day patients.
  - \* Chemotherapy (AR-DRG R63Z), accounted for 40.9 per cent of day patients within this MDC and 9.4 per cent of total day patients.
- The MDC with the largest proportion of in-patient discharges (21.1 per cent) was Pregnancy, Childbirth and the Puerperium, MDC 14.
  - Vaginal Delivery (AR-DRG O60Z), accounted for 41.9 per cent of inpatients within this MDC and 8.9 per cent of total in-patient discharges.

Overview SECTION
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# 1.1 INTRODUCTION

The aim of the Activity in Acute Public Hospitals Annual Report is to present an overview of discharge activity in acute public hospitals in Ireland during 2010 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 and ends at discharge from (or death in) that hospital.

Section One provides an overview of the 2010 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 2010 report including details of the changes from previous HIPE annual reports. 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 2006–2010.

# 1.2 BACKGROUND

The Economic and Social Research Institute (ESRI) oversees the administration and management of the HIPE scheme on behalf of the Health Service Executive and the Department of Health. Within the ESRI, the Health Research and Information Division (HRID) is responsible for overseeing all functions associated with the operation of this database, including the development and support of the data collection and reporting software, training of coders, data quality, audit, reporting, and responding to requests for data.<sup>2, 3</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 for 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 data, the HRID also manages an online data reporting tool.<sup>4</sup>

See Appendix I for a list of hospitals participating in HIPE in 2010.

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

The ESRI's HRID also oversees the administration and management of the National Perinatal Reporting System (NPRS) on behalf of the HSE.

An online data reporting tool is now available at www.hipe.ie

#### 1.3 **DATA SOURCES FOR ANNUAL REPORT 2010**

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.  $^{5,6}$  In 2010, 57 public hospitals in Ireland reported

to HIPE (see Appendix I).7

Hospital bed data from 2006–2010 were obtained from the Business Hospital Beds:

Intelligence Unit in the Corporate Planning and Corporate

Performance Directorate of the HSE (see Appendix IV for 2010 bed

For 2006, population data were obtained from Census 2006 (Central Population Statistics Office). Population estimates for 2007–2010 were obtained Estimates:

from the ESRI (see Appendix V for 2010 population estimates).

#### 1.4 **CHANGES TO ANNUAL REPORT 2010**

This report marks a change from the way in which HIPE data are presented compared with previous Activity in Acute Public Hospitals Annual Reports. In the previous reports, tables and figures presented in all Sections of the report were based on total discharges. For Annual Report 2010, Maternity discharges are excluded from the analyses in Sections Two and Three and a new section has been added to the report that looks exclusively at Maternity discharges (Section Four). 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.5

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 (4.9 days). By excluding Maternity discharges from Sections Two and Three this report can focus more specifically on the broad range of non-maternity activity taking place in acute public hospitals.

In addition to this significant change, there have been several other small changes to the way in which the data are reported:

Age: The way in which the younger age categories are presented has changed. There is now a less than 1-year-old category, a 1–14 years category and a 15–24 years category instead of the previous 0-4 years, 5-14 years, 15-19 years, and 20-24 years categories.

See Appendix II for details of data collected by HIPE and the HIPE Data Dictionary 2010 Version 2.0 available at

A copy of the HIPE data entry form for 2010 is contained in Appendix III.

For historic reasons, a small number of non-acute hospitals also reported to HIPE in 2010. Discharges from these hospitals have been included in this report.

- Additional Variables: Variables available in HIPE which were not presented in previous reports are now used. For example, admission source and discharge destination are presented for the first time in Sections Two and Three, and county of residence of discharges is also presented in Section Two in order to provide a more detailed analysis of patient flows.
- Cross-Tabulations: There is now a more detailed analysis of the data by making more use of cross-tabulations. For example, there is more extensive use of the admission type variable, whereby in-patient data are broken down by elective and emergency discharges. Section Three presents principal and all-listed diagnoses and procedures cross-tabulated by sex and age group.
- Length of Stay: In addition to the mean length of stay, the median length of stay is provided to highlight the effect of outlier cases.
- Annex: There is now an additional analysis on a chosen topic of interest. For this year's report, the topic chosen is Stroke.

#### 1.5 STRUCTURE OF ANNUAL REPORT 2010

Figure 1.1 outlines the structure of Annual Report 2010. It illustrates the number of discharges included in each of the five sections and the exclusion of Maternity discharges from Sections Two and Three.

FIGURE 1.1 Structure of the Activity in Acute Public Hospitals in Ireland Annual Report, 2010

# **Section One**

Total Discharges – 1,447,108

# **Section Two & Section Three**

(Demographic Profile, Hospital Activity and Morbidity Analysis) Total Discharges Excluding Maternity Discharges – 1,310,527

**Section Four** 

# **Section Five**

(Case Mix Analysis) Total Discharges – 1,447,108

#### 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 2010. 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 status, GMS status, and discharge status. The regional analysis uses HSE area of residence, county of residence, and HSE area of hospitalisation to see where discharges are being hospitalised, while the temporal analysis looks at day of admission, day of discharge, and month of admission to see when activity is occurring.

## 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 breakdowns for principal diagnoses and procedures 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. Data in Section Four are disaggregated by the delivery status of the discharges, that is, if 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 day patient and in-patient, with elective and emergency in-patients also presented. In-patient (elective, emergency and total) mean and median length of stay is also provided for each MDC and AR-DRG.

#### 1.6 **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 to estimate 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 would not be possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in **Emergency Departments.**
- Coverage of data: In previous annual reports, the coverage of the HIPE system was estimated from hospital returns and data provided from the DoH and subsequently from the HSE. Because of differences in the approach to compiling hospital activity data it not currently possible to adopt that approach here. Work is underway to address these differences between the systems. In the meantime, we have used the data returned as 'coded' as a proportion of total discharges appropriate for inclusion in the HIPE system as an estimate of coverage. The data available from participating hospitals for 2010 indicate that for day patient and in-patient discharges, that are appropriate for inclusion in the HIPE data set, 99.9 per cent of the discharges were coded and returned for inclusion in the national HIPE data set.8
- Hospital factors: There has been restructuring within the hospital system which will be reflected in the analysis presented in this report.

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 actually downloaded within the hospital.

#### 1.7 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.<sup>5</sup>
- Hospital Type: Due to confidentiality constraints, data cannot be published on a named hospital basis. Data are therefore presented at the more 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.<sup>9</sup>
- Derived Variables: For some of the categorical administrative variables, aggregation of categories has been necessary to ensure confidentiality. These derivations are presented in Appendix VI for admission type, admission source, and discharge destination.
- Length of Stay: In addition to the mean length of stay, the median length of stay is provided to highlight the effect of outlier cases.

#### 1.8 DISCHARGES REPORTED TO HIPE, 2006–2010

In 2010, 1,447,108 discharges were reported to HIPE by participating acute public hospitals, representing a mean annual percentage increase of 3.8 per cent over the period 2006–2010 and a 2.6 per cent increase between 2009 and 2010.

Table 1.1 and Figures 1.2 to 1.3 show the distribution of discharges over the period 2006–2010 by selected variables.

- The number of day patients has increased from 662,096 in 2006 to 855,618 in 2010, a mean annual increase of 6.6 per cent (see Figure 1.2).
- The number of in-patients has increased from 582,794 in 2006 to 591,490 in 2010, a mean annual increase of 0.4 per cent.
- Maternity discharges increased by a mean of 4.8 per cent over the period 2006– 2010 from 113,462 to 136,581 discharges.
- The male-female split has remained consistent with a slightly higher proportion of females (53.4 per cent) in 2010.
- Across the age groups, the 65 years and over age group accounted for 32.7 per cent of total discharges, with the smallest proportion in the under 15 years age group (8.9 per cent).
- There was a slight increasing trend in the proportion of public discharges rising from 77.4 per cent in 2006 to 80.9 per cent in 2010, with the remainder of each accounted for by private discharges.
- The number of GMS discharges increased by a mean of 6.4 per cent per year between 2006 and 2010, from 604,983 to 773,622 discharges.
- While total and acute in-patient mean length of stay have consistently fallen over the period 2006 to 2010.
- General hospitals continued to account for the largest proportion of total discharges (86.5 per cent) in 2010 with the remainder accounted for by 'other' hospitals (13.5 per cent). Voluntary and county hospitals accounted for the greatest proportions of total discharges (30.2 and 30.1 per cent) in the general hospital category in 2010 (see Figure 1.3).

 TABLE 1.1
 Acute Public Hospital Discharges in HIPE (N, %), 2006-2010

	2006	2007	2008	2009	2010	Mean Annual % Change	% Change 2009–2010
	N (%)	N (%)	N (%)	N (%)	N (%)	2006-2010 <sup>a</sup>	
Total Discharges	1,244,890	1,317,626	1,368,594	1,410,394	1,447,108	3.8	2.6
	(100)	(100)	(100)	(100)	(100)		
Patient Type							
Day Patients	662,096	718,851	771,145	820,234	855,618	6.6	4.3
	(53.2)	(54.6)	(56.3)	(58.2)	(59.1)		
In-Patients	582,794	598,775	597,449	590,160	591,490	0.4	0.2
	(46.8)	(45.4)	(43.7)	(41.8)	(40.9)		
Total Discharges	1,131,428	1,190,960	1,235,092	1,275,238	1,310,527	3.7	2.8
(excl. Maternity) <sup>b</sup>	(90.9)	(90.4)	(90.2)	(90.4)	(90.6)		
Day Patients	657,375	712,076	764,399	808,469	845,331	6.5	4.6
,	(52.8)	(54.0)	(55.9)	(57.3)	(58.4)		
In-Patients	474,053	478,884	470,693	466,769	465,196	-0.5	-0.3
	(38.1)	(36.3)	(34.4)	(33.1)	(32.1)		
Elective	122,435	120,012	115,507	110,355	108,825	-2.9	-1.4
LICCUVC	(9.8)	(9.1)	(8.4)	(7.8)	(7.5)	2.3	1.4
Emorgonou <sup>C</sup>						0.3	0.0
Emergency <sup>c</sup>	351,618	358,872	355,186	356,414	356,371	0.5	0.0
0.0 - to 'to	(28.2)	(27.2)	(26.0)	(25.3)	(24.6)		
Maternity Discharges	113,462	126,666	133,502	135,156	136,581	4.8	1.1
	(9.1)	(9.6)	(9.8)	(9.6)	(9.4)		
Day Patients	4,721	6,775	6,746	11,765	10,287	26.2	-12.6
	(0.4)	(0.5)	(0.5)	(0.8)	(0.7)		
In-Patients	108,741	119,891	126,756	123,391	126,294	3.9	2.4
	(8.7)	(9.1)	(9.3)	(8.7)	(8.7)		
Patient Characteristics							
Sex							
Males	586,077	615,312	630,950	651,525	674,978	3.6	3.6
···aico	(47.1)	(46.7)	(46.1)	(46.2)	(46.6)	3.0	5.0
Females	658,813	702,314	737,644	758,869	772,130	4.7	1.7
Territies	(52.9)	(53.3)	(53.9)	(53.8)	(53.4)	,	1.,
Age Group	(32.3)	(33.3)	(33.3)	(33.0)	(33.1)		
Under 15 years	127,461	125,348	127,471	127,264	128,551	0.2	1.0
Officer 15 years	(10.2)	(9.5)	(9.3)	(9.0)	(8.9)	0.2	1.0
15–44 years	390,774	420,388	430,068	435,965	439,317	3.0	0.8
13-44 years	(31.4)	(31.9)	(31.4)	(30.9)	(30.4)	3.0	0.8
AE 64 years						4.1	2.5
45–64 years	345,500	371,405	389,558	395,924	406,013	4.1	2.5
CE was and awar	(27.8)	(28.2)	(28.5)	(28.1)	(28.1)	Г.С	4.0
65 years and over	381,155	400,485	421,497	451,241	473,227	5.6	4.9
5 11: /5 : d	(30.6)	(30.4)	(30.8)	(32.0)	(32.7)		
Public/Private Status <sup>d</sup>							
Public Discharges	963,620	1,037,584	1,077,917	1,123,154	1,171,066	5.0	4.3
	(77.4)	(78.7)	(78.8)	(79.6)	(80.9)		
Private Discharges	281,270	280,042	290,677	287,240	276,042	-0.4	-3.9
	(22.6)	(21.3)	(21.2)	(20.4)	(19.1)		
GMS Status							
GMS (Medical card	604,983	663,162	686,181	735,723	773,622	6.4	5.2
holders)	(48.6)	(50.3)	(50.1)	(52.2)	(53.5)		
Non-GMS (Non-	579,950	620,708	641,093	660,812	657,214	3.2	-0.5
medical card holders)	(46.6)	(47.1)	(46.8)	(46.9)	(45.4)		
Unknown <sup>e</sup>	59,957	33,756	41,320	13,859	16,272	-17.6	17.4
	(4.8)	(2.6)	(3.0)	(1.0)	(1.1)	17.13	17.7
Mean Length of Stay	(4.0)	(2.0)	(3.0)	(1.0)	(1.1)		
	6.3	6.2	6.2	6.1	6.0	-1.2	-1.6
Total In-Patients							
Acute <sup>†</sup>	4.8	4.7	4.6	4.5 64.0	4.4 65.1	-2.2 2.1	-2.2
Extended <sup>g</sup>	60.0	59.8	62.5	64.9	65.1	2.1	0.3
Hospital Type <sup>n</sup>							
General Hospitals	1,074,202	1,130,965	1,192,755	1,225,574	1,252,454	3.9	2.2
	(86.3)	(85.8)	(87.2)	(86.9)	(86.5)		
Voluntary Hospitals	365,761	396,926	417,850	424,683	437,638	4.6	3.1
	(29.4)	(30.1)	(30.5)	(30.1)	(30.2)		
Regional Hospitals	317,643	325,484	355,837	369,774	379,846	4.6	2.7
	(25.5)	(24.7)	(26.0)	(26.2)	(26.2)	4.0	2.7
	(23.3)	(24.7)	(20.0)	(20.2)	(20.2)		

	2006	2007	2008	2009	2010	Mean Annual % Change	% Change 2009–2010
	N (%)	2006-2010 <sup>a</sup>					
County Hospitals	390,798	408,555	419,068	431,117	434,970	2.7	0.9
	(31.4)	(31.0)	(30.6)	(30.6)	(30.1)		
'Other' Hospitals	170,688	186,661	175,839	184,820	194,654	3.5	5.3
	(13.7)	(14.2)	(12.8)	(13.1)	(13.5)		
Discharge Rate Per 1,000 Population <sup>i</sup>	293.6	303.2	309.1	315.9	323.2	2.4	2.3
Total Bed Days	4,350,877	4,451,301	4,472,104	4,428,882	4,426,574	0.4	-0.1
Day Patients	662,096	718,851	771,145	820,234	855,618	6.6	4.3
	(15.2)	(16.1)	(17.2)	(18.5)	(19.3)		
In-Patients	3,688,781	3,732,450	3,700,959	3,608,648	3,570,956	-0.8	-1.0
	(84.8)	(83.9)	(82.8)	(81.5)	(80.7)		
Under 15 Years	302,697	301,025	309,361	301,909	295,262	-0.6	-2.2
	(7.0)	(6.8)	(6.9)	(6.8)	(6.7)		
15 to 44 Years	834,045	863,476	847,468	814,708	785,964	-1.4	-3.5
	(19.2)	(19.4)	(19.0)	(18.4)	(17.8)		
45 to 64 Years	769,340	790,809	768,845	730,938	714,472	-1.8	-2.3
	(17.7)	(17.8)	(17.2)	(16.5)	(16.1)		
65 Years and Over	1,782,699	1,777,140	1,775,285	1,761,093	1,775,258	-0.1	0.8
	(41.0)	(39.9)	(39.7)	(39.8)	(40.1)		

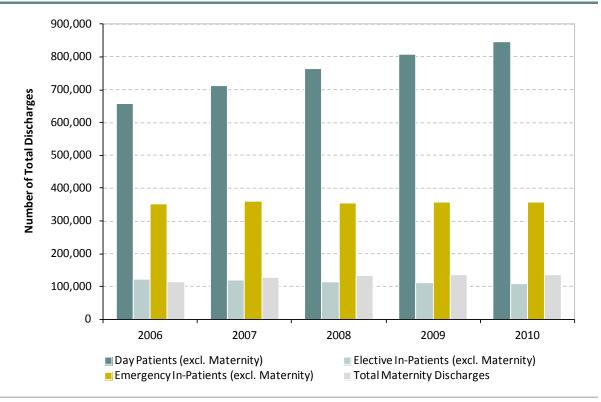
Notes: Percentage columns are subject to rounding.

- The mean annual percentage change is the mean of the four annual percentage growth rates over the five years.
- b Annual Reports from 2006 to 2009 did not exclude *Maternity* discharges. We have presented them in this report allow for comparability over the five year period.
- c Emergency in-patient admissions include patients who visited the Emergency Department and were subsequently admitted to hospital. Therefore, emergency admissions do not capture all of those patients who attended the Emergency Department. 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.
- d Public/Private status refers to the patient's status on discharge, which may be public (private) if the patient saw the consultant publicly (privately). This does not relate to the type of bed occupied by the patient during the hospital stay.
- e Includes discharges for which GMS status was not known.
- f Relates to lengths of stay for in-patients between 0 and 30 days (inclusive).
- g Relates to lengths of stay of more than 30 days.
- h As a result of the reconfiguration of maternity services in Cork in March 2007, activity previously reported as 'Maternity Hospital' activity for this region is reported as 'Regional Hospital' activity from 1 January 2008.
- i 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 were excluded, the crude discharge rate was 322.5 per 1.000 population.

Sources: Data on discharges and bed days for 2006–9 were obtained from HIPE.

 $For 2007-10\ population\ estimates\ were\ obtained\ from\ the\ Economic\ and\ Social\ Research\ Institute\ (see\ Appendix\ V\ for\ 2010\ data).$  For 2006, population\ data\ were\ obtained\ from\ Census\ 2006\ (Central\ Statistics\ Office).

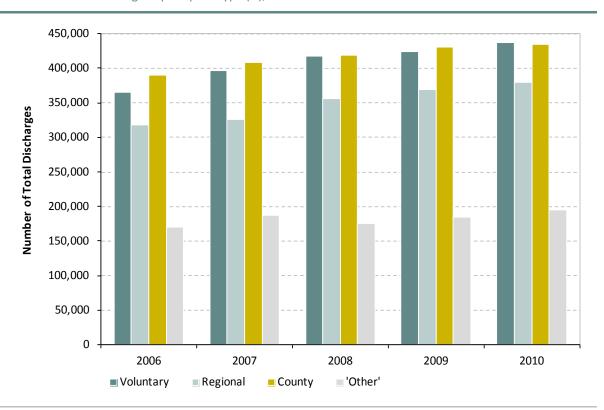
FIGURE 1.2 Total Discharges by Patient Type and Admission Type (N), 2006-2010



Notes: See Appendix I for a list of hospitals that participated in HIPE in 2010.

Sources: Data for 2006–2009 were obtained from HIPE.

FIGURE 1.3 Total Discharges by Hospital Type (N), 2006-2010



Notes: See Appendix I for a list of hospitals that participated in HIPE in 2010.

Sources: Data for 2006–2009 were obtained from HIPE.

Discharge Overview SECTION

2010

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# **Total Discharges** 1,447,108

# Discharges excluding Maternity 1,310,527

#### 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 1,310,527 discharges and is divided into three sections.

- Section 2.2 discusses who discharges were (age, sex, marital status, GMS status, public/private 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 2.3 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 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 who is discharged alive, as scheduled, on the same day. In 2010, day patient discharges accounted for 64.5 per cent of total discharges (excl. Maternity). In-patient discharges accounted for the remaining 35.5 per cent of total discharges (excl. Maternity) with 76.6 per cent of in-patients admitted on an emergency basis and 23.4 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) were in the 65–74 years age group (18.3 per cent). They accounted for the largest proportion of day patient discharges (20.4 per cent) and acute in-patient discharges (14.3 per cent).
- The 75–84 years age group accounted for the highest proportion of extended stay in-patient discharges (29.1 per cent).
- The 1–14 years age group accounted for 11.7 per cent of in-patient discharges and 4.1 per cent of in-patient bed days.
- Discharges in the older age groups accounted for a high proportion of bed days; the 75–84 years age group accounted for 14.2 per cent of in-patient discharges and 23.8 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 2.3 days for discharges aged 1-14 years to 8.2 days for discharges aged 85 years and over.
- Extended stay in-patient discharges did not show a similar increase with age. Those aged 85 years and over had the longest mean length of stay of 69.5 days, however, median length of stay was similar across all age groups ranging from 45 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 Patients		In-Patients										Total Discharges			
			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	4,404	0.5	26,871	6.0	105,632	4.8	948	5.9	56,007	5.4	27,819	6.0	161,639	5.0	32,223	2.5
1–14 Years	41,884	5.0	54,236	12.1	122,257	5.6	178	1.1	11,308	1.1	54,414	11.7	133,565	4.1	96,298	7.3
15–24 Years	31,708	3.8	31,985	7.1	92,915	4.2	236	1.5	15,916	1.5	32,221	6.9	108,831	3.4	63,929	4.9
25–34 Years	66,612	7.9	35,830	8.0	119,417	5.4	483	3.0	30,758	3.0	36,313	7.8	150,175	4.6	102,925	7.9
35–44 Years	94,872	11.2	40,729	9.1	150,716	6.9	651	4.1	42,969	4.1	41,380	8.9	193,685	6.0	136,252	10.4
45-54 Years	126,730	15.0	48,263	10.7	208,641	9.5	1,104	6.9	71,357	6.8	49,367	10.6	279,998	8.7	176,097	13.4
55–64 Years	168,640	19.9	58,931	13.1	309,466	14.1	2,005	12.6	123,899	11.9	60,936	13.1	433,365	13.4	229,576	17.5
65-74 Years	172,300	20.4	64,181	14.3	405,533	18.5	3,069	19.2	192,983	18.5	67,250	14.5	598,516	18.5	239,550	18.3
75–84 Years	114,995	13.6	61,199	13.6	456,805	20.8	4,643	29.1	313,039	30.0	65,842	14.2	769,844	23.8	180,837	13.8
85 Years and Over	23,186	2.7	27,003	6.0	222,614	10.1	2,651	16.6	184,284	17.7	29,654	6.4	406,898	12.6	52,840	4.0
Total Discharges (excl. <i>Maternity</i> )	845,331	100	449,228	100	2,193,996	100	15,968	100	1,042,520	100	465,196	100	3,236,516	100	1,310,527	100

In-Patient Length of Stay											
	Acute (0	–30 days)		Extended	(> 30 days)		Total In-Patient				
	Mean	Median		Mean	Median		Mean	Median			
< 1 Year	3.9	2	< 1 Year	59.1	46	< 1 Year	5.8	2			
1-14 Years	2.3	1	1–14 Years	63.5	45	1–14 Years	2.5	1			
15-24 Years	2.9	2	15–24 Years	67.4	45	15-24 Years	3.4	2			
25-34 Years	3.3	2	25-34 Years	63.7	46	25-34 Years	4.1	2			
35-44 Years	3.7	2	35–44 Years	66.0	47	35-44 Years	4.7	2			
45-54 Years	4.3	3	45-54 Years	64.6	47	45-54 Years	5.7	3			
55-64 Years	5.3	3	55–64 Years	61.8	45	55-64 Years	7.1	4			
65-74 Years	6.3	4	65-74 Years	62.9	46	65-74 Years	8.9	5			
75-84 Years	7.5	6	75–84 Years	67.4	48	75–84 Years	11.7	6			
85 Years and Over	8.2	6	85 Years and Over	69.5	49	85 Years and Over	13.7	7			
Acute In-Patients (excl. <i>Maternity</i> )	4.9	3	Extended In-Patients (excl. <i>Maternity</i> )	65.3	47	Total In-Patients (excl. <i>Maternity</i> )	7.0	3			

Note: Percentage columns are subject to rounding.

## 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 2010, females accounted for 48.5 per cent of total discharges (excl. *Maternity*).

# Discharges

- The 65–74 years age group accounted for the largest proportion of male discharges (20.0 per cent) whereas the 55–64 years age group accounted for the largest proportion of female discharges (16.9 per cent).
- Discharges aged 65 years and over accounted for 33.5 per cent of male inpatient discharges and 51.8 per cent of male in-patient bed days, while for females this group accounted for 36.5 per cent of female in-patient discharges and 58.1 per cent of female in-patient bed days.
- The 75–84 years age group accounted for the highest proportion of in-patient bed days for both males (22.6 per cent) and females (25.0 per cent).

## Length of Stay

- Female acute in-patient discharges had a longer mean length of stay (5.0 days) compared to male acute in-patients (4.8 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 broadly similar
  across the age groups for both males and females (see Figure 2.2). Median
  length of stay ranged between 44 days and 49 days for male discharges and
  between 42 days and 49 days for female discharges. Median length of stay was
  generally highest 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)

							Disch	narges and	d Bed Days							
	Day Patis	. m.t.o						In-Patie	ents						Total Ma	ale
	Day Patie	ents		Acute (	0–30 days)		E	ctended (	> 30 days)			Total In-	Patients		Discharg	es
	N	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%
< 1 Year	2,563	0.6	15,050	6.5	58,727	5.3	529	6.5	32,199	6.1	15,579	6.5	90,926	5.6	18,142	2.7
1–14 Years	24,320	5.6	30,026	13	65,319	5.9	95	1.2	6,653	1.3	30,121	12.6	71,972	4.4	54,441	8.1
15-24 Years	15,691	3.6	16,263	7.0	47,384	4.3	160	2.0	10,798	2.0	16,423	6.9	58,182	3.6	32,114	4.8
25-34 Years	30,130	6.9	17,675	7.7	59,727	5.4	274	3.4	18,268	3.5	17,949	7.5	77,995	4.8	48,079	7.1
35-44 Years	41,862	9.6	20,071	8.7	75,273	6.8	341	4.2	22,089	4.2	20,412	8.5	97,362	6.0	62,274	9.2
45-54 Years	57,894	13.3	24,355	10.5	106,314	9.6	630	7.8	42,419	8.0	24,985	10.5	148,733	9.1	82,879	12.3
55–64 Years	88,706	20.3	32,191	13.9	169,484	15.3	1,203	14.9	73,860	14.0	33,394	14.0	243,344	14.9	122,100	18.1
65-74 Years	98,734	22.6	34,806	15.1	219,601	19.9	1,778	22.0	113,249	21.5	36,584	15.3	332,850	20.4	135,318	20.0
75–84 Years	63,698	14.6	30,188	13.1	220,891	20.0	2,197	27.1	148,410	28.1	32,385	13.5	369,301	22.6	96,083	14.2
85 Years and Over	12,323	2.8	10,334	4.5	83,350	7.5	891	11.0	59,666	11.3	11,225	4.7	143,016	8.8	23,548	3.5
Total Male Discharges	435,921	100	230,959	1,106,070	8,098	100	527,611	100	239,057	100	1,633,681	100	674,978	100		

			In-Patient L	ength of Sta	ау			
	Acute (0	)-30 days)		Extended	(> 30 days)		Total In	n-Patient
	Mean	Median		Mean	Median		Mean	Median
< 1 Year	3.9	2	< 1 Year	60.9	45	< 1 Year	5.8	2
1-14 Years	2.2	1	1–14 Years	70.0	46	1–14 Years	2.4	1
15-24 Years	2.9	2	15–24 Years	67.5	44	15-24 Years	3.5	2
25-34 Years	3.4	2	25-34 Years	66.7	46	25-34 Years	4.3	2
35-44 Years	3.8	2	35–44 Years	64.8	46	35-44 Years	4.8	2
45-54 Years	4.4	3	45-54 Years	67.3	48	45-54 Years	6.0	3
55-64 Years	5.3	3	55–64 Years	61.4	45	55-64 Years	7.3	4
65-74 Years	6.3	4	65-74 Years	63.7	47	65-74 Years	9.1	5
75-84 Years	7.3	5	75–84 Years	67.6	48	75–84 Years	11.4	6
85 Years and Over	8.1	6	85 Years and Over	67.0	49	85 Years and Over	12.7	7
Acute Male In-Patients	4.8	3	Extended Male In-Patients	65.2	47	Total Male In-Patients	6.8	3

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)

							Di	scharge	s and Bed Da	ays						
								In-l	Patients						Total Fen	nale
	Day Pati	ents	P	Acute (0-	-30 days)		E	xtende	d (>30 days)			Total Ir	n-Patients		Discharg (excl. <i>Mate</i>	_
	N	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%
< 1 Year	1,841	0.4	11,821	5.4	46,905	4.3	419	5.3	23,808	4.6	12,240	5.4	70,713	4.4	14,081	2.2
1–14 Years	17,564	4.3	24,210	11.1	56,938	5.2	83	1.1	4,655	0.9	24,293	10.7	61,593	3.8	41,857	6.6
15–24 Years	16,017	3.9	15,722	7.2	45,531	4.2	76	1.0	5,118	1.0	15,798	7.0	50,649	3.2	31,815	5.0
25–34 Years	36,482	8.9	18,155	, and the second				2.7	12,490	2.4	18,364	8.1	72,180	4.5	54,846	8.6
35–44 Years	53,010	12.9	20,658	9.5	75,443	6.9	310	3.9	20,880	4.1	20,968	9.3	96,323	6.0	73,978	11.6
45–54 Years	68,836	16.8	23,908	11.0	102,327	9.4	474	6.0	28,938	5.6	24,382	10.8	131,265	8.2	93,218	14.7
55–64 Years	79,934	19.5	26,740	12.3	139,982	12.9	802	10.2	50,039	9.7	27,542	12.2	190,021	11.9	107,476	16.9
65-74 Years	73,566	18.0	29,375	13.5	185,932	17.1	1,291	16.4	79,734	15.5	30,666	13.6	265,666	16.6	104,232	16.4
75–84 Years	51,297	12.5	31,011	14.2	235,914	21.7	2,446	31.1	164,629	32.0	33,457	14.8	400,543	25.0	84,754	13.3
85 Years and Over	10,863	2.7	16,669	7.6	139,264	12.8	1,760	22.4	124,618	24.2	18,429	8.1	263,882	16.5	29,292	4.6
Total Female Discharges (excl. <i>Maternity</i> )	409,410	100	218,269	100	1,087,926	100	7,870	100	514,909	100	226,139	100	1,602,835	100	635,549	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	56.8	46	< 1 Year	5.8	2
1–14 Years	2.4	1	1–14 Years	56.1	42	1–14 Years	2.5	1
15–24 Years	2.9	2	15–24 Years	67.3	45	15–24 Years	3.2	2
25-34 Years	3.3	2	25-34 Years	59.8	45	25-34 Years	3.9	2
35–44 Years	3.7	2	35–44 Years	67.4	48	35–44 Years	4.6	2
45–54 Years	4.3	3	45–54 Years	61.1	46	45–54 Years	5.4	3
55–64 Years	5.2	3	55-64 Years	62.4	44	55–64 Years	6.9	4
65-74 Years	6.3	4	65-74 Years	61.8	45	65-74 Years	8.7	5
75–84 Years	7.6	6	75–84 Years	67.3	48	75–84 Years	12.0	6
85 Years and Over	8.4	7	85 Years and Over	70.8	49	85 Years and Over	14.3	7
Acute Female In-Patients (excl. <i>Maternity</i> )	5.0	3	Extended Female In-Patients (excl. <i>Maternity</i> )	65.4	47	Total Female In-Patients (excl. <i>Maternity</i> )	7.1	3

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

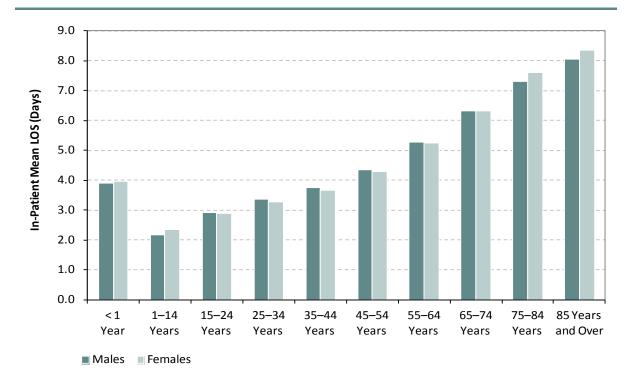
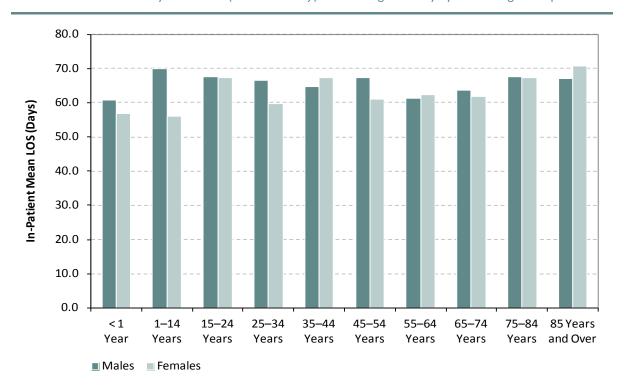


FIGURE 2.2 Extended Stay In-Patients (excl. Maternity): Mean Length of Stay by Sex and Age Group

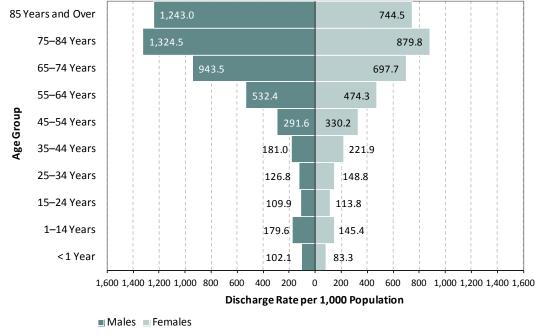


### 2.2.1.2 Discharge Rates by Age and Sex

Figure 2.3 shows the discharge rates per 1,000 population by sex and age group for total discharges (excl. *Maternity*).<sup>2</sup>

- For both males and females, the discharge rate generally increases with age, with those aged less than 1 year recording the lowest discharge rates (102.1 per 1,000 of the population for males, and 83.3 per 1,000 population for females) and those aged 75–84 years recording the highest discharge rates (1,324.5 per 1,000 population for males and 879.8 per 1,000 population for females).
- Apart from females aged between 15 and 54, males had a higher discharge rate per 1,000 population for all other age groups.

FIGURE 2.3 Total Discharges (excl. *Maternity*): Sex by Age Group (Discharge rate per 1,000 Population)



Note: Rates are based on population data estimated by the ESRI (see Appendix V).

Rates are based on population data estimated by the ESRI (see Appendix V).

### 2.2.2 Marital Status

### 2.2.2.1 Marital Status by Patient Type

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

- Married discharges accounted for 47.5 per cent of total discharges (excl. Maternity).
- Discharges who were single accounted for the highest proportion of acute inpatient discharges (44.1 per cent).
- Discharges with 'widowed' marital status accounted for 10.0 per cent of total discharges (excl. Maternity). However, they accounted for almost a quarter of extended stay in-patient discharges.

**TABLE 2.2** Total Discharges (excl. *Maternity*): Patient Type by Marital Status (N, %)

					In-Pati	ents			Total Disch	22200
	Day Pati	ients	Acute (0–30 da		Exten (> 30 d		Tota In-Patie	-	(excl. Mate	•
	N	%	N	%	N	%	N	%	N	%
Single	255,424	30.2	197,933	44.1	5,074	31.8	203,007	43.6	458,431	35.0
Married	445,880	52.7	171,069	38.1	5,770	36.1	176,839	38.0	622,719	47.5
Widowed	76,072	9.0	51,756	11.5	3,813	23.9	55,569	11.9	131,641	10.0
Other (includes separated)	39,568	4.7	19,347	4.3	816	5.1	20,163	4.3	59,731	4.6
Unknown	24,845	2.9	7,754	1.7	441	2.8	8,195	1.8	33,040	2.5
Divorced	3,542	0.4	1,369	0.3	54	0.3	1,423	0.3	4,965	0.4
Total Discharges (excl. <i>Maternity</i> )	845,331	100	449,228	100	15,968	100	465,196	100	1,310,527	100

Note:

Percentage columns are subject to rounding.

### 2.2.2.2 Marital Status by Age

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

- Over two-fifths of discharges who were single were aged 15–44 years.
- 87.6 per cent of widowed patients were 65 years and over.

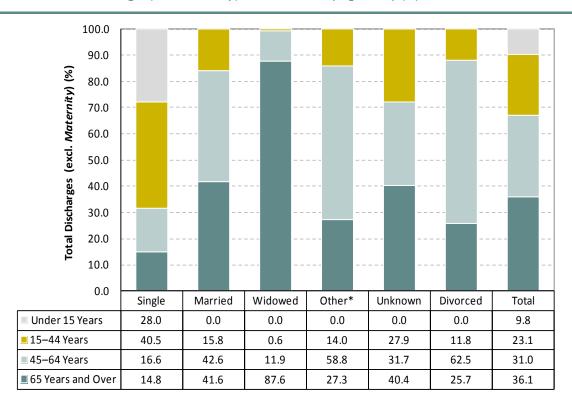


FIGURE 2.4 Total Discharges (excl. *Maternity*): Marital Status by Age Group (%)

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. Private consultant care may be funded through private health insurance and/or out-of-pocket payment; HIPE does not distinguish between these two methods of payment.<sup>3</sup>

Table 2.3 disaggregates total discharges (excl. *Maternity*) by public/private status and age group.

- Of total discharges (excl. Maternity), 81.1 per cent were discharged on a public basis.
- The 85 years and over age group had the highest proportion of total discharges (excl. *Maternity*) treated publicly (89.7 per cent) with only 10.3 per cent treated on a private basis.
- The 1–14 years age group had the highest proportion of total discharges (excl.
   *Maternity*) that were treated on a private basis, which accounted for 26.2 per
   cent of all discharges in this age group.

<sup>\* &#</sup>x27;Other' includes separated.

For length of stay analysis see Table 2.11.

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

	Pub	lic	Priv	ate	Total Dis (excl. <i>Mo</i>	•
	N	%	N	%	N	%
< 1 Years	25,283	78.5	6940	21.5	32,223	100
1–14 Years	71,028	73.8	25270	26.2	96,298	100
15–24 Years	52,128	81.5	11801	18.5	63,929	100
25–34 Years	86,282	83.8	16643	16.2	102,925	100
35–44 Years	108,990	80.0	27262	20.0	136,252	100
45–54 Years	140,105	79.6	35992	20.4	176,097	100
55–64 Years	181,496	79.1	48080	20.9	229,576	100
65-74 Years	194,273	81.1	45277	18.9	239,550	100
75–84 Years	155,875	86.2	24962	13.8	180,837	100
85 Years and Over	47,398	89.7	5442	10.3	52,840	100
Total Discharges (excl. Maternity)	1,062,858	81.1	247,669	18.9	1,310,527	100

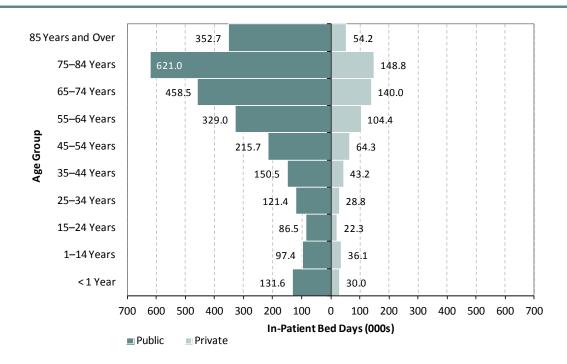
Note:

Percentage columns are subject to rounding.

Figure 2.5 disaggregates total in-patient bed days (excl. Maternity) by public/private status and age group.

- The largest number of in-patient bed days was recorded by public in-patient discharges aged 75-84 years, which accounted for approximately 621,000 bed days.
- The lowest number of in-patient bed days for both public and private patients was recorded in the 15-24 years age group, which accounted for approximately 86,500 public bed days and 22,300 private bed days.

FIGURE 2.5 Total In-Patient Bed Days (excl. Maternity): Public/Private Status by Age Group (Bed Days)



### 2.2.4 GMS Status

GMS status refers to the medical card status of each HIPE discharge. Eligibility for a medical card is predominately dependent on income or age. 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. 5

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

- Of total discharges (excl. *Maternity*), 56.9 per cent were GMS discharges.
- The proportion of total discharges (excl. *Maternity*) that were GMS discharges rose with age, with the highest proportion in the 85 years and over age group (87.8 per cent).

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

	GN	ıs	Non-	GMS	Unkn	own <sup>a</sup>	Total Disc (excl. <i>Ma</i> :	•
	N	%	N	%	N	%	N	%
< 1 Years	5,890	18.3	25,389	78.8	944	2.9	32,223	100
1-14 Years	42,486	44.1	53,487	55.5	325	0.3	96,298	100
15-24 Years	25,821	40.4	37,064	58.0	1,044	1.6	63,929	100
25-34 Years	41,400	40.2	59,884	58.2	1,641	1.6	102,925	100
35-44 Years	59,438	43.6	75,480	55.4	1,334	1.0	136,252	100
45-54 Years	81,959	46.5	92,911	52.8	1,227	0.7	176,097	100
55–64 Years	118,629	51.7	109,670	47.8	1,277	0.6	229,576	100
65-74 Years	167,992	70.1	69,639	29.1	1,919	0.8	239,550	100
75–84 Years	155,484	86.0	23,257	12.9	2,096	1.2	180,837	100
85 Years and Over	46,375	87.8	6,043	11.4	422	0.8	52,840	100
Total Discharges (excl. <i>Maternity</i> )	745,474	56.9	552,824	42.2	12,229	0.9	1,310,527	100

Notes:

Percentage columns are subject to rounding.

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

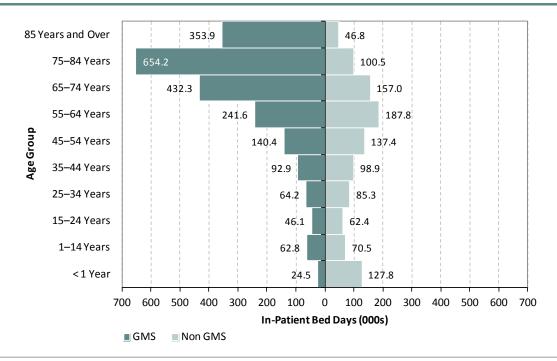
For 2010, the HSE reported that 1,615,809 individuals were covered by a medical card. Using population estimates from Appendix V, this equates to 36.1 per cent of the population.

http://www.hse.ie/eng/services/Publications/corporate/performancereports/December\_2010\_Performance\_Report.pdf For length of stay analysis see Table 2.7.

Figure 2.6 disaggregates in-patient bed days (excl. Maternity) by GMS status and age group. The discharges they relate to are presented in Table 2.4.

- The largest number of in-patient bed days for GMS discharges was in the 75-84 years age group, which accounted for approximately 654,200 bed days.
- The largest number of in-patient bed days for non-GMS discharges was in the 55–64 years age group, which accounted for approximately 187,800 bed days. The lowest number of in-patient bed days for GMS discharges was 24,500 in the less than one year age group, while the lowest number of in-patient bed days for non-GMS discharges was 46,800 in the 85 years and over age group.

FIGURE 2.6 Total In-Patient Bed Days (excl. Maternity): GMS Status by Age Group (Bed Days)



Note: 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, 89.7 per cent were treated on a public basis compared to 10.3 per cent who were treated privately.
- For non-GMS day patient discharges, 68.5 per cent were treated on a public basis with the remaining 31.5 per cent treated on a private basis.

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

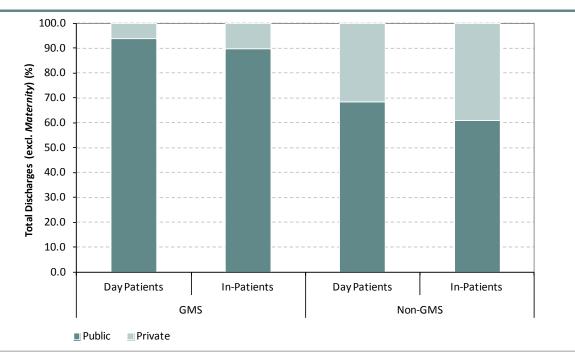
		Pub	lic	Priv	ate	Total Dis	
		N	%	N	%	N	%
	Day Patients	458,700	93.8	30,179	6.2	488,879	100
GMS	In-Patients	230,119	89.7	26,476	10.3	256,595	100
	Total GMS	688,819	92.4	56,655	7.6	745,474	100
MS	Day Patients	238,255	68.5	109,656	31.5	347,911	100
Non-GMS	In-Patients	125,217	61.1	79,696	38.9	204,913	100
8	Total Non-GMS	363,472	65.7	189,352	34.3	552,824	100
<sup>e</sup> u ×	Day Patients	7,097	83.1	1,444	16.9	8,541	100
Unknown	In-Patients	3,470	94.1	218	5.9	3,688	100
Š	Total GMS Unknown	10,567	86.4	1,662	13.6	12,229	100
	Day Patients	704,052	83.3	141,279	16.7	845,331	100
Total	In-Patients	358,806	77.1	106,390	22.9	465,196	100
_6 _	Total Discharges (excl. <i>Maternity</i> )	1,062,858	81.1	247,669	18.9	1,310,527	100

Notes:

Percentage columns are subject to rounding.

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

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



Note:

Discharges for whom GMS status was 'unknown' are not presented.

## 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. 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 by patient type.

## 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 highest proportion of total discharges (excl. Maternity) were hospitalised in the HSE Dublin Mid Leinster area (30.7 per cent) with the lowest proportion hospitalised in the HSE Dublin North East area (21.5 per cent).
- The highest proportion of day patients were hospitalised in the HSE Dublin Mid Leinster area (32.5 per cent) while the lowest proportion of day patient discharges were hospitalised in the HSE South area (21.3 per cent).
- The highest proportion of acute in-patient emergency discharges were hospitalised in the HSE West area (27.1 per cent) while the lowest were hospitalised in the HSE Dublin North East area (21.1 per cent).

## Length of Stay

- Acute in-patient mean length of stay ranged from 4.5 days in the HSE South area to 5.2 days in the HSE Dublin Mid Leinster area.
- Extended stay in-patient mean length of stay was highest in HSE Dublin North East (78.2 days) which was nearly 26 days longer than in the HSE West area (52.5 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	n East	Dublin Mid Le	inster	South		West		Total Dischar (excl. <i>Matern</i>	_
			N	%	N	%	N	%	N	%	N	%
Day	Patients		182,770	21.6	274,489	32.5	179,981	21.3	208,091	24.6	845,331	100
		Acute (0–30 days)	22,503	21.4	28,773	27.4	28,069	26.7	25,705	24.5	105,050	100
	Elective	Extended (>30 days)	721	19.1	1,954	51.8	632	16.7	468	12.4	3,775	100
v		Total Elective	23,224	21.3	30,727	28.2	28,701	26.4	26,173	24.1	108,825	100
ent		Acute (0–30 days)	72,466	21.1	92,379	26.8	86,027	25.0	93,306	27.1	344,178	100
atie	<b>Emergency</b> <sup>a</sup>	Extended (> 30 days)	3,277	26.9	4,630	38.0	2,421	19.9	1,865	15.3	12,193	100
In-Patients		Total Emergency	75,743	21.3	97,009	27.2	88,448	24.8	95,171	26.7	356,371	100
_		Acute (0–30 days)	94,969	21.1	121,152	27.0	114,096	25.4	119,011	26.5	449,228	100
	Total	Extended (> 30 days)	3,998	25.0	6,584	41.2	3,053	19.1	2,333	14.6	15,968	100
	Total In-Patients		98,967	21.3	127,736	27.5	117,149	25.2	121,344	26.1	465,196	100
Tota	al Discharges (excl. Maternity)		281,737	21.5	402,225	30.7	297,130	22.7	329,435	25.1	1,310,527	100

					lr	n-Patient Le	ength of Sta	у			
		Dul North		Dul Mid Le	olin einster	Soi	uth	W	est	Total Dis	scharges aternity)
		Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
	Acute (0–30 days)	5.4	3	5.1	3	4.4	2	4.5	2	4.8	3
Elective	Extended (> 30 days)	61.5	44	57.6	46	63.6	46	58.7	43	59.5	45
	Total Elective	7.1	3	8.5	3	5.7	3	5.4	3	6.7	3
	Acute (0–30 days)	5.1	3	5.3	3	4.5	2	4.8	3	4.9	3
Emergency	Extended (> 30 days)	81.9	52	68.6	49	56.5	45	51.0	42	67.1	47
	Total Emergency	8.4	3	8.3	3	6.0	3	5.7	3	7.0	3
	Acute (0–30 days)	5.1	3	5.2	3	4.5	2	4.7	3	4.9	3
Total	Extended (> 30 days)	78.2	50	65.3	48	58.0	45	52.5	42	65.3	47
	Total In-Patients (excl. Maternity)	8.1	3	8.3	3	5.9	3	5.6	3	7.0	3

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 would not be 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.

- 81.0 per cent of elective in-patients discharged in the HSE South and 80.5 per cent in the HSE West areas spent 7 days or less in hospital. By contrast, 72.9 per cent of elective in-patients discharged in the HSE Dublin North East area and 73.1 per cent in the HSE Dublin Mid Leinster area had a length of stay of 7 days or less.
- 79.9 per cent of emergency in-patients discharged in the HSE South and 79.2 per cent in the HSE West areas spent 7 days or less in hospital. This compared to 75.0 per cent in the HSE Dublin North East area and 73.8 per cent in the HSE Dublin Mid Leinster area.

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

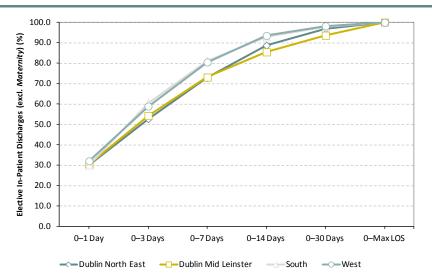
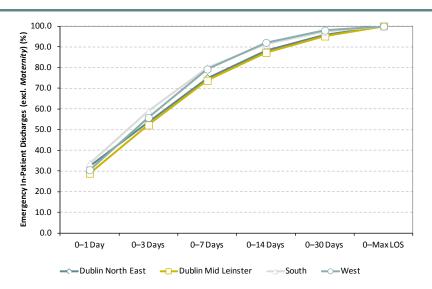


FIGURE 2.8b Emergency In-Patient Discharges<sup>a</sup>: Length of Stay by HSE Area of Hospitalisation (Cumulative Percentage)

Notes:



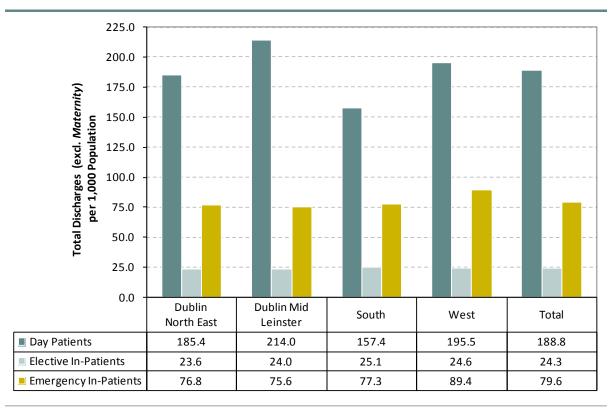
HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the emergency department will subsequently be admitted to hospital, it would not be possible to  $use\ emergency\ admissions\ reported\ to\ HIPE\ to\ draw\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

### 2.3.1.2 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 (214.0 per 1,000 population) compared with the lowest rate in the HSE South area (157.4 per 1,000 population).
- Elective in-patient discharges recorded a similar rate across all areas ranging from 23.6 in HSE Dublin North East to 25.1 per 1,000 population in the HSE South area.
- The HSE West area recorded the highest discharge rate for emergency in-patient discharges (89.4 per 1,000 population) compared with the lowest rate in the HSE Dublin Mid Leinster area (75.6 per 1,000 population).

FIGURE 2.9 Total Discharges (excl. *Maternity*): HSE Area of Hospitalisation by Patient Type and Admission Type (Discharge rate per 1,000 population)



Notes: Rates are based on population estimates from the ESRI (see Appendix V).

HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just 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 would not be 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 highest proportion of GMS discharges (29.7 per cent) while the HSE Dublin North East area treated the lowest proportion of GMS discharges (19.8 per cent).
- For extended stay in-patients, the HSE Dublin Mid Leinster area treated the highest proportion of both GMS discharges (38.3 per cent) and non-GMS discharges (48.3 per cent).

