Activity in Acute Public Hospitals in Ireland

2017
ANNUAL REPORT

Healthcare Pricing Office

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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 2017. Discharge activity is examined by patient type, admission type, hospital group, and by demographic parameters (such as age and sex). Particular issues of relevance to the Irish health care system covered in the report relate to the composition of discharges by medical card and public/private status. Discharges are also analysed by diagnoses, procedures, major diagnostic categories, and diagnosis related groups. The analysis is presented at the national level.

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ACKNOWLEDGEMENTS

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

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

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

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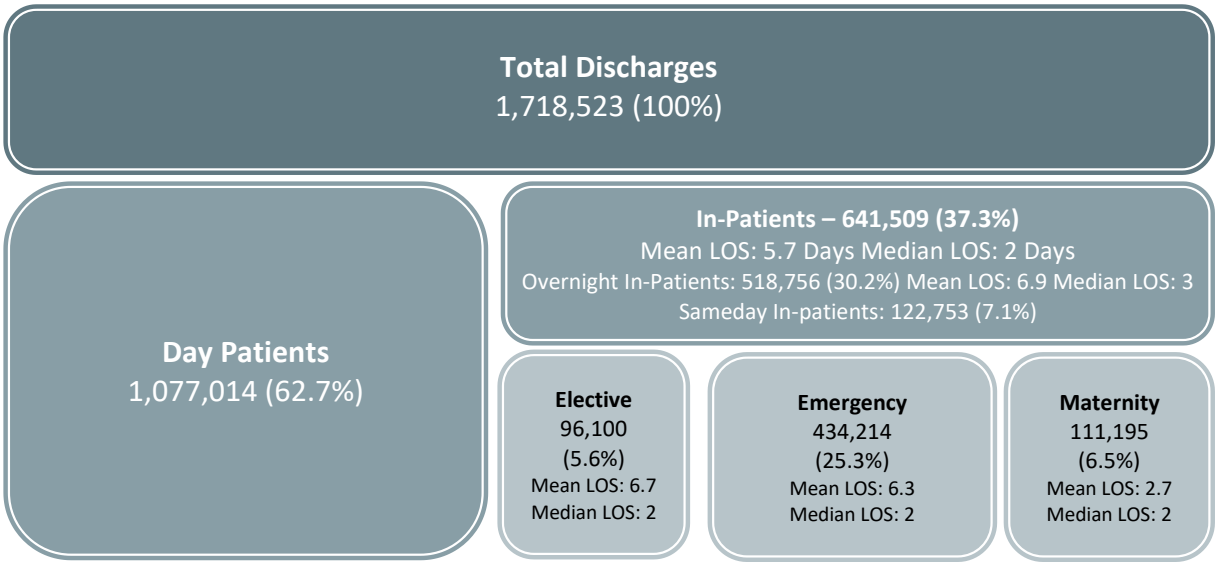
EXECUTIVE SUMMARY

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 2017 calendar year. The aim of this report is to present an overview of discharge activity in acute public hospitals in Ireland.

TOTAL DISCHARGES, 2017



Discharge Overview

- Over 1.7 million discharges were reported by participating hospitals in 2017.
- Day patients accounted for 62.7 per cent of total discharges, an increase of 1.5 per cent since 2016.
- In-patients accounted for 37.3 per cent of total discharges, a decrease of 0.4 per cent since 2016 and an increase of 3.1 per cent from 2013–2017.
- Over the period 2013–2017, the number of elective in-patient discharges decreased by 6.9 per cent, maternity in-patients decreased by 6.3 per cent, while emergency in-patients increased by 8.5 per cent.

Length of Stay

- In-patient average length of stay was 5.7 days in 2017, this has remained the same since 2015.
- Since 2013, average length of stay has remained relatively stable for elective, emergency and maternity in-patients at 6.7 days, 6.3 days and 2.7 days in 2017 respectively.

Sex

- Similar to previous years, females accounted for 53.4 per cent of total discharges with males accounting for 46.6 per cent.
- Excluding maternity discharges, females accounted for 49.5 per cent of discharges with males accounting for 50.5 per cent.

Age

- Discharges aged 65 years and over accounted for 36.9 per cent of total discharges, representing an increase of 2.8 per cent since 2016 and an increase of 19.7 per cent since 2013.
- Discharges aged 65 years and over accounted for 53.8 per cent of total in-patient bed days, an increase of 1.8 per cent since 2016 and an increase of 10.3 per cent since 2013.

Marital/Civil Status

- Married discharges accounted for 48.7 per cent of total discharges.

Public/Private Status

- Over 84 per cent of total discharges were treated on a public basis, representing a 2.1 per cent increase since 2016 and an 11.7 per cent increase since 2013. Private patients accounted for 15.4 per cent of total discharges, representing a 4.6 per cent increase from 2013–2017.
- The 25–34 years age group had the largest proportion of total discharges treated publicly (89.7 per cent) with only 10.3 per cent treated on a private basis.

General Medical Service (GMS) Status

- Of total discharges, 55.5 per cent were GMS discharges – an increase of 1.2 per cent since 2016 and an increase of 13.0 per cent since 2013.
- Of discharges in the 85 years and over age group, 83.5 per cent were GMS discharges compared to just 17.1 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 20.7 per cent of discharges were hospitalised, while the Dublin Midlands Hospital Group accounted for the highest proportion of day patients (20.6 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 (95.1 per cent).
- Of total emergency in-patients, 6.3 per cent were transferred to long stay accommodation, and 5.6 per cent were transferred to another hospital.

Day of Admission

- Over 60 per cent of elective in-patients were admitted between Monday and Wednesday, with only 6.0 per cent admitted at the weekend.

Day of Discharge

- The proportion of elective in-patients discharged increased throughout the week, from 10.5 per cent on Monday to 22.6 per cent on Friday, falling to 10.1 per cent on Saturday and 4.8 per cent on Sunday.

Month of Discharge

- The largest numbers of emergency in-patients were discharged in March (38,679 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 21.2 and 16.0 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 17.1 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 4.5 per cent of in-patients.
- At least one procedure was recorded for 57.4 per cent of in-patient discharges.
- The highest principal procedure block reported was *Generalised allied health interventions* which accounted for 27.0 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 *Coxarthrosis [arthrosis of hip],* accounting for 3.8 per cent of elective in-patient discharges.
- At least one procedure was recorded for 89.1 per cent of elective in-patient discharges.
- The highest principal procedure block reported for elective in-patients was *Generalised allied health interventions,* accounting for 10.8 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 93 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 4.3 per cent of emergency in-patient discharges.
- At least one procedure was recorded for 49.7 per cent of emergency in-patient discharges.
- The highest principal procedure block reported for emergency in-patients was *Generalised allied health interventions,* accounting for 40.3 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 48.0 per cent of delivery in-patient discharges.
- For delivery discharges who had a procedure reported, 34.1 per cent reported the principal procedure block *Caesarean section*.
- Non-delivery discharges with a principal diagnosis of *Other maternal diseases classifiable elsewhere but complicating pregnancy; childbirth and the puerperium* accounted for 27.0 per cent of non-delivery in-patient discharges.
- For non-delivery discharges who had a procedure reported, 28.7 per cent reported the principal procedure block *Curettage and evacuation of uterus*.

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

CASE MIX ANALYSIS

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

- The MDC with the largest proportion of day patients reported was *Neoplastic disorders (haematological and solid neoplasms)* (MDC 17), which accounted for 249,639 discharges or 23.2 per cent of day patients.
    - *Chemotherapy* (AR-DRG R63Z) accounted for 46.1 per cent of day patients within this MDC, and 10.7 per cent of total day patients*; Other Neoplastic Disorders, Minor Complexity* (AR-DRG R62C) accounted for 42.4 per cent of day patients within this MDC and 9.8 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 17.2 per cent of in-patients.
    - *Antenatal and Other Obstetric Admission* (AR-DRGs O66A and O66B) accounted for 37.1 per cent of in-patients within this MDC and 6.4 per cent of total in-patient discharges.
    - *Vaginal Delivery* (AR-DRGs O60A, O60B and O60C) accounted for 36.2 per cent of in-patients within this MDC and 6.2 per cent of total in-patient discharges.

[4] In 2016, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. See Appendix VIII for an overview of changes between Version 6.0 and Version 8.0 of the AR-DRG Classification System.

Overview SECTION

One

Table of Contents

1.1 INTRODUCTION

This report aims to present an overview of discharge activity in acute public hospitals in Ireland during 2017 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 2017 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 2013–2017.

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

1 See Appendix I for a list of hospitals participating in HIPE in 2017.

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

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

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

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

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

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

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

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

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

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.[12]

1.3 Data Sources for Annual Report 2017

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.[13,14] In 2017, 53 public hospitals in Ireland participated in HIPE (see Appendix I).[15,16]

Population Estimates: Population estimates for 2013–2017 are based on Census 2016 data published by the Central Statistics Office.

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

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

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

12 Available at www.hpo.ie

13 See Appendix II for details of data collected by HIPE, see also the HIPE Data Dictionary 2017 Version 9.1 available at www.hpo.ie

14 A copy of the HIPE data entry form for 2017 is contained in Appendix III.

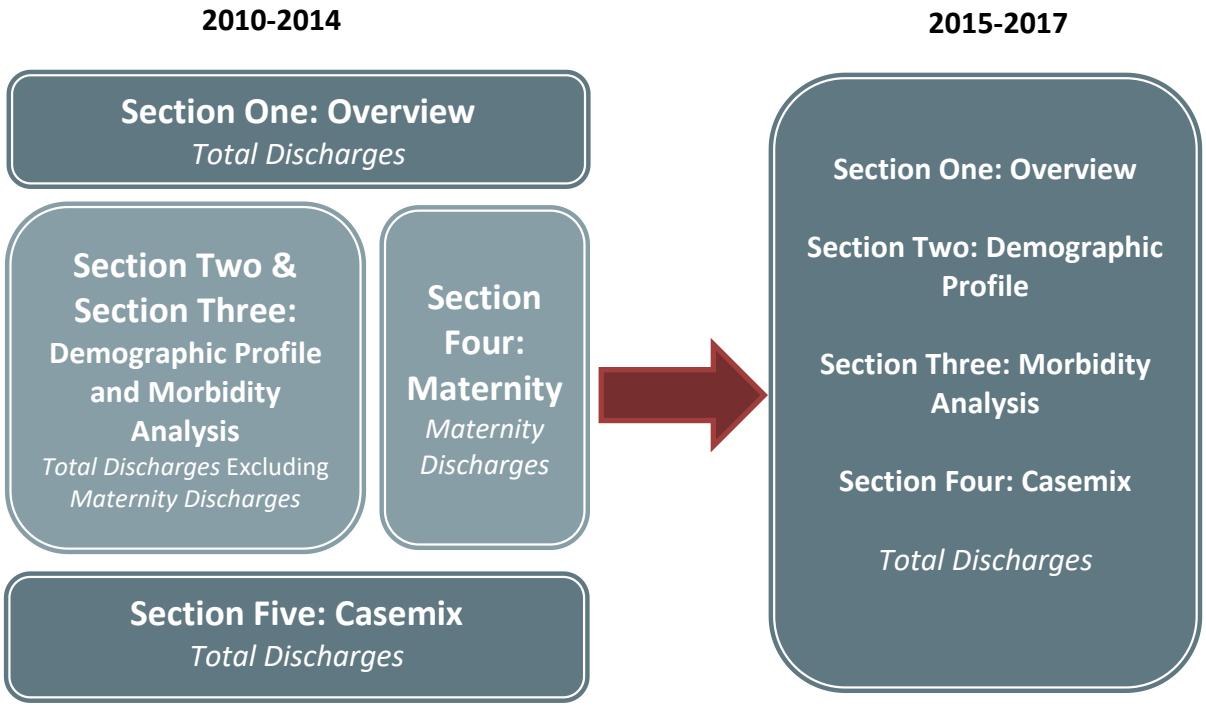
15 For historical reasons, a small number of non-acute hospitals also reported to HIPE in 2017. Discharges from these hospitals have been included in this report.

16 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 2017

Figure 1.1 outlines the changes to the structure of the *Activity in Acute Public Hospitals in Ireland* Annual Reports 2010–2017.[17] As shown in Figure 1.1, discharges with admission type 'Maternity' are no longer presented separately in Section Four from 2015.[18] 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, 2010-2017



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 2017. 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.

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

18 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 and 2017 reports is Version 8.0. 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.[19]

Annex

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

Glossary and Abbreviations

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

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

1.5 SCOPE OF HIPE DATA

- *Each HIPE discharge record represents one episode of care.* Patients may be admitted to hospital more than once in any given time period with the same or different diagnoses. In the absence of a unique health identifier, therefore, the data reported to HIPE facilitate analysis of hospital discharge activity but do not permit analysis of certain parameters, such as the number of hospital encounters per patient; or estimate the incidence or prevalence of a particular disease.
- *Emergency In-Patient Admissions:* HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about the total volume of activity in Emergency Departments.
- *Coverage of data:* Coverage of the HIPE system is calculated using the discharges returned as 'coded' as a proportion of total discharges reported within each hospital. The data available from participating hospitals for 2017 indicate that for day patient and in-patient discharges appropriate for inclusion in the HIPE data set, 99.74 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. [20] 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.[21] This has led to an increase in discharges recorded as sameday in-patients (in-patients admitted and discharged on the same day) who accounted for 7.1 per cent of total discharges in 2017. 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*".[22] 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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[20] 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.

[21] For more information see www.hse.ie/eng/about/Who/clinical/natclinprog/acutemedicineprogramme/about/

[22] 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.[23] 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.*[24] This resulted in the reorganisation of hospitals into seven groups. These hospital groups have been reported on from 2014 onwards.[25]

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.

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[23] 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.

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

[25] See Appendix I for a list of hospitals and their associated groups participating in HIPE in 2017. 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, 2013-2017

In 2017, 1,718,523 discharges were reported to HIPE by participating acute public hospitals,[26] representing an increase of 10.6 per cent over the period 2013–2017 and an increase of 0.8 per cent over the period 2016–2017.

Table 1.1 and Figures 1.2 to 1.3 show the distribution of discharges over the period 2013–2017 by selected variables. The following points provide a summary of changes over the period 2013–2017:

- The male-female split in 2017 has remained consistent with previous years, with a larger proportion of female discharges (53.4 per cent).
- The 65 years and over age group accounted for the largest proportion of total discharges in 2017 (36.9 per cent), representing an increase of 19.7 per cent for this age group from 2013–2017.
- From 2013–2017 there was an increase of 11.7 per cent for public discharges and an increase of 4.6 per cent for private discharges.
- The number of GMS discharges increased by 13.0 per cent between 2013 and 2017, from 843,727 to 953,030 discharges.
- The proportion of total discharges treated by each Hospital Group remained similar between 2016 and 2017. The largest percentage increase was in the UL Hospital Group with a 4.7 per cent increase between 2016 and 2017.
- The number of day patient discharges has increased from 932,073 in 2013 to 1,077,014 in 2017, an increase of 15.6 per cent, with an increase of 1.5 per cent between 2016 and 2017.[27]
- The number of in-patient discharges has increased from 622,217 in 2013 to 641,509 in 2017, an increase of 3.1 per cent. Between 2016 and 2017 there was a decrease of 0.4 per cent in the number of in-patient discharges.
- Emergency in-patient discharges comprised 64.3 per cent of total in-patient discharges in 2013, increasing to 67.7 per cent in 2017.
- Maternity in-patient discharges decreased by 6.3 per cent over the period 2013–2017 from 118,708 to 111,195 discharges. Between 2016 and 2017 there was a 3.7 per cent decrease in the proportion of maternity in-patient discharges reported to HIPE.
- Sameday in-patient discharges have increased by 14.8 per cent over the period 2013–2017 from 106,887 to 122,753 discharges.

[26] In 2017 there were <5 cases with sex recorded as 'unknown'. These cases were verified with the hospitals. For reasons of confidentiality these cases are not included in this report.

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

- Over the period 2013–2017, the average length of stay has remained relatively constant for emergency and maternity in-patients at 6.3 days and 2.7 days in 2017 respectively, while the average length of stay for elective in-patients has varied between 6.6 days and 6.9 days over the period, and was reported at 6.7 days in 2017.
- Overnight in-patient discharges stayed on average 6.5 days in 2013 which has increased to 6.9 days in 2017, an increase of 6.2 per cent. The median has remained constant at 3 days over the period.

TABLE 1.1 Acute Public Hospital Discharges in HIPE (N, %), 2013-2017

	2013 N (%)	2014 N (%)	2015 N (%)	2016 N (%)	2017 N (%)	% Change 2013–2017	% Change 2016–2017
Total Discharges	**1,554,290 100**	**1,592,672 100**	**1,664,066 100**	**1,704,452 100**	**1,718,523 100**	**10.6**	**0.8**
Discharge Rate[a]	**336.8**	**342.8**	**355**	**359.6**	**358.6**	**6.5**	**-0.3**
Sex							
Males	713,652 45.9	730,361 45.9	763,844 45.9	788,702 46.3	800,443 46.6	12.2	1.5
Females	840,638 54.1	862,311 54.1	900,222 54.1	915,750 53.7	918,080 53.4	9.2	0.3
Age Group							
Under 15 Years	131,439 8.5	132,608 8.3	133,638 8	132,677 7.8	127,545 7.4	-3.0	-3.9
15–44 Years	459,158 29.5	465,626 29.2	464,203 27.9	471,123 27.6	465,383 27.1	1.4	-1.2
45–64 Years	433,535 27.9	442,054 27.8	470,145 28.3	483,587 28.4	490,964 28.6	13.2	1.5
65 Years and Over	530,158 34.1	552,384 34.7	596,080 35.8	617,065 36.2	634,631 36.9	19.7	2.8
Public/Private Status[b]							
Public Discharges	1,301,481 83.7	1,336,317 83.9	1,398,932 84.1	1,424,290 83.6	1,454,057 84.6	11.7	2.1
Private Discharges	252,809 16.3	256,355 16.1	265,134 15.9	280,162 16.4	264,466 15.4	4.6	-5.6
GMS Status							
GMS	843,727 54.3	854,249 53.6	892,584 53.6	942,022 55.3	953,030 55.5	13.0	1.2
Non-GMS	699,003 45	726,530 45.6	748,461 45	744,344 43.7	740,996 43.1	6.0	-0.4
Unknown	11,560 0.7	11,893 0.8	23,021 1.4	18,086 1.1	24,497 1.4	111.9	35.4
Hospital Group[c]							
Ireland East	–	314,334 19.7	320,647 19.3	325,110 19.1	329,543 19.2	–	1.4
RCSI	–	245,979 15.4	244,242 14.7	254,227 14.9	258,768 15.1	–	1.8
Dublin Midlands[d]	–	267,077 16.8	310,649 18.7	318,725 18.7	319,373 18.6	–	0.2
South/South West	–	320,534 20.1	327,700 19.7	329,632 19.3	331,619 19.3	–	0.6
UL	–	97,738 6.1	102,762 6.2	106,749 6.3	111,771 6.5	–	4.7
Saolta	–	287,774 18.1	299,245 18	310,448 18.2	309,209 18.0	–	-0.4
Children's	–	53,038 3.3	52,841 3.2	54,234 3.2	53,211 3.1	–	-1.9
No group	–	6,198 0.4	5,980 0.4	5,327 0.3	5,029 0.3	–	-5.6
Day Patients[d]	**932,073 100**	**960,786 100**	**1,029,860 100**	**1,060,602 100**	**1,077,014 100**	**15.6**	**1.5**
Dialysis/Radiotherapy[d]/ Chemotherapy[e]	327,249 35.1	339,480 35.3	393,868 38.2	399,895 37.7	396,925 36.9	21.3	-0.7
Maternity[f]	13,914 1.5	19,043 2	19,838 1.9	20,763 2	20,831 1.9	49.7	0.3
Other	590,910 63.4	602,263 62.7	616,154 59.8	639,944 60.3	659,258 61.2	11.6	3.0
In-Patients	**622,217 100**	**631,886 100**	**634,206 100**	**643,850 100**	**641,509 100**	**3.1**	**-0.4**
Elective	103,237 16.6	100,287 15.9	99,086 15.6	95,870 14.9	96,100 15.0	-6.9	0.2
Emergency[g,h]	400,272 64.3	412,394 65.3	417,330 65.8	432,490 67.2	434,214 67.7	8.5	0.4
Maternity	118,708 19.1	119,205 18.9	117,790 18.6	115,490 17.9	111,195 17.3	-6.3	-3.7

Contd. overleaf

TABLE 1.1 Acute Public Hospital Discharges in HIPE (N, %), 2013–2017 (contd.)

		2013	2014	2015	2016	2017	% Change	% Change
		N (%)	N (%)	N (%)	N (%)	N (%)	2013–2017	2016–2017
Overnight In-Patients		515,330	515,619	516,604	519,738	518,756	0.7	-0.2
		82.8	81.6	81.5	80.7	80.9		
Sameday In-Patients		106,887	116,267	117,602	124,112	122,753	14.8	-1.1
		17.2	18.4	18.5	19.3	19.1		
In-Patient Length of Stay								
In-Patients	**Mean**	**5.6**	**5.6**	**5.7**	**5.7**	**5.7**	**1.8**	**0.0**
	Median	**2**	**2**	**2**	**2**	**2**		
Elective	Mean	6.6	6.7	6.7	6.9	6.7	1.5	-2.9
	Median	3	2	2	2	2		
Emergency[g]	Mean	6.2	6.2	6.3	6.2	6.3	1.6	1.6
	Median	2	2	2	2	2		
Maternity	Mean	2.7	2.6	2.6	2.7	2.7	0.0	0.0
	Median	2	2	2	2	2		
Overnight In-Patients	**Mean**	**6.5**	**6.6**	**6.8**	**6.8**	**6.9**	**6.2**	**1.5**
	Median	**3**	**3**	**3**	**3**	**3**		
In-Patient Bed Days[h]								
Total In-Patients		**3,480,802**	**3,531,563**	**3,622,860**	**3,651,438**	**3,679,625**	**5.7**	**0.8**
		100	**100**	**100**	**100**	**100**		
Under 15 Years		294,238	293,387	292,948	284,997	276,584	-6.0	-3.0
		8.5	8.3	8.1	7.8	7.5		
15 to 44 Years		718,445	722,104	713,848	717,761	709,097	-1.3	-1.2
		20.6	20.4	19.7	19.7	19.3		
45 to 64 Years		672,759	672,162	697,640	702,640	712,827	6.0	1.4
		19.3	19	19.3	19.2	19.4		
65 Years and Over		1,795,360	1,843,910	1,918,424	1,946,040	1,981,117	10.3	1.8
		51.6	52.2	53	53.3	53.8		
Overnight In-Patients		**3,373,915**	**3,415,296**	**3,505,258**	**3,527,326**	**3,556,872**	**5.4**	**0.8**
		96.9	**96.7**	**96.8**	**96.6**	**96.7**		

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 357.6 per 1,000 population.

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

c 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 2017.

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).

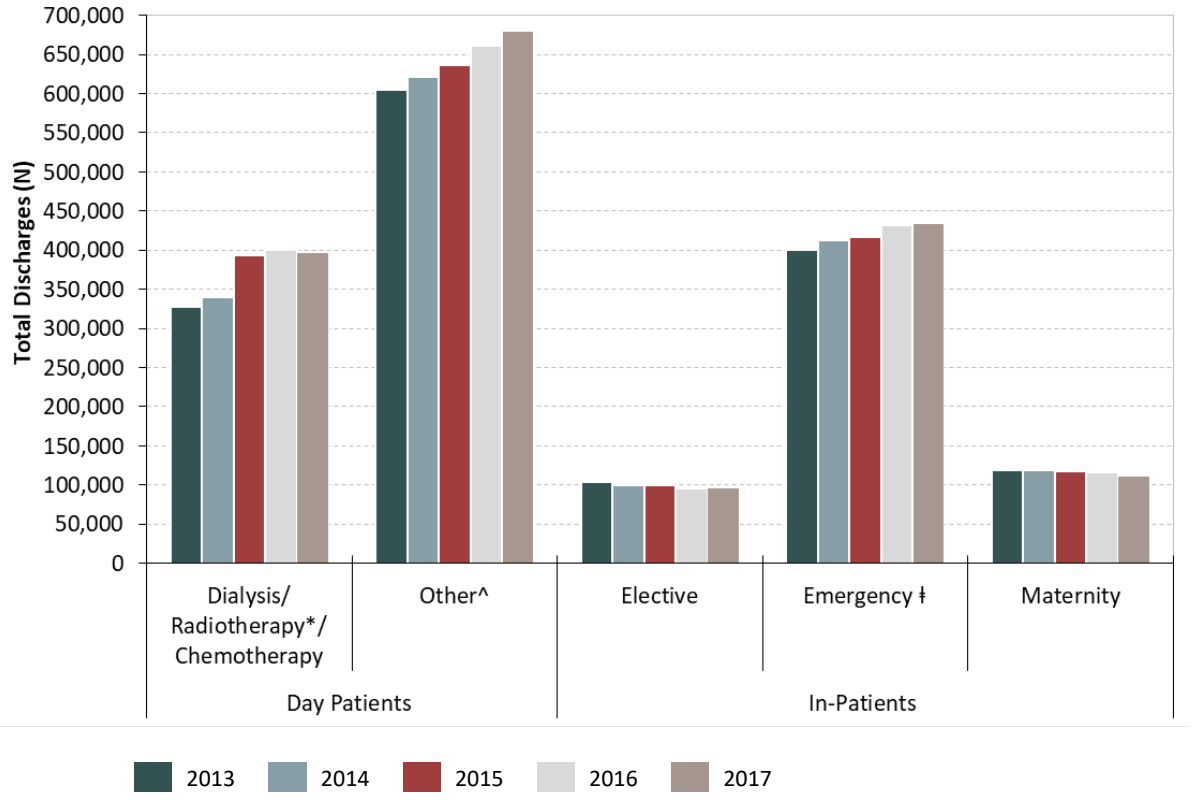
f Caution should be exercised when analysing the increase in Maternity day patients reported between 2013 and 2014. A large proportion of the increase from 2013 to 2014 can be attributed to a reorganisation of beds in one hospital, with a number of in-patient beds being converted to day beds.

