Activity in Acute Public Hospitals in Ireland

2018
ANNUAL REPORT

Healthcare Pricing Office

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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 2018. Discharge activity is examined by patient type, admission type, hospital group, and by demographic parameters (such as age and sex). Particular issues of relevance to the Irish health care system covered in the report relate to the composition of discharges by medical card and public/private status. Discharges are also analysed by diagnoses, procedures, major diagnostic categories, and diagnosis related groups. The analysis is presented at the national level.

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ACKNOWLEDGEMENTS

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

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

We would like to thank, specifically, Jacqui Curley (HPO), Brian McCarthy (HPO) and Deirdre Murphy (HPO) for reviewing and commenting on earlier drafts of this report and HIPE IT for assistance with data analysis.

Inevitably, a number of individuals have to carry most of the responsibility for producing a report of this type. In this case, Sheelagh Bonham, Karen Kearns, Laura Metcalfe, Sinead O'Hara and Rory O'Reilly 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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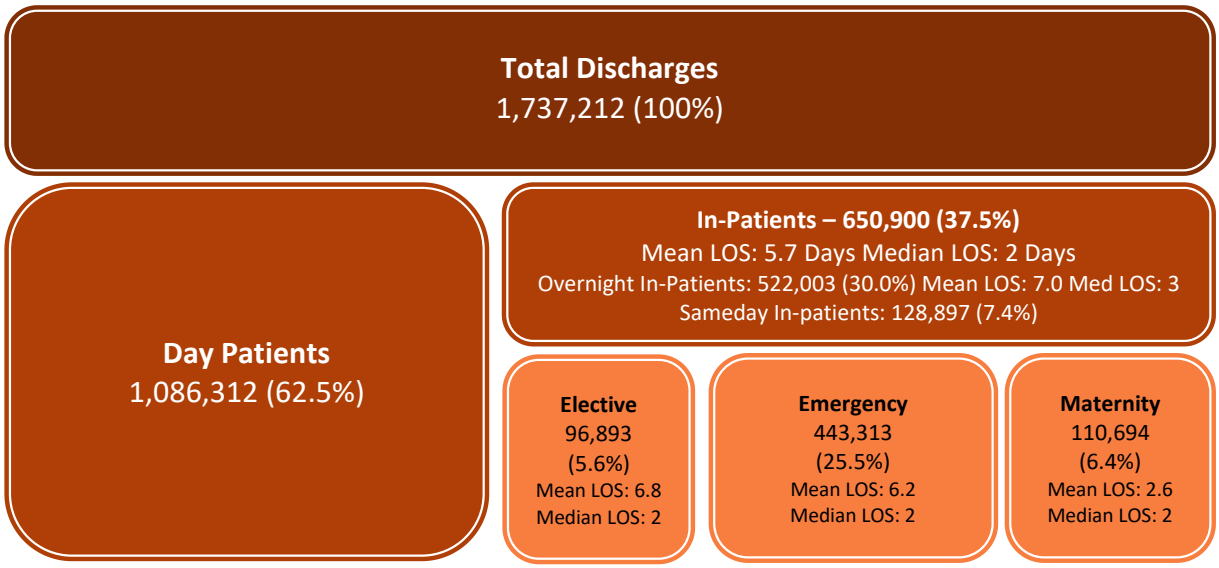
EXECUTIVE SUMMARY

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

This report relates to discharges that occurred in the 2018 calendar year. The aim of this report is to present an overview of discharge activity in acute public hospitals in Ireland.

TOTAL DISCHARGES, 2018



Discharge Overview

- Over 1.7 million discharges were reported by participating hospitals in 2018.
- Day patients accounted for 62.5 per cent of total discharges, an increase of 0.9 per cent since 2017.
- In-patients accounted for 37.5 per cent of total discharges, an increase of 1.5 per cent since 2017 and an increase of 3.0 per cent from 2014–2018.
- Over the period 2014–2018, the number of elective in-patient discharges decreased by 3.4 per cent, maternity in-patients decreased by 7.1 per cent, while emergency in-patients increased by 7.5 per cent.

Length of Stay

- In-patient average length of stay was 5.7 days in 2018, this has remained the same since 2015.
- Over the period 2014–2018, the average length of stay has remained relatively constant for elective, emergency and maternity in-patients at 6.8 days, 6.2 days and 2.6 days in 2018 respectively.

Sex

- Similar to previous years, females accounted for 52.9 per cent of total discharges with males accounting for 47.1 per cent.
- Excluding maternity discharges, females accounted for 49.1 per cent of discharges with males accounting for 50.9 per cent.

Age

- Discharges aged 65 years and over accounted for 37.8 per cent of total discharges, representing an increase of 3.5 per cent since 2017 and an increase of 18.9 per cent since 2014.
- Discharges aged 65 years and over accounted for 55.2 per cent of total in-patient bed days, an increase of 3.4 per cent since 2017 and an increase of 11.1 per cent since 2014.

Marital/Civil Status

- Married discharges accounted for 48.6 per cent of total discharges.

Public/Private Status

- Over 85 per cent of total discharges were treated on a public basis, representing a 2.3 per cent increase since 2017 and an 11.4 per cent increase since 2014. Private patients accounted for 14.3 per cent of total discharges, representing a 2.8 per cent decrease from 2014–2018.
- The 25–34 years age group had the largest proportion of total discharges treated publicly (90.1 per cent) with only 9.9 per cent treated on a private basis.

General Medical Service (GMS) Status

- Of total discharges, 55.9 per cent were GMS discharges – an increase of 2.0 per cent since 2017 and an increase of 13.8 per cent since 2014.
- Of discharges in the 85 years and over age group, 84.0 per cent were GMS discharges compared to just 23.5 per cent of the less than 1 year age group (this excludes discharges where GMS status was 'unknown').

Hospital Group

- The largest proportion of total discharges were hospitalised in the Ireland East Hospital Group (19.5 per cent).

- Total in-patient discharges were highest in the Ireland East Hospital Group where 21.0 per cent of discharges were hospitalised, while the Dublin Midlands Hospital Group accounted for the highest proportion of day patients (21.0 per cent).

Admission Source

- The majority of total discharges were admitted from home (96.4 per cent).

Discharge Destination

- The majority of total discharges were discharged home (94.8 per cent).
- Of total emergency in-patients, 6.5 per cent were transferred to long stay accommodation, and 5.6 per cent were transferred to another hospital.

Day of Admission

- Almost 62 per cent of elective in-patients were admitted between Monday and Wednesday, with only 6.3 per cent admitted at the weekend.

Day of Discharge

- The proportion of elective in-patients discharged increased throughout the week, from 11.2 per cent on Monday to 22.3 per cent on Friday, falling to 10.1 per cent on Saturday and 4.8 per cent on Sunday.

Month of Discharge

- The largest numbers of emergency in-patients were discharged in May (38,791 discharges).

MORBIDITY ANALYSIS

Day Patients

- Day patients with a principal diagnosis of *Other medical care* (includes *Chemotherapy* and *Radiotherapy* encounters) and day patients with a principal diagnosis of *Care involving dialysis* accounted for 20.8 and 15.7 per cent of day patient discharges respectively. [1]
- At least one procedure was recorded for 92.6 per cent of day patient discharges.
- The highest principal procedure block reported was *Haemodialysis*, accounting for 16.9 per cent of day patients with at least one procedure recorded.

In-Patients

- The highest principal diagnosis reported for in-patient discharges was *Single spontaneous delivery* which accounted for 4.3 per cent of in-patients.
- At least one procedure was recorded for 57.3 per cent of in-patient discharges.
- The highest principal procedure block reported was *Generalised allied health interventions* which accounted for 28.1 per cent of in-patient discharges with at least one procedure recorded.[2]

Elective In-Patients

- Elective in-patients with a principal diagnosis of *Care involving use of rehabilitation procedures* and *Chronic diseases of tonsils and adenoids* both accounted for 3.6 per cent of elective in-patient discharges.
- At least one procedure was recorded for 89.0 per cent of elective in-patient discharges.
- The highest principal procedure block reported for elective in-patients was *Generalised allied health interventions,* accounting for 11.0 per cent of elective in-patients who had at least one procedure reported.

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

2 This block includes interventions such as physiotherapy, pharmacy, dietetics, occupational therapy, speech pathology and social work. Together, these six interventions accounted for 93.9 per cent of cases within this procedure block.

Emergency In-Patients

- The highest principal diagnosis reported for emergency in-patients was *Pain in throat and chest*, accounting for 4.1 per cent of emergency in-patient discharges.
- At least one procedure was recorded for 49.8 per cent of emergency in-patient discharges.
- The highest principal procedure block reported for emergency in-patients was *Generalised allied health interventions,* accounting for 41.8 per cent of emergency in-patient discharges who had at least one procedure reported.

Maternity In-Patients – by Delivery Status[3]

- Delivery discharges with a principal diagnosis of *Single spontaneous delivery* accounted for 46.7 per cent of delivery in-patient discharges.
- For delivery discharges who had a procedure reported, 35.6 per cent reported the principal procedure block *Caesarean section*.
- Non-delivery discharges with a principal diagnosis of *Other maternal diseases classifiable elsewhere but complicating pregnancy; childbirth and the puerperium* accounted for 27.4 per cent of non-delivery in-patient discharges.
- For non-delivery discharges who had a procedure reported, 30.7 per cent reported the principal procedure block *Curettage and evacuation of uterus*.

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

CASE MIX ANALYSIS

The case mix classification presents analysis of patients who undergo similar treatment processes and incur similar levels of resource use.[4]

- The MDC with the largest proportion of day patients reported was *Neoplastic disorders (haematological and solid neoplasms)* (MDC 17), which accounted for 260,427 discharges or 24.0 per cent of day patients.
    - *Chemotherapy* (AR-DRG R63Z) accounted for 44.0 per cent of day patients within this MDC, and 10.5 per cent of total day patients*; Other Neoplastic Disorders, Minor Complexity* (AR-DRG R62C) accounted for 39.5 per cent of day patients within this MDC and 9.5 per cent of total day patients.
- The MDC with the largest proportion of in-patient discharges was *Pregnancy, Childbirth and the Puerperium* (MDC 14), which accounted for 16.9 per cent of in-patients.
    - *Antenatal and Other Obstetric Admission* (AR-DRGs O66A and O66B) accounted for 37.5 per cent of in-patients within this MDC and 6.3 per cent of total in-patient discharges.
    - *Vaginal Delivery* (AR-DRGs O60A, O60B and O60C) accounted for 35.0 per cent of in-patients within this MDC and 5.9 per cent of total in-patient discharges.

[4] In 2015, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. See Appendix VIII for an overview of changes between Version 6.0 and Version 8.0 of the AR-DRG Classification System.

Overview SECTION

One

Table of Contents

1.1 INTRODUCTION

This report aims to present an overview of discharge activity in acute public hospitals in Ireland during 2018 using data from the Hospital In-Patient Enquiry (HIPE) scheme. HIPE collects information on day patient and in-patient activity from participating hospitals.[1]

Section One provides an overview of the 2018 report. It outlines briefly the background of the HIPE scheme, and highlights other data sources used throughout the report. The scope of the HIPE data and the methods used in the report are discussed. Finally, an analysis of the trends in the main HIPE variables is undertaken using data from the period 2014–2018.

1.2 BACKGROUND

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

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

1 See Appendix I for a list of hospitals participating in HIPE in 2018.

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

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

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

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

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

7 National Casemix and Classification Centre (NCCC), 2013: The *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification* (ICD-10-AM), *Australian Classification of Health Interventions* (ACHI) and *Australian Coding Standards* (ACS) – ICD-10-AM/ACHI/ACS *(8th Ed)*: NCCC, Australian Health Services Research Institute, University of Wollongong.

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

changes in the new classification. Use of ICD-10-AM/ACHI/ACS is complemented by the Irish Coding Standards (ICS).[9] The ICS are developed for use with the Australian Classifications and Coding Standards (ACS) and are revised regularly to reflect changing clinical practice and to ensure that the classification and its application are relevant to the Irish healthcare system. Due to the update in the classification, caution must be exercised when comparing procedure and diagnosis categories presented in reports from 2015 onwards compared to previous reports, due to changes in sequencing of codes, addition of new codes, deletion of codes, and updates to ACS and ICS.[10]

In 2015, the Australian Refined Diagnosis Related Groups (AR-DRG) classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0[11]. The update to AR-DRG Version 8.0 included a revision of the complexity model used to assign AR-DRGs to discharges. In addition to this, it included a review of existing AR-DRGs, the removal of some AR-DRGs and the inclusion of new AR-DRGs. The naming convention for AR-DRGs was also updated. Due to the update in this classification, AR-DRGs in this report are not comparable with those in reports prior to 2016.[12]

Given the comprehensive coverage achieved by this information system, the data gathered by HIPE are used by policymakers, clinical teams and researchers. In addition to responding to requests for HIPE information, the HPO also manages the HIPE Statistics Reporter which is available online.[13]

1.3 Data Sources for Annual Report 2018

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.[14,15] In 2018, 53 public hospitals in Ireland participated in HIPE (see Appendix I).[16,17]

Population Estimates: Population estimates for 2014–2018 are based on Census 2016 data published by the Central Statistics Office.

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

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

11 AR-DRG Version 8.0 was first reported on in the HIPE Annual Report in 2016.

12 See Appendix VIII for an overview of changes between AR-DRG Version 6.0 and Version 8.0.

13 Available at www.hpo.ie

14 See Appendix II for details of data collected by HIPE, see also the HIPE Data Dictionary 2018 Version 10.0 available at www.hpo.ie

15 A copy of the HIPE data entry form for 2018 is contained in Appendix III.

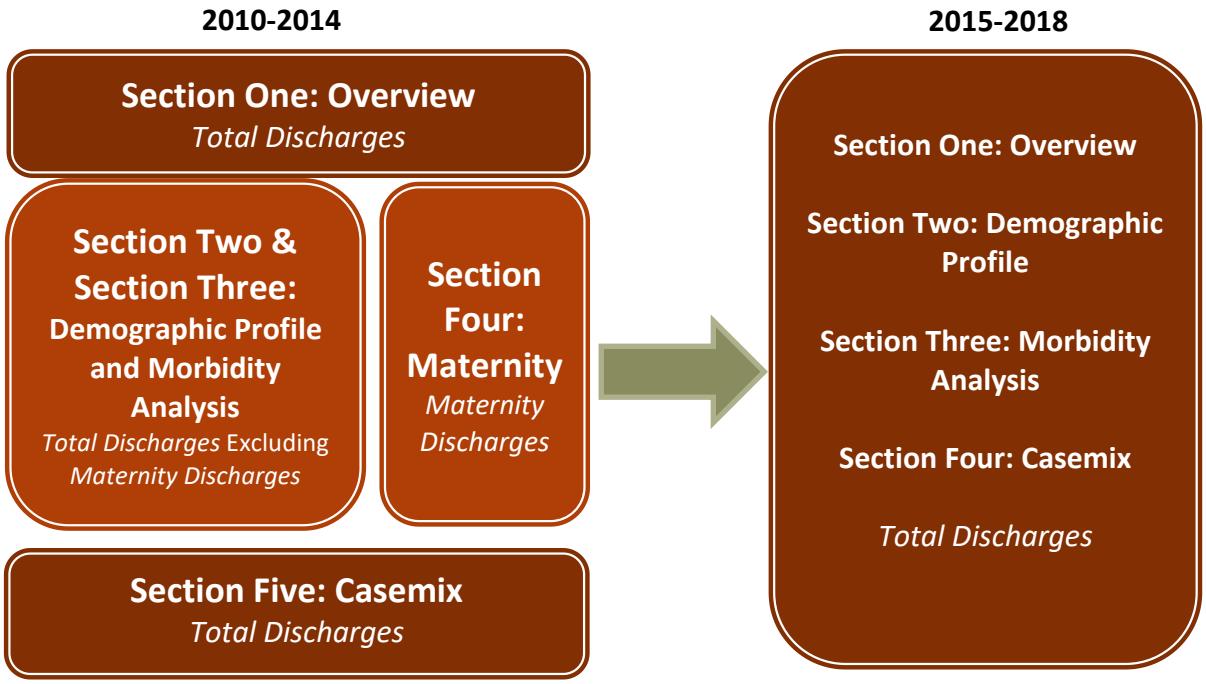
16 For historical reasons, a small number of non-acute hospitals also reported to HIPE in 2018. Discharges from these hospitals have been included in this report.

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

1.4 Structure of Annual Report 2018

Figure 1.1 outlines the changes to the structure of the *Activity in Acute Public Hospitals in Ireland* Annual Reports 2010–2018.[18] As shown in Figure 1.1, discharges with admission type 'Maternity' are no longer presented separately in Section Four from 2015.[19] In lieu of this, maternity discharges are separated out in selected tables in Section Two and Section Three.

FIGURE 1.1 Changes to structure of the Activity in Acute Public Hospitals in Ireland Annual Report, 2010-2018



The remainder of the report is structured as follows:

Section Two

In Section Two the report is concerned with providing a demographic (WHO), regional (WHERE) and temporal (WHEN) profile of discharges reported to HIPE in 2018. Section Two includes many of the administrative variables reported to HIPE, including age, sex, marital/civil status, GMS status, and discharge status. The regional analysis uses Hospital Group to see where discharges are being hospitalised, while the temporal analysis looks at day of admission, day of discharge, and month of discharge.

Section Three

Section Three focuses on the diagnoses and procedures recorded for discharges reported to HIPE. Section Three presents analysis of hospital activity by patient

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

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

type with top 20 principal diagnoses and procedure blocks presented for day patients and for total, elective and emergency in-patients. The top 10 principal diagnoses and procedure blocks are presented by delivery status for maternity in-patients. Further analysis is presented for diagnoses and procedures reported for total discharges by sex and age group. The mean and median length of stay for in-patient discharges is presented by principal diagnoses and principal procedures.

Section Four

Section Four provides analysis of all HIPE data by case mix. Each Major Diagnostic Category (MDC) is presented with its associated Australian Refined Diagnosis Related Groups (AR-DRG) for total discharges. The analyses provide a breakdown of MDCs and AR-DRGs by patient type, with in-patient mean and median length of stay also provided. The version of the AR-DRG Classification used from 2016-2018 is Version 8.0.[20]

Annex

The annex is designed to highlight particular topics of interest that merit further analysis. This year's topic of interest is discharges with a principal diagnosis of Neoplasms.

Glossary and Abbreviations

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

[20] Further information on AR-DRG Version 8.0 can be found on the Australian Consortium for Classification Development website https://www.accd.net.au/ArDrg.aspx?page=2 [Accessed 26th July 2018].

1.5 SCOPE OF HIPE DATA

- *Each HIPE discharge record represents one episode of care.* Patients may be admitted to hospital more than once in any given time period with the same or different diagnoses. In the absence of a unique health identifier, therefore, the data reported to HIPE facilitate analysis of hospital discharge activity but do not permit analysis of certain parameters, such as the number of hospital encounters per patient; or estimate the incidence or prevalence of a particular disease.
- *Emergency In-Patient Admissions:* HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.
- *Coverage of data:* Coverage of the HIPE system is calculated using the discharges returned as 'coded' as a proportion of total discharges reported within each hospital. The data available from participating hospitals for 2018 indicate that for day patient and in-patient discharges appropriate for inclusion in the HIPE data set, 99.9 per cent of the discharges reported from hospital systems were coded and returned for inclusion in the national HIPE data set.
- *Hospital factors:* Restructuring of the hospital system is reflected in the analysis presented in this report. From April 2011 St. Luke's Radiation Oncology Network commenced providing services at centres located in Beaumont and St. James's Hospitals, as well as continuing to provide services at St. Luke's Hospital, Rathgar. For 2011–2014 these data were not included in the HIPE national file, and 2015 was the first year these data were returned to HIPE.

1.6 METHODS AND DEFINITIONS

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

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

- A day patient is admitted to hospital for treatment on an elective (rather than an emergency) basis and is discharged alive, as scheduled, on the same day. [21] Deliveries are not included.
- An in-patient is admitted to hospital for treatment or investigation on an elective or emergency basis. Sameday in-patients are admitted as in-patients and discharged on the same day, while overnight in-patients stay at least one night in hospital.

In-Patient Length of Stay: In line with current reporting for Activity Based Funding, the length of stay assigned for sameday in-patients has changed in this report from one bed day to 0.5 bed days. This is based on an analysis of hospital data which shows that, on average, 0.5 days is a more appropriate measure of length of stay for this cohort of patients. This will impact on the total in-patient length of stay resulting in a lower average length of stay compared to previous years. Therefore, caution must be taken if comparing the average length of stay data presented in this report to previous HIPE annual reports.

Diagnosis Related Groups: *"Local DRG's" presented in report.* The official classification for AR-DRG's (Version 8.0) has been slightly modified by the addition of two local DRG's specific to Ireland to account for differences in the provision of care between Ireland and Australia. While this practice has been used for Activity Based Funding, this is the first year that this modification to the official AR-DRG classification has been published in the HIPE Annual Report.

- *R99Z (Oncology Repeat Attendance):* There are many attendances at oncology day wards where patients undergo only very minor procedures (e.g. taking of bloods) which are generally of lower complexity than administration of chemotherapy or other oncology procedures. The "local DRG" R99Z (*Oncology Repeat Attendance*) is used to identify these cases and to ensure that they are costed and reimbursed appropriately.
- *J98Z (UV Therapy):* In general UV therapy is not administered in the acute hospital setting in Australia whereas it is in a number of Irish hospitals. In order to differentiate this activity from other skin disorder treatments the "local DRG" J98Z (*UV Therapy*) has been created which isolates this activity so that it can be costed and reimbursed appropriately.

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

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

Reporting of small numbers: The HPO does not report cells where the number of discharges reported to HIPE is five or fewer. The tables contained in this report have been suppressed in this manner by replacing such cells with the symbol **~**. Where further suppression is necessary to ensure that cells with five or fewer discharges are not disclosed, the cell with the next lowest number of discharges may be replaced with the symbol *****. Where cells containing five or fewer discharges have been suppressed, the associated mean and median in-patient length of stay figures may be suppressed using the symbol **^**. In Section Three, the symbol **ǂ** is used to denote where the sex and/or age group breakdown for a particular diagnosis or procedure has not been provided, as the numbers reported would result in suppression across the majority of categories.

1.7 DISCHARGES REPORTED TO HIPE, 2014-2018

In 2018, 1,737,212 discharges were reported to HIPE by participating acute public hospitals,[22] representing an increase of 9.1 per cent over the period 2014–2018 and an increase of 1.1 per cent over the period 2017–2018.

Table 1.1 and Figures 1.2 to 1.3 show the distribution of discharges over the period 2014–2018 by selected variables. The following points provide a summary of changes over the period 2014–2018:

- The male-female split in 2018 has remained consistent with previous years, with a larger proportion of female discharges (52.9 per cent).
- The 65 years and over age group accounted for the largest proportion of total discharges in 2018 (37.8 per cent), representing an increase of 18.9 per cent for this age group from 2014–2018.
- From 2014–2018 there was an increase of 11.4 per cent for public discharges and a decrease of 2.8 per cent for private discharges.
- The number of GMS discharges increased by 13.8 per cent between 2014 and 2018, from 854,249 to 971,882 discharges.
- The proportion of total discharges treated by each Hospital Group remained similar between 2017 and 2018. The largest percentage increase was in the Ireland East Hospital Group with a 2.7 per cent increase between 2017 and 2018.
- The number of day patient discharges has increased from 960,786 in 2014 to 1,086,312 in 2018, an increase of 13.1 per cent, with an increase of 0.9 per cent between 2017 and 2018.[23]
- The number of in-patient discharges has increased from 631,886 in 2014 to 650,900 in 2018, an increase of 3.0 per cent. Between 2017 and 2018 there was an increase of 1.5 per cent in the number of in-patient discharges.
- Emergency in-patient discharges comprised 65.3 per cent of total in-patient discharges in 2014, increasing to 68.1 per cent in 2018.
- Maternity in-patient discharges decreased by 7.1 per cent over the period 2014–2018 from 119,205 to 110,694 discharges. Between 2017 and 2018 there was a 0.5 per cent decrease in the proportion of maternity in-patient discharges reported to HIPE.
- Sameday in-patient discharges have increased by 10.9 per cent over the period 2014–2018 from 116,267 to 128,897 discharges.

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[22] In 2018 there were <5 cases with sex recorded as 'unknown'. These cases were verified with the hospitals. For reasons of confidentiality these cases are not included in this report.

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

- Over the period 2014–2018, the average length of stay has remained relatively constant for elective, emergency and maternity in-patients at 6.8 days, 6.2 days and 2.6 days in 2018 respectively.
- Overnight in-patient discharges stayed on average 6.6 days in 2014 which has increased to 7.0 days in 2018, an increase of 6.1 per cent. The median has remained constant at 3 days over the period.

TABLE 1.1 Acute Public Hospital Discharges in HIPE (N, %), 2014-2018

	2014	2015	2016	2017	2018	% Change 2014–2018	% Change 2017–2018
	N (%)	N (%)	N (%)	N (%)	N (%)		
Total Discharges	**1,592,672 100**	**1,664,066 100**	**1,704,452 100**	**1,718,523 100**	**1,737,212 100**	**9.1**	**1.1**
Discharge Rate[a]	**342.8**	**355.0**	**359.6**	**358.6**	**357.7**	**4.3**	**-0.3**
Sex							
Males	730,361 45.9	763,844 45.9	788,702 46.3	800,443 46.6	817,851 47.1	12.0	2.2
Females	862,311 54.1	900,222 54.1	915,750 53.7	918,080 53.4	919,361 52.9	6.6	0.1
Age Group							
Under 15 Years	132,608 8.3	133,638 8.0	132,677 7.8	127,545 7.4	129,137 7.4	-2.6	1.2
15–44 Years	465,626 29.2	464,203 27.9	471,123 27.6	465,383 27.1	456,062 26.3	-2.1	-2.0
45–64 Years	442,054 27.8	470,145 28.3	483,587 28.4	490,964 28.6	495,211 28.5	12.0	0.9
65 Years and Over	552,384 34.7	596,080 35.8	617,065 36.2	634,631 36.9	656,802 37.8	18.9	3.5
Public/Private Status[b]							
Public Discharges	1,336,317 83.9	1,398,932 84.1	1,424,290 83.6	1,454,057 84.6	1,488,034 85.7	11.4	2.3
Private Discharges	256,355 16.1	265,134 15.9	280,162 16.4	264,466 15.4	249,178 14.3	-2.8	-5.8
GMS Status							
GMS	854,249 53.6	892,584 53.6	942,022 55.3	953,030 55.5	971,882 55.9	13.8	2.0
Non-GMS	726,530 45.6	748,461 45.0	744,344 43.7	740,996 43.1	740,522 42.6	1.9	-0.1
Unknown	11,893 0.8	23,021 1.4	18,086 1.1	24,497 1.4	24,808 1.4	108.6	1.3
Hospital Group							
Ireland East	314,334 19.7	320,647 19.3	325,110 19.1	329,543 19.2	338,603 19.5	7.7	2.7
RCSI	245,979 15.4	244,242 14.7	254,227 14.9	258,768 15.1	258,954 14.9	5.3	0.1
Dublin Midlands[c]	267,077 16.8	310,649 18.7	318,725 18.7	319,373 18.6	325,230 18.7	21.8	1.8
South/South West	320,534 20.1	327,700 19.7	329,632 19.3	331,619 19.3	329,610 19.0	2.8	-0.6
UL	97,738 6.1	102,762 6.2	106,749 6.3	111,771 6.5	113,077 6.5	15.7	1.2
Saolta	287,774 18.1	299,245 18.0	310,448 18.2	309,209 18.0	312,651 18.0	8.6	1.1
Children's	53,038 3.3	52,841 3.2	54,234 3.2	53,211 3.1	53,795 3.1	1.4	1.1
No group	6,198 0.4	5,980 0.4	5,327 0.3	5,029 0.3	5,292 0.3	-14.6	5.2
Day Patients[c]	**960,786 100**	**1,029,860 100**	**1,060,602 100**	**1,077,014 100**	**1,086,312 100**	**13.1**	**0.9**
Dialysis/Radiotherapy[c]/ Chemotherapy[d]	339,480 35.3	393,868 38.2	399,895 37.7	396,925 36.9	394,397 36.3	16.2	-0.6
Maternity	19,043 2.0	19,838 1.9	20,763 2.0	20,831 1.9	20,601 1.9	8.2	-1.1
Other	602,263 62.7	616,154 59.8	639,944 60.3	659,258 61.2	671,314 61.8	11.5	1.8
In-Patients	**631,886 100**	**634,206 100**	**643,850 100**	**641,509 100**	**650,900 100**	**3.0**	**1.5**
Elective	100,287 15.9	99,086 15.6	95,870 14.9	96,100 15.0	96,893 14.9	-3.4	0.8
Emergency[e]	412,394 65.3	417,330 65.8	432,490 67.2	434,214 67.7	443,313 68.1	7.5	2.1
Maternity	119,205 18.9	117,790 18.6	115,490 17.9	111,195 17.3	110,694 17.0	-7.1	-0.5

Contd. overleaf

TABLE 1.1 Acute Public Hospital Discharges in HIPE (N, %), 2014–2018 (contd.)

		2014	2015	2016	2017	2018	% Change	% Change
		N (%)	N (%)	N (%)	N (%)	N (%)	2014–2018	2017–2018
Overnight In-Patients		515,619	516,604	519,738	518,756	522,003	1.2	0.6
		81.6	81.5	80.7	80.9	80.2		
Sameday In-Patients		116,267	117,602	124,112	122,753	128,897	10.9	5.0
		18.4	18.5	19.3	19.1	19.8		
In-Patient Length of Stay								
In-Patients	**Mean**	**5.6**	**5.7**	**5.7**	**5.7**	**5.7**	**1.8**	**0.0**
	Median	**2**	**2**	**2**	**2**	**2**		
Elective	Mean	6.7	6.7	6.9	6.7	6.8	1.5	1.5
	Median	2	2	2	2	2		
Emergency[e]	Mean	6.2	6.3	6.2	6.3	6.2	0.0	-1.6
	Median	2	2	2	2	2		
Maternity	Mean	2.6	2.6	2.7	2.7	2.6	0.0	-3.7
	Median	2	2	2	2	2		
Overnight In-Patients	**Mean**	**6.6**	**6.8**	**6.8**	**6.9**	**7.0**	**6.1**	**1.4**
	Median	**3**	**3**	**3**	**3**	**3**		
In-Patient Bed Days[f]								
Total In-Patients		**3,531,563**	**3,622,860**	**3,651,438**	**3,679,625**	**3,711,417**	**5.1**	**0.9**
		100	**100**	**100**	**100**	**100**		
Under 15 Years		293,387	292,948	284,997	276,584	270,757	-7.7	-2.1
		8.3	8.1	7.8	7.5	7.3		
15 to 44 Years		722,104	713,848	717,761	709,097	670,925	-7.1	-5.4
		20.4	19.7	19.7	19.3	18.1		
45 to 64 Years		672,162	697,640	702,640	712,827	720,392	7.2	1.1
		19	19.3	19.2	19.4	19.4		
65 Years and Over		1,843,910	1,918,424	1,946,040	1,981,117	2,049,343	11.1	3.4
		52.2	53	53.3	53.8	55.2		
Overnight In-Patients		**3,415,296**	**3,505,258**	**3,527,326**	**3,556,872**	**3,646,968**	**6.8**	**2.5**
		96.7	**96.8**	**96.6**	**96.7**	**98.3**		

Notes: Percentage columns are subject to rounding.

a These rates are based on population estimates published by the CSO which are based on the 'usual residence' concept. Crude discharge rate is calculated as the ratio of total discharges to the population of Ireland, multiplied by 1,000. When those discharges with no fixed abode and who were living outside Ireland are excluded, the crude discharge rate is 356.6 per 1,000 population.

b Public/Private status refers to whether the patient saw the consultant on a private or public basis. It does not relate to the type of bed occupied nor is it an indicator of private health insurance.

c Includes additional day patients for radiotherapy that were collected from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals from 2015 onwards. These centres are operational since 2011, but data has only been included in HIPE from 2015.

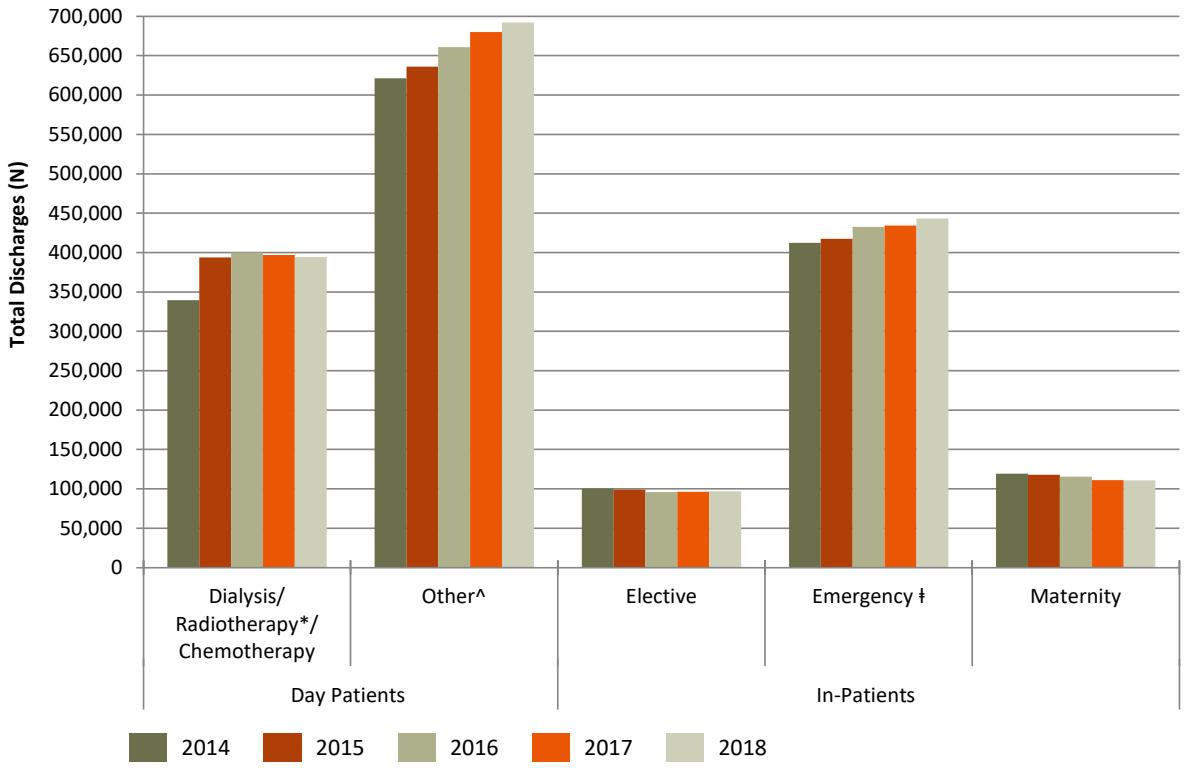
d The Dialysis category includes day patient discharges with a principal procedure of *haemodialysis* (ACHI procedure block 1060), the Chemotherapy category includes day patient discharges with a principal diagnosis of *pharmacotherapy session for neoplasm* (ICD-10-AM diagnosis code Z51.1), the Radiotherapy category includes day patient discharges with a principal diagnosis of *radiotherapy session* (ICD-10-AM diagnosis code Z51.0).

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

f Bed Days are presented as a proportion of total in-patient bed days. The calculation of bed days assigns 0.5 bed days to in-patients discharged on the same day (sameday in-patients) and one bed day to in-patients who stayed one night in hospital.

Sources: Data on discharges, length of stay and bed days for 2014-2018 were obtained from HIPE.
Population estimates for 2014-2018 were obtained from the Central Statistics Office.
www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=PEA01&PLanguage=0 [Accessed 14th June 2019].

FIGURE 1.2 Total Discharges by Patient Type and Admission Type (N), 2014–2018



Notes: See Appendix I for a list of hospitals that participated in HIPE in 2018.

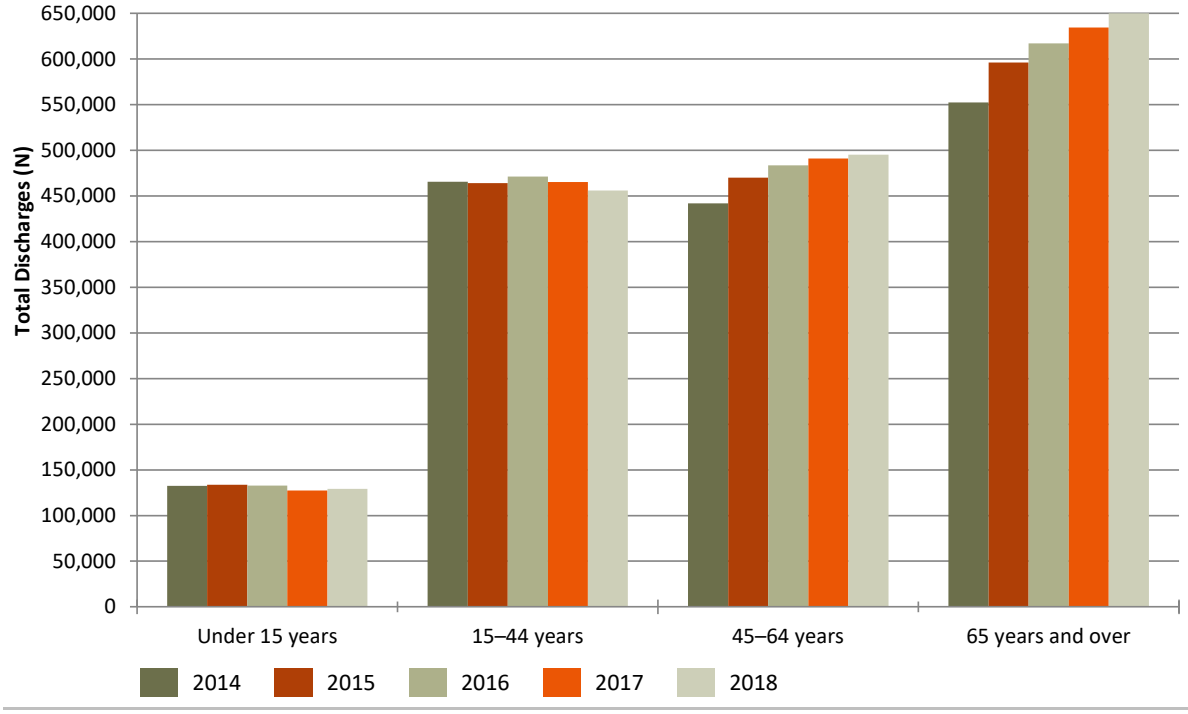
* From 2015 this includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

^ Includes day patient maternity discharges (see Table 1.1).

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

Source: Data for 2014–2018 were obtained from HIPE.

FIGURE 1.3 Total Discharges by Age Group (N), 2014–2018



Source: Data for 2014–2018 were obtained from HIPE.

Discharge Overview 2018

SECTION TWO

Table of Contents

2.1 INTRODUCTION

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

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

[1] The calculation of total in-patient length of stay differs in this report compared to previous reports. The length of stay assigned for sameday in-patients has changed in this report from one bed day to 0.5 bed days. This will impact on the total in-patient length of stay resulting in a lower average length of stay compared to previous years (see Section 1.6).

2.2 WHO

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

A day patient is admitted to hospital for treatment on an elective (rather than an emergency) basis and is discharged alive, as scheduled, on the same day. In 2018, day patient discharges accounted for 62.5 per cent of total discharges. In-patient discharges accounted for the remaining 37.5 per cent of total discharges with 68.1 per cent of in-patients admitted on an emergency basis, 14.9 per cent admitted on an elective basis and 17.0 per cent admitted as maternity in-patients.

2.2.1 Age

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

Discharges

- The largest proportion of total discharges were in the 65–74 years age group (19.2 per cent). This age group accounted for the largest proportion of day patient discharges (22.3 per cent).
- Discharges in the older age groups accounted for a relatively large proportion of bed days; those aged 65 years and over accounted for 33.7 per cent of in-patient discharges and 55.2 per cent of in-patient bed days.

Length of Stay

- Discharges aged 25–34 years accounted for 17.2 per cent of total sameday in-patients, the largest amongst all age groups.
- Apart from those aged less than one year, mean length of stay increased with age for overnight in-patient discharges rising from 2.8 days for discharges aged 1–14 years to 13.6 days for discharges aged 85 years and over. Median length of stay ranged between 2 to 7 days across all age groups.

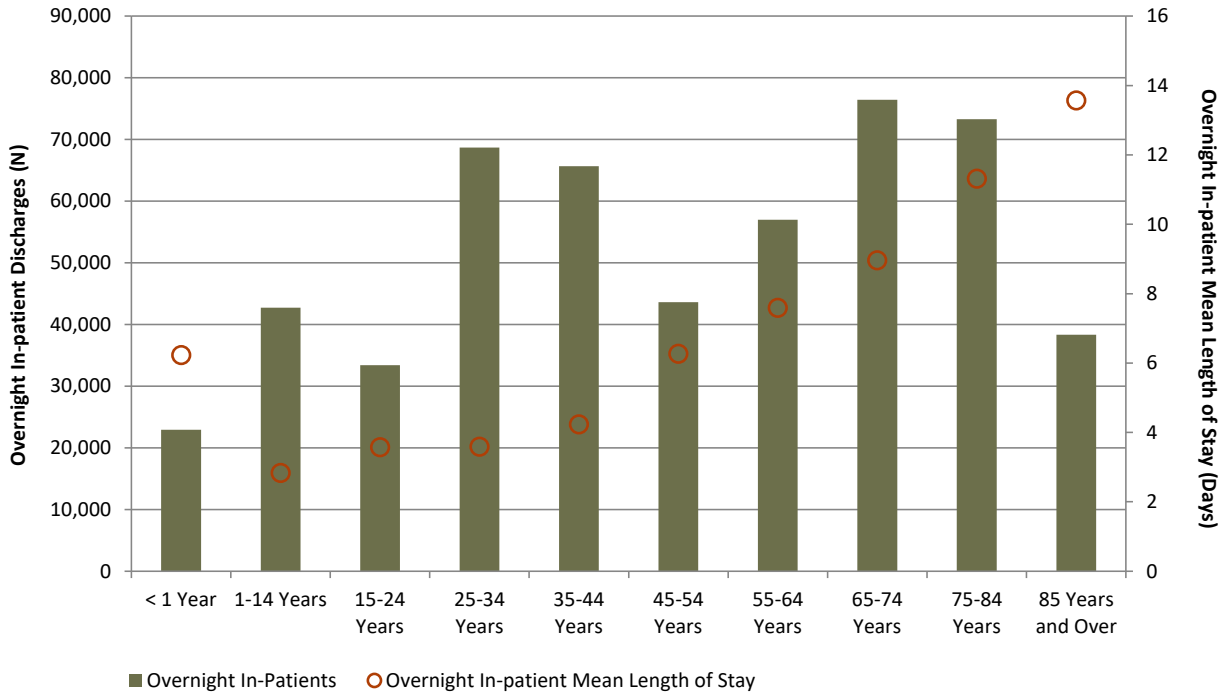
TABLE 2.1a Total Discharges: Patient Type by Age Group (N, %, Bed Days, %, and In-Patient Length of Stay)

	Discharges and Bed Days							
	Day Patients		In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
< 1 Year	4,353	0.4	26,171	4.0	144,304	3.9	30,524	1.8
1–14 Years	45,210	4.2	53,403	8.2	126,453	3.4	98,613	5.7
15–24 Years	39,472	3.6	45,745	7.0	125,503	3.4	85,217	4.9
25–34 Years	73,250	6.7	90,817	14.0	257,461	6.9	164,067	9.4
35–44 Years	120,640	11.1	86,138	13.2	287,960	7.8	206,778	11.9
45–54 Years	160,337	14.8	58,029	8.9	280,487	7.6	218,366	12.6
55–64 Years	205,277	18.9	71,568	11.0	439,905	11.9	276,845	15.9
65–74 Years	242,315	22.3	91,719	14.1	692,385	18.7	334,034	19.2
75–84 Years	157,865	14.5	84,674	13.0	834,811	22.5	242,539	14.0
85 Years and Over	37,593	3.5	42,636	6.6	522,146	14.1	80,229	4.6
Total Discharges	**1,086,312**	**100**	**650,900**	**100**	**3,711,417**	**100**	**1,737,212**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
< 1 Year	3,260	22,911	6.2	3	26,171	5.5	2
1–14 Years	10,696	42,707	2.8	2	53,403	2.4	1
15–24 Years	12,350	33,395	3.6	2	45,745	2.7	1
25–34 Years	22,140	68,677	3.6	2	90,817	2.8	2
35–44 Years	20,463	65,675	4.2	3	86,138	3.3	2
45–54 Years	14,420	43,609	6.3	3	58,029	4.8	2
55–64 Years	14,588	56,980	7.6	4	71,568	6.1	3
65–74 Years	15,289	76,430	9.0	5	91,719	7.5	4
75–84 Years	11,386	73,288	11.3	6	84,674	9.9	5
85 Years and Over	4,305	38,331	13.6	7	42,636	12.2	6
Total Discharges	**128,897**	**522,003**	**7.0**	**3**	**650,900**	**5.7**	**2**

Note: Percentage columns are subject to rounding.

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



2.2.1.1 Age and Sex

The data presented in Table 2.1a are disaggregated by sex in Table 2.1b – Table 2.1d. Table 2.1b presents male discharges, while Table 2.1c presents female discharges (excl. maternity) and Table 2.1d presents female discharges (maternity). In 2018, there were 919,361 female discharges, and of these 14.3 per cent were maternity discharges.

Discharges

- The 65–74 years age group accounted for the largest proportion of both male and female (excl. maternity) discharges, 22.8 per cent and 18.7 per cent respectively.
- Discharges aged 65 years and over accounted for 40.3 per cent of male in-patient discharges and 57.7 per cent of male in-patient bed days, while for females (excl. maternity) this group accounted for 40.8 per cent of female in-patient discharges and 62.1 per cent of female in-patient bed days.
- The 75–84 years age group accounted for the largest proportion of in-patient bed days for both males (23.8 per cent) and females (excl. maternity) (25.0 per cent).
- Females aged between 25 and 34 years accounted for just over half of maternity in-patient discharges (51.8 per cent), while those aged 35–44 years accounted for 35.1 per cent of in-patient discharges in this group.

Length of Stay

- Male overnight in-patient discharges had a mean length of stay of 7.8 days and female (excl. maternity) overnight in-patient discharges had a mean length of stay of 7.7 days. As displayed in Figure 2.2, overnight in-patient mean length of stay generally increased with age for both sexes.
- For all age groups aged between 15 and 74 years, females (excl. maternity) had a lower overnight in-patient mean length of stay compared to males. Median overnight in-patient length of stay was similar across all age groups, ranging between 2 to 7 days for males and 2 to 8 days for females.
- For maternity discharges, total overnight in-patient mean length of stay was 3.1 days, increasing with age, from 2.9 days for females aged less than 25 years to 4.3 days for those aged 45 years and over.

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

	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
< 1 Year	2,431	0.4	14,595	5.3	80,283	4.5	17,026	2.1
1–14 Years	25,826	4.7	29,120	10.7	66,887	3.8	54,946	6.7
15–24 Years	19,198	3.5	14,933	5.5	47,578	2.7	34,131	4.2
25–34 Years	28,428	5.2	15,601	5.7	57,873	3.3	44,029	5.4
35–44 Years	47,452	8.7	22,199	8.1	93,236	5.3	69,651	8.5
45–54 Years	69,731	12.8	28,534	10.4	148,996	8.4	98,265	12.0
55–64 Years	104,947	19.3	38,219	14.0	252,042	14.3	143,166	17.5
65–74 Years	137,345	25.2	49,489	18.1	383,151	21.7	186,834	22.8
75–84 Years	90,302	16.6	42,766	15.7	420,392	23.8	133,068	16.3
85 Years and Over	19,009	3.5	17,726	6.5	214,394	12.1	36,735	4.5
Total Discharges	**544,669**	**100**	**273,182**	**100**	**1,764,833**	**100**	**817,851**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
< 1 Year	1,852	12,743	6.2	3	14,595	5.5	2
1–14 Years	6,094	23,026	2.8	2	29,120	2.3	1
15–24 Years	3,948	10,985	4.2	2	14,933	3.2	1
25–34 Years	4,346	11,255	4.9	2	15,601	3.7	1
35–44 Years	5,984	16,215	5.6	3	22,199	4.2	2
45–54 Years	6,809	21,725	6.7	3	28,534	5.2	2
55–64 Years	7,221	30,998	8.0	4	38,219	6.6	3
65–74 Years	7,649	41,840	9.1	5	49,489	7.7	4
75–84 Years	5,316	37,450	11.2	6	42,766	9.8	5
85 Years and Over	1,679	16,047	13.3	7	17,726	12.1	6
Total Discharges	**50,898**	**222,284**	**7.8**	**3**	**273,182**	**6.5**	**2**

Note: Percentage columns are subject to rounding.

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

	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
< 1 Year	1,922	0.4	11,576	4.3	64,021	3.9	13,498	1.7
1–14 Years	19,383	3.7	24,274	9.1	59,534	3.6	43,657	5.5
15–24 Years	18,655	3.6	16,827	6.3	46,281	2.8	35,482	4.5
25–34 Years	34,721	6.7	17,925	6.7	56,357	3.4	52,646	6.7
35–44 Years	64,560	12.4	25,112	9.4	86,090	5.2	89,672	11.4
45–54 Years	90,355	17.3	28,916	10.8	129,337	7.8	119,271	15.1
55–64 Years	100,329	19.3	33,346	12.5	187,858	11.3	133,675	17.0
65–74 Years	104,970	20.1	42,230	15.8	309,234	18.6	147,200	18.7
75–84 Years	67,563	13.0	41,908	15.7	414,419	25.0	109,471	13.9
85 Years and Over	18,584	3.6	24,910	9.3	307,753	18.5	43,494	5.5
Total Discharges	**521,042**	**100**	**267,024**	**100**	**1,660,884**	**100**	**788,066**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
< 1 Year	1,408	10,168	6.2	3	11,576	5.5	2
1–14 Years	4,599	19,675	2.9	2	24,274	2.5	1
15–24 Years	4,557	12,270	3.6	2	16,827	2.8	1
25–34 Years	5,593	12,332	4.3	2	17,925	3.1	1
35–44 Years	7,477	17,635	4.7	2	25,112	3.4	1
45–54 Years	7,528	21,388	5.9	3	28,916	4.5	2
55–64 Years	7,365	25,981	7.1	4	33,346	5.6	2
65–74 Years	7,640	34,590	8.8	5	42,230	7.3	3
75–84 Years	6,070	35,838	11.5	6	41,908	9.9	5
85 Years and Over	2,626	22,284	13.8	8	24,910	12.4	7
Total Discharges	**54,863**	**212,161**	**7.7**	**4**	**267,024**	**6.2**	**2**

Note: Percentage columns are subject to rounding.

