Activity in Acute Public Hospitals in Ireland

2016 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 2016. 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. 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), Deirdre Murphy (HPO) and Cliona O'Donovan (HPO) for reviewing and commenting on earlier drafts of this report, and Phil Dunne (HPO) for his 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, Karen Kearns, Laura Metcalfe and Sinead O'Hara were to the fore in the preparation of the report for publication. We wish to express our sincere thanks to these colleagues for all of their hard work on the report. Their commitment, enthusiasm, and professionalism are gratefully acknowledged and sincerely appreciated.

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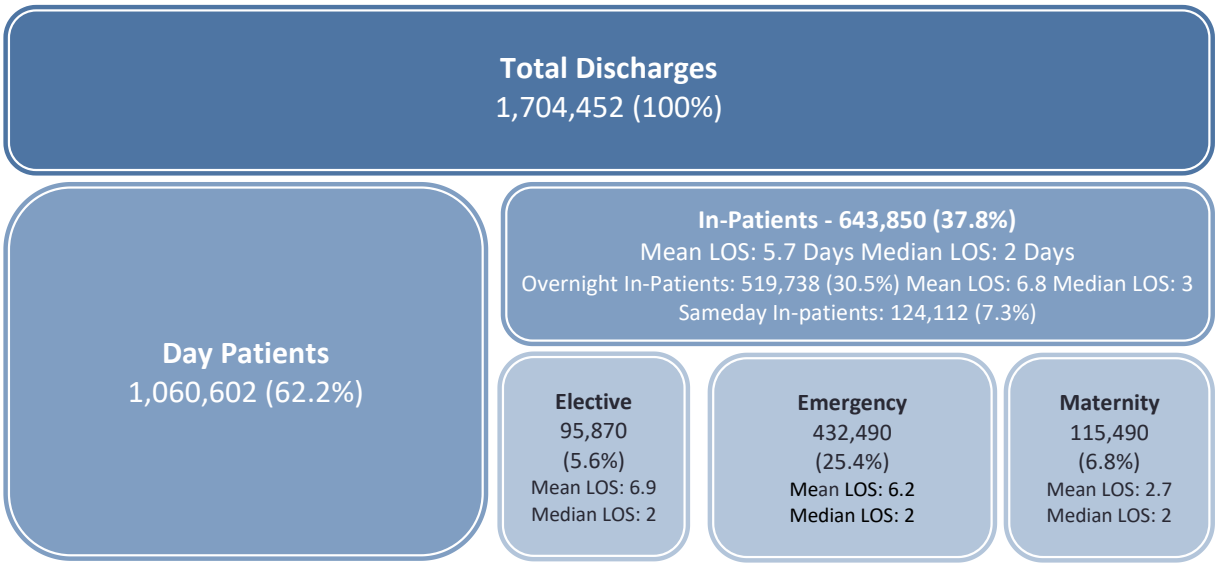
EXECUTIVE SUMMARY

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 2016 calendar year. The aim of this report is to present an overview of discharge activity in acute public hospitals in Ireland.

TOTAL DISCHARGES, 2016



Discharge Overview

- Over 1.7 million discharges were reported by participating hospitals compared to 1.66 million discharges in 2015 – an increase of 2.4 per cent.
- Day patients accounted for 62.2 per cent of total discharges, an increase of 3.0 per cent since 2015.
- In-patients accounted for 37.8 per cent of total discharges, an increase of 1.5 per cent since 2015 and an increase of 2.8 per cent from 2012–2016.
- Over the period 2012–2016, the number of elective in-patient discharges decreased by 10.6 per cent, maternity in-patients decreased by 9.2 per cent, while emergency in-patients increased by 10.3 per cent.

Length of Stay

- In-patient average length of stay was 5.7 days in 2016, this has remained the same since 2015.
- Since 2012, average length of stay has remained relatively stable for elective, emergency and maternity in-patients at 6.9 days, 6.2 days and 2.7 days in 2016 respectively.

Sex

- Similar to previous years, females accounted for 53.7 per cent of total discharges with males accounting for 46.3 per cent.
- Excluding maternity discharges, females accounted for 49.7 per cent of discharges with males accounting for 50.3 per cent.

Age

- Discharges aged 65 years and over accounted for 36.2 per cent of total discharges, representing an increase of 3.5 per cent since 2015 and an increase of 20.2 per cent since 2012.
- Discharges aged 65 years and over accounted for 53.3 per cent of total in-patient bed days, an increase of 1.4 per cent since 2015 and an increase of 9.4 per cent since 2012.

Marital/Civil Status

- Married discharges accounted for 48.8 per cent of total discharges.

Public/Private Status

- Over 83 per cent of total discharges were treated on a public basis, representing a 1.8 per cent increase since 2015 and a 10.7 per cent increase since 2012. Private patients accounted for 16.4 per cent of total discharges, representing an 8.5 per cent increase from 2012–2016.
- The 25–34 years age group had the largest proportion of total discharges treated publicly (89.2 per cent) with only 10.8 per cent treated on a private basis.

General Medical Service (GMS) Status

- Of total discharges, 55.3 per cent were GMS discharges – an increase of 5.5 per cent since 2015 and an increase of 13.5 per cent since 2012.
- Of discharges in the 85 years and over age group, 83.3 per cent were GMS discharges compared to just 18.2 per cent of the less than 1 year age group (this excludes discharges where GMS status was ‘unknown’).

Hospital Group

- The largest proportion of total discharges were hospitalised in the South/South West Hospital Group (19.3 per cent).
- Total in-patient discharges were highest in the Ireland East Hospital Group where 20.6 per cent of discharges were hospitalised, while the Dublin Midlands Hospital Group accounted for the highest proportion of day patients (21.1 per cent).

Admission Source

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

Discharge Destination

- The majority of total discharges were discharged home (95.2 per cent).
- Of total emergency in-patients, 5.9 per cent were transferred to long stay accommodation, and 5.4 per cent were transferred to another hospital.

Day of Admission

- The proportion of in-patient discharges admitted on an elective basis decreased throughout the week, with 62.3 per cent of elective in-patients admitted between Monday and Wednesday, falling to 6.2 per cent at the weekend.

Day of Discharge

- The proportion of elective in-patients discharged increased throughout the week, from 10.6 per cent on Monday to 22.5 per cent on Friday, falling to 10.6 per cent on Saturday and 4.7 per cent on Sunday.

Month of Discharge

- The largest numbers of emergency in-patients were discharged in March (37,679 discharges).

MORBIDITY ANALYSIS

Day Patients

- Day patients with a principal diagnosis of *Other medical care* (includes *Chemotherapy* and *Radiotherapy* encounters) and day patients with a principal diagnosis of *Care involving dialysis* accounted for 21.8 and 16.1 per cent of day patient discharges respectively. [1]
- At least one procedure was recorded for 93.3 per cent of day patient discharges.
- The highest principal procedure block reported was *Haemodialysis*, accounting for 17.3 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 4.7 per cent of in-patients.
- At least one procedure was recorded for 56.8 per cent of in-patient discharges.
- The highest principal procedure block reported was *Generalised allied health interventions* which accounted for 26.7 per cent of in-patient discharges with at least one procedure recorded.[2]

Elective In-Patients

- The highest principal diagnosis reported for elective in-patients was *Care involving use of rehabilitation procedures*, accounting for 3.9 per cent of elective in-patient discharges.
- At least one procedure was recorded for 89.3 per cent of elective in-patient discharges.
- The highest principal procedure block reported for elective in-patients was *Generalised allied health interventions,* accounting for 11.4 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 over 92 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 4.2 per cent of emergency in-patient discharges.
- At least one procedure was recorded for 49.1 per cent of emergency in-patient discharges.
- The highest principal procedure block reported for emergency in-patients was *Generalised allied health interventions,* accounting for 40.2 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 48.1 per cent of delivery in-patient discharges.
- The procedure block *Caesarean section* was reported for 33.9 per cent of delivery discharges who had a principal procedure reported.
- Non-delivery discharges with a principal diagnosis of *Other maternal diseases classifiable elsewhere but complicating pregnancy; childbirth and the puerperium* accounted for 26.2 per cent of non-delivery in-patient discharges.
- The procedure block *Curettage and evacuation of uterus* was reported for 30.7 per cent of non-delivery discharges who had a principal procedure reported.

[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 253,572 discharges or 23.9 per cent of day patients.
    - *Chemotherapy* (AR-DRG R63Z) accounted for 45.1 per cent of day patients within this MDC, and 10.8 per cent of total day patients*; Other Neoplastic Disorders, Minor Complexity* (AR-DRG R62C) accounted for 43.3 per cent of day patients within this MDC and 10.3 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 17.8 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 6.7 per cent of total in-patient discharges.
    - *Vaginal Delivery* (AR-DRGs O60A, O60B and O60C) accounted for 35.9 per cent of in-patients within this MDC and 6.4 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. This report is the first HIPE Annual Report to use 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 2016 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 2016 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 2012–2016.

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 was undertaken in 2014 and 2015 to ensure understanding of the changes in the new classification. Use of ICD-10-AM/ACHI/ACS is complemented by the Irish Coding

1 See Appendix I for a list of hospitals participating in HIPE in 2016.

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

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

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

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

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

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

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

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

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 previous reports.[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 2016

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 2016, 53 public hospitals in Ireland participated in HIPE (see Appendix I).[16,17]

Population Estimates: Population estimates for 2012–2016 are based on Census 2011 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 This report is the first HIPE Annual Report to use AR-DRG Version 8.0.

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 2016 Version 8.1 available at www.hpo.ie

15 A copy of the HIPE data entry form for 2016 is contained in Appendix III.

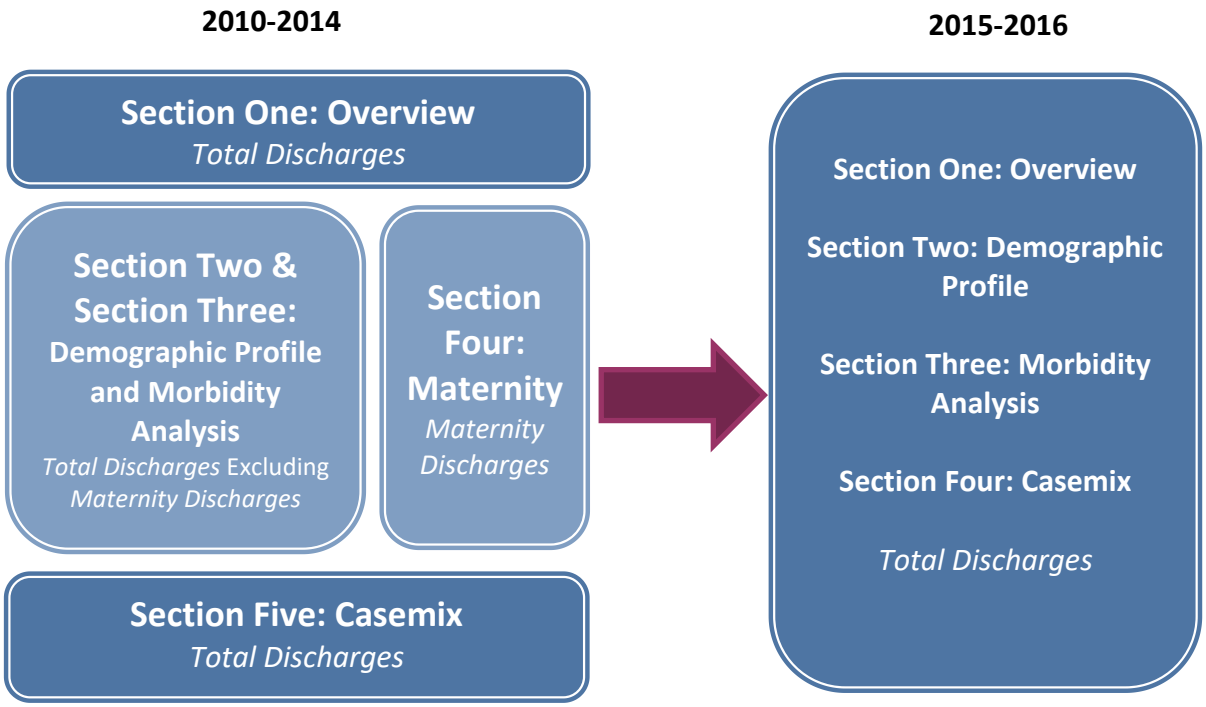
16 For historical reasons, a small number of non-acute hospitals also reported to HIPE in 2016. Discharges from these hospitals have been included in this report.

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 2016

Figure 1.1 outlines the changes to the structure of the *Activity in Acute Public Hospitals in Ireland* Annual Reports 2010–2016.[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 (see Section 1.6 for more detail).

FIGURE 1.1 Changes to structure of the Activity in Acute Public Hospitals in Ireland Annual Report, 2010-2016



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 2016. 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.

[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)

Section Three

Section Three focuses on the diagnoses and procedures recorded for discharges reported to HIPE. Section Three presents analysis of hospital activity by patient type with top 20 principal diagnoses and procedure blocks presented for day 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 for the 2016 report is Version 8.0. This is a change from recent years where Version 6.0 of the classification was used. 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.[20]

Annex

The annex is designed to highlight particular topics of interest that merit further analysis. This year's topic of interest is emergency in-patient discharges with any listed diagnosis of a fall.

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 1st June 2017].

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 2016 indicate that for day patient and in-patient discharges appropriate for inclusion in the HIPE data set, 99.88 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.

Unlike reports prior to 2015, sameday in-patients and overnight in-patients are presented separately for selected tables in this report. The HSE and Department of Health have developed a number of initiatives in recent years to improve patient flow throughout the system. One such initiative has been the introduction of Acute Medical Units.[22] This has led to an increase in discharges recorded as sameday in-patients (in-patients admitted and discharged on the same day) who accounted for 7.3 per cent of total discharges in 2016. The separate presentation of sameday in-patients throughout the report allows for monitoring of this particular group and distinguishes them from overnight in-patients.

In-Patient Length of Stay: The presentation of in-patient length of stay underwent review prior to the publication of the 2015 report. Prior to this, the HIPE annual report presented data for discharges with an 'acute' or 'extended' length of stay (0–30 days for acute in-patients and 31 days and over for extended stay in-patients). This split of in-patient discharges based on their length of stay was used in previous reports as HIPE collects data from a small number of non-acute hospitals, resulting in longer lengths of stays.

The OECD defines an in-patient discharge as "*the release of a patient who was formally admitted into a hospital for treatment and/or care and who stayed for a minimum of one night*".[23] In HIPE, discharges who do not meet the definition of a day patient are classified as in-patients; therefore there are discharges who did not stay overnight that are classified as in-patients. This results in the inclusion of sameday in-patients in the calculation of in-patient average length of stay. In this report one bed day is assigned to in-patients discharged on the same day (sameday in-patients) and one bed day is also assigned to in-patients who stayed one night in hospital.

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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.

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

23 Source: http://stats.oecd.org/

For comparability with international reporting, overnight in-patient length of stay is presented alongside the total in-patient length of stay.[24] The former will result in a higher average length of stay as it excludes sameday in-patients. Median length of stay is also provided for both groups of in-patients to highlight the effect of outlier cases.

Hospital Groups: *Increased reporting of Hospital Groups.* In May 2013, the Government approved the report on *The Establishment of Hospital Groups as a Transition to Independent Hospital Trusts.*[25] This resulted in the reorganisation of hospitals into seven groups. These hospital groups have been reported on from 2014 onwards.[26]

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

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

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

[25] http://health.gov.ie/wp-content/uploads/2014/03/IndHospTrusts.pdf

[26] See Appendix I for a list of hospitals and their associated groups participating in HIPE in 2016. There are a small number of non-acute HIPE hospitals that do not belong to a group which are categorised as 'No group'.

1.7 Discharges Reported to HIPE, 2012-2016

In 2016, 1,704,452 discharges were reported to HIPE by participating acute public hospitals,[27] representing an increase of 10.3 per cent over the period 2012–2016 and an increase of 2.4 per cent over the period 2015–2016.

Table 1.1 and Figures 1.2 to 1.3 show the distribution of discharges over the period 2012–2016 by selected variables. The following points provide a summary of changes over the period 2012–2016:

- The male-female split in 2016 has remained consistent with previous years, with a larger proportion of female discharges (53.7 per cent).
- The 65 years and over age group accounted for the largest proportion of total discharges in 2016 (36.2 per cent), representing an increase of 20.2 per cent for this age group from 2012–2016.
- Over the period 2012–2016 there was an increase of 10.7 per cent for public discharges and an increase of 8.5 per cent for private discharges.
- The number of GMS discharges increased by 13.5 per cent between 2012 and 2016, from 829,989 to 942,022 discharges.
- The proportion of total discharges treated by each Hospital Group remained similar between 2015 and 2016. The largest percentage increase was in the RCSI Hospital Group with a 4.1 per cent increase between 2015 and 2016.
- The number of day patient discharges has increased from 918,118 in 2012 to 1,060,602 in 2016, an increase of 15.5 per cent, with an increase of 3.0 per cent between 2015 and 2016.[28]
- The number of in-patient discharges has increased from 626,616 in 2012 to 643,850 in 2016, an increase of 2.8 per cent, with an increase of 1.5 per cent between 2015 and 2016.
- Emergency in-patient discharges comprised 62.6 per cent of total in-patient discharges in 2012, increasing to 67.2 per cent in 2016.
- Elective in-patients have declined as a proportion of total in-patients from 17.1 per cent in 2012 to 14.9 per cent in 2016.
- Maternity in-patient discharges decreased by 9.2 per cent over the period 2012–2016 from 127,222 to 115,490 discharges. Between 2015 and 2016 there was a 2.0 per cent decrease in the proportion of maternity in-patient discharges reported to HIPE.

[27] In 2016 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.

[28] 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.

- Sameday in-patient discharges have increased by 24.3 per cent over the period 2012–2016 from 99,876 to 124,112 discharges.
- Over the period 2012–2016, the average length of stay has remained relatively constant for elective, emergency and maternity in-patients at 6.9 days, 6.2 days and 2.7 days in 2016 respectively.
- Overnight in-patient discharges stayed on average 6.5 days in 2012 which has increased to 6.8 days in 2016, an increase of 4.6 per cent. The median has remained constant at 3 days over the period.

TABLE 1.1 Acute Public Hospital Discharges in HIPE (N, %), 2012-2016

	2012	2013	2014	2015	2016	% Change 2012–2016	% Change 2015–2016
	N (%)	N (%)	N (%)	N (%)	N (%)		
Total Discharges	**1,544,734 100**	**1,554,290 100**	**1,592,672 100**	**1,664,066 100**	**1,704,452 100**	**10.3**	**2.4**
Discharge Rate[a]	**336.9**	**338.4**	**345.5**	**359.0**	**364.7**	**8.3**	**1.6**
Sex							
Males	708,061 45.8	713,652 45.9	730,361 45.9	763,844 45.9	788,702 46.3	11.4	3.3
Females	836,673 54.2	840,638 54.1	862,311 54.1	900,222 54.1	915,750 53.7	9.5	1.7
Age Group							
Under 15 Years	137,154 8.9	131,439 8.5	132,608 8.3	133,638 8.0	132,677 7.8	-3.3	-0.7
15–44 Years	460,598 29.8	459,158 29.5	465,626 29.2	464,203 27.9	471,123 27.6	2.3	1.5
45–64 Years	433,761 28.1	433,535 27.9	442,054 27.8	470,145 28.3	483,587 28.4	11.5	2.9
65 Years and Over	513,221 33.2	530,158 34.1	552,384 34.7	596,080 35.8	617,065 36.2	20.2	3.5
Public/Private Status[b]							
Public Discharges	1,286,418 83.3	1,301,481 83.7	1,336,317 83.9	1,398,932 84.1	1,424,290 83.6	10.7	1.8
Private Discharges	258,316 16.7	252,809 16.3	256,355 16.1	265,134 15.9	280,162 16.4	8.5	5.7
GMS Status							
GMS	829,989 53.7	843,727 54.3	854,249 53.6	892,584 53.6	942,022 55.3	13.5	5.5
Non-GMS	694,470 45.0	699,003 45.0	726,530 45.6	748,461 45.0	744,344 43.7	7.2	-0.6
Unknown	20,275 1.3	11,560 0.7	11,893 0.8	23,021 1.4	18,086 1.1	-10.8	-21.4
Hospital Group[c]							
Ireland East	–	–	314,334 19.7	320,647 19.3	325,110 19.1	–	1.4
RCSI	–	–	245,979 15.4	244,242 14.7	254,227 14.9	–	4.1
Dublin Midlands[d]	–	–	267,077 16.8	310,649 18.7	318,725 18.7	–	2.6
South/South West	–	–	320,534 20.1	327,700 19.7	329,632 19.3	–	0.6
UL	–	–	97,738 6.1	102,762 6.2	106,749 6.3	–	3.9
Saolta	–	–	287,774 18.1	299,245 18.0	310,448 18.2	–	3.7
Children's	–	–	53,038 3.3	52,841 3.2	54,234 3.2	–	2.6
No group	–	–	6,198 0.4	5,980 0.4	5,327 0.3	–	-10.9
Day Patients[d]	**918,118 100**	**932,073 100**	**960,786 100**	**1,029,860 100**	**1,060,602 100**	**15.5**	**3.0**
Dialysis/Radiotherapy[d]/ Chemotherapy[e]	333,432 36.3	327,249 35.1	339,480 35.3	393,868 38.2	399,895 37.7	19.9	1.5
Maternity[f]	10,348 1.1	13,914 1.5	19,043 2.0	19,838 1.9	20,763 2.0	100.6	4.7
Other Day Patients	574,338 62.6	590,910 63.4	602,263 62.7	616,154 59.8	639,944 60.3	11.4	3.9
In-Patients	**626,616 100**	**622,217 100**	**631,886 100**	**634,206 100**	**643,850 100**	**2.8**	**1.5**
Elective	107,245 17.1	103,237 16.6	100,287 15.9	99,086 15.6	95,870 14.9	-10.6	-3.2
Emergency[g,h]	392,149 62.6	400,272 64.3	412,394 65.3	417,330 65.8	432,490 67.2	10.3	3.6
Maternity	127,222 20.3	118,708 19.1	119,205 18.9	117,790 18.6	115,490 17.9	-9.2	-2.0

Contd. overleaf

TABLE 1.1 Acute Public Hospital Discharges in HIPE (N, %), 2012–2016 (contd.)

		2012	2013	2014	2015	2016	% Change	% Change
		N (%)	N (%)	N (%)	N (%)	N (%)	2012–2016	2015–2016
Overnight In-Patients		526,740	515,330	515,619	516,604	519,738	-1.3	0.6
		84.1	82.8	81.6	81.5	80.7		
Sameday In-Patients		99,876	106,887	116,267	117,602	124,112	24.3	5.5
		15.9	17.2	18.4	18.5	19.3		
In-Patient Length of Stay								
In-Patients	**Mean**	**5.6**	**5.6**	**5.6**	**5.7**	**5.7**	**1.8**	**0.0**
	Median	**2**	**2**	**2**	**2**	**2**		
Elective	Mean	6.8	6.6	6.7	6.7	6.9	1.5	3.0
	Median	3	3	2	2	2		
Emergency [g,h]	Mean	6.3	6.2	6.2	6.3	6.2	-1.6	-1.6
	Median	2	2	2	2	2		
Maternity	Mean	2.6	2.7	2.6	2.6	2.7	3.8	3.8
	Median	2	2	2	2	2		
Overnight In-Patients	**Mean**	**6.5**	**6.5**	**6.6**	**6.8**	**6.8**	**4.6**	**0.0**
	Median	**3**	**3**	**3**	**3**	**3**		
In-Patient Bed Days[i]								
Total In-Patients		**3,525,693**	**3,480,802**	**3,531,563**	**3,622,860**	**3,651,438**	**3.6**	**0.8**
		100	**100**	**100**	**100**	**100**		
Under 15 Years		300,800	294,238	293,387	292,948	284,997	-5.3	-2.7
		8.5	8.5	8.3	8.1	7.8		
15 to 44 Years		760,922	718,445	722,104	713,848	717,761	-5.7	0.5
		21.6	20.6	20.4	19.7	19.7		
45 to 64 Years		684,444	672,759	672,162	697,640	702,640	2.7	0.7
		19.4	19.3	19.0	19.3	19.2		
65 Years and Over		1,779,527	1,795,360	1,843,910	1,918,424	1,946,040	9.4	1.4
		50.5	51.6	52.2	53.0	53.3		
Overnight In-Patients		**3,425,817**	**3,373,915**	**3,415,296**	**3,505,258**	**3,527,326**	**3.0**	**0.6**
		97.2	**96.9**	**96.7**	**96.8**	**96.6**		

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 363.7 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 Hospital Groups were established during 2013. Data is reported from 2014 as this was the first complete year that the groups were operational. See Appendix I for the list of hospitals by Group in 2016.

d 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.

e 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).

f Caution should be exercised when analysing the increase in Maternity day patients reported between 2012 and 2014. The increase from 2012 to 2013 is as a result of one hospital reclassifying activity previously reported as sameday in-patient activity to day patient activity in 2013; this reclassification is in line with how other hospitals would report this activity for Maternity discharges. A large proportion of the increase from 2013 to 2014 can be attributed to a reorganisation of beds in one hospital, with a number of in-patient beds being converted to day beds.

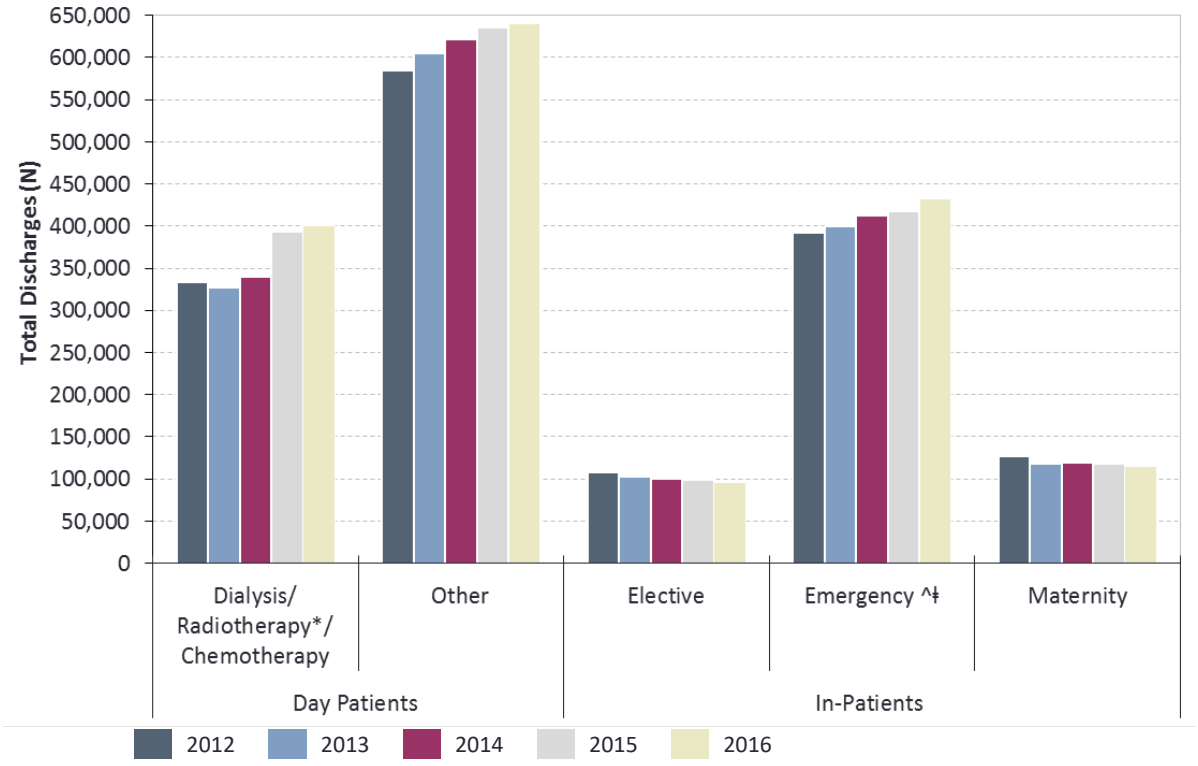
g HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about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

h HIPE collects Mode of Emergency Admission to indicate where the emergency in-patient was treated prior to being admitted, for example in an Emergency Department or in a registered Acute Medical Unit (AMU/AMAU/MAU). In 2012, the National Clinical Programme for Acute Medicine released national guidelines for AMU/AMAU/MAU's. There was a subsequent increase in the number of these units operating between 2011 and 2012 and this has led to an increase in the number of emergency in-patient admissions from 2012 onwards.

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

Sources: Data on discharges, length of stay and bed days for 2012-2016 were obtained from HIPE.
Population estimates for 2012-2016 were obtained from the Central Statistics Office.
www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=PEA01&PLanguage=0 [Accessed 1st June 2017].

FIGURE 1.2 Total Discharges by Patient Type and Admission Type (N), 2012–2016



Notes: See Appendix I for a list of hospitals that participated in HIPE in 2016.

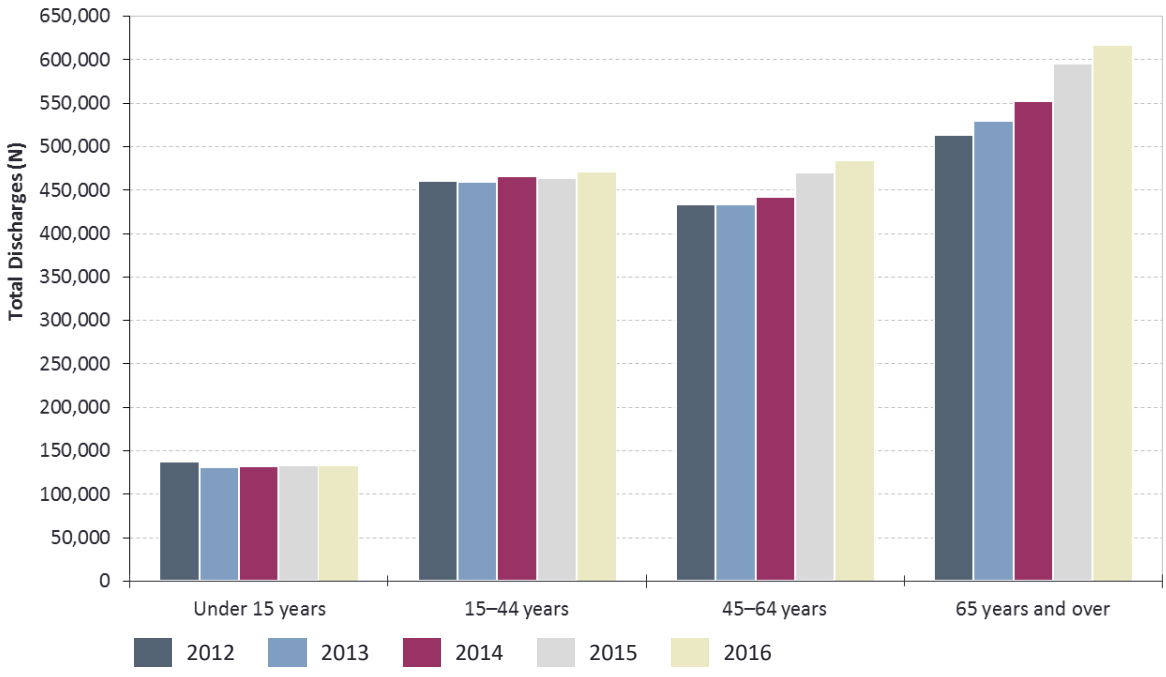
* From 2015 this includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

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.

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

Source: Data for 2012–2016 were obtained from HIPE.

FIGURE 1.3 Total Discharges by Age Group (N), 2012–2016



Source: Data for 2012–2016 were obtained from HIPE.

Discharge Overview 2016

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 presentation of in-patient length of stay differs from reports prior to 2015 which presented acute and total in-patient mean length of stay. This report presents mean and median total in-patient length of stay only (see Section 1.6).

2.2 WHO

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

A day patient is admitted to hospital for treatment on an elective (rather than an emergency) basis and is discharged alive, as scheduled, on the same day. In 2016, day patient discharges accounted for 62.2 per cent of total discharges. In-patient discharges accounted for the remaining 37.8 per cent of total discharges with 67.2 per cent of in-patients admitted on an emergency basis, 14.9 per cent admitted on an elective basis and 17.9 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 (18.7 per cent). They accounted for the largest proportion of day patient discharges (21.9 per cent).
- Discharges in the older age groups accounted for a relatively large proportion of bed days; those aged 65 years and over accounted for 31.8 per cent of in-patient discharges and 53.3 per cent of in-patient bed days.
- The 1–14 years age group accounted for 8.8 per cent of in-patient discharges and 3.6 per cent of in-patient bed days.

Length of Stay

- Discharges aged 25–34 years accounted for 18.0 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 2.6 days for discharges aged 1–14 years to 13.7 days for discharges aged 85 years and over. Median length of stay ranged between 2 to 7 days across all age groups.

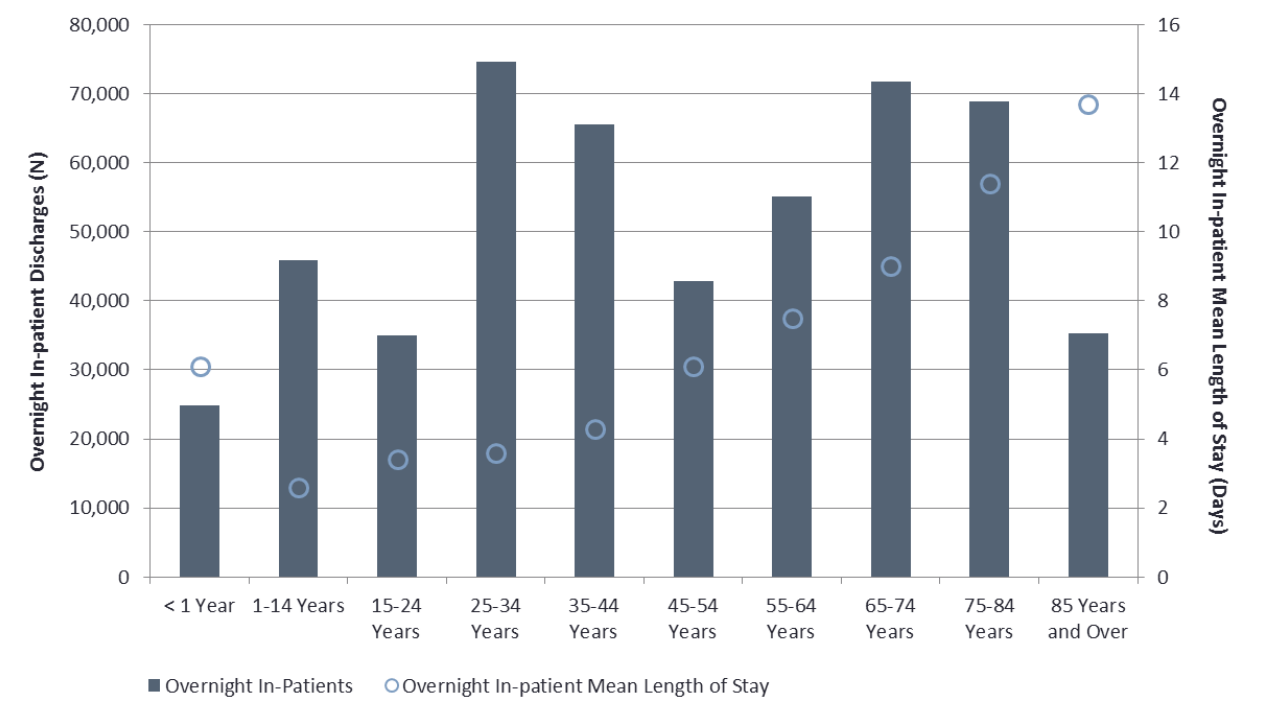
TABLE 2.1a Total Discharges: Patient Type by Age Group (N, %, Bed Days, %, and In-Patient Length of Stay)

	Discharges and Bed Days							
	Day Patients		In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
< 1 Year	4,190	0.4	27,737	4.3	153,617	4.2	31,927	1.9
1–14 Years	44,348	4.2	56,402	8.8	131,380	3.6	100,750	5.9
15–24 Years	36,742	3.5	47,221	7.3	129,510	3.5	83,963	4.9
25–34 Years	81,341	7.7	96,955	15.1	287,326	7.9	178,296	10.5
35–44 Years	123,731	11.7	85,133	13.2	300,925	8.2	208,864	12.3
45–54 Years	156,190	14.7	56,524	8.8	274,306	7.5	212,714	12.5
55–64 Years	201,877	19.0	68,996	10.7	428,334	11.7	270,873	15.9
65–74 Years	232,132	21.9	85,996	13.4	659,882	18.1	318,128	18.7
75–84 Years	148,144	14.0	79,766	12.4	799,578	21.9	227,910	13.4
85 Years and Over	31,907	3.0	39,120	6.1	486,580	13.3	71,027	4.2
Total Discharges	**1,060,602**	**100**	**643,850**	**100**	**3,651,438**	**100**	**1,704,452**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
< 1 Year	2,874	24,863	6.1	2	27,737	5.5	2
1–14 Years	10,484	45,918	2.6	2	56,402	2.3	1
15–24 Years	12,281	34,940	3.4	2	47,221	2.7	1
25–34 Years	22,308	74,647	3.6	2	96,955	3.0	2
35–44 Years	19,611	65,522	4.3	3	85,133	3.5	2
45–54 Years	13,728	42,796	6.1	3	56,524	4.9	2
55–64 Years	13,896	55,100	7.5	4	68,996	6.2	3
65–74 Years	14,271	71,725	9.0	5	85,996	7.7	4
75–84 Years	10,842	68,924	11.4	6	79,766	10.0	5
85 Years and Over	3,817	35,303	13.7	7	39,120	12.4	6
Total Discharges	**124,112**	**519,738**	**6.8**	**3**	**643,850**	**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 2016, there were 915,750 female discharges, and of these 14.9 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, 22.7 per cent and 17.9 per cent respectively.
- Discharges aged 65 years and over accounted for 38.3 per cent of male in-patient discharges and 55.6 per cent of male in-patient bed days, while for females (excl. maternity) this group accounted for 39.3 per cent of female in-patient discharges and 60.9 per cent of female in-patient bed days.
- The 75–84 years age group accounted for the largest proportion of in-patient bed days for both males (23.3 per cent) and females (excl. maternity) (24.5 per cent).
- Females aged between 25 and 34 years accounted for over half of maternity in-patient discharges (53.7 per cent), while those aged 35–44 years accounted for approximately a third of in-patient discharges in this group (33.1 per cent).

Length of Stay

- Both male and female (excl. maternity) overnight in-patient discharges had a mean length of stay of 7.6 days. As displayed in Figure 2.2, overnight in-patient mean length of stay generally increased with age for both sexes.
- For all age groups aged between 15 and 64 years, females (excl. maternity) had a lower overnight in-patient mean length of stay compared to males, however median length of stay was similar across all age groups, ranging between 1 to 7 days for males and 2 to 8 days for females.
- For maternity discharges, total overnight in-patient mean length of stay was 3.1 days, increasing with age, from 2.8 days for females aged less than 25 years to 4.5 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	2,408	0.5	15,586	5.9	84,809	5.0	17,994	2.3
1–14 Years	25,206	4.8	30,761	11.6	70,726	4.2	55,967	7.1
15–24 Years	17,319	3.3	15,210	5.7	46,220	2.7	32,529	4.1
25–34 Years	29,417	5.6	16,056	6.0	63,017	3.7	45,473	5.8
35–44 Years	47,293	9.1	22,001	8.3	100,230	5.9	69,294	8.8
45–54 Years	68,003	13.0	27,913	10.5	148,395	8.8	95,916	12.2
55–64 Years	101,378	19.4	36,791	13.8	239,321	14.1	138,169	17.5
65–74 Years	132,537	25.4	46,373	17.4	360,783	21.3	178,910	22.7
75–84 Years	83,242	15.9	39,934	15.0	394,883	23.3	123,176	15.6
85 Years and Over	15,732	3.0	15,542	5.8	185,455	10.9	31,274	4.0
Total Discharges	**522,535**	**100**	**266,167**	**100**	**1,693,839**	**100**	**788,702**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
< 1 Year	1,615	13,971	6.0	2	15,586	5.4	2
1–14 Years	5,985	24,776	2.6	1	30,761	2.3	1
15–24 Years	4,036	11,174	3.8	2	15,210	3.0	1
25–34 Years	4,425	11,631	5.0	2	16,056	3.9	1
35–44 Years	5,771	16,230	5.8	3	22,001	4.6	2
45–54 Years	6,517	21,396	6.6	3	27,913	5.3	2
55–64 Years	6,937	29,854	7.8	4	36,791	6.5	3
65–74 Years	7,196	39,177	9.0	5	46,373	7.8	4
75–84 Years	5,153	34,781	11.2	6	39,934	9.9	5
85 Years and Over	1,439	14,103	13.0	7	15,542	11.9	6
Total Discharges	**49,074**	**217,093**	**7.6**	**3**	**266,167**	**6.4**	**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	1,782	0.3	12,151	4.6	68,808	4.2	13,933	1.8
1–14 Years	19,142	3.7	25,637	9.8	60,642	3.7	44,779	5.7
15–24 Years	17,647	3.4	17,291	6.6	48,425	2.9	34,938	4.5
25–34 Years	41,372	8.0	18,913	7.2	63,430	3.8	60,285	7.7
35–44 Years	68,198	13.2	24,877	9.5	91,048	5.5	93,075	11.9
45–54 Years	87,992	17.0	28,086	10.7	123,860	7.5	116,078	14.9
55–64 Years	100,499	19.4	32,205	12.3	189,013	11.5	132,704	17.0
65–74 Years	99,595	19.3	39,623	15.1	299,099	18.1	139,218	17.9
75–84 Years	64,902	12.5	39,832	15.2	404,695	24.5	104,734	13.4
85 Years and Over	16,175	3.1	23,578	9.0	301,125	18.2	39,753	5.1
Total Discharges	**517,304**	**100**	**262,193**	**100.0**	**1,650,145**	**100**	**779,497**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
< 1 Year	1,259	10,892	6.2	2	12,151	5.7	2
1–14 Years	4,499	21,138	2.7	2	25,637	2.4	1
15–24 Years	4,471	12,820	3.4	2	17,291	2.8	1
25–34 Years	5,638	13,275	4.4	2	18,913	3.4	1
35–44 Years	7,237	17,640	4.8	2	24,877	3.7	1
45–54 Years	7,124	20,962	5.6	3	28,086	4.4	2
55–64 Years	6,959	25,246	7.2	4	32,205	5.9	2
65–74 Years	7,075	32,548	9.0	5	39,623	7.5	4
75–84 Years	5,689	34,143	11.7	6	39,832	10.2	5
85 Years and Over	2,378	21,200	14.1	8	23,578	12.8	7
Total Discharges	**52,329**	**209,864**	**7.6**	**3**	**262,193**	**6.3**	**2**

Note: Percentage columns are subject to rounding.