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 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 2013-2017 were obtained from HIPE.
Population estimates for 2013-2017 were obtained from the Central Statistics Office.
www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=PEA01&PLanguage=0 [Accessed 16th July 2018].

FIGURE 1.2 Total Discharges by Patient Type and Admission Type (N), 2013–2017



Notes: See Appendix I for a list of hospitals that participated in HIPE in 2017.

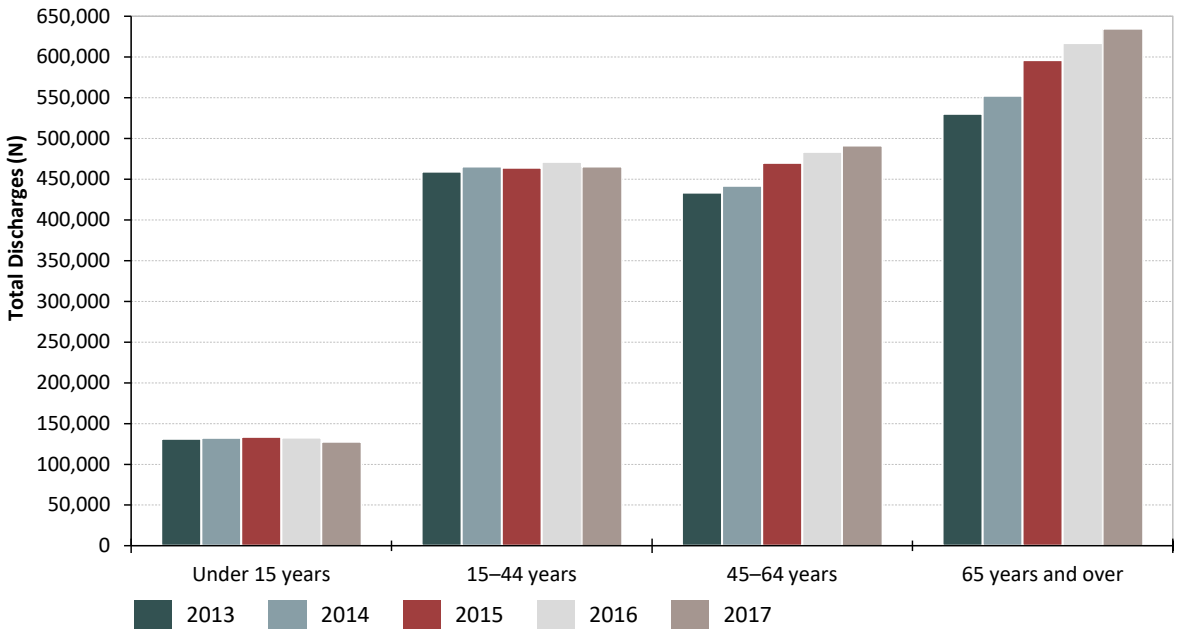
* From 2015 this includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

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

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

Source: Data for 2013–2017 were obtained from HIPE.

FIGURE 1.3 Total Discharges by Age Group (N), 2013–2017



Source: Data for 2013–2017 were obtained from HIPE.

Discharge Overview 2017

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 2017, day patient discharges accounted for 62.7 per cent of total discharges. In-patient discharges accounted for the remaining 37.3 per cent of total discharges with 67.7 per cent of in-patients admitted on an emergency basis, 15.0 per cent admitted on an elective basis and 17.3 per cent admitted as maternity in-patients.

2.2.1 Age

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

Discharges

- The largest proportion of total discharges were in the 65–74 years age group (19.0 per cent). This age group accounted for the largest proportion of day patient discharges (22.1 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 32.8 per cent of in-patient discharges and 53.8 per cent of in-patient bed days.
- The 1–14 years age group accounted for 8.2 per cent of in-patient discharges and 3.4 per cent of in-patient bed days.

Length of Stay

- Discharges aged 25–34 years accounted for 17.7 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 2.7 days for discharges aged 1–14 years to 13.5 days for discharges aged 85 years and over. Median length of stay ranged between 2 to 7 days across all age groups.

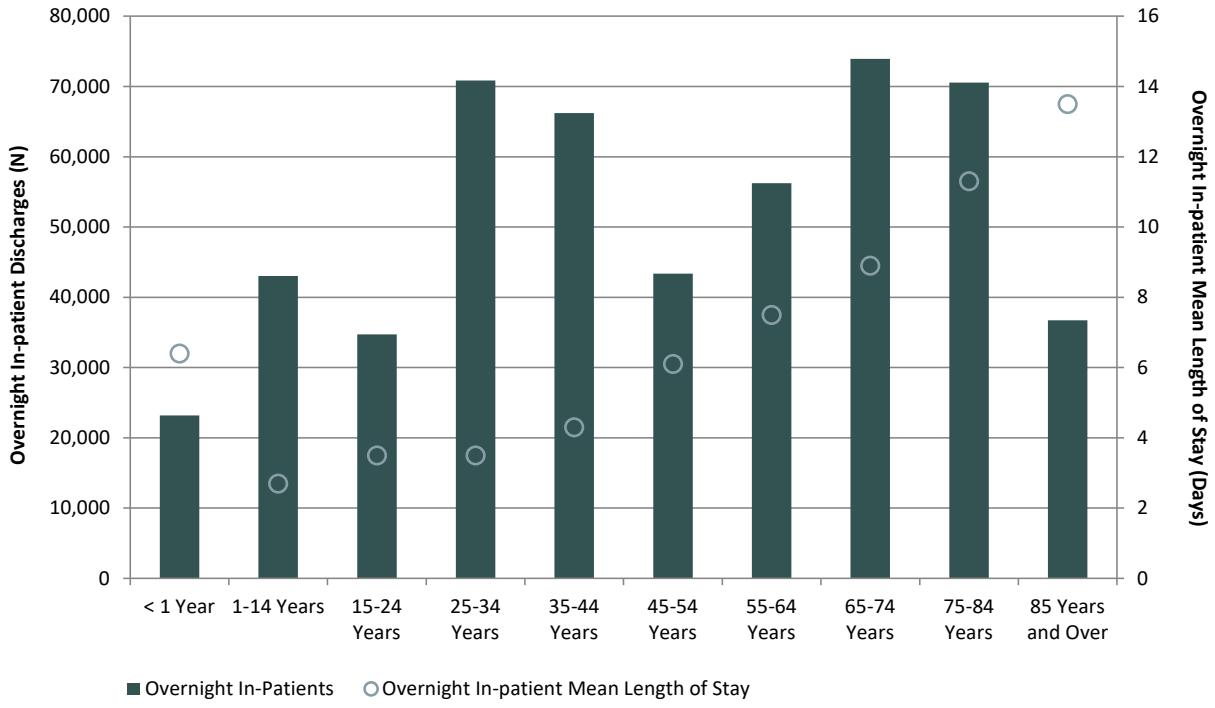
TABLE 2.1a Total Discharges: Patient Type by Age Group (N, %, Bed Days, %, and In-Patient Length of Stay)

	Discharges and Bed Days							
	Day Patients		In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
< 1 Year	3,853	0.4	26,064	4.1	150,016	4.1	29,917	1.7
1–14 Years	44,963	4.2	52,665	8.2	126,568	3.4	97,628	5.7
15–24 Years	36,498	3.4	47,009	7.3	132,571	3.6	83,507	4.9
25–34 Years	79,592	7.4	92,528	14.4	269,867	7.3	172,120	10.0
35–44 Years	124,134	11.5	85,622	13.3	306,659	8.3	209,756	12.2
45–54 Years	159,631	14.8	57,159	8.9	276,492	7.5	216,790	12.6
55–64 Years	203,993	18.9	70,181	10.9	436,335	11.9	274,174	16.0
65–74 Years	237,716	22.1	88,325	13.8	672,923	18.3	326,041	19.0
75–84 Years	152,350	14.1	81,178	12.7	806,664	21.9	233,528	13.6
85 Years and Over	34,284	3.2	40,778	6.4	501,530	13.6	75,062	4.4
Total Discharges	**1,077,014**	**100**	**641,509**	**100**	**3,679,625**	**100**	**1,718,523**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
< 1 Year	2,899	23,165	6.4	2	26,064	5.8	2
1–14 Years	9,646	43,019	2.7	2	52,665	2.4	1
15–24 Years	12,296	34,713	3.5	2	47,009	2.8	1
25–34 Years	21,674	70,854	3.5	2	92,528	2.9	2
35–44 Years	19,416	66,206	4.3	3	85,622	3.6	2
45–54 Years	13,808	43,351	6.1	3	57,159	4.8	2
55–64 Years	13,954	56,227	7.5	4	70,181	6.2	3
65–74 Years	14,398	73,927	8.9	5	88,325	7.6	4
75–84 Years	10,623	70,555	11.3	6	81,178	9.9	5
85 Years and Over	4,039	36,739	13.5	7	40,778	12.3	7
Total Discharges	**122,753**	**518,756**	**6.9**	**3**	**641,509**	**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 2017, there were 918,080 female discharges, and of these 14.4 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, 22.9 per cent and 18.1 per cent respectively.
- Discharges aged 65 years and over accounted for 39.2 per cent of male in-patient discharges and 56.5 per cent of male in-patient bed days, while for females (excl. maternity) this group accounted for 40.1 per cent of female in-patient discharges and 60.7 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 (23.5 per cent) and females (excl. maternity) (24.2 per cent).
- Females aged between 25 and 34 years accounted for over half of maternity in-patient discharges (52.3 per cent), while those aged 35–44 years accounted for approximately a third of in-patient discharges in this group (34.3 per cent).

Length of Stay

- Male overnight in-patient discharges had a mean length of stay of 7.7 days and female (excl. maternity) overnight in-patient discharges had a mean length of stay of 7.6 days. As displayed in Figure 2.2, overnight in-patient mean length of stay generally increased with age for both sexes.
- For all age groups aged between 15 and 74 years, females (excl. maternity) had a lower overnight in-patient mean length of stay compared to males. Median overnight in-patient 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 2.9 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	2,149	0.4	14,583	5.4	79,644	4.6	16,732	2.1
1–14 Years	25,769	4.8	28,940	10.8	68,081	3.9	54,709	6.8
15–24 Years	17,116	3.2	15,266	5.7	47,392	2.7	32,382	4.0
25–34 Years	28,174	5.3	15,791	5.9	58,917	3.4	43,965	5.5
35–44 Years	47,752	9.0	22,371	8.4	101,403	5.9	70,123	8.8
45–54 Years	68,681	12.9	28,222	10.5	147,145	8.5	96,903	12.1
55–64 Years	104,000	19.5	37,563	14.0	248,622	14.4	141,563	17.7
65–74 Years	136,178	25.6	47,417	17.7	374,278	21.7	183,595	22.9
75–84 Years	86,347	16.2	41,196	15.4	405,777	23.5	127,543	15.9
85 Years and Over	16,661	3.1	16,267	6.1	196,590	11.4	32,928	4.1
Total Discharges	**532,827**	**100**	**267,616**	**100**	**1,727,849**	**100**	**800,443**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
< 1 Year	1,622	12,961	6.0	2	14,583	5.5	2
1–14 Years	5,529	23,411	2.7	1	28,940	2.4	1
15–24 Years	4,063	11,203	3.9	2	15,266	3.1	1
25–34 Years	4,328	11,463	4.8	2	15,791	3.7	1
35–44 Years	5,834	16,537	5.8	3	22,371	4.5	2
45–54 Years	6,414	21,808	6.5	3	28,222	5.2	2
55–64 Years	6,958	30,605	7.9	4	37,563	6.6	3
65–74 Years	7,158	40,259	9.1	5	47,417	7.9	4
75–84 Years	5,102	36,094	11.1	6	41,196	9.8	5
85 Years and Over	1,547	14,720	13.3	7	16,267	12.1	6
Total Discharges	**48,555**	**219,061**	**7.7**	**3**	**267,616**	**6.5**	**2**

Note: Percentage columns are subject to rounding.

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

	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
< 1 Year	1,704	0.3	11,481	4.4	70,372	4.3	13,185	1.7
1–14 Years	19,193	3.7	23,717	9.0	58,434	3.5	42,910	5.5
15–24 Years	17,669	3.4	17,430	6.6	50,809	3.1	35,099	4.5
25–34 Years	40,985	7.8	18,558	7.1	60,327	3.6	59,543	7.6
35–44 Years	67,913	13.0	25,096	9.6	95,087	5.7	93,009	11.8
45–54 Years	90,735	17.3	28,397	10.8	127,285	7.7	119,132	15.2
55–64 Years	99,993	19.1	32,618	12.4	187,713	11.3	132,611	16.9
65–74 Years	101,538	19.4	40,908	15.6	298,645	18.1	142,446	18.1
75–84 Years	66,003	12.6	39,982	15.2	400,887	24.2	105,985	13.5
85 Years and Over	17,623	3.4	24,511	9.3	304,940	18.4	42,134	5.4
Total Discharges	**523,356**	**100**	**262,698**	**100**	**1,654,499**	**100**	**786,054**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
< 1 Year	1,277	10,204	6.8	2	11,481	6.1	2
1–14 Years	4,116	19,601	2.8	2	23,717	2.5	1
15–24 Years	4,586	12,844	3.6	2	17,430	2.9	1
25–34 Years	5,488	13,070	4.2	2	18,558	3.3	1
35–44 Years	7,062	18,034	4.9	2	25,096	3.8	1
45–54 Years	7,293	21,104	5.7	3	28,397	4.5	2
55–64 Years	6,996	25,622	7.1	4	32,618	5.8	2
65–74 Years	7,240	33,668	8.7	5	40,908	7.3	3
75–84 Years	5,521	34,461	11.5	6	39,982	10.0	5
85 Years and Over	2,492	22,019	13.7	8	24,511	12.4	7
Total Discharges	**52,071**	**210,627**	**7.6**	**3**	**262,698**	**6.3**	**2**

Note: Percentage columns are subject to rounding.

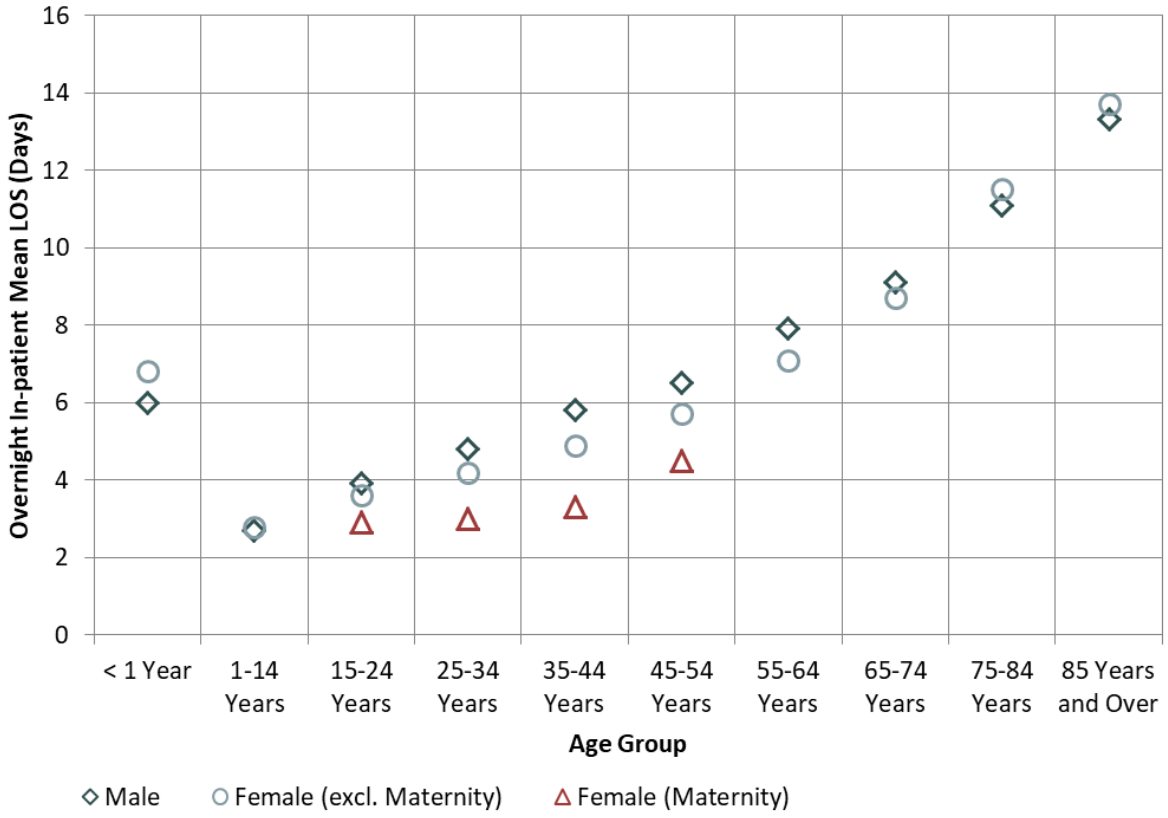
TABLE 2.1d Female Discharges (Maternity): Patient Type by Age Group (N, %, Bed Days, % and In-Patient Length of Stay)

	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
<25 Years	1,714	8.2	14,321	12.9	34,423	11.6	16,035	12.1
25–34 Years	10,433	50.1	58,179	52.3	150,623	50.7	68,612	52.0
35–44 Years	8,469	40.7	38,155	34.3	110,169	37.1	46,624	35.3
45 Years and Over	215	1.0	540	0.5	2,062	0.7	755	0.6
Total Discharges	**20,831**	**100**	**111,195**	**100**	**297,277**	**100**	**132,026**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
<25 Years	3,648	10,673	2.9	2	14,321	2.4	2
25–34 Years	11,858	46,321	3.0	2	58,179	2.6	2
35–44 Years	6,520	31,635	3.3	3	38,155	2.9	2
45 Years and Over	101	439	4.5	4	540	3.8	3
Total Discharges	**22,127**	**89,068**	**3.1**	**3**	**111,195**	**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)



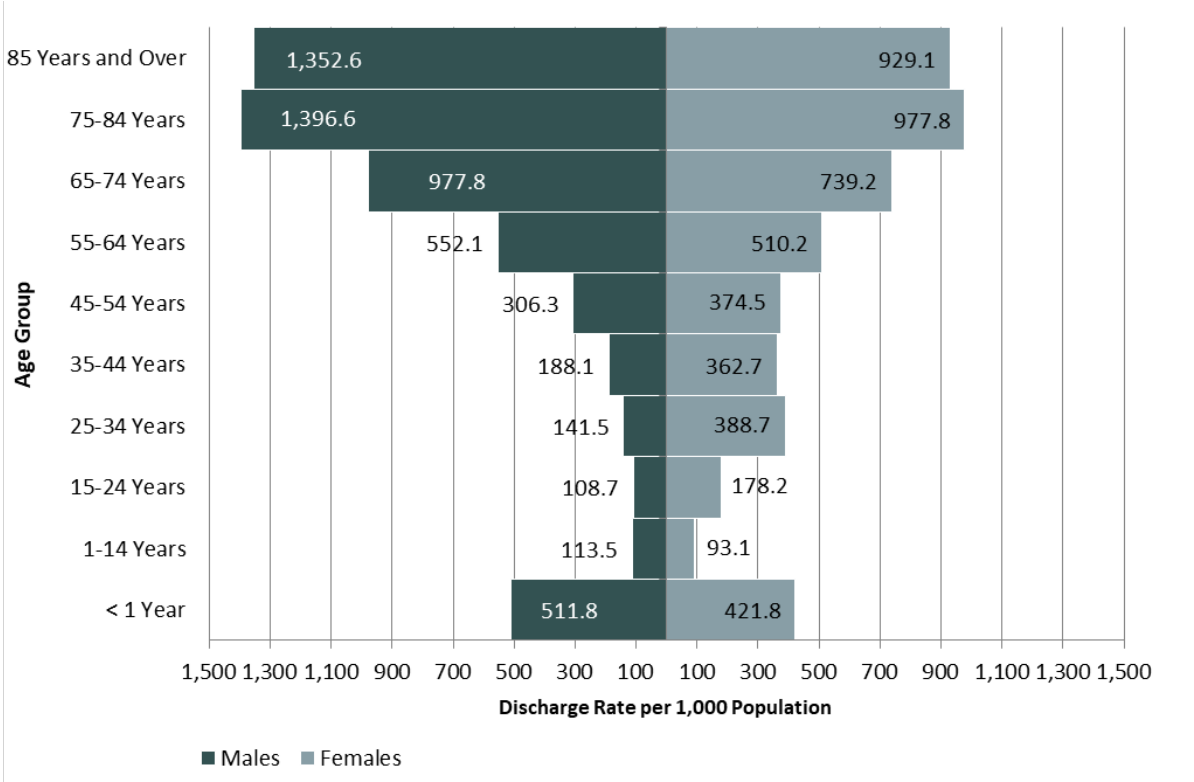
Note: Length of stay is not presented for female maternity discharges where there were a small number of discharges reported within a particular age group.

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 (1,396.6 per 1,000 population of males and 977.8 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 2017 by sex and age group were obtained from the CSO. https://www.cso.ie/px/pxeirestat/Statire/SelectVarVal/Define.asp?maintable=PEA11 [accessed 17th July 2018]

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 48.7 per cent of total discharges.
- Discharges who were widowed accounted for 9.6 per cent of total in-patient discharges, and 17.0 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 5.5 days, compared to 11.5 days for discharges who were widowed.

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

	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
Single	322,643	30.0	263,891	41.1	1,218,074	33.1	586,534	34.1
Married	564,054	52.4	272,950	42.5	1,524,553	41.4	837,004	48.7
Widowed	91,754	8.5	61,572	9.6	626,218	17.0	153,326	8.9
Other*	50,145	4.7	22,435	3.5	159,848	4.3	72,580	4.2
Unknown	29,289	2.7	11,908	1.9	95,522	2.6	41,197	2.4
Divorced	19,129	1.8	8,753	1.4	55,410	1.5	27,882	1.6
Total Discharges	**1,077,014**	**100**	**641,509**	**100**	**3,679,625**	**100**	**1,718,523**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
Single	52,739	211,152	5.5	2	263,891	4.6	2
Married	53,713	219,237	6.7	3	272,950	5.6	2
Widowed	7,988	53,584	11.5	6	61,572	10.2	5
Other*	4,146	18,289	8.5	4	22,435	7.1	3
Unknown	2,367	9,541	9.8	4	11,908	8.0	3
Divorced	1,800	6,953	7.7	4	8,753	6.3	3
Total Discharges	**122,753**	**518,756**	**6.9**	**3**	**641,509**	**5.7**	**2**

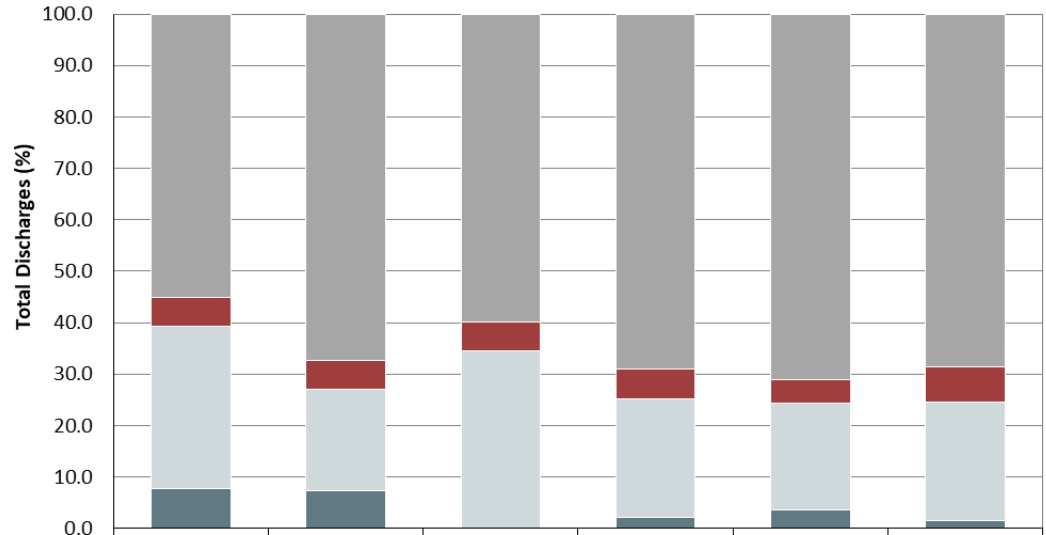
Notes: Percentage columns are subject to rounding.
* Other includes Separated, Civil Partner, Formal Civil Partner, and Surviving Civil Partner

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 (34.4 per cent and 31.5 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	55.0	67.4	59.8	69.1	71.1	68.6
In-Patients Elective	5.6	5.5	5.7	5.8	4.6	6.8
In-Patients Emergency	31.5	19.7	34.4	23.0	20.7	23.1
In-Patients Maternity	7.8	7.4	0.0	2.1	3.7	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, 84.6 per cent were discharged on a public basis.