# Length of Stay

- GMS discharges had a mean length of stay which was 3 days longer than their non-GMS counterparts (8.2 days compared to 5.2 days). Similarly, median length of stay was 2 days longer for GMS discharges.
- The HSE West area recorded the lowest in-patient mean length of stay for both GMS discharges (6.5 days) and non-GMS discharges (4.0 days).
- The HSE Dublin North East area had the longest mean length of stay for extended stay in-patient discharges for both GMS discharges (87.4 days) and non-GMS discharges (64.5 days).

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

							Discha	irges				
			Dub North		Dubli Mid Lein		South	າ	West		Total Discha (excl. <i>Mate</i> l	_
			N	%	N	%	N	%	N	%	N	%
	Day	y Patient	98,567	20.2	136,268	27.9	110,061	22.5	143,983	29.5	488,879	100
S	ents	Acute (0–30 days)	46,593	19.0	58,487	23.8	65,364	26.6	75,244	30.6	245,688	100
GMS	In-Patients	Extended (> 30 days)	2,539	23.3	4,180	38.3	2,345	21.5	1,843	16.9	10,907	100
		Total	49,132	19.1	62,667	24.4	67,709	26.4	77,087	30.0	256,595	100
		tal GMS	147,699	19.8	198,935	26.7	177,770	23.8	221,070	29.7	745,474	100
	Day	y Patient	83,610	24.0	137,249	39.4	64,476	18.5	62,576	18.0	347,911	100
iMS	ents	Acute (0–30 days)	46,950	23.4	61,431	30.7	48,498	24.2	43,360	21.7	200,239	100
Non-GMS	In-Patients	Extended (> 30 days)	1,234	26.4	2,256	48.3	702	15.0	482	10.3	4,674	100
		Total	48,184	23.5	63,687	31.1	49,200	24.0	43,842	21.4	204,913	100
		tal Non-GMS	131,794	23.8	200,936	36.3	113,676	20.6	106,418	19.2	552,824	100
	Day	y Patient	593	6.9	972	11.4	5,444	63.7	1,532	17.9	8,541	100
wna	ents	Acute (0–30 days)	1,426	43.2	1,234	37.4	234	7.1	407	12.3	3,301	100
Unknown <sup>a</sup>	In-Patients	Extended (> 30 days)	225	58.1	148	38.2	6	1.6	8	2.1	387	100
	_	Total	1,651	44.8	1,382	37.5	240	6.5	415	11.3	3,688	100
	Tot	tal GMS Unknown	2,244	18.3	2,354	19.2	5,684	46.5	1,947	15.9	12,229	100
	Day	y Patient	182,770	21.6	274,489	32.5	179,981	21.3	208,091	24.6	845,331	100
	ents	Acute (0–30 days)	94,969	21.1	121,152	27.0	114,096	25.4	119,011	26.5	449,228	100
Total	In-Patients	Extended (> 30 days)	3,998	25.0	6,584	41.2	3,053	19.1	2,333	14.6	15,968	100
	_	Total	98,967	21.3	127,736	27.5	117,149	25.2	121,344	26.1	465,196	100
		tal Discharges cl. <i>Maternity</i> )	281,737	21.5	402,225	30.7	297,130	22.7	329,435	25.1	1,310,527	100

					ln	Patient L	ength of St	ay			
			ublin th East		ıblin einster	Sc	outh	W	/est		ischarges Iaternity)
		Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
	Acute (0–30 days)	5.8	4	6.1	4	5.3	3	5.4	3	5.6	3
GMS	Extended (> 30 days)	87.4	53	66.4	49	57.9	45	52.5	42	67.1	47
	Total GMS	10.0	4	10.2	4	7.1	3	6.5	4	8.2	4
AIS	Acute (0-30 days)	4.2	2	4.4	2	3.5	2	3.5	2	3.9	2
Non-GMS	Extended (> 30 days)	64.5	48	63.2	47	58.5	44	52.8	43	61.8	47
Š	Total Non-GMS	5.8	2	6.4	2	4.3	2	4.0	2	5.2	2
۷n	Acute (0-30 days)	13.1	13	5.2	2	4.4	2	3.1	1	8.3	6
Unknown <sup>a</sup>	Extended (> 30 days)	49.6	41	67.6	55	50.2	43	46.5	41	56.4	44
Š	Total GMS Unknown	18.1	14	11.9	2	5.6	2	4.0	1	13.4	8
	Acute (0-30 days)	5.1	3	5.2	3	4.5	2	4.7	3	4.9	3
Total	Extended (> 30 days)	78.2	50	65.3	48	58.0	45	52.5	42	65.3	47
ř	Total In-Patients (excl. <i>Maternity</i> )	8.1	3	8.3	3	5.9	3	5.6	3	7.0	3

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.

- Approximately 74 per cent of GMS discharges in both the HSE South and HSE West areas spent 7 days or less in hospital. This compared to 69.1 per cent in the HSE Dublin North East area and 66.7 per cent in HSE Dublin Mid Leinster 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 81.9 per cent in the HSE Dublin North East area and 80.5 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)

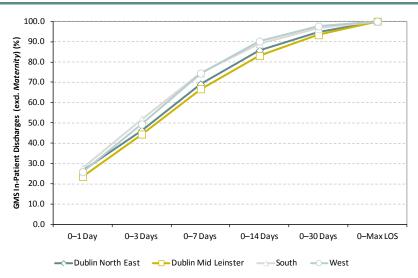


FIGURE 2.10b Non-GMS In-Patient Discharges (excl. Maternity): Length of Stay by HSE Area of Hospitalisation (Cumulative Percentage)



#### 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.

# 2.3.2.1 HSE Area of Residence by Age Group

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

- The HSE West area had the highest proportion of residents aged 85 years and over (4.6 per cent).
- The HSE South area had the highest proportion of residents aged 65–74 years (19.1 per cent) compared to the HSE Dublin North East area and HSE Dublin Mid Leinster area who both had 17.6 per cent of residents in this age group.

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

	Dubli North E		Dubl Mid Lei		Sout	h	Wes	t	Total Discha (excl. <i>Materi</i>	
	N	%	N	%	N	%	N	%	N	%
< 1 Years	6,891	2.4	9,130	2.5	8,236	2.6	7,869	2.3	32,126	2.5
1–14 Years	18,259	6.4	27,312	7.5	24,783	7.9	25,683	7.4	96,037	7.3
15-24 Years	14,105	4.9	17,493	4.8	15,870	5.0	16,210	4.7	63,678	4.9
25-34 Years	25,072	8.8	30,751	8.5	21,782	6.9	25,019	7.2	102,624	7.9
35–44 Years	32,932	11.5	39,474	10.9	31,392	10.0	32,036	9.3	135,834	10.4
45-54 Years	38,932	13.6	51,272	14.2	40,245	12.8	45,180	13.1	175,629	13.4
55-64 Years	48,949	17.2	61,911	17.1	55,601	17.7	62,549	18.1	229,010	17.5
65-74 Years	50,062	17.6	63,732	17.6	60,118	19.1	65,050	18.8	238,962	18.3
75–84 Years	39,113	13.7	46,704	12.9	44,388	14.1	50,263	14.5	180,468	13.8
85 Years and Over	10,903	3.8	13,973	3.9	11,988	3.8	15,927	4.6	52,791	4.0
Total Discharges (excl. <i>Maternity</i> )	285,218	100	361,752	100	314,403	100	345,786	100	1,307,159	100

Percentage columns are subject to rounding. Notes:

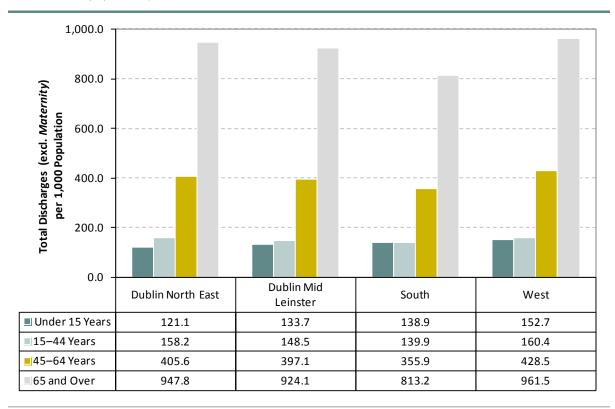
A small number of discharges have no HSE area of residence (including discharges resident outside the Republic of Ireland and those with no fixed abode). This table excludes discharges for whom HSE area of residence was unknown or not applicable.

### 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 West area recorded the highest discharge rate of 961.5 per 1,000 population compared to the lowest rate recorded for this age group in the HSE South area (813.2 per 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 (152.7 per 1,000 population) compared to a much lower rate in the HSE Dublin North East area (121.1 per 1,000 population).

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



Notes:

Rates are based on population estimates from the ESRI (see Appendix V)

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.

# 2.3.3 Inter-Regional Flows

Where a patient is hospitalised may be influenced by many factors including services required and proximity to local hospital, therefore there may be a greater flow of patients across HSE areas in border counties. To illustrate this in greater detail the following section examines inter-regional flows by HSE administrative area and by county.

### 2.3.3.1 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 and patient type.

- Inter-regional flows are evident for elective in-patient discharges. For example, 81.6 per cent of elective in-patient discharges residing in the HSE West area were hospitalised in this area compared to 93.2 per cent of emergency inpatient discharges and 92.5 per cent of day patient discharges.
- There was significant crossover between the HSE Dublin North East and HSE Dublin Mid Leinster areas. For example, for total discharges (excl. *Maternity*), of the 16.1 per cent of HSE Dublin North East area residents who were hospitalised outside their HSE area of residence, 15.7 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 (%)

			⊔SF /	Area of Hospita	lisation	
		Dublin North East	Dublin Mid Leinster	South	West	Total Discharges (excl. Maternity)
		%	%	%	%	%
	Day Patients					
	Dublin North East	81.4	18.3	0	0.2	100
	Dublin Mid Leinster	8.3	89.7	0.2	1.8	100
	South	1.4	6.8	90.9	0.9	100
	West	1.9	3.9	1.7	92.5	100
	Elective In-Patients					
9	Dublin North East	82.1	17.5	0.1	0.3	100
<u>e</u>	Dublin Mid Leinster	14.4	82.8	0.4	2.3	100
HSE Area of Residence	South	3.5	10.5	84.5	1.5	100
F. F.	West	4.9	9.6	3.9	81.6	100
a O	Emergency In-Patients <sup>a</sup>					
Fe Fe	Dublin North East	90.8	8.5	0.3	0.5	100
SE /	Dublin Mid Leinster	6.1	90.4	0.8	2.7	100
꿀	South	1	3	95.1	0.9	100
	West	1.8	2.5	2.5	93.2	100
	Total Discharges (excl. Mater	nity)				
	Dublin North East	83.9	15.7	0.1	0.3	100
	Dublin Mid Leinster	8.2	89.4	0.4	2.1	100
	South	1.5	6.1	91.4	0.9	100
	West	2.1	4.0	2.1	91.7	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. 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 would not be 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

Figure 2.12a to Figure 2.12d present county level inter-regional flows for total discharges (excl. Maternity), day patients, elective in-patients, and emergency inpatients.6

- Over 95 per cent of discharges in Cork, Galway and Mayo were hospitalised within their HSE area of residence for total discharges (excl. Maternity), day patients, and emergency in-patients.
- For elective in-patient discharges the proportion hospitalised within their area of residence is lower than for emergency in-patients in all counties.
- Carlow (total discharges (excl. *Maternity*): 63.6 per cent and day patients: 47.8 per cent) and Tipperary North (elective in-patients: 65.2 per cent and emergency in-patients: 66.8 per cent) had the lowest proportion of discharges hospitalised within their HSE area of residence.

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

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 (%)

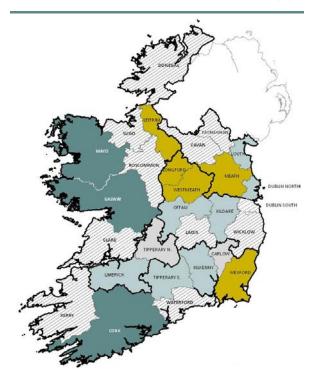


FIGURE 2.12c Elective In-Patient Discharges:
Proportion of Discharges Hospitalised
within their HSE Area of Residence (%)

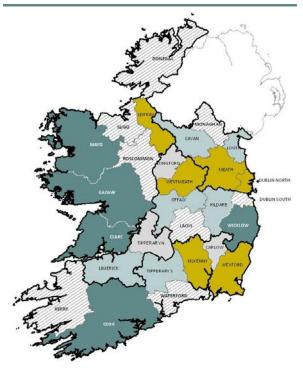
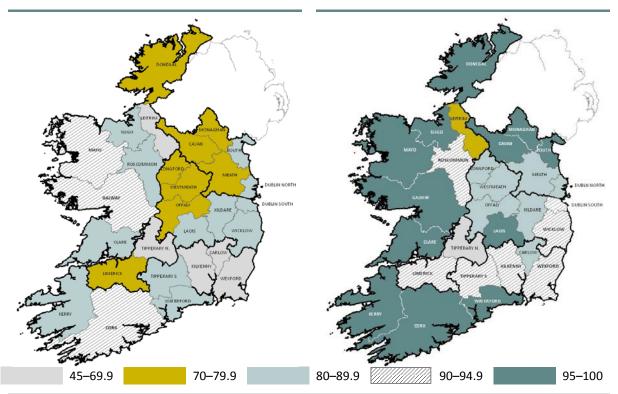


FIGURE 2.12d Emergency In-Patient Discharges<sup>a</sup>:

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



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

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 would not be 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) (89.7 per cent), while the remainder were discharged from 'other' hospitals that specialise in the treatment of particular conditions or patient groupings.<sup>7</sup>

### 2.3.4.1 Hospital Type by Admission Type

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

### Discharges

- Within all hospital types day patient discharges comprised the largest proportion of discharges. This was highest in voluntary hospitals which treated 72.0 per cent of their discharges as day patients and lowest in county hospitals which treated only 51.9 per cent as day patients.
- County hospitals treated the highest proportion of discharges as emergency inpatients (41.7 per cent) compared to voluntary hospitals which treated 20.5 per cent of their in-patients on an emergency basis.
- 'Other' hospitals treated 67.9 per cent of their discharges as day patients and 18.1 per cent as elective in-patients.

### Length of Stay

- The acute in-patient mean length of stay for elective in-patient discharges was 4.3 days in regional and county hospitals compared to 6.1 days in 'other' hospitals.
- The acute in-patient mean length of stay for emergency in-patient discharges was 4.1 days in 'other' hospitals compared to 6.2 days in voluntary hospitals.
- Voluntary hospitals recorded the highest acute in-patient mean length of stay (5.8 days) compared to county hospitals (4.4 days).
- Voluntary hospitals recorded the highest extended stay in-patient mean length of stay (74.4 days) compared to county hospitals (56.1 days).

<sup>&#</sup>x27;Other' hospitals include Cancer; Eye, Ear, Nose and Throat; Long Stay; Orthopaedic; Paediatric and Other Care (provide a range of specialist services including infectious disease, elderly care, wound management, and care of the young disabled). See Appendix I for the list of hospitals participating in HIPE in 2010.

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

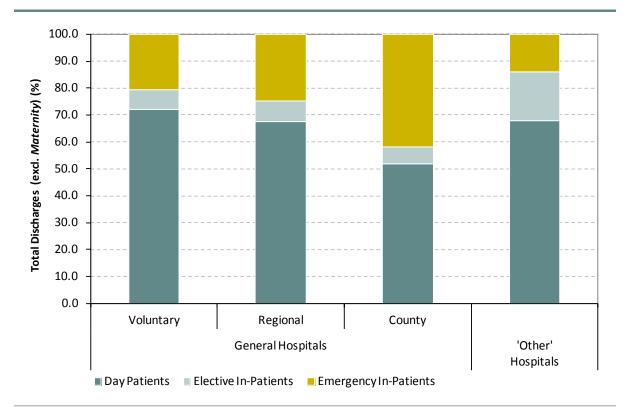
									Discharges					
						Genera	al Hospitals				'Oth	orl	Total Discharges	
			Volun	ary	Regio	nal	Cour	nty	Total G	eneral	Other		(excl. Maternity)	
			N	%	N	%	N	%	N	%	N	%	N	%
Day Patient		315,008	72.0	239,244	67.6	199,339	51.9	753,591	64.1	91,740	67.9	845,331	64.5	
		Acute (0–30 days)	31,792	7.3	26,645	7.5	24,041	6.3	82,478	7.0	22,572	16.7	105,050	8.0
	Elective	Extended (> 30 days)	859	0.2	530	0.1	558	0.1	1,947	0.2	1,828	1.4	3,775	0.3
S		Total	32,651	7.5	27,175	7.7	24,599	6.4	84,425	7.2	24,400	18.1	108,825	8.3
ent		Acute (0–30 days)	83,789	19.2	85,096	24.0	157,024	40.9	325,909	27.7	18,269	13.5	344,178	26.3
atie	Emergency	Extended (> 30 days)	5,992	1.4	2,376	0.7	3,203	0.8	11,571	1.0	622	0.5	12,193	0.9
In-Patients		Total	89,781	20.5	87,472	24.7	160,227	41.7	337,480	28.7	18,891	14.0	356,371	27.2
=		Acute (0–30 days)	115,581	26.4	111,741	31.6	181,065	47.1	408,387	34.7	40,841	30.2	449,228	34.3
	Total	Extended (> 30 days)	6,851	1.6	2,906	0.8	3,761	1.0	13,518	1.1	2,450	1.8	15,968	1.2
	Total		122,432	28.0	114,647	32.4	184,826	48.1	421,905	35.9	43,291	32.1	465,196	35.5
	Total Discharges (excl. <i>Maternity</i> )		437,440	100	353,891	100	384,165	100	1,175,496	100	135,031	100	1,310,527	100

						l	n-Patient Le	ngth of Stay	/				
					General I	lospitals				'Otl	or!	Total Discharges	
		Volui	ntary	Regi	onal	Cou	County Total Ge			Other		(excl. Maternity)	
		Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
	Acute (0–30 days)	4.7	3	4.3	2	4.3	2	4.5	2	6.1	4	4.8	3
Elective	Extended (> 30 days)	61.7	43	57.3	43	72.3	49	63.6	45	55.2	45	59.5	45
	Total	6.2	3	5.4	2	5.8	2	5.8	2	9.8	4	6.7	3
	Acute (0–30 days)	6.2	4	4.8	3	4.4	2	4.9	3	4.1	2	4.9	3
<b>Emergency</b> <sup>a</sup>	Extended (> 30 days)	76.6	51	55.8	44	57.7	45	67.1	47	66.8	48	67.1	47
	Total	10.9	4	6.1	3	5.5	3	7.1	3	6.2	2	7.0	3
	Acute (0–30 days)	5.8	4	4.7	3	4.4	2	4.9	3	5.2	3	4.9	3
Total	Extended (> 30 days)	74.7	50	56.1	44	59.9	45	66.6	47	58.1	46	65.3	47
Total	Total In-Patients (excl. <i>Maternity</i> )	9.6	4	6.0	3	5.5	3	6.8	3	8.2	3	7.0	3

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 would not be possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

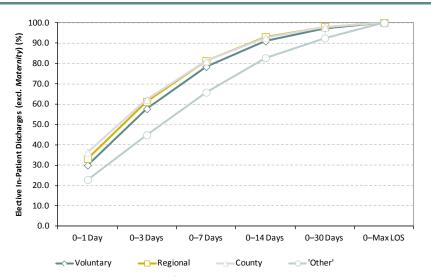
Total Discharges (excl. Maternity): Patient Type and Admission Type by Hospital Type (%) **FIGURE 2.13** 



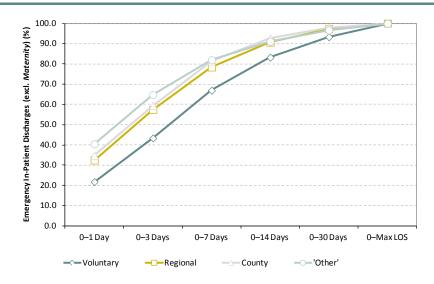
HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a Note: proportion of those attending the emergency department will subsequently be admitted to hospital, it would not be possible to use emergency admissions reported to HIPE to draw conclusions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

- Cumulative distributions for elective in-patients were approximately the same across voluntary, regional and county hospital types. However, for 'other' hospitals, the proportion of elective in-patients with a length of stay of 7 days or less was 65.8 per cent compared with 81.3 per cent for regional hospitals.
- Cumulative distributions for emergency in-patients were approximately the same across regional, county and 'other' hospitals. However, for voluntary hospitals, the proportion of emergency in-patients with a length of stay of 7 days or less was 66.9 per cent compared with 81.9 per cent for 'other' hospitals.

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 would not be 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 and public/private status.

### Discharges

- Voluntary hospitals treated the highest proportion of total discharges (excl. Maternity) on a public basis (83.6 per cent) compared to the lowest proportion in 'other' hospitals (73.7 per cent).
- Voluntary and 'other' hospitals had the largest proportion of public in-patients as extended stay patients (1.2 per cent and 1.5 per cent, respectively) compared to regional and county hospitals (0.6 per cent and 0.9 per cent, respectively).
- In contrast to all other hospital types, county hospitals treated a similar proportion of their private patients as day patients (8.6 per cent) and in-patients (8.5 per cent).

### Length of Stay

- Total mean in-patient length of stay was 7.1 days for public discharges compared to 6.3 days for private discharges.
- Voluntary hospitals recorded the highest acute mean length of stay for both public discharges (5.7 days) and private discharges (5.9 days). This was the only hospital grouping that recorded a higher acute mean length of stay for private in-patients compared to their public counterparts.
- County hospitals recorded the lowest acute mean length of stay for public discharges (4.4 days) and private discharges (4.2 days).
- Regional hospitals recorded similar in-patient lengths of stay for public and private extended stay discharges (55.9 days and 56.8 days respectively), whereas for all other hospital types the mean length of stay for public extended stay inpatients exceeded that of their private counterparts.

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

								Disc	charges					
						General	Hospitals				'Othe	ul.	Total Discha	rges
			Volunta	ıry	Region	al	Count	County		eral	Other		(excl. Maternity)	
			N	%	N	%	N	%	N	%	N	%	N	%
	Day Patien	t	272,983	62.4	195,900	55.4	166,411	43.3	635,294	54.0	68,758	50.9	704,052	53.7
. <u>2</u>	In-	Acute (0–30 days)	87,502	20.0	80,643	22.8	148,944	38.8	317,089	27.0	28,663	21.2	345,752	26.4
Public	Patient	Extended (> 30 days)	5,358	1.2	2,294	0.6	3,323	0.9	10,975	0.9	2,079	1.5	13,054	1.0
Δ.	raticiit	Total	92,860	21.2	82,937	23.4	152,267	39.6	328,064	27.9	30,742	22.8	358,806	27.4
	Total		365,843	83.6	278,837	78.8	318,678	83.0	963,358	82.0	99,500	73.7	1,062,858	81.1
	Day Patient		42,025	9.6	43,344	12.2	32,928	8.6	118,297	10.1	22,982	17.0	141,279	10.8
ţe.	In-	Acute (0–30 days)	28,079	6.4	31,098	8.8	32,121	8.4	91,298	7.8	12,178	9.0	103,476	7.9
Private	Patient	Extended (> 30 days)	1,493	0.3	612	0.2	438	0.1	2,543	0.2	371	0.3	2,914	0.2
₫.	raticiit	Total	29,572	6.8	31,710	9.0	32,559	8.5	93,841	8.0	12,549	9.3	106,390	8.1
	Total		71,597	16.4	75,054	21.2	65,487	17.0	212,138	18.0	35,531	26.3	247,669	18.9
	Day Patien	t	315,008	72.0	239,244	67.6	199,339	51.9	753,591	64.1	91,740	67.9	845,331	64.5
	In-	Acute (0–30 days)	115,581	26.4	111,741	31.6	181,065	47.1	408,387	34.7	40,841	30.2	449,228	34.3
Total	Patient	Extended (> 30 days)	6,851	1.6	2,906	0.8	3,761	1.0	13,518	1.1	2,450	1.8	15,968	1.2
10	Patient	Total	122,432	28.0	114,647	32.4	184,826	48.1	421,905	35.9	43,291	32.1	465,196	35.5
	Total Disch (excl. Mate		437,440	100	353,891	100	384,165	100	1,175,496	100	135,031	100	1,310,527	100

						In	-Patient Le	ength of	Stay				
					General	Hospitals	;			'0	ther'	<b>Total Discharges</b>	
		Volu	ıntary	Reg	ional	County Total General				U	iller	(excl. Maternity)	
		Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
<u>.2</u>	Acute (0–30 days)	5.7	3	4.8	3	4.4	2	4.9	3	5.5	3	4.9	3
Public	Extended (> 30 days)	77.2	50	55.9	44	60.5	45	67.7	47	58.8	46	66.3	47
<u> </u>	Total	9.9	4	6.2	3	5.6	2	7.0	3	9.1	3	7.1	3
te	Acute (0–30 days)	5.9	4	4.4	3	4.2	3	4.8	3	4.6	3	4.8	3
Private	Extended (> 30 days)	65.9	49	56.8	44	55.4	44	61.9	47	54.6	44	61.0	46
P	Total	8.9	4	5.4	3	4.9	3	6.3	3	6.1	3	6.3	3
	Acute (0–30 days)	5.8	4	4.7	3	4.4	2	4.9	3	5.2	3	4.9	3
Total	Extended (> 30 days)	74.7	50	56.1	44	59.9	45	66.6	47	58.1	46	65.3	47
To	Total In-Patients (excl. <i>Maternity</i> )	9.6	4	6.0	3	5.5	3	6.8	3	8.2	3	7.0	3

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

- 78.1 per cent and 80.8 per cent of public in-patients discharged from regional and county hospitals, respectively, spent less than 7 days in hospital. In contrast, 70.0 per cent and 70.1 per cent of public in-patients discharged from voluntary and 'other' hospitals, respectively, had a length of stay of 7 days or less.
- 69.8 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 (81.6 per cent), county (83.5 per cent) and 'other' (79.5 per cent) hospitals.

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

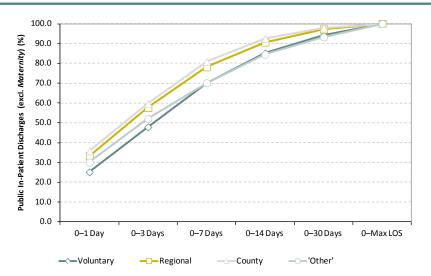
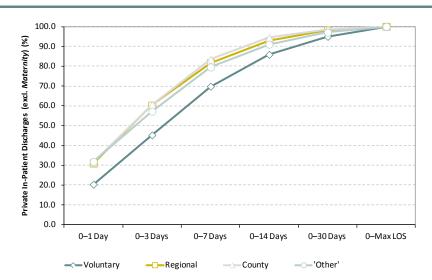


FIGURE 2.15b Private In-Patient Discharges (excl. Maternity): Length of Stay by Hospital Type (Cumulative Percentage)



### 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 95.1 per cent in the HSE Dublin North East area to 97.0 per cent in the HSE West area.
- The HSE Dublin North East area had the highest proportion of in-patient discharges who were transferred from another hospital (7.4 per cent) compared to 3.2 per cent in the HSE West area.
- The HSE South area had the highest proportion of in-patient discharges admitted from long stay accommodation (2.4 per cent) compared to only 1.3 per cent of in-patients in the HSE Dublin Mid Leinster area.

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

						Discha	rges				
				H:	SE Area of Ho	ospitalisation					
		Dubl North I		Dubl Mid Leiı		South		West		Total Disc (excl. <i>Mat</i>	
		N	%	N	%	N	%	N	%	N	%
	Home	180,173	98.6	273,633	99.7	178,146	99.0	207,294	99.6	839,246	99.
nts	Long stay accommodation	313	0.2	157	0.1	252	0.1	154	0.1	876	0.
atie	Transfer from other Hospital	2,271	1.2	660	0.2	1,567	0.9	628	0.3	5,126	0.
Day Patients	New Born	0	0.0	~	0.0	0	0.0	0	0.0	~	0.
Da)	Other	13	0.0	*	0.0	16	0.0	15	0.0	*	0.
	Total Day Patients	182,770	100	274,489	100	179,981	100	208,091	100	845,331	10
	Home	20,546	88.5	28,252	91.9	25,802	89.9	23,761	90.8	98,361	90.
a)	Long stay accommodation	61	0.3	87	0.3	200	0.7	126	0.5	474	0.
ţį	Transfer from other Hospital	2,605	11.2	2,361	7.7	2,679	9.3	2,270	8.7	9,915	9
Elec	New Born	~	0.0	12	0.0	~	0.0	~	0.0	18	0
"	Other	*	0.0	15	0.0	*	0.1	*	0.1	57	0
	Total Elective In-Patients	23,224	100	30,727	100	28,701	100	26,173	100	108,825	10
	Home	67,290	88.8	87,492	90.2	80,333	90.8	88,466	93.0	323,581	90.
ج ا	Long stay accommodation	1,311	1.7	1,589	1.6	2,663	3.0	2,519	2.6	8,082	2
en	Transfer from other Hospital	4,754	6.3	4,322	4.5	2,285	2.6	1,575	1.7	12,936	3
mergency	New Born	1,941	2.6	2,932	3.0	2,430	2.7	2,262	2.4	9,565	2
E	Other	447	0.6	674	0.7	737	0.8	349	0.4	2,207	0
	Total Emergency In-Patients	75,743	100	97,009	100	88,448	100	95,171	100	356,371	10
	Home	87,836	88.8	115,744	90.6	106,135	90.6	112,227	92.5	421,942	90
	Long stay accommodation	1,372	1.4	1,676	1.3	2,863	2.4	2,645	2.2	8,556	1
Ta I	Transfer from other Hospital	7,359	7.4	6,683	5.2	4,964	4.2	3,845	3.2	22,851	4
Tota	New Born	1,944	2.0	2,944	2.3	2,432	2.1	2,263	1.9	9,583	2
	Other	456	0.5	689	0.5	755	0.6	364	0.3	2,264	0
	Total In-Patients	98,967	100	127,736	100	117,149	100	121,344	100	465,196	10
	Home	268,009	95.1	389,377	96.8	284,281	95.7	319,521	97.0	1,261,188	96
	Long stay accommodation	1,685	0.6	1,833	0.5	3,115	1.0	2,799	0.8	9,432	C
<u>e</u>	Transfer from other Hospital	9,630	3.4	7,343	1.8	6,531	2.2	4,473	1.4	27,977	2
Total	New Born	1,944	0.7	2,946	0.7	2,432	0.8	2,263	0.7	9,585	C
	Other	469	0.2	726	0.2	771	0.3	379	0.1	2,345	0
	Total Discharges (excl. Maternity)	281,737	100	402,225	100	297,130	100	329,435	100	1,310,527	10

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 VI 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 would not be 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 85.7 per cent in HSE West area to 87.0 per cent in the HSE Dublin Mid Leinster area.
- The proportion of in-patient discharges discharged to long stay accomodation ranged from 3.6 per cent in the HSE Dublin Mid Leinster area to 7.1 per cent in the HSE West area.
- For emergency in-patient discharges, the proportion of discharges transferred to another hospital ranged from 4.7 per cent in the HSE West area to 6.4 per cent in the HSE South area.

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

						Discha	rges				
				F	ISE Area of Ho	ospitalisation				Total Disc	charges
		Dublin No	rth East	Dublin Mic	Leinster	Sou	th	We	st	(excl. Ma	ternity)
		N	%	N	%	N	%	N	%	N	%
	Home	180,299	98.6	273,377	99.6	178,184	99.0	207,244	99.6	839,104	99.3
nts	Long stay accommodation	374	0.2	206	0.1	272	0.2	206	0.1	1,058	0.1
atie	Transfer to other Hospital	2,084	1.1	861	0.3	1,512	0.8	610	0.3	5,067	0.6
Day Patients	Died <sup>a</sup>	-	-	-	-	-	-	-	-	-	-
Da)	Other	13	0.0	45	0.0	13	0.0	31	0.0	102	0.0
	Total Day Patients	182,770	100	274,489	100	179,981	100	208,091	100	845,331	100
	Home	21,458	92.4	28,207	91.8	26,614	92.7	24,308	92.9	100,587	92.4
	Long stay accommodation	721	3.1	522	1.7	871	3.0	972	3.7	3,086	2.8
	Transfer to other Hospital	688	3.0	1,297	4.2	911	3.2	635	2.4	3,531	3.2
	Died	153	0.7	591	1.9	223	0.8	171	0.7	1,138	1.0
	Other	204	0.9	110	0.4	82	0.3	87	0.3	483	0.4
	Total Elective In-patients	23,224	100	30,727	100	28,701	100	26,173	100	108,825	100
	Home	64,044	84.6	82,963	85.5	74,385	84.1	79,638	83.7	301,030	84.5
ts e	Transfer to long stay accommodation	3,978	5.3	4,111	4.2	4,430	5.0	7,612	8.0	20,131	5.6
tier	Transfer to other Hospital	4,033	5.3	5,761	5.9	5,672	6.4	4,510	4.7	19,976	5.6
In-Patients	Died	2,304	3.0	2,820	2.9	2,480	2.8	2,328	2.4	9,932	2.8
ے ا	Other	1,384	1.8	1,354	1.4	1,481	1.7	1,083	1.1	5,302	1.5
	Total Emergency In-Patients	75,743	100	97,009	100	88,448	100	95,171	100	356,371	100
	Home	85,502	86.4	111,170	87.0	100,999	86.2	103,946	85.7	401,617	86.3
	Long stay accommodation	4,699	4.7	4,633	3.6	5,301	4.5	8,584	7.1	23,217	5.0
	Transfer to other Hospital	4,721	4.8	7,058	5.5	6,583	5.6	5,145	4.2	23,507	5.1
	Died	2,457	2.5	3,411	2.7	2,703	2.3	2,499	2.1	11,070	2.4
	Other	1,588	1.6	1,464	1.1	1,563	1.3	1,170	1.0	5,785	1.2
	Total In-Patients	98,967	100	127,736	100	117,149	100	121,344	100	465,196	100
	Home	265,801	94.3	384,547	95.6	279,183	94.0	311,190	94.5	1,240,721	94.7
	Long stay accommodation	5,073	1.8	4,839	1.2	5,573	1.9	8,790	2.7	24,275	1.9
Total	Transfer to other Hospital	6,805	2.4	7,919	2.0	8,095	2.7	5,755	1.7	28,574	2.2
P_	Died	2,457	0.9	3,411	0.8	2,703	0.9	2,499	0.8	11,070	0.8
	Other	1,601	0.6	1,509	0.4	1,576	0.5	1,201	0.4	5,887	0.4
	Total Discharges (excl. Maternity)	281,737	100	402,225	100	297,130	100	329,435	100	1,310,527	100

Notes:

Percentage columns are subject to rounding.

See Appendix VI 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 who 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 would not be 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 89.3 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).
- Over a quarter of in-patients (25.6 per cent) who were admitted from another hospital were transferred back to another hospital, with the almost two thirds discharged home (63.5 per cent).

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

		Discharges													
		Discharge Destination													
	Hon	ne	Long Stay Accommodation		Transfer to other Hospital		Died		Other		Discharges (excl. <i>Maternity</i> )				
Admission Source	N	%	N	%	N	%	N	%	N	%	N	%			
Home	376,801	89.3	14,698	3.5	16,546	3.9	9,012	2.1	4,885	1.2	421,942	100			
Long Stay Accommodation	180	2.1	7,172	83.8	276	3.2	912	10.7	16	0.2	8,556	100			
Transfer from other Hospital	14,504	63.5	1,331	5.8	5,846	25.6	1,032	4.5	138	0.6	22,851	100			
New Born	8,741	91.2	0	0.0	714	7.5	88	0.9	40	0.4	9,583	100			
Other	1391	61.4	16	0.7	125	5.5	26	1.1	706	31.2	2,264	100			
Total In-Patient Discharges (excl. Maternity)	401,617	86.3	23,217	5.0	23,507	5.1	11,070	2.4	5,785	1.2	465,196	100			

Percentage columns are subject to rounding.
See Appendix VI for information on how the HIPE variable 'Discharge Destination' was 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-patients admitted on an elective basis decreased throughout the week, with the over 63 per cent admitted from Monday to Wednesday, falling to 10.9 per cent at the weekend.
- Emergency in-patient admissions remained relatively constant throughout the week at approximately 15 per cent per day, but fell at weekends when no more than 12 per cent were admitted per day.
- The majority of day patients were admitted midweek, ranging from 20.0 per cent on Tuesday and Wednesday to only 1.2 per cent on Sunday.

### Length of Stay

- Mean length of stay for elective in-patients ranged from 6.2 days on Monday to 10.4 days for those admitted on a Saturday.
- Mean length of stay for emergency in-patients ranged from 6.6 days on Sunday to 7.4 days for those admitted on a Friday.

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

		Discharges								
	Day Bati	omto			In-Patier	its			Total Discharges	
	Day Pati	ents	Elective		<b>Emergency</b> <sup>a</sup>		Total		(excl. Maternity)	
	N	%	N	%	N	%	N	%	N	%
Monday	156,946	18.6	25,696	23.6	55,436	15.6	81,132	17.4	238,078	18.2
Tuesday	169,426	20.0	22,378	20.6	58,336	16.4	80,714	17.4	250,140	19.1
Wednesday	169,081	20.0	21,155	19.4	55,477	15.6	76,632	16.5	245,713	18.7
Thursday	164,594	19.5	18,148	16.7	55,413	15.5	73,561	15.8	238,155	18.2
Friday	150,476	17.8	9,595	8.8	54,754	15.4	64,349	13.8	214,825	16.4
Saturday	24,427	2.9	2,397	2.2	39,967	11.2	42,364	9.1	66,791	5.1
Sunday	10,381	1.2	9,456	8.7	36,988	10.4	46,444	10.0	56,825	4.3
Total Discharges	845,331	100	108,825	100	356,371	100	465,196	100	1,310,527	100
(excl. Maternity)	043,331		100,023	100	330,371	100	403,130	100	1,310,321	100

		In-Patient Length of Stay					
	Ele	ctive	<b>Emergency</b> <sup>a</sup>		Total		
	Mean	Median	Mean	Median	Mean	Median	
Monday	6.2	3	6.7	3	6.6	3	
Tuesday	6.6	3	7.0	3	6.9	3	
Wednesday	6.8	2	7.2	2	7.1	2	
Thursday	6.4	2	7.1	3	7.0	3	
Friday	8.2	3	7.4	4	7.5	3	
Saturday	10.4	5	7.0	3	7.2	3	
Sunday	6.5	4	6.6	3	6.6	3	
In-Patient Discharges (excl. <i>Maternity</i> )	6.7	3	7.0	3	7.0	3	

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 would not be possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

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 rose throughout the week, going from 10.6 per cent on Monday to 22.8 per cent on Friday, falling to 5.0 per cent on Sunday.
- The highest proportion of emergency in-patients were discharged on Friday (20.9 per cent), with the lowest proportion discharged on Sunday (6.6 per cent).

### Length of Stay

- In-patient mean length of stay for elective discharges generally fell throughout the week, from 9.8 days for those discharged on a Monday to 4.7 days for those discharged on a Saturday.
- Emergency in-patient mean length of stay also fell throughout the week falling from 7.9 days for those discharged on Monday to 4.3 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)

		Discharges								
	Day Dati	outo			In-Patie	nts			Total Discharges	
	Day Pati	ents	Elective		<b>Emergency</b> <sup>a</sup>		Total		(excl. Maternity)	
	N	%	N	N %		%	N	%	N	%
Monday	156,946	18.6	11,498	10.6	54,225	15.2	65,723	14.1	222,669	17.0
Tuesday	169,426	20.0	17,817	16.4	57,493	16.1	75,310	16.2	244,736	18.7
Wednesday	169,081	20.0	19,370	17.8	58,966	16.5	78,336	16.8	247,417	18.9
Thursday	164,594	19.5	19,653	18.1	58,370	16.4	78,023	16.8	242,617	18.5
Friday	150,476	17.8	24,837	22.8	74,442	20.9	99,279	21.3	249,755	19.1
Saturday	24,427	2.9	10,172	9.3	29,320	8.2	39,492	8.5	63,919	4.9
Sunday	10,381	1.2	5,478	5.0	23,555	6.6	29,033	6.2	39,414	3.0
Total Discharges (excl. <i>Maternity</i> )	845,331	100	108,825	100	356,371	100	465,196	100	1,310,527	100

		In-Patient Length of Stay						
	Elec	tive	Emerg	gency <sup>a</sup>	Total			
	Mean	Mean Median		Median	Mean	Median		
Monday	9.8	6	7.9	4	8.2	4		
Tuesday	6.6	2	7.6	3	7.3	3		
Wednesday	6.7	2	7.5	3	7.3	3		
Thursday	6.2	2	7.5	3	7.1	3		
Friday	6.8	3	6.9	3	6.9	3		
Saturday	4.7	2	5.0	2	4.9	2		
Sunday	6.5	4	4.3	2	4.7	2		
In-Patient Discharges (excl. <i>Maternity</i> )	6.7	3	7.0	3	7.0	3		

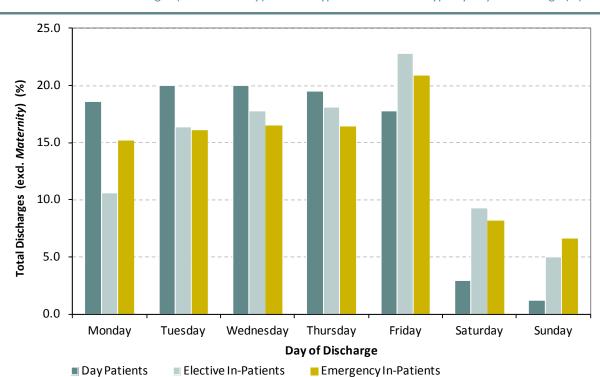
Notes: Percentage columns are subject to rounding.

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 would not be possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

25.0 20.0 Total Discharges (excl. Maternity) (%) 15.0 10.0 5.0 0.0 Monday Tuesday Wednesday Thursday Friday Saturday Sunday **Day of Admission** Day Patients ■ Elective In-Patients ■ Emergency In-Patients

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

HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion Note: of those attending the emergency department will subsequently be admitted to hospital, it would not be 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 (%)

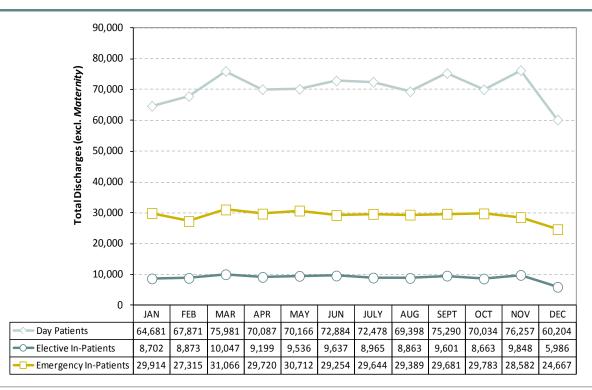
HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion  $of those \ attending \ the \ emergency \ department \ will \ subsequently \ be \ admitted \ to \ hospital, it \ would \ not \ be \ possible \ to \ use \ emergency$ admissions 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 is based on discharges admitted and discharged in 2010.

- Hospital admissions peaked in March for both elective in-patients and emergency in-patients.
- The highest number of day patients was treated in November with 76,257 discharges, with December recording the lowest number of day patients (60,204 discharges).
- May recorded the highest number of emergency in-patient admissions (30,712 discharges).
- October recorded the lowest number of elective in-patient admissions with only 8,663 in-patient discharges admitted in this month (apart from December).

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



Notes: This does not include 7,549 discharges that were admitted prior to 2010 but were discharged in 2010. 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 would not be possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

Morbidity Analysis SECTION

2010

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## **Total Discharges** 1,447,108

## Discharges excluding *Maternity* 1,310,527

#### 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 diagnoses 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 procedures, 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, sex and age group, and administrative analyses including admission source, mode of emergency admissions (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. 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; they perform 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 2010, 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.<sup>3</sup>

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 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 Health Research and Information Division (HRID) of the ESRI is responsible for the training of coders. For further information see www.hipe.ie

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

National Centre of Classification in Health (NCCH), 2008: The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (6thEd): 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 reports, available at www.hipe.ie

Table 3.1 provides details of the structure of ICD-10-AM Diagnostic 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.

Chap	ter and Title	Code Prefix	Chap	oter 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	Е	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	1	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

National Centre of Classification in Health (NCCH), 2008: The International Statistical Classification of Diseases and Related Health Source: Problems, Tenth Revision, Australian Modification (6thEd): 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.
- 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 of Classification in Health (NCCH), 2008: The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (6thEd): Australian Coding Standards. Sydney: NCCH, Faculty of Health Sciences, The University of Sydney: p. 3.

National Centre of 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.

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

In 2010, HIPE collected a principal diagnosis for each discharge, together with up to nineteen additional diagnosis codes.8

#### 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'. 9

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. 10

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 2.7.
- The mean number of diagnoses recorded for in-patient discharges was 3.8 compared to 2.0 for day patients.
- The mean number of diagnoses recorded was slightly higher for male discharges compared with female discharges; 2.7 for males and 2.6 for females.

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	3.8	2.7
Sex			
Male	2.0	4.0	2.7
Female	2.0	3.7	2.6
Age Group			
< 15 Years	1.8	2.7	2.4
15–44 Years	1.7	3.0	2.2
45–64 Years	2.1	3.8	2.6
65 Years and Over	2.2	5.0	3.1

From 1 January 2011 HIPE collects one principal diagnosis and up to 29 additional diagnoses.

National Centre of Classification in Health (NCCH), 2008: The International Statistical Classification of Diseases and Related  $Health\ Problems,\ Tenth\ Revision,\ Australian\ Modification\ (6^{th}Ed):\ Australian\ Coding\ Standards.\ Sydney:\ NCCH,\ Faculty\ of$ Health Sciences, The University of Sydney, p 10.

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

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

In 2010, a principal procedure and up to nineteen 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). 11 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 and
- diagnostic/exploratory procedure related to additional diagnoses for the episode of care. 12

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>13</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. 14

#### 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. Section 4 provides details of procedures reported for Maternity discharges.

- Of the 1,310,527 total discharges (excl. Maternity) principal procedures were recorded for 1,101,807 (84.1 per cent).
- Close to 94 per cent of day patient discharges had a principal procedure recorded.
- Over 66 per cent of in-patient discharges had a principal procedure recorded, with 89.5 per cent of elective in-patients and 59.1 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 ( $6^{th}$ Ed): Australian Coding Standards. Sydney: NCCH, Faculty of Health Sciences, The University of Sydney.

National Centre of 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 of Classification in Health (NCCH), 2008, The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification ( $6^{th}$  Ed.): Australian Classification of Health Interventions (ACHI). 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 VIII).

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

	Total Discharges (excl. <i>Maternity</i> )	Total Discharges (excl. <i>Maternity</i> ) with a Principal Procedure	
	N	N	%
Total Discharges (excl. Maternity)	1,310,527	1,101,807	84.1
Day Patients	845,331	793,867	93.9
In-Patients	465,196	307,940	66.2
Elective In-Patients	108,825	97,398	89.5
Emergency In-Patients	356,371	210,542	59.1

#### 3.2.2.2 Mean Number of Procedures Reported

Table 3.5 outlines the mean number of procedures reported for day patient, inpatient 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>15</sup>

- For those discharges who underwent at least one procedure, in-patient discharges had a mean number of 2.9 procedures recorded compared to 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 higher than that reported for the 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	1.3	2.9	1.8
Female	1.4	2.9	1.8
Age Group			
< 15 Years	1.9	2.5	2.2
15–44 Years	1.5	2.6	1.8
45–64 Years	1.4	3.0	1.7
65 Years and Over	1.2	3.2	1.8

Includes all anaesthesia except local, see ACS 0031 Anaesthesia in National Centre of 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. 16 This analysis reports on the most commonly recorded diagnoses, procedures 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 64.5 per cent of total discharges (excl. Maternity).
- Day patients aged 65-74 years accounted for 20.4 per cent of day patient discharges.

#### Day Patients – Top 20 Principal Diagnoses

- Day patients with a principal diagnosis of other medical care (includes chemotherapy and radiotherapy encounters) accounted for 21.0 per cent of day patient discharges.
- Care involving dialysis accounted for 19.9 per cent of day patient discharges.

## Day Patients - Top 20 Principal Procedures

- A principal procedure was recorded for 93.9 per cent of day patient discharges (see Table 3.4).
- Haemodialysis was reported as a principal procedure for 21.2 per cent of day patients with at least one procedure.

#### Day Patients - Top 10 AR-DRGs

- The top 3 AR-DRGs accounted for over 40 per cent of day patient discharges reported to HIPE when analysed by diagnosis related group. 17
- Haemodialysis accounted for 19.9 per cent, radiotherapy accounted for 11.0 per cent and *chemotherapy* accounting for 9.5 per cent of day patient discharges.

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

See Section Five for details of the case mix classification.

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

Principa	l Diagnosis – Top 20 <sup>a</sup>	N	%
Z51	Other medical care	177,790	21.0
Z49	Care involving dialysis	168,098	19.9
E83	Disorders of mineral metabolism	22,831	2.7
L40	Psoriasis	17,534	2.1
K29	Gastritis and duodenitis	12,106	1.4
M54	Dorsalgia	9,514	1.1
184	Haemorrhoids	7,512	0.9
C44	Other malignant neoplasms of skin	7,485	0.9
M25	Other joint disorders, not elsewhere classified	7,242	0.9
R10	Abdominal and pelvic pain	7,125	0.8
K57	Diverticular disease of intestine	6,988	0.8
Z08	Follow-up examination after treatment for malignant	6,524	0.8
	neoplasms		
Z09	Follow-up examination after treatment for conditions other	6,359	0.8
	than malignant neoplasms		
K44	Diaphragmatic hernia	6,151	0.7
Z13	Special screening examination for other diseases and	5,981	0.7
	disorders		
H26	Other cataract	5,912	0.7
H35	Other retinal disorders	5,843	0.7
K21	Gastro-oesophageal reflux disease	5,833	0.7
Z45	Adjustment and management of implanted device	5,590	0.7
125	Chronic ischaemic heart disease	5,103	0.6
Admissi	on Source	N	%
Home		839,246	99.3
Long sta	y accommodation	876	0.1
Transfer	from other hospital	5,126	0.6
Other (i	ncludes new born)	83	0.0

845,331

Male

Female

Day Patients

435,921

409,410

51.6

48.4

Age Group	N	%
< 1 Years	4,404	0.5
1-14 Years	41,884	5.0
15-24 Years	31,708	3.8
25-34 Years	66,612	7.9
35-44 Years	94,872	11.2
45-54 Years	126,730	15.0
55-64 Years	168,640	19.9
65-74 Years	172,300	20.4
75-84 Years	114,995	13.6
85 Years and Over	23,186	2.7

Principa	l Procedure – Top 20 <sup>b</sup>	N	%
1060	Haemodialysis	167,969	21.2
1920	Administration of pharmacotherapy	106,190	13.4
1788	Megavoltage radiation treatment	86,810	10.9
1008	Panendoscopy with excision	37,729	4.8
1620	Excision of lesion(s) of skin and subcutaneous tissue	30,394	3.8
0905	Fibreoptic colonoscopy	24,750	3.1
0725	Other incision procedures on veins	22,952	2.9
0911	Fibreoptic colonoscopy with excision	20,971	2.6
1610	Ultraviolet B [UVB] light therapy of skin	15,637	2.0
1893	Administration of blood and blood products	13,089	1.6
1552	Administration of agent into other musculoskeletal sites	12,546	1.6
1089	Examination procedures on bladder	11,490	1.4
0668	Coronary angiography	8,833	1.1
1005	Panendoscopy	8,774	1.1
0197	Extracapsular crystalline lens extraction by phacoemulsification	6,912	0.9
0209	Application, insertion or removal procedures on retina, choroid or posterior chamber	5,751	0.7
1612	Destruction of lesion of skin or cartilage	5,220	0.7
0457	Nonsurgical removal of tooth	4,211	0.5
0544	Bronchoscopy with biopsy or removal of foreign body	4,192	0.5
0309	Myringotomy	4,047	0.5

L612 Haemodialysis 167,954 19.9 R64Z Radiotherapy 92,924 11.0 R63Z Chemotherapy 80,217 9.5 J11Z Other skin, subcutaneous tissue and breast procedures 35,281 4.2 G48C Colonoscopy, sameday 35,274 4.2 G47C Other gastroscopy, sameday 34,633 4.1 Z61B Red blood cell disorders w/o catastrophic or severe cc 29,811 3.5 Z64B Other factors influencing health status, sameday 24,585 2.9 J68C Major skin disorders, sameday 20,934 2.5	AR-DRG	– Top 10	N	%
R63ZChemotherapy80,2179.5J11ZOther skin, subcutaneous tissue and breast procedures35,2814.2G48CColonoscopy, sameday35,2744.2G47COther gastroscopy, sameday34,6334.1Q61BRed blood cell disorders w/o catastrophic or severe cc29,8113.5Z64BOther factors influencing health status, sameday24,5852.9	L61Z	Haemodialysis	167,954	19.9
J11ZOther skin, subcutaneous tissue and breast procedures35,2814.2G48CColonoscopy, sameday35,2744.2G47COther gastroscopy, sameday34,6334.1Q61BRed blood cell disorders w/o catastrophic or severe cc29,8113.5Z64BOther factors influencing health status, sameday24,5852.9	R64Z	Radiotherapy	92,924	11.0
G48CColonoscopy, sameday35,2744.2G47COther gastroscopy, sameday34,6334.1Q61BRed blood cell disorders w/o catastrophic or severe cc29,8113.5Z64BOther factors influencing health status, sameday24,5852.9	R63Z	Chemotherapy	80,217	9.5
G47COther gastroscopy, sameday34,6334.1Q61BRed blood cell disorders w/o catastrophic or severe cc29,8113.5Z64BOther factors influencing health status, sameday24,5852.9	J11Z	Other skin, subcutaneous tissue and breast procedures	35,281	4.2
Q61B Red blood cell disorders w/o catastrophic or severe cc 29,811 3.5 Z64B Other factors influencing health status, sameday 24,585 2.9	G48C	Colonoscopy, sameday	35,274	4.2
Z64B Other factors influencing health status, sameday 24,585 2.9	G47C	Other gastroscopy, sameday	34,633	4.1
. ,	Q61B	Red blood cell disorders w/o catastrophic or severe cc	29,811	3.5
J68C Major skin disorders, sameday 20,934 2.5	Z64B	Other factors influencing health status, sameday	24,585	2.9
	J68C	Major skin disorders, sameday	20,934	2.5
R61C Lymphoma and non-acute leukaemia, sameday 15,935 1.9	R61C	Lymphoma and non-acute leukaemia, sameday	15,935	1.9

Discharge Destination	N	%
Home	839,104	99.3
Long stay accommodation	1,058	0.1
Transfer to other hospital	5,067	0.6
Other	102	0.0

Notes: Percentage columns are subject to rounding.