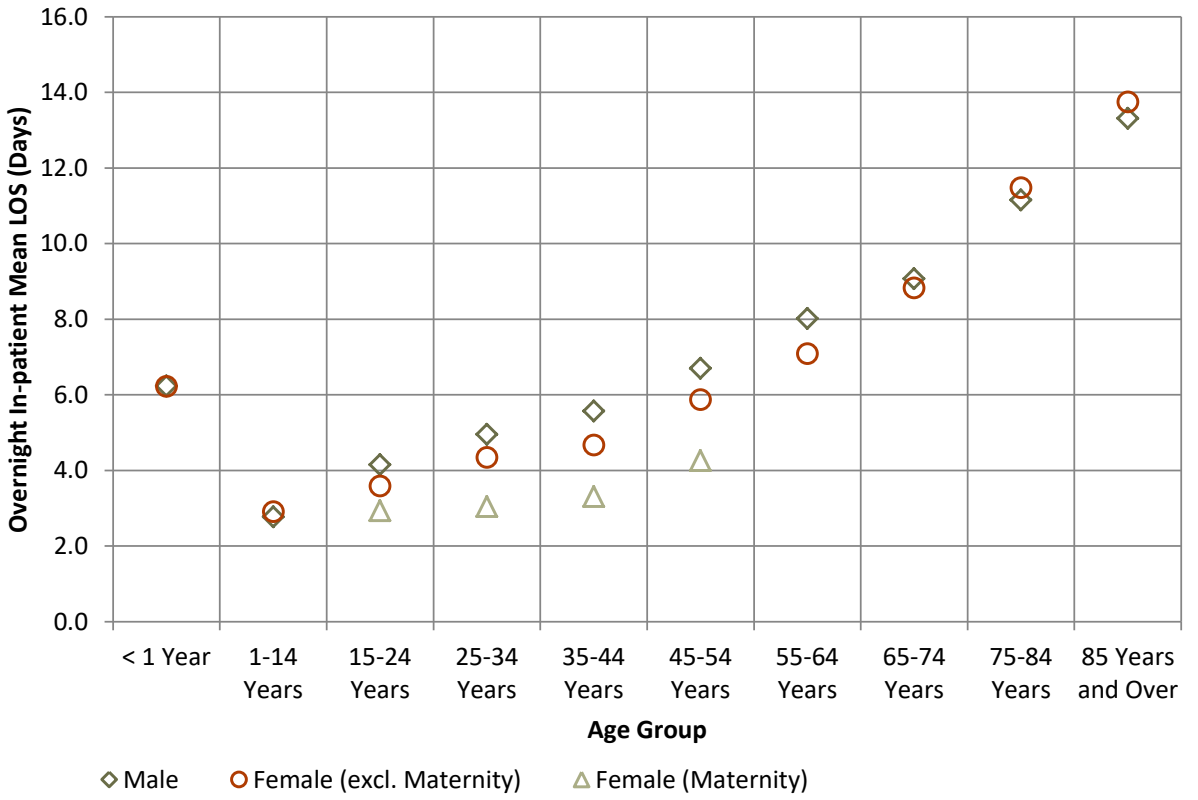
TABLE 2.1d Female Discharges (Maternity): Patient Type by Age Group (N, %, Bed Days, % and In-Patient Length of Stay)

	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
<25 Years	1,620	7.9	13,994	12.6	31,676	11.1	15,614	11.9
25–34 Years	10,101	49.0	57,291	51.8	143,231	50.1	67,392	51.3
35–44 Years	8,628	41.9	38,827	35.1	108,634	38.0	47,455	36.1
45 Years and Over	252	1.2	582	0.5	2,159	0.8	834	0.6
Total Discharges	**20,601**	**100**	**110,694**	**100**	**285,699**	**100**	**131,295**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
<25 Years	3,848	10,146	2.9	2	13,994	2.3	2
25–34 Years	12,201	45,090	3.0	2	57,291	2.5	2
35–44 Years	7,002	31,825	3.3	3	38,827	2.8	3
45 Years and Over	85	497	4.3	3	582	3.7	3
Total Discharges	**23,136**	**87,558**	**3.1**	**3**	**110,694**	**2.6**	**2**

Note: Percentage columns are subject to rounding.

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



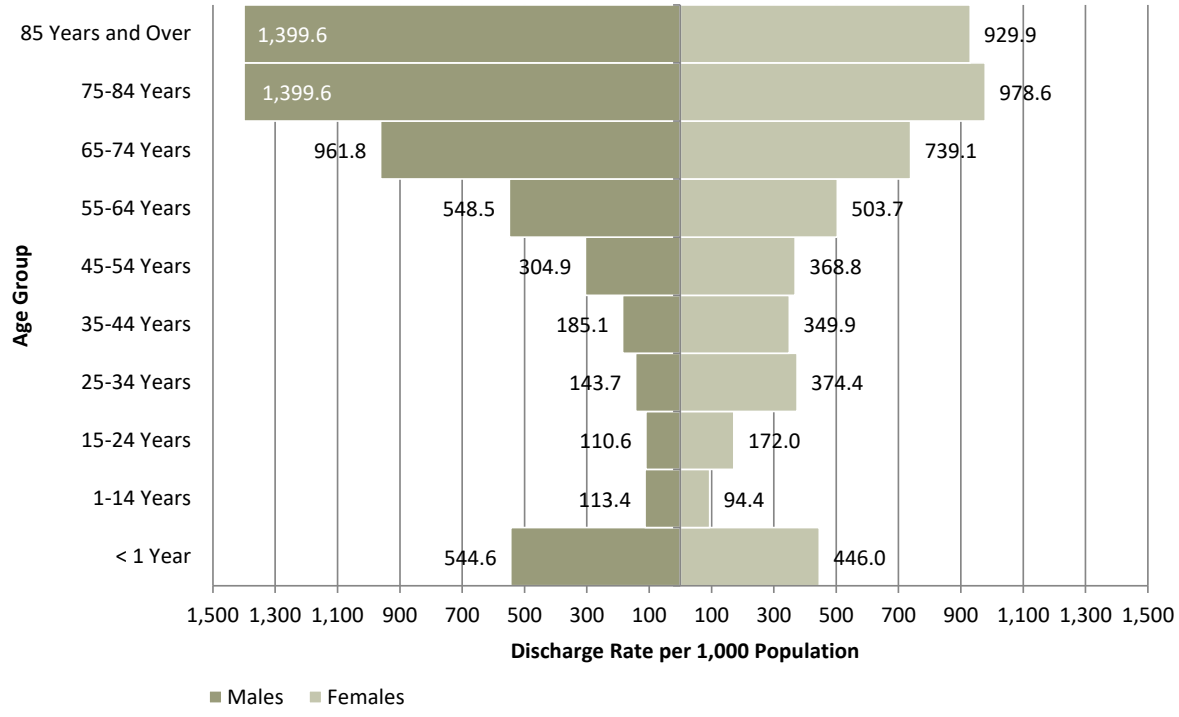
Note: Mean length of stay is not presented for female maternity discharges where there were a small number of discharges reported within a particular age group.

2.2.1.2 Discharge Rates by Age and Sex

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

- Apart from the youngest age group, for both males and females, the discharge rate generally increased with age. Males aged 75 years and over recorded the highest discharge rate (1,399.6 per 1,000 population of males). Females aged 75 to 84 years recorded the highest discharge rate for females (978.6 per 1,000 population of females).
- Females aged between 15 and 54 years had a higher discharge rate per 1,000 population than males; males had a higher discharge rate for all other age groups.

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



Source: Population estimates for 2018 by sex and age group were obtained from the CSO. https://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=PEA11 [accessed 14th June 2019]

2.2.2 Marital/Civil Status

2.2.2.1 Marital/Civil Status by Patient Type

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

- Married discharges accounted for 48.6 per cent of total discharges.
- Discharges who were widowed accounted for 9.6 per cent of total in-patient discharges, and 16.8 per cent of in-patient bed days.
- Overnight in-patient discharges with a marital status of single had the lowest mean length of stay of 5.7 days, compared to 11.5 days for discharges who were widowed.

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

	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
Single	327,278	30.1	266,765	41.0	1,222,238	32.9	594,043	34.2
Married	567,427	52.2	276,425	42.5	1,533,244	41.3	843,852	48.6
Widowed	90,790	8.4	62,456	9.6	623,393	16.8	153,246	8.8
Other*	48,115	4.4	23,195	3.6	161,889	4.4	71,310	4.1
Unknown	32,932	3.0	12,753	2.0	110,664	3.0	45,685	2.6
Divorced	19,770	1.8	9,306	1.4	59,988	1.6	29,076	1.7
Total Discharges	**1,086,312**	**100**	**650,900**	**100**	**3,711,417**	**100**	**1,737,212**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
Single	55,682	211,083	5.7	2	266,765	4.6	2
Married	56,007	220,418	6.8	3	276,425	5.5	2
Widowed	8,434	54,022	11.5	6	62,456	10.0	5
Other*	1,973	7,333	8.0	4	9,306	6.4	3
Unknown	4,358	18,837	8.5	4	23,195	7.0	3
Divorced	2,443	10,310	10.6	4	12,753	8.7	3
Total Discharges	**128,897**	**522,003**	**7.0**	**3**	**650,900**	**5.7**	**2**

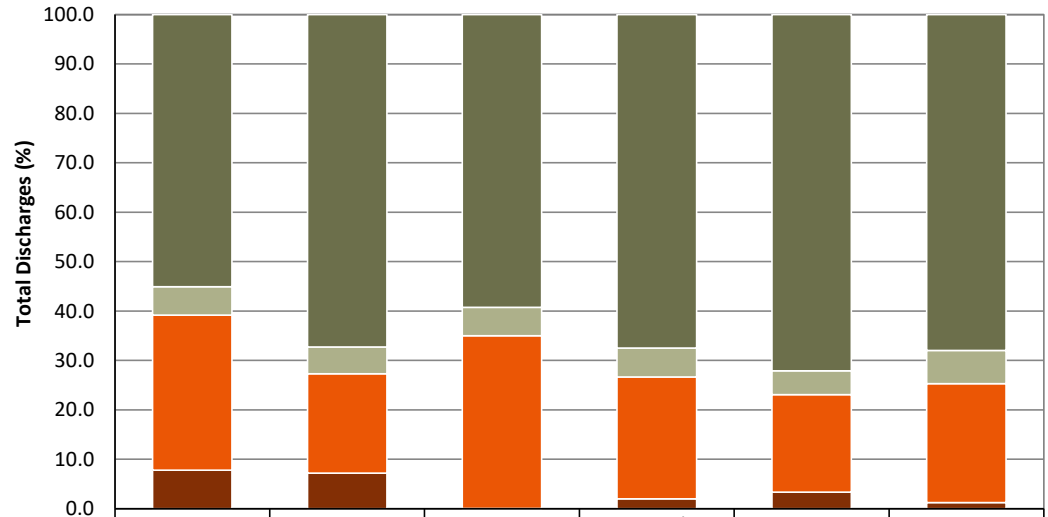
Notes: Percentage columns are subject to rounding.
* Other includes Separated, Civil Partner, Formal Civil Partner, and Surviving Civil Partner

2.2.2.2 Marital/Civil Status by Admission Type

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

- Approximately a third of total discharges with a marital/civil status of widowed or single were admitted as emergency in-patients (35.0 per cent and 31.4 per cent respectively).
- Almost eight per cent of total discharges with a marital/civil status of single and 7.2 per cent with a marital/civil status of married were admitted as maternity in-patients.

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



	Single	Married	Widowed	Other*	Unknown	Divorced
Day Patient	55.1	67.2	59.2	67.5	72.1	68.0
In-Patients Elective	5.7	5.4	5.7	5.8	4.8	6.7
In-Patients Emergency	31.4	20.1	35.0	24.7	19.7	24.1
In-Patients Maternity	7.8	7.2	0.1	2.0	3.4	1.2

Notes: Percentages are subject to rounding.
* Other includes Separated, Civil Partner, Formal Civil Partner, and Surviving Civil Partner

2.2.3 Public/Private Status

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

Table 2.3 and Figure 2.5 disaggregate total discharges by public/private status and age group. Of total discharges, 85.7 per cent were discharged on a public basis.

- The 25–34 years age group had the largest proportion of total discharges treated publicly (90.1 per cent) with only 9.9 per cent treated on a private basis.
- The 1–14 years age group had the largest proportion of total discharges that were treated on a private basis, accounting for 18.4 per cent of all discharges in this age group.

Length of Stay

- For the majority of age groups, the public overnight in-patient mean length of stay exceeded the private overnight in-patient mean length of stay. The difference is largest for discharges aged 65–74 years, where public discharges stayed on average 1.6 days longer than their private counterparts (see Table 2.3 and Figure 2.6). Median length of stay for overnight in-patients was 5 days for public discharges and 4 days for private discharges aged 65–74 years.

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

	Discharges											
	Day Patients				Total In-Patients				Total Discharges			
	Public		Private		Public		Private		Public		Private	
	N	%	N	%	N	%	N	%	N	%	N	%
< 1 Year	3,970	91.2	383	8.8	22,323	85.3	3,848	14.7	26,293	86.1	4,231	13.9
1–14 Years	38,297	84.7	6,913	15.3	42,154	78.9	11,249	21.1	80,451	81.6	18,162	18.4
15–24 Years	35,152	89.1	4,320	10.9	40,958	89.5	4,787	10.5	76,110	89.3	9,107	10.7
25–34 Years	66,138	90.3	7,112	9.7	81,638	89.9	9,179	10.1	147,776	90.1	16,291	9.9
35–44 Years	102,456	84.9	18,184	15.1	68,900	80.0	17,238	20.0	171,356	82.9	35,422	17.1
45–54 Years	136,921	85.4	23,416	14.6	48,618	83.8	9,411	16.2	185,539	85.0	32,827	15.0
55–64 Years	176,221	85.8	29,056	14.2	58,931	82.3	12,637	17.7	235,152	84.9	41,693	15.1
65–74 Years	209,019	86.3	33,296	13.7	75,350	82.2	16,369	17.8	284,369	85.1	49,665	14.9
75–84 Years	139,587	88.4	18,278	11.6	70,491	83.2	14,183	16.8	210,078	86.6	32,461	13.4
85 Years and Over	34,127	90.8	3,466	9.2	36,783	86.3	5,853	13.7	70,910	88.4	9,319	11.6
Total Discharges	**941,888**	**86.7**	**144,424**	**13.3**	**546,146**	**83.9**	**104,754**	**16.1**	**1,488,034**	**85.7**	**249,178**	**14.3**

	In-Patient Length of Stay											
	Sameday In-Patients		Overnight In-Patients						Total In-Patients			
	Public	Private	Public			Private			Public		Private	
	N	N	N	Mean	Median	N	Mean	Median	Mean	Median	Mean	Median
< 1 Year	2,925	335	19,398	6.4	3	3,513	5.4	2	5.6	2	5.0	2
1–14 Years	8,994	1,702	33,160	2.9	2	9,547	2.6	2	2.6	2	2.3	1
15–24 Years	11,587	763	29,371	3.6	2	4,024	3.3	2	3.3	2	2.8	2
25–34 Years	20,620	1,520	61,018	3.6	2	7,659	3.6	3	3.6	3	3.1	2
35–44 Years	17,933	2,530	50,967	4.3	3	14,708	3.9	3	3.9	3	3.4	3
45–54 Years	13,107	1,313	35,511	6.5	3	8,098	5.1	3	5.1	3	4.4	2
55–64 Years	13,072	1,516	45,859	7.8	4	11,121	6.7	3	6.7	3	5.9	3
65–74 Years	13,833	1,456	61,517	9.3	5	14,913	7.7	4	7.7	4	7.1	4
75–84 Years	10,433	953	60,058	11.6	6	13,230	10.2	6	10.2	6	9.6	5
85 Years and Over	4,020	285	32,763	13.6	7	5,568	13.5	8	13.5	8	12.9	7
Total Discharges	**116,524**	**12,373**	**429,622**	**7.1**	**3**	**92,381**	**6.3**	**3**	**6.3**	**3**	**5.6**	**3**

Note: Percentage columns are subject to rounding.

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

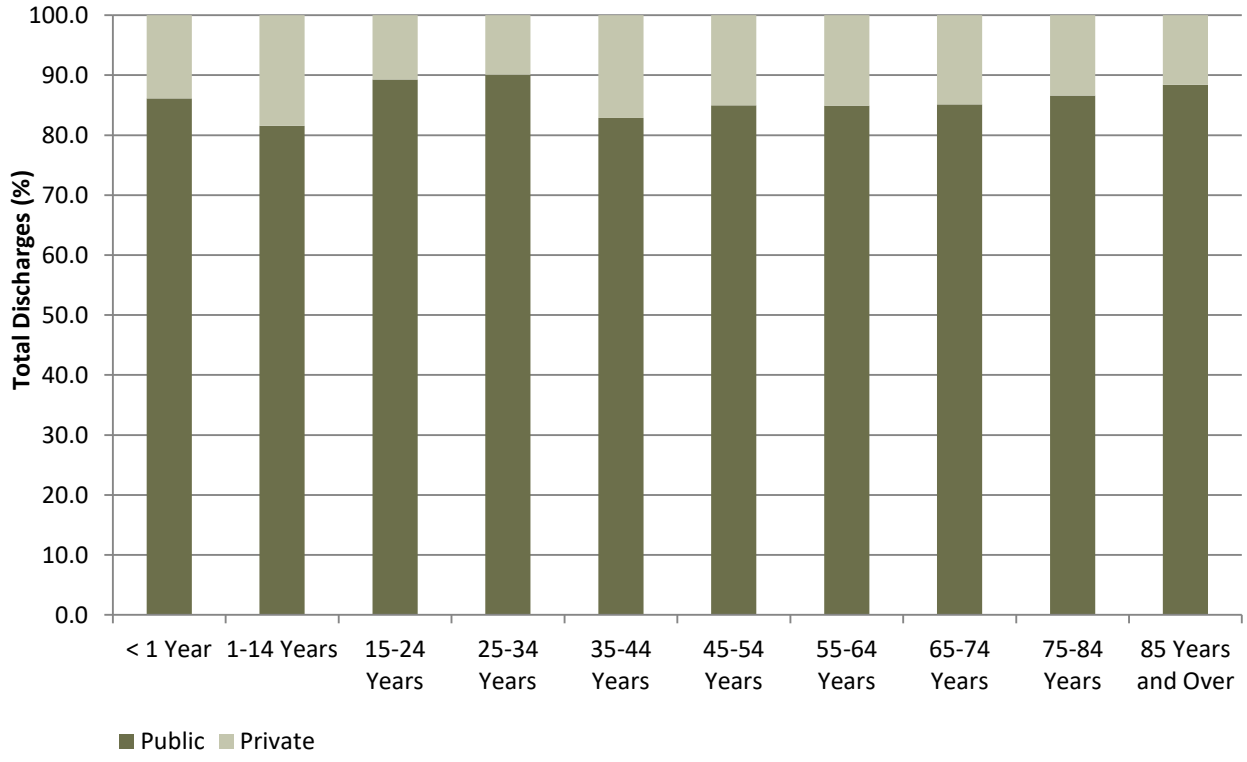
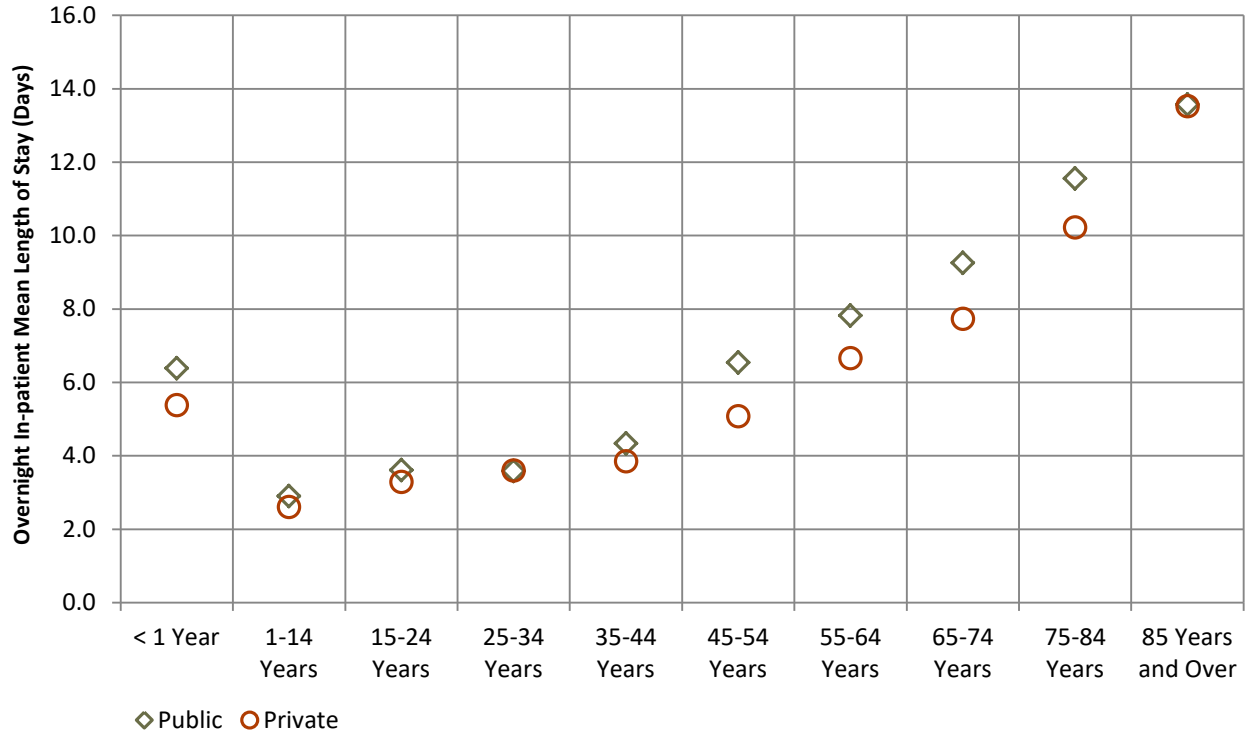


FIGURE 2.6 Overnight In-Patients: Mean Length of Stay (Days) by Age Group and Public/Private Status



2.2.4 GMS Status

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

2.2.4.1 GMS Status by Age Group

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

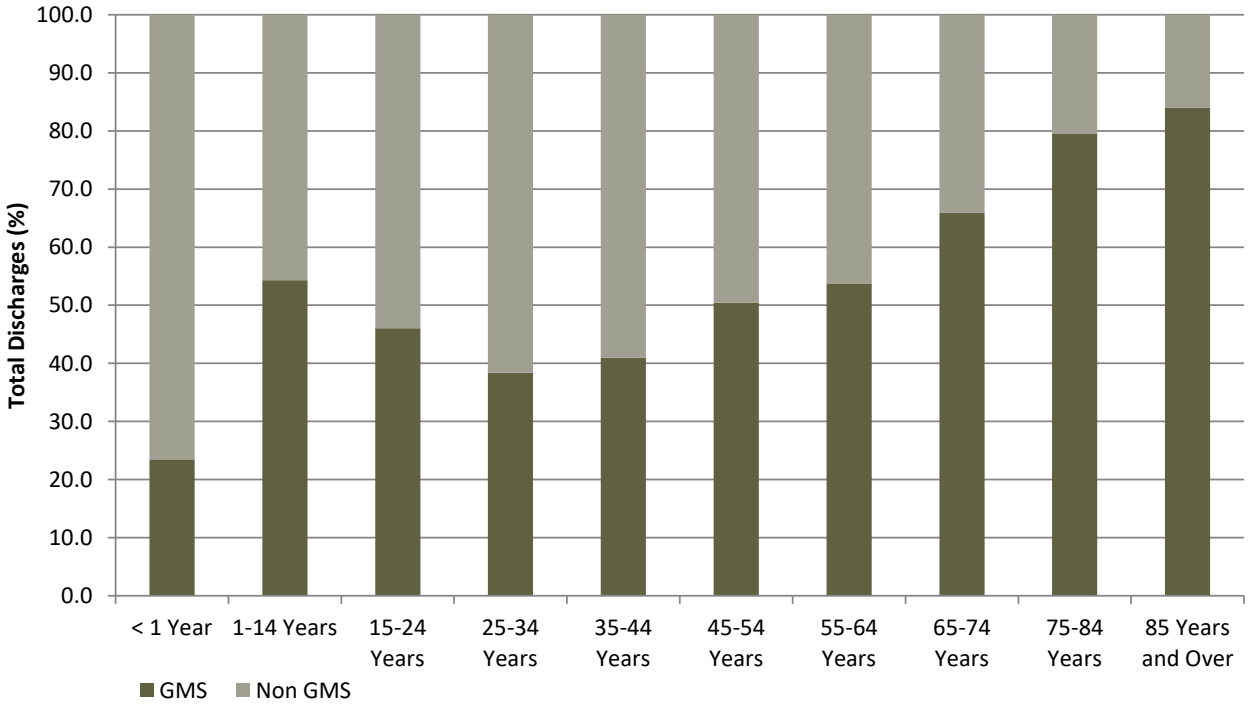
- Of total discharges, those aged 65–74 years accounted for the largest proportion of GMS discharges (22.3 per cent).
- The proportion of total discharges that were GMS discharges generally increased with age, with the largest proportion in the 85 years and over age group (84.0 per cent) – see Figure 2.7.

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

	GMS		Non-GMS		Unknown[a]		Total Discharges	
	N	%	N	%	N	%	N	%
< 1 Year	7,134	0.7	23,248	3.1	142	0.6	30,524	1.8
1–14 Years	53,356	5.5	44,868	6.1	389	1.6	98,613	5.7
15–24 Years	39,097	4.0	45,794	6.2	326	1.3	85,217	4.9
25–34 Years	62,534	6.4	100,314	13.5	1,219	4.9	164,067	9.4
35–44 Years	83,833	8.6	120,631	16.3	2,314	9.3	206,778	11.9
45–54 Years	108,318	11.1	106,499	14.4	3,549	14.3	218,366	12.6
55–64 Years	146,129	15.0	125,720	17.0	4,996	20.1	276,845	15.9
65–74 Years	216,556	22.3	112,139	15.1	5,339	21.5	334,034	19.2
75–84 Years	189,079	19.5	48,785	6.6	4,675	18.8	242,539	14.0
85 Years and Over	65,846	6.8	12,524	1.7	1,859	7.5	80,229	4.6
Total Discharges	**971,882**	**100**	**740,522**	**100**	**24,808**	**100**	**1,737,212**	**100**

Notes: Percentage columns are subject to rounding.
a Relates to discharges for whom GMS status was not known.

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



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

2.3 WHERE

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

2.3.1 Hospital Group

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

Discharges

- The largest proportion of total discharges were hospitalised in the Ireland East Hospital Group (19.5 per cent).
- Total in-patient discharges were also highest in the Ireland East Hospital Group where 21.0 per cent of discharges were hospitalised, while the Dublin Midlands Hospital Group accounted for the highest proportion of day patients (21.0 per cent).

Length of Stay

- The overnight in-patient mean length of stay ranged from 4.7 days (Children's) to 8.0 days (Dublin Midlands) – see Figure 2.8.

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

	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
Ireland East	201,674	18.6	136,929	21.0	777,229	20.9	338,603	19.5
RCSI	156,150	14.4	102,804	15.8	576,239	15.5	258,954	14.9
Dublin Midlands	227,706	21.0	97,524	15.0	660,166	17.8	325,230	18.7
South/South West	213,258	19.6	116,352	17.9	653,011	17.6	329,610	19.0
UL	61,795	5.7	51,282	7.9	246,591	6.6	113,077	6.5
Saolta	195,551	18.0	117,100	18.0	582,811	15.7	312,651	18.0
Children's	28,755	2.6	25,040	3.8	100,474	2.7	53,795	3.1
No group^	1,423	0.1	3,869	0.6	114,898	3.1	5,292	0.3
Total Discharges	**1,086,312**	**100**	**650,900**	**100**	**3,711,417**	**100**	**1,737,212**	**100**

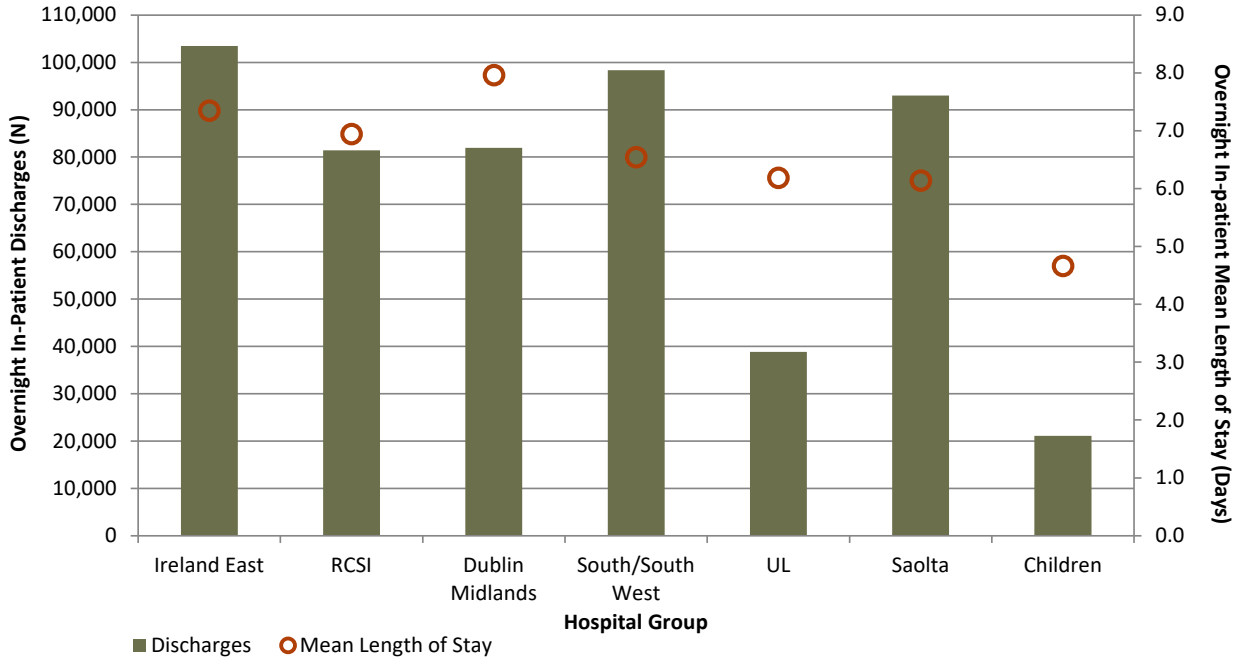
	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
Ireland East	33,445	103,484	7.3	3	136,929	5.7	2
RCSI	21,383	81,421	6.9	3	102,804	5.6	2
Dublin Midlands	15,606	81,918	8.0	3	97,524	6.8	3
South/South West	17,974	98,378	6.5	3	116,352	5.6	3
UL	12,428	38,854	6.2	3	51,282	4.8	2
Saolta	24,125	92,975	6.1	3	117,100	5.0	2
Children's	3,931	21,109	4.7	2	25,040	4.0	2
No group^	~	3,864	29.7	18	3,869	29.7	18
Total Discharges	**128,897**	**522,003**	**7.0**	**3**	**650,900**	**5.7**	**2**

Notes: Percentage columns are subject to rounding.

^ Discharges allocated to 'No group' are not referred to in the text of this report as they refer to the small group of discharges in non-acute hospitals and would not be considered to be comparable to other groups. See Appendix I for the list of hospitals by Group in 2018.

~ Denotes five or fewer discharges reported to HIPE.

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



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

2.3.1.1 Hospital Group by Admission Type

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

Discharges

- The largest proportion of elective in-patients were treated in the South/South West Hospital Group (20.5 per cent), accounting for 16.5 per cent of total elective in-patient bed days.
- The Ireland East Hospital Group treated the largest proportion of both emergency in-patients (21.2 per cent) and maternity in-patients (21.8 per cent) compared to other groups.

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

	Discharges and Bed Days															
	Day Patients		In-Patients												Total Discharges	
			Elective				Emergency[a]				Maternity					
	N	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%
Ireland East	201,674	18.6	18,839	19.4	117,526	17.8	93,979	21.2	604,186	21.9	24,111	21.8	55,516	19.4	338,603	19.5
RCSI	156,150	14.4	11,408	11.8	64,684	9.8	69,646	15.7	454,577	16.4	21,750	19.6	56,978	19.9	258,954	14.9
Dublin Midlands	227,706	21.0	13,206	13.6	102,346	15.5	62,627	14.1	509,370	18.4	21,691	19.6	48,450	17.0	325,230	18.7
South/South West	213,258	19.6	19,845	20.5	108,989	16.5	78,253	17.7	485,939	17.6	18,254	16.5	58,084	20.3	329,610	19.0
UL	61,795	5.7	6,684	6.9	30,734	4.6	38,043	8.6	192,677	7.0	6,555	5.9	23,180	8.1	113,077	6.5
Saolta	195,551	18.0	16,197	16.7	94,433	14.3	82,570	18.6	444,887	16.1	18,333	16.6	43,491	15.2	312,651	18.0
Children's	28,755	2.6	6,848	7.1	27,946	4.2	18,192	4.1	72,528	2.6	0	-	0	-	53,795	3.1
No group[ǂ]	1,423	0.1	3,866	4.0	114,857	17.4	~	-	^	-	0	-	0	-	5,292	0.3
Total Discharges	**1,086,312**	**100**	**96,893**	**100**	**661,513**	**100**	**443,313**	**100**	**2,764,204**	**100**	**110,694**	**100**	**285,699**	**100**	**1,737,212**	**100**

Notes:

~ Denotes five or fewer discharges reported to HIPE.

^ Denotes that bed days are suppressed where the number of discharges is not reported.

Percentage columns are subject to rounding

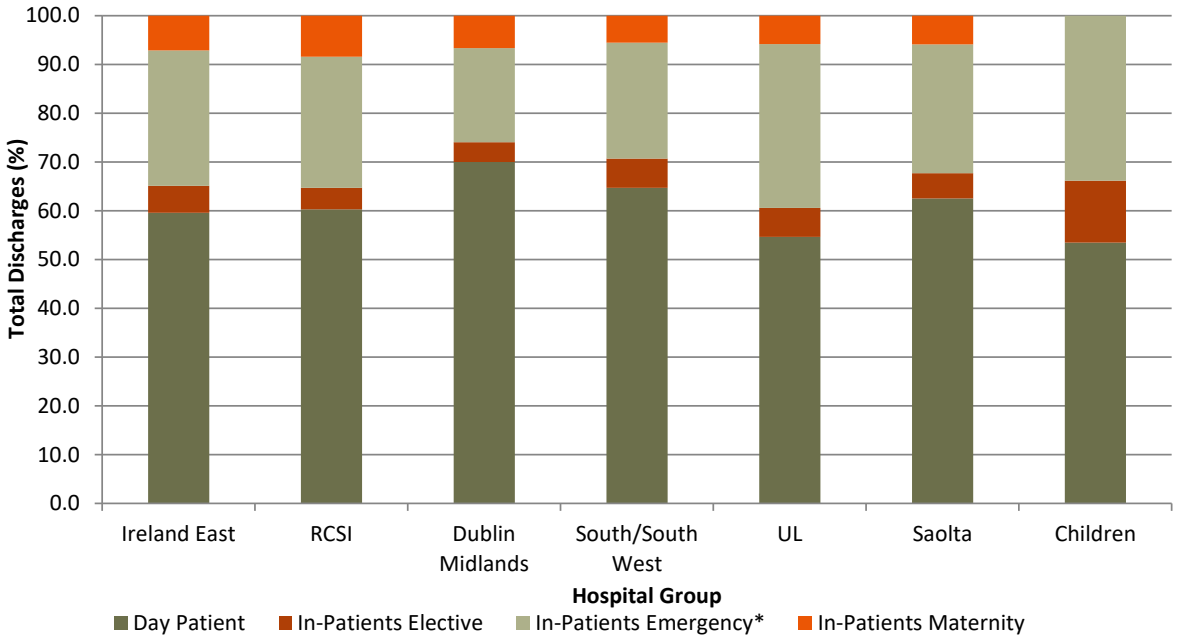
a HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about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

ǂ Discharges allocated to 'No group' are not referred to in the text as they refer to the small group of discharges in non-acute hospitals and would not be considered to be comparable to other groups. See Appendix I for the list of hospitals by Group in 2018.

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

- Across all hospital groups, the largest proportion of total discharges were treated as day patients, ranging from 53.5 per cent in the Children's Hospital Group to 70.0 per cent in the Dublin Midlands Hospital Group.
- The RCSI Hospital Group treated 8.4 per cent of total discharges as maternity in-patients, the highest amongst all hospital groups.
- The Children's Hospital Group treated the highest proportion of total discharges as emergency in-patients (33.8 per cent), followed by the UL Hospital Group (33.6 per cent).

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



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

2.3.1.2 Hospital Group by Public/Private Status

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

Discharges

- The RCSI Hospital Group treated the largest proportion of total discharges on a public basis (90.5 per cent), while the University of Limerick Hospital Group treated the smallest proportion of total discharges on a public basis (75.9 per cent).
- A larger proportion of total day patients were treated as public day patients, reaching 92 per cent in both the Ireland East and RCSI Hospital Groups. The smallest proportion was in the University of Limerick Hospital Group where 75.1 per cent of total day patients were treated on a public basis.
- The proportion of total in-patients treated on a public basis exceeded 80 per cent in all Hospital Groups except for the University of Limerick Hospital Group.

Length of Stay

- Overnight in-patient mean length of stay was 7.1 days for public discharges compared to 6.3 days for private discharges.
- The Dublin Midlands Hospital Group recorded the longest overnight in-patient mean length of stay for both public (8.0 days) and private discharges (7.7 days) compared to the other groups.

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

	Discharges											
	Day Patients				Total In-Patients				Total Discharges			
	Public		Private		Public		Private		Public		Private	
	N	%	N	%	N	%	N	%	N	%	N	%
Ireland East	185,593	92.0	16,081	8.0	116,256	84.9	20,673	15.1	301,849	89.1	36,754	10.9
RCSI	143,612	92.0	12,538	8.0	90,816	88.3	11,988	11.7	234,428	90.5	24,526	9.5
Dublin Midlands	193,044	84.8	34,662	15.2	80,243	82.3	17,281	17.7	273,287	84.0	51,943	16.0
South/South West	174,002	81.6	39,256	18.4	93,553	80.4	22,799	19.6	267,555	81.2	62,055	18.8
UL	46,388	75.1	15,407	24.9	39,387	76.8	11,895	23.2	85,775	75.9	27,302	24.1
Saolta	173,340	88.6	22,211	11.4	102,195	87.3	14,905	12.7	275,535	88.1	37,116	11.9
Children's	24,486	85.2	4,269	14.8	20,227	80.8	4,813	19.2	44,713	83.1	9,082	16.9
No group[ǂ]	1,423	100.0	0	–	3,469	89.7	400	10.3	4,892	92.4	400	7.6
Total Discharges	**941,888**	**86.7**	**144,424**	**13.3**	**546,146**	**83.9**	**104,754**	**16.1**	**1,488,034**	**85.7**	**249,178**	**14.3**

	In-Patient Length of Stay											
	Sameday In-Patients		Overnight In-Patients						Total In-Patients			
	Public	Private	Public			Private			Public		Private	
	N	N	N	Mean	Median	N	Mean	Median	Mean	Median	Mean	Median
Ireland East	30,096	3,349	86,160	7.6	3	17,324	6.1	3	5.8	2	5.2	3
RCSI	20,048	1,335	70,768	6.9	3	10,653	7.1	4	5.5	2	6.3	3
Dublin Midlands	13,688	1,918	66,555	8.0	3	15,363	7.7	4	6.7	3	6.9	3
South/South West	15,761	2,213	77,792	6.7	3	20,586	6.1	3	5.6	2	5.5	3
UL	11,542	886	27,845	6.5	4	11,009	5.5	3	4.7	2	5.1	3
Saolta	21,951	2,174	80,244	6.1	3	12,731	6.1	3	4.9	2	5.3	2
Children's	3,433	498	16,794	5.0	2	4,315	3.5	2	4.2	2	3.2	2
No group[ǂ]	~	0	3,464	31.7	20	400	13.1	2	31.6	20	13.1	2
Total Discharges	**116,524**	**12,373**	**429,622**	**7.1**	**3**	**92,381**	**6.3**	**3**	**5.7**	**2**	**5.6**	**3**

Notes: Percentage columns are subject to rounding.

~ Denotes five or fewer discharges reported to HIPE.

ǂ Discharges allocated to 'No group' are not referred to in the text of this report as they refer to the small group of discharges in non-acute hospitals and would not be considered to be comparable to other groups. See Appendix I for the list of hospitals by Group in 2018.

2.3.2 Admission Source

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

- The majority of total discharges were admitted from home (96.4 per cent).
- Of total emergency in-patients, 4.1 per cent were transferred in from another hospital.
- Almost 12 per cent of elective in-patients were transferred from another hospital.

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

	Day Patients		In-Patients						Total Discharges	
			Elective		Emergency[a]		Maternity			
	N	%	N	%	N	%	N	%	N	%
Home	1,076,962	99.1	85,215	87.9	402,646	90.8	109,810	99.2	1,674,633	96.4
Long stay accommodation	1,172	0.1	385	0.4	11,389	2.6	0	–	12,946	0.7
Transfer from other hospital	7,750	0.7	11,206	11.6	18,275	4.1	741	0.7	37,972	2.2
Other	428	0.0	87	0.1	11,003	2.5	143	0.1	11,661	0.7
Total	**1,086,312**	**100**	**96,893**	**100**	**443,313**	**100**	**110,694**	**100**	**1,737,212**	**100**

Notes: Percentage columns are subject to rounding.
See Appendix IV for information on how the HIPE variable 'Admission Source' was grouped for this report.

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

2.3.3 Discharge Destination

Discharge destination identifies the destination of the discharge upon completion of their episode of care. Table 2.9 disaggregates total discharges by patient type, admission type and discharge destination.

- The majority of total discharges were discharged home (94.8 per cent).
- Of total emergency in-patients, 6.5 per cent were transferred to long stay accommodation, and 5.6 per cent were transferred to another hospital.

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

	Day Patients		In-Patients						Total Discharges	
			Elective		Emergency[a]		Maternity			
	N	%	N	%	N	%	N	%	N	%
Home	1,075,907	99.0	88,261	91.1	372,872	84.1	109,042	98.5	1,646,082	94.8
Long stay accommodation	2,048	0.2	*	–	28,638	6.5	~	–	33,914	2.0
Transfer to other hospital	7,987	0.7	4,167	4.3	24,971	5.6	629	0.6	37,754	2.2
Died	0	–	*	–	10,433	2.4	~	–	11,197	0.6
Other	370	0.0	489	0.5	6,399	1.4	1,007	0.9	8,265	0.5
Total Discharges	**1,086,312**	**100**	**96,893**	**100**	**443,313**	**100**	**110,694**	**100**	**1,737,212**	**100**

Notes: Percentage columns are subject to rounding.
See Appendix IV for information on how the HIPE variable 'Discharge Destination' was grouped for this report.

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

~ Denotes five or fewer discharges reported to HIPE.

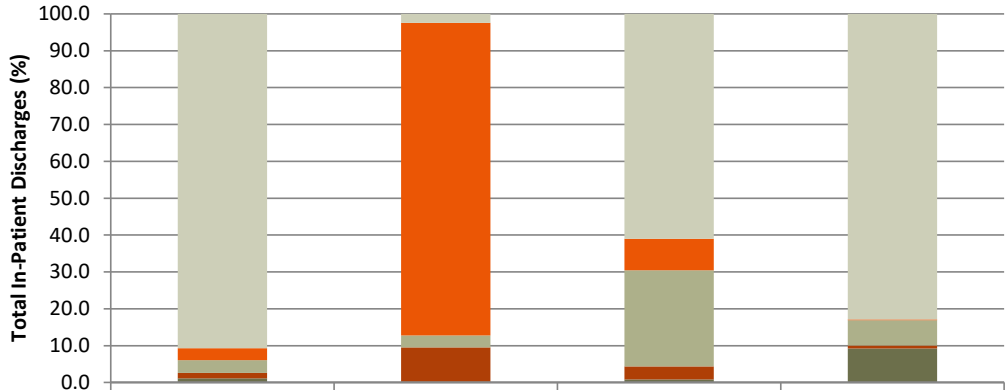
* Further suppression required to prevent disclosure of five or fewer discharges.

2.3.4 Admission Source by Discharge Destination

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

- Of in-patients who were admitted from home, 90.7 per cent were discharged home.
- In-patients admitted from long stay accommodation were primarily discharged back to long stay accommodation (84.8 per cent).
- Over a quarter of in-patients (26.1 per cent) who were admitted from another hospital were transferred to another hospital, while 61.0 per cent were discharged home.

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



	Home	Long stay accommodation	Transfer from other hospital	Other
Home	90.7	2.4	61.0	82.9
Long stay accommodation	3.2	84.8	8.6	0.2
Transfer to other hospital	3.5	3.2	26.1	6.9
Died	1.5	9.4	3.5	0.8
Other	1.1	0.2	0.9	9.2

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

2.4 WHEN

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

2.4.1 Day of Admission

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

Discharges

- Almost 62 per cent of elective in-patients were admitted between Monday and Wednesday, with only 6.3 per cent admitted at the weekend.
- The proportion of in-patient discharges admitted as emergency in-patients remained relatively constant throughout the week at approximately 16 per cent per day, but fell at weekends when approximately 10 per cent were admitted per day.
- The majority of day patients were admitted mid-week, ranging from 20.9 per cent on Wednesday to only 2.5 per cent on Saturday and 1.0 per cent on Sunday.

Length of Stay[2]

- Mean length of stay for elective in-patients ranged from 6.4 days for those admitted on a Tuesday to 10.8 days for those admitted on a Saturday.
- Mean length of stay for emergency in-patients ranged from 5.9 days for those admitted on a Monday to 6.8 days for those admitted on a Saturday.

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

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

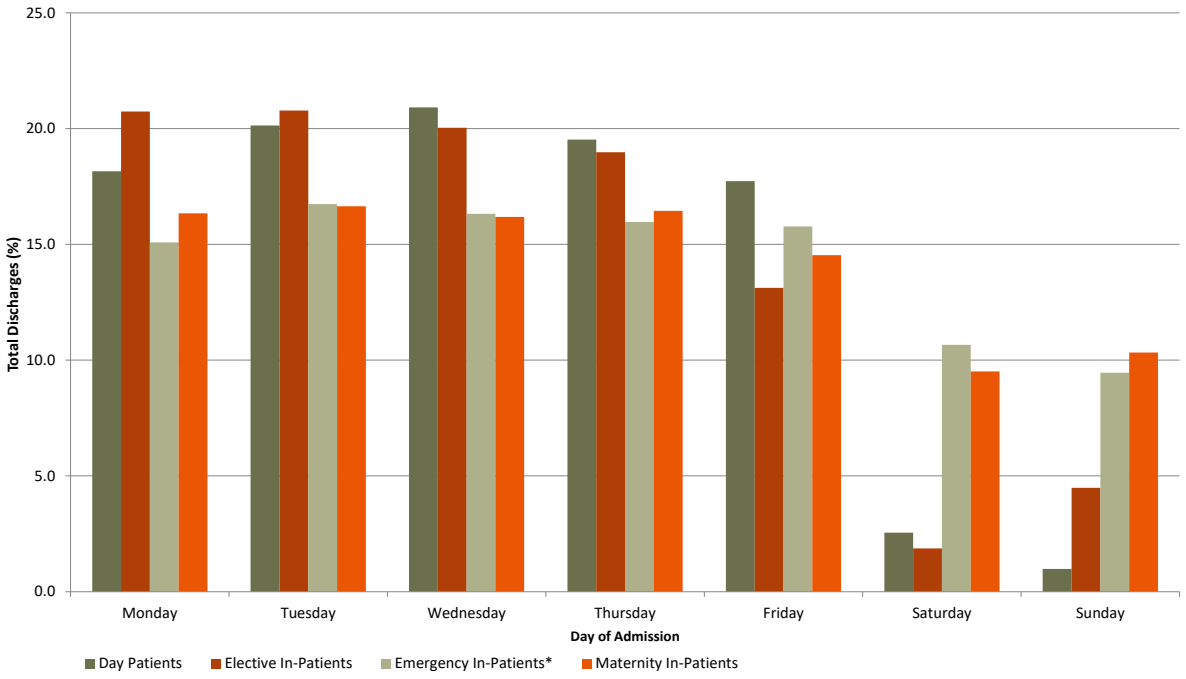
	Discharges									
	Day Patients		In-Patients						Total Discharges	
			Elective		Emergency[a]		Maternity			
	N	%	N	%	N	%	N	%	N	%
Monday	197,259	18.2	20,094	20.7	66,869	15.1	18,088	16.3	302,310	17.4
Tuesday	218,727	20.1	20,133	20.8	74,224	16.7	18,429	16.6	331,513	19.1
Wednesday	227,245	20.9	19,412	20.0	72,345	16.3	17,921	16.2	336,923	19.4
Thursday	212,123	19.5	18,388	19.0	70,782	16.0	18,210	16.5	319,503	18.4
Friday	192,618	17.7	12,714	13.1	69,929	15.8	16,086	14.5	291,347	16.8
Saturday	27,692	2.5	1,809	1.9	47,254	10.7	10,528	9.5	87,283	5.0
Sunday	10,648	1.0	4,343	4.5	41,910	9.5	11,432	10.3	68,333	3.9
Total Discharges	**1,086,312**	**100**	**96,893**	**100**	**443,313**	**100**	**110,694**	**100**	**1,737,212**	**100**

	In-Patient Length of Stay								
	Elective		Emergency[a]		Maternity		Total In-Patients		
	Mean	Median	Mean	Median	Mean	Median	N	Mean	Median
Monday	6.5	3	5.9	2	2.6	2	105,051	5.4	2
Tuesday	6.4	2	6.1	2	2.6	2	112,786	5.6	2
Wednesday	6.7	2	6.1	2	2.6	2	109,678	5.7	2
Thursday	6.6	2	6.2	2	2.6	2	107,380	5.6	2
Friday	7.5	3	6.4	3	2.5	2	98,729	5.9	3
Saturday	10.8	4	6.8	3	2.4	2	59,591	6.1	3
Sunday	8.1	4	6.4	3	2.5	2	57,685	5.8	3
In-Patient Discharges	**6.8**	**2**	**6.2**	**2**	**2.6**	**2**	**650,900**	**5.7**	**2**

Notes: Percentage columns are subject to rounding.

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

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



Note: * See note under Table 2.10

2.4.2 Day of Discharge

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

Discharges

- The proportion of elective in-patients discharged increased throughout the week, from 11.2 per cent on Monday to 22.3 per cent on Friday, falling to 10.1 per cent on Saturday and 4.8 per cent on Sunday.
- The largest proportion of emergency in-patients were discharged on Friday (20.3 per cent), with the smallest proportion discharged on Sunday (5.8 per cent).

Length of Stay[3]

- Elective in-patients discharged on a Monday had the longest in-patient mean length of stay (10.5 days).
- Emergency in-patient mean length of stay generally fell throughout the week from 6.8 days for those discharged on a Monday to 4.0 days for those discharged on a Sunday.

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

	Discharges									
	Day Patients		In-Patients						Total Discharges	
			Elective		Emergency[a]		Maternity			
	N	%	N	%	N	%	N	%	N	%
Monday	197,259	18.2	10,804	11.2	70,526	15.9	16,711	15.1	295,300	17.0
Tuesday	218,727	20.1	15,378	15.9	74,455	16.8	15,895	14.4	324,455	18.7
Wednesday	227,245	20.9	16,987	17.5	75,318	17.0	15,025	13.6	334,575	19.3
Thursday	212,123	19.5	17,715	18.3	74,420	16.8	16,192	14.6	320,450	18.4
Friday	192,618	17.7	21,589	22.3	89,976	20.3	17,745	16.0	321,928	18.5
Saturday	27,692	2.5	9,782	10.1	32,726	7.4	15,375	13.9	85,575	4.9
Sunday	10,648	1.0	4,638	4.8	25,892	5.8	13,751	12.4	54,929	3.2
Total Discharges	**1,086,312**	**100**	**96,893**	**100**	**443,313**	**100**	**110,694**	**100**	**1,737,212**	**100**

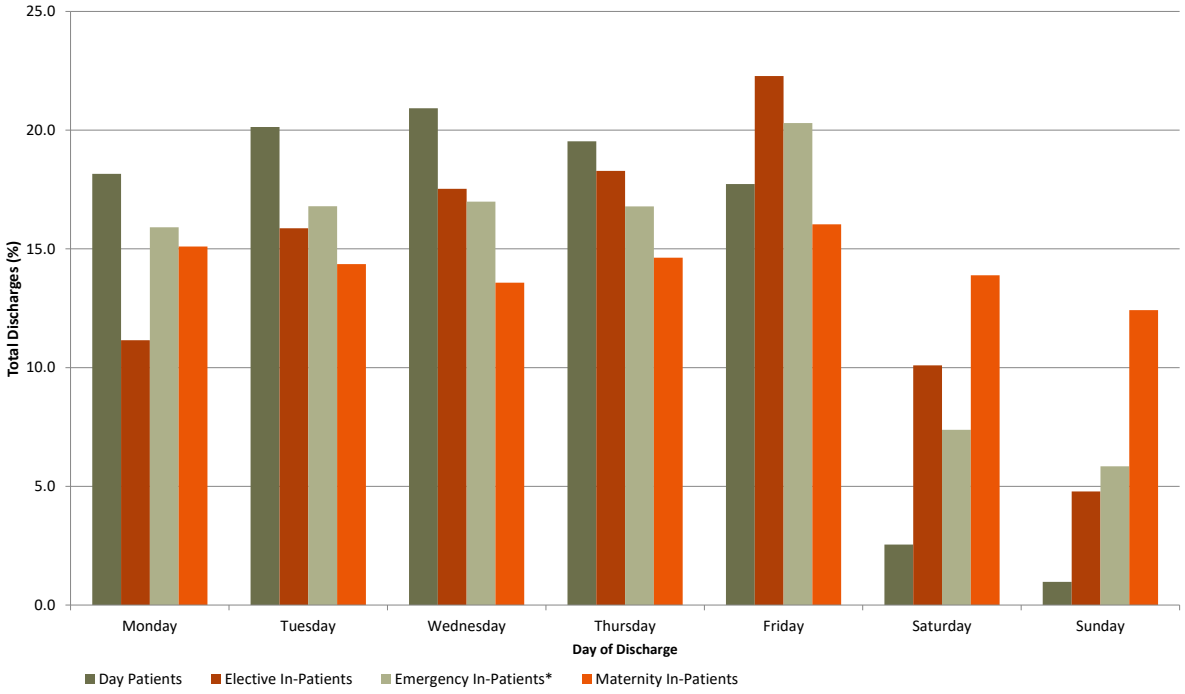
	In-Patient Length of Stay								
	Elective		Emergency[a]		Maternity		Total In-Patients		
	Mean	Median	Mean	Median	Mean	Median	N	Mean	Median
Monday	10.5	5	6.8	3	2.8	2	98,041	6.5	3
Tuesday	7.2	2	6.6	3	2.6	2	105,728	6.1	2
Wednesday	6.8	2	6.5	2	2.4	2	107,330	6.0	2
Thursday	6.4	2	6.6	2	2.3	2	108,327	5.9	2
Friday	6.5	2	6.2	3	2.5	2	129,310	5.7	2
Saturday	4.0	2	4.5	2	2.7	2	57,883	3.9	2
Sunday	6.1	4	4.0	2	2.8	2	44,281	3.9	2
In-Patient Discharges	**6.8**	**2**	**6.2**	**2**	**2.6**	**2**	**650,900**	**5.7**	**2**

Notes: Percentage columns are subject to rounding.