- The 25–34 years age group had the largest proportion of total discharges treated publicly (89.7 per cent) with only 10.3 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 20.6 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 55–64 years, where public discharges stayed on average 1.4 days longer than their private counterparts (see Table 2.3 and Figure 2.6). Median length of stay for overnight in-patients was 4 days for both public and private discharges aged 55–64 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	3,345	86.8	508	13.2	21,570	82.8	4,494	17.2	24,915	83.3	5,002	16.7
1–14 Years	37,269	82.9	7,694	17.1	40,263	76.5	12,402	23.5	77,532	79.4	20,096	20.6
15–24 Years	32,058	87.8	4,440	12.2	41,681	88.7	5,328	11.3	73,739	88.3	9,768	11.7
25–34 Years	72,160	90.7	7,432	9.3	82,317	89.0	10,211	11.0	154,477	89.7	17,643	10.3
35–44 Years	104,770	84.4	19,364	15.6	67,919	79.3	17,703	20.7	172,689	82.3	37,067	17.7
45–54 Years	134,279	84.1	25,352	15.9	46,816	81.9	10,343	18.1	181,095	83.5	35,695	16.5
55–64 Years	172,599	84.6	31,394	15.4	56,464	80.5	13,717	19.5	229,063	83.5	45,111	16.5
65–74 Years	204,478	86.0	33,238	14.0	70,830	80.2	17,495	19.8	275,308	84.4	50,733	15.6
75–84 Years	134,184	88.1	18,166	11.9	65,718	81.0	15,460	19.0	199,902	85.6	33,626	14.4
85 Years and Over	31,025	90.5	3,259	9.5	34,312	84.1	6,466	15.9	65,337	87.0	9,725	13.0
Total Discharges	**926,167**	**86.0**	**150,847**	**14.0**	**527,890**	**82.3**	**113,619**	**17.7**	**1,454,057**	**84.6**	**264,466**	**15.4**

	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	2,549	350	19,021	6.5	2	4,144	5.5	2	5.9	2	5.1	2
1–14 Years	7,838	1,808	32,425	2.8	2	10,594	2.5	2	2.4	1	2.3	1
15–24 Years	11,475	821	30,206	3.5	2	4,507	3.6	2	2.8	1	3.2	2
25–34 Years	20,029	1,645	62,288	3.5	2	8,566	3.5	3	2.9	2	3.1	2
35–44 Years	16,951	2,465	50,968	4.4	2	15,238	4.0	3	3.6	2	3.6	3
45–54 Years	12,363	1,445	34,453	6.3	3	8,898	5.2	3	4.9	2	4.6	2
55–64 Years	12,361	1,593	44,103	7.8	4	12,124	6.4	4	6.3	2	5.8	3
65–74 Years	12,772	1,626	58,058	9.2	5	15,869	7.9	4	7.7	4	7.3	4
75–84 Years	9,554	1,069	56,164	11.5	6	14,391	10.5	6	10.0	5	9.9	5
85 Years and Over	3,672	367	30,640	13.7	7	6,099	13.0	8	12.3	6	12.3	7
Total Discharges	**109,564**	**13,189**	**418,326**	**7.0**	**3**	**100,430**	**6.3**	**3**	**5.7**	**2**	**5.7**	**3**

Note: Percentage columns are subject to rounding.

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

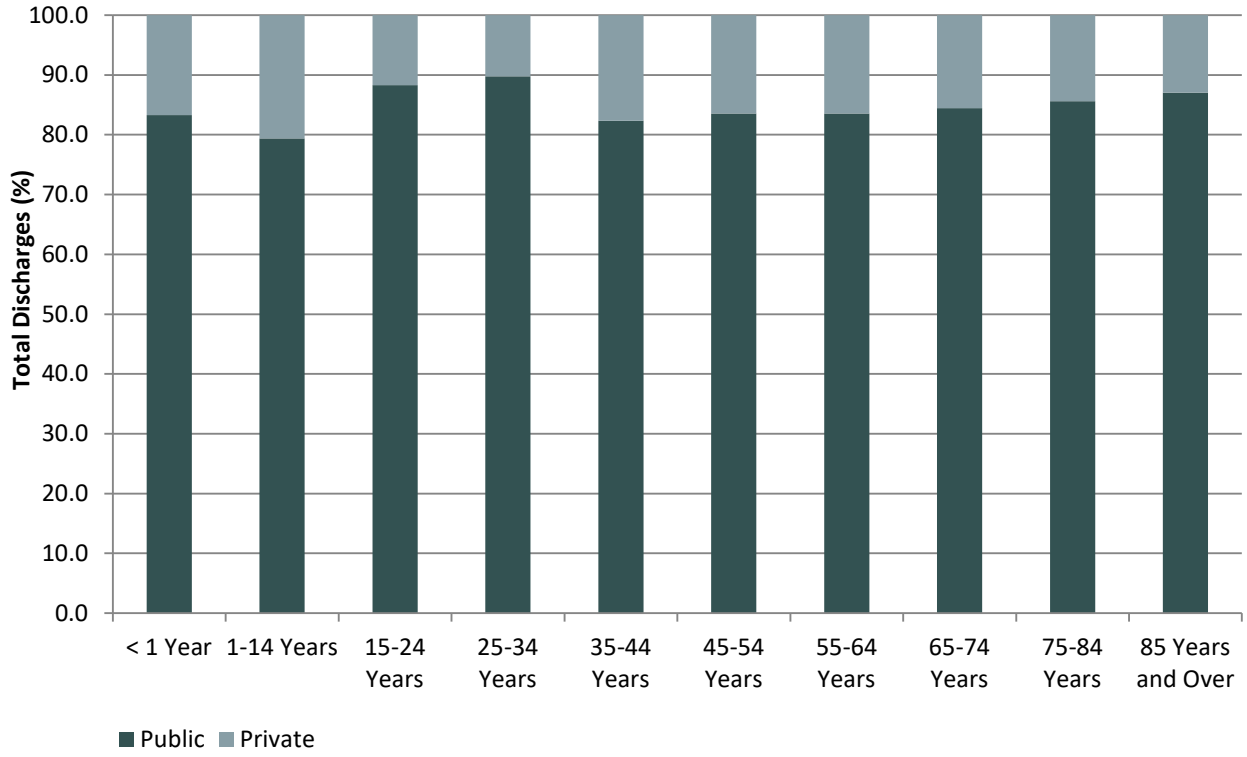
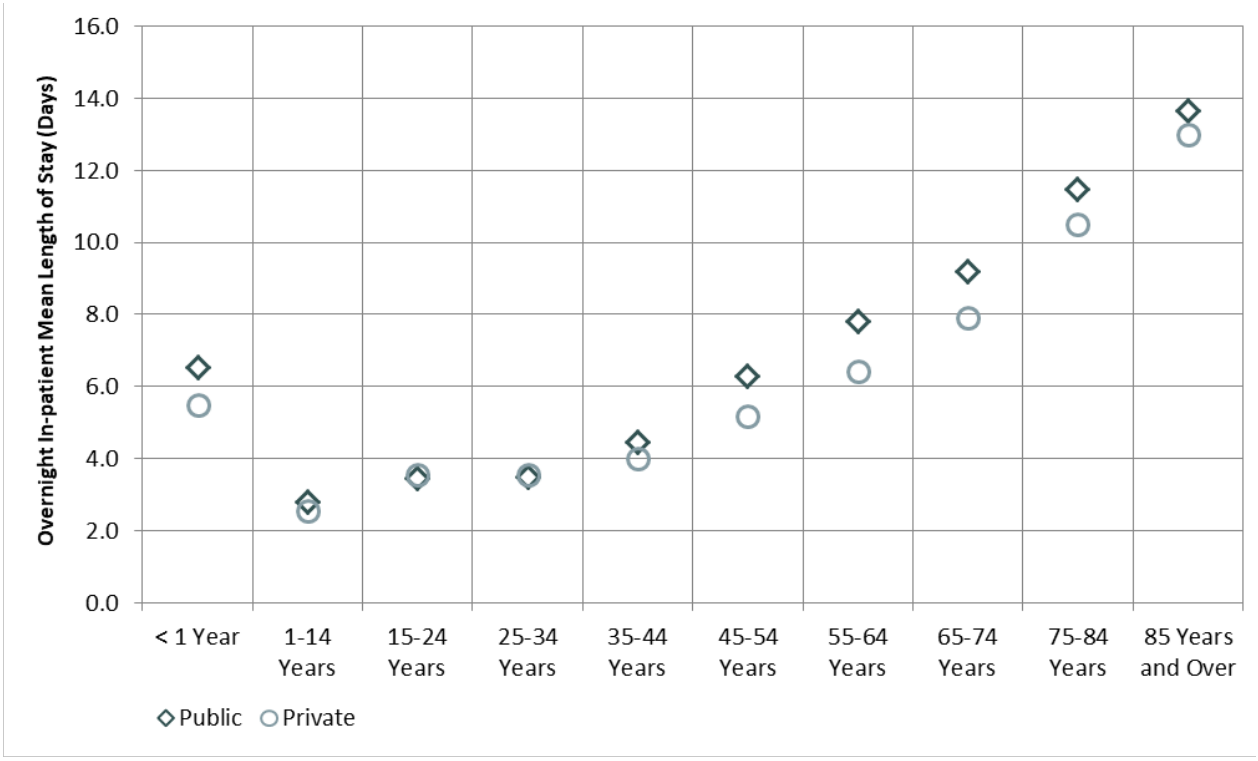


FIGURE 2.6 Overnight In-Patients: Mean Length of Stay (Days) by Age Group and Public/Private Status



2.2.4 GMS Status

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

2.2.4.1 GMS Status by Age Group

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

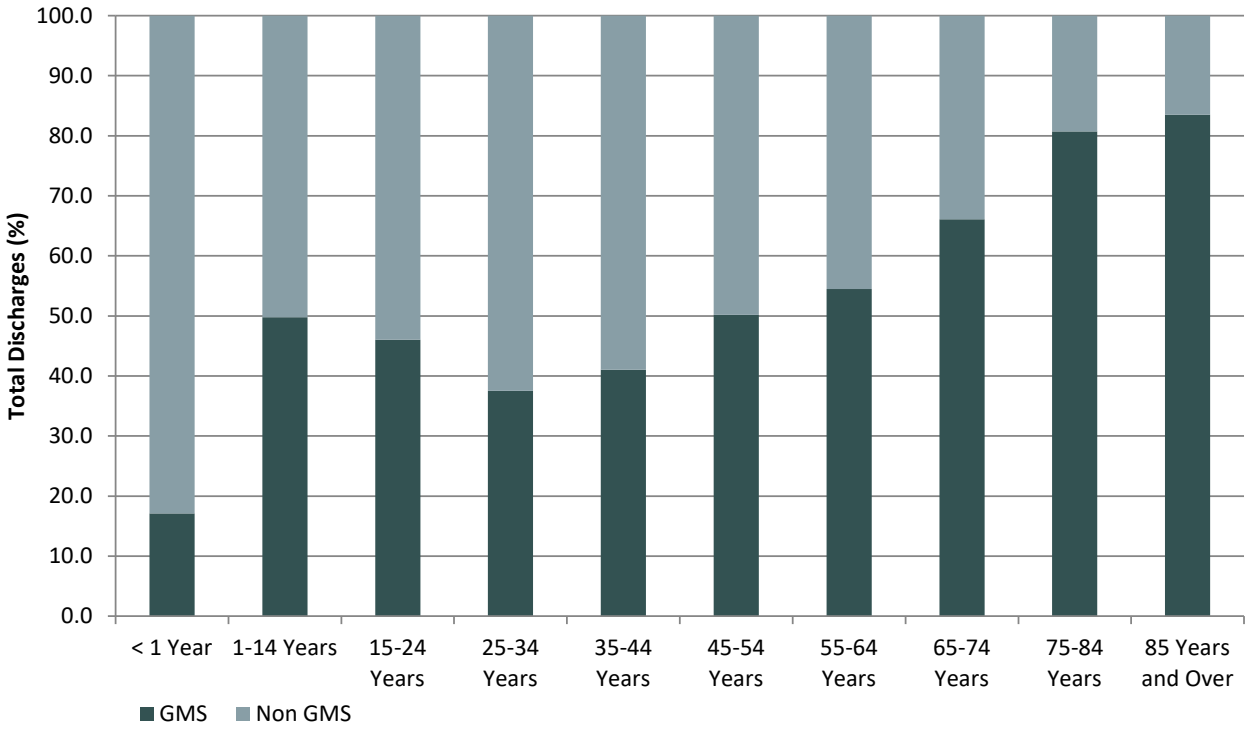
- Of total discharges, those aged 65–74 years accounted for the largest proportion of GMS discharges (22.2 per cent).
- The proportion of total discharges that were GMS discharges generally increased with age, with the largest proportion in the 85 years and over age group (83.5 per cent) – see Figure 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	5,078	0.5	24,579	3.3	260	1.1	29,917	1.7
1–14 Years	48,440	5.1	48,831	6.6	357	1.5	97,628	5.7
15–24 Years	38,178	4.0	44,732	6.0	597	2.4	83,507	4.9
25–34 Years	63,967	6.7	106,535	14.4	1,618	6.6	172,120	10.0
35–44 Years	85,133	8.9	122,373	16.5	2,250	9.2	209,756	12.2
45–54 Years	106,864	11.2	106,036	14.3	3,890	15.9	216,790	12.6
55–64 Years	146,884	15.4	122,761	16.6	4,529	18.5	274,174	16.0
65–74 Years	211,914	22.2	108,780	14.7	5,347	21.8	326,041	19.0
75–84 Years	185,108	19.4	44,236	6.0	4,184	17.1	233,528	13.6
85 Years and Over	61,464	6.4	12,133	1.6	1,465	6.0	75,062	4.4
Total Discharges	**953,030**	**100**	**740,996**	**100**	**24,497**	**100**	**1,718,523**	**100**

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

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



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

2.3 WHERE

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

2.3.1 Hospital Group

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

Discharges

- The largest proportion of total discharges were hospitalised in the South/South West Hospital Group (19.3 per cent).
- Total in-patient discharges were highest in the Ireland East Hospital Group where 20.7 per cent of discharges were hospitalised, while the Dublin Midlands Hospital Group accounted for the highest proportion of day patients (20.6 per cent).

Length of Stay

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

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

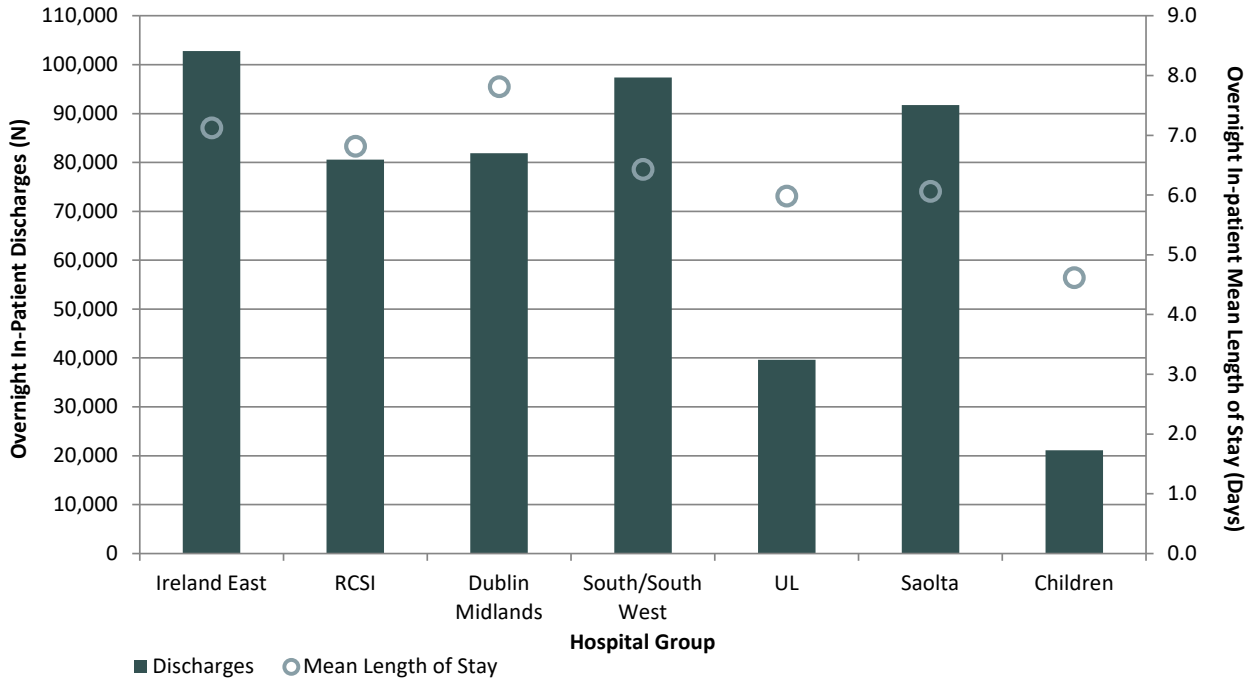
	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
Ireland East	196,715	18.3	132,828	20.7	762,684	20.7	329,543	19.2
RCSI	156,242	14.5	102,526	16.0	571,568	15.5	258,768	15.1
Dublin Midlands	222,388	20.6	96,985	15.1	655,506	17.8	319,373	18.6
South/South West	214,931	20.0	116,688	18.2	645,478	17.5	331,619	19.3
UL	60,901	5.7	50,870	7.9	248,360	6.7	111,771	6.5
Saolta	196,036	18.2	113,173	17.6	577,516	15.7	309,209	18.0
Children's	28,438	2.6	24,773	3.9	101,120	2.7	53,211	3.1
No group^	1,363	0.1	3,666	0.6	117,393	3.2	5,029	0.3
Total Discharges	**1,077,014**	**100**	**641,509**	**100**	**3,679,625**	**100**	**1,718,523**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
Ireland East	30,040	102,788	7.1	3	132,828	5.7	2
RCSI	21,944	80,582	6.8	3	102,526	5.6	2
Dublin Midlands	15,072	81,913	7.8	3	96,985	6.8	3
South/South West	19,320	97,368	6.4	3	116,688	5.5	2
UL	11,269	39,601	6.0	3	50,870	4.9	2
Saolta	21,437	91,736	6.1	3	113,173	5.1	2
Children's	3,665	21,108	4.6	2	24,773	4.1	2
No group^	6	3,660	32.1	21	3,666	32.0	21
Total Discharges	**122,753**	**518,756**	**6.9**	**3**	**641,509**	**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 2017.

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



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

2.3.1.1 Hospital Group by Admission Type

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

Discharges

- The largest proportion of elective in-patients were treated in the South/South West Hospital Group (20.4 per cent), accounting for 15.9 per cent of total elective in-patient bed days.
- The Ireland East Hospital Group treated the largest proportion of both emergency in-patients (20.6 per cent) and maternity in-patients (22.4 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	196,715	18.3	18,509	19.3	112,613	17.4	89,384	20.6	589,314	21.5	24,935	22.4	60,757	20.4	329,543	19.2
RCSI	156,242	14.5	11,000	11.4	62,872	9.7	69,575	16.0	449,464	16.4	21,951	19.7	59,232	19.9	258,768	15.1
Dublin Midlands	222,388	20.6	13,507	14.1	98,278	15.2	61,702	14.2	506,370	18.5	21,776	19.6	50,858	17.1	319,373	18.6
South/South West	214,931	20.0	19,620	20.4	102,933	15.9	78,819	18.2	484,708	17.7	18,249	16.4	57,837	19.5	331,619	19.3
UL	60,901	5.7	7,414	7.7	35,553	5.5	36,973	8.5	189,402	6.9	6,483	5.8	23,405	7.9	111,771	6.5
Saolta	196,036	18.2	16,140	16.8	91,937	14.2	79,232	18.2	440,391	16.1	17,801	16.0	45,188	15.2	309,209	18.0
Children's	28,438	2.6	*	-	^	-	*	-	^	-	0	-	0	-	53,211	3.1
No group[ǂ]	1,363	0.1	*	-	^	-	~	-	^	-	0	-	0	-	5,029	0.3
Total Discharges	**1,077,014**	**100**	**96,100**	**100**	**647,595**	**100**	**434,214**	**100**	**2,734,753**	**100**	**111,195**	**100**	**297,277**	**100**	**1,718,523**	**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

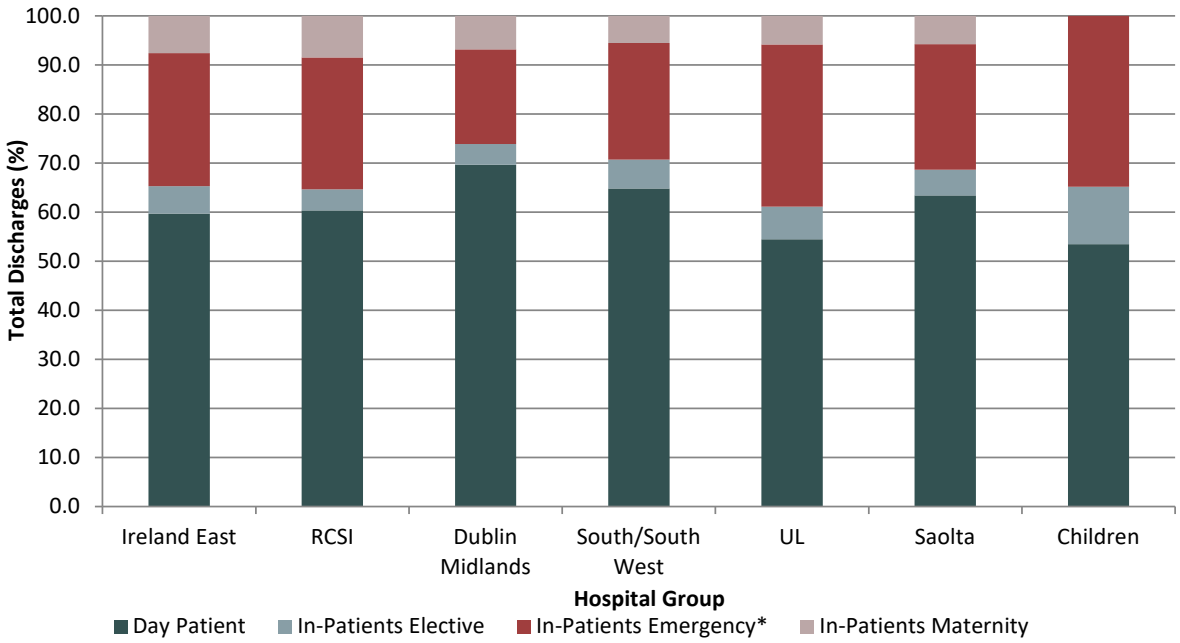
a HIPE includes patients who attended the Emergency Department and were subsequently admitted to hospital. As just a proportion of those attending the Emergency Department will subsequently be admitted to hospital, it is not possible to use emergency admissions reported to HIPE to draw conclusions about 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 2017.

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

- Across all hospital groups, the largest proportion of total discharges were treated as day patients, ranging from 53.4 per cent in the Children's Hospital Group to 69.6 per cent in the Dublin Midlands Hospital Group.
- The RCSI Hospital Group treated 8.5 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 (34.8 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 (89.7 per cent), while the University of Limerick Hospital Group treated the smallest proportion of total discharges on a public basis (72.8 per cent).
- A larger proportion of total day patients were treated as public day patients, exceeding 90 per cent in both the Ireland East and RCSI Hospital Groups. The smallest proportion was in the University of Limerick Hospital Group where 72.3 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, Dublin Midlands and Saolta Hospital Groups.

Length of Stay

- Overnight in-patient mean length of stay was 7.0 days for public discharges compared to 6.3 days for private discharges.
- The Dublin Midlands Hospital Group recorded the longest overnight in-patient mean length of stay for both public and private discharges (7.8 days) compared to the other groups.