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

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

#### 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). While an elective inpatient would stay for at least one night, in the case of emergency admissions the date of admission and discharge may be the same. Table 3.7 presents a summary of in-patient activity reported to HIPE.

#### In-Patients - Profile

- In-patient discharges accounted for 35.5 per cent of total discharges (excl. Maternity).
- Over 96 per cent (449,228) were acute in-patient discharges (those with a length
  of stay of 30 days or less). They used 67.8 per cent of in-patient bed days (excl.
  Maternity) while extended stay in-patients accounted for 3.4 per cent of inpatient discharges and 32.2 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 3.4 per cent of in-patient discharges.
- In-patient discharges with a principal diagnosis of *other chronic obstructive* pulmonary disease accounted for 2.3 per cent of in-patients.

#### In-Patients – Top 20 Principal Procedures

- A principal procedure was recorded for 66.2 per cent of in-patient discharges (Table 3.4).
- Generalised allied health interventions were reported as a principal procedure
  for 13.9 per cent of in-patient discharges with at least one procedure reported.
  This category includes interventions such as physiotherapy, dietetics, pharmacy,
  social work, and occupational therapy. Together, these five interventions
  accounted for 90.0 per cent of cases within this procedure block.
- Computerised tomography of brain accounted for 8.4 per cent of in-patient discharges with a principal procedure reported.

#### In-Patients – Top 10 AR-DRGs

- The top 3 AR-DRGs accounted for 7.2 per cent of in-patient discharges when analysed by diagnosis related group.<sup>18</sup>
- Chest pain accounted for 3.2 per cent, abdominal pain or mesenteric adenitis accounted for 2.0 per cent and oesophagitis and gastroenteritis w/o cat/sev cc accounted for 2.0 per cent of in-patient discharges.

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

Principa	al Diagnosis – Top 20 <sup>a</sup>	N	%	Total Mean LOS <sup>c</sup>	Acute Mean LOS <sup>d</sup>
R07	Pain in throat and chest	15,743	3.4	2.3	2.3
J44	Other chronic obstructive pulmonary disease	10,862	2.3	9.5	7.3
R10	Abdominal and pelvic pain	10,749	2.3	2.5	2.5
J22	Unspecified acute lower respiratory infection	9,361	2.0	7.1	5.6
J18	Pneumonia, organism unspecified	8,512	1.8	11.2	7.6
N39	Other disorders of urinary system	8,166	1.8	8.0	5.4
R55	Syncope and collapse	6,572	1.4	5.8	4.3
S52	Fracture of forearm	6,197	1.3	2.2	1.9
K80	Cholelithiasis	6,166	1.3	5.0	4.6
K35	Acute appendicitis	6,061	1.3	3.6	3.6
148	Atrial fibrillation and flutter	6,039	1.3	5.4	4.5
A09	Other gastroenteritis and colitis of infectious and unspecified origin	5,854	1.3	3.3	2.9
121	Acute myocardial infarction	5,845	1.3	8.1	6.1
150	Heart failure	5,696	1.2	12.4	8.7
125	Chronic ischaemic heart disease	5,020	1.1	5.5	4.7
120	Angina pectoris	4,855	1.0	5.1	4.8
S82	Fracture of lower leg, including ankle	4,759	1.0	5.2	3.9
L03	Cellulitis	4,662	1.0	6.9	5.9
R51	Headache	4,392	0.9	2.5	2.4
163	Cerebral infarction	4,317	0.9	23.8	10.3

Admission Source	N	%
Home	421,942	90.7
Long stay accommodation	8,556	1.8
Transfer from other hospital	22,851	4.9
New born	9,583	2.1
Other	2,264	0.5

Discharge Destination	N	%
Home	401,617	86.3
Long stay accommodation	23,217	5.0
Transfer to other hospital	23,507	5.1
Died	11,070	2.4
Other	5,785	1.2

III-ratiello	
465,196	

Discharges	N	%
Total	465,196	100.0
Acute	449,228	96.6
Extended	15,968	3.4

Bed Days	N	%
Total	3,236,516	100.0
Acute	2,193,996	67.8
Extended	1,042,520	32.2

Length of Stay	Mean
Total	7.0
Acute	4.9
Extended	65.3

Sex	N	%
Male	239,057	51.4
Female	226,139	48.6

Age Group	N	%
< 1 Years	27,819	6.0
1-14 Years	54,414	11.7
15-24 Years	32,221	6.9
25-34 Years	36,313	7.8
35-44 Years	41,380	8.9
45-54 Years	49,367	10.6
55-64 Years	60,936	13.1
65-74 Years	67,250	14.5
75-84 Years	65,842	14.2
85 Years and Over	29,654	6.4

1916         Generalised allied health interventions         42,719         13.9         11.7         8.0           1952         Computerised tomography of brain         25,999         8.4         10.4         5.8           1920         Administration of pharmacotherapy         10,522         3.4         7.0         5.4           1008         Panendoscopy with excision         8,513         2.8         10.1         6.9           2015         Magnetic resonance imaging         7,228         2.3         11.7         7.3           0926         Appendicectomy         6,644         2.2         3.5         3.5           1893         Administration of blood and blood products         6,544         2.1         8.3         6.2           1893         Computerised tomography of abdomen and pelvis         5,388         1.7         6.6         5.7           1963         Computerised tomography of hip         4,930         1.6         8.7         6.6           1489         Arthroplasty of hip         4,911         1.6         13.7         9.9           0668         Coronary angiography         4,865         1.6         6.5         5.6           0412         Tonsillectomy or adenoidectomy         4,081	Principa	l Procedure – Top 20 <sup>b</sup>	N	%	Total Mean LOS <sup>c</sup>	Acute Mean LOS <sup>d</sup>
1920         Administration of pharmacotherapy         10,522         3.4         7.0         5.4           1008         Panendoscopy with excision         8,513         2.8         10.1         6.9           2015         Magnetic resonance imaging         7,228         2.3         11.7         7.3           0926         Appendicectomy         6,644         2.2         3.5         3.5           1893         Administration of blood and blood products         6,544         2.1         8.3         6.2           1963         Computerised tomography of abdomen and pelvis         5,388         1.7         6.6         5.7           1966         Other computerised tomography         4,930         1.6         8.7         6.6           1489         Arthroplasty of hip         4,911         1.6         13.7         9.9           0668         Coronary angiography         4,865         1.6         6.5         5.6           0412         Tonsillectomy or adenoidectomy         4,081         1.3         1.6         1.5           0965         Cholecystectomy         3,972         1.3         4.4         3.9           0569         Ventilatory support         3,527         1.1         2.3         8	1916	Generalised allied health interventions	42,719	13.9	11.7	8.0
1008         Panendoscopy with excision         8,513         2.8         10.1         6.9           2015         Magnetic resonance imaging         7,228         2.3         11.7         7.3           0926         Appendicectomy         6,644         2.2         3.5         3.5           1893         Administration of blood and blood products         6,544         2.1         8.3         6.2           1963         Computerised tomography of abdomen and pelvis         5,388         1.7         6.6         5.7           1966         Other computerised tomography         4,930         1.6         8.7         6.6           1489         Arthroplasty of hip         4,911         1.6         13.7         9.9           0668         Coronary angiography         4,865         1.6         6.5         5.6           0412         Tonsillectomy or adenoidectomy         4,081         1.3         1.6         1.5           0965         Cholecystectomy         3,972         1.3         4.4         3.9           0569         Ventilatory support         3,527         1.1         22.3         8.6           1427         Closed reduction of fracture of radius with stenting         3,416         1.1         4.3	1952	Computerised tomography of brain	25,999	8.4	10.4	5.8
2015         Magnetic resonance imaging         7,228         2.3         11.7         7.3           0926         Appendicectomy         6,644         2.2         3.5         3.5           1893         Administration of blood and blood products         6,544         2.1         8.3         6.2           1963         Computerised tomography of abdomen and pelvis         5,388         1.7         6.6         5.7           1966         Other computerised tomography         4,930         1.6         8.7         6.6           1489         Arthroplasty of hip         4,911         1.6         13.7         9.9           0668         Coronary angiography         4,865         1.6         6.5         5.6           0412         Tonsillectomy or adenoidectomy         4,081         1.3         1.6         1.5           0965         Cholecystectomy         3,972         1.3         4.4         3.9           0569         Ventilatory support         3,527         1.1         22.3         8.6           1427         Closed reduction of fracture of radius         3,505         1.1         1.8         1.6           0570         Non-invasive ventilatory support         3,400         1.1         15.3	1920	Administration of pharmacotherapy	10,522	3.4	7.0	5.4
0926         Appendicectomy         6,644         2.2         3.5         3.5           1893         Administration of blood and blood products         6,544         2.1         8.3         6.2           1963         Computerised tomography of abdomen and pelvis         5,388         1.7         6.6         5.7           1966         Other computerised tomography         4,930         1.6         8.7         6.6           1489         Arthroplasty of hip         4,911         1.6         13.7         9.9           0668         Coronary angiography         4,865         1.6         6.5         5.6           0412         Tonsillectomy or adenoidectomy         4,081         1.3         1.6         1.5           0965         Cholecystectomy         3,972         1.3         4.4         3.9           0569         Ventilatory support         3,527         1.1         22.3         8.6           1427         Closed reduction of fracture of radius         3,505         1.1         1.8         1.6           0671         Transluminal coronary angioplasty with stenting         3,416         1.1         4.3         3.8           0570         Non-invasive ventilatory support         3,400         1.1	1008	Panendoscopy with excision	8,513	2.8	10.1	6.9
1893         Administration of blood and blood products         6,544         2.1         8.3         6.2           1963         Computerised tomography of abdomen and pelvis         5,388         1.7         6.6         5.7           1966         Other computerised tomography         4,930         1.6         8.7         6.6           1489         Arthroplasty of hip         4,911         1.6         13.7         9.9           0668         Coronary angiography         4,865         1.6         6.5         5.6           0412         Tonsillectomy or adenoidectomy         4,081         1.3         1.6         1.5           0965         Cholecystectomy         3,972         1.3         4.4         3.9           0569         Ventilatory support         3,527         1.1         22.3         8.6           1427         Closed reduction of fracture of radius         3,505         1.1         1.8         1.6           0671         Transluminal coronary angioplasty with stenting         3,416         1.1         4.3         3.8           0570         Non-invasive ventilatory support         3,400         1.1         15.3         9.2           1962         Computerised tomography of abdomen         3,337	2015	Magnetic resonance imaging	7,228	2.3	11.7	7.3
products  1963 Computerised tomography of abdomen and pelvis  1966 Other computerised tomography 4,930 1.6 8.7 6.6  1489 Arthroplasty of hip 4,911 1.6 13.7 9.9  0668 Coronary angiography 4,865 1.6 6.5 5.6  0412 Tonsillectomy or adenoidectomy 4,081 1.3 1.6 1.5  0965 Cholecystectomy 3,972 1.3 4.4 3.9  0569 Ventilatory support 3,527 1.1 22.3 8.6  1427 Closed reduction of fracture of radius 3,505 1.1 1.8 1.6  0671 Transluminal coronary angioplasty with stenting  0570 Non-invasive ventilatory support 3,400 1.1 15.3 9.2  1962 Computerised tomography of 3,337 1.1 6.9 5.6  abdomen  0911 Fibreoptic colonoscopy with excision 3,132 1.0 10.1 7.4	0926	Appendicectomy	6,644	2.2	3.5	3.5
abdomen and pelvis  1966 Other computerised tomography 4,930 1.6 8.7 6.6  1489 Arthroplasty of hip 4,911 1.6 13.7 9.9  0668 Coronary angiography 4,865 1.6 6.5 5.6  0412 Tonsillectomy or adenoidectomy 4,081 1.3 1.6 1.5  0965 Cholecystectomy 3,972 1.3 4.4 3.9  0569 Ventilatory support 3,527 1.1 22.3 8.6  1427 Closed reduction of fracture of radius 3,505 1.1 1.8 1.6  0671 Transluminal coronary angioplasty 3,416 1.1 4.3 3.8  with stenting  0570 Non-invasive ventilatory support 3,400 1.1 15.3 9.2  1962 Computerised tomography of 3,337 1.1 6.9 5.6  abdomen  0911 Fibreoptic colonoscopy with excision 3,132 1.0 10.1 7.4	1893		6,544	2.1	8.3	6.2
1489         Arthroplasty of hip         4,911         1.6         13.7         9.9           0668         Coronary angiography         4,865         1.6         6.5         5.6           0412         Tonsillectomy or adenoidectomy         4,081         1.3         1.6         1.5           0965         Cholecystectomy         3,972         1.3         4.4         3.9           0569         Ventilatory support         3,527         1.1         22.3         8.6           1427         Closed reduction of fracture of radius         3,505         1.1         1.8         1.6           0671         Transluminal coronary angioplasty with stenting         3,416         1.1         4.3         3.8           0570         Non-invasive ventilatory support         3,400         1.1         15.3         9.2           1962         Computerised tomography of abdomen         3,337         1.1         6.9         5.6           0911         Fibreoptic colonoscopy with excision         3,132         1.0         10.1         7.4	1963		5,388	1.7	6.6	5.7
0668         Coronary angiography         4,865         1.6         6.5         5.6           0412         Tonsillectomy or adenoidectomy         4,081         1.3         1.6         1.5           0965         Cholecystectomy         3,972         1.3         4.4         3.9           0569         Ventilatory support         3,527         1.1         22.3         8.6           1427         Closed reduction of fracture of radius         3,505         1.1         1.8         1.6           0671         Transluminal coronary angioplasty with stenting         3,416         1.1         4.3         3.8           0570         Non-invasive ventilatory support         3,400         1.1         15.3         9.2           1962         Computerised tomography of abdomen         3,337         1.1         6.9         5.6           0911         Fibreoptic colonoscopy with excision         3,132         1.0         10.1         7.4	1966	Other computerised tomography	4,930	1.6	8.7	6.6
0412         Tonsillectomy or adenoidectomy         4,081         1.3         1.6         1.5           0965         Cholecystectomy         3,972         1.3         4.4         3.9           0569         Ventilatory support         3,527         1.1         22.3         8.6           1427         Closed reduction of fracture of radius         3,505         1.1         1.8         1.6           0671         Transluminal coronary angioplasty with stenting         3,416         1.1         4.3         3.8           0570         Non-invasive ventilatory support         3,400         1.1         15.3         9.2           1962         Computerised tomography of abdomen         3,337         1.1         6.9         5.6           0911         Fibreoptic colonoscopy with excision         3,132         1.0         10.1         7.4	1489	Arthroplasty of hip	4,911	1.6	13.7	9.9
0965         Cholecystectomy         3,972         1.3         4.4         3.9           0569         Ventilatory support         3,527         1.1         22.3         8.6           1427         Closed reduction of fracture of radius         3,505         1.1         1.8         1.6           0671         Transluminal coronary angioplasty with stenting         3,416         1.1         4.3         3.8           0570         Non-invasive ventilatory support         3,400         1.1         15.3         9.2           1962         Computerised tomography of abdomen         3,337         1.1         6.9         5.6           0911         Fibreoptic colonoscopy with excision         3,132         1.0         10.1         7.4	0668	Coronary angiography	4,865	1.6	6.5	5.6
0569         Ventilatory support         3,527         1.1         22.3         8.6           1427         Closed reduction of fracture of radius         3,505         1.1         1.8         1.6           0671         Transluminal coronary angioplasty with stenting         3,416         1.1         4.3         3.8           0570         Non-invasive ventilatory support         3,400         1.1         15.3         9.2           1962         Computerised tomography of abdomen         3,337         1.1         6.9         5.6           0911         Fibreoptic colonoscopy with excision         3,132         1.0         10.1         7.4	0412	Tonsillectomy or adenoidectomy	4,081	1.3	1.6	1.5
1427         Closed reduction of fracture of radius         3,505         1.1         1.8         1.6           0671         Transluminal coronary angioplasty with stenting         3,416         1.1         4.3         3.8           0570         Non-invasive ventilatory support         3,400         1.1         15.3         9.2           1962         Computerised tomography of abdomen         3,337         1.1         6.9         5.6           0911         Fibreoptic colonoscopy with excision         3,132         1.0         10.1         7.4	0965	Cholecystectomy	3,972	1.3	4.4	3.9
0671         Transluminal coronary angioplasty with stenting         3,416         1.1         4.3         3.8           0570         Non-invasive ventilatory support         3,400         1.1         15.3         9.2           1962         Computerised tomography of abdomen         3,337         1.1         6.9         5.6           0911         Fibreoptic colonoscopy with excision         3,132         1.0         10.1         7.4	0569	Ventilatory support	3,527	1.1	22.3	8.6
with stenting         3,400         1.1         15.3         9.2           1962         Computerised tomography of abdomen         3,337         1.1         6.9         5.6           0911         Fibreoptic colonoscopy with excision         3,132         1.0         10.1         7.4	1427	Closed reduction of fracture of radius	3,505	1.1	1.8	1.6
1962         Computerised tomography of abdomen         3,337         1.1         6.9         5.6           0911         Fibreoptic colonoscopy with excision         3,132         1.0         10.1         7.4	0671	, , ,	3,416	1.1	4.3	3.8
abdomen 0911 Fibreoptic colonoscopy with excision 3,132 1.0 10.1 7.4	0570	Non-invasive ventilatory support	3,400	1.1	15.3	9.2
	1962		3,337	1.1	6.9	5.6
1005 Panendoscopy 2,972 1.0 10.1 6.9	0911	Fibreoptic colonoscopy with excision	3,132	1.0	10.1	7.4
	1005	Panendoscopy	2,972	1.0	10.1	6.9

AR-DRG	– Top 10	N	%	Total Mean LOS <sup>c</sup>	Acute Mean LOS <sup>d</sup>
F74Z	Chest pain	14,735	3.2	2.2	2.2
G66Z	Abdominal pain or mesenteric adenitis	9,484	2.0	2.3	2.2
G67B	Oesophagitis and gastroenteritis w/o cat/sev cc	9,448	2.0	2.3	2.3
E65B	Chronic obstructive airways disease w/o cat cc	8,214	1.8	7.2	6.3
G70B	Other digestive system diagnoses w/o cat/sev cc	8,108	1.7	3.3	3.2
D63Z	Otitis media and uri	7,469	1.6	2.2	2.1
B77Z	Headache	6,371	1.4	2.5	2.4
F76B	Arrhythmia, cardiac arrest and conduction disorders w/o cat/sev cc	6,039	1.3	3.8	3.6
L63B	Kidney and urinary tract infections w/o cat/sev cc	5,860	1.3	5.2	4.5
G47B	Other gastroscopy w/o cat cc	5,833	1.3	5.1	4.7

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. % is based on in-patients with 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.

#### 3.3.2.1 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 8.3 per cent of total discharges (excl. *Maternity*) and 23.4 per cent of in-patients.
- Elective in-patient discharges accounted for 732,501 bed days, 22.6 per cent of in-patient bed days (see Table 3.8).
- Over 90 per cent of elective in-patient discharges were admitted from home with a further 9.1 per cent admitted by transfer from another hospital.
- Over 92 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 *chronic diseases of tonsils and adenoids* accounted for 3.7 per cent of elective in-patient discharges.
- Care involving use of rehabilitation procedures reported the longest length of stay of the top 20 principal diagnoses for elective in-patient discharges, at 26.7 days.

## Elective In-Patients – Top 20 Principal Procedures

- A principal procedure was recorded for 89.5 per cent of elective in-patient discharges (see Table 3.4).
- *Generalised allied health interventions* were reported for 8.7 per cent of elective in-patients who had a principal procedure reported.
- Over 4 per cent of elective in-patient discharges had a principal procedure of tonsillectomy or adenoidectomy reported, with a mean length of stay of 1.5 days.

#### Elective In-Patients – Top 10 AR-DRGs

- The top 3 AR-DRGs accounted for 9.5 per cent of elective in-patient discharges reported to HIPE when analysed by case mix.<sup>19</sup>
- Tonsillectomy and/or adenoidectomy accounted for 3.7 per cent, rehabilitation
  w/o catastrophic cc accounted for 3.0 per cent and hip replacement w/o
  catastrophic cc accounted for 2.8 per cent of elective in-patient discharges.

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

Princip	al Diagnosis – Top 20°	N	%	Total Mean LOS <sup>c</sup>	Acute Mean LOS <sup>d</sup>
J35	Chronic diseases of tonsils and adenoids	4,012	3.7	1.5	1.5
Z50	Care involving use of rehabilitation procedures	3,787	3.5	26.7	13.5
M16	Coxarthrosis [arthrosis of hip]	3,089	2.8	8.3	8.1
K80	Cholelithiasis	2,718	2.5	2.8	2.7
125	Chronic ischaemic heart disease	2,413	2.2	4.1	3.5
C50	Malignant neoplasm of breast	2,307	2.1	7.1	5.2
G47	Sleep disorders	2,243	2.1	1.3	1.3
M17	Gonarthrosis [arthrosis of knee]	2,101	1.9	7.8	7.6
K40	Inguinal hernia	1,828	1.7	2.3	2.1
Z48	Other surgical follow-up care	1,777	1.6	8.6	5.6
N81	Female genital prolapse	1,510	1.4	4.5	4.5
C34	Malignant neoplasm of bronchus and lung	1,478	1.4	11.1	7.3
Z47	Other orthopaedic follow-up care	1,380	1.3	9.9	6.8
C18	Malignant neoplasm of colon	1,007	0.9	10.2	8.8
N92	Excessive, frequent and irregular menstruation	1,001	0.9	2.7	2.7
C61	Malignant neoplasm of prostate	911	0.8	13.4	7.1
C67	Malignant neoplasm of bladder	902	0.8	6.6	5.2
148	Atrial fibrillation and flutter	835	0.8	2.7	2.6
N39	Other disorders of urinary system	829	0.8	3.1	2.9
E11	Type 2 diabetes mellitus	825	0.8	7.6	4.2

Admission Source	N	%
Home	98,361	90.4
Long stay accommodation	474	0.4
Transfer from other hospital	9,915	9.1
New born	18	0.0
Other	57	0.1

Discharge Destination	N	%
Home	100,587	92.4
Long stay accommodation	3,086	2.8
Transfer to other hospital	3,531	3.2
Died	1,138	1.0
Other	483	0.4

Elective In-Patients					
10	108,825				
Discharges	N	%			
Total	108,825	100			
Acute	105,050	96.5			
Extended	3,775	3.5			
Bed Days	N	%			
Total	732,501	100			
Acute	507,874	69.3			
Extended	224,627	30.7			
(6)					
Length of Sta	У	Mean			
Total		6.7			
Acute		4.8			
Extended		59.5			
Sex	N	%			
Male	53,051	48.7			
Female	55,774	51.3			

Age Group	N	%
< 1 Years	1,808	1.7
1-14 Years	10,545	9.7
15-24 Years	5,526	5.1
25-34 Years	7,528	6.9
35-44 Years	10,823	9.9
45-54 Years	14,687	13.5
55-64 Years	19,438	17.9
65-74 Years	20,244	18.6
75-84 Years	14,444	13.3
85 Years and Over	3,782	3.5

Principa	al Procedure – Top 20 <sup>b</sup>	N	%	Total Mean LOS <sup>c</sup>	Acute Mean LOS <sup>d</sup>
1916	Generalised allied health interventions	8,456	8.7	17.7	10.7
0412	Tonsillectomy or adenoidectomy	4,044	4.2	1.5	1.5
1920	Administration of pharmacotherapy	3,760	3.9	6.4	5.2
1489	Arthroplasty of hip	3,108	3.2	8.8	8.4
0965	Cholecystectomy	3,063	3.1	2.9	2.8
1828	Sleep study	1,965	2.0	1.1	1.1
1518	Arthroplasty of knee	1,842	1.9	8.7	8.5
0990	Repair of inguinal hernia	1,743	1.8	2.2	2.1
1893	Administration of blood and blood products	1,644	1.7	5.2	3.8
1268	Abdominal hysterectomy	1,625	1.7	6.6	6.4
1788	Megavoltage radiation treatment	1,410	1.4	27.0	13.7
0671	Transluminal coronary angioplasty with stenting	1,352	1.4	1.8	1.8
1008	Panendoscopy with excision	1,133	1.2	6.3	4.9
1620	Excision of lesion(s) of skin and subcutaneous tissue	1,113	1.1	3.3	3.0
1744	Excision of lesion of breast	1,061	1.1	2.3	2.3
1269	Vaginal hysterectomy	959	1.0	5.0	4.9
0911	Fibreoptic colonoscopy with excision	956	1.0	5.6	4.4
0668	Coronary angiography	927	1.0	4.0	3.4
2015	Magnetic resonance imaging	902	0.9	8.4	6.0
0905	Fibreoptic colonoscopy	864	0.9	3.8	3.1

AR-DRG	- Top 10	N	%	Total Mean LOS <sup>c</sup>	Acute Mean LOS <sup>d</sup>
D11Z	Tonsillectomy and/or Adenoidectomy	4,077	3.7	1.5	1.5
Z60B	Rehabilitation w/o Catastrophic CC	3,284	3.0	22.8	13.3
103B	Hip Replacement w/o Catastrophic CC	2,999	2.8	8.4	8.3
H08B	Laparoscopic Cholecystectomy w/o Closed CDE w/o Cat or Sev CC	2,646	2.4	2.3	2.3
Z63B	Other Surgical Follow Up and Medical Care w/o Catastrophic CC	2,330	2.1	8.1	6.5
G10B	Hernia Procedures w/o CC	2,274	2.1	2.2	2.2
E63Z	Sleep Apnoea	2,124	2.0	1.3	1.3
J06Z	Major Procedures for Breast Conditions	2,024	1.9	3.9	3.9
N04B	Hysterectomy for Non- Malignancy w/o Catastrophic or Severe CC	1,920	1.8	5.2	5.2
104B	Knee Replacement w/o Catastrophic or Severe CC	1,634	1.5	8.2	8.1

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. % is based on in-patients with principal procedure reported. d Includes mean length of stay for acute in-patients only.
- 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>20</sup> Table 3.9 presents a summary of emergency in-patient activity reported to HIPE.

#### Emergency In-Patients - Profile

- Emergency in-patient discharges accounted for 27.2 per cent of total discharges (excl. *Maternity*) and 76.6 per cent of in-patients.
- Emergency in-patient discharges accounted for 77.4 per cent of in-patient bed days.
- Over 80 per cent of emergency in-patient discharges were admitted from an Emergency Department.

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

- Emergency in-patient discharges with a principal diagnoses pain in throat and chest accounted for 4.3 per cent of emergency in-patients.
- Emergency in-patient discharges with a principal diagnosis of *abdominal and* pelvic pain and other chronic obstructive pulmonary disease both accounted for 2.9 per cent of emergency in-patients.

## Emergency In-Patients – Top 20 Principal Procedures

- A principal procedure was recorded for 59.1 per cent of emergency in-patient discharges (see Table 3.4).
- *Generalised allied health interventions* were reported for 16.3 per cent of emergency in-patient discharges with a procedure recorded.
- Computerised tomography of brain was reported for 12.1 per cent of emergency in-patient discharges with a principal procedure recorded.

#### Emergency In-Patient - Top 10 AR-DRGs

- The top 3 AR-DRGs accounted for 9.3 per cent of emergency in-patient discharges reported to HIPE when analysed by case mix. 21
- Chest Pain accounted for 4.1 per cent, oesophagitis and gastroenteritis w/o cat/sev cc accounted for 2.6 per cent and abdominal pain or mesenteric adenitis accounted for 2.6 per cent of emergency in-patient discharges.

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 would not be possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

See Section Five for details of the case mix classification.

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

Princip	al Diagnosis – Top 20 <sup>a</sup>	N	%	Total ALOS <sup>c</sup>	Acute ALOS <sup>d</sup>
R07	Pain in throat and chest	15,343	4.3	2.3	2.3
R10	Abdominal and pelvic pain	10,206	2.9	2.5	2.5
J44	Other chronic obstructive pulmonary disease	10,172	2.9	9.3	7.2
J22	Unspecified acute lower respiratory infection	9,108	2.6	7.1	5.6
J18	Pneumonia, organism unspecified	8,346	2.3	11.2	7.5
N39	Other disorders of urinary system	7,337	2.1	8.6	5.7
R55	Syncope and collapse	6,443	1.8	5.8	4.3
K35	Acute appendicitis	6,018	1.7	3.6	3.6
S52	Fracture of forearm	5,948	1.7	2.2	1.9
A09	Other gastroenteritis and colitis of infectious and unspecified origin	5,688	1.6	3.3	2.9
121	Acute myocardial infarction	5,463	1.5	8.3	6.3
150	Heart failure	5,389	1.5	12.3	8.7
148	Atrial fibrillation and flutter	5,204	1.5	5.8	4.8
S82	Fracture of lower leg, including ankle	4,592	1.3	5.3	4.0
L03	Cellulitis	4,514	1.3	6.9	5.8
S72	Fracture of femur	4,259	1.2	18.2	11.2
R51	Headache	4,254	1.2	2.5	2.4
163	Cerebral infarction	4,249	1.2	23.6	10.3
120	Angina pectoris	4,084	1.1	5.3	5.0
R56	Convulsions, not elsewhere classified	3,572	1.0	3.8	3.1

Admission Source	N	%
Home	323,581	90.8
Long stay accommodation	8,082	2.3
Transfer from other hospital	12,936	3.6
New born	9,565	2.7
Other	2,207	0.6

Discharge Destination	N	%
Home	301,030	84.5
Long stay accommodation	20,131	5.6
Transfer to other hospital	19,976	5.6
Died	9,932	2.8
Other	5,302	1.5

Mode of Emergency Admission	N	%
Emergency Department	285,668	80.2
Medical assessment unit in-patient	10,625	3.0
Medical assessment unit day Patient	11,758	3.3
Other	47,899	13.4
Unknown	421	0.1

Emergency In-Patients	
356,371	

Total

344,178	96.6
12,193	3.4
N	%
2,504,015	100
1,686,122	67.3
817,893	32.7
	N 2,504,015 1,686,122

356,371

Mean
7.0
4.9
67.1

Sex	N	%
Male	186,006	52.2
Female	170,365	47.8

Age Group	N	%
< 1 Years	26,011	7.3
1–14 Years	43,869	12.3
15-24 Years	26,695	7.5
25-34 Years	28,785	8.1
35-44 Years	30,557	8.6
45-54 Years	34,680	9.7
55-64 Years	41,498	11.6
65-74 Years	47,006	13.2
75-84 Years	51,398	14.4
85 Years	25,872	7.3
and Over		

Principa	l Procedure – Top 20 <sup>b</sup>	N	%	Total ALOS <sup>c</sup>	Acute ALOS <sup>d</sup>
1916	Generalised allied health interventions	34,263	16.3	10.2	7.4
1952	Computerised tomography of brain	25,389	12.1	10.4	5.8
1008	Panendoscopy with excision	7,380	3.5	10.7	7.3
1920	Administration of pharmacotherapy	6,762	3.2	7.4	5.6
0926	Appendicectomy	6,511	3.1	3.5	3.5
2015	Magnetic resonance imaging	6,326	3.0	12.1	7.4
1963	Computerised tomography of abdomen and pelvis	5,182	2.5	6.4	5.6
1893	Administration of blood and blood products	4,900	2.3	9.4	7.0
1966	Other computerised tomography	4,699	2.2	8.8	6.7
0668	Coronary angiography	3,938	1.9	7.0	6.1
0569	Ventilatory support	3,407	1.6	21.7	8.6
1427	Closed reduction of fracture of radius	3,344	1.6	1.8	1.6
1962	Computerised tomography of abdomen	3,184	1.5	6.8	5.5
0570	Noninvasive ventilatory support	2,981	1.4	16.3	10.0
0030	Lumbar puncture	2,679	1.3	7.6	5.5
1960	Computerised tomography of chest	2,610	1.2	10.0	7.6
1005	Panendoscopy	2,560	1.2	10.7	7.3
1539	Open reduction of fracture of	2,276	1.1	4.5	3.7
	ankle or toe				
0911	Fibreoptic colonoscopy with excision	2,176	1.0	12.1	8.8
1961	Computerised tomography of chest,	2,099	1.0	11.0	8.4
	abdomen and pelvis				

AR-DRG	– Top 10	N	%	Total ALOS <sup>c</sup>	Acute ALOS <sup>d</sup>
F74Z	Chest Pain	14,439	4.1	2.2	2.2
G67B	Oesophagitis and Gastroenteritis W/O Cat/Sev CC	9,228	2.6	2.3	2.2
G66Z	Abdominal Pain or Mesenteric Adenitis	9,225	2.6	2.2	2.2
E65B	Chronic Obstructive Airways Disease W/O Catastrophic CC	7,587	2.1	6.9	6.2
G70B	Other Digestive System Diagnoses	7,371	2.1	3.4	3.2
	W/O Catastrophic or Severe CC				
D63Z	Otitis Media and URI	7,239	2.0	2.1	2.1
B77Z	Headache	6,211	1.7	2.5	2.4
L63B	Kidney and Urinary Tract Infections W/O Catastrophic or Severe CC	5,674	1.6	5.2	4.5
F73B	Syncope and Collapse W/O Catastrophic or Severe CC	5,333	1.5	3.6	3.3
G07B	Appendicectomy W/O Malignancy or Peritonitis W/O Cat or Sev CC	5,272	1.5	3.1	3.1

Notes: Percentage columns are subject to rounding.

- a ICD-10-AM diagnosis codes are analysed at three-digit level.
- b ACHI Procedure codes are analysed at block level. % is based on in-patients with principal procedure reported. d
- 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).
  - 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>22</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 reported by block at chapter level with 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*) Principal Diagnosis by Age and Sex

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

- Over 31 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).
- The chapter diseases of the digestive system had the second highest number of principal diagnoses with over 9.9 per cent of total discharges (excl. Maternity).
- For discharges aged less than 15 years the most common principal diagnosis came from the chapter diseases of the respiratory system which accounted for 12.1 per cent of discharges within this age category.
- Factors influencing health status and contact with health services were the most common principal diagnosis for the remaining age categories.

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

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 this 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 ischaemic heart disease may in fact 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>23</sup>

<sup>&</sup>lt;sup>22</sup> See Section Four for details of the diagnoses and procedures reported for *Maternity* discharges.

See Section Two for details of discharge destination.

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 (7.4 days) was recorded for acute in-patient discharges with principal diagnosis of neoplasms. When analysed by sex, male discharges reported 7.8 days and females 7.0 days.
- For discharges aged less than 15 years, those with a principal diagnosis of certain conditions originating in the perinatal period recorded an acute in-patient mean length of stay of 5.8 days.
- The longest acute in-patient mean length of stay for discharges aged 15-44 years and 45-64 years was reported for those with a principal diagnosis of neoplasms; 5.9 and 7.0 days respectively.
- The shortest acute in-patient mean length of stay (2.7 days) was recorded for acute in-patient discharges with a principal diagnoses from the chapter diseases of the ear and mastoid process. When analysed by sex, male discharges reported 2.5 days and female discharges 2.8 days.

#### 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. Almost 3.5 million diagnoses were recorded for total discharges (excl. Maternity) reported to HIPE. As one principal diagnosis and up to nineteen 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 780,457 diagnoses, or 22 per cent of all-listed diagnoses (excl. Maternity) reported.
- Neoplasms accounted for 467,262 diagnoses or 13.4 per cent of all-listed diagnoses reported for total discharges (excl. *Maternity*).
- For total discharges (excl. *Maternity*) aged less than 15 years and those aged 15— 44 years, external causes of morbidity and mortality were recorded for 13.2 per cent 11.7 per cent of all-listed diagnoses reported, respectively.<sup>24</sup>

<sup>&</sup>quot;The codes in this chapter 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>	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	Total
Total Discharges (excl. Maternity)	_	72,583	142,467	204,979	254,949	674,978	55,938	160,639	200,694	218,278	635,549	128,521	303,106	405,673	473,227	1,310,52
Certain infectious and parasitic diseases	A00-B99	5,636	2,829	1,386	1,573	11,424	5,223	2,765	1,491	2,041	11,520	10,859	5,594	2,877	3,614	22,94
Intestinal infectious diseases including diarrhoea	A00-A09	3,443	676	517	672	5,308	3,295	921	664	1,090	5,970	6,738	1,597	1,181	1,762	11,27
Tuberculosis	A15-A19	9	167	49	45	270	~	94	38	36	172	13	261	87	81	442
Septicaemia	A40-A41	93	88	185	511	877	48	65	185	479	777	141	153	370	990	1,654
Human immunodeficiency virus [HIV] disease	B20-B24	~	96	31	0	132	~	73	8	0	84	8	169	39	0	210
Neoplasms	C00-D48	2,938	7,853	18,497	26,861	56,149	2,492	14,341	20,268	21,403	58,504	5,430	22,194	38,765	48,264	114,653
Malignant neoplasms	C00-C96	2,157	4,485	14,404	20,789	41,835	1,785	5,101	14,147	16,579	37,612	3,942	9,586	28,551	37,368	79,447
Malignant neoplasm of colon, rectum and anus (primary)	C18-C21	~	195	1,957	2,738	4,894	~	239	1,078	1,651	2,969	~	434	3,035	4,389	7,863
Malignant neoplasm of trachea, bronchus and lung (primary)	C33-C34	0	111	1,339	1,877	3,327	0	126	973	1,416	2,515	0	237	2,312	3,293	5,842
Malignant neoplasm of skin (primary)	C43-C44	~	359	1,315	3,741	5,420	~	362	1,024	2,688	4,077	8	721	2,339	6,429	9,497
Malignant neoplasm of breast (primary)	C50	0	~	11	26	40	0	1,100	4,134	2,234	7,468	0	1,103	4,145	2,260	7,50
Malignant neoplasms of female genital organs (primary)	C51-C58	0	0	0	0	0	15	649	1,539	1,380	3,583	15	649	1,539	1,380	3,583
Malignant neoplasm of prostate (primary)	C61	0	22	1,293	2,338	3,653	0	0	0	0	0	0	22	1,293	2,338	3,65
Malignant neoplasm of bladder (primary)	C67	0	68	353	1,113	1,534	0	25	166	552	743	0	93	519	1,665	2,27
Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81-C96	1,216	2,132	4,041	4,223	11,612	1,100	1,477	2,454	3,354	8,385	2,316	3,609	6,495	7,577	19,99
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10-D48	781	3,338	3,876	5,462	13,457	705	7,471	5,365	3,724	17,265	1,486	10,809	9,241	9,186	30,722
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	D50-D89	1,969	1,857	1,897	3,040	8,763	1,384	2,513	2,590	3,531	10,018	3,353	4,370	4,487	6,571	18,78
Endocrine, nutritional and metabolic diseases	E00-E89	1,692	7,333	12,002	6,805	27,832	1,191	3,444	5,382	4,900	14,917	2,883	10,777	17,384	11,705	42,749
Diabetes mellitus	E10-E14	299	1,227	2,268	2,694	6,488	295	837	1,081	2,097	4,310	594	2,064	3,349	4,791	10,798
Cystic fibrosis	E84	369	623	7	0	999	320	501	15	0	836	689	1,124	22	0	1,83
Mental and behavioural disorders	F00-F99	412	1,404	1,203	584	3,603	245	879	647	699	2,470	657	2,283	1,850	1,283	6,07
Mental and behavioural disorders due to alcohol	F10	39	792	924	187	1,942	51	280	309	76	716	90	1,072	1,233	263	2,65
Mental and behavioural disorders due to use of other psychoactive substance	F11–F19	~	179	18	~	204	~	82	17	7	108	~	261	35	12	312
Diseases of nervous system	G00-G99	1,447	3,600	4,208	3,335	12,590	1,152	5,813	4,281	3,536	14,782	2,599	9,413	8,489	6,871	27,37
Multiple sclerosis	G35	~	915	515	34	1,465	0	2,421	978	44	3,443	~	3,336	1,493	78	4,90
Epilepsy	G40, G41	620	732	442	277	2,071	563	664	297	302	1,826	1,183	1,396	739	579	3,89
Transient cerebral ischaemic attacks and related syndromes	G45	0	68	455	965	1,488	~	73	327	1,188	1,592	~	141	782	2,153	3,08
Diseases of the eye and adnexa	H00-H59	759	1,457	2,922	7,298	12,436	708	1,502	2,918	10,637	15,765	1,467	2,959	5,840	17,935	28,20
Diseases of the ear and mastoid process	H60-H95	2,455	1,310	975	699	5,439	1,696	1,392	991	664	4,743	4,151	2,702	1,966	1,363	10,18
Diseases of the circulatory system	100-199	583	5,533	16,346	21,378	43,840	450	4,811	8,301	17,354	30,916	1,033	10,344	24,647	38,732	74,750
Hypertensive diseases	I10-I15	33	272	447	309	1,061	19	235	404	536	1,194	52	507	851	845	2,25
Angina pectoris	120	0	170	1,707	1,907	3,784	0	67	627	1,194	1,888	0	237	2,334	3,101	5,672
Acute myocardial infarction	121-122	0	262	1,909	2,126	4,297	0	64	417	1,349	1,830	0	326	2,326	3,475	6,12
Other ischaemic heart disease	123-125	0	310	3,425	3,525	7,260	~	77	1,059	1,827	2,964	~	387	4,484	5,352	10,22
Pulmonary heart disease and diseases of pulmonary circulation	126–128	~	169	277	378	829	12	170	195	558	935	17	339	472	936	1,76
Conduction disorders and cardiac arrhythmias	144-149	97	700	2,494	3,444	6,735	60	344	935	3,003	4,342	157	1,044	3,429	6,447	11,07
Heart failure	150	6	45	423	2,767	3,241	7	18	211	2,327	2,563	13	63	634	5,094	5,80
Cerebrovascular disease	160-169	24	249	1,143	2,466	3,882	34	235	760	2,539	3,568	58	484	1,903	5,005	7,45
Atherosclerosis (non-coronary)	170	0	18	306	637	961	~	27	95	466	589	~	45	401	1,103	1,55
Diseases of the respiratory system	J00-J99	8,803	5,464	6,075	12,899	33,241	6,741	6,026	6,049	12,190	31,006	15,544	11,490	12,124	25,089	64,24
Acute upper respiratory infections and influenza Pneumonia	J00-J11 J12-J18	2,790 656	772 541	150 806	97 <b>2,78</b> 5	3,809 4,788	2,093 608	1,098 453	174 679	102 2,730	3,467 4,470	4,883 1,264	1,870 994	324 1,485	199 5,515	7,27 9,25
Chronic diseases of tonsils and adenoids	J35	1.532	492	25	12	2.061	1,505	994	47	9	2.555	3.037	1.486	72	21	4.61

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

Principal Diagnosis	ICD-10-AM			Male			Female (excl. Maternity)					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			
Chronic obstructive pulmonary disease and bronchiectasis	J40–J44, J47	43	330	1,608	4,935	6,916	27	388	1,936	4,322	6,673	70	718	3,544	9,257	13,58			
Asthma	J45-J46	1,151	516	657	191	2,515	671	862	864	318	2,715	1,822	1,378	1,521	509	5,2			
Diseases of the digestive system	K00-K93	6,400	20,329	20,856	16,881	64,466	4,929	21,988	20,802	17,704	65,423	11,329	42,317	41,658	34,585	129,88			
Diseases of oesophagus, stomach and duodenum	K20-K31	719	5,887	6,837	4,932	18,375	591	5,634	6,904	5,257	18,386	1,310	11,521	13,741	10,189	36,70			
Diseases of appendix	K35-K38	1,099	2,069	309	102	3,579	891	1,856	279	87	3,113	1,990	3,925	588	189	6,69			
Inguinal hernia	K40	486	822	1,129	1,128	3,565	100	40	66	96	302	586	862	1,195	1,224	3,8			
Noninfective enteritis and colitis	K50-K52	221	3,229	1,542	725	5,717	205	3,327	1,652	932	6,116	426	6,556	3,194	1,657	11,8			
Alcoholic liver disease	K70	0	210	460	133	803	0	95	226	43	364	0	305	686	176	1,1			
Cholelithiasis	K80	~	431	847	1,132	2,412	21	2,331	1,543	1,420	5,315	23	2,762	2,390	2,552	7,7			
Diseases of the skin and subcutaneous tissue	L00-L99	1,390	13,010	8,255	6,155	28,810	1,178	11,233	7,178	6,441	26,030	2,568	24,243	15,433	12,596	54,8			
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02-L03	355	1,131	968	936	3,390	280	631	601	1,136	2,648	635	1,762	1,569	2,072	6,0			
Diseases of the musculoskeletal system and connective tissue	M00-M99	1,469	8,005	9,740	6,986	26,200	1,473	7,644	12,940	11,477	33,534	2,942	15,649	22,680	18,463	59,7			
Rheumatoid arthritis	M05-M06	~	324	704	463	1,492	~	718	1,576	839	3,134	~	1,042	2,280	1,302	4,6			
Coxarthrosis and Gonarthrosis	M16-M17	~	276	1,380	1,923	3,581	0	198	1,615	2,711	4,524	~	474	2,280	4,634	8,1			
Intervertebral disc disorders	M50-M51	~	547	518	208	1.275	~	578	582	308	1,472	6	1.125	1.100	516	2,7			
Dorsalgia (back pain)	M54	55	1,448	1,821	937	4,261	53	2,055	2,756	1,993	6.857	108	3,503	4,577	2,930	11,1			
Diseases of the genitourinary system	N00-N99	4.444	4.766	5.732	7.953	22.895	2.646	18.315	13.274	7.441	41.676	7.090	23.081	19.006	15.394	64,5			
Chronic kidney disease	N18	201	345	366	577	1,489	148	202	246	365	961	349	547	612	942	2,4			
Urolithiasis	N20-N23	63	1,508	1,353	475	3,399	35	693	680	185	1,593	98	2,201	2,033	660	4,9			
Hyperplasia of prostate	N40	0	82	1,279	2,589	3,950	0	0	0	0	0	0	82	1,279	2,589	3,9			
Disorders of breast	N60-N64	8	104	45	35	192	10	1,116	914	219	2,259	18	1,220	959	2,363	2,4			
Inflammatory diseases of female pelvic organs	N70-N77	0	0	0	0	0	28	1.026	313	65	1.432	28	1.026	313	65	1.4			
Noninflammatory disorders of female genital tract	N80-N98	0	0	0	0	0	182	12,486	8,142	1,777	22,587	182	12,486	8,142	1.777	22,5			
Pregnancy, childbirth and the puerperium <sup>a</sup>	000-099	0	0	0	0	0	~	229	~	0	231	~	229	~	0	2			
Pregnancy with abortive outcome	000-008	0	0	0	0	0	0	16	0	0	16	0	16	0	0	_			
Certain conditions originating in the perinatal period	P00-P96	5,576	0	0	0	5,576	4,167	0	~	0	4,168	9,743	0	~	0	9,7			
Congenital malformations, deformations and	Q00-Q99	5,415	513	162	86	6,176	3,697	753	219	93	4,762	9,112	1,266	381	179	10,9			
chromosomal abnormalities	400 400	5,125	525	-0-		0,270	0,007	, 55		30	.,, 02	5,111	2,200	501		20,5			
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	R00-R99	5,458	12,663	14,803	14,529	47,453	4,906	18,199	15,569	14,638	53,312	10,364	30,862	30,372	29,167	100,7			
Abdominal and pelvic pain	R10	988	2,428	1,694	960	6,070	1,195	6,486	2,745	1,378	11,804	2,183	8,914	4,439	2,338	17,8			
Injury, poisoning and certain other consequences of	S00-T98	7,488	15,377	6,271	5,558	34.694	4,941	6,793	5,409	8,213	25,356	12,429	22,170	11,680	13,771	60,0			
external causes	300 130	7,400	13,377	0,271	3,330	34,034	7,371	0,755	3,403	0,213	23,330	12,423	22,170	11,000	13,771	00,0			
Intracranial injury	S06	202	799	359	390	1,750	109	240	158	275	782	311	1,039	517	665	2,5			
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	2,289	3,102	611	560	6,562	1,467	689	324	580	3,060	3,756	3,791	935	1,140	9,6			
Fracture of femur	S72	136	119	254	982	1,491	59	50	255	2,453	2,817	195	169	509	3,435	4,3			
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36-T65	225	1,290	387	117	2,019	258	1,397	509	120	2,284	483	2,687	896	237	4,3			
Factors influencing health status and contact with	U00-U49,	8,249	29,164	73,649	112,329	223,391	6,718	31,999	72,383	75,316	186,416	14,967	61,163	146,032	187,645	409,8			
health services <sup>b</sup> Other medical care (including radiotherapy and	<b>Z00–Z99</b> Z51	3,153	5,700	31,970	46,469	87,292	2,628	13,839	45,114	29,289	90,870	5,781	19,539	77,084	75,758	178,1			
chemotherapy sessions)	231	3,133	3,700	31,570	40,409	01,232	2,028	13,039	45,114	23,203	90,670	3,/61	13,339	77,064	13,138	1/0,1			