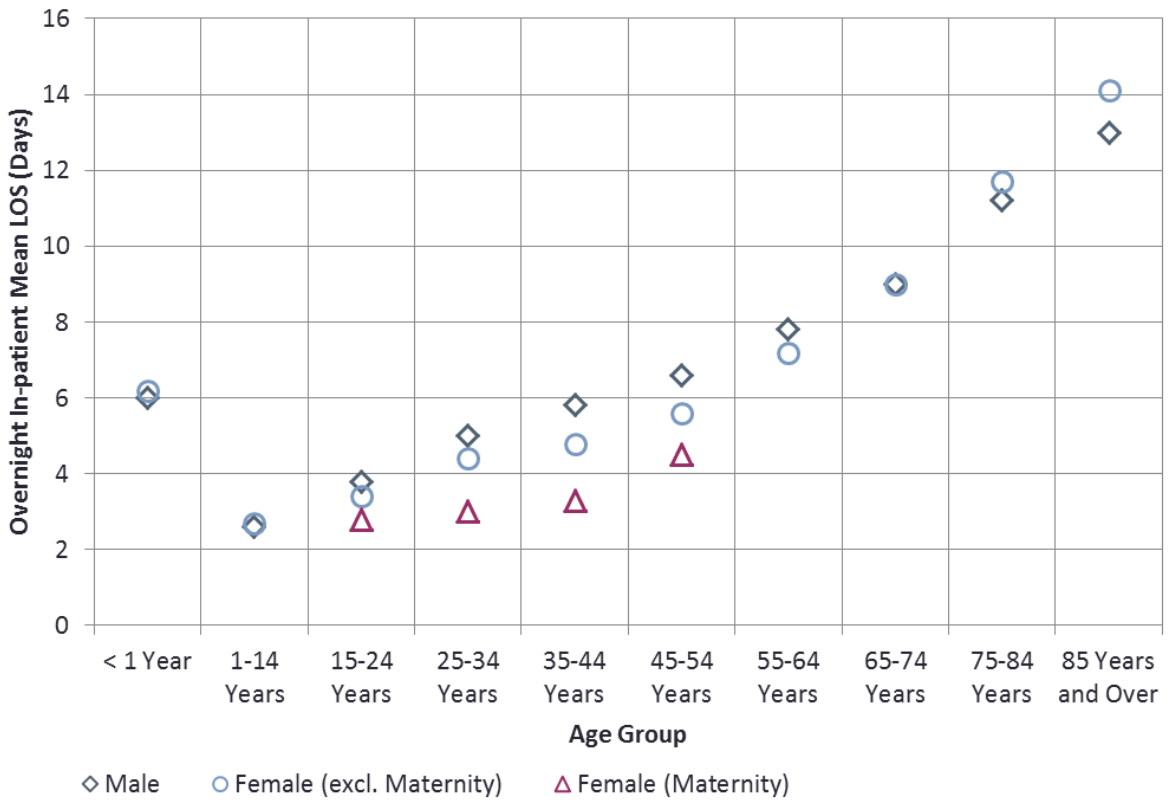
TABLE 2.1d Female Discharges (Maternity): Patient Type by Age Group (N, %, Bed Days, % and In-Patient Length of Stay)

	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
<25 Years	1,776	8.6	14,724	12.7	34,877	11.3	16,500	12.1
25–34 Years	10,552	50.8	61,986	53.7	160,879	52.3	72,538	53.2
35–44 Years	8,240	39.7	38,255	33.1	109,647	35.7	46,495	34.1
45 Years and Over	195	0.9	525	0.5	2,051	0.7	720	0.5
Total Discharges	**20,763**	**100**	**115,490**	**100**	**307,454**	**100**	**136,253**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
<25 Years	3,774	10,950	2.8	2	14,724	2.4	2
25–34 Years	12,245	49,741	3.0	2	61,986	2.6	2
35–44 Years	6,603	31,652	3.3	3	38,255	2.9	2
45 Years and Over	87	438	4.5	4	525	3.9	3
Total Discharges	**22,709**	**92,781**	**3.1**	**3**	**115,490**	**2.7**	**2**

Note: Percentage columns are subject to rounding.

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



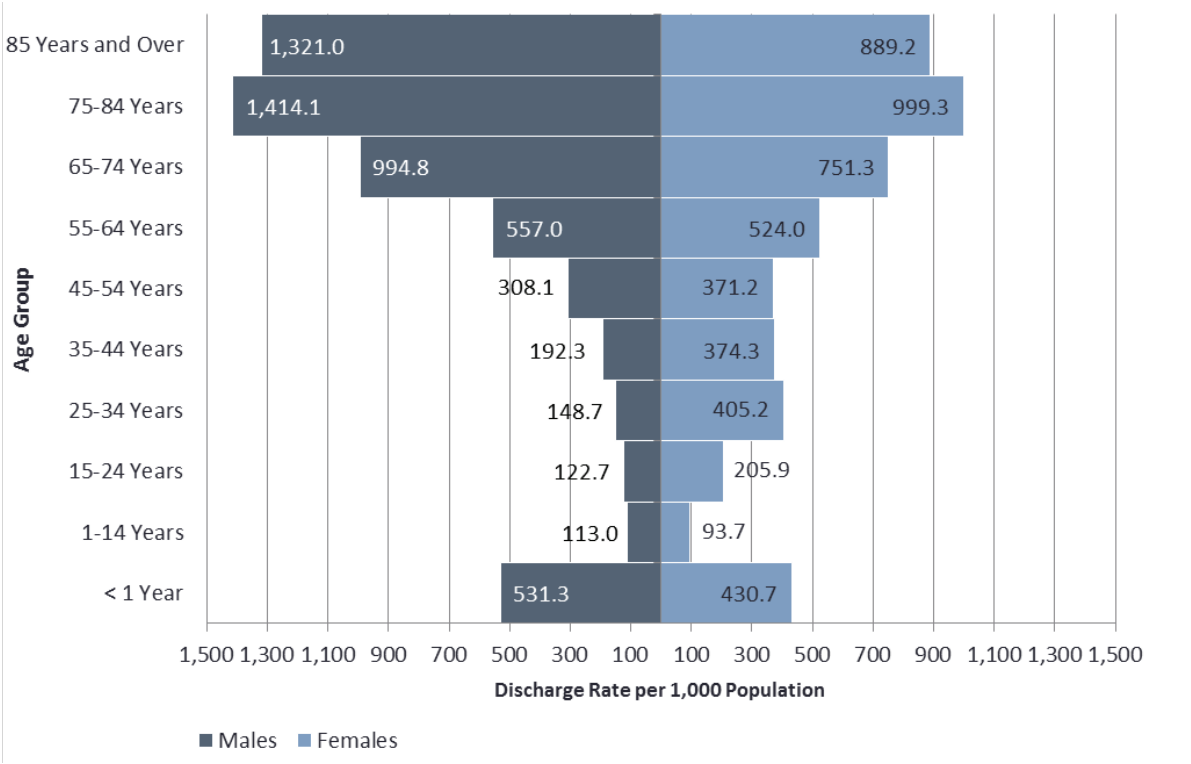
Note: Length of stay is not presented for female maternity discharges where there were a small number of discharges reported within a particular age group.

2.2.1.2 Discharge Rates by Age and Sex

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

- Apart from the youngest age group, for both males and females, the discharge rate generally increased with age. Those aged 75 to 84 years recorded the highest discharge rate for both males and females (1,414.1 per 1,000 population of males and 999.3 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 2016 by sex and age group were obtained from the CSO. http://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=PEA11 [accessed 6th July 2017]

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 48.8 per cent of total discharges.
- Discharges who were widowed accounted for 9.5 per cent of total in-patient discharges, and 17.2 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 5.4 days, compared to 11.8 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	316,657	29.9	267,342	41.5	1,213,005	33.2	583,999	34.3
Married	558,851	52.7	273,460	42.5	1,512,530	41.4	832,311	48.8
Widowed	89,744	8.5	60,884	9.5	629,032	17.2	150,628	8.8
Other*	49,634	4.7	21,880	3.4	153,838	4.2	71,514	4.2
Unknown	28,013	2.6	12,173	1.9	91,401	2.5	40,186	2.4
Divorced	17,703	1.7	8,111	1.3	51,632	1.4	25,814	1.5
Total Discharges	**1,060,602**	**100**	**643,850**	**100**	**3,651,438**	**100**	**1,704,452**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
Single	53,394	213,948	5.4	2	267,342	4.5	2
Married	54,014	219,446	6.6	3	273,460	5.5	2
Widowed	8,070	52,814	11.8	6	60,884	10.3	5
Other*	4,240	17,640	8.5	4	21,880	7.0	3
Unknown	2,671	9,502	9.3	4	12,173	7.5	2
Divorced	1,723	6,388	7.8	4	8,111	6.4	3
Total Discharges	**124,112**	**519,738**	**6.8**	**3**	**643,850**	**5.7**	**2**

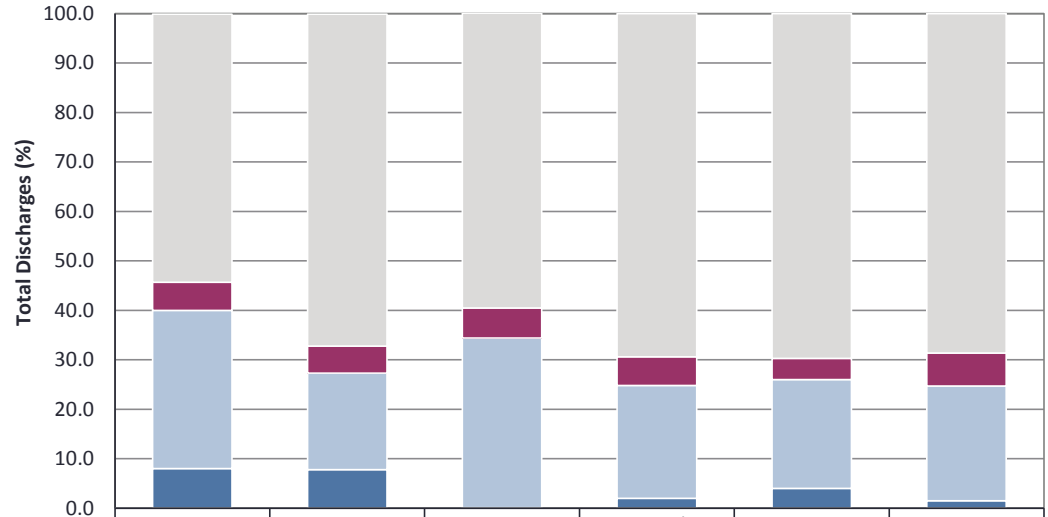
Notes: Percentage columns are subject to rounding.
* Other includes Separated, Civil Partner, Formal Civil Partner, and Surviving Civil Partner

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 (34.3 per cent and 32.0 per cent respectively).
- Approximately eight per cent of total discharges with a marital/civil status of single or married were admitted as maternity in-patients.

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



	Single	Married	Widowed	Other*	Unknown	Divorced
Day Patient	54.2	67.1	59.6	69.4	69.7	68.6
In-Patients Elective	5.7	5.5	6.1	5.8	4.3	6.7
In-Patients Emergency	32.0	19.5	34.3	22.8	22.0	23.2
In-Patients Maternity	8.0	7.8	0.1	2.0	4.0	1.5

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, 83.6 per cent were discharged on a public basis.

- The 25–34 years age group had the largest proportion of total discharges treated publicly (89.2 per cent) with only 10.8 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 23.2 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 75–84 years, where public discharges stayed on average 1.7 days longer than their private counterparts (see Table 2.3 and Figure 2.6). Median length of stay for overnight in-patients was 6 days for both public and private discharges aged 75–84 years.

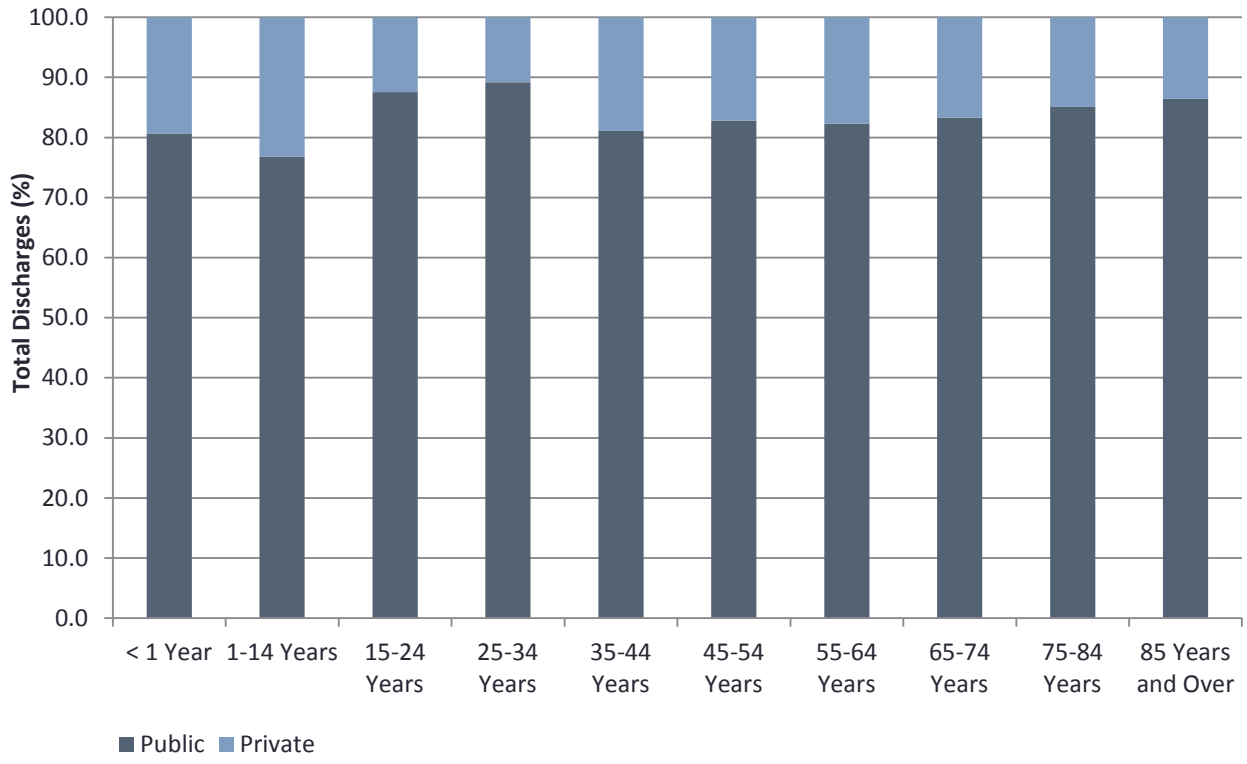
TABLE 2.3 Total Discharges: Public/Private Status by Patient Type and Age Group (N, Row %, In-Patient Length of Stay)

	Discharges											
	Day Patients				Total In-Patients				Total Discharges			
	Public		Private		Public		Private		Public		Private	
	N	%	N	%	N	%	N	%	N	%	N	%
< 1 Year	3,545	84.6	645	15.4	22,214	80.1	5,523	19.9	25,759	80.7	6,168	19.3
1–14 Years	36,168	81.6	8,180	18.4	41,178	73.0	15,224	27.0	77,346	76.8	23,404	23.2
15–24 Years	32,129	87.4	4,613	12.6	41,399	87.7	5,822	12.3	73,528	87.6	10,435	12.4
25–34 Years	73,444	90.3	7,897	9.7	85,531	88.2	11,424	11.8	158,975	89.2	19,321	10.8
35–44 Years	103,483	83.6	20,248	16.4	65,872	77.4	19,261	22.6	169,355	81.1	39,509	18.9
45–54 Years	130,816	83.8	25,374	16.2	45,327	80.2	11,197	19.8	176,143	82.8	36,571	17.2
55–64 Years	168,881	83.7	32,996	16.3	54,045	78.3	14,951	21.7	222,926	82.3	47,947	17.7
65–74 Years	198,167	85.4	33,965	14.6	66,788	77.7	19,208	22.3	264,955	83.3	53,173	16.7
75–84 Years	130,486	88.1	17,658	11.9	63,430	79.5	16,336	20.5	193,916	85.1	33,994	14.9
85 Years and Over	29,079	91.1	2,828	8.9	32,308	82.6	6,812	17.4	61,387	86.4	9,640	13.6
Total Discharges	**906,198**	**85.4**	**154,404**	**14.6**	**518,092**	**80.5**	**125,758**	**19.5**	**1,424,290**	**83.6**	**280,162**	**16.4**

	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	2,451	423	19,763	6.2	2	5,100	5.6	2	5.6	2	5.2	2
1–14 Years	8,177	2,307	33,001	2.7	2	12,917	2.5	2	2.3	1	2.3	1
15–24 Years	11,397	884	30,002	3.4	2	4,938	3.2	2	2.7	1	2.9	2
25–34 Years	20,588	1,720	64,943	3.5	2	9,704	3.6	3	2.9	2	3.2	2
35–44 Years	16,943	2,668	48,929	4.4	2	16,593	4.0	3	3.5	2	3.6	3
45–54 Years	12,207	1,521	33,120	6.3	3	9,676	5.3	3	4.9	2	4.7	2
55–64 Years	12,226	1,670	41,819	7.9	4	13,281	6.3	3	6.3	2	5.7	3
65–74 Years	12,514	1,757	54,274	9.3	5	17,451	8.0	4	7.8	3	7.4	4
75–84 Years	9,687	1,155	53,743	11.8	6	15,181	10.1	6	10.2	5	9.5	5
85 Years and Over	3,483	334	28,825	13.8	7	6,478	13.0	8	12.4	6	12.4	7
Total Discharges	**109,673**	**14,439**	**408,419**	**6.9**	**3**	**111,319**	**6.2**	**3**	**5.7**	**2**	**5.6**	**3**

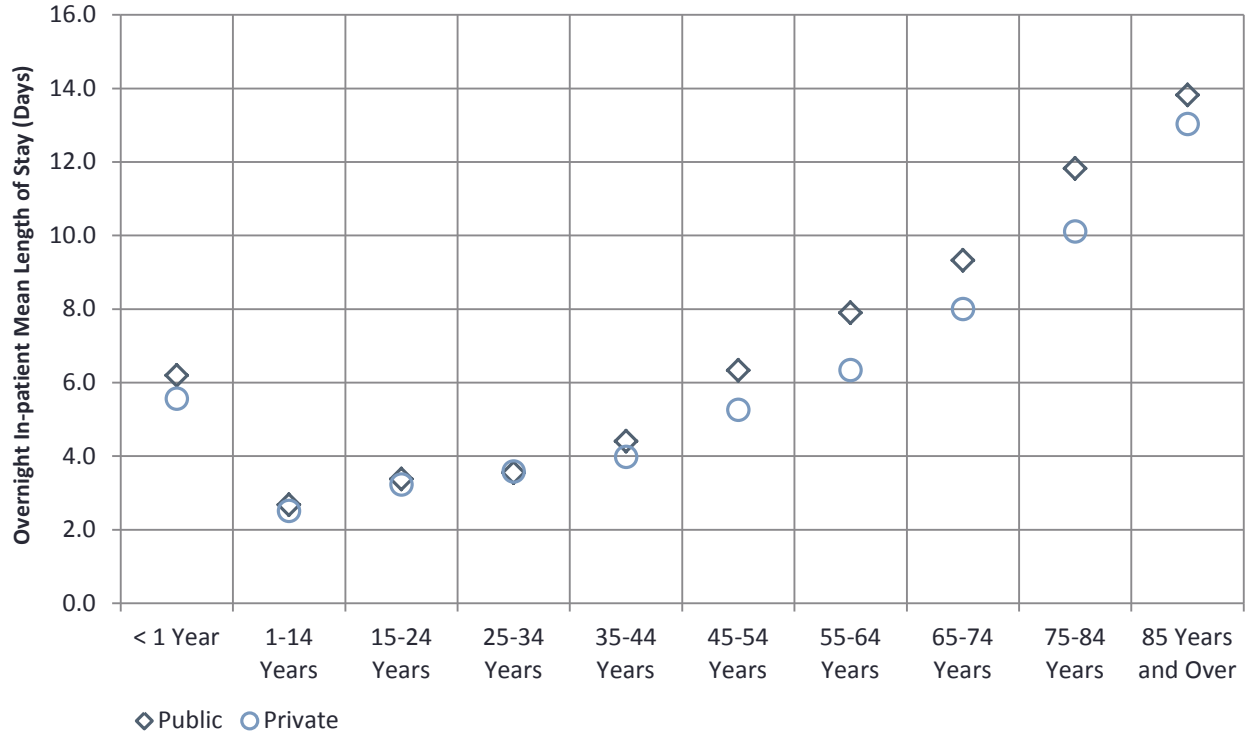
Note: Percentage columns are subject to rounding.

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



Notes: Percentages are subject to rounding.

FIGURE 2.6 Overnight In-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.

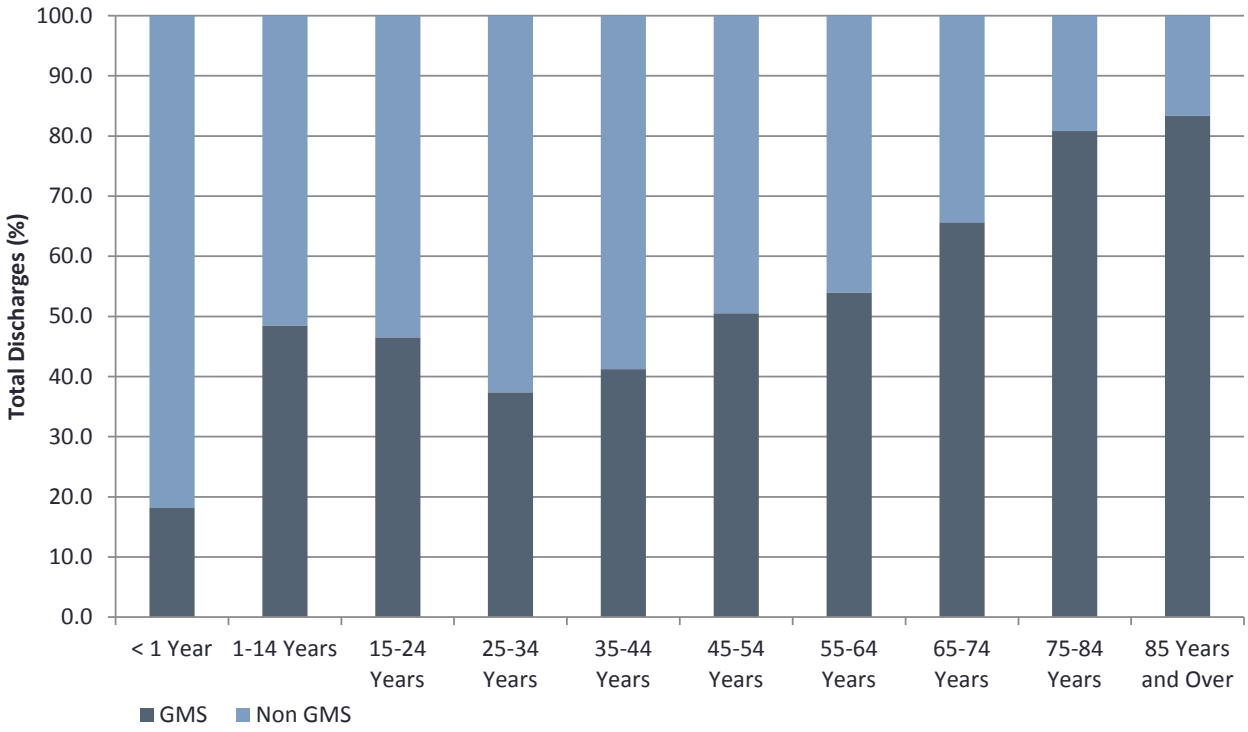
- Of total discharges, those aged 65–74 years accounted for the largest proportion of GMS discharges (21.9 per cent).
- The proportion of total discharges that were GMS discharges generally increased with age, with the largest proportion in the 85 years and over age group (83.3 per cent) – see Figure 2.7.

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

	GMS		Non-GMS		Unknown[a]		Total Discharges	
	N	%	N	%	N	%	N	%
< 1 Year	5,756	0.6	25,921	3.5	250	1.4	31,927	1.9
1–14 Years	48,821	5.2	51,817	7.0	112	0.6	100,750	5.9
15–24 Years	38,727	4.1	44,529	6.0	707	3.9	83,963	4.9
25–34 Years	65,885	7.0	110,437	14.8	1,974	10.9	178,296	10.5
35–44 Years	85,272	9.1	121,500	16.3	2,092	11.6	208,864	12.3
45–54 Years	106,025	11.3	103,911	14.0	2,778	15.4	212,714	12.5
55–64 Years	144,710	15.4	123,263	16.6	2,900	16.0	270,873	15.9
65–74 Years	206,688	21.9	108,148	14.5	3,292	18.2	318,128	18.7
75–84 Years	181,645	19.3	43,108	5.8	3,157	17.5	227,910	13.4
85 Years and Over	58,493	6.2	11,710	1.6	824	4.6	71,027	4.2
Total Discharges	**942,022**	**100**	**744,344**	**100**	**18,086**	**100**	**1,704,452**	**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 (%)



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

2.3 WHERE

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

2.3.1 Hospital Group

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

Discharges

- The largest proportion of total discharges were hospitalised in the South/South West Hospital Group (19.3 per cent).
- Total in-patient discharges were highest in the Ireland East Hospital Group where 20.6 per cent of discharges were hospitalised, while the Dublin Midlands Hospital Group accounted for the highest proportion of day patients (21.1 per cent).

Length of Stay

- The overnight in-patient mean length of stay ranged from 4.4 days (Children's) to 7.7 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)

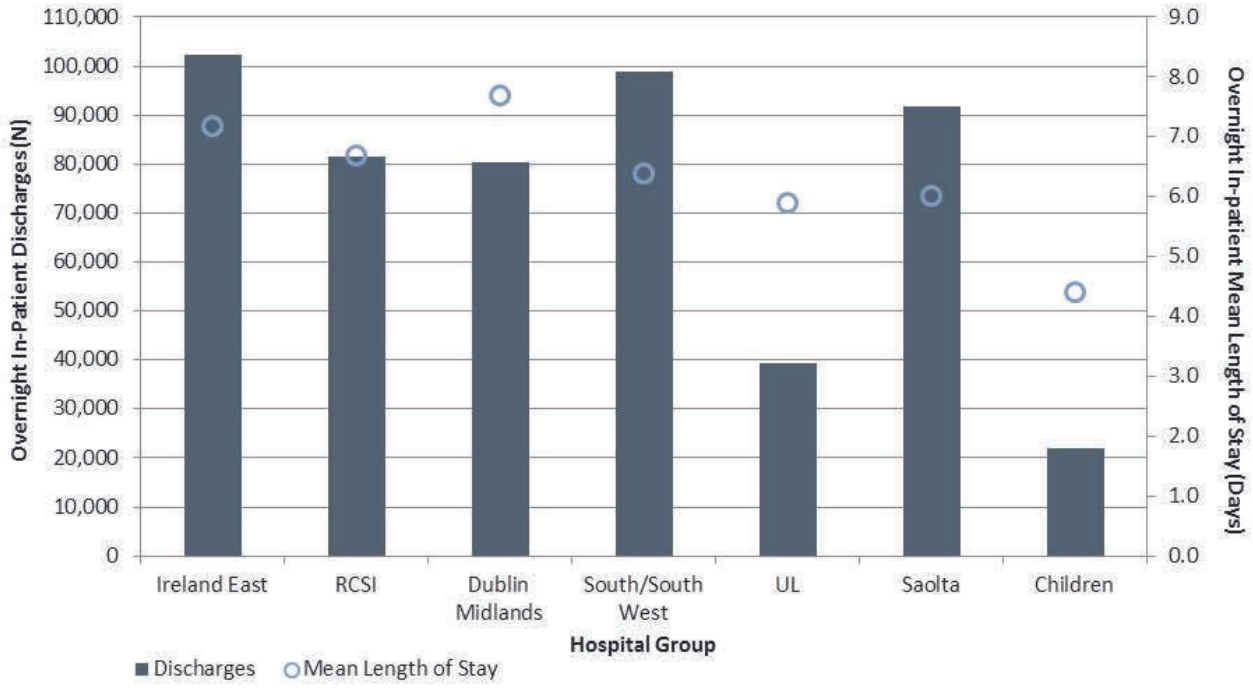
	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
Ireland East	192,549	18.2	132,561	20.6	763,109	20.9	325,110	19.1
RCSI	150,679	14.2	103,548	16.1	565,936	15.5	254,227	14.9
Dublin Midlands	224,028	21.1	94,697	14.7	631,850	17.3	318,725	18.7
South/South West	210,500	19.8	119,132	18.5	651,486	17.8	329,632	19.3
UL	56,694	5.3	50,055	7.8	242,223	6.6	106,749	6.3
Saolta	196,771	18.6	113,677	17.7	572,295	15.7	310,448	18.2
Children's	27,954	2.6	26,280	4.1	100,686	2.8	54,234	3.2
No group^	1,427	0.1	3,900	0.6	123,853	3.4	5,327	0.3
Total Discharges	**1,060,602**	**100**	**643,850**	**100**	**3,651,438**	**100**	**1,704,452**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
Ireland East	30,415	102,146	7.2	3	132,561	5.8	2
RCSI	22,116	81,432	6.7	3	103,548	5.5	2
Dublin Midlands	14,326	80,371	7.7	4	94,697	6.7	3
South/South West	20,141	98,991	6.4	3	119,132	5.5	2
UL	10,736	39,319	5.9	3	50,055	4.8	2
Saolta	22,041	91,636	6.0	3	113,677	5.0	2
Children's	4,330	21,950	4.4	2	26,280	3.8	2
No group^	7	3,893	31.8	20	3,900	31.8	20
Total Discharges	**124,112**	**519,738**	**6.8**	**3**	**643,850**	**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 2016.

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 (21.0 per cent), accounting for 16.3 per cent of total elective in-patient bed days.
- The Ireland East Hospital Group treated the largest proportion of both emergency in-patients (20.4 per cent) and maternity in-patients (22.9 per cent) compared to other groups.

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

	Discharges and Bed Days															
	Day Patients		In-Patients												Total Discharges	
			Elective				Emergency[a]				Maternity					
	N	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%
Ireland East	192,549	18.2	17,900	18.7	115,941	17.7	88,260	20.4	583,831	21.7	26,401	22.9	63,337	20.6	325,110	19.1
RCSI	150,679	14.2	9,995	10.4	62,686	9.5	71,090	16.4	443,096	16.5	22,463	19.5	60,154	19.6	254,227	14.9
Dublin Midlands	224,028	21.1	13,547	14.1	99,199	15.1	58,859	13.6	478,841	17.8	22,291	19.3	53,810	17.5	318,725	18.7
South/South West	210,500	19.8	20,085	21.0	106,761	16.3	80,082	18.5	485,578	18.1	18,965	16.4	59,147	19.2	329,632	19.3
UL	56,694	5.3	*	–	^	–	35,645	8.2	184,206	6.9	*	–	^	–	106,749	6.3
Saolta	196,771	18.6	16,604	17.3	91,427	13.9	78,483	18.1	434,104	16.2	18,590	16.1	46,764	15.2	310,448	18.2
Children's	27,954	2.6	*	–	^	–	*	–	^	–	~	–	^	–	54,234	3.2
No group[ǂ]	1,427	0.1	*	–	^	–	~	–	^	–	0	0.0	0	0.0	5,327	0.3
Total Discharges	**1,060,602**	**100**	**95,870**	**100**	**656,639**	**100**	**432,490**	**100**	**2,687,345**	**100**	**115,490**	**100**	**307,454**	**100**	**1,704,452**	**100**

Notes:

~ Denotes five or fewer discharges reported to HIPE.

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

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

Percentage columns are subject to rounding

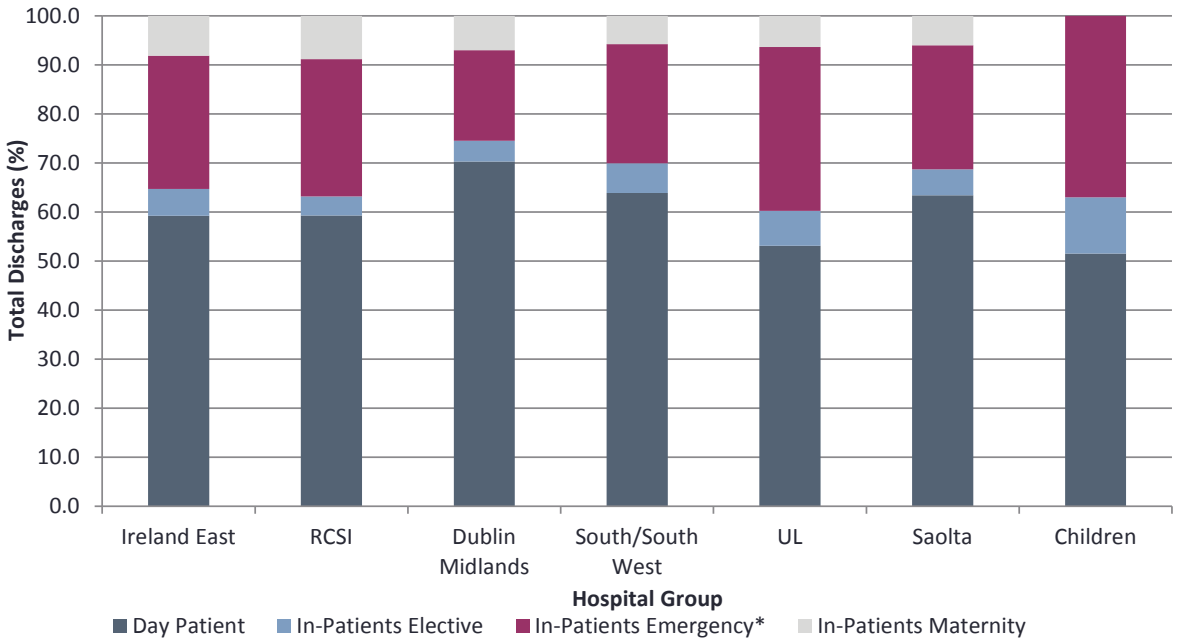
a HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about 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 2016.

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 51.5 per cent in the Children's Hospital Group to 70.3 per cent in the Dublin Midlands Hospital Group.
- The RCSI Hospital Group treated 8.8 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 (37.0 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 (88.8 per cent) compared to the smallest proportion treated on a public basis in the University of Limerick Hospital Group (70.7 per cent).
- A larger proportion of total day patients were treated as public day patients, exceeding 90 per cent in both the Ireland East and RCSI Hospital Groups. The smallest proportion was in the University of Limerick Hospital Group where 69.2 per cent of total day patients were treated on a public basis.
- The proportion of total in-patients treated on a public basis exceeded 80 per cent in the Ireland East, RCSI and Saolta Hospital Groups.

Length of Stay

- Overnight in-patient mean length of stay was 6.9 days for public discharges compared to 6.2 days for private discharges.
- The Dublin Midlands Hospital Group recorded the longest overnight in-patient mean length of stay for both public discharges (7.8 days) and private discharges (7.4 days) compared to the other groups.
- The Children's Hospital Group recorded the shortest overnight in-patient mean length of stay; 4.6 days for public discharges and 3.9 days for private discharges.

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

	Discharges											
	Day Patients				Total In-Patients				Total Discharges			
	Public		Private		Public		Private		Public		Private	
	N	%	N	%	N	%	N	%	N	%	N	%
Ireland East	176,112	91.5	16,437	8.5	106,982	80.7	25,579	19.3	283,094	87.1	42,016	12.9
RCSI	136,810	90.8	13,869	9.2	88,927	85.9	14,621	14.1	225,737	88.8	28,490	11.2
Dublin Midlands	185,475	82.8	38,553	17.2	75,233	79.4	19,464	20.6	260,708	81.8	58,017	18.2
South/South West	170,930	81.2	39,570	18.8	91,525	76.8	27,607	23.2	262,455	79.6	67,177	20.4
UL	39,240	69.2	17,454	30.8	36,215	72.4	13,840	27.6	75,455	70.7	31,294	29.3
Saolta	173,465	88.2	23,306	11.8	96,216	84.6	17,461	15.4	269,681	86.9	40,767	13.1
Children's	22,739	81.3	5,215	18.7	19,463	74.1	6,817	25.9	42,202	77.8	12,032	22.2
No group[ǂ]	1,427	100.0	0	0.0	3,531	90.5	369	9.5	4,958	93.1	369	6.9
Total Discharges	**906,198**	**85.4**	**154,404**	**14.6**	**518,092**	**80.5**	**125,758**	**19.5**	**1,424,290**	**83.6**	**280,162**	**16.4**

	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	26,738	3,677	80,244	7.4	3	21,902	6.5	3	5.8	2	5.7	3
RCSI	20,534	1,582	68,393	6.7	3	13,039	6.7	4	5.4	2	6.1	3
Dublin Midlands	12,456	1,870	62,777	7.8	3	17,594	7.4	4	6.6	3	6.8	3
South/South West	17,156	2,985	74,369	6.5	3	24,622	6.0	3	5.5	2	5.5	3
UL	9,748	988	26,467	6.2	3	12,852	5.2	3	4.8	2	4.9	3
Saolta	19,559	2,482	76,657	6.1	3	14,979	5.7	3	5.0	2	5.0	2
Children's	*	*	*	^	^	*	^	^	3.9	2	3.6	2
No group[ǂ]	~	~	*	^	^	*	^	^	33.5	22	15.3	4
Total Discharges	**109,673**	**14,439**	**408,419**	**6.9**	**3**	**111,319**	**6.2**	**3**	**5.7**	**2**	**5.6**	**3**

Notes:

Percentage columns are subject to rounding.

~ Denotes five or fewer discharges reported to HIPE.

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

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

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 2016.

2.3.2 Admission Source

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

- The majority of total discharges were admitted from home (96.7 per cent).
- Of total emergency in-patients, 2.5 per cent were transferred in from long stay accommodation.
- Almost 12 per cent of elective in-patients were transferred from another hospital.

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

	Day Patients		In-Patients						Total Discharges	
			Elective		Emergency[a]		Maternity			
	N	%	N	%	N	%	N	%	N	%
Home	1,054,925	99.5	84,256	87.9	394,094	91.1	114,687	99.3	1,647,962	96.7
Long stay accommodation	1,630	0.2	*	–	10,759	2.5	~	–	12,753	0.7
Transfer from other hospital	3,955	0.4	11,196	11.7	15,980	3.7	741	0.6	31,872	1.9
Other	92	0.0	*	–	11,657	2.7	*	–	11,865	0.7
Total	**1,060,602**	**100**	**95,870**	**100**	**432,490**	**100**	**115,490**	**100**	**1,704,452**	**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.

~ Denotes five or fewer discharges reported to HIPE.

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

2.3.3 Discharge Destination

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

- The majority of total discharges were discharged home (95.2 per cent).
- Of total emergency in-patients, 5.9 per cent were transferred to long stay accommodation, and 5.4 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	1,054,078	99.4	87,551	91.3	367,177	84.9	114,102	98.8	1,622,908	95.2
Long stay accommodation	2,108	0.2	*	–	25,665	5.9	*	–	30,905	1.8
Transfer to other hospital	4,295	0.4	4,046	4.2	23,371	5.4	655	0.6	32,367	1.9
Died	0	0.0	*	–	10,504	2.4	~	–	11,201	0.7
Other	121	0.0	455	0.5	5,773	1.3	722	0.6	7,071	0.4
Total Discharges	**1,060,602**	**100**	**95,870**	**100**	**432,490**	**100**	**115,490**	**100**	**1,704,452**	**100**

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

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

~ Denotes five or fewer discharges reported to HIPE.

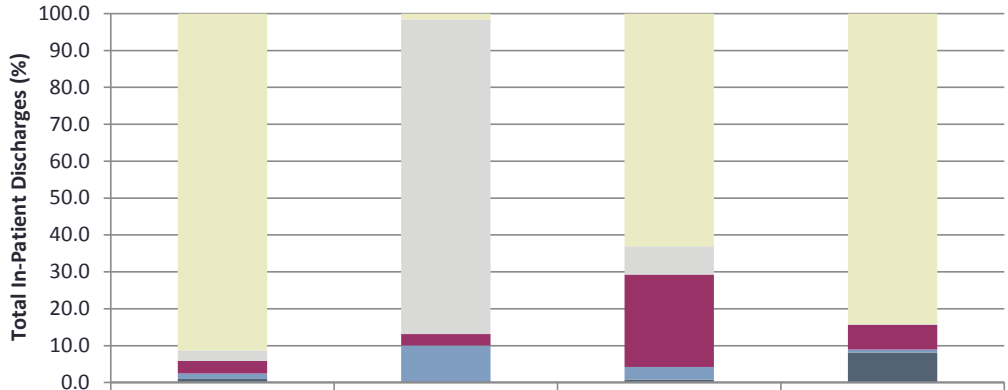
* Further suppression required to prevent disclosure of five or fewer discharges.

2.3.4 Admission Source by Discharge Destination

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

- Of in-patients who were admitted from home, 91.2 per cent were discharged home.
- In-patients admitted from long stay accommodation were primarily discharged back to long stay accommodation (85.2 per cent).
- Over a quarter of in-patients (25.1 per cent) who were admitted from another hospital were transferred to another hospital, while 63.1 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	91.2	1.7	63.1	84.2
Long stay accommodation	2.9	85.2	7.7	0.2
Transfer to other hospital	3.4	3.1	25.1	6.7
Died	1.5	9.9	3.5	0.8
Other	1.0	0.1	0.7	8.1

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

2.4 WHEN

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

2.4.1 Day of Admission

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

Discharges

- The proportion of in-patient discharges admitted on an elective basis decreased throughout the week, with 62.3 per cent admitted between Monday and Wednesday, falling to 6.2 per cent at the weekend.
- The proportion of in-patient discharges admitted as emergency in-patients remained relatively constant throughout the week at approximately 16 per cent per day, but fell at weekends when approximately 10 per cent were admitted per day.
- The majority of day patients were admitted mid-week, ranging from 21.1 per cent on Wednesday to only 2.5 per cent on Saturday and 0.9 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 Wednesday to 10.6 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)

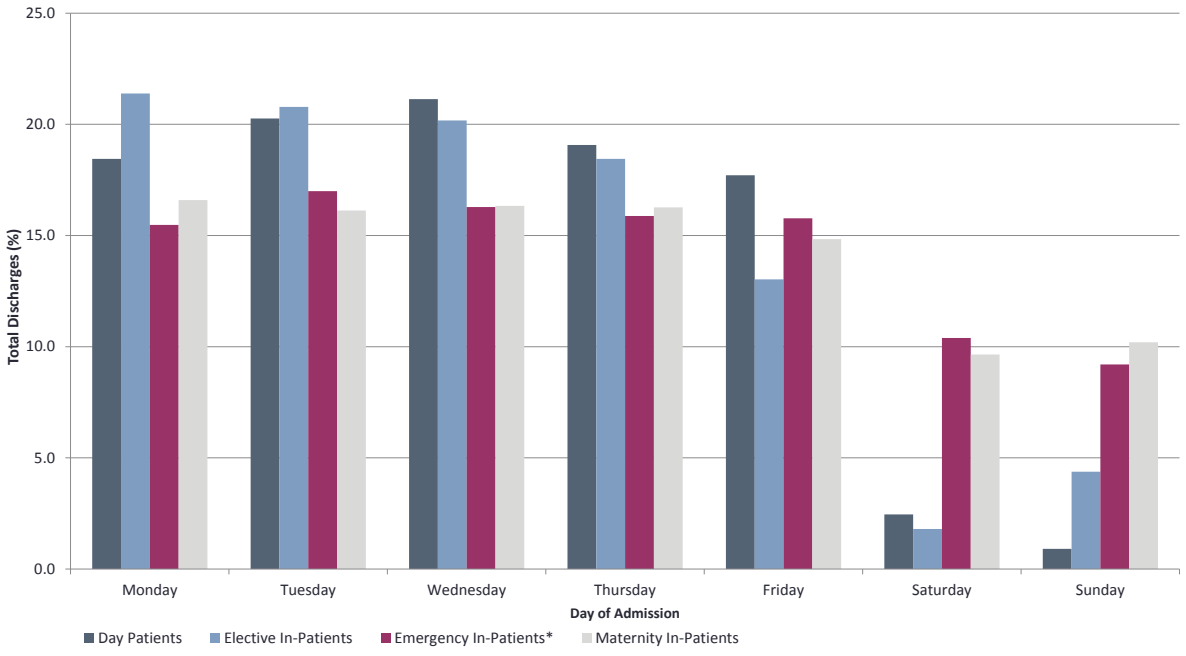
	Discharges									
	Day Patients		In-Patients						Total Discharges	
			Elective		Emergency[a]		Maternity			
	N	%	N	%	N	%	N	%	N	%
Monday	195,685	18.5	20,508	21.4	66,944	15.5	19,161	16.6	302,298	17.7
Tuesday	214,945	20.3	19,926	20.8	73,509	17.0	18,623	16.1	327,003	19.2
Wednesday	224,200	21.1	19,340	20.2	70,403	16.3	18,864	16.3	332,807	19.5
Thursday	202,308	19.1	17,683	18.4	68,679	15.9	18,788	16.3	307,458	18.0
Friday	187,800	17.7	12,491	13.0	68,233	15.8	17,135	14.8	285,659	16.8
Saturday	26,046	2.5	1,728	1.8	44,935	10.4	11,141	9.6	83,850	4.9
Sunday	9,618	0.9	4,194	4.4	39,787	9.2	11,778	10.2	65,377	3.8
Total Discharges	**1,060,602**	**100**	**95,870**	**100**	**432,490**	**100**	**115,490**	**100**	**1,704,452**	**100**

	In-Patient Length of Stay								
	Elective		Emergency[a]		Maternity		Total In-Patients		
	Mean	Median	Mean	Median	Mean	Median	N	Mean	Median
Monday	6.7	3	5.9	2	2.7	2	106,613	5.5	2
Tuesday	6.6	2	6.1	2	2.8	2	112,058	5.6	2
Wednesday	6.4	2	6.1	2	2.7	2	108,607	5.6	2
Thursday	6.6	2	6.2	2	2.7	2	105,150	5.6	2
Friday	7.6	3	6.3	3	2.6	2	97,859	5.8	3
Saturday	10.6	4	6.8	3	2.4	2	57,804	6.1	3
Sunday	8.1	4	6.4	3	2.6	2	55,759	5.7	3
In-Patient Discharges	**6.8**	**2**	**6.2**	**2**	**2.7**	**2**	**643,850**	**5.7**	**2**

Notes: Percentage columns are subject to rounding.