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

	Discharges											
	Day Patients				Total In-Patients				Total Discharges			
	Public		Private		Public		Private		Public		Private	
	N	%	N	%	N	%	N	%	N	%	N	%
Ireland East	180,157	91.6	16,558	8.4	109,885	82.7	22,943	17.3	290,042	88.0	39,501	12.0
RCSI	142,604	91.3	13,638	8.7	89,478	87.3	13,048	12.7	232,082	89.7	26,686	10.3
Dublin Midlands	185,410	83.4	36,978	16.6	79,128	81.6	17,857	18.4	264,538	82.8	54,835	17.2
South/South West	175,728	81.8	39,203	18.2	92,131	79.0	24,557	21.0	267,859	80.8	63,760	19.2
UL	44,041	72.3	16,860	27.7	37,354	73.4	13,516	26.6	81,395	72.8	30,376	27.2
Saolta	173,258	88.4	22,778	11.6	97,145	85.8	16,028	14.2	270,403	87.4	38,806	12.6
Children's	23,606	83.0	4,832	17.0	19,394	78.3	5,379	21.7	43,000	80.8	10,211	19.2
No group[ǂ]	1,363	100.0	0	0.0	3,375	92.1	291	7.9	4,738	94.2	291	5.8
Total Discharges	**926,167**	**86.0**	**150,847**	**14.0**	**527,890**	**82.3**	**113,619**	**17.7**	**1,454,057**	**84.6**	**264,466**	**15.4**

	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	26,545	3,495	83,340	7.3	3	19,448	6.4	3	5.8	2	5.6	3
RCSI	20,480	1,464	68,998	6.8	3	11,584	7.1	4	5.4	2	6.5	3
Dublin Midlands	13,249	1,823	65,879	7.8	3	16,034	7.8	4	6.7	3	7.1	3
South/South West	16,716	2,604	75,415	6.6	3	21,953	6.0	3	5.6	2	5.4	3
UL	10,264	1,005	27,090	6.2	3	12,511	5.5	3	4.8	2	5.1	3
Saolta	19,227	2,210	77,918	6.1	3	13,818	6.0	3	5.1	2	5.3	2
Children's	*	*	*	^	^	*	^	^	4.2	2	3.6	2
No group[ǂ]	~	~	*	^	^	*	^	^	33.5	22	15.3	5
Total Discharges	**109,564**	**13,189**	**418,326**	**7.0**	**3**	**100,430**	**6.3**	**3**	**5.7**	**2**	**5.7**	**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 2017.

2.3.2 Admission Source

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

- The majority of total discharges were admitted from home (96.7 per cent).
- Of total emergency in-patients, 2.6 per cent were transferred in from long stay accommodation.
- Almost 11 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	1,070,519	99.4	85,179	88.6	395,132	91.0	110,325	99.2	1,661,155	96.7
Long stay accommodation	1,411	0.1	411	0.4	11,176	2.6	0	0.0	12,998	0.8
Transfer from other hospital	4,857	0.5	10,435	10.9	16,654	3.8	790	0.7	32,736	1.9
Other	227	0.0	75	0.1	11,252	2.6	80	0.1	11,634	0.7
Total	**1,077,014**	**100**	**96,100**	**100.0**	**434,214**	**100**	**111,195**	**100.0**	**1,718,523**	**100**

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

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

2.3.3 Discharge Destination

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

- The majority of total discharges were discharged home (95.1 per cent).
- Of total emergency in-patients, 6.3 per cent were transferred to long stay accommodation, and 5.6 per cent were transferred to another hospital.

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

	Day Patients		In-Patients						Total Discharges	
			Elective		Emergency[a]		Maternity			
	N	%	N	%	N	%	N	%	N	%
Home	1,069,973	99.3	88,027	91.6	366,291	84.4	109,689	98.6	1,633,980	95.1
Long stay accommodation	1,762	0.2	*	-	27,270	6.3	~	-	32,248	1.9
Transfer to other hospital	5,020	0.5	3,629	3.8	24,247	5.6	715	0.6	33,611	2.0
Died	0	0.0	*	-	10,364	2.4	~	-	11,082	0.6
Other	259	0.0	516	0.5	6,042	1.4	785	0.7	7,602	0.4
Total Discharges	**1,077,014**	**100**	**96,100**	**100**	**434,214**	**100**	**111,195**	**100**	**1,718,523**	**100**

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

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

~ Denotes five or fewer discharges reported to HIPE.

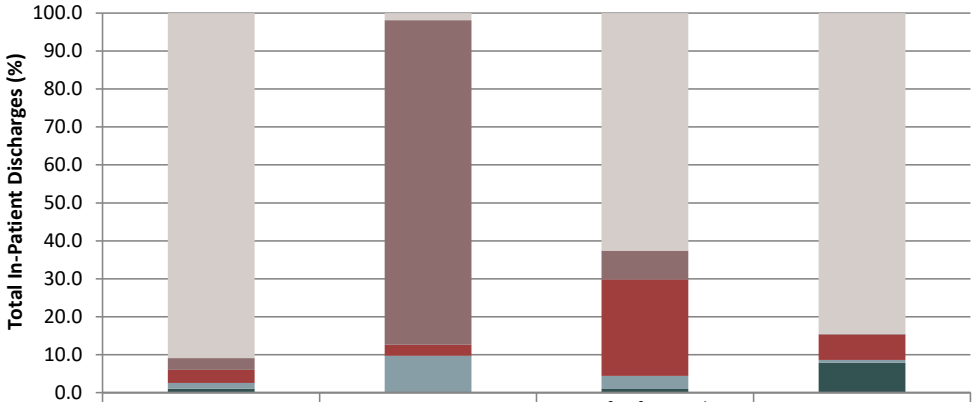
* Further suppression required to prevent disclosure of five or fewer discharges.

2.3.4 Admission Source by Discharge Destination

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

- Of in-patients who were admitted from home, 90.9 per cent were discharged home.
- In-patients admitted from long stay accommodation were primarily discharged back to long stay accommodation (85.5 per cent).
- Over a quarter of in-patients (25.4 per cent) who were admitted from another hospital were transferred to another hospital, while 62.6 per cent were discharged home.

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



	Home	Long stay accommodation	Transfer from other hospital	Other
Home	90.9	1.9	62.6	84.5
Long stay accommodation	3.1	85.5	7.5	0.2
Transfer to other hospital	3.5	2.9	25.4	6.7
Died	1.5	9.6	3.5	0.8
Other	1.0	0.1	1.0	7.9

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

- Over 60 per cent of elective in-patients were admitted between Monday and Wednesday, with only 6.0 per cent admitted at the weekend.
- The proportion of in-patient discharges admitted as emergency in-patients remained relatively constant throughout the week at approximately 16 per cent per day, but fell at weekends when approximately 10 per cent were admitted per day.
- The majority of day patients were admitted mid-week, ranging from 21.4 per cent on Wednesday to only 2.4 per cent on Saturday and 1.0 per cent on Sunday.

Length of Stay[2]

- Mean length of stay for elective in-patients ranged from 6.1 days for those admitted on a Tuesday to 10.3 days for those admitted on a Saturday.
- Mean length of stay for emergency in-patients ranged from 6.0 days for those admitted on a Monday to 6.7 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)

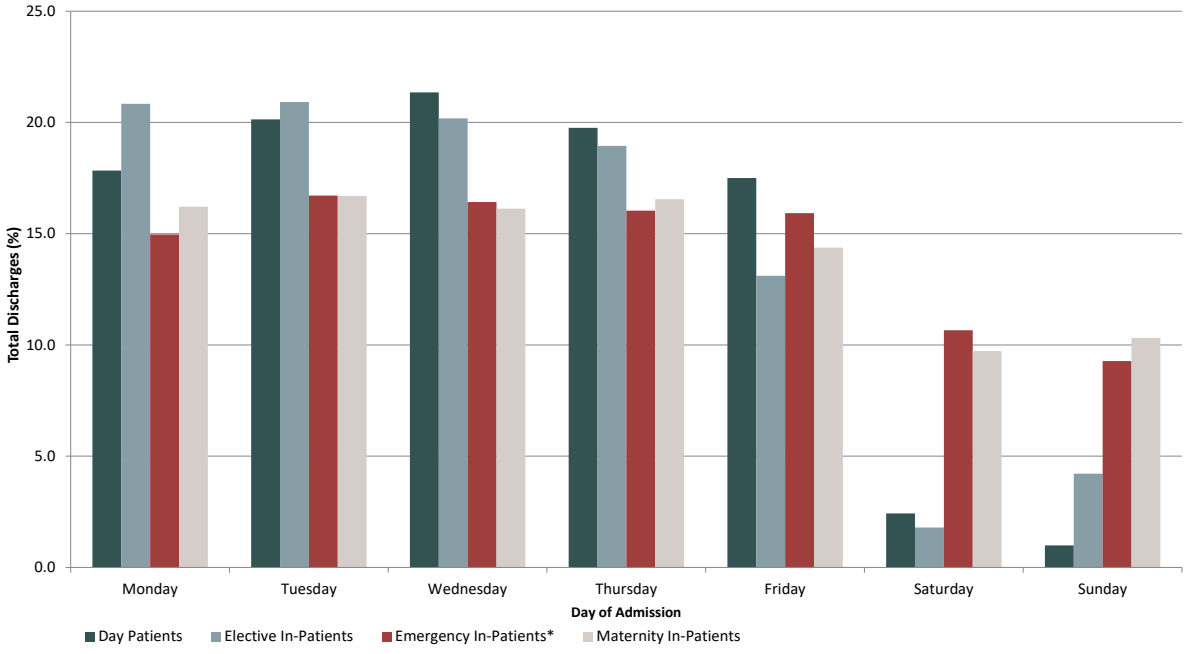
	Discharges									
	Day Patients		In-Patients						Total Discharges	
			Elective		Emergency[a]		Maternity			
	N	%	N	%	N	%	N	%	N	%
Monday	192,143	17.8	20,023	20.8	64,964	15.0	18,028	16.2	295,158	17.2
Tuesday	216,899	20.1	20,104	20.9	72,574	16.7	18,569	16.7	328,146	19.1
Wednesday	229,956	21.4	19,395	20.2	71,322	16.4	17,932	16.1	338,605	19.7
Thursday	212,806	19.8	18,209	18.9	69,632	16.0	18,398	16.5	319,045	18.6
Friday	188,480	17.5	12,596	13.1	69,143	15.9	15,984	14.4	286,203	16.7
Saturday	26,104	2.4	1,725	1.8	46,302	10.7	10,814	9.7	84,945	4.9
Sunday	10,626	1.0	4,048	4.2	40,277	9.3	11,470	10.3	66,421	3.9
Total Discharges	**1,077,014**	**100**	**96,100**	**100**	**434,214**	**100**	**111,195**	**100**	**1,718,523**	**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	6.0	2	2.7	2	103,015	5.5	2
Tuesday	6.1	2	6.2	2	2.8	2	111,247	5.6	2
Wednesday	6.4	2	6.2	2	2.8	2	108,649	5.7	2
Thursday	6.6	2	6.3	2	2.7	2	106,239	5.7	2
Friday	7.4	3	6.5	3	2.6	2	97,723	6.0	3
Saturday	10.3	4	6.7	3	2.4	2	58,841	6.0	3
Sunday	8.2	4	6.3	3	2.6	2	55,795	5.7	3
In-Patient Discharges	**6.7**	**2**	**6.3**	**2**	**2.7**	**2**	**641,509**	**5.7**	**2**

Notes: Percentage columns are subject to rounding.

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

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



Note: * See note under Table 2.10

2.4.2 Day of Discharge

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

Discharges

- The proportion of elective in-patients discharged increased throughout the week, from 10.5 per cent on Monday to 22.6 per cent on Friday, falling to 10.1 per cent on Saturday and 4.8 per cent on Sunday.
- The largest proportion of emergency in-patients were discharged on Friday (20.3 per cent), with the smallest proportion discharged on Sunday (6.1 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 6.9 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)

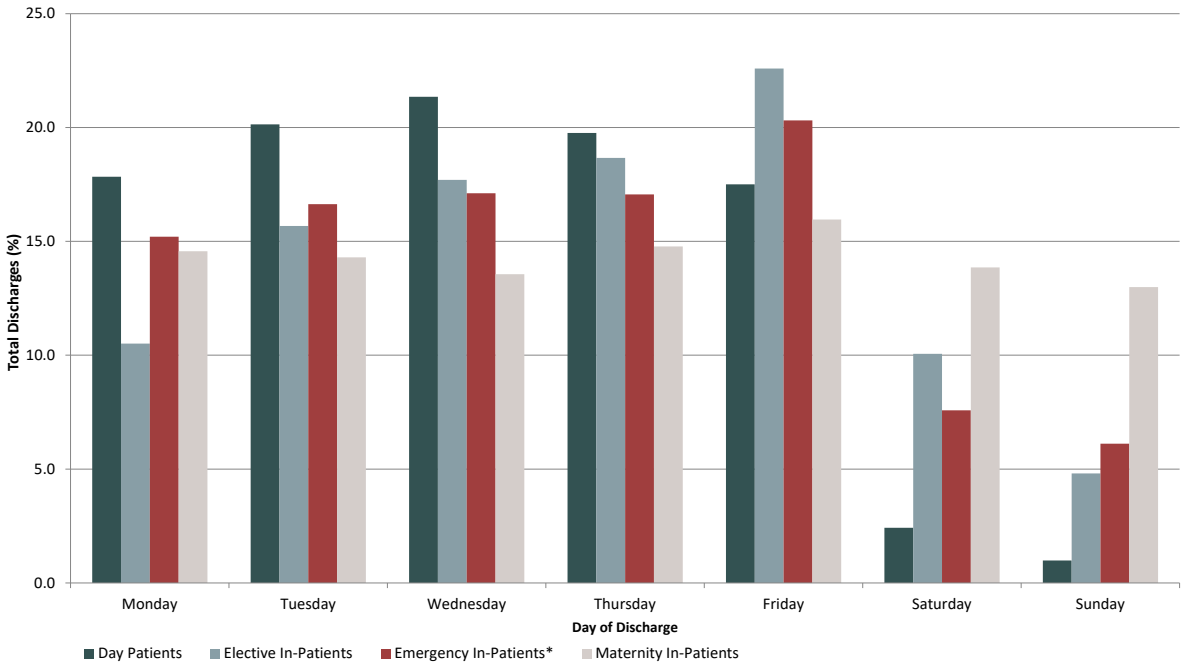
	Discharges									
	Day Patients		In-Patients						Total Discharges	
			Elective		Emergency[a]		Maternity			
	N	%	N	%	N	%	N	%	N	%
Monday	192,143	17.8	10,097	10.5	66,004	15.2	16,196	14.6	284,440	16.6
Tuesday	216,899	20.1	15,064	15.7	72,209	16.6	15,899	14.3	320,071	18.6
Wednesday	229,956	21.4	17,008	17.7	74,312	17.1	15,076	13.6	336,352	19.6
Thursday	212,806	19.8	17,937	18.7	74,078	17.1	16,432	14.8	321,253	18.7
Friday	188,480	17.5	21,711	22.6	88,179	20.3	17,741	16.0	316,111	18.4
Saturday	26,104	2.4	9,665	10.1	32,897	7.6	15,405	13.9	84,071	4.9
Sunday	10,626	1.0	4,618	4.8	26,535	6.1	14,446	13.0	56,225	3.3
Total Discharges	**1,077,014**	**100**	**96,100**	**100**	**434,214**	**100**	**111,195**	**100**	**1,718,523**	**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	6.9	3	2.9	2	92,297	6.6	3
Tuesday	7.2	2	6.6	3	2.7	2	103,172	6.1	2
Wednesday	6.8	2	6.7	2	2.5	2	106,396	6.1	2
Thursday	6.4	2	6.6	2	2.4	2	108,447	6.0	2
Friday	6.5	2	6.2	3	2.6	2	127,631	5.7	2
Saturday	3.9	2	4.6	2	2.7	2	57,967	4.0	2
Sunday	6.0	4	4.2	2	2.9	2	45,599	4.0	2
In-Patient Discharges	**6.7**	**2**	**6.3**	**2**	**2.7**	**2**	**641,509**	**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 (%)



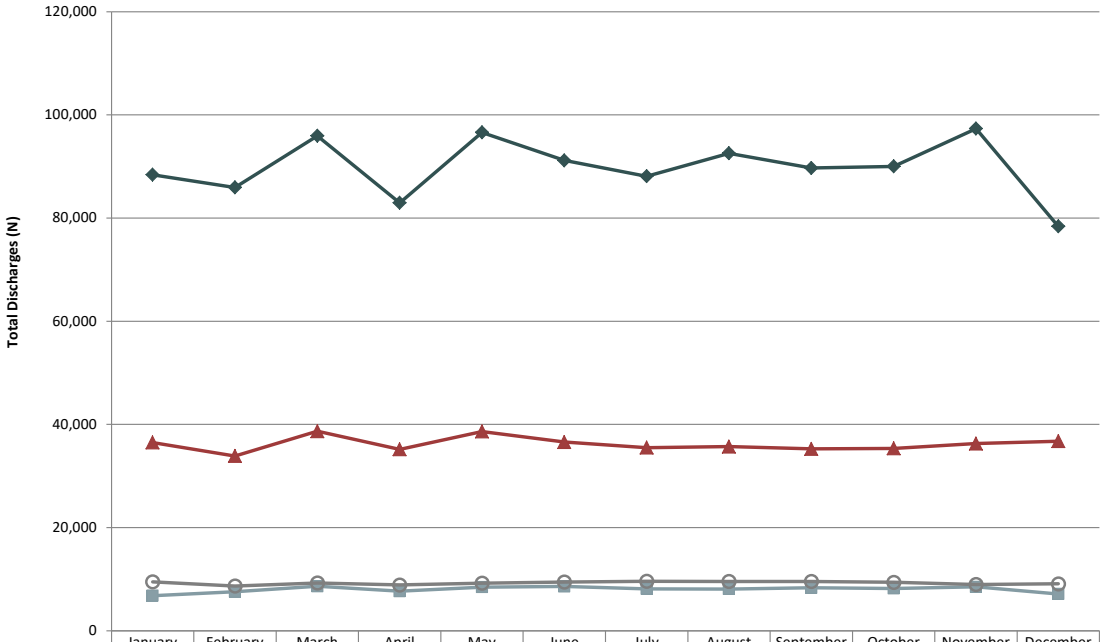
Note: * See note under Table 2.10

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 March for elective in-patients (8,618 discharges), while January recorded the smallest number of elective in-patients with only 6,801 elective in-patients discharged in this month.
- Emergency in-patient hospital discharges peaked in March (38,679 discharges), while the smallest number of emergency in-patients were discharged in February with 33,869 discharges.
- Maternity in-patient discharges were highest in July (9,603 discharges) and lowest in February (8,672 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	88,386	85,923	95,926	82,957	96,598	91,166	88,100	92,543	89,692	90,015	97,330	78,378
Elective In-Patients	6,801	7,568	8,618	7,665	8,451	8,589	8,136	8,083	8,337	8,199	8,519	7,134
Emergency In-Patients*	36,485	33,869	38,679	35,170	38,617	36,575	35,494	35,694	35,248	35,352	36,287	36,744
Maternity	9,494	8,672	9,275	8,874	9,235	9,456	9,603	9,553	9,564	9,396	8,973	9,100

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

Includes 9,073 discharges admitted prior to 2017 and discharged in 2017.

Morbidity Analysis 2017

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, just over 100 coders have achieved this certification.

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 300 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 2017, 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 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).[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. Coding standards are provided with general guidelines and are categorised by site and/or body system according to the clinical specialty to which a disease or procedure relates. Use of ICD-10-AM/ACHI/ACS is complemented by the Irish Coding Standards (ICS); these are revised regularly to reflect changing clinical practice and to ensure the classification and its application are relevant to the Irish Healthcare system.[8]

Due to the update in the classification, caution must be exercised when comparing procedure and diagnosis categories presented in reports from 2015 onwards compared to previous reports, due to changes in sequencing of codes, addition of new codes, deletion of codes, and updates to ACS and ICS.[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). The final report is available at www.hpo.ie

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

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

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

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

Australian Classification of Health Interventions (ACHI)

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

The main features of the classification are:

1) The procedure classification captures procedures and interventions performed in public and private hospitals, day centres and ambulatory settings. Allied health interventions, dental services and procedures performed outside the operating theatre are included.[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 Casemix and Classification Centre (NCCC), 2013: *Australian Coding Standards* (ACS) *(8th Ed)*: NCCC, Australian Health Services Research Institute, University of Wollongong.
p. xvii.
National Casemix and Classification Centre (NCCC), 2013: *Australian Classification of Health Interventions* (ACHI) *Tabular List of Interventions (8th Ed)*: NCCC, Australian Health Services Research Institute, University of Wollongong.
p. iii.

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

3.2.1 Definition of a Diagnosis

In 2017, 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 2.8.
- The mean number of diagnoses recorded for in-patient discharges was 4.1, compared to 2.0 for day patients.
- The mean number of diagnoses recorded for in-patient discharges was higher for males (4.3) compared with females (3.9).
- The mean number of diagnoses recorded for in-patient discharges increased with age ranging from 2.7 in the less than 15 years age group to 5.3 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**	**4.1**	**2.8**
Sex			
Male	2.0	4.3	2.8
Female	2.0	3.9	2.7
Maternity	1.8	3.7	3.4
Non-Maternity	2.0	3.9	2.6
Age Group			
< 15 Years	1.9	2.7	2.4
15–44 Years	1.7	3.4	2.5
45–64 Years	2.1	3.9	2.5
65 Years and Over	2.1	5.3	3.2

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

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

3.2.2 Definition of a Procedure

In 2017, 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 1,718,523 total discharges, principal procedures were recorded for 1,373,300 discharges (79.9 per cent).
- Over 93 per cent of day patient discharges had a principal procedure recorded.
- Over 57 per cent of in-patient discharges had a principal procedure recorded, with 89.1 per cent of elective in-patients, 49.7 per cent of emergency in-patients, and 59.6 per cent of maternity in-patients undergoing a principal procedure.

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

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

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

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	**1,718,523**	**1,373,300**	**79.9**
Day Patients	1,077,014	1,005,388	93.3
In-Patients	641,509	367,912	57.4
Elective In-Patients	96,100	85,665	89.1
Emergency In-Patients	434,214	215,937	49.7
Maternity In-Patients	111,195	66,310	59.6

3.2.2.2 Mean Number of Procedures Reported

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

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

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

	Day Patients	In-Patients	Total Discharges
Total	**1.5**	**2.8**	**1.8**
Sex			
Male	1.4	2.9	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	1.9	2.6	2.2
15–44 Years	1.5	2.7	1.9
45–64 Years	1.5	2.9	1.7
65 Years and Over	1.4	3.0	1.8

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

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

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

3.3.1 Day Patient Activity

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

Day Patients – Profile

- Day patient discharges accounted for 62.7 per cent of total discharges.
- Day patients aged 65–74 years accounted for 22.1 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 21.2 and 16.0 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 17.1 per cent of day patients with at least one procedure.

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

- The top three AR-DRGs accounted for 36.4 per cent of day patient discharges reported to HIPE when analysed by diagnosis related group.[19,20]
- *Haemodialysis* accounted for 15.9 per cent, while *Chemotherapy* and *Other Neoplastic Disorders, Minor Complexit*y accounted for 10.7 per cent and 9.8 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 2016, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. See Appendix VIII for an overview of changes between Version 6.0 and Version 8.0 of the AR-DRG Classification System.

TABLE 3.6 Day Patient Activity (N, %)

Top 20 Principal Diagnoses[a]		N	%
Z51	Other medical care[c,d]	228,118	21.2
Z49	Care involving dialysis	171,799	16.0
E83	Disorders of mineral metabolism	22,812	2.1
H35	Other retinal disorders	20,279	1.9
L40	Psoriasis	16,461	1.5
Z13	Special screening examination for other diseases and disorders	14,804	1.4
K29	Gastritis and duodenitis	13,777	1.3
C44	Other malignant neoplasms of skin	11,904	1.1
M54	Dorsalgia	11,867	1.1
K64	Haemorrhoids and perianal venous thrombosis	9,064	0.8
K50	Crohn's disease [regional enteritis]	8,816	0.8
D12	Benign neoplasm of colon, rectum, anus and anal canal	8,803	0.8
K57	Diverticular disease of intestine	8,688	0.8
Z09	Follow-up examination after treatment for conditions other than malignant neoplasms	8,606	0.8
M25	Other joint disorders, not elsewhere classified	8,510	0.8
K44	Diaphragmatic hernia	7,774	0.7
R10	Abdominal and pelvic pain	7,623	0.7
Z48	Other surgical follow-up care	7,527	0.7
Z08	Follow-up examination after treatment for malignant neoplasms	7,407	0.7
H25	Senile cataract	7,356	0.7

Day Patients

1,077,014

Sex	N	%
Male	532,827	49.5
Female	544,187	50.5

Age Group	N	%
< 1 Year	3,853	0.4
1–14 Years	44,963	4.2
15–24 Years	36,498	3.4
25–34 Years	79,592	7.4
35–44 Years	124,134	11.5
45–54 Years	159,631	14.8
55–64 Years	203,993	18.9
65–74 Years	237,716	22.1
75–84 Years	152,350	14.1
85 Years and Over	34,284	3.2

Top 20 Principal Procedure Blocks[b]		N	%
1060	Haemodialysis	171,468	17.1
1920	Administration of pharmacotherapy	155,329	15.4
1788	Megavoltage radiation treatment[d]	106,138	10.6
1008	Panendoscopy with excision	46,904	4.7
0911	Fibreoptic colonoscopy with excision	37,199	3.7
1620	Excision of lesion(s) of skin and subcutaneous tissue	36,730	3.7
0905	Fibreoptic colonoscopy	27,964	2.8
0209	Application, insertion or removal procedures on retina, choroid or posterior chamber	26,190	2.6
1552	Administration of agent into other musculoskeletal sites	23,687	2.4
0725	Other incision procedures on veins	22,415	2.2
1610	Ultraviolet B [UVB] light therapy of skin	18,474	1.8
1893	Administration of blood and blood products	15,655	1.6
1089	Examination procedures on bladder	15,297	1.5
0197	Extracapsular crystalline lens extraction by phacoemulsification	10,745	1.1
0668	Coronary angiography	10,725	1.1
1005	Panendoscopy	8,100	0.8
1822	Assessment of personal care and other activities of daily/independent living	7,742	0.8
1618	Biopsy of skin and subcutaneous tissue	7,554	0.8
1601	Dressing of other wound	7,050	0.7
1259	Examination procedures on uterus	5,681	0.6

Hospital Group	N	%
Ireland East	196,715	18.3
RCSI	156,242	14.5
Dublin Midlands	222,388	20.6
South/South West	214,931	20.0
UL	60,901	5.7
Saolta	196,036	18.2
Children's	28,438	2.6
No group	1,363	0.1

Top 10 AR-DRGs		N	%
L61Z	Haemodialysis	171,418	15.9
R63Z	Chemotherapy	115,060	10.7
R62C	Other Neoplastic Disorders, Minor Complexity[d]	105,929	9.8
G48B	Colonoscopy, Minor Complexity	48,734	4.5
I40Z	Infusions for Musculoskeletal Disorders, Sameday	39,175	3.6
G47C	Gastroscopy, Minor Complexity	38,143	3.5
J11B	Other Skin, Subcutaneous Tissue and Breast Procedures, Minor Complexity	37,319	3.5
Z64B	Other Factors Influencing Health Status, Minor Complexity	35,384	3.3
C03B	Retinal Procedures, Minor Complexity	24,799	2.3
Q61C	Red Blood Cell Disorders, Minor Complexity	22,077	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 37.3 per cent of total discharges.
- Overnight in-patient discharges accounted for 80.9 per cent (518,756) of in-patient discharges and had a mean length of stay of 6.9 days.