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

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			Male				Femal	e (excl. <i>Mate</i>	ernitv)			Total Disch	arges (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
Acute In-Patient Discharges	_	2.8	3.4	4.9	7.0	4.8	2.9	3.3	4.8	7.3	5.0	2.8	3.3	4.8	7.1	4.9
Certain infectious and parasitic diseases	A00-B99	2.0	4.9	6.3	8.1	3.7	2.0	4.3	5.9	8.0	3.8	2.0	4.6	6.1	8.1	3.8
Intestinal infectious diseases including diarrhoea	A00-A09	1.8	3.5	4.4	6.4	2.6	1.8	3.2	5.1	7.0	3.1	1.8	3.4	4.8	6.8	2.9
Tuberculosis	A15-A19	10.0	9.8	11.4	13.5	10.7	~	10.7	10.9	13.5	11.0	7.5	10.1	11.2	13.5	10.8
Septicaemia	A40-A41	5.7	9.3	9.1	10.0	9.4	4.5	7.8	8.7	10.0	9.1	5.2	8.7	8.9	10.0	9.3
Human immunodeficiency virus [HIV] disease	B20-B24	~	10.7	13.8		11.5	~	12.8	~		12.3	~	11.5	12.9		11.8
Neoplasms	C00-D48	3.6	6.7	7.6	8.6	7.8	3.8	5.5	6.6	8.5	7.0	3.7	5.9	7.0	8.5	7.4
Malignant neoplasms	C00-C96	3.7	7.1	7.8	8.9	8.1	3.9	6.5	7.0	8.8	7.6	3.8	6.7	7.4	8.9	7.9
Malignant neoplasm of colon, rectum and anus (primary)	C18-C21	~	8.4	8.9	10.6	9.9	~	7.0	8.5	11.1	10.0	~	7.7	8.8	10.8	9.9
Malignant neoplasm of trachea, bronchus and lung (primary)	C33-C34	-	7.2	7.3	9.5	8.6	-	7.2	7.6	9.3	8.6	-	7.2	7.4	9.4	8.6
Malignant neoplasm of skin (primary)	C43-C44	~	5.2	5.3	4.7	4.9	_	4.0	4.0	5.6	5.1	~	4.7	4.7	5.1	5.0
Malignant neoplasm of breast (primary)	C50	-	-	3.7	5.5	5.0	-	5.0	5.2	6.5	5.6	-	5.0	5.2	6.5	5.6
Malignant neoplasms of female genital organs (primary)	C51-C58	-	_	-	-	-	~	6.1	6.8	8.4	7.3	~	6.1	6.8	8.4	7.3
Malignant neoplasm of prostate (primary)	C61	-	8.8	7.1	8.2	7.8	-	-	-		-	-	8.8	7.1	8.2	7.8
Malignant neoplasm of bladder (primary)	C67	_	4.8	5.9	6.4	6.2	-	9.1	6.2	6.7	6.7	-	5.7	6.0	6.5	6.4
Malignant neoplasms of lymphoid, haematopoietic and related	C81-C96	3.7	8.8	9.1	9.1	8.2	4.0	9.1	8.5	8.7	7.9	3.8	8.9	8.8	8.9	8.0
tissue																
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10-D48	3.3	4.6	5.4	5.8	5.2	3.4	4.0	5.2	6.0	4.9	3.3	4.1	5.2	5.9	5.0
Diseases of the blood and blood-forming organs and certain	D50-D89	3.1	4.6	5.3	6.0	4.9	2.8	4.4	5.3	5.9	5.0	3.0	4.5	5.3	5.9	4.9
disorders involving the immune mechanism	D30 D03	3.1	4.0	3.3	0.0	4.5	2.0	7.7	3.3	3.5	3.0	3.0	4.5	3.3	3.5	4.5
Endocrine, nutritional and metabolic diseases	E00-E89	4.2	5.7	5.6	6.9	5.9	4.2	5.0	4.9	6.9	5.6	4.2	5.4	5.3	6.9	5.7
Diabetes mellitus	E10-E14	3.9	3.4	5.8	7.3	5.6	3.5	3.8	5.6	7.1	5.5	3.7	3.6	5.8	7.2	5.6
Cystic fibrosis	E84	7.4	12.1	~	7.5	10.8	7.8	11.8	12.2	7.1	10.3	7.6	12.0	13.0		10.6
Mental and behavioural disorders	F00-F99	2.1	3.8	4.2	8.2	4.5	2.5	4.5	4.6	8.9	5.3	2.3	4.1	4.4	8.5	4.8
Mental and behavioural disorders due to alcohol	F10	1.1	2.9	4.0	6.4	3.7	1.1	2.7	4.2	6.2	3.6	1.1	2.8	4.1	6.4	3.7
Mental and behavioural disorders due to use of other psychoactive	F11-F19	~	8.0	8.7	~	7.9	~	9.6	10.8	11.0	9.8	~	8.5	9.7	7.9	8.5
substance	111 115		0.0	0.7		7.5		3.0	10.0	11.0	5.0		0.5	3.7	7.5	0.5
Diseases of nervous system	G00-G99	3.2	3.3	3.9	6.2	4.3	3.3	3.7	4.4	6.4	4.7	3.2	3.5	4.1	6.3	4.5
Multiple sclerosis	G35	~	4.8	6.0	11.0	5.7	-	5.1	6.9	8.4	5.8	~	5.0	6.5	9.5	5.8
Epilepsy	G40, G41	3.4	3.3	4.4	6.2	4.0	3.1	3.7	5.0	6.6	4.3	3.2	3.5	4.6	6.4	4.1
Transient cerebral ischaemic attacks and related syndromes	G45	-	3.9	4.2	5.4	5.0	~	3.7	4.1	5.5	5.1	~	3.8	4.2	5.5	5.1
Diseases of the eye and adnexa	H00-H59	2.3	3.0	3.5	3.6	3.3	2.0	3.0	3.4	3.4	3.1	2.2	3.0	3.4	3.5	3.2
Diseases of the ear and mastoid process	H60-H95	1.9	2.4	3.1	4.5	2.5	2.0	2.7	3.3	3.6	2.8	1.9	2.6	3.2	4.0	2.7
Diseases of the circulatory system	100-199	3.1	4.4	5.1	6.9	6.0	3.3	4.2	5.3	7.4	6.6	3.2	4.3	5.1	7.2	6.2
Hypertensive diseases	110-115	3.3	3.2	3.3	4.8	3.7	3.9	2.7	3.1	3.9	3.4	3.5	3.0	3.2	4.2	3.5
Angina pectoris	120	-	3.1	4.2	5.4	4.8	-	2.9	4.0	5.3	4.8	-	3.1	4.1	5.4	4.8
Acute myocardial infarction	121-122	-	4.0	4.8	6.8	5.8	-	4.5	5.1	7.6	6.9	-	4.1	4.9	7.1	6.1
Other ischaemic heart disease	123-125	-	3.3	4.0	5.2	4.6	~	4.3	4.6	5.1	4.9	~	3.5	4.1	5.2	4.7
Pulmonary heart disease and diseases of pulmonary circulation	126-128	~	7.0	7.2	9.1	8.0	6.0	6.2	7.9	10.1	8.9	5.3	6.6	7.5	9.7	8.5
Conduction disorders and cardiac arrhythmias	144–149	2.9	2.9	3.9	4.9	4.3	2.8	2.7	4.0	5.6	5.0	2.9	2.8	3.9	5.2	4.6
Heart failure	150	~	7.4	7.7	8.8	8.7	7.0	4.4	7.1	9.0	8.8	8.1	6.6	7.5	8.9	8.7
Cerebrovascular disease	160–169	8.2	7.6	8.6	9.5	9.1	8.9	7.1	8.6	10.2	9.6	8.6	7.4	8.6	9.8	9.3
Atherosclerosis (non-coronary)	170	-	9.9	6.9	8.7	8.1	-	8.0	6.8	9.3	8.9	-	9.2	6.9	8.9	8.4
Diseases of the respiratory system	J00-J99	2.3	3.6	5.8	7.9	5.3	2.4	3.1	5.7	8.0	5.3	2.3	3.3	5.8	7.9	5.3
Acute upper respiratory infections and influenza	J00-J11	1.8	2.4	3.3	4.1	2.0	1.8	2.3	2.8	5.7	2.1	1.8	2.4	3.1	5.0	2.1
Pneumonia	J12-J18	4.1	5.9	7.2	9.0	7.6	4.2	5.6	7.3	9.0	7.7	4.1	5.8	7.3	9.0	7.7
Chronic diseases of tonsils and adenoids	J35	1.4	1.7	2.1	1.6	1.5	1.4	1.7	1.6	~	1.5	1.4	1.7	1.8	2.9	1.5
Chronic obstructive pulmonary disease and bronchiectasis	J40-J44, J47	3.9	4.9	6.0	7.5	7.1	2.9	4.2	6.3	7.9	7.3	3.6	4.5	6.2	7.7	7.2
Asthma	J45-J46	1.9	3.2	3.9	5.6	2.5	2.0	3.6	4.5	5.2	3.4	1.9	3.4	4.3	5.3	3.0
Diseases of the digestive system	K00-K93	2.9	4.0	5.1	6.2	4.8	3.0	3.9	5.2	6.7	5.0	3.0	3.9	5.1	6.5	4.9
Diseases of oesophagus, stomach and duodenum	K20-K31	2.6	3.0	4.3	5.7	4.2	2.3	3.0	4.5	6.2	4.5	2.4	3.0	4.4	6.0	4.3
Diseases of appendix	K35-K38	3.4	3.2	4.6	7.9	3.5	3.5	3.2	5.6	7.2	3.6	3.5	3.2	5.1	7.6	3.6

**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.)

n to to I plan out	ICD-10-AM			Male				Fem <u>al</u>	e (excl. <i>Mat</i>	ernity)			Total Disch	arges (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
Inguinal hernia	K40	2.0	1.7	2.0	3.0	2.4	2.0	2.4	3.7	3.7	3.3	2.0	1.7	2.1	3.1	2.5
Noninfective enteritis and colitis	K50-K52	3.2	7.0	7.1	7.2	6.7	3.9	6.3	6.4	7.8	6.5	3.6	6.6	6.7	7.6	6.6
Alcoholic liver disease	K70	-	8.1	8.9	9.1	8.7	-	9.7	10.7	10.9	10.4	-	8.6	9.5	9.6	9.2
Cholelithiasis	K80	~	4.0	4.6	6.5	5.3	5.4	3.2	3.8	6.4	4.2	5.1	3.3	4.1	6.5	4.6
Diseases of the skin and subcutaneous tissue	L00-L99	2.9	3.4	5.6	7.4	4.8	2.9	3.4	5.4	7.7	5.2	2.9	3.4	5.5	7.5	5.0
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02-L03	3.1	4.0	5.7	7.4	5.3	3.0	3.8	5.5	7.7	5.8	3.0	3.9	5.6	7.5	5.5
Diseases of the musculoskeletal system and connective tissue	M00-M99	2.9	3.0	4.7	7.0	4.9	3.6	3.3	4.6	7.1	5.4	3.2	3.2	4.7	7.0	5.1
Rheumatoid arthritis	M05-M06	-	8.3	5.1	7.6	6.6	-	3.0	4.2	6.4	4.9	-	4.7	4.5	6.8	5.5
Coxarthrosis and Gonarthrosis	M16-M17	~	5.8	6.7	8.4	7.7	-	5.3	7.1	8.7	8.1	~	5.6	6.9	8.6	7.9
Intervertebral disc disorders	M50-M51	~	3.5	4.3	6.8	4.3	~	3.7	4.8	7.1	4.7	~	3.6	4.5	7.0	4.5
Dorsalgia (back pain)	M54	1.9	2.9	4.2	5.5	3.9	2.4	3.4	3.8	6.1	4.3	2.1	3.2	3.9	5.9	4.1
Diseases of the genitourinary system	N00-N99	2.5	3.1	4.5	6.7	4.7	2.9	2.9	4.0	6.8	4.2	2.7	2.9	4.1	6.8	4.4
Chronic kidney disease	N18	3.3	5.7	7.2	6.6	6.1	3.6	6.6	6.2	7.6	6.5	3.4	6.1	6.8	7.0	6.3
Urolithiasis	N20-N23	2.9	2.5	2.8	4.2	2.9	3.3	2.9	3.8	5.7	3.5	3.1	2.6	3.1	4.6	3.1
Hyperplasia of prostate	N40		-	4.9	5.6	5.4	-	-	-	-	-	-	-	4.9	5.6	5.4
Disorders of breast	N60-N64	~	2.1	3.7	~	2.4	2.9	2.6	2.8	5.8	3.0	2.8	2.6	2.9	5.4	3.0
Inflammatory diseases of female pelvic organs	N70-N77	-	-	-	-	-	3.0	2.7	3.7	4.7	3.0	3.0	2.7	3.7	4.7	3.0
Noninflammatory disorders of female genital tract	N80-N98	-	-	-	-	-	2.1	2.5	3.4	4.2	3.1	2.1	2.5	3.4	4.2	3.1
Pregnancy, childbirth and the puerperium <sup>b</sup>	000-099	-	-	-	-	-	~	3.0	~	-	3.0	~	3.0	~	-	3.0
Pregnancy with abortive outcome	000-008	-	-	-	-	-	-	3.4	-	-	3.4	-	3.4	-	-	3.4
Certain conditions originating in the perinatal period	P00-P96	5.7	-	-	-	5.7	6.0		~	-	6.0	5.8		~	-	5.8
Congenital malformations, deformations and chromosomal	Q00-Q99	4.4	3.8	5.1	7.1	4.4	4.7	4.2	5.1	6.7	4.7	4.5	4.0	5.1	6.9	4.5
abnormalities																
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	R00-R99	1.9	2.2	2.9	4.8	3.1	2.2	2.3	3.0	4.9	3.2	2.0	2.2	2.9	4.8	3.2
Abdominal and pelvic pain	R10	1.6	2.3	2.8	4.0	2.5	1.8	2.2	3.0	4.2	2.5	1.7	2.2	2.9	4.1	2.5
Injury, poisoning and certain other consequences of external causes	S00-T98	1.6	2.6	4.3	7.5	3.5	1.7	2.7	3.9	8.1	4.5	1.6	2.6	4.1	7.9	3.9
Intracranial injury	S06	1.8	3.4	5.2	7.4	4.4	1.9	3.3	4.3	8.0	4.8	1.8	3.4	4.9	7.6	4.6
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	1.2	2.0	2.7	4.5	2.0	1.3	1.7	2.4	5.5	2.3	1.2	2.0	2.6	5.0	2.1
Fracture of femur	S72	5.1	6.4	8.6	12.4	10.5	5.8	7.9	8.8	12.2	11.6	5.3	6.8	8.7	12.3	11.2
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36-T65	1.3	2.1	3.0	5.0	2.4	1.5	2.0	2.9	5.8	2.4	1.4	2.1	2.9	5.4	2.4
Factors influencing health status and contact with health services <sup>c</sup>	U00–U49, Z00–Z99	2.0	4.8	5.9	8.2	5.5	2.2	3.8	7.0	11.0	7.0	2.1	4.2	6.4	9.7	6.3
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	5.6	3.1	2.9	3.7	3.5	5.4	2.4	2.5	3.8	3.6	5.5	2.8	2.7	3.7	3.6

Notes:

- ~ Denotes five or less discharges reported to HIPE.
- Mean length of stay cannot be calculated as no acute in-patients (length of stay of 30 days or less) 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 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)

Diagnosis	ICD-10-AM			Male				Fema	le (excl. <i>Mate</i>	ernity)			Total Di	scharges (excl. I	Maternity)	
	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)		72.583	142.467	204.979	254.949	674.978	55.938	160.639	200.694	218.278	635.549	128.521	303.106	405.673	473.227	1.310.527
All Conditions	_	171.902	331.921	534.781	783.919	1.822.523	132.611	331.684	500.367	694,694	1.659.356	304.513	663,605	1.035,148	1.478.613	3,481,879
Certain infectious and parasitic diseases	A00-B99	8,948	8,357	7,495	10,767	35,567	8,258	7,929	6,689	13,633	36,509	17,206	16,286	14,184	24,400	72,076
Intestinal infectious diseases including	A00-A09	4,084	1,185	1,192	1,977	8,438	3,816	1,557	1,335	2,913	9,621	7,900	2,742	2,527	4,890	18,059
diarrhoea	A00 A03	4,004	1,103	1,132	1,577	0,430	3,010	1,337	1,555	2,313	3,021	7,500	2,772	2,327	4,030	10,033
Tuberculosis	A15-A19	12	219	84	85	400	~	125	61	66	257	17	344	145	151	657
Septicaemia	A40-A41	187	434	945	2,277	3,843	119	344	742	1,980	3,185	306	778	1,687	4,257	7,028
Human immunodeficiency virus [HIV] disease	B20-B24	20	320	135	2,277	483	0	544	207	34	244	20	323	342	4,257	7,028
, , ,																
Neoplasms	C00-D48	7,365	18,747	78,592	111,903	216,607	6,036	43,027	114,265	87,327	250,655	13,401	61,774	192,857	199,230	467,262
Malignant neoplasms	C00-C96	6,349	14,445	72,912	102,354	196,060	5,060	31,162	102,928	79,556	218,706	11,409	45,607	175,840	181,910	414,766
Malignant neoplasm of colon, rectum and anus (primary)	C18-C21		875	9,425	12,155	22,459		1,143	5,117	5,937	12,199	6	2,018	14,542	18,092	34,658
Malignant neoplasm of trachea, bronchus and lung (primary)	C33-C34	0	274	4,667	5,843	10,784	0	364	3,619	4,732	8,715	0	638	8,286	10,575	19,499
Malignant neoplasm of skin (primary)	C43-C44	~	649	2,200	6,035	8,889	~	498	1,484	3,693	5,678	8	1,147	3,684	9,728	14,567
Malignant neoplasm of breast (primary)	C50	0	11	116	206	333		9,780	33,241	15,755	58,776	0	9,791	33,357	15,961	59,109
Malignant neoplasms of female genital organs	C51-C58	J	0	0	0	0	52	2,588	7,057	5,273	14,970	52	2,588	7,057	5,273	14,970
(primary)	C31-C36	0	U	U	Ü	U	32	2,300	7,037	3,273	14,570	32	2,300	7,037	3,273	14,370
Malignant neoplasm of prostate (primary)	C61	0	179	12,843	28,089	41,111	0	0	0	0	0	0	179	12,843	28,089	41.111
Malignant neoplasm of bladder (primary)	C67	~	140	776	2.422	3.339	0	46	386	1.045	1,477	~	186	1,162	3,467	4.816
Malignant neoplasms of lymphoid,	C81-C96	3,498	4,309	9,071	,	27,184	2,593	3,099	5,337	7,968	18,997	6,091	7,408	1,162	18,274	46,181
	C81-C90	3,496	4,309	9,071	10,306	27,164	2,595	3,099	5,557	7,908	10,997	6,091	7,408	14,408	10,274	40,181
haematopoietic and related tissue	D10-D48	1.016	4,252	5,380	0.646	19,294	974	0.464	7 444	F C00	22.407	1.000	13,416	12,821	14,254	42,481
Benign neoplasms and neoplasms of uncertain	D10-D48	1,016	4,252	5,380	8,646	19,294	974	9,164	7,441	5,608	23,187	1,990	13,416	12,821	14,254	42,481
or unknown behaviour	DE0 D00	2 724	4.670	7.070	45.200	24 5 4 7	2.002	F 004	7.564	45 224	24 755	C C07	40 503	45 443	20 500	62.202
Diseases of the blood and blood-forming organs	D50-D89	3,724	4,679	7,878	15,266	31,547	2,963	5,904	7,564	15,324	31,755	6,687	10,583	15,442	30,590	63,302
and certain disorders involving the immune																
mechanism																
Endocrine, nutritional and metabolic diseases	E00-E89	5,259	14,818	39,923	54,514	114,514	4,679	8,771	24,433	50,384	88,267	9,938	23,589	64,356	104,898	202,781
Diabetes mellitus	E10-E14	435	4,260	18,269	31,590	54,554	479	2,342	10,780	24,930	38,531	914	6,602	29,049	56,520	93,085
Cystic fibrosis	E84		480	1,026	27	1,533	433	717	23	~	1,174	433	1,197	1,049	28	2,707
Mental and behavioural disorders	F00-F99	1,778	9,032	9,193	8,305	28,308	981	5,434	5,458	10,229	22,102	2,759	14,466	14,651	18,534	50,410
Mental and behavioural disorders due to alcohol	F10	51	4,134	5,267	2,103	11,555	65	1,352	1,769	711	3,897	116	5,486	7,036	2,814	15,452
Mental and behavioural disorders due to use of	F11-F19	10	2,072	333	54	2,469	9	852	156	63	1,080	19	2,924	489	117	3,549
other psychoactive substance																
Diseases of nervous system	G00-G99	3,665	6,785	8,589	11,292	30,331	3,170	8,537	8,055	11,350	31,112	6,835	15,322	16,644	22,642	61,443
Multiple sclerosis	G35	~	1,008	817	198	2,024		2,588	1,563	277	4,428	~	3,596	2,380	475	6,452
Epilepsy	G40, G41	1,154	1,531	1,061	873	4,619	1,041	1,227	803	873	3,944	2,195	2,758	1,864	1,746	8,563
Transient cerebral ischaemic attacks and	G45	8	77	522	1,137	1,744	~	90	392	1,403	1,890	13	167	914	2,540	3,634
related syndromes																
Diseases of the eye and adnexa	H00-H59	1,597	2,627	5,145	11,287	20,656	1,482	2,674	4,558	15,300	24,014	3,079	5,301	9,703	26,587	44,670
Diseases of the ear and mastoid process	H60-H95	3,736	2,011	1,448	1,422	8,617	2,609	1,991	1,446	1,415	7,461	6,345	4,002	2,894	2,837	16,078
Diseases of the circulatory system	100-199	1,659	12,942	52,924	105,113	172,638	1,588	9,513	26,697	90,194	127,992	3,247	22,455	79,621	195,307	300,630
Hypertensive diseases	I10-I15	357	3,684	17,040	30,487	51,568	378	2,068	9,958	31,031	43,435	735	5,752	26,998	61,518	95,003
Angina pectoris	120	0	193	2,184	2,965	5,342	0	77	832	2,087	2,996	0	270	3,016	5,052	8,338
Acute myocardial infarction	121-122	~	307	2,392	3,049	5,749	0	85	555	2,015	2,655	~	392	2,947	5,064	8,404
Other ischaemic heart disease	123-125	~	817	10,299	16,740	27,860	~	231	2,902	9,412	12,548	7	1,048	13,201	26,152	40,408
Pulmonary heart disease and diseases of	126-128	110	292	616	1,133	2,151	114	283	489	1,362	2,248	224	575	1,105	2,495	4,399
pulmonary circulation					,	•				•	•			,	•	,
Conduction disorders and cardiac arrhythmias	144-149	238	1,314	6,208	19,955	27,715	155	674	2,405	16,263	19,497	393	1,988	8,613	36,218	47,212
Heart failure	150	61	126	1,302	8,795	10,284	85	65	750	7,851	8,751	146	191	2,052	16,646	19,035
Cerebrovascular disease	160–169	90	489	2,161	5,532	8,272	130	448	1,472	5,547	7,597	220	937	3,633	11,079	15,869
Atherosclerosis (non-coronary)	170	50	59	937	2,373	3,369	~	40	259	1,378	1,678	~	99	1,196	3,751	5,047
Diseases of the respiratory system	J00-J99	12,495	10,076	14,983	34,586	72,140	9,445	10,083	13,299	31,577	64,404	21,940	20,159	28,282	66,163	136,544
Acute upper respiratory infections and	J00-J99 J00-J11	3,819	1,004	267	225	5,315	2,850	1,432	347	229	4,858	6,669	2,436	614	454	10,173
influenza			,													
Pneumonia	J12-J18	873	1,212	1,702	5,641	9,428	797	887	1,294	5,048	8,026	1,670	2,099	2,996	10,689	17,454
Chronic diseases of tonsils and adenoids	J35	1,906	537	34	15	2,492	1,763	1,031	60	17	2,871	3,669	1,568	94	32	5,363

 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>	rnity)			Total Disc	harges (excl. 1	Naternity)	
	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	84	609	3,839	11,781	16,313	62	658	3,665	9,523	13,908	146	1,267	7,504	21,304	30,2
Asthma	J45-J46	1,869	1,332	1,525	946	5,672	1,120	1,985	1,985	1,694	6,784	2,989	3,317	3,510	2,640	12,
Diseases of the digestive system	K00-K93	8,697	33,358	41,898	40,283	124,236	6,610	34,973	40,086	42,442	124,111	15,307	68,331	81,984	82,725	248
Diseases of oesophagus, stomach and duodenum	K20-K31	1,492	11,506	15,378	12,782	41,158	1,027	10,360	14,367	13,160	38,914	2,519	21,866	29,745	25,942	80
Diseases of appendix	K35-K38	1,123	2,121	336	120	3,700	910	1,929	304	101	3,244	2,033	4,050	640	221	6
Inguinal hernia	K40	611	857	1,180	1,372	4,020	113	43	73	127	356	724	900	1,253	1,499	4
Noninfective enteritis and colitis	K50-K52	295	4,233	2,436	1,679	8,643	270	4,536	2,662	2,187	9,655	565	8,769	5,098	3,866	18
Alcoholic liver disease	K70	0	553	1,363	484	2,400	0	270	612	130	1,012	0	823	1,975	614	3
Cholelithiasis	K80	15	536	1,116	1,842	3,509	32	2,686	1,886	2,316	6,920	47	3,222	3,002	4,158	10
Diseases of the skin and subcutaneous tissue	L00-L99	2,302	14,477	10,726	10,756	38,261	1,829	12,573	9,215	11,226	34,843	4,131	27,050	19,941	21,982	73
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02-L03	496	1,683	1,751	2,388	6,318	397	886	1,114	2,626	5,023	893	2,569	2,865	5,014	11
Diseases of the musculoskeletal system and connective tissue	M00-M99	2,409	10,717	15,469	15,967	44,562	2,359	10,937	19,039	25,188	57,523	4,768	21,654	34,508	41,155	102
Rheumatoid arthritis	M05-M06	~	365	962	895	2,223	~	864	2,081	1,920	4,868	~	1,229	3,043	2,815	7.
Coxarthrosis and Gonarthrosis	M16-M17	~	348	1,660	2,773	4,783	0	231	1,899	3,864	4,868 5,994	~	579	3,559	6,637	10
Intervertebral disc disorders	M50-M51	60	657	776	538	2,031	~	712	853	726	2,296	65	1,369	1,629	1,264	4
Dorsalgia (back pain)	M54	91	1.755	2.264	1.490	5,600	95	2.558	3.421	2.802	8.876	186	4.313	5,685	4.292	14
Diseases of the genitourinary system	N00-N99	7,135	18,056	33,159	69,775	128,125	3,826	35,271	34,157	50,394	123,648	10,961	53,327	67,316	120,169	251
Chronic kidney disease	N18	876	10,258	21,203	43,786	76,123	370	6,106	11,607	28,877	46,960	1,246	16,364	32,810	72,663	123
Urolithiasis	N20-N23	156	1,671	1.594	43,780 717	4,138	60	794	812	329	1,995	216	2,465	2,406	1.046	123
Hyperplasia of prostate	N40	120	1,671	2,019	5,592	7,717	0	794	0	0	1,995	0	106	2,406	5,592	7
Disorders of breast	N60-N64	19	115	2,019	5,592	259	13	1,304	1,165	400	2,882	32	1,419	1,230	460	3
Inflammatory diseases of female pelvic organs	N70-N77	0	112	0	0	259	58	2.139	746	283	3,226	58	2,139	746	283	3
Noninflammatory disorders of female genital tract	N80-N98	0	0	0	0	0	266	17,338	12,323	3,308	33,235	266	17,338	12,323	3,308	33
Pregnancy, childbirth and the puerperium <sup>a</sup>	000-099	0	0	0	0	0	~	506	7	0	515	~	506	7	0	
Pregnancy with abortive outcome	000-008	0	0	0	0	0	0	19	0	0	19	0	19	0	0	
Certain conditions originating in the perinatal period	P00-P96	16,276	~	~	0	16,281	12,172	~	~	0	12,176	28,448	6	~	0	28
Congenital malformations, deformations and chromosomal abnormalities	Q00-Q99	14,354	2,388	2,194	1,244	20,180	11,148	2,551	1,792	1,140	16,631	25,502	4,939	3,986	2,384	36
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	R00-R99	12,193	23,472	29,593	40,784	106,042	10,971	30,487	28,836	41,488	111,782	23,164	53,959	58,429	82,272	217
Abdominal and pelvic pain	R10	1,210	3,157	2,341	1,554	8,262	1,431	7,986	3,698	2,193	15,308	2,641	11,143	6,039	3,747	23
injury, poisoning and certain other consequences of external causes	S00-T98	9,445	26,277	11,804	11,154	58,680	6,389	11,154	8,894	14,614	41,051	15,834	37,431	20,698	25,768	99
Intracranial injury	S06	340	1,600	671	735	3,346	189	427	299	512	1,427	529	2,027	970	1,247	4
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	2,691	5,056	1,254	1,362	10,363	1,728	1,120	619	1,370	4,837	4,419	6,176	1,873	2,732	15
Fracture of femur	S72	150	174	338	1,325	1,987	73	74	348	3,271	3,766	223	248	686	4,596	5
Poisonings by drugs, medicaments and biological substances and toxic effects of	T36-T65	258	2,417	715	201	3,591	337	2,522	937	222	4,018	595	4,939	1,652	423	7
substances chiefly nonmedicinal as to source																
External causes of morbidity and mortality	U50-Y98	24,060	53,127	25,251	27,066	129,504	15,974	24,410	21,037	36,654	98,075	40,034	77,537	46,288	63,720	227
Transport accidents	V01-V99	743	2,237	620	256	3,856	466	880	360	225	1,931	1,209	3,117	980	481	5
Factors influencing health status and contact with health services b	U00–U49, Z00–Z99	24,805	59,971	138,516	202,435	425,727	20,120	64,957	124,838	144,815	354,730	44,925	124,928	263,354	347,250	780
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	3,308	5,889	33,299	49,377	91,873	2,715	14,273	46,516	31,976	95,480	6,023	20,162	79,815	81,353	187

Notes:

Denotes five or less discharges reported to HIPE.

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

Over 84 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.

- The most common principal procedure was non-invasive, cognitive and other interventions, not elsewhere classified. This accounted for 20.7 per cent of total discharges (excl. Maternity) with a principal procedure reported. Over 32 per cent of discharges aged under 15 years, 20.7 per cent aged between 45-64 years and 20.7 per cent aged 65 years and older had this recorded as a principal procedure. For the 15–44 year age group the most common principal procedure was procedures on digestive system at 18.8 per cent.
- The most common principal procedure for male discharges with a procedure reported was procedures on urinary system, which accounted for 21.4 per cent of all principal procedures for male discharges.
- The most common principal procedure for female discharges (excl. Maternity) with a procedure reported was non-invasive, cognitive and other interventions, not elsewhere classified. This accounted for 22.6 per cent of all principal procedures for female discharges.
- Over 66 per cent of principal procedures on cardiovascular system were reported for male discharges with a principal procedure reported.
- Over 77 per cent of principal procedures on endocrine system were reported for female discharges (excl. Maternity) with a principal procedure reported.
- Of total discharges (excl. Maternity) with procedures on eye and adnexa recorded as a principal procedure 62.8 per cent were aged 65 years and over.

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

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 postoperative 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>25</sup>

- At chapter level the longest acute in-patient mean length of stay was reported for radiation oncology procedures at 11.6 days, with male and female discharges reporting at 12.1 and 11.1 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.
- The longest acute in-patient mean length of stay for those less than 15 years was reported for procedures on respiratory system at 8.8 days.
- The shortest acute in-patient mean length of stay was reported for procedures on ear and mastoid process at 2.3 days for total discharges (excl. Maternity); across the age groups this ranged from 1.7 days for discharges aged less than 15 years to 4.5 days for those aged 65 years and over.

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

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 nineteen 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 1.9 million procedures were reported for total discharges (excl. *Maternity*).
- Procedures within the chapter non-invasive, cognitive and other interventions, not elsewhere classified accounted for 821,719 of all-listed procedures or 41.5 per cent of all procedures reported for total discharges (excl. Maternity). This pattern was consistent across both sexes and all age groups.
- Over 61 per cent of procedures on eye and adnexa were reported for total discharges (excl. Maternity) aged 65 years and over.
- Over 33 per cent of procedures on nose, mouth and pharynx were reported for total discharges (excl. Maternity) aged 15 years.

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

Principal Procedure	Procedure			Male	_			Fe <u>ma</u>	le (excl. Mat	ernity)			Total Disc	charges (excl.	Materni <u>ty</u> )	
	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)		72,583	142,467	204,979	254,949	674,978	55,938	160,639	200,694	218,278	635,549	128,521	303,106	405,673	473,227	1,310,527
All Principal Procedures	0001-2016	44.639	119.652	179,129	224.219	567,639	32,890	134,538	178,420	188,320	534,168	77,529	254,190	357,549	412,539	1,101,807
Procedures on nervous system	0001-0086	816	3,289	3,378	1,942	9,425	649	3,950	4,758	3,157	12,514	1,465	7,239	8,136	5,099	21,939
Lumbar puncture	0030	575	551	226	170	1.522	444	871	368	172	1,855	1,019	1,422	594	342	3,377
Procedures on endocrine system	0110-0129	31	93	139	100	363	27	466	479	244	1,216	58	559	618	344	1,579
Procedures on eye and adnexa	0160-0256	803	1,396	3,170	6,959	12,328	713	1,184	2,608	9,696	14,201	1,516	2,580	5,778	16,655	26,529
Lens extraction	0195-0202	36	158	725	2,752	3,671	38	93	681	4,148	4.960	74	251	1,406	6.900	8.63
Procedures on ear and mastoid process	0300-0333	2,260	1,213	789	549	4,811	1,566	1,239	776	481	4,062	3,826	2,452	1,565	1,030	8,873
Myringotomy	0309	1,640	330	259	205	2,434	1,121	345	258	176	1,900	2,761	675	517	381	4,33
Procedures on nose, mouth and pharynx	0370-0422	2,446	2,684	2,071	1,359	8,560	1,999	2,836	1,739	1,192	7,766	4,445	5,520	3,810	2,551	16,32
Tonsillectomy or adenoidectomy	0412	1,478	429	26	8	1,941	1,451	919	27	~	2,402	2,929	1,348	53	13	4,34
Dental services	0450-0490	2,386	929	363	193	3,871	1,978	1,083	271	111	3,443	4,364	2,012	634	304	7,31
Procedures on respiratory system	0520-0570	1,975	2,138	3,474	4,451	12,038	1,367	1,429	2,880	3,420	9,096	3,342	3,567	6,354	7,871	21,13
Bronchoscopy with/without biopsy	0543-0544, 41892-01[0545]	181	802	1,432	1,741	4,156	137	576	1,314	1,320	3,347	318	1,378	2,746	3,061	7,50
Procedures on cardiovascular system	0600-0777	744	7,274	17,744	12,572	38,334	621	3,458	8,253	7,329	19,661	1,365	10,732	25,997	19,901	57,99
Coronary angiography	0668	55	682	4,063	3,619	8,419	47	310	2,312	2,610	5,279	102	992	6,375	6,229	13,698
Transluminal coronary angioplasty with/without stenting	0670-0671	9	190	1,748	1,431	3,378	~	37	366	607	1,011	10	227	2,114	2,038	4,389
CABG	0672-0679	0	16	302	349	667	0	~	52	102	157	0	19	354	451	82
Leg varicose vein ligation	0727-0728	~	299	387	115	802	0	767	649	174	1,590	~	1,066	1,036	289	2,392
Procedures on blood and blood-forming organs	0800-0817	153	506	770	957	2,386	109	571	958	817	2,455	262	1,077	1,728	1,774	4,841
Procedures on digestive system	0850-1011	2,834	21,370	27,567	23,411	75,182	2,056	26,390	27,294	23,111	78,851	4,890	47,760	54,861	46,522	154,033
Fibreoptic colonoscopy with/without excision	0905, 0911	82	6,184	10,138	8,507	24,911	67	7,417	10,556	8,443	26,483	149	13,601	20,694	16,950	51,394
Appendicectomy	0926	1,095	2,011	284	85	3,475	918	1,943	258	73	3,192	2,013	3,954	542	158	6,667
Procedures for haemorrhoids	0941	0	788	849	263	1,900	0	684	621	275	1,580	0	1,472	1,470	538	3,480
Cholecystectomy	0965	~	329	483	372	1,185	14	1,729	1,136	488	3,367	15	2,058	1,619	860	4,55
Division of abdominal adhesions	0986	6	34	49	46	135	8	454	154	90	706	14	488	203	136	84
Repair of inguinal and obstructed hernia	0990, 0997	468	790	1,111	1,064	3,433	93	49	88	140	370	561	839	1,199	1,204	3,80
Panendoscopy with/without excision	1005-1008	219	8,123	10,395	8,831	27,568	221	9,578	11,266	9,667	30,732	440	17,701	21,661	18,498	58,30
Procedures on urinary system	1040-1129	1,131	18,297	37,390	64,622	121,440	758	11,622	21,470	40,458	74,308	1,889	29,919	58,860	105,080	195,74
Examination procedures on bladder (includes cystoscopy)	1089	90	975	2,457	4,483	8,005	117	1,108	1,564	1,871	4,660	207	2,083	4,021	6,354	12,66
Procedures on male genital organs	1160-1203	3,514	1,622	2,565	2,842	10,543	0	~	0	0	~	3,514	1,623	2,565	2,842	10,54
Prostatectomy	1165-1167	0	9	535	900	1,444	0	0	0	0	0	0	9	535	900	1,44
Circumcision	30653-00[1196]	1,957	492	195	81	2,725	0	0	0	0	0	1,957	492	195	81	2,725
Gynaecological procedures	1240-1299	0	0	0	0	0	99	15,440	10,313	2,170	28,022	99	15,440	10,313	2,170	28,022
Oophorectomy and salpingo-oophorectomy	1243, 1252	0	0	0	0	0	9	357	317	82	765	9	357	317	82	765
Salpingectomy	1251	0	0	0	0	0	~	76	19	~	99	~	76	19	~	99
Examination procedures on uterus	1259	0	0	0	0	0	~	1,686	2,151	368	4,209	~	1,686	2,151	368	4,209
Curettage and evacuation of uterus	1265	0	0	0	0	0	~	1,754	2,595	427	4,777	~	1,754	2,595	427	4,777
Hysterectomy	1268-1269	0	0	0	0	0	0	647	1,571	540	2,758	0	647	1,571	540	2,758
Repair of prolapse of uterus, pelvic floor or enterocele	1283	0	0	0	0	0	~	77	377	255	711	~	77	377	255	711
Obstetric procedures <sup>a</sup>	1330-1347	0	0	0	0	0	0	24	~	0	25	0	24	~	0	2
Induction and augmentation of labour	1334, 1335	0	0	0	0	0	0	0	~	0	~	0	0	~	0	•
Vacuum extraction	1338	0	0	0	0	0	0	~	0	0	~	0	~	0	0	•
Caesarean section	1340	0	0	0	0	0	0	8	0	0	8	0	8	0	0	8
Episiotomy associated with delivery	90472-00[1343]															
Postpartum suture	1344	0	0	0	0	0	0	10	0	0	10	0	10	0	0	10
Procedures on musculoskeletal system	1360-1579	3,967	12,695	8,224	6,290	31,176	2,925	6,119	9,791	11,075	29,910	6,892	18,814	18,015	17,365	61,086
Arthroplasty of hip	1489	~	107	636	1,446	2,190	~	67	550	2,104	2,722	~	174	1,186	3,550	4,912

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>	rnity)			Total Disc	harges (excl.	Maternity)	
	Block	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total
Arthroplasty of knee	1518-1519	0	21	273	428	722	0	13	359	767	1,139	0	34	632	1,195	1,86
Dermatological and plastic procedures	1600-1718	3,438	16,608	10,580	10,368	40,994	2,825	16,110	10,024	10,154	39,113	6,263	32,718	20,604	20,522	80,10
Excision of lesion(s) of skin and subcutaneous tissue	1620	538	4,746	4,335	5,399	15,018	552	6,251	4,777	5,124	16,704	1,090	10,997	9,112	10,523	31,72
Other debridement of skin and subcutaneous tissue	1628	178	622	347	274	1,421	84	149	146	190	569	262	771	493	464	1,99
Skin graft	1640-1650	23	92	59	60	234	28	36	25	79	168	51	128	84	139	40
Procedures on breast	1740-1759	~	105	49	56	214	7	3,344	3,598	1,478	8,427	11	3,449	3,647	1,534	8,64
Breast biopsy	1743-1744	0	43	35	29	107	~	2,133	2,245	941	5,324	~	2,176	2,280	970	5,43
Mastectomy	1747-1748	~	30	~	10	46	0	189	413	270	872	~	219	417	280	91
Radiation oncology procedures	1786-1799	528	2,304	18,708	30,642	52,182	280	6,717	22,909	13,732	43,638	808	9,021	41,617	44,374	95,82
Non-invasive, cognitive and other interventions, not elsewhere classified	1820-1922	13,564	19,142	32,548	42,185	107,439	11,255	24,534	41,568	43,169	120,526	24,819	43,676	74,116	85,354	227,96
Administration of blood and blood products	1893	1,620	1,093	2,357	5,459	10,529	1,163	1,200	2,252	4,489	9,104	2,783	2,293	4,609	9,948	19,63
Conduction anaesthesia	1909	0	12	10	9	31	0	13	20	10	43	0	25	30	19	7
Cerebral anaesthesia	1910	8	19	9	11	47	11	15	16	9	51	19	34	25	20	9
Imaging services	1940-2016	4,045	7,987	9,600	14,721	36,353	3,656	8,021	8,730	16,526	36,933	7,701	16,008	18,330	31,247	73,28
Computerised tomography scan	1952-1966	1,064	6,160	6,952	11,432	25,608	776	5,498	6,285	13,001	25,560	1,840	11,658	13,237	24,433	51,16
Magnetic resonance imaging	2015	1,478	991	1,129	1,185	4,783	1,272	1,426	1,167	1.261	5,126	2,750	2,417	2,296	2,446	9,90

Notes:

Denotes five or less discharges reported to HIPE.

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.

 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 Disch	arges (excl. A	Matern <u>ity</u> )	
	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	-	2.8	3.4	4.9	7.0	4.8	2.9	3.3	4.8	7.3	5.0	2.8	3.3	4.8	7.1	4.9
All Principal Procedures	0001-2016	3.7	4.0	5.8	8.0	5.9	4.0	4.0	5.6	8.5	6.1	3.8	4.0	5.7	8.3	6.0
Procedures on nervous system	0001-0086	5.2	4.8	6.8	7.9	5.9	5.7	4.9	6.6	8.1	6.1	5.4	4.9	6.7	8.0	6.0
Lumbar puncture	0030	4.8	4.8	8.0	9.7	5.6	4.6	4.4	6.5	11.1	5.4	4.7	4.5	7.1	10.4	5.5
Procedures on endocrine system	0110-0129	3.3	5.4	4.7	7.9	5.6	4.5	4.0	4.1	5.6	4.4	3.9	4.3	4.3	6.3	4.7
Procedures on eye and adnexa	0160-0256	2.1	2.9	3.4	3.3	3.1	1.8	2.9	3.2	3.3	3.0	1.9	2.9	3.3	3.3	3.1
Lens extraction	0195-0202	2.9	2.5	2.1	2.3	2.3	2.7	2.5	1.7	2.1	2.0	2.8	2.5	1.9	2.1	2.2
Procedures on ear and mastoid process	0300-0333	1.6	2.3	2.7	4.3	2.1	1.8	2.7	2.9	4.8	2.5	1.7	2.5	2.8	4.5	2.3
Myringotomy	0309	1.3	1.9	~	~	1.4	1.2	4.4	2.1	~	1.7	1.3	3.1	1.9	1.2	1.5
Procedures on nose, mouth and pharynx	0370-0422	1.5	2.3	3.9	4.8	2.5	1.5	2.1	3.6	5.3	2.3	1.5	2.2	3.7	5.0	2.4
Tonsillectomy or adenoidectomy	0412	1.4	1.7	3.3	2.3	1.5	1.4	1.7	2.4	~	1.6	1.4	1.7	2.9	5.2	1.5
Dental services	0450-0490	1.9	2.2	2.2	3.8	2.4	2.0	1.9	2.3	4.2	2.3	1.9	2.1	2.2	3.9	2.4
Procedures on respiratory system	0520-0570	8.5	7.4	8.4	9.8	8.8	9.1	7.3	8.5	10.0	9.1	8.8	7.4	8.4	9.9	8.9
Bronchoscopy with/without biopsy	0543-0544, 41892- 1[0545]	4.6	9.0	10.0	11.4	10.0	4.8	8.8	9.6	11.1	9.8	4.7	8.9	9.8	11.3	9.9
Procedures on cardiovascular system	0600-0777	8.3	5.8	5.5	7.2	6.4	8.5	5.5	5.5	7.2	6.5	8.4	5.7	5.5	7.2	6.4
Coronary angiography	0668	2.6	4.7	5.0	6.7	5.7	3.1	5.3	4.7	6.2	5.5	2.8	4.9	4.9	6.5	5.6
Transluminal coronary angioplasty with/without stenting	0670-0671	2.8	3.3	3.3	4.2	3.7	~	3.6	3.5	4.6	4.2	2.7	3.3	3.3	4.3	3.8
CABG	0672-0679	-	10.8	11.5	13.3	12.4	_	~	13.3	14.9	14.2	_	10.8	11.8	13.6	12.8
Leg varicose vein ligation	0727-0728	-	1.1	1.6	2.1	1.6	-	1.3	1.5	1.8	1.5	-	1.2	1.5	1.9	1.5
Procedures on blood and blood-forming organs	0800-0817	6.9	8.4	9.1	9.5	8.9	7.1	6.8	6.9	9.5	7.7	7.0	7.6	7.8	9.5	8.3
Procedures on digestive system	0850-1011	4.0	4.4	6.3	8.4	6.4	4.3	4.0	6.2	8.8	6.2	4.1	4.2	6.3	8.6	6.3
Fibreoptic colonoscopy with/without excision	0905, 0911	4.2	6.8	6.1	7.3	6.9	4.5	6.0	6.1	7.8	7.0	4.4	6.4	6.1	7.5	6.9
Appendicectomy	0926	3.4	3.1	4.5	8.2	3.5	3.4	3.2	5.0	6.4	3.5	3.4	3.2	4.7	7.4	3.5
Procedures for haemorrhoids	0941	5.4	2.6	2.7	5.2	3.1	-	2.0	2.4	3.0	2.4	-	2.3	2.6	4.0	2.8
Cholecystectomy	0965	_	4.0	4.4	6.6	5.0	3.9	3.1	3.4	5.2	3.5	3.9	3.3	3.7	5.8	3.9
Division of abdominal adhesions	0986	8.7	7.2	9.7	10.4	9.2	10.8	3.4	6.6	12.2	5.8	9.9	3.8	7.3	11.6	6.5
Repair of inguinal and obstructed hernia	0990, 0997	2.5	1.8	2.1	3.2	2.6	2.7	2.5	4.5	5.3	4.5	2.5	1.9	2.4	3.5	2.8
Panendoscopy with/without excision	1005–1008	2.5	4.3	6.2	8.5	6.9	3.1	4.5	6.3	8.7	7.0	2.8	4.4	6.2	8.6	6.9
Procedures on urinary system	1040-1129	5.1	4.4	5.4	6.9	6.0	5.0	4.4	5.2	7.2	5.7	5.1	4.4	5.3	7.0	5.9
Examination procedures on bladder (includes cystoscopy)	1089	3.0	4.0	4.3	6.0	5.4	3.5	4.1	4.5	5.8	4.9	3.3	4.1	4.4	5.9	5.2
Procedures on male genital organs	1160-1203	1.6	2.4	5.1	6.3	4.3	-	~	-	-	~	1.6	2.4	5.1	6.3	4.3
Prostatectomy	1165-1167	-	5.5	6.2	6.7	6.5	-	-	-	-	-	-	5.5	6.2	6.7	6.5
Circumcision	30653- 00[1196]	1.2	1.3	1.5	3.5	1.5	-	-	-	-	-	1.2	1.3	1.5	3.5	1.5
Gynaecological procedures	1240-1299	-	-	-	-	-	3.6	3.3	4.3	5.4	4.1	3.6	3.3	4.3	5.4	4.1
Oophorectomy and salpingo-oophorectomy	1243, 1252	-	-	-	-	-	4.9	4.5	4.8	8.1	5.0	4.9	4.5	4.8	8.1	5.0
Salpingectomy	1251	-	-	-	-	-	~	3.4	3.5	~	3.5	~	3.4	3.5	~	3.5
Examination procedures on uterus	1259	-	-	-	-	-	-	1.7	1.8	2.9	2.0	-	1.7	1.8	2.9	2.0
Curettage and evacuation of uterus	1265	-	-	-	-	-	-	1.5	1.6	2.9	1.9	-	1.5	1.6	2.9	1.9
Hysterectomy	1268-1269	-	-	-	-	-	-	5.7	5.9	7.2	6.1	-	5.7	5.9	7.2	6.1
Repair of prolapse of uterus, pelvic floor or enterocele	1283	-	-	-	-	-	~	3.5	4.2	4.6	4.3	~	3.5	4.2	4.6	4.3
Obstetric procedures <sup>b</sup>	1330-1347	-	-	-	-	-	-	3.8	~	-	3.8		3.8	~	-	3.8
Induction and augmentation of labour	1334, 1335	_	-	-	-	-	-	-	~	-	~	-	-	3.0	-	3.0
Vacuum extraction	1338	-	-	-	-	-	-	~	-	-	~	-	~	-	-	~
Caesarean section	1340						_	6.3			6.3		6.3			6.3

**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				Femal	e (excl. <i>Mate</i>	rnity)			Total Disch	arges (excl. 1	Maternity)	
	Block	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total
Episiotomy associated with delivery	90472- 00[1343]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Postpartum suture	1344	-	-	-	-	-	-	~	-	-	~	-	~		-	~
Procedures on musculoskeletal system	1360-1579	1.8	2.7	5.1	8.7	4.4	2.3	2.9	4.6	8.7	5.7	2.0	2.7	4.9	8.7	5.0
Arthroplasty of hip	1489	~	6.6	7.5	10.3	9.3	~	7.1	8.1	11.1	10.3	~	6.8	7.8	10.8	9.9
Arthroplasty of knee	1518-1519	-	7.3	7.4	8.7	8.2	-	6.6	8.0	9.2	8.8	-	7.1	7.7	9.0	8.5
Dermatological and plastic procedures	1600-1718	2.7	3.1	4.9	5.8	3.6	3.1	3.2	4.8	7.2	4.2	2.9	3.1	4.8	6.5	3.9
Excision of lesion(s) of skin and subcutaneous tissue	1620	2.1	2.4	2.6	3.7	3.2	2.6	2.3	3.0	4.8	3.8	2.3	2.3	2.8	4.2	3.5
Other debridement of skin and subcutaneous tissue	1628	2.1	3.6	6.3	8.2	4.6	1.7	5.7	8.0	10.6	7.1	2.0	3.9	6.8	9.3	5.3
Skin graft	1640-1650	6.2	7.2	6.7	9.2	7.4	10.2	6.7	8.1	10.8	9.4	8.4	7.1	7.0	10.2	8.2
Procedures on breast	1740-1759	~	2.1	~	4.3	3.0	~	3.7	3.7	5.0	4.0	~	3.6	3.7	5.0	4.0
Breast biopsy	1743-1744	-	~	~	~	2.0	~	2.3	2.3	3.7	2.7	~	2.2	2.3	3.7	2.7
Mastectomy	1747-1748	~	~	~	4.7	4.0	-	6.1	6.0	6.7	6.2	~	6.0	6.0	6.7	6.2
Radiation oncology procedures	1786-1799		11.4	12.2	12.2	12.1	~	6.7	10.9	13.0	11.1	~	8.0	11.4	12.6	11.6
Non-invasive, cognitive and other interventions, not elsewhere classified	1820–1922	4.1	5.0	5.8	8.4	6.5	4.3	5.0	6.4	9.1	7.2	4.2	5.0	6.0	8.8	6.8
Administration of blood and blood products	1893	3.2	5.0	6.0	7.2	6.2	3.4	4.3	5.6	7.1	6.1	3.3	4.6	5.7	7.2	6.2
Conduction anaesthesia	1909	-	6.6	~	~	8.7	-	~	6.2	13.2	9.5	-	7.8	7.7	12.4	9.1
Cerebral anaesthesia	1910	~	4.8	~	~	5.2	~	~	3.1	6.5	5.3	~	4.5	3.0	7.7	5.3
Imaging services	1940-2016	3.6	3.9	5.6	8.0	6.1	3.9	4.1	5.6	8.4	6.4	3.7	4.0	5.6	8.2	6.2
Computerised tomography scan	1952-1966	2.4	3.6	5.2	7.9	5.8	2.6	3.7	5.2	8.2	6.3	2.5	3.6	5.2	8.0	6.1
Magnetic resonance imaging	2015	4.8	5.8	7.5	9.6	7.4	4.4	5.3	7.3	10.5	7.2	4.6	5.5	7.4	10.1	7.3

Notes:

- ~ Denotes five or less discharges reported to HIPE.
- Mean length of stay cannot be calculated as no acute in-patients (length of stay of 30 days or less) 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.