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

[3] Where length of stay is analysed by admission type, a breakdown of sameday and overnight in-patient length of stay is not provided.

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



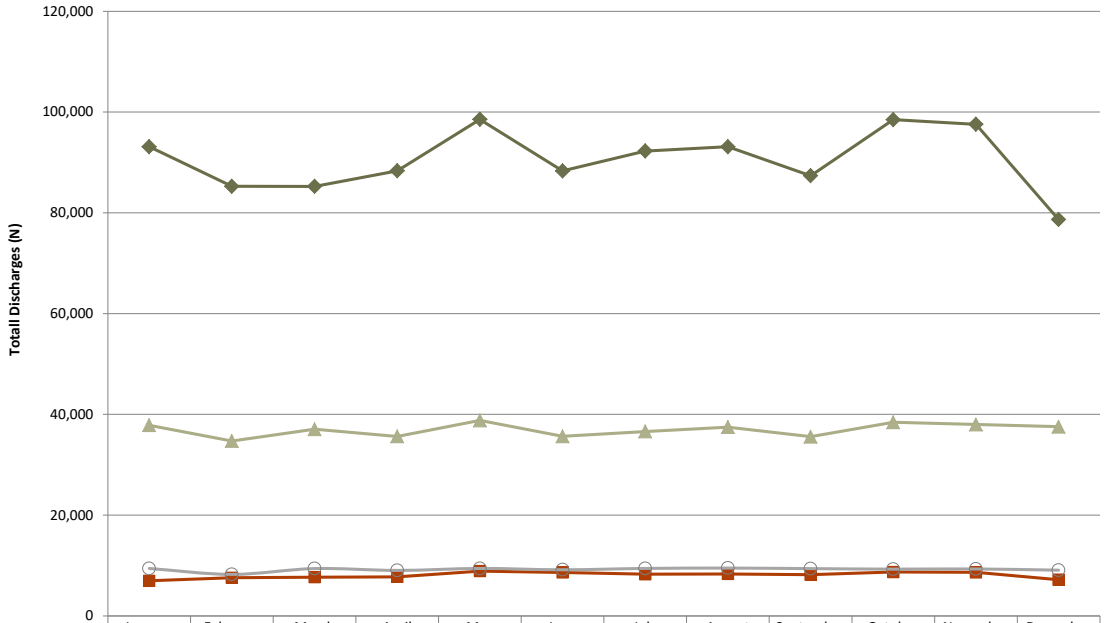
Note: * See note under Table 2.10

2.4.3 Month of Discharge

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

- Hospital discharges peaked in May for elective in-patients (8,898 discharges), while January recorded the smallest number of elective in-patients with only 6,965 elective in-patients discharged in this month.
- Emergency in-patient hospital discharges peaked in May (38,791 discharges), while the smallest number of emergency in-patients were discharged in February with 34,725 discharges.
- Maternity in-patient discharges were highest in August (9,498 discharges) and lowest in February (8,245 discharges).

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



	January	February	March	April	May	June	July	August	September	October	November	December
Day Patients	93,120	85,271	85,254	88,330	98,543	88,324	92,265	93,125	87,360	98,491	97,569	78,660
Elective In-Patients	6,965	7,579	7,695	7,767	8,898	8,625	8,289	8,327	8,194	8,713	8,648	7,193
Emergency In-Patients*	37,848	34,725	37,050	35,622	38,791	35,645	36,605	37,466	35,570	38,434	37,993	37,564
Maternity	9,421	8,245	9,401	9,034	9,422	9,162	9,425	9,498	9,392	9,289	9,324	9,081

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

Includes 9,447 discharges admitted prior to 2018 and discharged in 2018.

Morbidity Analysis 2018

SECTION Three

Table of Contents

3.1 INTRODUCTION

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

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

3.2 CODING OF DIAGNOSES AND PROCEDURES

Coding of HIPE hospital activity is performed by the HIPE Clinical Coder who translates medical terminology into alpha-numeric codes. The coder performs an essential function in providing high quality, accurate, and uniform medical information. The HPO is responsible for the training of all HIPE coders nationally.[3,4] Since 2014, the HPO have delivered certification courses for HIPE coders in collaboration with, and accredited by, the School of Computing in the Technological University Dublin (formally Dublin Institute of Technology). To date, over 100 coders have achieved this certification.

The source document for coding for the HIPE system is the medical record or chart which can be in paper or electronic format. The clinical coder uses the entire chart to extract the conditions and procedures to provide a complete record of the patient and their hospital stay. In addition to the discharge summary or letter, additional documentation referenced for coding a case include; nursing notes, consultation reports, progress notes, operative reports,

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

2 The calculation of total in-patient length of stay differs in this report compared to previous reports. The length of stay assigned for sameday in-patients has changed in this report from one bed day to 0.5 bed days. This will impact on the total in-patient length of stay resulting in a lower average length of stay compared to previous years (see Section 1.6).

3 There are currently approximately 300 coders working full time and part time across all HIPE hospitals.

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

pre- and post-operative reports, pathology reports and, more recently, the sepsis form. Appendix III shows the HIPE Data Entry Form for 2018, which details the information that is collected and coded for each hospital discharge. No interpretation of test results may be presumed by the Coder and all diagnoses and procedures recorded must be documented by a clinician in the chart.

All HIPE data are entered in the hospital using the HIPE Portal data entry system which runs an extensive number of validation edit checks to ensure the quality of the data. Other data quality activities and data quality tools are in use at local and national HPO level.[5,6]

At the start of 2015, the classification used to code clinical information was updated from the 6th Edition to the 8th Edition of the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM), Australian Classification of Health interventions (ACHI), Australian Coding Standards (ACS).[7,8] Details of the ICD-10-AM diagnosis and ACHI procedure coding scheme are provided in Tables 3.1 and 3.2. ACS are developed to provide guidance in the application of ICD-10-AM and ACHI codes. Coding standards are provided with general guidelines and are categorised by site and/or body system according to the clinical specialty to which a disease or procedure relates. Use of ICD-10-AM/ACHI/ACS is complemented by the Irish Coding Standards (ICS); these are revised regularly to reflect changing clinical practice and to ensure the classification and its application are relevant to the Irish Healthcare system.[9]

Due to the update in the classification, caution must be exercised when comparing procedure and diagnosis categories presented in reports from 2015 onwards compared to previous reports.Updates may include changes in sequencing of codes, addition of new codes, deletion of codes, and updates to ACS and ICS.[10]

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

6 In 2018, a commercial data quality tool, Performance Indicators of Coding Quality (PICQ), was procured by the HSE for use both locally in the hospitals and at a national level in the HPO.

7 National Casemix and Classification Centre (NCCC), 2013: The *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification* (ICD-10-AM), *Australian Classification of Health Interventions* (ACHI) and *Australian Coding Standards* (ACS) – ICD-10-AM/ACHI/ACS *(8th Ed)*: NCCC, Australian Health Services Research Institute, University of Wollongong.

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

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

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

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

WHO intends the codes U00–U99 to be used for provisional assignment of new diseases of uncertain aetiology, for emergency use and for specific research purposes. U50–U73 are used in ICD-10-AM to classify activity and U90 classifies healthcare associated infections.

Chapter and Title		Code Prefix	Chapter and Title		Code Prefix
1	Certain infectious and parasitic diseases	A, B	12	Diseases of the skin and subcutaneous tissue	L
2	Neoplasms	C, D	13	Diseases of the musculoskeletal system and connective tissue	M
3	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	D	14	Diseases of the genitourinary system	N
4	Endocrine, nutritional and metabolic diseases	E	15	Pregnancy, childbirth and the puerperium	O
5	Mental and behavioural disorders	F	16	Certain conditions originating in the perinatal period	P
6	Diseases of the nervous system	G	17	Congenital malformations, deformations and chromosomal abnormalities	Q
7	Diseases of the eye and adnexa	H	18	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	R
8	Diseases of the ear and mastoid process	H	19	Injury, poisoning and certain other consequences of external causes	S, T
9	Diseases of the circulatory system	I	20	External causes of morbidity and mortality	U, V, W, X, Y
10	Diseases of the respiratory system	J	21	Factors influencing health status and contact with health services	Z
11	Diseases of the digestive system	K	22	Codes for special purposes	U

Source: National Casemix and Classification Centre (NCCC), 2013: *Australian Coding Standards* (ACS) *(8th Ed)*: NCCC, Australian Health Services Research Institute, University of Wollongong.p. xv-xvi.

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

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

Australian Classification of Health Interventions (ACHI)

The Australian Classification of Health Interventions (ACHI) was first developed by the National Centre for Classification in Health (NCCH) (the previous custodians of ICD-10-AM/ACHI/ACS) and is generally based on the Commonwealth Medicare Benefits Schedule (MBS).

The main features of the classification are:

1) The procedure classification captures procedures and interventions performed in public and private hospitals, day centres and ambulatory settings. Allied health interventions, dental services and procedures performed outside the operating theatre are included.[11]
2) The intervention classification has been based on the Commonwealth Medicare Benefits Schedule (MBS) (with some exceptions). A two digit extension number has been attached to each MBS item number to represent individual procedural concepts (e.g., 36564-00). Other ACHI procedures and interventions which are not represented in MBS are allocated a code number from the 90000 series. Note: 97000 code numbers are reserved for dental services.
3) The structure of the procedure classification is based on anatomy rather than surgical specialty. Chapters closely follow the chapter headings of the WHO ICD-10 to maintain parity with the disease classification.
4) Nonsurgical procedures are listed separately from the surgical procedures, whenever feasible.
5) A hierarchical structure with the following axes:
   - First level – anatomical site axis
   - Second level – procedure type axis
   - Third level – block axis
6) Inclusion of many more procedures which can be utilised in non-institutional settings, such as community based health and ambulatory care.
7) The interventions in the procedure classification are provider neutral. That is, the same code should be assigned for a specific intervention regardless of which health professional performs the intervention.

Chapter and Title		Chapter and Title	
1	Procedures on nervous system	11	Procedures on urinary system
2	Procedures on endocrine system	12	Procedures on male genital organs
3	Procedures on eye and adnexa	13	Gynaecological procedures
4	Procedures on ear and mastoid process	14	Obstetric procedures
5	Procedures on nose, mouth and pharynx	15	Procedures on musculoskeletal system
6	Dental services	16	Dermatological and plastic procedures
7	Procedures on respiratory system	17	Procedures on breast
8	Procedures on cardiovascular system	18	Radiation oncology procedures
9	Procedures on blood and blood-forming organs	19	Non-invasive, cognitive and other interventions, not elsewhere classified
10	Procedures on digestive system	20	Imaging services

Sources: National Casemix and Classification Centre (NCCC), 2013: *Australian Coding Standards* (ACS) *(8th Ed)*: NCCC, Australian Health Services Research Institute, University of Wollongong. p. xvii.
National Casemix and Classification Centre (NCCC), 2013: *Australian Classification of Health Interventions* (ACHI) *Tabular List of Interventions (8th Ed)*: NCCC, Australian Health Services Research Institute, University of Wollongong. p. iii.

[11] HIPE collects data on discharges from, and deaths in, acute public hospitals.

3.2.1 Definition of a Diagnosis

In 2018, HIPE collected a principal diagnosis for each discharge, together with up to 29 additional diagnosis codes.

DIAGNOSES

A **principal diagnosis** is defined as, 'the diagnosis established after study to be chiefly responsible for occasioning an episode of admitted patient care, an episode of residential care or an attendance at the healthcare establishment, as represented by a code'.[12]

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.[13]

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

3.2.1.1 Mean Number of Diagnoses Reported

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

- The mean number of diagnoses recorded for total discharges was 2.7.
- The mean number of diagnoses recorded for in-patient discharges was 3.9, compared to 2.0 for day patients.
- The mean number of diagnoses recorded for in-patient discharges was higher for males (4.1) compared with females (3.7).
- The mean number of diagnoses recorded for in-patient discharges increased with age ranging from 2.6 in the less than 15 years age group to 5.0 in the 65 years and over age group.

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

	Day Patients	In-Patients	Total Discharges
Total	**2.0**	**3.9**	**2.7**
Sex			
Male	2.0	4.1	2.7
Female	2.0	3.7	2.7
Maternity	1.8	3.8	3.5
Non-Maternity	2.0	3.7	2.6
Age Group			
< 15 Years	1.8	2.6	2.3
15–44 Years	1.7	3.4	2.5
45–64 Years	2.1	3.8	2.5
65 Years and Over	2.1	5.0	3.1

[12] National Casemix and Classification Centre (NCCC), 2013: *Australian Coding Standards* (ACS) *(8th Ed)*: NCCC, Australian Health Services Research Institute, University of Wollongong. p. 1.

[13] National Casemix and Classification Centre (NCCC), op. cit., p. 4.

3.2.2 Definition of a Procedure

In 2018, a principal procedure and up to 19 additional procedure codes for each discharge could be reported to HIPE where appropriate.

PROCEDURES

The classification of procedures in ICD-10-AM uses the Australian Classification of Health Interventions (ACHI).[14] Procedures are coded in HIPE in accordance with the following hierarchy:

- procedure performed for treatment of the principal diagnosis
- procedure performed for treatment of an additional diagnosis
- diagnostic/exploratory procedure related to the principal diagnosis
- diagnostic/exploratory procedure related to an additional diagnosis for the episode of care.[15]

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.[16] 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.[17]

3.2.2.1 Discharges with a Procedure

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

- Of the 1,737,212 total discharges, principal procedures were recorded for 1,379,087 discharges (79.4 per cent).
- Almost 93 per cent of day patient discharges had a principal procedure recorded.
- Over 57 per cent of in-patient discharges had a principal procedure recorded, with 89.0 per cent of elective in-patients, 49.8 per cent of emergency in-patients, and 59.5 per cent of maternity in-patients undergoing a principal procedure.

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14 National Casemix and Classification Centre (NCCC), 2013: *Australian Classification of Health Interventions* (ACHI) *(8th Ed)*: NCCC, Australian Health Services Research Institute, University of Wollongong.

15 National Casemix and Classification Centre (NCCC), 2013: *Australian Coding Standards* (ACS) *(8th Ed)*: NCCC, Australian Health Services Research Institute, University of Wollongong. p. 21.

16 National Casemix and Classification Centre (NCCC), 2013: *Australian Classification of Health Interventions* (ACHI) *Tabular List of Interventions (8th Ed)*: NCCC, Australian Health Services Research Institute, University of Wollongong. p. viii.

17 The move to the ACHI introduced significant changes to the collection of procedures from 2005, including the use of Australian Coding Standard (ACS) 0042 *Procedures normally not coded* (see Appendix V).

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

	Total Discharges	Total Discharges with a Principal Procedure	
	N	N	%
Total Discharges	**1,737,212**	**1,379,087**	**79.4**
Day Patients	1,086,312	1,006,275	92.6
In-Patients	650,900	372,812	57.3
Elective In-Patients	96,893	86,281	89.0
Emergency In-Patients	443,313	220,669	49.8
Maternity In-Patients	110,694	65,862	59.5

3.2.2.2 Mean Number of Procedures Reported

Table 3.5 outlines the mean number of procedures reported for day patients, in-patients and total discharges, by sex and age group. The calculation of mean procedures is based on discharges with at least one procedure reported to HIPE.[18]

- For those discharges who underwent at least one procedure, in-patient discharges had a mean number of 2.8 procedures recorded, compared to a mean of 1.5 procedures for day patients.
- While the mean number of procedures increased with age for in-patient discharges, the day patient pattern differed. For those undergoing a procedure, day patient discharges aged less than 15 years recorded a mean of 2.0 procedures, which was larger than that reported for older age groups.

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

	Day Patients	In-Patients	Total Discharges
Total	**1.5**	**2.8**	**1.8**
Sex			
Male	1.4	2.9	1.8
Female	1.5	2.8	1.9
Maternity	1.5	2.8	2.7
Non-Maternity	1.5	2.8	1.8
Age Group			
< 15 Years	2.0	2.6	2.3
15–44 Years	1.5	2.7	1.9
45–64 Years	1.5	2.9	1.7
65 Years and Over	1.4	3.0	1.8

[18] Includes all anaesthesia except local anaesthesia. See ACS 0031 *Anaesthesia* in National Casemix and Classification Centre (NCCC), 2013: *Australian Coding Standards* (ACS) *(8th Ed)*: NCCC, Australian Health Services Research Institute, University of Wollongong. p.29.

3.3 Morbidity Analysis: Summary of Day Patient and In-Patient Activity

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

3.3.1 Day Patient Activity

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

Day Patients – Profile

- Day patient discharges accounted for 62.5 per cent of total discharges.
- Day patients aged 65 years or over accounted for 40.3 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)[19] and those with a principal diagnosis of *Care involving dialysis* accounted for 20.8 and 15.7 per cent of day patient discharges respectively.

Day Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 92.6 per cent of day patient discharges (see Table 3.4).
- Procedures from the block *Haemodialysis* were reported as a principal procedure for 16.9 per cent of day patients with at least one procedure recorded.

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

- The top three AR-DRGs accounted for 35.7 per cent of day patient discharges reported to HIPE when analysed by diagnosis related group.[20,21]
- *Haemodialysis* accounted for 15.7 per cent, while *Chemotherapy* and *Other Neoplastic Disorders, Minor Complexity* accounted for 10.5 per cent and 9.5 per cent of day patient discharges respectively.

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

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

21 In 2015, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. See Appendix VIII for an overview of changes between Version 6.0 and Version 8.0 of the AR-DRG Classification System.

TABLE 3.6 Day Patient Activity (N, %)

Top 20 Principal Diagnoses[a]		N	%
Z51	Other medical care[c,d]	226,328	20.8
Z49	Care involving dialysis	170,802	15.7
H35	Other retinal disorders	24,660	2.3
E83	Disorders of mineral metabolism	24,132	2.2
L40	Psoriasis	16,368	1.5
K29	Gastritis and duodenitis	13,819	1.3
Z13	Special screening examination for other diseases and disorders	13,816	1.3
C44	Other malignant neoplasms of skin	12,700	1.2
M54	Dorsalgia	11,341	1.0
K50	Crohn's disease [regional enteritis]	10,274	0.9
D12	Benign neoplasm of colon, rectum, anus and anal canal	10,260	0.9
K57	Diverticular disease of intestine	9,106	0.8
K64	Haemorrhoids and perianal venous thrombosis	8,887	0.8
H25	Senile cataract	8,392	0.8
K51	Ulcerative colitis	8,383	0.8
Z48	Other surgical follow-up care	8,301	0.8
Z09	Follow-up examination after treatment for conditions other than malignant neoplasms	8,292	0.8
M25	Other joint disorders, not elsewhere classified	8,060	0.7
R10	Abdominal and pelvic pain	7,995	0.7
C50	Malignant neoplasm of breast	7,961	0.7

Day Patients

1,086,312

Sex	N	%
Male	544,669	50.1
Female	541,643	49.9

Age Group	N	%
< 1 Year	4,353	0.4
1–14 Years	45,210	4.2
15–24 Years	39,472	3.6
25–34 Years	73,250	6.7
35–44 Years	120,640	11.1
45–54 Years	160,337	14.8
55–64 Years	205,277	18.9
65–74 Years	242,315	22.3
75–84 Years	157,865	14.5
85 Years and Over	37,593	3.5

Top 20 Principal Procedure Blocks[b]		N	%
1060	Haemodialysis	170,541	16.9
1920	Administration of pharmacotherapy	160,683	16.0
1788	Megavoltage radiation treatment[d]	103,791	10.3
1008	Panendoscopy with excision	47,371	4.7
911	Fibreoptic colonoscopy with excision	39,062	3.9
1620	Excision of lesion(s) of skin and subcutaneous tissue	37,695	3.7
209	Application, insertion or removal procedures on retina, choroid or posterior chamber	29,365	2.9
905	Fibreoptic colonoscopy	28,523	2.8
1552	Administration of agent into other musculoskeletal sites	23,698	2.4
725	Other incision procedures on veins	23,520	2.3
1610	Ultraviolet B [UVB] light therapy of skin	18,716	1.9
1893	Administration of blood and blood products	18,111	1.8
1089	Examination procedures on bladder	15,980	1.6
197	Extracapsular crystalline lens extraction by phacoemulsification	12,205	1.2
668	Coronary angiography	10,440	1.0
1618	Biopsy of skin and subcutaneous tissue	7,946	0.8
1005	Panendoscopy	7,887	0.8
1601	Dressing of other wound	7,550	0.8
1824	Other assessment, consultation, interview, examination or evaluation	6,309	0.6
1259	Examination procedures on uterus	6,255	0.6

Hospital Group	N	%
Ireland East	201,674	18.6
RCSI	156,150	14.4
Dublin Midlands	227,706	21.0
South/South West	213,258	19.6
UL	61,795	5.7
Saolta	195,551	18.0
Children's	28,755	2.6
No group	1,423	0.1

Top 10 AR-DRGs		N	%
L61Z	Haemodialysis	170,461	15.7
R63Z	Chemotherapy	114,598	10.5
R62C	Other Neoplastic Disorders, Minor Complexity[d]	102,989	9.5
G48B	Colonoscopy, Minor Complexity	50,507	4.6
I40Z	Infusions for Musculoskeletal Disorders, Sameday	38,654	3.6
G47C	Gastroscopy, Minor Complexity	38,177	3.5
J11B	Other Skin, Subcutaneous Tissue and Breast Procedures, Minor Complexity	37,987	3.5
Z64B	Other Factors Influencing Health Status, Minor Complexity	36,210	3.3
C03B	Retinal Procedures, Minor Complexity	28,169	2.6
Q61C	Red Blood Cell Disorders, Minor Complexity	23,268	2.1

Notes: Percentage columns are subject to rounding.

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

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

c *Other medical care* includes chemotherapy and radiotherapy encounters.

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

3.3.2 In-Patient Activity

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

In-Patients – Profile

- In-patient discharges accounted for 37.5 per cent of total discharges.
- Overnight in-patient discharges accounted for 80.2 per cent of in-patient discharges and had a mean length of stay of 7.0 days.

In-Patients – Top 20 Principal Diagnoses

- In-patient discharges with a principal diagnosis of *Single spontaneous delivery* accounted for 4.3 per cent of in-patient discharges.
- In-patient discharges with a principal diagnosis of *Pain in throat and chest* accounted for 2.9 per cent of in-patient discharges while those with a principal diagnosis of *Single delivery by caesarean section* accounted for 2.7 per cent of in-patient discharges.

In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 57.3 per cent of total in-patient discharges (see Table 3.4).
- Procedures from the block *Generalised allied health interventions* were reported for 28.1 per cent of in-patient discharges with at least one procedure reported.[22]

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

- The top three AR-DRGs accounted for 10.0 per cent of in-patient discharges when analysed by diagnosis related group.[23,24]
- *Antenatal and Other Obstetric Admissions, Minor Complexity* accounted for 4.7 per cent of in-patient discharges. *Vaginal Delivery, Intermediate Complexity* and *Vaginal Delivery, Minor Complexity* accounted for 2.8 per cent and 2.6 per cent of in-patient discharges respectively.

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22 This block includes interventions such as physiotherapy, pharmacy, dietetics, occupational therapy, speech pathology and social work. Together, these six interventions accounted for 93.9 per cent of cases within this procedure block.

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

24 In 2015, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. See Appendix VIII for an overview of changes between Version 6.0 and Version 8.0 of the AR-DRG Classification System.

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

Top 20 Principal Diagnoses[a]		N	%	Mean LOS	Med LOS
O80	Single spontaneous delivery	27,864	4.3	2.4	2
R07	Pain in throat and chest	18,881	2.9	1.4	1
O82	Single delivery by caesarean section	17,530	2.7	4.5	4
J44	Other chronic obstructive pulmonary disease	15,694	2.4	7.8	5
J22	Unspecified acute lower respiratory infection	14,708	2.3	6.7	4
O99	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium	14,218	2.2	1.3	1
N39	Other disorders of urinary system	13,659	2.1	8.6	4
J18	Pneumonia, organism unspecified	12,887	2.0	10.1	6
R10	Abdominal and pelvic pain	10,274	1.6	2.0	1
R55	Syncope and collapse	9,396	1.4	4.5	2
O81	Single delivery by forceps and vacuum extractor	8,269	1.3	3.3	3
I48	Atrial fibrillation and flutter	6,855	1.1	3.7	2
I50	Heart failure	6,568	1.0	10.3	6
L03	Cellulitis	6,366	1.0	6.4	4
I21	Acute myocardial infarction	6,275	1.0	6.4	4
R51	Headache	6,053	0.9	1.7	1
K35	Acute appendicitis	6,012	0.9	3.3	2
K80	Cholelithiasis	5,924	0.9	4.8	3
R06	Abnormalities of breathing	5,417	0.8	1.6	1
A09	Other gastroenteritis and colitis of infectious and unspecified origin	5,360	0.8	3.9	2

In-Patients

650,900

Discharges	N	%
Total	**650,900**	**100**
Sameday	128,897	19.8
Overnight	522,003	80.2

Length of Stay	Mean	Median
Total	**5.7**	**2**
Overnight	7.0	3

Bed Days	N
Total	**3,711,417**
Overnight	3,646,968

Top 20 Principal Procedure Blocks[b]		N	%	Mean LOS	Med LOS
1916	Generalised allied health interventions	104,709	28.1	11.7	6
1340	Caesarean section	20,128	5.4	5.2	4
1344	Postpartum suture	13,963	3.7	2.5	2
1920	Administration of pharmacotherapy	10,005	2.7	7.5	3
1893	Administration of blood and blood products	9,052	2.4	9.9	5
1008	Panendoscopy with excision	6,620	1.8	10.1	6
1338	Vacuum extraction	6,487	1.7	3.3	3
0926	Appendicectomy	6,471	1.7	3.1	2
0570	Noninvasive ventilatory support	6,119	1.6	15.3	9
1489	Arthroplasty of hip	5,399	1.4	10.0	5
0668	Coronary angiography	5,067	1.4	5.3	3
0671	Transluminal coronary angioplasty with stenting	4,634	1.2	4.0	2
0030	Lumbar puncture	4,372	1.2	9.5	5
1334	Medical or surgical induction of labour	4,142	1.1	3.1	3
0412	Tonsillectomy or adenoidectomy	3,662	1.0	1.2	1
0569	Ventilatory support	3,388	0.9	23.5	10
1343	Other procedures associated with	3,350	0.9	3.0	3
1828	Sleep study	3,290	0.9	1.7	1
1265	Curettage and evacuation of uterus	3,218	0.9	1.2	1
965	Cholecystectomy	2,985	0.8	3.5	1

Hospital Group	N	%
Ireland East	136,929	21.0
RCSI	102,804	15.8
Dublin Midlands	97,524	15.0
South/South West	116,352	17.9
UL	51,282	7.9
Saolta	117,100	18.0
Children's	25,040	3.8
No group	3,869	0.6

Sex	N	%
Male	273,182	42.0
Female	377,718	58.0

Age Group	N	%
< 1 Year	26,171	4.0
1–14 Years	53,403	8.2
15–24 Years	45,745	7.0
25–34 Years	90,817	14.0
35–44 Years	86,138	13.2
45–54 Years	58,029	8.9
55–64 Years	71,568	11.0
65–74 Years	91,719	14.1
75–84 Years	84,674	13.0
85 Years and Over	42,636	6.6

Top 10 AR-DRGs		N	%	Mean LOS	Med LOS
O66B	Antenatal and Other Obstetric Admissions, Minor Complexity	30,285	4.7	1.0	1
O60B	Vaginal Delivery, Intermediate Complexity	17,994	2.8	3.0	3
O60C	Vaginal Delivery, Minor Complexity	16,798	2.6	2.1	2
F74B	Chest Pain, Minor Complexity	15,175	2.3	1.1	1
O01C	Caesarean Delivery, Minor Complexity	11,393	1.8	4.1	4
O66A	Antenatal and Other Obstetric Admissions, Major Complexity	10,969	1.7	2.0	1
E65B	Chronic Obstructive Airways Disease, Minor Complexity	9,739	1.5	4.7	4
E75A	Other Respiratory System Disorders, Major Complexity	8,734	1.3	9.0	5
E62A	Respiratory Infections and Inflammations, Major Complexity	8,458	1.3	13.3	8
L63B	Kidney and Urinary Tract Infections, Minor Complexity	8,260	1.3	4.2	3

Notes: Percentage columns are subject to rounding.

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

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

3.3.2.1 Elective In-Patient Activity

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

Elective In-Patients – Profile

- Elective in-patient discharges accounted for 5.6 per cent of total discharges and 14.9 per cent of in-patients.
- Elective in-patient bed days accounted for 661,513 in-patient bed days, or 17.8 per cent of total in-patient bed days (see Table 3.7).
- Elective overnight in-patient discharges accounted for 94.4 per cent of total elective in-patient discharges and had a mean length of stay of 7.2 days.

Elective In-Patients – Top 20 Principal Diagnoses

- Elective in-patients with a principal diagnosis of *Care involving use of rehabilitation procedures* and *Chronic diseases of tonsils and adenoids* both accounted for 3.6 per cent of elective in-patient discharges.
- *Coxarthrosis [arthrosis of hip]* accounted for 3.4 per cent of elective in-patient discharges.

Elective In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 89.0 per cent of elective in-patient discharges (see Table 3.4).
- The procedure block *Generalised allied health interventions* was reported for 11.0 per cent of elective in-patients who had a principal procedure reported.
- The procedure blocks *Tonsillectomy or adenoidectomy* and *Administration of pharmacotherapy* were reported for 4.2 per cent and 4.0 per cent of elective in-patient discharges with a principal procedure reported respectively.

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

- The top three AR-DRGs accounted for 9.2 per cent of elective in-patient discharges reported to HIPE when analysed by diagnosis related group.[25,26]
- *Tonsillectomy and Adenoidectomy* and *Hip Replacement, Minor Complexity* accounted for 3.7 per cent and 3.3 per cent of elective in-patient discharges respectively. *Knee Replacement, Minor Complexity* accounted for 2.2 per cent of elective in-patient discharges.

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[25] See Section Four for details of the case mix classification.

[26] In 2015, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. See Appendix VIII for an overview of changes between Version 6.0 and Version 8.0 of the AR-DRG Classification System.

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

Top 20 Principal Diagnoses[a]		N	%	Mean LOS	Med LOS
Z50	Care involving use of rehabilitation procedures	3,522	3.6	37.4	25
J35	Chronic diseases of tonsils and adenoids	3,478	3.6	1.1	1
M16	Coxarthrosis [arthrosis of hip]	3,281	3.4	4.8	4
G47	Sleep disorders	2,625	2.7	1.3	1
Z48	Other surgical follow-up care	2,622	2.7	17.5	6
I25	Chronic ischaemic heart disease	2,438	2.5	3.9	1
M17	Gonarthrosis [arthrosis of knee]	2,426	2.5	5.0	4
C50	Malignant neoplasm of breast	2,017	2.1	4.5	2
K80	Cholelithiasis	1,989	2.1	2.2	1
N81	Female genital prolapse	1,381	1.4	3.4	3
K40	Inguinal hernia	1,270	1.3	1.5	1
R06	Abnormalities of breathing	1,104	1.1	1.4	1
C34	Malignant neoplasm of bronchus and lung	1,103	1.1	9.9	7
C18	Malignant neoplasm of colon	933	1.0	10.2	7
C67	Malignant neoplasm of bladder	870	0.9	5.7	3
J44	Other chronic obstructive pulmonary disease	845	0.9	9.0	5
I48	Atrial fibrillation and flutter	765	0.8	2.1	1
Z51	Other medical care	732	0.8	28.6	18
R07	Pain in throat and chest	706	0.7	1.1	1
D25	Leiomyoma of uterus	686	0.7	3.7	4

Elective In-Patients

96,893

Discharges	N	%
Total	**96,893**	**100**
Sameday	5,448	5.6
Overnight	91,445	94.4

Length of Stay	Mean	Median
Total	**6.8**	**2**
Overnight	7.2	3

Bed Days	N
Total	**661,513**
Overnight	658,789

Top 20 Principal Procedure Blocks[b]		N	%	Mean LOS	Med LOS
1916	Generalised allied health interventions	9,478	11.0	24.0	13
0412	Tonsillectomy or adenoidectomy	3,637	4.2	1.2	1
1920	Administration of pharmacotherapy	3,430	4.0	8.0	4
1489	Arthroplasty of hip	3,393	3.9	5.0	4
1828	Sleep study	3,073	3.6	1.3	1
1518	Arthroplasty of knee	2,301	2.7	5.2	4
0965	Cholecystectomy	2,203	2.6	2.1	1
1893	Administration of blood and blood products	1,529	1.8	7.1	3
1268	Abdominal hysterectomy	1,502	1.7	5.0	4
0671	Transluminal coronary angioplasty with stenting	1,257	1.5	1.9	1
0990	Repair of inguinal hernia	1,234	1.4	1.5	1
0913	Colectomy	982	1.1	10.9	8
1744	Excision of lesion of breast	964	1.1	1.5	1
1748	Simple mastectomy	936	1.1	4.2	3
1620	Excision of lesion(s) of skin and subcutaneous tissue	823	1.0	2.8	1
0668	Coronary angiography	772	0.9	3.4	1
1283	Repair of prolapse of uterus, pelvic floor or enterocele	756	0.9	3.0	3
1788	Megavoltage radiation treatment	689	0.8	23.4	20
1100	Endoscopic resection of bladder lesion or tissue	673	0.8	4.0	3
0114	Thyroidectomy	657	0.8	2.8	2

Hospital Group	N	%
Ireland East	18,839	19.4
RCSI	11,408	11.8
Dublin Midlands	13,206	13.6
South/South West	19,845	20.5
UL	6,684	6.9
Saolta	16,197	16.7
Children's	6,848	7.1
No group	3,866	4.0

Sex	N	%
Male	48,499	50.1
Female	48,394	49.9

Age Group	N	%
< 1 Year	1,516	1.6
1–14 Years	9,651	10.0
15–24 Years	4,486	4.6
25–34 Years	4,843	5.0
35–44 Years	8,987	9.3
45–54 Years	12,844	13.3
55–64 Years	17,074	17.6
65–74 Years	20,299	20.9
75–84 Years	13,476	13.9
85 Years and Over	3,717	3.8

Top 10 AR-DRGs		N	%	Mean LOS	Med LOS
D11Z	Tonsillectomy and Adenoidectomy	3,619	3.7	1.1	1
I03B	Hip Replacement, Minor Complexity	3,184	3.3	4.6	4
I04B	Knee Replacement, Minor Complexity	2,122	2.2	4.8	4
Z60B	Rehabilitation, Minor Complexity	2,094	2.2	28.7	20
H08B	Laparoscopic Cholecystectomy, Minor Complexity	1,940	2.0	1.5	1
G10B	Hernia Procedures, Minor Complexity	1,761	1.8	1.6	1
J06B	Major Procedures for Breast Disorders, Minor Complexity	1,685	1.7	2.2	2
Z63B	Other Follow Up After Surgery or Medical Care, Minor Complexity	1,624	1.7	11.4	3
Z63A	Other Follow Up After Surgery or Medical Care, Major Complexity	1,600	1.7	27.4	16
N04B	Hysterectomy for Non-Malignancy, Minor Complexity	1,472	1.5	3.8	4

Notes: Percentage columns are subject to rounding.

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

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

3.3.2.2 Emergency In-Patient Activity

An emergency in-patient admission is unforeseen and requires urgent care. Table 3.9 presents a summary of emergency in-patient activity reported to HIPE. [27]

Emergency In-Patients – Profile

- Emergency in-patient discharges accounted for 25.5 per cent of total discharges and 68.1 per cent of in-patients.
- Emergency in-patient bed days accounted for 2,764,204 in-patient bed days, or 74.5 per cent of total in-patient bed days (see Table 3.7).
- Over 67 per cent of emergency in-patient discharges were admitted from an Emergency Department, with 7.4 per cent admitted via a medical assessment unit (where they were admitted as an in-patient).

Emergency In-Patients – Top 20 Principal Diagnoses

- Emergency in-patient discharges with a principal diagnosis of *Pain in throat and chest* accounted for 4.1 per cent of emergency in-patients.
- Emergency in-patient discharges with a principal diagnosis of *Other chronic obstructive pulmonary disease* and those with a principal diagnosis of *Unspecified acute lower respiratory infection* accounted for 3.3 per cent and 3.2 per cent of emergency in-patient discharges respectively.

Emergency In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 49.8 per cent of emergency in-patient discharges (see Table 3.4).
- Procedures from the block *Generalised allied health interventions* were reported for 41.8 per cent of emergency in-patient discharges with a procedure recorded.

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

- The top three AR-DRGs accounted for 7.3 per cent of emergency in-patient discharges reported to HIPE when analysed by diagnosis related group.[28,29]
- *Chest Pain, Minor Complexity* accounted for 3.3 per cent of emergency in-patient discharges. *Chronic Obstructive Airways Disease, Minor Complexity* and *Other Respiratory System Disorders, Major Complexity* accounted for 2.1 per cent and 1.9 per cent of emergency in-patient discharges respectively.

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

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

29 In 2015, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. See Appendix VIII for an overview of changes between Version 6.0 and Version 8.0 of the AR-DRG Classification System.

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

Top 20 Principal Diagnoses[a]		N	%	Mean LOS	Med LOS
R07	Pain in throat and chest	18,167	4.1	1.5	1
J44	Other chronic obstructive pulmonary disease	14,849	3.3	7.7	5
J22	Unspecified acute lower respiratory infection	14,362	3.2	6.6	4
N39	Other disorders of urinary system	13,067	2.9	8.7	5
J18	Pneumonia, organism unspecified	12,673	2.9	10.1	6
R10	Abdominal and pelvic pain	10,000	2.3	2.0	1
R55	Syncope and collapse	9,239	2.1	4.5	2
I50	Heart failure	6,327	1.4	10.3	6
L03	Cellulitis	6,231	1.4	6.3	3
I48	Atrial fibrillation and flutter	6,090	1.4	4.0	2
I21	Acute myocardial infarction	5,991	1.4	6.4	4
K35	Acute appendicitis	5,907	1.3	3.3	2
R51	Headache	5,905	1.3	1.7	1
A09	Other gastroenteritis and colitis of infectious and unspecified origin	5,232	1.2	3.9	2
I63	Cerebral infarction	4,636	1.0	16.2	8
S72	Fracture of femur	4,604	1.0	16.8	11
S52	Fracture of forearm	4,334	1.0	2.8	1
R06	Abnormalities of breathing	4,310	1.0	1.7	1
T81	Complications of procedures, not elsewhere classified	4,216	1.0	6.3	3
R56	Convulsions, not elsewhere classified	4,161	0.9	3.2	1

Emergency In-Patients

443,313

Discharges	N	%
Total	**443,313**	**100**
Sameday	100,313	22.6
Overnight	343,000	77.4

Length of Stay	Mean	Median
Total	**6.2**	**2**
Overnight	7.9	4

Bed Days	N
Total	**2,764,204**
Overnight	2,714,048

Top 20 Principal Procedure Blocks[b]		N	%	Mean LOS	Med LOS
1916	Generalised allied health interventions	92,130	41.8	10.7	6
1893	Administration of blood and blood products	7,347	3.3	10.7	6
1920	Administration of pharmacotherapy	6,293	2.9	7.5	3
0926	Appendicectomy	6,254	2.8	3.2	2
1008	Panendoscopy with excision	6,037	2.7	10.4	6
0570	Noninvasive ventilatory support	5,718	2.6	15.7	10
0668	Coronary angiography	4,292	1.9	5.7	3
0030	Lumbar puncture	4,159	1.9	9.4	5
0671	Transluminal coronary angioplasty with stenting	3,377	1.5	4.8	3
0569	Ventilatory support	3,272	1.5	23.0	10
1823	Mental, behavioural or psychosocial assessment	2,480	1.1	7.1	2
1005	Panendoscopy	2,335	1.1	12.0	7
0911	Fibreoptic colonoscopy with excision	2,062	0.9	10.7	7
1872	Alcohol and drug rehabilitation and detoxification	2,044	0.9	6.7	4
1489	Arthroplasty of hip	2,006	0.9	18.3	12
1539	Open reduction of fracture of ankle or toe	1,783	0.8	4.6	2
1479	Fixation of fracture of pelvis or femur	1,667	0.8	18.9	12
1060	Haemodialysis	1,651	0.7	13.3	7
0560	Application, insertion or removal procedures on chest wall, mediastinum or diaphragm	1,550	0.7	15.0	10
1628	Other debridement of skin and subcutaneous tissue	1,539	0.7	9.6	3

Hospital Group	N	%
Ireland East	93,979	21.2
RCSI	69,646	15.7
Dublin Midlands	62,627	14.1
South/South West	78,253	17.7
UL	38,043	8.6
Saolta	82,570	18.6
Children's	18,192	4.1
No group	~	-

Mode of Emergency Admission	N	%
Emergency Department	298,169	67.3
Medical assessment unit - admitted as in-patient	32,727	7.4
Medical assessment unit only	60,342	13.6
Other[c]	52,064	11.7
Unknown	11	0.0

Sex	N	%
Male	224,683	50.7
Female	218,630	49.3

Age Group	N	%
< 1 Year	24,655	5.6
1–14 Years	43,743	9.9
15–24 Years	27,274	6.2
25–34 Years	28,683	6.5
35–44 Years	38,324	8.6
45–54 Years	44,606	10.1
55–64 Years	54,491	12.3
65–74 Years	71,420	16.1
75–84 Years	71,198	16.1
85 Years and Over	38,919	8.8

Top 10 AR-DRGs		N	%	Mean LOS	Med LOS
F74B	Chest Pain, Minor Complexity	14,605	3.3	1.1	1
E65B	Chronic Obstructive Airways Disease, Minor Complexity	9,133	2.1	4.6	3
E75A	Other Respiratory System Disorders, Major Complexity	8,482	1.9	8.9	5
E62A	Respiratory Infections and Inflammations, Major Complexity	8,299	1.9	13.3	8
L63B	Kidney and Urinary Tract Infections, Minor Complexity	8,065	1.8	4.2	3
F73B	Syncope and Collapse, Minor Complexity	8,024	1.8	2.5	1
B77B	Headaches, Minor Complexity	7,813	1.8	1.3	1
D63B	Otitis Media and Upper Respiratory Infections, Minor Complexity	7,770	1.8	1.4	1
G66B	Abdominal Pain and Mesenteric Adenitis, Minor Complexity	7,506	1.7	1.4	1
E75B	Other Respiratory System Disorders, MINC	7,148	1.6	2.4	1

Notes:
Percentage columns are subject to rounding.
~ Denotes five of fewer discharges reported to HIPE.
a ICD-10-AM diagnosis codes are analysed at three-character level
b ACHI Procedure codes are analysed at block level. The percentage (%) is based on emergency in-patients with principal procedure reported.
c 'Other' includes emergency in-patients who were treated in locations other than an Emergency Department, for example, in a Local injury Unit, prior to admission to hospital.

3.3.2.3 Maternity In-Patient Activity

Maternity discharges are those who were admitted in relation to their obstetrical experience (from conception to six weeks post-delivery); that is, they were allocated to Admission Type 'Maternity'.[30] Table 3.10 presents a summary of maternity in-patient activity reported to HIPE; and presents diagnoses and procedures by delivery status. Delivery discharges include discharges with a diagnosis of outcome of delivery (ICD-10-AM: Z37). Non-delivery discharges are maternity discharges where admission was related to their obstetrical experience but they did not deliver during that episode of care.

Maternity In-Patients – Profile

- Maternity in-patient discharges accounted for 6.4 per cent of total discharges and 17.0 per cent of in-patients.
- Of maternity in-patient discharges, 53.8 per cent reported a diagnosis of *outcome of delivery* i.e. delivery discharges; while 46.2 per cent were non-delivery discharges.
- Single deliveries accounted for 98.1 per cent of delivery discharges.
- Over 61 per cent of delivery discharges were multiparous deliveries. [31]
- Of delivery discharges, 34.4 per cent were aged between 30–34 years.

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

- Delivery discharges with a principal diagnosis of *Single spontaneous delivery* accounted for 46.7 per cent of delivery in-patient discharges.
- Non-delivery discharges with a principal diagnosis of *Other maternal diseases classifiable elsewhere but complicating pregnancy; childbirth and the puerperium* accounted for 27.4 per cent of non-delivery in-patient discharges.

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

- A principal procedure was recorded for 59.5 per cent of delivery discharges (see Table 3.4).
- For delivery discharges who had a procedure reported, 35.6 per cent reported the principal procedure block *Caesarean section*.
- For non-delivery discharges who had a procedure reported, 30.7 per cent reported the principal procedure block *Curettage and evacuation of uterus*.

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

- The top three AR-DRGs accounted for 58.8 per cent of maternity in-patient discharges reported to HIPE when analysed by diagnosis related group.[32,33]
- *Antenatal and Other Obstetric Admission, Minor Complexity* accounted for 27.4 per cent of maternity in-patient discharges.

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30 See Hospital In-Patient Enquiry Scheme (HIPE) Data Dictionary 2018 Version 10.0 available at www.hpo.ie.

31 See Table 3.10 notes for definition of multiparous deliveries.

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

33 In 2015, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. See Appendix VIII for an overview of changes between Version 6.0 and Version 8.0 of the AR-DRG Classification System.

TABLE 3.10 Maternity In-Patient Activity (N, %, Mean and Median Length of Stay)

	Top 10 Principal Diagnoses[a]		N	%	Mean	Med
Delivery	O80	Single spontaneous delivery[b]	27,864	46.7	2.4	2
	O82	Single delivery by caesarean section[b]	17,530	29.4	4.5	4
	O81	Single delivery by forceps and vacuum extractor[b]	8,269	13.9	3.3	3
	O42	Premature rupture of membranes	1,075	1.8	6.8	4
	O84	Multiple delivery[b]	895	1.5	5.2	4
	O83	Other assisted single delivery[b]	832	1.4	3.0	3
	O36	Maternal care for other known or suspected fetal problems	688	1.2	7.7	5
	O13	Gestational [pregnancy-induced] hypertension	381	0.6	7.6	6
	O14	Pre-eclampsia	300	0.5	9.4	8
	O46	Antepartum haemorrhage; not elsewhere classified	275	0.5	5.8	4
Non-Delivery	O99	Other maternal diseases classifiable elsewhere but complicating pregnancy; childbirth and the puerperium	14,012	27.4	1.2	1
	Z36	Antenatal screening	5,077	9.9	0.7	1
	O47	False labour	4,539	8.9	1.0	1
	O03	Spontaneous abortion	2,667	5.2	1.3	1
	O21	Excessive vomiting in pregnancy	2,608	5.1	1.6	1
	O02	Other abnormal products of conception	2,356	4.6	1.0	1
	O46	Antepartum haemorrhage, not elsewhere classified	1,917	3.8	1.5	1
	O13	Gestational [pregnancy-induced] hypertension	1,878	3.7	1.4	1
	O36	Maternal care for other known or suspected fetal problems	1,727	3.4	1.5	1
	O23	Infections of genitourinary tract	1,310	2.6	2.0	1

Maternity In-Patients

110,694

Delivery Status	N	%	Mean	Med
Total	**110,694**	**100**	**2.6**	**2**
Delivery[c]	59,608	53.8	3.6	3
Non-Delivery[d]	51,086	46.2	1.4	1

Delivery Discharges

Delivery Outcome[c]	N	%	Mean	Med
Single	58,472	98.1	3.6	3
Multiple	1,125	1.9	6.8	5
Unspecified	11	0.0	3.3	3
Parity[e]	**N**	**%**	**Mean**	**Med**
Primiparous	23,159	38.9	4.2	4
Multiparous	36,449	61.1	3.3	3
Age	**N**	**%**	**Mean**	**Med**
< 20 Years	950	1.6	3.8	3
20-24 Years	4,999	8.4	3.5	3
25-29 Years	10,316	17.3	3.4	3
30-34 Years	20,479	34.4	3.5	3
35-39 Years	18,419	30.9	3.7	3
40-44 Years	4,154	7.0	4.3	4
45 Years and Over	291	0.5	5.6	4
Discharge Status	**N**	**%**	**Mean**	**Med**
Public	48,702	81.7	3.6	3
Private	10,906	18.3	3.9	3

	Top 10 Principal Procedure Blocks[f]		N	%	Mean	Med
Delivery	1340	Caesarean section[g]	20,128	35.6	5.2	4
	1344	Postpartum suture	13,800	24.4	2.5	2
	1338	Vacuum extraction	6,487	11.5	3.3	3
	1334	Medical or surgical induction of labour	3,939	7.0	3.2	3
	1343	Other procedures associated with delivery[h]	3,350	5.9	3.0	3
	1333	Analgesia and anaesthesia during labour and delivery procedure	2,741	4.9	2.8	2
	1337	Forceps delivery	1,972	3.5	3.7	3
	1335	Medical or surgical augmentation of labour	1,760	3.1	2.3	2
	1336	Spontaneous vertex delivery[i]	616	1.1	2.2	2
	1916	Generalised allied health interventions	526	0.9	3.1	2
Non-Delivery	1265	Curettage and evacuation of uterus	2,882	30.7	1.0	1
	1916	Generalised allied health interventions	2,575	27.4	2.9	2
	1884	Immunisation	913	9.7	1.4	1
	1256	Procedures for management of ectopic pregnancy	682	7.3	2.1	2
	1920	Administration of pharmacotherapy	280	3.0	1.6	1
	1330	Antepartum application, insertion or removal procedures	268	2.9	1.7	1
	1274	Application, insertion or removal procedures on cervix	220	2.3	2.4	1
	1334	Medical or surgical induction of labour	203	2.2	1.8	1
	1344	Postpartum suture	163	1.7	2.2	2
	1893	Administration of blood and blood products	158	1.7	3.5	2

Top 10 AR-DRG's		N	%	Mean	Med
O66B	Antenatal & Other Obs Adm, Minor Complexity	30,276	27.4	1.0	1
O60B	Vaginal Delivery, Intermediate Complexity	17,994	16.3	3.0	3
O60C	Vaginal Delivery, Minor Complexity	16,798	15.2	2.1	2
O01C	Caesarean Delivery, Minor Complexity	11,393	10.3	4.1	4
O66A	Antenatal & Other Obs Adm, Major Complexity	10,965	9.9	2.0	1
O01B	Caesarean Delivery, Intermediate Complexity	7,422	6.7	5.8	5
O60A	Vaginal Delivery, Major Complexity	3,718	3.4	4.8	4
O05Z	Abortion W OR Procedures	2,860	2.6	1.0	1
O61B	Postpartum & Post Abortion W/O OR Proc, MINC	2,569	2.3	1.9	1
O63B	Abortion W/O OR Procedures, Minor Complexity	2,143	1.9	1.2	1

Notes:

Percentage columns are subject to rounding.