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

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



Note: * See note under Table 2.10

2.4.2 Day of Discharge

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

Discharges

- The proportion of elective in-patients discharged increased throughout the week, from 10.6 per cent on Monday to 22.5 per cent on Friday, falling to 10.6 per cent on Saturday and 4.7 per cent on Sunday.
- The largest proportion of emergency in-patients were discharged on Friday (20.2 per cent), with the smallest proportion discharged on Sunday (6.0 per cent).

Length of Stay

- Elective in-patients discharged on a Monday had the longest in-patient mean length of stay (10.2 days).
- Emergency in-patient mean length of stay fell throughout the week from 6.7 days for those discharged on a Monday to 4.2 days for those discharged on a Sunday.

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

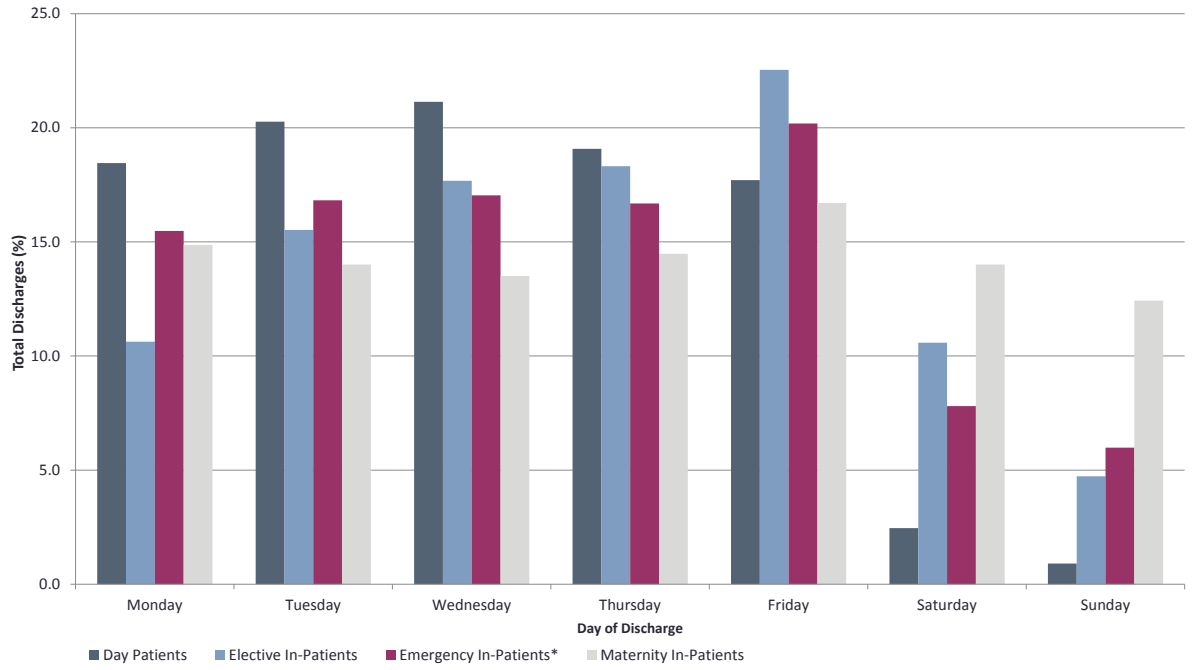
	Discharges									
	Day Patients		In-Patients						Total Discharges	
			Elective		Emergency[a]		Maternity			
	N	%	N	%	N	%	N	%	N	%
Monday	195,685	18.5	10,190	10.6	66,934	15.5	17,176	14.9	289,985	17.0
Tuesday	214,945	20.3	14,882	15.5	72,748	16.8	16,174	14.0	318,749	18.7
Wednesday	224,200	21.1	16,947	17.7	73,691	17.0	15,600	13.5	330,438	19.4
Thursday	202,308	19.1	17,561	18.3	72,169	16.7	16,724	14.5	308,762	18.1
Friday	187,800	17.7	21,609	22.5	87,317	20.2	19,292	16.7	316,018	18.5
Saturday	26,046	2.5	10,148	10.6	33,740	7.8	16,176	14.0	86,110	5.1
Sunday	9,618	0.9	4,533	4.7	25,891	6.0	14,348	12.4	54,390	3.2
Total Discharges	**1,060,602**	**100**	**95,870**	**100**	**432,490**	**100**	**115,490**	**100**	**1,704,452**	**100**

	In-Patient Length of Stay								
	Elective		Emergency[a]		Maternity		Total In-Patients		
	Mean	Median	Mean	Median	Mean	Median	N	Mean	Median
Monday	10.2	5	6.7	3	2.9	2	94,300	6.4	3
Tuesday	7.2	2	6.6	3	2.8	2	103,804	6.1	2
Wednesday	7.0	2	6.6	2	2.5	2	106,238	6.0	2
Thursday	6.4	2	6.6	2	2.4	2	106,454	5.9	2
Friday	6.7	2	6.1	2	2.6	2	128,218	5.7	2
Saturday	4.0	2	4.6	2	2.7	2	60,064	3.9	2
Sunday	6.5	4	4.2	2	2.9	2	44,772	4.0	2
In-Patient Discharges	**6.8**	**2**	**6.2**	**2**	**2.7**	**2**	**643,850**	**5.7**	**2**

Notes: Percentage columns are subject to rounding.

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

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



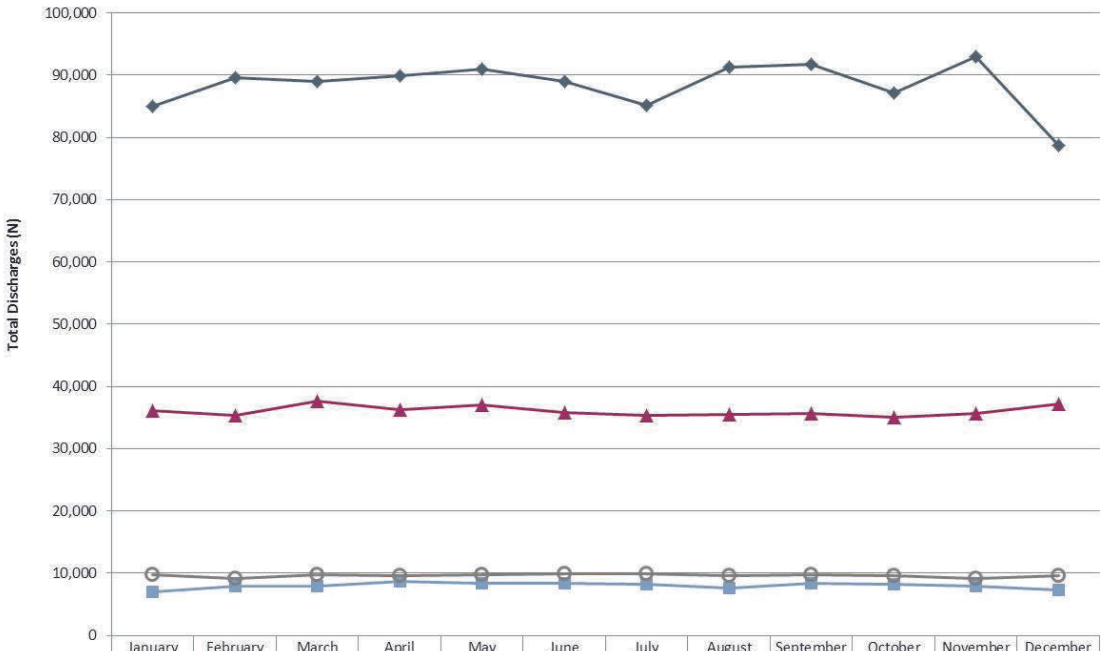
Note: * HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions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

2.4.1 Month of Discharge

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

- Hospital discharges peaked in April for elective in-patients (8,622 discharges), while January recorded the smallest number of elective in-patients with only 7,037 elective in-patients discharged in this month.
- Emergency in-patient hospital discharges peaked in March (37,679 discharges), while the smallest number of emergency in-patients were discharged in October with 35,015 discharges.
- Maternity in-patient discharges were highest in June (9,931 discharges) and lowest in November (9,102 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	85,053	89,542	88,991	89,880	90,978	88,944	85,144	91,289	91,798	87,183	93,050	78,750
Elective In-Patients	7,037	7,977	7,872	8,622	8,367	8,378	8,159	7,637	8,392	8,207	7,883	7,339
Emergency In-Patients*	36,078	35,320	37,679	36,287	36,987	35,754	35,306	35,541	35,672	35,015	35,597	37,254
Maternity	9,743	9,204	9,743	9,552	9,688	9,931	9,891	9,577	9,780	9,613	9,102	9,666

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

Includes 8,555 discharges admitted prior to 2016 and discharged in 2016.

Morbidity Analysis 2016

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 and greatly contributes to the continuous growth of medical knowledge. 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 Dublin Institute of Technology (DIT). To date almost 80 coders have achieved this certification while over 30 coders are currently undertaking studies.

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

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

2 The presentation of in-patient length of stay differs from reports prior to 2015 which presented acute and total in-patient mean length of stay. This report presents mean and median total in-patient length of stay only (see Section 1.6).

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

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

progress notes, operative reports, pre- and post-operative reports, pathology reports and more recently the sepsis form. Appendix III shows the HIPE Data Entry Form for 2016, which details the information coded for each hospital discharge. No interpretation of test results may be presumed by the Coder and all diagnoses recorded must be documented by a clinician in the chart.

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

At the start of 2015, the classification to code clinical information was updated from the 6th Edition to the 8th Edition of the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM), Australian Classification of Health interventions (ACHI), Australian Coding Standards (ACS).[6,7] Details of the ICD-10-AM diagnosis and ACHI procedure coding scheme are provided in Tables 3.1 and 3.2. ACS are developed to provide guidance in the application of ICD-10-AM and ACHI codes. Standards are 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.[8]

Due to the update in the classification, caution must be exercised when comparing procedure and diagnosis categories presented in this report and in the 2015 report compared to reports prior to 2015, due to changes in sequencing of codes, addition of new codes, deletion of codes, and updates to ACS and ICS.[9]

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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). Available at www.hpo.ie

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

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

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

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

Table 3.1 provides details of the structure of ICD-10-AM diagnosis codes and presents the chapter structure 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 Centre for Classification in Health (NCCH), 2013: *The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (8th Ed): Australian Coding Standards.* Sydney: NCCH, Australian Health Services Research Institute, The University of Wollongong. p. xv-xvi.

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

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

Australian Classification of Health Interventions (ACHI)

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

The main features of the classification are:

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

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

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

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

3.2.1 Definition of a Diagnosis

In 2016, HIPE collected a principal diagnosis for each discharge, together with up to 29 additional diagnosis codes.

DIAGNOSES

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

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

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

3.2.1.1 Mean Number of Diagnoses Reported

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

- The mean number of diagnoses recorded for total discharges was 2.7.
- The mean number of diagnoses recorded for in-patient discharges was 3.9, compared to 2.0 for day patients.
- The mean number of diagnoses recorded for in-patient discharges was higher for males (4.2) compared with females (3.8).
- 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 5.2 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	4.2	2.8
Female	2.0	3.8	2.7
Maternity	1.8	3.6	3.4
Non-Maternity	2.0	3.8	2.6
Age Group			
< 15 Years	1.8	2.6	2.3
15–44 Years	1.7	3.3	2.5
45–64 Years	2.1	3.8	2.5
65 Years and Over	2.1	5.2	3.1

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

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

3.2.2 Definition of a Procedure

In 2016, a principal procedure and up to 19 additional procedure codes for each discharge could be reported to HIPE where appropriate.

PROCEDURES

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

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

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

3.2.2.1 Discharges with a Procedure

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

- Of the 1,704,452 total discharges, principal procedures were recorded for 1,355,394 discharges (79.5 per cent).
- Over 93 per cent of day patient discharges had a principal procedure recorded.
- Over 56 per cent of in-patient discharges had a principal procedure recorded, with 89.3 per cent of elective in-patients, 49.1 per cent of emergency in-patients, and 58.7 per cent of maternity in-patients undergoing a principal procedure.

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

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

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

16 The move to the ACHI introduced significant changes to the collection of procedures from 2005, including the use of Australian Coding Standard (ACS) 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	**1,704,452**	**1,355,394**	**79.5**
Day Patients	1,060,602	989,570	93.3
In-Patients	643,850	365,824	56.8
Elective In-Patients	95,870	85,634	89.3
Emergency In-Patients	432,490	212,426	49.1
Maternity In-Patients	115,490	67,764	58.7

3.2.2.2 Mean Number of Procedures Reported

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

- For those discharges who underwent at least one procedure, in-patient discharges had a mean number of 2.8 procedures recorded, compared to a mean of 1.5 procedures for day patients.
- While the mean number of procedures increased with age for in-patient discharges, the day patient pattern differed. For those undergoing a procedure, day patient discharges aged less than 15 years recorded a mean of 1.8 procedures, which was larger than that reported for older age groups.

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

	Day Patients	In-Patients	Total Discharges
Total	**1.5**	**2.8**	**1.8**
Sex			
Male	1.4	2.8	1.8
Female	1.5	2.8	1.9
Maternity	1.6	2.7	2.7
Non-Maternity	1.5	2.8	1.8
Age Group			
< 15 Years	1.8	2.5	2.1
15–44 Years	1.5	2.6	1.9
45–64 Years	1.5	2.9	1.7
65 Years and Over	1.4	3.0	1.8

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

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

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

3.3.1 Day Patient Activity

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

Day Patients – Profile

- Day patient discharges accounted for 62.2 per cent of total discharges.
- Day patients aged 65–74 years accounted for 21.9 per cent of day patient discharges.

Day Patients – Top 20 Principal Diagnoses

- Day patients with a principal diagnosis of *Other medical care* (includes *Chemotherapy* and *Radiotherapy* encounters)[18] and those with a principal diagnosis of *Care involving dialysis* accounted for 21.8 and 16.1 per cent of day patient discharges respectively.

Day Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 93.3 per cent of day patient discharges (see Table 3.4).
- Procedures from the block *Haemodialysis* were reported as a principal procedure for 17.3 per cent of day patients with at least one procedure.

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

- The top three AR-DRGs accounted for 37.2 per cent of day patient discharges reported to HIPE when analysed by diagnosis related group.[19,20]
- *Haemodialysis* accounted for 16.1 per cent, while *Chemotherapy* and *Other Neoplastic Disorders, Minor Complexity* accounted for 10.8 per cent and 10.3 per cent of day patient discharges respectively.

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

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

20 In 2015, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. This report is the first HIPE Annual Report to use AR-DRG Version 8.0. See Appendix VIII for an overview of changes between these versions.

TABLE 3.6 Day Patient Activity (N, %)

Top 20 Principal Diagnoses[a]		N	%
Z51	Other medical care[c,d]	231,390	21.8
Z49	Care involving dialysis	171,221	16.1
E83	Disorders of mineral metabolism	22,108	2.1
H35	Other retinal disorders	17,750	1.7
L40	Psoriasis	15,895	1.5
Z13	Special screening examination for other diseases and disorders	14,657	1.4
K29	Gastritis and duodenitis	14,537	1.4
M54	Dorsalgia	11,852	1.1
C44	Other malignant neoplasms of skin	10,706	1.0
K64	Haemorrhoids and perianal venous thrombosis	9,175	0.9
M25	Other joint disorders, not elsewhere classified	9,047	0.9
D12	Benign neoplasm of colon, rectum, anus and anal canal	8,615	0.8
K57	Diverticular disease of intestine	8,432	0.8
K50	Crohn's disease [regional enteritis]	8,003	0.8
R10	Abdominal and pelvic pain	7,878	0.7
Z09	Follow-up examination after treatment for conditions other than malignant neoplasms	7,666	0.7
K44	Diaphragmatic hernia	7,441	0.7
Z45	Adjustment and management of drug delivery or implanted device	7,289	0.7
Z48	Other surgical follow-up care	7,162	0.7
Z08	Follow-up examination after treatment for malignant neoplasms	6,944	0.7

Day Patients

1,060,602

Sex	N	%
Male	522,535	49.3
Female	538,067	50.7

Age Group	N	%
< 1 Year	4,190	0.4
1–14 Years	44,348	4.2
15–24 Years	36,742	3.5
25–34 Years	81,341	7.7
35–44 Years	123,731	11.7
45–54 Years	156,190	14.7
55–64 Years	201,877	19.0
65–74 Years	232,132	21.9
75–84 Years	148,144	14.0
85 Years and Over	31,907	3.0

Top 20 Principal Procedure Blocks[b]		N	%
1060	Haemodialysis	170,798	17.3
1920	Administration of pharmacotherapy	150,879	15.2
1788	Megavoltage radiation treatment[d]	109,311	11.0
1008	Panendoscopy with excision	47,304	4.8
0911	Fibreoptic colonoscopy with excision	35,243	3.6
1620	Excision of lesion(s) of skin and subcutaneous tissue	35,077	3.5
0905	Fibreoptic colonoscopy	27,507	2.8
0209	Application, insertion or removal procedures on retina, choroid or posterior chamber	23,315	2.4
1552	Administration of agent into other musculoskeletal sites	23,220	2.3
0725	Other incision procedures on veins	21,775	2.2
1610	Ultraviolet B [UVB] light therapy of skin	17,277	1.7
1893	Administration of blood and blood products	15,153	1.5
1089	Examination procedures on bladder	14,899	1.5
0668	Coronary angiography	10,267	1.0
0197	Extracapsular crystalline lens extraction by phacoemulsification	9,478	1.0
1005	Panendoscopy	9,071	0.9
1822	Assessment of personal care and other activities of daily/independent living	7,422	0.8
1601	Dressing of other wound	6,648	0.7
1618	Biopsy of skin and subcutaneous tissue	6,460	0.7
1259	Examination procedures on uterus	5,611	0.6

Hospital Group	N	%
Ireland East	192,549	18.2
RCSI	150,679	14.2
Dublin Midlands	224,028	21.1
South/South West	210,500	19.8
UL	56,694	5.3
Saolta	196,771	18.6
Children's	27,954	2.6
No group	1,427	0.1

Top 10 AR-DRGs		N	%
L61Z	Haemodialysis	170,726	16.1
R63Z	Chemotherapy	114,475	10.8
R62C	Other Neoplastic Disorders, Minor Complexity[d]	109,687	10.3
G48B	Colonoscopy, Minor Complexity	48,233	4.5
G47C	Gastroscopy, Minor Complexity	38,614	3.6
I40Z	Infusions for Musculoskeletal Disorders, Sameday	38,121	3.6
J11B	Other Skin, Subcutaneous Tissue and Breast Procedures, Minor Complexity	35,484	3.3
Z64B	Other Factors Influencing Health Status, Minor Complexity	35,049	3.3
C03B	Retinal Procedures, Minor Complexity	21,951	2.1
Q61C	Red Blood Cell Disorders, Minor Complexity	21,488	2.0

Notes: Percentage columns are subject to rounding.

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

b ACHI Procedure codes are analysed at block level. The percentage (%) is based on 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 37.8 per cent of total discharges.
- Overnight in-patient discharges accounted for 80.7 per cent (519,738) of in-patient discharges and had a mean length of stay of 6.8 days.

In-Patients – Top 20 Principal Diagnoses

- In-patient discharges with a principal diagnosis of *Single spontaneous delivery* accounted for 4.7 per cent of in-patient discharges.
- In-patient discharges with a principal diagnosis of *Pain in throat and chest* accounted for 2.9 per cent of in-patient discharges while those with a principal diagnosis of *Single delivery by caesarean section* accounted for 2.7 per cent of in-patient discharges.

In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 56.8 per cent of total in-patient discharges (see Table 3.4).
- Procedures from the block *Generalised allied health interventions* were reported for 26.7 per cent of in-patient discharges with at least one procedure reported.[21]

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

- The top three AR-DRGs accounted for 10.8 per cent of in-patient discharges when analysed by diagnosis related group.[22,23]
- *Antenatal and Other Obstetric Admissions, Minor Complexity* accounted for 5.0 per cent of in-patient discharges. *Vaginal Delivery, Minor Complexity* and *Vaginal Delivery, Intermediate Complexity* each accounted for 2.9 per cent of in-patient discharges.

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21 This block includes interventions such as physiotherapy, pharmacy, dietetics, occupational therapy, speech pathology and social work. Together, these six interventions accounted for over 92 per cent of cases within this procedure block.

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

23 In 2015, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. This report is the first HIPE Annual Report to use AR-DRG Version 8.0. See Appendix VIII for an overview of changes between these versions.

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	30,048	4.7	2.4	2
R07	Pain in throat and chest	18,563	2.9	1.8	1
O82	Single delivery by caesarean section	17,534	2.7	4.5	4
J22	Unspecified acute lower respiratory infection	16,245	2.5	6.3	3
J44	Other chronic obstructive pulmonary disease	15,123	2.3	7.9	5
O99	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium	14,126	2.2	1.6	1
N39	Other disorders of urinary system	13,246	2.1	8.5	4
J18	Pneumonia, organism unspecified	12,243	1.9	9.7	6
R10	Abdominal and pelvic pain	10,618	1.6	2.3	1
R55	Syncope and collapse	9,534	1.5	4.6	2
O81	Single delivery by forceps and vacuum extractor	8,818	1.4	3.2	3
I48	Atrial fibrillation and flutter	6,776	1.1	3.8	2
L03	Cellulitis	6,561	1.0	6.7	4
K80	Cholelithiasis	6,113	0.9	4.8	3
I50	Heart failure	6,101	0.9	10.3	6
I21	Acute myocardial infarction	6,058	0.9	6.5	4
K35	Acute appendicitis	6,012	0.9	3.3	2
R51	Headache	5,993	0.9	2.0	1
A09	Other gastroenteritis and colitis of infectious and unspecified origin	5,827	0.9	4.0	2
O47	False labour	5,343	0.8	1.3	1

In-Patients
643,850

Discharges	N	%
Total	**643,850**	**100**
Sameday	124,112	19.3
Overnight	519,738	80.7

Length of Stay	Mean	Median
Total	**5.7**	**2**
Overnight	6.8	3

Bed Days	N
Total	**3,651,438**
Overnight	3,527,326

Top 20 Principal Procedure Blocks[b]		N	%	Mean LOS	Med LOS
1916	Generalised allied health interventions	97,497	26.7	11.8	7
1340	Caesarean section	19,981	5.5	5.2	4
1344	Postpartum suture	15,693	4.3	2.5	2
1920	Administration of pharmacotherapy	10,543	2.9	7.6	3
1893	Administration of blood and blood products	8,629	2.4	9.6	5
1008	Panendoscopy with excision	7,033	1.9	9.9	5
0926	Appendicectomy	6,650	1.8	3.1	2
1338	Vacuum extraction	6,269	1.7	3.2	3
0668	Coronary angiography	5,824	1.6	5.2	2
1489	Arthroplasty of hip	5,451	1.5	10.1	6
0570	Noninvasive ventilatory support	4,616	1.3	15.6	10
0030	Lumbar puncture	4,317	1.2	8.5	4
1334	Medical or surgical induction of labour	3,814	1.0	3.2	3
1343	Other procedures associated with delivery	3,755	1.0	3.1	3
0671	Transluminal coronary angioplasty with stenting	3,648	1.0	3.6	2
0412	Tonsillectomy or adenoidectomy	3,487	1.0	1.2	1
0569	Ventilatory support	3,408	0.9	24.5	10
1828	Sleep study	3,333	0.9	1.6	1
0965	Cholecystectomy	3,114	0.9	3.8	2
1265	Curettage and evacuation of uterus	3,001	0.8	1.5	1

Hospital Group	N	%
Ireland East	132,561	20.6
RCSI	103,548	16.1
Dublin Midlands	94,697	14.7
South/South West	119,132	18.5
UL	50,055	7.8
Saolta	113,677	17.7
Children's	26,280	4.1
No group	3,900	0.6

Sex	N	%
Male	266,167	41.3
Female	377,683	58.7

Age Group	N	%
< 1 Year	27,737	4.3
1–14 Years	56,402	8.8
15–24 Years	47,221	7.3
25–34 Years	96,955	15.1
35–44 Years	85,133	13.2
45–54 Years	56,524	8.8
55–64 Years	68,996	10.7
65–74 Years	85,996	13.4
75–84 Years	79,766	12.4
85 Years and Over	39,120	6.1

Top 10 AR-DRGs		N	%	Mean LOS	Med LOS
O66B	Antenatal and Other Obstetric Admissions, Minor Complexity	32,285	5.0	1.4	1
O60C	Vaginal Delivery, Minor Complexity	18,737	2.9	2.1	2
O60B	Vaginal Delivery, Intermediate Complexity	18,710	2.9	3.0	3
F74B	Chest Pain, Minor Complexity	14,065	2.2	1.4	1
O01C	Caesarean Delivery, Minor Complexity	12,040	1.9	4.2	4
O66A	Antenatal and Other Obstetric Admissions, Major Complexity	10,715	1.7	2.2	1
E75A	Other Respiratory System Disorders, Major Complexity	9,780	1.5	8.4	5
E65B	Chronic Obstructive Airways Disease, Minor Complexity	8,996	1.4	4.9	4
G67B	Oesophagitis and Gastroenteritis, Minor Complexity	8,782	1.4	1.9	1
E75B	Other Respiratory System Disorders, Minor Complexity	7,941	1.2	2.5	1

Notes: Percentage columns are subject to rounding.

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

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

3.3.2.1 Elective In-Patient Activity

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

Elective In-Patients – Profile

- Elective in-patient discharges accounted for 5.6 per cent of total discharges and 14.9 per cent of in-patients.
- Elective in-patient bed days accounted for 656,639 in-patient bed days, or 18.0 per cent of total in-patient bed days (see Table 3.7).
- Elective overnight in-patient discharges accounted for 96.0 per cent of total elective in-patient discharges and had a mean length of stay of 7.1 days.

Elective In-Patients – Top 20 Principal Diagnoses

- Elective in-patients with a principal diagnosis of *Care involving use of rehabilitation procedures* accounted for 3.9 per cent of elective in-patient discharges.
- *Coxarthrosis [arthrosis of hip]* accounted for 3.7 per cent of elective in-patient discharges.

Elective In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 89.3 per cent of elective in-patient discharges (see Table 3.4).
- The procedure block *Generalised allied health interventions* was reported for 11.4 per cent of elective in-patients who had a principal procedure reported.
- The procedure blocks *Arthroplasty of hip* and *Tonsillectomy or adenoidectomy* 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 9.4 per cent of elective in-patient discharges reported to HIPE when analysed by diagnosis related group.[24,25]
- *Tonsillectomy and Adenoidectomy* and *Hip Replacement, Minor Complexity* accounted for 3.6 per cent and 3.5 per cent of elective in-patient discharges respectively. *Rehabilitation, Minor Complexity* accounted for 2.3 per cent of elective in-patient discharges.

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

[25] In 2015, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. This report is the first HIPE Annual Report to use AR-DRG Version 8.0. See Appendix VIII for an overview of changes between these versions.

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	3,692	3.9	36.3	25
M16	Coxarthrosis [arthrosis of hip]	3,506	3.7	5.2	4
J35	Chronic diseases of tonsils and adenoids	3,415	3.6	1.2	1
G47	Sleep disorders	2,812	2.9	1.2	1
Z48	Other surgical follow-up care	2,616	2.7	16.5	6
I25	Chronic ischaemic heart disease	2,591	2.7	3.5	1
M17	Gonarthrosis [arthrosis of knee]	2,473	2.6	5.0	4
K80	Cholelithiasis	2,192	2.3	2.2	1
C50	Malignant neoplasm of breast	1,794	1.9	5.6	3
N81	Female genital prolapse	1,328	1.4	3.6	3
K40	Inguinal hernia	1,283	1.3	1.6	1
C34	Malignant neoplasm of bronchus and lung	1,163	1.2	10.1	7
Z51	Other medical care[c]	987	1.0	22.0	12
N39	Other disorders of urinary system	937	1.0	4.5	2
C18	Malignant neoplasm of colon	918	1.0	10.6	8
R06	Abnormalities of breathing	832	0.9	1.5	1
C67	Malignant neoplasm of bladder	796	0.8	5.2	2
I48	Atrial fibrillation and flutter	760	0.8	2.5	1
D25	Leiomyoma of uterus	681	0.7	3.8	4
C20	Malignant neoplasm of rectum	620	0.6	12.9	8

Elective In-Patients

95,870

Discharges	N	%
Total	**95,870**	**100**
Sameday	3,871	4.0
Overnight	91,999	96.0

Length of Stay	Mean	Median
Total	**6.8**	**2**
Overnight	7.1	3

Bed Days	N
Total	**656,639**
Overnight	652,768

Top 20 Principal Procedure Blocks[b]		N	%	Mean LOS	Med LOS
1916	Generalised allied health interventions	9,743	11.4	23.2	13
1489	Arthroplasty of hip	3,581	4.2	5.6	4
0412	Tonsillectomy or adenoidectomy	3,463	4.0	1.2	1
1828	Sleep study	3,128	3.7	1.2	1
1920	Administration of pharmacotherapy	3,050	3.6	9.3	4
1518	Arthroplasty of knee	2,363	2.8	5.3	5
0965	Cholecystectomy	2,332	2.7	2.3	1
1893	Administration of blood and blood products	1,571	1.8	6.6	3
1268	Abdominal hysterectomy	1,413	1.7	5.1	5
0671	Transluminal coronary angioplasty with stenting	1,358	1.6	1.6	1
0990	Repair of inguinal hernia	1,251	1.5	1.5	1
0668	Coronary angiography	1,130	1.3	2.8	1
0913	Colectomy	1,017	1.2	11.4	8
1748	Simple mastectomy	846	1.0	4.7	4
1620	Excision of lesion(s) of skin and subcutaneous tissue	836	1.0	3.3	1
1744	Excision of lesion of breast	811	0.9	1.9	1
1283	Repair of prolapse of uterus, pelvic floor or enterocele	710	0.8	3.4	3
1008	Panendoscopy with excision	684	0.8	6.1	2
1269	Vaginal hysterectomy	681	0.8	4.0	4
0114	Thyroidectomy	669	0.8	2.8	2

Hospital Group	N	%
Ireland East	17,900	18.7
RCSI	9,995	10.4
Dublin Midlands	13,547	14.1
South/South West	20,085	21.0
UL	7,631	8.0
Saolta	16,604	17.3
Children's	6,213	6.5
No group	3,895	4.1

Sex	N	%
Male	47,824	49.9
Female	48,046	50.1

Age Group	N	%
< 1 Year	1,460	1.5
1–14 Years	9,165	9.6
15–24 Years	4,498	4.7
25–34 Years	5,269	5.5
35–44 Years	9,194	9.6
45–54 Years	12,439	13.0
55–64 Years	16,759	17.5
65–74 Years	19,966	20.8
75–84 Years	13,414	14.0
85 Years and Over	3,706	3.9

Top 10 AR-DRGs		N	%	Mean LOS	Med LOS
D11Z	Tonsillectomy and Adenoidectomy	3,490	3.6	1.2	1
I03B	Hip Replacement, Minor Complexity	3,350	3.5	5.1	4
Z60B	Rehabilitation, Minor Complexity	2,218	2.3	29.3	21
I04B	Knee Replacement, Minor Complexity	2,173	2.3	4.9	4
H08B	Laparoscopic Cholecystectomy, Minor Complexity	2,023	2.1	1.6	1
Z63A	Other Follow Up After Surgery or Medical Care, Major Complexity	1,869	1.9	23.7	14
Z63B	Other Follow Up After Surgery or Medical Care, Minor Complexity	1,759	1.8	10.8	3
G10B	Hernia Procedures, Minor Complexity	1,710	1.8	1.6	1
E63B	Sleep Apnoea, Minor Complexity	1,530	1.6	1.1	1
J06B	Major Procedures for Breast Disorders, Minor Complexity	1,473	1.5	2.6	2

Notes: Percentage columns are subject to rounding.

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

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

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

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. [26]

Emergency In-Patients – Profile

- Emergency in-patient discharges accounted for 25.4 per cent of total discharges and 67.2 per cent of in-patients.
- Emergency in-patient bed days accounted for 2,687,345 in-patient bed days, or 73.6 per cent of total in-patient bed days (see Table 3.7).
- Over 63 per cent of emergency in-patient discharges were admitted from an Emergency Department, with 8.8 per cent admitted via a medical assessment unit (where they were treated as an in-patient).

Emergency In-Patients – Top 20 Principal Diagnoses

- Emergency in-patient discharges with a principal diagnosis of *Pain in throat and chest* accounted for 4.2 per cent of emergency in-patients.
- Emergency in-patient discharges with a principal diagnosis of *Unspecified acute lower respiratory infection* and those with a principal diagnosis of *Other chronic obstructive pulmonary disease* accounted for 3.7 and 3.4 per cent of emergency in-patient discharges respectively.

Emergency In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 49.1 per cent of emergency in-patient discharges (see Table 3.4).
- Procedures from the block *Generalised allied health interventions* were reported for 40.2 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 7.4 per cent of emergency in-patient discharges reported to HIPE when analysed by diagnosis related group.[27,28]
- *Chest Pain, Minor Complexity* accounted for 3.2 per cent of emergency in-patient discharges. *Other Respiratory System Disorders, Major Complexity* and *Oesophagitis and Gastroenteritis, Minor Complexity* accounted for 2.2 and 2.0 per cent of emergency in-patient discharges.

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[26] 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.

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

[28] In 2015, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. This report is the first HIPE Annual Report to use AR-DRG Version 8.0. See Appendix VIII for an overview of changes between these versions.

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	18,242	4.2	1.7	1
J22	Unspecified acute lower respiratory infection	15,886	3.7	6.3	3
J44	Other chronic obstructive pulmonary disease	14,539	3.4	7.8	5
N39	Other disorders of urinary system	12,302	2.8	8.8	4
J18	Pneumonia, organism unspecified	12,050	2.8	9.6	6
R10	Abdominal and pelvic pain	10,262	2.4	2.2	1
R55	Syncope and collapse	9,395	2.2	4.7	2
L03	Cellulitis	6,421	1.5	6.6	4
I48	Atrial fibrillation and flutter	6,016	1.4	4.0	2
K35	Acute appendicitis	5,932	1.4	3.3	2
I50	Heart failure	5,896	1.4	10.1	6
R51	Headache	5,859	1.4	2.0	1
A09	Other gastroenteritis and colitis of infectious and unspecified origin	5,702	1.3	4.0	2
I21	Acute myocardial infarction	5,585	1.3	6.6	4
S52	Fracture of forearm	4,713	1.1	2.7	1
I63	Cerebral infarction	4,666	1.1	17.4	9
A08	Viral and other specified intestinal infections	4,515	1.0	2.0	1
B34	Viral infection of unspecified site	4,431	1.0	1.8	1
S72	Fracture of femur	4,413	1.0	17.6	11
R06	Abnormalities of breathing	4,348	1.0	2.0	1

Emergency In-Patients

432,490

Discharges	N	%
Total	**432,490**	**100**
Sameday	97,532	22.6
Overnight	334,958	77.4

Length of Stay	Mean	Median
Total	**6.2**	**2**
Overnight	7.7	4

Bed Days	N
Total	**2,687,345**
Overnight	2,589,813

Top 20 Principal Procedure Blocks[b]		N	%	Mean LOS	Med LOS
1916	Generalised allied health interventions	85,363	40.2	10.8	6
1920	Administration of pharmacotherapy	6,901	3.2	7.3	3
1893	Administration of blood and blood products	6,852	3.2	10.5	6
0926	Appendicectomy	6,433	3.0	3.2	2
1008	Panendoscopy with excision	6,348	3.0	10.3	6
0668	Coronary angiography	4,693	2.2	5.8	3
0570	Noninvasive ventilatory support	4,236	2.0	16.1	10
0030	Lumbar puncture	4,076	1.9	8.5	4
0569	Ventilatory support	3,309	1.6	23.7	10
1823	Mental, behavioural or psychosocial assessment	2,435	1.1	6.7	2
0671	Transluminal coronary angioplasty with stenting	2,290	1.1	4.8	3
1005	Panendoscopy	2,135	1.0	12.0	6
0911	Fibreoptic colonoscopy with excision	2,004	0.9	11.5	7
1489	Arthroplasty of hip	1,870	0.9	18.8	12
1872	Alcohol and drug rehabilitation and detoxification	1,841	0.9	6.3	3
1427	Closed reduction of fracture of radius	1,779	0.8	1.7	1
1539	Open reduction of fracture of ankle or toe	1,706	0.8	4.6	2
1628	Other debridement of skin and subcutaneous tissue	1,604	0.8	8.5	2
1060	Haemodialysis	1,571	0.7	12.2	7
1479	Fixation of fracture of pelvis or femur	1,505	0.7	20.3	12

Hospital Group	N	%
Ireland East	88,260	20.4
RCSI	71,090	16.4
Dublin Midlands	58,859	13.6
South/South West	80,082	18.5
UL	35,645	8.2
Saolta	78,483	18.1
Children's	20,066	4.6
No group	~	-

Mode of Emergency Admission	N	%
Emergency Department	275,889	63.8
Medical assessment unit - admitted as in-patient	37,978	8.8
Medical assessment unit only	62,271	14.4
Other[c]	56,343	13.0
Unknown	9	0.0

Sex	N	%
Male	218,343	50.5
Female	214,147	49.5

Age Group	N	%
< 1 Year	26,277	6.1
1–14 Years	47,233	10.9
15–24 Years	28,003	6.5
25–34 Years	29,700	6.9
35–44 Years	37,684	8.7
45–54 Years	43,560	10.1
55–64 Years	52,237	12.1
65–74 Years	66,030	15.3
75–84 Years	66,352	15.3
85 Years and Over	35,414	8.2

Top 10 AR-DRGs		N	%	Mean LOS	Med LOS
F74B	Chest Pain, Minor Complexity	13,929	3.2	1.4	1
E75A	Other Respiratory System Disorders, Major Complexity	9,500	2.2	8.4	5
G67B	Oesophagitis and Gastroenteritis, Minor Complexity	8,674	2.0	1.9	1
E65B	Chronic Obstructive Airways Disease, Minor Complexity	8,604	2.0	4.7	4
E75B	Other Respiratory System Disorders, Minor Complexity	7,781	1.8	2.5	1
F73B	Syncope and Collapse, Minor Complexity	7,680	1.8	2.6	1
D63B	Otitis Media and Upper Respiratory Infections, Minor Complexity	7,644	1.8	1.6	1
E62A	Respiratory Infections and Inflammations, Major Complexity	7,546	1.7	13.0	8
G66B	Abdominal Pain and Mesenteric Adenitis, Minor Complexity	7,465	1.7	1.7	1
B77B	Headaches, Minor Complexity	7,443	1.7	1.5	1

Notes: Percentage columns are subject to rounding.

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

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

~ Denotes five of fewer discharges reported to HIPE.

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'.[29] 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 6.8 per cent of total discharges and 17.9 per cent of in-patients.
- Of maternity in-patient discharges, 54.1 per cent reported a diagnosis of *outcome of delivery* i.e. delivery discharges; while 45.9 per cent were non-delivery discharges.
- Single deliveries accounted for 98.0 per cent of delivery discharges.
- Of delivery discharges, 62.2 per cent were multiparous deliveries. [30]
- Over 36 per cent of delivery discharges were aged between 30–34 years.

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

- Delivery discharges with a principal diagnosis of *Single spontaneous delivery* accounted for 48.1 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 26.2 per cent of non-delivery in-patient discharges.

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

- The procedure block *Caesarean section* was reported for 33.9 per cent of delivery discharges who had a principal procedure reported.
- The procedure block *Curettage and evacuation of uterus* was reported for 30.7 per cent of non-delivery discharges who had a principal procedure reported.

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

- The top three AR-DRGs accounted for 60.3 per cent of maternity in-patient discharges reported to HIPE when analysed by diagnosis related group.[31,32]
- *Antenatal and Other Obstetric Admission, Minor Complexity* accounted for 27.9 per cent of maternity in-patient discharges. *Vaginal Delivery, Minor Complexity* and *Vaginal Delivery, Intermediate Complexity* each accounted for 16.2 per cent of maternity in-patient discharges.

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29 Hospital In-Patient Enquiry Scheme (HIPE) Data Dictionary 2016 Version 8.1 available at www.hpo.ie.

30 See Table 3.10 notes for definition of multiparous deliveries.

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

32 In 2015, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. This report is the first HIPE Annual Report to use AR-DRG Version 8.0. See Appendix VIII for an overview of changes between these versions.

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]	30,047	48.1	2.4	2
	O82	Single delivery by caesarean section[b]	17,533	28.1	4.5	4
	O81	Single delivery by forceps and vacuum extractor[b]	8,818	14.1	3.2	3
	O84	Multiple delivery[b]	962	1.5	5.4	5
	O83	Other assisted single delivery[b]	961	1.5	3.0	3
	O42	Premature rupture of membranes	699	1.1	8.1	5
	O36	Maternal care for other known or suspected fetal problems	674	1.1	6.9	5
	O13	Gestational [pregnancy-induced] hypertension	414	0.7	8.2	7
	O14	Pre-eclampsia	353	0.6	9.7	8
	O46	Antepartum haemorrhage; not elsewhere classified	267	0.4	7.1	5
Non-Delivery	O99	Other maternal diseases classifiable elsewhere but complicating pregnancy; childbirth and the puerperium	13,914	26.2	1.5	1
	O47	False labour	5,339	10.1	1.3	1
	Z36	Antenatal screening	4,329	8.2	1.1	1
	O03	Spontaneous abortion	3,012	5.7	1.4	1
	O21	Excessive vomiting in pregnancy	2,831	5.3	1.8	1
	O13	Gestational [pregnancy-induced] hypertension	2,287	4.3	1.6	1
	O46	Antepartum haemorrhage; not elsewhere classified	2,248	4.2	1.7	1
	O02	Other abnormal products of conception	2,147	4.0	1.3	1
	O36	Maternal care for other known or suspected fetal problems	1,682	3.2	1.6	1
	O20	Haemorrhage in early pregnancy	1,528	2.9	1.2	1

Maternity In-Patients

115,490

Delivery Status	N	%	Mean	Med
Total	**115,490**	**100**	**2.7**	**2**
Delivery[c]	62,442	54.1	3.5	3
Non-Delivery[d]	53,048	45.9	1.6	1

Delivery Discharges

Delivery Outcome[c]	N	%	Mean	Med
Single	61,210	98.0	3.5	3
Multiple	1,219	2.0	7.3	5
Unspecified	13	0.0	6.2	5
Parity[e]	**N**	**%**	**Mean**	**Med**
Primiparous	23,604	37.8	4.1	4
Multiparous	38,808	62.2	3.2	3
Unknown	30	0.0	4.6	4
Age	**N**	**%**	**Mean**	**Med**
< 20 Years	1,094	1.8	3.7	3
20-24 Years	5,147	8.2	3.5	3
25-29 Years	11,180	17.9	3.3	3
30-34 Years	22,553	36.1	3.5	3
35-39 Years	18,272	29.3	3.6	3
40-44 Years	3,937	6.3	4.1	4
45 Years and Over	259	0.4	5.8	4
Discharge Status	**N**	**%**	**Mean**	**Med**
Public	50,661	81.1	3.5	3
Private	11,781	18.9	4.0	3

	Top 10 Principal Procedure Blocks[f]		N	%	Mean	Med
Delivery	1340	Caesarean section[g]	19,980	33.9	5.2	4
	1344	Postpartum suture	15,545	26.4	2.5	2
	1338	Vacuum extraction	6,269	10.6	3.2	3
	1343	Other procedures associated with delivery[h]	3,754	6.4	3.1	3
	1334	Medical or surgical induction of labour	3,669	6.2	3.2	3
	1333	Analgesia and anaesthesia during labour and delivery procedure	2,750	4.7	2.8	2
	1335	Medical or surgical augmentation of labour	2,420	4.1	2.3	2
	1337	Forceps delivery	1,867	3.2	3.6	3
	1336	Spontaneous vertex delivery[i]	888	1.5	2.2	2
	1345	Postpartum evacuation of uterus	536	0.9	3.5	3
Non-Delivery	1265	Curettage and evacuation of uterus	2,703	30.7	1.4	1
	1916	Generalised allied health interventions	1,876	21.3	3.4	2
	1884	Immunisation	927	10.5	1.5	1
	1256	Procedures for management of ectopic pregnancy	693	7.9	2.1	2
	1920	Administration of pharmacotherapy	586	6.6	2.2	1
	1330	Antepartum application, insertion or removal procedures	238	2.7	1.8	1
	1274	Application, insertion or removal procedures on cervix	224	2.5	1.6	1
	1893	Administration of blood and blood products	182	2.1	2.5	1
	1345	Postpartum evacuation of uterus	152	1.7	2.3	2
	1344	Postpartum suture	146	1.7	2.3	2

Top 10 AR-DRG's		N	%	Mean	Med
O66B	Antenatal & Other Obs Adm, MINC	32,255	27.9	1.4	1
O60C	Vaginal Delivery, Minor Complexity	18,737	16.2	2.1	2
O60B	Vaginal Delivery, Intermediate Complexity	18,710	16.2	3.0	3
O01C	Caesarean Delivery, Minor Complexity	12,040	10.4	4.2	4
O66A	Antenatal & Other Obs Adm, MAJC	10,707	9.3	2.2	1
O01B	Caesarean Delivery, Intermediate Complexity	6,854	5.9	5.9	5
O60A	Vaginal Delivery, Major Complexity	3,809	3.3	4.7	4
O61B	Postpartum & Post Abortion W/O OR Procedures, Minor Complexity	2,716	2.4	2.1	1
O05Z	Abortion W OR Procedures	2,679	2.3	1.4	1
O63B	Abortion W/O OR Procedures, MINC	2,465	2.1	1.3	1

Notes:

a ICD-10-AM diagnosis codes are analysed at three-digit 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 94.4 per cent of delivery in-patient discharges and 16.6 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.