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

All Procedures	Procedure			Male				Femal	e (excl. Mat	ernity)			Total Disc	harges (excl.	. Materni <u>ty</u> )	
	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)	-	72,583	142,467	204,979	254,949	674,978	55,938	160,639	200,694	218,278	635,549	128,521	303,106	405,673	473,227	1,310,52
All Procedures	0001-2016	97,987	213,167	306,707	388,932	1,006,793	71,870	240,190	308,716	352,878	973,654	169,857	453,357	615,423	741,810	1,980,44
Procedures on nervous system	0001-0086	1,893	4,381	4,356	2,558	13,188	1,561	5,117	5,932	3,983	16,593	3,454	9,498	10,288	6,541	29,78
Lumbar puncture	0030	1,433	1,037	554	396	3,420	1,132	1,465	720	410	3,727	2,565	2,502	1,274	806	7,14
Procedures on endocrine system	0110-0129	38	110	166	130	444	28	476	516	283	1,303	66	586	682	413	1,74
Procedures on eye and adnexa	0160-0256	1,026	1,801	3,859	8,127	14,813	880	1,451	3,126	11,130	16,587	1,906	3,252	6,985	19,257	31,40
Lens extraction	0195-0202	40	172	748	2,808	3,768	42	99	696	4,211	5,048	82	271	1,444	7,019	8,81
Procedures on ear and mastoid process	0300-0333	3,073	1,407	907	614	6,001	2,193	1,394	884	543	5,014	5,266	2,801	1,791	1,157	11,01
Myringotomy	0309	2,072	367	282	208	2,929	1,480	370	274	184	2,308	3,552	737	556	392	5,23
Procedures on nose, mouth and pharynx	0370-0422	2,935	3,434	2,796	1,725	10,890	2,342	3,355	2,164	1,469	9,330	5,277	6,789	4,960	3,194	20,22
Tonsillectomy or adenoidectomy	0412	1,600	441	33	10	2,084	1,520	931	31	6	2,488	3,120	1,372	64	16	4,57
Dental services	0450-0490	4,466	1,448	464	249	6,627	3,600	1,511	341	141	5,593	8,066	2,959	805	390	12,22
Procedures on respiratory system	0520-0570	3,639	3,186	5,703	7,478	20,006	2,539	2,106	4,126	5,516	14,287	6,178	5,292	9,829	12,994	34,29
Bronchoscopy with/without biopsy	0543-0544, 41892-01[0545]	289	912	1,670	2,057	4,928	212	642	1,438	1,536	3,828	501	1,554	3,108	3,593	8,75
Procedures on cardiovascular system	0600-0777	2,391	9,241	25,469	21,244	58,345	1,736	4,629	11,654	12,363	30,382	4,127	13,870	37,123	33,607	88,72
Coronary angiography	0668	153	907	5,846	5,214	12,120	119	361	2,755	3,307	6,542	272	1,268	8,601	8,521	18,66
Transluminal coronary angioplasty with/without stenting	0670-0671	12	209	1,992	1,685	3,898	~	40	419	725	1,185	13	249	2,411	2,410	5,08
CABG	0672-0679	0	36	669	812	1,517	~	6	111	248	366	~	42	780	1,060	1,88
Leg varicose vein ligation	0727-0728	~	303	391	118	813	0	778	656	181	1,615	~	1,081	1,047	299	2,42
Procedures on blood and blood-forming organs	0800-0817	413	752	1,218	1,502	3,885	301	1,203	2,566	1,888	5,958	714	1,955	3,784	3,390	9,84
Procedures on digestive system	0850-1011	3,323	26,276	35,513	32,003	97,115	2,474	32,930	35,121	31,226	101,751	5,797	59,206	70,634	63,229	198,86
Fibreoptic colonoscopy with/without excision	0905, 0911	161	7,939	12,913	11,416	32,429	136	9,678	13,632	11,447	34,893	297	17,617	26,545	22,863	67,32
Appendicectomy	0926	1,113	2,052	313	119	3,597	943	2,052	382	140	3,517	2,056	4,104	695	259	7,11
Procedures for haemorrhoids	0941	~	1,616	1,776	577	3,971	0	1,389	1,301	607	3,297	~	3,005	3,077	1,184	7,26
Cholecystectomy	0965	~	344	538	420	1,303	15	1,756	1,169	528	3,468	16	2,100	1,707	948	4,77
Division of abdominal adhesions	0986	28	196	235	265	724	25	1,030	530	308	1,893	53	1,226	765	573	2,61
Repair of inguinal and obstructed hernia	0990, 0997	497	800	1,126	1,110	3,533	95	52	90	151	388	592	852	1,216	1,261	3,92
Panendoscopy with/without excision	1005-1008	255	8,876	11,876	10,934	31,941	257	10,477	12,642	11,567	34,943	512	19,353	24,518	22,501	66,88
Procedures on urinary system	1040-1129	1,435	19,323	39,493	68,895	129,146	926	12,400	22,747	42,059	78,132	2,361	31,723	62,240	110,954	207,27
Examination procedures on bladder (includes cystoscopy)	1089	108	1,042	2,616	4,886	8,652	129	1,254	1,823	2,073	5,279	237	2,296	4,439	6,959	13,93
Procedures on male genital organs	1160-1203	3,892	1,766	2,740	3,091	11,489	0	~	0	0	~	3,892	1,767	2,740	3,091	11,49
Prostatectomy	1165-1167	0	10	566	980	1,556	0	0	0	0	0	0	10	566	980	1,55
Circumcision	30653-00[1196]	2,040	501	205	93	2,839	0	0	0	0	0	2,040	501	205	93	2,83
Gynaecological procedures	1240-1299	0	0	0	~	~	152	26,520	18,413	3,394	48,479	152	26,520	18,413	3,395	48,48
Oophorectomy and salpingo-oophorectomy	1243, 1252	0	0	0	0	0	10	422	392	116	940	10	422	392	116	94
Salpingectomy	1251	0	0	0	0	0	7	118	33	7	165	7	118	33	7	16
Examination procedures on uterus	1259	0	0	0	0	0	~	3,455	4,078	644	8,182	~	3,455	4,078	644	8,18
Curettage and evacuation of uterus	1265	0	0	0	0	0	~	3,554	4,762	745	9,063	~	3,554	4,762	745	9,06
Hysterectomy	1268-1269	0	0	0	0	0	0	664	1,610	574	2,848	0	664	1,610	574	2,84
Repair of prolapse of uterus, pelvic floor or enterocele	1283	0	0	0	0	0	~	124	837	509	1,472	~	124	837	509	1,47
Obstetric procedures <sup>a</sup>	1330-1347	0	0	0	0	0	0	44	~	0	47	0	44	~	0	4
Induction and augmentation of labour	1334, 1335	0	0	0	0	0	0	~	~	0	~	0	~	~	0	
Vacuum extraction	1338	0	0	0	0	0	0	~	0	0	~	0	~	0	0	
Caesarean section	1340	0	0	0	0	0	0	8	0	0	8	0	8	0	0	
Episiotomy associated with delivery	90472-00[1343]	0	0	0	0	0	0	~	0	0	~	0	~	0	0	
	1344	0	0	0	0	0	0	12	0	0	12	0	12	0	0	1
Postpartuiii suture																
Postpartum suture Procedures on musculoskeletal system	1360–1579	5,013	15,702	10,380	7,660	38,755	3,908	7,551	11,757	13,059	36,275	8,921	23,253	22,137	20,719	75,03

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

All Procedures	Procedure			Male				Fema	le (excl. <i>Mat</i>	ernity)			Total Disc	harges (excl	. Maternity)	
	Block	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total	< 15	15-44	45-64	≥65	Total
Arthroplasty of knee	1518-1519	0	21	277	430	728	0	13	360	772	1,145	0	34	637	1,202	1,873
Dermatological and plastic procedures	1600-1718	5,262	20,534	13,406	13,577	52,779	4,167	18,422	12,031	12,769	47,389	9,429	38,956	25,437	26,346	100,168
Excision of lesion(s) of skin and subcutaneous tissue	1620	590	5,392	5,071	6,422	17,475	603	7,272	5,571	5,908	19,354	1,193	12,664	10,642	12,330	36,829
Other debridement of skin and subcutaneous tissue	1628	569	2,170	1,185	755	4,679	328	565	466	602	1,961	897	2,735	1,651	1,357	6,640
Skin graft	1640-1650	73	286	310	534	1,203	69	104	161	527	861	142	390	471	1,061	2,064
Procedures on breast	1740-1759	~	110	50	60	224	9	4,018	4,773	1,800	10,600	13	4,128	4,823	1,860	10,824
Breast biopsy	1743-1744	0	46	35	33	114	6	2,379	2,493	1,053	5,931	6	2,425	2,528	1,086	6,045
Mastectomy	1747-1748	~	31	~	10	47	0	190	418	272	880	~	221	422	282	927
Radiation oncology procedures	1786-1799	567	2,526	19,642	31,600	54,335	311	7,452	25,288	14,914	47,965	878	9,978	44,930	46,514	102,300
Non-invasive, cognitive and other interventions, not elsewhere classified	1820-1922	51,612	84,135	115,755	152,571	404,073	38,744	92,521	125,754	160,627	417,646	90,356	176,656	241,509	313,198	821,719
Administration of blood and blood products	1893	2,960	2,296	5,193	10,839	21,288	2,165	2,284	4,499	9,286	18,234	5,125	4,580	9,692	20,125	39,522
Conduction anaesthesia	1909	122	1,457	2,800	4,635	9,014	103	1,091	2,985	5,755	9,934	225	2,548	5,785	10,390	18,948
Cerebral anaesthesia	1910	24,240	43,366	46,854	41,947	156,407	16,666	50,126	52,998	40,902	160,692	40,906	93,492	99,852	82,849	317,099
Imaging services	1940-2016	7,005	17,035	24,790	35,847	84,677	5,999	17,089	21,520	35,714	80,322	13,004	34,124	46,310	71,561	164,999
Computerised tomography scan	1952-1966	1,577	11,746	15,159	24,634	53,116	1,154	9,666	12,828	25,540	49,188	2,731	21,412	27,987	50,174	102,304
Magnetic resonance imaging	2015	1,956	2,228	2,921	3,210	10,315	1,718	3,005	2,771	3,160	10,654	3,674	5,233	5,692	6,370	20,969

Notes:

Denotes five or less discharges reported to HIPE.

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.

Maternity Discharges

2010

SECTION

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# **Total Discharges** 1,447,108

# Discharges excluding Maternity 1,310,527

Maternity 136.581

#### 4.1 **INTRODUCTION**

Section Four examines *Maternity* discharges only. In 2010, 9.4 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.<sup>2</sup>

The Health Research and Information Division at the ESRI 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>3</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>4</sup> There are a number of key differences between the number of deliveries reported here and the number of maternities 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 incorporate data from private hospitals or domiciliary births.
- Delivery data in the NPRS is reported based on date of delivery, HIPE is reported on the date of discharge of the mother. For example, a delivery that occurs on 27 December 2009 and the mother is discharged on 1 January 2010 will be recorded as a 2009 delivery in NPRS and a 2010 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.

See Section 1.4 Changes to Annual Report 2010.

Hospital In-Patient Enquiry Scheme (HIPE) Data Dictionary 2010 Version 2.0

See www.nprs.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 (n=12), delivered during this episode. These women are not included here.

- 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. Top 20 diagnoses and Top 10 procedures are provided, along with further details on Caesarean section deliveries.
- Section 4.4 provides a summary of Non-Delivery discharges and reports on age, martial status and public/private status for day patients and in-patients. Top 10 principal diagnosis and procedures are also presented.

#### 4.2 MATERNITY DISCHARGES - TOTAL

This section provides an overview of the 136,581 Maternity discharges reported to HIPE. Of those discharges registered as *Maternity*, there were 72,675 (53.2 per cent) Delivery discharges and 63,906 (46.8 per cent) Non-Delivery discharges.

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

Table 4.1 disaggregates Maternity discharges and bed days by patient type and delivery status. 5,6 Mean and median lengths of stay for in-patient discharges are also presented.7

#### Discharges

- Day patients accounted for 10,287 (7.5 per cent) of Maternity discharges. The remaining 126,294 (92.5 per cent) of Maternity discharges were in-patients.
- 57.6 per cent of *Maternity* discharges were aged 25–34 years (see Figure 4.1).
- Single women accounted for 37.0 per cent of Maternity discharges while married women accounted for 60.3 per cent (see Figure 4.2).
- Almost 21 per cent of *Maternity* discharges were discharged on a private basis and 79.2 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, for discharges staying 3 days or less, 62.9 per cent of Delivery in-patient discharges used 39.6 per cent of bed days, while Non-Delivery discharges accounted for over 93 per cent of discharges using 73.5 per cent of bed days.

See Glossary for definition of patient type.

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 Be	d Days							
	Day Pat	ients						In-P	atients						Total	Matern	ity Discharge	S
			<=7 Days > 7 Days Total <i>Maternity</i> In-Patient								nt							
	N	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%	Bed Days	%
Delivery <sup>a,b</sup>	-	-	70,155	57.0	212,546	73.0	2,520	78.8	34,549	79.5	72,675	57.5	247,095	73.9	72,675	53.2	247,095	71.7
Non-Delivery	10,287	100	52,940	43.0	78,434	27.0	679	21.2	8,911	20.5	53,619	42.5	87,345	26.1	63,906	46.8	97,632	28.3
Total Maternity	10,287	100	123,095	100	290,980	100	3,199	100	43,460	100	126,294	100	334,440	100	136,581	100	344,727	100

			In-Pati	ient Length	of Stay			
	<=7	Days		>71	Days		Total Materni	ity In-Patient
	Mean	Median		Mean	Median		Mean	Median
Delivery	3.0	3	Delivery	13.7	10	Delivery	3.4	3
Non-Delivery	1.5	1	Non-Delivery	13.1	10	Non-Delivery	1.6	1
Total Maternity	2.4	2	Total Maternity	13.6	10	Total Maternity	2.6	2

Notes:

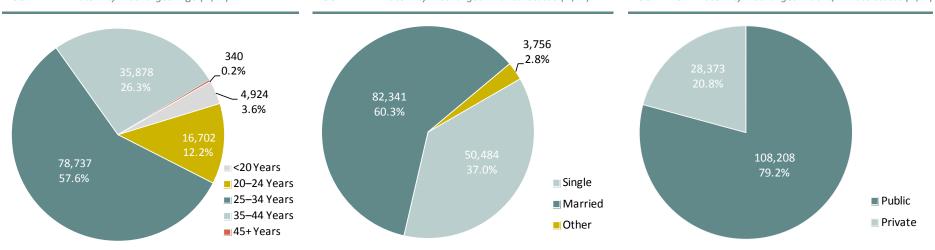
Percentage columns are subject to rounding.

- 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.nprs.ie).

FIGURE 4.1 Maternity Discharges: Age (N, %)

FIGURE 4.2 Maternity Discharges: Marital Status (N, %)

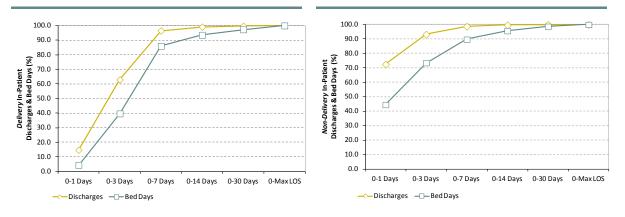
FIGURE 4.3 Maternity Discharges: Public/Private Status (N, %)



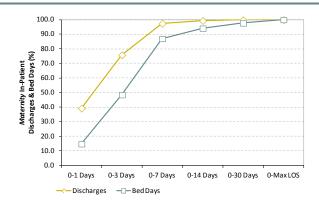
Notes: Data represent Delivery discharges in acute public hospitals reporting to HIPE which have been allocated an admission type Maternity. For national statistics on perinatal events in Ireland see the National Perinatal Reporting System (www.nprs.ie).

**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.nprs.ie).

b Delivery discharges are all in-patients.

#### 4.3 MATERNITY DISCHARGES - DELIVERY

There were 72,675 Maternity discharges with a diagnosis of delivery reported to HIPE (53.2 per cent of Maternity discharges and 5.0 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. 10

- Single deliveries accounted for 98.3 per cent of total Delivery discharges while multiple deliveries accounted for 1.7 per cent.
- The in-patient mean length of stay for a single delivery was 3.3 days compared to 6.7 days for a multiple delivery.

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

		Delivery D	ischarges <sup>a</sup>	In-Patient Le	ngth of Stay <sup>b</sup>
		N	%	Mean	Median
Z37.0-Z37.1	Single Deliveries	71,416	98.3	3.3	3
Z37.2-Z37.7	Multiple Deliveries	1,248	1.7	6.7	5
Z37.9	Unspecified	11	0.0	6.5	5
Total Delivery	Total <i>Delivery</i> Discharges		100	3.4	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.nprs.ie).

ICD-10-AM (any) diagnosis codes 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. (Extracted from NCCH eBook, July 2008, Factors Affecting Health Status.)

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.nprs.ie).

## 4.3.2 Delivery Discharges: Method of Delivery

Method of delivery is derived from delivery procedure codes and, 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> Table 4.3 disaggregates *Delivery* discharges by method of delivery and outcome of delivery. Figure 4.5 shows the proportion of *Delivery* discharges by method of delivery and in-patient length of stay.

## Discharges

- Non-instrumental deliveries accounted for 57.9 per cent of single deliveries and 23.7 per cent of multiple deliveries.
- Caesarean section accounted for 25.7 per cent of single deliveries and 64.3 per cent of multiple deliveries.
- The proportion of elective and emergency Caesarean sections were similar for both the single and multiple deliveries.

## Length of Stay

- The in-patient mean length of stay was 2.5 days for non-instrumental, 3.3 days for instrumental and 5.4 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 single Caesarean section deliveries, in-patient mean length of stay was shorter for elective deliveries (4.9 days) than emergency deliveries (5.6 days). In contrast, for multiple Caesarean section deliveries the in-patient mean length of stay was shorter for emergency deliveries (7.6 days) than elective deliveries (7.9 days).
- Only 3.5 per cent of total *Delivery* discharges had an in-patient mean length of stay of more than 7 days (see Figure 4.5).

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].

<sup>&</sup>lt;sup>14</sup> The term 'elective' is not an indication of maternal choice.

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.

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

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

							Delivery D	ischarges					
		Non-Instr	umontal	Instrun	nontal			Caesarea	n Section			Total <i>De</i>	livery
		NOII-IIISU	umemai	ilistrui	Hentai	Electiv	ve CS	Emerge	ency CS	Tota	I CS	Discha	rges <sup>a</sup>
		N	%	N	%	N	%	N	%	N	%	N	%
ىە	<=7 Days	40,825	59.0	11,451	16.6	8,377	12.1	8,490	12.3	16,867	24.4	69,143	100
Single	> 7 Days	521	22.9	240	10.6	569	25.0	943	41.5	1512	66.5	2273	100
S	Total Single	41,346	57.9	11,691	16.4	8,946	12.5	9,433	13.2	18,379	25.7	71,416	100
e	<=7 Days	270	26.9	124	12.4	324	32.3	285	28.4	609	60.7	1,003	100
Multiple	> 7 Days	26	10.6	26	10.6	97	39.6	96	39.2	193	78.8	245	100
Ē	Total Multiple	296	23.7	150	12.0	421	33.7	381	30.5	802	64.3	1,248	100
	<=7 Days	41,095	58.6	11,575	16.5	8,701	12.4	8,775	12.5	17,476	24.9	70,146	100
Total <sup>a</sup>	> 7 Days	547	21.7	266	10.6	666	26.4	1039	41.3	1705	67.7	2518	100
10	Total <i>Delivery</i>	41,642	57.3	11,841	16.3	9,367	12.9	9,814	13.5	19,181	26.4	72,664	100
	Discharges	41,042	37.3	11,041	10.3	3,307	12.9	3,614	13.5	13,101	20.4	72,004	100

						Deli	ivery In-Patien	nt Length of S	tay <sup>b</sup>					
		Non-Inst	rumontal	Instru	montal			Caesarea	n Section			Total D	elivery	
		NOII-IIISU	lullielitai	mstrui	Helital	Elect	ive CS	Emerge	ency CS	Tota	al CS	Discharges		
		Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	
a	<=7 Days	2.4	2	3.1	3	4.2	4	4.7	5	4.5	4	3.0	3	
Single	> 7 Days	12.4	10	10.6	9	15.5	12	13.4	10	14.2	11	13.4	10	
S	Total Single	2.5	2	3.3	3	4.9	4	5.6	5	5.3	4	3.3	3	
e e	<=7 Days	3.3	3	4.0	4	4.8	5	5.1	5	4.9	5	4.4	4	
Multiple	> 7 Days	13.8	10	14.4	10	18.3	13	15.2	11	16.8	12	16.2	12	
ž	Total Multiple	4.3	3	5.8	4	7.9	5	7.6	6	7.8	5	6.7	5	
	<=7 Days	2.4	2	3.1	3	4.2	4	4.7	5	4.5	4	3.0	3	
Total	> 7 Days	12.5	10	11.0	9	15.9	12	13.6	10	14.5	11	13.7	10	
10	Total <i>Delivery</i>	2.5	2	3.3	3	5.1	4	5.6	5	5.4	5	3.4	2	
	Discharges	2.5	2	3.3	3	5.1	4	5.6	5	5.4	5	3.4	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.nprs.ie).

a Outcome of Delivery is 'unspecified' for 11 discharges; these are not included here due to the small numbers.

b 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 **Elective CS Emergency CS** Total CS Non-Caesarean Section Total Instrumental Instrumental >7 Days 1.3 2.2 7.1 10.6 8.9 3.5 4-7 Days 14.7 32.9 72.6 77.5 75.1 33.6 84.0 64.9 16.0 62.9 ■ 0-3 Days 20.3 11.9

FIGURE 4.5 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.nprs.ie).

## 4.3.3 *Delivery* Discharges: Age

Table 4.4 and Figure 4.6 disaggregate *Delivery* discharges by method of delivery and mother's age.

#### Discharges

- For all ages up to 44 years the majority of deliveries were non-instrumental.
- A higher proportion of older women delivered by elective Caesarean section (20.5 per cent for women aged 35–44 compared to 11.3 per cent for women aged 25–34).
- For women aged 45 years and over, 55.5 per cent delivered by Caesarean section and 34.2 per cent had non-instrumental deliveries.

## Length of Stay

- In-patient mean length of stay were shortest for non-instrumental deliveries for all age groups, this ranged from 2.5 days to 2.8 days across all age groups.
- The in-patient mean length of stay for Caesarean section deliveries was highest for women aged 45 years and over (7.6 days).
- In-patient mean length of stay varied from 3.1 days for mothers aged 20–24 years to 5.6 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)

						Deliver	y Dischar	ges				
	No		Instrum	nental			Caesarea	n Sectio	n		Total D	elivery
	Instrum	nental			Electiv	ve CS	Emerge	ncy CS	Total	CS	Discharges	
	N	%	N	%	N	%	N	%	N	%	N	%
<20 Years	1,327	65.0	400	19.6	57	2.8	257	12.6	314	15.4	2,041	100
20–24 Years	5,074	63.4	1,457	18.2	395	4.9	1,079	13.5	1,474	18.4	8,005	100
25-34 Years	24,556	57.5	7,531	17.6	4,806	11.3	5,779	13.5	10,585	24.8	42,672	100
35–44 Years	10,637	53.7	2,438	12.3	4,062	20.5	2,674	13.5	6,736	34.0	19,811	100
45 Years and Over	50	34.2	15	10.3	53	36.3	28	19.2	81	55.5	146	100
Total <i>Delivery</i> Discharges	41,644	57.3	11,841	16.3	9,373	12.9	9,817	13.5	19,190	26.4	72,675	100

					Deliver	y In-Patie	nt Lengi	th of Stay <sup>©</sup>	1			
	N	on-	Instru	mental			Caesare	an Section			Total Delivery	
	Instru	ımental			Elect	ive CS	Emergency CS		Total CS		Disch	narges
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
<20 Years	2.7	3	3.2	3	5.7	5	5.5	5	5.6	5	3.3	3
20-24 Years	2.5	2	3.2	3	5.0	4	5.2	5	5.2	4	3.1	3
25-34 Years	2.5	2	3.3	3	4.9	4	5.5	5	5.3	4	3.3	3
35-44 Years	2.6	2	3.4	3	5.2	4	6.0	5	5.5	5	3.7	3
45 Years and Over	2.8	3	4.1	3	8.0	5	6.9	5	7.6	5	5.6	4
Total <i>Delivery</i> Discharges	2.5	2	3.3	3	5.1	4	5.6	5	5.4	5	3.4	3

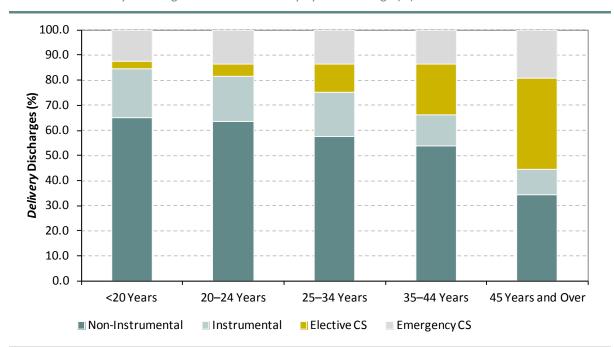
Notes:

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.nprs.ie).

a Delivery discharges are all in-patients.

FIGURE 4.6 Delivery Discharges: Method of Delivery by Mother's Age (%)

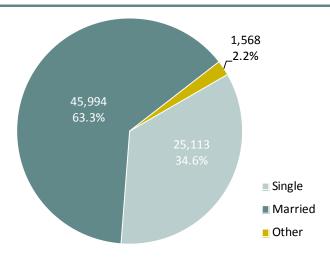


Notes: Data represent Delivery discharges in acute public hospitals reporting to HIPE which have been allocated an admission type Maternity. For national statistics on perinatal events in Ireland see the National Perinatal Reporting System (www.nprs.ie).

#### 4.3.4 Delivery Discharges: Marital Status

Marital status for *Delivery* discharges is presented in Figure 4.7 and shows that 63.3 per cent of *Delivery* discharges were married women while 34.6 per cent were single.

FIGURE 4.7 Delivery Discharges: Marital 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.nprs.ie).

## 4.3.5 Delivery Discharges: Public/Private Status<sup>16</sup>

Table 4.5 and Figure 4.8 disaggregate *Delivery* discharges by method of delivery and public/private status.

#### Discharges

- Over 75 per cent of *Delivery* discharges were treated on a public basis (see Figure 4.8).
- Of *Delivery* discharges treated on a private basis, 48.0 per cent had a non-instrumental delivery, 17.3 per cent had an instrumental delivery, while the remaining 34.7 per cent were delivered by Caesarean Section.
- Of *Delivery* discharges treated on a public basis, 60.3 per cent had a non-instrumental delivery, 16.0 per cent had an instrumental delivery, while the remaining 23.8 per cent were delivered by Caesarean Section.
- Almost 21 per cent of *Delivery* discharges treated on a private basis had an elective Caesarean section compared to 10.3 per cent of discharges who were treated publicly.

#### Length of Stay

• *Delivery disch*arges treated on a private basis had a longer in-patient mean length of stay than those treated on a public basis for both non-instrumental

- (2.8 days compared to 2.5 days) and instrumental deliveries (3.4 days compared to 3.3 days).
- A higher in-patient mean length of stay was recorded for emergency Caesarean section deliveries treated on a private basis compared to those treated on a public basis (5.9 days compared to 5.6 days).

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

					De	livery Di	scharges					
	Non	-	Location	antal.		С	aesarean	Section	1		Total Del	ivery
	Instrum	ental	Instrum	ientai	Electiv	ve CS	Emerge	ncy CS	Total	CS	Dischar	ges
	N	%	N	%	N	%	N	%	N	%	N	%
Public	33,197	60.3	8,803	16.0	5,696	10.3	7,390	13.4	13,086	23.8	55,086	100
Private	8,447	48.0	3,038	17.3	3,677	20.9	2,427	13.8	6,104	34.7	17,589	100
Total <i>Delivery</i> Discharges	41,644	57.3	11,841	16.3	9,373	12.9	9,817	13.5	19,190	26.4	72,675	100

					Delivery	/ In-Patie	nt Lengt	h of Stay <sup>a</sup>				
	N	on-	Inctru	mental		(	Caesare	an Section	1		Total I	Delivery
	Instru	mental	IIISUU	illelitai	Elect	ive 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	5.1	4	5.6	5	5.4	4	3.3	3
Private	2.8	3	3.4	3	5.0	4	5.9	5	5.4	5	3.8	3
Total <i>Delivery</i> Discharges	2.5	2	3.3	3	5.1	4	5.6	5	5.4	5	3.4	3

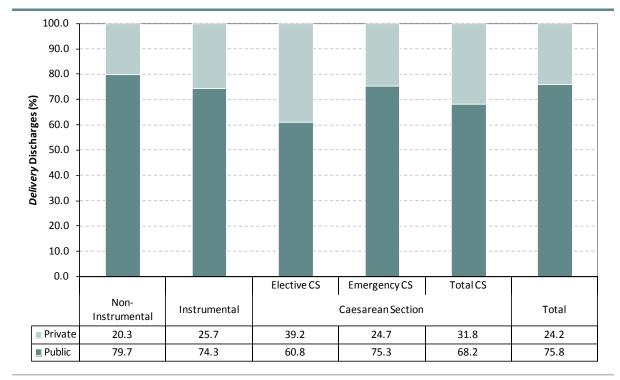
Notes:

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.nprs.ie).

Delivery discharges are all in-patients.

FIGURE 4.8 Delivery Discharges: Method of Delivery by Public/Private Status (%)



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

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

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

- Admissions were most frequent midweek with 16.2 per cent of *Delivery* discharges admitted on both Tuesday and Wednesday.
- Caesarean section admissions were most frequent on Mondays (18.7 per cent).
   At the weekend, 9.1 per cent of elective Caesarean sections were admitted compared to 21.7 per cent of emergency Caesarean sections.

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

	Nor	)-	Instrun	nental		(	Caesarea	n Sectior	1		Total Delivery		
	Instrum	ental			Electi	ve CS	Emerge	ency CS	Total	CS	Discha	Discharges	
	N	%	N	%	N	%	N	%	N	%	N	%	
Monday	6,264	15.0	1,877	15.9	1,866	19.9	1,728	17.6	3,594	18.7	11,735	16.1	
Tuesday	6,510	15.6	1,863	15.7	1,776	18.9	1,591	16.2	3,367	17.5	11,740	16.2	
Wednesday	6,482	15.6	1,850	15.6	1,908	20.4	1,538	15.7	3,446	18.0	11,778	16.2	
Thursday	6,597	15.8	1,832	15.5	1,721	18.4	1,549	15.8	3,270	17.0	11,699	16.1	
Friday	5,877	14.1	1,606	13.6	1,255	13.4	1,286	13.1	2,541	13.2	10,024	13.8	
Saturday	4,701	11.3	1,282	10.8	232	2.5	921	9.4	1,153	6.0	7,136	9.8	
Sunday	5,213	12.5	1,531	12.9	615	6.6	1,204	12.3	1,819	9.5	8,563	11.8	
Total <i>Delivery</i> Discharges	41,644	100	11,841	100	9,373	100	9,817	100	19,190	100	72,675	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.nprs.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 20 Principal Diagnoses

The mean number of all diagnoses recorded for total *Delivery* discharges was 3.3. Table 4.7 outlines the top 20 principal diagnoses recorded for *Delivery* discharges. Almost 54 per cent of discharges record one of the top three principal diagnoses. Over 93 per cent record one of the top 20 principal diagnoses. 17

A principal diagnosis of perineal laceration during delivery was recorded for 23.3 per cent of total Delivery discharges. This was followed by Single spontaneous delivery (15.5 per cent) and Labour and delivery complicated by fetal stress [distress] (15.1 per cent).

Delivery Discharges: Top 20 Principal Diagnoses (N, % and Length of Stay) **TABLE 4.7** 

Princip	al Diagnoses – Top 20	N	% of Top 20 Principal Diagnoses For Deliveries	% of Total Deliveries	In-Patient Mean LOS <sup>a</sup> (≤ 7 Days)
070	Perineal laceration during delivery	16,899	24.9	23.3	2.4
080	Single spontaneous delivery <sup>b</sup>	11,231	16.5	15.5	2.0
068	Labour and delivery complicated by fetal stress [distress]	10,966	16.2	15.1	3.3
034	Maternal care for known or suspected abnormality of pelvic organs (includes scar from previous Caesarean sections)	5,919	8.7	8.1	4.1
048	Prolonged pregnancy (≥42 weeks)	3,333	4.9	4.6	3.2
063	Long labour (>18 hours)	2,928	4.3	4	3.8
062	Abnormalities of forces of labour	2,575	3.8	3.5	3.6
032	Maternal care for known or suspected malpresentation of fetus	2,114	3.1	2.9	4.2
036	Maternal care for other known or suspected fetal problems	2,013	3.0	2.8	3.4
042	Premature rupture of membranes	1,767	2.6	2.4	3.7
013	Gestational [pregnancy-induced] hypertension without significant proteinuria	1,089	1.6	1.5	4.2
065	Labour and delivery affected by maternal pelvic abnormality	1,053	1.6	1.4	2.8
064	Labour and delivery affected by malposition and malpresentation of fetus	1,046	1.5	1.4	3.9
099	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium	950	1.4	1.3	3.4
060	Preterm labour and delivery	850	1.3	1.2	3.6
075	Other complications of labour and delivery, not elsewhere classified	809	1.2	1.1	3.1
014	Gestational [pregnancy-induced] hypertension with significant proteinuria	765	1.1	1.1	4.6
024	Diabetes mellitus in pregnancy	555	0.8	0.8	3.3
041	Other disorders of amniotic fluid and membranes	532	0.8	0.7	3.6
072	Postpartum haemorrhage	502	0.7	0.7	2.9
Top 20	Principal Diagnoses for <i>Delivery</i> Discharges	67,896	100	93.4	3.0
Deliver	y Discharges – Total	72,675	-	-	3.0

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.nprs.ie).

Delivery discharges are all in-patients.

<sup>080</sup> 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].

See Section Three for details of clinical coding and classification.

#### 4.3.7.2 Top 10 Principal Procedures

In 2010, 93.1 per cent of *Delivery* discharges had a principal procedure reported. The mean number of all procedures recorded for total *Delivery* discharges was 2.7. Almost all (98.0 per cent) of these deliveries were accounted for in the top ten principal procedures (see Table 4.8). <sup>18</sup>

The top principal procedure was Caesarean section, which was recorded in 28.2 per cent of Delivery discharges with a principal procedure (see Section 4.3.8 for more information on Caesarean Section deliveries) This was followed by postpartum suture (26.9 per cent) and vacuum extraction (10.6 per cent).

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

Principa	al Procedure – Top 10	N	% of Top 10 Procedures for Deliveries	% of Deliveries with a Principal Procedure	In-Patient Mean LOS <sup>a</sup> (≤ 7 Days)
1340	Caesarean section <sup>b</sup>	19,097	28.8	28.2	4.5
1344	Postpartum suture	18,163	27.4	26.9	2.5
1338	Vacuum extraction	7,163	10.8	10.6	3.0
1343	Other procedures associated with delivery <sup>c</sup>	5,384	8.1	8	2.9
1335	Medical or surgical augmentation of labour	4,398	6.6	6.5	2.1
1334	Medical or surgical induction of labour	4,197	6.3	6.2	2.9
1333	Analgesia and anaesthesia during labour and delivery procedure	3,802	5.7	5.6	2.4
1337	Forceps delivery	2,408	3.6	3.6	3.3
1336	Spontaneous vertex delivery <sup>d</sup>	1,061	1.6	1.6	1.9
1345	Postpartum evacuation of uterus	559	0.8	0.8	2.9
Top 20	Principal Procedure Blocks for Deliveries	66,232	100	98.0	3.1
Deliver	y Discharges with a Principal Procedure – Total	67,646	-	-	3.1
	y Discharges – Total ng those with and without a Principal Procedure)	72,675	-	-	3.0

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.nprs.ie).

Delivery discharges are all in-patients.

b As one principal procedure and up to nineteen 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.

c Includes episiotomy.

d 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]

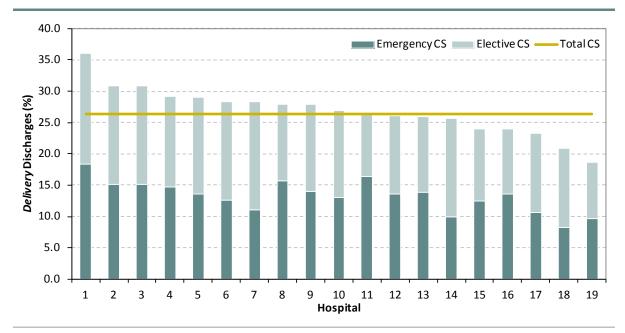
### 4.3.8 Delivery Discharges: Caesarean Section Deliveries

A Caesarean section was reported for 19,190 (26.4 per cent) *Delivery* discharges. Section 4.3.8 presents additional information on discharges who underwent a Caesarean section procedure.

# 4.3.8.1 Caesarean Section by Hospital 19

Figure 4.9 presents the proportion of *Delivery* discharges with an emergency/ elective Caesarean section procedure by (anonymised) hospital. It shows that the proportion ranged from 18.6 per cent to 36.1 per cent.

FIGURE 4.9 Delivery Discharges: Caesarean Section by Hospital (%)



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.nprs.ie). Three hospitals had <10 deliveries and were excluded from this presentation.

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.nprs.ie.

### 4.3.8.2 Previous Caesarean Section by Method of Delivery

Table 4.9 disaggregates *Delivery* discharges into two categories according to their Caesarean section history. <sup>20</sup> *Previous Caesarean* refers to women with a diagnosis of delivery this episode where evidence of a previous Caesarean section has been coded.

- Almost 12 per cent of *Delivery* discharges had a previous Caesarean section.
- Of those women who had a previous Caesarean section 85.7 per cent had a Caesarean section procedure (70.8 per cent by elective Caesarean section) this episode, 9.5 per cent had a non-instrumental delivery and 4.7 per cent had an instrumental delivery.
- Over 88 per cent of deliveries were to previous non-Caesarean or first time mothers; 18.6 per cent delivered by Caesarean section this episode, 63.6 per cent had a non-instrumental delivery and 17.8 per cent had an instrumental delivery.

**TABLE 4.9** Delivery Discharges: Previous Caesarean Section by Method of Delivery (N, %)

		Previous Caesarean Delivery <sup>a</sup> N %		n-Caesarean ne Mother <sup>b</sup>	Total <i>Delivery</i> Discharges		
	N			%	N	%	
Non-Instrumental	801	9.5	40,843	63.6	41,644	57.3	
Instrumental	399	4.7	11,442	17.8	11,841	16.3	
Caesarean Section	7,209	85.7	11,981	18.6	19,190	26.4	
Elective	5,951	70.8	3,422	5.3	9,373	12.9	
Emergency	1,258	15.0	8,559	13.3	9,817	13.5	
Total <i>Delivery</i> Discharges	8,409	100	64,266	100	72,675	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.nprs.ie).

a Includes Maternal care due to uterine scar from previous surgery (O34.2) and Vaginal delivery following previous Caesarean section (O75.7), which should be assigned for all cases where a trial of Caesarean scar proceeds to a vaginal delivery.

b These are mothers who have never had a Caesarean section. This category includes mothers that have previous delivered vaginally and first time mothers.

Parity was not available in HIPE in 2010 but its introduction to the HIPE system in 2011 will allow more in-depth analysis of this in future years.

#### Caesarean Section Deliveries: Top 10 Principal Diagnoses 4.3.8.3

Table 4.10 presents the top ten principal diagnoses for Delivery discharges with a Caesarean section procedure. The top three principal diagnoses accounted for over 56 per cent of all principal diagnoses within this category:

- Over 30 per cent of Caesarean section Delivery discharges had a principal diagnosis of Maternal care for known or suspected abnormality of pelvic organs. Of these, almost 94 per cent were elective Caesarean sections.
- Exactly 16 per cent of Caesarean section Delivery discharges had a principal diagnosis of Labour and delivery complicated by fetal stress [distress]. Of these, over 97 per cent were emergency Caesarean sections.

TABLE 4.10 Delivery Discharges: Top 10 Principal Diagnoses for Discharges with a Caesarean Section Procedure (N, Col % and Row %)

					Cae	esarean S	ection			
		Ele	ective CS	5	Em	ergency	cs		aesarean S <i>ery</i> Discha	
		N	Col %	Row %	N	Col %	Row %	N	Col %	Row %
034	Maternal care for known or suspected abnormality of pelvic organs	5,410	57.7	93.6	368	3.7	6.4	5,778	30.1	100
068	Labour and delivery complicated by fetal stress [distress]	77	0.8	2.5	2,988	30.4	97.5	3,065	16.0	100
032	Maternal care for known or suspected malpresentation of fetus	1,638	17.5	84.7	295	3.0	15.3	1,933	10.1	100
062	Abnormalities of forces of labour	25	0.3	2.6	941	9.6	97.4	966	5.0	100
063	Long labour (>18 hours)	21	0.2	2.3	898	9.1	97.7	919	4.8	100
O64	Labour and delivery affected by malposition and malpresentation of fetus	203	2.2	25.3	598	6.1	74.7	801	4.2	100
O36	Maternal care for other known or suspected fetal problems	330	3.5	46.7	377	3.8	53.3	707	3.7	100
048	Prolonged pregnancy (≥42 weeks)	36	0.4	6.3	539	5.5	93.7	575	3.0	100
061	Failed induction of labour	23	0.2	4.9	448	4.6	95.1	471	2.5	100
014	Gestational [pregnancy- induced] hypertension with significant proteinuria	133	1.4	30.2	307	3.1	69.8	440	2.3	100
All Ot	her Diagnoses	1,477	15.8	41.8	2,058	21.0	58.2	3,535	18.4	100
	Total Caesarean Section  Delivery Discharges		100	48.8	9,817	100	51.2	19,190	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.nprs.ie).

# 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 2010 there were 63,906 Non-Delivery discharges reported to HIPE (46.8 per cent of total Maternity discharges and 4.4 per cent of total HIPE discharges). Non-Delivery discharges are examined by day patient activity in Tables 4.11–4.12 and Figures 4.10–4.12 and in-patient activity in Tables 4.13–4.14 and Figures 4.13–4.15.

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

Day patients accounted for 16.1 per cent (10,287) of Non-Delivery discharges.

- The top two principal diagnoses for *Non-Delivery* day patient discharges were; special screening examination for other diseases and disorders (17.4 per cent), followed by other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium (13.2 per cent).
- Non-Delivery day patient discharges recorded a principal procedure for 29.7 per cent of discharges. Of these the top two principal procedures were; curettage and evacuation of uterus (54.3 per cent), and other cardiovascular diagnostic tests, measures or investigations (19.6 per cent).

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

In-patients accounted for 83.9 per cent (53,619) 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 (23.8 per cent), followed by false labour (14.4 per cent).
- Non-Delivery in-patient discharges recorded a principal procedure for 19.0 per cent of discharges. Of these the top two principal procedures were; curettage and evacuation of uterus (34.1 per cent), and administration of pharmacotherapy (18.1 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 excessive vomiting in pregnancy.
- In the top 10 principal procedures 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 to 2.4 days for *generalised* allied health interventions.

N					
for other diseases and disorders  O99 Other maternal diseases 1,362 14.6 13.2  classifiable elsewhere but complicating pregnancy, childbirth and the puerperium  O02 Other abnormal products of 1,338 14.4 13.0  conception  Z36 Antenatal screening 1,320 14.2 12.8  O03 Spontaneous abortion 1,230 13.2 12.0  (miscarriage)  O20 Haemorrhage in early pregnancy 1,048 11.2 10.2  Z34 Supervision of normal 481 5.2 4.7  pregnancy  O13 Gestational [pregnancy-induced] 352 3.8 3.4  hypertension without significant proteinuria  O14 Gestational [pregnancy-induced] 205 2.2 2.0  hypertension with significant proteinuria  O24 Diabetes mellitus in pregnancy 187 2.0 1.8  Top 10 Principal Diagnoses for Day 9,316 100 90.6			N	Top 10 Principal Diagnoses For Day	Day
classifiable elsewhere but complicating pregnancy, childbirth and the puerperium  O02 Other abnormal products of 1,338 14.4 13.0 conception  Z36 Antenatal screening 1,320 14.2 12.8  O03 Spontaneous abortion 1,230 13.2 12.0 (miscarriage)  O20 Haemorrhage in early pregnancy 1,048 11.2 10.2  Z34 Supervision of normal 481 5.2 4.7 pregnancy  O13 Gestational [pregnancy-induced] 352 3.8 3.4 hypertension without significant proteinuria  O14 Gestational [pregnancy-induced] 205 2.2 2.0 hypertension with significant proteinuria  O24 Diabetes mellitus in pregnancy 187 2.0 1.8  Top 10 Principal Diagnoses for Day 9,316 100 90.6	Z13		1,793	19.2	17.4
236	O99	classifiable elsewhere but complicating pregnancy,	1,362	14.6	13.2
003         Spontaneous abortion (miscarriage)         1,230         13.2         12.0           020         Haemorrhage in early pregnancy         1,048         11.2         10.2           234         Supervision of normal pregnancy         481         5.2         4.7           013         Gestational [pregnancy-induced] hypertension without significant proteinuria         352         3.8         3.4           014         Gestational [pregnancy-induced] hypertension with significant proteinuria         205         2.2         2.0           024         Diabetes mellitus in pregnancy         187         2.0         1.8           Top 10 Principal Diagnoses for Day Patients – Total         9,316         100         90.6	O02		1,338	14.4	13.0
(miscarriage)  O20 Haemorrhage in early pregnancy 1,048 11.2 10.2  Z34 Supervision of normal 481 5.2 4.7 pregnancy  O13 Gestational [pregnancy-induced] 352 3.8 3.4 hypertension without significant proteinuria  O14 Gestational [pregnancy-induced] 205 2.2 2.0 hypertension with significant proteinuria  O24 Diabetes mellitus in pregnancy 187 2.0 1.8  Top 10 Principal Diagnoses for Day 9,316 100 90.6	Z36	Antenatal screening	1,320	14.2	12.8
Z34 Supervision of normal pregnancy 481 5.2 4.7 pregnancy O13 Gestational [pregnancy-induced] hypertension without significant proteinuria O14 Gestational [pregnancy-induced] 205 2.2 2.0 hypertension with significant proteinuria O24 Diabetes mellitus in pregnancy 187 2.0 1.8 Top 10 Principal Diagnoses for Day 9,316 100 90.6 Patients – Total	003	•	1,230	13.2	12.0
pregnancy O13 Gestational [pregnancy-induced] hypertension without significant proteinuria O14 Gestational [pregnancy-induced] 205 2.2 2.0 hypertension with significant proteinuria O24 Diabetes mellitus in pregnancy 187 2.0 1.8 Top 10 Principal Diagnoses for Day 9,316 100 90.6 Patients – Total	020	Haemorrhage in early pregnancy	1,048	11.2	10.2
hypertension without significant proteinuria O14 Gestational [pregnancy-induced] 205 2.2 2.0 hypertension with significant proteinuria O24 Diabetes mellitus in pregnancy 187 2.0 1.8 Top 10 Principal Diagnoses for Day 9,316 100 90.6 Patients – Total	Z34	'	481	5.2	4.7
hypertension with significant proteinuria  O24 Diabetes mellitus in pregnancy 187 2.0 1.8  Top 10 Principal Diagnoses for Day 9,316 100 90.6  Patients – Total	013	hypertension without significant	352	3.8	3.4
Top 10 Principal Diagnoses for Day 9,316 100 90.6 Patients – Total	014	hypertension with significant	205	2.2	2.0
Patients – Total	024	Diabetes mellitus in pregnancy	187	2.0	1.8
Day Patients – Total 10.287			9,316	100	90.6
10,207	Day Pa	tients – Total	10,287		-

**TABLE 4.12** Non-Delivery Discharges: Day Patient Top 10 Principal Procedures (N, %)

		N	% of	% of Total
			Top 10	Day
			Principal	Patients
			Procedures	with a
			For Day	Principal
			Patients	Procedure
1265	Curettage and evacuation of uterus	1,660	56.1	54.3
1857	Other cardiovascular diagnostic tests, measures or investigations	599	20.2	19.6
1920	Administration of pharmacotherapy	388	13.1	12.7
1916	Generalised allied health interventions	72	2.4	2.4
0063	Administration of anaesthetic agent around other peripheral nerve	60	2.0	2.0
1893	Administration of blood and blood products	51	1.7	1.7
1274	Application, insertion or removal procedures on cervix	42	1.4	1.4
1884	Immunisation	40	1.4	1.3
1256	Procedures for management of ectopic pregnancy	29	1.0	0.9
1330	Antepartum application, insertion or removal procedures	19	0.6	0.6
	Principal Procedures for Day	2,960	100	96.9
Patients	s – Total			
Day Pat – Total	ients with a Principal Procedure	3,055		100
Day Pat	ients – Total (including those	10,287		-
with an	d without a procedure			

FIGURE 4.10 Non-Delivery Discharges:
Day Patient Age (N, %)

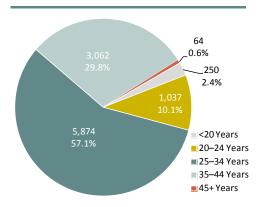


FIGURE 4.11 Non-Delivery Discharges:

Day Patient Marital Status
(N, %)

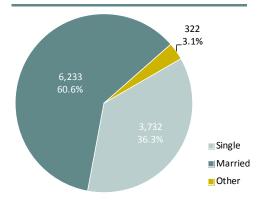
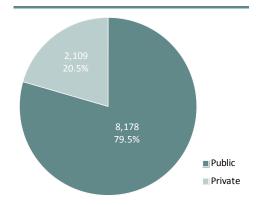


FIGURE 4.12 Non-Delivery Discharges: Day
Patient Public/Private Status
(N, %)



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

		N	% of Top 10 Principal Diagnoses for In-Patients	% of Total In-Patients	Mean LOS (≤7 Days)
O99	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium	12,772	30.5	23.8	1.5
047	False labour	7,726	18.5	14.4	1.2
003	Spontaneous abortion (miscarriage)	3,837	9.2	7.2	1.3
021	Excessive vomiting in pregnancy	3,424	8.2	6.4	2.0
002	Other abnormal products of conception	2,708	6.5	5.1	1.2
013	Gestational [pregnancy-induced] hypertension without significant proteinuria	2,563	6.1	4.8	1.6
O46	Antepartum haemorrhage, not elsewhere classified	2,545	6.1	4.7	1.5
O20	Haemorrhage in early pregnancy	2,315	5.5	4.3	1.2
Z36	Antenatal screening	2,184	5.2	4.1	1.1
023	Infections of genitourinary tract in pregnancy	1,750	4.2	3.3	1.9
	Principal Diagnoses for	41,824	100	78.0	1.4
	ents – Total	F2 C10			15
in-Pati	ents – Total	53,619	<u> </u>	-	1.5

**TABLE 4.14** Non-Delivery Discharges: In-Patient Top 10 Principal Procedures (N, %, and Length of Stay)

		N	% of Top 10 Principal Procedures	% of Total In-Patients with a	Mean LOS (≤7 Days)
			for	Principal	(=: = = , = ,
			In-Patients	Procedure	
1265	Curettage and evacuation of uterus	3,487	38.7	34.1	1.3
1920	Administration of pharmacotherapy	1,846	20.5	18.1	1.8
1916	Generalised allied health interventions	1,193	13.3	11.7	2.4
1884	Immunisation	770	8.6	7.5	1.4
1256	Procedures for management of ectopic pregnancy	688	7.6	6.7	2.3
1330	Antepartum application, insertion or removal procedures	327	3.6	3.2	1.5
1344	Postpartum suture	198	2.2	1.9	2.3
1274	Application, insertion or removal procedures on cervix	192	2.1	1.9	1.5
1345	Postpartum evacuation of uterus	167	1.9	1.6	2.3
1334	Medical or surgical induction of labour	131	1.5	1.3	1.9
for In-P	Principal Procedures atients – Total	8,999	100	88.1	1.7
	nts with a Principal ıre - Total	10,212	-	-	1.8
those w	nts – Total (including ith and without a	53,619	-	-	1.5
procedu	ıre				

FIGURE 4.13 Non-Delivery Discharges: In-Patient Age (N, %)

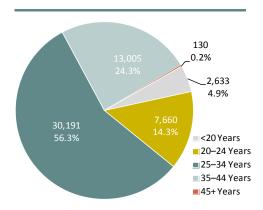


FIGURE 4.14 Non-Delivery Discharges: In-Patient Marital Status (N, %)

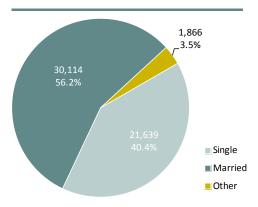
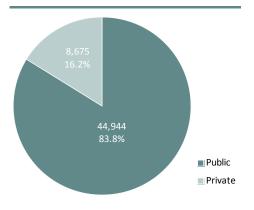


FIGURE 4.15 Non-Delivery Discharges: In-Patient Public/Private Status (N, %)



Case Mix Analysis SECTION
2010

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# Total Discharges 1,447,108

## 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 2010. Hospital case mix may be defined as 'the proportion of cases of each disease and health problem treated in the hospital'.<sup>1</sup>

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

#### 5.1.1 Case Mix Classification

- The 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 Diagnosis Related Group (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 2010.<sup>3</sup> 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 onwards.<sup>4</sup>

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

<sup>&</sup>lt;sup>3</sup> 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., 2011, '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.