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

b In ICD-10-AM 8th Edition O80-O84 are delivery diagnosis codes for use in all obstetric episodes of care where delivery is the outcome. If the patient is admitted for a delivery then a delivery code will be assigned as the principal diagnosis.

c Discharges with ICD-10-AM Diagnosis Code Z37 *Outcome of Delivery* (used for delivery outcome variable).

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

e Maternal parity is the number of previous live births and number of previous stillbirths (>500g). Primiparous Delivery discharges are deliveries to women who have had no previous pregnancy resulting in a live birth or stillbirth (>500g). Multiparous Delivery discharges are deliveries to women who have had at least one previous pregnancy resulting in a live birth or stillbirth (>500g).

f ACHI Procedure codes are analysed at block level. The percentage (%) is based on maternity in-patients with principal procedure reported. A principal procedure was recorded for 94.7 per cent of delivery in-patient discharges and 18.4 per cent of non-delivery in-patient discharges.

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

h Includes episiotomy

i 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, Vol.5 No3, Jan 1999]

3.4 Morbidity Analysis: Total Discharge Activity

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

3.4.1 Total Discharges by Principal Diagnosis, Sex and Age Group

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

- Just over 28 per cent of total discharges had a principal diagnosis of *Factors influencing health status and contact with health services*; this includes persons encountering health services for examination and investigation or for specific procedures and health care (e.g., *Chemotherapy*, *Radiotherapy* and *Dialysis*).[34]
- The chapter *Diseases of the digestive system* had the second largest number of principal diagnoses, with 9.7 per cent of total discharges.
- For discharges aged less than 15 years (including discharges aged less than 1 year), the most common principal diagnosis came from the chapter *Diseases of the respiratory system,* which accounted for 13.7 per cent of total discharges within this age category.
- Diagnoses from the chapter *Factors influencing health status and contact with health services* were the most common principal diagnoses for discharges in the 45-64 years and 65 years and over age groups.

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

Table 3.12 presents the total in-patient mean and median length of stay for principal diagnosis by sex and age group. The analysis presented here includes total in-patient (sameday and overnight) discharges,[35] and excludes day patients. It should also be noted that the analysis by length of stay does not take into account the discharge destination of the patient. For example, a patient with a length of stay of one day for a diagnosis of chronic ischaemic heart disease may

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

[35] The calculation of total in-patient length of stay differs in this report compared to previous reports. The length of stay assigned for sameday in-patients has changed in this report from one bed day to 0.5 bed days. This will impact on the total in-patient length of stay resulting in a lower average length of stay compared to previous years (see Section 1.6).

be transferred to another facility on discharge. Care must be taken, therefore, in interpreting the data on length of stay presented in Table 3.12, in the absence of information on discharge destination.[36]

Discussion of total in-patient mean length of stay is limited to ICD-10-AM chapter level.

- The longest in-patient mean length of stay was recorded for in-patient discharges with a principal diagnosis from the chapter *Mental and behavioural disorders* (12.0 days).
- For discharges aged less than 15 years, those with a principal diagnosis from the chapter *Certain conditions originating in the perinatal period* recorded an in-patient mean length of stay of 8.8 days.
- The longest in-patient mean length of stay for discharges aged 15–44 years was reported for those with a principal diagnosis from the *Neoplasms* chapter (7.2 days). When this diagnosis is analysed by sex, male discharges reported 8.9 days and females reported 6.2 days.
- The shortest in-patient mean length of stay for all ages was recorded for in-patient discharges with a principal diagnosis from the chapter *Diseases of the ear and mastoid process* (2.2 days).

3.4.3 All-Listed Diagnoses by Sex and Age Group

Table 3.13 provides details of all-listed diagnoses reported by sex and age group. Over 4.7 million diagnoses were recorded for total discharges reported to HIPE. As one principal diagnosis and up to 29 secondary diagnoses may be collected per discharge, the number of diagnoses will not equal the number of discharges.

- With the exception of females aged 15-44 years, the chapter *Factors influencing health status and contact with health services* had the most frequently reported diagnoses across both sexes and all age groups for total discharges. It accounted for 1,122,462 diagnoses, or 23.7 per cent of all-listed diagnoses reported.[37]
- *Neoplasms* accounted for 590,138 diagnoses or 12.5 per cent of all-listed diagnoses reported for total discharges.

[36] See Section Two for details of discharge destination.

[37] This chapter includes diagnoses such as Z51 *Other medical care* and Z49 *Care involving dialysis*.

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

Principal Diagnosis	ICD-10-AM Code	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Total Discharges	–	71,972	147,811	241,431	356,637	817,851	57,165	308,251	253,780	300,165	919,361	129,137	456,062	495,211	656,802	1,737,212
Certain infectious and parasitic diseases	**A00–B99**	**4,301**	**3,208**	**2,268**	**2,957**	**12,734**	**3,977**	**3,525**	**2,547**	**3,560**	**13,609**	**8,278**	**6,733**	**4,815**	**6,517**	**26,343**
Intestinal infectious diseases (including diarrhoea)	A00–A09	2,319	1,362	1,032	1,216	5,929	2,169	1,761	1,412	1,999	7,341	4,488	3,123	2,444	3,215	13,270
Tuberculosis	A15–A19	~	86	46	*	168	~	68	31	*	119	8	154	77	48	287
Septicaemia	A40–A41	90	107	388	1,159	1,744	115	152	315	918	1,500	205	259	703	2,077	3,244
Human immunodeficiency virus [HIV] disease	B20–B24	†	†	†	†	†	†	†	†	†	†	†	†	†	†	61
Neoplasms	**C00–D48**	**3,328**	**7,854**	**22,490**	**38,681**	**72,353**	**2,817**	**13,436**	**24,434**	**27,860**	**68,547**	**6,145**	**21,290**	**46,924**	**66,541**	**140,900**
Malignant neoplasms	C00–C96	2,678	4,143	15,689	28,685	51,195	2,024	5,171	16,054	20,612	43,861	4,702	9,314	31,743	49,297	95,056
Malignant neoplasms of colon, rectum and anus	C18–C21	0	195	1,639	2,436	4,270	~	*	1,102	1,292	2,590	~	*	2,741	3,728	6,860
Malignant neoplasms of trachea, bronchus and lung	C33–C34	0	69	1,087	2,330	3,486	0	113	1,049	1,755	2,917	0	182	2,136	4,085	6,403
Melanoma and other malignant neoplasms of skin	C43–C44	~	*	1,997	6,642	9,074	~	*	1,496	3,954	5,911	~	*	3,493	10,596	14,985
Malignant neoplasms of breast	C50	0	~	*	38	57	0	*	*	3,639	10,398	0	1,608	5,170	3,677	10,455
Malignant neoplasms of female genital organs	C51–C58	0	0	0	0	0	0	560	1,404	1,344	3,308	0	560	1,404	1,344	3,308
Malignant neoplasm of prostate	C61	0	17	1,777	3,680	5,474	0	0	0	0	0	0	17	1,777	3,680	5,474
Malignant neoplasm of bladder	C67	19	38	399	1,325	1,781	0	16	182	475	673	19	54	581	1,800	2,454
Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81–C96	1,544	1,571	3,946	6,052	13,113	1,069	1,030	2,357	4,048	8,504	2,613	2,601	6,303	10,100	21,617
In situ neoplasms	D00-D09	~	*	496	1,307	1,895	0	405	990	1,443	2,838	~	*	1,486	2,750	4,733
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10–D48	649	3,620	6,305	8,689	19,263	793	7,860	7,390	5,805	21,848	1,442	11,480	13,695	14,494	41,111
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	**D50–D89**	**2,471**	**2,513**	**3,276**	**6,469**	**14,729**	**1,515**	**3,908**	**3,985**	**6,530**	**15,938**	**3,986**	**6,421**	**7,261**	**12,999**	**30,667**
Endocrine, nutritional and metabolic diseases	**E00–E89**	**1,363**	**6,866**	**11,589**	**8,336**	**28,154**	**1,553**	**4,401**	**6,167**	**6,361**	**18,482**	**2,916**	**11,267**	**17,756**	**14,697**	**46,636**
Diabetes mellitus	E10–E14	277	1,017	1,946	2,532	5,772	219	810	886	1,672	3,587	496	1,827	2,832	4,204	9,359
Cystic fibrosis	E84	386	1,092	81	0	1,559	452	903	*	~	1,434	838	1,995	*	~	2,993
Mental and behavioural disorders	**F00–F99**	**419**	**1,422**	**1,223**	**1,237**	**4,301**	**375**	**1,099**	**764**	**1,290**	**3,528**	**794**	**2,521**	**1,987**	**2,527**	**7,829**
Mental and behavioural disorders due to alcohol	F10	24	794	831	307	1,956	22	343	359	132	856	46	1,137	1,190	439	2,812
Mental and behavioural disorders due to use of other psychoactive substance	F11–F19	~	214	33	*	257	~	91	19	*	128	~	305	52	*	385
Diseases of nervous system	**G00–G99**	**1,752**	**4,726**	**5,356**	**5,088**	**16,922**	**1,341**	**7,783**	**6,866**	**5,313**	**21,303**	**3,093**	**12,509**	**12,222**	**10,401**	**38,225**
Multiple sclerosis	G35	*	1,330	762	*	2,184	~	2,801	1,565	*	4,532	13	4,131	2,327	245	6,716
Epilepsy	G40, G41	686	931	518	338	2,473	538	780	385	306	2,009	1,224	1,711	903	644	4,482
Transient cerebral ischaemic attacks and related syndromes	G45	0	56	414	1,108	1,578	~	*	360	1,259	1,680	~	*	774	2,367	3,258
Diseases of the eye and adnexa	**H00–H59**	**695**	**1,980**	**5,860**	**18,255**	**26,790**	**644**	**1,923**	**4,949**	**23,775**	**31,291**	**1,339**	**3,903**	**10,809**	**42,030**	**58,081**
Diseases of the ear and mastoid process	**H60–H95**	**2,210**	**1,249**	**1,154**	**1,014**	**5,627**	**1,552**	**1,347**	**1,226**	**960**	**5,085**	**3,762**	**2,596**	**2,380**	**1,974**	**10,712**
Diseases of the circulatory system	**I00–I99**	**862**	**3,783**	**15,454**	**26,003**	**46,102**	**746**	**3,452**	**8,017**	**18,832**	**31,047**	**1,608**	**7,235**	**23,471**	**44,835**	**77,149**
Hypertensive diseases	I10–I15	30	348	534	409	1,321	28	320	535	727	1,610	58	668	1,069	1,136	2,931
Angina pectoris	I20	0	93	969	1,393	2,455	0	37	435	722	1,194	0	130	1,404	2,115	3,649
Acute myocardial infarction	I21–I22	0	235	1,928	2,422	4,585	0	59	454	1,337	1,850	0	294	2,382	3,759	6,435
Other ischaemic heart disease	I23–I25	0	259	3,779	4,964	9,002	~	*	1,187	2,221	3,483	~	*	4,966	7,185	12,485
Pulmonary heart disease and diseases of pulmonary circulation	I26–I28	0	154	343	414	911	18	205	252	547	1,022	18	359	595	961	1,933
Conduction disorders and cardiac arrhythmias	I44–I49	123	647	2,818	4,561	8,149	100	351	1,020	3,458	4,929	223	998	3,838	8,019	13,078
Heart failure	I50	~	*	482	3,260	3,786	*	*	225	2,758	3,023	9	75	707	6,018	6,809
Cerebrovascular disease	I60–I69	34	235	1,166	2,936	4,371	28	224	757	2,459	3,468	62	459	1,923	5,395	7,839
Atherosclerosis (non-coronary)	I70	0	19	400	866	1,285	0	10	156	458	624	0	29	556	1,324	1,909
Diseases of the respiratory system	**J00–J99**	**9,945**	**6,138**	**8,802**	**21,293**	**46,178**	**7,746**	**7,936**	**9,656**	**20,532**	**45,870**	**17,691**	**14,074**	**18,458**	**41,825**	**92,048**
Acute upper respiratory infections and influenza	J00–J11	3,273	1,032	517	815	5,637	2,498	1,615	659	944	5,716	5,771	2,647	1,176	1,759	11,353
Pneumonia	J12–J18	605	635	1,260	4,729	7,229	591	601	1,132	4,534	6,858	1,196	1,236	2,392	9,263	14,087
Chronic diseases of tonsils and adenoids	J35	1,432	444	50	11	1,937	1,308	1,037	68	21	2,434	2,740	1,481	118	32	4,371
Chronic obstructive pulmonary disease and bronchiectasis	J40–J44, J47	31	229	1,956	6,933	9,149	18	330	2,553	6,807	9,708	49	559	4,509	13,740	18,857
Asthma	J45–J46	1,092	634	1,261	672	3,659	648	1,368	1,816	931	4,763	1,740	2,002	3,077	1,603	8,422

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

Principal Diagnosis	ICD-10-AM Code	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Diseases of the digestive system	**K00–K93**	**5,845**	**26,603**	**27,617**	**23,988**	**84,053**	**4,523**	**28,389**	**28,046**	**23,233**	**84,191**	**10,368**	**54,992**	**55,663**	**47,221**	**168,244**
Diseases of oesophagus, stomach and duodenum	K20–K31	532	5,048	7,355	6,424	19,359	438	5,622	7,670	6,232	19,962	970	10,670	15,025	12,656	39,321
Diseases of appendix	K35–K38	1,164	1,934	377	166	3,641	921	1,792	337	105	3,155	2,085	3,726	714	271	6,796
Inguinal hernia	K40	401	711	1,308	1,435	3,855	95	53	68	105	321	496	764	1,376	1,540	4,176
Noninfective enteritis and colitis	K50–K52	550	7,463	3,288	1,167	12,468	409	6,360	3,138	1,299	11,206	959	13,823	6,426	2,466	23,674
Alcoholic liver disease	K70	0	173	507	180	860	0	102	214	59	375	0	275	721	239	1,235
Cholelithiasis	K80	16	485	927	1,576	3,004	25	2,146	1,801	1,658	5,630	41	2,631	2,728	3,234	8,634
Diseases of the skin and subcutaneous tissue	**L00–L99**	**1,626**	**12,904**	**9,486**	**8,414**	**32,430**	**1,468**	**13,039**	**9,722**	**8,274**	**32,503**	**3,094**	**25,943**	**19,208**	**16,688**	**64,933**
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02–L03	386	1,172	1,237	1,590	4,385	376	631	831	1,595	3,433	762	1,803	2,068	3,185	7,818
Decubitus ulcer and pressure area	L89	~	*	37	65	133	*	*	19	68	110	10	44	56	133	243
Diseases of the musculoskeletal system and connective tissue	**M00–M99**	**1,681**	**7,269**	**12,984**	**11,804**	**33,738**	**2,272**	**9,088**	**17,853**	**18,999**	**48,212**	**3,953**	**16,357**	**30,837**	**30,803**	**81,950**
Rheumatoid arthritis	M05–M06	0	335	926	828	2,089	~	*	1,866	1,586	4,057	~	*	2,792	2,414	6,146
Coxarthrosis and Gonarthrosis	M16–M17	0	252	1,838	2,598	4,688	~	*	2,279	4,032	6,553	~	*	4,117	6,630	11,241
Intervertebral disc disorders	M50–M51	~	543	620	*	1,505	~	656	720	*	1,863	6	1,199	1,340	823	3,368
Dorsalgia (back pain)	M54	74	1,401	2,203	1,481	5,159	75	2,034	3,501	2,935	8,545	149	3,435	5,704	4,416	13,704
Diseases of the genitourinary system	**N00–N99**	**3,551**	**5,106**	**7,523**	**12,029**	**28,209**	**2,187**	**15,848**	**16,249**	**12,461**	**46,745**	**5,738**	**20,954**	**23,772**	**24,490**	**74,954**
Chronic kidney disease	N18	57	417	506	654	1,634	65	420	314	265	1,064	122	837	820	919	2,698
Urolithiasis	N20–N23	58	1,431	2,010	909	4,408	49	884	1,023	478	2,434	107	2,315	3,033	1,387	6,842
Hyperplasia of prostate	N40	0	46	999	2,109	3,154	0	0	0	0	0	0	46	999	2,109	3,154
Disorders of breast	N60–N64	7	72	61	16	156	12	1,444	1,507	349	3,312	19	1,516	1,568	365	3,468
Inflammatory diseases of female pelvic organs	N70–N77	0	0	0	0	0	29	821	289	83	1,222	29	821	289	83	1,222
Noninflammatory disorders of female genital tract	N80–N98	0	0	0	0	0	227	8,587	9,174	2,986	20,974	227	8,587	9,174	2,986	20,974
Pregnancy, childbirth and the puerperium	**O00–O99**	**0**	**0**	**0**	**0**	**0**	**8**	**112,297**	**681**	**0**	**112,986**	**8**	**112,297**	**681**	**0**	**112,986**
Gestational [pregnancy induced] hypertension	O13	0	0	0	0	0	0	3,912	35	0	3,947	0	3,912	35	0	3,947
Diabetes mellitus in pregnancy	O24	0	0	0	0	0	0	2,176	38	0	2,214	0	2,176	38	0	2,214
Single spontaneous delivery	O80	0	0	0	0	0	0	27,803	61	0	27,864	0	27,803	61	0	27,864
Single delivery by forceps and vacuum extractor	O81	0	0	0	0	0	~	8,247	*	0	8,269	~	8,247	*	0	8,269
Single delivery by caesarean section	O82	0	0	0	0	0	0	17,382	148	0	17,530	0	17,382	148	0	17,530
Other assisted single delivery	O83	0	0	0	0	0	0	*	~	0	832	0	*	~	0	832
Multiple delivery	O84	0	0	0	0	0	0	880	15	0	895	0	880	15	0	895
Certain conditions originating in the perinatal period	**P00–P96**	**5,713**	**0**	**0**	**0**	**5,713**	**4,412**	**0**	**0**	**0**	**4,412**	**10,125**	**0**	**0**	**0**	**10,125**
Congenital malformations, deformations and chromosomal abnormalities	**Q00–Q99**	**4,632**	**631**	**214**	**116**	**5,593**	**3,124**	**815**	**296**	**102**	**4,337**	**7,756**	**1,446**	**510**	**218**	**9,930**
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	**R00–R99**	**6,541**	**13,387**	**19,078**	**22,152**	**61,158**	**5,635**	**20,265**	**20,167**	**21,633**	**67,700**	**12,176**	**33,652**	**39,245**	**43,785**	**128,858**
Pain in throat and chest	R07	95	3,045	5,219	3,146	11,505	76	2,613	4,348	3,119	10,156	171	5,658	9,567	6,265	21,661
Abdominal and pelvic pain	R10	896	2,189	1,852	1,162	6,099	1,142	6,171	3,208	1,649	12,170	2,038	8,360	5,060	2,811	18,269
Injury, poisoning and certain other consequences of external causes	**S00–T98**	**6,652**	**13,061**	**6,998**	**8,549**	**35,260**	**4,633**	**6,792**	**6,066**	**11,624**	**29,115**	**11,285**	**19,853**	**13,064**	**20,173**	**64,375**
Intracranial injury	S06	146	546	396	627	1,715	102	228	178	556	1,064	248	774	574	1,183	2,779
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	1,831	2,282	726	1,086	5,925	1,230	693	422	1,207	3,552	3,061	2,975	1,148	2,293	9,477
Fracture of femur	S72	91	109	218	1,169	1,587	53	43	264	2,727	3,087	144	152	482	3,896	4,674
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36–T65	237	1,026	404	174	1,841	308	1,298	559	195	2,360	545	2,324	963	369	4,201
Factors influencing health status and contact with health services[a]	**U00–U49, Z00–Z99**	**8,385**	**29,111**	**80,059**	**140,252**	**257,807**	**6,637**	**52,908**	**86,089**	**88,826**	**234,460**	**15,022**	**82,019**	**166,148**	**229,078**	**492,267**
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	3,403	6,268	35,380	62,222	107,273	2,412	15,977	55,685	45,757	119,831	5,815	22,245	91,065	107,979	227,104

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

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

Principal Diagnosis	ICD-10-AM Code	Male					Female					Total In-Patient Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Total In-Patient Discharges	Mean	3.4	3.8	6.0	9.3	6.5	3.4	2.8	5.1	9.5	5.2	3.4	3.0	5.6	9.4	5.7
	Median	1	1	2	4	2	1	2	2	5	2	1	2	2	4	2
Certain infectious and parasitic diseases	**A00–B99**	**1.9**	**4.1**	**7.8**	**11.8**	**5.6**	**2.0**	**3.3**	**5.8**	**11.1**	**5.4**	**1.9**	**3.6**	**6.7**	**11.4**	**5.5**
		1	**2**	**4**	**6**	**2**	**1**	**2**	**3**	**6**	**2**	**1**	**2**	**3**	**6**	**2**
Intestinal infectious diseases (including diarrhoea)	A00–A09	1.7	2.7	4.2	7.9	3.4	1.7	2.6	4.2	9.1	4.4	1.7	2.6	4.2	8.6	3.9
		1	2	3	4	2	1	2	3	5	2	1	2	3	5	2
Tuberculosis	A15–A19	^	21.2	24.4	24.8	22.3	^	11.5	13.7	22.0	13.3	2.3	17.1	20.9	24.0	19.0
		^	9	14	17	12	^	8	7	15	8	2	9	10	17	10
Septicaemia	A40–A41	5.1	7.6	11.2	14.7	13.0	5.8	7.6	10.2	14.4	12.4	5.4	7.6	10.7	14.6	12.8
		4	5	7	8	8	4	5	7	9	7	4	5	7	9	7
Human immunodeficiency virus [HIV] disease	B20–B24	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	14.6
		ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	8
Neoplasms	**C00–D48**	**4.8**	**8.9**	**10.2**	**11.5**	**10.5**	**5.8**	**6.2**	**7.7**	**10.6**	**8.6**	**5.2**	**7.2**	**8.8**	**11.1**	**9.5**
		3	**4**	**5**	**7**	**6**	**3**	**3**	**4**	**6**	**4**	**3**	**4**	**4**	**6**	**5**
Malignant neoplasms	C00–C96	5.0	9.8	10.7	12.1	11.1	5.7	8.3	8.8	11.1	9.8	5.3	9.0	9.7	11.7	10.5
		3	5	6	7	6	3	4	5	6	5	3	4	5	7	6
Malignant neoplasm of colon, rectum and anus	C18–C21	-	9.4	11.0	14.5	13.1	^	9.4	10.9	14.6	12.9	^	9.4	11.0	14.6	13.0
		-	6	7	9	8	^	6	7	9	8	^	6	7	9	8
Malignant neoplasm of trachea, bronchus and lung	C33–C34	-	9.7	10.2	12.3	11.6	-	10.3	9.3	11.7	10.9	-	10.0	9.8	12.1	11.3
		-	6	6	8	7	-	7	6	7	7	-	6	6	8	7
Melanoma and other malignant neoplasms of skin	C43–C44	^	8.2	3.6	7.9	7.1	-	4.0	5.3	5.8	5.6	^	6.6	4.3	7.1	6.5
		^	1	2	2	2	-	1	1	2	1	^	1	1	2	2
Malignant neoplasm of breast	C50	-	^	^	3.3	4.0	-	4.1	5.1	6.0	5.3	-	4.1	5.1	5.9	5.2
		-	^	^	3	3	-	2	2	3	2	-	2	2	3	2
Malignant neoplasms of female genital organs	C51–C58	-	-	-	-	-	-	8.8	9.4	11.1	10.0	-	8.8	9.4	11.1	10.0
		-	-	-	-	-	-	5	5	7	6	-	5	5	7	6
Malignant neoplasm of prostate	C61	-	4.0	6.8	12.6	10.1	-	-	-	-	-	-	4.0	6.8	12.6	10.1
		-	4	4	6	5	-	-	-	-	-	-	4	4	6	5
Malignant neoplasm of bladder	C67	5.7	3.2	5.8	8.2	7.6	-	7.7	7.0	9.1	8.5	5.7	5.4	6.2	8.4	7.8
		2	2	3	4	3	-	5	3	4	4	2	3	3	4	4
Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81–C96	6.2	15.3	12.5	11.8	11.9	6.2	15.1	11.2	11.5	11.4	6.2	15.2	12.0	11.7	11.7
		3	6	6	6	6	4	6	6	6	6	3	6	6	6	6
In situ neoplasms	D00-D09	-	1.9	2.3	5.0	3.9	-	2.8	2.6	3.4	2.9	-	2.7	2.5	4.2	3.1
		-	1	2	2	2	-	2	1	2	2	-	2	1	2	2
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10–D48	3.4	4.1	6.3	6.6	5.9	6.1	3.6	4.4	6.6	4.7	5.1	3.7	4.9	6.6	5.1
		2	2	3	3	3	2	2	3	4	3	2	2	3	3	3
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	**D50–D89**	**3.6**	**4.1**	**5.9**	**6.5**	**5.6**	**3.5**	**2.8**	**4.6**	**5.7**	**4.7**	**3.5**	**3.3**	**5.1**	**6.1**	**5.1**
		2	**3**	**2**	**3**	**3**	**2**	**1**	**2**	**3**	**2**	**2**	**1**	**2**	**3**	**2**
Endocrine, nutritional and metabolic diseases	**E00–E89**	**6.2**	**7.1**	**7.6**	**10.2**	**8.4**	**4.2**	**5.7**	**5.8**	**8.5**	**6.7**	**5.2**	**6.3**	**6.8**	**9.3**	**7.5**
		3	**3**	**3**	**5**	**4**	**3**	**2**	**2**	**4**	**3**	**3**	**3**	**3**	**4**	**3**
Diabetes mellitus	E10–E14	3.9	3.7	8.7	12.6	8.7	4.2	3.8	8.9	11.7	7.9	4.0	3.7	8.8	12.3	8.4
		4	2	4	6	4	4	2	3	5	3	4	2	3	6	3
Cystic fibrosis	E84	9.8	15.9	14.3	-	14.5	8.9	15.1	17.1	^	13.6	9.4	15.5	15.6	^	14.1
		10	14	13	-	14	8	14	13	^	13	9	14	13	^	14
Mental and behavioural disorders	**F00–F99**	**5.6**	**5.6**	**9.7**	**20.2**	**11.2**	**8.4**	**7.6**	**9.6**	**21.1**	**13.1**	**7.2**	**6.5**	**9.7**	**20.6**	**12.0**
		1	**2**	**3**	**8**	**3**	**3**	**2**	**3**	**9**	**4**	**2**	**2**	**3**	**8**	**3**
Mental and behavioural disorders due to alcohol	F10	0.9	2.9	7.7	11.6	6.3	1.0	3.0	6.1	14.3	6.0	1.0	2.9	7.2	12.4	6.2
		1	2	3	5	2	1	2	3	5	2	1	2	3	5	2
Mental and behavioural disorders due to use of other psychoactive substance	F11–F19	^	8.7	10.5	26.3	9.5	^	10.1	10.2	11.4	10.2	^	9.1	10.4	16.8	9.7
		^	3	8	14	4	^	6	5	10	6	^	3	7	10	4

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

Principal Diagnosis	ICD-10-AM Code	Male					Female					Total In-Patient Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Diseases of nervous system	**G00–G99**	**4.0**	**5.4**	**6.8**	**10.0**	**7.1**	**4.7**	**3.2**	**5.9**	**9.4**	**5.9**	**4.3**	**4.1**	**6.4**	**9.7**	**6.5**
		1	**1**	**1**	**3**	**2**	**1**	**1**	**2**	**3**	**2**	**1**	**1**	**1**	**3**	**2**
Multiple sclerosis	G35	^	5.2	9.9	26.6	9.1	-	4.1	12.2	11.3	7.2	^	4.4	11.4	15.8	7.8
		^	4	5	6	4	-	4	4	5	4	^	4	4	6	4
Epilepsy	G40, G41	4.8	3.9	7.1	10.6	5.9	3.8	3.8	6.1	9.3	5.2	4.4	3.9	6.7	10.0	5.6
		2	1	3	4	2	2	2	3	4	2	2	2	3	4	2
Transient cerebral ischaemic attacks and related syndromes	G45	-	2.5	3.3	4.9	4.4	^	2.9	3.2	5.2	4.7	^	2.7	3.3	5.1	4.6
		-	2	2	3	2	^	1	2	3	3	^	2	2	3	2
Diseases of the eye and adnexa	**H00–H59**	**3.0**	**2.7**	**2.8**	**2.9**	**2.8**	**2.4**	**2.7**	**2.5**	**3.2**	**2.8**	**2.7**	**2.7**	**2.6**	**3.0**	**2.8**
		2	**2**	**2**	**1**	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Diseases of the ear and mastoid process	**H60–H95**	**1.5**	**1.7**	**2.3**	**3.9**	**2.3**	**1.5**	**1.8**	**2.2**	**2.9**	**2.1**	**1.5**	**1.7**	**2.2**	**3.4**	**2.2**
		1	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Diseases of the circulatory system	**I00–I99**	**2.3**	**5.0**	**6.2**	**8.5**	**7.4**	**2.7**	**4.3**	**5.7**	**8.9**	**7.6**	**2.5**	**4.7**	**6.0**	**8.6**	**7.5**
		1	**2**	**3**	**4**	**3**	**1**	**1**	**2**	**4**	**3**	**1**	**2**	**2**	**4**	**3**
Hypertensive diseases	I10–I15	2.7	2.3	2.5	3.8	2.8	2.6	1.4	1.7	3.3	2.4	2.7	1.8	2.1	3.4	2.6
		2	1	1	1	1	2	1	1	1	1	2	1	1	1	1
Angina pectoris	I20	-	3.0	3.8	4.5	4.2	-	3.3	3.1	3.5	3.4	-	3.0	3.6	4.2	3.9
		-	2	2	2	2	-	1	2	2	2	-	2	2	2	2
Acute myocardial infarction	I21–I22	-	5.3	4.9	7.0	6.0	-	3.8	4.8	8.2	7.2	-	5.0	4.9	7.4	6.4
		-	3	3	4	3	-	3	3	5	4	-	3	3	4	4
Other ischaemic heart disease	I23–I25	-	3.7	4.6	5.2	4.9	^	2.8	3.6	3.8	3.7	^	3.5	4.4	4.9	4.6
		-	2	1	2	2	^	1	2	2	2	^	1	1	2	2
Pulmonary heart disease and diseases of pulmonary circulation	I26–I28	-	6.6	6.3	8.4	7.3	9.9	4.2	6.9	9.0	7.5	9.9	5.2	6.5	8.8	7.4
		-	4	4	6	5	3	3	4	6	5	3	3	4	6	5
Conduction disorders and cardiac arrhythmias	I44–I49	2.9	3.0	3.0	4.7	4.0	3.1	2.4	2.8	4.8	4.2	3.0	2.8	3.0	4.7	4.1
		2	1	1	2	2	2	1	1	3	2	2	1	1	2	2
Heart failure	I50	^	10.1	8.3	9.9	9.7	24.3	12.5	10.3	11.0	11.0	22.6	11.1	9.0	10.4	10.3
		^	7	6	6	6	8	5	6	7	7	15	6	6	7	6
Cerebrovascular disease	I60–I69	11.0	11.7	14.8	15.6	15.2	10.6	10.0	12.8	16.6	15.3	10.9	10.8	14.0	16.0	15.2
		6	7	7	7	7	3	6	6	8	8	5	6	7	8	7
Atherosclerosis (non-coronary)	I70	-	7.5	12.2	14.7	13.9	-	10.1	8.6	15.0	13.5	-	8.4	11.2	14.8	13.7
		-	4	7	7	7	-	5	4	7	6	-	4	6	7	7
Diseases of the respiratory system	**J00–J99**	**2.5**	**3.2**	**6.5**	**9.7**	**6.7**	**2.5**	**2.8**	**6.0**	**9.9**	**6.7**	**2.5**	**3.0**	**6.2**	**9.8**	**6.7**
		1	**1**	**3**	**6**	**3**	**1**	**1**	**3**	**6**	**3**	**1**	**1**	**3**	**6**	**3**
Acute upper respiratory infections and influenza	J00–J11	1.9	1.8	4.7	9.5	3.2	1.7	1.8	3.6	9.1	3.2	1.8	1.8	4.1	9.3	3.2
		1	1	2	5	1	1	1	2	5	1	1	1	2	5	1
Pneumonia	J12–J18	4.1	6.1	9.1	12.1	10.4	4.1	5.9	8.7	12.3	10.5	4.1	6.0	8.9	12.2	10.5
		2	4	6	7	6	3	4	5	7	6	2	4	5	7	6
Chronic diseases of tonsils and adenoids	J35	1.1	1.2	1.1	^	1.1	1.2	1.2	1.6	^	1.2	1.1	1.2	1.4	3.2	1.2
		1	1	1	^	1	1	1	1	^	1	1	1	1	1	1
Chronic obstructive pulmonary disease and bronchiectasis	J40–J44, J47	3.7	4.4	5.8	7.9	7.4	6.3	4.1	6.4	8.7	8.0	4.9	4.2	6.2	8.3	7.7
		1	3	4	5	5	3	2	4	6	5	2	2	4	5	5
Asthma	J45–J46	1.7	2.1	3.2	4.4	2.3	1.8	2.2	3.1	4.7	2.8	1.8	2.2	3.1	4.6	2.6
		1	1	2	2	1	1	1	2	2	2	1	1	2	2	1
Diseases of the digestive system	**K00–K93**	**2.8**	**4.0**	**5.8**	**8.1**	**5.8**	**3.1**	**3.6**	**5.8**	**8.6**	**5.8**	**2.9**	**3.8**	**5.8**	**8.4**	**5.8**
		2	**2**	**3**	**4**	**3**	**2**	**2**	**3**	**5**	**3**	**2**	**2**	**3**	**4**	**3**
Diseases of oesophagus, stomach and duodenum	K20–K31	2.1	2.5	4.2	7.2	4.6	2.0	2.3	3.9	5.7	3.9	2.1	2.4	4.1	6.5	4.3
		1	1	2	4	2	1	1	2	3	2	1	1	2	3	2
Diseases of appendix	K35–K38	3.0	2.8	4.3	6.7	3.2	3.5	2.7	4.2	8.2	3.3	3.2	2.8	4.3	7.3	3.2
		2	2	3	5	2	3	2	3	6	2	2	2	3	5	2

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

Principal Diagnosis	ICD-10-AM Code	Male					Female					Total In-Patient Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Inguinal hernia	K40	1.9 1	1.3 1	1.6 1	2.9 1	2.3 1	1.7 1	1.1 1	2.1 1	5.6 1	3.6 1	1.9 1	1.3 1	1.6 1	3.2 1	2.4 1
Noninfective enteritis and colitis	K50–K52	3.1 2	6.5 5	7.8 4	11.4 6	7.5 4	4.1 2	6.5 5	7.2 4	9.7 6	7.4 5	3.6 2	6.5 5	7.5 4	10.3 6	7.5 5
Alcoholic liver disease	K70	- -	12.9 7	12.7 8	13.8 7	13.0 7	- -	13.9 7	14.7 9	17.5 11	14.8 8	- -	13.3 7	13.3 8	14.7 7	13.5 7
Cholelithiasis	K80	3.2 2	3.0 2	4.6 3	7.2 5	5.7 4	3.8 3	2.9 2	3.4 2	7.0 4	4.3 2	3.6 3	2.9 2	3.8 2	7.1 5	4.8 3
Diseases of the skin and subcutaneous tissue	**L00–L99**	**2.5 2**	**3.2 2**	**6.3 3**	**9.1 5**	**5.7 3**	**2.7 2**	**2.8 1**	**5.3 3**	**9.8 5**	**6.2 3**	**2.6 2**	**3.0 2**	**5.9 3**	**9.5 5**	**5.9 3**
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02–L03	2.7 2	3.3 2	5.1 3	8.3 5	5.6 3	3.0 2	3.2 2	5.7 3	8.9 5	6.4 3	2.8 2	3.3 2	5.3 3	8.6 5	6.0 3
Decubitus ulcer and pressure area	L89	- -	22.2 8	66.7 26	36.1 16	43.0 17	^ ^	19.0 10	33.0 10	36.6 12	32.2 11	^ ^	21.0 8	56.6 19	36.4 15	38.0 14
Diseases of the musculoskeletal system and connective tissue	**M00–M99**	**3.3 2**	**3.2 1**	**4.8 2**	**7.2 4**	**5.4 2**	**4.1 2**	**2.9 1**	**3.9 2**	**6.8 4**	**5.0 2**	**3.7 2**	**3.0 1**	**4.3 2**	**7.0 4**	**5.2 2**
Rheumatoid arthritis	M05–M06	- -	3.4 4	4.8 2	7.5 4	6.0 3	- -	4.0 3	5.0 2	4.7 4	4.7 3	- -	3.8 3	4.9 2	5.6 4	5.1 3
Coxarthrosis and Gonarthrosis	M16–M17	- -	3.3 3	4.0 3	5.8 4	5.1 4	^ ^	3.3 3	4.2 4	5.9 5	5.3 4	^ ^	3.3 3	4.1 4	5.9 5	5.2 4
Intervertebral disc disorders	M50–M51	^ ^	2.9 2	3.1 2	9.0 5	4.4 2	- -	3.0 2	4.9 2	7.7 5	4.7 2	^ ^	3.0 2	4.0 2	8.3 5	4.6 2
Dorsalgia (back pain)	M54	1.6 1	2.2 1	2.5 1	6.6 2	3.7 1	2.8 2	2.0 1	2.9 1	8.1 3	4.4 1	2.3 1	2.1 1	2.7 1	7.5 3	4.1 1
Diseases of the genitourinary system	**N00–N99**	**2.4 2**	**3.0 1**	**5.0 3**	**9.6 5**	**6.6 3**	**2.7 2**	**2.7 2**	**4.1 3**	**10.1 5**	**5.8 3**	**2.5 2**	**2.8 2**	**4.5 3**	**9.9 5**	**6.1 3**
Chronic kidney disease	N18	5.1 4	6.6 6	7.6 6	11.6 5	9.3 5	4.3 2	6.1 7	7.1 5	10.0 4	7.8 4	4.6 3	6.4 6	7.4 5	11.1 4	8.8 5
Urolithiasis	N20–N23	2.1 1	2.0 1	2.5 2	4.0 2	2.6 2	3.8 2	2.4 2	2.8 2	3.7 2	2.8 2	2.9 2	2.2 1	2.6 2	3.9 2	2.7 2
Hyperplasia of prostate	N40	- -	^ ^	3.4 3	4.5 3	4.2 3	- -	- -	- -	- -	- -	- -	^ ^	3.4 3	4.5 3	4.2 3
Disorders of breast	N60–N64	2.8 3	1.2 1	^ ^	^ ^	1.5 1	1.9 1	1.7 1	1.9 1	2.5 1	1.9 1	2.3 2	1.7 1	1.9 1	2.4 1	1.9 1
Inflammatory diseases of female pelvic organs	N70–N77	- -	- -	- -	- -	- -	2.4 2	2.4 2	4.2 2	5.3 3	2.9 2	2.4 2	2.4 2	4.2 2	5.3 3	2.9 2
Noninflammatory disorders of female genital tract	N80–N98	- -	- -	- -	- -	- -	1.7 1	2.1 1	2.7 2	3.8 3	2.6 2	1.7 1	2.1 1	2.7 2	3.8 3	2.6 2
Pregnancy, childbirth and the puerperium	**O00–O99**	**- -**	**- -**	**- -**	**- -**	**- -**	**4.0 3**	**2.7 2**	**3.9 3**	**- -**	**2.7 2**	**4.0 3**	**2.7 2**	**3.9 3**	**- -**	**2.7 2**
Gestational [pregnancy induced] hypertension	O13	- -	- -	- -	- -	- -	- -	2.5 1	4.0 2	- -	2.5 1	- -	2.5 1	4.0 2	- -	2.5 1
Diabetes mellitus in pregnancy	O24	- -	- -	- -	- -	- -	- -	2.4 1	3.0 2	- -	2.4 1	- -	2.4 1	3.0 2	- -	2.4 1
Single spontaneous delivery	O80	- -	- -	- -	- -	- -	- -	2.4 2	2.5 2	- -	2.4 2	- -	2.4 2	2.5 2	- -	2.4 2
Single delivery by forceps and vacuum extractor	O81	- -	- -	- -	- -	- -	^ ^	3.3 3	3.3 3	- -	3.3 3	^ ^	3.3 3	3.3 3	- -	3.3 3
Single delivery by caesarean section	O82	- -	- -	- -	- -	- -	- -	4.5 4	5.0 5	- -	4.5 4	- -	4.5 4	5.0 5	- -	4.5 4
Other assisted single delivery	O83	- -	- -	- -	- -	- -	- -	3.0 3	^ ^	- -	3.0 3	- -	3.0 3	^ ^	- -	3.0 3

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

Principal Diagnosis	ICD-10-AM Code	Male					Female					Total In-Patient Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Multiple delivery	O84	-	-	-	-	-	-	5.2	5.3	-	5.2	-	5.2	5.3	-	5.2
		-	-	-	-	-	-	4	5	-	4	-	4	5	-	4
Certain conditions originating in the perinatal period	**P00–P96**	**8.6**	**-**	**-**	**-**	**8.6**	**9.1**	**-**	**-**	**-**	**9.1**	**8.8**	**-**	**-**	**-**	**8.8**
		3	**-**	**-**	**-**	**3**	**3**	**-**	**-**	**-**	**3**	**3**	**-**	**-**	**-**	**3**
Congenital malformations, deformations and chromosomal abnormalities	**Q00–Q99**	**6.9**	**4.4**	**9.2**	**11.7**	**6.8**	**6.3**	**3.7**	**5.1**	**3.3**	**5.7**	**6.6**	**4.0**	**6.8**	**7.2**	**6.3**
		2	**2**	**3**	**4**	**2**	**2**	**2**	**3**	**1**	**2**	**2**	**2**	**3**	**2**	**2**
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	**R00–R99**	**1.7**	**1.5**	**2.3**	**4.7**	**2.9**	**1.9**	**1.6**	**2.1**	**4.4**	**2.7**	**1.8**	**1.6**	**2.2**	**4.6**	**2.8**
		1	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**1**
Pain in throat and chest	R07	1.2	0.9	1.4	2.1	1.4	1.5	0.9	1.3	2.1	1.4	1.3	0.9	1.3	2.1	1.4
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Abdominal and pelvic pain	R10	1.3	1.6	2.1	3.5	2.0	1.5	1.7	2.4	3.3	2.0	1.4	1.7	2.3	3.4	2.0
		1	1	1	2	1	1	1	1	2	1	1	1	1	2	1
Injury, poisoning and certain other consequences of external causes	**S00–T98**	**1.5**	**3.1**	**5.8**	**12.2**	**5.8**	**1.5**	**3.1**	**5.3**	**12.3**	**7.2**	**1.5**	**3.1**	**5.6**	**12.2**	**6.4**
		1	**1**	**2**	**5**	**2**	**1**	**1**	**2**	**7**	**2**	**1**	**1**	**2**	**6**	**2**
Intracranial injury	S06	3.5	8.0	10.1	14.2	10.4	1.6	5.7	10.7	13.0	9.9	2.7	7.3	10.3	13.6	10.2
		1	1	3	6	3	1	1	2	5	3	1	1	3	6	3
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	1.0	2.1	3.2	7.4	3.0	1.0	1.4	2.8	7.6	3.7	1.0	1.9	3.1	7.5	3.3
		1	1	1	2	1	1	1	1	3	1	1	1	1	2	1
Fracture of femur	S72	4.3	8.4	14.3	19.8	17.4	3.4	11.3	10.5	17.3	16.4	4.0	9.2	12.2	18.1	16.7
		2	5	8	13	11	2	7	7	12	11	2	6	7	12	11
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36–T65	1.4	2.4	3.8	7.8	3.1	1.6	2.7	3.8	6.7	3.2	1.5	2.6	3.8	7.2	3.1
		1	1	1	3	1	1	1	1	3	1	1	1	1	3	1
Factors influencing health status and contact with health services[b]	**U00–U49, Z00–Z99**	**3.0**	**17.8**	**18.5**	**21.9**	**16.4**	**2.8**	**1.9**	**13.3**	**25.6**	**8.9**	**2.9**	**3.2**	**16.0**	**23.9**	**11.4**
		2	**3**	**4**	**10**	**4**	**2**	**1**	**4**	**15**	**1**	**2**	**1**	**4**	**13**	**2**
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	10.6	24.3	14.1	30.1	24.7	11.1	1.8	21.3	37.6	29.9	10.8	8.8	16.3	34.7	27.7
		4	4	5	21	12	7	1	5	27	20	5	1	5	25	16

Notes: The calculation of total in-patient length of stay differs in this report compared to previous reports. The length of stay assigned for sameday in-patients has changed in this report from one bed day to 0.5 bed days. This will impact on the total in-patient length of stay resulting in a lower average length of stay compared to previous years (see Section 1.6).

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

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

ǂ Denotes that no breakdown is provided.