- Over 29 per cent of total discharges had a principal diagnosis of *Factors influencing health status and contact with health services*; this includes persons encountering health services for examination and investigation or for specific procedures and health care (e.g., *Chemotherapy*, *Radiotherapy* and *Dialysis*).[33]
- The chapter *Diseases of the digestive system* had the second largest number of principal diagnoses, with 9.6 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 14.0 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,[34] and excludes day patients. It should also be noted that the analysis by length of stay does not take into account the status of the patient on discharge. For example, a patient with a length of stay of one day for a diagnosis of chronic ischaemic heart disease may be transferred to another facility on discharge.

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

[34] This differs from reports prior to 2015 where the analysis was limited to the mean length of stay for acute in-patients (length of stay of 30 days or less). Median length of stay is also provided alongside the mean length of stay.

Care must be taken, therefore, in interpreting the data on length of stay presented in Table 3.12, in the absence of information on discharge destination.[35] 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* (11.8 days). When this diagnosis is analysed by sex, male discharges reported 10.5 days and females reported 13.4 days. Median length of stay was 3 days for both males and females.
- For discharges aged less than 15 years, those with a principal diagnosis from the chapter *Congenital malformations, deformations and chromosomal abnormalities* recorded an in-patient mean length of stay of 7.1 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 (7.4 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 4.6 million diagnoses were recorded for total discharges reported to HIPE. As one principal diagnosis and up to 29 secondary diagnoses may be collected per discharge, the number of diagnoses will not equal the number of discharges.

- Excluding females aged 15-44 years, the chapter *Factors influencing health status and contact with health services* had the most frequently reported diagnoses across both sexes and all remaining age groups for total discharges. It accounted for 1,126,731 diagnoses, or 24.2 per cent of all-listed diagnoses reported.[36]
- *Neoplasms* accounted for 583,009 diagnoses or 12.5 per cent of all-listed diagnoses reported for total discharges.

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

[36] 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	–	**73,961**	**147,296**	**234,085**	**333,360**	**788,702**	**58,716**	**323,827**	**249,502**	**283,705**	**915,750**	**132,677**	**471,123**	**483,587**	**617,065**	**1,704,452**
Certain infectious and parasitic diseases	**A00–B99**	**5,812**	**3,221**	**2,127**	**2,609**	**13,769**	**5,256**	**3,493**	**2,362**	**3,245**	**14,356**	**11,068**	**6,714**	**4,489**	**5,854**	**28,125**
Intestinal infectious diseases (including diarrhoea)	A00–A09	3,309	1,258	971	1,142	6,680	3,186	1,787	1,311	1,874	8,158	6,495	3,045	2,282	3,016	14,838
Tuberculosis	A15–A19	9	89	64	31	193	32	50	26	22	130	41	139	90	53	323
Septicaemia	A40–A41	102	125	308	948	1,483	66	138	284	797	1,285	168	263	592	1,745	2,768
Human immunodeficiency virus [HIV] disease	B20–B24	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	49
Neoplasms	**C00–D48**	**2,808**	**7,615**	**21,680**	**34,788**	**66,891**	**2,711**	**15,330**	**22,050**	**25,951**	**66,042**	**5,519**	**22,945**	**43,730**	**60,739**	**132,933**
Malignant neoplasms	C00–C96	2,212	4,031	15,390	25,855	47,488	1,915	5,229	14,512	19,104	40,760	4,127	9,260	29,902	44,959	88,248
Malignant neoplasms of colon, rectum and anus	C18–C21	~	*	1,587	2,564	4,349	~	*	1,057	1,433	2,689	~	*	2,644	3,997	7,038
Malignant neoplasms of trachea, bronchus and lung	C33–C34	0	65	991	2,107	3,163	0	110	1,036	1,929	3,075	0	175	2,027	4,036	6,238
Melanoma and other malignant neoplasms of skin	C43–C44	*	*	1,725	5,467	7,616	~	*	1,373	3,600	5,415	12	854	3,098	9,067	13,031
Malignant neoplasms of breast	C50	0	~	14	*	46	0	*	4,396	*	8,686	0	1,459	4,410	2,863	8,732
Malignant neoplasms of female genital organs	C51–C58	0	0	0	0	0	9	551	1,349	1,243	3,152	9	551	1,349	1,243	3,152
Malignant neoplasm of prostate	C61	6	28	1,671	2,900	4,605	0	0	0	0	0	6	28	1,671	2,900	4,605
Malignant neoplasm of bladder	C67	~	*	372	1,178	1,577	0	10	108	377	495	~	*	480	1,555	2,072
Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81–C96	1,308	1,679	4,362	5,662	13,011	959	1,219	2,273	4,048	8,499	2,267	2,898	6,635	9,710	21,510
In situ neoplasms	D00-D09	~	85	*	1,107	1,663	~	2,666	*	1,366	5,073	7	2,751	1,505	2,473	6,736
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10–D48	594	3,499	5,821	7,826	17,740	791	7,435	6,502	5,481	20,209	1,385	10,934	12,323	13,307	37,949
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	**D50–D89**	**2,496**	**1,960**	**2,913**	**5,360**	**12,729**	**1,777**	**3,387**	**3,235**	**5,205**	**13,604**	**4,273**	**5,347**	**6,148**	**10,565**	**26,333**
Endocrine, nutritional and metabolic diseases	**E00–E89**	**1,475**	**6,902**	**11,148**	**7,602**	**27,127**	**1,501**	**4,361**	**5,756**	**6,051**	**17,669**	**2,976**	**11,263**	**16,904**	**13,653**	**44,796**
Diabetes mellitus	E10–E14	275	1,027	2,324	2,825	6,451	261	882	1,027	1,853	4,023	536	1,909	3,351	4,678	10,474
Cystic fibrosis	E84	380	1,192	*	~	1,699	437	1,013	*	~	1,544	817	2,205	*	~	3,243
Mental and behavioural disorders	**F00–F99**	**427**	**1,351**	**1,198**	**1,065**	**4,041**	**327**	**982**	**733**	**1,122**	**3,164**	**754**	**2,333**	**1,931**	**2,187**	**7,205**
Mental and behavioural disorders due to alcohol	F10	32	722	869	292	1,915	35	289	324	99	747	67	1,011	1,193	391	2,662
Mental and behavioural disorders due to use of other psychoactive substance	F11–F19	*	153	25	*	190	~	79	9	*	103	9	232	34	18	293
Diseases of nervous system	**G00–G99**	**1,648**	**4,528**	**5,163**	**4,739**	**16,078**	**1,421**	**7,255**	**6,089**	**4,926**	**19,691**	**3,069**	**11,783**	**11,252**	**9,665**	**35,769**
Multiple sclerosis	G35	~	1,115	652	*	1,834	0	2,385	1,310	119	3,814	~	3,500	1,962	*	5,648
Epilepsy	G40, G41	642	879	506	323	2,350	602	750	369	312	2,033	1,244	1,629	875	635	4,383
Transient cerebral ischaemic attacks and related syndromes	G45	~	*	441	1,162	1,664	~	*	387	1,280	1,736	~	*	828	2,442	3,400
Diseases of the eye and adnexa	**H00–H59**	**736**	**1,764**	**5,398**	**14,618**	**22,516**	**685**	**1,801**	**4,051**	**18,886**	**25,423**	**1,421**	**3,565**	**9,449**	**33,504**	**47,939**
Diseases of the ear and mastoid process	**H60–H95**	**2,211**	**1,203**	**1,127**	**967**	**5,508**	**1,617**	**1,347**	**1,226**	**978**	**5,168**	**3,828**	**2,550**	**2,353**	**1,945**	**10,676**
Diseases of the circulatory system	**I00–I99**	**725**	**3,707**	**15,265**	**24,267**	**43,964**	**580**	**3,563**	**8,140**	**18,021**	**30,304**	**1,305**	**7,270**	**23,405**	**42,288**	**74,268**
Hypertensive diseases	I10–I15	39	322	528	367	1,256	26	270	512	622	1,430	65	592	1,040	989	2,686
Angina pectoris	I20	0	95	1,177	1,554	2,826	~	*	522	813	1,374	~	*	1,699	2,367	4,200
Acute myocardial infarction	I21–I22	~	*	1,825	2,323	4,384	0	43	520	1,375	1,938	~	*	2,345	3,698	6,322
Other ischaemic heart disease	I23–I25	0	267	3,773	4,535	8,575	0	61	1,125	2,077	3,263	0	328	4,898	6,612	11,838
Pulmonary heart disease and diseases of pulmonary circulation	I26–I28	~	*	285	343	752	~	*	240	502	907	6	283	525	845	1,659
Conduction disorders and cardiac arrhythmias	I44–I49	118	665	2,700	4,297	7,780	70	371	1,025	3,399	4,865	188	1,036	3,725	7,696	12,645
Heart failure	I50	~	*	467	2,968	3,489	*	*	192	2,497	2,724	17	72	659	5,465	6,213
Cerebrovascular disease	I60–I69	32	226	1,141	2,706	4,105	25	222	764	2,493	3,504	57	448	1,905	5,199	7,609
Atherosclerosis (non-coronary)	I70	0	32	385	902	1,319	~	*	154	439	614	~	*	539	1,341	1,933
Diseases of the respiratory system	**J00–J99**	**10,581**	**6,374**	**8,091**	**19,112**	**44,158**	**8,055**	**7,949**	**8,628**	**18,391**	**43,023**	**18,636**	**14,323**	**16,719**	**37,503**	**87,181**
Acute upper respiratory infections and influenza	J00–J11	3,198	1,098	407	294	4,997	2,560	1,653	439	338	4,990	5,758	2,751	846	632	9,987
Pneumonia	J12–J18	763	661	1,105	4,130	6,659	751	743	1,031	4,009	6,534	1,514	1,404	2,136	8,139	13,193
Chronic diseases of tonsils and adenoids	J35	1,414	407	36	13	1,870	1,250	969	57	16	2,292	2,664	1,376	93	29	4,162
Chronic obstructive pulmonary disease and bronchiectasis	J40–J44, J47	39	218	1,807	6,613	8,677	26	279	2,314	6,152	8,771	65	497	4,121	12,765	17,448
Asthma	J45–J46	1,226	687	997	411	3,321	730	1,241	1,303	688	3,962	1,956	1,928	2,300	1,099	7,283

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

Principal Diagnosis	ICD-10-AM Code	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Diseases of the digestive system	**K00–K93**	**6,140**	**25,419**	**27,446**	**22,558**	**81,563**	**4,728**	**27,849**	**26,939**	**22,098**	**81,614**	**10,868**	**53,268**	**54,385**	**44,656**	**163,177**
Diseases of oesophagus, stomach and duodenum	K20–K31	622	5,641	7,715	6,297	20,275	527	6,074	7,900	6,327	20,828	1,149	11,715	15,615	12,624	41,103
Diseases of appendix	K35–K38	1,198	1,991	382	128	3,699	923	1,808	359	135	3,225	2,121	3,799	741	263	6,924
Inguinal hernia	K40	407	768	1,138	1,371	3,684	80	66	81	107	334	487	834	1,219	1,478	4,018
Noninfective enteritis and colitis	K50–K52	500	5,714	2,501	936	9,651	322	5,132	2,449	977	8,880	822	10,846	4,950	1,913	18,531
Alcoholic liver disease	K70	0	174	458	153	785	0	80	231	49	360	0	254	689	202	1,145
Cholelithiasis	K80	8	562	957	1,437	2,964	10	2,331	1,874	1,578	5,793	18	2,893	2,831	3,015	8,757
Diseases of the skin and subcutaneous tissue	**L00–L99**	**1,786**	**12,932**	**9,508**	**8,044**	**32,270**	**1,428**	**11,723**	**8,629**	**8,072**	**29,852**	**3,214**	**24,655**	**18,137**	**16,116**	**62,122**
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02–L03	434	1,274	1,326	1,552	4,586	333	657	731	1,675	3,396	767	1,931	2,057	3,227	7,982
Decubitus ulcer and pressure area	L89	~	*	34	49	128	~	*	21	61	95	~	*	55	110	223
Diseases of the musculoskeletal system and connective tissue	**M00–M99**	**1,879**	**8,367**	**13,155**	**10,875**	**34,276**	**2,096**	**9,499**	**17,573**	**18,126**	**47,294**	**3,975**	**17,866**	**30,728**	**29,001**	**81,570**
Rheumatoid arthritis	M05–M06	0	325	993	782	2,100	0	740	1,885	1,563	4,188	0	1,065	2,878	2,345	6,288
Coxarthrosis and Gonarthrosis	M16–M17	~	*	2,098	2,657	5,056	0	296	2,202	3,909	6,407	~	*	4,300	6,566	11,463
Intervertebral disc disorders	M50–M51	~	567	585	*	1,455	*	650	744	*	1,841	11	1,217	1,329	739	3,296
Dorsalgia (back pain)	M54	73	1,605	2,308	1,388	5,374	71	2,253	3,517	2,988	8,829	144	3,858	5,825	4,376	14,203
Diseases of the genitourinary system	**N00–N99**	**3,757**	**4,710**	**7,002**	**10,727**	**26,196**	**2,120**	**23,276**	**16,279**	**11,367**	**53,042**	**5,877**	**27,986**	**23,281**	**22,094**	**79,238**
Chronic kidney disease	N18	125	308	470	456	1,359	86	285	260	261	892	211	593	730	717	2,251
Urolithiasis	N20–N23	54	1,383	1,816	769	4,022	28	830	896	415	2,169	82	2,213	2,712	1,184	6,191
Hyperplasia of prostate	N40	0	44	1,032	2,119	3,195	0	0	0	0	0	0	44	1,032	2,119	3,195
Disorders of breast	N60–N64	6	95	41	9	151	26	1,529	1,342	310	3,207	32	1,624	1,383	319	3,358
Inflammatory diseases of female pelvic organs	N70–N77	0	0	0	0	0	19	1,466	387	99	1,971	19	1,466	387	99	1,971
Noninflammatory disorders of female genital tract	N80–N98	0	0	0	0	0	193	15,427	9,326	2,662	27,608	193	15,427	9,326	2,662	27,608
Pregnancy, childbirth and the puerperium	**O00–O99**	**0**	**0**	**0**	**0**	**0**	**~**	**117,507**	*****	**0**	**118,111**	**~**	**117,507**	*****	**0**	**118,111**
Gestational [pregnancy induced] hypertension	O13	0	0	0	0	0	0	4,407	53	0	4,460	0	4,407	53	0	4,460
Diabetes mellitus in pregnancy	O24	0	0	0	0	0	0	1,968	27	0	1,995	0	1,968	27	0	1,995
Single spontaneous delivery	O80	0	0	0	0	0	~	30,000	*	0	30,048	~	30,000	*	0	30,048
Single delivery by forceps and vacuum extractor	O81	0	0	0	0	0	0	8,810	8	0	8,818	0	8,810	8	0	8,818
Single delivery by caesarean section	O82	0	0	0	0	0	~	17,395	*	0	17,534	~	17,395	*	0	17,534
Other assisted single delivery	O83	0	0	0	0	0	0	*	~	0	961	0	*	~	0	961
Multiple delivery	O84	0	0	0	0	0	0	936	26	0	962	0	936	26	0	962
Certain conditions originating in the perinatal period	**P00–P96**	ǂ	ǂ	ǂ	ǂ	**5,621**	ǂ	ǂ	ǂ	ǂ	**4,328**	ǂ	ǂ	ǂ	ǂ	**9,949**
Congenital malformations, deformations and chromosomal abnormalities	**Q00–Q99**	**4,959**	**587**	**224**	**123**	**5,893**	**3,364**	**652**	**244**	**121**	**4,381**	**8,323**	**1,239**	**468**	**244**	**10,274**
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	**R00–R99**	**6,409**	**13,565**	**18,015**	**20,393**	**58,382**	**5,451**	**22,666**	**20,440**	**20,453**	**69,010**	**11,860**	**36,231**	**38,455**	**40,846**	**127,392**
Pain in throat and chest	R07	91	3,059	5,044	3,122	11,316	71	2,673	4,449	3,080	10,273	162	5,732	9,493	6,202	21,589
Abdominal and pelvic pain	R10	921	2,222	1,771	1,051	5,965	1,132	6,674	3,110	1,615	12,531	2,053	8,896	4,881	2,666	18,496
Injury, poisoning and certain other consequences of external causes	**S00–T98**	**6,776**	**12,819**	**6,557**	**7,244**	**33,396**	**4,819**	**6,532**	**5,691**	**10,260**	**27,302**	**11,595**	**19,351**	**12,248**	**17,504**	**60,698**
Intracranial injury	S06	186	632	342	527	1,687	130	229	171	423	953	316	861	513	950	2,640
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	1,945	2,311	735	894	5,885	1,321	659	364	972	3,316	3,266	2,970	1,099	1,866	9,201
Fracture of femur	S72	105	130	202	1,067	1,504	62	40	271	2,580	2,953	167	170	473	3,647	4,457
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36–T65	223	887	357	141	1,608	293	1,274	520	175	2,262	516	2,161	877	316	3,870
Factors influencing health status and contact with health services[a]	**U00–U49, Z00–Z99**	**7,715**	**30,272**	**78,068**	**138,269**	**254,324**	**6,450**	**54,654**	**90,836**	**90,432**	**242,372**	**14,165**	**84,926**	**168,904**	**228,701**	**496,696**
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	2,687	7,249	35,756	62,137	107,829	2,442	18,269	59,307	44,574	124,592	5,129	25,518	95,063	106,711	232,421

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**	**3.9**	**6.0**	**9.2**	**6.4**	**3.4**	**2.9**	**5.2**	**9.8**	**5.2**	**3.4**	**3.1**	**5.6**	**9.5**	**5.7**
	Median	**1**	**1**	**2**	**4**	**2**	**2**	**2**	**2**	**5**	**2**	**1**	**2**	**2**	**5**	**2**
Certain infectious and parasitic diseases	**A00–B99**	**2.0**	**4.1**	**7.6**	**11.0**	**4.8**	**2.0**	**3.9**	**6.4**	**10.7**	**5.0**	**2.0**	**4.0**	**7.0**	**10.9**	**4.9**
		1	**2**	**4**	**6**	**2**	**1**	**2**	**3**	**6**	**2**	**1**	**2**	**3**	**6**	**2**
Intestinal infectious diseases (including diarrhoea)	A00–A09	1.8	2.9	4.7	8.7	3.3	1.7	3.1	4.9	8.6	3.9	1.8	3.0	4.8	8.6	3.6
		1	2	2	5	1	1	2	3	4	2	1	2	3	4	2
Tuberculosis	A15–A19	5.3	12.3	23.5	29.9	18.3	5.7	13.3	17.5	22.6	15.2	5.5	12.6	21.7	26.8	17.2
		5	9	14	20	11	5	7	8	15	8	5	8	13	17	10
Septicaemia	A40–A41	6.7	9.4	12.2	13.5	12.4	8.0	7.5	11.5	14.7	12.9	7.2	8.4	11.8	14.1	12.7
		4	6	8	8	7	5	5	7	9	8	4	5	7	8	7
Human immunodeficiency virus [HIV] disease	B20–B24	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	15.0
		ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	10
Neoplasms	**C00–D48**	**5.0**	**8.8**	**10.9**	**11.7**	**10.9**	**4.4**	**6.6**	**8.3**	**10.7**	**8.9**	**4.7**	**7.4**	**9.5**	**11.3**	**9.9**
		3	**5**	**6**	**7**	**6**	**2**	**3**	**4**	**6**	**5**	**3**	**4**	**5**	**6**	**5**
Malignant neoplasms	C00–C96	5.0	9.6	11.4	12.3	11.5	4.6	8.7	9.4	11.4	10.1	4.8	9.1	10.4	11.9	10.8
		3	5	6	7	6	3	4	5	7	6	3	5	6	7	6
Malignant neoplasm of colon, rectum and anus	C18–C21	-	8.7	11.6	14.9	13.6	^	11.7	10.7	14.1	12.8	^	10.4	11.2	14.6	13.2
		-	7	8	9	8	^	8	8	9	8	^	7	8	9	8
Malignant neoplasm of trachea, bronchus and lung	C33–C34	-	5.9	10.7	12.3	11.7	-	8.4	10.7	11.6	11.2	-	7.2	10.7	11.9	11.5
		-	5	7	7	7	-	6	7	8	7	-	6	7	8	7
Melanoma and other malignant neoplasms of skin	C43–C44	^	4.6	4.4	6.7	6.1	-	7.0	5.8	6.3	6.3	^	5.5	5.0	6.5	6.1
		^	3	1	2	2	-	2	2	2	2	^	2	2	2	2
Malignant neoplasm of breast	C50	-	^	2.2	4.4	3.6	-	4.8	5.7	6.9	6.0	-	4.8	5.7	6.9	6.0
		-	^	2	3	2	-	3	3	3	3	-	3	3	3	3
Malignant neoplasms of female genital organs	C51–C58	-	-	-	-	-	^	8.9	8.2	11.5	9.7	^	8.9	8.2	11.5	9.7
		-	-	-	-	-	^	4	5	7	5	^	4	5	7	5
Malignant neoplasm of prostate	C61	^	4.6	7.4	13.7	11.1	-	-	-	-	-	^	4.6	7.4	13.7	11.1
		^	4	5	6	5	-	-	-	-	-	^	4	5	6	5
Malignant neoplasm of bladder	C67	^	4.6	6.3	7.1	6.9	-	^	7.3	6.2	6.6	^	6.8	6.5	6.9	6.8
		^	3	3	4	3	-	^	3	3	3	^	4	3	3	3
Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81–C96	4.9	13.7	13.1	12.7	12.4	5.2	13.7	13.0	12.6	12.2	5.0	13.7	13.1	12.7	12.3
		3	6	6	7	6	3	6	6	7	6	3	6	6	7	6
In situ neoplasms	D00-D09	^	3.0	3.6	4.3	4.0	-	4.6	4.0	4.3	4.2	^	4.4	4.0	4.3	4.2
		^	3	2	2	2	-	2	2	2	2	^	2	2	2	2
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10–D48	5.0	4.6	6.1	7.3	6.4	3.8	3.7	5.1	6.6	4.9	4.3	3.9	5.4	6.9	5.4
		2	2	3	4	3	2	2	3	3	3	2	2	3	3	3
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	**D50–D89**	**3.8**	**5.0**	**5.7**	**5.9**	**5.4**	**4.3**	**2.7**	**5.2**	**6.2**	**5.1**	**4.1**	**3.6**	**5.4**	**6.1**	**5.3**
		2	**3**	**3**	**3**	**3**	**2**	**1**	**2**	**3**	**2**	**2**	**2**	**3**	**3**	**2**
Endocrine, nutritional and metabolic diseases	**E00–E89**	**4.8**	**7.6**	**7.8**	**9.7**	**8.0**	**4.9**	**5.9**	**5.9**	**9.1**	**7.0**	**4.9**	**6.7**	**6.9**	**9.4**	**7.5**
		3	**3**	**3**	**5**	**3**	**3**	**2**	**2**	**4**	**3**	**3**	**3**	**3**	**4**	**3**
Diabetes mellitus	E10–E14	4.2	5.0	8.0	11.8	8.2	4.3	3.8	7.8	11.0	7.2	4.2	4.5	7.9	11.5	7.8
		4	2	3	5	3	4	2	3	5	3	4	2	3	5	3
Cystic fibrosis	E84	8.4	14.2	22.0	^	13.3	9.2	13.0	14.2	^	12.0	8.8	13.6	18.3	^	12.7
		8	14	14	^	14	7	11	14	^	10	7	14	14	^	13
Mental and behavioural disorders	**F00–F99**	**4.2**	**6.9**	**7.1**	**20.8**	**10.5**	**7.0**	**7.9**	**9.2**	**22.6**	**13.4**	**5.7**	**7.3**	**7.9**	**21.7**	**11.8**
		1	**2**	**3**	**8**	**3**	**1**	**2**	**2**	**9**	**3**	**1**	**2**	**3**	**9**	**3**
Mental and behavioural disorders due to alcohol	F10	1.3	2.9	6.1	10.7	5.5	1.1	3.6	5.8	11.6	5.5	1.2	3.1	6.0	11.0	5.5
		1	2	3	5	2	1	2	3	4	2	1	2	3	5	2
Mental and behavioural disorders due to use of other psychoactive substance	F11–F19	1.3	8.9	10.8	4.0	8.8	^	15.1	14.7	8.8	14.0	1.8	11.0	11.9	7.2	10.6
		1	3	6	2	3	^	18	16	7	13	1	4	9	4	5

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**	**3.7**	**4.2**	**6.0**	**9.8**	**6.5**	**3.3**	**3.7**	**4.8**	**8.5**	**5.4**	**3.5**	**3.9**	**5.4**	**9.2**	**5.9**
		1	**1**	**1**	**3**	**1**	**1**	**1**	**1**	**3**	**2**	**1**	**1**	**1**	**3**	**2**
Multiple sclerosis	G35	^	7.2	11.2	12.5	9.4	-	6.8	8.7	10.2	7.8	^	6.9	9.4	11.2	8.3
		^	4	4	4	4	-	4	4	7	4	^	4	4	6	4
Epilepsy	G40, G41	3.9	3.9	5.7	7.7	4.9	3.6	4.1	5.7	9.5	5.2	3.8	4.0	5.7	8.6	5.1
		2	2	3	4	2	2	2	3	4	3	2	2	3	4	2
Transient cerebral ischaemic attacks and related syndromes	G45	^	2.3	3.3	4.9	4.4	^	2.5	2.7	5.6	4.8	^	2.4	3.0	5.2	4.6
		^	1	2	3	3	^	1	1	3	3	^	1	2	3	3
Diseases of the eye and adnexa	**H00–H59**	**2.5**	**2.7**	**3.2**	**3.1**	**3.0**	**2.5**	**2.6**	**2.4**	**3.2**	**2.8**	**2.5**	**2.7**	**2.8**	**3.2**	**2.9**
		1	**1**	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Diseases of the ear and mastoid process	**H60–H95**	**1.7**	**1.8**	**2.4**	**3.2**	**2.2**	**1.7**	**1.7**	**2.3**	**3.5**	**2.3**	**1.7**	**1.7**	**2.4**	**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**	**3.5**	**5.4**	**6.1**	**8.8**	**7.6**	**3.0**	**4.7**	**5.9**	**9.4**	**8.1**	**3.3**	**5.1**	**6.0**	**9.1**	**7.8**
		1	**2**	**3**	**4**	**3**	**1**	**1**	**2**	**5**	**4**	**1**	**2**	**2**	**4**	**3**
Hypertensive diseases	I10–I15	4.1	2.2	2.5	3.1	2.6	2.2	1.9	2.0	2.7	2.3	3.1	2.1	2.2	2.8	2.4
		2	1	1	1	1	2	1	1	1	1	2	1	1	1	1
Angina pectoris	I20	-	3.1	3.6	4.6	4.1	^	3.2	3.0	4.0	3.6	^	3.1	3.5	4.4	4.0
		-	1	2	2	2	^	2	1	2	2	^	1	2	2	2
Acute myocardial infarction	I21–I22	^	4.2	5.1	7.1	6.1	-	4.1	4.8	8.2	7.2	^	4.2	5.1	7.5	6.5
		^	3	3	4	3	-	3	3	5	4	^	3	3	4	4
Other ischaemic heart disease	I23–I25	-	5.1	4.2	5.3	4.8	-	3.6	3.9	4.9	4.6	-	4.9	4.1	5.2	4.8
		-	2	1	2	2	-	2	2	2	2	-	2	1	2	2
Pulmonary heart disease and diseases of pulmonary circulation	I26–I28	^	6.5	5.8	10.3	8.0	^	5.1	7.1	10.0	8.5	^	5.7	6.4	10.1	8.2
		^	4	4	5	4	^	3	4	7	6	^	4	4	6	5
Conduction disorders and cardiac arrhythmias	I44–I49	4.0	3.4	3.1	4.7	4.1	3.5	2.7	3.1	4.9	4.3	3.8	3.1	3.1	4.8	4.2
		2	1	1	2	2	1	1	1	3	2	2	1	1	2	2
Heart failure	I50	^	6.6	8.7	10.0	9.8	3.5	8.3	12.2	10.8	10.9	4.4	7.1	9.7	10.4	10.3
		^	4	5	6	6	3	8	7	7	7	3	5	6	6	6
Cerebrovascular disease	I60–I69	5.9	12.8	14.6	16.9	16.0	6.4	10.1	13.1	18.7	16.9	6.2	11.5	14.0	17.8	16.4
		4	6	7	8	8	5	7	7	9	8	4	6	7	9	8
Atherosclerosis (non-coronary)	I70	-	18.5	12.4	16.0	15.1	^	13.0	10.7	13.1	12.6	^	16.1	11.9	15.1	14.3
		-	5	6	7	7	^	8	6	7	7	^	7	6	7	7
Diseases of the respiratory system	**J00–J99**	**2.5**	**3.5**	**6.4**	**9.7**	**6.5**	**2.5**	**2.8**	**5.6**	**9.8**	**6.4**	**2.5**	**3.1**	**6.0**	**9.8**	**6.4**
		1	**1**	**3**	**6**	**3**	**2**	**1**	**3**	**6**	**3**	**1**	**1**	**3**	**6**	**3**
Acute upper respiratory infections and influenza	J00–J11	1.8	2.1	5.1	6.5	2.4	2.0	2.1	3.4	6.4	2.4	1.9	2.1	4.2	6.4	2.4
		1	1	2	3	1	1	1	2	3	1	1	1	2	3	1
Pneumonia	J12–J18	4.0	6.1	8.4	12.2	10.0	3.6	5.1	8.2	12.0	9.7	3.8	5.6	8.3	12.1	9.9
		2	4	5	7	6	3	3	5	7	6	2	4	5	7	6
Chronic diseases of tonsils and adenoids	J35	1.1	1.3	1.3	^	1.2	1.2	1.2	1.6	1.3	1.2	1.1	1.2	1.5	1.4	1.2
		1	1	1	^	1	1	1	1	1	1	1	1	1	1	1
Chronic obstructive pulmonary disease and bronchiectasis	J40–J44, J47	3.6	4.8	5.8	8.4	7.8	3.2	4.7	6.0	8.7	7.9	3.4	4.7	5.9	8.5	7.8
		3	3	4	5	5	2	2	4	6	5	2	2	4	6	5
Asthma	J45–J46	1.9	2.3	3.6	3.6	2.4	1.9	2.4	3.4	4.9	2.9	1.9	2.4	3.4	4.5	2.6
		1	1	2	2	1	1	1	2	3	2	1	1	2	3	1
Diseases of the digestive system	**K00–K93**	**2.8**	**4.0**	**6.0**	**7.9**	**5.7**	**2.9**	**3.6**	**5.8**	**8.5**	**5.7**	**2.9**	**3.8**	**5.9**	**8.2**	**5.7**
		2	**2**	**3**	**4**	**3**	**2**	**2**	**3**	**4**	**3**	**2**	**2**	**3**	**4**	**3**
Diseases of oesophagus, stomach and duodenum	K20–K31	2.0	3.0	3.9	6.1	4.2	1.9	3.0	4.0	7.1	4.6	2.0	3.0	4.0	6.6	4.4
		1	1	2	3	2	1	1	2	4	2	1	1	2	3	2
Diseases of appendix	K35–K38	3.1	2.9	4.4	7.2	3.3	3.2	2.9	4.6	6.1	3.3	3.1	2.9	4.5	6.6	3.3
		2	2	3	6	2	3	2	3	4	3	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	2.0 1	1.5 1	1.5 1	2.8 1	2.2 1	1.7 1	1.8 1	2.6 2	4.9 2	3.6 2	1.9 1	1.5 1	1.6 1	2.9 1	2.3 1
Noninfective enteritis and colitis	K50–K52	4.1 3	6.7 5	8.4 4	10.2 6	7.6 5	3.7 3	6.2 4	8.1 5	9.8 6	7.4 5	3.9 3	6.4 4	8.3 5	9.9 6	7.5 5
Alcoholic liver disease	K70	- -	10.6 7	12.2 8	16.2 10	12.6 8	- -	12.5 8	16.3 8	19.9 14	15.9 8	- -	11.2 7	13.6 8	17.1 10	13.6 8
Cholelithiasis	K80	10.0 4	3.5 2	4.7 3	6.9 5	5.6 4	1.8 1	2.8 2	3.8 2	7.0 4	4.4 2	5.4 2	3.0 2	4.1 2	6.9 4	4.8 3
Diseases of the skin and subcutaneous tissue	**L00–L99**	**2.7 2**	**3.5 2**	**6.7 3**	**9.0 5**	**5.9 3**	**2.8 2**	**3.0 1**	**5.5 3**	**10.5 5**	**6.6 3**	**2.8 2**	**3.3 2**	**6.3 3**	**9.8 5**	**6.2 3**
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02–L03	2.9 2	3.7 2	5.3 3	8.5 5	5.8 3	3.2 3	3.3 2	5.8 3	9.7 5	7.0 4	3.0 2	3.6 2	5.5 3	9.1 5	6.3 3
Decubitus ulcer and pressure area	L89	^ ^	22.0 5	67.9 17	17.7 12	32.0 9	^ ^	5.4 2	15.5 6	39.7 12	31.2 11	^ ^	18.5 4	50.5 15	29.9 12	31.7 10
Diseases of the musculoskeletal system and connective tissue	**M00–M99**	**2.8 1**	**3.1 1**	**4.7 2**	**6.9 4**	**5.1 2**	**3.8 2**	**2.7 1**	**3.8 2**	**6.7 4**	**4.9 2**	**3.3 2**	**2.9 1**	**4.2 2**	**6.8 4**	**5.0 2**
Rheumatoid arthritis	M05–M06	- -	7.6 1	4.7 2	6.0 4	5.6 2	- -	3.6 2	3.5 2	4.8 4	4.2 3	- -	4.6 1	4.0 2	5.1 4	4.7 3
Coxarthrosis and Gonarthrosis	M16–M17	^ ^	3.5 3	4.2 4	6.0 5	5.2 4	- -	3.9 4	4.6 4	6.2 5	5.6 5	^ ^	3.7 3	4.4 4	6.1 5	5.4 4
Intervertebral disc disorders	M50–M51	- -	3.5 2	4.3 3	9.9 4	5.0 2	^ ^	3.5 2	4.6 3	9.4 5	5.1 3	^ ^	3.5 2	4.4 3	9.6 5	5.0 3
Dorsalgia (back pain)	M54	2.4 2	2.2 1	3.7 1	5.9 2	3.9 1	2.3 1	2.2 1	3.0 1	6.2 2	3.8 1	2.3 2	2.2 1	3.3 1	6.1 2	3.9 1
Diseases of the genitourinary system	**N00–N99**	**2.5 2**	**3.0 2**	**4.5 3**	**9.3 5**	**6.2 3**	**3.0 2**	**2.7 2**	**4.3 3**	**10.5 5**	**5.9 3**	**2.7 2**	**2.8 2**	**4.4 3**	**10.0 5**	**6.0 3**
Chronic kidney disease	N18	5.0 2	6.4 5	6.3 5	11.3 5	8.2 4	8.0 3	5.0 3	8.1 6	9.0 5	7.8 4	6.3 2	5.8 4	7.0 5	10.5 5	8.1 4
Urolithiasis	N20–N23	2.5 2	2.2 1	2.4 2	3.6 2	2.6 2	4.1 3	2.4 2	3.2 2	3.9 2	3.0 2	3.0 2	2.3 1	2.7 2	3.7 2	2.7 2
Hyperplasia of prostate	N40	- -	^ ^	3.6 3	4.5 3	4.3 3	- -	- -	- -	- -	- -	- -	^ ^	3.6 3	4.5 3	4.3 3
Disorders of breast	N60–N64	^ ^	1.9 1	3.4 4	^ ^	2.1 1	2.0 2	2.1 1	2.0 1	4.0 2	2.2 1	1.9 2	2.1 1	2.1 1	3.9 1	2.2 1
Inflammatory diseases of female pelvic organs	N70–N77	- -	- -	- -	- -	- -	2.3 2	2.7 2	3.3 2	6.9 3	3.0 2	2.3 2	2.7 2	3.3 2	6.9 3	3.0 2
Noninflammatory disorders of female genital tract	N80–N98	- -	- -	- -	- -	- -	2.1 1	2.3 1	3.1 3	4.4 3	2.9 2	2.1 1	2.3 1	3.1 3	4.4 3	2.9 2
Pregnancy, childbirth and the puerperium	**O00–O99**	**- -**	**- -**	**- -**	**- -**	**- -**	**^ ^**	**2.7 2**	**4.0 3**	**- -**	**2.7 2**	**^ ^**	**2.7 2**	**4.0 3**	**- -**	**2.7 2**
Gestational [pregnancy induced] hypertension	O13	- -	- -	- -	- -	- -	- -	2.6 1	5.1 2	- -	2.6 1	- -	2.6 1	5.1 2	- -	2.6 1
Diabetes mellitus in pregnancy	O24	- -	- -	- -	- -	- -	- -	2.7 2	3.9 2	- -	2.7 2	- -	2.7 2	3.9 2	- -	2.7 2
Single spontaneous delivery	O80	- -	- -	- -	- -	- -	^ ^	2.4 2	2.6 2	- -	2.4 2	^ ^	2.4 2	2.6 2	- -	2.4 2
Single delivery by forceps and vacuum extractor	O81	- -	- -	- -	- -	- -	- -	3.2 3	3.8 3	- -	3.2 3	- -	3.2 3	3.8 3	- -	3.2 3
Single delivery by caesarean section	O82	- -	- -	- -	- -	- -	^ ^	4.5 4	5.1 5	- -	4.5 4	^ ^	4.5 4	5.1 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	-	-	-	-	-	-	5.4	6.6	-	5.4	-	5.4	6.6	-	5.4
		-	-	-	-	-	-	5	5	-	5	-	5	5	-	5
Certain conditions originating in the perinatal period	**P00–P96**	ǂ	ǂ	ǂ	ǂ	**8.5**	ǂ	ǂ	ǂ	ǂ	**9.4**	ǂ	ǂ	ǂ	ǂ	**8.9**
		ǂ	ǂ	ǂ	ǂ	**3**	ǂ	ǂ	ǂ	ǂ	**3**	ǂ	ǂ	ǂ	ǂ	**3**
Congenital malformations, deformations and chromosomal abnormalities	**Q00–Q99**	**7.3**	**4.8**	**4.9**	**12.3**	**7.0**	**6.8**	**5.6**	**5.9**	**8.9**	**6.7**	**7.1**	**5.2**	**5.4**	**10.5**	**6.9**
		2	**2**	**3**	**5**	**2**	**2**	**2**	**3**	**5**	**2**	**2**	**2**	**3**	**5**	**2**
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	**R00–R99**	**1.9**	**1.8**	**2.6**	**4.9**	**3.1**	**2.0**	**1.9**	**2.3**	**5.2**	**3.0**	**1.9**	**1.9**	**2.4**	**5.1**	**3.1**
		1	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**2**	**1**
Pain in throat and chest	R07	1.5	1.3	1.7	2.4	1.8	1.4	1.3	1.6	2.3	1.7	1.4	1.3	1.6	2.4	1.8
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Abdominal and pelvic pain	R10	1.6	2.0	2.4	3.8	2.3	1.7	2.0	2.6	4.0	2.3	1.6	2.0	2.5	3.9	2.3
		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**	**1.6**	**3.5**	**6.1**	**12.4**	**5.7**	**1.7**	**3.1**	**5.4**	**12.9**	**7.2**	**1.7**	**3.4**	**5.8**	**12.7**	**6.4**
		1	**1**	**2**	**5**	**2**	**1**	**1**	**2**	**7**	**2**	**1**	**1**	**2**	**6**	**2**
Intracranial injury	S06	3.0	6.9	14.7	14.6	10.4	2.7	4.6	13.2	11.7	9.0	2.9	6.3	14.2	13.3	9.9
		1	1	3	5	2	1	1	2	5	2	1	1	3	5	2
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	1.2	2.1	2.7	8.3	3.0	1.3	1.9	2.8	7.5	3.6	1.2	2.1	2.7	7.9	3.2
		1	1	1	2	1	1	1	1	2	1	1	1	1	2	1
Fracture of femur	S72	3.8	7.6	12.4	20.7	17.3	3.2	10.2	13.0	18.7	17.8	3.6	8.2	12.8	19.3	17.6
		2	5	7	13	11	2	5	7	12	11	2	5	7	12	11
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36–T65	1.3	3.4	3.8	10.9	3.9	2.0	2.3	4.6	10.1	3.4	1.7	2.8	4.3	10.4	3.6
		1	1	2	5	1	1	1	1	3	1	1	1	1	4	1
Factors influencing health status and contact with health services[b]	**U00–U49, Z00–Z99**	**3.5**	**16.4**	**16.6**	**19.6**	**14.7**	**2.9**	**2.3**	**13.7**	**25.5**	**9.7**	**3.2**	**3.8**	**15.2**	**22.8**	**11.4**
		2	**3**	**4**	**9**	**3**	**2**	**1**	**4**	**15**	**1**	**2**	**1**	**4**	**13**	**2**
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	12.9	8.9	10.1	21.3	17.8	10.4	5.0	10.6	28.6	24.0	11.8	6.4	10.3	25.7	21.3
		8	3	4	12	9	5	1	6	20	14	6	2	4	16	11