In-Patients – Top 20 Principal Diagnoses

- In-patient discharges with a principal diagnosis of *Single spontaneous delivery* accounted for 4.5 per cent of in-patient discharges.
- In-patient discharges with a principal diagnosis of *Pain in throat and chest* accounted for 3.0 per cent of in-patient discharges while those with a principal diagnosis of *Single delivery by caesarean section* accounted for 2.6 per cent of in-patient discharges.

In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 57.4 per cent of total in-patient discharges (see Table 3.4).
- Procedures from the block *Generalised allied health interventions* were reported for 27.0 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 10.3 per cent of in-patient discharges when analysed by diagnosis related group.[22,23]
- *Antenatal and Other Obstetric Admissions, Minor Complexity* accounted for 4.7 per cent of in-patient discharges. *Vaginal Delivery, Intermediate Complexity* and *Vaginal Delivery, Minor Complexity* each accounted for 2.8 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 93 per cent of cases within this procedure block.

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

23 In 2016, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. See Appendix VIII for an overview of changes between Version 6.0 and Version 8.0 of the AR-DRG Classification System.

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

Top 20 Principal Diagnoses[a]		N	%	Mean LOS	Med LOS
O80	Single spontaneous delivery	29,047	4.5	2.4	2
R07	Pain in throat and chest	18,938	3.0	1.7	1
O82	Single delivery by caesarean section	16,785	2.6	4.5	4
J22	Unspecified acute lower respiratory infection	14,812	2.3	6.7	4
J44	Other chronic obstructive pulmonary disease	14,809	2.3	8.1	5
O99	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium	13,906	2.2	1.6	1
N39	Other disorders of urinary system	13,593	2.1	8.4	4
J18	Pneumonia, organism unspecified	11,949	1.9	10.2	6
R10	Abdominal and pelvic pain	10,375	1.6	2.2	1
R55	Syncope and collapse	9,495	1.5	4.6	2
O81	Single delivery by forceps and vacuum extractor	8,272	1.3	3.3	3
L03	Cellulitis	6,621	1.0	6.7	4
I48	Atrial fibrillation and flutter	6,614	1.0	3.8	2
I50	Heart failure	6,367	1.0	10.1	7
I21	Acute myocardial infarction	6,329	1.0	6.6	4
K80	Cholelithiasis	6,305	1.0	4.7	3
R51	Headache	6,301	1.0	2.0	1
K35	Acute appendicitis	6,106	1.0	3.3	2
A09	Other gastroenteritis and colitis of infectious and unspecified origin	5,379	0.8	3.9	2
I25	Chronic ischaemic heart disease	5,246	0.8	4.9	2

In-Patients

641,509

Discharges	N	%
Total	**641,509**	**100**
Sameday	122,753	19.1
Overnight	518,756	80.9

Length of Stay	Mean	Median
Total	**5.7**	**2**
Overnight	6.9	3

Bed Days	N
Total	**3,679,625**
Overnight	3,556,872

Top 20 Principal Procedure Blocks[b]		N	%	Mean LOS	Med LOS
1916	Generalised allied health interventions	99,195	27.0	11.7	7
1340	Caesarean section	19,462	5.3	5.2	4
1344	Postpartum suture	14,773	4.0	2.5	2
1920	Administration of pharmacotherapy	10,033	2.7	7.2	3
1893	Administration of blood and blood products	8,775	2.4	9.6	5
1008	Panendoscopy with excision	6,849	1.9	10.0	6
0926	Appendicectomy	6,581	1.8	3.1	2
1338	Vacuum extraction	5,759	1.6	3.3	3
1489	Arthroplasty of hip	5,686	1.5	10.7	5
0570	Noninvasive ventilatory support	5,139	1.4	15.6	10
0668	Coronary angiography	5,010	1.4	5.5	3
0671	Transluminal coronary angioplasty with stenting	4,575	1.2	3.8	2
0030	Lumbar puncture	4,440	1.2	8.3	4
1334	Medical or surgical induction of labour	4,052	1.1	3.2	3
1343	Other procedures associated with delivery	3,831	1.0	3.1	3
1828	Sleep study	3,414	0.9	1.6	1
0569	Ventilatory support	3,389	0.9	23.0	10
0412	Tonsillectomy or adenoidectomy	3,254	0.9	1.2	1
0965	Cholecystectomy	3,164	0.9	3.5	1
1265	Curettage and evacuation of uterus	2,926	0.8	1.5	1

Hospital Group	N	%
Ireland East	132,828	20.7
RCSI	102,526	16.0
Dublin Midlands	96,985	15.1
South/South West	116,688	18.2
UL	50,870	7.9
Saolta	113,173	17.6
Children's	24,773	3.9
No group	3,666	0.6

Sex	N	%
Male	267,616	41.7
Female	373,893	58.3

Age Group	N	%
< 1 Year	26,064	4.1
1–14 Years	52,665	8.2
15–24 Years	47,009	7.3
25–34 Years	92,528	14.4
35–44 Years	85,622	13.3
45–54 Years	57,159	8.9
55–64 Years	70,181	10.9
65–74 Years	88,325	13.8
75–84 Years	81,178	12.7
85 Years and Over	40,778	6.4

Top 10 AR-DRGs		N	%	Mean LOS	Med LOS
O66B	Antenatal and Other Obstetric Admissions, Minor Complexity	30,026	4.7	1.3	1
O60B	Vaginal Delivery, Intermediate Complexity	18,219	2.8	3.0	3
O60C	Vaginal Delivery, Minor Complexity	17,949	2.8	2.1	2
F74B	Chest Pain, Minor Complexity	14,480	2.3	1.4	1
O01C	Caesarean Delivery, Minor Complexity	11,293	1.8	4.1	4
O66A	Antenatal and Other Obstetric Admissions, Major Complexity	11,033	1.7	2.1	1
E75A	Other Respiratory System Disorders, Major Complexity	9,301	1.4	8.7	5
E65B	Chronic Obstructive Airways Disease, Minor Complexity	8,738	1.4	4.9	4
E62A	Respiratory Infections and Inflammations, Major Complexity	8,121	1.3	13.5	8
B77B	Headaches, Minor Complexity	8,048	1.3	1.6	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 15.0 per cent of in-patients.
- Elective in-patient bed days accounted for 647,595 in-patient bed days, or 17.6 per cent of total in-patient bed days (see Table 3.7).
- Elective overnight in-patient discharges accounted for 95.2 per cent of total elective in-patient discharges and had a mean length of stay of 7.0 days.

Elective In-Patients – Top 20 Principal Diagnoses

- Elective in-patients with a principal diagnosis of *Coxarthrosis [arthrosis of hip]* accounted for 3.8 per cent of elective in-patient discharges.
- *Care involving use of rehabilitation procedures* accounted for 3.6 per cent of elective in-patient discharges.

Elective In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 89.1 per cent of elective in-patient discharges (see Table 3.4).
- The procedure block *Generalised allied health interventions* was reported for 10.8 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 4.4 per cent and 3.8 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 9.3 per cent of elective in-patient discharges reported to HIPE when analysed by diagnosis related group.[24,25]
- *Hip Replacement, Minor Complexity* and *Tonsillectomy and Adenoidectomy* accounted for 3.7 per cent and 3.4 per cent of elective in-patient discharges respectively. *Knee Replacement, Minor Complexity* accounted 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 2016, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. See Appendix VIII for an overview of changes between Version 6.0 and Version 8.0 of the AR-DRG Classification System.

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

Top 20 Principal Diagnoses[a]		N	%	Mean LOS	Med LOS
M16	Coxarthrosis [arthrosis of hip]	3,648	3.8	5.2	4
Z50	Care involving use of rehabilitation procedures	3,425	3.6	38.2	26
J35	Chronic diseases of tonsils and adenoids	3,176	3.3	1.1	1
Z48	Other surgical follow-up care	2,591	2.7	16.3	6
G47	Sleep disorders	2,568	2.7	1.2	1
I25	Chronic ischaemic heart disease	2,510	2.6	3.9	1
M17	Gonarthrosis [arthrosis of knee]	2,470	2.6	5.1	4
K80	Cholelithiasis	2,227	2.3	2.2	1
C50	Malignant neoplasm of breast	1,927	2.0	5.1	2
N81	Female genital prolapse	1,417	1.5	3.4	3
K40	Inguinal hernia	1,352	1.4	1.5	1
C34	Malignant neoplasm of bronchus and lung	1,079	1.1	10.4	7
R06	Abnormalities of breathing	1,047	1.1	1.5	1
Z51	Other medical care	1,044	1.1	21.3	11
C18	Malignant neoplasm of colon	955	1.0	9.9	7
N39	Other disorders of urinary system	923	1.0	4.5	2
C67	Malignant neoplasm of bladder	811	0.8	5.8	3
I48	Atrial fibrillation and flutter	743	0.8	1.9	1
C83	Non-follicular lymphoma	680	0.7	9.2	5
I70	Atherosclerosis	672	0.7	7.7	3

Elective In-Patients

96,100

Discharges	N	%
Total	**96,100**	**100**
Sameday	4,638	4.8
Overnight	91,462	95.2

Length of Stay	Mean	Median
Total	**6.7**	**2**
Overnight	7.0	3

Bed Days	N
Total	**647,595**
Overnight	642,957

Top 20 Principal Procedure Blocks[b]		N	%	Mean LOS	Med LOS
1916	Generalised allied health interventions	9,244	10.8	23.8	13
1489	Arthroplasty of hip	3,783	4.4	5.5	4
0412	Tonsillectomy or adenoidectomy	3,231	3.8	1.2	1
1828	Sleep study	3,207	3.7	1.2	1
1920	Administration of pharmacotherapy	3,139	3.7	8.5	4
0965	Cholecystectomy	2,404	2.8	2.2	1
1518	Arthroplasty of knee	2,336	2.7	5.4	5
1268	Abdominal hysterectomy	1,444	1.7	5.0	4
0671	Transluminal coronary angioplasty with stenting	1,363	1.6	1.6	1
1893	Administration of blood and blood products	1,355	1.6	7.2	3
0990	Repair of inguinal hernia	1,305	1.5	1.5	1
0913	Colectomy	955	1.1	11.8	8
1744	Excision of lesion of breast	895	1.0	1.9	1
1748	Simple mastectomy	848	1.0	4.1	3
1620	Excision of lesion(s) of skin and subcutaneous tissue	847	1.0	3.4	1
1283	Repair of prolapse of uterus, pelvic floor or enterocele	746	0.9	3.1	3
1100	Endoscopic resection of bladder lesion or tissue	685	0.8	4.1	2
1269	Vaginal hysterectomy	665	0.8	3.9	4
0114	Thyroidectomy	656	0.8	2.6	2
1165	Transurethral prostatectomy	654	0.8	4.0	3

Hospital Group	N	%
Ireland East	18,509	19.3
RCSI	11,000	11.4
Dublin Midlands	13,507	14.1
South/South West	19,620	20.4
UL	7,414	7.7
Saolta	16,140	16.8
Children's	6,249	6.5
No group	3,661	3.8

Sex	N	%
Male	47,731	49.7
Female	48,369	50.3

Age Group	N	%
< 1 Year	1,388	1.4
1–14 Years	9,070	9.4
15–24 Years	4,396	4.6
25–34 Years	5,099	5.3
35–44 Years	9,353	9.7
45–54 Years	12,732	13.2
55–64 Years	17,152	17.8
65–74 Years	19,829	20.6
75–84 Years	13,307	13.8
85 Years and Over	3,774	3.9

Top 10 AR-DRGs		N	%	Mean LOS	Med LOS
I03B	Hip Replacement, Minor Complexity	3,525	3.7	5.0	4
D11Z	Tonsillectomy and Adenoidectomy	3,260	3.4	1.2	1
I04B	Knee Replacement, Minor Complexity	2,175	2.3	4.9	4
H08B	Laparoscopic Cholecystectomy, Minor Complexity	2,064	2.1	1.6	1
Z60B	Rehabilitation, Minor Complexity	2,054	2.1	30.7	21
Z63A	Other Follow Up After Surgery or Medical Care, Major Complexity	1,854	1.9	23.8	13
G10B	Hernia Procedures, Minor Complexity	1,822	1.9	1.5	1
Z63B	Other Follow Up After Surgery or Medical Care, Minor Complexity	1,761	1.8	10.5	3
J06B	Major Procedures for Breast Disorders, Minor Complexity	1,549	1.6	2.4	2
N04B	Hysterectomy for Non-Malignancy, Minor Complexity	1,404	1.5	4.0	4

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.

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 25.3 per cent of total discharges and 67.7 per cent of in-patients.
- Emergency in-patient bed days accounted for 2,734,753 in-patient bed days, or 74.3 per cent of total in-patient bed days (see Table 3.7).
- Over 65 per cent of emergency in-patient discharges were admitted from an Emergency Department, with 8.3 per cent admitted via a medical assessment unit (where they were admitted as an in-patient).

Emergency In-Patients – Top 20 Principal Diagnoses

- Emergency in-patient discharges with a principal diagnosis of *Pain in throat and chest* accounted for 4.3 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* each accounted for 3.3 per cent of emergency in-patient discharges.

Emergency In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 49.7 per cent of emergency in-patient discharges (see Table 3.4).
- Procedures from the block *Generalised allied health interventions* were reported for 40.3 per cent of emergency in-patient discharges with a procedure recorded.

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

- The top three AR-DRGs accounted for 7.2 per cent of emergency in-patient discharges reported to HIPE when analysed by diagnosis related group.[27,28]
- *Chest Pain, Minor Complexity* accounted for 3.3 per cent of emergency in-patient discharges. *Other Respiratory System Disorders, Major Complexity* and *Chronic Obstructive Airways Disease, Minor Complexity* accounted for 2.1 and 1.9 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 2016, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. See Appendix VIII for an overview of changes between Version 6.0 and Version 8.0 of the AR-DRG Classification System.

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

Top 20 Principal Diagnoses[a]		N	%	Mean LOS	Med LOS
R07	Pain in throat and chest	18,478	4.3	1.7	1
J22	Unspecified acute lower respiratory infection	14,470	3.3	6.6	4
J44	Other chronic obstructive pulmonary disease	14,174	3.3	7.9	5
N39	Other disorders of urinary system	12,662	2.9	8.7	5
J18	Pneumonia, organism unspecified	11,758	2.7	10.1	6
R10	Abdominal and pelvic pain	10,068	2.3	2.2	1
R55	Syncope and collapse	9,357	2.2	4.6	2
L03	Cellulitis	6,492	1.5	6.6	4
I50	Heart failure	6,154	1.4	10.2	7
R51	Headache	6,153	1.4	2.0	1
K35	Acute appendicitis	6,019	1.4	3.3	2
I21	Acute myocardial infarction	5,993	1.4	6.6	4
I48	Atrial fibrillation and flutter	5,871	1.4	4.1	2
A09	Other gastroenteritis and colitis of infectious and unspecified origin	5,267	1.2	3.9	2
I63	Cerebral infarction	4,664	1.1	16.2	8
S52	Fracture of forearm	4,584	1.1	2.8	1
S72	Fracture of femur	4,369	1.0	18.1	11
A08	Viral and other specified intestinal infections	4,156	1.0	2.1	1
K80	Cholelithiasis	4,078	0.9	6.1	4
T81	Complications of procedures, not elsewhere classified	3,941	0.9	6.5	3

Emergency In-Patients

434,214

Discharges	N	%
Total	**434,214**	**100**
Sameday	95,988	22.1
Overnight	338,226	77.9

Length of Stay	Mean	Median
Total	**6.3**	**2**
Overnight	7.8	4

Bed Days	N
Total	**2,734,753**
Overnight	2,638,765

Top 20 Principal Procedure Blocks[b]		N	%	Mean LOS	Med LOS
1916	Generalised allied health interventions	87,112	40.3	10.7	6
1893	Administration of blood and blood products	7,229	3.3	10.2	6
1920	Administration of pharmacotherapy	6,405	3.0	7.0	3
0926	Appendicectomy	6,383	3.0	3.1	2
1008	Panendoscopy with excision	6,227	2.9	10.2	6
0570	Noninvasive ventilatory support	4,752	2.2	16.1	10
0668	Coronary angiography	4,394	2.0	5.7	3
0030	Lumbar puncture	4,232	2.0	8.3	4
0569	Ventilatory support	3,276	1.5	22.4	9
0671	Transluminal coronary angioplasty with stenting	3,212	1.5	4.7	3
1823	Mental, behavioural or psychosocial assessment	2,634	1.2	7.4	2
1005	Panendoscopy	2,223	1.0	11.9	6
0911	Fibreoptic colonoscopy with excision	2,100	1.0	11.1	7
1872	Alcohol and drug rehabilitation and detoxification	1,904	0.9	7.3	4
1489	Arthroplasty of hip	1,903	0.9	21.2	12
1539	Open reduction of fracture of ankle or toe	1,736	0.8	4.1	2
1427	Closed reduction of fracture of radius	1,614	0.7	1.7	1
1628	Other debridement of skin and subcutaneous tissue	1,597	0.7	8.7	2
1479	Fixation of fracture of pelvis or femur	1,583	0.7	19.3	12
0560	Application, insertion or removal procedures on chest wall, mediastinum or diaphragm	1,560	0.7	14.0	10

Hospital Group	N	%
Ireland East	89,384	20.6
RCSI	69,575	16.0
Dublin Midlands	61,702	14.2
South/South West	78,819	18.2
UL	36,973	8.5
Saolta	79,232	18.2
Children's	18,524	4.3
No group	~	-

Mode of Emergency Admission	N	%
Emergency Department	284,416	65.5
Medical assessment unit - admitted as in-patient	35,942	8.3
Medical assessment unit only	59,691	13.7
Other[c]	54,152	12.5
Unknown	13	0.0

Sex	N	%
Male	219,885	50.6
Female	214,329	49.4

Age Group	N	%
< 1 Year	24,676	5.7
1–14 Years	43,587	10.0
15–24 Years	28,300	6.5
25–34 Years	29,250	6.7
35–44 Years	38,114	8.8
45–54 Years	43,887	10.1
55–64 Years	53,029	12.2
65–74 Years	68,496	15.8
75–84 Years	67,871	15.6
85 Years and Over	37,004	8.5

Top 10 AR-DRGs		N	%	Mean LOS	Med LOS
F74B	Chest Pain, Minor Complexity	14,145	3.3	1.4	1
E75A	Other Respiratory System Disorders, Major Complexity	9,037	2.1	8.7	5
E65B	Chronic Obstructive Airways Disease, Minor Complexity	8,280	1.9	4.6	3
E62A	Respiratory Infections and Inflammations, Major Complexity	7,981	1.8	13.3	8
B77B	Headaches, Minor Complexity	7,911	1.8	1.5	1
G67B	Oesophagitis and Gastroenteritis, Minor Complexity	7,893	1.8	1.9	1
F73B	Syncope and Collapse, Minor Complexity	7,593	1.7	2.7	1
G66B	Abdominal Pain and Mesenteric Adenitis, Minor Complexity	7,286	1.7	1.6	1
D63B	Otitis Media and Upper Respiratory Infections, Minor Complexity	7,253	1.7	1.6	1
L63B	Kidney and Urinary Tract Infections, Minor Complexity	7,195	1.7	4.4	3

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

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 6.5 per cent of total discharges and 17.3 per cent of in-patients.
- Of maternity in-patient discharges, 54.4 per cent reported a diagnosis of *outcome of delivery* i.e. delivery discharges; while 45.6 per cent were non-delivery discharges.
- Single deliveries accounted for 98.1 per cent of delivery discharges.
- Over 61 percent of delivery discharges were multiparous deliveries. [30]
- Of delivery discharges, 35 per cent were aged between 30–34 years.

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

- Delivery discharges with a principal diagnosis of *Single spontaneous delivery* accounted for 48.0 per cent of delivery in-patient discharges.
- Non-delivery discharges with a principal diagnosis of *Other maternal diseases classifiable elsewhere but complicating pregnancy; childbirth and the puerperium* accounted for 27.0 per cent of non-delivery in-patient discharges.

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

- For delivery discharges who had a procedure reported, 34.1 per cent reported the principal procedure block *Caesarean section*.
- For non-delivery discharges who had a procedure reported, 28.7 per cent reported the principal procedure block *Curettage and evacuation of uterus*.

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

- The top three AR-DRGs accounted for 59.5 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 27.0 per cent of maternity in-patient discharges. *Vaginal Delivery, Intermediate Complexity* and *Vaginal Delivery, Minor Complexity* accounted for 16.4 and 16.1 per cent of maternity in-patient discharges respectively.

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29 Hospital In-Patient Enquiry Scheme (HIPE) Data Dictionary 2017 Version 9.1 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 2016, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. See Appendix VIII for an overview of changes between Version 6.0 and Version 8.0 of the AR-DRG Classification System.

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

	Top 10 Principal Diagnoses[a]		N	%	Mean	Med
Delivery	O80	Single spontaneous delivery[b]	29,047	48.0	2.4	2
	O82	Single delivery by caesarean section[b]	16,785	27.7	4.5	4
	O81	Single delivery by forceps and vacuum extractor[b]	8,272	13.7	3.3	3
	O42	Premature rupture of membranes	1,145	1.9	6.6	4
	O84	Multiple delivery[b]	895	1.5	5.2	5
	O83	Other assisted single delivery[b]	837	1.4	3.1	3
	O36	Maternal care for other known or suspected fetal problems	724	1.2	6.5	5
	O13	Gestational [pregnancy-induced] hypertension	458	0.8	7.8	6
	O14	Pre-eclampsia	351	0.6	9.4	8
	O46	Antepartum haemorrhage; not elsewhere classified	298	0.5	6.7	4
Non-Delivery	O99	Other maternal diseases classifiable elsewhere but complicating pregnancy; childbirth and the puerperium	13,668	27.0	1.5	1
	O47	False labour	4,965	9.8	1.2	1
	Z36	Antenatal screening	4,182	8.2	1.1	1
	O21	Excessive vomiting in pregnancy	2,856	5.6	1.7	1
	O03	Spontaneous abortion	2,813	5.5	1.4	1
	O02	Other abnormal products of conception	2,060	4.1	1.3	1
	O13	Gestational [pregnancy-induced] hypertension	2,023	4.0	1.6	1
	O46	Antepartum haemorrhage; not elsewhere classified	2,011	4.0	1.6	1
	O36	Maternal care for other known or suspected fetal problems	1,611	3.2	1.6	1
	O23	Infections of genitourinary tract in pregnancy	1,402	2.8	2.2	2

Maternity In-Patients

111,195

Delivery Status	N	%	Mean	Med
Total	**111,195**	**100**	**2.7**	**2**
Delivery[c]	60,496	54.4	3.6	3
Non-Delivery[d]	50,699	45.6	1.6	1

Delivery Discharges

Delivery Outcome[c]	N	%	Mean	Med
Single	59,337	98.1	3.5	3
Multiple	1,150	1.9	6.7	5
Unspecified	9	0.0	14.0	7
Parity[e]	**N**	**%**	**Mean**	**Med**
Primiparous	23,227	38.4	4.1	4
Multiparous	37,244	61.6	3.2	3
Unknown	25	0.0	3.0	3
Age	**N**	**%**	**Mean**	**Med**
< 20 Years	1,043	1.7	3.6	3
20-24 Years	5,100	8.4	3.5	3
25-29 Years	10,631	17.6	3.4	3
30-34 Years	21,188	35.0	3.5	3
35-39 Years	18,408	30.4	3.7	3
40-44 Years	3,837	6.3	4.2	4
45 Years and Over	289	0.5	5.7	5
Discharge Status	**N**	**%**	**Mean**	**Med**
Public	49,448	81.7	3.5	3
Private	11,048	18.3	3.9	3

	Top 10 Principal Procedure Blocks[f]		N	%	Mean	Med
Delivery	1340	Caesarean section[g]	19,462	34.1	5.2	4
	1344	Postpartum suture	14,620	25.6	2.5	2
	1338	Vacuum extraction	5,759	10.1	3.3	3
	1334	Medical or surgical induction of labour	3,915	6.9	3.3	3
	1343	Other procedures associated with delivery[h]	3,829	6.7	3.1	3
	1333	Analgesia and anaesthesia during labour and delivery procedure	2,849	5.0	2.8	2
	1335	Medical or surgical augmentation of labour	2,068	3.6	2.2	2
	1337	Forceps delivery	2,020	3.5	3.7	3
	1336	Spontaneous vertex delivery[i]	859	1.5	2.4	2
	1916	Generalised allied health interventions	545	1.0	3.0	2
Non-Delivery	1265	Curettage and evacuation of uterus	2,650	28.7	1.4	1
	1916	Generalised allied health interventions	2,294	24.8	3.1	2
	1884	Immunisation	997	10.8	1.7	1
	1256	Procedures for management of ectopic pregnancy	674	7.3	2.2	2
	1920	Administration of pharmacotherapy	481	5.2	2.2	1
	1330	Antepartum application, insertion or removal procedures	302	3.3	1.9	1
	1274	Application, insertion or removal procedures on cervix	224	2.4	1.7	1
	1893	Administration of blood and blood products	166	1.8	2.3	2
	1345	Postpartum evacuation of uterus	155	1.7	3.0	2
	1344	Postpartum suture	152	1.6	2.5	2

Top 10 AR-DRG's		N	%	Mean	Med
O66B	Antenatal & Other Obs Adm, MINC	30,001	27.0	1.3	1
O60B	Vaginal Delivery, Intermediate Complexity	18,219	16.4	3.0	3
O60C	Vaginal Delivery, Minor Complexity	17,949	16.1	2.1	2
O01C	Caesarean Delivery, Minor Complexity	11,293	10.2	4.1	4
O66A	Antenatal & Other Obs Adm, MAJC	11,016	9.9	2.1	1
O01B	Caesarean Delivery, Intermediate Complexity	6,899	6.2	5.8	5
O60A	Vaginal Delivery, Major Complexity	3,856	3.5	4.8	4
O61B	Postpartum & Post Abortion W/O OR Procedures, Minor Complexity	2,633	2.4	2.1	1
O05Z	Abortion W OR Procedures	2,624	2.4	1.3	1
O63B	Abortion W/O OR Procedures, MINC	2,179	2.0	1.3	1

Notes:

Percentage columns are subject to rounding.