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

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

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

Diagnosis	ICD-10-AM Code	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Total Discharges	–	71,972	147,811	241,431	356,637	817,851	57,165	308,251	253,780	300,165	919,361	129,137	456,062	495,211	656,802	1,737,212
All Conditions	–	165,309	338,098	629,804	1,103,934	2,237,145	131,642	819,921	620,856	917,332	2,489,751	296,951	1,158,019	1,250,660	2,021,266	4,726,896
Certain infectious and parasitic diseases	**A00-B99**	**8,941**	**10,531**	**11,082**	**20,378**	**50,932**	**8,389**	**13,783**	**10,161**	**22,288**	**54,621**	**17,330**	**24,314**	**21,243**	**42,666**	**105,553**
Intestinal infectious diseases (including diarrhoea)	A00–A09	2,964	2,344	2,363	3,782	11,453	2,715	4,319	2,964	5,356	15,354	5,679	6,663	5,327	9,138	26,807
Tuberculosis	A15–A19	~	111	79	*	265	~	87	47	*	180	10	198	126	111	445
Septicaemia	A40–A41	160	612	1,741	5,173	7,686	196	845	1,308	4,238	6,587	356	1,457	3,049	9,411	14,273
Human immunodeficiency virus [HIV] disease	B20–B24	†	†	†	†	†	†	†	†	†	†	†	†	†	†	634
Neoplasms	**C00–D48**	**7,922**	**20,085**	**93,398**	**155,749**	**277,154**	**6,588**	**44,893**	**136,930**	**124,573**	**312,984**	**14,510**	**64,978**	**230,328**	**280,322**	**590,138**
Malignant neoplasms	C00–C96	6,975	15,201	81,910	136,648	240,734	5,419	33,667	120,981	110,623	270,690	12,394	48,868	202,891	247,271	511,424
Malignant neoplasm of colon, rectum and anus	C18–C21	0	1,074	8,661	11,858	21,593	~	*	5,599	6,209	12,572	~	*	14,260	18,067	34,165
Malignant neoplasm of trachea, bronchus and lung	C33–C34	0	368	5,204	10,499	16,071	0	559	5,550	8,398	14,507	0	927	10,754	18,897	30,578
Melanoma and other malignant neoplasms of skin	C43–C44	~	*	3,460	12,249	16,512	~	*	2,513	6,336	9,577	~	*	5,973	18,585	26,089
Malignant neoplasm of breast	C50	0	7	80	183	270	0	11,205	39,636	22,256	73,097	0	11,212	39,716	22,439	73,367
Malignant neoplasms of female genital organs	C51–C58	0	0	0	0	0	0	2,884	7,505	6,908	17,297	0	2,884	7,505	6,908	17,297
Malignant neoplasm of prostate	C61	~	*	8,818	25,903	34,770	0	0	0	0	0	~	*	8,818	25,903	34,770
Malignant neoplasm of bladder	C67	45	62	1,146	3,237	4,490	0	47	508	1,071	1,626	45	109	1,654	4,308	6,116
Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81–C96	4,069	3,448	9,990	17,961	35,468	2,535	2,242	6,074	12,105	22,956	6,604	5,690	16,064	30,066	58,424
In situ neoplasms	D00-D09	~	*	653	1,985	2,748	0	1,121	4,318	3,357	8,796	~	*	4,971	5,342	11,544
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10–D48	944	4,777	10,835	17,116	33,672	1,169	10,105	11,631	10,593	33,498	2,113	14,882	22,466	27,709	67,170
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	**D50–D89**	**3,579**	**4,289**	**7,399**	**17,005**	**32,272**	**2,388**	**10,190**	**7,760**	**16,148**	**36,486**	**5,967**	**14,479**	**15,159**	**33,153**	**68,758**
Endocrine, nutritional and metabolic diseases	**E00–E89**	**3,654**	**14,837**	**46,106**	**85,734**	**150,331**	**3,888**	**16,518**	**27,341**	**63,631**	**111,378**	**7,542**	**31,355**	**73,447**	**149,365**	**261,709**
Diabetes mellitus	E10–E14	433	6,020	27,875	61,038	95,366	531	5,872	14,849	36,876	58,128	964	11,892	42,724	97,914	153,494
Cystic fibrosis	E84	509	1,447	141	0	2,097	588	1,229	100	6	1,923	1,097	2,676	241	6	4,020
Mental and behavioural disorders	**F00–F99**	**2,051**	**9,207**	**10,262**	**15,804**	**37,324**	**1,339**	**7,433**	**6,280**	**16,605**	**31,657**	**3,390**	**16,640**	**16,542**	**32,409**	**68,981**
Mental and behavioural disorders due to alcohol	F10	31	3,769	5,773	3,400	12,973	33	1,568	2,277	1,189	5,067	64	5,337	8,050	4,589	18,040
Mental and behavioural disorders due to use of other psychoactive substance	F11–F19	*	2,535	955	*	3,606	~	1,366	327	*	1,824	20	3,901	1,282	227	5,430
Diseases of nervous system	**G00–G99**	**3,947**	**7,313**	**10,059**	**14,581**	**35,900**	**3,054**	**11,028**	**10,529**	**13,321**	**37,932**	**7,001**	**18,341**	**20,588**	**27,902**	**73,832**
Multiple sclerosis	G35	12	1,452	1,056	256	2,776	~	3,084	2,055	489	5,629	13	4,536	3,111	745	8,405
Epilepsy	G40, G41	1,187	1,353	1,008	733	4,281	996	1,428	759	723	3,906	2,183	2,781	1,767	1,456	8,187
Transient cerebral ischaemic attacks and related syndromes	G45	~	*	473	1,247	1,792	~	*	414	1,409	1,904	~	*	887	2,656	3,696
Diseases of the eye and adnexa	**H00–H59**	**1,393**	**3,142**	**8,232**	**24,015**	**36,782**	**1,205**	**3,576**	**6,806**	**30,025**	**41,612**	**2,598**	**6,718**	**15,038**	**54,040**	**78,394**
Diseases of the ear and mastoid process	**H60–H95**	**3,366**	**1,790**	**1,654**	**1,747**	**8,557**	**2,324**	**1,986**	**1,711**	**1,658**	**7,679**	**5,690**	**3,776**	**3,365**	**3,405**	**16,236**
Diseases of the circulatory system	**I00–I99**	**1,999**	**8,392**	**40,370**	**96,135**	**146,896**	**1,886**	**8,465**	**19,697**	**70,851**	**100,899**	**3,885**	**16,857**	**60,067**	**166,986**	**247,795**
Hypertensive diseases	I10–I15	384	2,068	9,710	19,879	32,041	468	2,421	4,912	15,913	23,714	852	4,489	14,622	35,792	55,755
Angina pectoris	I20	0	116	1,270	2,021	3,407	0	43	539	1,087	1,669	0	159	1,809	3,108	5,076
Acute myocardial infarction	I21–I22	0	289	2,448	3,545	6,282	~	*	622	2,090	2,798	~	*	3,070	5,635	9,080
Other ischaemic heart disease	I23–I25	~	*	7,885	13,423	21,927	~	*	2,265	5,911	8,359	6	796	10,150	19,334	30,286
Pulmonary heart disease and diseases of pulmonary circulation	I26–I28	47	277	705	1,412	2,441	52	353	628	1,598	2,631	99	630	1,333	3,010	5,072
Conduction disorders and cardiac arrhythmias	I44–I49	228	1,169	6,318	21,539	29,254	166	766	2,351	16,046	19,329	394	1,935	8,669	37,585	48,583
Heart failure	I50	17	153	1,360	9,841	11,371	31	205	721	8,455	9,412	48	358	2,081	18,296	20,783
Cerebrovascular disease	I60–I69	118	480	2,094	5,765	8,457	122	421	1,353	4,609	6,505	240	901	3,447	10,374	14,962
Atherosclerosis (non-coronary)	I70	0	48	767	2,088	2,903	0	26	277	1,056	1,359	0	74	1,044	3,144	4,262
Diseases of the respiratory system	**J00–J99**	**13,285**	**10,193**	**18,016**	**48,947**	**90,441**	**10,270**	**13,278**	**17,343**	**45,496**	**86,387**	**23,555**	**23,471**	**35,359**	**94,443**	**176,828**
Acute upper respiratory infections and influenza	J00–J11	4,304	1,362	852	1,651	8,169	3,231	2,694	1,061	1,856	8,842	7,535	4,056	1,913	3,507	17,011
Pneumonia	J12–J18	710	1,248	2,357	8,709	13,024	705	1,173	1,900	7,957	11,735	1,415	2,421	4,257	16,666	24,759
Chronic diseases of tonsils and adenoids	J35	1,948	514	70	16	2,548	1,697	1,096	82	25	2,900	3,645	1,610	152	41	5,448
Chronic obstructive pulmonary disease and bronchiectasis	J40–J44, J47	102	455	3,613	13,338	17,508	134	559	3,959	12,307	16,959	236	1,014	7,572	25,645	34,467
Asthma	J45–J46	1,437	942	1,611	1,043	5,033	827	2,045	2,371	1,605	6,848	2,264	2,987	3,982	2,648	11,881
Diseases of the digestive system	**K00–K93**	**7,709**	**42,726**	**58,546**	**63,589**	**172,570**	**6,212**	**46,560**	**56,702**	**59,824**	**169,298**	**13,921**	**89,286**	**115,248**	**123,413**	**341,868**

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

Diagnosis	ICD-10-AM Code	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Diseases of oesophagus, stomach and duodenum	K20–K31	831	11,094	17,965	18,293	48,183	695	11,391	17,752	16,912	46,750	1,526	22,485	35,717	35,205	94,933
Diseases of appendix	K35–K38	1,211	1,986	401	199	3,797	957	1,896	376	136	3,365	2,168	3,882	777	335	7,162
Inguinal hernia	K40	512	735	1,374	1,659	4,280	102	59	75	124	360	614	794	1,449	1,783	4,640
Noninfective enteritis and colitis	K50–K52	617	8,300	4,010	1,773	14,700	461	7,470	3,957	2,037	13,925	1,078	15,770	7,967	3,810	28,625
Alcoholic liver disease	K70	0	507	1,583	674	2,764	0	275	684	227	1,186	0	782	2,267	901	3,950
Cholelithiasis	K80	23	560	1,183	2,196	3,962	30	2,510	2,064	2,346	6,950	53	3,070	3,247	4,542	10,912
Diseases of the skin and subcutaneous tissue	**L00–L99**	**2,431**	**14,724**	**12,962**	**17,248**	**47,365**	**2,199**	**15,879**	**12,676**	**16,767**	**47,521**	**4,630**	**30,603**	**25,638**	**34,015**	**94,886**
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02–L03	562	1,705	2,056	3,580	7,903	510	1,066	1,406	3,505	6,487	1,072	2,771	3,462	7,085	14,390
Decubitus ulcer and pressure area	L89	15	132	442	2,011	2,600	29	75	263	2,027	2,394	44	207	705	4,038	4,994
Diseases of the musculoskeletal system and connective tissue	**M00–M99**	**2,475**	**10,008**	**18,149**	**21,481**	**52,113**	**3,171**	**16,313**	**24,641**	**32,530**	**76,655**	**5,646**	**26,321**	**42,790**	**54,011**	**128,768**
Rheumatoid arthritis	M05–M06	~	*	1,101	1,128	2,600	~	*	2,116	2,187	5,005	~	*	3,217	3,315	7,605
Coxarthrosis and Gonarthrosis	M16–M17	~	*	2,026	3,207	5,529	~	*	2,509	5,068	7,853	~	*	4,535	8,275	13,382
Intervertebral disc disorders	M50–M51	~	*	895	708	2,311	~	*	1,033	986	2,864	7	1,546	1,928	1,694	5,175
Dorsalgia (back pain)	M54	115	1,793	2,844	2,480	7,232	133	4,642	4,399	4,348	13,522	248	6,435	7,243	6,828	20,754
Diseases of the genitourinary system	**N00–N99**	**5,567**	**16,101**	**38,273**	**87,297**	**147,238**	**4,303**	**36,105**	**40,695**	**60,250**	**141,353**	**9,870**	**52,206**	**78,968**	**147,547**	**288,591**
Chronic kidney disease	N18	518	8,561	24,724	53,159	86,962	810	7,446	13,662	27,101	49,019	1,328	16,007	38,386	80,260	135,981
Urolithiasis	N20–N23	84	1,652	2,311	1,295	5,342	62	1,081	1,196	690	3,029	146	2,733	3,507	1,985	8,371
Hyperplasia of prostate	N40	0	87	1,569	4,379	6,035	0	0	0	0	0	0	87	1,569	4,379	6,035
Disorders of breast	N60–N64	7	87	68	36	198	14	1,836	1,989	623	4,462	21	1,923	2,057	659	4,660
Inflammatory diseases of female pelvic organs	N70–N77	0	0	0	0	0	51	2,597	808	403	3,859	51	2,597	808	403	3,859
Noninflammatory disorders of female genital tract	N80–N98	0	0	0	0	0	327	16,155	14,237	5,249	35,968	327	16,155	14,237	5,249	35,968
Pregnancy, childbirth and the puerperium	**O00–O99**	**0**	**0**	**0**	**0**	**0**	**21**	**266,027**	**1,711**	**2**	**267,761**	**21**	**266,027**	**1,711**	**~**	**267,761**
Gestational [pregnancy induced] hypertension	O13	0	0	0	0	0	0	5,880	55	0	5,935	0	5,880	55	0	5,935
Diabetes mellitus in pregnancy	O24	0	0	0	0	0	~	11,036	*	0	11,176	~	11,036	*	0	11,176
Single spontaneous delivery	O80	0	0	0	0	0	0	29,276	63	0	29,339	0	29,276	63	0	29,339
Single delivery by forceps and vacuum extractor	O81	0	0	0	0	0	1	8,795	23	0	8,819	~	8,795	23	0	8,819
Single delivery by caesarean section	O82	0	0	0	0	0	0	19,244	174	0	19,418	0	19,244	174	0	19,418
Other assisted single delivery	O83	0	0	0	0	0	0	*	~	0	905	0	*	~	0	905
Multiple delivery	O84	0	0	0	0	0	0	1,101	27	0	1,128	0	1,101	27	0	1,128
Certain conditions originating in the perinatal period	**P00–P96**	**16,254**	**~**	**~**	**0**	**16,263**	**12,318**	**~**	**~**	**0**	**12,323**	**28,572**	**8**	**6**	**0**	**28,586**
Congenital malformations, deformations and chromosomal abnormalities	**Q00–Q99**	**12,458**	**2,124**	**1,322**	**567**	**16,471**	**9,564**	**2,601**	**1,532**	**596**	**14,293**	**22,022**	**4,725**	**2,854**	**1,163**	**30,764**
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	**R00–R99**	**13,816**	**26,607**	**41,069**	**74,611**	**156,103**	**11,879**	**54,692**	**41,149**	**70,167**	**177,887**	**25,695**	**81,299**	**82,218**	**144,778**	**333,990**
Pain in throat and chest	R07	157	3,664	6,159	4,208	14,188	162	3,918	5,244	4,246	13,570	319	7,582	11,403	8,454	27,758
Abdominal and pelvic pain	R10	1,153	3,022	2,714	2,043	8,932	1,443	14,841	4,580	2,802	23,666	2,596	17,863	7,294	4,845	32,598
Injury, poisoning and certain other consequences of external causes	**S00–T98**	**8,854**	**24,542**	**15,504**	**19,711**	**68,611**	**5,972**	**12,374**	**11,485**	**23,205**	**53,036**	**14,826**	**36,916**	**26,989**	**42,916**	**121,647**
Intracranial injury	S06	307	1,144	886	1,233	3,570	183	439	367	1,023	2,012	490	1,583	1,253	2,256	5,582
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	2,249	4,294	1,908	3,062	11,513	1,486	1,312	988	3,121	6,907	3,735	5,606	2,896	6,183	18,420
Fracture of femur	S72	104	163	278	1,608	2,153	58	64	352	3,606	4,080	162	227	630	5,214	6,233
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36–T65	301	2,154	861	388	3,704	421	2,524	1,190	444	4,579	722	4,678	2,051	832	8,283
External causes of morbidity and mortality	**U50–Y98**	**21,814**	**46,677**	**31,771**	**49,699**	**149,961**	**15,159**	**28,906**	**26,370**	**58,953**	**129,388**	**36,973**	**75,583**	**58,141**	**108,652**	**279,349**
Transport accidents	V01–V99	529	1,758	847	489	3,623	337	967	420	376	2,100	866	2,725	1,267	865	5,723
Factors influencing health status and contact with health services[a]	**U00–U49, Z00–Z99**	**23,794**	**64,806**	**165,625**	**289,636**	**543,861**	**19,513**	**209,310**	**159,336**	**190,442**	**578,601**	**43,307**	**274,116**	**324,961**	**480,078**	**1,122,462**
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	3,568	6,636	37,662	68,937	116,803	2,489	16,549	57,758	51,749	128,545	6,057	23,185	95,420	120,686	245,348

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

3.4.4 Total Discharges by Principal Procedure, Sex and Age Group

In 2018, 79.4 per cent of total discharges had a principal procedure recorded (see Table 3.4). Discussion of procedures is confined to ACHI chapter level.

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

- Procedures from the chapter *Non-invasive, cognitive and other interventions, not elsewhere classified* accounted for 26.3 per cent of total discharges with a principal procedure reported. Over 38 per cent of discharges aged less than 15 years, 20.8 per cent aged between 15–44 years, 24.5 per cent aged between 45–64 years and 29.2 per cent aged 65 years and over had a procedure from this chapter recorded as a principal procedure.
- Over 63 per cent of total discharges with a principal procedure from the chapter *Procedures on urinary system* were male discharges. Procedures from this chapter accounted for 15.1 per cent of total discharges with a principal procedure reported.
- Over 27 per cent of female discharges aged between 15–44 years who underwent a procedure recorded a principal procedure from the chapter *Obstetric procedures*.
- Procedures from the chapter *Procedures on digestive system* accounted for 13.3 per cent of total discharges with a principal procedure reported, over 70 per cent of these were aged 45 years and over.

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

Table 3.15 presents the in-patient mean and median length of stay for principal procedure by sex and age group. The analysis presented here includes total in-patient (sameday and overnight) discharges,[38] and excludes day patients. These measures include pre-operative and post-operative length of stay. It should also be noted that this analysis by length of stay does not take into account the status of the patient on discharge. For example, a patient may be transferred to another facility on discharge. Care must be taken, therefore, in interpreting the data on length of stay presented in Table 3.15, in the absence of information on discharge destination.[39]

- At chapter level, *Radiation oncology procedures* reported the longest in-patient mean length of stay at 18.0 days. It should be noted that the majority

[38] The calculation of total in-patient length of stay differs in this report compared to previous reports. The length of stay assigned for sameday in-patients has changed in this report from one bed day to 0.5 bed days. This will impact on the total in-patient length of stay resulting in a lower average length of stay compared to previous years (see Section 1.6).

[39] See Section Two for details of discharge destination.

of discharges with *Radiation oncology procedures* recorded as a principal procedure were day patients[40] and are therefore not included in Table 3.15.

- The longest in-patient mean length of stay for those aged less than 15 years and those aged between 15–44 years was reported for the chapter *Procedures on respiratory system* at 18.0 days and 14.3 days respectively. For the two older age groups the longest in-patient mean length of stay was reported for the chapter *Radiation oncology procedures* at 18.1 days for those aged between 45–64 years and 19.3 days for those aged 65 years and over.
- The shortest in-patient mean lengths of stay were reported for the chapters *Procedures on ear and mastoid process* at 2.3 days and *Procedures on nose, mouth and pharynx* at 2.5 days for total discharges.

3.4.6 All-Listed Procedures by Sex and Age Group

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

- Over 2.5 million procedures were reported for total discharges.
- Procedures within the chapter *Non-invasive, cognitive and other interventions, not elsewhere classified* accounted for 1,125,498 of all-listed procedures or 44.7 per cent of all procedures reported for total discharges.
- Males accounted for over 66 per cent of procedures from the chapter *Procedures on cardiovascular system*.
- Total discharges aged less than 15 years accounted for almost 43 per cent of procedures from the chapter *Procedures on ear and mastoid process*.

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

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

Principal Procedure	Procedure Block	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Total Discharges	-	71,972	147,811	241,431	356,637	817,851	57,165	308,251	253,780	300,165	919,361	129,137	456,062	495,211	656,802	1,737,212
All Principal Procedures	0001–2016	42,604	117,459	204,153	306,905	671,121	32,361	206,432	216,078	253,095	707,966	74,965	323,891	420,231	560,000	1,379,087
Procedures on nervous system	**0001–0086**	**858**	**3,241**	**4,378**	**3,235**	**11,712**	**691**	**4,444**	**6,197**	**5,077**	**16,409**	**1,549**	**7,685**	**10,575**	**8,312**	**28,121**
Lumbar puncture	0030	659	722	549	427	2,357	500	1,204	672	427	2,803	1,159	1,926	1,221	854	5,160
Procedures on endocrine system	**0110–0129**	**30**	**134**	**213**	**131**	**508**	**22**	**461**	**617**	**363**	**1,463**	**52**	**595**	**830**	**494**	**1,971**
Procedures on eye and adnexa	**0160–0256**	**628**	**1,857**	**5,926**	**17,235**	**25,646**	**543**	**1,493**	**4,444**	**21,979**	**28,459**	**1,171**	**3,350**	**10,370**	**39,214**	**54,105**
Lens extraction	0195–0202	30	117	1,018	4,721	5,886	22	103	1,164	6,637	7,926	52	220	2,182	11,358	13,812
Procedures on ear and mastoid process	**0300–0333**	**1,979**	**1,117**	**858**	**745**	**4,699**	**1,418**	**1,053**	**881**	**574**	**3,926**	**3,397**	**2,170**	**1,739**	**1,319**	**8,625**
Myringotomy	0309	1,217	110	75	63	1,465	820	128	67	43	1,058	2,037	238	142	106	2,523
Procedures on nose, mouth and pharynx	**0370–0422**	**2,424**	**2,936**	**2,434**	**1,828**	**9,622**	**1,923**	**3,227**	**2,169**	**1,401**	**8,720**	**4,347**	**6,163**	**4,603**	**3,229**	**18,342**
Tonsillectomy or adenoidectomy	0412	1,467	401	49	14	1,931	1,289	948	35	14	2,286	2,756	1,349	84	28	4,217
Dental services	**0450–0490**	**1,841**	**808**	**267**	**141**	**3,057**	**1,549**	**1,064**	**245**	**112**	**2,970**	**3,390**	**1,872**	**512**	**253**	**6,027**
Procedures on respiratory system	**0520–0571**	**2,104**	**1,990**	**4,220**	**6,715**	**15,029**	**1,624**	**1,746**	**3,740**	**5,639**	**12,749**	**3,728**	**3,736**	**7,960**	**12,354**	**27,778**
Bronchoscopy with/without biopsy	0543–0544, 41892-01[0545]	181	759	1,834	2,653	5,427	139	679	1,773	2,262	4,853	320	1,438	3,607	4,915	10,280
Procedures on cardiovascular system	**0600–0777**	**773**	**6,369**	**18,172**	**16,023**	**41,337**	**758**	**3,393**	**9,200**	**9,295**	**22,646**	**1,531**	**9,762**	**27,372**	**25,318**	**63,983**
Coronary angiography	0668	72	588	4,391	4,794	9,845	34	229	2,225	3,174	5,662	106	817	6,616	7,968	15,507
Transluminal coronary angioplasty with/without stenting	0670–0671	0	203	2,022	2,320	4,545	0	42	435	905	1,382	0	245	2,457	3,225	5,927
CABG	0672–0679	0	*	*	402	743	0	~	*	56	98	0	20	363	458	841
Leg varicose vein ligation	0727–0728	0	432	648	337	1,417	0	873	1,124	512	2,509	0	1,305	1,772	849	3,926
Procedures on blood and blood-forming organs	**0800–0817**	**140**	**414**	**967**	**1,349**	**2,870**	**109**	**510**	**962**	**934**	**2,515**	**249**	**924**	**1,929**	**2,283**	**5,385**
Procedures on digestive system	**0850–1011**	**2,714**	**21,792**	**32,929**	**33,389**	**90,824**	**1,911**	**27,296**	**33,639**	**29,922**	**92,768**	**4,625**	**49,088**	**66,568**	**63,311**	**183,592**
Fibreoptic colonoscopy with/without excision	0905, 0911	60	7,698	13,849	14,122	35,729	45	9,339	14,531	12,512	36,427	105	17,037	28,380	26,634	72,156
Appendicectomy	0926	1,143	1,825	335	111	3,414	922	1,805	303	75	3,105	2,065	3,630	638	186	6,519
Procedures for haemorrhoids	0941	~	887	910	*	2,190	~	964	800	*	2,167	~	1,851	1,710	*	4,357
Cholecystectomy	0965	8	302	551	468	1,329	15	1,554	1,255	507	3,331	23	1,856	1,806	975	4,660
Division of abdominal adhesions	0986	6	17	49	68	140	14	250	138	89	491	20	267	187	157	631
Repair of inguinal and obstructed hernia	0990, 0997	395	678	1,307	1,355	3,735	91	83	100	176	450	486	761	1,407	1,531	4,185
Panendoscopy with/without excision	1005–1008	375	7,545	11,124	11,268	30,312	339	9,924	12,674	11,522	34,459	714	17,469	23,798	22,790	64,771
Procedures on urinary system	**1040–1129**	**792**	**16,630**	**40,180**	**74,197**	**131,799**	**947**	**13,988**	**24,251**	**36,756**	**75,942**	**1,739**	**30,618**	**64,431**	**110,953**	**207,741**
Examination procedures on bladder (includes cystoscopy)	1089	72	1,151	3,133	6,305	10,661	61	1,280	2,241	2,643	6,225	133	2,431	5,374	8,948	16,886
Procedures on male genital organs	**1160–1203**	†	†	†	†	†	†	†	†	†	†	**3,061**	**1,385**	**2,762**	**2,852**	**10,060**
Prostatectomy	1165–1167	0	~	*	695	1,135	0	0	0	0	0	0	~	*	695	1,135
Circumcision	30653-00[1196]	1,372	512	263	127	2,274	0	0	0	0	0	1,372	512	263	127	2,274
Gynaecological procedures	**1240–1299**	†	†	†	†	†	†	†	†	†	†	**91**	**14,413**	**10,855**	**3,063**	**28,422**
Oophorectomy and salpingo-oophorectomy	1243, 1252	0	0	0	0	0	15	385	418	120	938	15	385	418	120	938
Salpingectomy	1251	0	0	0	0	0	~	207	39	~	250	~	207	39	~	250
Examination procedures on uterus	1259	0	0	0	0	0	~	2,376	3,607	*	6,786	~	2,376	3,607	*	6,786
Curettage and evacuation of uterus	1265	0	0	0	0	0	~	5,473	2,170	*	8,027	~	5,473	2,170	*	8,027
Hysterectomy	1268–1269	0	0	0	0	0	0	487	1,271	592	2,350	0	487	1,271	592	2,350
Repair of prolapse of uterus, pelvic floor or enterocele	1283	0	0	0	0	0	~	*	387	297	784	~	*	387	297	784
Obstetric procedures	**1330–1347**	**0**	**0**	**0**	**0**	**0**	**~**	**56,166**	*	**0**	**56,457**	**~**	**56,166**	*	**0**	**56,457**
Analgesia and anaesthesia during labour and delivery procedure	1333	0	0	0	0	0	0	2,735	8	0	2,743	0	2,735	8	0	2,743

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

Principal Procedure	Procedure Block	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Medical or surgical induction of labour	1334	0	0	0	0	0	0	4,155	12	0	4,167	0	4,155	12	0	4,167
Medical or surgical augmentation of labour	1335	0	0	0	0	0	0	*	~	0	1,762	0	*	~	0	1,762
Forceps delivery	1337	0	0	0	0	0	0	*	~	0	1,972	0	*	~	0	1,972
Vacuum extraction	1338	0	0	0	0	0	~	6,469	*	0	6,487	~	6,469	*	0	6,487
Breech delivery and extraction	1339	0	0	0	0	0	0	59	0	0	59	0	59	0	0	59
Caesarean section	1340	0	0	0	0	0	0	19,928	200	0	20,128	0	19,928	200	0	20,128
Episiotomy associated with delivery	90472-00[1343]	0	0	0	0	0	0	3,258	8	0	3,266	0	3,258	8	0	3,266
Postpartum suture	1344	0	0	0	0	0	0	13,938	29	0	13,967	0	13,938	29	0	13,967
Procedures on musculoskeletal system	**1360–1580**	**3,582**	**10,245**	**9,652**	**9,117**	**32,596**	**3,027**	**6,359**	**12,548**	**15,180**	**37,114**	**6,609**	**16,604**	**22,200**	**24,297**	**69,710**
Arthroplasty of hip	1489	~	*	726	1,486	2,322	~	*	656	2,337	3,082	7	192	1,382	3,823	5,404
Arthroplasty of knee	1518–1519	0	12	312	607	931	0	21	474	932	1,427	0	33	786	1,539	2,358
Dermatological and plastic procedures	**1600–1718**	**3,200**	**16,712**	**13,454**	**16,794**	**50,160**	**2,550**	**17,992**	**13,889**	**13,863**	**48,294**	**5,750**	**34,704**	**27,343**	**30,657**	**98,454**
Excision of lesion(s) of skin and subcutaneous tissue	1620	512	4,632	5,680	8,570	19,394	415	6,506	5,940	6,618	19,479	927	11,138	11,620	15,188	38,873
Other debridement of skin and subcutaneous tissue	1628	199	555	329	315	1,398	129	172	209	254	764	328	727	538	569	2,162
Skin graft	1640–1650	27	89	67	76	259	11	42	45	67	165	38	131	112	143	424
Procedures on breast	**1740–1759**	**~**	**79**	**41**	*****	**160**	**~**	**3,748**	**5,026**	*****	**10,953**	**9**	**3,827**	**5,067**	**2,210**	**11,113**
Breast biopsy	1743–1744	0	25	24	21	70	~	2,606	3,404	*	7,632	~	2,631	3,428	*	7,702
Mastectomy	1747–1748	~	*	6	11	41	0	218	534	313	1,065	~	*	540	324	1,106
Radiation oncology procedures[a]	**1786–1799**	**334**	**2,829**	**18,752**	**36,207**	**58,122**	**347**	**7,794**	**28,046**	**21,664**	**57,851**	**681**	**10,623**	**46,798**	**57,871**	**115,973**
Non-invasive, cognitive and other interventions, not elsewhere classified	**1820–1922**	**16,016**	**27,603**	**46,309**	**82,577**	**172,505**	**12,970**	**39,841**	**56,774**	**81,064**	**190,649**	**28,986**	**67,444**	**103,083**	**163,641**	**363,154**
Administration of blood and blood products	1893	1,973	1,475	3,130	7,835	14,413	1,253	2,144	3,021	6,332	12,750	3,226	3,619	6,151	14,167	27,163
Conduction anaesthesia	1909	~	9	17	*	36	0	72	7	12	91	~	81	24	*	127
Cerebral anaesthesia	1910	20	19	19	27	85	12	17	42	18	89	32	36	61	45	174
Imaging services[b]	**1940–2016**	**2,125**	**1,320**	**2,638**	**4,334**	**10,417**	**1,874**	**1,442**	**2,306**	**4,035**	**9,657**	**3,999**	**2,762**	**4,944**	**8,369**	**20,074**
Computerised tomography scan	1952–1966	245	373	853	1,480	2,951	184	301	776	923	2,184	429	674	1,629	2,403	5,135
Magnetic resonance imaging	2015	1,374	138	75	69	1,656	1,068	153	88	63	1,372	2,442	291	163	132	3,028

Notes:
~ Denotes five or fewer discharges reported to HIPE.
* Further suppression required to prevent disclosure of five or fewer discharges.
ǂ Denotes that no breakdown is provided.
a From 2015 this data includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.
b See Appendix V for information on updated Australian Coding Standard (ACS) 0042 *Procedures normally not coded* in ICD-10-AM 8th edition.

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

Principal Procedure	Procedure Block	Male					Female					Total In-Patient Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Total In-Patient Discharges	Mean	3.4	3.8	6.0	9.3	6.5	3.4	2.8	5.1	9.5	5.2	3.4	3.0	5.6	9.4	5.7
	Median	1	1	2	4	2	1	2	2	5	2	1	2	2	4	2
All Principal Procedures	**0001–2016**	**5.5**	**5.7**	**8.8**	**12.4**	**9.5**	**5.7**	**3.9**	**7.5**	**12.8**	**7.6**	**5.6**	**4.4**	**8.2**	**12.6**	**8.4**
		2	**2**	**4**	**7**	**4**	**2**	**3**	**4**	**7**	**4**	**2**	**3**	**4**	**7**	**4**
Procedures on nervous system	**0001–0086**	6.0	7.9	9.2	15.9	9.7	6.1	5.9	9.6	15.6	9.0	6.0	6.8	9.4	15.7	9.4
		4	4	5	7	5	4	3	5	7	4	4	3	5	7	4
Lumbar puncture	0030	4.9	7.3	12.1	23.7	10.5	5.2	4.6	9.0	23.0	8.6	5.0	5.6	10.4	23.3	9.5
		4	4	7	13	5	4	3	5	12	4	4	3	6	12	5
Procedures on endocrine system	**0110–0129**	**4.0**	**3.8**	**4.9**	**7.8**	**5.2**	**1.8**	**3.9**	**3.1**	**6.6**	**4.1**	**3.1**	**3.9**	**3.6**	**6.9**	**4.4**
		2	**2**	**3**	**4**	**3**	**1**	**2**	**2**	**3**	**2**	**1**	**2**	**2**	**3**	**2**
Procedures on eye and adnexa	**0160–0256**	**3.1**	**4.0**	**2.8**	**3.4**	**3.3**	**3.0**	**2.3**	**2.6**	**3.7**	**3.1**	**3.0**	**3.4**	**2.7**	**3.5**	**3.2**
		1	**2**	**2**	**2**	**2**	**1**	**1**	**2**	**2**	**1**	**1**	**2**	**2**	**2**	**2**
Lens extraction	0195–0202	1.4	2.3	2.1	3.5	3.0	1.6	1.1	1.7	2.9	2.5	1.5	2	1.9	3.2	2.8
		1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
Procedures on ear and mastoid process	**0300–0333**	**1.3**	**2.5**	**1.8**	**7.5**	**2.5**	**1.2**	**1.9**	**2.6**	**3.6**	**2.0**	**1.2**	**2.3**	**2.2**	**5.9**	**2.3**
		1	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**1**
Myringotomy	0309	1.4	1.5	2.1	3.1	1.5	1.1	1.8	1.7	6.5	1.4	1.3	1.6	2.0	4.3	1.4
		1	1	2	3	1	1	1	1	7	1	1	1	2	5	1
Procedures on nose, mouth and pharynx	**0370–0422**	**1.6**	**1.8**	**4.2**	**7.3**	**2.8**	**1.4**	**1.6**	**3.4**	**7.2**	**2.2**	**1.5**	**1.7**	**3.9**	**7.3**	**2.5**
		1	**1**	**1**	**3**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**3**	**1**
Tonsillectomy or adenoidectomy	0412	1.2	1.2	2.1	8.3	1.3	1.1	1.2	1.8	5.7	1.2	1.2	1.2	2	7.1	1.2
		1	1	1	3	1	1	1	1	1	1	1	1	1	1	1
Dental services	**0450–0490**	**1.9**	**4.6**	**4.4**	**5.4**	**3.5**	**1.4**	**1.8**	**8.5**	**11.0**	**3.6**	**1.7**	**3.2**	**6.5**	**7.4**	**3.5**
		1	**2**	**2**	**1**	**1**	**1**	**1**	**2**	**4**	**1**	**1**	**1**	**2**	**2**	**1**
Procedures on respiratory system	**0520–0571**	**18.4**	**13.8**	**16.2**	**18.1**	**17.2**	**17.6**	**15.0**	**15.3**	**17.1**	**16.6**	**18.0**	**14.3**	**15.8**	**17.6**	**16.9**
		8	**6**	**8**	**10**	**9**	**9**	**7**	**8**	**10**	**9**	**9**	**7**	**8**	**10**	**9**
Bronchoscopy with/without biopsy	0543–0544, 41892-1 [0545]	17.5	17.4	12.9	17.6	16.2	9.0	12.3	12.0	15.1	13.5	13.9	15.3	12.5	16.6	15.1
		3	8	9	13	10	4	9	9	11	10	3	8	9	12	10
Procedures on cardiovascular system	**0600–0777**	**11.9**	**7.0**	**6.8**	**8.1**	**7.7**	**10.8**	**5.9**	**5.6**	**8.6**	**7.6**	**11.4**	**6.6**	**6.5**	**8.3**	**7.6**
		6	**2**	**3**	**4**	**3**	**6**	**2**	**2**	**4**	**3**	**6**	**2**	**2**	**4**	**3**
Coronary angiography	0668	3.3	4.5	4.8	6.1	5.4	2.3	4.7	4.0	6.1	5.2	3.1	4.6	4.6	6.1	5.3
		1	2	2	3	3	1	3	2	3	3	1	2	2	3	3
Transluminal coronary angioplasty with/without stenting	0670–0671	-	4.8	3.3	4.2	3.8	-	2.8	3.3	5.2	4.5	-	4.4	3.3	4.5	4
		-	2	2	2	2	-	2	2	2	2	-	2	2	2	2
CABG	0672–0679	-	13.9	16.3	17.1	16.7	-	^	15.8	17.3	16.5	-	13.3	16.2	17.1	16.6
		-	11	10	13	11	-	^	11	12	11	-	11	10	12	11
Leg varicose vein ligation	0727–0728	-	1.3	1.7	3.2	2.0	-	0.9	1.0	1.0	1.0	-	1.1	1.3	2.0	1.4
		-	1	1	1	1	-	1	1	1	1	-	1	1	1	1
Procedures on blood and blood-forming organs	**0800–0817**	**12.2**	**15.2**	**16.6**	**14.8**	**15.4**	**12.6**	**12.7**	**10.1**	**11.5**	**11.2**	**12.4**	**14.0**	**13.4**	**13.4**	**13.5**
		5	**8**	**9**	**9**	**8**	**6**	**5**	**4**	**6**	**5**	**6**	**6**	**6**	**8**	**7**
Procedures on digestive system	**0850–1011**	**4.9**	**5.5**	**8.9**	**12.7**	**9.3**	**5.2**	**4.9**	**8.5**	**13.5**	**9.1**	**5.0**	**5.1**	**8.7**	**13.1**	**9.2**
		2	**2**	**5**	**7**	**4**	**3**	**2**	**4**	**7**	**4**	**3**	**2**	**4**	**7**	**4**
Fibreoptic colonoscopy with/without excision	0905, 0911	7.5	5.8	9.0	11.7	10.0	1.4	6.2	7.0	11.9	9.5	5.0	6.0	8.0	11.8	9.7
		7	4	4	6	5	1	5	4	7	6	3	4	4	7	6
Appendicectomy	0926	3.0	2.7	4.0	6.3	3.0	3.4	2.8	4.5	7.5	3.2	3.2	2.7	4.2	6.7	3.1
		2	2	3	4	2	3	2	3	5	2	2	2	3	4	2
Procedures for haemorrhoids	0941	-	2.0	2.5	9.3	4.0	^	1.8	1.6	8.4	3.3	^	1.9	2.1	8.9	3.7
		-	1	1	3	1	^	1	1	2	1	^	1	1	2	1

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

Principal Procedure	Procedure Block	Male					Female					Total In-Patient Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Cholecystectomy	0965	3.0	3.0	3.9	5.9	4.5	3.6	2.7	2.7	4.9	3.1	3.4	2.7	3.0	5.4	3.5
		2	1	2	3	2	3	1	1	2	1	3	1	1	2	1
Division of abdominal adhesions	0986	9.8	9.3	13	17.2	14.6	10.6	5.0	6.8	13.9	8.0	10.4	5.5	8.6	15.4	9.8
		8	8	9	12	11	7	2	5	9	5	7	3	6	11	6
Repair of inguinal and obstructed hernia	0990, 0997	4.4	1.5	2.2	3.4	2.9	1.7	2.9	3.3	9.6	6.5	4	1.8	2.3	4.4	3.4
		1	1	1	1	1	1	2	2	5	3	1	1	1	1	1
Panendoscopy with/without excision	1005–1008	2.9	5.2	9.2	13.1	10.6	3.8	5.5	9.2	12.8	10.4	3.3	5.4	9.2	13	10.5
		2	3	5	7	6	2	3	5	7	6	2	3	5	7	6
Procedures on urinary system	**1040–1129**	**6.5**	**5.0**	**6.6**	**11.2**	**8.8**	**5.2**	**5.2**	**6.8**	**11.3**	**8.2**	**5.9**	**5.1**	**6.7**	**11.3**	**8.6**
		4	**2**	**3**	**5**	**4**	**3**	**3**	**3**	**6**	**4**	**3**	**3**	**3**	**5**	**4**
Examination procedures on bladder (includes cystoscopy)	1089	3.9	3.8	6.5	13.7	11.5	4.1	4.0	6.9	12.8	10.0	4.0	3.9	6.6	13.5	11.1
		3	2	3	6	5	1	1	2	7	4	2	2	2	6	5
Procedures on male genital organs	**1160–1203**	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	**2.0**	**1.5**	**2.3**	**5.1**	**5.9**	**4.1**
		ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	**2**	**1**	**1**	**3**	**4**	**2**
Prostatectomy	1165–1167	-	3.3	4.5	5.1	4.9	-	-	-	-	-	-	3.3	4.5	5.1	4.9
		-	3	4	4	4	-	-	-	-	-	-	3	4	4	4
Circumcision	30653-00 [1196]	1.2	3.3	6.3	3.0	2.8	-	-	-	-	-	1.2	3.3	6.3	3.0	2.8
		1	1	1	1	1	-	-	-	-	-	1	1	1	1	1
Gynaecological procedures	**1240–1299**	-	-	-	-	-	**3.8**	**2.0**	**3.8**	**5.5**	**3.0**	**3.8**	**2.0**	**3.8**	**5.5**	**3.0**
		-	-	-	-	-	**3**	**1**	**3**	**3**	**2**	**3**	**1**	**3**	**3**	**2**
Oophorectomy and salpingo-oophorectomy	1243, 1252	-	-	-	-	-	6.3	3.5	3.4	5.1	3.8	6.3	3.5	3.4	5.1	3.8
		-	-	-	-	-	3	3	2	2	2	3	3	2	2	2
Salpingectomy	1251	-	-	-	-	-	^	2.4	3.1	4.5	2.6	^	2.4	3.1	4.5	2.6
		-	-	-	-	-	^	2	2	5	2	^	2	2	5	2
Examination procedures on uterus	1259	-	-	-	-	-	^	2.0	2.3	5.0	2.9	^	2.0	2.3	5.0	2.9
		-	-	-	-	-	^	1	1	1	1	^	1	1	1	1
Curettage and evacuation of uterus	1265	-	-	-	-	-	-	1.1	1.4	4.2	1.2	-	1.1	1.4	4.2	1.2
		-	-	-	-	-	-	1	1	1	1	-	1	1	1	1
Hysterectomy	1268–1269	-	-	-	-	-	-	4.7	4.8	5.8	5.0	-	4.7	4.8	5.8	5.0
		-	-	-	-	-	-	4	4	4	4	-	4	4	4	4
Repair of prolapse of uterus, pelvic floor or enterocele	1283	-	-	-	-	-	^	2.6	2.8	3.5	3.1	^	2.6	2.8	3.5	3.1
		-	-	-	-	-	^	3	3	3	3	^	3	3	3	3
Obstetric procedures	**1330–1347**	-	-	-	-	-	^	**3.7**	**5.6**	-	**3.7**	^	**3.7**	**5.6**	-	**3.7**
		-	-	-	-	-	^	**3**	**4**	-	**3**	^	**3**	**4**	-	**3**
Analgesia and anaesthesia during labour and delivery procedure	1333	-	-	-	-	-	-	2.8	6.6	-	2.8	-	2.8	6.6	-	2.8
		-	-	-	-	-	-	2	4	-	2	-	2	4	-	2
Medical or surgical induction of labour	1334	-	-	-	-	-	-	3.1	1.9	-	3.1	-	3.1	1.9	-	3.1
		-	-	-	-	-	-	3	2	-	3	-	3	2	-	3
Medical or surgical augmentation of labour	1335	-	-	-	-	-	-	2.3	2.0	-	2.3	-	2.3	2.0	-	2.3
		-	-	-	-	-	-	2	2	-	2	-	2	2	-	2
Forceps delivery	1337	-	-	-	-	-	-	3.7	3.2	-	3.7	-	3.7	3.2	-	3.7
		-	-	-	-	-	-	3	3	-	3	-	3	3	-	3
Vacuum extraction	1338	-	-	-	-	-	7.0	3.3	3.3	-	3.3	7.0	3.3	3.3	-	3.3
		-	-	-	-	-	7	3	3	-	3	7	3	3	-	3
Breech delivery and extraction	1339	-	-	-	-	-	-	6.2	-	-	6.2	-	6.2	-	-	6.2
		-	-	-	-	-	-	4	-	-	4	-	4	-	-	4

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

Principal Procedure	Procedure Block	Male					Female					Total In-Patient Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Caesarean section	1340	-	-	-	-	-	-	5.2	6.7	-	5.2	-	5.2	6.7	-	5.2
		-	-	-	-	-	-	4	5	-	4	-	4	5	-	4
Episiotomy associated with delivery	90472-00 [1343]	-	-	-	-	-	-	3.0	2.8	-	3.0	-	3.0	2.8	-	3.0
		-	-	-	-	-	-	3	3	-	3	-	3	3	-	3
Postpartum suture	1344	-	-	-	-	-	-	2.5	2.6	-	2.5	-	2.5	2.6	-	2.5
		-	-	-	-	-	-	2	2	-	2	-	2	2	-	2
Procedures on musculoskeletal system	**1360–1580**	**1.9**	**3.1**	**7.1**	**13.3**	**7.1**	**2.3**	**3.6**	**5.3**	**11.8**	**7.9**	**2.1**	**3.2**	**6.2**	**12.4**	**7.5**
		1	**1**	**3**	**6**	**3**	**1**	**2**	**3**	**6**	**3**	**1**	**1**	**3**	**6**	**3**
Arthroplasty of hip	1489	^	4.7	5.0	11.7	9.3	^	4.5	5.3	12.2	10.5	4.9	4.6	5.1	12.0	10.0
		^	3	4	6	5	^	4	4	7	6	4	3	4	7	5
Arthroplasty of knee	1518–1519		3.7	4.4	5.7	5.2	-	3.4	4.8	5.7	5.4	-	3.5	4.7	5.7	5.3
			4	4	5	4	-	3	4	5	4	-	3	4	5	4
Dermatological and plastic procedures	**1600–1718**	**2.7**	**3.2**	**7.3**	**10.5**	**5.3**	**3.8**	**3.3**	**6.3**	**13.2**	**6.3**	**3.2**	**3.2**	**6.9**	**11.7**	**5.7**
		1	**1**	**2**	**3**	**2**	**1**	**1**	**2**	**4**	**2**	**1**	**1**	**2**	**4**	**2**
Excision of lesion(s) of skin and subcutaneous tissue	1620	1.4	1.4	3.4	6.2	4.7	1.7	1.6	1.5	4.1	3.0	1.5	1.5	2.6	5.4	4.0
		1	1	1	2	1	1	1	1	1	1	1	1	1	1	1
Other debridement of skin and subcutaneous tissue	1628	1.6	4.4	10.6	16.9	8.5	2.1	4.7	13.4	23.9	13.2	1.8	4.5	11.6	19.9	10.1
		1	2	3	7	2	1	2	6	10	4	1	2	4	8	3
Skin graft	1640–1650	6.0	10.0	14.5	16.8	12.5	6.4	17.0	13.7	16.9	15.3	6.1	12.3	14.2	16.8	13.5
		4	5	10	10	7	6	9	8	12	9	5	6	9	11	8
Procedures on breast	**1740–1759**	^	**2.4**	**1.7**	**2.4**	**2.3**	^	**2.4**	**2.6**	**3.9**	**2.9**	**2.8**	**2.4**	**2.6**	**3.9**	**2.9**
		^	**1**	**1**	**2**	**2**	^	**1**	**1**	**2**	**2**	**3**	**1**	**1**	**2**	**2**
Breast biopsy	1743–1744	-	2.1	1.0	4.0	2.1	-	1.5	1.3	3.1	1.9	-	1.5	1.3	3.1	1.9
		-	1	1	4	1	-	1	1	1	1	-	1	1	1	1
Mastectomy	1747–1748	^	3.2	3.0	2.6	2.9	-	3.9	3.9	5.1	4.3	^	3.9	3.9	5.0	4.2
		^	3	3	2	3	-	3	3	3	3	^	3	3	3	3
Radiation oncology procedures	**1786–1799**	-	**12.5**	**20.1**	**19.1**	**18.9**	-	**11.8**	**16.5**	**19.5**	**17.1**	-	**12.0**	**18.1**	**19.3**	**18.0**
		-	**5**	**15**	**14**	**14**	-	**7**	**11**	**17**	**12**	-	**6**	**13**	**15**	**13**
Non-invasive, cognitive and other interventions, not elsewhere classified	**1820–1922**	**4.9**	**7.5**	**9.6**	**12.7**	**10.6**	**5.2**	**4.9**	**9.0**	**13.4**	**10.5**	**5.0**	**5.9**	**9.4**	**13.1**	**10.6**
		3	**3**	**5**	**7**	**6**	**3**	**2**	**5**	**8**	**6**	**3**	**3**	**5**	**7**	**6**
Administration of blood and blood products	1893	3.5	8.3	9.5	11.6	10.2	3.6	4.8	8.1	12.4	9.6	3.6	5.8	8.8	12.0	9.9
		2	5	5	6	5	2	2	4	7	5	2	3	5	7	5
Conduction anaesthesia	1909	^	14.9	6.6	23.0	14.4		3.2	-	8.3	3.6	^	3.8	6.6	15.0	5.2
		^	14	5	17	10		3	-	6	3	^	3	5	9	3
Cerebral anaesthesia	1910	19	4.9	5.8	9.7	9.9	1.9	4.5	3.1	3.5	3.4	12.9	4.7	4.4	6.8	6.8
		3	2	3	2	2	2	1	2	3	2	3	1	2	3	2
Imaging services	**1940–2016**	**5.6**	**6.8**	**11.6**	**13.1**	**10.6**	**6.5**	**4.2**	**8.6**	**13.2**	**9.2**	**6.0**	**5.5**	**10.4**	**13.1**	**10.0**
		1	**3**	**6**	**7**	**5**	**2**	**1**	**4**	**7**	**4**	**1**	**2**	**5**	**7**	**4**
Computerised tomography scan	1952-1966	6.5	2.4	9.9	1.7	4.9	6.3	1.3	1.7	12.2	5.2	6.4	1.8	6.4	5.4	5.0
		1	1	1	1	1	2	1	1	1	1	1	1	1	1	1
Magnetic resonance imaging	2015	5.9	2.2	20.7	14.5	7.1	7.5	1.0	18.3	3.7	7.2	6.5	1.3	19.3	8.2	7.1
		1	1	1	4	1	2	1	2	1	1	2	1	1	1	1

Notes: The calculation of total in-patient length of stay differs in this report compared to previous reports. The length of stay assigned for sameday in-patients has changed in this report from one bed day to 0.5 bed days. This will impact on the total in-patient length of stay resulting in a lower average length of stay compared to previous years (see Section 1.6).

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

ǂ Denotes that no breakdown is provided.

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

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

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

All Procedures	Procedure Block	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Total Discharges	-	71,972	147,811	241,431	356,637	817,851	57,165	308,251	253,780	300,165	919,361	129,137	456,062	495,211	56,802	1,737,212
All Procedures	0001–2016	97,413	200,002	346,915	537,115	1,181,445	72,341	423,976	374,028	463,510	1,333,855	169,754	623,978	720,943	1,000,625	2,515,300
Procedures on nervous system	**0001–0086**	**1,934**	**4,528**	**6,332**	**4,801**	**17,595**	**1,390**	**6,041**	**8,762**	**7,519**	**23,712**	**3,324**	**10,569**	**15,094**	**12,320**	**41,307**
Lumbar puncture	0030	1,571	891	762	643	3,867	1,030	1,315	833	598	3,776	2,601	2,206	1,595	1,241	7,643
Procedures on endocrine system	**0110–0129**	**35**	**146**	**254**	**149**	**584**	**24**	**472**	**652**	**390**	**1,538**	**59**	**618**	**906**	**539**	**2,122**
Procedures on eye and adnexa	**0160–0256**	**853**	**2,222**	**6,786**	**18,858**	**28,719**	**702**	**1,839**	**5,006**	**23,624**	**31,171**	**1,555**	**4,061**	**11,792**	**42,482**	**59,890**
Lens extraction	0195–0202	38	131	1,043	4,804	6,016	24	108	1,191	6,734	8,057	62	239	2,234	11,538	14,073
Procedures on ear and mastoid process	**0300–0333**	**2,731**	**1,341**	**1,042**	**876**	**5,990**	**1,941**	**1,269**	**1,038**	**677**	**4,925**	**4,672**	**2,610**	**2,080**	**1,553**	**10,915**
Myringotomy	0309	1,591	133	96	71	1,891	1,069	149	83	53	1,354	2,660	282	179	124	3,245
Procedures on nose, mouth and pharynx	**0370–0422**	**2,967**	**3,790**	**3,371**	**2,492**	**12,620**	**2,292**	**3,814**	**2,755**	**1,729**	**10,590**	**5,259**	**7,604**	**6,126**	**4,221**	**23,210**
Tonsillectomy or adenoidectomy	0412	1,606	407	56	18	2,087	1,384	959	37	14	2,394	2,990	1,366	93	32	4,481
Dental services	**0450–0490**	**4,639**	**2,175**	**602**	**209**	**7,625**	**3,233**	**1,958**	**449**	**152**	**5,792**	**7,872**	**4,133**	**1,051**	**361**	**13,417**
Procedures on respiratory system	**0520–0571**	**3,637**	**2,961**	**6,494**	**10,073**	**23,165**	**2,593**	**2,392**	**5,026**	**7,806**	**17,817**	**6,230**	**5,353**	**11,520**	**17,879**	**40,982**
Bronchoscopy with/without biopsy	0543–0544, 41892-01[0545]	293	926	2,199	3,170	6,588	228	784	1,982	2,593	5,587	521	1,710	4,181	5,763	12,175
Procedures on cardiovascular system	**0600–0777**	**3,186**	**7,374**	**23,670**	**23,399**	**57,629**	**2,442**	**3,890**	**10,800**	**12,410**	**29,542**	**5,628**	**11,264**	**34,470**	**35,809**	**87,171**
Coronary angiography	0668	303	858	6,500	7,274	14,935	226	312	2,692	4,142	7,372	529	1,170	9,192	11,416	22,307
Transluminal coronary angioplasty with/without stenting	0670–0671	0	227	2,230	2,595	5,052	0	48	476	1,001	1,525	0	275	2,706	3,596	6,577
CABG	0672–0679	~	*	770	937	1,750	0	6	82	125	213	~	*	852	1,062	1,963
Leg varicose vein ligation	0727–0728	0	438	655	344	1,437	0	886	1,144	524	2,554	0	1,324	1,799	868	3,991
Procedures on blood and blood-forming organs	**0800–0817**	**410**	**693**	**1,642**	**2,299**	**5,044**	**311**	**1,262**	**3,155**	**2,616**	**7,344**	**721**	**1,955**	**4,797**	**4,915**	**12,388**
Procedures on digestive system	**0850–1011**	**3,204**	**26,708**	**41,934**	**44,288**	**116,134**	**2,227**	**34,571**	**43,034**	**39,354**	**119,186**	**5,431**	**61,279**	**84,968**	**83,642**	**235,320**
Fibreoptic colonoscopy with/without excision	0905, 0911	166	9,613	17,328	18,024	45,131	113	11,929	18,288	16,067	46,397	279	21,542	35,616	34,091	91,528
Appendicectomy	0926	1,159	1,838	359	151	3,507	939	1,860	399	166	3,364	2,098	3,698	758	317	6,871
Procedures for haemorrhoids	0941	~	1,571	1,686	*	3,997	~	1,616	1,430	*	3,792	~	3,187	3,116	*	7,789
Cholecystectomy	0965	8	312	615	542	1,477	15	1,573	1,304	557	3,449	23	1,885	1,919	1,099	4,926
Division of abdominal adhesions	0986	42	237	357	414	1,050	39	1,344	769	490	2,642	81	1,581	1,126	904	3,692
Repair of inguinal and obstructed hernia	0990, 0997	429	689	1,326	1,390	3,834	91	85	108	187	471	520	774	1,434	1,577	4,305
Panendoscopy with/without excision	1005–1008	400	8,354	12,854	14,036	35,644	360	11,011	14,536	13,945	39,852	760	19,365	27,390	27,981	75,496
Procedures on urinary system	**1040–1129**	**976**	**17,514**	**42,052**	**77,256**	**137,798**	**1,054**	**14,851**	**25,734**	**38,170**	**79,809**	**2,030**	**32,365**	**67,786**	**115,426**	**217,607**
Examination procedures on bladder (includes cystoscopy)	1089	102	1,204	3,268	6,728	11,302	70	1,422	2,534	2,909	6,935	172	2,626	5,802	9,637	18,237
Procedures on male genital organs	**1160–1203**	**†**	**†**	**†**	**†**	**†**	**†**	**†**	**†**	**†**	**†**	**3,408**	**1,573**	**2,961**	**3,132**	**11,074**
Prostatectomy	1165–1167	0	~	*	769	1,233	0	0	0	0	0	0	~	*	769	1,233
Circumcision	30653-00[1196]	1,431	523	278	143	2,375	0	0	0	0	0	1,431	523	278	143	2,375
Gynaecological procedures	**1240–1299**	**†**	**†**	**†**	**†**	**†**	**†**	**†**	**†**	**†**	**†**	**120**	**24,954**	**20,395**	**4,947**	**50,416**
Oophorectomy and salpingo-oophorectomy	1243, 1252	0	0	0	0	0	19	450	498	173	1,140	19	450	498	173	1,140
Salpingectomy	1251	0	0	0	0	0	~	943	86	*	1,046	~	943	86	*	1,046
Examination procedures on uterus	1259	0	0	0	0	0	6	4,597	6,202	1,188	11,993	6	4,597	6,202	1,188	11,993
Curettage and evacuation of uterus	1265	0	0	0	0	0	~	7,712	5,210	*	13,868	~	7,712	5,210	*	13,868
Hysterectomy	1268–1269	0	0	0	0	0	0	535	1,332	633	2,500	0	535	1,332	633	2,500
Repair of prolapse of uterus, pelvic floor or enterocele	1283	0	0	0	0	0	~	*	652	575	1,363	~	*	652	575	1,363

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

All Procedures	Procedure Block	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Obstetric procedures	**1330–1347**	**0**	**0**	**0**	**0**	**0**	**~**	**120,613**	*****	**0**	**121,073**	**~**	**120,613**	*****	**0**	**121,073**
Analgesia and anaesthesia during labour and delivery procedure	1333	0	0	0	0	0	~	23,425	*	0	23,479	~	23,425	*	0	23,479
Medical or surgical induction of labour	1334	0	0	0	0	0	~	19,403	*	0	19,484	~	19,403	*	0	19,484
Medical or surgical augmentation of labour	1335	0	0	0	0	0	0	9,448	11	0	9,459	0	9,448	11	0	9,459
Forceps delivery	1337	0	0	0	0	0	0	2,276	6	0	2,282	0	2,276	6	0	2,282
Vacuum extraction	1338	0	0	0	0	0	~	7,687	*	0	7,708	~	7,687	*	0	7,708
Breech delivery and extraction	1339	0	0	0	0	0	0	106	0	0	106	0	106	0	0	106
Caesarean section	1340	0	0	0	0	0	0	20,026	200	0	20,226	0	20,026	200	0	20,226
Episiotomy associated with delivery	90472-00[1343]	0	0	0	0	0	~	10,483	*	0	10,507	~	10,483	*	0	10,507
Postpartum suture	1344	0	0	0	0	0	0	17,975	36	0	18,011	0	17,975	36	0	18,011
Procedures on musculoskeletal system	**1360–1579**	**4,820**	**13,678**	**12,787**	**11,706**	**42,991**	**4,409**	**9,058**	**16,871**	**19,327**	**49,665**	**9,229**	**22,736**	**29,658**	**31,033**	**92,656**
Arthroplasty of hip	1489	~	*	732	1,513	2,357	~	*	663	2,370	3,124	7	196	1,395	3,883	5,481
Arthroplasty of knee	1518–1519	0	12	312	609	933	0	21	475	934	1,430	0	33	787	1,543	2,363
Dermatological and plastic procedures	**1600–1718**	**4,863**	**20,490**	**17,609**	**23,893**	**66,855**	**3,719**	**21,610**	**17,388**	**18,535**	**61,252**	**8,582**	**42,100**	**34,997**	**42,428**	**128,107**
Excision of lesion(s) of skin and subcutaneous tissue	1620	559	5,881	7,274	11,318	25,032	460	8,159	7,554	8,337	24,510	1,019	14,040	14,828	19,655	49,542
Other debridement of skin and subcutaneous tissue	1628	495	1,665	1,211	1,134	4,505	273	1,173	632	803	2,881	768	2,838	1,843	1,937	7,386
Skin graft	1640–1650	83	255	313	803	1,454	47	93	185	478	803	130	348	498	1,281	2,257
Procedures on breast	**1740–1759**	**~**	**87**	**46**	*****	**174**	**~**	**4,402**	**6,380**	*****	**13,340**	**10**	**4,489**	**6,426**	**2,589**	**13,514**
Breast biopsy	1743–1744	0	28	24	21	73	~	2,705	3,603	*	8,033	~	2,733	3,627	*	8,106
Mastectomy	1747–1748	~	*	6	11	41	0	219	534	313	1,066	~	*	540	324	1,107
Radiation oncology procedures[a]	**1786–1799**	**812**	**5,541**	**33,493**	**61,998**	**101,844**	**798**	**14,415**	**46,602**	**34,416**	**96,231**	**1,610**	**19,956**	**80,095**	**96,414**	**198,075**
Non-invasive, cognitive and other interventions, not elsewhere classified	**1820–1922**	**56,282**	**87,277**	**141,175**	**244,423**	**529,157**	**42,689**	**154,173**	**155,859**	**243,620**	**596,341**	**98,971**	**241,450**	**297,034**	**488,043**	**1,125,498**
Administration of blood and blood products	1893	3,326	2,693	6,369	14,036	26,424	2,244	4,962	5,214	11,172	23,592	5,570	7,655	11,583	25,208	50,016
Conduction anaesthesia	1909	348	1,654	3,394	6,443	11,839	130	17,806	4,211	8,518	30,665	478	19,460	7,605	14,961	42,504
Cerebral anaesthesia	1910	22,071	38,662	51,838	55,684	168,255	15,092	54,019	61,074	52,027	182,212	37,163	92,681	112,912	107,711	350,467
Imaging services[b]	**1940–2016**	**2,652**	**1,906**	**4,664**	**7,226**	**16,448**	**2,387**	**2,390**	**3,667**	**5,666**	**14,110**	**5,039**	**4,296**	**8,331**	**12,892**	**30,558**
Computerised tomography scan	1952–1966	298	493	1,156	1,895	3,842	225	424	1,049	1,304	3,002	523	917	2,205	3,199	6,844
Magnetic resonance imaging	2015	1,622	170	89	92	1,973	1,303	195	118	78	1,694	2,925	365	207	170	3,667

Notes:
~ Denotes five or fewer discharges reported to HIPE.
* Further suppression required to prevent disclosure of five or fewer discharges.
ǂ Denotes that no breakdown is provided.
a From 2015 this data includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.
b See Appendix V for information on updated Australian Coding Standard (ACS) 0042 *Procedures normally not coded* in ICD-10-AM 8th edition.