Notes:
^ Denotes that length of stay calculation was based on five or fewer discharges.
\- Length of stay cannot be calculated as no in-patients are reported.
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	–	**73,961**	**147,296**	**234,085**	**333,360**	**788,702**	**58,716**	**323,827**	**249,502**	**283,705**	**915,750**	**132,677**	**471,123**	**483,587**	**617,065**	**1,704,452**
All Conditions	–	**170,579**	**340,609**	**615,512**	**1,044,315**	**2,171,015**	**135,876**	**844,738**	**615,605**	**890,946**	**2,487,165**	**306,455**	**1,185,347**	**1,231,117**	**1,935,261**	**4,658,180**
Certain infectious and parasitic diseases	**A00-B99**	**9,695**	**10,048**	**10,557**	**18,046**	**48,346**	**8,762**	**15,959**	**9,419**	**20,828**	**54,968**	**18,457**	**26,007**	**19,976**	**38,874**	**103,314**
Intestinal infectious diseases (including diarrhoea)	A00–A09	4,010	2,213	2,269	3,582	12,074	3,732	4,340	2,825	5,033	15,930	7,742	6,553	5,094	8,615	28,004
Tuberculosis	A15–A19	10	116	86	65	277	33	72	42	38	185	43	188	128	103	462
Septicaemia	A40–A41	198	663	1,631	4,754	7,246	138	791	1,263	4,055	6,247	336	1,454	2,894	8,809	13,493
Human immunodeficiency virus [HIV] disease	B20–B24	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	904
Neoplasms	**C00–D48**	**6,771**	**21,072**	**92,138**	**150,234**	**270,215**	**6,874**	**50,599**	**138,221**	**117,100**	**312,794**	**13,645**	**71,671**	**230,359**	**267,334**	**583,009**
Malignant neoplasms	C00–C96	5,961	16,408	81,663	133,016	237,048	5,773	37,255	123,779	104,007	270,814	11,734	53,663	205,442	237,023	507,862
Malignant neoplasm of colon, rectum and anus	C18–C21	~	*	9,235	12,714	23,060	~	*	6,250	5,947	13,171	~	*	15,485	18,661	36,231
Malignant neoplasm of trachea, bronchus and lung	C33–C34	0	367	5,098	10,157	15,622	~	*	4,862	8,377	13,533	~	*	9,960	18,534	29,155
Melanoma and other malignant neoplasms of skin	C43–C44	*	*	2,840	9,345	13,027	~	*	2,113	5,477	8,398	15	1,635	4,953	14,822	21,425
Malignant neoplasm of breast	C50	0	~	*	251	372	0	*	*	21,316	76,471	0	12,985	42,291	21,567	76,843
Malignant neoplasms of female genital organs	C51–C58	0	0	0	0	0	34	3,025	8,118	6,065	17,242	34	3,025	8,118	6,065	17,242
Malignant neoplasm of prostate	C61	16	64	10,298	28,712	39,090	0	0	0	0	0	16	64	10,298	28,712	39,090
Malignant neoplasm of bladder	C67	6	65	859	2,784	3,714	0	17	299	991	1,307	6	82	1,158	3,775	5,021
Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81–C96	3,337	4,157	10,659	16,469	34,622	2,651	3,108	6,172	12,743	24,674	5,988	7,265	16,831	29,212	59,296
In situ neoplasms	D00-D09	~	*	622	1,720	2,443	~	*	3,992	3,095	10,783	7	3,790	4,614	4,815	13,226
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10–D48	808	4,565	9,853	15,498	30,724	1,096	9,653	10,450	9,998	31,197	1,904	14,218	20,303	25,496	61,921
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	**D50–D89**	**4,076**	**4,286**	**7,312**	**16,573**	**32,247**	**2,786**	**10,452**	**7,517**	**15,639**	**36,394**	**6,862**	**14,738**	**14,829**	**32,212**	**68,641**
Endocrine, nutritional and metabolic diseases	**E00–E89**	**4,598**	**14,635**	**40,804**	**73,442**	**133,479**	**4,436**	**15,218**	**25,857**	**58,819**	**104,330**	**9,034**	**29,853**	**66,661**	**132,261**	**237,809**
Diabetes mellitus	E10–E14	473	4,824	22,276	48,726	76,299	529	4,784	12,417	30,105	47,835	1,002	9,608	34,693	78,831	124,134
Cystic fibrosis	E84	505	1,664	*	~	2,328	563	1,385	*	~	2,064	1,068	3,049	*	~	4,392
Mental and behavioural disorders	**F00–F99**	**1,964**	**9,145**	**10,278**	**14,583**	**35,970**	**1,362**	**7,728**	**6,705**	**16,210**	**32,005**	**3,326**	**16,873**	**16,983**	**30,793**	**67,975**
Mental and behavioural disorders due to alcohol	F10	46	3,788	5,869	3,271	12,974	40	1,426	2,110	1,151	4,727	86	5,214	7,979	4,422	17,701
Mental and behavioural disorders due to use of other psychoactive substance	F11–F19	16	2,111	680	124	2,931	8	1,464	302	127	1,901	24	3,575	982	251	4,832
Diseases of nervous system	**G00–G99**	**3,970**	**7,760**	**10,268**	**14,744**	**36,742**	**3,196**	**10,852**	**10,327**	**13,888**	**38,263**	**7,166**	**18,612**	**20,595**	**28,632**	**75,005**
Multiple sclerosis	G35	~	1,223	1,137	*	2,725	0	2,689	1,929	490	5,108	~	3,912	3,066	*	7,833
Epilepsy	G40, G41	1,200	1,609	1,112	903	4,824	1,066	1,609	847	885	4,407	2,266	3,218	1,959	1,788	9,231
Transient cerebral ischaemic attacks and related syndromes	G45	~	*	494	1,357	1,928	~	*	431	1,483	1,993	~	*	925	2,840	3,921
Diseases of the eye and adnexa	**H00–H59**	**1,578**	**2,947**	**7,965**	**21,133**	**33,623**	**1,297**	**3,439**	**5,782**	**26,455**	**36,973**	**2,875**	**6,386**	**13,747**	**47,588**	**70,596**
Diseases of the ear and mastoid process	**H60–H95**	**3,335**	**1,624**	**1,629**	**1,750**	**8,338**	**2,288**	**1,915**	**1,722**	**1,755**	**7,680**	**5,623**	**3,539**	**3,351**	**3,505**	**16,018**
Diseases of the circulatory system	**I00–I99**	**1,667**	**9,117**	**43,804**	**106,496**	**161,084**	**1,649**	**8,110**	**22,387**	**84,276**	**116,422**	**3,316**	**17,227**	**66,191**	**190,772**	**277,506**
Hypertensive diseases	I10–I15	193	2,549	11,528	24,088	38,358	286	2,092	6,541	22,455	31,374	479	4,641	18,069	46,543	69,732
Angina pectoris	I20	0	125	1,561	2,322	4,008	~	*	690	1,404	2,136	~	*	2,251	3,726	6,144
Acute myocardial infarction	I21–I22	~	*	2,364	3,525	6,193	0	64	654	2,153	2,871	~	*	3,018	5,678	9,064
Other ischaemic heart disease	I23–I25	~	*	8,909	16,414	26,021	~	*	2,617	8,028	10,807	~	*	11,526	24,442	36,828
Pulmonary heart disease and diseases of pulmonary circulation	I26–I28	77	256	608	1,214	2,155	90	296	553	1,701	2,640	167	552	1,161	2,915	4,795
Conduction disorders and cardiac arrhythmias	I44–I49	226	1,269	6,657	24,159	32,311	150	813	2,532	18,454	21,949	376	2,082	9,189	42,613	54,260
Heart failure	I50	30	157	1,467	10,290	11,944	38	94	657	9,170	9,959	68	251	2,124	19,460	21,903
Cerebrovascular disease	I60–I69	97	510	2,097	5,861	8,565	99	432	1,450	5,341	7,322	196	942	3,547	11,202	15,887
Atherosclerosis (non-coronary)	I70	~	*	840	2,314	3,218	~	*	352	1,170	1,561	~	*	1,192	3,484	4,779
Diseases of the respiratory system	**J00–J99**	**14,248**	**11,205**	**18,354**	**46,763**	**90,570**	**10,869**	**14,352**	**17,014**	**43,549**	**85,784**	**25,117**	**25,557**	**35,368**	**90,312**	**176,354**
Acute upper respiratory infections and influenza	J00–J11	4,238	1,421	691	643	6,993	3,380	2,854	805	695	7,734	7,618	4,275	1,496	1,338	14,727
Pneumonia	J12–J18	951	1,408	2,139	7,420	11,918	882	1,375	1,740	6,850	10,847	1,833	2,783	3,879	14,270	22,765
Chronic diseases of tonsils and adenoids	J35	1,978	447	55	22	2,502	1,653	1,037	69	20	2,779	3,631	1,484	124	42	5,281
Chronic obstructive pulmonary disease and bronchiectasis	J40–J44, J47	75	475	3,722	13,580	17,852	110	554	4,096	12,365	17,125	185	1,029	7,818	25,945	34,977
Asthma	J45–J46	1,713	1,347	1,560	925	5,545	1,070	2,678	2,132	1,712	7,592	2,783	4,025	3,692	2,637	13,137
Diseases of the digestive system	**K00–K93**	**8,178**	**41,794**	**58,057**	**57,662**	**165,691**	**6,659**	**46,130**	**54,043**	**56,387**	**163,219**	**14,837**	**87,924**	**112,100**	**114,049**	**328,910**

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

Diagnosis	ICD-10-AM Code	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Diseases of oesophagus, stomach and duodenum	K20–K31	1,087	12,067	18,463	16,947	48,564	858	11,888	17,265	16,529	46,540	1,945	23,955	35,728	33,476	95,104
Diseases of appendix	K35–K38	1,223	2,047	401	149	3,820	952	1,938	385	162	3,437	2,175	3,985	786	311	7,257
Inguinal hernia	K40	525	782	1,197	1,603	4,107	92	72	84	141	389	617	854	1,281	1,744	4,496
Noninfective enteritis and colitis	K50–K52	535	6,610	3,326	1,556	12,027	357	6,427	3,309	1,832	11,925	892	13,037	6,635	3,388	23,952
Alcoholic liver disease	K70	0	526	1,580	709	2,815	0	242	696	225	1,163	0	768	2,276	934	3,978
Cholelithiasis	K80	10	663	1,218	2,080	3,971	14	2,705	2,207	2,307	7,233	24	3,368	3,425	4,387	11,204
Diseases of the skin and subcutaneous tissue	**L00–L99**	**2,693**	**14,809**	**12,774**	**15,497**	**45,773**	**2,170**	**14,317**	**11,268**	**15,288**	**43,043**	**4,863**	**29,126**	**24,042**	**30,785**	**88,816**
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02–L03	571	1,843	2,229	3,482	8,125	466	1,092	1,306	3,658	6,522	1,037	2,935	3,535	7,140	14,647
Decubitus ulcer and pressure area	L89	9	168	304	1,434	1,915	7	88	235	1,391	1,721	16	256	539	2,825	3,636
Diseases of the musculoskeletal system and connective tissue	**M00–M99**	**2,814**	**11,418**	**19,021**	**20,581**	**53,834**	**2,959**	**16,507**	**24,716**	**33,629**	**77,811**	**5,773**	**27,925**	**43,737**	**54,210**	**131,645**
Rheumatoid arthritis	M05–M06	0	371	1,212	1,212	2,795	0	878	2,278	2,408	5,564	0	1,249	3,490	3,620	8,359
Coxarthrosis and Gonarthrosis	M16–M17	~	*	2,370	3,299	6,039	0	345	2,519	5,060	7,924	~	*	4,889	8,359	13,963
Intervertebral disc disorders	M50–M51	~	*	912	725	2,330	*	*	1,064	1,039	2,986	14	1,562	1,976	1,764	5,316
Dorsalgia (back pain)	M54	130	1,945	2,973	2,233	7,281	126	4,643	4,387	4,349	13,505	256	6,588	7,360	6,582	20,786
Diseases of the genitourinary system	**N00–N99**	**5,651**	**16,659**	**36,259**	**84,220**	**142,789**	**3,807**	**42,555**	**40,321**	**60,849**	**147,532**	**9,458**	**59,214**	**76,580**	**145,069**	**290,321**
Chronic kidney disease	N18	497	9,128	23,356	52,702	85,683	586	6,719	13,959	30,242	51,506	1,083	15,847	37,315	82,944	137,189
Urolithiasis	N20–N23	88	1,625	2,139	1,167	5,019	49	1,005	1,077	626	2,757	137	2,630	3,216	1,793	7,776
Hyperplasia of prostate	N40	0	70	1,590	4,867	6,527	0	0	0	0	0	0	70	1,590	4,867	6,527
Disorders of breast	N60–N64	11	110	59	26	206	30	2,089	1,935	597	4,651	41	2,199	1,994	623	4,857
Inflammatory diseases of female pelvic organs	N70–N77	0	0	0	0	0	64	3,144	807	367	4,382	64	3,144	807	367	4,382
Noninflammatory disorders of female genital tract	N80–N98	0	0	0	0	0	300	22,598	13,990	4,757	41,645	300	22,598	13,990	4,757	41,645
Pregnancy, childbirth and the puerperium	**O00–O99**	**0**	**0**	**0**	**0**	**0**	**7**	**268,192**	**1,472**	**0**	**269,671**	**7**	**268,192**	**1,472**	**0**	**269,671**
Gestational [pregnancy induced] hypertension	O13	0	0	0	0	0	0	6,627	69	0	6,696	0	6,627	69	0	6,696
Diabetes mellitus in pregnancy	O24	0	0	0	0	0	0	9,125	92	0	9,217	0	9,125	92	0	9,217
Single spontaneous delivery	O80	0	0	0	0	0	~	31,484	*	0	31,534	~	31,484	*	0	31,534
Single delivery by forceps and vacuum extractor	O81	0	0	0	0	0	0	9,304	8	0	9,312	0	9,304	8	0	9,312
Single delivery by caesarean section	O82	0	0	0	0	0	~	19,182	*	0	19,342	~	19,182	*	0	19,342
Other assisted single delivery	O83	0	0	0	0	0	0	*	~	0	1,041	0	*	~	0	1,041
Multiple delivery	O84	0	0	0	0	0	0	1,180	39	0	1,219	0	1,180	39	0	1,219
Certain conditions originating in the perinatal period	**P00–P96**	ǂ	ǂ	ǂ	ǂ	**15,264**	ǂ	ǂ	ǂ	ǂ	**11,716**	ǂ	ǂ	ǂ	ǂ	**26,980**
Congenital malformations, deformations and chromosomal abnormalities	**Q00–Q99**	**14,349**	**2,168**	**1,397**	**687**	**18,601**	**10,982**	**2,307**	**2,269**	**838**	**16,396**	**25,331**	**4,475**	**3,666**	**1,525**	**34,997**
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	**R00–R99**	**14,647**	**26,777**	**39,356**	**65,564**	**146,344**	**11,751**	**55,520**	**40,377**	**64,519**	**172,167**	**26,398**	**82,297**	**79,733**	**130,083**	**318,511**
Pain in throat and chest	R07	154	3,704	6,004	4,140	14,002	133	4,053	5,424	4,265	13,875	287	7,757	11,428	8,405	27,877
Abdominal and pelvic pain	R10	1,183	3,098	2,646	1,876	8,803	1,389	15,751	4,526	2,731	24,397	2,572	18,849	7,172	4,607	33,200
Injury, poisoning and certain other consequences of external causes	**S00–T98**	**8,669**	**23,392**	**13,669**	**16,192**	**61,922**	**6,218**	**11,815**	**10,191**	**20,048**	**48,272**	**14,887**	**35,207**	**23,860**	**36,240**	**110,194**
Intracranial injury	S06	267	1,291	741	995	3,294	191	421	349	815	1,776	458	1,712	1,090	1,810	5,070
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	2,388	4,245	1,793	2,479	10,905	1,605	1,222	804	2,529	6,160	3,993	5,467	2,597	5,008	17,065
Fracture of femur	S72	121	190	264	1,409	1,984	63	63	356	3,345	3,827	184	253	620	4,754	5,811
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36–T65	283	1,719	764	313	3,079	395	2,365	1,048	370	4,178	678	4,084	1,812	683	7,257
External causes of morbidity and mortality	**U50–Y98**	**21,834**	**44,903**	**28,799**	**40,881**	**136,417**	**15,628**	**27,476**	**24,163**	**51,493**	**118,760**	**37,462**	**72,379**	**52,962**	**92,374**	**255,177**
Transport accidents	V01–V99	506	1,724	772	441	3,443	319	1,134	398	340	2,191	825	2,858	1,170	781	5,634
Factors influencing health status and contact with health services[a]	**U00–U49, Z00–Z99**	**24,580**	**66,848**	**163,071**	**279,267**	**533,766**	**20,463**	**221,293**	**161,833**	**189,376**	**592,965**	**45,043**	**288,141**	**324,904**	**468,643**	**1,126,731**
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	2,781	7,624	38,211	68,934	117,550	2,573	18,921	61,523	50,569	133,586	5,354	26,545	99,734	119,503	251,136

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

3.4.4 Total Discharges by Principal Procedure, Sex and Age Group

In 2016, 79.5 per cent of total discharges had a principal procedure recorded (see Table 3.4). Discussion of procedures is confined to ACHI chapter level.

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

- Procedures from the chapter *Non-invasive, cognitive and other interventions, not elsewhere classified* accounted for 25.9 per cent of total discharges with a principal procedure reported. Over 37 per cent of discharges aged less than 15 years, 19.4 per cent aged between 15–44 years, 24.5 per cent aged between 45–64 years and 29.4 per cent aged 65 years and over had a procedure from this chapter recorded as a principal procedure.
- Almost 64 per cent of total discharges with a principal procedure from the chapter *Procedures on cardiovascular system* were male discharges.
- Over 75 per cent of total discharges with a principal procedure from the chapter *Procedures on endocrine system* were female discharges.
- Over 69 per cent of total discharges with a principal procedure from the chapter *Procedures on eye and adnexa* were aged 65 years and over.

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

Table 3.15 presents the in-patient mean and median length of stay for principal procedure by sex and age group. The analysis presented here includes total in-patient (sameday and overnight) discharges,[37] 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.[38]

- At chapter level, *Radiation oncology procedures* reported the longest in-patient mean length of stay at 18.7 days. It should be noted that the majority of discharges with *Radiation oncology procedures* recorded as a principal procedure were day patients[39] and are therefore not included in Table 3.15.
- The longest in-patient mean length of stay for those aged less than 15 years was reported for the chapter *Procedures on respiratory system* at 19.4 days.

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37 This differs from reports prior to 2015 where the analysis was limited to the mean length of stay for acute in-patients (length of stay of 30 days or less). Median length of stay is also provided alongside the mean length of stay.

38 See Section Two for details of discharge destination.

39 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.

- The shortest in-patient mean lengths of stay were reported for the chapters *Procedures on male genital organs* at 1.3 days and *Procedures on ear and mastoid process* at 2.2 days for total discharges; when analysed by age group the mean length of stay for the chapter *Procedures on ear and mastoid process* increased as discharges got older.

3.4.6 All-Listed Procedures by Sex and Age Group

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

- Over 2.4 million procedures were reported for total discharges.
- Procedures within the chapter *Non-invasive, cognitive and other interventions, not elsewhere classified* accounted for 1,086,257 of all-listed procedures or 44.0 per cent of all procedures reported for total discharges.
- Total discharges aged 65 years and over accounted for almost 68 per cent of procedures from the chapter *Procedures on eye and adnexa*.
- Total discharges aged less than 15 years accounted for over 43 per cent of procedures from the chapter *Procedures on ear and mastoid process*.

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

Principal Procedure	Procedure Block	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Total Discharges	-	**73,961**	**147,296**	**234,085**	**333,360**	**788,702**	**58,716**	**323,827**	**249,502**	**283,705**	**915,750**	**132,677**	**471,123**	**483,587**	**617,065**	**1,704,452**
All Principal Procedures	0001–2016	**42,367**	**117,970**	**199,017**	**289,277**	**648,631**	**32,422**	**219,074**	**214,748**	**240,519**	**706,763**	**74,789**	**337,044**	**413,765**	**529,796**	**1,355,394**
Procedures on nervous system	**0001–0086**	**978**	**3,497**	**4,214**	**2,840**	**11,529**	**723**	**4,752**	**6,039**	**4,761**	**16,275**	**1,701**	**8,249**	**10,253**	**7,601**	**27,804**
Lumbar puncture	0030	741	740	537	310	2,328	494	1,311	622	367	2,794	1,235	2,051	1,159	677	5,122
Procedures on endocrine system	**0110–0129**	**22**	**99**	**170**	**117**	**408**	**13**	**409**	**535**	**305**	**1,262**	**35**	**508**	**705**	**422**	**1,670**
Procedures on eye and adnexa	**0160–0256**	**760**	**1,671**	**5,721**	**13,976**	**22,128**	**598**	**1,426**	**3,654**	**17,260**	**22,938**	**1,358**	**3,097**	**9,375**	**31,236**	**45,066**
Lens extraction	0195–0202	40	115	943	3,884	4,982	29	127	854	5,299	6,309	69	242	1,797	9,183	11,291
Procedures on ear and mastoid process	**0300–0333**	**2,010**	**1,065**	**894**	**756**	**4,725**	**1,415**	**1,084**	**883**	**670**	**4,052**	**3,425**	**2,149**	**1,777**	**1,426**	**8,777**
Myringotomy	0309	1,217	109	83	49	1,458	779	110	80	46	1,015	1,996	219	163	95	2,473
Procedures on nose, mouth and pharynx	**0370–0422**	**2,274**	**2,659**	**2,062**	**1,559**	**8,554**	**1,771**	**2,933**	**1,856**	**1,171**	**7,731**	**4,045**	**5,592**	**3,918**	**2,730**	**16,285**
Tonsillectomy or adenoidectomy	0412	1,377	368	34	12	1,791	1,229	893	31	6	2,159	2,606	1,261	65	18	3,950
Dental services	**0450–0490**	**2,084**	**794**	**227**	**122**	**3,227**	**1,756**	**1,043**	**210**	**80**	**3,089**	**3,840**	**1,837**	**437**	**202**	**6,316**
Procedures on respiratory system	**0520–0571**	**1,951**	**2,014**	**4,019**	**5,819**	**13,803**	**1,338**	**1,536**	**3,569**	**4,886**	**11,329**	**3,289**	**3,550**	**7,588**	**10,705**	**25,132**
Bronchoscopy with/without biopsy	0543–0544, 41892-01[0545]	155	776	1,706	2,391	5,028	143	655	1,720	2,037	4,555	298	1,431	3,426	4,428	9,583
Procedures on cardiovascular system	**0600–0777**	**779**	**6,297**	**17,636**	**15,081**	**39,793**	**738**	**3,688**	**9,269**	**8,833**	**22,528**	**1,517**	**9,985**	**26,905**	**23,914**	**62,321**
Coronary angiography	0668	230	597	4,523	4,731	10,081	228	260	2,405	3,117	6,010	458	857	6,928	7,848	16,091
Transluminal coronary angioplasty with/without stenting	0670–0671	0	177	1,813	1,890	3,880	0	27	416	727	1,170	0	204	2,229	2,617	5,050
CABG	0672–0679	~	*	*	366	654	0	~	*	85	123	~	*	*	451	777
Leg varicose vein ligation	0727–0728	0	446	685	323	1,454	0	1,116	1,167	483	2,766	0	1,562	1,852	806	4,220
Procedures on blood and blood-forming organs	**0800–0817**	**127**	**463**	**911**	**1,315**	**2,816**	**129**	**569**	**848**	**1,045**	**2,591**	**256**	**1,032**	**1,759**	**2,360**	**5,407**
Procedures on digestive system	**0850–1011**	**2,797**	**22,174**	**32,980**	**30,859**	**88,810**	**1,995**	**28,268**	**32,563**	**28,008**	**90,834**	**4,792**	**50,442**	**65,543**	**58,867**	**179,644**
Fibreoptic colonoscopy with/without excision	0905, 0911	72	7,296	13,539	12,610	33,517	37	9,125	13,562	10,981	33,705	109	16,421	27,101	23,591	67,222
Appendicectomy	0926	1,169	1,913	338	97	3,517	918	1,862	316	98	3,194	2,087	3,775	654	195	6,711
Procedures for haemorrhoids	0941	~	912	1,058	*	2,306	~	1,009	804	*	2,232	~	1,921	1,862	*	4,538
Cholecystectomy	0965	7	340	569	425	1,341	9	1,681	1,219	484	3,393	16	2,021	1,788	909	4,734
Division of abdominal adhesions	0986	6	33	51	69	159	10	244	140	104	498	16	277	191	173	657
Repair of inguinal and obstructed hernia	0990, 0997	383	754	1,138	1,274	3,549	78	86	116	171	451	461	840	1,254	1,445	4,000
Panendoscopy with/without excision	1005–1008	415	8,147	11,457	10,854	30,873	408	10,523	12,724	11,612	35,267	823	18,670	24,181	22,466	66,140
Procedures on urinary system	**1040–1129**	**719**	**17,221**	**37,090**	**72,536**	**127,566**	**713**	**12,256**	**25,512**	**40,030**	**78,511**	**1,432**	**29,477**	**62,602**	**112,566**	**206,077**
Examination procedures on bladder (includes cystoscopy)	1089	57	1,111	2,983	5,720	9,871	50	1,225	2,202	2,505	5,982	107	2,336	5,185	8,225	15,853
Procedures on male genital organs	**1160–1203**	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	**3,018**	**1,313**	**2,794**	**2,647**	**9,772**
Prostatectomy	1165–1167	0	12	360	637	1,009	0	0	0	0	0	0	12	360	637	1,009
Circumcision	30653-00[1196]	1,397	424	240	134	2,195	0	0	0	0	0	1,397	424	240	134	2,195
Gynaecological procedures	**1240–1299**	**0**	**0**	**0**	**0**	**0**	**97**	**26,268**	**11,976**	**2,816**	**41,157**	**97**	**26,268**	**11,976**	**2,816**	**41,157**
Oophorectomy and salpingo-oophorectomy	1243, 1252	0	0	0	0	0	7	340	368	116	831	7	340	368	116	831
Salpingectomy	1251	0	0	0	0	0	~	175	33	~	213	~	175	33	~	213
Examination procedures on uterus	1259	0	0	0	0	0	~	2,315	3,143	*	6,101	~	2,315	3,143	*	6,101
Curettage and evacuation of uterus	1265	0	0	0	0	0	~	5,410	2,006	*	7,749	~	5,410	2,006	*	7,749
Hysterectomy	1268–1269	0	0	0	0	0	0	495	1,280	587	2,362	0	495	1,280	587	2,362
Repair of prolapse of uterus, pelvic floor or enterocele	1283	0	0	0	0	0	~	*	338	307	728	~	*	338	307	728
Obstetric procedures	**1330–1347**	**0**	**0**	**0**	**0**	**0**	**~**	**58,455**	*****	**0**	**58,714**	**~**	**58,455**	*****	**0**	**58,714**
Analgesia and anaesthesia during labour and delivery procedure	1333	0	0	0	0	0	0	*	~	0	2,755	0	*	~	0	2,755

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	*	~	0	3,819	0	*	~	0	3,819
Medical or surgical augmentation of labour	1335	0	0	0	0	0	0	2,413	10	0	2,423	0	2,413	10	0	2,423
Forceps delivery	1337	0	0	0	0	0	0	1,867	0	0	1,867	0	1,867	0	0	1,867
Vacuum extraction	1338	0	0	0	0	0	0	6,262	7	0	6,269	0	6,262	7	0	6,269
Breech delivery and extraction	1339	0	0	0	0	0	0	*	~	0	124	0	*	~	0	124
Caesarean section	1340	0	0	0	0	0	~	19,786	*	0	19,981	~	19,786	*	0	19,981
Episiotomy associated with delivery	90472-00[1343]	0	0	0	0	0	0	*	~	0	3,706	0	*	~	0	3,706
Postpartum suture	1344	0	0	0	0	0	~	15,673	*	0	15,699	~	15,673	*	0	15,699
Procedures on musculoskeletal system	**1360–1580**	**3,696**	**11,303**	**10,021**	**8,518**	**33,538**	**3,008**	**6,748**	**12,447**	**14,615**	**36,818**	**6,704**	**18,051**	**22,468**	**23,133**	**70,356**
Arthroplasty of hip	1489	~	*	803	1,528	2,436	~	*	699	2,204	3,017	6	213	1,502	3,732	5,453
Arthroplasty of knee	1518–1519	0	20	407	592	1,019	0	22	452	897	1,371	0	42	859	1,489	2,390
Dermatological and plastic procedures	**1600–1718**	**3,239**	**16,373**	**13,146**	**14,786**	**47,544**	**2,825**	**16,293**	**12,556**	**12,980**	**44,654**	**6,064**	**32,666**	**25,702**	**27,766**	**92,198**
Excision of lesion(s) of skin and subcutaneous tissue	1620	439	4,773	5,262	7,525	17,999	481	6,325	5,494	6,009	18,309	920	11,098	10,756	13,534	36,308
Other debridement of skin and subcutaneous tissue	1628	205	537	338	288	1,368	155	179	174	192	700	360	716	512	480	2,068
Skin graft	1640–1650	16	54	33	55	158	20	32	29	68	149	36	86	62	123	307
Procedures on breast	**1740–1759**	**~**	**88**	**52**	*****	**170**	*****	**3,728**	**4,443**	*****	**10,050**	**13**	**3,816**	**4,495**	**1,896**	**10,220**
Breast biopsy	1743–1744	0	29	34	15	78	8	2,450	2,817	1,387	6,662	8	2,479	2,851	1,402	6,740
Mastectomy	1747–1748	0	28	9	11	48	0	214	461	249	924	0	242	470	260	972
Radiation oncology procedures[a]	**1786–1799**	**205**	**3,298**	**19,428**	**36,605**	**59,536**	**259**	**9,366**	**29,670**	**19,570**	**58,865**	**464**	**12,664**	**49,098**	**56,175**	**118,401**
Non-invasive, cognitive and other interventions, not elsewhere classified	**1820–1922**	**15,231**	**26,238**	**45,135**	**77,899**	**164,503**	**12,959**	**39,002**	**56,396**	**78,019**	**186,376**	**28,190**	**65,240**	**101,531**	**155,918**	**350,879**
Administration of blood and blood products	1893	1,936	1,251	2,677	7,113	12,977	1,221	1,863	2,121	5,600	10,805	3,157	3,114	4,798	12,713	23,782
Conduction anaesthesia	1909	0	11	8	9	28	0	76	9	8	93	0	87	17	17	121
Cerebral anaesthesia	1910	15	21	30	17	83	14	23	33	23	93	29	44	63	40	176
Imaging services[b]	**1940–2016**	**2,475**	**1,404**	**2,517**	**3,814**	**10,210**	**2,071**	**1,249**	**2,066**	**3,602**	**8,988**	**4,546**	**2,653**	**4,583**	**7,416**	**19,198**
Computerised tomography scan	1952–1966	251	403	786	1,316	2,756	207	279	726	872	2,084	458	682	1,512	2,188	4,840
Magnetic resonance imaging	2015	1,538	135	80	72	1,825	1,167	119	106	75	1,467	2,705	254	186	147	3,292

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**	**3.9**	**6.0**	**9.2**	**6.4**	**3.4**	**2.9**	**5.2**	**9.8**	**5.2**	**3.4**	**3.1**	**5.6**	**9.5**	**5.7**
	Median	**1**	**1**	**2**	**4**	**2**	**2**	**2**	**2**	**5**	**2**	**1**	**2**	**2**	**5**	**2**
All Principal Procedures	0001–2016	5.4	5.7	8.5	12.2	9.2	5.6	3.9	7.4	13.1	7.6	5.5	4.3	8.0	12.7	8.3
		2	2	4	7	4	2	3	4	7	4	2	3	4	7	4
Procedures on nervous system	**0001–0086**	**6.0**	**6.7**	**10.6**	**15.0**	**9.3**	**5.5**	**6.0**	**8.9**	**14.3**	**8.3**	**5.8**	**6.3**	**9.7**	**14.6**	**8.8**
		4	**3**	**4**	**7**	**4**	**4**	**3**	**5**	**7**	**4**	**4**	**3**	**5**	**7**	**4**
Lumbar puncture	0030	5.4	5.4	11.9	21.1	8.8	4.9	5.9	8.0	20.4	8.2	5.2	5.7	9.8	20.7	8.5
		4	3	6	12	4	3	3	4	12	4	4	3	5	12	4
Procedures on endocrine system	**0110–0129**	**6.1**	**4.8**	**4.6**	**9.3**	**6.1**	**9.2**	**3.6**	**3.8**	**5.3**	**4.2**	**7.2**	**3.8**	**4.0**	**6.5**	**4.7**
		5	**3**	**3**	**4**	**3**	**3**	**2**	**2**	**3**	**2**	**3**	**2**	**2**	**3**	**2**
Procedures on eye and adnexa	**0160–0256**	**1.8**	**2.6**	**2.9**	**3.1**	**2.8**	**2.6**	**2.7**	**2.4**	**4.6**	**3.5**	**2.2**	**2.7**	**2.7**	**3.9**	**3.1**
		1	**2**	**2**	**2**	**2**	**1**	**2**	**1**	**2**	**1**	**1**	**2**	**2**	**2**	**2**
Lens extraction	0195–0202	1.8	1.8	2.2	2.4	2.2	1.7	2.3	1.9	4.0	3.4	1.7	2.1	2.1	3.2	2.8
		2	2	1	1	1	2	1	1	1	1	2	1	1	1	1
Procedures on ear and mastoid process	**0300–0333**	**1.4**	**1.8**	**2.6**	**5.4**	**2.2**	**1.4**	**1.8**	**2.9**	**6.9**	**2.3**	**1.4**	**1.8**	**2.8**	**6.0**	**2.2**
		1	**1**	**2**	**2**	**1**	**1**	**1**	**1**	**3**	**1**	**1**	**1**	**2**	**2**	**1**
Myringotomy	0309	1.3	1.6	2.8	4.7	1.6	1.3	5.3	2.1	^	2.1	1.3	3.3	2.5	7.1	1.8
		1	1	1	3	1	1	2	1	^	1	1	1	1	3	1
Procedures on nose, mouth and pharynx	**0370–0422**	**1.3**	**1.9**	**4.7**	**7.1**	**2.8**	**1.3**	**1.6**	**3.3**	**5.1**	**2.0**	**1.3**	**1.7**	**4.2**	**6.3**	**2.4**
		1	**1**	**2**	**3**	**1**	**1**	**1**	**2**	**3**	**1**	**1**	**1**	**2**	**3**	**1**
Tonsillectomy or adenoidectomy	0412	1.1	1.3	2.3	3.3	1.2	1.2	1.2	1.5	1.5	1.2	1.1	1.2	1.9	2.5	1.2
		1	1	1	2	1	1	1	1	2	1	1	1	1	2	1
Dental services	**0450–0490**	**1.5**	**3.9**	**11.9**	**11.5**	**4.6**	**1.7**	**2.0**	**4.9**	**39.8**	**3.8**	**1.6**	**2.8**	**8.8**	**19.2**	**4.2**
		1	**1**	**2**	**3**	**1**	**1**	**1**	**3**	**1**	**1**	**1**	**1**	**2**	**2**	**1**
Procedures on respiratory system	**0520–0571**	**18.2**	**14.2**	**17.7**	**17.2**	**17.1**	**21.2**	**14.1**	**14.3**	**18.1**	**17.3**	**19.4**	**14.2**	**16.3**	**17.6**	**17.2**
		9	**6**	**8**	**10**	**9**	**12**	**7**	**8**	**10**	**9**	**10**	**6**	**8**	**10**	**9**
Bronchoscopy with/without biopsy	0543–0544, 41892-1 [0545]	20.9	11.4	14.0	17.1	15.5	24.7	10.5	14.3	15.8	15.2	22.6	11.0	14.2	16.5	15.4
		4	8	8	11	9	5	7	9	10	9	4	8	9	10	9
Procedures on cardiovascular system	**0600–0777**	**16.1**	**5.9**	**5.8**	**8.3**	**7.5**	**13.5**	**7.3**	**6.1**	**9.0**	**8.2**	**15.0**	**6.5**	**5.9**	**8.5**	**7.7**
		8	**2**	**2**	**4**	**3**	**7**	**2**	**2**	**4**	**3**	**7**	**2**	**2**	**4**	**3**
Coronary angiography	0668	14.1	3.6	4.3	5.9	5.3	5.3	4.8	4.1	5.7	5.1	10.1	3.9	4.2	5.8	5.2
		1	2	2	3	2	1	2	2	3	3	1	2	2	3	2
Transluminal coronary angioplasty with/without stenting	0670–0671	-	3.7	3.1	3.9	3.5	-	2.6	3.5	4.7	4.2	-	3.5	3.2	4.1	3.7
		-	2	2	1	2	-	2	2	2	2	-	2	2	2	2
CABG	0672–0679	^	13.9	14.3	17.5	16.1	-	^	18.6	22.0	20.8	^	13.7	14.8	18.3	16.8
		^	10	10	12	11	-	^	14	12	13	^	9	10	12	12
Leg varicose vein ligation	0727–0728	-	1.3	1.3	1.4	1.3	-	1.1	1.1	1.5	1.2	-	1.2	1.2	1.5	1.2
		-	1	1	1	1	-	1	1	1	1	-	1	1	1	1
Procedures on blood and blood-forming organs	**0800–0817**	**11.2**	**15.3**	**14.3**	**14.5**	**14.4**	**15.6**	**12.0**	**9.7**	**15.5**	**12.6**	**13.6**	**13.6**	**12.0**	**14.9**	**13.6**
		5	**9**	**7**	**8**	**8**	**9**	**4**	**4**	**8**	**5**	**6**	**6**	**6**	**8**	**7**
Procedures on digestive system	**0850–1011**	**4.8**	**5.2**	**9.0**	**12.6**	**9.1**	**5.0**	**4.5**	**8.2**	**13.8**	**8.9**	**4.9**	**4.8**	**8.6**	**13.2**	**9.0**
		2	**2**	**4**	**7**	**4**	**3**	**2**	**4**	**8**	**4**	**3**	**2**	**4**	**7**	**4**
Fibreoptic colonoscopy with/without excision	0905, 0911	2.7	6.6	9.4	11.8	10.2	2.0	6.7	7.9	11.4	9.6	2.4	6.7	8.7	11.6	9.9
		3	5	4	6	5	1	5	5	7	6	2	5	5	6	5
Appendicectomy	0926	3.0	2.8	3.9	6.4	3.1	3.2	2.9	4.2	8.0	3.2	3.1	2.8	4.1	7.2	3.1
		2	2	3	5	2	3	2	3	4	3	2	2	3	5	2
Procedures for haemorrhoids	0941	-	1.7	2.4	4.0	2.6	^	2.1	2.1	5.0	3.1	^	1.9	2.3	4.6	2.8
		-	1	1	2	1	^	1	1	1	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	10.1 3	3.2 1	5.1 2	6.5 2	5.2 2	2.0 2	2.4 1	3.0 1	5.2 2	3.1 1	5.6 2	2.6 1	3.7 2	5.8 2	3.8 2
Division of abdominal adhesions	0986	46.0 8	11.3 7	14.3 10	20.3 13	17.6 10	5.6 5	4.2 2	8.7 6	15.0 12	8.7 5	20.8 6	5.6 3	10.4 7	17.1 12	11.4 7
Repair of inguinal and obstructed hernia	0990, 0997	2.0 1	1.7 1	2.0 1	2.8 1	2.4 1	2.5 1	2.4 2	4.0 3	9.7 4	6.7 3	2.0 1	1.8 1	2.3 1	3.8 1	3.0 1
Panendoscopy with/without excision	1005–1008	2.9 2	5.3 3	8.6 4	12.6 7	10.0 5	3.3 2	5.5 3	8.6 5	13.3 7	10.4 6	3.1 2	5.4 3	8.6 5	12.9 7	10.2 5
Procedures on urinary system	**1040–1129**	**5.4 3**	**5.0 3**	**6.1 3**	**9.5 5**	**7.6 4**	**6.1 3**	**4.5 3**	**6.2 3**	**10.3 5**	**7.2 3**	**5.6 3**	**4.7 3**	**6.2 3**	**9.7 5**	**7.5 4**
Examination procedures on bladder (includes cystoscopy)	1089	1.6 1	7.1 2	9.6 3	11.1 5	10.4 4	^ ^	4.8 2	4.5 2	13.8 6	9.3 3	1.4 1	5.9 2	7.5 2	11.7 5	10.1 4
Procedures on male genital organs	**1160–1203**	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	**1.3 1**	**2.6 1**	**5.1 4**	**5.4 4**	**3.9 2**	**1.3 1**
Prostatectomy	1165–1167	- -	5.2 4	5.4 4	5.3 4	5.4 4	- -	- -	- -	- -	- -	- -	5.2 4	5.4 4	5.3 4	5.4 4
Circumcision	30653-00 [1196]	1.4 1	1.4 1	1.4 1	4.5 1	2.1 1	- -	- -	- -	- -	- -	1.4 1	1.4 1	1.4 1	4.5 1	2.1 1
Gynaecological procedures	**1240–1299**	**- -**	**- -**	**- -**	**- -**	**- -**	**2.7 2**	**2.2 1**	**3.8 3**	**5.6 4**	**3.1 2**	**2.7 2**	**2.2 1**	**3.8 3**	**5.6 4**	**3.1 2**
Oophorectomy and salpingo-oophorectomy	1243, 1252	- -	- -	- -	- -	- -	3.7 4	3.8 3	3.1 2	4.6 3	3.6 3	3.7 4	3.8 3	3.1 2	4.6 3	3.6 3
Salpingectomy	1251	- -	- -	- -	- -	- -	^ ^	2.8 2	2.9 1	^ ^	2.8 2	^ ^	2.8 2	2.9 1	^ ^	2.8 2
Examination procedures on uterus	1259	- -	- -	- -	- -	- -	^ ^	2.8 1	2.0 1	6.1 2	3.3 1	^ ^	2.8 1	2.0 1	6.1 2	3.3 1
Curettage and evacuation of uterus	1265	- -	- -	- -	- -	- -	- -	1.4 1	2.3 1	7.7 1	1.5 1	- -	1.4 1	2.3 1	7.7 1	1.5 1
Hysterectomy	1268–1269	- -	- -	- -	- -	- -	- -	4.7 4	4.9 4	6.2 5	5.2 4	- -	4.7 4	4.9 4	6.2 5	5.2 4
Repair of prolapse of uterus, pelvic floor or enterocele	1283	- -	- -	- -	- -	- -	- -	3.2 3	3.2 3	3.9 3	3.5 3	- -	3.2 3	3.2 3	3.9 3	3.5 3
Obstetric procedures	**1330–1347**	**- -**	**- -**	**- -**	**- -**	**- -**	**^ ^**	**3.6 3**	**5.8 5**	**- -**	**3.6 3**	**^ ^**	**3.6 3**	**5.8 5**	**- -**	**3.6 3**
Analgesia and anaesthesia during labour and delivery procedure	1333	- -	- -	- -	- -	- -	- -	2.8 2	^ ^	- -	2.8 2	- -	2.8 2	^ ^	- -	2.8 2
Medical or surgical induction of labour	1334	- -	- -	- -	- -	- -	- -	3.2 3	^ ^	- -	3.2 3	- -	3.2 3	^ ^	- -	3.2 3
Medical or surgical augmentation of labour	1335	- -	- -	- -	- -	- -	- -	2.3 2	2.1 2	- -	2.3 2	- -	2.3 2	2.1 2	- -	2.3 2
Forceps delivery	1337	- -	- -	- -	- -	- -	- -	3.6 3	- -	- -	3.6 3	- -	3.6 3	- -	- -	3.6 3
Vacuum extraction	1338	- -	- -	- -	- -	- -	- -	3.2 3	4.9 3	- -	3.2 3	- -	3.2 3	4.9 3	- -	3.2 3
Breech delivery and extraction	1339	- -	- -	- -	- -	- -	- -	6.1 4	^ ^	- -	6.0 4	- -	6.1 4	^ ^	- -	6.0 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]	-	-	-	-	-	-	3.1	^	-	3.1	-	3.1	^	-	3.1
		-	-	-	-	-	-	3	^	-	3	-	3	^	-	3
Postpartum suture	1344	-	-	-	-	-	^	2.5	2.9	-	2.5	^	2.5	2.9	-	2.5
		-	-	-	-	-	^	2	3	-	2	^	2	3	-	2
Procedures on musculoskeletal system	**1360–1580**	**2.0**	**3.7**	**6.6**	**13.2**	**6.8**	**2.2**	**3.6**	**5.1**	**12.2**	**7.9**	**2.1**	**3.6**	**5.8**	**12.6**	**7.4**
		1	**1**	**3**	**6**	**2**	**1**	**2**	**3**	**6**	**4**	**1**	**1**	**3**	**6**	**3**
Arthroplasty of hip	1489	^	4.4	5.7	11.3	9.2	^	5.0	5.9	12.8	10.9	8.8	4.7	5.8	12.2	10.1
		^	4	4	6	5	^	4	4	7	6	5	4	4	7	6
Arthroplasty of knee	1518–1519	-	5.2	4.7	5.9	5.4	-	5.2	4.7	5.5	5.3	-	5.2	4.7	5.7	5.3
		-	4	4	5	4	-	4	4	5	5	-	4	4	5	5
Dermatological and plastic procedures	**1600–1718**	**2.9**	**3.4**	**7.7**	**11.1**	**5.6**	**3.3**	**3.3**	**6.2**	**11.0**	**5.4**	**3.1**	**3.3**	**7.2**	**11.1**	**5.5**
		1	**1**	**2**	**3**	**2**	**1**	**1**	**2**	**4**	**2**	**1**	**1**	**2**	**3**	**2**
Excision of lesion(s) of skin and subcutaneous tissue	1620	1.3	2.1	2.7	7.5	5.4	1.1	1.5	3.1	5.6	4.2	1.2	1.8	2.9	6.7	4.8
		1	1	1	2	1	1	1	1	1	1	1	1	1	1	1
Other debridement of skin and subcutaneous tissue	1628	1.3	4.7	10.6	18.0	8.7	1.6	5.5	9.8	15.5	8.7	1.5	4.9	10.4	17.1	8.7
		1	2	3	7	2	1	1	4	9	3	1	2	3	8	2
Skin graft	1640–1650	4.1	8.6	13.6	16.7	11.1	10.6	9.9	9.6	20.6	14.2	7.6	9.0	11.9	18.8	12.5
		2	5	13	13	8	6	7	8	15	10	2	6	10	14	9
Procedures on breast	**1740–1759**	**^**	**2.5**	**7.2**	**5.3**	**4.1**	**^**	**2.5**	**3.3**	**5.4**	**3.6**	**^**	**2.5**	**3.3**	**5.4**	**3.6**
		^	**2**	**2**	**3**	**2**	**^**	**1**	**2**	**2**	**2**	**^**	**1**	**2**	**2**	**2**
Breast biopsy	1743–1744	-	^	^	^	9.9	-	1.6	1.9	5.7	3.2	-	1.6	2.1	5.7	3.2
		-	^	^	^	2	-	1	1	1	1	-	1	1	1	1
Mastectomy	1747–1748	-	3.0	2.0	4.4	3.3	-	4.1	4.7	5.8	4.9	-	4.0	4.7	5.7	4.8
		-	4	1	3	3	-	3	4	4	4	-	3	4	4	4
Radiation oncology procedures	**1786–1799**	**^**	**20.1**	**19.6**	**20.3**	**20.0**	**^**	**10.8**	**17.8**	**21.1**	**17.7**	**^**	**12.8**	**18.5**	**20.6**	**18.7**
		^	**10**	**14**	**14**	**14**	**^**	**5**	**13**	**17**	**12**	**^**	**5**	**13**	**15**	**13**
Non-invasive, cognitive and other interventions, not elsewhere classified	**1820–1922**	**4.8**	**7.4**	**9.2**	**12.8**	**10.5**	**5.1**	**5.2**	**9.1**	**13.9**	**10.7**	**4.9**	**6.1**	**9.2**	**13.4**	**10.6**
		3	**4**	**5**	**7**	**6**	**3**	**2**	**5**	**8**	**6**	**3**	**3**	**5**	**8**	**6**
Administration of blood and blood products	1893	3.9	7.8	9.5	11.1	9.9	4.7	4.6	9.6	11.1	9.3	4.3	5.6	9.5	11.1	9.6
		2	4	6	6	5	2	2	4	6	5	2	3	5	6	5
Conduction anaesthesia	1909	-	^	^	17.8	12.0	-	4.0	^	^	4.0	-	4.1	^	12.6	5.0
		-	^	^	9	2	-	3	^	^	3	-	3	^	2	3
Cerebral anaesthesia	1910	^	18.1	20.6	5.7	14.7	6.8	3.6	10.0	7.9	6.8	7.8	11.8	15.3	6.8	10.7
		^	2	5	6	3	6	3	6	4	4	6	2	5	5	3
Imaging services	**1940–2016**	**5.9**	**10.7**	**9.5**	**13.7**	**10.6**	**6.1**	**6.3**	**9.8**	**13.0**	**9.8**	**6.0**	**8.4**	**9.6**	**13.4**	**10.2**
		1	**4**	**5**	**7**	**4**	**2**	**3**	**5**	**7**	**5**	**1**	**3**	**5**	**7**	**4**
Computerised tomography scan	1952-1966	4.6	11.7	6.7	8.9	8.3	7.2	1.5	2.1	5.9	4.3	6.0	6.2	4.4	7.3	6.2
		1	1	1	1	1	3	1	1	1	1	2	1	1	1	1
Magnetic resonance imaging	2015	6.7	10.0	6.9	22.2	7.8	6.9	5.2	15.9	11.1	8.0	6.8	7.6	12.0	14.9	7.9
		1	2	3	10	1	3	1	3	5	3	2	1	3	6	2