### 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 the AR-DRG level. In total, there are 698 AR-DRGs in version 6.0.

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.

'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>8, 9</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. 10

#### 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. Over 53 per cent of extended stay inpatients had the highest resource use, these discharges accounted for 10.5 per cent of total discharges within this AR-DRG complexity split indicator.

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

						Discha	rges				
		Day				In-Pati	ents			Tota	
		Patien	ts	Acut	е	Extend	ded	Tota	I	Discharges	
		N	%	N	%	N	%	N	%	N	%
	A Highest consumption of resources	6,415	0.7	67,897	11.8	8,696	53.9	76,593	12.9	83,008	5.7
<b>2</b> -	<b>B</b> Second highest consumption of resources	188,909	22.1	264,745	46.0	5,159	32.0	269,904	45.6	458,813	31.7
AR-DRG Complexity	C Third highest consumption of resources	152,345	17.8	28,481	5.0	546	3.4	29,027	4.9	181,372	12.5
	<b>D</b> Fourth highest consumption of resources	355	0.0	5,494	1.0	51	0.3	5,545	0.9	5,900	0.4
	<b>Z</b> No complexity split	507,594	59.3	208,736	36.3	1,685	10.4	210,421	35.6	718,015	49.6
	Total Discharges	855,618	100	575,353	100	16,137	100	591,490	100	1,447,108	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. Canberra: Commonwealth Department of Health and Ageing. p 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. p 9-10.

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 2010 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.

The following analysis is provided for tables 5.3 to 5.15 and 5.17 to 5.27 for each MDC and its associated AR-DRGs.

<b>Total Day Patients</b>				
		Elective In-Patients		
	Discharges	Emergency In-Patients <sup>11</sup>		
In-Patients		Total In-Patients		
III-Patients		Elective In-Patients		
	Mean Length of Stay	Emergency In-Patients		
		Total In-Patients		
<b>Total Discharges</b>				

In-patient discharges are made up of elective, emergency and *Maternity* in-patients. The analysis of in-patients presented in this section is based on admission type, indicating the priority of admission, elective or emergency. While the majority of *Maternity* in-patients (97.5 per cent) are assigned to MDC 14, *Pregnancy*, *Childbirth* and the *Puerperium* and its associated AR-DRGs (see Tables 5.2 and 5.16), some *Maternity* in-patients may be assigned to other MDCs and their associated AR-DRGs. For these MDCs and AR-DRGs *Maternity* in-patients are not presented separately but are included in overall figure for total in-patients, therefore the sum of elective in-patients and emergency in-patients will not equal total in-patients.<sup>12</sup>

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 would not be possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.

As DRG assignment is the result of a multivariate process, the confidentiality of individual discharges is ensured. In this context cells in this section with small numbers have not been suppressed.

#### Analysis of Total Discharges by MDC and AR-DRG 5.2.1

- The MDC with the highest volume of total discharges, 210,413 or 14.5 per cent assigned was Diseases and Disorders of the Kidney and Urinary tract, MDC 11 (see Tables 5.2 and 5.13 and Figure 5.2). Day patients make up over 89 per cent of activity within this MDC (see Figure 5.3).
  - Haemodialysis (AR-DRG L61Z) accounted for 167,963 discharges or 11.6 per cent total discharges. Haemodialysis was the highest ranked AR-DRG for day patients accounting for 19.6 per cent of total day patients.
- The second highest volume of discharges by MDC was Neoplastic Disorders (Haematological and Solid Neoplasms) (MDC 17) which accounted for 201,858 discharges or close to 14 per cent of total discharges (see Tables 5.2 and 5.19 and Figure 5.2).
  - Radiotherapy (AR-DRG R64Z) and Chemotherapy (AR-DRG R63Z), together accounted for 12.0 per cent total discharges.

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

- The MDC with the largest number of day patients reported was Neoplastic Disorders (Haematological and Solid Neoplasms) (MDC 17), with 196,336 discharges which accounted for 22.9 per cent of day patients (see Tables 5.2 and 5.19 and Figure 5.3).
  - Radiotherapy (AR-DRG R64Z), accounted for 47.3 per cent of day patients within this MDC and 10.9 per cent total day patients.
  - Chemotherapy (AR-DRG R63Z), accounted for 40.9 per cent of day patients within this MDC and 9.4 per cent of total day patients.
- Diseases and Disorders of the Kidney and Urinary Tract (MDC 11), accounted for 187,792 discharges or 21.9 per cent of day patients (see Tables 5.2 and 5.13 and Figure 5.3).
  - Haemodialysis (AR-DRG L61Z), accounted for 89.4 per cent of day patients within this MDC and 19.6 per cent of total day patients.

### 5.2.3 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 125,068 discharges which
   accounted for 21.1 per cent of in-patients (see Tables 5.2 and 5.16 and Figure
   5.2).
  - \* Vaginal Delivery (AR-DRG O60Z), accounted for 41.9 per cent of inpatients within this MDC and 8.9 per cent of total in-patient discharges.
  - \* Antenatal and Other Obstetric Admission (AR-DRG O66Z), accounted for 27.8 per cent of in-patients within this MDC and 5.9 per cent of total inpatients.
  - \* Caesarean Delivery without Catastrophic or Severe Complication and/or Comorbidity (AR-DRG 001B), accounted for 12.8 per cent of in-patients within this MDC and at 2.7 per cent of total in-patients.
- Diseases and Disorders of the Musculoskeletal System and Connective Tissue (MDC 8), accounted for 16,450 elective in-patients, just over 15 per cent of total elective in-patients (see Table 5.2). Within this MDC the AR-DRG Hip Replacement without Catastrophic Complication and/or Comorbidity (AR-DRG 103B), accounted for 4,381 in-patients of which 2,999 or 68.5 per cent were elective in-patient discharges (see Table 5.10).
- The highest proportion of emergency in-patients was accounted for by *Diseases and Disorders of the Circulatory System* (MDC 5) at 57,821 discharges or 16.2 per cent (see Table 5.2). Within this MDC *Chest Pain* (AR-DRG F74Z) accounted for 14,439 emergency in-patients, with an emergency in-patient mean length of stay of 2.2 days (see Table 5.7).

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

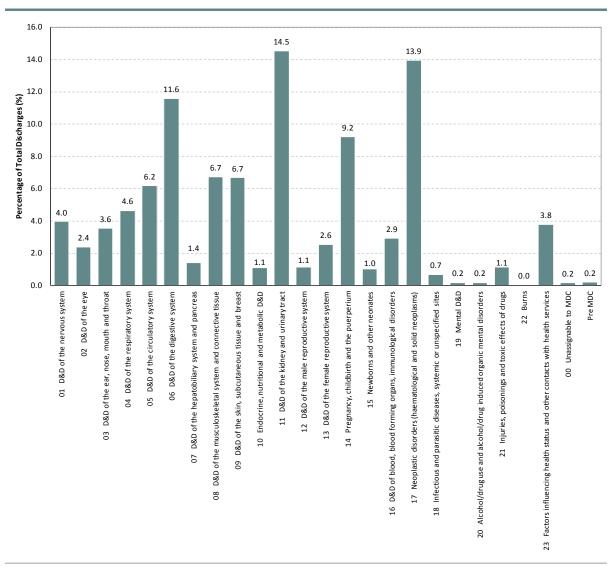
Major Diagnostic Category	Day Patients <sup>a</sup>		In-Patients								Total	
			Elective		Emergency		Maternity		Total		Discharges <sup>b</sup>	
	N	%	N	%	N	%	N	%	N	%	N	%
01 Diseases and disorders of the nervous system	15,929	1.9	3,935	3.6	37,441	10.5	5	0.0	41,381	7.0	57,310	4.0
02 Diseases and disorders of the eye	29,573	3.5	2,523	2.3	2,488	0.7	0	0.0	5,011	0.8	34,584	2.4
03 Diseases and disorders of the ear, nose, mouth and throat	26,252	3.1	9,480	8.7	15,673	4.4	4	0.0	25,157	4.3	51,409	3.6
04 Diseases and disorders of the respiratory system	13,093	1.5	6,951	6.4	47,239	13.3	6	0.0	54,196	9.2	67,289	4.6
05 Diseases and disorders of the circulatory system	21,493	2.5	10,020	9.2	57,821	16.2	11	0.0	67,852	11.5	89,345	6.2
06 Diseases and disorders of the digestive system	101,137	11.8	12,276	11.3	54,489	15.3	28	0.0	66,793	11.3	167,930	11.6
07 Diseases and disorders of the hepatobiliary system and pancreas	5,382	0.6	5,216	4.8	9,788	2.7	2	0.0	15,006	2.5	20,388	1.4
08 Diseases and disorders of the musculoskeletal system and connective tissue	47,995	5.6	16,450	15.1	32,967	9.3	7	0.0	49,424	8.4	97,419	6.7
09 Diseases and disorders of the skin, subcutaneous tissue and breast	79,260	9.3	6,000	5.5	11,428	3.2	9	0.0	17,437	2.9	96,697	6.7
10 Endocrine, nutritional and metabolic diseases and disorders	5,332	0.6	2,943	2.7	7,433	2.1	2	0.0	10,378	1.8	15,710	1.1
11 Diseases and disorders of the kidney and urinary tract	187,792	21.9	5,095	4.7	17,519	4.9	7	0.0	22,621	3.8	210,413	14.5
12 Diseases and disorders of the male reproductive system	11,372	1.3	2,829	2.6	2,436	0.7	0	0.0	5,265	0.9	16,637	1.1
13 Diseases and disorders of the female reproductive system	22,807	2.7	9,443	8.7	4,681	1.3	22	0.0	14,146	2.4	36,953	2.6
14 Pregnancy, childbirth and the puerperium	8,510	1.0	21	0.0	137	0.0	124,910	98.9	125,068	21.1	133,578	9.2
15 Newborns and other neonates	498	0.1	386	0.4	14,153	4.0	0	0.0	14,539	2.5	15,037	1.0
16 Diseases and disorders of blood, blood forming organs, immunological disorders	36,168	4.2	1,419	1.3	4,598	1.3	3	0.0	6,020	1.0	42,188	2.9
17 Neoplastic disorders (haematological and solid neoplasms)	196,336	22.9	2,847	2.6	2,674	0.8	1	0.0	5,522	0.9	201,858	13.9
18 Infectious and parasitic diseases, systemic or unspecified sites	1,548	0.2	524	0.5	7,786	2.2	6	0.0	8,316	1.4	9,864	0.7
19 Mental diseases and disorders	607	0.1	272	0.2	1,790	0.5	3	0.0	2,065	0.3	2,672	0.2
20 Alcohol/drug use and alcohol/drug induced organic mental disorders	8	0.0	158	0.1	2,490	0.7	0	0.0	2,648	0.4	2,656	0.2
21 Injuries, poisonings and toxic effects of drugs	970	0.1	327	0.3	14,769	4.1	240	0.2	15,336	2.6	16,306	1.1
22 Burns	41	0.0	58	0.1	615	0.2	0	0.0	673	0.1	714	0.0
23 Factors influencing health status and other contacts with health services	42,772	5.0	8,340	7.7	2,526	0.7	1,018	0.8	11,884	2.0	54,656	3.8
00 Unassignable to MDC	595	0.1	632	0.6	1,247	0.3	5	0.0	1,884	0.3	2,479	0.2
Pre-MDC	148	0.0	680	0.6	2,183	0.6	5	0.0	2,868	0.5	3,016	0.2
Total Discharges	855,618	100	108,825	100	356,371	100	126,294	100	591,490	100	1,447,108	100

Notes: Percentage columns are subject to rounding.

a Includes *Maternity* day patients.

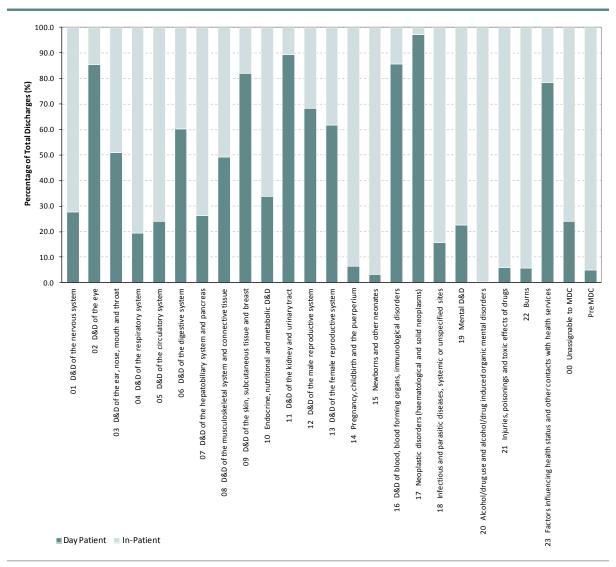
b Includes day patients and in-patients.

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



Note: D&D = Diseases and disorders

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 and Admission Type (N, In-Patient Length of Stay)

MDC 1 Diseases and Disorders of the Nervous System	Day In-Patients										Total
	Patients <sup>a</sup>		Discharges				Length o	of Stay <sup>c</sup>			Discharges <sup>b</sup>
		Elective Emergency		Total <sup>d</sup>	Elective		Emergency		Total <sup>e</sup>		
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
B01A Ventricular Shunt Revision W Cat or Sev CC	0	2	49	51	7.5	8	5.6	3	5.7	3	51
B01B Ventricular Shunt Revision W/O Cat or Sev CC	1	15	46	61	6.1	4	4.3	3	4.8	3	62
B02A Cranial Procedures W Cat CC	0	37	154	191	44.2	21	23	15	27.1	15	191
B02B Cranial Procedures W Sev CC	0	86	219	305	11.1	9	14.2	10	13.3	9	305
B02C Cranial Procedures W/O Cat or Sev CC	3	459	616	1,075	6.8	5	10.3	7	8.8	7	1,078
B03A Spinal Procedures W Cat or Sev CC	2	14	30	44	10.3	9	24.9	14	20.2	11	46
B03B Spinal Procedures W/O Cat or Sev CC	79	137	55	192	5.2	3	9.3	5	6.3	4	271
B04A Extracranial Vascular Procedures W Cat CC	0	25	45	70	19.8	11	34.8	17	29.4	15	70
BO4B Extracranial Vascular Procedures W/O Cat CC	0	204	117	321	6.3	5	13	9	8.7	6	321
B05Z Carpal Tunnel Release	1,486	114	15	129	1.4	1	3.6	3	1.6	1	1,615
B06A Procs for Cerebral Palsy, Muscular Dystrophy, Neuropathy W CC	9	24	51	75	8.1	6	46	17	33.9	13	84
B06B Procs for Cerebral Palsy, Muscular Dystrophy, Neuropathy W/O CC	188	103	13	116	2.7	2	11.7	10	3.7	2	304
B07A Peripheral and Cranial Nerve and Other Nervous System	3	9	59	68	14.9	8	33.5	11	31	11	71
Procedures W CC	70	20	206	425	2.4	2	2		2.4	2	500
B07B Peripheral and Cranial Nerve and Other Nervous System Procedures W/O CC	73	39	396	435	3.4	2	2	1	2.1	2	508
B40Z Plasmapheresis W Neurological Disease, Sameday	31	0	0	0	-	-	-	-	-	-	31
B41Z Telemetric EEG Monitoring	21	144	135	279	5.3	4	9.5	5	7.4	4	300
B42A Nervous System Diagnosis W Ventilator Support W Cat CC	0	0	57	57	-	-	19.1	9	19.1	9	57
B42B Nervous System Diagnosis W Ventilator Support W/O Cat CC	0	1	140	141	2	2	8.1	3	8.1	3	141
B60A Acute Paraplegia/Quadriplegia W or W/O OR Procs W Cat CC	1	9	13	22	52.4	35	56.5	37	54.8	36	23
B60B Acute Paraplegia/Quadriplegia W or W/O OR Procs W/O Cat CC	142	37	37	74	46	26	13.2	6	29.6	11	216
B61A Spinal Cord Conditions W or W/O OR Procedures W Cat or Sev CC	0	6	42	48	30.3	13	26.1	19	26.6	18	48
B61B Spinal Cord Conditions W or W/O OR Procedures W/O Cat or Sev CC	9	22	106	128	5.9	5	7.8	4	7.4	5	137
B62Z Apheresis	81	8	2	10	3.1	3	4	4	3.3	4	91
B63Z Dementia and Other Chronic Disturbances of Cerebral Function	143	41	567	608	30.5	10	40.7	18	40	17	751
B64A Delirium W Cat CC	0	3	142	145	13.3	4	29.6	13	29.3	13	145
B64B Delirium W/O Cat CC	54	42	1,401	1,443	9.5	6	9.2	5	9.3	5	1,497
B65Z Cerebral Palsy	261	20	22	42	4.7	3	7.8	3	6.3	3	303
B66A Nervous System Neoplasm W Cat or Sev CC	61	100	276	376	16.5	9	15.9	9	16.1	9	437
B66B Nervous System Neoplasm W/O Cat or Sev CC	792	245	452	697	15.7	7	8.6	4	11.1	5	1,489
B67A Degenerative Nervous System Disorders W Cat or Sev CC	6	56	399	455	43.8	20	30.4	14	32.1	14	461
B67B Degenerative Nervous System Disorders W Moderate CC	28	68	255	323	10.1	5	12.3	7	11.8	6	351
B67C Degenerative Nervous System Disorders W/O CC	621	241	481	722	10.1	6	9.5	5	9.7	6	1,343
B68A Multiple Sclerosis and Cerebellar Ataxia W CC	32	33	138	171	13.5	4	18.4	8	17.4	8	203
B68B Multiple Sclerosis and Cerebellar Ataxia W/O CC	4,319	155	425	580	4.8	4	5.8	4	5.6	4	4,899
B69A TIA and Precerebral Occlusion W Cat or Sev CC	5	16	649	665	11.2	9	11	6	11	6	670
B69B TIA and Precerebral Occlusion W/O Cat or Sev CC	56	73	2,237	2,310	4.2	3	4.8	4	4.8	4	2,366

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

	Day				1	n-Patients					Total
	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
MDC 1 Diseases and Disorders of the Nervous System		Elective	Emergency	Total <sup>d</sup>	Ele	ective	Emer	gency	To	otal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
B70A Stroke and Other Cerebrovascular Disorders W Cat CC	0	23	1,033	1,056	76.2	27	49.2	27	49.8	27	1,056
B70B Stroke and Other Cerebrovascular Disorders W Sev CC	2	32	1,478	1,510	30.6	23	22.1	12	22.3	12	1,512
B70C Stroke and Other Cerebrovascular Disorders W/O Cat or Sev CC	26	83	2,600	2,683	13.1	8	13.0	8	13.0	8	2,709
B70D Stroke and Other Cerebrovascular Disorders, Died or Transferred <5 Days	4	4	545	549	2.3	2	1.8	1	1.8	1	553
B71A Cranial and Peripheral Nerve Disorders W CC	103	74	257	331	6.1	4	14.2	7	12.4	6	434
B71B Cranial and Peripheral Nerve Disorders W/O CC	2,488	134	633	767	4.8	4	4.5	2	4.5	2	3,255
B72A Nervous System Infection Except Viral Meningitis W Cat or Sev CC	4	7	98	105	11.9	11	26.9	15	25.9	14	109
B72B Nervous System Infection Except Viral Meningitis W/O Cat or Sev CC	136	16	268	284	4.9	4	10.2	8	9.9	8	420
B73Z Viral Meningitis	7	4	248	252	7.8	8	5.5	5	5.5	5	259
B74A Nontraumatic Stupor and Coma W CC	4	3	105	108	29.0	9	7.2	3	7.8	3	112
B74B Nontraumatic Stupor and Coma W/O CC	19	6	59	65	1.2	1	3.2	1	3.0	1	84
B75Z Febrile Convulsions	23	4	776	780	2.8	2	1.8	1	1.8	1	803
B76A Seizure W Cat or Sev CC	12	25	957	982	16.8	7	10.7	5	10.9	5	994
B76B Seizure W/O Cat or Sev CC	1,099	207	4,735	4,943	4.8	3	3.2	2	3.3	2	6,042
B77Z Headache	863	160	6,211	6,374	2.6	1	2.5	1	2.5	1	7,237
B78A Intracranial Injury W Cat or Sev CC	0	7	187	194	78.3	49	30.4	13	32.1	14	194
B78B Intracranial Injury W/O Cat or Sev CC	0	18	608	626	39.2	14	7.2	3	8.1	3	626
B79A Skull Fractures W Cat or Sev CC	0	0	39	39	-	-	14.6	7	14.6	7	39
B79B Skull Fractures W/O Cat or Sev CC	4	2	359	361	6.0	6	3.7	2	3.7	2	365
B80Z Other Head Injury	10	4	3,461	3,466	5.0	4	2.0	1	2.0	1	3,476
B81A Other Disorders of the Nervous System W Cat or Sev CC	25	43	547	590	13.1	10	22.3	10	21.6	10	615
B81B Other Disorders of the Nervous System W/O Cat or Sev CC	2,340	276	2,027	2,303	5.5	3	7.2	3	7.0	3	4,643
B82A Chronic and Unspecified Paraplegia/Quadriplegia W or W/O OR Procs W Cat CC	2	32	75	107	79.3	46	51.2	28	59.6	32	109
B82B Chronic and Unspecified Paraplegia/Quadriplegia W or W/O OR Procs W Sev CC	8	57	94	151	38.4	27	12.4	8	22.2	10	159
B82C Chronic and Unspecified Paraplegia/Quadriplegia W or W/O OR Pr W/O Cat/Sev CC	243	126	200	326	35.9	11	9.6	6	19.8	7	569
Total Discharges	15,929	3,935	37,441	41,381	11.9	5	9.3	3	9.6	3	57,310

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

a Includes *Maternity* day patients.

b Includes day patients and in-patients.

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

d Total in-patients include *Maternity* in-patients.

e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

TABLE 5.4 Total Discharges: MDC 2 Diseases and Disorders of the Eye: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day					In-Patients					Total
MDC 2 Discours and Discourdant of the Eve	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
MDC 2 Diseases and Disorders of the Eye		Elective	Emergency	Total <sup>d</sup>	Elec	ctive	Emer	gency	To	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
C01Z Procedures for Penetrating Eye Injury	2	3	113	116	1.7	2	4.1	4	4.1	4	118
CO2Z Enucleations and Orbital Procedures	50	90	29	119	2.7	2	4.5	4	3.1	2	169
C03Z Retinal Procedures	9,129	885	428	1,313	2.8	2	4.8	4	3.5	3	10,442
CO4Z Major Corneal, Scleral and Conjunctival Procedures	7	116	21	137	3.7	3	13.7	8	5.2	4	144
C05Z Dacryocystorhinostomy	81	82	5	87	1.3	1	2.0	1	1.4	1	168
C10Z Strabismus Procedures	464	217	1	218	1.2	1	1.0	1	1.2	1	682
C11Z Eyelid Procedures	603	54	96	150	1.5	1	1.9	1	1.7	1	753
C12Z Other Corneal, Scleral and Conjunctival Procedures	141	29	52	81	2.4	1	6.1	5	4.8	3	222
C13Z Lacrimal Procedures	685	12	6	18	1.3	1	3.2	4	1.9	2	703
C14Z Other Eye Procedures	1,769	66	112	178	2.6	2	5.3	4	4.3	3	1,947
C15A Glaucoma and Complex Cataract Procedures	0	223	68	291	2.5	2	4.3	3	2.9	2	291
C15B Glaucoma and Complex Cataract Procedures, Sameday	580	0	5	5	-	-	1.0	1	1.0	1	585
C16Z Lens Procedures	6,239	517	27	544	2.0	2	3.1	2	2.1	2	6,783
C60A Acute and Major Eye Infections W CC	4	4	41	45	33.3	5	10.5	8	12.5	7	49
C60B Acute and Major Eye Infections W/O CC	38	7	118	125	4.1	2	5.3	5	5.2	5	163
C61A Neurological and Vascular Disorders of the Eye W CC	31	12	115	127	4.7	3	6.6	5	6.4	5	158
C61B Neurological and Vascular Disorders of the Eye W/O CC	537	27	225	252	2.2	1	4.0	3	3.8	3	789
C62Z Hyphema and Medically Managed Trauma to the Eye	95	12	430	442	2.4	1	2.9	1	2.9	1	537
C63Z Other Disorders of the Eye	9,118	167	596	763	2.7	1	3.2	2	3.1	2	9,881
Total Discharges	29,573	2,523	2,488	5,011	2.5	2	4.1	3	3.3	2	34,584

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

a Includes *Maternity* day patients.

b Includes day patients and in-patients.

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

d Total in-patients include *Maternity* in-patients.

e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

TABLE 5.5 Total Discharges: MDC 3 Diseases and Disorders of the Ear, Nose, Mouth and Throat: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day				- 1	n-Patients					Total
MDC 2 Discours and Discoudant of the Fay Ness Mouth and Threat	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
MDC 3 Diseases and Disorders of the Ear, Nose, Mouth and Throat		Elective	Emergency	Total <sup>d</sup>	Elec	ctive	Emer	gency	To	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
D01Z Cochlear Implant	0	70	1	71	5.4	5	6.0	6	5.4	5	71
D02A Head and Neck Procedures W Cat or Sev CC	1	52	33	85	18.5	11	34.8	28	24.8	15	86
D02B Head and Neck Procedures W Malignancy or Moderate CC	2	59	32	91	10.9	9	12.3	12	11.4	9	93
D02C Head and Neck Procedures W/O Malignancy W/O CC	18	90	8	98	3.3	3	9.5	9	3.8	3	116
D03Z Surgical Repair for Cleft Lip or Palate Diagnosis	5	164	1	165	3.7	3	2.0	2	3.7	3	170
D04A Maxillo Surgery W CC	3	22	98	120	3.9	3	3.4	3	3.5	3	123
D04B Maxillo Surgery W/O CC	62	218	531	749	2.9	3	2.4	2	2.5	2	811
D05Z Parotid Gland Procedures	2	159	13	172	4.6	4	5.9	5	4.7	4	174
D06Z Sinus and Complex Middle Ear Procedures	69	330	19	349	2.0	2	6.1	4	2.2	2	418
D10Z Nasal Procedures	377	602	38	640	1.6	1	4.0	3	1.7	1	1,017
D11Z Tonsillectomy and/or Adenoidectomy	360	4,077	432	4,509	1.5	1	3.2	3	1.7	1	4,869
D12Z Other Ear, Nose, Mouth and Throat Procedures	1,086	673	311	984	2.5	2	4.3	2	3.1	2	2,070
D13Z Myringotomy W Tube Insertion	2,578	149	22	171	1.2	1	4.3	3	1.6	1	2,749
D14Z Mouth and Salivary Gland Procedures	765	249	167	416	3.0	2	5.6	3	4.1	2	1,181
D15Z Mastoid Procedures	19	276	23	299	2.5	2	10.5	8	3.1	2	318
D40Z Dental Extractions and Restorations	6,166	144	113	257	1.5	1	2.4	2	1.9	1	6,423
D60A Ear, Nose, Mouth and Throat Malignancy W Cat or Sev CC	44	158	121	279	27.3	17	23.9	14	25.8	14	323
D60B Ear, Nose, Mouth and Throat Malignancy W/O Cat or Sev CC	519	430	199	629	11.3	5	9.0	5	10.5	5	1,148
D61Z Dysequilibrium	616	64	1,905	1,972	3.6	3	3.3	2	3.3	2	2,588
D62Z Epistaxis	419	13	962	975	2.0	1	3.9	3	3.9	3	1,394
D63Z Otitis Media and URI	2,369	230	7,239	7,470	2.9	1	2.1	2	2.2	2	9,839
D64Z Laryngotracheitis and Epiglottitis	7	7	534	541	1.3	1	1.4	1	1.4	1	548
D65Z Nasal Trauma and Deformity	884	54	518	572	1.5	1	2.8	1	2.7	1	1,456
D66A Other Ear, Nose, Mouth and Throat Diagnoses W CC	248	194	170	364	3.1	2	6.9	4	4.9	3	612
D66B Other Ear, Nose, Mouth and Throat Diagnoses W/O CC	8,384	900	817	1,717	1.5	1	2.7	1	2.0	1	10,101
D67A Oral and Dental Disorders Except Extractions and Restorations	0	68	960	1,028	3.1	1	2.9	2	2.9	2	1,028
D67B Oral and Dental Disorders Except Extractions and Restorations,	1,249	28	406	434	1.0	1	1.0	1	1.0	1	1,683
Sameday											
Total Discharges	26,252	9,480	15,673	25,157	2.9	1	3.0	2	3.0	2	51,409

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

<sup>-</sup> Mean and median length of stay cannot be calculated as no in-patients reported.

a Includes *Maternity* day patients.

b Includes day patients and in-patients.

d Total in-patients include *Maternity* in-patients.

e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

 TABLE 5.6
 Total Discharges: MDC 4 Diseases and Disorders of the Respiratory System: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day					In-Patients					Total
NADC A Discourse of Discourse of the Description Control	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>t</sup>
MDC 4 Diseases and Disorders of the Respiratory System		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
E01A Major Chest Procedures W Cat CC	1	193	147	340	15.9	12	25.7	17	20.1	14	341
E01B Major Chest Procedures W/O Cat CC	19	303	173	476	9.3	8	13.0	11	10.6	9	495
E02A Other Respiratory System OR Procedures W Cat CC	4	55	142	197	24.5	14	28.8	22	27.6	19	201
E02B Other Respiratory System OR Procedures W Sev or Moderate CC	16	68	83	151	6.6	4	12.9	9	10.0	7	167
E02C Other Respiratory System OR Procedures W/O CC	19	120	51	171	3.9	2	7.9	6	5.1	3	190
E40A Respiratory System Diagnosis W Ventilator Support W Cat CC	0	6	133	139	39.0	26	17.7	11	18.6	11	139
E40B Respiratory System Diagnosis W Ventilator Support W/O Cat CC	0	4	88	92	13.8	5	8.8	6	9.0	6	92
E41Z Respiratory System Diagnosis W Non-Invasive Ventilation	1	64	1,066	1,130	19.9	11	17.5	11	17.7	11	1,131
E42A Bronchoscopy W Cat CC	0	35	329	364	15.3	14	27.8	21	26.6	19	364
E42B Bronchoscopy W/O Cat CC	0	378	936	1,314	6.1	3	13.1	9	11.1	8	1,314
E42C Bronchoscopy, Sameday	4,731	15	27	42	1.0	1	1.0	1	1.0	1	4,773
E60A Cystic Fibrosis W Cat or Sev CC	19	120	286	410	15.3	14	15.6	14	15.4	14	429
E60B Cystic Fibrosis W/O Cat or Sev CC	799	313	328	641	9.1	9	9.1	9	9.1	9	1,440
E61A Pulmonary Embolism W Cat CC	0	7	178	185	21.0	9	14.7	11	14.9	11	185
E61B Pulmonary Embolism W/O Cat CC	72	28	1,217	1,245	8.9	8	8.3	7	8.3	7	1,317
E62A Respiratory Infections/Inflammations W Cat CC	1	54	2,673	2,727	21.9	15	18.6	10	18.7	10	2,728
E62B Respiratory Infections/Inflammations W Sev or Moderate CC	7	60	3,678	3,738	10.6	7	9.9	7	9.9	7	3,745
E62C Respiratory Infections/Inflammations W/O CC	66	55	2,990	3,045	6.5	5	4.7	3	4.7	3	3,111
E63Z Sleep Apnoea	87	2,124	80	2,204	1.3	1	4.7	3	1.5	1	2,291
E64A Pulmonary Oedema and Respiratory Failure W Cat CC	0	6	271	277	6.2	7	15.1	9	14.9	9	277
E64B Pulmonary Oedema and Respiratory Failure W/O Cat CC	8	12	497	509	13.2	8	7.2	5	7.3	5	517
E65A Chronic Obstructive Airways Disease W Cat CC	14	84	2,028	2,112	12.2	8	14.1	8	14.0	8	2,126
E65B Chronic Obstructive Airways Disease W/O Cat CC	1,442	627	7,587	8,214	11.0	7	6.9	5	7.2	5	9,656
E66A Major Chest Trauma W Cat CC	0	0	35	35	_	-	13.7	10	13.7	10	35
E66B Major Chest Trauma W Sev or Moderate CC	0	0	170	170	-	-	8.3	5	8.3	5	170
E66C Major Chest Trauma W/O CC	0	0	225	225	_	-	3.3	2	3.3	2	225
E67A Respiratory Signs and Symptoms W Cat or Sev CC	74	58	521	579	4.1	2	7.7	5	7.4	4	653
E67B Respiratory Signs and Symptoms W/O Cat or Sev CC	958	283	2,553	2,836	2.5	1	2.3	1	2.3	1	3,794
E68A Pneumothorax W CC	0	8	250	258	12.1	10	7.7	6	7.9	6	258
E68B Pneumothorax W/O CC	3	10	440	450	2.8	2	4.3	4	4.3	4	453
E69A Bronchitis and Asthma W CC	17	26	490	516	6.4	2	5.8	3	5.8	3	533
E69B Bronchitis and Asthma W/O CC	1,686	128	2,875	3,003	2.5	1	2.5	2	2.5	2	4,689
E70A Whooping Cough and Acute Bronchiolitis W CC	1	5	151	156	12.8	7	5.9	4	6.1	4	157
E70B Whooping Cough and Acute Bronchiolitis W/O CC	9	16	1,584	1,600	3.4	3	2.9	2	2.9	2	1,609
E71A Respiratory Neoplasms W Cat CC	144	152	446	598	12.5	8	15.1	11	14.4	10	742
E71B Respiratory Neoplasms W/O Cat CC	2,264	952	1,050	2,002	8.9	3	8.8	6	8.9	5	4,266
E72Z Respiratory Problems Arising from Neonatal Period	14	20	74	94	9.5	3	3.1	2	4.5	2	108
E73A Pleural Effusion W Cat CC	3	17	152	169	19.1	10	14.1	11	14.6	10	172
E73B Pleural Effusion W Sev or Moderate CC	38	43	354	397	8.9	7	8.2	6	8.3	6	435

TABLE 5.6 Total Discharges: MDC 4 Diseases and Disorders of the Respiratory System: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay) (contd.)

	Day					In-Patients					Total
MDC 4 Discours and Discoudant of the Beautystamy Contains	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
MDC 4 Diseases and Disorders of the Respiratory System		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
E73C Pleural Effusion W/O CC	37	35	186	221	5.0	2	6.4	4	6.2	4	258
E74A Interstitial Lung Disease W Cat CC	2	13	98	111	11.0	9	15.6	13	15.0	11	113
E74B Interstitial Lung Disease W Sev or Moderate CC	32	67	174	241	8.2	5	9.3	8	9.0	7	273
E74C Interstitial Lung Disease W/O CC	123	63	213	276	6.0	4	5.4	4	5.6	4	399
E75A Other Respiratory System Diagnosis W Cat CC	1	33	1,151	1,184	13.6	10	16.1	9	16	9	1,185
E75B Other Respiratory System Diagnosis W Sev or Moderate CC	58	136	3,971	4,108	7.6	6	7.4	5	7.4	5	4,166
E75C Other Respiratory System Diagnosis W/O CC	293	133	4,943	5,077	3.4	2	3.5	2	3.5	2	5,370
E76Z Respiratory Tuberculosis	30	22	145	167	16.5	6.5	15.1	8	15.3	8	197
Total Discharges	13,093	6,951	47,239	54,196	6.8	2	8.3	5	8.1	5	67,289

Note

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

- a Includes *Maternity* day patients.
- b Includes day patients and in-patients.

- c Length of stay (mean and median) is based on acute and extended in-patients.
- d Total in-patients include *Maternity* in-patients.
- e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

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

	Day					In-Patients					Total
NADC F Discours and Discours and the Circulate on Contains	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
MDC 5 Diseases and Disorders of the Circulatory System		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emerg	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
F01A Implantation or Replacement of AICD, Total System W Cat CC	0	37	64	101	5.3	2	24.3	17	17.3	12	101
F01B Implantation or Replacement of AICD, Total System W/O Cat CC	77	221	95	316	2.5	2	8.7	7	4.4	2	393
F02Z Other AICD Procedures	15	20	24	44	2.3	1	15.4	7	9.5	3	59
F03A Cardiac Valve Proc W CPB Pump W Invasive Cardiac Investigation W Cat CC	0	10	30	40	43.0	31	28.4	26	32.0	26	40
F03B Cardiac Valve Proc W CPB Pump W Invasive Cardiac Investigation W/O Cat CC	1	8	7	15	18.4	17	19.7	20	19.0	20	16
F04A Cardiac Valve Proc W CPB Pump W/O Invasive Cardiac Inves W Cat CC	0	153	80	233	19.2	14	24.6	18	21.1	15	233
F04B Cardiac Valve Proc W CPB Pump W/O Invasive Cardiac Inves W/O Cat CC	0	176	26	202	12.0	11	12.9	11	12.1	11	202
F05A Coronary Bypass W Invasive Cardiac Investigation W Reoperation or W Cat CC	0	29	46	75	21.1	17	29.7	24	26.4	21	75
F05B Coronary Bypass W Invasive Cardiac Investigation W/O Reoperation W/O Cat CC	1	35	38	73	18.7	15	20.9	20	19.8	18	74
F06A Coronary Bypass W/O Invasive Cardiac Inves W Reoperation or W Cat or Sev CC	0	257	191	448	13.4	11	15.7	13	14.4	12	448
F06B Coronary Bypass W/O Invasive Cardiac Inves W/O Reoperation W/O Cat or Sev CC	0	149	58	207	9.7	9	10.2	9	9.8	9	207
F07A Other Cardiothoracic/Vascular Procedures W CPB Pump W Cat CC	0	42	18	60	18.0	16	23.0	23	19.5	17	60
F07B Other Cardiothoracic/Vascular Procedures W CPB Pump W Sev or Moderate CC	0	54	7	61	14.7	13	20.9	19	15.4	13	61
F07C Other Cardiothoracic/Vascular Procedures W CPB Pump W/O CC	0	52	6	58	9.5	9	25.2	16	11.2	9	58
F08A Major Reconstruct Vascular Procedures W/O CPB Pump W Cat CC	0	102	141	243	19.9	14	27.6	21	24.3	19	243
F08B Major Reconstruct Vascular Procedures W/O CPB Pump W/O Cat CC	6	366	215	581	8.8	8	12.3	10	10.1	8	587
F09A Other Cardiothoracic Procedures W/O CPB Pump W Cat CC	0	23	57	80	10.7	8	12.6	10	12.1	9	80
F09B Other Cardiothoracic Procedures W/O CPB Pump W Sev or Moderate CC	4	31	51	82	5.8	3	8.1	7	7.2	6	86
F09C Other Cardiothoracic Procedures W/O CPB Pump W/O CC	22	35	36	71	3.8	2	5.8	5	4.8	4	93
F10A Interventional Coronary Procedures W AMI W Cat CC	1	11	126	137	5.4	4	15.4	11	14.6	10	138
F10B Interventional Coronary Procedures W AMI W/O Cat CC	143	108	1,105	1,213	2.5	1	4.6	4	4.5	4	1,356
F11A Amputation for Circ System Except Upper Limb and Toe W Cat CC	0	25	58	83	34.8	33	55.9	36	49.5	35	83
F11B Amputation for Circ System Except Upper Limb and Toe W/O Cat CC	0	29	66	95	22.5	15	25.6	19	24.6	17	95
F12A Implantation or Replacement of Pacemaker, Total System W Cat CC	2	16	90	106	10.6	6	27.4	13	24.9	12	108
F12B Implantation or Replacement of Pacemaker, Total System W/O Cat	301	280	409	689	2.5	2	6.6	5	4.9	3	990
F13A Upper Limb and Toe Amputation for Circulatory Sys Disorders W Cat or Sev CC	1	15	46	61	19.8	11	22.2	20	21.6	17	62
F13B Upper Limb and Toe Amputation for Circulatory Sys Disorders W/O Cat or Sev CC	1	19	31	50	8.5	5	15.5	8	12.9	7	51

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

	Day					In-Patients					Total
MDC 5 Diseases and Disorders of the Circulatory System	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharge
MDC 5 Diseases and Disorders of the Circulatory System		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
F14A Vascular Procs Except Major Reconstruction W/O CPB Pump W Cat CC	5	67	191	258	14.6	7	20.6	15	19.1	14	26
F14B Vascular Procs Except Major Reconstruction W/O CPB Pump W Sevor Mod CC	17	136	155	291	4.8	3	11.5	9	8.4	6	30
F14C Vascular Procs Except Major Reconstruction W/O CPB Pump W/O CC	126	387	147	534	3.0	2	8.0	6	4.4	2	66
F15A Interventional Coronary Procs W/O AMI W Stent Implantation W Cat or Sev CC	52	267	316	583	2.4		7.8	5	5.3	3	63
F15B Interventional Coronary Procs W/O AMI W Stent Implantation W/O Cat or Sev CC	712	996	690	1,686	1.4	1	4.3	3	2.6	1	2,39
F16A Interventional Coronary Procedures W/O AMI W/O Stent mplantation W CC	6	24	23	47	3.3	1	9.4	8	6.3	3	5
F16B Interventional Coronary Procedures W/O AMI W/O Stent mplantation W/O CC	23	35	33	68	1.6	1	4.0	3	2.8	2	Ġ
F17A Insertion or Replacement of Pacemaker Generator W Cat or Sev CC	2	18	20	38	5.7	3	19.2	10	12.8	8	
17B Insertion or Replacement of Pacemaker Generator W/O Cat or Sev	79	124	39	163	2.0	2	6.1	5	3.0	2	2
18A Other Pacemaker Procedures W CC	1	7	25	32	5.7	6	8.8	5	8.1	6	
18B Other Pacemaker Procedures W/O CC	8	14	17	31	1.4	1	6.5	4	4.2	2	
19Z Trans-Vascular Percutaneous Cardiac Intervention	30	124	27	151	2.1	2	17.4	12	4.9	2	1
-20Z Vein Ligation and Stripping	2,254	756	29	785	1.5	1	8.9	2	1.8	1	3,0
21A Other Circulatory System OR Procedures W Cat CC	1	11	45	56	19.8	13	24.7	19	23.7	17	
F21B Other Circulatory System OR Procedures W/O Cat CC	16	18	57	75	14.4	4	13.8	8	14.0	7	
40A Circulatory System Diagnosis W Ventilator Support W Cat CC	0	2	53	55	5.0	5	13.8	8	13.4	8	
40B Circulatory System Diagnosis W Ventilator Support W/O Cat CC	0	3	62	65	15.7	15	8.0	4	8.4	4	
41A Circulatory Disorders W AMI W Invasive Cardiac Inves Proc W Cat or Sev CC	8	5	168	173	7.2	6	11.6	8	11.5	8	1
41B Circulatory Disorders W AMI W Invasive Cardiac Inves Proc W/O Cator Sev CC	117	20	449	469	5.7	2	6.2	5	6.1	5	5
42A Circulatory Disorders W/O AMI W Invasive Cardiac Inves Proc W Cator Sev CC	0	113	540	654	7.4	3	11.4	8	10.7	7	6
42B Circulatory Disorders W/O AMI W Invasive Cardiac Inves Proc W/O Cat or Sev CC	0	631	2,108	2,739	2.8	1	5.1	4	4.6	3	2,7
42C Circulatory Disorders W/O AMI W Invasive Cardiac Inves Proc, ameday	8,262	92	237	329	1.0	1	1.0	1	1.0	1	8,5
F43Z Circulatory System Diagnosis W Non-Invasive Ventilation	0	5	158	163	19.0	21	21.5	13	21.4	13	1
F60A Circulatory Disorders W AMI W/O Invasive Cardiac Inves Proc W Cat	0	9	449	458	13.3	13	19.5	10	19.4	10	4
F60B Circulatory Disorders W AMI W/O Invasive Cardiac Inves Pr W/O Cat CC	8	189	2,825	3,014	3.7	2	6.3	4	6.1	4	3,0

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

	Day					In-Patients					Total
AND CERTIFICATION OF THE CONTRACT OF THE CONTR	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
MDC 5 Diseases and Disorders of the Circulatory System		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	To	tal <sup>e</sup>	•
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
F61A Infective Endocarditis W Cat CC	0	3	36	39	31.0	35	35.9	28	35.5	28	39
F61B Infective Endocarditis W/O Cat CC	81	10	51	61	17.7	10	23.8	22	22.8	19	142
F62A Heart Failure and Shock W Cat CC	3	56	1,254	1,310	22.8	13	21.2	12	21.2	12	1,313
F62B Heart Failure and Shock W/O Cat CC	78	204	3,821	4,028	9.8	7	8.6	6	8.7	6	4,106
F63A Venous Thrombosis W Cat or Sev CC	6	14	356	370	10.8	10	11.1	7	11.1	7	376
F63B Venous Thrombosis W/O Cat or Sev CC	172	47	1,243	1,291	4.3	2	4.9	4	4.9	4	1,463
F64A Skin Ulcers in Circulatory Disorders W Cat or Sev CC	0	15	120	135	21.0	16	23.5	15	23.3	15	135
F64B Skin Ulcers in Circulatory Disorders W/O Cat or Sev CC	88	38	151	189	9.5	7	10.2	7	10.1	7	277
F65A Peripheral Vascular Disorders W Cat or Sev CC	28	85	307	392	10.4	5	18.4	8	16.6	7	420
F65B Peripheral Vascular Disorders W/O Cat or Sev CC	724	316	615	931	3.9	3	6.3	4	5.5	3	1,655
F66A Coronary Atherosclerosis W Cat or Sev CC	13	94	373	467	6.3	4	9.8	6	9.1	5	480
F66B Coronary Atherosclerosis W/O Cat or Sev CC	253	515	1,700	2,215	3.0	2	4.7	3	4.3	3	2,468
F67A Hypertension W Cat or Sev CC	7	8	152	160	6.5	3	7.3	5	7.3	5	167
F67B Hypertension W/O Cat or Sev CC	331	72	1,306	1,378	3.0	2	3.1	1	3.1	1	1,709
F68A Congenital Heart Disease W CC	97	24	31	55	4.0	3	18.7	6	12.3	4	152
F68B Congenital Heart Disease W/O CC	452	71	91	162	2.2	1	3.6	2	3.0	2	614
F69A Valvular Disorders W Cat or Sev CC	36	28	256	284	13.4	10	11.6	7	11.8	7	320
F69B Valvular Disorders W/O Cat or Sev CC	639	141	1,803	1,945	3.3	2	2.6	1	2.6	1	2,584
F72A Unstable Angina W Cat or Sev CC	4	18	340	358	7.6	5	8.1	6	8.0	6	362
F72B Unstable Angina W/O Cat or Sev CC	35	307	1,873	2,180	2.1	1	4.3	3	4.0	3	2,215
F73A Syncope and Collapse W Cat or Sev CC	18	30	1,695	1,725	8.4	8	12.1	6	12.1	6	1,743
F73B Syncope and Collapse W/O Cat or Sev CC	2,535	100	5,333	5,435	4.1	3	3.6	2	3.6	2	7,970
F74Z Chest Pain	1,303	296	14,439	14,736	2.7	1	2.2	1	2.2	1	16,039
F75A Other Circulatory System Diagnoses W Cat CC	1	18	189	207	18.8	17	12.5	9	13.0	9	208
F75B Other Circulatory System Diagnoses W Sev or Moderate CC	149	180	887	1,068	5.7	5	6.8	5	6.6	5	1,217
F75C Other Circulatory System Diagnoses W/O CC	295	121	719	841	3.4	2	3.6	2	3.6	2	1,136
F76A Arrhythmia, Cardiac Arrest and Conduction Disorders W Cat or Sev CC	42	75	1,435	1,510	5.6	3	10.5	6	10.2	6	1,552
F76B Arrhythmia, Cardiac Arrest and Conduction Disorders W/O Cat or	1,801	778	5,261	6,039	2.6	1	4.0	3	3.8	2	7,840
Sev CC	04.400	40.000	001	CT 070							00.045
Total Discharges	21,493	10,020	57,821	67,852	5.1	2	6.0	3	5.9	3	89,345

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

a Includes *Maternity* day patients.

b Includes day patients and in-patients.

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

d Total in-patients include *Maternity* in-patients.

e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

 TABLE 5.8
 Total Discharges: MDC 6 Diseases and Disorders of the Digestive System: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day				11	n-Patients					Total
MDC C Discours and Discoulous of the Discoulous	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
MDC 6 Diseases and Disorders of the Digestive System		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
G01A Rectal Resection W Cat CC	0	152	115	267	27.9	17	30.0	22	28.8	20	267
G01B Rectal Resection W/O Cat CC	2	493	123	616	11.8	10	18.2	16	13.1	11	618
G02A Major Small and Large Bowel Procedures W Cat CC	0	280	597	877	22.8	17	29.8	21	27.5	20	877
G02B Major Small and Large Bowel Procedures W/O Cat CC	72	921	715	1,636	10.5	9	15.1	12	12.5	10	1,708
G03A Stomach, Oesophageal and Duodenal Procedure W Malignancy or	2	242	144	386	19.5	16	28.3	20	22.8	17	388
W Cat CC											
G03B Stomach, Oesophageal and Duodenal Procedures W/O Malignancy	1	45	84	129	8.8	6	11.2	8	10.3	7	130
W Sev or Mod CC											
G03C Stomach, Oesophageal and Duodenal Procedures W/O Malignancy	57	152	142	294	4.4	3	8.5	6	6.4	5	351
W/O CC											
G04A Peritoneal Adhesiolysis W Cat CC	0	18	64	82	12.8	13	24.9	21	22.2	17	82
G04B Peritoneal Adhesiolysis W Sev or Moderate CC	2	48	81	129	10.8	7	13.3	11	12.4	9	131
G04C Peritoneal Adhesiolysis W/O CC	62	216	335	551	4.7	3	6.4	5	5.7	4	613
G05A Minor Small and Large Bowel Procedures W Cat CC	0	36	19	55	15.3	9	35.5	25	22.3	14	55
G05B Minor Small and Large Bowel Procedures W Sev or Moderate CC	0	70	22	92	9.3	8	14.9	15	10.6	8	92
G05C Minor Small and Large Bowel Procedures W/O CC	16	192	28	220	7.3	7	12.3	10	7.9	7	236
G06Z Pyloromyotomy Procedure	0	4	101	105	2.8	3	4.0	4	4.0	4	105
G07A Appendicectomy W Malignancy or Peritonitis or W Cat or Sev CC	3	21	1,035	1,056	3.7	3	5.4	4	5.4	4	1,059
G07B Appendicectomy W/O Malignancy or Peritonitis W/O Cat or Sev CC	14	93	5,272	5,365	2.5	2	3.1	3	3.1	3	5,379
G10A Hernia Procedures W CC	18	290	187	477	5.1	3	10.0	7	7.0	5	495
G10B Hernia Procedures W/O CC	2,099	2,274	559	2,833	2.2	2	3.9	3	2.5	2	4,932
G11Z Anal and Stomal Procedures	3,410	658	956	1,614	3.2	2	3.8	2	3.5	2	5,024
G12A Other Digestive System OR Procedures W Cat CC	8	45	124	169	20.0	10	26.9	21	25.1	17	177
G12B Other Digestive System OR Procedures W Sev or Moderate CC	56	108	160	268	6.7	5	13.3	9	10.7	7	324
G12C Other Digestive System OR Procedures W/O CC	239	158	440	600	3.9	2	6.4	5	5.7	4	839
G46A Complex Gastroscopy W Cat CC	0	36	233	269	40.2	25	24.3	17	26.5	17	269
G46B Complex Gastroscopy W/O Cat CC	0	650	1,634	2,284	4.7	2	9.4	7	8.0	6	2,284
G46C Complex Gastroscopy, Sameday	10,613	6	16	22	1.0	1	1.0	1	1.0	1	10,635
G47A Other Gastroscopy W Cat CC	0	32	376	408	12.2	11	19.9	12	19.3	12	408
G47B Other Gastroscopy W/O Cat CC	0	767	5,066	5,834	3.9	2	5.3	4	5.1	3	5,834
G47C Other Gastroscopy, Sameday	34,633	22	279	302	1.0	1	1.0	1	1.0	1	34,935
G48A Colonoscopy W Cat or Sev CC	0	128	475	603	8.4	5	16.4	10	14.7	9	603
G48B Colonoscopy W/O Cat or Sev CC	0	1,150	2,004	3,154	3.1	2	6.8	5	5.5	4	3,154
G48C Colonoscopy, Sameday	35,274	23	32	55	1.0	1	1.0	1	1.0	1	35,329
G60A Digestive Malignancy W Cat CC	60	98	288	386	17.1	11	15.4	11	15.8	11	446
G60B Digestive Malignancy W/O Cat CC	4,608	1,150	792	1,942	8.9	3	7.0	4	8.1	4	6,550
G61A GI Haemorrhage W Cat or Sev CC	10	16	307	323	26.9	9	8.2	4	9.2	5	333
G61B GI Haemorrhage W/O Cat or Sev CC	242	50	1,014	1,064	3.1	2	3.6	2	3.6	2	1,306
G62Z Complicated Peptic Ulcer	65	7	73	80	6.7	3	10.0	7	9.7	7	145
G63Z Uncomplicated Peptic Ulcer	18	6	53	59	3.8	3	4.0	2	4.0	2	77

TABLE 5.8 Total Discharges: MDC 6 Diseases and Disorders of the Digestive System: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay) (contd.)