Case Mix Analysis 2018

SECTION Four

Table of Contents

4.1 INTRODUCTION

The analysis in this Section focuses on the case mix classification for all discharges reported to the Hospital In-Patient Enquiry (HIPE) scheme in 2018.[1] Hospital case mix may be defined as 'the proportion of cases of each disease and health problem treated in the hospital'.[2]

- Section 4.2 presents background to the applied case mix classification and details of the assignment of discharges to Major Diagnostic Categories (MDC) and Australian Refined Diagnosis Related Groups (AR-DRG). The AR-DRG Classification System has been updated from Version 6.0 to Version 8.0 for 2015 onwards.[3] The update to AR-DRG Version 8.0 included a revision of the complexity model used to assign AR-DRGs to episodes of care. In addition to this, it included a review of existing AR-DRGs, the removal of some AR-DRGs and the inclusion of new AR-DRGs. The naming convention for AR-DRGs was also updated. Due to the update in this classification, DRGs in this report are not comparable with those in reports prior to 2016.[4]
- Section 4.3 presents analysis of HIPE data by case mix for day patients and in-patients.

4.2 OVERVIEW

4.2.1 Case Mix Classification

- The Diagnosis Related Group (DRG) scheme enables the disaggregation of patients into homogeneous groups, which undergo similar treatment processes and incur similar levels of resource use.
- The data required for DRG assignment include principal and secondary diagnoses, procedures performed, age, sex, length of stay, admission weight, sameday status and patient destination on discharge from hospital.
- Since the inception of the national case mix programme, the DRG classification scheme has been adopted as the national standard for Ireland.[5] One of the key features of this methodology is the classification of cases into different levels of complexity within AR-DRGs. ICD-10-AM/ACHI/ACS 8th Edition is the coding system used for AR-DRG grouping since 2015.[6] As all of the data required for AR-DRG classification are available on the HIPE system,

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

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

3 AR-DRG Version 8.0 was first reported on in the HIPE Annual Report in 2016.

4 See Appendix VIII for an overview of changes between AR-DRG Version 6.0 and Version 8.0.

5 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.

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

and since diagnoses and procedures are coded with ICD-10-AM/ACHI/ACS, discharges are assigned to the AR-DRG system from this database. AR-DRG Version 6.0 was used in Ireland from 2009-2014.[7] In 2015, this classification was updated to AR-DRG Version 8.0.[8]

4.2.2 Assignment of Discharges to MDC and AR-DRG

Figure 4.1 shows the steps in AR-DRG assignment;

- The first step in assignment is the classification of discharges by Major Diagnostic Category (MDC). There are 23 MDCs which are essentially primary diagnostic groupings based on the systems of the body, for example nervous system (MDC 1), eye (MDC 2), circulatory system (MDC 5), etc. As not all discharges can be assigned directly to a MDC, there is a category entitled 'unassignable to MDC'.
- To deal with certain categories of high cost discharges, the second step involves a Pre-MDC analysis which can override the initial MDC assignment. Examples of discharges affected include transplants, human immunodeficiency virus (HIV) disease, and multiple significant trauma.[9]
- After assignment to the appropriate MDCs, discharges are assigned to an AR-DRG. In total, there are 807 AR-DRGs in version 8.0 of the AR-DRG classification.

FIGURE 4.1 Steps in AR-DRG Assignment

In AR-DRG Version 8.0 an AR-DRG consists of four alphanumeric characters in the form of 'MAAD':

- 'M' 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).[10]
- 'AA' identifies the partition to which the adjacent DRG belongs.[11] Both characters are numbers whose values indicate whether the code is surgical,

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

8 See Appendix VIII for an overview of changes between AR-DRG Version 6.0 and Version 8.0.

9 'Some episodes involving procedures that are particularly resource-intensive may be assigned to the *Pre-MDC* category, 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.

10 '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.

medical or other.[12] 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.

- 'D' 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.[13] 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.[14]

4.2.2.1 AR-DRG Complexity Split

The AR-DRG complexity split for total discharges is presented in Table 4.1. Over 28 per cent of total discharges had no complexity split. For in-patient discharges, 25.7 per cent were assigned to complexity group A *'Highest consumption of resources'*, and 59.2 per cent were assigned to complexity group B *'Second highest consumption of resources'.*

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

	Discharges									
	Day Patients		In-Patients[a]						Total Discharges	
			Sameday In-Patients		Overnight In-Patients		Total In-Patients			
	N	%	N	%	N	%	N	%	N	%
A Highest consumption of resources	32,998	3.0	13,894	10.8	153,380	29.4	167,274	25.7	200,272	11.5
B Second highest consumption of resources	395,678	36.4	97,095	75.3	288,058	55.2	385,153	59.2	780,831	44.9
C Third highest consumption of resources	190,027	17.5	5,060	3.9	57,017	10.9	62,077	9.5	252,104	14.5
D Fourth highest consumption of resources	360	0.0	920	0.7	6,216	1.2	7,136	1.1	7,496	0.4
Z No complexity split	467,249	43.0	11,928	9.3	17,332	3.3	29,260	4.5	496,509	28.6
Total Discharges	**1,086,312**	**100**	**128,897**	**100**	**522,003**	**100**	**650,900**	**100**	**1,737,212**	**100**

Notes: Percentage columns are subject to rounding.

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

11 'Adjacent Diagnosis Related Group (ADRGs) are clinically meaningful MDC partitions that are generally defined by the same (principal) diagnosis or intervention codes. Occasionally ADRGs may also be defined by age, length of stay (i.e. sameday) and separation mode (e.g. died or transfer). An ADRG consists of one or more end classes or DRGs.' Australian Consortium for Classification Development, 2015, *Australian Refined Diagnosis Related Groups, Version 8.0, Definitions Manual*, Volume 1. Independent Hospital Pricing Authority. p. xiii.

12 'The separate ranges - 01 to 39, 40 to 59 and 60 to 99 - are used to indicate the surgical, other and medical partitions respectively.' Australian Consortium for Classification Development, 2015, *Australian Refined Diagnosis Related Groups, Version 8.0, Definitions Manual*, Volume 1. Independent Hospital Pricing Authority. p. 8.

13 For a more detailed description of how AR-DRGs are numbered see Australian Consortium for Classification Development, 2015, *Australian Refined Diagnosis Related Groups, Version 8.0, Definitions Manual*, Volume 1. Independent Hospital Pricing Authority. pp. 4–11.

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

4.3 Analysis of HIPE Data by Case Mix

The analysis presented in this section includes all discharges reported to HIPE. Analysis of 2018 HIPE data by MDC is presented in Table 4.2 and Figures 4.2 and 4.3. Tables 4.3 to 4.27 represent each MDC (including unassignable to MDC and pre-MDC) and their associated AR-DRGs.[15,16,17]

4.3.1 Analysis of Day Patients by MDC and AR-DRG

- The MDC with the largest proportion of day patients reported was *Neoplastic disorders (haematological and solid neoplasms)* (MDC 17), which accounted for 260,427 discharges or 24.0 per cent of day patients (see Tables 4.2 and 4.19 and Figure 4.3).
    - *Chemotherapy* (AR-DRG R63Z) accounted for 44.0 per cent of day patients within this MDC, and 10.5 per cent of total day patients; *Other Neoplastic Disorders, Minor Complexity* (AR-DRG R62C) accounted for 39.5 per cent of day patients within this MDC and 9.5 per cent of total day patients.[18]

- *Diseases and disorders of the kidney and urinary tract* (MDC 11), with 199,020 discharges, accounted for 18.3 per cent of day patients (see Tables 4.2 and 4.13 and Figure 4.3).
    - *Haemodialysis* (AR-DRG L61Z) accounted for 85.7 per cent of day patients within this MDC and 15.7 per cent of total day patients.

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

- The MDC with the largest proportion of in-patient discharges was *Pregnancy, Childbirth and the Puerperium* (MDC 14), with 110,040 discharges, which accounted for 16.9 per cent of in-patients (see Tables 4.2 and 4.16 and Figure 4.3).
    - *Antenatal and Other Obstetric Admission* (AR-DRGs O66A and O66B) accounted for 37.5 per cent of in-patients within this MDC and 6.3 per cent of total in-patient discharges.

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

16 The official classification for AR-DRG's (Version 8.0) has been slightly modified by the addition of two local DRG's specific to Ireland to account for differences in the provision of care between Ireland and Australia. While this practice has been used for Activity Based Funding, this is the first year that this modification to the official AR-DRG classification has been published in the HIPE Annual Report. See MDC 9 (Table 4.11) for a description of J98Z (*UV Therapy*) and MDC 17 (Table 4.19) for a description of R99Z (*Oncology Repeat Attendance*).

17 The calculation of total in-patient length of stay differs in this report compared to previous reports. The length of stay assigned for sameday in-patients has changed in this report from one bed day to 0.5 bed days. This will impact on the total in-patient length of stay resulting in a lower average length of stay compared to previous years (see Section 1.6).

18 R62 *Other Neoplastic Disorders* is a new ADRG in Version 8.0 of the AR-DRG classification system; most cases in this ADRG were grouped to R64 *Radiotherapy* in AR-DRG Version 6.0. For an overview of changes between AR-DRG Version 6.0 and Version 8.0 see Appendix VIII.

- *Vaginal Delivery* (AR-DRGs O60A, O60B and O60C) accounted for 35.0 per cent of in-patients within this MDC and 5.9 per cent of total in-patient discharges.
- *Caesarean Delivery* (AR-DRGs O01A, O01B and O01C) accounted for 18.4 per cent of in-patients within this MDC, with *Caesarean Delivery, Minor Complexity* (AR-DRG O01C) accounting for the majority of these cases (56.3 per cent).
- For *Vaginal Delivery* (AR-DRGs O60A, O60B and O60C), the in-patient mean length of stay ranged from 2.1 days for *Vaginal Delivery, Minor Complexity* (AR-DRG O60C) to 4.8 days for *Vaginal Delivery, Major Complexity* (AR-DRG O60A).
- For *Caesarean Delivery* (AR-DRGs O01A, O01B and O01C), the in-patient mean length of stay ranged from 4.1 days for *Caesarean Delivery, Minor Complexity* (AR-DRG O01C) to 11.2 days for *Caesarean Delivery, Major Complexity* (AR-DRG O01A).

- *Diseases and Disorders of the Circulatory System* (MDC 5), with 79,253 in-patient discharges, accounted for 12.2 per cent of total in-patients (see Tables 4.2 and 4.7 and Figure 4.3).
- *Diseases and Disorders of the Respiratory System* (MDC 4), with 76,210 discharges, accounted for 11.7 per cent of total in-patients (see Tables 4.2 and 4.6 and Figure 4.3).

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

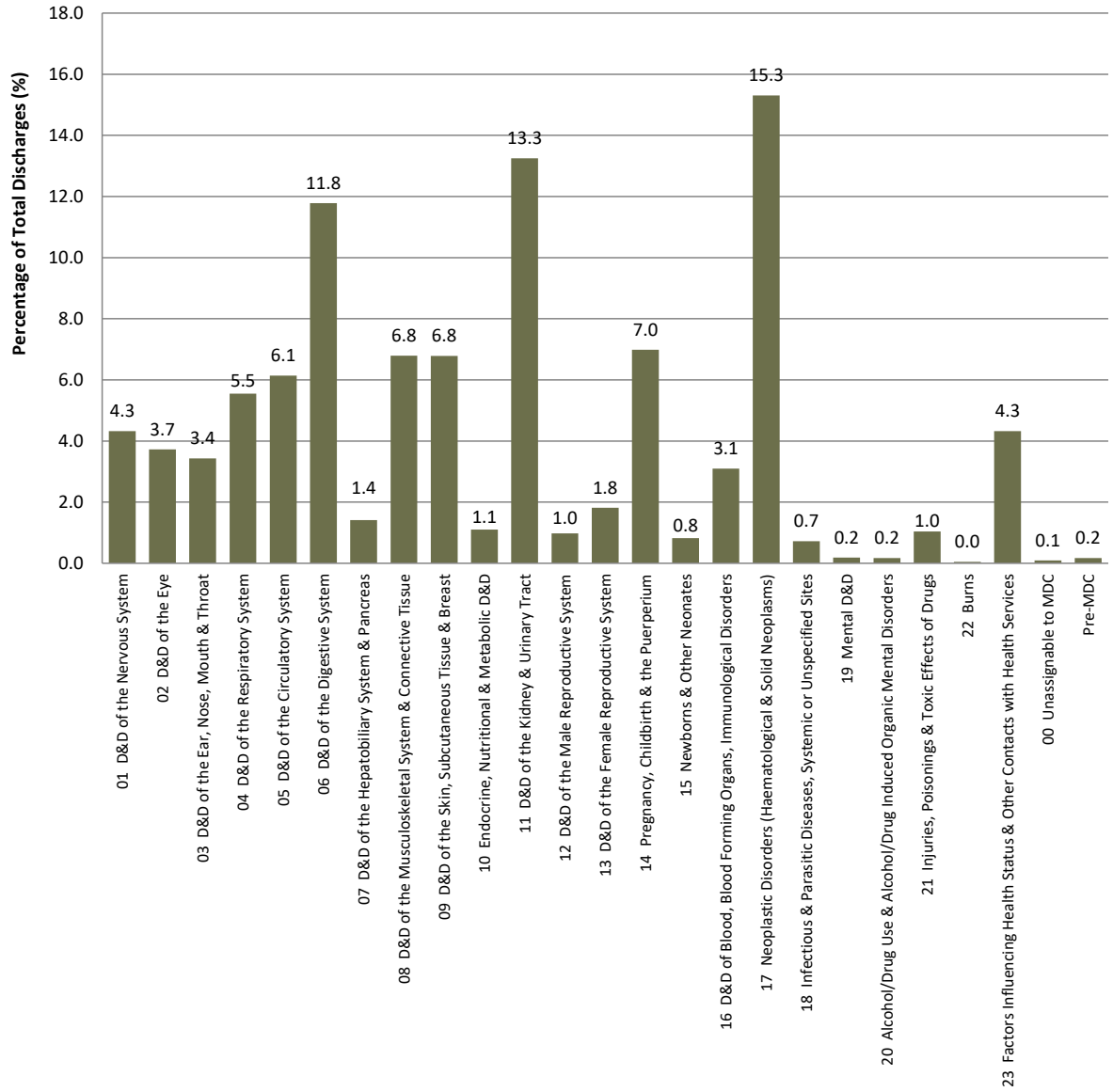
Major Diagnostic Category	Day Patients		In-Patients		Total Discharges	
	N	%	N	%	N	%
01 Diseases and disorders of the nervous system	23,143	2.1	51,903	8.0	75,046	4.3
02 Diseases and disorders of the eye	58,638	5.4	6,061	0.9	64,699	3.7
03 Diseases and disorders of the ear, nose, mouth and throat	27,855	2.6	31,688	4.9	59,543	3.4
04 Diseases and disorders of the respiratory system	20,116	1.9	76,210	11.7	96,326	5.5
05 Diseases and disorders of the circulatory system	27,355	2.5	79,253	12.2	106,608	6.1
06 Diseases and disorders of the digestive system	138,235	12.7	66,431	10.2	204,666	11.8
07 Diseases and disorders of the hepatobiliary system and pancreas	8,068	0.7	16,403	2.5	24,471	1.4
08 Diseases and disorders of the musculoskeletal system and connective tissue	64,457	5.9	53,534	8.2	117,991	6.8
09 Diseases and disorders of the skin, subcutaneous tissue and breast	97,193	8.9	20,577	3.2	117,770	6.8
10 Endocrine, nutritional and metabolic diseases and disorders	6,569	0.6	12,524	1.9	19,093	1.1
11 Diseases and disorders of the kidney and urinary tract	199,020	18.3	31,167	4.8	230,187	13.3
12 Diseases and disorders of the male reproductive system	12,284	1.1	4,656	0.7	16,940	1.0
13 Diseases and disorders of the female reproductive system	20,298	1.9	11,181	1.7	31,479	1.8
14 Pregnancy, childbirth and the puerperium	11,317	1.0	110,040	16.9	121,357	7.0
15 Newborns and other neonates	507	0.0	13,778	2.1	14,285	0.8
16 Diseases and disorders of blood, blood forming organs, immunological disorders	45,437	4.2	8,384	1.3	53,821	3.1
17 Neoplastic disorders (haematological and solid neoplasms)[a]	260,427	24.0	5,415	0.8	265,842	15.3
18 Infectious and parasitic diseases, systemic or unspecified sites	975	0.1	11,563	1.8	12,538	0.7
19 Mental diseases and disorders	639	0.1	2,509	0.4	3,148	0.2
20 Alcohol/drug use and alcohol/drug induced organic mental disorders	10	0.0	2,918	0.4	2,928	0.2
21 Injuries, poisonings and toxic effects of drugs	1,523	0.1	16,504	2.5	18,027	1.0
22 Burns	120	0.0	637	0.1	757	0.0
23 Factors influencing health status and other contacts with health services	61,602	5.7	13,452	2.1	75,054	4.3
Unassignable to MDC	380	0.0	1,278	0.2	1,658	0.1
Pre-MDC	144	0.0	2,834	0.4	2,978	0.2
Total Discharges	**1,086,312**	**100**	**650,900**	**100**	**1,737,212**	**100**

Notes:

Percentage columns are subject to rounding.

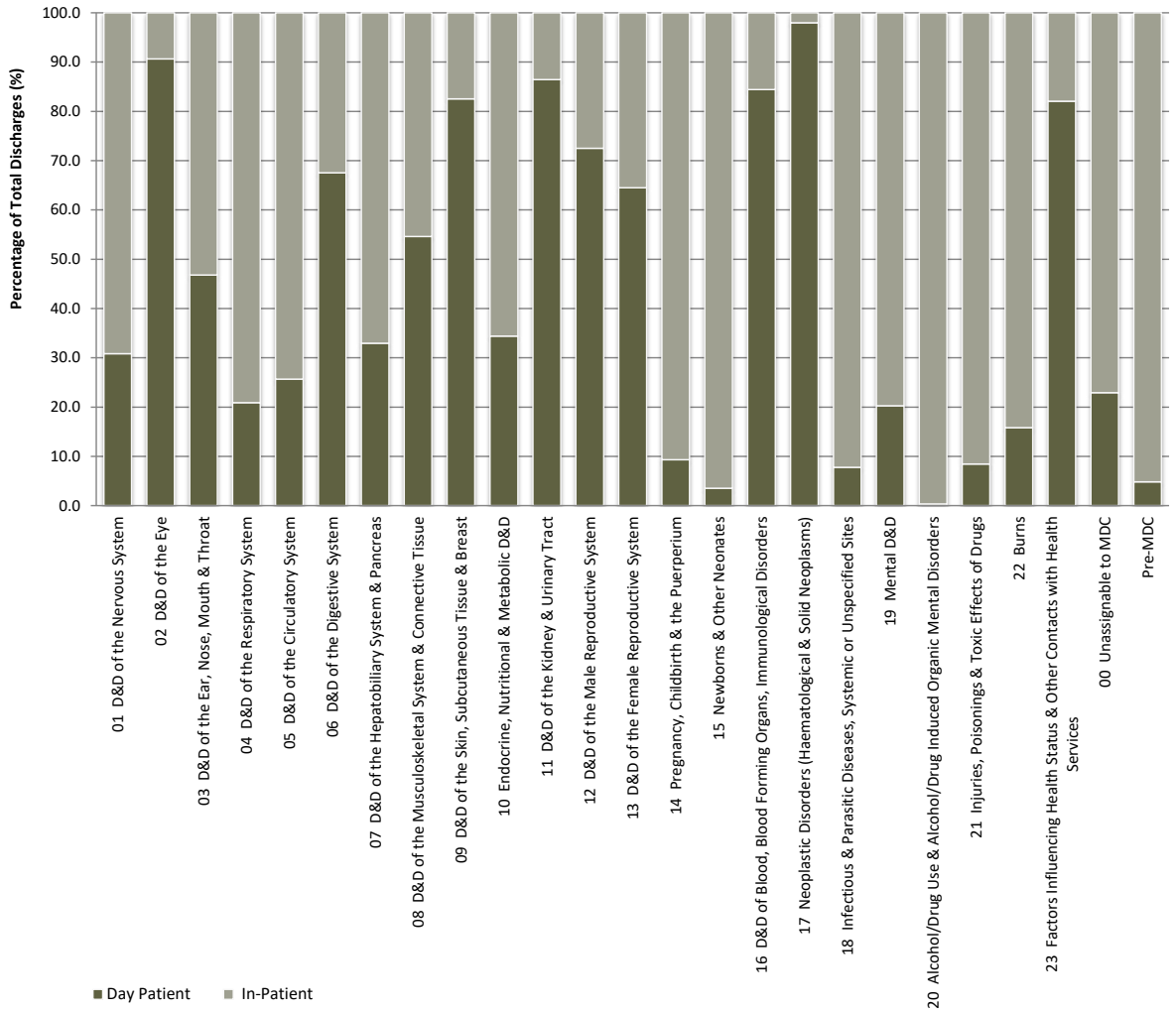
a From 2015 this data includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

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



Notes: D&D = Diseases and disorders
Percentages are subject to rounding.

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



Note: D&D = Diseases and disorders

TABLE 4.3 Total Discharges: MDC 1 Diseases and Disorders of the Nervous System: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 1 Diseases and Disorders of the Nervous System	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
B01A Ventricular Shunt Revision, Major Complexity	0	30	14.7	4
B01B Ventricular Shunt Revision, Minor Complexity	0	72	6.4	4
B02A Cranial Procedures, Major Complexity	0	184	35.4	19
B02B Cranial Procedures, Intermediate Complexity	~	583	11.8	8
B02C Cranial Procedures, Minor Complexity	9	1,301	6.6	5
B03A Spinal Procedures, Major Complexity	~	62	14.8	8
B03B Spinal Procedures, Intermediate Complexity	~	118	4.6	2
B03C Spinal Procedures, Minor Complexity	22	89	4.6	3
B04A Extracranial Vascular Procedures, Major Complexity	0	40	24.2	17
B04B Extracranial Vascular Procedures, Intermediate Complexity	0	109	10.6	9
B04C Extracranial Vascular Procedures, Minor Complexity	~	190	4.8	4
B05Z Carpal Tunnel Release	1,794	46	1.6	1
B06A Procedures for Cerebral Palsy, Muscular Dystrophy and Neuropathy, Major Comp	~	35	50.9	40
B06B Procedures for Cerebral Palsy, Muscular Dystrophy and Neuropathy, Interm Comp	13	46	20.5	4
B06C Procedures for Cerebral Palsy, Muscular Dystrophy and Neuropathy, Minor Comp	186	112	6.6	2
B07A Cranial or Peripheral Nerve and Other Nervous System Procedures, Major Comp	~	86	30.1	13
B07B Cranial or Peripheral Nerve and Other Nervous System Procedures, Minor Comp	161	330	2.3	1
B40Z Plasmapheresis W Neurological Disease, Sameday	22	0	-	-
B41Z Telemetric EEG Monitoring	14	179	6.9	6
B42A Nervous System Disorders W Ventilator Support, Major Complexity	0	49	19.7	14
B42B Nervous System Disorders W Ventilator Support, Minor Complexity	0	124	7.5	3
B60A Acute Paraplegia and Quadriplegia W or W/O OR Procedures, Major Complexity	0	14	58.9	25
B60B Acute Paraplegia and Quadriplegia W or W/O OR Procedures, Minor Complexity	~	57	25.2	11
B61A Spinal Cord Conditions W or W/O OR Procedures, Major Complexity	~	75	28.6	18
B61B Spinal Cord Conditions W or W/O OR Procedures, Minor Complexity	11	144	9.7	5
B62Z Apheresis	238	~	^	^
B63A Dementia and Other Chronic Disturbances of Cerebral Function, Major Complexity	81	636	44.9	24
B63B Dementia and Other Chronic Disturbances of Cerebral Function, Minor Complexity	244	551	17.7	7
B64A Delirium, Major Complexity	7	915	16.0	8
B64B Delirium, Minor Complexity	24	1,027	4.2	2
B65A Cerebral Palsy, Major Complexity	23	21	13.4	1
B65B Cerebral Palsy, Minor Complexity	220	*	^	^
B66A Nervous System Neoplasms, Major Complexity	89	564	18.1	10
B66B Nervous System Neoplasms, Minor Complexity	1,344	754	7.6	4
B67A Degenerative Nervous System Disorders, Major Complexity	121	927	28.7	13
B67B Degenerative Nervous System Disorders, Intermediate Complexity	422	790	5.9	3
B67C Degenerative Nervous System Disorders, Minor Complexity	798	156	2.9	2
B68A Multiple Sclerosis and Cerebellar Ataxia, Major Complexity	279	469	11.8	6
B68B Multiple Sclerosis and Cerebellar Ataxia, Minor Complexity	5,824	520	4.6	3
B69A TIA and Precerebral Occlusion, Major Complexity	6	892	9.2	5
B69B TIA and Precerebral Occlusion, Minor Complexity	31	2,161	3.1	2
B70A Stroke and Other Cerebrovascular Disorders, Major Complexity	0	798	42.0	29
B70B Stroke and Other Cerebrovascular Disorders, Intermediate Complexity	~	2,330	15.9	9
B70C Stroke and Other Cerebrovascular Disorders, Minor Complexity	16	2,681	8.1	5
B70D Stroke and Other Cerebrovascular Disorders, Transferred <5 Days	~	354	1.4	1
B71A Cranial and Peripheral Nerve Disorders, Major Complexity	1,533	1,375	5.4	2
B71B Cranial and Peripheral Nerve Disorders, Minor Complexity	3,258	331	3.8	1
B72A Nervous System Infection Except Viral Meningitis, Major Complexity	10	251	19.7	13
B72B Nervous System Infection Except Viral Meningitis, Minor Complexity	174	265	9.0	6
B73Z Viral Meningitis	0	291	5.0	4
B74A Nontraumatic Stupor and Coma, Major Complexity	~	68	8.2	5
B74B Nontraumatic Stupor and Coma, Minor Complexity	11	150	2.9	1
B75Z Febrile Convulsions	27	687	1.7	1
B76A Seizures, Major Complexity	66	2,174	8.0	4
B76B Seizures, Minor Complexity	945	5,181	2.5	1
B77A Headaches, Major Complexity	93	1,878	3.3	2
B77B Headaches, Minor Complexity	1,509	7,939	1.3	1
B78A Intracranial Injuries, Major Complexity	0	325	25.9	12
B78B Intracranial Injuries, Minor Complexity	0	784	6.8	3
B78C Intracranial Injuries, Transferred <5 Days	0	74	1.5	1
B79A Skull Fractures, Major Complexity	0	162	7.7	4

TABLE 4.3 Total Discharges: MDC 1 Diseases and Disorders of the Nervous System: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay) (contd.)

MDC 1 Diseases and Disorders of the Nervous System	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
B79B Skull Fractures, Minor Complexity	0	211	2.5	1
B80A Other Head Injuries, Major Complexity	0	466	7.2	3
B80B Other Head Injuries, Minor Complexity	13	2,793	1.3	1
B81A Other Disorders of the Nervous System, Major Complexity	42	994	17.2	9
B81B Other Disorders of the Nervous System, Minor Complexity	3,226	4,199	4.0	1
B82A Chronic & Unspec Para/Quadriplegia W or W/O OR Proc, Major Complexity	0	117	79.2	40
B82B Chronic & Unspec Para/Quadriplegia W or W/O OR Proc, Intermediate Complexity	15	339	28.5	11
B82C Chronic & Unspec Para/Quadriplegia W or W/O OR Proc, Minor Complexity	194	213	13.2	4
Total	**23,143**	**51,903**	**7.9**	**2**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
* Further suppression required to prevent disclosure of five or fewer discharges.
^ Denotes that length of stay is suppressed where the number of discharges is not reported.
\- Mean and median length of stay cannot be calculated as no in-patients are reported.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.4 Total Discharges: MDC 2 Diseases and Disorders of the Eye: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 2 Diseases and Disorders of the Eye	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
C01A Procedures for Penetrating Eye Injury, Major Complexity	~	46	5.1	4
C01B Procedures for Penetrating Eye Injury, Minor Complexity	10	53	2.8	2
C02Z Enucleations and Orbital Procedures	38	104	3.6	2
C03A Retinal Procedures, Major Complexity	3,263	1,254	2.9	2
C03B Retinal Procedures, Minor Complexity	28,169	165	2.0	1
C04A Major Corneal, Scleral and Conjunctival Procedures, Major Complexity	~	50	4.4	3
C04B Major Corneal, Scleral and Conjunctival Procedures, Minor Complexity	9	122	1.7	2
C05Z Dacryocystorhinostomy	80	137	1.1	1
C10Z Strabismus Procedures	807	70	1.0	1
C11Z Eyelid Procedures	992	101	1.6	1
C12Z Other Corneal, Scleral and Conjunctival Procedures	389	100	6.9	4
C13Z Lacrimal Procedures	407	15	2.2	1
C14A Other Eye Procedures, Major Complexity	104	84	4.9	3
C14B Other Eye Procedures, Minor Complexity	1,606	108	1.4	1
C15Z Glaucoma and Complex Cataract Procedures	820	255	2.0	1
C16Z Lens Procedures	12,997	250	1.6	1
C60A Acute and Major Eye Infections, Major Complexity	~	57	9.1	6
C60B Acute and Major Eye Infections, Minor Complexity	42	212	4.7	4
C61A Neurological and Vascular Disorders of the Eye, Major Complexity	276	398	4.9	3
C61B Neurological and Vascular Disorders of the Eye, Minor Complexity	730	575	2.6	1
C62A Hyphaema and Medically Managed Trauma to the Eye, Major Complexity	34	185	6.4	3
C62B Hyphaema and Medically Managed Trauma to the Eye, Minor Complexity	63	357	2.2	1
C63A Other Disorders of the Eye, Major Complexity	240	212	6.0	3
C63B Other Disorders of the Eye, Intermediate Complexity	2,798	1,009	1.9	1
C63C Other Disorders of the Eye, Minor Complexity	4,753	142	1.4	1
Total	**58,638**	**6,061**	**3.0**	**1**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.5 Total Discharges: MDC 3 Diseases and Disorders of the Ear, Nose, Mouth and Throat: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 3 Diseases and Disorders of the Ear, Nose, Mouth and Throat	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
D01Z Cochlear Implant	0	155	2.1	2
D02A Head and Neck Procedures, Major Complexity	~	83	25.8	15
D02B Head and Neck Procedures, Intermediate Complexity	0	62	9.1	6
D02C Head and Neck Procedures, Minor Complexity	39	119	3.2	2
D03Z Surgical Repair for Cleft Lip and Palate Disorders	21	147	2.7	2
D04A Maxillo Surgery, Major Complexity	48	443	3.0	2
D04B Maxillo Surgery, Minor Complexity	30	234	2.5	2
D05Z Parotid Gland Procedures	11	170	2.2	1
D06Z Sinus and Complex Middle Ear Procedures	399	713	1.7	1
D10Z Nasal Procedures	594	504	1.4	1
D11Z Tonsillectomy and Adenoidectomy	698	4,149	1.3	1
D12A Other Ear, Nose, Mouth and Throat Procedures, Major Complexity	78	132	7.6	4
D12B Other Ear, Nose, Mouth and Throat Procedures, Minor Complexity	1,257	371	2.0	1
D13Z Myringotomy W Tube Insertion	2,097	133	1.5	1
D14A Mouth and Salivary Gland Procedures, Major Complexity	315	289	3.6	2
D14B Mouth and Salivary Gland Procedures, Minor Complexity	621	56	1.6	1
D15Z Mastoid Procedures	34	308	1.6	1
D40Z Dental Extractions and Restorations	5,311	249	1.7	1
D60A Ear, Nose, Mouth and Throat Malignancy, Major Complexity	46	354	27.1	22
D60B Ear, Nose, Mouth and Throat Malignancy, Minor Complexity	1,037	352	7.2	3
D61A Dysequilibrium, Major Complexity	15	870	4.7	2
D61B Dysequilibrium, Minor Complexity	264	4,217	1.7	1
D62A Epistaxis, Major Complexity	~	136	6.7	5
D62B Epistaxis, Minor Complexity	534	955	2.2	2
D63A Otitis Media and Upper Respiratory Infections, Major Complexity	150	3,808	5.0	3
D63B Otitis Media and Upper Respiratory Infections, Minor Complexity	2,280	7,935	1.4	1
D64A Laryngotracheitis and Epiglottitis, Major Complexity	~	72	1.9	1
D64B Laryngotracheitis and Epiglottitis, Minor Complexity	14	491	1.0	1
D65A Nasal Trauma and Deformity, Major Complexity	13	120	7.4	3
D65B Nasal Trauma and Deformity, Minor Complexity	1,147	386	1.2	1
D66A Other Ear, Nose, Mouth and Throat Disorders, Major Complexity	629	545	5.2	2
D66B Other Ear, Nose, Mouth and Throat Disorders, Minor Complexity	8,693	1,719	1.5	1
D67A Oral and Dental Disorders, Major Complexity	63	421	4.2	2
D67B Oral and Dental Disorders, Minor Complexity	1,410	990	1.6	1
Total	**27,855**	**31,688**	**2.7**	**1**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.6 Total Discharges: MDC 4 Diseases and Disorders of the Respiratory System: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 4 Diseases and Disorders of the Respiratory System	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
E01A Major Chest Procedures, Major Complexity	0	68	27.6	21
E01B Major Chest Procedures, Intermediate Complexity	0	298	13.7	11
E01C Major Chest Procedures, Minor Complexity	24	676	7.7	7
E02A Other Respiratory System OR Procedures, Major Complexity	~	215	23.0	16
E02B Other Respiratory System OR Procedures, Intermediate Complexity	246	250	7.5	5
E02C Other Respiratory System OR Procedures, Minor Complexity	245	124	1.5	1
E40A Respiratory System Disorders W Ventilator Support, Major Complexity	0	103	24.0	13
E40B Respiratory System Disorders W Ventilator Support, Minor Complexity	0	177	11.3	9
E41A Respiratory System Disorders W Non-Invasive Ventilation, Major Complexity	0	647	24.9	16
E41B Respiratory System Disorders W Non-Invasive Ventilation, Minor Complexity	0	1,607	13.2	9
E42A Bronchoscopy, Major Complexity	530	1,039	16.4	13
E42B Bronchoscopy, Minor Complexity	6,460	541	6.1	5
E60A Cystic Fibrosis, Major Complexity	261	617	13.5	13
E60B Cystic Fibrosis, Minor Complexity	1,697	238	8.7	8
E61A Pulmonary Embolism, Major Complexity	~	624	9.6	7
E61B Pulmonary Embolism, Minor Complexity	9	901	4.1	3
E62A Respiratory Infections and Inflammations, Major Complexity	28	8,458	13.3	8
E62B Respiratory Infections and Inflammations, Minor Complexity	108	6,750	5.3	4
E63A Sleep Apnoea, Major Complexity	10	596	2.0	1
E63B Sleep Apnoea, Minor Complexity	59	1,481	1.2	1
E64A Pulmonary Oedema and Respiratory Failure, Major Complexity	0	182	13.5	8
E64B Pulmonary Oedema and Respiratory Failure, Minor Complexity	~	290	5.0	3
E65A Chronic Obstructive Airways Disease, Major Complexity	131	5,253	11.0	7
E65B Chronic Obstructive Airways Disease, Minor Complexity	1,097	9,739	4.7	4
E66A Major Chest Trauma, Major Complexity	0	237	13.1	8
E66B Major Chest Trauma, Minor Complexity	~	384	3.7	2
E67A Respiratory Signs and Symptoms, Major Complexity	168	1,215	3.3	1
E67B Respiratory Signs and Symptoms, Minor Complexity	1,090	5,239	1.2	1
E68A Pneumothorax, Major Complexity	0	288	9.4	6
E68B Pneumothorax, Minor Complexity	~	504	3.4	3
E69A Bronchitis and Asthma, Major Complexity	51	551	6.3	4
E69B Bronchitis and Asthma, Minor Complexity	3,969	4,012	2.0	1
E70A Whooping Cough and Acute Bronchiolitis, Major Complexity	7	428	4.4	3
E70B Whooping Cough and Acute Bronchiolitis, Minor Complexity	27	2,364	2.5	2
E71A Respiratory Neoplasms, Major Complexity	92	874	14.0	9
E71B Respiratory Neoplasms, Minor Complexity	2,238	1,178	6.1	4
E72Z Respiratory Problems Arising from Neonatal Period	11	84	6.7	2
E73A Pleural Effusion, Major Complexity	~	179	17.5	14
E73B Pleural Effusion, Intermediate Complexity	28	449	8.6	6
E73C Pleural Effusion, Minor Complexity	86	294	4.5	3
E74A Interstitial Lung Disease, Major Complexity	136	534	11.3	8
E74B Interstitial Lung Disease, Minor Complexity	588	362	4.5	3
E75A Other Respiratory System Disorders, Major Complexity	87	8,734	9.0	5
E75B Other Respiratory System Disorders, Minor Complexity	586	7,307	2.4	1
E76A Respiratory Tuberculosis, Major Complexity	0	55	25.1	12
E76B Respiratory Tuberculosis, Minor Complexity	28	64	8.2	6
Total	**20,116**	**76,210**	**7.0**	**4**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.7 Total Discharges: MDC 5 Diseases and Disorders of the Circulatory System: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 5 Diseases and Disorders of the Circulatory System	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
F01A Implantation and Replacement of AICD, Total System, Major Complexity	0	79	15.2	14
F01B Implantation and Replacement of AICD, Total System, Minor Complexity	270	298	3.6	1
F02Z Other AICD Procedures	16	38	3.4	1
F03A Cardiac Valve Procedures W CPB Pump W Invasive Cardiac Investigation, Major Comp	~	48	24.1	21
F03B Cardiac Valve Procedures W CPB Pump W Invasive Cardiac Investigation, Minor Comp	~	118	15.9	12
F04A Cardiac Valve Procedures W CPB Pump W/O Invasive Cardiac Invest, Major Comp	0	47	32.8	27
F04B Cardiac Valve Procedures W CPB Pump W/O Invasive Cardiac Invest, Interm Comp	0	183	15.3	12
F04C Cardiac Valve Procedures W CPB Pump W/O Invasive Cardiac Invest, Minor Comp	0	348	9.4	9
F05A Coronary Bypass W Invasive Cardiac Investigation, Major Complexity	0	32	26.8	25
F05B Coronary Bypass W Invasive Cardiac Investigation, Minor Complexity	0	115	20.5	19
F06A Coronary Bypass W/O Invasive Cardiac Investigation, Major Complexity	0	83	22.7	19
F06B Coronary Bypass W/O Invasive Cardiac Investigation, Minor Complexity	0	540	11.2	9
F07A Other Cardiothoracic/Vascular Procedures W CPB Pump, Major Complexity	0	26	17.2	15
F07B Other Cardiothoracic/Vascular Procedures W CPB Pump, Intermediate Complexity	0	46	11.0	8
F07C Other Cardiothoracic/Vascular Procedures W CPB Pump, Minor Complexity	0	73	9.4	9
F08A Major Reconstructive Vascular Procedures W/O CPB Pump, Major Complexity	0	102	37.0	26
F08B Major Reconstructive Vascular Procedures W/O CPB Pump, Intermediate Complexity	0	408	13.2	9
F08C Major Reconstructive Vascular Procedures W/O CPB Pump, Minor Complexity	18	349	7.4	6
F09A Other Cardiothoracic Procedures W/O CPB Pump, Major Complexity	~	31	20.7	10
F09B Other Cardiothoracic Procedures W/O CPB Pump, Intermediate Complexity	7	75	10.6	6
F09C Other Cardiothoracic Procedures W/O CPB Pump, Minor Complexity	24	73	3.9	2
F10A Interventional Coronary Procedures, Admitted for AMI, Major Complexity	~	285	13.6	8
F10B Interventional Coronary Procedures, Admitted for AMI, Minor Complexity	90	2,096	3.0	2
F11A Amputation, Except Upper Limb and Toe, for Circulatory Disorders, Major Comp	0	91	73.7	61
F11B Amputation, Except Upper Limb and Toe, for Circulatory Disorders, Minor Comp	~	124	30.8	25
F12A Implantation and Replacement of Pacemaker, Total System, Major Complexity	19	269	11.8	8
F12B Implantation and Replacement of Pacemaker, Total System, Minor Complexity	452	609	4.0	2
F13A Amputation, Upper Limb and Toe, for Circulatory Disorders, Major Complexity	0	52	20.9	18
F13B Amputation, Upper Limb and Toe, for Circulatory Disorders, Minor Complexity	8	94	9.1	7
F14A Vascular Procedures, Except Major Reconstruction, W/O CPB Pump, Major Complexity	20	175	17.8	7
F14B Vascular Procedures, Except Major Reconstruction, W/O CPB Pump, Interm Comp	52	461	7.2	5
F14C Vascular Procedures, Except Major Reconstruction, W/O CPB Pump, Minor Complexity	210	398	3.9	2
F15A Interventional Coronary Procs, Not Adm for AMI, W Stent Implant, Major Comp	17	292	8.1	5
F15B Interventional Coronary Procs, Not Adm for AMI, W Stent Implant, Minor Comp	992	2,182	2.1	1
F16A Interventional Coronary Procs, Not Adm for AMI, W/O Stent Implant, Major Comp	0	9	5.6	2
F16B Interventional Coronary Procs, Not Adm for AMI, W/O Stent Implant, Minor Comp	36	90	2.1	1
F17A Insertion and Replacement of Pacemaker Generator, Major Complexity	18	37	10.0	3
F17B Insertion and Replacement of Pacemaker Generator, Minor Complexity	277	49	1.6	1
F18A Other Pacemaker Procedures, Major Complexity	~	39	17.4	7
F18B Other Pacemaker Procedures, Minor Complexity	22	52	4.5	3
F19A Trans-Vascular Percutaneous Cardiac Intervention, Major Complexity	34	72	6.6	1
F19B Trans-Vascular Percutaneous Cardiac Intervention, Minor Complexity	122	70	2.3	1
F20Z Vein Ligation and Stripping	4,364	239	1.7	1
F21A Other Circulatory System OR Procedures, Major Complexity	~	39	34.9	27
F21B Other Circulatory System OR Procedures, Intermediate Complexity	8	63	8.3	4
F21C Other Circulatory System OR Procedures, Minor Complexity	13	30	4.0	2
F40A Circulatory Disorders W Ventilator Support, Major Complexity	0	55	17.9	10
F40B Circulatory Disorders W Ventilator Support, Minor Complexity	0	46	7.5	3

TABLE 4.7 Total Discharges: MDC 5 Diseases and Disorders of the Circulatory System: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay) (contd.)