Notes: ^ 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	-	**73,961**	**147,296**	**234,085**	**333,360**	**788,702**	**58,716**	**323,827**	**249,502**	**283,705**	**915,750**	**132,677**	**471,123**	**483,587**	**617,065**	**1,704,452**
All Procedures	0001–2016	**90,854**	**202,405**	**346,679**	**505,485**	**1,145,423**	**68,552**	**448,899**	**368,803**	**435,038**	**1,321,292**	**159,406**	**651,304**	**715,482**	**940,523**	**2,466,715**
Procedures on nervous system	**0001–0086**	**1,982**	**4,651**	**5,708**	**4,031**	**16,372**	**1,444**	**6,032**	**8,108**	**6,618**	**22,202**	**3,426**	**10,683**	**13,816**	**10,649**	**38,574**
Lumbar puncture	0030	1,504	932	709	489	3,634	1,057	1,456	766	543	3,822	2,561	2,388	1,475	1,032	7,456
Procedures on endocrine system	**0110–0129**	**24**	**115**	**191**	**139**	**469**	**16**	**427**	**564**	**334**	**1,341**	**40**	**542**	**755**	**473**	**1,810**
Procedures on eye and adnexa	**0160–0256**	**991**	**1,985**	**6,360**	**14,972**	**24,308**	**740**	**1,675**	**4,044**	**18,298**	**24,757**	**1,731**	**3,660**	**10,404**	**33,270**	**49,065**
Lens extraction	0195–0202	48	125	969	3,928	5,070	33	133	873	5,366	6,405	81	258	1,842	9,294	11,475
Procedures on ear and mastoid process	**0300–0333**	**2,711**	**1,210**	**1,003**	**840**	**5,764**	**1,900**	**1,218**	**985**	**742**	**4,845**	**4,611**	**2,428**	**1,988**	**1,582**	**10,609**
Myringotomy	0309	1,614	130	96	59	1,899	1,056	135	92	49	1,332	2,670	265	188	108	3,231
Procedures on nose, mouth and pharynx	**0370–0422**	**2,805**	**3,410**	**2,820**	**1,978**	**11,013**	**2,063**	**3,466**	**2,323**	**1,460**	**9,312**	**4,868**	**6,876**	**5,143**	**3,438**	**20,325**
Tonsillectomy or adenoidectomy	0412	1,537	375	41	17	1,970	1,319	898	33	6	2,256	2,856	1,273	74	23	4,226
Dental services	**0450–0490**	**4,260**	**1,713**	**486**	**192**	**6,651**	**3,486**	**1,760**	**362**	**107**	**5,715**	**7,746**	**3,473**	**848**	**299**	**12,366**
Procedures on respiratory system	**0520–0571**	**3,203**	**2,965**	**6,271**	**8,882**	**21,321**	**2,198**	**2,189**	**4,872**	**6,932**	**16,191**	**5,401**	**5,154**	**11,143**	**15,814**	**37,512**
Bronchoscopy with/without biopsy	0543–0544, 41892-01[0545]	280	925	2,059	2,837	6,101	221	764	1,938	2,352	5,275	501	1,689	3,997	5,189	11,376
Procedures on cardiovascular system	**0600–0777**	**2,604**	**7,346**	**23,836**	**22,828**	**56,614**	**2,206**	**4,320**	**11,543**	**12,477**	**30,546**	**4,810**	**11,666**	**35,379**	**35,305**	**87,160**
Coronary angiography	0668	268	829	6,460	6,871	14,428	242	311	2,889	4,018	7,460	510	1,140	9,349	10,889	21,888
Transluminal coronary angioplasty with/without stenting	0670–0671	~	*	2,293	2,487	5,009	~	*	517	958	1,509	~	*	2,810	3,445	6,518
CABG	0672–0679	~	*	617	856	1,514	0	7	83	202	292	~	*	700	1,058	1,806
Leg varicose vein ligation	0727–0728	0	449	695	327	1,471	0	1,131	1,173	489	2,793	0	1,580	1,868	816	4,264
Procedures on blood and blood-forming organs	**0800–0817**	**313**	**722**	**1,597**	**2,197**	**4,829**	**294**	**1,372**	**2,767**	**2,535**	**6,968**	**607**	**2,094**	**4,364**	**4,732**	**11,797**
Procedures on digestive system	**0850–1011**	**3,235**	**27,148**	**42,285**	**40,900**	**113,568**	**2,296**	**35,653**	**41,364**	**36,798**	**116,111**	**5,531**	**62,801**	**83,649**	**77,698**	**229,679**
Fibreoptic colonoscopy with/without excision	0905, 0911	143	9,238	17,118	16,196	42,695	101	11,816	17,201	14,302	43,420	244	21,054	34,319	30,498	86,115
Appendicectomy	0926	1,191	1,937	359	132	3,619	936	1,951	451	191	3,529	2,127	3,888	810	323	7,148
Procedures for haemorrhoids	0941	~	1,643	1,941	*	4,256	~	1,692	1,478	*	3,948	~	3,335	3,419	*	8,204
Cholecystectomy	0965	7	355	633	492	1,487	9	1,704	1,269	532	3,514	16	2,059	1,902	1,024	5,001
Division of abdominal adhesions	0986	37	233	313	394	977	43	1,225	690	485	2,443	80	1,458	1,003	879	3,420
Repair of inguinal and obstructed hernia	0990, 0997	417	764	1,154	1,307	3,642	78	88	119	182	467	495	852	1,273	1,489	4,109
Panendoscopy with/without excision	1005–1008	439	8,840	13,099	13,247	35,625	423	11,430	14,178	13,677	39,708	862	20,270	27,277	26,924	75,333
Procedures on urinary system	**1040–1129**	**898**	**18,104**	**38,696**	**75,189**	**132,887**	**811**	**13,118**	**26,991**	**41,261**	**82,181**	**1,709**	**31,222**	**65,687**	**116,450**	**215,068**
Examination procedures on bladder (includes cystoscopy)	1089	83	1,178	3,122	6,097	10,480	63	1,411	2,576	2,735	6,785	146	2,589	5,698	8,832	17,265
Procedures on male genital organs	**1160–1203**	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	**3,310**	**1,503**	**2,977**	**2,878**	**10,668**
Prostatectomy	1165–1167	0	13	381	701	1,095	0	0	0	0	0	0	13	381	701	1,095
Circumcision	30653-00[1196]	1,457	432	249	142	2,280	0	0	0	0	0	1,457	432	249	142	2,280
Gynaecological procedures	**1240–1299**	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	**137**	**44,410**	**21,395**	**4,435**	**70,377**
Oophorectomy and salpingo-oophorectomy	1243, 1252	0	0	0	0	0	8	413	440	157	1,018	8	413	440	157	1,018
Salpingectomy	1251	0	0	0	0	0	~	746	65	~	817	~	746	65	~	817
Examination procedures on uterus	1259	0	0	0	0	0	~	4,520	5,384	*	10,894	~	4,520	5,384	*	10,894
Curettage and evacuation of uterus	1265	0	0	0	0	0	~	7,539	4,492	*	12,837	~	7,539	4,492	*	12,837
Hysterectomy	1268–1269	0	0	0	0	0	0	531	1,330	621	2,482	0	531	1,330	621	2,482
Repair of prolapse of uterus, pelvic floor or enterocele	1283	0	0	0	0	0	~	*	624	575	1,339	~	*	624	575	1,339

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**	**~**	**125,612**	**358**	**~**	**125,975**	**~**	**125,612**	**358**	**~**	**125,975**
Analgesia and anaesthesia during labour and delivery procedure	1333	0	0	0	0	0	0	24,058	31	0	24,089	0	24,058	31	0	24,089
Medical or surgical induction of labour	1334	0	0	0	0	0	0	18,967	47	0	19,014	0	18,967	47	0	19,014
Medical or surgical augmentation of labour	1335	0	0	0	0	0	~	11,511	*	0	11,531	~	11,511	*	0	11,531
Forceps delivery	1337	0	0	0	0	0	0	2,442	0	0	2,442	0	2,442	0	0	2,442
Vacuum extraction	1338	0	0	0	0	0	0	8,141	9	0	8,150	0	8,141	9	0	8,150
Breech delivery and extraction	1339	0	0	0	0	0	0	*	~	0	183	0	*	~	0	183
Caesarean section	1340	0	0	0	0	0	~	19,974	*	0	20,170	~	19,974	*	0	20,170
Episiotomy associated with delivery	90472-00[1343]	0	0	0	0	0	0	10,640	9	0	10,649	0	10,640	9	0	10,649
Postpartum suture	1344	0	0	0	0	0	~	19,513	*	0	19,543	~	19,513	*	0	19,543
Procedures on musculoskeletal system	**1360–1579**	**4,909**	**14,539**	**12,917**	**10,622**	**42,987**	**4,333**	**9,007**	**16,134**	**18,078**	**47,552**	**9,242**	**23,546**	**29,051**	**28,700**	**90,539**
Arthroplasty of hip	1489	~	*	813	1,554	2,480	~	*	708	2,231	3,054	~	*	1,521	3,785	5,534
Arthroplasty of knee	1518–1519	0	20	408	594	1,022	~	*	453	902	1,378	~	*	861	1,496	2,400
Dermatological and plastic procedures	**1600–1718**	**4,832**	**19,957**	**16,788**	**20,464**	**62,041**	**4,021**	**19,122**	**15,697**	**16,984**	**55,824**	**8,853**	**39,079**	**32,485**	**37,448**	**117,865**
Excision of lesion(s) of skin and subcutaneous tissue	1620	502	6,064	6,822	9,786	23,174	542	8,034	7,036	7,538	23,150	1,044	14,098	13,858	17,324	46,324
Other debridement of skin and subcutaneous tissue	1628	458	1,498	974	877	3,807	366	441	542	645	1,994	824	1,939	1,516	1,522	5,801
Skin graft	1640–1650	47	208	273	730	1,258	41	89	161	527	818	88	297	434	1,257	2,076
Procedures on breast	**1740–1759**	**~**	**97**	**57**	*****	**186**	*****	**4,329**	**5,514**	*****	**12,043**	**13**	**4,426**	**5,571**	**2,219**	**12,229**
Breast biopsy	1743–1744	0	29	37	17	83	8	2,561	2,978	1,508	7,055	8	2,590	3,015	1,525	7,138
Mastectomy	1747–1748	0	28	9	11	48	0	214	464	254	932	0	242	473	265	980
Radiation oncology procedures[a]	**1786–1799**	**219**	**6,875**	**38,688**	**65,245**	**111,027**	**278**	**16,789**	**48,933**	**30,922**	**96,922**	**497**	**23,664**	**87,621**	**96,167**	**207,949**
Non-invasive, cognitive and other interventions, not elsewhere classified	**1820–1922**	**51,320**	**88,062**	**141,028**	**227,199**	**507,609**	**39,597**	**156,151**	**153,306**	**229,594**	**578,648**	**90,917**	**244,213**	**294,334**	**456,793**	**1,086,257**
Administration of blood and blood products	1893	3,241	2,426	5,614	12,749	24,030	2,351	4,529	4,235	10,300	21,415	5,592	6,955	9,849	23,049	45,445
Conduction anaesthesia	1909	424	1,623	3,326	5,913	11,286	107	17,550	3,851	7,520	29,028	531	19,173	7,177	13,433	40,314
Cerebral anaesthesia	1910	22,256	39,770	52,336	51,954	166,316	15,437	55,377	58,831	48,449	178,094	37,693	95,147	111,167	100,403	344,410
Imaging services[b]	**1940–2016**	**3,236**	**2,004**	**4,971**	**6,898**	**17,109**	**2,717**	**2,248**	**3,543**	**5,274**	**13,782**	**5,953**	**4,252**	**8,514**	**12,172**	**30,891**
Computerised tomography scan	1952–1966	302	501	1,014	1,592	3,409	245	358	905	1,194	2,702	547	859	1,919	2,786	6,111
Magnetic resonance imaging	2015	1,870	180	111	105	2,266	1,416	163	138	106	1,823	3,286	343	249	211	4,089

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 2016

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 2016.[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 in 2015. 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 previous reports.[3]
- Section 4.3 presents analysis of HIPE data by case mix for day patients and in-patients.

4.2 OVERVIEW

4.2.1 Case Mix Classification

- The Diagnosis Related Group (DRG) scheme enables the disaggregation of patients into homogeneous groups, which undergo similar treatment processes and incur similar levels of resource use.
- The data required for DRG assignment include principal and secondary diagnoses, procedures performed, age, sex and patient destination on discharge from hospital.
- Since the inception of the national case mix programme, the DRG classification scheme has been adopted as the national standard for Ireland.[4] 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.[5] As all of the data required for AR-DRG classification are available on the HIPE system, and since diagnoses and procedures are coded with ICD-10-AM/ACHI/ACS,

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

4 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.

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

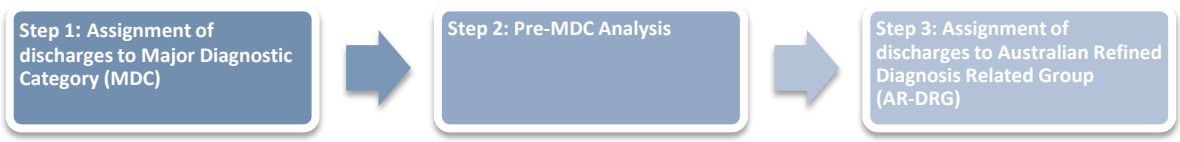
discharges are assigned to the AR-DRG system from this database. AR-DRG Version 6.0 was used in Ireland from 2009-2014.[6] In 2015, this classification was updated to AR-DRG Version 8.0[7].

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.[8]
- 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



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

- 'A' is either a letter (indicating the broad group of the DRG) or an '8' or a '9' (indicating an unrelated operating room procedure DRG or an error DRG, respectively).[9]
- 'DD' identifies the partition to which the adjacent DRG belongs.[10] Both characters are numbers whose values indicate whether the code is surgical,

6 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.

7 This report is the first HIPE Annual Report to use AR-DRG Version 8.0.

8 '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.

9 '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.[11] 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.

- 'S' is a complexity split indicator that ranks DRGs within adjacent DRGs on the basis of their level of complexity/resource use. It is either 'A', 'B', 'C', 'D' or 'Z' with 'A' being the most complex or 'Z' indicating that there is no complexity split.[12] 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.[13]

4.2.2.1 AR-DRG Complexity Split

The AR-DRG complexity split for total discharges is presented in Table 4.1. Almost 27 per cent of total discharges had no complexity split. Over 26 per cent of in-patient discharges were assigned to complexity group A '*Highest consumption of resources'*, while 58.3 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	35,469	3.3	14,407	11.6	153,690	29.6	168,097	26.1	203,566	11.9
B Second highest consumption of resources	403,461	38.0	92,570	74.6	282,613	54.4	375,183	58.3	778,644	45.7
C Third highest consumption of resources	193,219	18.2	4,601	3.7	58,006	11.2	62,607	9.7	255,826	15.0
D Fourth highest consumption of resources	315	0.0	854	0.7	6,958	1.3	7,812	1.2	8,127	0.5
Z No complexity split	428,138	40.4	11,680	9.4	18,471	3.6	30,151	4.7	458,289	26.9
Total Discharges	**1,060,602**	**100.0**	**124,112**	**100.0**	**519,738**	**100.0**	**643,850**	**100.0**	**1,704,452**	**100.0**

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

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

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

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

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.

4.3 Analysis of HIPE Data by Case Mix

The analysis presented in this section includes all discharges reported to HIPE. Analysis of 2016 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.[14]

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 253,572 discharges or 23.9 per cent of day patients (see Tables 4.2 and 4.19 and Figure 4.3).
    - *Chemotherapy* (AR-DRG R63Z) accounted for 45.1 per cent of day patients within this MDC, and 10.8 per cent of total day patients; *Other Neoplastic Disorders, Minor Complexity* (AR-DRG R62C) accounted for 43.3 per cent of day patients within this MDC and 10.3 per cent of total day patients.[15]

- *Diseases and disorders of the kidney and urinary tract* (MDC 11), with 197,927 discharges, accounted for 18.7 per cent of day patients (see Tables 4.2 and 4.13 and Figure 4.3).
    - *Haemodialysis* (AR-DRG L61Z) accounted for 86.3 per cent of day patients within this MDC and 16.1 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 114,817 discharges, which accounted for 17.8 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 6.7 per cent of total in-patient discharges.

[14] See Glossary & Abbreviations for details of the abbreviations used in this section.
[15] 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 35.9 per cent of in-patients within this MDC and 6.4 per cent of total in-patient discharges.
- *Caesarean Delivery* (AR-DRGs O01A, O01B and O01C) accounted for 17.6 per cent of in-patients within this MDC, with *Caesarean Delivery, Minor Complexity* (AR-DRG O01C) accounting for the majority of these cases (59.7 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 4.7 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 4.2 days for *Caesarean Delivery, Minor Complexity* (AR-DRG O01C) to 10.9 days for *Caesarean Delivery, Major Complexity* (AR-DRG O01A).

- *Diseases and Disorders of the Circulatory System* (MDC 5), with 77,793 discharges, accounted for 12.1 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 75,681 discharges, accounted for 11.8 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	22,354	2.1	50,107	7.8	72,461	4.3
02 Diseases and disorders of the eye	49,928	4.7	5,865	0.9	55,793	3.3
03 Diseases and disorders of the ear, nose, mouth and throat	26,937	2.5	29,255	4.5	56,192	3.3
04 Diseases and disorders of the respiratory system	18,074	1.7	75,681	11.8	93,755	5.5
05 Diseases and disorders of the circulatory system	26,489	2.5	77,793	12.1	104,282	6.1
06 Diseases and disorders of the digestive system	133,078	12.5	67,643	10.5	200,721	11.8
07 Diseases and disorders of the hepatobiliary system and pancreas	8,201	0.8	15,858	2.5	24,059	1.4
08 Diseases and disorders of the musculoskeletal system and connective tissue	63,895	6.0	53,128	8.3	117,023	6.9
09 Diseases and disorders of the skin, subcutaneous tissue and breast	91,157	8.6	19,890	3.1	111,047	6.5
10 Endocrine, nutritional and metabolic diseases and disorders	5,962	0.6	11,392	1.8	17,354	1.0
11 Diseases and disorders of the kidney and urinary tract	197,927	18.7	29,052	4.5	226,979	13.3
12 Diseases and disorders of the male reproductive system	12,552	1.2	4,278	0.7	16,830	1.0
13 Diseases and disorders of the female reproductive system	33,163	3.1	11,552	1.8	44,715	2.6
14 Pregnancy, childbirth and the puerperium	11,655	1.1	114,817	17.8	126,472	7.4
15 Newborns and other neonates	489	0.0	14,463	2.2	14,952	0.9
16 Diseases and disorders of blood, blood forming organs, immunological disorders	41,824	3.9	7,655	1.2	49,479	2.9
17 Neoplastic disorders (haematological and solid neoplasms)[a]	253,572	23.9	5,214	0.8	258,786	15.2
18 Infectious and parasitic diseases, systemic or unspecified sites	1,019	0.1	11,293	1.8	12,312	0.7
19 Mental diseases and disorders	601	0.1	2,490	0.4	3,091	0.2
20 Alcohol/drug use and alcohol/drug induced organic mental disorders	~	0.0	*	0.4	2,635	0.2
21 Injuries, poisonings and toxic effects of drugs	1,241	0.1	15,442	2.4	16,683	1.0
22 Burns	*	0.0	*	0.1	673	0.0
23 Factors influencing health status and other contacts with health services	59,899	5.6	13,734	2.1	73,633	4.3
Unassignable to MDC	306	0.0	1,239	0.2	1,545	0.1
Pre-MDC	161	0.0	2,819	0.4	2,980	0.2
Total Discharges	**1,060,602**	**100**	**643,850**	**100**	**1,704,452**	**100**

Notes:

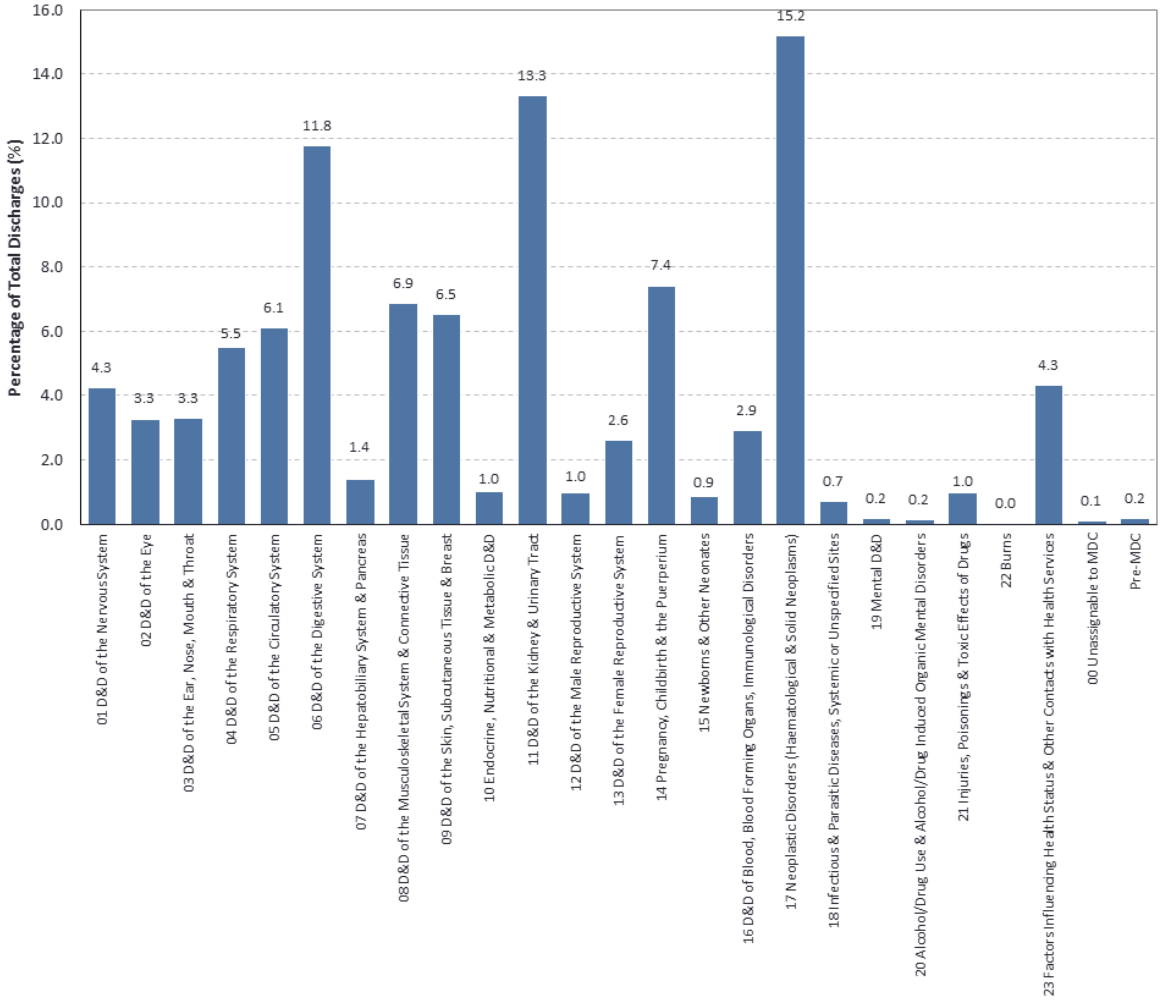
Percentage columns are subject to rounding.

~ Denotes five or fewer discharges reported to HIPE.

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

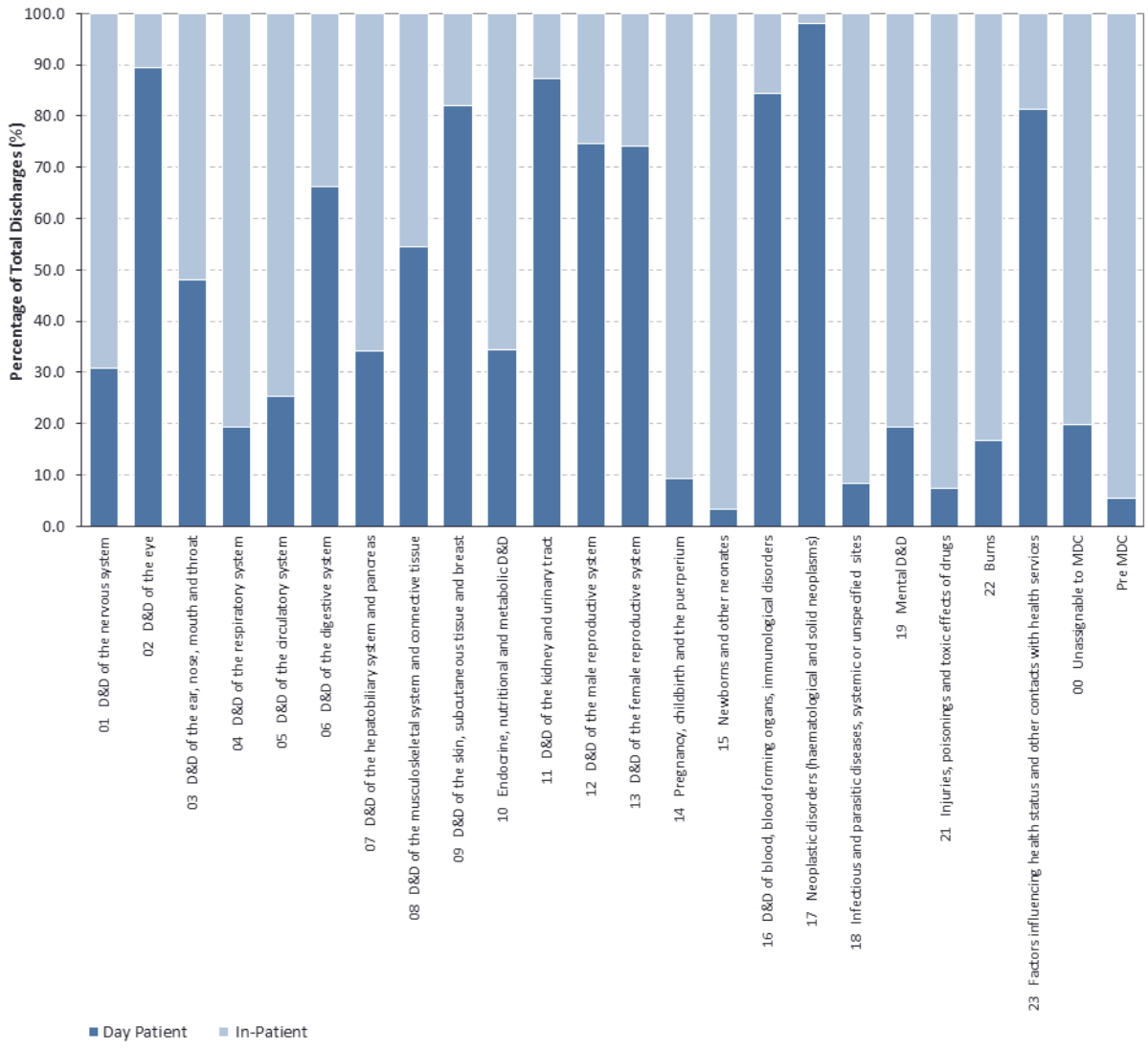
a From 2015 this data includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

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



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

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



Notes: D&D = Diseases and disorders
Percentages based on five or fewer discharges are not included in this figure.

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	29	7.2	3
B01B Ventricular Shunt Revision, Minor Complexity	~	71	4.2	3
B02A Cranial Procedures, Major Complexity	0	158	25.5	17
B02B Cranial Procedures, Intermediate Complexity	0	609	12.7	8
B02C Cranial Procedures, Minor Complexity	~	1,069	6.4	5
B03A Spinal Procedures, Major Complexity	0	49	17.8	10
B03B Spinal Procedures, Intermediate Complexity	~	112	5.0	3
B03C Spinal Procedures, Minor Complexity	24	83	3.9	2
B04A Extracranial Vascular Procedures, Major Complexity	0	46	20.2	20
B04B Extracranial Vascular Procedures, Intermediate Complexity	0	112	10.9	10
B04C Extracranial Vascular Procedures, Minor Complexity	~	184	4.5	3
B05Z Carpal Tunnel Release	1,862	40	1.7	1
B06A Procedures for Cerebral Palsy, Muscular Dystrophy and Neuropathy, Major Comp	~	45	31.4	23
B06B Procedures for Cerebral Palsy, Muscular Dystrophy and Neuropathy, Interm Comp	10	51	12.0	7
B06C Procedures for Cerebral Palsy, Muscular Dystrophy and Neuropathy, Minor Comp	221	113	5.0	2
B07A Cranial or Peripheral Nerve and Other Nervous System Procedures, Major Comp	~	60	18.1	7
B07B Cranial or Peripheral Nerve and Other Nervous System Procedures, Minor Comp	129	332	2.3	1
B40Z Plasmapheresis W Neurological Disease, Sameday	52	~	^	^
B41Z Telemetric EEG Monitoring	16	268	6.2	6
B42A Nervous System Disorders W Ventilator Support, Major Complexity	0	53	20.5	14
B42B Nervous System Disorders W Ventilator Support, Minor Complexity	0	137	6.3	3
B60A Acute Paraplegia and Quadriplegia W or W/O OR Procedures, Major Complexity	0	24	44.0	19
B60B Acute Paraplegia and Quadriplegia W or W/O OR Procedures, Minor Complexity	9	60	18.8	7
B61A Spinal Cord Conditions W or W/O OR Procedures, Major Complexity	0	81	24.1	14
B61B Spinal Cord Conditions W or W/O OR Procedures, Minor Complexity	16	118	10.1	5
B62Z Apheresis	265	*	^	^
B63A Dementia and Other Chronic Disturbances of Cerebral Function, Major Complexity	81	569	45.0	22
B63B Dementia and Other Chronic Disturbances of Cerebral Function, Minor Complexity	187	408	19.5	8
B64A Delirium, Major Complexity	19	870	15.9	8
B64B Delirium, Minor Complexity	46	958	4.4	2
B65A Cerebral Palsy, Major Complexity	49	22	6.5	3
B65B Cerebral Palsy, Minor Complexity	210	18	2.4	1
B66A Nervous System Neoplasms, Major Complexity	65	495	16.9	11
B66B Nervous System Neoplasms, Minor Complexity	2,016	665	9.0	5
B67A Degenerative Nervous System Disorders, Major Complexity	121	876	21.6	11
B67B Degenerative Nervous System Disorders, Intermediate Complexity	409	631	6.0	3
B67C Degenerative Nervous System Disorders, Minor Complexity	502	117	4.7	4
B68A Multiple Sclerosis and Cerebellar Ataxia, Major Complexity	227	452	13.4	6
B68B Multiple Sclerosis and Cerebellar Ataxia, Minor Complexity	4,835	418	4.5	3
B69A TIA and Precerebral Occlusion, Major Complexity	~	1,102	7.9	5
B69B TIA and Precerebral Occlusion, Minor Complexity	38	2,053	3.1	2
B70A Stroke and Other Cerebrovascular Disorders, Major Complexity	~	940	44.0	29
B70B Stroke and Other Cerebrovascular Disorders, Intermediate Complexity	~	2,360	16.7	10
B70C Stroke and Other Cerebrovascular Disorders, Minor Complexity	33	2,533	8.6	6
B70D Stroke and Other Cerebrovascular Disorders, Transferred <5 Days	~	311	1.7	1
B71A Cranial and Peripheral Nerve Disorders, Major Complexity	1,470	1,319	5.2	2
B71B Cranial and Peripheral Nerve Disorders, Minor Complexity	2,869	330	4.5	2
B72A Nervous System Infection Except Viral Meningitis, Major Complexity	8	247	20.8	13
B72B Nervous System Infection Except Viral Meningitis, Minor Complexity	98	211	9.1	6
B73Z Viral Meningitis	9	351	5.4	4
B74A Nontraumatic Stupor and Coma, Major Complexity	~	78	12.9	5
B74B Nontraumatic Stupor and Coma, Minor Complexity	19	148	2.9	1
B75Z Febrile Convulsions	19	760	1.7	1
B76A Seizures, Major Complexity	100	2,331	7.6	4
B76B Seizures, Minor Complexity	848	4,936	2.6	1
B77A Headaches, Major Complexity	113	2,059	3.6	2
B77B Headaches, Minor Complexity	1,371	7,544	1.5	1
B78A Intracranial Injuries, Major Complexity	0	309	28.0	12
B78B Intracranial Injuries, Minor Complexity	~	618	6.6	4
B78C Intracranial Injuries, Transferred <5 Days	0	95	1.7	1
B79A Skull Fractures, Major Complexity	0	146	9.1	3

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	~	175	2.1	1
B80A Other Head Injuries, Major Complexity	0	412	7.9	3
B80B Other Head Injuries, Minor Complexity	7	3,098	1.3	1
B81A Other Disorders of the Nervous System, Major Complexity	58	1,018	18.8	9
B81B Other Disorders of the Nervous System, Minor Complexity	3,538	3,516	4.1	1
B82A Chronic & Unspec Para/Quadriplegia W or W/O OR Proc, Major Complexity	~	98	71.5	28
B82B Chronic & Unspec Para/Quadriplegia W or W/O OR Proc, Intermediate Complexity	23	364	29.0	9
B82C Chronic & Unspec Para/Quadriplegia W or W/O OR Proc, Minor Complexity	328	233	12.1	4
Total Discharges	**22,354**	**50,107**	**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.
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	~	34	5.7	5
C01B Procedures for Penetrating Eye Injury, Minor Complexity	~	43	4.1	3
C02Z Enucleations and Orbital Procedures	51	98	3.2	1
C03A Retinal Procedures, Major Complexity	3,331	1,149	2.9	2
C03B Retinal Procedures, Minor Complexity	21,951	184	2.2	1
C04A Major Corneal, Scleral and Conjunctival Procedures, Major Complexity	~	58	5.0	3
C04B Major Corneal, Scleral and Conjunctival Procedures, Minor Complexity	43	87	2.5	2
C05Z Dacryocystorhinostomy	86	122	1.3	1
C10Z Strabismus Procedures	667	143	1.0	1
C11Z Eyelid Procedures	840	143	2.2	1
C12Z Other Corneal, Scleral and Conjunctival Procedures	380	88	5.0	4
C13Z Lacrimal Procedures	447	17	2.3	1
C14A Other Eye Procedures, Major Complexity	126	76	4.9	4
C14B Other Eye Procedures, Minor Complexity	1,593	110	1.9	1
C15Z Glaucoma and Complex Cataract Procedures	613	337	2.6	1
C16Z Lens Procedures	10,514	382	1.9	1
C60A Acute and Major Eye Infections, Major Complexity	~	51	10.0	7
C60B Acute and Major Eye Infections, Minor Complexity	27	154	4.8	4
C61A Neurological and Vascular Disorders of the Eye, Major Complexity	279	374	4.8	2
C61B Neurological and Vascular Disorders of the Eye, Minor Complexity	635	459	2.4	1
C62A Hyphaema and Medically Managed Trauma to the Eye, Major Complexity	44	202	7.3	3
C62B Hyphaema and Medically Managed Trauma to the Eye, Minor Complexity	85	307	1.8	1
C63A Other Disorders of the Eye, Major Complexity	384	225	4.3	3
C63B Other Disorders of the Eye, Intermediate Complexity	3,007	898	2.1	1
C63C Other Disorders of the Eye, Minor Complexity	4,817	124	1.8	1
Total Discharges	**49,928**	**5,865**	**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	~	161	2.7	2
D02A Head and Neck Procedures, Major Complexity	0	79	16.5	10
D02B Head and Neck Procedures, Intermediate Complexity	0	54	8.0	5
D02C Head and Neck Procedures, Minor Complexity	26	110	3.5	2
D03Z Surgical Repair for Cleft Lip and Palate Disorders	15	150	2.3	2
D04A Maxillo Surgery, Major Complexity	30	454	3.1	2
D04B Maxillo Surgery, Minor Complexity	36	336	2.3	2
D05Z Parotid Gland Procedures	~	184	2.6	2
D06Z Sinus and Complex Middle Ear Procedures	312	646	1.6	1
D10Z Nasal Procedures	479	523	1.4	1
D11Z Tonsillectomy and Adenoidectomy	647	3,961	1.3	1
D12A Other Ear, Nose, Mouth and Throat Procedures, Major Complexity	75	151	8.8	4
D12B Other Ear, Nose, Mouth and Throat Procedures, Minor Complexity	1,148	408	2.1	1
D13Z Myringotomy W Tube Insertion	2,034	121	2.0	1
D14A Mouth and Salivary Gland Procedures, Major Complexity	214	277	4.3	2
D14B Mouth and Salivary Gland Procedures, Minor Complexity	614	79	1.8	1
D15Z Mastoid Procedures	24	280	2.0	1
D40Z Dental Extractions and Restorations	5,517	317	1.7	1
D60A Ear, Nose, Mouth and Throat Malignancy, Major Complexity	31	302	27.8	20
D60B Ear, Nose, Mouth and Throat Malignancy, Minor Complexity	985	386	11.5	4
D61A Dysequilibrium, Major Complexity	17	822	4.0	2
D61B Dysequilibrium, Minor Complexity	178	3,711	1.9	1
D62A Epistaxis, Major Complexity	~	168	8.3	5
D62B Epistaxis, Minor Complexity	460	817	2.5	2
D63A Otitis Media and Upper Respiratory Infections, Major Complexity	156	2,544	3.7	2
D63B Otitis Media and Upper Respiratory Infections, Minor Complexity	1,992	7,801	1.6	1
D64A Laryngotracheitis and Epiglottitis, Major Complexity	~	96	2.5	1
D64B Laryngotracheitis and Epiglottitis, Minor Complexity	18	494	1.3	1
D65A Nasal Trauma and Deformity, Major Complexity	14	102	11.7	2
D65B Nasal Trauma and Deformity, Minor Complexity	1,041	294	1.5	1
D66A Other Ear, Nose, Mouth and Throat Disorders, Major Complexity	607	559	4.1	2
D66B Other Ear, Nose, Mouth and Throat Disorders, Minor Complexity	8,630	1,499	1.6	1
D67A Oral and Dental Disorders, Major Complexity	103	417	4.2	2
D67B Oral and Dental Disorders, Minor Complexity	1,522	952	1.8	1
Total Discharges	**26,937**	**29,255**	**2.6**	**1**