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 94.3 per cent of delivery in-patient discharges and 18.2 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.

- Almost 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 9.7 per cent of total discharges.
- For discharges aged less than 15 years (including discharges aged less than 1 year), the most common principal diagnosis came from the chapter *Diseases of the respiratory system,* which accounted for 12.8 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 *Factors influencing health status and contact with health services* (11.6 days). When this diagnosis is analysed by sex, male discharges reported 15.2 days and females reported 9.7 days.
- 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 8.1 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 (7.2 days).
- The shortest in-patient mean length of stay for all ages was recorded for in-patient discharges with a principal diagnosis from the chapter *Diseases of the ear and mastoid process* (2.4 days).

3.4.3 All-Listed Diagnoses by Sex and Age Group

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

- 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 1,133,257 diagnoses, or 23.9 per cent of all-listed diagnoses reported.[36]
- *Neoplasms* accounted for 577,441 diagnoses or 12.2 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	–	**71,441**	**146,470**	**238,466**	**344,066**	**800,443**	**56,104**	**318,913**	**252,498**	**290,565**	**918,080**	**127,545**	**465,383**	**490,964**	**634,631**	**1,718,523**
Certain infectious and parasitic diseases	**A00–B99**	**5,144**	**3,176**	**2,258**	**3,041**	**13,619**	**4,532**	**3,514**	**2,478**	**3,552**	**14,076**	**9,676**	**6,690**	**4,736**	**6,593**	**27,695**
Intestinal infectious diseases (including diarrhoea)	A00–A09	2,947	1,291	1,019	1,227	6,484	2,825	1,774	1,396	1,888	7,883	5,772	3,065	2,415	3,115	14,367
Tuberculosis	A15–A19	0	96	48	32	176	~	68	*	23	117	~	164	*	55	293
Septicaemia	A40–A41	75	139	364	1,251	1,829	59	162	351	1,050	1,622	134	301	715	2,301	3,451
Human immunodeficiency virus [HIV] disease	B20–B24	†	†	†	†	†	†	†	†	†	†	†	†	†	†	63
Neoplasms	**C00–D48**	**3,072**	**7,485**	**21,096**	**36,430**	**68,083**	**2,488**	**15,060**	**22,982**	**26,651**	**67,181**	**5,560**	**22,545**	**44,078**	**63,081**	**135,264**
Malignant neoplasms	C00–C96	2,407	3,870	14,817	26,825	47,919	1,696	4,939	15,071	19,820	41,526	4,103	8,809	29,888	46,645	89,445
Malignant neoplasms of colon, rectum and anus	C18–C21	~	*	1,469	2,480	4,195	~	*	894	1,357	2,451	6	440	2,363	3,837	6,646
Malignant neoplasms of trachea, bronchus and lung	C33–C34	0	72	987	2,099	3,158	0	85	955	1,840	2,880	0	157	1,942	3,939	6,038
Melanoma and other malignant neoplasms of skin	C43–C44	~	*	1,961	6,227	8,570	~	*	1,505	3,675	5,656	7	851	3,466	9,902	14,226
Malignant neoplasms of breast	C50	0	0	12	43	55	0	1,481	4,493	3,190	9,164	0	1,481	4,505	3,233	9,219
Malignant neoplasms of female genital organs	C51–C58	0	0	0	0	0	0	544	1,429	1,361	3,334	0	544	1,429	1,361	3,334
Malignant neoplasm of prostate	C61	0	35	1,558	3,162	4,755	0	0	0	0	0	0	35	1,558	3,162	4,755
Malignant neoplasm of bladder	C67	~	*	436	1,181	1,657	0	35	135	439	609	~	*	571	1,620	2,266
Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81–C96	1,595	1,497	3,828	5,557	12,477	858	1,072	2,715	4,305	8,950	2,453	2,569	6,543	9,862	21,427
In situ neoplasms	D00-D09	0	68	483	1,208	1,759	0	2,469	1,083	1,465	5,017	0	2,537	1,566	2,673	6,776
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10–D48	665	3,547	5,796	8,397	18,405	792	7,652	6,828	5,366	20,638	1,457	11,199	12,624	13,763	39,043
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	**D50–D89**	**2,400**	**2,214**	**3,005**	**5,800**	**13,419**	**1,580**	**3,635**	**3,527**	**5,721**	**14,463**	**3,980**	**5,849**	**6,532**	**11,521**	**27,882**
Endocrine, nutritional and metabolic diseases	**E00–E89**	**1,451**	**6,989**	**11,425**	**7,919**	**27,784**	**1,638**	**4,395**	**5,972**	**5,866**	**17,871**	**3,089**	**11,384**	**17,397**	**13,785**	**45,655**
Diabetes mellitus	E10–E14	271	1,018	2,135	2,635	6,059	250	844	1,035	1,793	3,922	521	1,862	3,170	4,428	9,981
Cystic fibrosis	E84	354	1,323	*	~	1,812	462	1,141	*	~	1,693	816	2,464	216	9	3,505
Mental and behavioural disorders	**F00–F99**	**450**	**1,360**	**1,249**	**1,093**	**4,152**	**350**	**990**	**740**	**1,179**	**3,259**	**800**	**2,350**	**1,989**	**2,272**	**7,411**
Mental and behavioural disorders due to alcohol	F10	32	766	852	279	1,929	33	322	345	110	810	65	1,088	1,197	389	2,739
Mental and behavioural disorders due to use of other psychoactive substance	F11–F19	~	167	29	*	208	0	85	13	9	107	~	252	42	*	315
Diseases of nervous system	**G00–G99**	**1,674**	**4,624**	**5,266**	**4,889**	**16,453**	**1,334**	**7,438**	**6,513**	**5,142**	**20,427**	**3,008**	**12,062**	**11,779**	**10,031**	**36,880**
Multiple sclerosis	G35	~	1,166	669	*	1,896	~	2,381	1,418	*	3,948	6	3,547	2,087	204	5,844
Epilepsy	G40, G41	662	863	532	327	2,384	566	722	382	336	2,006	1,228	1,585	914	663	4,390
Transient cerebral ischaemic attacks and related syndromes	G45	~	*	435	1,098	1,584	~	*	357	1,238	1,676	~	*	792	2,336	3,260
Diseases of the eye and adnexa	**H00–H59**	**668**	**1,739**	**5,403**	**16,004**	**23,814**	**640**	**1,764**	**4,453**	**21,296**	**28,153**	**1,308**	**3,503**	**9,856**	**37,300**	**51,967**
Diseases of the ear and mastoid process	**H60–H95**	**2,199**	**1,168**	**1,054**	**916**	**5,337**	**1,675**	**1,312**	**1,114**	**915**	**5,016**	**3,874**	**2,480**	**2,168**	**1,831**	**10,353**
Diseases of the circulatory system	**I00–I99**	**777**	**3,828**	**15,605**	**25,818**	**46,028**	**685**	**3,538**	**7,988**	**18,500**	**30,711**	**1,462**	**7,366**	**23,593**	**44,318**	**76,739**
Hypertensive diseases	I10–I15	23	331	510	379	1,243	30	277	478	700	1,485	53	608	988	1,079	2,728
Angina pectoris	I20	0	115	1,097	1,510	2,722	0	47	463	740	1,250	0	162	1,560	2,250	3,972
Acute myocardial infarction	I21–I22	0	274	1,893	2,480	4,647	~	*	483	1,340	1,887	~	*	2,376	3,820	6,534
Other ischaemic heart disease	I23–I25	0	268	3,848	4,919	9,035	~	*	1,215	2,195	3,479	~	*	5,063	7,114	12,514
Pulmonary heart disease and diseases of pulmonary circulation	I26–I28	~	*	312	419	867	*	*	254	571	1,040	9	342	566	990	1,907
Conduction disorders and cardiac arrhythmias	I44–I49	87	667	2,703	4,551	8,008	77	407	1,051	3,358	4,893	164	1,074	3,754	7,909	12,901
Heart failure	I50	*	*	472	3,183	3,708	~	*	172	2,588	2,789	10	72	644	5,771	6,497
Cerebrovascular disease	I60–I69	41	251	1,214	2,881	4,387	15	211	697	2,497	3,420	56	462	1,911	5,378	7,807
Atherosclerosis (non-coronary)	I70	~	*	392	946	1,362	~	*	175	527	720	~	*	567	1,473	2,082
Diseases of the respiratory system	**J00–J99**	**9,356**	**6,251**	**8,223**	**19,594**	**43,424**	**6,979**	**7,789**	**8,863**	**18,842**	**42,473**	**16,335**	**14,040**	**17,086**	**38,436**	**85,897**
Acute upper respiratory infections and influenza	J00–J11	3,027	1,083	334	374	4,818	2,212	1,621	451	414	4,698	5,239	2,704	785	788	9,516
Pneumonia	J12–J18	674	583	1,157	4,279	6,693	569	586	988	4,115	6,258	1,243	1,169	2,145	8,394	12,951
Chronic diseases of tonsils and adenoids	J35	1,366	425	45	17	1,853	1,162	966	59	25	2,212	2,528	1,391	104	42	4,065
Chronic obstructive pulmonary disease and bronchiectasis	J40–J44, J47	35	199	1,918	6,349	8,501	31	313	2,382	6,339	9,065	66	512	4,300	12,688	17,566
Asthma	J45–J46	1,097	643	1,175	584	3,499	612	1,276	1,571	730	4,189	1,709	1,919	2,746	1,314	7,688

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

Principal Diagnosis	ICD-10-AM Code	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Diseases of the digestive system	**K00–K93**	**5,771**	**25,879**	**27,948**	**23,310**	**82,908**	**4,588**	**28,115**	**27,511**	**22,984**	**83,198**	**10,359**	**53,994**	**55,459**	**46,294**	**166,106**
Diseases of oesophagus, stomach and duodenum	K20–K31	519	5,148	7,630	6,335	19,632	469	5,789	7,767	6,419	20,444	988	10,937	15,397	12,754	40,076
Diseases of appendix	K35–K38	1,188	1,937	389	148	3,662	851	1,854	368	127	3,200	2,039	3,791	757	275	6,862
Inguinal hernia	K40	415	742	1,343	1,424	3,924	107	49	69	101	326	522	791	1,412	1,525	4,250
Noninfective enteritis and colitis	K50–K52	518	6,483	2,815	1,078	10,894	340	5,665	2,810	1,077	9,892	858	12,148	5,625	2,155	20,786
Alcoholic liver disease	K70	0	181	504	159	844	0	125	198	60	383	0	306	702	219	1,227
Cholelithiasis	K80	9	552	989	1,481	3,031	13	2,380	2,008	1,594	5,995	22	2,932	2,997	3,075	9,026
Diseases of the skin and subcutaneous tissue	**L00–L99**	**1,796**	**13,604**	**9,888**	**8,509**	**33,797**	**1,413**	**12,059**	**9,210**	**8,145**	**30,827**	**3,209**	**25,663**	**19,098**	**16,654**	**64,624**
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02–L03	405	1,256	1,371	1,562	4,594	341	725	816	1,663	3,545	746	1,981	2,187	3,225	8,139
Decubitus ulcer and pressure area	L89	~	*	45	61	168	~	~	23	63	93	~	*	68	124	261
Diseases of the musculoskeletal system and connective tissue	**M00–M99**	**1,766**	**7,553**	**13,419**	**11,435**	**34,173**	**2,122**	**9,533**	**17,996**	**18,927**	**48,578**	**3,888**	**17,086**	**31,415**	**30,362**	**82,751**
Rheumatoid arthritis	M05–M06	~	*	934	815	2,040	0	704	1,873	1,572	4,149	~	*	2,807	2,387	6,189
Coxarthrosis and Gonarthrosis	M16–M17	0	295	2,081	2,728	5,104	~	*	2,403	4,266	6,900	~	*	4,484	6,994	12,004
Intervertebral disc disorders	M50–M51	~	554	599	*	1,452	~	718	663	*	1,839	6	1,272	1,262	751	3,291
Dorsalgia (back pain)	M54	59	1,449	2,374	1,444	5,326	96	2,206	3,600	3,013	8,915	155	3,655	5,974	4,457	14,241
Diseases of the genitourinary system	**N00–N99**	**3,789**	**5,117**	**7,145**	**11,651**	**27,702**	**2,055**	**22,862**	**16,671**	**11,827**	**53,415**	**5,844**	**27,979**	**23,816**	**23,478**	**81,117**
Chronic kidney disease	N18	217	359	411	546	1,533	94	385	244	324	1,047	311	744	655	870	2,580
Urolithiasis	N20–N23	40	1,530	1,900	869	4,339	36	899	867	440	2,242	76	2,429	2,767	1,309	6,581
Hyperplasia of prostate	N40	0	59	1,036	2,358	3,453	0	0	0	0	0	0	59	1,036	2,358	3,453
Disorders of breast	N60–N64	9	90	30	19	148	22	1,437	1,396	308	3,163	31	1,527	1,426	327	3,311
Inflammatory diseases of female pelvic organs	N70–N77	0	0	0	0	0	17	1,431	379	102	1,929	17	1,431	379	102	1,929
Noninflammatory disorders of female genital tract	N80–N98	0	0	0	0	0	190	14,760	9,708	2,642	27,300	190	14,760	9,708	2,642	27,300
Pregnancy, childbirth and the puerperium	**O00–O99**	**0**	**0**	**0**	**0**	**0**	**7**	**113,385**	**606**	**0**	**113,998**	**7**	**113,385**	**606**	**0**	**113,998**
Gestational [pregnancy induced] hypertension	O13	0	0	0	0	0	0	4,067	42	0	4,109	0	4,067	42	0	4,109
Diabetes mellitus in pregnancy	O24	0	0	0	0	0	0	1,874	18	0	1,892	0	1,874	18	0	1,892
Single spontaneous delivery	O80	0	0	0	0	0	~	29,000	*	0	29,047	~	29,000	*	0	29,047
Single delivery by forceps and vacuum extractor	O81	0	0	0	0	0	0	8,256	16	0	8,272	0	8,256	16	0	8,272
Single delivery by caesarean section	O82	0	0	0	0	0	0	16,621	164	0	16,785	0	16,621	164	0	16,785
Other assisted single delivery	O83	0	0	0	0	0	0	*	~	0	837	0	*	~	0	837
Multiple delivery	O84	0	0	0	0	0	0	873	22	0	895	0	873	22	0	895
Certain conditions originating in the perinatal period	**P00–P96**	**5,538**	**0**	**0**	**0**	**5,538**	**4,254**	**0**	**0**	**0**	**4,254**	**9,792**	**0**	**0**	**0**	**9,792**
Congenital malformations, deformations and chromosomal abnormalities	**Q00–Q99**	**4,742**	**641**	**236**	**122**	**5,741**	**3,228**	**784**	**240**	**110**	**4,362**	**7,970**	**1,425**	**476**	**232**	**10,103**
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	**R00–R99**	**5,986**	**13,520**	**18,297**	**21,040**	**58,843**	**5,166**	**22,035**	**20,382**	**21,006**	**68,589**	**11,152**	**35,555**	**38,679**	**42,046**	**127,432**
Pain in throat and chest	R07	104	3,098	5,100	3,294	11,596	83	2,601	4,380	3,238	10,302	187	5,699	9,480	6,532	21,898
Abdominal and pelvic pain	R10	830	2,196	1,806	1,092	5,924	1,099	6,382	3,040	1,553	12,074	1,929	8,578	4,846	2,645	17,998
Injury, poisoning and certain other consequences of external causes	**S00–T98**	**6,597**	**13,085**	**6,885**	**7,696**	**34,263**	**4,671**	**6,572**	**5,965**	**10,919**	**28,127**	**11,268**	**19,657**	**12,850**	**18,615**	**62,390**
Intracranial injury	S06	176	633	368	579	1,756	90	251	205	448	994	266	884	573	1,027	2,750
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	1,807	2,209	691	981	5,688	1,192	646	358	1,153	3,349	2,999	2,855	1,049	2,134	9,037
Fracture of femur	S72	97	124	186	1,072	1,479	61	32	294	2,562	2,949	158	156	480	3,634	4,428
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36–T65	196	1,013	412	133	1,754	274	1,373	560	205	2,412	470	2,386	972	338	4,166
Factors influencing health status and contact with health services[a]	**U00–U49, Z00–Z99**	**8,265**	**28,237**	**80,064**	**138,799**	**255,365**	**6,699**	**54,133**	**89,287**	**88,983**	**239,102**	**14,964**	**82,370**	**169,351**	**227,782**	**494,467**
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	3,161	6,782	36,431	60,570	106,944	2,444	17,698	57,120	45,002	122,264	5,605	24,480	93,551	105,572	229,208

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**	**9.3**	**6.5**	**3.7**	**2.9**	**5.2**	**9.5**	**5.2**	**3.5**	**3.1**	**5.6**	**9.4**	**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**	**4.4**	**7.9**	**12.3**	**5.6**	**2.0**	**3.8**	**6.2**	**10.5**	**5.2**	**2.0**	**4.0**	**7.0**	**11.3**	**5.4**
		1	**2**	**4**	**7**	**2**	**1**	**2**	**3**	**6**	**2**	**1**	**2**	**3**	**6**	**2**
Intestinal infectious diseases (including diarrhoea)	A00–A09	1.8	3.0	4.5	8.4	3.4	1.8	2.9	4.5	8.0	3.8	1.8	2.9	4.5	8.1	3.6
		1	2	3	4	2	1	2	3	4	2	1	2	3	4	2
Tuberculosis	A15–A19	-	14.5	25.0	12.7	17.1	^	13.9	16.8	33.1	18.3	^	14.3	22.7	20.5	17.5
		-	8	11	9	8	^	7	10	16	11	^	8	11	12	9
Septicaemia	A40–A41	6.3	9.5	12.7	15.7	14.2	8.1	9.0	10.3	13.5	12.2	7.1	9.2	11.5	14.7	13.3
		4	6	7	9	8	4	6	6	8	7	4	6	7	9	8	
Human immunodeficiency virus [HIV] disease	B20–B24	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	14.9
		ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	10
Neoplasms	**C00–D48**	**5.2**	**8.6**	**10.3**	**11.7**	**10.7**	**4.8**	**6.3**	**8.3**	**11.1**	**9.0**	**5.0**	**7.2**	**9.2**	**11.4**	**9.8**
		3	**5**	**6**	**7**	**6**	**3**	**3**	**4**	**6**	**5**	**3**	**4**	**5**	**7**	**5**
Malignant neoplasms	C00–C96	5.5	9.5	10.8	12.2	11.2	5.3	8.0	9.5	11.8	10.3	5.4	8.7	10.1	12.0	10.8
		3	5	6	7	6	3	4	5	7	5	3	4	5	7	6
Malignant neoplasm of colon, rectum and anus	C18–C21	^	8.8	11.2	13.6	12.5	^	8.0	10.7	13.6	12.3	3.5	8.4	11.0	13.6	12.4
		^	6	8	9	8	^	4	8	10	8	3	5	8	9	8
Malignant neoplasm of trachea, bronchus and lung	C33–C34	-	13.3	11.0	12.7	12.2	-	6.3	9.7	12.3	11.4	-	10.1	10.4	12.6	11.8
		-	7	7	8	8	-	6	7	8	7	-	7	7	8	7
Melanoma and other malignant neoplasms of skin	C43–C44	-	5.0	6.3	7.5	7.2	^	4.4	5.2	6.8	6.2	^	4.7	5.8	7.3	6.9
		-	1	1	2	2	^	1	2	2	2	^	1	2	2	2
Malignant neoplasm of breast	C50	-	-	^	5.0	4.8	-	4.8	5.6	6.0	5.6	-	4.8	5.6	6.0	5.6
		-	-	^	2	3	-	3	2	3	3	-	3	2	3	3
Malignant neoplasms of female genital organs	C51–C58	-	-	-	-	-	-	7.6	8.8	12.5	10.1	-	7.6	8.8	12.5	10.1
		-	-	-	-	-	-	4	5	7	5	-	4	5	7	5
Malignant neoplasm of prostate	C61	-	8.8	8.1	13.6	11.3	-	-	-	-	-	-	8.8	8.1	13.6	11.3
		-	7	5	6	5	-	-	-	-	-	-	7	5	6	5
Malignant neoplasm of bladder	C67	^	7.7	7.2	8.5	8.2	-	11.5	8.2	8.1	8.4	^	9.6	7.5	8.4	8.3
		^	2	3	4	4	-	3	3	3	3	^	3	3	4	4
Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81–C96	6.3	13.8	12.1	12.0	11.7	5.5	14.1	15.0	14.7	13.7	6.0	13.9	13.3	13.1	12.5
		3	6	6	7	6	3	6	6	7	6	3	6	6	7	6
In situ neoplasms	D00-D09	-	1.9	3.7	4.8	4.3	-	3.1	3.3	4.2	3.5	-	3.0	3.4	4.5	3.7
		-	2	2	2	2	-	2	2	2	2	-	2	2	2	2
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10–D48	3.5	4.1	6.6	7.3	6.3	3.5	3.9	4.3	6.6	4.7	3.5	3.9	4.9	7.0	5.2
		1	2	3	3	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**	**3.7**	**5.2**	**5.7**	**6.2**	**5.6**	**3.7**	**4.1**	**4.6**	**6.2**	**5.2**	**3.7**	**4.5**	**5.1**	**6.2**	**5.4**
		2	**3**	**3**	**3**	**3**	**2**	**2**	**2**	**3**	**2**	**2**	**2**	**2**	**3**	**3**
Endocrine, nutritional and metabolic diseases	**E00–E89**	**4.6**	**7.1**	**7.8**	**10.6**	**8.2**	**4.6**	**6.1**	**5.3**	**8.2**	**6.6**	**4.6**	**6.5**	**6.6**	**9.3**	**7.4**
		3	**3**	**3**	**5**	**4**	**3**	**2**	**2**	**4**	**3**	**3**	**3**	**3**	**5**	**3**
Diabetes mellitus	E10–E14	4.1	3.6	8.0	12.8	8.3	3.9	3.6	6.6	9.7	6.5	4.0	3.6	7.5	11.6	7.6
		4	2	3	6	4	3	2	3	5	3	4	2	3	6	3
Cystic fibrosis	E84	8.5	14.3	19.1	^	13.4	9.6	14.8	15.6	-	13.5	9.1	14.6	17.8	^	13.5
		7	14	15	^	14	7	14	13	-	13	7	14	15	^	13
Mental and behavioural disorders	**F00–F99**	**4.2**	**5.3**	**8.6**	**20.3**	**10.3**	**7.4**	**8.6**	**9.0**	**19.3**	**12.4**	**5.9**	**6.7**	**8.7**	**19.8**	**11.3**
		1	**2**	**3**	**8**	**3**	**2**	**1**	**3**	**8**	**3**	**1**	**2**	**3**	**8**	**3**
Mental and behavioural disorders due to alcohol	F10	1.1	3.2	6.8	10.9	5.8	1.1	4.4	5.2	12.2	5.7	1.1	3.5	6.4	11.3	5.8
		1	2	3	5	2	1	1	3	5	2	1	1	3	5	2
Mental and behavioural disorders due to use of other psychoactive substance	F11–F19	^	10.5	11.3	11.0	10.5	-	10.5	11.0	3.1	9.9	^	10.5	11.2	6.3	10.3
		^	4	8	9	4	-	7	6	2	5	^	4	8	2	4