	Day				li	n-Patients					Total
MADO C Discours and Discoulant of the Discouling Contains	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
MDC 6 Diseases and Disorders of the Digestive System		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	:al <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
G64A Inflammatory Bowel Disease W CC	78	27	173	200	6.8	5	7.1	6	7.0	6	278
G64B Inflammatory Bowel Disease W/O CC	3,667	127	593	721	4.9	4	5.2	4	5.1	4	4,388
G65A GI Obstruction W Cat or Sev CC	0	7	323	330	22.6	22	12.0	8	12.2	8	330
G65B GI Obstruction W/O Cat or Sev CC	14	16	798	814	3.7	3	4.8	4	4.8	4	828
G66Z Abdominal Pain or Mesenteric Adenitis	767	259	9,225	9,495	2.9	2	2.2	1	2.3	1	10,262
G67A Oesophagitis and Gastroenteritis W Cat/Sev CC	38	50	1,257	1,307	11.7	5	8.2	5	8.3	5	1,345
G67B Oesophagitis and Gastroenteritis W/O Cat/Sev CC	1,020	220	9,228	9,457	3.1	2	2.3	1	2.3	1	10,477
G70A Other Digestive System Diagnoses W Cat or Sev CC	111	176	1,576	1,752	10.8	4	8.4	5	8.6	5	1,863
G70B Other Digestive System Diagnoses W/O Cat or Sev CC	3,858	737	7,371	8,111	3.3	2	3.4	2	3.3	2	11,969
Total Discharges	101,137	12,276	54,489	66,793	6.5	3	5.2	3	5.4	3	167,930

- Mean and median length of stay cannot be calculated as no in-patients reported.
- Includes *Maternity* day patients.
- b Includes day patients and in-patients.

- c Length of stay (mean and median) is based on acute and extended in-patients.
- d Total in-patients include *Maternity* in-patients.
- Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

TABLE 5.9 Total Discharges: MDC 7 Diseases and Disorders of the Hepatobiliary System and Pancreas: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day				<u>In</u>	-Patients					Total
MDC 7 Diseases and Disorders of the Hepatobiliary System and	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
Pancreas		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
H01A Pancreas, Liver and Shunt Procedures W Cat CC	1	72	47	119	22.3	18	33.2	28	26.6	21	120
H01B Pancreas, Liver and Shunt Procedures W/O Cat CC	9	112	36	148	9.2	9	17.7	15	11.3	9	157
H02A Major Biliary Tract Procedures W Cat CC	0	20	61	81	17.0	14	27.3	24	24.8	20	81
H02B Major Biliary Tract Procedures W Sev CC	11	26	48	74	13.2	11	18.5	16	16.6	13	85
H02C Major Biliary Tract Procedures W/O Cat or Sev CC	48	67	65	132	9.1	8	14.8	11	11.9	9	180
H05A Hepatobiliary Diagnostic Procedures W Cat CC	2	15	21	36	10.3	12	24.2	21	18.4	15	38
H05B Hepatobiliary Diagnostic Procedures W/O Cat CC	19	47	41	88	4.5	3	12.6	12	8.2	6	107
H06A Other Hepatobiliary and Pancreas OR Procedures W Cat CC	0	24	49	73	11.6	4	34.5	23	27.0	16	73
H06B Other Hepatobiliary and Pancreas OR Procedures W/O Cat CC	22	70	41	111	4.7	3	18.3	16	9.7	5	133
H07A Open Cholecystectomy W Closed CDE or W Cat CC	0	18	31	49	15.2	16	35.7	16	28.2	16	49
H07B Open Cholecystectomy W/O Closed CDE W/O Cat CC	5	158	88	246	6.0	5	12.5	11	8.3	7	251
H08A Laparoscopic Cholecystectomy W Closed CDE or W (Cat or Sev CC)	8	179	149	329	5.8	3	11.3	10	8.3	7	337
H08B Laparoscopic Cholecystectomy W/O Closed CDE W/O Cat or Sev CC	559	2,646	609	3,255	2.3	2	6.2	5	3.0	2	3,814
H40A Endoscopic Procedures for Bleeding Oesophageal Varices W Cat CC	0	2	28	30	13.5	14	24.4	14	23.6	14	30
${\tt H40BEndoscopicProceduresforBleedingOesophagealVaricesW/OCat} \\ {\tt CC}$	5	11	49	60	4.8	2	10.4	8	9.4	7	65
H43A ERCP Procedures W Cat or Sev CC	17	56	258	314	8.1	7	17.9	12	16.1	11	331
H43B ERCP Procedures W/O Cat or Sev CC	1,230	275	621	896	3.1	1	7.6	6	6.2	5	2,126
H60A Cirrhosis and Alcoholic Hepatitis W Cat CC	5	28	274	302	17.8	9	18.7	14	18.6	13	307
H60B Cirrhosis and Alcoholic Hepatitis W Sev or Moderate CC	80	85	512	597	4.7	2	11.9	7	10.9	7	677
H60C Cirrhosis and Alcoholic Hepatitis W/O CC	186	49	107	156	2.9	1	6.5	5	5.4	3	342
H61A Malignancy of Hepatobiliary System, Pancreas W Cat CC	29	39	223	262	12.3	8	15.8	10	15.3	10	291
H61B Malignancy of Hepatobiliary System, Pancreas W/O Cat CC	1,032	353	523	876	9.1	4	10.3	8	9.8	6	1,908
H62A Disorders of Pancreas Except for Malignancy W Cat or Sev CC	4	20	309	329	16.0	7	12.9	10	13.1	10	333
H62B Disorders of Pancreas Except for Malignancy W/O Cat or Sev CC	300	45	1,144	1,189	3.7	2	6.1	5	6.0	5	1,489
H63A Disorders of Liver Except Malig, Cirrhosis, Alcoholic Hepatitis W Cat/Sev CC	35	67	316	383	11.1	4	14.0	10	13.5	9	418
H63B Disorders of Liver Excep Malig, Cirrhosis, Alcoholic Hepatitis W/O Cat/Sev CC	1,305	344	649	993	1.9	1	5.1	4	4.0	2	2,298
H64A Disorders of the Biliary Tract W CC	49	101	881	982	5.5	3	9.6	7	9.2	7	1,031
H64B Disorders of the Biliary Tract W/O CC	421	287	2,608	2,896	3.1	2	4.5	4	4.4	3	3,317
Total Discharges	5,382	5,216	9,788	15,006	4.3	2	8.9	6	7.3	4	20,388

<sup>-</sup> Mean and median length of stay cannot be calculated as no in-patients reported.

Includes Maternity day patients.

b Includes day patients and in-patients.

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

d Total in-patients include *Maternity* in-patients.

Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

**TABLE 5.10** Total Discharges: MDC 8 Diseases and Disorders of the Musculoskeletal System and Connective Tissue: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day				ln-	-Patients					Total
MDC 8 Diseases and Disorders of the Musculoskeletal System and	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
Connective Tissue		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
IO1A Bilateral/Multiple Major Joint Proc of Lower Extremity W Revision or W Cat CC	0	20	14	34	44.9	39	69.4	25	55.0	34	34
IO1B Bilateral/Multiple Major Joint Pr of Lower Extremity W/O Revision W/O Cat CC	0	33	8	41	12.3	9	74.3	54	24.4	12	41
IO2A Microvascular Tissue Transfer or (Skin Graft W Cat or Sev CC), Excluding Hand	0	13	41	54	26.8	26	49.2	35	43.8	33	54
IO2B Skin Graft W/O Cat or Sev CC, Excluding Hand	11	49	35	84	6.1	2	14.5	9	9.6	4	95
I03A Hip Replacement W Cat CC	0	74	342	416	17.7	14	39.8	24	35.9	22	416
IO3B Hip Replacement W/O Cat CC	1	2,999	1,382	4,381	8.4	8	14.9	11	10.4	8	4,382
I04A Knee Replacement W Cat or Sev CC	0	208	5	213	13.1	11	28.6	15	13.4	11	213
IO4B Knee Replacement W/O Cat or Sev CC	0	1,634	12	1,646	8.2	8	7.9	8	8.2	8	1,646
I05A Other Joint Replacement W Cat or Sev CC	0	13	15	28	13.9	5	14.7	10	14.3	7	28
I05B Other Joint Replacement W/O Cat or Sev CC	2	120	57	177	5.3	4	7.0	5	5.8	4	179
I06Z Spinal Fusion W Deformity	6	140	14	154	10.8	7	12.9	9	11.0	8	160
IO7Z Amputation	0	22	21	43	18.5	8	31.3	21	24.7	13	43
108A Other Hip and Femur Procedures W Cat CC	1	12	369	381	33.9	17	46.3	27	45.9	27	382
I08B Other Hip and Femur Procedures W/O Cat CC	26	325	1,966	2,291	5.7	3	12.8	10	11.8	9	2,317
109A Spinal Fusion W Cat CC	0	19	26	45	13.3	11	27.6	21	21.6	15	45
IO9B Spinal Fusion W/O Cat CC	2	288	159	447	6.3	5	10.2	7	7.7	6	449
I10A Other Back and Neck Procedures W Cat or Sev CC	2	42	47	89	17.7	6	20.2	12	19.0	9	91
I10B Other Back and Neck Procedures W/O Cat or Sev CC	972	909	304	1,213	3.2	2	5.5	3	3.8	2	2,185
I11Z Limb Lengthening Procedures	3	40	9	49	6.2	6	12.4	6	7.4	6	52
I12A Infect/Inflam of Bone and Joint W Misc Musculoskeletal Procs W Cat CC	0	9	43	52	27.1	26	39.5	28	37.4	28	52
I12B Infect/Inflam of Bone and Joint W Misc Musculoskeletal Procs W Sev or Mod CC	4	31	97	128	13.0	7	17.7	14	16.5	14	132
I12C Infect/Inflam of Bone and Joint W Misc Musculoskeletal Procs W/O CC	60	129	151	280	6.5	3	10.8	9	8.8	5	340
I13A Humerus, Tibia, Fibula and Ankle Procedures W CC	2	64	495	559	5.7	3	12.8	6	12.0	5	561
I13B Humerus, Tibia, Fibula and Ankle Procedures W/O CC	93	550	3,943	4,493	2.6	2	3.4	2	3.3	2	4,586
I15Z Cranio-Facial Surgery	0	33	6	39	7.1	6	7.8	9	7.2	6	39
I16Z Other Shoulder Procedures	112	770	40	810	1.8	2	3.5	3	1.9	2	922
I17A Maxillo-Facial Surgery W CC	0	6	14	20	7.3	6	5.1	4	5.8	4	20
I17B Maxillo-Facial Surgery W/O CC	3	23	38	61	3.0	2	4.0	4	3.6	3	64
I18Z Other Knee Procedures	2,189	521	229	750	1.7	1	4.1	2	2.4	1	2,939
I19A Other Elbow or Forearm Procedures W CC	9	26	286	312	2.8	2	8.6	3	8.1	3	321
I19B Other Elbow or Forearm Procedures W/O CC	283	279	3,389	3,668	1.5	1	1.8	1	1.8	1	3,951
120Z Other Foot Procedures	372	723	507	1,230	2.1	2	3.2	2	2.5	2	1,602

**TABLE 5.10** Total Discharges: MDC 8 Diseases and Disorders of the Musculoskeletal System and Connective Tissue: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay) (contd.)

ADC a Discourse of	Day				<u>In-</u>	-Patients					Total
MDC 8 Diseases and Disorders of the Musculoskeletal System and	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
Connective Tissue		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
121Z Local Excision and Removal of Internal Fixation Devices of Hip and	77	61	10	71	2.5	1	12.0	5	3.8	1	148
Femur											
123Z Local Excision and Removal of Internal Fixation Devices Excl Hip and	2,903	508	75	583	2.2	1	5.8	2	2.7	1	3,486
Femur											
I24Z Arthroscopy	984	218	73	291	1.5	1	3.9	1	2.1	1	1,275
125A Bone and Joint Diagnostic Procedures Including Biopsy W CC	21	20	30	50	5.0	2.	26.4	18	17.8	11	71
I25B Bone and Joint Diagnostic Procedures Including Biopsy W/O CC	116	30	38	68	4.5	1	5.8	2	5.2	2	184
127A Soft Tissue Procedures W CC	34	56	109	165	6.8	3	16.5	8	13.2	7	199
127B Soft Tissue Procedures W/O CC	547	256	361	617	3.1	2	3.7	2	3.5	2	1,164
128A Other Musculoskeletal Procedures W CC	16	54	104	158	13.2	7	19.8	9	17.5	8	174
I28B Other Musculoskeletal Procedures W/O CC	174	182	420	602	3.2	2	4.0	2	3.8	2	776
129Z Knee Reconstruction or Revision	29	455	28	483	1.7	1	5.6	2	1.9	1	512
I30Z Hand Procedures	1,399	634	1,886	2,520	1.7	1	1.7	1	1.7	1	3,919
I31A Hip Revision W Cat CC	0	15	17	32	29.1	21	44.3	37	37.2	29	32
I31B Hip Revision W/O Cat CC	0	323	93	416	11.4	9	20.8	15	13.5	10	416
I32A Knee Revision W Cat CC	0	3	4	7	24.0	22	27.3	25	25.9	22	7
I32B Knee Revision W Sev CC	0	18	1	19	20.9	14	17.0	17	20.7	15	19
132C Knee Revision W/O Cat or Sev CC	0	66	11	77	10.3	9	28.5	25	12.9	9	77
I60Z Femoral Shaft Fractures	0	1	86	87	10.0	10	7.5	3	7.5	3	87
I61A Distal Femoral Fractures W CC	0	1	23	24	208.0	208	22.3	8	30.0	8	24
I61B Distal Femoral Fractures W/O CC	2	2	55	57	4.5	5	6.0	3	5.9	3	59
I63A Sprains, Strains and Dislocations of Hip, Pelvis and Thigh W CC	0	1	41	42	9.0	9	8.6	4	8.6	4	42
I63B Sprains, Strains and Dislocations of Hip, Pelvis and Thigh W/O CC	3	2	152	154	3.0	3	3.0	2	3.0	2	157
I64A Osteomyelitis W Cat or Sev CC	5	15	69	84	20.9	16	31.2	20	29.4	19	89
I64B Osteomyelitis W/O Cat or Sev CC	161	45	128	173	5.8	4	10.0	7	8.9	6	334
I65A Musculoskeletal Malignant Neoplasms W Cat CC	19	47	74	121	11.1	6	19.5	15	16.3	10	140
I65B Musculoskeletal Malignant Neoplasms W/O Cat CC	884	368	382	750	6.0	4	7.8	5	7.0	4	1,634
166A Inflammatory Musculoskeletal Disorders W Cat or Sev CC	55	37	117	154	21.7	10	24.2	12	23.6	11	209
I66B Inflammatory Musculoskeletal Disorders W/O Cat or Sev CC	6,054	245	470	715	3.7	2	5.9	4	5.1	3	6,769
167A Septic Arthritis W Cat or Sev CC	0	6	29	35	12.8	12	23.9	22	22.0	18	35
I67B Septic Arthritis W/O Cat or Sev CC	29	9	91	100	17.7	12	7.8	5	8.7	6	129
I68A Non-surgical Spinal Disorders W CC	0	108	822	930	6.6	4	12.7	7	12.0	7	930
I68B Non-surgical Spinal Disorders W/O CC	0	302	1,694	1,996	4.3	2	4.8	3	4.8	3	1,996
I68C Non-surgical Spinal Disorders, Sameday	11,631	38	416	454	1.0	1	1.0	1	1.0	1	12,085
169A Bone Diseases and Arthropathies W Cat or Sev CC	23	42	195	237	7.8	2	14.6	9	13.4	8	260
I69B Bone Diseases and Arthropathies W/O Cat or Sev CC	3,825	309	542	851	2.9	1	5.1	3	4.3	2	4,676
171A Other Musculotendinous Disorders W Cat or Sev CC	46	19	208	227	7.6	6	11.5	6	11.2	6	273
I71B Other Musculotendinous Disorders W/O Cat or Sev CC	7,791	336	2,111	2,452	3.5	1	2.7	1	2.8	1	10,243

**TABLE 5.10** Total Discharges: MDC 8 Diseases and Disorders of the Musculoskeletal System and Connective Tissue: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay) (contd.)

	Day				In-	Patients					Total
MDC 8 Diseases and Disorders of the Musculoskeletal System and	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
Connective Tissue		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
172A Specific Musculotendinous Disorders W Cat or Sev CC	10	11	68	79	29.5	4	17.7	9	19.3	9	89
172B Specific Musculotendinous Disorders W/O Cat or Sev CC	2,519	115	507	622	2.7	1	4.1	2	3.8	2	3,141
173A Aftercare of Musculoskeletal Implants/Prostheses W Cat or Sev CC	8	415	33	448	17.7	12	20.8	16	17.9	12	456
173B Aftercare of Musculoskeletal Implants/Prostheses W/O Cat or Sev	1,984	462	223	685	11.2	7	6.9	3	9.8	5	2,669
CC											
174Z Injury to Forearm, Wrist, Hand or Foot	308	101	2,985	3,086	1.5	1	2.0	1	2.0	1	3,394
175A Injury to Shoulder, Arm, Elbow, Knee, Leg or Ankle W CC	5	17	441	458	19.8	8	17.5	7	17.6	7	463
175B Injury to Shoulder, Arm, Elbow, Knee, Leg or Ankle W/O CC	177	54	1,816	1,872	2.3	1	2.6	1	2.6	1	2,049
176A Other Musculoskeletal Disorders W Cat or Sev CC	30	17	131	148	25.1	7	19.3	9	19.9	9	178
176B Other Musculoskeletal Disorders W/O Cat or Sev CC	1,933	252	656	908	2.6	1	3.5	1	3.3	1	2,841
177A Fractures of Pelvis W Cat or Sev CC	0	5	178	183	19.0	11	21.4	15	21.3	14	183
177B Fractures of Pelvis W/O Cat or Sev CC	1	4	384	388	7.3	8	9.7	6	9.7	6	389
178A Fractures of Neck of Femur W Cat or Sev CC	0	3	93	96	35.3	41	14.0	9	14.7	9	96
178B Fractures of Neck of Femur W/O Cat or Sev CC	0	9	193	202	21.6	16	7.6	3	8.2	3	202
179A Pathological Fracture W Cat CC	0	4	24	28	30.3	35	33.8	24	33.3	26	28
I79B Pathological Fracture W/O Cat CC	39	25	206	231	9.3	8	12.6	8	12.2	8	270
Total Discharges	47,995	16,450	32,967	49,424	6.1	4	7.0	2	6.7	3	97,419

- Mean and median length of stay cannot be calculated as no in-patients reported.
- a Includes *Maternity* day patients.
- b Includes day patients and in-patients.

- c Length of stay (mean and median) is based on acute and extended in-patients.
- d Total in-patients include *Maternity* in-patients.
- e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

TABLE 5.11 Total Discharges: MDC 9 Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day				In	-Patients					Total
MDC 9 Diseases and Disorders of the Skin, Subcutaneous Tissue and	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
Breast		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
J01A Microvas Tiss Transf for Skin, Subcutaneous Tiss & Breast Disd W Cat/Sev CC	0	10	0	10	11.3	9	=	-	11.3	9	10
J01B Microvas Tiss Transf for Skin, Subcutaneous Tiss & Breast Disd W/O Cat/Sev CC	0	15	1	16	8.2	8	10.0	10	8.3	8	16
J06Z Major Procedures for Breast Conditions	475	2,024	45	2,069	3.9	3	3.9	3	3.9	3	2,544
J07Z Minor Procedures for Breast Conditions	1,647	374	23	397	1.9	1	10.9	3	2.4	1	2,044
J08A Other Skin Graft and/or Debridement Procedures W CC	25	102	93	195	12.5	6	23.2	12	17.6	9	220
J08B Other Skin Graft and/or Debridement Procedures W/O CC	705	264	105	369	4.1	2	5.2	3	4.4	2	1,074
J09Z Perianal and Pilonidal Procedures	325	256	130	386	2.5	2	2.2	2	2.4	2	711
J10Z Skin, Subcutaneous Tissue and Breast Plastic OR Procedures	847	274	23	297	3.0	2	5.7	3	3.2	2	1,144
J11Z Other Skin, Subcutaneous Tissue and Breast Procedures	35,281	774	346	1,120	2.8	2	7.7	2	4.3	2	36,401
J12A Lower Limb Procs W Ulcer/Cellulitis W Cat CC	0	7	17	24	31.4	25	34.6	18	33.7	18	24
J12B Lower Limb Procs W Ulcer/Cellulitis W/O Cat CC W Skin Graft/Flap Repair	4	17	12	29	12.2	8	43.3	22	25.1	14	33
J12C Lower Limb Procs W Ulcer/Cellulitis W/O Cat CC W/O Skin Graft/Flap Repair	14	26	52	78	10.8	4	14.4	10	13.2	8	92
J13A Lower Limb Procs W/O Ulcer/Cellulitis W Cat CC or W (Skin Graft and Sev CC)	0	21	11	32	12.4	9	15.2	10	13.4	10	32
J13B Lower Limb Procs W/O Ulcer/Cellulitis W/O Cat CC W/O (Skin Graft and Sev CC)	97	132	22	154	4.1	2	6.0	6	4.3	2	251
J14Z Major Breast Reconstructions	3	197	6	203	7.4	7	8.2	8	7.4	7	206
J60A Skin Ulcers W Cat CC	0	8	63	71	60.3	19	32.6	14	35.7	14	71
J60B Skin Ulcers W/O Cat CC	0	52	339	391	15.5	9	12.6	8	13.0	8	391
J60C Skin Ulcers, Sameday	351	1	20	21	1.0	1	1.0	1	1.0	1	372
J62A Malignant Breast Disorders W CC	2,209	323	401	724	15.8	9	9.1	6	12.1	7	2,933
J62B Malignant Breast Disorders W/O CC	1,909	166	30	196	22.7	22	4.4	4	19.9	17	2,105
J63A Non-Malignant Breast Disorders W CC	23	6	36	42	6.3	6	6.6	4	6.5	4	65
J63B Non-Malignant Breast Disorders W/O CC	2,865	38	254	292	2.1	1	2.4	2	2.4	2	3,157
J64A Cellulitis W Cat or Sev CC	13	32	850	882	11.3	8	13.2	8	13.1	8	895
J64B Cellulitis W/O Cat or Sev CC	386	206	4,979	5,185	5.7	3	4.6	3	4.7	3	5,571
J65A Trauma to the Skin, Subcutaneous Tissue and Breast W Cat or Sev CC	0	0	155	155	-	-	-	7	13.2	7	155
J65B Trauma to the Skin, Subcutaneous Tissue and Breast W/O Cat or Sev CC	35	9	1,192	1,206	3.2	1	2.3	1	2.3	1	1,241
J67A Minor Skin Disorders	0	374	949	1,325	6.1	2	3.3	2	4.1	2	1,325
J67B Minor Skin Disorders, Sameday	9,852	19	362	382	1.0	1	1.0	1	1.0	1	10,234
J68A Major Skin Disorders W Cat or Sev CC	0	10	114	124	12.5	10	15.4	9	15.2	9	124
J68B Major Skin Disorders W/O Cat or Sev CC	0	72	553	626	6.9	4	4.1	3	4.4	3	626
J68C Major Skin Disorders, Sameday	20,934	14	128	142	1.0	1	1.0	1	1.0	1	21,076

**TABLE 5.11** Total Discharges: MDC 9 Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay) (contd.)

	Day				ln-	-Patients					Total
MDC 9 Diseases and Disorders of the Skin, Subcutaneous Tissue and	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
Breast		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	:al <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
J69A Skin Malignancy W Cat CC	0	29	36	65	15.6	8	18.3	11	17.1	9	65
J69B Skin Malignancy W/O Cat CC	0	144	76	220	11.1	7	10.6	6	10.9	7	220
J69C Skin Malignancy, Sameday	1,260	4	5	9	1.0	1	1.0	1	1.0	1	1,269
Total Discharges	79,260	6,000	11,428	17,437	5.8	3	5.9	3	5.9	3	96,697

- Mean and median length of stay cannot be calculated as no in-patients reported.
- a Includes *Maternity* day patients.
- b Includes day patients and in-patients.

- c Length of stay (mean and median) is based on acute and extended in-patients.
- d Total in-patients include *Maternity* in-patients.
- e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

TABLE 5.12 Total Discharges: MDC 10 Endocrine, Nutritional and Metabolic Diseases and Disorders: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day				In	-Patients					Total
	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
MDC 10 Endocrine, Nutritional and Metabolic Diseases and Disorders		Elective	Emergency	Total <sup>d</sup>	Elec	ctive	Emer	gency	To	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
K01A OR Procedures for Diabetic Complications W Cat CC	0	23	133	156	36.8	21	43.1	23	42.1	23	156
KO1B OR Procedures for Diabetic Complications W/O Cat CC	12	38	127	165	9.9	6	18.1	13	16.2	11	177
KO2A Pituitary Procedures W CC	0	26	7	33	12.0	6	14.0	12	12.4	7	33
KO2B Pituitary Procedures W/O CC	2	51	4	55	5.4	5	7.3	8	5.6	5	57
K03Z Adrenal Procedures	1	33	13	46	8.2	6	19.6	16	11.4	8	47
KO4A Major Procedures for Obesity W CC	0	6	0	6	13.2	5	-	-	13.2	5	6
KO4B Major Procedures for Obesity W/O CC	0	24	0	24	5.1	5	-	-	-	5	24
K05A Parathyroid Procedures W Cat or Sev CC	0	21	4	25	6.0	5	23.5	22	8.8	5	25
K05B Parathyroid Procedures W/O Cat or Sev CC	23	117	5	122	3.0	2	4.8	5	3.1	3	145
K06A Thyroid Procedures W Cat or Sev CC	0	41	11	52	6.9	6	22.5	21	10.2	7	52
K06B Thyroid Procedures W/O Cat or Sev CC	12	669	61	730	3.5	3	10.4	6	4.1	3	742
K07Z Obesity Procedures	7	32	1	33	4.1	4	1.0	1	4.0	4	40
K08Z Thyroglossal Procedures	9	51	1	52	2.5	2	1.0	1	2.5	2	61
K09A Other Endocrine, Nutritional and Metabolic OR Procedures W Cat	0	6	25	31	6.7	7	27.0	19	23.0	15	31
CC											
K09B Other Endocrine, Nutritional and Metabolic OR Procs W Sev or	4	26	20	46	7.0	4	14.5	13	10.3	6	50
Moderate CC											
K09C Other Endocrine, Nutritional and Metabolic OR Procedures W/O CC	35	33	9	42	3.4	3	9.6	5	4.7	3	77
K40A Endoscopic or Investigative Proc for Metabolic Disorders W Cat CC	0	7	67	74	18.4	10	34.1	21	32.6	21	74
K40B Endoscopic or Investigative Proc for Metabolic Disorders W/O Cat CC	0	112	269	381	7.2	4	12.5	9	10.9	8	381
K40C Endoscopic or Investigative Procedure for Metabolic Disorders,	866	1	0	1	1.0	1	-	-	1.0	1	867
Sameday											
K60A Diabetes W Cat or Sev CC	2	41	654	695	23.6	12	11.7	7	12.4	7	697
K60B Diabetes W/O Cat or Sev CC	330	433	2,943	3,378	3.5	2	4.3	3	4.2	3	3,708
K61Z Sev Nutritional Disturbance	1	3	32	35	12.3	15	37.7	19	35.5	18	36
K62A Miscellaneous Metabolic Disorders W Cat or Sev CC	60	76	758	834	11.2	6	11.6	6	11.5	6	894
K62B Miscellaneous Metabolic Disorders W/O Cat or Sev CC	1,050	474	1,572	2,046	3.6	2	4.6	2	4.4	2	3,096
K63A Inborn Errors of Metabolism W CC	165	41	32	73	6.3	5	13.8	8	9.6	5	238
K63B Inborn Errors of Metabolism W/O CC	1,023	120	94	214	2.9	2	2.1	1	2.5	1	1,237
K64A Endocrine Disorders W Cat or Sev CC	111	55	134	189	5.7	3	12.6	8	10.6	6	300
K64B Endocrine Disorders W/O Cat or Sev CC	1,619	383	457	840	4.3	3	4.6	2	4.4	3	2,459
Total Discharges	5,332	2,943	7,433	10,378	4.9	3	7.8	4	7.0	3	15,710

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

a Includes Maternity day patients.

b Includes day patients and in-patients.

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

d Total in-patients include *Maternity* in-patients.

e Total in-patient length of stay (mean and median) includes Maternity in-patient length of stay.

 TABLE 5.13
 Total Discharges: MDC 11 Diseases and Disorders of the Kidney and Urinary Tract: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day				_In	-Patients					Total
	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
MDC 11 Diseases and Disorders of the Kidney and Urinary Tract		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer		Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
L02A Operative Insertion of Peritoneal Catheter for Dialysis W Cat or Sev CC	1	19	23	42	5.7	4	24.0	10	15.7	8	43
L02B Operative Insertion of Peritoneal Catheter for Dialysis W/O Cat or Sev CC	9	25	17	42	5.9	4	12.8	7	8.7	6	51
L03A Kidney, Ureter and Major Bladder Procedures for Neoplasm W Cat ${\sf CC}$	0	73	26	99	17.7	14	37.5	24	22.9	16	99
L03B Kidney, Ureter and Major Bladder Procedures for Neoplasm W Sev CC	0	89	24	113	11.4	10	16.5	14	12.5	11	113
L03C Kidney, Ureter and Major Bladder Procedures for Neoplasm W/O Cat or Sev CC	6	254	22	276	8.4	7	12.5	12	8.7	8	282
L04A Kidney, Ureter & Major Bladder Procedures for Non-Neoplasm W Cat CC	8	56	99	155	19.4	10	23.6	18	22.1	16	163
LO4B Kidney, Ureter and Major Bladder Procedures for Non-Neoplasm W Sev CC	9	75	54	129	7.4	5	13.3	10	9.8	8	138
L04C Kidney, Ureter & Major Bladder Procedures for Non-Neoplasm W/O Cat or Sev CC	168	433	145	578	5.8	5	7.8	6	6.3	5	746
LO5A Transurethral Prostatectomy W Cat or Sev CC	0	20	25	45	9.0	9	19.2	15	14.7	12	45
LO5B Transurethral Prostatectomy W/O Cat or Sev CC	8	101	43	144	4.8	4	9.2	8	6.1	5	152
LO6A Minor Bladder Procedures W Cat or Sev CC	13	26	73	99	10.3	9	14.3	11	13.3	10	112
LO6B Minor Bladder Procedures W/O Cat or Sev CC	380	173	88	261	3.8	3	6.2	5	4.6	3	641
LO7A Transurethral Procedures Except Prostatectomy W CC	43	305	198	503	5.9	4	9.2	6	7.2	5	546
LO7B Transurethral Procedures Except Prostatectomy W/O CC	762	631	523	1,154	3.0	2	3.2	2	3.1	2	1,916
L08A Urethral Procedures W CC	2	28	17	45	5.3	4	9.9	5	7.0	4	47
LO8B Urethral Procedures W/O CC	95	111	50	161	3.2	2	4.2	4	3.5	3	256
L09A Other Procedures for Kidney and Urinary Tract Disorders W Cat CC	2	22	60	82	16.5	9	33.6	23	29.0	21	84
L09B Other Procedures for Kidney and Urinary Tract Disorders W Sev CC	8	53	32	85	4.1	2	15.7	11	8.5	4	93
L09C Other Procedures for Kidney and Urinary Tract Disorders W/O Cat or Sev CC	108	167	46	213	2.3	1	9.2	6	3.7	2	321
L40Z Ureteroscopy	80	39	115	154	3.2	2	3.6	3	3.5	3	234
L41Z Cystourethroscopy, Sameday	7,276	11	11	22	1.0	1	1.0	1	1.0	1	7,298
L42Z ESW Lithotripsy for Urinary Stones	1,200	25	47	72	2.4	1	4.3	3	3.7	3	1,272
L60A Renal Failure W Cat CC	15	29	477	506	15.9	10	24.3	13	23.8	13	521
L60B Renal Failure W Sev CC	259	64	661	725	8.3	7	11.7	7	11.4	7	984
L60C Renal Failure W/O Cat or Sev CC	849	231	860	1,091	4.3	2	7.3	5	6.6	4	1,940
L61Z Haemodialysis	167,954	8	1	9	2.0	2	1.0	1	1.9	1	167,963
L62A Kidney and Urinary Tract Neoplasms W Cat or Sev CC	300	97	236	333	10.9	5	12.8	9	12.2	8	633
L62B Kidney and Urinary Tract Neoplasms W/O Cat or Sev CC	901	221	184	405	5.9	3	5.3	3	5.6	3	1,306
L63A Kidney and Urinary Tract Infections W Cat or Sev CC	15	40	2,141	2,181	11.5	6	16.1	8	16.0	8	2,196
L63B Kidney and Urinary Tract Infections W/O Cat or Sev CC	1,516	186	5,674	5,865	4.1	3	5.2	3	5.2	3	7,381

TABLE 5.13 Total Discharges: MDC 11 Diseases and Disorders of the Kidney and Urinary Tract: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay) (contd.)

	Day				In	-Patients					Total
NADC 11 Discours and Discours of the Widows and University	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
MDC 11 Diseases and Disorders of the Kidney and Urinary Tract		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
L64Z Urinary Stones and Obstruction	345	220	2,358	2,579	3.9	2	2.9	2	3.0	2	2,924
L65A Kidney and Urinary Tract Signs and Symptoms W Cat or Sev CC	27	52	344	397	6.0	3	9.8	5	9.3	5	424
L65B Kidney and Urinary Tract Signs and Symptoms W/O Cat or Sev CC	1,298	264	1,206	1,470	2.9	2	4.1	3	3.9	2	2,768
L66Z Urethral Stricture	161	79	39	118	3.1	2	6.8	3	4.4	2	279
L67A Other Kidney and Urinary Tract Diagnoses W Cat or Sev CC	178	161	537	698	7.8	4	12.1	7	11.1	7	876
L67B Other Kidney and Urinary Tract Diagnoses W/O Cat or Sev CC	3,739	707	1,063	1,770	2.8	2	5.2	3	4.2	2	5,509
L68Z Peritoneal Dialysis	57	0	0	0	-	-	-	-	-	-	57
Total Discharges	187,792	5,095	17,519	22,621	5.3	3	7.9	4	7.3	4	210,413

- Mean and median length of stay cannot be calculated as no in-patients reported.
- a Includes Maternity day patients.
- b Includes day patients and in-patients.

- c Length of stay (mean and median) is based on acute and extended in-patients.
- d Total in-patients include *Maternity* in-patients.
- e Total in-patient length of stay (mean and median) includes Maternity in-patient length of stay.

**TABLE 5.14** Total Discharges: MDC 12 Diseases and Disorders of the Male Reproductive System: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day				In	-Patients					Total
MDC 12 Diseases and Disorders of the Male Reproductive System	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
WIDC 12 Diseases and Disorders of the Male Reproductive System		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
M01A Major Male Pelvic Procedures W Cat or Sev CC	0	66	2	68	10.2	8	36.5	37	10.9	8	68
M01B Major Male Pelvic Procedures W/O Cat or Sev CC	0	292	8	300	7.0	7	9.3	8	7.1	7	300
M02A Transurethral Prostatectomy W Cat or Sev CC	1	90	50	140	8.6	6	17.0	16	11.6	9	141
M02B Transurethral Prostatectomy W/O Cat or Sev CC	18	641	111	752	4.8	4	8.0	7	5.3	4	770
M03Z Penis Procedures	522	215	48	263	2.8	2	3.6	3	3.0	2	785
M04Z Testes Procedures	1,042	432	350	782	2.2	1	2.5	1	2.3	1	1,824
M05Z Circumcision	2,283	259	30	289	1.4	1	1.5	1	1.4	1	2,572
M06A Other Male Reproductive System OR Procedures W CC	27	24	22	46	6.6	5	13.5	12	9.9	8	73
M06B Other Male Reproductive System OR Procedures W/O CC	416	28	7	35	3.3	3	5.3	4	3.7	3	451
M40Z Cystourethroscopy, Sameday	1,675	1	4	5	1.0	1	1.0	1	1.0	1	1,680
M60A Malignancy, Male Reproductive System W Cat or Sev CC	192	139	245	384	13.3	6	14.6	8	14.1	7	576
M60B Malignancy, Male Reproductive System W/O Cat or Sev CC	2,278	417	140	557	18.3	6	6.8	5	15.4	6	2,835
M61Z Benign Prostatic Hypertrophy	1,384	99	101	200	3.7	2	6.2	5	5.0	4	1,584
M62Z Inflammation of the Male Reproductive System	516	49	780	829	4.5	1	3.3	2	3.4	2	1,345
M63Z Sterilisation, Male	357	8	0	8	1.4	1	-	-	1.4	1	365
M64Z Other Male Reproductive System Diagnoses	661	69	538	607	2.7	2	2.3	1	2.3	1	1,268
Total Discharges	11,372	2,829	2,436	5,265	6.7	4.0	5.0	2.0	5.9	3.0	16,637

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

a Includes *Maternity* day patients.

b Includes day patients and in-patients.

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

d Total in-patients include *Maternity* in-patients.

e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

**TABLE 5.15** Total Discharges: MDC 13 Diseases and Disorders of the Female Reproductive System: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day				In	-Patients					Total
NADC 12 Discourse and Discourse after Foundation Contact	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
MDC 13 Diseases and Disorders of the Female Reproductive System		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
N01Z Pelvic Evisceration and Radical Vulvectomy	0	34	13	47	17.4	16	21.2	14	18.4	14	47
NO4A Hysterectomy for Non-Malignancy W Cat or Sev CC	0	183	23	206	8.5	7	15.4	12	9.3	7	206
NO4B Hysterectomy for Non-Malignancy W/O Cat or Sev CC	1	1,920	65	1,986	5.2	5	9.0	8	5.3	5	1,987
N05A Oophorectomies and Complex Fallopian Tube Procs for Non-Malig W Cat or Sev CC	0	45	14	59	8.5	7	10.3	9	8.9	7	59
N05B Oophorectomies & Complex Fallopian Tube Procs for Non-Malig W/O Cat or Sev CC	53	474	132	606	4.0	4	5.6	5	4.3	4	659
N06A Female Reproductive System Reconstructive Procs W Cat or Sev CC	1	74	1	75	5.2	5	6.0	6	5.3	5	76
N06B Female Reproductive System Reconstructive Procs W/O Cat or Sev CC	147	1,318	11	1,329	3.4	3	2.7	1	3.3	3	1,476
N07Z Other Uterine and Adnexa Procedures for Non-Malignancy	1,992	1,364	419	1,784	2.3	2	4.2	3	2.8	2	3,776
N08Z Endoscopic and Laparoscopic Procedures for Female Reproductive System	1,769	610	374	985	1.5	1	3.3	3	2.2	1	2,754
N09Z Conisation, Vagina, Cervix and Vulva Procedures	6,466	768	320	1,089	4.0	1	4.0	1	4.0	1	7,555
N10Z Diagnostic Curettage or Diagnostic Hysteroscopy	6,292	1,078	132	1,210	1.5	1	4.5	3	1.9	1	7,502
N11Z Other Female Reproductive System OR Procedures	23	60	50	111	9.3	7	14.5	10	11.5	7	134
N12A Uterine and Adnexa Procedures for Malignancy W Cat CC	0	54	33	87	17.1	13	23.6	19	19.6	15	87
N12B Uterine and Adnexa Procedures for Malignancy W/O Cat CC	16	502	82	584	7.2	7	10.0	9	7.6	7	600
N60A Malignancy, Female Reproductive System W Cat CC	58	40	115	155	12.3	10	19.0	15	17.3	14	213
N60B Malignancy, Female Reproductive System W/O Cat CC	1,154	426	410	838	8.8	4	8.6	5	8.7	4	1,992
N61Z Infections, Female Reproductive System	103	15	281	298	3.3	2	2.7	2	2.7	2	401
N62Z Menstrual and Other Female Reproductive System Disorders	4,732	478	2,206	2,697	1.9	1	2.2	1	2.1	1	7,429
Total Discharges	22,807	9,443	4,681	14,146	4.1	3	4.4	2	4.2	2	36,953

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

a Includes *Maternity* day patients.

b Includes day patients and in-patients.

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

d Total in-patients include *Maternity* in-patients.

Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

**TABLE 5.16** Total Discharges: MDC 14 Pregnancy, Childbirth and the Puerperium: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Davi						In-Patients	;						Total
BADC 14 December Childhigh and the December	Day Dation to a		Discha	arges					Length	of Stay <sup>c</sup>				Total
MDC 14 Pregnancy, Childbirth and the Puerperium	Patients <sup>a</sup>	Elective	Emergency	Maternity	Total <sup>d</sup>	Ele	ctive	Eme	rgency	Mat	ternity	To	otal <sup>e</sup>	Discharges <sup>b</sup>
	N	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	Mean	Median	N
O01A Caesarean Delivery W Cat or Sev CC	0	1	2	3,159	3,162	32.0	32	5.0	5	8.9	6	8.9	6	3,162
O01B Caesarean Delivery W/O Cat or Sev CC	0	0	1	16,024	16,025	-	-	1.0	1	4.7	4	4.7	4	16,025
O02A Vaginal Delivery W OR Procedure W Cat or Sev CC	0	0	0	167	167	-	-	-	-	5.2	4	5.2	4	167
O02B Vaginal Delivery W OR Procedure W/O Cat or Sev CC	0	0	0	897	897	-	-	-	-	3.3	3	3.3	3	897
O03A Ectopic Pregnancy W CC	0	0	1	28	29	-	-	2.0	2	3.7	3	3.6	3	29
O03B Ectopic Pregnancy W/O CC	29	0	2	675	677	-	-	3.0	3	2.4	2	2.4	2	706
O04A Postpartum and Post Abortion W OR Procedure W Cat or Sev CC <sup>f</sup>	1	1	2	26	29	1.0	1	10.5	11	10.2	6	9.9	6	30
O04B Postpartum and Post Abortion W OR Procedure W/O Cat or Sev CC <sup>f</sup>	37	0	1	178	179	-	-	3.0	3	2.6	2	2.6	2	216
O05Z Abortion W OR Procedure <sup>f</sup>	1,648	0	2	3,483	3,485	-	-	3.5	4	1.3	1	1.3	1	5,133
O60Z Vaginal Delivery	0	3	2	52,417	52,422	2.3	2	1.0	1	2.7	2	2.7	2	52,422
O61Z Postpartum and Post Abortion W/O OR Procedure <sup>f</sup>	52	8	16	2,330	2,354	2.3	1	6.4	3	2.4	2	2.4	2	2,406
O63Z Abortion W/O OR Procedure <sup>f</sup>	960	0	1	3,131	3,132	-	-	2.0	2	1.3	1	1.3	1	4,092
O64Z False Labour	64	0	0	7,726	7,726	-	-	-	-	1.2	1	1.2	1	7,790
O66Z Antenatal and Other Obstetric Admission	5,719	8	107	34,669	34,784	2.6	2	2.6	2	1.7	1	1.7	1	40,503
Total Discharges	8,510	21	137	124,910	125,068	3.8	2	3.1	2	2.7	2	2.7	2	133,578

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

- a Includes Maternity day patients.
- b Includes day patients and in-patients.
- c Length of stay (mean and median) is based on acute and extended in-patients.
- d Total in-patients include Maternity in-patients.
- e Total in-patient length of stay (mean and median) includes Maternity in-patient length of stay.
- f This includes pregnancy with abortive outcome.

 TABLE 5.17
 Total Discharges: MDC 15 Newborns and Other Neonates: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day				In-	-Patients					Total
NADO AF Name and Other Name and	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges
MDC 15 Newborns and Other Neonates		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
P01Z Neonate, Died or Transferred <5 Days of Admission W Significant	0	7	56	63	2.1	2	2.4	2	2.3	2	6
OR Procedure											
P02Z Cardiothoracic/Vascular Procedures for Neonates	0	1	62	63	31.0	31	32.0	21	32.0	21	6
P03Z Neonate, AdmWt 1000-1499 g W Significant OR Procedure	0	8	217	225	46.3	43	46.1	44	46.1	44	2:
PO4Z Neonate, AdmWt 1500-1999 g W Significant OR Procedure	0	7	99	106	42.1	37	28.7	28	29.6	29	1
P05Z Neonate, AdmWt 2000-2499 g W Significant OR Procedure	0	4	65	69	20.8	19	27.2	20	26.8	20	
P06A Neonate, AdmWt >2499 g W Significant OR Procedure W Multi Major Problems	3	13	175	188	14.6	7	35.1	17	33.7	16	1
P06B Neonate, AdmWt >2499 g W Significant OR Procedure W/O Multi Major Problems	5	28	123	151	5.6	5	15.0	11	13.3	10	1
P60A Neonate, Died or Transferred <5 Days of Adm, W/O Significant DR Proc, Newborn	0	0	488	488	-	-	1.4	1	1.4	1	4
P60B Neonate, Died or Transf <5 Days of Adm, W/O Significant OR Proc, Not Newborn	7	26	208	234	1.7	1	1.6	1	1.6	1	2
P61Z Neonate, AdmWt <750 g	3	1	82	83	37.0	37	63.3	56	63.0	55	
P62Z Neonate, AdmWt 750-999 g	2	3	179	182	81.0	90	55.8	58	56.2	58	2
P63Z Neonate, AdmWt 1000-1249 g W/O Significant OR Procedure	2	5	84	89	35.4	45	36.7	38	36.6	38	
P64Z Neonate, AdmWt 1250-1499 g W/O Significant OR Procedure	0	13	164	177	36.9	39	30.9	29	31.3	30	:
P65A Neonate, AdmWt 1500-1999 g W/O Significant OR Proc W Multi Major Problems	0	7	71	78	31.4	32	26.4	26	26.8	27	
P65B Neonate, AdmWt 1500-1999 g W/O Significant OR Procedure W Major Problem	0	16	205	221	19.9	15	21.0	20	20.9	20	2
P65C Neonate, AdmWt 1500-1999 g W/O Significant OR Procedure W Other Problem	0	6	309	315	29.5	32	17.7	17	17.9	17	į
P65D Neonate, AdmWt 1500-1999 g W/O Significant OR Procedure N/O Problem	1	10	165	175	15.6	15	14.0	14.0	14.1	14	:
P66A Neonate, AdmWt 2000-2499 g W/O Significant OR Proc W Multi Major Problems	2	3	53	56	35.0	37	15.4	13.0	16.4	13	
P66B Neonate, AdmWt 2000-2499 g W/O Significant OR Procedure W Major Problem	3	6	266	272	10.7	9	13.6	13.0	13.5	12	2
P66C Neonate, AdmWt 2000-2499 g W/O Significant OR Procedure W Other Problem	1	5	678	683	12.4	8	8.4	7.0	8.4	7	(
966D Neonate, AdmWt 2000-2499 g W/O Significant OR Procedure V/O Problem	21	13	542	555	12.3	10	4.8	2.0	5.0	2	
P67A Neonate, AdmWt >2499 g W/O Significant OR Procedure W Multi Major Problems	24	37	303	340	18.7	4	9.6	8.0	10.6	7	į
P67B Neonate, AdmWt >2499 g W/O Significant OR Procedure W Major Problem	79	60	1,318	1,378	10.4	4	6.8	5.0	6.9	5	1,
P67C Neonate, AdmWt >2499 g W/O Significant OR Procedure W Other Problem	17	35	4,144	4,179	5.1	2	3.0	2.0	3.1	2	4,:

TABLE 5.17 Total Discharges: MDC 15 Newborns and Other Neonates: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay) (contd.)

	Day				In-	Patients					Total
MDC 15 Newborns and Other Neonates	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
MIDC 13 NEWDOTTS and Other Neonates		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
P67D Neonate, AdmWt >2499 g W/O Significant OR Procedure W/O	328	72	4,097	4,169	4.9	1	2.3	1	2.4	1	4,497
Problem											
Total Discharges	498	386	14,153	14,539	13.6	5	7.8	3	7.9	3	15,037

- Mean and median length of stay cannot be calculated as no in-patients reported.
- a Includes Maternity day patients.
- b Includes day patients and in-patients.

- Length of stay (mean and median) is based on acute and extended in-patients.
- d Total in-patients include *Maternity* in-patients.
- e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

**TABLE 5.18** Total Discharges: MDC 16 Diseases and Disorders of Blood, Blood Forming Organs, Immunological Disorders: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day				ln-	-Patients					Total
MDC 16 Diseases and Disorders of Blood, Blood Forming Organs,	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
Immunological Disorders		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
Q01Z Splenectomy	0	23	25	48	5.4	5	9.5	8	7.5	6	48
Q02A Other OR Procedure of Blood and Blood Forming Organs W Cat or Sev CC	7	26	47	73	9.1	6	25.8	14	19.9	10	80
Q02B Other OR Procedure of Blood and Blood Forming Organs W/O Cat or Sev CC	389	156	64	220	2.9	2	8.0	5	4.4	2	609
Q60A Reticuloendothelial and Immunity Disorders W Cat or Sev CC	105	114	466	580	6.4	5	8.9	5	8.4	5	685
Q60B Reticuloendothelial and Immunity Disorders W/O Cat or Sev CC W Malignancy	124	53	197	250	4.6	4	4.5	4	4.6	4	374
Q60C Reticuloendothelial and Immunity Disorders W/O Cat or Sev CC W/O Malignancy	2,446	128	514	642	3.8	2	3.8	2	3.8	2	3,088
Q61A Red Blood Cell Disorders W Cat or Sev CC	216	135	690	825	8.0	5	11.9	8	11.3	7	1,041
Q61B Red Blood Cell Disorders W/O Cat or Sev CC	29,811	633	1,636	2,271	2.5	1	4.5	3	4.0	2	32,082
Q62Z Coagulation Disorders	3,070	151	959	1,111	3.7	2	4.8	2	4.6	2	4,181
Total Discharges	36,168	1,419	4,598	6,020	3.9	2	6.3	3	5.8	3	42,188

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

Includes *Maternity* day patients.

b Includes day patients and in-patients.