MDC 5 Diseases and Disorders of the Circulatory System	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
F41A Circulatory Disorders, Adm for AMI W Invasive Cardiac Inves Proc, Major Comp	~	174	11.1	7
F41B Circulatory Disorders, Adm for AMI W Invasive Cardiac Inves Proc, Minor Comp	46	483	3.7	3
F42A Circulatory Dsrds, Not Adm for AMI W Invasive Cardiac Inves Proc, Major Comp	367	1,060	8.9	6
F42B Circulatory Dsrds, Not Adm for AMI W Invasive Cardiac Inves Proc, Minor Comp	9,738	3,135	2.7	1
F43A Circulatory Disorders W Non-Invasive Ventilation, Major Complexity	0	89	32.1	19
F43B Circulatory Disorders W Non-Invasive Ventilation, Minor Complexity	0	151	14.6	10
F60A Circulatory Dsrd, Adm for AMI W/O Invas Card Inves Proc	6	2,325	7.9	5
F60B Circulatory Dsrd, Adm for AMI W/O Invas Card Inves Proc, Transf <5 Days	10	593	1.7	1
F61A Infective Endocarditis, Major Complexity	0	59	34.8	30
F61B Infective Endocarditis, Minor Complexity	11	79	14.9	11
F62A Heart Failure and Shock, Major Complexity	~	2,211	15.7	11
F62B Heart Failure and Shock, Minor Complexity	164	3,796	6.1	5
F62C Heart Failure and Shock, Transferred <5 Days	~	112	1.9	1
F63A Venous Thrombosis, Major Complexity	~	511	8.5	5
F63B Venous Thrombosis, Minor Complexity	71	1,476	1.7	1
F64A Skin Ulcers in Circulatory Disorders, Major Complexity	0	154	18.9	14
F64B Skin Ulcers in Circulatory Disorders, Intermediate Complexity	48	223	9.0	7
F64C Skin Ulcers in Circulatory Disorders, Minor Complexity	13	62	6.3	3
F65A Peripheral Vascular Disorders, Major Complexity	36	507	11.6	7
F65B Peripheral Vascular Disorders, Minor Complexity	957	956	3.4	1
F66A Coronary Atherosclerosis, Major Complexity	36	325	7.5	6
F66B Coronary Atherosclerosis, Minor Complexity	622	2,110	2.9	1
F67A Hypertension, Major Complexity	14	373	6.5	4
F67B Hypertension, Minor Complexity	140	2,247	1.5	1
F68A Congenital Heart Disease, Major Complexity	461	72	4.3	1
F68B Congenital Heart Disease, Minor Complexity	422	65	2.4	1
F69A Valvular Disorders, Major Complexity	60	328	9.8	7
F69B Valvular Disorders, Minor Complexity	859	3,244	1.4	1
F72A Unstable Angina, Major Complexity	~	223	7.6	5
F72B Unstable Angina, Minor Complexity	18	928	3.6	2
F73A Syncope and Collapse, Major Complexity	16	2,815	10.5	6
F73B Syncope and Collapse, Minor Complexity	2,376	8,160	2.5	1
F74A Chest Pain, Major Complexity	51	2,612	2.9	1
F74B Chest Pain, Minor Complexity	637	15,175	1.1	1
F75A Other Circulatory Disorders, Major Complexity	~	290	15.9	12
F75B Other Circulatory Disorders, Intermediate Complexity	29	547	7.4	5
F75C Other Circulatory Disorders, Minor Complexity	693	1,685	3.3	2
F76A Arrhythmia, Cardiac Arrest and Conduction Disorders, Major Complexity	131	2,557	7.1	4
F76B Arrhythmia, Cardiac Arrest and Conduction Disorders, Minor Complexity	2,201	6,211	2.2	1
Total	**27,355**	**79,253**	**4.6**	**2**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.8 Total Discharges: MDC 6 Diseases and Disorders of the Digestive System: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 6 Diseases and Disorders of the Digestive System	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
G01A Rectal Resection, Major Complexity	0	73	51.9	33
G01B Rectal Resection, Intermediate Complexity	0	159	23.4	20
G01C Rectal Resection, Minor Complexity	~	858	10.2	8
G02A Major Small and Large Bowel Procedures, Major Complexity	0	285	50.9	33
G02B Major Small and Large Bowel Procedures, Intermediate Complexity	~	873	19.6	16
G02C Major Small and Large Bowel Procedures, Minor Complexity	49	1,653	9.4	7
G03A Stomach, Oesophageal and Duodenal Procedures, Major Complexity	~	179	23.1	17
G03B Stomach, Oesophageal and Duodenal Procedures, Intermediate Complexity	12	209	12.5	9
G03C Stomach, Oesophageal and Duodenal Procedures, Minor Complexity	37	272	5.4	4
G04A Peritoneal Adhesiolysis, Major Complexity	0	64	27.1	21
G04B Peritoneal Adhesiolysis, Intermediate Complexity	~	276	11.1	10
G04C Peritoneal Adhesiolysis, Minor Complexity	91	534	4.1	3
G05A Minor Small and Large Bowel Procedures, Major Complexity	0	72	16.1	13
G05B Minor Small and Large Bowel Procedures, Minor Complexity	21	338	6.4	6
G06Z Pyloromyotomy	0	45	3.3	3
G07A Appendicectomy, Major Complexity	~	500	6.5	5
G07B Appendicectomy, Minor Complexity	36	5,602	2.7	2
G10A Hernia Procedures, Major Complexity	57	430	6.7	5
G10B Hernia Procedures, Minor Complexity	3,365	2,266	2.0	1
G11A Anal and Stomal Procedures, Major Complexity	43	300	8.5	4
G11B Anal and Stomal Procedures, Minor Complexity	1,458	1,166	2.2	1
G12A Other Digestive System OR Procedures, Major Complexity	0	99	39.6	22
G12B Other Digestive System OR Procedures, Intermediate Complexity	15	298	11.8	9
G12C Other Digestive System OR Procedures, Minor Complexity	228	336	4.7	3
G46A Complex Endoscopy, Major Complexity	562	1,166	12.2	7
G46B Complex Endoscopy, Minor Complexity	12,736	631	4.9	4
G47A Gastroscopy, Major Complexity	194	1,731	11.2	7
G47B Gastroscopy, Intermediate Complexity	1,884	1,605	4.1	3
G47C Gastroscopy, Minor Complexity	38,177	1,822	3.1	2
G48A Colonoscopy, Major Complexity	2,310	1,583	9.8	6
G48B Colonoscopy, Minor Complexity	50,507	1,541	4.0	3
G60A Digestive Malignancy, Major Complexity	224	768	13.6	8
G60B Digestive Malignancy, Minor Complexity	2,118	613	5.0	3
G61A Gastrointestinal Haemorrhage, Major Complexity	20	713	6.3	4
G61B Gastrointestinal Haemorrhage, Minor Complexity	395	1,084	2.7	1
G64A Inflammatory Bowel Disease, Major Complexity	239	305	7.0	5
G64B Inflammatory Bowel Disease, Minor Complexity	15,036	798	3.6	3
G65A Gastrointestinal Obstruction, Major Complexity	~	412	12.7	8
G65B Gastrointestinal Obstruction, Minor Complexity	17	1,067	4.0	3
G66A Abdominal Pain and Mesenteric Adenitis, Major Complexity	107	2,745	2.8	1
G66B Abdominal Pain and Mesenteric Adenitis, Minor Complexity	1,038	7,607	1.4	1
G67A Oesophagitis and Gastroenteritis, Major Complexity	48	3,068	6.5	4
G67B Oesophagitis and Gastroenteritis, Minor Complexity	742	7,178	1.8	1
G70A Other Digestive System Disorders, Major Complexity	1,127	6,281	5.5	3
G70B Other Digestive System Disorders, Minor Complexity	5,332	6,826	2.0	1
Total	**138,235**	**66,431**	**4.9**	**2**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.9 Total Discharges: MDC 7 Diseases and Disorders of the Hepatobiliary System and Pancreas: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 7 Diseases and Disorders of the Hepatobiliary System and Pancreas	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
H01A Pancreas, Liver and Shunt Procedures, Major Complexity	0	18	45.3	29
H01B Pancreas, Liver and Shunt Procedures, Intermediate Complexity	8	328	11.5	7
H01C Pancreas, Liver and Shunt Procedures, Minor Complexity	9	131	7.1	6
H02A Major Biliary Tract Procedures, Major Complexity	~	91	27.9	22
H02B Major Biliary Tract Procedures, Minor Complexity	38	163	10.6	8
H05A Hepatobiliary Diagnostic Procedures, Major Complexity	~	49	21.4	11
H05B Hepatobiliary Diagnostic Procedures, Minor Complexity	38	49	5.7	3
H06A Other Hepatobiliary and Pancreas OR Procedures, Major Complexity	0	78	27.5	21
H06B Other Hepatobiliary and Pancreas OR Procedures, Intermediate Complexity	8	91	9.7	8
H06C Other Hepatobiliary and Pancreas OR Procedures, Minor Complexity	9	142	1.9	1
H07A Open Cholecystectomy, Major Complexity	0	24	23.9	16
H07B Open Cholecystectomy, Intermediate Complexity	0	25	9.0	8
H07C Open Cholecystectomy, Minor Complexity	16	102	6.6	5
H08A Laparoscopic Cholecystectomy, Major Complexity	24	246	8.5	6
H08B Laparoscopic Cholecystectomy, Minor Complexity	1,634	2,507	2.4	1
H40A Endoscopic Procedures for Bleeding Oesophageal Varices, Major Complexity	0	30	18.7	13
H40B Endoscopic Procedures for Bleeding Oesophageal Varices, Intermediate Complexity	~	34	7.5	5
H40C Endoscopic Procedures for Bleeding Oesophageal Varices, Minor Complexity	21	20	5.9	4
H43A ERCP Procedures, Major Complexity	14	205	19.5	13
H43B ERCP Procedures, Intermediate Complexity	221	384	9.0	7
H43C ERCP Procedures, Minor Complexity	1,511	753	4.5	3
H60A Cirrhosis and Alcoholic Hepatitis, Major Complexity	~	416	19.7	12
H60B Cirrhosis and Alcoholic Hepatitis, Intermediate Complexity	97	603	8.3	6
H60C Cirrhosis and Alcoholic Hepatitis, Minor Complexity	223	120	4.4	3
H61A Malignancy of Hepatobiliary System and Pancreas, Major Complexity	22	502	13.4	10
H61B Malignancy of Hepatobiliary System and Pancreas, Minor Complexity	762	770	6.2	4
H62A Disorders of Pancreas, Except Malignancy, Major Complexity	~	394	13.4	10
H62B Disorders of Pancreas, Except Malignancy, Minor Complexity	399	1,349	4.9	4
H63A Other Disorders of Liver, Major Complexity	51	530	12.4	8
H63B Other Disorders of Liver, Intermediate Complexity	431	792	4.2	3
H63C Other Disorders of Liver, Minor Complexity	1,793	580	2.2	1
H64A Disorders of the Biliary Tract, Major Complexity	132	1,989	8.3	6
H64B Disorders of the Biliary Tract, Minor Complexity	592	2,888	4.0	3
Total	**8,068**	**16,403**	**6.8**	**4**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.10 Total Discharges: MDC 8 Diseases and Disorders of the Musculoskeletal System and Connective Tissue: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 8 Diseases and Disorders of the Musculoskeletal System and Connective Tissue	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
I01A Bilateral and Multiple Major Joint Procedures of Lower Limb, Major Complexity	0	82	31.8	10
I01B Bilateral and Multiple Major Joint Procedures of Lower Limb, Minor Complexity	0	25	5.0	5
I02A Microvascular Tissue Transfers or Skin Grafts, Excluding Hand, Major Complexity	0	19	76.1	45
I02B Microvascular Tissue Transfers or Skin Grafts, Excluding Hand, Intermediate Comp	10	75	18.9	13
I02C Microvascular Tissue Transfers or Skin Grafts, Excluding Hand, Minor Complexity	22	36	10.6	6
I03A Hip Replacement, Major Complexity	0	469	25.9	16
I03B Hip Replacement, Minor Complexity	~	4,801	7.8	5
I04A Knee Replacement, Major Complexity	0	210	10.8	8
I04B Knee Replacement, Minor Complexity	~	2,126	4.8	4
I05A Other Joint Replacement, Major Complexity	0	47	10.0	7
I05B Other Joint Replacement, Minor Complexity	~	307	3.6	3
I06Z Spinal Fusion for Deformity	46	245	9.5	6
I07Z Amputation	~	66	42.5	23
I08A Other Hip and Femur Procedures, Major Complexity	~	636	29.5	18
I08B Other Hip and Femur Procedures, Minor Complexity	45	2,172	11.3	8
I09A Spinal Fusion, Major Complexity	0	34	42.4	18
I09B Spinal Fusion, Intermediate Complexity	~	168	10.0	7
I09C Spinal Fusion, Minor Complexity	8	368	4.7	4
I10A Other Back and Neck Procedures, Major Complexity	~	135	12.6	7
I10B Other Back and Neck Procedures, Minor Complexity	865	942	3.3	2
I11Z Limb Lengthening Procedures	~	27	5.3	4
I12A Misc Musculoskeletal Procs for Infect/Inflam of Bone/Joint, Major Complexity	0	105	46.1	27
I12B Misc Musculoskeletal Procs for Infect/Inflam of Bone/Joint, Intermediate Comp	14	256	15.2	11
I12C Misc Musculoskeletal Procs for Infect/Inflam of Bone/Joint, Minor Complexity	140	205	8.0	5
I13A Humerus, Tibia, Fibula and Ankle Procedures, Major Complexity	10	641	11.8	6
I13B Humerus, Tibia, Fibula and Ankle Procedures, Minor Complexity	366	3,765	2.9	2
I15A Cranio-Facial Surgery, Major Complexity	~	35	6.2	4
I15B Cranio-Facial Surgery, Minor Complexity	~	26	4.4	4
I16Z Other Shoulder Procedures	271	733	1.4	1
I17A Maxillo-Facial Surgery, Major Complexity	~	24	6.1	3
I17B Maxillo-Facial Surgery, Minor Complexity	12	57	2.7	2
I18A Other Knee Procedures, Major Complexity	92	286	4.4	2
I18B Other Knee Procedures, Minor Complexity	1,423	270	1.6	1
I19A Other Elbow and Forearm Procedures, Major Complexity	7	224	8.5	4
I19B Other Elbow and Forearm Procedures, Minor Complexity	609	2,924	1.6	1
I20A Other Foot Procedures, Major Complexity	21	169	6.0	3
I20B Other Foot Procedures, Minor Complexity	407	1,116	1.6	1
I21Z Local Excision and Removal of Internal Fixation Devices of Hip and Femur	77	64	3.6	2
I23A Local Excision & Removal of Internal Fixation Device, Except Hip & Fmr, Maj Comp	123	145	4.0	2
I23B Local Excision & Removal of Internal Fixation Device, Except Hip & Fmr, Min Comp	2,121	325	1.4	1
I24A Arthroscopy, Major Complexity	41	51	5.2	1
I24B Arthroscopy, Minor Complexity	376	81	1.6	1
I25A Bone and Joint Diagnostic Procedures Including Biopsy, Major Complexity	26	55	18.6	9
I25B Bone and Joint Diagnostic Procedures Including Biopsy, Minor Complexity	153	66	4.4	2
I27A Soft Tissue Procedures, Major Complexity	17	149	21.0	11
I27B Soft Tissue Procedures, Minor Complexity	710	646	3.1	1
I28A Other Musculoskeletal Procedures, Major Complexity	~	114	21.3	12
I28B Other Musculoskeletal Procedures, Intermediate Complexity	136	418	3.9	2
I28C Other Musculoskeletal Procedures, Minor Complexity	144	195	2.0	1
I29Z Knee Reconstructions, and Revisions of Reconstructions	74	318	1.5	1
I30Z Hand Procedures	2,202	1,973	1.3	1
I31A Revision of Hip Replacement, Major Complexity	0	68	47.5	32
I31B Revision of Hip Replacement, Intermediate Complexity	0	139	16.2	12
I31C Revision of Hip Replacement, Minor Complexity	0	289	9.5	7
I32A Revision of Knee Replacement, Major Complexity	0	35	31.5	23
I32B Revision of Knee Replacement, Minor Complexity	0	103	8.6	6
I40Z Infusions for Musculoskeletal Disorders, Sameday	38,654	96	0.5	1
I60Z Femoral Shaft Fractures	0	64	3.7	2
I61A Distal Femoral Fractures, Major Complexity	0	19	12.7	8
I61B Distal Femoral Fractures, Minor Complexity	0	38	6.1	4
I63A Sprains, Strains and Dislocations of Hip, Pelvis and Thigh, Major Complexity	0	54	15.3	9

TABLE 4.10 Total Discharges: MDC 8 Diseases and Disorders of the Musculoskeletal System and Connective Tissue: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay) (contd.)

MDC 8 Diseases and Disorders of the Musculoskeletal System and Connective Tissue	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
I63B Sprains, Strains and Dislocations of Hip, Pelvis and Thigh, Minor Complexity	0	130	3.5	2
I64A Osteomyelitis, Major Complexity	0	137	32.9	19
I64B Osteomyelitis, Minor Complexity	0	356	11.9	8
I65A Musculoskeletal Malignant Neoplasms, Major Complexity	0	194	19.9	15
I65B Musculoskeletal Malignant Neoplasms, Minor Complexity	0	787	6.2	4
I66A Inflammatory Musculoskeletal Disorders, Major Complexity	0	106	26.6	15
I66B Inflammatory Musculoskeletal Disorders, Intermediate Complexity	0	197	10.6	6
I66C Inflammatory Musculoskeletal Disorders, Minor Complexity	0	607	5.1	4
I67A Septic Arthritis, Major Complexity	0	62	32.5	15
I67B Septic Arthritis, Minor Complexity	0	107	7.2	6
I68A Non-surgical Spinal Disorders, Major Complexity	0	1,559	14.2	8
I68B Non-surgical Spinal Disorders, Minor Complexity	0	2,375	4.7	3
I69A Bone Diseases and Arthropathies, Major Complexity	0	429	12.1	5
I69B Bone Diseases and Arthropathies, Minor Complexity	0	652	4.9	3
I71A Other Musculotendinous Disorders, Major Complexity	0	525	11.5	6
I71B Other Musculotendinous Disorders, Minor Complexity	0	1,300	3.3	2
I72A Specific Musculotendinous Disorders, Major Complexity	0	176	12.8	8
I72B Specific Musculotendinous Disorders, Minor Complexity	0	630	4.4	3
I73A Aftercare of Musculoskeletal Implants or Prostheses, Major Complexity	0	109	19.9	14
I73B Aftercare of Musculoskeletal Implants or Prostheses, Minor Complexity	0	235	6.3	4
I74A Injuries to Forearm, Wrist, Hand and Foot, Major Complexity	0	334	14.8	8
I74B Injuries to Forearm, Wrist, Hand and Foot, Minor Complexity	0	1,042	1.7	1
I75A Injuries to Shoulder, Arm, Elbow, Knee, Leg and Ankle, Major Complexity	0	547	21.1	12
I75B Injuries to Shoulder, Arm, Elbow, Knee, Leg and Ankle, Minor Complexity	0	1,251	3.7	2
I76A Other Musculoskeletal Disorders, Major Complexity	0	135	23.3	14
I76B Other Musculoskeletal Disorders, Intermediate Complexity	0	304	8.4	4
I76C Other Musculoskeletal Disorders, Minor Complexity	0	386	3.9	2
I77A Fractures of Pelvis, Major Complexity	0	425	25.7	16
I77B Fractures of Pelvis, Minor Complexity	0	489	10.2	6
I78A Fractures of Neck of Femur, Major Complexity	0	90	23.8	17
I78B Fractures of Neck of Femur, Minor Complexity	0	168	8.9	6
I79A Pathological Fractures, Major Complexity	0	111	23.3	16
I79B Pathological Fractures, Minor Complexity	0	287	10.0	8
I80Z Femoral Fractures, Transferred to Acute Facility <2 Days	0	30	0.8	1
I81Z Musculoskeletal Injuries, Sameday	780	1,855	0.5	1
I82Z Other Sameday Treatment for Musculoskeletal Disorders	14,427	6,076	0.5	1
Total	**64,457**	**53,534**	**6.5**	**2**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.11 Total Discharges: MDC 9 Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 9 Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
J01A Microvas Tiss Transf for Skin, Subcut Tiss & Breast Dsrds, Major Complexity	0	~	^	^
J01B Microvas Tiss Transf for Skin, Subcut Tiss & Breast Dsrds, Minor Complexity	~	91	7.6	7
J06A Major Procedures for Breast Disorders, Major Complexity	52	258	6.0	4
J06B Major Procedures for Breast Disorders, Minor Complexity	1,244	1,766	2.2	2
J07A Minor Procedures for Breast Disorders, Major Complexity	822	209	1.3	1
J07B Minor Procedures for Breast Disorders, Minor Complexity	1,240	103	0.9	1
J08A Other Skin Grafts and Debridement Procedures, Major Complexity	~	108	24.8	12
J08B Other Skin Grafts and Debridement Procedures, Intermediate Complexity	40	148	5.2	3
J08C Other Skin Grafts and Debridement Procedures, Minor Complexity	1,407	258	2.9	1
J09Z Perianal and Pilonidal Procedures	454	244	1.6	1
J10A Plastic OR Procs for Skin, Subcutaneous Tissue and Breast Disorders, Major Comp	106	64	4.2	2
J10B Plastic OR Procs for Skin, Subcutaneous Tissue and Breast Disorders, Minor Comp	1,065	133	1.5	1
J11A Other Skin, Subcutaneous Tissue and Breast Procedures, Major Complexity	1,452	411	6.1	2
J11B Other Skin, Subcutaneous Tissue and Breast Procedures, Minor Complexity	37,987	577	1.4	1
J12A Lower Limb Procedures W Ulcer or Cellulitis, Major Complexity	0	52	26.9	19
J12B Lower Limb Procedures W Ulcer or Cellulitis, Minor Complexity	14	97	12.7	9
J13A Lower Limb Procedures W/O Ulcer or Cellulitis, Major Complexity	10	*	^	^
J13B Lower Limb Procedures W/O Ulcer or Cellulitis, Minor Complexity	153	103	2.9	1
J14Z Major Breast Reconstructions	27	257	3.7	3
J60A Skin Ulcers, Major Complexity	6	215	25.1	13
J60B Skin Ulcers, Intermediate Complexity	17	283	7.6	6
J60C Skin Ulcers, Minor Complexity	1,029	163	5.1	4
J62A Malignant Breast Disorders, Major Complexity	46	203	15.5	11
J62B Malignant Breast Disorders, Minor Complexity	4,851	426	9.6	4
J63A Non-Malignant Breast Disorders, Major Complexity	196	315	2.6	2
J63B Non-Malignant Breast Disorders, Minor Complexity	3,339	230	0.7	1
J64A Cellulitis, Major Complexity	18	2,406	10.6	7
J64B Cellulitis, Minor Complexity	635	5,535	3.1	2
J65A Trauma to Skin, Subcutaneous Tissue and Breast, Major Complexity	~	578	14.2	7
J65B Trauma to Skin, Subcutaneous Tissue and Breast, Minor Complexity	57	1,443	1.9	1
J67A Minor Skin Disorders, Major Complexity	666	544	4.7	2
J67B Minor Skin Disorders, Minor Complexity	14,142	1,876	1.3	1
J68A Major Skin Disorders, Major Complexity	604	838	5.0	2
J68B Major Skin Disorders, Minor Complexity	1,698	362	2.4	1
J69A Skin Malignancy, Major Complexity	39	89	21.4	15
J69B Skin Malignancy, Intermediate Complexity	451	80	10.0	7
J69C Skin Malignancy, Minor Complexity	2,329	63	7.2	1
J98Z UV Therapy[b]	20,993	0	-	-
Total	**97,193**	**20,577**	**5.0**	**2**

Notes:
~ Denotes five or fewer discharges reported to HIPE.
* Further suppression required to prevent disclosure of five or fewer discharges.
^ Denotes that length of stay is suppressed where the number of discharges is not reported.
- Mean and median length of stay cannot be calculated as no in-patients are reported.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.
b The official classification for AR-DRG's (Version 8.0) has been slightly modified by the addition of two local DRG's specific to Ireland to account for some differences between Ireland and Australia in the provision of care. While this practice has been used for Activity Based Funding, this is the first year that this modification to the official classification has been published in the HIPE Annual Report. In general UV therapy is not administered in the acute hospital setting in Australia whereas it is in a number of Irish hospitals. In order to differentiate this activity from other skin disorder treatments the local DRG J98Z (*UV Therapy*) has been created which isolates this activity so it can be costed and reimbursed appropriately.

TABLE 4.12 Total Discharges: MDC 10 Endocrine, Nutritional and Metabolic Diseases and Disorders: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 10 Endocrine, Nutritional and Metabolic Diseases and Disorders	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
K01A OR Procedures for Diabetic Complications, Major Complexity	0	58	49.9	33
K01B OR Procedures for Diabetic Complications, Intermediate Complexity	0	99	21.7	18
K01C OR Procedures for Diabetic Complications, Minor Complexity	~	166	13.1	10
K02A Pituitary Procedures, Major Complexity	0	6	13.3	11
K02B Pituitary Procedures, Minor Complexity	~	71	7.3	5
K03Z Adrenal Procedures	~	72	7.6	6
K05A Parathyroid Procedures, Major Complexity	0	40	7.9	3
K05B Parathyroid Procedures, Minor Complexity	14	171	2.1	1
K06A Thyroid Procedures, Major Complexity	0	88	7.4	5
K06B Thyroid Procedures, Minor Complexity	29	574	2.2	2
K08Z Thyroglossal Procedures	10	64	1.7	1
K09A Other Endocrine, Nutritional and Metabolic OR Procedures, Major Complexity	~	35	34.1	20
K09B Other Endocrine, Nutritional and Metabolic OR Procedures, Minor Complexity	34	41	13.5	8
K10A Revisional and Open Bariatric Procedures, Major Complexity	0	~	^	^
K10B Revisional and Open Bariatric Procedures, Minor Complexity	0	8	2.4	2
K11A Major Laparoscopic Bariatric Procedures, Major Complexity	0	51	4.4	3
K11B Major Laparoscopic Bariatric Procedures, Minor Complexity	0	58	2.8	3
K12A Other Bariatric Procedures, Major Complexity	0	~	^	^
K12B Other Bariatric Procedures, Minor Complexity	~	0	-	-
K13Z Plastic OR Procedures for Endocrine, Nutritional and Metabolic Disorders	6	38	2.7	2
K40A Endoscopic and Investigative Procedures for Metabolic Disorders, Major Comp	25	299	16.4	10
K40B Endoscopic and Investigative Procedures for Metabolic Disorders, Minor Comp	1,008	122	6.8	5
K60A Diabetes, Major Complexity	~	889	12.7	6
K60B Diabetes, Minor Complexity	306	2,905	3.9	2
K61A Severe Nutritional Disturbance, Major Complexity	0	29	41.8	28
K61B Severe Nutritional Disturbance, Minor Complexity	6	21	16.1	10
K62A Miscellaneous Metabolic Disorders, Major Complexity	22	699	14.0	8
K62B Miscellaneous Metabolic Disorders, Intermediate Complexity	158	1,845	5.3	3
K62C Miscellaneous Metabolic Disorders, Minor Complexity	1,449	2,291	2.4	1
K63A Inborn Errors of Metabolism, Major Complexity	298	141	7.8	2
K63B Inborn Errors of Metabolism, Minor Complexity	337	69	3.1	2
K64A Endocrine Disorders, Major Complexity	714	867	5.8	3
K64B Endocrine Disorders, Minor Complexity	2,142	701	1.9	1
Total	**6,569**	**12,524**	**6.1**	**3**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
^ Denotes that length of stay is suppressed where the number of discharges is not reported.
- Mean and median length of stay cannot be calculated as no in-patients are reported.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.13 Total Discharges: MDC 11 Diseases and Disorders of the Kidney and Urinary Tract: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 11 Diseases and Disorders of the Kidney and Urinary Tract	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
L02A Operative Insertion of Peritoneal Catheter for Dialysis, Major Complexity	0	29	12.0	9
L02B Operative Insertion of Peritoneal Catheter for Dialysis, Minor Complexity	47	38	3.1	3
L03A Kidney, Ureter and Major Bladder Procedures for Neoplasm, Major Complexity	0	74	26.9	18
L03B Kidney, Ureter and Major Bladder Procedures for Neoplasm, Intermediate Comp	0	238	10.0	7
L03C Kidney, Ureter and Major Bladder Procedures for Neoplasm, Minor Complexity	20	362	6.4	6
L04A Kidney, Ureter and Major Bladder Procedures for Non-Neoplasm, Major Complexity	~	212	25.5	15
L04B Kidney, Ureter and Major Bladder Procedures for Non-Neoplasm, Intermediate Comp	42	722	7.9	5
L04C Kidney, Ureter and Major Bladder Procedures for Non-Neoplasm, Minor Complexity	677	1,340	3.2	2
L05A Transurethral Prostatectomy for Urinary Disorder, Major Complexity	0	19	17.1	14
L05B Transurethral Prostatectomy for Urinary Disorder, Minor Complexity	~	106	5.8	3
L06A Minor Bladder Procedures, Major Complexity	~	67	25.3	17
L06B Minor Bladder Procedures, Intermediate Complexity	8	102	7.6	6
L06C Minor Bladder Procedures, Minor Complexity	105	174	4.3	3
L07A Other Transurethral Procedures, Major Complexity	14	257	10.6	6
L07B Other Transurethral Procedures, Minor Complexity	696	971	3.1	2
L08A Urethral Procedures, Major Complexity	~	30	6.1	3
L08B Urethral Procedures, Minor Complexity	64	109	2.6	2
L09A Other Procedures for Kidney and Urinary Tract Disorders, Major Complexity	~	44	39.0	31
L09B Other Procedures for Kidney and Urinary Tract Disorders, Intermediate Complexity	7	53	11.5	8
L09C Other Procedures for Kidney and Urinary Tract Disorders, Minor Complexity	251	120	3.2	1
L40Z Ureteroscopy	86	111	3.9	2
L41Z Cystourethroscopy for Urinary Disorder, Sameday	11,589	75	0.5	1
L42Z ESW Lithotripsy	2,293	86	2.3	2
L60A Kidney Failure, Major Complexity	~	657	23.0	14
L60B Kidney Failure, Intermediate Complexity	224	1,892	7.6	5
L60C Kidney Failure, Minor Complexity	1,398	539	3.6	2
L61Z Haemodialysis	170,461	18	1.7	1
L62A Kidney and Urinary Tract Neoplasms, Major Complexity	29	213	15.1	11
L62B Kidney and Urinary Tract Neoplasms, Minor Complexity	897	332	5.6	3
L63A Kidney and Urinary Tract Infections, Major Complexity	34	6,715	12.9	7
L63B Kidney and Urinary Tract Infections, Minor Complexity	1,256	8,260	4.2	3
L64A Urinary Stones and Obstruction, Major Complexity	93	905	4.2	3
L64B Urinary Stones and Obstruction, Minor Complexity	326	1,762	1.9	1
L65A Kidney and Urinary Tract Signs and Symptoms, Major Complexity	30	601	9.8	6
L65B Kidney and Urinary Tract Signs and Symptoms, Minor Complexity	2,131	1,680	2.9	2
L66Z Urethral Stricture	155	107	2.3	1
L67A Other Kidney and Urinary Tract Disorders, Major Complexity	465	1,013	8.8	5
L67B Other Kidney and Urinary Tract Disorders, Intermediate Complexity	2,435	964	3.0	2
L67C Other Kidney and Urinary Tract Disorders, Minor Complexity	3,175	170	1.9	1
Total	**199,020**	**31,167**	**7.2**	**4**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.14 Total Discharges: MDC 12 Diseases and Disorders of the Male Reproductive System: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 12 Diseases and Disorders of the Male Reproductive System	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
M01A Major Male Pelvic Procedures, Major Complexity	0	64	7.3	6
M01B Major Male Pelvic Procedures, Minor Complexity	0	327	4.2	4
M02A Transurethral Prostatectomy for Reproductive System Disorder, Major Complexity	0	53	9.2	6
M02B Transurethral Prostatectomy for Reproductive System Disorder, Minor Complexity	*	566	4.0	3
M03A Penis Procedures, Major Complexity	21	61	5.6	3
M03B Penis Procedures, Minor Complexity	481	121	1.6	1
M04Z Testes Procedures	1,441	760	2.2	1
M05Z Circumcision	1,951	159	1.2	1
M06A Other Male Reproductive System OR Procedures, Major Complexity	70	39	15.9	8
M06B Other Male Reproductive System OR Procedures, Minor Complexity	142	39	2.1	2
M40Z Cystourethroscopy for Male Reproductive System Disorder, Sameday	1,951	*	^	^
M60A Male Reproductive System Malignancy, Major Complexity	265	414	11.1	6
M60B Male Reproductive System Malignancy, Minor Complexity	3,326	157	14.1	5
M61A Benign Prostatic Hypertrophy, Major Complexity	31	35	5.8	4
M61B Benign Prostatic Hypertrophy, Minor Complexity	872	72	2.8	1
M62A Male Reproductive System Inflammation, Major Complexity	~	190	9.0	6
M62B Male Reproductive System Inflammation, Minor Complexity	818	932	2.2	1
M63Z Male Sterilisation Procedures	178	~	^	^
M64A Other Male Reproductive System Disorders, Major Complexity	34	81	4.1	2
M64B Other Male Reproductive System Disorders, Minor Complexity	685	575	1.2	1
Total	**12,284**	**4,656**	**4.2**	**2**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
* Further suppression required to prevent disclosure of five or fewer discharges.
^ Denotes that length of stay is suppressed where the number of discharges is not reported.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.15 Total Discharges: MDC 13 Diseases and Disorders of the Female Reproductive System: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 13 Diseases and Disorders of the Female Reproductive System	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
N01A Pelvic Evisceration and Radical Vulvectomy, Major Complexity	0	57	20.5	16
N01B Pelvic Evisceration and Radical Vulvectomy, Minor Complexity	0	131	6.9	5
N04A Hysterectomy for Non-Malignancy, Major Complexity	0	224	6.8	5
N04B Hysterectomy for Non-Malignancy, Minor Complexity	~	1,520	3.9	4
N05A Oophorectomy and Complex Fallopian Tube Procedures for Non-Malignancy, Maj Comp	~	71	6.5	5
N05B Oophorectomy and Complex Fallopian Tube Procedures for Non-Malignancy, Min Comp	221	536	2.5	2
N06A Female Reproductive System Reconstructive Procedures, Major Complexity	0	78	5.0	4
N06B Female Reproductive System Reconstructive Procedures, Minor Complexity	119	976	2.7	3
N07A Other Uterus and Adnexa Procedures for Non-Malignancy, Major Complexity	1,231	1,188	2.7	2
N07B Other Uterus and Adnexa Procedures for Non-Malignancy, Minor Complexity	2,061	182	1.3	1
N08Z Endoscopic and Laparoscopic Procedures, Female Reproductive System	843	407	3.4	1
N09Z Other Vagina, Cervix and Vulva Procedures	1,952	715	4.8	2
N10Z Diagnostic Curettage and Diagnostic Hysteroscopy	9,105	666	2.3	1
N11A Other Female Reproductive System OR Procedures, Major Complexity	12	93	11.4	7
N11B Other Female Reproductive System OR Procedures, Minor Complexity	10	8	2.0	1
N12A Uterus and Adnexa Procedures for Malignancy, Major Complexity	0	55	20.6	12
N12B Uterus and Adnexa Procedures for Malignancy, Intermediate Complexity	7	161	7.3	7
N12C Uterus and Adnexa Procedures for Malignancy, Minor Complexity	43	366	4.2	4
N60A Female Reproductive System Malignancy, Major Complexity	13	223	17.3	13
N60B Female Reproductive System Malignancy, Minor Complexity	838	504	6.5	4
N61A Female Reproductive System Infections, Major Complexity	10	83	5.3	4
N61B Female Reproductive System Infections, Minor Complexity	211	290	2.3	2
N62A Menstrual and Other Female Reproductive System Disorders, Major Complexity	145	475	3.5	2
N62B Menstrual and Other Female Reproductive System Disorders, Minor Complexity	3,469	2,172	1.6	1
Total	**20,298**	**11,181**	**3.8**	**2**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.16 Total Discharges: MDC 14 Pregnancy, Childbirth and the Puerperium: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 14 Pregnancy, Childbirth and the Puerperium	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
O01A Caesarean Delivery, Major Complexity	0	1,404	11.2	8
O01B Caesarean Delivery, Intermediate Complexity	0	7,422	5.8	5
O01C Caesarean Delivery, Minor Complexity	0	11,393	4.1	4
O02A Vaginal Delivery W OR Procedures, Major Complexity	0	147	5.2	4
O02B Vaginal Delivery W OR Procedures, Minor Complexity	0	723	3.3	3
O03A Ectopic Pregnancy, Major Complexity	0	133	2.8	2
O03B Ectopic Pregnancy, Minor Complexity	21	543	1.9	2
O04A Postpartum and Post Abortion W OR Procedures, Major Complexity[b]	~	81	4.5	4
O04B Postpartum and Post Abortion W OR Procedures, Minor Complexity[b]	19	138	2.6	2
O05Z Abortion W OR Procedures[b]	1,300	2,860	1.0	1
O60A Vaginal Delivery, Major Complexity	0	3,718	4.8	4
O60B Vaginal Delivery, Intermediate Complexity	0	17,994	3.0	3
O60C Vaginal Delivery, Minor Complexity	0	16,798	2.1	2
O61A Postpartum and Post Abortion W/O OR Procedures, Major Complexity[b]	10	557	3.9	3
O61B Postpartum and Post Abortion W/O OR Procedures, Minor Complexity[b]	1,064	2,577	1.9	1
O63A Abortion W/O OR Procedures, Major Complexity[b]	~	155	2.6	2
O63B Abortion W/O OR Procedures, Minor Complexity[b]	275	2,143	1.2	1
O66A Antenatal and Other Obstetric Admissions, Major Complexity	1,427	10,969	2.0	1
O66B Antenatal and Other Obstetric Admissions, Minor Complexity	7,198	30,285	1.0	1
Total	**11,317**	**110,040**	**2.6**	**2**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.
b This includes spontaneous abortions and pregnancies with abortive outcome.

TABLE 4.17 Total Discharges: MDC 15 Newborns and Other Neonates: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 15 Newborns and Other Neonates	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
P01Z Neonate W Sig OR Proc/Vent>=96hrs, Died or Transfer to Acute Faclity <5Days	0	39	2.0	2
P02Z Cardiothoracic and Vascular Procedures for Neonates	0	53	31.5	19
P03A Neonate, AdmWt 1000-1499g W Significant OR Proc/Vent>=96hrs, Major Complexity	0	71	60.9	65
P03B Neonate, AdmWt 1000-1499g W Significant OR Proc/Vent>=96hrs, Minor Complexity	0	136	40.0	42
P04A Neonate, AdmWt 1500-1999g W Significant OR Proc/Vent>=96hrs, Major Complexity	0	19	47.9	37
P04B Neonate, AdmWt 1500-1999g W Significant OR Proc/Vent>=96hrs, Minor Complexity	0	140	29.5	29
P05A Neonate, AdmWt 2000-2499g W Significant OR Proc/Vent>=96hrs, Major Complexity	0	9	146.0	54
P05B Neonate, AdmWt 2000-2499g W Significant OR Proc/Vent>=96hrs, Minor Complexity	0	83	22.0	18
P06A Neonate, AdmWt >=2500g W Significant OR Proc/Vent>=96hrs, Major Complexity	0	111	32.0	23
P06B Neonate, AdmWt >=2500g W Significant OR Proc/Vent>=96hrs, Minor Complexity	~	222	11.9	9
P07Z Neonate, AdmWt <750g W Significant OR Procedures	0	~	^	^
P08Z Neonate, AdmWt 750-999g W Significant OR Procedures	0	*	^	^
P60A Neonate W/O Sig OR/Vent>=96hrs, Died/Transfer Acute Facility <5 Days, MajC	0	92	2.1	2
P60B Neonate W/O Sig OR/Vent>=96hrs, Died/Transfer Acute Facility <5 Days, MinC	8	537	1.1	1
P61Z Neonate, AdmWt <750g W/O Significant OR procedure	0	76	63.1	64
P62A Neonate, AdmWt 750-999g W/O Significant OR Procedures, Major Complexity	0	28	77.5	83
P62B Neonate, AdmWt 750-999g W/O Significant OR Procedures, Minor Complexity	0	86	47.3	51
P63A Neonate, AdmWt 1000-1249g W/O Significant OR Proc/Vent>=96hrs, Major Complexity	0	16	42.6	41
P63B Neonate, AdmWt 1000-1249g W/O Significant OR Proc/Vent>=96hrs, Minor Complexity	0	31	29.5	32
P64A Neonate, AdmWt 1250-1499g W/O Significant OR Proc/Vent>=96hrs, Major Complexity	0	21	36.8	36
P64B Neonate, AdmWt 1250-1499g W/O Significant OR Proc/Vent>=96hrs, Minor Complexity	0	72	27.6	27
P65A Neonate, AdmWt 1500-1999g W/O Significant OR Proc/Vent>=96hrs, Extreme Comp	0	34	35.8	34
P65B Neonate, AdmWt 1500-1999g W/O Significant OR Proc/Vent>=96hrs, Major Complexity	0	117	24.8	25
P65C Neonate, AdmWt 1500-1999g W/O Significant OR Proc/Vent>=96hrs, Intermediate Comp	0	348	19.8	19
P65D Neonate, AdmWt 1500-1999g W/O Significant OR Proc/Vent>=96hrs, Minor Complexity	0	170	14.5	14
P66A Neonate, AdmWt 2000-2499g W/O Significant OR Proc/Vent>=96hrs, Extreme Comp	0	116	19.5	16
P66B Neonate, AdmWt 2000-2499g W/O Significant OR Proc/Vent>=96hrs, Major Complexity	0	305	13.9	14
P66C Neonate, AdmWt 2000-2499g W/O Significant OR Proc/Vent>=96hrs, Intermediate Comp	~	645	9.1	8
P66D Neonate, AdmWt 2000-2499g W/O Significant OR Proc/Vent>=96hrs, Minor Complexity	11	459	3.8	3
P67A Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, <37 Comp Wks Gest, Extr Comp	~	98	16.6	12
P67B Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, <37 Comp Wks Gest, Maj Comp	~	215	9.2	7
P67C Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, <37 Comp Wks Gest, Int Comp	~	238	7.6	7
P67D Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, <37 Comp Wks Gest, Min Comp	18	335	5.3	3
P68A Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Comp Wks Gest, Ext Comp	16	494	10.1	7
P68B Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Comp Wks Gest, Maj Comp	28	1,029	4.8	3
P68C Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Comp Wks Gest, Int Comp	90	1,503	3.5	3
P68D Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Comp Wks Gest, Min Comp	326	5,818	2.2	2
Total	**507**	**13,778**	**7.7**	**3**

Notes:
~ Denotes five or fewer discharges reported to HIPE.
* Further suppression required to prevent disclosure of five or fewer discharges.
^ Denotes that length of stay is suppressed where the number of discharges is not reported.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.18 Total Discharges: MDC 16 Diseases and Disorders of Blood, Blood Forming Organs, Immunological Disorders: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 16 Diseases and Disorders of Blood, Blood Forming Organs, Immunological Disorders	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
Q01A Splenectomy, Major Complexity	0	~	^	^
Q01B Splenectomy, Minor Complexity	0	*	^	^
Q02A Blood and Immune System Disorders W Other OR Procedures, Major Complexity	~	70	24.2	10
Q02B Blood and Immune System Disorders W Other OR Procedures, Minor Complexity	457	194	5.2	3
Q60A Reticuloendothelial and Immunity Disorders, Major Complexity	544	1,282	6.5	4
Q60B Reticuloendothelial and Immunity Disorders, Minor Complexity	3,929	486	1.9	1
Q61A Red Blood Cell Disorders, Major Complexity	824	2,155	7.6	5
Q61B Red Blood Cell Disorders, Intermediate Complexity	12,952	3,063	2.3	1
Q61C Red Blood Cell Disorders, Minor Complexity	23,268	53	0.8	1
Q62A Coagulation Disorders, Major Complexity	*	441	7.2	3
Q62B Coagulation Disorders, Minor Complexity	3,423	612	2.1	1
Total	**45,437**	**8,384**	**4.8**	**2**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
* Further suppression required to prevent disclosure of five or fewer discharges.
^ Denotes that length of stay is suppressed where the number of discharges is not reported.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.19 Total Discharges: MDC 17 Neoplastic Disorders (Haematological and Solid Neoplasms): AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 17 Neoplastic Disorders (Haematological and Solid Neoplasms)	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
R01A Lymphoma and Leukaemia W Major OR Procedures, Major Complexity	~	63	28.4	17
R01B Lymphoma and Leukaemia W Major OR Procedures, Minor Complexity	21	61	6.3	5
R02A Other Neoplastic Disorders W Major OR Procedures, Major Complexity	0	18	17.2	16
R02B Other Neoplastic Disorders W Major OR Procedures, Intermediate Complexity	~	82	6.8	6
R02C Other Neoplastic Disorders W Major OR Procedures, Minor Complexity	38	157	4.4	3
R03A Lymphoma and Leukaemia W Other OR Procedures, Major Complexity	0	61	44.3	37
R03B Lymphoma and Leukaemia W Other OR Procedures, Intermediate Complexity	11	108	13.7	12
R03C Lymphoma and Leukaemia W Other OR Procedures, Minor Complexity	194	155	5.3	3
R04A Other Neoplastic Disorders W Other OR Procedures, Major Complexity	28	63	15.1	13
R04B Other Neoplastic Disorders W Other OR Procedures, Minor Complexity	813	107	4.6	3
R60A Acute Leukaemia, Major Complexity	128	466	23.0	18
R60B Acute Leukaemia, Minor Complexity	2,215	428	5.8	3
R61A Lymphoma and Non-Acute Leukaemia, Major Complexity	361	1,413	13.2	8
R61B Lymphoma and Non-Acute Leukaemia, Minor Complexity	9,391	1,843	4.3	3
R62A Other Neoplastic Disorders, Major Complexity[b]	817	209	15.0	10
R62B Other Neoplastic Disorders, Intermediate Complexity[b]	5,827	151	7.0	4
R62C Other Neoplastic Disorders, Minor Complexity[b]	102,989	30	7.5	3
R63Z Chemotherapy	114,598	0	-	-
R99Z Oncology Repeat Attendance[c]	22,990	0	-	-
Total	**260,427**	**5,415**	**10.0**	**5**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
- Mean and median length of stay cannot be calculated as no in-patients are reported.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.
b From 2015 this data includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.
c The official classification for AR-DRG's (V8.0) has been slightly modified by the addition of two local DRG's specific to Ireland to account for some differences in the provision of care. While this practice has been used for Activity Based Funding, this is the first year that this modification to the official classification has been published in the HIPE Annual Report.
There are many attendances at oncology day wards where patients undergo only very minor procedures (e.g. taking of bloods) which are generally of lower complexity than administration of chemotherapy or other oncology procedures. The local DRG R99Z (*Oncology Repeat Attendance*) is used to identify these cases and to ensure that they are costed and reimbursed appropriately.

TABLE 4.20 Total Discharges: MDC 18 Infectious and Parasitic Diseases, Systemic or Unspecified Sites: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 18 Infectious and Parasitic Diseases, Systemic or Unspecified Sites	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
S65A Human Immunodeficiency Virus, Major Complexity	0	35	29.9	13
S65B Human Immunodeficiency Virus, Intermediate Complexity	~	102	10.5	7
S65C Human Immunodeficiency Virus, Minor Complexity	29	34	4.3	2
T01A Infectious and Parasitic Diseases W OR Procedures, Major Complexity	~	117	42.0	32
T01B Infectious and Parasitic Diseases W OR Procedures, Intermediate Complexity	7	219	18.0	13
T01C Infectious and Parasitic Diseases W OR Procedures, Minor Complexity	35	274	10.1	7
T40Z Infectious and Parasitic Diseases W Ventilator Support	0	31	18.8	12
T60A Septicaemia, Major Complexity	0	393	25.8	17
T60B Septicaemia, Intermediate Complexity	54	1,181	12.0	8
T60C Septicaemia, Minor Complexity	13	1,567	7.1	5
T61A Postoperative and Post-Traumatic Infections, Major Complexity	30	369	10.3	6
T61B Postoperative and Post-Traumatic Infections, Minor Complexity	90	899	4.7	3
T62A Fever of Unknown Origin, Major Complexity	~	167	7.1	5
T62B Fever of Unknown Origin, Minor Complexity	32	1,026	2.5	2
T63A Viral Illnesses, Major Complexity	12	531	4.6	3
T63B Viral Illnesses, Minor Complexity	552	4,143	1.6	1
T64A Other Infectious and Parasitic Diseases, Major Complexity	0	35	30.0	18
T64B Other Infectious and Parasitic Diseases, Intermediate Complexity	9	122	10.4	8
T64C Other Infectious and Parasitic Diseases, Minor Complexity	107	318	4.2	2
Total	**975**	**11,563**	**6.4**	**3**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.21 Total Discharges: MDC 19 Mental Diseases and Disorders: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 19 Mental Diseases and Disorders	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
U40Z Mental Health Treatment W ECT, Sameday	60	~	^	^
U60A Mental Health Treatment W/O ECT, Sameday, Major Complexity	361	270	0.5	1
U60B Mental Health Treatment W/O ECT, Sameday, Minor Complexity	218	498	0.5	1
U61A Schizophrenia Disorders, Major Complexity	0	42	56.2	28
U61B Schizophrenia Disorders, Minor Complexity	0	101	31.3	16
U62A Paranoia and Acute Psychotic Disorders, Major Complexity	0	33	22.1	17
U62B Paranoia and Acute Psychotic Disorders, Minor Complexity	0	104	15.0	6
U63A Major Affective Disorders, Major Complexity	0	51	35.3	27
U63B Major Affective Disorders, Minor Complexity	0	166	21.2	13
U64A Other Affective and Somatoform Disorders, Major Complexity	0	47	17.0	7
U64B Other Affective and Somatoform Disorders, Minor Complexity	0	178	7.5	3
U65A Anxiety Disorders, Major Complexity	0	139	13.5	7
U65B Anxiety Disorders, Minor Complexity	0	320	4.3	2
U66A Eating and Obsessive-Compulsive Disorders, Major Complexity	0	72	46.1	35
U66B Eating and Obsessive-Compulsive Disorders, Minor Complexity	0	165	15.2	7
U67A Personality Disorders and Acute Reactions, Major Complexity	0	80	21.1	10
U67B Personality Disorders and Acute Reactions, Minor Complexity	0	176	7.3	3
U68A Childhood Mental Disorders, Major Complexity	0	*	^	^
U68B Childhood Mental Disorders, Minor Complexity	0	35	3.8	2
Total	**639**	**2,509**	**11.2**	**2**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
* Further suppression required to prevent disclosure of five or fewer discharges.
^ Denotes that length of stay is suppressed where the number of discharges is not reported.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.22 Total Discharges: MDC 20 Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 20 Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
V60A Alcohol Intoxication and Withdrawal, Major Complexity	0	433	12.4	5
V60B Alcohol Intoxication and Withdrawal, Minor Complexity	0	1,092	3.2	2
V61A Drug Intoxication and Withdrawal, Major Complexity	0	35	15.9	8
V61B Drug Intoxication and Withdrawal, Minor Complexity	0	143	6.6	3
V62A Alcohol Use and Dependence, Major Complexity	0	99	15.6	9
V62B Alcohol Use and Dependence, Minor Complexity	0	470	4.2	3
V63Z Opioid Use and Dependence	0	86	19.6	21
V64Z Other Drug Use and Dependence	0	43	8.5	3
V65Z Treatment for Alcohol Disorders, Sameday	*	460	0.5	1
V66Z Treatment for Drug Disorders, Sameday	~	57	0.5	1
Total	**10**	**2,918**	**5.5**	**2**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
* Further suppression required to prevent disclosure of five or fewer discharges.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.23 Total Discharges: MDC 21 Injuries, Poisonings and Toxic Effects of Drugs: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 21 Injuries, Poisonings and Toxic Effects of Drugs	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
W01A Vent, Trac & Cran Procs for Mult Sig Trauma, Major Complexity	0	22	83.7	39
W01B Vent, Trac & Cran Procs for Mult Sig Trauma, Intermediate Complexity	0	40	48.3	28
W01C Vent, Trac & Cran Procs for Mult Sig Trauma, Minor Complexity	0	40	22.8	18
W02A Hip, Femur and Lower Limb Procedures for Multiple Sig Trauma, Major Complexity	0	18	34.4	20
W02B Hip, Femur and Lower Limb Procedures for Multiple Sig Trauma, Minor Complexity	0	95	25.0	17
W03Z Abdominal Procedures for Multiple Significant Trauma	0	20	17.6	14
W04A Multiple Significant Trauma W Other OR Procedures, Major Complexity	0	18	33.4	32
W04B Multiple Significant Trauma W Other OR Procedures, Minor Complexity	0	43	11.2	9
W60A Multiple Sig Trauma, Died or Transferred to Acute Facility <5 Days, Major Comp	0	31	1.8	1
W60B Multiple Sig Trauma, Died or Transferred to Acute Facility <5 Days, Minor Comp	0	30	2.1	2
W61A Multiple Significant Trauma W/O OR Procedures, Major Complexity	0	85	31.6	19
W61B Multiple Significant Trauma W/O OR Procedures, Minor Complexity	0	154	9.8	7
X02A Microvascular Tissue Transfer and Skin Grafts for Injuries to Hand, Major Comp	~	23	10.2	8
X02B Microvascular Tissue Transfer and Skin Grafts for Injuries to Hand, Minor Comp	14	75	1.9	1
X04A Other Procedures for Injuries to Lower Limb, Major Complexity	~	36	31.8	10
X04B Other Procedures for Injuries to Lower Limb, Minor Complexity	11	158	3.5	2
X05A Other Procedures for Injuries to Hand, Major Complexity	54	272	2.7	2
X05B Other Procedures for Injuries to Hand, Minor Complexity	289	896	0.9	1
X06A Other Procedures for Other Injuries, Major Complexity	~	118	21.4	14
X06B Other Procedures for Other Injuries, Intermediate Complexity	50	303	6.0	4
X06C Other Procedures for Other Injuries, Minor Complexity	200	890	2.4	1
X07A Skin Grafts for Injuries Excluding Hand, Major Complexity	0	28	27.1	17
X07B Skin Grafts for Injuries Excluding Hand, Intermediate Complexity	~	42	11.0	10
X07C Skin Grafts for Injuries Excluding Hand, Minor Complexity	15	50	6.7	4
X40A Injuries, Poisoning and Toxic Effects of Drugs W Ventilator Support, Major Comp	0	28	15.3	8
X40B Injuries, Poisoning and Toxic Effects of Drugs W Ventilator Support, Minor Comp	0	55	5.9	4
X60A Injuries, Major Complexity	11	964	11.9	6
X60B Injuries, Minor Complexity	506	3,774	1.6	1
X61A Allergic Reactions, Major Complexity	0	96	2.6	1
X61B Allergic Reactions, Minor Complexity	~	346	1.1	1
X62A Poisoning/Toxic Effects of Drugs and Other Substances, Major Complexity	0	960	6.0	3
X62B Poisoning/Toxic Effects of Drugs and Other Substances, Minor Complexity	93	3,319	1.7	1
X63A Sequelae of Treatment, Major Complexity	21	693	7.6	5
X63B Sequelae of Treatment, Minor Complexity	236	1,980	2.2	1
X64A Other Injuries, Poisonings and Toxic Effects, Major Complexity	0	218	11.2	6
X64B Other Injuries, Poisonings and Toxic Effects, Minor Complexity	10	584	1.7	1
Total	**1,523**	**16,504**	**4.1**	**1**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.24 Total Discharges: MDC 22 Burns: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 22 Burns	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
Y01Z Vent >=96hrs or Trach for Burns or OR Procs for Severe Full Thickness Burns	0	15	59.9	32
Y02A Skin Grafts for Other Burns, Major Complexity	~	59	18.9	17
Y02B Skin Grafts for Other Burns, Intermediate Complexity	~	73	9.8	7
Y02C Skin Grafts for Other Burns, Minor Complexity	~	36	6.8	6
Y03A Other OR Procedures for Other Burns, Major Complexity	18	32	11.1	4
Y03B Other OR Procedures for Other Burns, Minor Complexity	8	46	5.2	4
Y60Z Burns, Transferred to Acute Facility <5 Days	0	44	1.1	1
Y61Z Severe Burns	6	60	9.4	4
Y62A Other Burns, Major Complexity	~	98	7.7	4
Y62B Other Burns, Minor Complexity	74	174	2.9	1
Total	**120**	**637**	**8.5**	**4**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

TABLE 4.25 Total Discharges: MDC 23 Factors Influencing Health Status and Other Contacts with Health Services: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 23 Factors Influencing Health Status and Other Contacts with Health Services	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
Z01A Other Contacts W Health Services W OR Procedures, Major Complexity	38	127	25.3	11
Z01B Other Contacts W Health Services W OR Procedures, Minor Complexity	716	236	2.8	1
Z40Z Other Contacts W Health Services W Endoscopy, Sameday	15,826	38	0.5	1
Z60A Rehabilitation, Major Complexity	645	1,481	44.2	32
Z60B Rehabilitation, Minor Complexity	780	2,402	26.3	18
Z61A Signs and Symptoms, Major Complexity	24	612	10.3	4
Z61B Signs and Symptoms, Intermediate Complexity	202	935	3.5	1
Z61C Signs and Symptoms, Minor Complexity	986	1,399	1.6	1
Z63A Other Follow Up After Surgery or Medical Care, Major Complexity	84	1,676	27.6	16
Z63B Other Follow Up After Surgery or Medical Care, Minor Complexity	2,104	1,718	11.1	3
Z64A Other Factors Influencing Health Status, Major Complexity	3,878	648	11.2	2
Z64B Other Factors Influencing Health Status, Minor Complexity	36,210	1,524	1.7	1
Z65Z Congenital Anomalies and Problems Arising from Neonatal Period	90	65	5.7	2
Z66Z Sleep Disorders	19	591	1.2	1
Total	**61,602**	**13,452**	**16.4**	**4**

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

TABLE 4.26 Total Discharges: Unassignable to MDC: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

Unassignable to MDC[b]	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
801A OR Procedures Unrelated to Principal Diagnosis, Major Complexity	~	405	51.1	35
801B OR Procedures Unrelated to Principal Diagnosis, Intermediate Complexity	*	556	18.7	13
801C OR Procedures Unrelated to Principal Diagnosis, Minor Complexity	341	*	^	^
963Z Neonatal Diagnosis Not Consistent W Age/Weight	0	~	^	^
Total	**380**	**1,278**	**25.8**	**14**

Notes:
~ Denotes five or fewer discharges reported to HIPE.
* Further suppression required to prevent disclosure of five or fewer discharges.
^ Denotes that length of stay is suppressed where the number of discharges is not reported.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.
b As not all discharges can be assigned directly to an MDC, there is a category entitled 'unassignable to MDC'. These cases are always queried by the HPO.
Unrelated OR DRGs: Patients whose OR procedures are unrelated to the patient's principal diagnosis are assigned to one of three OR DRGs: 801A *OR Procedures Unrelated to Principal Diagnosis Major Complexity*, 801B *OR Procedures Unrelated to Principal Diagnosis Intermediate Complexity* or 801C *OR Procedures Unrelated to Principal Diagnosis Minor Complexity*. An example of when this may be assigned is when a patient is admitted for a medical treatment; they develop a complication unrelated to the principal diagnosis and later have an OR procedure performed for the additional diagnoses associated with the complication.
Error DRGs: Episodes that contain clinically atypical or invalid information are assigned to one of three error DRGs: 960Z *Ungroupable*, *961Z Unacceptable Principal Diagnosis* or 963Z *Neonatal Diagnosis Not Consistent W Age/Weight*.
Australian Consortium for Classification Development, 2015, *Australian Refined Diagnosis Related Groups, Version 8.0, Definitions Manual*, Volume 1. Independent Hospital Pricing Authority. p.11.