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

TABLE 4.6 Total Discharges: MDC 4 Diseases and Disorders of the Respiratory System: AR-DRG 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	75	30.2	20
E01B Major Chest Procedures, Intermediate Complexity	0	340	13.0	11
E01C Major Chest Procedures, Minor Complexity	45	640	8.7	7
E02A Other Respiratory System OR Procedures, Major Complexity	6	201	24.5	15
E02B Other Respiratory System OR Procedures, Intermediate Complexity	263	208	7.3	5
E02C Other Respiratory System OR Procedures, Minor Complexity	250	52	1.6	1
E40A Respiratory System Disorders W Ventilator Support, Major Complexity	0	83	23.0	17
E40B Respiratory System Disorders W Ventilator Support, Minor Complexity	0	170	10.5	8
E41A Respiratory System Disorders W Non-Invasive Ventilation, Major Complexity	0	439	24.2	17
E41B Respiratory System Disorders W Non-Invasive Ventilation, Minor Complexity	0	1,096	14.0	10
E42A Bronchoscopy, Major Complexity	459	1,011	16.7	12
E42B Bronchoscopy, Minor Complexity	5,894	526	6.0	5
E60A Cystic Fibrosis, Major Complexity	370	712	13.1	14
E60B Cystic Fibrosis, Minor Complexity	1,696	328	7.8	6
E61A Pulmonary Embolism, Major Complexity	~	633	10.1	7
E61B Pulmonary Embolism, Minor Complexity	21	733	4.3	3
E62A Respiratory Infections and Inflammations, Major Complexity	30	7,682	13.0	8
E62B Respiratory Infections and Inflammations, Minor Complexity	70	6,449	5.2	4
E63A Sleep Apnoea, Major Complexity	17	509	1.8	1
E63B Sleep Apnoea, Minor Complexity	44	1,601	1.1	1
E64A Pulmonary Oedema and Respiratory Failure, Major Complexity	0	243	13.8	9
E64B Pulmonary Oedema and Respiratory Failure, Minor Complexity	~	287	6.1	4
E65A Chronic Obstructive Airways Disease, Major Complexity	61	5,670	10.7	7
E65B Chronic Obstructive Airways Disease, Minor Complexity	558	8,996	4.9	4
E66A Major Chest Trauma, Major Complexity	0	190	13.5	8
E66B Major Chest Trauma, Minor Complexity	~	311	3.1	2
E67A Respiratory Signs and Symptoms, Major Complexity	208	1,466	3.6	1
E67B Respiratory Signs and Symptoms, Minor Complexity	947	4,606	1.6	1
E68A Pneumothorax, Major Complexity	~	254	8.9	6
E68B Pneumothorax, Minor Complexity	~	470	4.1	3
E69A Bronchitis and Asthma, Major Complexity	27	604	5.6	4
E69B Bronchitis and Asthma, Minor Complexity	2,650	4,230	2.1	1
E70A Whooping Cough and Acute Bronchiolitis, Major Complexity	~	483	5.4	4
E70B Whooping Cough and Acute Bronchiolitis, Minor Complexity	26	2,642	2.6	2
E71A Respiratory Neoplasms, Major Complexity	127	959	13.4	9
E71B Respiratory Neoplasms, Minor Complexity	3,121	1,128	6.7	4
E72Z Respiratory Problems Arising from Neonatal Period	7	87	6.0	2
E73A Pleural Effusion, Major Complexity	~	194	16.6	11
E73B Pleural Effusion, Intermediate Complexity	19	456	8.0	6
E73C Pleural Effusion, Minor Complexity	82	264	4.9	3
E74A Interstitial Lung Disease, Major Complexity	46	451	10.2	7
E74B Interstitial Lung Disease, Minor Complexity	384	319	3.8	2
E75A Other Respiratory System Disorders, Major Complexity	75	9,780	8.4	5
E75B Other Respiratory System Disorders, Minor Complexity	524	7,941	2.5	1
E76A Respiratory Tuberculosis, Major Complexity	~	82	22.3	15
E76B Respiratory Tuberculosis, Minor Complexity	35	80	10.4	6
Total Discharges	**18,074**	**75,681**	**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 4.7 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	~	70	17.3	14
F01B Implantation and Replacement of AICD, Total System, Minor Complexity	262	287	5.2	1
F02Z Other AICD Procedures	14	33	6.1	3
F03A Cardiac Valve Procedures W CPB Pump W Invasive Cardiac Investigation, Major Complexity	0	48	27.1	25
F03B Cardiac Valve Procedures W CPB Pump W Invasive Cardiac Investigation, Minor Complexity	~	116	17.9	14
F04A Cardiac Valve Procedures W CPB Pump W/O Invasive Cardiac Invest, Major Comp	0	50	31.0	19
F04B Cardiac Valve Procedures W CPB Pump W/O Invasive Cardiac Invest, Interm Comp	0	193	16.0	12
F04C Cardiac Valve Procedures W CPB Pump W/O Invasive Cardiac Invest, Minor Comp	~	347	11.3	10
F05A Coronary Bypass W Invasive Cardiac Investigation, Major Complexity	0	39	32.5	28
F05B Coronary Bypass W Invasive Cardiac Investigation, Minor Complexity	0	126	21.9	20
F06A Coronary Bypass W/O Invasive Cardiac Investigation, Major Complexity	0	83	19.4	15
F06B Coronary Bypass W/O Invasive Cardiac Investigation, Minor Complexity	0	501	11.2	9
F07A Other Cardiothoracic/Vascular Procedures W CPB Pump, Major Complexity	0	28	21.8	19
F07B Other Cardiothoracic/Vascular Procedures W CPB Pump, Intermediate Complexity	0	48	13.8	10
F07C Other Cardiothoracic/Vascular Procedures W CPB Pump, Minor Complexity	0	68	10.1	8
F08A Major Reconstructive Vascular Procedures W/O CPB Pump, Major Complexity	0	129	33.6	23
F08B Major Reconstructive Vascular Procedures W/O CPB Pump, Intermediate Complexity	~	388	12.1	9
F08C Major Reconstructive Vascular Procedures W/O CPB Pump, Minor Complexity	31	276	6.8	5
F09A Other Cardiothoracic Procedures W/O CPB Pump, Major Complexity	~	31	22.6	9
F09B Other Cardiothoracic Procedures W/O CPB Pump, Intermediate Complexity	9	48	7.0	6
F09C Other Cardiothoracic Procedures W/O CPB Pump, Minor Complexity	16	88	2.8	2
F10A Interventional Coronary Procedures, Admitted for AMI, Major Complexity	~	227	12.9	8
F10B Interventional Coronary Procedures, Admitted for AMI, Minor Complexity	115	1,782	3.4	3
F11A Amputation, Except Upper Limb and Toe, for Circulatory Disorders, Major Comp	0	96	66.9	49
F11B Amputation, Except Upper Limb and Toe, for Circulatory Disorders, Minor Comp	~	106	31.2	23
F12A Implantation and Replacement of Pacemaker, Total System, Major Complexity	20	258	12.3	8
F12B Implantation and Replacement of Pacemaker, Total System, Minor Complexity	493	539	3.7	2
F13A Amputation, Upper Limb and Toe, for Circulatory Disorders, Major Complexity	0	66	21.7	16
F13B Amputation, Upper Limb and Toe, for Circulatory Disorders, Minor Complexity	15	76	12.3	9
F14A Vascular Procedures, Except Major Reconstruction, W/O CPB Pump, Major Complexity	36	165	21.0	14
F14B Vascular Procedures, Except Major Reconstruction, W/O CPB Pump, Interm Comp	30	479	7.3	4
F14C Vascular Procedures, Except Major Reconstruction, W/O CPB Pump, Minor Complexity	184	392	3.7	2
F15A Interventional Coronary Procs, Not Adm for AMI, W Stent Implant, Major Comp	30	359	7.9	4
F15B Interventional Coronary Procs, Not Adm for AMI, W Stent Implant, Minor Comp	750	2,299	2.0	1
F16A Interventional Coronary Procs, Not Adm for AMI, W/O Stent Implant, Major Comp	0	18	8.4	5
F16B Interventional Coronary Procs, Not Adm for AMI, W/O Stent Implant, Minor Comp	46	116	2.6	1
F17A Insertion and Replacement of Pacemaker Generator, Major Complexity	31	46	5.9	4
F17B Insertion and Replacement of Pacemaker Generator, Minor Complexity	284	63	1.7	1
F18A Other Pacemaker Procedures, Major Complexity	~	26	7.4	5
F18B Other Pacemaker Procedures, Minor Complexity	28	42	3.1	2
F19A Trans-Vascular Percutaneous Cardiac Intervention, Major Complexity	71	59	7.5	1
F19B Trans-Vascular Percutaneous Cardiac Intervention, Minor Complexity	151	43	1.5	1
F20Z Vein Ligation and Stripping	4,783	310	1.5	1
F21A Other Circulatory System OR Procedures, Major Complexity	0	41	36.7	13
F21B Other Circulatory System OR Procedures, Intermediate Complexity	19	45	8.7	6
F21C Other Circulatory System OR Procedures, Minor Complexity	12	35	4.3	2
F40A Circulatory Disorders W Ventilator Support, Major Complexity	0	51	17.9	11
F40B Circulatory Disorders W Ventilator Support, Minor Complexity	0	58	4.7	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 Complexity	~	187	8.7	6
F41B Circulatory Disorders, Adm for AMI W Invasive Cardiac Inves Proc, Minor Complexity	102	501	3.9	3
F42A Circulatory Dsrds, Not Adm for AMI W Invasive Cardiac Inves Proc, Major Complexity	521	1,221	8.4	5
F42B Circulatory Dsrds, Not Adm for AMI W Invasive Cardiac Inves Proc, Minor Complexity	9,044	2,956	2.8	1
F43A Circulatory Disorders W Non-Invasive Ventilation, Major Complexity	0	87	22.3	18
F43B Circulatory Disorders W Non-Invasive Ventilation, Minor Complexity	0	95	13.6	10
F60A Circulatory Dsrd, Adm for AMI W/O Invas Card Inves Proc	13	2,449	8.1	5
F60B Circulatory Dsrd, Adm for AMI W/O Invas Card Inves Proc, Transf <5 Days	15	622	1.8	1
F61A Infective Endocarditis, Major Complexity	~	64	37.2	28
F61B Infective Endocarditis, Minor Complexity	16	65	15.7	7
F62A Heart Failure and Shock, Major Complexity	0	2,203	15.6	10
F62B Heart Failure and Shock, Minor Complexity	58	3,351	6.0	5
F62C Heart Failure and Shock, Transferred <5 Days	~	122	2.0	2
F63A Venous Thrombosis, Major Complexity	10	508	8.1	5
F63B Venous Thrombosis, Minor Complexity	51	1,405	2.1	1
F64A Skin Ulcers in Circulatory Disorders, Major Complexity	0	180	17.6	10
F64B Skin Ulcers in Circulatory Disorders, Intermediate Complexity	87	233	9.1	6
F64C Skin Ulcers in Circulatory Disorders, Minor Complexity	7	60	5.1	4
F65A Peripheral Vascular Disorders, Major Complexity	60	529	9.8	6
F65B Peripheral Vascular Disorders, Minor Complexity	1,073	882	3.6	1
F66A Coronary Atherosclerosis, Major Complexity	31	446	7.8	5
F66B Coronary Atherosclerosis, Minor Complexity	537	1,956	2.9	1
F67A Hypertension, Major Complexity	18	412	5.0	3
F67B Hypertension, Minor Complexity	144	1,992	1.7	1
F68A Congenital Heart Disease, Major Complexity	540	95	4.5	1
F68B Congenital Heart Disease, Minor Complexity	345	68	1.8	1
F69A Valvular Disorders, Major Complexity	57	368	8.3	5
F69B Valvular Disorders, Minor Complexity	736	3,123	1.8	1
F72A Unstable Angina, Major Complexity	~	332	6.1	5
F72B Unstable Angina, Minor Complexity	18	1,194	3.5	2
F73A Syncope and Collapse, Major Complexity	16	2,910	9.9	6
F73B Syncope and Collapse, Minor Complexity	2,232	7,786	2.6	1
F74A Chest Pain, Major Complexity	61	3,422	3.0	1
F74B Chest Pain, Minor Complexity	636	14,065	1.4	1
F75A Other Circulatory Disorders, Major Complexity	6	269	16.3	11
F75B Other Circulatory Disorders, Intermediate Complexity	38	587	7.8	5
F75C Other Circulatory Disorders, Minor Complexity	416	1,614	3.3	2
F76A Arrhythmia, Cardiac Arrest and Conduction Disorders, Major Complexity	140	2,785	6.8	4
F76B Arrhythmia, Cardiac Arrest and Conduction Disorders, Minor Complexity	2,003	5,855	2.4	1
Total Discharges	**26,489**	**77,793**	**4.7**	**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 4.8 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	67	43.9	30
G01B Rectal Resection, Intermediate Complexity	0	202	23.8	19
G01C Rectal Resection, Minor Complexity	~	756	10.4	8
G02A Major Small and Large Bowel Procedures, Major Complexity	0	271	46.7	35
G02B Major Small and Large Bowel Procedures, Intermediate Complexity	~	797	19.4	15
G02C Major Small and Large Bowel Procedures, Minor Complexity	73	1,636	10.0	8
G03A Stomach, Oesophageal and Duodenal Procedures, Major Complexity	~	175	23.4	18
G03B Stomach, Oesophageal and Duodenal Procedures, Intermediate Complexity	15	226	12.3	10
G03C Stomach, Oesophageal and Duodenal Procedures, Minor Complexity	40	272	5.3	4
G04A Peritoneal Adhesiolysis, Major Complexity	0	95	26.7	20
G04B Peritoneal Adhesiolysis, Intermediate Complexity	~	267	10.7	9
G04C Peritoneal Adhesiolysis, Minor Complexity	77	496	4.3	3
G05A Minor Small and Large Bowel Procedures, Major Complexity	~	76	21.6	14
G05B Minor Small and Large Bowel Procedures, Minor Complexity	21	314	6.6	6
G06Z Pyloromyotomy	0	63	3.8	3
G07A Appendicectomy, Major Complexity	~	508	6.4	5
G07B Appendicectomy, Minor Complexity	49	5,800	2.8	2
G10A Hernia Procedures, Major Complexity	50	484	6.1	4
G10B Hernia Procedures, Minor Complexity	3,075	2,259	2.0	1
G11A Anal and Stomal Procedures, Major Complexity	50	300	7.4	4
G11B Anal and Stomal Procedures, Minor Complexity	1,418	1,065	2.0	1
G12A Other Digestive System OR Procedures, Major Complexity	0	92	26.3	21
G12B Other Digestive System OR Procedures, Intermediate Complexity	41	333	12.2	9
G12C Other Digestive System OR Procedures, Minor Complexity	338	391	4.7	3
G46A Complex Endoscopy, Major Complexity	633	1,223	12.3	8
G46B Complex Endoscopy, Minor Complexity	12,199	605	4.7	3
G47A Gastroscopy, Major Complexity	270	1,726	11.0	7
G47B Gastroscopy, Intermediate Complexity	2,078	1,587	4.1	3
G47C Gastroscopy, Minor Complexity	38,614	1,953	3.0	2
G48A Colonoscopy, Major Complexity	2,308	1,563	9.9	6
G48B Colonoscopy, Minor Complexity	48,233	1,530	3.8	3
G60A Digestive Malignancy, Major Complexity	362	799	12.8	7
G60B Digestive Malignancy, Minor Complexity	4,108	601	6.9	4
G61A Gastrointestinal Haemorrhage, Major Complexity	16	705	7.5	4
G61B Gastrointestinal Haemorrhage, Minor Complexity	330	1,082	2.5	1
G64A Inflammatory Bowel Disease, Major Complexity	156	397	6.7	5
G64B Inflammatory Bowel Disease, Minor Complexity	10,737	813	3.7	3
G65A Gastrointestinal Obstruction, Major Complexity	0	505	9.9	6
G65B Gastrointestinal Obstruction, Minor Complexity	13	958	3.9	3
G66A Abdominal Pain and Mesenteric Adenitis, Major Complexity	102	2,696	3.0	2
G66B Abdominal Pain and Mesenteric Adenitis, Minor Complexity	954	7,602	1.7	1
G67A Oesophagitis and Gastroenteritis, Major Complexity	51	3,388	6.1	3
G67B Oesophagitis and Gastroenteritis, Minor Complexity	742	8,782	1.9	1
G70A Other Digestive System Disorders, Major Complexity	933	5,945	5.5	3
G70B Other Digestive System Disorders, Minor Complexity	4,980	6,238	2.1	1
Total Discharges	**133,078**	**67,643**	**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	21	34.6	23
H01B Pancreas, Liver and Shunt Procedures, Intermediate Complexity	~	300	11.6	8
H01C Pancreas, Liver and Shunt Procedures, Minor Complexity	9	88	8.3	6
H02A Major Biliary Tract Procedures, Major Complexity	~	99	23.2	18
H02B Major Biliary Tract Procedures, Minor Complexity	35	154	10.7	9
H05A Hepatobiliary Diagnostic Procedures, Major Complexity	~	44	18.5	15
H05B Hepatobiliary Diagnostic Procedures, Minor Complexity	46	46	5.1	4
H06A Other Hepatobiliary and Pancreas OR Procedures, Major Complexity	0	73	21.9	18
H06B Other Hepatobiliary and Pancreas OR Procedures, Intermediate Complexity	10	84	12.3	7
H06C Other Hepatobiliary and Pancreas OR Procedures, Minor Complexity	17	123	2.4	1
H07A Open Cholecystectomy, Major Complexity	0	22	27.0	18
H07B Open Cholecystectomy, Intermediate Complexity	~	30	10.3	8
H07C Open Cholecystectomy, Minor Complexity	24	133	5.3	4
H08A Laparoscopic Cholecystectomy, Major Complexity	18	285	8.5	6
H08B Laparoscopic Cholecystectomy, Minor Complexity	1,569	2,562	2.3	1
H40A Endoscopic Procedures for Bleeding Oesophageal Varices, Major Complexity	0	41	18.8	11
H40B Endoscopic Procedures for Bleeding Oesophageal Varices, Intermediate Complexity	0	28	8.3	6
H40C Endoscopic Procedures for Bleeding Oesophageal Varices, Minor Complexity	6	20	6.5	5
H43A ERCP Procedures, Major Complexity	11	227	19.4	15
H43B ERCP Procedures, Intermediate Complexity	214	391	8.6	7
H43C ERCP Procedures, Minor Complexity	1,563	830	4.4	3
H60A Cirrhosis and Alcoholic Hepatitis, Major Complexity	0	390	19.4	13
H60B Cirrhosis and Alcoholic Hepatitis, Intermediate Complexity	67	490	8.4	6
H60C Cirrhosis and Alcoholic Hepatitis, Minor Complexity	668	138	4.2	2
H61A Malignancy of Hepatobiliary System and Pancreas, Major Complexity	38	461	12.8	9
H61B Malignancy of Hepatobiliary System and Pancreas, Minor Complexity	1,300	668	6.6	4
H62A Disorders of Pancreas, Except Malignancy, Major Complexity	12	431	12.6	9
H62B Disorders of Pancreas, Except Malignancy, Minor Complexity	391	1,336	5.0	4
H63A Other Disorders of Liver, Major Complexity	46	504	12.7	7
H63B Other Disorders of Liver, Intermediate Complexity	287	672	4.5	3
H63C Other Disorders of Liver, Minor Complexity	1,220	483	2.3	1
H64A Disorders of the Biliary Tract, Major Complexity	137	2,039	8.1	6
H64B Disorders of the Biliary Tract, Minor Complexity	505	2,645	3.8	3
Total Discharges	**8,201**	**15,858**	**6.7**	**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	88	44.2	14
I01B Bilateral and Multiple Major Joint Procedures of Lower Limb, Minor Complexity	0	20	6.5	5
I02A Microvascular Tissue Transfers or Skin Grafts, Excluding Hand, Major Complexity	0	9	56.3	45
I02B Microvascular Tissue Transfers or Skin Grafts, Excluding Hand, Intermediate Comp	12	62	19.2	17
I02C Microvascular Tissue Transfers or Skin Grafts, Excluding Hand, Minor Complexity	16	20	12.3	12
I03A Hip Replacement, Major Complexity	0	517	24.2	14
I03B Hip Replacement, Minor Complexity	~	4,839	8.0	5
I04A Knee Replacement, Major Complexity	~	190	9.7	8
I04B Knee Replacement, Minor Complexity	6	2,177	4.9	4
I05A Other Joint Replacement, Major Complexity	0	72	15.4	7
I05B Other Joint Replacement, Minor Complexity	~	243	3.9	3
I06Z Spinal Fusion for Deformity	50	152	8.0	7
I07Z Amputation	0	65	43.4	19
I08A Other Hip and Femur Procedures, Major Complexity	0	661	29.8	18
I08B Other Hip and Femur Procedures, Minor Complexity	35	2,081	12.8	9
I09A Spinal Fusion, Major Complexity	0	42	29.8	23
I09B Spinal Fusion, Intermediate Complexity	~	182	11.7	7
I09C Spinal Fusion, Minor Complexity	~	344	5.1	4
I10A Other Back and Neck Procedures, Major Complexity	9	164	15.4	7
I10B Other Back and Neck Procedures, Minor Complexity	673	1,017	3.2	2
I11Z Limb Lengthening Procedures	~	29	5.2	4
I12A Misc Musculoskeletal Procs for Infect/Inflam of Bone/Joint, Major Complexity	~	112	35.9	28
I12B Misc Musculoskeletal Procs for Infect/Inflam of Bone/Joint, Intermediate Comp	9	195	15.7	11
I12C Misc Musculoskeletal Procs for Infect/Inflam of Bone/Joint, Minor Complexity	106	207	6.4	3
I13A Humerus, Tibia, Fibula and Ankle Procedures, Major Complexity	6	665	13.1	6
I13B Humerus, Tibia, Fibula and Ankle Procedures, Minor Complexity	256	3,759	3.0	2
I15A Cranio-Facial Surgery, Major Complexity	0	46	8.7	4
I15B Cranio-Facial Surgery, Minor Complexity	0	6	5.2	6
I16Z Other Shoulder Procedures	380	778	1.5	1
I17A Maxillo-Facial Surgery, Major Complexity	~	26	6.9	5
I17B Maxillo-Facial Surgery, Minor Complexity	11	55	2.6	2
I18A Other Knee Procedures, Major Complexity	132	296	4.8	2
I18B Other Knee Procedures, Minor Complexity	1,997	329	1.6	1
I19A Other Elbow and Forearm Procedures, Major Complexity	8	262	8.0	3
I19B Other Elbow and Forearm Procedures, Minor Complexity	533	3,114	1.8	1
I20A Other Foot Procedures, Major Complexity	19	171	5.2	3
I20B Other Foot Procedures, Minor Complexity	395	1,148	1.6	1
I21Z Local Excision and Removal of Internal Fixation Devices of Hip and Femur	74	64	3.6	1
I23A Local Excision & Removal of Internal Fixation Device, Except Hip & Fmr, Maj Comp	119	141	4.4	1
I23B Local Excision & Removal of Internal Fixation Device, Except Hip & Fmr, Min Comp	2,406	321	1.7	1
I24A Arthroscopy, Major Complexity	47	53	3.6	2
I24B Arthroscopy, Minor Complexity	638	107	1.8	1
I25A Bone and Joint Diagnostic Procedures Including Biopsy, Major Complexity	44	61	10.5	7
I25B Bone and Joint Diagnostic Procedures Including Biopsy, Minor Complexity	181	74	5.0	2
I27A Soft Tissue Procedures, Major Complexity	18	188	15.4	9
I27B Soft Tissue Procedures, Minor Complexity	740	625	2.8	2
I28A Other Musculoskeletal Procedures, Major Complexity	~	113	16.6	12
I28B Other Musculoskeletal Procedures, Intermediate Complexity	116	495	3.8	2
I28C Other Musculoskeletal Procedures, Minor Complexity	117	213	1.9	1
I29Z Knee Reconstructions, and Revisions of Reconstructions	68	436	1.2	1
I30Z Hand Procedures	2,010	2,000	1.4	1
I31A Revision of Hip Replacement, Major Complexity	0	40	46.3	32
I31B Revision of Hip Replacement, Intermediate Complexity	0	130	18.2	13
I31C Revision of Hip Replacement, Minor Complexity	0	296	8.2	6
I32A Revision of Knee Replacement, Major Complexity	0	31	25.1	12
I32B Revision of Knee Replacement, Minor Complexity	0	88	7.5	6
I40Z Infusions for Musculoskeletal Disorders, Sameday	38,121	94	1.0	1
I60Z Femoral Shaft Fractures	0	66	6.4	3
I61A Distal Femoral Fractures, Major Complexity	0	16	24.3	14
I61B Distal Femoral Fractures, Minor Complexity	0	55	5.4	3
I63A Sprains, Strains and Dislocations of Hip, Pelvis and Thigh, Major Complexity	0	49	10.7	3

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	103	2.7	2
I64A Osteomyelitis, Major Complexity	0	132	27.2	19
I64B Osteomyelitis, Minor Complexity	0	289	11.3	9
I65A Musculoskeletal Malignant Neoplasms, Major Complexity	0	186	18.2	13
I65B Musculoskeletal Malignant Neoplasms, Minor Complexity	0	735	7.3	4
I66A Inflammatory Musculoskeletal Disorders, Major Complexity	0	100	22.8	15
I66B Inflammatory Musculoskeletal Disorders, Intermediate Complexity	0	218	9.6	7
I66C Inflammatory Musculoskeletal Disorders, Minor Complexity	0	628	4.7	4
I67A Septic Arthritis, Major Complexity	0	54	20.4	15
I67B Septic Arthritis, Minor Complexity	0	97	8.4	5
I68A Non-surgical Spinal Disorders, Major Complexity	0	1,338	16.2	7
I68B Non-surgical Spinal Disorders, Minor Complexity	0	2,098	4.8	3
I69A Bone Diseases and Arthropathies, Major Complexity	0	378	12.0	7
I69B Bone Diseases and Arthropathies, Minor Complexity	0	601	5.1	3
I71A Other Musculotendinous Disorders, Major Complexity	0	511	10.9	5
I71B Other Musculotendinous Disorders, Minor Complexity	0	1,222	3.4	2
I72A Specific Musculotendinous Disorders, Major Complexity	0	202	11.9	8
I72B Specific Musculotendinous Disorders, Minor Complexity	0	581	3.6	2
I73A Aftercare of Musculoskeletal Implants or Prostheses, Major Complexity	0	96	25.9	16
I73B Aftercare of Musculoskeletal Implants or Prostheses, Minor Complexity	0	211	6.8	3
I74A Injuries to Forearm, Wrist, Hand and Foot, Major Complexity	0	270	16.8	7
I74B Injuries to Forearm, Wrist, Hand and Foot, Minor Complexity	0	1,090	1.7	1
I75A Injuries to Shoulder, Arm, Elbow, Knee, Leg and Ankle, Major Complexity	0	466	18.5	11
I75B Injuries to Shoulder, Arm, Elbow, Knee, Leg and Ankle, Minor Complexity	0	1,252	3.5	2
I76A Other Musculoskeletal Disorders, Major Complexity	0	109	18.4	10
I76B Other Musculoskeletal Disorders, Intermediate Complexity	0	272	7.3	3
I76C Other Musculoskeletal Disorders, Minor Complexity	0	392	3.7	2
I77A Fractures of Pelvis, Major Complexity	0	325	25.3	17
I77B Fractures of Pelvis, Minor Complexity	0	433	10.2	6
I78A Fractures of Neck of Femur, Major Complexity	0	74	20.0	15
I78B Fractures of Neck of Femur, Minor Complexity	0	138	9.1	5
I79A Pathological Fractures, Major Complexity	0	79	24.1	17
I79B Pathological Fractures, Minor Complexity	0	249	9.6	7
I80Z Femoral Fractures, Transferred to Acute Facility <2 Days	0	52	1.0	1
I81Z Musculoskeletal Injuries, Sameday	625	2,050	1.0	1
I82Z Other Sameday Treatment for Musculoskeletal Disorders	13,892	6,198	1.0	1
Total Discharges	**63,895**	**53,128**	**6.3**	**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	0	36	6.9	7
J06A Major Procedures for Breast Disorders, Major Complexity	23	241	5.6	4
J06B Major Procedures for Breast Disorders, Minor Complexity	973	1,547	2.6	2
J07A Minor Procedures for Breast Disorders, Major Complexity	817	210	3.7	1
J07B Minor Procedures for Breast Disorders, Minor Complexity	1,139	78	1.3	1
J08A Other Skin Grafts and Debridement Procedures, Major Complexity	~	110	23.4	10
J08B Other Skin Grafts and Debridement Procedures, Intermediate Complexity	42	103	5.7	3
J08C Other Skin Grafts and Debridement Procedures, Minor Complexity	1,271	251	2.7	1
J09Z Perianal and Pilonidal Procedures	534	261	1.9	1
J10A Plastic OR Procs for Skin, Subcutaneous Tissue and Breast Disorders, Major Complexity	81	75	4.7	2
J10B Plastic OR Procs for Skin, Subcutaneous Tissue and Breast Disorders, Minor Complexity	972	126	1.8	1
J11A Other Skin, Subcutaneous Tissue and Breast Procedures, Major Complexity	1,346	384	6.5	2
J11B Other Skin, Subcutaneous Tissue and Breast Procedures, Minor Complexity	35,484	639	1.5	1
J12A Lower Limb Procedures W Ulcer or Cellulitis, Major Complexity	~	55	32.0	19
J12B Lower Limb Procedures W Ulcer or Cellulitis, Minor Complexity	9	91	10.0	7
J13A Lower Limb Procedures W/O Ulcer or Cellulitis, Major Complexity	10	38	17.2	9
J13B Lower Limb Procedures W/O Ulcer or Cellulitis, Minor Complexity	148	82	3.2	2
J14Z Major Breast Reconstructions	13	270	6.1	6
J60A Skin Ulcers, Major Complexity	~	223	24.9	13
J60B Skin Ulcers, Intermediate Complexity	32	226	8.6	6
J60C Skin Ulcers, Minor Complexity	1,126	151	4.6	2
J62A Malignant Breast Disorders, Major Complexity	72	199	12.8	9
J62B Malignant Breast Disorders, Minor Complexity	5,304	469	11.6	5
J63A Non-Malignant Breast Disorders, Major Complexity	281	333	3.1	2
J63B Non-Malignant Breast Disorders, Minor Complexity	2,971	345	1.1	1
J64A Cellulitis, Major Complexity	30	2,651	10.7	6
J64B Cellulitis, Minor Complexity	610	5,412	3.2	2
J65A Trauma to Skin, Subcutaneous Tissue and Breast, Major Complexity	~	437	11.8	6
J65B Trauma to Skin, Subcutaneous Tissue and Breast, Minor Complexity	63	1,179	2.2	1
J67A Minor Skin Disorders, Major Complexity	1,197	599	4.6	3
J67B Minor Skin Disorders, Minor Complexity	13,557	1,645	1.8	1
J68A Major Skin Disorders, Major Complexity	849	835	5.4	3
J68B Major Skin Disorders, Minor Complexity	19,815	351	2.2	1
J69A Skin Malignancy, Major Complexity	22	85	16.2	11
J69B Skin Malignancy, Intermediate Complexity	400	101	10.1	6
J69C Skin Malignancy, Minor Complexity	1,954	*	^	^
Total Discharges	**91,157**	**19,890**	**5.3**	**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 4.12 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	37	62.8	45
K01B OR Procedures for Diabetic Complications, Intermediate Complexity	0	89	25.0	16
K01C OR Procedures for Diabetic Complications, Minor Complexity	7	115	14.0	9
K02A Pituitary Procedures, Major Complexity	0	14	18.0	15
K02B Pituitary Procedures, Minor Complexity	~	58	8.1	6
K03Z Adrenal Procedures	0	64	10.1	6
K05A Parathyroid Procedures, Major Complexity	0	48	8.6	4
K05B Parathyroid Procedures, Minor Complexity	19	119	2.3	2
K06A Thyroid Procedures, Major Complexity	0	63	8.3	5
K06B Thyroid Procedures, Minor Complexity	23	618	2.4	2
K08Z Thyroglossal Procedures	~	40	1.6	1
K09A Other Endocrine, Nutritional and Metabolic OR Procedures, Major Complexity	~	32	20.4	12
K09B Other Endocrine, Nutritional and Metabolic OR Procedures, Minor Complexity	25	44	7.0	4
K10A Revisional and Open Bariatric Procedures, Major Complexity	0	~	^	^
K10B Revisional and Open Bariatric Procedures, Minor Complexity	0	13	2.8	3
K11A Major Laparoscopic Bariatric Procedures, Major Complexity	0	36	3.8	3
K11B Major Laparoscopic Bariatric Procedures, Minor Complexity	0	24	3.1	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	15	45	2.9	3
K40A Endoscopic and Investigative Procedures for Metabolic Disorders, Major Comp	29	304	16.1	10
K40B Endoscopic and Investigative Procedures for Metabolic Disorders, Minor Comp	951	104	5.3	4
K60A Diabetes, Major Complexity	~	943	11.4	5
K60B Diabetes, Minor Complexity	186	2,805	3.9	2
K61A Severe Nutritional Disturbance, Major Complexity	0	27	61.0	53
K61B Severe Nutritional Disturbance, Minor Complexity	~	26	11.5	7
K62A Miscellaneous Metabolic Disorders, Major Complexity	31	684	13.0	8
K62B Miscellaneous Metabolic Disorders, Intermediate Complexity	160	1,593	5.6	3
K62C Miscellaneous Metabolic Disorders, Minor Complexity	1,172	1,812	2.9	1
K63A Inborn Errors of Metabolism, Major Complexity	442	153	6.8	3
K63B Inborn Errors of Metabolism, Minor Complexity	517	61	1.9	1
K64A Endocrine Disorders, Major Complexity	685	802	6.0	3
K64B Endocrine Disorders, Minor Complexity	1,684	614	2.1	1
Total Discharges	**5,962**	**11,392**	**6.2**	**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	33	10.9	8
L02B Operative Insertion of Peritoneal Catheter for Dialysis, Minor Complexity	38	51	3.2	2
L03A Kidney, Ureter and Major Bladder Procedures for Neoplasm, Major Complexity	0	78	22.7	19
L03B Kidney, Ureter and Major Bladder Procedures for Neoplasm, Intermediate Comp	~	229	9.6	8
L03C Kidney, Ureter and Major Bladder Procedures for Neoplasm, Minor Complexity	6	325	6.7	6
L04A Kidney, Ureter and Major Bladder Procedures for Non-Neoplasm, Major Complexity	~	184	22.7	14
L04B Kidney, Ureter and Major Bladder Procedures for Non-Neoplasm, Intermediate Complexity	51	655	6.6	4
L04C Kidney, Ureter and Major Bladder Procedures for Non-Neoplasm, Minor Complexity	490	1,065	3.5	3
L05A Transurethral Prostatectomy for Urinary Disorder, Major Complexity	0	30	18.3	12
L05B Transurethral Prostatectomy for Urinary Disorder, Minor Complexity	~	89	5.3	4
L06A Minor Bladder Procedures, Major Complexity	~	63	16.5	14
L06B Minor Bladder Procedures, Intermediate Complexity	19	132	5.7	4
L06C Minor Bladder Procedures, Minor Complexity	77	186	3.0	2
L07A Other Transurethral Procedures, Major Complexity	16	247	8.3	5
L07B Other Transurethral Procedures, Minor Complexity	659	884	2.9	2
L08A Urethral Procedures, Major Complexity	~	46	5.2	4
L08B Urethral Procedures, Minor Complexity	73	109	2.1	2
L09A Other Procedures for Kidney and Urinary Tract Disorders, Major Complexity	0	48	27.9	23
L09B Other Procedures for Kidney and Urinary Tract Disorders, Intermediate Complexity	9	57	10.2	7
L09C Other Procedures for Kidney and Urinary Tract Disorders, Minor Complexity	219	138	3.5	2
L40Z Ureteroscopy	83	116	2.9	2
L41Z Cystourethroscopy for Urinary Disorder, Sameday	10,892	97	1.0	1
L42Z ESW Lithotripsy	2,072	87	2.1	1
L60A Kidney Failure, Major Complexity	~	646	20.4	13
L60B Kidney Failure, Intermediate Complexity	188	1,806	7.8	5
L60C Kidney Failure, Minor Complexity	1,047	453	3.4	2
L61Z Haemodialysis	170,726	23	3.9	1
L62A Kidney and Urinary Tract Neoplasms, Major Complexity	76	227	12.2	9
L62B Kidney and Urinary Tract Neoplasms, Minor Complexity	1,194	321	6.1	3
L63A Kidney and Urinary Tract Infections, Major Complexity	56	6,512	12.4	7
L63B Kidney and Urinary Tract Infections, Minor Complexity	1,182	7,265	4.4	3
L64A Urinary Stones and Obstruction, Major Complexity	99	923	4.1	2
L64B Urinary Stones and Obstruction, Minor Complexity	308	1,552	2.0	1
L65A Kidney and Urinary Tract Signs and Symptoms, Major Complexity	35	625	8.2	5
L65B Kidney and Urinary Tract Signs and Symptoms, Minor Complexity	2,092	1,631	2.9	2
L66Z Urethral Stricture	141	97	3.2	2
L67A Other Kidney and Urinary Tract Disorders, Major Complexity	545	980	8.1	4
L67B Other Kidney and Urinary Tract Disorders, Intermediate Complexity	2,617	845	3.1	2
L67C Other Kidney and Urinary Tract Disorders, Minor Complexity	2,716	197	2.2	2
L68Z Peritoneal Dialysis	184	0	-	-
Total Discharges	**197,927**	**29,052**	**7.0**	**4**

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

TABLE 4.14 Total Discharges: MDC 12 Diseases and Disorders of the Male Reproductive System: AR-DRG 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	41	7.5	6
M01B Major Male Pelvic Procedures, Minor Complexity	0	242	5.1	5
M02A Transurethral Prostatectomy for Reproductive System Disorder, Major Complexity	0	72	7.1	4
M02B Transurethral Prostatectomy for Reproductive System Disorder, Minor Complexity	~	549	4.2	3
M03A Penis Procedures, Major Complexity	16	48	6.4	3
M03B Penis Procedures, Minor Complexity	448	118	1.6	1
M04Z Testes Procedures	1,310	689	2.4	1
M05Z Circumcision	1,889	182	1.8	1
M06A Other Male Reproductive System OR Procedures, Major Complexity	83	38	10.7	6
M06B Other Male Reproductive System OR Procedures, Minor Complexity	107	30	3.2	2
M40Z Cystourethroscopy for Male Reproductive System Disorder, Sameday	1,625	*	^	^
M60A Male Reproductive System Malignancy, Major Complexity	461	429	10.8	5
M60B Male Reproductive System Malignancy, Minor Complexity	3,589	175	17.1	4
M61A Benign Prostatic Hypertrophy, Major Complexity	24	48	5.7	3
M61B Benign Prostatic Hypertrophy, Minor Complexity	1,286	59	1.9	1
M62A Male Reproductive System Inflammation, Major Complexity	~	164	6.5	4
M62B Male Reproductive System Inflammation, Minor Complexity	835	779	2.5	1
M63Z Male Sterilisation Procedures	159	~	^	^
M64A Other Male Reproductive System Disorders, Major Complexity	35	79	5.1	2
M64B Other Male Reproductive System Disorders, Minor Complexity	676	528	1.4	1
Total Discharges	**12,552**	**4,278**	**4.6**	**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	*	^	^
N01B Pelvic Evisceration and Radical Vulvectomy, Minor Complexity	0	199	7.0	7
N04A Hysterectomy for Non-Malignancy, Major Complexity	~	217	7.0	6
N04B Hysterectomy for Non-Malignancy, Minor Complexity	~	1,531	4.3	4
N05A Oophorectomy and Complex Fallopian Tube Procedures for Non-Malignancy, Maj Complexity	6	78	6.4	5
N05B Oophorectomy and Complex Fallopian Tube Procedures for Non-Malignancy, Min Complexity	144	530	2.8	2
N06A Female Reproductive System Reconstructive Procedures, Major Complexity	0	113	5.2	4
N06B Female Reproductive System Reconstructive Procedures, Minor Complexity	202	1,331	2.6	2
N07A Other Uterus and Adnexa Procedures for Non-Malignancy, Major Complexity	1,178	1,262	2.6	2
N07B Other Uterus and Adnexa Procedures for Non-Malignancy, Minor Complexity	1,686	192	1.5	1
N08Z Endoscopic and Laparoscopic Procedures, Female Reproductive System	1,126	470	2.6	1
N09Z Other Vagina, Cervix and Vulva Procedures	12,887	774	4.1	2
N10Z Diagnostic Curettage and Diagnostic Hysteroscopy	8,209	563	2.5	1
N11A Other Female Reproductive System OR Procedures, Major Complexity	17	107	11.5	7
N11B Other Female Reproductive System OR Procedures, Minor Complexity	15	~	^	^
N12A Uterus and Adnexa Procedures for Malignancy, Major Complexity	0	39	13.6	12
N12B Uterus and Adnexa Procedures for Malignancy, Intermediate Complexity	~	163	7.9	7
N12C Uterus and Adnexa Procedures for Malignancy, Minor Complexity	36	348	4.5	4
N60A Female Reproductive System Malignancy, Major Complexity	~	173	18.4	12
N60B Female Reproductive System Malignancy, Minor Complexity	1,282	428	6.6	3
N61A Female Reproductive System Infections, Major Complexity	0	89	5.6	4
N61B Female Reproductive System Infections, Minor Complexity	220	300	2.5	2
N62A Menstrual and Other Female Reproductive System Disorders, Major Complexity	135	479	3.6	2
N62B Menstrual and Other Female Reproductive System Disorders, Minor Complexity	6,005	2,130	1.8	1
Total Discharges	**33,163**	**11,552**	**3.7**	**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 4.16 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	1,269	10.9	8
O01B Caesarean Delivery, Intermediate Complexity	0	6,854	5.9	5
O01C Caesarean Delivery, Minor Complexity	0	12,040	4.2	4
O02A Vaginal Delivery W OR Procedures, Major Complexity	0	146	5.2	4
O02B Vaginal Delivery W OR Procedures, Minor Complexity	0	864	3.3	3
O03A Ectopic Pregnancy, Major Complexity	0	107	2.9	2
O03B Ectopic Pregnancy, Minor Complexity	31	577	2.0	2
O04A Postpartum and Post Abortion W OR Procedures, Major Complexity[b]	~	67	6.0	4
O04B Postpartum and Post Abortion W OR Procedures, Minor Complexity[b]	19	160	2.4	2
O05Z Abortion W OR Procedures[b]	1,483	2,680	1.4	1
O60A Vaginal Delivery, Major Complexity	0	3,809	4.7	4
O60B Vaginal Delivery, Intermediate Complexity	0	18,710	3.0	3
O60C Vaginal Delivery, Minor Complexity	0	18,737	2.1	2
O61A Postpartum and Post Abortion W/O OR Procedures, Major Complexity[b]	22	487	3.9	3
O61B Postpartum and Post Abortion W/O OR Procedures, Minor Complexity[b]	1,183	2,723	2.1	1
O63A Abortion W/O OR Procedures, Major Complexity[b]	~	119	2.4	1
O63B Abortion W/O OR Procedures, Minor Complexity[b]	380	2,468	1.3	1
O66A Antenatal and Other Obstetric Admissions, Major Complexity	1,289	10,715	2.2	1
O66B Antenatal and Other Obstetric Admissions, Minor Complexity	7,243	32,285	1.4	1
Total Discharges	**11,655**	**114,817**	**2.7**	**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 Facility <5Days	0	38	2.5	2
P02Z Cardiothoracic and Vascular Procedures for Neonates	0	67	31.2	16
P03A Neonate, AdmWt 1000-1499g W Significant OR Proc/Vent>=96hrs, Major Complexity	0	42	65.6	60
P03B Neonate, AdmWt 1000-1499g W Significant OR Proc/Vent>=96hrs, Minor Complexity	0	148	39.4	40
P04A Neonate, AdmWt 1500-1999g W Significant OR Proc/Vent>=96hrs, Major Complexity	0	18	40.9	37
P04B Neonate, AdmWt 1500-1999g W Significant OR Proc/Vent>=96hrs, Minor Complexity	0	122	29.7	31
P05A Neonate, AdmWt 2000-2499g W Significant OR Proc/Vent>=96hrs, Major Complexity	0	6	116.3	54
P05B Neonate, AdmWt 2000-2499g W Significant OR Proc/Vent>=96hrs, Minor Complexity	0	79	18.0	15
P06A Neonate, AdmWt >=2500g W Significant OR Proc/Vent>=96hrs, Major Complexity	0	118	36.2	23
P06B Neonate, AdmWt >=2500g W Significant OR Proc/Vent>=96hrs, Minor Complexity	~	180	13.6	10
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	79	2.1	2
P60B Neonate W/O Sig OR/Vent>=96hrs, Died/Transfer Acute Facility <5 Days, MinC	27	576	1.4	1
P61Z Neonate, AdmWt <750g W/O Significant OR procedure	~	89	64.2	68
P62A Neonate, AdmWt 750-999g W/O Significant OR Procedures, Major Complexity	0	39	80.8	78
P62B Neonate, AdmWt 750-999g W/O Significant OR Procedures, Minor Complexity	~	72	53.3	54
P63A Neonate, AdmWt 1000-1249g W/O Significant OR Proc/Vent>=96hrs, Major Complexity	0	18	45.4	43
P63B Neonate, AdmWt 1000-1249g W/O Significant OR Proc/Vent>=96hrs, Minor Complexity	0	39	34.7	37
P64A Neonate, AdmWt 1250-1499g W/O Significant OR Proc/Vent>=96hrs, Major Complexity	0	26	38.2	36
P64B Neonate, AdmWt 1250-1499g W/O Significant OR Proc/Vent>=96hrs, Minor Complexity	0	99	26.9	27
P65A Neonate, AdmWt 1500-1999g W/O Significant OR Proc/Vent>=96hrs, Extreme Complexity	0	46	31.7	32
P65B Neonate, AdmWt 1500-1999g W/O Significant OR Proc/Vent>=96hrs, Major Complexity	0	110	26.1	26
P65C Neonate, AdmWt 1500-1999g W/O Significant OR Proc/Vent>=96hrs, Intermediate Complexity	0	343	19.2	18
P65D Neonate, AdmWt 1500-1999g W/O Significant OR Proc/Vent>=96hrs, Minor Complexity	0	218	12.8	12
P66A Neonate, AdmWt 2000-2499g W/O Significant OR Proc/Vent>=96hrs, Extreme Complexity	0	94	19.5	17
P66B Neonate, AdmWt 2000-2499g W/O Significant OR Proc/Vent>=96hrs, Major Complexity	0	297	13.8	14
P66C Neonate, AdmWt 2000-2499g W/O Significant OR Proc/Vent>=96hrs, Intermediate Complexity	~	686	9.0	8
P66D Neonate, AdmWt 2000-2499g W/O Significant OR Proc/Vent>=96hrs, Minor Complexity	14	545	3.8	2
P67A Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, <37 Comp Wks Gest, Extreme Complexity	6	72	18.3	13
P67B Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, <37 Comp Wks Gest, Major Complexity	6	175	10.2	9
P67C Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, <37 Comp Wks Gest, Int Complexity	11	173	7.3	6
P67D Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, <37 Comp Wks Gest, Min Complexity	25	305	5.4	3
P68A Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Comp Wks Gest, Ext Complexity	13	536	10.2	7
P68B Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Comp Wks Gest, Maj Complexity	30	1,150	5.3	4
P68C Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Comp Wks Gest, Int Complexity	76	1,415	3.6	3
P68D Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Comp Wks Gest, Min Complexity	275	6,433	2.3	2
Total Discharges	**489**	**14,463**	**7.6**	**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	6	66	20.5	11
Q02B Blood and Immune System Disorders W Other OR Procedures, Minor Complexity	465	205	3.9	2
Q60A Reticuloendothelial and Immunity Disorders, Major Complexity	437	1,131	5.9	4
Q60B Reticuloendothelial and Immunity Disorders, Minor Complexity	3,195	413	2.3	1
Q61A Red Blood Cell Disorders, Major Complexity	852	2,122	7.5	5
Q61B Red Blood Cell Disorders, Intermediate Complexity	11,915	2,379	2.6	1
Q61C Red Blood Cell Disorders, Minor Complexity	21,488	60	1.5	1
Q62A Coagulation Disorders, Major Complexity	146	572	5.4	2
Q62B Coagulation Disorders, Minor Complexity	3,320	675	2.3	1
Total Discharges	**41,824**	**7,655**	**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	~	73	28.5	16
R01B Lymphoma and Leukaemia W Major OR Procedures, Minor Complexity	17	46	5.4	4
R02A Other Neoplastic Disorders W Major OR Procedures, Major Complexity	0	24	21.8	15
R02B Other Neoplastic Disorders W Major OR Procedures, Intermediate Complexity	*	77	8.8	7
R02C Other Neoplastic Disorders W Major OR Procedures, Minor Complexity	34	165	5.0	3
R03A Lymphoma and Leukaemia W Other OR Procedures, Major Complexity	0	58	39.1	30
R03B Lymphoma and Leukaemia W Other OR Procedures, Intermediate Complexity	8	116	16.6	13
R03C Lymphoma and Leukaemia W Other OR Procedures, Minor Complexity	177	159	5.0	2
R04A Other Neoplastic Disorders W Other OR Procedures, Major Complexity	18	54	14.3	11
R04B Other Neoplastic Disorders W Other OR Procedures, Minor Complexity	772	108	4.1	2
R60A Acute Leukaemia, Major Complexity	130	454	23.9	19
R60B Acute Leukaemia, Minor Complexity	4,387	501	6.8	3
R61A Lymphoma and Non-Acute Leukaemia, Major Complexity	1,126	1,420	13.6	8
R61B Lymphoma and Non-Acute Leukaemia, Minor Complexity	17,422	1,650	4.3	3
R62A Other Neoplastic Disorders, Major Complexity[b]	558	156	14.4	9
R62B Other Neoplastic Disorders, Intermediate Complexity[b]	4,753	125	7.7	3
R62C Other Neoplastic Disorders, Minor Complexity[b]	109,687	28	5.1	3
R63Z Chemotherapy	114,475	0	-	-
Total Discharges	**253,572**	**5,214**	**10.4**	**5**