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

Principal Diagnosis	ICD-10-AM Code	Male					Female					Total In-Patient Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Diseases of nervous system	**G00–G99**	**4.5**	**4.1**	**5.1**	**9.9**	**6.3**	**3.7**	**3.8**	**5.2**	**8.5**	**5.5**	**4.1**	**3.9**	**5.1**	**9.2**	**5.9**
		1	**1**	**1**	**3**	**2**	**1**	**1**	**1**	**3**	**2**	**1**	**1**	**1**	**3**	**2**
Multiple sclerosis	G35	^	5.1	9.5	14.9	7.2	^	7.6	8.3	8.5	7.9	^	6.8	8.6	10.1	7.7
		^	3	4	6	4	^	4	4	5	4	^	4	4	6	4
Epilepsy	G40, G41	4.9	3.5	5.6	8.7	5.1	3.0	4.1	4.7	9.0	4.9	4.0	3.8	5.3	8.8	5.0
		2	2	3	4	2	2	2	3	5	2	2	2	3	4	2
Transient cerebral ischaemic attacks and related syndromes	G45	^	2.8	3.3	4.7	4.3	^	3.0	3.2	4.9	4.4	^	3.0	3.2	4.8	4.4
		^	2	2	3	3	^	1	2	3	2	^	2	2	3	3
Diseases of the eye and adnexa	**H00–H59**	**2.3**	**2.5**	**2.8**	**3.1**	**2.8**	**2.9**	**2.6**	**2.7**	**3.0**	**2.8**	**2.6**	**2.6**	**2.8**	**3.0**	**2.8**
		1	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Diseases of the ear and mastoid process	**H60–H95**	**1.7**	**1.9**	**2.0**	**3.6**	**2.2**	**1.8**	**1.9**	**2.3**	**4.3**	**2.5**	**1.7**	**1.9**	**2.2**	**4.0**	**2.4**
		1	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**2**	**1**
Diseases of the circulatory system	**I00–I99**	**3.4**	**5.2**	**6.3**	**8.6**	**7.5**	**4.0**	**5.0**	**6.0**	**9.1**	**8.0**	**3.7**	**5.1**	**6.2**	**8.8**	**7.7**
		1	**2**	**3**	**4**	**3**	**1**	**2**	**2**	**5**	**4**	**1**	**2**	**3**	**4**	**3**
Hypertensive diseases	I10–I15	3.4	2.1	2.6	3.3	2.7	2.7	1.8	1.9	2.9	2.4	3.0	2.0	2.3	3.0	2.5
		2	1	1	1	1	2	1	1	1	1	2	1	1	1	1
Angina pectoris	I20	-	2.7	3.8	4.4	4.1	-	2.8	3.4	4.0	3.7	-	2.8	3.7	4.3	4.0
		-	2	2	2	2	-	2	2	2	2	-	2	2	2	2
Acute myocardial infarction	I21–I22	-	3.9	5.6	7.2	6.3	^	4.1	5.6	8.0	7.3	^	3.9	5.6	7.5	6.6
		-	3	3	4	3	^	3	3	5	4	^	3	3	4	4
Other ischaemic heart disease	I23–I25	-	4.1	4.9	5.5	5.2	^	3.7	3.6	4.5	4.2	^	4.0	4.6	5.2	4.9
		-	2	2	2	2	^	1	1	2	2	^	2	2	2	2
Pulmonary heart disease and diseases of pulmonary circulation	I26–I28	-	5.1	6.0	9.5	7.6	^	5.0	8.4	9.2	8.3	^	5.1	7.1	9.4	8.0
		-	4	4	6	5	^	3	5	6	5	^	4	5	6	5
Conduction disorders and cardiac arrhythmias	I44–I49	2.9	2.9	3.2	4.6	4.0	3.5	4.3	3.1	5.1	4.6	3.2	3.4	3.1	4.8	4.2
		1	1	1	2	2	2	1	1	3	2	2	1	1	2	2
Heart failure	I50	27.8	8.7	9.0	10.0	9.9	^	7.7	10.3	10.5	10.5	22.9	8.4	9.3	10.2	10.1
		10	6	6	7	6	^	6	5	7	7	10	6	6	7	7
Cerebrovascular disease	I60–I69	13.0	12.4	13.3	15.7	14.8	7.9	11.1	13.1	17.2	16.0	11.3	11.8	13.2	16.4	15.3
		6	6	6	8	7	7	6	6	9	8	6	6	6	8	7
Atherosclerosis (non-coronary)	I70	-	21.3	14.3	15.1	15.0	^	6.5	11.2	14.7	13.7	^	14.8	13.4	15.0	14.6
		-	7	6	8	7	^	5	6	8	7	^	6	6	8	7
Diseases of the respiratory system	**J00–J99**	**2.4**	**3.4**	**6.6**	**9.9**	**6.8**	**2.4**	**2.6**	**6.0**	**9.8**	**6.6**	**2.4**	**3.0**	**6.3**	**9.9**	**6.7**
		1	**1**	**3**	**6**	**3**	**1**	**1**	**3**	**6**	**3**	**1**	**1**	**3**	**6**	**3**
Acute upper respiratory infections and influenza	J00–J11	1.7	1.8	4.3	7.8	2.3	1.7	1.8	3.2	6.3	2.3	1.7	1.8	3.6	7.0	2.3
		1	1	1	4	1	1	1	1	4	1	1	1	1	4	1
Pneumonia	J12–J18	3.9	6.1	9.2	12.3	10.4	4.1	5.5	8.3	12.5	10.4	3.9	5.8	8.8	12.4	10.4
		2	4	5	7	6	3	3	5	8	6	2	4	5	7	6
Chronic diseases of tonsils and adenoids	J35	1.1	1.2	2.5	^	1.2	1.1	1.2	1.2	1.4	1.2	1.1	1.2	1.6	1.7	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	3.1	4.3	5.8	8.5	7.8	3.3	3.9	6.6	8.9	8.2	3.2	4.0	6.2	8.7	8.0
		1	3	4	5	5	2	2	4	6	5	2	2	4	6	5
Asthma	J45–J46	1.7	2.4	4.2	3.7	2.5	2.0	2.3	3.8	5.7	3.1	1.8	2.3	3.9	4.9	2.8
		1	1	2	2	1	2	1	2	3	2	1	1	2	3	1
Diseases of the digestive system	**K00–K93**	**2.9**	**4.0**	**6.0**	**7.7**	**5.7**	**2.9**	**3.7**	**5.7**	**8.1**	**5.6**	**2.9**	**3.9**	**5.9**	**7.9**	**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	2.3	2.7	4.3	6.8	4.6	1.8	3.0	4.0	6.2	4.3	2.1	2.9	4.1	6.5	4.4
		1	1	2	3	2	1	1	2	3	2	1	1	2	3	2
Diseases of appendix	K35–K38	3.1	2.8	4.0	7.7	3.2	3.3	2.9	4.0	7.2	3.3	3.2	2.9	4.0	7.5	3.3
		2	2	3	6	2	3	2	3	5	3	2	2	3	6	2

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

Principal Diagnosis	ICD-10-AM Code	Male					Female					Total In-Patient Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Inguinal hernia	K40	2.1 1	1.5 1	1.5 1	3.1 1	2.3 1	1.4 1	1.3 1	3.2 1	3.9 2	3.1 1	2.0 1	1.5 1	1.6 1	3.1 1	2.4 1
Noninfective enteritis and colitis	K50–K52	5.0 3	6.8 5	7.3 5	10.6 6	7.5 5	3.3 2	6.6 5	6.4 5	9.9 6	7.2 5	4.2 3	6.7 5	6.8 5	10.2 6	7.3 5
Alcoholic liver disease	K70	- -	9.8 6	12.0 7	14.7 8	12.0 7	- -	13.7 9	12.8 8	13.8 8	13.3 8	- -	11.4 7	12.2 7	14.5 8	12.4 7
Cholelithiasis	K80	3.1 2	3.8 2	4.6 3	7.1 5	5.7 4	3.0 3	2.9 2	3.7 2	6.7 4	4.2 2	3.1 3	3.1 2	4.0 2	6.9 4	4.7 3
Diseases of the skin and subcutaneous tissue	**L00–L99**	**2.6 2**	**3.9 2**	**6.0 3**	**9.4 5**	**5.9 3**	**2.8 2**	**3.1 1**	**6.0 3**	**9.6 5**	**6.3 3**	**2.7 2**	**3.6 2**	**6.0 3**	**9.5 5**	**6.1 3**
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02–L03	2.9 2	3.9 2	5.1 3	8.9 5	5.9 3	2.9 2	3.4 2	5.9 3	9.1 5	6.6 3	2.9 2	3.7 2	5.4 3	9.0 5	6.2 3
Decubitus ulcer and pressure area	L89	^ ^	50.5 6	32.2 13	23.4 14	32.1 11	^ ^	^ ^	32.9 8	26.9 14	27.0 13	^ ^	44.3 5	32.5 11	25.1 14	30.0 12
Diseases of the musculoskeletal system and connective tissue	**M00–M99**	**3.8 2**	**3.2 1**	**5.0 2**	**7.5 4**	**5.5 3**	**4.3 2**	**2.7 1**	**3.7 2**	**6.9 4**	**5.0 2**	**4.1 2**	**2.9 1**	**4.3 2**	**7.1 4**	**5.3 2**
Rheumatoid arthritis	M05–M06	- -	4.6 2	3.5 2	5.6 4	4.6 3	- -	3.5 1	3.6 2	4.9 3	4.3 3	- -	3.8 1	3.6 2	5.2 3	4.4 3
Coxarthrosis and Gonarthrosis	M16–M17	- -	3.5 3	4.1 4	6.0 5	5.2 4	^ ^	3.7 4	4.5 4	6.1 5	5.5 5	^ ^	3.6 3	4.3 4	6.0 5	5.3 4
Intervertebral disc disorders	M50–M51	^ ^	3.4 2	5.2 2	9.1 4	5.2 2	^ ^	3.3 2	4.5 3	8.7 5	4.7 3	^ ^	3.3 2	4.9 2	8.9 5	4.9 2
Dorsalgia (back pain)	M54	2.0 1	2.0 1	3.0 1	7.0 2	4.1 1	2.6 1	2.2 1	3.2 1	7.3 2	4.4 1	2.4 1	2.1 1	3.1 1	7.2 2	4.3 1
Diseases of the genitourinary system	**N00–N99**	**2.7 2**	**3.0 2**	**5.1 3**	**9.5 5**	**6.5 3**	**2.9 2**	**3.0 2**	**4.1 3**	**9.9 5**	**5.8 3**	**2.8 2**	**3.0 2**	**4.5 3**	**9.7 5**	**6.1 3**
Chronic kidney disease	N18	3.9 3	5.8 4	7.4 4	9.0 5	7.2 4	4.4 2	5.6 3	8.1 5	10.4 5	7.9 4	4.1 3	5.7 4	7.6 4	9.4 5	7.5 4
Urolithiasis	N20–N23	3.6 3	2.1 1	2.5 2	3.3 2	2.5 2	3.5 4	2.5 1	2.8 2	3.1 2	2.8 2	3.5 3	2.3 1	2.6 2	3.2 2	2.6 2
Hyperplasia of prostate	N40	- -	^ ^	3.5 3	4.6 4	4.4 3	- -	- -	- -	- -	- -	- -	^ ^	3.5 3	4.6 4	4.4 3
Disorders of breast	N60–N64	^ ^	1.4 1	^ ^	^ ^	2.4 1	2.5 2	2.4 1	2.2 1	3.5 1	2.4 1	2.5 2	2.4 1	2.3 1	3.4 1	2.4 1
Inflammatory diseases of female pelvic organs	N70–N77	- -	- -	- -	- -	- -	1.9 1	2.8 2	4.2 3	9.0 3	3.4 2	1.9 1	2.8 2	4.2 3	9.0 3	3.4 2
Noninflammatory disorders of female genital tract	N80–N98	- -	- -	- -	- -	- -	1.9 1	2.2 1	2.9 3	4.1 3	2.8 2	1.9 1	2.2 1	2.9 3	4.1 3	2.8 2
Pregnancy, childbirth and the puerperium	**O00–O99**	**- -**	**- -**	**- -**	**- -**	**- -**	**6.9 6**	**2.8 2**	**4.0 3**	**- -**	**2.8 2**	**6.9 6**	**2.8 2**	**4.0 3**	**- -**	**2.8 2**
Gestational [pregnancy induced] hypertension	O13	- -	- -	- -	- -	- -	- -	2.7 1	4.8 2	- -	2.7 1	- -	2.7 1	4.8 2	- -	2.7 1
Diabetes mellitus in pregnancy	O24	- -	- -	- -	- -	- -	- -	2.6 1	2.8 1	- -	2.6 1	- -	2.6 1	2.8 1	- -	2.6 1
Single spontaneous delivery	O80	- -	- -	- -	- -	- -	^ ^	2.4 2	3.1 3	- -	2.4 2	^ ^	2.4 2	3.1 3	- -	2.4 2
Single delivery by forceps and vacuum extractor	O81	- -	- -	- -	- -	- -	- -	3.3 3	3.4 3	- -	3.3 3	- -	3.3 3	3.4 3	- -	3.3 3
Single delivery by caesarean section	O82	- -	- -	- -	- -	- -	- -	4.5 4	5.0 5	- -	4.5 4	- -	4.5 4	5.0 5	- -	4.5 4
Other assisted single delivery	O83	- -	- -	- -	- -	- -	- -	3.2 3	^ ^	- -	3.1 3	- -	3.2 3	^ ^	- -	3.1 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	-	-	-	-	-	-	5.1	8.3	-	5.2	-	5.1	8.3	-	5.2
		-	-	-	-	-	-	4	5	-	5	-	4	5	-	5
Certain conditions originating in the perinatal period	**P00–P96**	ǂ	ǂ	ǂ	ǂ	**8.6**	ǂ	ǂ	ǂ	ǂ	**9.9**	ǂ	ǂ	ǂ	ǂ	**9.1**
		ǂ	ǂ	ǂ	ǂ	**3**	ǂ	ǂ	ǂ	ǂ	**3**	ǂ	ǂ	ǂ	ǂ	**3**
Congenital malformations, deformations and chromosomal abnormalities	**Q00–Q99**	**7.2**	**4.0**	**6.9**	**8.0**	**6.8**	**9.0**	**4.7**	**6.3**	**7.7**	**8.1**	**8.1**	**4.4**	**6.6**	**7.9**	**7.4**
		2	**2**	**3**	**3**	**2**	**2**	**2**	**3**	**4**	**2**	**2**	**2**	**3**	**3**	**2**
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	**R00–R99**	**1.8**	**1.9**	**2.7**	**4.8**	**3.1**	**1.9**	**1.9**	**2.3**	**4.9**	**3.0**	**1.9**	**1.9**	**2.5**	**4.9**	**3.1**
		1	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**2**	**1**
Pain in throat and chest	R07	1.3	1.3	1.7	2.3	1.7	1.3	1.3	1.6	2.4	1.8	1.3	1.3	1.6	2.3	1.7
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Abdominal and pelvic pain	R10	1.5	1.9	2.3	3.2	2.1	1.6	1.9	2.5	3.6	2.2	1.6	1.9	2.4	3.5	2.2
		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**	**3.4**	**6.1**	**12.6**	**5.8**	**1.8**	**3.1**	**5.1**	**12.7**	**7.2**	**1.7**	**3.3**	**5.7**	**12.6**	**6.5**
		1	**1**	**2**	**5**	**1**	**1**	**1**	**2**	**7**	**2**	**1**	**1**	**2**	**6**	**2**
Intracranial injury	S06	2.3	6.9	8.8	13.4	9.0	1.6	4.5	7.3	13.9	9.1	2.1	6.2	8.3	13.6	9.0
		1	1	2	5	2	1	1	2	5	2	1	1	2	5	2
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	1.3	2.1	2.9	7.8	3.0	1.3	2.1	2.4	7.8	4.0	1.3	2.1	2.7	7.8	3.4
		1	1	1	2	1	1	1	1	2	1	1	1	1	2	1
Fracture of femur	S72	4.6	9.4	13.0	23.3	19.7	3.1	8.8	12.7	18.1	17.2	4.0	9.3	12.8	19.6	18.0
		3	5	8	14	11	2	6	8	12	11	3	5	8	13	11
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36–T65	1.2	3.4	5.3	9.5	4.0	2.2	2.4	3.9	8.2	3.3	1.8	2.8	4.5	8.8	3.6
		1	1	2	4	1	1	1	1	3	1	1	1	2	3	1
Factors influencing health status and contact with health services[b]	**U00–U49, Z00–Z99**	**3.2**	**18.9**	**16.2**	**20.7**	**15.2**	**2.6**	**2.2**	**12.8**	**26.1**	**9.7**	**2.9**	**3.9**	**14.6**	**23.6**	**11.6**
		2	**3**	**4**	**9**	**4**	**2**	**1**	**4**	**16**	**1**	**2**	**1**	**4**	**13**	**2**
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	15.5	5.9	8.6	20.6	16.9	9.9	2.9	9.2	28.2	23.2	12.9	3.9	8.9	25.4	20.7
		14	3	3	11	8	4	1	6	20	13	7	1	4	16	10

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	–	**71,441**	**146,470**	**238,466**	**344,066**	**800,443**	**56,104**	**318,913**	**252,498**	**290,565**	**918,080**	**127,545**	**465,383**	**490,964**	**634,631**	**1,718,523**
All Conditions	–	**170,027**	**342,762**	**630,240**	**1,088,650**	**2,231,679**	**136,112**	**842,031**	**620,546**	**916,787**	**2,515,476**	**306,139**	**1,184,793**	**1,250,786**	**2,005,437**	**4,747,155**
Certain infectious and parasitic diseases	**A00-B99**	**9,615**	**10,048**	**11,689**	**20,346**	**51,698**	**8,444**	**16,058**	**10,343**	**22,285**	**57,130**	**18,059**	**26,106**	**22,032**	**42,631**	**108,828**
Intestinal infectious diseases (including diarrhoea)	A00–A09	3,675	2,205	2,335	3,643	11,858	3,414	4,409	2,897	5,040	15,760	7,089	6,614	5,232	8,683	27,618
Tuberculosis	A15–A19	0	161	70	59	290	7	93	38	48	186	7	254	108	107	476
Septicaemia	A40–A41	184	708	1,879	5,770	8,541	147	949	1,435	4,791	7,322	331	1,657	3,314	10,561	15,863
Human immunodeficiency virus [HIV] disease	B20–B24	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	938
Neoplasms	**C00–D48**	**7,497**	**20,354**	**90,697**	**150,435**	**268,983**	**6,420**	**48,364**	**134,539**	**119,135**	**308,458**	**13,917**	**68,718**	**225,236**	**269,570**	**577,441**
Malignant neoplasms	C00–C96	6,534	15,472	80,195	132,309	234,510	5,294	34,929	120,168	106,234	266,625	11,828	50,401	200,363	238,543	501,135
Malignant neoplasm of colon, rectum and anus	C18–C21	~	*	8,582	12,241	21,851	~	*	5,488	6,237	12,785	7	2,081	14,070	18,478	34,636
Malignant neoplasm of trachea, bronchus and lung	C33–C34	~	*	5,060	8,680	14,057	0	270	4,978	7,494	12,742	~	*	10,038	16,174	26,799
Melanoma and other malignant neoplasms of skin	C43–C44	~	*	3,415	11,000	15,186	*	*	2,465	5,616	8,920	10	1,600	5,880	16,616	24,106
Malignant neoplasm of breast	C50	0	~	*	241	334	0	*	*	21,527	72,816	0	12,363	39,019	21,768	73,150
Malignant neoplasms of female genital organs	C51–C58	0	0	0	0	0	18	3,043	8,269	6,695	18,025	18	3,043	8,269	6,695	18,025
Malignant neoplasm of prostate	C61	0	121	9,374	25,760	35,255	0	0	0	0	0	0	121	9,374	25,760	35,255
Malignant neoplasm of bladder	C67	~	*	1,086	2,777	3,930	0	97	421	992	1,510	~	*	1,507	3,769	5,440
Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81–C96	4,038	3,723	10,320	16,864	34,945	2,305	2,640	6,872	13,061	24,878	6,343	6,363	17,192	29,925	59,823
In situ neoplasms	D00-D09	0	82	674	1,900	2,656	0	3,320	3,445	2,716	9,481	0	3,402	4,119	4,616	12,137
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10–D48	963	4,800	9,828	16,226	31,817	1,126	10,115	10,926	10,185	32,352	2,089	14,915	20,754	26,411	64,169
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	**D50–D89**	**3,877**	**4,392**	**7,275**	**16,707**	**32,251**	**2,440**	**11,148**	**7,824**	**15,939**	**37,351**	**6,317**	**15,540**	**15,099**	**32,646**	**69,602**
Endocrine, nutritional and metabolic diseases	**E00–E89**	**4,348**	**14,575**	**43,583**	**79,900**	**142,406**	**4,588**	**15,911**	**26,841**	**61,622**	**108,962**	**8,936**	**30,486**	**70,424**	**141,522**	**251,368**
Diabetes mellitus	E10–E14	455	5,256	24,037	53,409	83,157	560	4,981	13,789	33,211	52,541	1,015	10,237	37,826	86,620	135,698
Cystic fibrosis	E84	463	1,706	195	6	2,370	643	1,573	103	7	2,326	1,106	3,279	298	13	4,696
Mental and behavioural disorders	**F00–F99**	**2,284**	**9,595**	**10,981**	**15,434**	**38,294**	**1,452**	**7,887**	**6,638**	**17,303**	**33,280**	**3,736**	**17,482**	**17,619**	**32,737**	**71,574**
Mental and behavioural disorders due to alcohol	F10	40	3,845	6,021	3,410	13,316	52	1,642	2,150	1,284	5,128	92	5,487	8,171	4,694	18,444
Mental and behavioural disorders due to use of other psychoactive substance	F11–F19	13	2,385	753	108	3,259	8	1,336	310	128	1,782	21	3,721	1,063	236	5,041
Diseases of nervous system	**G00–G99**	**3,951**	**7,709**	**10,434**	**15,291**	**37,385**	**3,188**	**11,201**	**10,389**	**13,831**	**38,609**	**7,139**	**18,910**	**20,823**	**29,122**	**75,994**
Multiple sclerosis	G35	~	1,274	1,028	*	2,627	~	2,747	1,889	*	5,149	7	4,021	2,917	831	7,776
Epilepsy	G40, G41	1,259	1,491	1,171	991	4,912	1,020	1,527	875	840	4,262	2,279	3,018	2,046	1,831	9,174
Transient cerebral ischaemic attacks and related syndromes	G45	~	*	500	1,281	1,841	~	*	402	1,425	1,931	6	158	902	2,706	3,772
Diseases of the eye and adnexa	**H00–H59**	**1,428**	**2,939**	**8,021**	**22,559**	**34,947**	**1,314**	**3,602**	**6,521**	**28,839**	**40,276**	**2,742**	**6,541**	**14,542**	**51,398**	**75,223**
Diseases of the ear and mastoid process	**H60–H95**	**3,425**	**1,745**	**1,623**	**1,797**	**8,590**	**2,590**	**1,952**	**1,679**	**1,740**	**7,961**	**6,015**	**3,697**	**3,302**	**3,537**	**16,551**
Diseases of the circulatory system	**I00–I99**	**1,976**	**9,158**	**44,250**	**107,542**	**162,926**	**2,038**	**8,123**	**21,859**	**81,359**	**113,379**	**4,014**	**17,281**	**66,109**	**188,901**	**276,305**
Hypertensive diseases	I10–I15	387	2,569	11,381	23,344	37,681	557	1,978	6,333	20,639	29,507	944	4,547	17,714	43,983	67,188
Angina pectoris	I20	~	*	1,487	2,370	3,992	0	58	640	1,238	1,936	~	*	2,127	3,608	5,928
Acute myocardial infarction	I21–I22	0	334	2,477	3,598	6,409	~	*	641	2,117	2,840	~	*	3,118	5,715	9,249
Other ischaemic heart disease	I23–I25	0	710	8,944	16,194	25,848	~	*	2,640	7,325	10,153	~	*	11,584	23,519	36,001
Pulmonary heart disease and diseases of pulmonary circulation	I26–I28	60	253	727	1,378	2,418	68	339	564	1,722	2,693	128	592	1,291	3,100	5,111
Conduction disorders and cardiac arrhythmias	I44–I49	188	1,225	6,495	24,336	32,244	155	857	2,577	17,830	21,419	343	2,082	9,072	42,166	53,663
Heart failure	I50	28	134	1,549	10,406	12,117	52	143	650	8,986	9,831	80	277	2,199	19,392	21,948
Cerebrovascular disease	I60–I69	155	456	2,146	6,195	8,952	46	453	1,390	5,129	7,018	201	909	3,536	11,324	15,970
Atherosclerosis (non-coronary)	I70	~	*	875	2,574	3,512	~	*	351	1,323	1,705	~	*	1,226	3,897	5,217
Diseases of the respiratory system	**J00–J99**	**12,985**	**11,250**	**18,302**	**48,098**	**90,635**	**9,713**	**13,711**	**17,184**	**44,794**	**85,402**	**22,698**	**24,961**	**35,486**	**92,892**	**176,037**
Acute upper respiratory infections and influenza	J00–J11	4,049	1,417	550	752	6,768	2,954	2,584	714	843	7,095	7,003	4,001	1,264	1,595	13,863
Pneumonia	J12–J18	842	1,249	2,189	7,923	12,203	675	1,166	1,664	7,328	10,833	1,517	2,415	3,853	15,251	23,036
Chronic diseases of tonsils and adenoids	J35	1,906	510	55	22	2,493	1,552	1,068	80	34	2,734	3,458	1,578	135	56	5,227
Chronic obstructive pulmonary disease and bronchiectasis	J40–J44, J47	85	460	3,848	13,421	17,814	151	606	4,135	12,603	17,495	236	1,066	7,983	26,024	35,309
Asthma	J45–J46	1,572	1,279	1,767	1,095	5,713	919	2,299	2,429	1,677	7,324	2,491	3,578	4,196	2,772	13,037
Diseases of the digestive system	**K00–K93**	**7,798**	**42,645**	**59,342**	**61,505**	**171,290**	**6,504**	**46,779**	**55,437**	**59,410**	**168,130**	**14,302**	**89,424**	**114,779**	**120,915**	**339,420**