TABLE 4.27 Total Discharges: Pre-MDC: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

Pre-MDC	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
A01Z Liver Transplant	0	57	30.9	21
A03Z Lung or Heart-Lung Transplant	0	26	34.1	20
A05Z Heart Transplant	0	16	75.7	51
A06A Tracheostomy and/or Ventilation >=96hours, Major Complexity	0	247	118.8	69
A06B Tracheostomy and/or Ventilation >=96hours, Intermediate Complexity	0	793	55.8	39
A06C Tracheostomy and/or Ventilation >=96hours, Minor Complexity	0	1,112	28.1	19
A07A Allogeneic Bone Marrow Transplant, Age <=16 Years or Major Complexity	0	37	61.4	44
A07B Allogeneic Bone Marrow Transplant, Age >=17 Years and Minor Complexity	~	55	33.5	36
A08A Autologous Bone Marrow Transplant, Major Complexity	0	125	24.6	22
A08B Autologous Bone Marrow Transplant, Minor Complexity	~	52	8.0	5
A09A Kidney Transplant, Age <=16 Years or Major Complexity	0	30	16.4	12
A09B Kidney Transplant, Age >=17 Years and Minor Complexity	0	140	9.6	9
A10Z Insertion of Ventricular Assist Device	0	*	^	^
A11A Insertion of Implantable Spinal Infusion Device, Major Complexity	0	10	21.0	4
A11B Insertion of Implantable Spinal Infusion Device, Minor Complexity	~	~	^	^
A12Z Insertion of Neurostimulator Device	138	89	5.1	2
A40A ECMO, Major Complexity	0	10	44.4	43
A40B ECMO, Minor Complexity	0	24	18.9	15
Total	**144**	**2,834**	**42.5**	**24**

Notes:
~ Denotes five or fewer discharges reported to HIPE.
* Further suppression required to prevent disclosure of five or fewer discharges.
^ Denotes that length of stay is suppressed where the number of discharges is not reported.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.

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2018

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NEOPLASM DISCHARGE PROFILE, 2018

A.1.1 INTRODUCTION

As noted in Section One, this Annex is designed to highlight particular topics of interest that merit more focused supplementary analysis. The focus of this year's Annex is discharges with a principal diagnosis[1] of *Neoplasms* (ICD-10-AM diagnosis codes C00-D48). The assignment of the appropriate ICD-10-AM code is dependent on the behaviour and the site of the neoplasm (see box below). The morphology code of the neoplasm, which, relates to the tissue that the neoplasm originates in, is not collected in Ireland.

The Neoplasm chapter in ICD-10-AM splits the codes into the following categories:

- C00–C96: Malignant neoplasms
- D00–D09: In situ neoplasms
- D10–D36: Benign neoplasms
- D37–D48: Neoplasms of uncertain or unknown behaviour

Neoplasm behaviour

Behaviour of a neoplasm is the way in which the cells act and spread within the body. The terms used to describe the behaviour of a neoplasm are:

- malignant (primary and secondary) – also known as cancer, these neoplasms (primary sites) are invasive and can grow and invade nearby organs as well as spread (metastasise) to different parts of the body (known as secondary sites).
- in situ – these neoplasms are in the process of undergoing malignant changes but have not yet invaded other areas. They are still only within the original tissue they developed from.
- benign – these neoplasms grow in one place and do not invade or spread to other areas in the body. They are usually contained within a capsule.
- uncertain – these are neoplasms that are known to become malignant but have not yet done so at this point in time.
- unspecified – a neoplasm that there has been no morphology (or documentation) to say what its behaviour is. Very rarely do we assign this behaviour in hospital settings.

Site of Neoplasm

Under the blocks for behaviour are the categories for sites. The sites for primary malignant neoplasms are much more specific than those for secondary malignant neoplasms.

Source: ICD 10-AM/ACHI/ACS Eighth Edition Chapter 2: Neoplams, Australian Health Services Research Institute, University of Wollongong.

[1] 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'. Neoplasms may be reported as a secondary diagnosis in HIPE but analysis of this activity is beyond the scope of this Annex. See Section Three for details of clinical coding and classifications.

This annex will mainly focus on in-patient discharges with a principal diagnosis of neoplasm. The guidelines for the classification of neoplasms for day patients differ slightly, and this is presented separately in Table A 1.5. [2]

Table A 1.1 provides an overview of in-patient discharges with a principal diagnosis of *Neoplasms* (C00-D48) by diagnosis categories.

- *Malignant neoplasms* accounted for the majority of total discharges (83.1 per cent), with the remainder accounted for by *In situ neoplasms* (1.6 per cent), *Benign neoplasms* (11.5 per cent) and *Neoplasms of uncertain or unknown behaviour* (3.8 per cent).
- The mean length of stay for all overnight in-patients was 10.1 days.
- The category with the highest number of total discharges was *Malignant neoplasms of digestive organs*, accounting for 17.3 per cent of total in-patient discharges.
- The category with the longest mean length of stay was *Malignant neoplasms of lip, oral cavity and pharynx*, with a mean length of stay of 18.8 days.

[2] Please see Appendix IX for coding guidelines for Radiotherapy (Australian Coding Standard 0229 *Radiotherapy*) and for Chemotherapy (Australian Coding Standard 0044 *Chemotherapy*).

TABLE A 1.1 Neoplasm In-Patient Discharges by ICD-10-AM Diagnosis Category (N, % and In-Patient Length of Stay)

Principal Diagnosis	ICD-10 AM Code	Sameday In-Patients	Overnight In-Patients			Total In-Patients	
		N	N	Mean	Median	N	%
Malignant neoplasms of lip, oral cavity and pharynx	C00-C14	24	774	18.8	10	798	2.3
Malignant neoplasms of digestive organs	C15-C26	319	5,595	13.1	8	5,914	17.3
Malignant neoplasms of respiratory and intrathoracic organs	C30-C39	148	2,853	12.9	8	3,001	8.8
Malignant neoplasms of bone and articular cartilage	C40-C41	8	440	7.8	4	448	1.3
Melanoma and other malignant neoplasms of skin	C43-C44	131	888	7.4	2	1,019	3.0
Malignant neoplasms of mesothelial and soft tissue	C45-C49	23	448	9.0	5	471	1.4
Malignant neoplasms of breast	C50	366	2,128	6.1	3	2,494	7.3
Malignant neoplasms of female genital organs	C51-C58	27	1,727	10.1	6	1,754	5.1
Malignant neoplasms of male genital organs	C60-C63	26	1,236	9.0	4	1,262	3.7
Malignant neoplasms of urinary tract	C64-C68	42	1,912	8.3	5	1,954	5.7
Malignant neoplasms of eye, brain and other parts of central nervous system	C69-C72	32	1,040	11.9	7	1,072	3.1
Malignant neoplasms of thyroid and other endocrine glands	C73-C75	11	520	6.0	3	531	1.5
Malignant neoplasms of ill-defined, secondary and unspecified sites	C76-C80	190	3,194	11.0	7	3,384	9.9
Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81-C96	177	4,216	12.1	6	4,393	12.8
In situ neoplasms	D00-D09	92	464	3.7	2	556	1.6
Benign neoplasms	D10-D36	384	3,539	4.9	3	3,923	11.5
Neoplasms of uncertain or unknown behaviour	D37-D48	130	1,157	7.8	4	1,287	3.8
Total *Neoplasm* In-Patient Discharges		**2,130**	**32,131**	**10.1**	**5**	**34,261**	**100**

Note: Percentage column is subject to rounding.

A.1.2 NEOPLASMS – DEMOGRAPHIC ANALYSIS

Table A 1.2 shows the distribution of in-patient discharges with a principal diagnosis of neoplasm by selected variables.

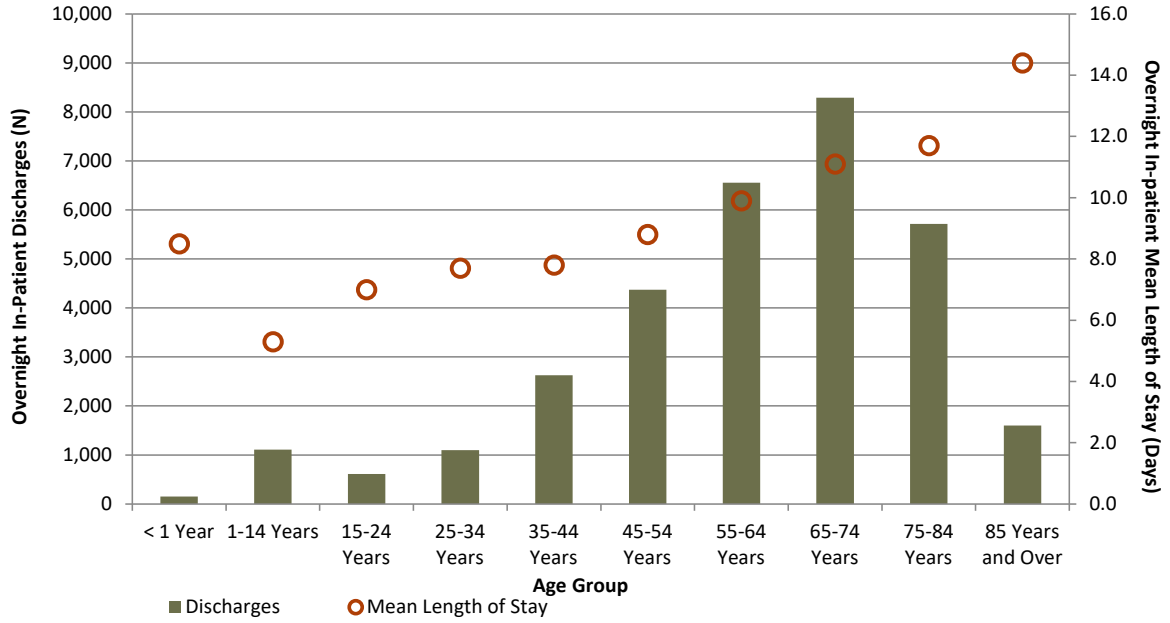
- Discharges are almost evenly divided by sex, with slightly more females (50.3 per cent) than males (49.7 per cent).
- The largest proportion of discharges with a principal diagnosis of neoplasm were aged between 65 and 74 years (25.6 per cent).
- Apart from the youngest age group the mean length of stay increased with age, with discharges aged 85 years and over recording the highest mean length of stay at 14.4 days (see Fig. A 1.1).
- Elective overnight in-patients had a mean length of stay of 8.0 days compared to 13.5 days for emergency overnight in-patients.

TABLE A 1.2 Neoplasm In-Patient Discharges: Demographic Profile (N, %, In-Patient Length of Stay)

	Same Day In-patients	Overnight In-patients			Total In-Patients	
	N	N	Mean	Median	N	%
Total	**2,130**	**32,131**	**10.1**	**5**	**34,261**	**100**
Sex						
Male	835	16,207	11.0	6	17,042	49.7
Female	1,295	15,924	9.2	5	17,219	50.3
Age Group						
< 1 Year	35	153	8.5	3	188	0.5
1-14 Years	87	1,107	5.3	3	1,194	3.5
15-24 Years	40	612	7.0	4	652	1.9
25-34 Years	93	1,098	7.7	4	1,191	3.5
35-44 Years	199	2,624	7.8	4	2,823	8.2
45-54 Years	395	4,371	8.8	4	4,766	13.9
55-64 Years	462	6,558	9.9	5	7,020	20.5
65-74 Years	469	8,292	11.1	6	8,761	25.6
75-84 Years	266	5,713	11.7	7	5,979	17.5
85 Years and Over	84	1,603	14.4	8	1,687	4.9
Public/Private Status[a]						
Public	1,741	24,213	10.4	5	25,954	75.8
Private	389	7,918	9.4	5	8,307	24.2
Hospital Group						
Ireland East	874	5,703	9.6	5	6,577	19.2
RCSI	363	3,952	10.4	6	4,315	12.6
Dublin Midlands	175	6,840	13.8	7	7,015	20.5
South/South West	259	6,552	8.3	4	6,811	19.9
UL	82	1,586	7.7	4	1,668	4.9
Saolta	357	6,407	9.7	6	6,764	19.7
Children's	20	1,089	6.1	3	1,109	3.2
No Group	0	~	^	^	~	^
Admission Type						
Elective	965	19,709	8.0	4	20,674	60.3
Emergency	1,165	12,422	13.5	8	13,587	39.7

Note: Percentage column is subject to rounding.
~ Denotes five or fewer discharges reported to HIPE.
^ Denotes that length of stay is suppressed where the number of discharges is not reported.
a Public/Private status refers to whether the patient saw the consultant on a private or public basis. It does not relate to the type of bed occupied nor is it an indicator of private health insurance.

FIGURE A 1.1 Neoplasm Overnight In-Patient Discharges: Age Group (N, Overnight In-Patient Length of Stay)



Note: See Table A 1.2 for data.

A.1.3 PRINCIPAL PROCEDURES

Table A 1.3 presents the top 20 principal procedure blocks for in-patient discharges with a principal diagnosis of neoplasm, based on the ACHI classification.[3]

- 89 per cent of total in-patient discharges with a principal diagnosis of neoplasm had a principal procedure recorded.
- The *Pharmacotherapy* procedure block accounted for the highest proportion of in-patient discharges (12.3 per cent).
- The longest mean length of stay was recorded for *Megavoltage radiation treatment* with a mean length of stay of 22.6 days.

[3] See Section Three for details of clinical coding and classification.

TABLE A 1.3 Neoplasm In-Patient Discharges: Top 20 Principal Procedure Blocks (N, %, In-Patient Length of Stay)

Principal Procedure Block		Sameday In-Patients	Overnight In-Patients			Total In-Patients	
		N	N	Mean	Median	N	%
1920	Pharmacotherapy	19	4,190	10.2	5	4,209	12.3
1916	Generalised allied health interventions	20	2,821	14.1	9	2,841	8.3
1893	Administration of blood and blood products	76	1,055	9.3	5	1,131	3.3
1268	Abdominal hysterectomy	0	1,047	5.9	5	1,047	3.1
0913	Colectomy	46	946	15.7	10	992	2.9
1744	Excision of lesion of breast	222	764	1.9	1	986	2.9
1748	Simple mastectomy	73	808	4.7	3	881	2.6
1620	Excision of lesion of skin and subcutaneous tissue	160	713	3.5	1	873	2.5
1788	Megavoltage radiation treatment	11	849	22.6	19	860	2.5
1100	Endoscopic resection of bladder lesion or tissue	~	770	6.0	3	*	^
0953	Excision procedures on liver	59	494	11.0	7	553	1.6
1008	Panendoscopy with excision	~	547	14.1	9	*	^
0911	Fibreoptic colonoscopy with excision	16	526	7.6	4	542	1.6
0935	Anterior resection of rectum	37	478	12.3	9	515	1.5
0015	Removal of intracranial lesion	0	479	10.6	7	479	1.4
0552	Lobectomy of lung	17	436	12.1	8	453	1.3
0768	Transcatheter embolisation of blood vessels	~	375	2.6	1	*	^
0544	Bronchoscopy with biopsy, broncho-alveolar lavage or removal of foreign body	11	366	14.7	11	377	1.1
0800	Biopsy of bone marrow	8	349	16.5	10	357	1.0
0114	Thyroidectomy	10	304	3.7	2	314	0.9
Other Procedure Block		**576**	**10,792**	**–**	**–**	**11,368**	**33.2**
No Procedure		**761**	**3,022**	**–**	**–**	**3,783**	**11.0**
Total Discharges		**2,130**	**32,131**	**10.1**	**5**	**34,261**	**100**

Notes: Percentage column is subject to rounding

~ Denotes five or fewer discharges reported to HIPE.

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

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

A.1.4 DIAGNOSIS RELATED GROUPS

Table A 1.4 presents the top 20 AR-DRG's for in-patient discharges with a principal diagnosis of neoplasm.[4]

- In-patient activity is represented by a broad range of DRGs, with only *Lymphoma and Non-Acute Leukaemia, Minor Complexity* (AR-DRG R61B) accounting for more than 5 per cent of total discharges (5.4 per cent).
- The top 20 AR-DRGs accounted for 53.2 per cent of all discharges.
- Of the top 20 AR-DRGs, *Acute Leukaemia, Major Complexity* (AR-DRG R60A) had the longest mean length of stay with a mean of 23.0 days.

TABLE A 1.4 Neoplasm In-Patient Discharges: Top 20 AR-DRG's (N, %, In-Patient Length of Stay)

AR-DRG		Sameday In-Patients	Overnight In-Patients			Total In-Patients	
		N	N	Mean	Median	N	%
R61B	Lymphoma and Non-Acute Leukaemia, Minor Complexity	122	1,715	4.6	3	1,837	5.4
J06B	Major Procedures for Breast Disorders, Minor Complexity	173	1,240	2.6	2	1,413	4.1
R61A	Lymphoma and Non-Acute Leukaemia, Major Complexity	20	1,392	13.3	8	1,412	4.1
E71B	Respiratory Neoplasms, Minor Complexity	124	1,054	6.8	4	1,178	3.4
E71A	Respiratory Neoplasms, Major Complexity	17	857	14.3	10	874	2.6
G02C	Major Small and Large Bowel Procedures, Minor Complexity	49	774	10.1	8	823	2.4
I65B	Musculoskeletal Malignant Neoplasms, Minor Complexity	0	786	6.2	4	786	2.3
H61B	Malignancy of Hepatobiliary System and Pancreas, Minor Complexity	98	672	7.0	4	770	2.2
G60A	Digestive Malignancy, Major Complexity	25	743	14.0	8	768	2.2
B66B	Nervous System Neoplasms, Minor Complexity	65	689	8.3	5	754	2.2
L07B	Other Transurethral Procedures, Minor Complexity	9	723	3.4	2	732	2.1
G60B	Digestive Malignancy, Minor Complexity	59	554	5.5	3	613	1.8
G01C	Rectal Resection, Minor Complexity	44	532	10.5	9	576	1.7
B66A	Nervous System Neoplasms, Major Complexity	11	553	18.4	10	564	1.6
N07A	Other Uterus and Adnexa Procedures for Non-Malignancy, Major Complexity	6	509	2.7	2	515	1.5
N60B	Female Reproductive System Malignancy, Minor Complexity	24	478	6.8	4	502	1.5
H61A	Malignancy of Hepatobiliary System and Pancreas, Major Complexity	7	495	13.6	11	502	1.5
B02C	Cranial Procedures, Minor Complexity	0	502	8.0	6	502	1.5
R60A	Acute Leukaemia, Major Complexity	11	453	23.0	19	464	1.4
N04B	Hysterectomy for Non-Malignancy, Minor Complexity	0	448	4.2	4	448	1.3
Other AR-DRG		**1,266**	**16,962**	**–**	**–**	**18,228**	**53.2**
Total Discharges		**2,130**	**32,131**	**10.1**	**5**	**34,261**	**100**

Note: Percentage column is subject to rounding.

[4] See Section Four for details of AR-DRG classification.

A.1.5 DAY PATIENTS

Table A 1.5 presents the number of discharges by age group for the highest volume day patient principal diagnosis categories associated with neoplasms; principal diagnosis of *Neoplasm* (C00-D48), *Radiotherapy* (Z51.0) and *Pharmacotherapy* (Z51.1). [5,6]

- The 65–74 year age group accounted for the highest volume of day patient discharges with a principal diagnosis of *Neoplasm* (25.2 per cent), followed by the 55–64 year age group (19.9 per cent).
- The 65–74 year age group also accounted for the highest volume of day patient discharges with a principal diagnosis of *Radiotherapy* (31.6 per cent), and the highest volume with a principal diagnosis of *Pharmacotherapy* (30.1 per cent), each followed by the 55–64 year age group (24.9 per cent and 24.6 per cent respectively).

TABLE A 1.5 Day Patient Discharges: Principal Diagnosis Category by Age Group (N, %)

	Neoplasm ICD 10-AM: C00-D48		Radiotherapy ICD 10-AM: Z51.0		Pharmacotherapy ICD 10-AM: Z51.1	
	N	%	N	%	N	%
< 1 Year	408	0.4	0	–	128	0.1
1-14 Years	4,355	4.1	632	0.6	3,898	3.4
15-24 Years	2,446	2.3	828	0.8	877	0.8
25-34 Years	4,798	4.5	2,107	1.9	2,306	2.0
35-44 Years	9,368	8.8	6,991	6.4	8,240	7.2
45-54 Years	13,937	13.1	17,078	15.6	18,286	16.0
55-64 Years	21,193	19.9	27,149	24.9	28,155	24.6
65-74 Years	26,912	25.2	34,489	31.6	34,519	30.1
75-84 Years	18,371	17.2	17,253	15.8	16,521	14.4
85 Years and Over	4,831	4.5	2,695	2.5	1,704	1.5
Total Discharges	**106,619**	**100**	**109,222**	**100**	**114,634**	**100**

Note: Percentage columns are subject to rounding.

[5] Please see Appendix IX for coding guidelines for Radiotherapy (Australian Coding Standard 0229 *Radiotherapy*) and Chemotherapy (Australian Coding Standard 0044 *Chemotherapy*).

[6] Table A 1.5 examines three principal diagnosis categories which account for the majority of neoplasm day patients. Other neoplasm related diagnoses exist which could be coded as a principal diagnosis (e.g. Z08 *Follow-up examination after treatment for malignant neoplasms*), but these are not covered in this section.

Glossary & Abbreviations

GLOSSARY

Acute hospital

An acute hospital provides medical and surgical treatment of relatively short duration (Department of Health and Children, 2001).

Additional diagnosis

This is a condition or complaint either coexisting with the principal diagnosis or arising during the episode of admitted patient care, episode of residential care or attendance at a health care establishment, as represented by a code (Australian Institute of Health and Welfare (2012), National Health Data Dictionary, Version 16, AIHW).

Admission type

The type of admission may generally be classified as a planned or emergency admission. Unlike emergency admissions, planned admissions are arranged in advance by the patient and/or service provider.

Australian Coding Standards

Australian Coding Standards (ACS) is a document developed to provide guidance in the application of ICD-10-AM and ACHI codes. Standards are provided with general guidelines and are categorised by site and/or body system according to the clinical specialty to which a disease or procedure relates.

Case mix

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

Complications

Complications may arise during the hospital stay.

Comorbidities

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

Day patient

A day patient is admitted to hospital for treatment on an elective (rather than an emergency) basis and is discharged alive, as scheduled, on the same day (Department of Health and Children, 2001). Deliveries are not included.

Delivery discharges

Refers to Maternity discharges where the woman had a diagnosis of delivery (ICD-10-AM diagnosis code Z37 *Outcome of delivery*).

Delivery status

Refers to the disaggregation of Maternity discharges into delivery and non-delivery status determined by the presence of a diagnosis of delivery (ICD-10-AM diagnosis code Z37 *Outcome of delivery*).

Diagnosis Related Group (DRG)

DRGs are clusters of cases with similar clinical attributes and resource requirements. In Ireland, Australian Refined Diagnosis Related Group (AR-DRG) have been in use in Ireland since 2005.

Discharge rate

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

$$\frac{\text{Discharges in group i}}{\text{Population of group i}} \times 1{,}000$$

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.

Elective admission

This is an admission or procedure that has been arranged in advance (Department of Health and Children, 2001). This term is generally used to refer to in-patient discharges. The term planned admission may also be used.

Emergency admission	An emergency admission is unforeseen and requires urgent care. This term is used to refer to in-patient discharges.
GMS status	Refers to whether a patient holds a medical card.
Hospital Groups	The organisational structure of public hospitals was revised in 2013 with the establishment of hospital groups on a non-statutory administrative basis.
Hospital In-Patient Enquiry (HIPE)	HIPE is a health information system that collates data on discharges from, and deaths in, acute hospitals in Ireland.
In-Patient	An in-patient is admitted to hospital for treatment or investigation on a planned or emergency basis. **Overnight In-Patient:** These discharges are in-patient discharges who stayed at least one night in hospital. **Sameday In-Patient:** These discharges are admitted as in-patients and discharged on the same day. They do not meet the criteria to be classified as a day patient. They are assigned a length of stay of 0.5 days
Irish Coding Standards	Irish Coding Standards (ICS) is a document which provides guidance and instruction on all aspects of HIPE data collection by addressing issues specific to the Irish hospital setting. It is revised regularly to reflect changing clinical practice. ICS is designed to complement the Australian Coding Standards. ICS V9B2018 was used in the collection of HIPE data in 2018.
Length of stay	Length of stay refers to the time, expressed in days, between admission to and discharge from hospital. For day patients and same day in-patients where the dates of admission and discharge are the same, length of stay is set equal to 0.5 days. Mean and median lengths of stay are provided for in-patients only. Mean length of stay is computed by dividing the number of days stayed by the number of discharges. The median length of stay is the middle value among the ordered lengths of stay, such that half of the values for length of stay are below the median and half the values for length of stay are above the median.
Major Diagnostic Category (MDC)	The MDC is a category generally based on a single body system or aetiology that is associated with a particular medical specialty. However, records assigned to MDCs 01, 15, 18 and 21 may have principal diagnoses associated with other categories. In AR-DRG Version 8.0, there are 23 MDCs.
Medical Assessment Unit	A medical assessment unit (MAU) also referred to as an Acute Medical Assessment Unit (AMAU) or an Acute Medical Unit (AMU), is a consultant led unit that accepts direct referrals from GPs. It offers priority access to diagnostic facilities.
Maternity discharges	These discharges are admitted in relation to their obstetrical experience (from conception to six weeks post-delivery), that is, they are allocated to Admission Type Maternity.
Non-delivery	Non-delivery discharges are Maternity discharges where the admission was related to their obstetrical experience but who did not deliver during that episode of care.
Parity	HIPE collects the number of previous live births and number of previous stillbirths (over 500g) for all cases with admission type code Maternity.

Primiparous: These are women who have had no previous pregnancy resulting in a live birth or stillbirth.
Multiparous: These are women who have had at least one previous pregnancy resulting in a live birth or stillbirth.

Patient type

A patient may be admitted to hospital as a day patient (which is planned and does not involve an overnight stay), or an in-patient.

Principal diagnosis

This is the diagnosis established after study to be chiefly responsible for occasioning an episode of admitted patient care, an episode of residential care, or an attendance at the health care establishment, as represented by a code (Australian Institute of Health and Welfare (2012), National Health Data Dictionary, Version 16, 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 (NCCC, 2013).

Public/private status

Refers to whether the patient is a public or private patient of the consultant. It does not relate to the type of bed occupied nor is it an indicator of possession of private health insurance.

Sources: The above definitions are taken directly from, or based on, those provided in the following:
Department of Health and Children, 2001. Quality and Fairness a Health System for You: Health Strategy. Dublin: The Stationery Office.
'Hospital Services – Introduction': Citizen's Information; date consulted: 9 December 2011. www.citizensinformation.ie/categories/health/hospital-services/hospital_services_introduction
For further information on the definitions of diagnoses see National Casemix and Classification Centre (NCCC), 2013: *Australian Coding Standards* (ACS) *(8th Ed)*: NCCC, Australian Health Services Research Institute, University of Wollongong. General Standards for Diseases.p 1-14.
For further information on the definitions of procedures see National Casemix and Classification Centre (NCCC), 2013: *Australian Coding Standards* (ACS) *(8th Ed)*: NCCC, Australian Health Services Research Institute, University of Wollongong. General Standards for Interventions. P 21-36
For further information on AR-DRG Version 8.0 see Australian Consortium for Classification Development website https://www.accd.net.au/ArDrg.aspx?page=2 [Accessed 26th July 2018].

ABBREVIATIONS

Adm	Admission
Admwt	Admission Weight
ACHI	Australian Classification of Health Interventions
ACS	Australian Coding Standards
ADRG	Adjacent Diagnosis Related Groups
AICD	Automatic Implantable Cardioverter-Defibrillator
AMI	Acute Myocardial Infarction
AR-DRG	Australian Refined Diagnosis Related Group
CABG	Coronary Artery Bypass Graft
CC	Complication and/or Comorbidity
CDE	Common Bile Duct Exploration
Circ	Circulatory
Comp	Complexity
CPB	Cardiopulmonary Bypass
Cran	Cranial
CSO	Central Statistics Office
D&D	Diseases and Disorders
CPB pump	Cardiopulmonary bypass pump
Dsrds	Disorders
DoH	Department of Health
DRG	Diagnosis Related Group
EEG	Electroencephalography
ECMO	Extra corporeal membrane oxygenation
ECT	Electroconvulsive therapy
ENT	Ear, Nose and Throat
ERCP	Endoscopic Retrograde Cholangio Pancreatography
ESRI	Economic and Social Research Institute
ESW	Extracorporeal Shock Waves
excl	Excluding
Ext	Extreme
Fmr	Femur
Gest	Gestation
GI	Gastro-intestinal
g	Grams
GMS	General Medical Services
GP	General Practitioner
HIPE	Hospital In-Patient Enquiry
HIV	Human Immunodeficiency Virus
HPO	Healthcare Pricing Office
HSE	Health Service Executive
ICD-10-AM	Tenth Revision of the International Classification of Diseases, Australian Modification
ICS	Irish Coding Standards

Incl	Including
Infect/inflam	Infection/inflammation
Inhal	Inhalation
Int/Interm	Intermediate
Inves/Invest	Investigative
IT	Information Technology
LOS	Length of Stay
Maj	Major
MAJC	Major Complexity
MDC	Major Diagnostic Category
Med	Median
Microvas	Microvascular
Min	Minor
MINC	Minor Complexity
misc	Miscellaneous
Mod	Moderate
Mult	Multiple
n/a	Not applicable
NCCC	National Casemix and Classification Centre
NCCH	National Centre for Classification in Health
N	Number of Observations/Discharges
Non-malig	Non-malignant
NPRS	National Perinatal Reporting System
NTPF	National Treatment Purchase Fund
Obs	Obstetric
OR	Operating Room
Pr/Proc(s)	Procedure(s)
Psych	Psychiatric
RCSI	Royal College of Surgeons in Ireland
Sev	Severe
Sig	Significant
TIA	Transient Ischaemic Attack
Tiss	Tissue
Tfr/Transf	Transfer
Trac	Tracheostomy
UL	University of Limerick Hospital Group
URI	Upper Respiratory Infection
Vent	Ventilation
WHO	World Health Organisation
W	With
W/O	Without

Appendices

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APPENDIX I: HIPE HOSPITALS

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

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

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

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

Notes: Total number of hospitals participating in 2018: 53

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

b For reporting purposes, discharges aged 17 years and older from Tallaght University Hospital are included in the Dublin Midlands Hospital Group, while discharges aged less than 17 years from Tallaght University Hospital are included in the Children's Hospital Group.

APPENDIX II: HIPE DATA COLLECTED

TABLE II.1 Data Collected by HIPE*

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

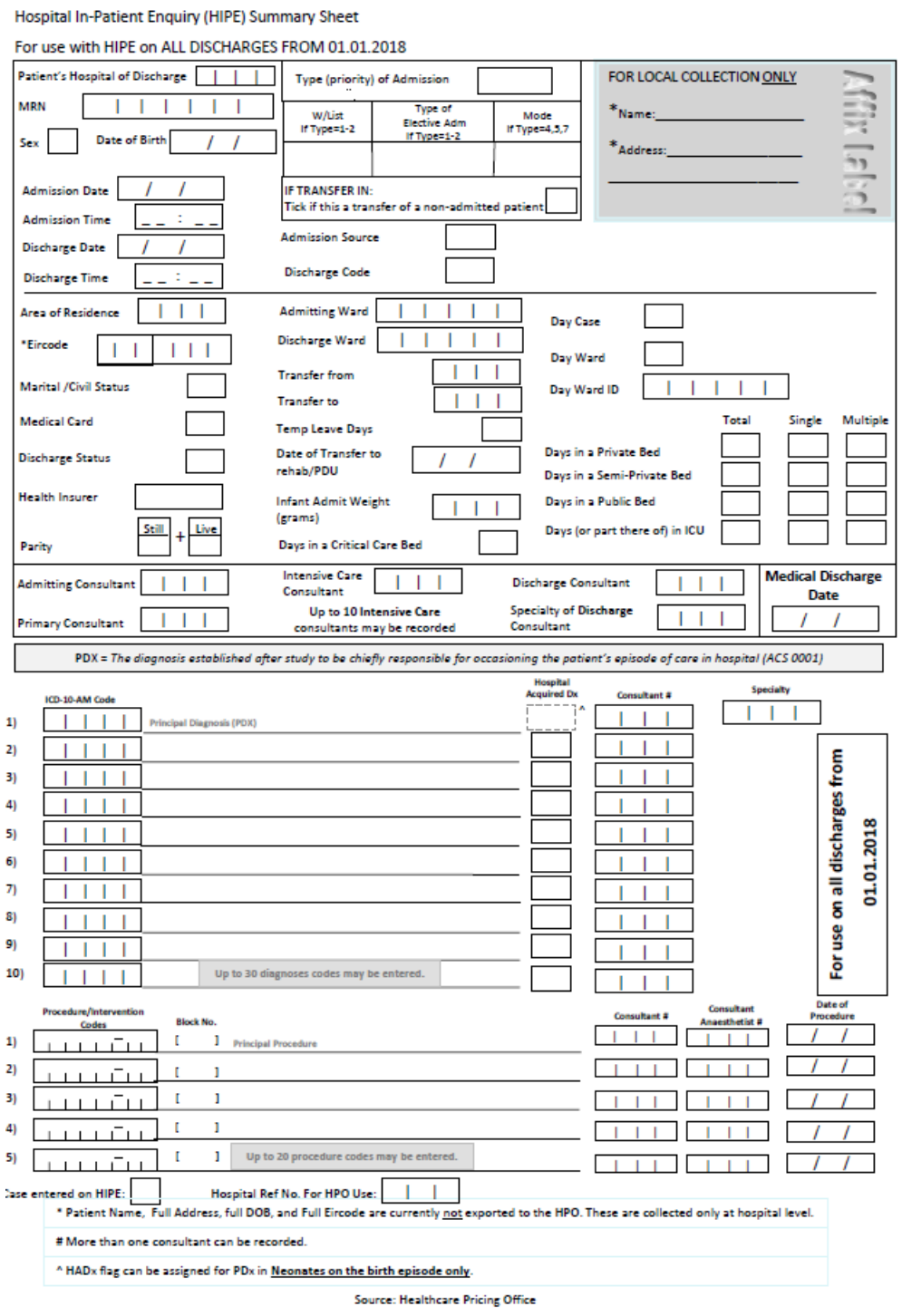
Data Collected by HIPE (contd.)

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

Note: * For details of all variables collected by HIPE see HIPE Data Dictionary 2018 Version 10.0.
Source: HIPE Data Dictionary 2018 Version 10.0, available at www.hpo.ie

APPENDIX III: HIPE DATA ENTRY FORM

FIGURE III.1 HIPE Data Entry Form, 2018



Hospital In-Patient Enquiry (HIPE) Summary Sheet

For use with HIPE on ALL DISCHARGES FROM 01.01.2018

Patient's Hospital of Discharge | | | | MRN | | | | | | | Sex | | Date of Birth / /

Admission Date / / Admission Time _ _ : _ _ Discharge Date / / Discharge Time _ _ : _ _

Area of Residence | | | | *Eircode | | | | | | | Marital /Civil Status | | Medical Card | | Discharge Status | | Health Insurer | | Parity Still + Live

Type (priority) of Admission | | W/List If Type=1-2 | Type of Elective Adm If Type=1-2 | Mode If Type=4,5,7 | IF TRANSFER IN: Tick if this a transfer of a non-admitted patient | Admission Source | | Discharge Code | |

Admitting Ward | | | | | | Discharge Ward | | | | | | Transfer from | | | Transfer to | | | Temp Leave Days | | Date of Transfer to rehab/PDU / / Infant Admit Weight (grams) | | | Days in a Critical Care Bed | |

Day Case | | Day Ward | | Day Ward ID | | | | | |

	Total	Single	Multiple
Days in a Private Bed			
Days in a Semi-Private Bed			
Days in a Public Bed			
Days (or part there of) in ICU			

FOR LOCAL COLLECTION ONLY

*Name:_____

*Address:_____

Affix Label

Admitting Consultant | | | Primary Consultant | | | Intensive Care Consultant | | | Up to 10 Intensive Care consultants may be recorded

Discharge Consultant | | | Specialty of Discharge Consultant | | | Medical Discharge Date / /

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

	ICD-10-AM Code	Principal Diagnosis (PDX)	Hospital Acquired Dx	Consultant #	Specialty
1)			^		
2)					
3)					
4)					
5)					
6)					
7)					
8)					
9)					
10)		Up to 30 diagnoses codes may be entered.			

For use on all discharges from 01.01.2018

	Procedure/Intervention Codes	Block No.		Consultant #	Consultant Anaesthetist #	Date of Procedure
1)	_ _ _ _ _ _ _	[ ]	Principal Procedure			/ /
2)	_ _ _ _ _ _ _	[ ]				/ /
3)	_ _ _ _ _ _ _	[ ]				/ /
4)	_ _ _ _ _ _ _	[ ]				/ /
5)	_ _ _ _ _ _ _	[ ]	Up to 20 procedure codes may be entered.			/ /

Case entered on HIPE: | Hospital Ref No. For HPO Use: | |

* Patient Name, Full Address, full DOB, and Full Eircode are currently not exported to the HPO. These are collected only at hospital level.

More than one consultant can be recorded.

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

Source: Healthcare Pricing Office

APPENDIX IV: DERIVED VARIABLES

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

TABLE IV.1 Derived Variables

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

Note: For further information on all variables collected by HIPE see HIPE Data Dictionary 2018 Version 10.0 available at www.hpo.ie

APPENDIX V: AUSTRALIAN CODING STANDARD 0042

Australian Coding Standard 0042 Procedures normally not coded[1]

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. That is, for a particular diagnosis or procedure there is a standard treatment which is unnecessary to code. For example:

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

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 cerebral anaesthesia is required in order for the procedure to be performed (see ACS 0031 *Anaesthesia*).
- These procedures should be coded if they are the principal reason for admission in same-day episodes of care. This includes patients who are admitted the day before or discharged on the day after a procedure because a same-day admission is not possible or practicable for them (eg elderly patients, those who live in remote locations).

1. Application of plaster
2. Bladder washout via indwelling catheter
3. Cardioplegia when associated with cardiac surgery
4. Cardiotocography (CTG) except fetal scalp electrodes
5. Catheterisation:
   - arterial or venous (such as Hickman's, PICC, CVC, Swan Ganz) except cardiac catheterisation (blocks [667] and [668]), surgical catheterisation (block [741]) or catheterisation in neonates (see ACS 1615 *Specific interventions for the sick neonate*)
   - urinary except if suprapubic

[1] Extracted from NCCC eBook, July 2013, General Standards for Interventions.

6. Doppler recordings

7. Dressings

8. Drug treatment/pharmacotherapy
Drug treatment should not be coded except if:
   - the substance is given as the principal treatment in same-day episodes of care
   - drug treatment is specifically addressed in a coding standard (see ACS 0044 *Chemotherapy*, ACS 1316 *Cement spacer/beads* and ACS 1615 *Specific interventions for the sick neonate*)

9. Electrocardiography (ECG) except patient-activated implantable cardiac event monitoring (loop recorder)

10. Electrodes (pacing wires) – temporary: insertion of temporary trans-cutaneous or transvenous electrodes when associated with cardiac surgery; adjustment, repositioning, manipulation or removal of temporary electrodes

11. Electromyography (EMG)

12. Hypothermia when associated with cardiac surgery

13. Imaging services – all codes in ACHI Chapter 20 *Imaging services* and block [451] *Dental radiological examination and interpretation* except:
   - transoesophageal echocardiogram (TOE) (55118-00 [1942])
   - when instructed to do so

14. Monitoring: cardiac, electroencephalography (EEG), vascular pressure except radiographic/video EEG monitoring ≥ 24 hours

15. Nasogastric intubation, aspiration and feeding, except nasogastric feeding in neonates (see ACS 1615 *Specific interventions for the sick neonate*)

16. Perfusion when associated with cardiac surgery

17. Primary suture of surgical and traumatic wounds
Code only for traumatic wounds which are not associated with an underlying injury (e.g. suture of lacerated forearm would be coded if there is no other associated injury repair) (see ACS 1217 *Repair of wound of skin and subcutaneous tissue*)

18. Procedure components (see also ACS 0016 *General procedure guidelines*)

19. Stress test

20. Traction if associated with another procedure

APPENDIX VI: FURTHER INFORMATION ON HIPE SCHEME

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

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

- *Coding Notes:* This quarterly bulletin is distributed to all coders nationally. It contains important updates on coding queries, changes in coding practice and any other relevant information including the scheduling of training courses.

- *HIPE Data Dictionary:* This dictionary provides definitions and codes for data collected within HIPE as of a specified year (e.g. 2018 relates to discharges reported for 2018). It provides standard definitions for variables with the objective of ensuring that consistency and data quality are maintained.

- *HIPE Instruction Manual:* This manual which is updated annually provides instruction on the capture of administrative and demographic data for each HIPE discharge record. Clinical data are captured in accordance with the classification and associated standards.

- *Irish Coding Standards:* Irish Coding Standards (ICS), which are updated annually, apply to activity coded in HIPE and provide guidance and instruction on all aspects of HIPE data collection by addressing issues relevant to the Irish hospital setting. ICS are developed to complement the Australian Coding Standards (ACS) and are revised regularly to reflect changing clinical practice.

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

VII.1 Introduction

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

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

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

VII.2 Main Changes in ICD-10-AM/ACHI/ACS 8th edition

ICD-10-AM Diagnoses

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

New codes

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

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

ACHI Procedures

- Minimally invasive procedures proceeding to open procedure

New generic codes

90343-00 [1011] *Endoscopic procedure proceeding to open procedure*
90343-01 [1011] *Laparoscopic procedure proceeding to open procedure*
90613-00 [1579] *Arthroscopic procedure proceeding to open procedure*

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

- Change in Standard: ACS 0020 *Bilateral/Multiple Procedures*

- Change in Standard: ACS 0042 *Procedures normally not coded*

> A major review of ACS 0042 *Procedures normally not coded* was undertaken due to the many queries received as to what components should or should not be coded in major surgeries. As a result the following instruction has been added to ACS 0042
>
> **Imaging services –** all codes in ACHI Chapter 20 *Imaging services* and block [451] *Dental radiological examination and interpretation* **except:**
>
> - transoesophageal echocardiogram (TOE) (55118-00 [1942])
> - when instructed to do so

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

Australian Coding Standards (ACS)

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

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

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

APPENDIX VIII: OVERVIEW OF CHANGES BETWEEN VERSION 6.0 AND VERSION 8.0 OF THE AR-DRG CLASSIFICATION SYSTEM

VIII.1 Introduction

Ireland updated to Version 8.0 of the Australian Refined Diagnosis Related Group (AR-DRG) classification system in 2015.[2] A number of changes took place during this update; the largest change was the complete revision of the case complexity methodology within the AR-DRG classification.[3] This appendix gives a brief outline of the major changes in AR-DRG Version 8.0 compared to Version 6.0.

VIII.2 Summary

VIII.2.1 Revision of ADRG Splitting

The number of Diagnosis Related Groups (DRGs) has increased from 698 in AR-DRG Version 6.0 to 807 in AR-DRG Version 8.0, while the number of Adjacent Diagnosis Related Groups (ADRGs) has increased from 399 in AR-DRG Version 6.0 to 406 in AR-DRG Version 8.0.

In AR-DRG Version 8.0, 14 ADRGs were added and 7 ADRGs were removed; while 194 splits were added and 22 splits were removed. Table VIII.1 outlines the increase in splits in AR-DRG Version 8.0 compared to AR-DRG Version 6.0. This increase results in greater granularity in AR-DRG Version 8.0.

TABLE VIII.1 Changes in ADRG splits

ADRG Splitting	Number of ADRGs	
	Version 6.0	Version 8.0
No Split (Z)	156	85
Two Levels (A,B)	192	246
Three Levels (A,B,C)	46	70
Four Levels (A,B,C,D)	5	5
Total ADRGs	399	406

[2] AR-DRG Version 8.0 was first reported on in the HIPE Annual Report in 2016.

[3] Further information on AR-DRG Version 8.0 can be found on the Australian Consortium for Classification Development website https://www.accd.net.au/ArDrg.aspx?page=2 [Accessed 26th July 2018].

VIII.2.2 ADRGs Added and Removed in Version 8.0 of the AR-DRG Classification System

There were 14 ADRGs added in AR-DRG Version 8.0 (see Table VIII.2). These include a number of musculoskeletal codes, bariatric codes, neonate codes, alcohol and drug sameday, and sleep disorders.

TABLE VIII.2 ADRGs Added in Version 8.0 of the AR-DRG Classification System

ADRG	ADRG Description
I40	Infusions for Musculoskeletal Disorders, Sameday
I80	Femoral Fractures, Transferred to Acute Facility <2 Days
I81	Musculoskeletal Injuries, Sameday
I82	Other Sameday Treatment for Musculoskeletal Disorders
K10	Revisional and Open Bariatric Procedures
K11	Major Laparoscopic Bariatric Procedures
K12	Other Bariatric Procedures
K13	Plastic OR Procedures for Endocrine, Nutritional and Metabolic Disorders
P07	Neonate, AdmWt <750g W Significant OR Procedure
P08	Neonate, AdmWt 750-999g W Significant OR Procedure
P68	Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Completed Wks Gestation
V65	Treatment for Alcohol Disorders, Sameday
V66	Treatment for Drug Disorders, Sameday
Z66	Sleep Disorders

There were 7 ADRGs removed in AR-DRG Version 8.0 (see Table VIII.3). These include peptic ulcer codes, obesity procedures, false labour, radiotherapy, and HIV, sameday. Some of the cases previously grouped to these DRGs have grouped to pre-existing DRGs, while some have grouped to new DRGs. For example, all cases previously grouped to R64 *Radiotherapy* have grouped to R62 *Other Neoplastic Disorders* in AR-DRG Version 8.0; the majority of these have grouped to R62C *Other Neoplastic Disorders, Minor Complexity*.

TABLE VIII.3 ADRGs Removed in Version 8.0 of the AR-DRG Classification System

ADRG	ADRG Description
G62	Complicated Peptic Ulcer
G63	Uncomplicated Peptic Ulcer
K04	Major Procedures for Obesity
K07	Obesity Procedures
O64	False Labour
R64	Radiotherapy
S60	HIV, Sameday

VIII.2.3 Naming Convention of AR-DRGs

The terminology used to name AR-DRGs has been updated. The descriptive terms mild, moderate, severe and catastrophic CC have been replaced with minor, intermediate, major and extreme complexity. An example of this is shown in Table VIII.4 below which compares the naming of ADRG B02 *Cranial Procedures* in both versions of the classification system.

TABLE VIII.4 Example of change in naming convention between AR-DRG Version 6.0 and Version 8.0

Version 6.0	Version 8.0
B02A Cranial Procedures W Catastrophic CC	B02A Cranial Procedures, Major Complexity
B02B Cranial Procedures W Severe CC	B02B Cranial Procedures, Intermediate Complexity
B02C Cranial Procedures W/O Catastrophic or Severe CC	B02C Cranial Procedures, Minor Complexity

VIII.2.3 Changes in Complexity Split

All AR-DRG splits have been revised using the Episode Clinical Complexity (ECC) Model.[4] As a result, an ADRG may have the same description in both versions but may have different DRG splits. For example, O60 *Vaginal Delivery* is present in both Version 6.0 and Version 8.0, with a different number of splits in each. AR-DRG Version 6.0 has no split (O60Z *Vaginal Delivery*) whereas AR-DRG Version 8.0 has three end classes:

- O60A *Vaginal Delivery, Major Complexity*
- O60B *Vaginal Delivery, Intermediate Complexity*
- O60C *Vaginal Delivery, Minor Complexity*

[4] Further information on the ECC Model in AR-DRG Version 8.0 can be found at https://www.ihpa.gov.au/sites/g/files/net636/f/publications/review_of_the_ar-drg_case_complexity_process.pdf [Accessed 26th July 2018]

APPENDIX IX: AUSTRALIAN CODING STANDARDS 0229 AND 0044

Australian Coding Standard: 0229 Radiotherapy[5]

Same day episodes of care for radiotherapy

Should there be any same-day radiotherapy admissions (admission and discharge on the same day), assign Z51.0 *Radiotherapy session* as the principal diagnosis followed by the neoplasm code.

Australian Coding Standard: 0044 Chemotherapy[6]

Definition

Pharmacotherapy is the treatment of a condition by means of drug(s). Chemotherapy is a type of pharmacotherapy and generally refers to pharmacotherapy for malignancy and to a lesser extent other systemic conditions such as HIV (see also ACS 0102 *HIV/AIDS*), lupus erythematosus and rheumatoid arthritis.

For coding purposes, chemotherapy is defined as:
"The administration of any therapeutic substance (usually a drug), excluding blood and blood products."

Chemotherapy can be administered in a number of ways, including the following:

1. intravenous
2. intra-arterial
3. intramuscular
4. intralesional/subcutaneous
5. intracavitary, eg intraperitoneal, intrathecal, bladder
6. oral

Classification

Same-day episodes of care for chemotherapy for neoplasm

For episodes of care for chemotherapy for a neoplasm or neoplasm related condition, where the patient is discharged on the same-day as the admission, assign:

---

5 Source: Extracted from National Casemix and Classification Centre (NCCC), 2013: *Australian Coding Standards* (ACS) *(8th Ed)*: NCCC, Australian Health Services Research Institute, University of Wollongong. Neoplasms, p. 58

6 Extracted from National Casemix and Classification Centre (NCCC), 2013: *Australian Coding Standards* (ACS) *(8th Ed)*: NCCC, Australian Health Services Research Institute, University of Wollongong. General Standards for Interventions, p. 32

- Z51.1 *Pharmacotherapy session for neoplasm* as principal diagnosis
- a code for the neoplasm being treated as the first additional diagnosis (see also ACS 0236 *Neoplasm coding and sequencing*)
- additional diagnosis code(s) for any neoplasm related condition(s) being treated
- the appropriate procedure code.

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