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

d Total in-patients include *Maternity* in-patients.

e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

**TABLE 5.19** Total Discharges: MDC 17 Neoplastic Disorders (Haematological and Solid Neoplasms): AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day				In-	-Patients					Total
MDC 17 Neoplastic Disorders (Haematological and Solid Neoplasms)	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
MDC 17 Neoplastic disorders (naematological and solid Neoplasins)		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
R01A Lymphoma and Leukaemia W Major OR Procedures W Cat or Sev CC	0	20	45	65	23.0	17	28.0	22	26.4	21	65
R01B Lymphoma and Leukaemia W Major OR Procedures W/O Cat or Sev CC	18	35	40	76	4.9	4	12.5	10	8.9	7	94
R02A Other Neoplastic Disorders W Major OR Procedures W Cat CC	0	21	9	30	18.3	14	20.3	19	18.9	15	30
R02B Other Neoplastic Disorders W Major OR Procedures W Sev or Moderate CC	3	35	10	45	9.3	7	14.0	17	10.4	8	48
R02C Other Neoplastic Disorders W Major OR Procedures W/O CC	32	164	20	184	5.1	4	9.2	10	5.6	5	216
R03A Lymphoma and Leukaemia W Other OR Procedures W Cat or Sev CC	3	44	102	146	27.4	20	36.7	25	33.9	24	149
R03B Lymphoma and Leukaemia W Other OR Procedures W/O Cat or Sev CC	140	133	92	225	4.4	2	11.2	8	7.2	4	365
R04A Other Neoplastic Disorders W Other OR Procedures W CC	58	43	44	87	6.9	4	20.2	14	13.6	9	145
RO4B Other Neoplastic Disorders W Other OR Procedures W/O CC	674	66	12	78	4.6	4	6.3	7	4.9	4	752
R60A Acute Leukaemia W Cat CC	88	163	228	391	23.4	23	23.5	13	23.5	19	479
R60B Acute Leukaemia W/O Cat CC	5,005	416	455	871	8.8	4	5.7	2	7.2	3	5,876
R61A Lymphoma and Non-Acute Leukaemia W Cat CC	0	139	307	446	21.8	19	22.1	14	22.0	15	446
R61B Lymphoma and Non-Acute Leukaemia W/O Cat CC	0	1,353	1,058	2,411	5.8	3	9.4	6	7.4	4	2,411
R61C Lymphoma and Non-Acute Leukaemia, Sameday	15,935	29	87	116	1.0	1	1.0	1	1.0	1	16,051
R62A Other Neoplastic Disorders W CC	288	95	111	206	12.7	6	11.7	7	12.2	7	494
R62B Other Neoplastic Disorders W/O CC	951	91	54	145	9.8	3	7.1	5	8.8	4	1,096
R63Z Chemotherapy	80,217	0	0	0	-	-	-	-	-	-	80,217
R64Z Radiotherapy	92,924	0	0	0	-	-	-	-	-	-	92,924
Total Discharges	196,336	2,847	2,674	5,522	8.8	4	12.9	7	10.8	5	201,858

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

a Includes Maternity day patients.

b Includes day patients and in-patients.

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

d Total in-patients include *Maternity* in-patients.

Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

TABLE 5.20 Total Discharges: MDC 18 Infectious and Parasitic Diseases, Systemic or Unspecified Sites: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day	In-Patients										
MDC 18 Infectious and Parasitic Diseases, Systemic or Unspecified	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>	
Sites		Elective	Emergency	Total <sup>d</sup>	Elec	ctive	Emergency		Tot	:al <sup>e</sup>		
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N	
S60Z HIV, Sameday	38	2	10	12	1.0	1	1.0	1	1.0	1	50	
S65A HIV-Related Diseases W Cat CC	0	8	57	65	79.3	29	17.5	12	25.1	12	65	
S65B HIV-Related Diseases W Sev CC	0	12	63	75	9.2	7	11.4	8	11.1	8	75	
S65C HIV-Related Diseases W/O Cat or Sev CC	0	151	62	213	23.2	15	7.5	7	18.6	11	213	
T01A OR Procedures for Infectious and Parasitic Diseases W Cat CC	3	10	120	130	27.5	23	38.3	20	37.5	20	133	
TO1B OR Procedures for Infectious and Parasitic Diseases W Sev or	25	32	111	143	13.5	12	17.7	9	16.8	10	168	
Moderate CC												
T01C OR Procedures for Infectious and Parasitic Diseases W/O CC	59	60	184	244	7.6	6	9.3	8	8.9	7	303	
T40Z Infectious and Parasitic Diseases W Ventilator Support	0	1	19	20	4.0	4	11.3	5	11.0	5	20	
T60A Septicaemia W Cat CC	0	8	605	613	16.6	12	18.3	11	18.2	11	613	
T60B Septicaemia W/O Cat CC	36	20	893	913	9.7	7	9.1	6	9.1	6	949	
T61A Postoperative and Post-Traumatic Infections W Cat or Sev CC	18	22	152	174	10.5	7	13.7	7	13.3	7	192	
T61B Postoperative and Post-Traumatic Infections W/O Cat or Sev CC	220	94	774	871	7.1	5	5.5	4	5.6	4	1,091	
T62A Fever of Unknown Origin W CC	8	16	208	224	6.3	5	5.4	3	5.4	3	232	
T62B Fever of Unknown Origin W/O CC	23	14	279	294	2.5	2	3.6	2	3.5	2	317	
T63Z Viral Illness	840	47	3,977	4,026	3.1	2	2.2	1	2.2	1	4,866	
T64A Other Infectious and Parasitic Diseases W Cat CC	4	0	28	28	-	-	33.5	19	33.5	19	32	
T64B Other Infectious and Parasitic Diseases W Sev or Moderate CC	25	14	76	90	9.9	4	8.4	6	8.6	6	115	
T64C Other Infectious and Parasitic Diseases W/O CC	249	13	168	181	6.9	4	3.8	3	4.0	3	430	
Total Discharges	1,548	524	7,786	8,316	13.6	7	6.3	3	6.8	3	9,864	

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

- a Includes *Maternity* day patients.
- b Includes day patients and in-patients.

- c Length of stay (mean and median) is based on acute and extended in-patients.
- d Total in-patients include *Maternity* in-patients.
- e Total in-patient length of stay (mean and median) includes Maternity in-patient length of stay.

**TABLE 5.21** Total Discharges: MDC 19 Mental Diseases and Disorders: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day	In-Patients										
MDC 19 Mental Diseases and Disorders	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>	
MDC 19 Mental Diseases and Disorders		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	:al <sup>e</sup>		
		N	N	N	Mean	Median	Mean	Median	Mean	Median	N	
U40Z Mental Health Treatment, Sameday, W ECT	104	2	2	4	1.0	1	1.0	1	1.0	1	108	
U60Z Mental Health Treatment, Sameday, W/O ECT	503	19	570	589	1.0	1	1.0	1	1.0	1	1,092	
U61Z Schizophrenia Disorders	0	17	123	140	37.5	19	50.6	25	49.0	24	140	
U62A Paranoia & Acute Psych Disorder W Cat/Sev CC or W Mental Health	0	3	14	17	11.0	11	23.1	16	20.9	14	17	
Legal Status												
U62B Paranoia & Acute Psych Disorder W/O Cat/Sev CC W/O Mental	0	10	86	96	22.5	16	15.4	6	16.1	7	96	
Health Legal Status												
U63Z Major Affective Disorders	0	32	201	235	67.1	16	24.4	10	30.0	11	235	
U64Z Other Affective and Somatoform Disorders	0	16	167	183	8.4	6	11.8	4	11.5	4	183	
U65Z Anxiety Disorders	0	100	328	429	2.3	1	7.3	3	6.1	3	429	
U66Z Eating and Obsessive-Compulsive Disorders	0	20	49	69	31.4	36	19.3	9	22.8	12	69	
U67Z Personality Disorders and Acute Reactions	0	18	193	211	12.6	6	13.4	4	13.3	4	211	
U68Z Childhood Mental Disorders	0	35 57 92		1.9	1	4.9	3	3.8	2	92		
Total Discharges	607	272 1,790 2,065		16.0	2	12.0	2	12.5	2	2,672		

- Mean and median length of stay cannot be calculated as no in-patients reported.
- a Includes *Maternity* day patients.
- b Includes day patients and in-patients.

- c Length of stay (mean and median) is based on acute and extended in-patients.
- d Total in-patients include *Maternity* in-patients.
- e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

**TABLE 5.22** Total Discharges: MDC 20 Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day	In-Patients											
MDC 20 Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental	Patients <sup>a</sup>		Discharges			Discharges <sup>b</sup>							
Disorders		Elective	Emergency	Total <sup>d</sup>	Elec	ctive	Emer	gency	Tot	tal <sup>e</sup>			
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N		
V60Z Alcohol Intoxication and Withdrawal	4	8	1,382	1,390	9.0	5	3.6	2	3.6	2	1,394		
V61Z Drug Intoxication and Withdrawal	1	2	103	105	14.0	14	3.1	1	3.3	1	106		
V62A Alcohol Use Disorder and Dependence	0	29	784	813	15.5	12	5.1	3	5.5	3	813		
V62B Alcohol Use Disorder and Dependence, Sameday	1	1	142	143	1.0	1	1.0	1	1.0	1	144		
V63Z Opioid Use Disorder and Dependence	2	70	21	91	16.8	17	6.0	2	14.3	15	93		
V64Z Other Drug Use Disorder and Dependence	0	48 58 106		21.3 21		5.1	1	12.4	6	106			
Total Discharges	8	158 2,490 2,648		17.4 17		4.0	2	4.8	2	2,656			

- Mean and median length of stay cannot be calculated as no in-patients reported.
- a Includes *Maternity* day patients.
- b Includes day patients and in-patients.

- c Length of stay (mean and median) is based on acute and extended in-patients.
- d Total in-patients include *Maternity* in-patients.
- e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

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

	Day				<u>In</u>	-Patients					Total
NADO 24 lui via primir	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
MDC 21 Injuries, Poisonings and Toxic Effects of Drugs		Elective	Emergency	Total <sup>d</sup>	Ele	ctive	Eme	rgency	To	otal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
W01Z Ventilation or Cranial Procedures for Multiple Significant Trauma	0	0	25	25	-	-	23.4	15	23.4	15	25
W02A Hip, Femur & Limb Pr for Mult Signif Trauma, Incl Implantation W Cat/Sev CC	0	0	29	29	-	-	43.4	22	43.4	22	29
W02B Hip, Femur & Limb Pr for Mult Signif Trauma, Incl Implantation W/O Cat/Sev CC	0	1	39	40	49.0	49	16.9	12	17.7	12	40
W03Z Abdominal Procedures for Multiple Significant Trauma	0	0	32	32	-	-	13.5	11	13.5	11	32
W04A Other OR Procs for Multiple Significant Trauma W Cat or Sev CC	0	0	17	17	-	-	25.4	14	25.4	14	17
W04B Other OR Procs for Multiple Significant Trauma W/O Cat or Sev CC	0	2	33	35	13.5	14	16.0	13	15.9	13	35
W60Z Multiple Trauma, Died or Transferred to Another Acute Care Facility <5 Days	1	0	75	75	-	-	1.7	1	1.7	1	76
W61A Multiple Trauma W/O Significant Procedures W Cat or Sev CC	0	3	45	48	34.0	24	33.6	15	33.6	16	48
W61B Multiple Trauma W/O Significant Procedures W/O Cat or Sev CC	0	5	85	90	20.0	13	9.6	7	10.1	7	90
X02A Microvascular Tiss Transfer or (Skin Graft W Cat/Sev CC) for Injuries to Hand	0	1	20	21	6.0	6	12.6	6	12.3	6	21
X02B Skin Graft for Injuries to Hand W/O Cat or Sev CC	3	2	103	105	1.5	2	2.1	1	2.1	1	108
X04A Other Procedures for Injuries to Lower Limb W Cat or Sev CC	1	0	31	31	-	-	33.5	14	33.5	14	32
X04B Other Procedures for Injuries to Lower Limb W/O Cat or Sev CC	13	8	163	171	6.0	3	5.3	2	5.3	2	184
X05A Other Procedures for Injuries to Hand W CC	1	1	37	38	3.0	3	3.7	2	3.7	2	39
X05B Other Procedures for Injuries to Hand W/O CC	72	12	1,185	1,197	1.8	2	1.3	1	1.3	1	1,269
X06A Other Procedures for Other Injuries W Cat or Sev CC	8	28	192	220	13.1	10	16.2	8	15.8	8	228
X06B Other Procedures for Other Injuries W/O Cat or Sev CC	101	89	1,001	1,090	3.5	2	2.7	2	2.7	2	1,193
X07A Skin Graft for Injuries Ex Hand W Microvascular Tiss Tfr or W (Cat or Sev CC)	3	5	44	49	19.2	19	16.0	13	16.4	13	52
X07B Skin Graft for Injuries Ex Hand W/O Microvascular Tiss Tfr W/O Cat or Sev CC	2	13	82	95	8.2	6	7.8	7	7.9	7	97
X40Z Injuries, Poisoning and Toxic Effects of Drugs W Ventilator Support	0	0	85	85	-	-	9.1	4	9.1	4	85
X60A Injuries W Cat or Sev CC	2	6	382	389	6.7	4	11.4	7	11.3	6	391
X60B Injuries W/O Cat or Sev CC	212	42	4,220	4,292	1.7	1	2.1	1	2.1	1	4,504
X61Z Allergic Reactions	3	3	289	292	15.7	1	1.7	1	1.9	1	295
X62A Poisoning/Toxic Effects of Drugs and Other Substances W Cat or Sev CC	0	9	581	590	3.9	3	5.5	3	5.5	3	590
X62B Poisoning/Toxic Effects of Drugs and Other Substances W/O Cat or Sev CC	66	11	3,688	3,700	2.1	2	2.1	1	2.1	1	3,766
X63A Sequelae of Treatment W Cat or Sev CC	15	22	292	314	22.7	9	8.8	6	9.8	6	329
X63B Sequelae of Treatment W/O Cat or Sev CC	451	60	1,517	1,578	5.5	2	3.2	2	3.3	2	2,029
X64A Other Injury, Poisoning and Toxic Effect Diagnosis W Cat or Sev CC	0	3	48	53	20.3	19	15.9	5	15.7	5	53
X64B Other Injury, Poisoning and Toxic Effect Diagnosis W/O Cat or Sev CC	16	1	429	635	2.0	2	2.0	1	1.7	1	651
Total Discharges	970	327	14,769	15,336	7.2	2	3.5	1	3.6	1	16,306

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

a Includes *Maternity* day patients.

b Includes day patients and in-patients.

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

Total in-patients include Maternity in-patients.

e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

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

	Day				In	-Patients					Total
MDC 22 D	Patients <sup>a</sup>		Discharges			Discharges <sup>b</sup>					
MDC 22 Burns		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emergency		Total <sup>e</sup>		
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
Y01Z Ventilation for Burns and Sev Full Thickness Burns	0	1	23	24	1.0	1	42.7	30	41.0	26	24
Y02A Other Burns W Skin Graft W CC	0	4	68	72	5.0	5	24.4	18	23.3	17	72
Y02B Other Burns W Skin Graft W/O CC	2	15	62	77	4.1	2	12.5	9	10.9	7	79
Y03Z Other OR Procedures for Other Burns	13	28	42	70	4.9	2	8.4	6	7.0	4	83
Y60Z Burns, Transferred to Another Acute Care Facility <5 Days	0	0	67	67	-	-	1.4	1	1.4	1	67
Y61Z Severe Burns	0	4	65	69	6.3	6	13.3	6	12.9	6	69
Y62A Other Burns W CC	0	2	48	50	7.0	7	9.7	6	9.6	6	50
Y62B Other Burns W/O CC	26	4 240 244		7.5 6 4.5		2	4.6	2	270		
Total Discharges	41	58	615	673	5.0	3	10.2	4	9.8	4	714

- Mean and median length of stay cannot be calculated as no in-patients reported.
- a Includes *Maternity* day patients.
- b Includes day patients and in-patients.

- c Length of stay (mean and median) is based on acute and extended in-patients.
- d Total in-patients include *Maternity* in-patients.
- e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

**TABLE 5.25** Total Discharges: MDC 23 Factors Influencing Health Status and Other Contacts with Health Services: AR-DRG by Patient Type and Admission Type (N, In-Patient Length of Stay)

	Day				In	-Patients					Total
MDC 23 Factors Influencing Health Status and Other Contacts with	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
Health Services		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	tal <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
Z01A OR Procedures W Diagnoses of Other Contacts W Health Services W Cat/Sev CC	79	101	14	115	13.4	4	24.9	18	14.8	4	194
Z01B OR Procedures W Diagnoses of Other Contacts W Health Services W/O Cat/Sev CC	846	224	26	251	3.3	2	27.6	3	5.8	2	1,097
Z40Z Endoscopy W Diagnoses of Other Contacts W Health Services, Sameday	12,319	5	0	5	1.0	1	-	-	1.0	1	12,324
Z60A Rehabilitation W Cat CC	0	351	8	359	50.0	36	39.5	37	49.7	36	359
Z60B Rehabilitation W/O Cat CC	0	3,284	70	3,354	22.8	15	11.8	5	22.6	15	3,354
Z60C Rehabilitation, Sameday	762	4	2	6	1.0	1	1.0	1	1.0	1	768
Z61A Signs and Symptoms	0	197	1,103	1,301	4.8	3	10.0	4	9.2	4	1,301
Z61B Signs and Symptoms, Sameday	1,221	42	370	412	1.0	1	1.0	1	1.0	1	1,633
Z63A Other Surgical Follow Up and Medical Care W Cat CC	3	303	14	317	19.7	11	13.6	7	19.4	11	320
Z63B Other Surgical Follow Up and Medical Care W/O Cat CC	1,052	2,330	199	2,537	8.1	4	3.1	1	7.7	4	3,589
Z64A Other Factors Influencing Health Status	0	1,292	392	1,716	7.4	3	7.9	2	7.4	3	1,716
Z64B Other Factors Influencing Health Status, Sameday	26,408	155	284	1,415	1.0	1	1.0	1	1.0	1	27,823
Z65Z Congenital Anomalies and Problems Arising from Neonatal Period	82	52 44		96	3.2	2	7.6	3	5.2	2	178
Total Discharges	42,772	8,340	2,526	11,884	15.6	9	7.2	2	12.6	5	54,656

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

a Includes Maternity day patients.

b Includes day patients and in-patients.

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

d Total in-patients include Maternity in-patients.

e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

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

	Day	In-Patients										
Unassignable to MDC	Patients <sup>a</sup>		Discharges		Length of Stay <sup>c</sup>						Discharges⁵	
Oliassigliable to MDC		Elective	Elective Emergency To		Elective		Emergency		Total <sup>e</sup>			
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N	
801A OR Procedures Unrelated to Principal Diagnosis W Cat CC	4	93	623	717	31.2	18	41.2	24	40.0	24	721	
801 B OR Procedures Unrelated to Principal Diagnosis W Sev or Moderate CC	39	143	301	446	9.2	6	20.4	11	16.8	10	485	
801C OR Procedures Unrelated to Principal Diagnosis W/O CC	549	394	322	718	5.1	3	8.1	4	6.5	3	1,267	
963Z Neonatal Diagnosis Not Consistent W Age/Weight	3	2 1 3		16.5	16	33.0	33	22.0	25	6		
Total Discharges	595	632	1,247	1,884	9.9	4	27.7	15	21.7	10	2,479	

- Mean and median length of stay cannot be calculated as no in-patients reported.
- a Includes *Maternity* day patients.
- b Includes day patients and in-patients.

- c Length of stay (mean and median) is based on acute and extended in-patients.
- d Total in-patients include *Maternity* in-patients.
- e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

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

	Day				ln-	-Patients					Total
Pre-MDC	Patients <sup>a</sup>		Discharges				Length	of Stay <sup>c</sup>			Discharges <sup>b</sup>
FIE-IVIDC		Elective	Emergency	Total <sup>d</sup>	Elec	tive	Emer	gency	Tot	:al <sup>e</sup>	
	N	N	N	N	Mean	Median	Mean	Median	Mean	Median	N
A01Z Liver Transplant	0	26	14	40	24.1	22	88.8	48	46.8	24	40
A03Z Lung or Heart/Lung Transplant	0	1	3	4	40.0	40	28.3	20	31.3	30	4
A05Z Heart Transplant	0	1	3	4	24.0	24	134.0	84	106.5	54	4
A06A Tracheostomy W Ventilation >95 hours W Cat CC	0	75	472	548	76.4	60	81.0	56	80.4	56	548
A06B Trach W Vent >95 hours W/O Cat CC or Trach/Vent >95 hours W Cat CC	0	209	1,322	1,535	60.1	35	37.9	24	40.9	25	1,535
A06C Ventilation >95 hours W/O Cat CC	0	27	131	158	22.6	17	16.5	11	17.6	12	158
A06D Tracheostomy W/O Cat CC	1	44	53	97	27.6	20	26.9	23	27.2	22	98
A07Z Allogeneic Bone Marrow Transplant	3	75	13	88	39.7	35	55.2	37	42.0	35	91
A08A Autologous Bone Marrow Transplant W Cat CC	0	47	11	58	25.8	24	82.5	25	36.6	24	58
A08B Autologous Bone Marrow Transplant W/O Cat CC	16	34	13	47	15.6	17	9.0	7	13.8	16	63
A09A Renal Transplant W Pancreas Transplant or W Cat CC	0	8	25	33	14.0	12	18.6	17	17.5	15	33
A09B Renal Transplant W/O Pancreas Transplant W/O Cat CC	0	23	68	91	10.2	7	10.0	9	10.1	8	91
A10Z Insertion of Ventricular Assist Devices	0	3	5	8	209.7	61	30.0	15	97.4	44	8
A11A Insertion of Implantable Spinal Infusion Device W Cat CC	1	6	6	12	29.5	16	18.0	18	23.8	18	13
A11B Insertion of Implantable Spinal Infusion Device W/O Cat CC	3	17	3	20	8.2	6	56.3	37	15.5	8	23
A12Z Insertion of Neurostimulator Device	124	81	30	111	3.8	2	8.3	3	5.0	2	235
A40Z ECMO	0	3	11	14	16.0	17	81.5	42	67.4	25	14
Total Discharges	148	680	2,183	2,868	40.0	25	44.9	26	43.8	26	3,016

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

a Includes Maternity day patients.

b Includes day patients and in-patients.

- c Length of stay (mean and median) is based on acute and extended in-patients.
- d Total in-patients include *Maternity* in-patients.
- e Total in-patient length of stay (mean and median) includes *Maternity* in-patient length of stay.

## Annex 2010

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#### STROKE DISCHARGE PROFILE, 2010

#### A 1.1 INTRODUCTION

As noted in Section One, this annex is designed to highlight particular topics of interest that merit a more focused supplementary analysis. This is the first year of this section's inclusion and a report on stroke has been chosen as the first topic.

A stroke is defined as 'a brain attack caused by a blockage of a blood vessel or a haemorrhage that disrupts blood flow to the brain, causing a focal or global neurological deficit lasting more than 24 hours, or causing death within 24 hours' (Smith *et al.*, 2010). The following analysis only considers in-patient discharges with a principal diagnosis of stroke. <sup>2</sup>

Stroke is classified here into four main types using ICD-10-AM diagnostic codes (Table A 1.1), in line with recent analysis in the Irish literature (Smith *et al.*, 2010).<sup>3</sup>

**TABLE A 1.1** Coding of Stroke (ICD-10-AM)

ICD-10-AM Code	Definition
160	Subarachnoid Haemorrhage
I61	Intracerebral Haemorrhage
163	Cerebral Infarction
164	Stroke, not specified as haemorrhage or infarction

Note: This definition of stroke corresponds with that used in Smith et al. (2010)

#### A 1.2 STROKE IN-PATIENT DISCHARGES

In 2010, 5,973 in-patient discharges (excl. *Maternity*) with a principal diagnosis of stroke were reported to HIPE hospitals, totalling 133,160 in-patient bed days. <sup>4</sup> These discharges had an in-patient mean length of stay of 22.3 days (median – 10 days). <sup>5</sup> This compares with an in-patient mean length of stay for total in-patient discharges (excl. *Maternity*) of 7.0 days (median – 3 days). Excluding *Maternity*, stroke in-patient discharges accounted for 1.3 per cent of total in-patient discharges and 4.1 per cent of total in-patient bed days.

Smith, S., Horgan, F., Sexton, E., Cowman, S., Hickey, A., Kelly, P., McGee, H., Murphy, S., O'Neill, D., Royston, M., Shelley, E., and Wiley M. (2010) Cost of Stroke in Ireland – Estimating the annual economic cost of stroke and transient ischemic attack (TIA) in Ireland. Dublin: Irish Heart Foundation.

<sup>&</sup>lt;sup>2</sup> In 2010, 99.6% of discharges with a principal diagnosis of stroke were in-patients. No cases with a principal diagnosis of stroke were allocated an admission type *Maternity*.

<sup>&</sup>lt;sup>3</sup> See Section Three for details of clinical coding and classification.

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 to estimate incidence or prevalence of a particular disease.

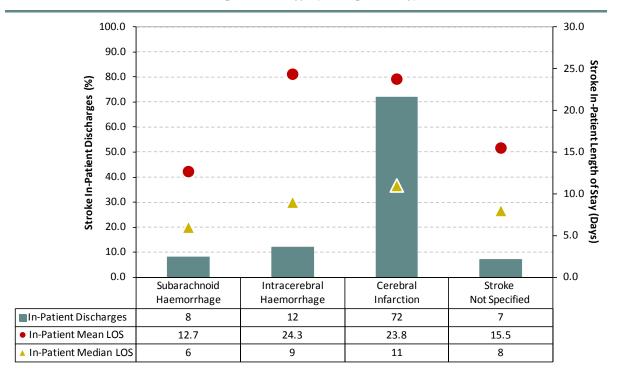
In 2010, 39 HIPE hospitals discharged in-patients with a principal diagnosis of stroke.

#### A 1.3 STROKE TYPE

Figure A 1.1 presents stroke in-patient discharges and length of stay by stroke type.

- Of 5,973 in-patient discharges with a principal diagnosis of stroke, 4, 317 (72 per cent) were classified as having cerebral infarction.
- Haemorrhages accounted for over 20 per cent of all stroke in-patient discharges.
   Of these, 723 stroke in-patient discharges (12.1 per cent) were classified as having intracerebral haemorrhage with 507 (8.5 per cent) classified as having subarachnoid haemorrhage.
- Subarachnoid haemorrhage recorded the lowest in-patient mean length of stay
  of 12.7 days. Intracerebral haemorrhage had the highest in-patient mean length
  of stay of all stroke types (24.3 days).

FIGURE A 1.1 Stroke In-Patient Discharges: Stroke Type (N, Length of Stay)



#### A 1.4 DEMOGRAPHIC ANALYSIS

Table A 1.2 disaggregates stroke in-patient discharges by sex, age group and stroke type.

- Overall, 51.4 per cent of stroke in-patient discharges were male but this varied by stroke type.
- In terms of stroke type, the largest disparity between the sexes occurred for subarachnoid haemorrhage where 61.9 per cent of stroke in-patient discharges were female.
- Overall, 31.1 per cent of stroke in-patient discharges were between 75 and 84 years old, with those under 45 years representing only 6.4 per cent of discharges.
- The age profile varied by stroke type. In-patient discharges with a diagnosis of *subarachnoid haemorrhage* had a younger age profile relative to the other stroke diagnoses. Over 50 per cent of stroke in-patient discharges with a diagnosis of *subarachnoid haemorrhage* were in the 45–64 years age group.

TABLE A 1.2 Stroke In-Patient Discharges: Stroke Type by Sex and Age (N, %)

		Subara Haemo		Intrace Haemo		Cere Infar		Stro Not Spo		Stro In-Pa Discha	tient
		N	%	N	%	N	%	N	%	N	%
	< 45 Years	53	10.5	41	5.7	104	2.4	8	1.9	206	3.4
	45-64 Years	95	18.7	119	16.5	601	13.9	61	14.3	876	14.7
Male	65-74 Years	27	5.3	81	11.2	590	13.7	40	9.4	738	12.4
Ž	75-84 Years	15	3.0	117	16.2	691	16.0	74	17.4	897	15.0
	85 Years and Over	~	0.6	34	4.7	284	6.6	32	7.5	353	5.9
	Total	193	38.1	392	54.2	2,270	52.6	215	50.5	3,070	51.4
	< 45 Years	63	12.4	31	4.3	71	1.6	9	2.1	174	2.9
d)	45-64 Years	162	32.0	70	9.7	256	5.9	35	8.2	523	8.8
Female	65-74 Years	46	9.1	60	8.3	400	9.3	31	7.3	537	9.0
Fen	75-84 Years	26	5.1	114	15.8	750	17.4	71	16.7	961	16.1
	85 Years and Over	17	3.4	56	7.7	570	13.2	65	15.3	708	11.9
	Total	314	61.9	331	45.8	2,047	47.4	211	49.5	2,903	48.6
	< 45 Years	116	22.9	72	10.0	175	4.1	17	4.0	380	6.4
	45-64 Years	257	50.7	189	26.1	857	19.9	96	22.5	1,399	23.4
<del>-</del>	65-74 Years	73	14.4	141	19.5	990	22.9	71	16.7	1,275	21.3
Total	75-84 Years	41	8.1	231	32.0	1,441	33.4	145	34.0	1,858	31.1
_	85 Years and Over	20	3.9	90	12.4	854	19.8	97	22.8	1,061	17.8
	Stroke In-Patient Discharges	507	100	723	100	4,317	100	426	100	5,973	100

Note: Percentage columns are subject to rounding.

Figure A 1.2 disaggregates stroke in-patient bed days by sex and age group.

- Stroke in-patient discharges in the 75–84 years age group accounted for the largest proportion of in-patient bed days, for both males (30.7 per cent) and females (35.0 per cent).
- In the 85 years and over age group, females accounted for 20,480 in-patient bed days (30.3 per cent) compared to 7,560 (11.5 per cent) for males.

85 Years and Over 7.6 20.5 75-84 Years 20.1 23.6 Age Group 65-74 Years 17.1 12.3 8.6 45-64 Years 17.7 **Under 45 Years** 3.1 2.6 30 25 20 15 10 5 0 5 10 15 20 25 30 Stroke In-Patient Bed Days (000s)

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

#### A 1.5 DISCHARGE DESTINATION

■ Male ■ Female

Table A 1.3 examines discharge destination and length of stay patterns for stroke inpatient discharges.

- Just over half of stroke in-patient discharges (50.6 per cent) were discharged home.
- 16.1 per cent of stroke in-patient discharges were transferred to another hospital.
- 16.2 per cent of stroke in-patient discharges died in hospital.
- Those discharged to long stay accommodation had an in-patient mean length of stay of 44.8 days, compared with those discharged home, who had an inpatient mean length of stay of 15.5 days.

TABLE A 1.3 Stroke In-Patient Discharges: Discharge Destination (N, %, and Length of Stay)

Discharge Destination		n-Patient arges	In-Patient Length of Stay		
	N	%	Mean	Median	
Home	3,023	50.6	15.5	9	
Long stay accommodation	978	16.4	44.8	21	
Transfer to other hospital	962	16.1	25.9	12	
Died	966	16.2	17.6	7	
Other	44	0.7	14.4	6	
Stroke In-Patient Discharges	5,973	100	22.3	10.0	

Note: Percentage columns are subject to rounding.

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

#### A 1.6 PRINCIPAL PROCEDURES

Table A 1.4 presents the top 5 principal procedures for stroke in-patient discharges that underwent a principal procedure based on ICD-10-AM classification. <sup>6</sup>

- 5, 685 (95.2 per cent of) stroke in-patient discharges had a principal procedure.
- Of the 5,685 principal procedures performed, the top five procedures accounted for 83.4 per cent of these procedures.
- Stroke in-patient discharges with a principal procedure of *computerised* tomography of brain accounted for 55.0 per cent of stroke in-patient discharges with a principal procedure.

TABLE A 1.4 Stroke In-Patient Discharges: Top 5 Principal Procedure Blocks (N, %, and Length of Stay)

Principal Procedure – Top 5		Stroke In Disch		In-Patient Length of Stay	
		N	%	Mean	Median
1952	Computerised tomography of brain	3,125	55.0	19.5	9
2015	Magnetic resonance imaging	735	12.9	23.6	11
1916	Generalised allied health interventions	548	9.6	24.6	12
0011	Destruction of intracranial aneurysm or other vascular lesion	175	3.1	16.8	12
0569	Ventilatory support	158	2.8	15.7	3
Top 5 Principal Procedures for Stroke In-Patient Discharges		4,741	83.4	20.5	10
Stroke	In-Patient Discharges with a Principal Procedure	5,685	100	23.0	10

Notes: Percentage columns are subject to rounding.

<sup>&</sup>lt;sup>6</sup> See Section Three for details of clinical coding and classification.

#### A 1.7 CASE MIX ANALYSIS

Table A 1.5 presents the top 5 AR-DRGs for stroke in-patient discharges.  $^{7}$ 

- 93.2 per cent of stroke in-patient discharges were assigned to one of the top five AR-DRGs.
- 41.7 per cent of stroke in-patient discharges were assigned to AR-DRG B70C Stroke and Other Cerebrovascular Disorders W/O Cat/Sev CC.

**TABLE A 1.5** Stroke In-Patient Discharges: Top 5 AR-DRGs (N, %, and Length of Stay)

AR-DRGs – Top 5		Stroke In-Patient Discharges		In-Patient Length of Stay	
		N	%	Mean	Median
B70C	Stroke and Other Cerebrovascular Disorders W/O Cat/Sev CC	2,490	41.7	13.5	8
B70B	Stroke and Other Cerebrovascular Disorders W Sev CC	1,440	24.1	22.6	13
B70A	Stroke and Other Cerebrovascular Disorders W Cat CC	1,027	17.2	50.1	28
B70D	Stroke and Other Cerebrovascular Disorders, Died or Transferred <5 Days	494	8.3	1.8	1
B02C	Cranial Procedures W/O Cat/Sev CC	113	1.9	11.9	8
Top 5 A	R-DRGs for Stroke In-Patient Discharges	5,564	93.2	21.5	10
Stroke I	n-Patient Discharges	5,973	100	22.3	10

Notes: Percentage columns are 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

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.

Case mix

Case mix is a method of quantifying hospital workload taking account of the complexity and resource-intensity of the services provided.

**Complications** 

Complications may arise during the hospital stay.

Comorbidities

Comorbidities are assumed to be prior existing conditions, which were present at the time of admission.

Day patient

A day patient is admitted to hospital for treatment on an elective (rather than an emergency) basis and 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).

**Delivery status** 

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)

DRGs are clusters of cases with similar clinical attributes and resource requirements. In Ireland, the decision was made to move to 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

Population of group i x 1,000

**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** 

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. Up to 2004, the General Medical Services (Payments) Board was responsible for making payments on behalf of the health boards/regional authorities for national schemes (including GP services and prescriptions used by medical card holders). At the end of 2004, the GMS (Payments) Board was replaced by the Primary Care Reimbursement Service.

# 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). While a planned in-patient would stay for at least one night, in the case of emergency admissions the date of admission and discharge may be the same.

#### **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 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) is a consultant led unit that accepts direct referrals from G.P.s, 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

Discharges *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.

#### 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**

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.

#### **Voluntary hospital**

Management authorities for this group of hospitals 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.citizensinformation.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
ALOS Average Length of Stay

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

CSO Central Statistics Office
D&C Dilation and Curettage
D&D Diseases and Disorders

CPB pump Cardiopulmonary bypass pump

DoH&C Department of Health and Children

DRG Diagnosis Related Group
EEG Electroencephalography

**ECMO** Extra corporeal membrane oxygenation

ECT Electroconvulsive therapy
ENT Ear, Nose and Throat

ERCP Endoscopic Retrograde Cholangio Pancreatography

ESRI Economic and Social Research Institute

ESW Extracorporeal Shock Waves

GI Gastro-intestinal

Fx Fracture g Grams

GMS General Medical Services
GP General Practitioner

HIPE Hospital In-Patient Enquiry
HIV Human Immunodeficiency Virus

**HSE** Health Service Executive

ICD-9-CM Ninth Revision of the International Classification of Diseases, Clinical Modification, Version

October 1998

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

Incl Including

IHD Ischaemic Heart Disease
Infect/inflam Infection/inflammation

Inhal Inhalation
Inves Investigative

IT Information Technology MDC Major Diagnostic Category

misc Miscellaneous Not applicable n/a

NCCH National Centre for Classification in Health

Number of Observations/Discharges Ν

Non-malig Non-malignant

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

OR Operating Room

**PTCA** Percutaneous Transluminal Coronary Angioplasty

Sev Severe

TIA Transient Ischaemic Attack URI **Upper Respiratory Infection** WHO World Health Organisation

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 & St. Anne's Hospital	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, Harold's Cross	Dublin	Voluntary	Long Stay
Midland Regional Hospital, Mullingar	Westmeath	Non-Voluntary	County
Midland Regional Hospital, Portlaoise	Laois	Non-Voluntary	County
Midland Regional Hospital, Tullamore	Offaly	Non-Voluntary	County
Cherry Orchard Hospital, Ballyfermot	Dublin	Non-Voluntary	Other Care
Blackrock Hospice <sup>a</sup>	Dublin	Voluntary	Long Stay

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

Hospital Name	County	Hospital Type	
HSE West			
Midwestern Regional Hospital, Ennis	Clare	Non-Voluntary	County
Midwestern Regional Hospital, Nenagh	Tipperary	Non-Voluntary	County
Midwestern Regional Hospital, Dooradoyle	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 General 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 <sup>b</sup>	Galway	Non-Voluntary	Regional
HSE South			
Lourdes Orthopaedic Hospital, Kilcreene	Kilkenny	Non-Voluntary	Orthopaedic
St. Luke's General Hospital	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 Hospitalb	Cork	Non-Voluntary	Regional
Kerry General Hospital, Tralee	Kerry	Non-Voluntary	County
Bantry General Hospital	Cork	Non-Voluntary	County
Mallow General Hospital	Cork	Non-Voluntary	County
Mercy University Hospital	Cork	Voluntary	General
South Infirmary Victoria Hospital	Cork	Voluntary	General
South Infirmary Victoria Hospital St. Finbarr's Hospital	Cork Cork	Voluntary Non-Voluntary	General County

Notes:

Total number of hospitals participating in 2010: 57

Participating in HIPE from 1 January 2010.
 HIPE activity data from 2010 for University College Hospital Galway and Merlin Park Regional Hospital are now reported as Galway University Hospitals.

#### APPENDIX II: HIPE DATA COLLECTED

 TABLE II.1
 Data Collected by HIPE

Type of Data	Parameters	Notes
	Date of birth	Full date of birth not exported outside the hospital.
•	Sex	
ic Data	Marital status	Values include single, married, widowed, other (including separated), unknown, or divorced.
Demographic Data	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.
Der	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.
ata	Nineteen 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.
	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.
	Patient name	Is not exported outside the hospital.
	Hospital number	
	Chart number	Is unique to hospital of discharge.
	Admission and	
	discharge dates	
	Dates of principal and first procedures	
	Day case indicator	
	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. <sup>a</sup>
Iminist	Waiting list indicator	Indicates if an elective admission case is funded by the National Treatment Purchase Fund (NTPF).
Ac	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 Data	Parameters	Notes
	Discharge destination	Values include: self discharge, home, nursing home, convalescent home or long stay accommodation, transfer to hospital (in HIPE) as emergency, transfer to hospital (in HIPE) as non-emergency, transfer to psychiatric hospital/unit, died with post-mortem, died without post-mortem, transfer to other hospital (not in HIPE) as emergency, transfer to other hospital (not in HIPE) as non-emergency, rehabilitation facility, hospice, prison, absconded, other, or temporary place of residence (e.g. hotel).
	Discharge status	Refers to the public/private status of the patient on discharge and not to the type of bed occupied.
	General Medical Service status	Refers to whether the patient is a medical card holder.
	Days in an intensive care environment	
Ġ	Days in a private/ semi-private bed	
ont	Days in a public bed	
Administrative Data (contd.)	Specialty	Refers to specialty of consultant associated with the principal diagnosis and is assigned locally based on a list provided by the Department of Health and Children.
Ε̈́Ε	Primary consultant	Encrypted.
trai	Anaesthetist	Encrypted. Collected for each procedure performed under anaesthetic.
minis	Intensive care consultant	Encrypted. Up to ten may be recorded.
PΑ	Admitting consultant	Encrypted.
	Discharge consultant	Encrypted.
	Consultant responsible for each diagnosis	Encrypted.
	Consultant responsible for each procedure	Encrypted.
	Date of transfer to a pre-discharge unit	Date may be collected to identify when a patient was transferred to a pre- discharge unit prior to being discharged as planned – optional variable collected since 2004
	Ward Identification	Admitting ward: The ward to which the patient was admitted.  Discharge ward: The ward from which the patient was discharged.
	Temporary leave days	Refers to the number of days the patient was absent from the hospital during an episode of care <sup>b</sup>

Notes:

Source: HIPE Data Dictionary 2010 Version 2.0 available at www.hipe.ie.

<sup>&</sup>lt;sup>a</sup> For *Maternity* discharges on or after 1 January 2009 there is no longer a distinction between elective and emergency admissions as in previous years.

b This was a new variable in 2007. To be consistent with previous years the calculation of average 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, 2010

Hospital In-Patient Enquiry (HIPE) Summary Sheet	
For use with W-HIPE data entry software on ALL DISCHARGES FROM  Hospital No.	FOR LOCAL COLLECTION ONLY  *Name:  *Address:  Admitting Consultant Discharge Consultant Primary Consultant Intensive Care Consultant Up to 10 Intensive Care consultants
Day Ward ID         Days in an Intensive Care Oncology Day Ward Flag environment	may be recorded
PDX = The diagnosis established after study to be chiefly responsible for occasioning the ICD-10-AM Code Principal Diagnosis (PDX)  (2) (3) (4) (5) (6) (7) (8) Up to 20 diagnoses codes may be entered on W-HIPE as appropriate – Continue on reverse of sheet if necessary	Patient's episode of care in hospital (ACS 0001)  Consultant Specialty Speci
Procedure/Intervention Block No. Principal Procedure	Consultant Consultant Anaesthetist
(1)	
Date of 1st Procedure         /         Date of Principal Procedure         /           Case Entered on W-HIPE         Comment:	
*Patient Name Address full DOB and GMS number are currently not exported to the ESR	L Collected only at hospital level

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> These were initially produced by the Department of Health but since 2006 have been provided by the HSE. For HIPE hospitals not managed by the HSE, bed data are sourced directly from those hospitals.

Number of Beds in HIPE Hospitals, 2006-2010

Table IV.1 shows the number of beds in HIPE hospitals over the years 2006–2010.

**TABLE IV.1** Number of Beds in HIPE Hospitals, 2006-2010

	2006 (%)	2007 (%)	2008 (%)	2009 (%)	2010 (%)	Average Annual % Change <sup>a</sup>	% Change
						2006-2010	2009-2010
Day Patient Beds	1,402	1,529	1,697	1,774	1,859	7.3	4.8
	(10.2)	(11.0)	(12.2)	(13.1)	(14.0)	-	-
In-Patient Beds	12,371	12,356	12,182	11,751	11,417	-2.0	-2.8
	(89.8)	(89.0)	(87.8)	(86.9)	(86.0)		
Total Hospital Beds	13,773 (100)	13,885 (100)	13,879 (100)	13,525 (100)	13,276 (100)	-	-

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.

Source: Business Intelligence Unit in the Corporate Planning and Corporate Performance Directorate of the Health Service Executive (December, 2011)

The following tables indicate the volume and distribution of beds across the health system for 2010.

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, 2010

	Day Patient Beds		In-Patient Beds		Total HIPE Hospital Beds	
	N	%	N	%	N	%
HSE Dublin North East	442	14.6	2,586	85.4	3,028	100
	23.8		22.7		22.8	
<b>HSE Dublin Mid Leinster</b>	564	13.3	3,674	86.7	4,238	100
	30.3		32.2		31.9	
HSE South	383	12.6	2,651	87.4	3,034	100
	20.6		23.2		22.9	
HSE West	470	15.8	2,506	84.2	2,976	100
	25.3		21.9		22.4	
Tota Hospital Bedsl	1,859	14.0	11,417	86.0	13,276	100
	100		100		100	

Notes: Percentages columns are subject to rounding.

See additional notes and Source under Table IV.1.

Number of beds represents the average number of beds per day that were available throughout the year and is exclusive of bed closures (HSE, 2011).

#### 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, 2010

	Day Patient Beds		In-Patie	nt Beds	Total Hospital Beds	
	N	%	N	%	N	%
General Hospitals	1,672	14.7	9,711	85.3	11,383	100
	89.9		85.1		85.7	
Voluntary	640	15.3	3,546	84.7	4,186	100
	34.4		31.1		31.5	
Regional	422	14.7	2,440	85.3	2,862	100
	22.7		21.4		21.6	
County	610	14.1	3,725	85.9	4,335	100
	32.8		32.6		32.7	
Special Hospitals	187	9.9	1,706	90.1	1,893	100
	10.1		14.9		14.3	
Total (All Hospital Types)	1,859	14.0	11,417	86.0	13,276	100
	100		100		100	

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

#### **APPENDIX V: POPULATION ESTIMATES**

Table V.1 presents the population data estimated in the ESRI which was used to calculate rates in Section Two. These are presented by sex, age group and HSE area of residence.

TABLE V.1 Population Data (Total, Male, Female by Age Group) by HSE Area of Residence, 2010

		HSE Dublin	HSE Dublin	HSE South	HSE West	Total
		North East	Mid Leinster			
	<1 Years	78,432	104,108	86,008	78,193	346,741
	1-14 Years	129,244	168,409	151,689	141,551	590,893
_	15-24 Years	120,264	157,988	149,731	143,774	571,757
Total Population	25-34 Years	179,637	231,310	175,555	161,240	747,742
	35-44 Years	155,944	201,318	168,284	151,755	677,301
ldo	45-54 Years	121,780	160,413	148,195	136,119	566,507
<u> </u>	55-64 Years	94,899	124,645	121,085	115,308	455,937
ote	65-74 Years	59,950	77,551	80,586	74,718	292,806
	75-84 Years	34,274	43,232	46,789	44,575	168,870
	85 and Over	11,365	13,838	15,886	17,199	58,289
	Total	985,791	1,282,812	1,143,808	1,064,432	4,476,843
	<1 Years	40,210	53,342	44,026	40,101	177,680
Male Population	1-14 Years	66,496	86,419	77,703	72,447	303,064
	15-24 Years	61,483	80,732	76,410	73,618	292,243
	25-34 Years	90,192	116,412	89,651	82,821	379,077
	35-44 Years	79,203	101,840	85,821	77,108	343,972
obr	45-54 Years	60,707	79,845	74,852	68,781	284,185
e P	55-64 Years	47,081	61,888	61,478	58,912	229,360
/al	65-74 Years	28,858	37,173	39,847	37,543	143,422
_	75-84 Years	14,218	18,106	20,304	19,913	72,541
	85 and Over	3,457	4,258	5,276	5,953	18,944
	Total	491,906	640,014	575,370	537,199	2,244,489
	<1 Years	38,222	50,766	41,982	38,092	169,061
	1-14 Years	62,748	81,990	73,987	69,104	287,829
<u>_</u>	15-24 Years	58,782	77,256	73,321	70,155	279,514
Female Population	25-34 Years	89,445	114,898	85,903	78,419	368,665
Jig _	35-44 Years	76,741	99,478	82,463	74,647	333,329
Рок	45-54 Years	61,073	80,568	73,343	67,338	282,322
e e	55-64 Years	47,818	62,756	59,607	56,396	226,577
E	65-74 Years	31,092	40,378	40,739	37,175	149,384
F	75-84 Years	20,056	25,126	26,485	24,662	96,328
	85 and Over	7,909	9,580	10,610	11,246	39,345
	Total	493,885	642,798	568,438	527,234	2,232,354

Note:

These population estimates were constructed by age, sex and county with counties Dublin and Tipperary split into north and south components as per the HSE area definitions. The estimates were derived using a cohort component model, and then applying the same mortality rates used by the CSO for their population projections, the CSO F2 fertility assumption along with published international migration data.

Source: The population data were estimated by the Economic and Social Research Institute (29<sup>th</sup> August 2011).

#### **APPENDIX VI: 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 VI.1** Derived Variables

	- Variable	Der	ived Variable for Report
Adn	nission Type		
1	'Elective'	1	'Elective' (1, 2)
2	'Elective Readmission'	2	'Emergency' (4, 5, 7)
4	'Emergency'	3	'Maternity' (6)
5	'Emergency Readmission'		
6	'Maternity'		
7	'New born'		
Adn	nission Source		
1	'Home'	1	'Home' (1)
2	'Transfer from nursing home/convalescent home or	2	Long stay accommodation (2, 5)
	other long stay accommodation'		
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	'New born' (7)
5	'Transfer from hospice - not in HIPE listing'	5	'Other' (8, 9, 0)
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		
	- 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'		

#### APPENDIX VII: REFERENCE TABLES

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

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

		Day Patients		Day Elective Patients In-Patients			Emerg In-Pat		Total Discharges (excl. Maternity)	
		N	%	N %		N %		N %		
	Dublin North	90,388	79.5	9,427	85.0	30,908	88.8	130,723	81.9	
સ <u>⊒</u> .	Cavan	13,514	89.7	1,401	78.8	8,516	95.9	23,431	91.1	
HSE Dublin North East	Monaghan	11,286	90.2	1,055	77.0	5,413	95.7	17,754	90.9	
급된	Louth	19,841	87.2	2,271	82.2	9,604	95.8	31,716	89.2	
R S	Meath	20,488	76.0	2,759	76.7	12,384	86.9	35,631	79.5	
	Total	155,517	81.4	16,913	82.1	66,825	90.8	239,255	83.9	
	Dublin South	117,489	93.3	10,303	85.6	41,670	93.2	169,462	92.7	
	Kildare	25,163	82.0	2,948	80.2	12,558	86.2	40,669	83.1	
in ter	Wicklow	25,122	96.1	2,403	84.7	7,671	93.0	35,196	94.5	
HSE Dublin Mid Leinster	Longford	5,218	67.8	614	72.6	3,603	86.8	9,435	74.4	
E D	Westmeath	15,813	78.1	1,417	70.0	7,747	81.1	24,977	78.5	
HS	Offaly	15,007	89.1	1,416	79.1	5,599	88.4	22,022	88.2	
	Laois	13,616	91.5	1,641	89.7	6,348	95.0	21,605	92.3	
	Total	217,428	89.7	20,742	82.8	85,196	90.4	323,366	89.4	
	Carlow	3,674	47.8	601	45.4	5,334	87.4	9,609	63.6	
	Wexford	17,619	75.9	1,978	57.6	11,475	90.7	31,072	79.1	
표	Kilkenny	7,433	79.2	1,237	67.9	8,398	94.2	17,068	84.8	
no	Tipp South	11,604	86.6	2,910	87.0	7,972	94.6	22,486	89.4	
HSE South	Waterford	18,320	94.6	2,261	82.7	9,595	96.9	30,176	94.3	
Ξ̈́	Cork	96,215	98.0	14,745	94.1	31,527	97.5	142,487	97.5	
	Kerry	20,835	94.1	3,624	89.4	10,037	96.9	34,496	94.4	
	Total	175,700	90.9	27,356	84.5	84,338	95.1	287,394	91.4	
	Limerick	25,827	89.4	4,317	79.0	13,717	91.8	43,861	88.9	
	Clare	14,267	95.1	2,673	87.8	8,577	96.5	25,517	94.7	
	Tipp North	8,672	69.1	1,244	60.4	4,358	66.8	14,274	67.6	
st	Galway	53,531	97.8	5,289	90.2	20,632	97.5	79,452	97.2	
HSE West	Roscommon	12,491	90.1	1,420	80.5	5,157	93.2	19,068	90.1	
SE	Mayo	33,416	96.4	4,818	92.2	13,675	97.2	51,909	96.2	
Î	Leitrim	5,127	76.9	510	59.0	1,944	77.5	7,581	75.5	
	Sligo	18,417	93.9	1,762	81.8	7,146	96.5	27,325	93.7	
	Donegal	29,640	93.3	2,975	70.5	15,557	95.3	48,172	92.1	
	Total	201,388	92.5	25,008	81.6	90,763	93.2	317,159	91.7	

Note: Percentage columns are subject to rounding.

#### APPENDIX VIII: 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:

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.

The listed procedures should be coded if anaesthesia (except local) is required for the procedure (see ACS 0031 *Anaesthesia*).

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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