Notes:
~ Denotes five or fewer discharges reported to HIPE.
* Further suppression required to prevent disclosure of five or fewer discharges.
- Mean and median length of stay cannot be calculated as no in-patients are reported.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.
b From 2015 this data includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

TABLE 4.20 Total Discharges: MDC 18 Infectious and Parasitic Diseases, Systemic or Unspecified Sites: AR-DRG 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	40	24.2	16
S65B Human Immunodeficiency Virus, Intermediate Complexity	~	106	7.9	5
S65C Human Immunodeficiency Virus, Minor Complexity	28	36	6.3	6
T01A Infectious and Parasitic Diseases W OR Procedures, Major Complexity	~	128	35.2	27
T01B Infectious and Parasitic Diseases W OR Procedures, Intermediate Complexity	7	178	16.2	11
T01C Infectious and Parasitic Diseases W OR Procedures, Minor Complexity	39	257	10.8	7
T40Z Infectious and Parasitic Diseases W Ventilator Support	0	30	19.0	13
T60A Septicaemia, Major Complexity	7	328	25.1	16
T60B Septicaemia, Intermediate Complexity	~	1,005	12.5	8
T60C Septicaemia, Minor Complexity	15	1,406	7.3	5
T61A Postoperative and Post-Traumatic Infections, Major Complexity	10	319	10.1	7
T61B Postoperative and Post-Traumatic Infections, Minor Complexity	44	754	4.6	3
T62A Fever of Unknown Origin, Major Complexity	~	174	6.4	4
T62B Fever of Unknown Origin, Minor Complexity	21	817	2.8	2
T63A Viral Illnesses, Major Complexity	34	557	4.2	3
T63B Viral Illnesses, Minor Complexity	694	4,764	1.7	1
T64A Other Infectious and Parasitic Diseases, Major Complexity	0	29	28.7	22
T64B Other Infectious and Parasitic Diseases, Intermediate Complexity	9	111	8.1	6
T64C Other Infectious and Parasitic Diseases, Minor Complexity	99	254	4.8	2
Total Discharges	**1,019**	**11,293**	**6.0**	**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 4.21 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	43	~	^	^
U60A Mental Health Treatment W/O ECT, Sameday, Major Complexity	359	312	1.0	1
U60B Mental Health Treatment W/O ECT, Sameday, Minor Complexity	199	516	1.0	1
U61A Schizophrenia Disorders, Major Complexity	0	*	^	^
U61B Schizophrenia Disorders, Minor Complexity	0	103	31.6	18
U62A Paranoia and Acute Psychotic Disorders, Major Complexity	0	44	20.9	11
U62B Paranoia and Acute Psychotic Disorders, Minor Complexity	0	115	17.0	6
U63A Major Affective Disorders, Major Complexity	0	64	34.8	20
U63B Major Affective Disorders, Minor Complexity	0	128	18.5	10
U64A Other Affective and Somatoform Disorders, Major Complexity	0	57	23.3	10
U64B Other Affective and Somatoform Disorders, Minor Complexity	0	162	9.9	4
U65A Anxiety Disorders, Major Complexity	0	145	10.8	5
U65B Anxiety Disorders, Minor Complexity	0	284	3.8	2
U66A Eating and Obsessive-Compulsive Disorders, Major Complexity	0	48	32.1	22
U66B Eating and Obsessive-Compulsive Disorders, Minor Complexity	0	130	15.9	7
U67A Personality Disorders and Acute Reactions, Major Complexity	0	98	20.4	9
U67B Personality Disorders and Acute Reactions, Minor Complexity	0	158	8.4	3
U68A Childhood Mental Disorders, Major Complexity	0	43	3.5	1
U68B Childhood Mental Disorders, Minor Complexity	0	42	3.6	1
Total Discharges	**601**	**2,490**	**11.1**	**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	407	7.9	4
V60B Alcohol Intoxication and Withdrawal, Minor Complexity	0	993	3.3	2
V61A Drug Intoxication and Withdrawal, Major Complexity	0	20	9.3	7
V61B Drug Intoxication and Withdrawal, Minor Complexity	0	89	7.8	3
V62A Alcohol Use and Dependence, Major Complexity	0	100	16.3	8
V62B Alcohol Use and Dependence, Minor Complexity	0	391	4.8	3
V63Z Opioid Use and Dependence	0	84	20.3	21
V64Z Other Drug Use and Dependence	0	34	11.9	8
V65Z Treatment for Alcohol Disorders, Sameday	~	455	1.0	1
V66Z Treatment for Drug Disorders, Sameday	~	57	1.0	1
Total Discharges	**~**	**2,630**	**5.1**	**2**

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

TABLE 4.23 Total Discharges: MDC 21 Injuries, Poisonings and Toxic Effects of Drugs: AR-DRG 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	24	108.4	59
W01B Vent, Trac & Cran Procs for Mult Sig Trauma, Intermediate Complexity	0	43	44.5	30
W01C Vent, Trac & Cran Procs for Mult Sig Trauma, Minor Complexity	0	51	39.1	17
W02A Hip, Femur and Lower Limb Procedures for Multiple Sig Trauma, Major Complexity	0	21	38.5	30
W02B Hip, Femur and Lower Limb Procedures for Multiple Sig Trauma, Minor Complexity	0	75	21.0	15
W03Z Abdominal Procedures for Multiple Significant Trauma	0	24	17.1	12
W04A Multiple Significant Trauma W Other OR Procedures, Major Complexity	0	24	24.0	13
W04B Multiple Significant Trauma W Other OR Procedures, Minor Complexity	0	35	9.4	8
W60A Multiple Sig Trauma, Died or Transferred to Acute Facility <5 Days, Major Comp	0	34	2.1	2
W60B Multiple Sig Trauma, Died or Transferred to Acute Facility <5 Days, Minor Comp	0	51	1.9	1
W61A Multiple Significant Trauma W/O OR Procedures, Major Complexity	0	70	31.5	17
W61B Multiple Significant Trauma W/O OR Procedures, Minor Complexity	0	109	8.5	6
X02A Microvascular Tissue Transfer and Skin Grafts for Injuries to Hand, Major Comp	~	21	9.3	6
X02B Microvascular Tissue Transfer and Skin Grafts for Injuries to Hand, Minor Comp	10	84	2.1	1
X04A Other Procedures for Injuries to Lower Limb, Major Complexity	~	37	24.6	16
X04B Other Procedures for Injuries to Lower Limb, Minor Complexity	12	148	3.0	2
X05A Other Procedures for Injuries to Hand, Major Complexity	19	208	2.4	1
X05B Other Procedures for Injuries to Hand, Minor Complexity	219	933	1.2	1
X06A Other Procedures for Other Injuries, Major Complexity	0	161	24.6	11
X06B Other Procedures for Other Injuries, Intermediate Complexity	32	210	7.0	4
X06C Other Procedures for Other Injuries, Minor Complexity	184	964	2.2	1
X07A Skin Grafts for Injuries Excluding Hand, Major Complexity	~	23	24.2	17
X07B Skin Grafts for Injuries Excluding Hand, Intermediate Complexity	~	29	16.2	14
X07C Skin Grafts for Injuries Excluding Hand, Minor Complexity	8	47	5.0	4
X40A Injuries, Poisoning and Toxic Effects of Drugs W Ventilator Support, Major Comp	0	31	12.7	9
X40B Injuries, Poisoning and Toxic Effects of Drugs W Ventilator Support, Minor Comp	0	51	5.6	4
X60A Injuries, Major Complexity	~	932	11.2	5
X60B Injuries, Minor Complexity	415	3,477	1.8	1
X61A Allergic Reactions, Major Complexity	~	88	2.4	1
X61B Allergic Reactions, Minor Complexity	~	282	1.2	1
X62A Poisoning/Toxic Effects of Drugs and Other Substances, Major Complexity	0	869	6.5	3
X62B Poisoning/Toxic Effects of Drugs and Other Substances, Minor Complexity	131	3,060	1.8	1
X63A Sequelae of Treatment, Major Complexity	25	734	7.5	5
X63B Sequelae of Treatment, Minor Complexity	164	1,853	2.3	1
X64A Other Injuries, Poisonings and Toxic Effects, Major Complexity	0	130	11.8	7
X64B Other Injuries, Poisonings and Toxic Effects, Minor Complexity	9	509	1.7	1
Total Discharges	**1,241**	**15,442**	**4.4**	**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	14	61.8	40
Y02A Skin Grafts for Other Burns, Major Complexity	0	42	20.9	16
Y02B Skin Grafts for Other Burns, Intermediate Complexity	~	51	12.7	11
Y02C Skin Grafts for Other Burns, Minor Complexity	~	28	8.3	7
Y03A Other OR Procedures for Other Burns, Major Complexity	17	29	7.8	2
Y03B Other OR Procedures for Other Burns, Minor Complexity	~	13	5.2	3
Y60Z Burns, Transferred to Acute Facility <5 Days	0	38	1.5	1
Y61Z Severe Burns	~	62	9.0	5
Y62A Other Burns, Major Complexity	~	91	8.0	5
Y62B Other Burns, Minor Complexity	86	192	3.9	2
Total Discharges	**113**	**560**	**8.9**	**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	53	120	25.4	6
Z01B Other Contacts W Health Services W OR Procedures, Minor Complexity	879	214	2.7	2
Z40Z Other Contacts W Health Services W Endoscopy, Sameday	15,117	21	1.0	1
Z60A Rehabilitation, Major Complexity	933	1,460	42.0	30
Z60B Rehabilitation, Minor Complexity	476	2,548	26.5	18
Z61A Signs and Symptoms, Major Complexity	110	707	10.9	5
Z61B Signs and Symptoms, Intermediate Complexity	246	882	3.7	1
Z61C Signs and Symptoms, Minor Complexity	1,090	1,140	2.2	1
Z63A Other Follow Up After Surgery or Medical Care, Major Complexity	55	1,930	23.9	14
Z63B Other Follow Up After Surgery or Medical Care, Minor Complexity	1,755	1,857	10.4	3
Z64A Other Factors Influencing Health Status, Major Complexity	4,010	710	9.1	2
Z64B Other Factors Influencing Health Status, Minor Complexity	35,049	1,284	2.1	1
Z65Z Congenital Anomalies and Problems Arising from Neonatal Period	95	59	3.7	1
Z66Z Sleep Disorders	31	802	1.1	1
Total Discharges	**59,899**	**13,734**	**16.1**	**5**

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	~	397	48.0	30
801B OR Procedures Unrelated to Principal Diagnosis, Intermediate Complexity	*	493	17.8	11
801C OR Procedures Unrelated to Principal Diagnosis, Minor Complexity	255	349	5.3	3
Total Discharges	**306**	**1,239**	**24.0**	**12**

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.
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*. Typically, these are patients admitted for a medical treatment; they develop a complication unrelated to the principal diagnosis and later have an OR procedure performed for the secondary diagnoses associated with the complication.
Error DRGs: Hospital records that contain clinically atypical or invalid information are assigned to one of three error DRGs: 960Z Ungroupable, 961Z Unacceptable Principal Diagnosis or 963Z Neonatal Diagnosis Not Consistent W Age/Weight.
Commonwealth of Australia (Department of Health and Ageing) 2008, Australian Refined Diagnosis Related Groups, Version 6.0, Definitions Manual, Volume 1. Canberra: Commonwealth Department of Health and Ageing. Pages 14 and 15.

TABLE 4.27 Total Discharges: Pre-MDC: AR-DRG 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	55	35.5	23
A03Z Lung or Heart-Lung Transplant	0	31	46.8	22
A05Z Heart Transplant	0	14	71.9	34
A06A Tracheostomy and/or Ventilation >=96hours, Major Complexity	0	230	104.1	65
A06B Tracheostomy and/or Ventilation >=96hours, Intermediate Complexity	~	765	57.7	36
A06C Tracheostomy and/or Ventilation >=96hours, Minor Complexity	0	1,141	28.4	19
A07A Allogeneic Bone Marrow Transplant, Age <=16 Years or Major Complexity	0	49	47.2	40
A07B Allogeneic Bone Marrow Transplant, Age >=17 Years and Minor Complexity	0	47	35.6	37
A08A Autologous Bone Marrow Transplant, Major Complexity	0	108	24.0	21
A08B Autologous Bone Marrow Transplant, Minor Complexity	*	40	12.4	16
A09A Kidney Transplant, Age <=16 Years or Major Complexity	0	30	15.1	13
A09B Kidney Transplant, Age >=17 Years and Minor Complexity	0	141	9.9	9
A10Z Insertion of Ventricular Assist Device	0	~	^	^
A11A Insertion of Implantable Spinal Infusion Device, Major Complexity	0	14	7.6	7
A11B Insertion of Implantable Spinal Infusion Device, Minor Complexity	0	*	^	^
A12Z Insertion of Neurostimulator Device	130	120	8.3	1
A40A ECMO, Major Complexity	0	7	109.9	126
A40B ECMO, Minor Complexity	0	19	28.6	25
Total Discharges	**161**	**2,819**	**41.3**	**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.

Annex
2016

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PROFILE OF DISCHARGES WITH *FALLS*, 2016

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 emergency in-patient discharges with any listed diagnosis of a fall.[1] Additional external cause codes are assigned to any discharge with an injury coded to identify the cause, place of occurrence and activity of the injury. ICD-10-AM external cause diagnosis codes W00–W19 *falls* indicate where an injury relates to a fall.[2]

In 2016, 28,708 emergency in-patient discharges had a listed diagnosis of a fall.[3,4] These discharges accounted for 6.6 per cent of total emergency in-patient discharges. Table A 1.1 disaggregates these discharges by their associated 3-digit diagnosis code.

TABLE A 1.1 ICD-10-AM External Cause Diagnosis Codes for *falls:* Emergency[a] In-Patient Discharges (N, %)

Diagnosis code	Description	N	%
W00	Fall on same level involving ice and snow	167	0.6
W01	Fall on same level from slipping, tripping and stumbling	5,108	17.8
W02	Fall involving ice-skates, skis, roller-skates, skateboards, scooters and other pedestrian conveyances	367	1.3
W03	Other fall on same level due to collision with, or pushing by, another person	576	2
W04	Fall while being carried or supported by other persons	120	0.4
W05	Fall involving wheelchair	106	0.4
W06	Fall involving bed	1,339	4.7
W07	Fall involving chair	989	3.4
W08	Fall involving other furniture	150	0.5
W09	Fall involving playground equipment	796	2.8
W10	Fall on and from stairs and steps	2,239	7.8
W11	Fall on and from ladder	759	2.6
W12	Fall on and from scaffolding	63	0.2
W13	Fall from, out of or through building or structure	624	2.2
W14	Fall from tree	104	0.4
W15	Fall from cliff	50	0.2
W16	Diving or jumping into water causing injury other than drowning or submersion	26	0.1
W17	Other fall from one level to another	1,003	3.5
W18	Other fall on same level	3,952	13.8
W19	Unspecified fall	10,170	35.4
Total Discharges		**28,708**	**100**

Notes: Percentage columns are subject to rounding.

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

1 HIPE collects a principal diagnosis and up to 29 additional diagnoses. For more information please see Section Three.

2 See Section Three for details of clinical coding and classifications.

3 In 2016, 280 discharges had more than one diagnosis of a fall recorded. In Table A 1.1, the diagnoses reported on is the first listed diagnosis of a fall in the discharge record.

4 Of the 28,708 emergency in-patient discharges with a listed diagnosis of a fall, 1,409 discharges had a diagnosis of a fall which was flagged as hospital acquired.

A.1.2 DEMOGRAPHIC ANALYSIS

Table A 1.2 disaggregates emergency in-patient discharges with a listed diagnosis of a fall by sex and age group. In-patients are disaggregated by sameday and overnight in-patients.

Of emergency in-patients with a listed diagnosis of a fall:

- 15.8 per cent of discharges were treated on the same day, and 84.2 per cent of discharges were treated on an overnight basis
- 46.6 per cent of discharges were male and 53.4 per cent of discharges were female
- the highest proportion of discharges treated on the same day were in the 1–14 years age group (36.0 per cent)
- the highest proportion of discharges treated on an overnight basis were in the 75–84 years age group (22.5 per cent)
- the highest proportion of males were in the 1–14 years age group (19.0 per cent) compared to an older profile for females for whom the highest proportion of discharges were in the 75–84 year age group (23.4 per cent).

Figure A 1.1 shows emergency in-patient discharges with a listed diagnosis of a fall by age group and sex.

- For discharges aged between 0 and 54 years, males represented over half of all emergency in-patients with a listed diagnosis of a fall. This proportion was highest in the 15–24 year age group where 71.6 per cent of discharges were male.
- Females aged 55 years and over represented over half of all emergency in-patient discharges with a listed diagnosis of a fall. This proportion was highest in the the 85 years and over age group where 70.3 per cent of discharges were female.

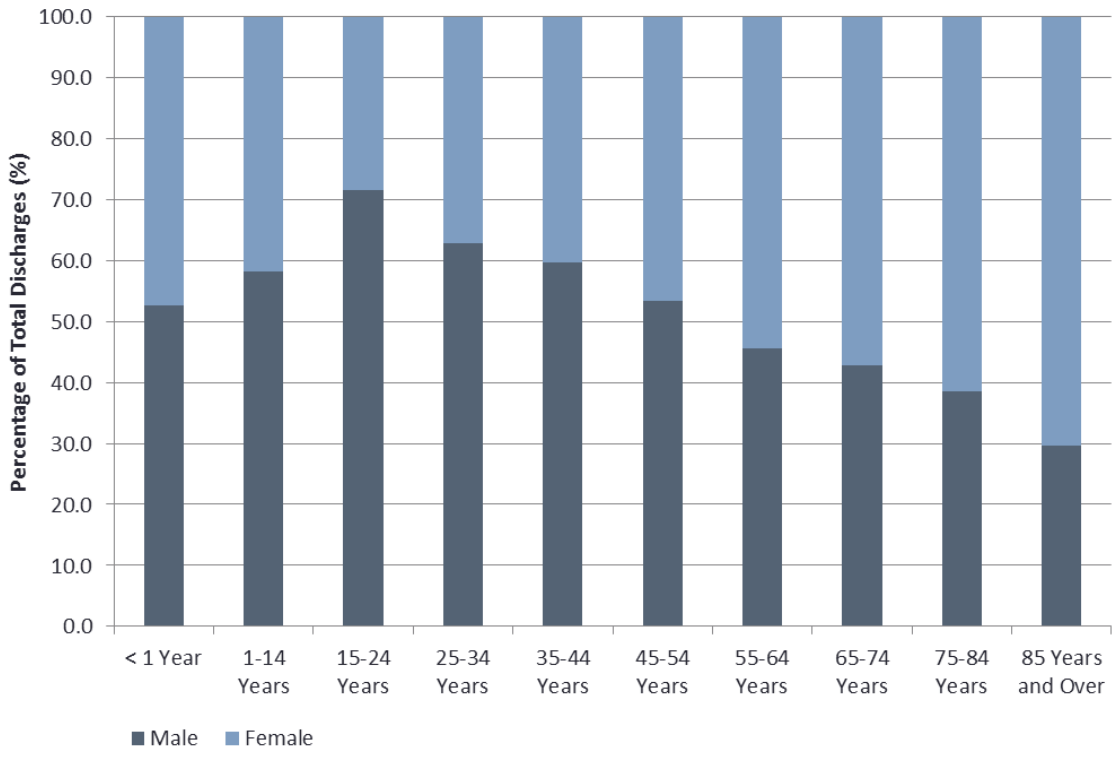
TABLE A 1.2 Emergency[a] In-Patient Discharges with a listed diagnosis of a fall: Sex and Age Group (N, %)

		Sameday In-Patients		Overnight In-Patients		Total In-Patients	
		N	%	N	%	N	%
Total	< 1 Year	117	2.6	444	1.8	561	2.0
	1-14 Years	1,635	36.0	2,726	11.3	4,361	15.2
	15-24 Years	391	8.6	917	3.8	1,308	4.6
	25-34 Years	300	6.6	876	3.6	1,176	4.1
	35-44 Years	291	6.4	1,276	5.3	1,567	5.5
	45-54 Years	338	7.4	1,766	7.3	2,104	7.3
	55-64 Years	438	9.7	2,649	11.0	3,087	10.8
	65-74 Years	425	9.4	3,856	16.0	4,281	14.9
	75-84 Years	398	8.8	5,428	22.5	5,826	20.3
	85 Years and Over	205	4.5	4,232	17.5	4,437	15.5
	Total	**4,538**	**100**	**24,170**	**100**	**28,708**	**100**
Male	< 1 Year	59	2.4	236	2.2	295	2.2
	1-14 Years	991	40.3	1,550	14.2	2,541	19.0
	15-24 Years	276	11.2	660	6.0	936	7.0
	25-34 Years	186	7.6	554	5.1	740	5.5
	35-44 Years	164	6.7	772	7.1	936	7.0
	45-54 Years	186	7.6	939	8.6	1,125	8.4
	55-64 Years	189	7.7	1,221	11.2	1,410	10.5
	65-74 Years	177	7.2	1,657	15.2	1,834	13.7
	75-84 Years	171	6.9	2,075	19.0	2,246	16.8
	85 Years and Over	62	2.5	1,254	11.5	1,316	9.8
	Total	**2,461**	**100**	**10,918**	**100**	**13,379**	**100**
Female	< 1 Year	58	2.8	208	1.6	266	1.7
	1-14 Years	644	31.0	1,176	8.9	1,820	11.9
	15-24 Years	115	5.5	257	1.9	372	2.4
	25-34 Years	114	5.5	322	2.4	436	2.8
	35-44 Years	127	6.1	504	3.8	631	4.1
	45-54 Years	152	7.3	827	6.2	979	6.4
	55-64 Years	249	12.0	1,428	10.8	1,677	10.9
	65-74 Years	248	11.9	2,199	16.6	2,447	16.0
	75-84 Years	227	10.9	3,353	25.3	3,580	23.4
	85 Years and Over	143	6.9	2,978	22.5	3,121	20.4
	Total	**2,077**	**100**	**13,252**	**100**	**15,329**	**100**

Notes: Percentage columns are subject to rounding.

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

FIGURE A 1.1 Emergency[a] In-Patient Discharges with a listed diagnosis of a fall by Age group and Sex (%)



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.

A.1.3 HOSPITAL GROUP

Table A 1.3 disaggregates emergency in-patient discharges with a listed diagnosis of a fall by Hospital Group. In-patients are disaggregated by sameday and overnight in-patients.

- The highest proportion of discharges were treated in the South/South West Hospital Group (22.7 per cent), both on a same day (20.9 per cent) and an overnight basis (23.0 per cent).

TABLE A 1.3 Emergency[a] In-Patient Discharges with a listed diagnosis of a fall: Hospital Group (N, %)

	Sameday In-Patients		Overnight In-Patients		Total In-Patients	
	N	%	N	%	N	%
Ireland East	785	17.3	3,898	16.1	4,683	16.3
RCSI	859	18.9	4,300	17.8	5,159	18.0
Dublin Midlands	253	5.6	3,628	15.0	3,881	13.5
South/South West	947	20.9	5,569	23.0	6,516	22.7
UL	333	7.3	1,769	7.3	2,102	7.3
Saolta	732	16.1	4,069	16.8	4,801	16.7
Children's	629	13.9	937	3.9	1,566	5.5
Total	**4,538**	**100**	**24,170**	**100**	**28,708**	**100**

Notes: Percentage columns are subject to rounding.

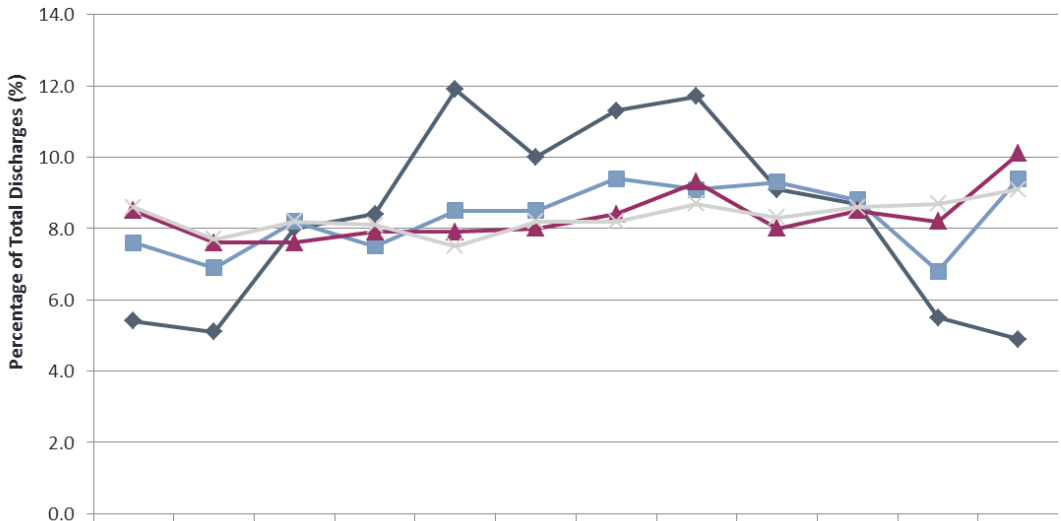
a HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about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

A.1.4 TEMPORAL ANALYSIS

Figure A 1.2 shows emergency in-patient discharges with a listed diagnosis of a fall by age group and month of admission.

- Discharges aged under 15 years showed the highest proportion of admissions compared to the other age groups between May and August. Discharges for this age group were highest in May at 11.9 per cent.
- For discharges in the older age groups, admissions were highest in December, peaking at 10.1 per cent amongst those aged 45–64 years, and 9.1 per cent for those aged 65 years and over.

FIGURE A 1.2 Emergency[a] In-Patient Discharges with a listed diagnosis of a fall by Age Group and Month of Admission (%)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Under 15 Years	5.4	5.1	8.0	8.4	11.9	10.0	11.3	11.7	9.1	8.7	5.5	4.9
15-44 Years	7.6	6.9	8.2	7.5	8.5	8.5	9.4	9.1	9.3	8.8	6.8	9.4
45-64 Years	8.5	7.6	7.6	7.9	7.9	8.0	8.4	9.3	8.0	8.5	8.2	10.1
65 Years and Over	8.6	7.7	8.2	8.1	7.5	8.2	8.2	8.7	8.3	8.6	8.7	9.1

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. Includes 821 discharges admitted prior to 2016 and discharged in 2016.

A.1.5 PRINCIPAL DIAGNOSES

Table A 1.4 presents the top 10 principal diagnoses for discharges with a listed diagnosis of a fall based on the ICD-10-AM classification.[5]

- The highest principal diagnosis reported was *Fracture of Femur* accounting for 13.9 per cent of in-patient discharges, with a total in-patient mean length of stay of 18.2 days.
- *Fracture of Forearm* accounted for 13.3 per cent of in-patient discharges, while the in-patient mean length of stay was 2.7 days.

TABLE A 1.4 Emergency[a] In-Patient Discharges with a listed diagnosis of a fall: Top 10 Principal Diagnoses (N, %, In-Patient Length of Stay, Average Age)

Top 10 Principal Diagnoses		N	%	In-Patient LOS		Average Age
				Mean	Median	
S72	Fracture of femur	3,996	13.9	18.2	12	76
S52	Fracture of forearm	3,824	13.3	2.7	1	41
S82	Fracture of lower leg including ankle	2,603	9.1	6.5	3	48
S09	Other and unspecified injuries of head	2,048	7.1	2.4	1	29
S42	Fracture of shoulder and upper arm	1,698	5.9	6.6	2	45
S06	Intracranial injury	1,628	5.7	11.3	3	57
S01	Open wound of head	1,366	4.8	4.4	1	50
S32	Fracture of lumbar spine and pelvis	1,215	4.2	15.4	8	73
S22	Fracture rib(s) sternum & thoracic spine	681	2.4	11.8	5	67
R55	Syncope and collapse	676	2.4	10.1	4	69
Top 10 Principal Diagnoses		**19,735**	**68.7**	**–**	**–**	**–**
Total In-Patients		**28,708**	**100**	**10.6**	**3**	**56**

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.

5 See Section Three for details of clinical coding and classification.

A.1.6 PRINCIPAL PROCEDURE

Table A 1.5 presents the top 10 principal procedure blocks for discharges with a listed diagnosis of a fall based on the ICD-10-AM classification.[6]

- A principal procedure was recorded for 21,774 (75.8 per cent) of all emergency in-patients with a listed diagnosis of a fall.
- The procedure block *Generalised allied health interventions* was reported for 31.3 per cent of in-patient discharges, with an in-patient mean length of stay of 16.7 days.
- The procedure block *Arthroplasty of hip* accounted for 7.5 per cent of in-patient discharges, while the in-patient mean length of stay was 18.2 days.

TABLE A 1.5 Emergency[a] In-Patient Discharges with a listed diagnosis of a fall: Top 10 Principal Procedures Blocks (N, %, In-Patient Length of Stay, Average Age)

Top 10 Principal Procedure Blocks		N	%	In-Patient LOS		Average Age
				Mean	Median	
1916	Generalised allied health interventions	6,818	31.3	16.7	8	73
1489	Arthroplasty of hip	1,632	7.5	18.2	12	79
1427	Closed reduction of fracture of radius	1,514	7.0	1.8	1	34
1479	Fixation of fracture of pelvis or femur	1,348	6.2	21.3	12	78
1539	Open reduction of fracture of ankle or toe	1,245	5.7	5.0	2	48
1429	Open reduction of fracture of radius	1,123	5.2	2.6	2	53
1486	Reduction of fracture of pelvis or femur	669	3.1	20.1	11	72
1414	Open reduction of fracture of humerus or elbow	536	2.5	5.7	2	46
1413	Closed reduction of fracture of humerus or elbow	413	1.9	2.1	1	13
1431	Reduction of fracture of shaft of radius and ulna	355	1.6	1.4	1	11
Top 10 Principal Procedure Blocks		**15,653**	**71.9**	**–**	**–**	**–**
Total In-Patients with Procedure		**21,774**	**100**	**13.3**	**5**	**60**

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.

6 See Section Three for details of clinical coding and classification.

A.1.7 CASEMIX ANALYSIS

Table A 1.6 presents the top 10 AR-DRGs for emergency in-patient discharges with a listed diagnosis of a fall.[7]

- The highest proportion of discharges were grouped to *Humerus, Tibia, Fibula and Ankle Procedures, Minor Complexity* (AR-DRG I13B), representing 8.0 per cent of in-patient discharges, with an average length of stay of 3.2 days.
- Discharges grouped to *Other Elbow and Forearm Procedures, Minor Complexity* (AR-DRG I19B) represented 7.5 per cent of in-patient discharges, and stayed on average 1.8 days in hospital.

TABLE A 1.6 Emergency[a] In-Patient Discharges with a listed diagnosis of a fall: Top 10 AR-DRGs (N, %, In-Patient Length of Stay, Average Age)

Top 10 AR-DRGs		N	%	In-Patient LOS		Average Age
				Mean	Median	
I13B	Humerus, Tibia, Fibula and Ankle Procedures, Minor Complexity	2,299	8.0	3.2	2	40
I19B	Other Elbow and Forearm Procedures, Minor Complexity	2,150	7.5	1.8	1	47
B80B	Other Head Injuries, Minor Complexity	1,866	6.5	1.3	1	26
I08B	Other Hip and Femur Procedures, Minor Complexity	1,521	5.3	15.6	11	76
X60B	Injuries, Minor Complexity	1,471	5.1	2.3	1	44
I03B	Hip Replacement, Minor Complexity	1,345	4.7	14.9	11	79
I81Z	Musculoskeletal Injuries, Sameday	1,247	4.3	1.0	1	30
I75B	Injuries to Shoulder, Arm, Elbow, Knee, Leg and Ankle, Minor Complexity	857	3.0	3.7	2	48
I74B	Injuries to Forearm, Wrist, Hand and Foot, Minor Complexity	744	2.6	1.7	1	28
X60A	Injuries, Major Complexity	684	2.4	13.2	6	77
Top 10 AR-DRGs		**14,184**	**49.4**	**–**	**–**	**–**
Total In-Patients		**28,708**	**100**	**10.6**	**3**	**56**

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.

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

Glossary & Abbreviations

GLOSSARY

Acute hospital

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

Additional diagnosis

This is a condition or complaint either coexisting with the principal diagnosis or arising during the episode of admitted patient care, episode of residential care or attendance at a health care establishment, as represented by a code (Health Data Standards Committee (2006), National Health Data Dictionary, Version 13, AIHW).

Admission type

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

Australian Coding Standards

Australian Coding Standards (ACS) is a document developed to provide guidance in the application of ICD-10-AM and ACHI codes. Standards are 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 admitted as in-patients and discharged on the same day. They do not meet the criteria to be classified as a day patient.
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 V8.0 was used in the collection of HIPE data in 2016.
Length of stay	Length of stay refers to the time, expressed in days, between admission to and discharge from hospital. For day patients or where the dates of admission and discharge are the same, length of stay is set equal to one day. Mean and median lengths of stay are provided for in-patients only. Mean length of stay is computed by dividing the number of days stayed by the number of discharges. The median length of stay is the middle value among the ordered lengths of stay, such that half of the values for length of stay are below the median and half the values for length of stay are above the median.
Major Diagnostic Category (MDC)	The MDC is a category generally based on a single body system or aetiology that is associated with a particular medical specialty. However, records assigned to MDCs 01, 15, 18 and 21 may have principal diagnoses associated with other categories. In AR-DRG Version 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 (Health Data Standards Committee (2006), National Health Data Dictionary, Version 13, AIHW).

Principal and additional procedure

A procedure is defined as a clinical intervention that

- is surgical in nature, and/or
- carries a procedural risk, and/or
- carries an anaesthetic risk, and/or
- requires specialised training, and/or
- requires special facilities or equipment only available in an acute care setting.

The order of codes should be determined using the following hierarchy:

- procedure performed for treatment of the principal diagnosis
- procedure performed for treatment of an additional diagnosis
- diagnostic/exploratory procedure related to the principal diagnosis
- diagnostic/exploratory procedure related to an additional diagnosis for the episode of care (NCCH, 2013).

Public/private status

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

Sources: The above definitions are taken directly from, or based on, those provided in the following:
Department of Health and Children, 2001. Quality and Fairness a Health System for You: Health Strategy. Dublin: The Stationery Office.
'Hospital Services – Introduction': Citizen's Information; date consulted: 9 December 2011.
www.citizensinformation.ie/categories/health/hospital-services/hospital_services_introduction
For further information on the definitions of diagnoses see NCCH ICD-10-AM, July 2013, General Standards for Diseases.
For further information on the definitions of procedures see NCCH ICD-10-AM, July 2013, General Standards for Interventions.
For further information on AR-DRG Version 8.0 see Australian Consortium for Classification Development website https://www.accd.net.au/ArDrg.aspx?page=2 [Accessed 1st June 2017].

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, 8th Edition

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
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

Table of Contents

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	Voluntary
St. James's Hospital, Dublin	Dublin	Voluntary
Coombe Women & Infants University Hospital	Dublin	Voluntary
Tallaght 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 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 2016: 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 Hospital are included in the Dublin Midlands Hospital Group, while discharges aged less than 17 years from Tallaght Hospital are included in the Children's Hospital Group.

APPENDIX II: HIPE DATA COLLECTED

TABLE II.1 Data Collected by HIPE*

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

Data Collected by HIPE (contd.)

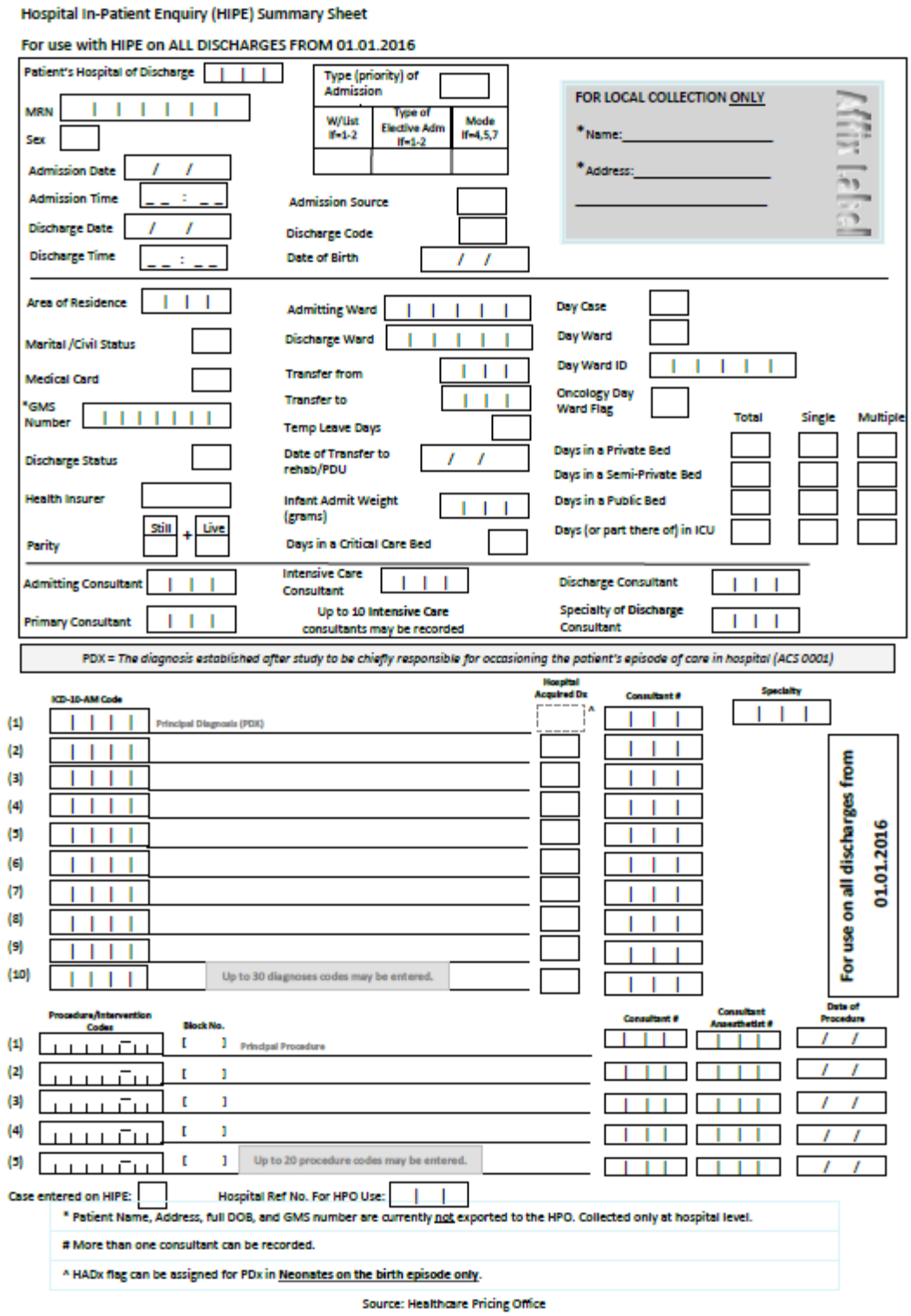
Type of Data	Parameters	Notes
		residence, prison, or other.
Administrative Data (contd.)	Discharge destination	Values include self discharge, home, nursing home, convalescent home or long stay accommodation, transfer to hospital (in HIPE) as emergency, transfer to hospital (in HIPE) as non-emergency,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

Note: * For details of all variables collected by HIPE see HIPE Data Dictionary 2016 Version 8.1.

Source: HIPE Data Dictionary 2016 Version 8.1, available at www.hpo.ie

APPENDIX III: HIPE DATA ENTRY FORM

FIGURE III.1 HIPE Data Entry Form, 2016



Hospital In-Patient Enquiry (HIPE) Summary Sheet

For use with HIPE on ALL DISCHARGES FROM 01.01.2016

Patient's Hospital of Discharge | | |

MRN | | | | | | |

Sex

Admission Date / /

Admission Time _ _ : _ _

Discharge Date / /

Discharge Time _ _ : _ _

Type (priority) of Admission

W/List If=1-2 | Type of Elective Adm If=1-2 | Mode If=4,5,7

Admission Source

Discharge Code

Date of Birth / /

FOR LOCAL COLLECTION ONLY

*Name:

*Address:

Area of Residence | | |

Marital /Civil Status

Medical Card

*GMS Number | | | | | | | |

Discharge Status

Health Insurer

Parity: Still + Live

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 | | | | | |

Oncology Day Ward Flag

	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			

Admitting Consultant | | |

Primary Consultant | | |

Intensive Care Consultant | | |

Up to 10 Intensive Care consultants may be recorded

Discharge Consultant | | |

Specialty of Discharge Consultant | | |

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

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

For use on all discharges from 01.01.2016

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

More than one consultant can be recorded.

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

Source: Healthcare Pricing Office

APPENDIX IV: DERIVED VARIABLES

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

TABLE IV.1 Derived Variables

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

Note: For further information on all variables collected by HIPE see HIPE Data Dictionary 2016 Version 8.1 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 NCCH 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. 2016 relates to discharges reported for 2016). It provides standard definitions for variables with the objective of ensuring that consistency and data quality are maintained.

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

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

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

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

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

Australian Coding Standards (ACS)

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

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

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

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] This report is the first HIPE Annual Report to use AR-DRG Version 8.0.

[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 1st June 2017].

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 31st June 2017]

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