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	905	11,500	18,677	17,501	48,583	781	11,603	17,489	17,105	46,978	1,686	23,103	36,166	34,606	95,561
Diseases of appendix	K35–K38	1,220	1,995	430	167	3,812	875	1,976	398	154	3,403	2,095	3,971	828	321	7,215
Inguinal hernia	K40	517	774	1,410	1,691	4,392	118	51	78	136	383	635	825	1,488	1,827	4,775
Noninfective enteritis and colitis	K50–K52	584	7,400	3,568	1,760	13,312	385	6,885	3,606	1,927	12,803	969	14,285	7,174	3,687	26,115
Alcoholic liver disease	K70	0	534	1,789	680	3,003	0	348	745	253	1,346	0	882	2,534	933	4,349
Cholelithiasis	K80	20	658	1,282	2,210	4,170	31	2,766	2,349	2,407	7,553	51	3,424	3,631	4,617	11,723
Diseases of the skin and subcutaneous tissue	**L00–L99**	**2,780**	**15,456**	**13,501**	**16,960**	**48,697**	**2,241**	**14,941**	**11,989**	**16,191**	**45,362**	**5,021**	**30,397**	**25,490**	**33,151**	**94,059**
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02–L03	585	1,820	2,302	3,584	8,291	484	1,199	1,349	3,588	6,620	1,069	3,019	3,651	7,172	14,911
Decubitus ulcer and pressure area	L89	15	186	391	1,817	2,409	10	67	234	1,837	2,148	25	253	625	3,654	4,557
Diseases of the musculoskeletal system and connective tissue	**M00–M99**	**2,618**	**10,664**	**19,209**	**21,931**	**54,422**	**3,109**	**17,158**	**25,220**	**34,395**	**79,882**	**5,727**	**27,822**	**44,429**	**56,326**	**134,304**
Rheumatoid arthritis	M05–M06	~	*	1,143	1,171	2,648	0	849	2,189	2,307	5,345	~	*	3,332	3,478	7,993
Coxarthrosis and Gonarthrosis	M16–M17	0	369	2,328	3,475	6,172	~	*	2,692	5,442	8,410	~	*	5,020	8,917	14,582
Intervertebral disc disorders	M50–M51	~	*	850	738	2,271	~	*	979	1,051	2,962	7	1,608	1,829	1,789	5,233
Dorsalgia (back pain)	M54	114	1,894	3,085	2,347	7,440	163	4,735	4,604	4,491	13,993	277	6,629	7,689	6,838	21,433
Diseases of the genitourinary system	**N00–N99**	**6,033**	**16,078**	**36,394**	**87,598**	**146,103**	**4,145**	**43,316**	**41,745**	**60,052**	**149,258**	**10,178**	**59,394**	**78,139**	**147,650**	**295,361**
Chronic kidney disease	N18	680	8,261	23,002	53,533	85,476	798	6,906	14,454	27,968	50,126	1,478	15,167	37,456	81,501	135,602
Urolithiasis	N20–N23	74	1,762	2,273	1,306	5,415	59	1,088	1,050	647	2,844	133	2,850	3,323	1,953	8,259
Hyperplasia of prostate	N40	0	98	1,605	5,167	6,870	0	0	0	0	0	0	98	1,605	5,167	6,870
Disorders of breast	N60–N64	15	101	41	37	194	28	1,862	1,934	583	4,407	43	1,963	1,975	620	4,601
Inflammatory diseases of female pelvic organs	N70–N77	0	0	0	0	0	46	3,236	926	444	4,652	46	3,236	926	444	4,652
Noninflammatory disorders of female genital tract	N80–N98	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	284	22,747	14,649	4,851	42,531
Pregnancy, childbirth and the puerperium	**O00–O99**	**0**	**0**	**0**	**0**	**0**	**17**	**264,712**	**1,617**	**0**	**266,346**	**17**	**264,712**	**1,617**	**0**	**266,346**
Gestational [pregnancy induced] hypertension	O13	0	0	0	0	0	0	6,078	60	0	6,138	0	6,078	60	0	6,138
Diabetes mellitus in pregnancy	O24	0	0	0	0	0	0	9,731	83	0	9,814	0	9,731	83	0	9,814
Single spontaneous delivery	O80	0	0	0	0	0	~	30,746	*	0	30,797	~	30,746	*	0	30,797
Single delivery by forceps and vacuum extractor	O81	0	0	0	0	0	0	8,838	17	0	8,855	0	8,838	17	0	8,855
Single delivery by caesarean section	O82	0	0	0	0	0	~	18,589	*	0	18,780	~	18,589	*	0	18,780
Other assisted single delivery	O83	0	0	0	0	0	0	*	~	0	921	0	*	~	0	921
Multiple delivery	O84	0	0	0	0	0	0	1,120	31	0	1,151	0	1,120	31	0	1,151
Certain conditions originating in the perinatal period	**P00–P96**	ǂ	ǂ	ǂ	ǂ	**15,803**	ǂ	ǂ	ǂ	ǂ	**12,583**	ǂ	ǂ	ǂ	ǂ	**28,386**
Congenital malformations, deformations and chromosomal abnormalities	**Q00–Q99**	**13,292**	**2,128**	**1,406**	**578**	**17,404**	**10,890**	**2,725**	**1,932**	**653**	**16,200**	**24,182**	**4,853**	**3,338**	**1,231**	**33,604**
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	**R00–R99**	**14,387**	**28,036**	**41,579**	**72,682**	**156,684**	**12,022**	**57,341**	**41,925**	**70,451**	**181,739**	**26,409**	**85,377**	**83,504**	**143,133**	**338,423**
Pain in throat and chest	R07	160	3,816	6,172	4,418	14,566	138	4,020	5,328	4,420	13,906	298	7,836	11,500	8,838	28,472
Abdominal and pelvic pain	R10	1,129	3,182	2,736	1,967	9,014	1,419	15,101	4,509	2,677	23,706	2,548	18,283	7,245	4,644	32,720
Injury, poisoning and certain other consequences of external causes	**S00–T98**	**8,841**	**24,612**	**14,823**	**17,827**	**66,103**	**6,186**	**12,290**	**11,163**	**21,497**	**51,136**	**15,027**	**36,902**	**25,986**	**39,324**	**117,239**
Intracranial injury	S06	394	1,287	785	1,117	3,583	147	448	416	886	1,897	541	1,735	1,201	2,003	5,480
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	2,268	4,360	1,841	2,685	11,154	1,450	1,220	886	2,931	6,487	3,718	5,580	2,727	5,616	17,641
Fracture of femur	S72	109	174	251	1,388	1,922	74	44	379	3,370	3,867	183	218	630	4,758	5,789
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36–T65	251	2,099	860	296	3,506	382	2,723	1,169	436	4,710	633	4,822	2,029	732	8,216
External causes of morbidity and mortality	**U50–Y98**	**21,734**	**46,413**	**30,816**	**44,315**	**143,278**	**15,405**	**28,460**	**25,889**	**54,801**	**124,555**	**37,139**	**74,873**	**56,705**	**99,116**	**267,833**
Transport accidents	V01–V99	516	1,838	770	410	3,534	300	979	460	367	2,106	816	2,817	1,230	777	5,640
Factors influencing health status and contact with health services[a]	**U00–U49, Z00–Z99**	**25,361**	**64,960**	**166,314**	**287,145**	**543,780**	**20,824**	**216,351**	**159,812**	**192,490**	**589,477**	**46,185**	**281,311**	**326,126**	**479,635**	**1,133,257**
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	3,325	7,193	38,822	67,555	116,895	2,531	18,459	59,311	51,166	131,467	5,856	25,652	98,133	118,721	248,362

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 2017, 79.9 per cent of total discharges had a principal procedure recorded (see Table 3.4). Discussion of procedures is confined to ACHI chapter level.

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

- Procedures from the chapter *Non-invasive, cognitive and other interventions, not elsewhere classified* accounted for 26.0 per cent of total discharges with a principal procedure reported. Over 37 per cent of discharges aged less than 15 years, 20.0 per cent aged between 15–44 years, 24.3 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 65 per cent of total discharges with a principal procedure from the chapter *Procedures on cardiovascular system* were male discharges.
- Over 74 per cent of total discharges with a principal procedure from the chapter *Procedures on endocrine system* were female discharges.
- Over 71 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 19.1 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.

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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 longest in-patient mean length of stay for those aged less than 15 years was reported for the chapter *Procedures on respiratory system* at 20.2 days.
- The shortest in-patient mean lengths of stay were reported for the chapters *Procedures on nose, mouth and pharynx* at 2.4 days and *Procedures on ear and mastoid process* at 2.7 days for total discharges.

3.4.6 All-Listed Procedures by Sex and Age Group

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

- Over 2.5 million procedures were reported for total discharges.
- Procedures within the chapter *Non-invasive, cognitive and other interventions, not elsewhere classified* accounted for 1,102,645 of all-listed procedures or 43.9 per cent of all procedures reported for total discharges.
- Total discharges aged 65 years and over accounted for almost 70 per cent of procedures from the chapter *Procedures on eye and adnexa*.
- Total discharges aged less than 15 years accounted for over 45 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	-	**71,441**	**146,470**	**238,466**	**344,066**	**800,443**	**56,104**	**318,913**	**252,498**	**290,565**	**918,080**	**127,545**	**465,383**	**490,964**	**634,631**	**1,718,523**
All Principal Procedures	0001–2016	**42,348**	**116,880**	**203,208**	**299,114**	**661,550**	**31,866**	**216,351**	**216,891**	**246,642**	**711,750**	**74,214**	**333,231**	**420,099**	**545,756**	**1,373,300**
Procedures on nervous system	**0001–0086**	**938**	**3,404**	**4,402**	**2,947**	**11,691**	**724**	**4,852**	**6,202**	**4,894**	**16,672**	**1,662**	**8,256**	**10,604**	**7,841**	**28,363**
Lumbar puncture	0030	712	738	525	352	2,327	553	1,313	682	366	2,914	1,265	2,051	1,207	718	5,241
Procedures on endocrine system	**0110–0129**	**26**	**108**	**175**	**165**	**474**	**21**	**476**	**582**	**310**	**1,389**	**47**	**584**	**757**	**475**	**1,863**
Procedures on eye and adnexa	**0160–0256**	**622**	**1,716**	**5,789**	**15,368**	**23,495**	**556**	**1,375**	**4,067**	**19,880**	**25,878**	**1,178**	**3,091**	**9,856**	**35,248**	**49,373**
Lens extraction	0195–0202	30	135	1,007	4,137	5,309	30	106	992	6,083	7,211	60	241	1,999	10,220	12,520
Procedures on ear and mastoid process	**0300–0333**	**2,033**	**1,060**	**846**	**682**	**4,621**	**1,566**	**1,080**	**803**	**593**	**4,042**	**3,599**	**2,140**	**1,649**	**1,275**	**8,663**
Myringotomy	0309	1,221	101	78	54	1,454	855	117	54	36	1,062	2,076	218	132	90	2,516
Procedures on nose, mouth and pharynx	**0370–0422**	**2,234**	**2,788**	**2,157**	**1,757**	**8,936**	**1,659**	**2,989**	**2,039**	**1,353**	**8,040**	**3,893**	**5,777**	**4,196**	**3,110**	**16,976**
Tonsillectomy or adenoidectomy	0412	1,361	354	24	14	1,753	1,135	865	43	13	2,056	2,496	1,219	67	27	3,809
Dental services	**0450–0490**	**1,884**	**830**	**208**	**117**	**3,039**	**1,640**	**993**	**219**	**81**	**2,933**	**3,524**	**1,823**	**427**	**198**	**5,972**
Procedures on respiratory system	**0520–0571**	**1,940**	**2,091**	**4,126**	**6,334**	**14,491**	**1,477**	**1,580**	**3,608**	**5,112**	**11,777**	**3,417**	**3,671**	**7,734**	**11,446**	**26,268**
Bronchoscopy with/without biopsy	0543–0544, 41892-01[0545]	179	782	1,865	2,451	5,277	145	693	1,720	2,136	4,694	324	1,475	3,585	4,587	9,971
Procedures on cardiovascular system	**0600–0777**	**761**	**6,294**	**18,350**	**16,175**	**41,580**	**790**	**3,427**	**9,361**	**8,978**	**22,556**	**1,551**	**9,721**	**27,711**	**25,153**	**64,136**
Coronary angiography	0668	38	593	4,288	4,923	9,842	36	243	2,425	3,189	5,893	74	836	6,713	8,112	15,735
Transluminal coronary angioplasty with/without stenting	0670–0671	0	200	2,090	2,272	4,562	~	*	449	858	1,346	~	*	2,539	3,130	5,908
CABG	0672–0679	0	*	*	424	751	0	~	*	75	114	0	17	349	499	865
Leg varicose vein ligation	0727–0728	0	398	684	327	1,409	0	1,003	1,122	491	2,616	0	1,401	1,806	818	4,025
Procedures on blood and blood-forming organs	**0800–0817**	**112**	**446**	**951**	**1,258**	**2,767**	**104**	**517**	**975**	**990**	**2,586**	**216**	**963**	**1,926**	**2,248**	**5,353**
Procedures on digestive system	**0850–1011**	**2,741**	**22,107**	**33,220**	**32,483**	**90,551**	**1,906**	**27,637**	**32,764**	**29,119**	**91,426**	**4,647**	**49,744**	**65,984**	**61,602**	**181,977**
Fibreoptic colonoscopy with/without excision	0905, 0911	56	7,695	13,659	13,718	35,128	31	9,000	13,655	11,882	34,568	87	16,695	27,314	25,600	69,696
Appendicectomy	0926	1,171	1,848	339	92	3,450	873	1,897	314	93	3,177	2,044	3,745	653	185	6,627
Procedures for haemorrhoids	0941	~	916	1,004	*	2,292	0	1,028	891	459	2,378	~	1,944	1,895	*	4,670
Cholecystectomy	0965	7	371	578	427	1,383	7	1,680	1,392	490	3,569	14	2,051	1,970	917	4,952
Division of abdominal adhesions	0986	6	30	56	64	156	12	245	118	111	486	18	275	174	175	642
Repair of inguinal and obstructed hernia	0990, 0997	392	732	1,327	1,322	3,773	102	74	105	162	443	494	806	1,432	1,484	4,216
Panendoscopy with/without excision	1005–1008	303	7,635	11,316	10,914	30,168	288	10,065	12,596	11,571	34,520	591	17,700	23,912	22,485	64,688
Procedures on urinary system	**1040–1129**	**809**	**15,786**	**38,849**	**74,526**	**129,970**	**893**	**13,236**	**25,808**	**37,797**	**77,734**	**1,702**	**29,022**	**64,657**	**112,323**	**207,704**
Examination procedures on bladder (includes cystoscopy)	1089	61	1,122	3,005	5,976	10,164	40	1,271	2,176	2,527	6,014	101	2,393	5,181	8,503	16,178
Procedures on male genital organs	**1160–1203**	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	**3,216**	**1,510**	**2,766**	**2,879**	**10,371**
Prostatectomy	1165–1167	0	~	*	686	1,082	0	0	0	0	0	0	~	*	686	1,082
Circumcision	30653-00[1196]	1,462	532	247	147	2,388	0	0	0	0	0	1,462	532	247	147	2,388
Gynaecological procedures	**1240–1299**	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	**71**	**25,147**	**12,398**	**2,918**	**40,534**
Oophorectomy and salpingo-oophorectomy	1243, 1252	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	8	332	412	126	878
Salpingectomy	1251	0	0	0	0	0	~	177	24	~	206	~	177	24	~	206
Examination procedures on uterus	1259	0	0	0	0	0	~	2,217	3,296	*	6,171	~	2,217	3,296	*	6,171
Curettage and evacuation of uterus	1265	0	0	0	0	0	~	5,478	2,071	*	7,889	~	5,478	2,071	*	7,889
Hysterectomy	1268–1269	0	0	0	0	0	0	471	1,285	597	2,353	0	471	1,285	597	2,353
Repair of prolapse of uterus, pelvic floor or enterocele	1283	0	0	0	0	0	0	89	364	308	761	0	89	364	308	761
Obstetric procedures	**1330–1347**	**0**	**0**	**0**	**0**	**0**	**~**	**56,676**	*	**0**	**56,968**	**~**	**56,676**	*	**0**	**56,968**
Analgesia and anaesthesia during labour and delivery procedure	1333	0	0	0	0	0	~	2,845	~	0	2,850	~	2,845	~	0	2,850

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

Principal Procedure	Procedure Block	Male					Female					Total Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Medical or surgical induction of labour	1334	0	0	0	0	0	0	4,035	18	0	4,053	0	4,035	18	0	4,053
Medical or surgical augmentation of labour	1335	0	0	0	0	0	0	*	~	0	2,072	0	*	~	0	2,072
Forceps delivery	1337	0	0	0	0	0	0	*	~	0	2,020	0	*	~	0	2,020
Vacuum extraction	1338	0	0	0	0	0	0	5,746	13	0	5,759	0	5,746	13	0	5,759
Breech delivery and extraction	1339	0	0	0	0	0	0	84	0	0	84	0	84	0	0	84
Caesarean section	1340	0	0	0	0	0	~	19,242	*	0	19,462	~	19,242	*	0	19,462
Episiotomy associated with delivery	90472-00[1343]	0	0	0	0	0	0	*	~	0	3,784	0	*	~	0	3,784
Postpartum suture	1344	0	0	0	0	0	0	14,759	17	0	14,776	0	14,759	17	0	14,776
Procedures on musculoskeletal system	**1360–1580**	**3,689**	**10,587**	**10,036**	**8,925**	**33,237**	**3,091**	**6,408**	**12,602**	**15,182**	**37,283**	**6,780**	**16,995**	**22,638**	**24,107**	**70,520**
Arthroplasty of hip	1489	~	*	829	1,562	2,517	~	*	768	2,320	3,171	8	201	1,597	3,882	5,688
Arthroplasty of knee	1518–1519	~	*	384	590	991	0	11	439	934	1,384	~	*	823	1,524	2,375
Dermatological and plastic procedures	**1600–1718**	**3,370**	**17,240**	**13,691**	**16,414**	**50,715**	**2,720**	**16,707**	**13,526**	**13,279**	**46,232**	**6,090**	**33,947**	**27,217**	**29,693**	**96,947**
Excision of lesion(s) of skin and subcutaneous tissue	1620	497	4,656	5,555	8,313	19,021	473	6,388	5,877	6,187	18,925	970	11,044	11,432	14,500	37,946
Other debridement of skin and subcutaneous tissue	1628	192	587	359	258	1,396	101	214	187	229	731	293	801	546	487	2,127
Skin graft	1640–1650	18	64	52	67	201	14	29	30	68	141	32	93	82	135	342
Procedures on breast	**1740–1759**	**~**	**68**	**44**	*****	**160**	*****	**3,654**	**4,546**	*****	**10,280**	**19**	**3,722**	**4,590**	**2,109**	**10,440**
Breast biopsy	1743–1744	0	19	26	18	63	6	2,474	2,909	1,499	6,888	6	2,493	2,935	1,517	6,951
Mastectomy	1747–1748	~	*	6	12	46	0	213	455	293	961	~	*	461	305	1,007
Radiation oncology procedures[a]	**1786–1799**	**410**	**2,738**	**19,334**	**35,265**	**57,747**	**346**	**8,612**	**28,511**	**20,133**	**57,602**	**756**	**11,350**	**47,845**	**55,398**	**115,349**
Non-invasive, cognitive and other interventions, not elsewhere classified	**1820–1922**	**15,267**	**26,776**	**45,766**	**80,015**	**167,824**	**12,263**	**39,719**	**56,359**	**80,294**	**188,635**	**27,530**	**66,495**	**102,125**	**160,309**	**356,459**
Administration of blood and blood products	1893	1,910	1,306	2,611	7,243	13,070	1,238	1,850	2,470	5,802	11,360	3,148	3,156	5,081	13,045	24,430
Conduction anaesthesia	1909	~	11	16	*	36	0	24	13	6	43	~	35	29	*	79
Cerebral anaesthesia	1910	16	20	25	29	90	14	27	31	18	90	30	47	56	47	180
Imaging services[b]	**1940–2016**	**2,292**	**1,331**	**2,498**	**3,761**	**9,882**	**2,021**	**1,266**	**2,232**	**3,663**	**9,182**	**4,313**	**2,597**	**4,730**	**7,424**	**19,064**
Computerised tomography scan	1952–1966	236	392	853	1,232	2,713	206	220	716	846	1,988	442	612	1,569	2,078	4,701
Magnetic resonance imaging	2015	1,461	150	81	70	1,762	1,166	138	118	66	1,488	2,627	288	199	136	3,250

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**	**9.3**	**6.5**	**3.7**	**2.9**	**5.2**	**9.5**	**5.2**	**3.5**	**3.1**	**5.6**	**9.4**	**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	5.6	8.6	12.3	9.3	6.1	4.0	7.4	12.7	7.6	5.7	4.4	8.0	12.5	8.3
		2	2	4	7	4	2	3	4	7	4	2	3	4	7	4
Procedures on nervous system	**0001–0086**	**5.3**	**6.8**	**10.2**	**14.6**	**9.0**	**6.5**	**5.5**	**9.4**	**15.9**	**8.7**	**5.8**	**6.1**	**9.7**	**15.3**	**8.9**
		4	**3**	**5**	**7**	**4**	**4**	**3**	**5**	**8**	**4**	**4**	**3**	**5**	**7**	**4**
Lumbar puncture	0030	4.6	5.3	10.6	22.5	8.6	5.2	5.2	9.2	20.6	8.1	4.9	5.2	9.8	21.5	8.3
		4	3	6	13	4	3	3	5	13	4	4	3	5	13	4
Procedures on endocrine system	**0110–0129**	**2.8**	**5.6**	**4.5**	**7.2**	**5.5**	**2.2**	**3.5**	**3.2**	**4.0**	**3.5**	**2.5**	**4.0**	**3.6**	**5.1**	**4.0**
		1	**3**	**3**	**3**	**3**	**1**	**2**	**2**	**2**	**2**	**1**	**2**	**2**	**3**	**2**
Procedures on eye and adnexa	**0160–0256**	**2.0**	**2.8**	**2.6**	**3.5**	**2.9**	**4.1**	**2.7**	**2.6**	**3.1**	**2.9**	**3.0**	**2.8**	**2.6**	**3.3**	**2.9**
		1	**2**	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**
Lens extraction	0195–0202	1.4	2.0	2.2	4.1	3.3	2.4	1.9	1.9	2.9	2.6	2.0	2.0	2.0	3.5	2.9
		1	1	1	1	1	1	2	1	1	1	1	1	1	1	1
Procedures on ear and mastoid process	**0300–0333**	**1.5**	**1.8**	**2.8**	**8.3**	**2.6**	**1.4**	**3.7**	**2.6**	**6.0**	**2.9**	**1.5**	**2.7**	**2.7**	**7.4**	**2.7**
		1	**1**	**1**	**3**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**2**	**1**
Myringotomy	0309	1.5	4.4	8.7	^	2.8	1.1	2.5	^	^	1.3	1.4	3.3	7.0	^	2.3
		1	2	4	^	1	1	1	^	^	1	1	2	2	^	1
Procedures on nose, mouth and pharynx	**0370–0422**	**1.3**	**1.9**	**4.4**	**7.0**	**2.7**	**1.2**	**1.6**	**3.6**	**5.4**	**2.1**	**1.3**	**1.7**	**4.1**	**6.4**	**2.4**
		1	**1**	**2**	**3**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**2**	**3**	**1**
Tonsillectomy or adenoidectomy	0412	1.1	1.2	2.6	16.2	1.3	1.1	1.2	1.4	1.3	1.2	1.1	1.2	1.8	9.0	1.2
		1	1	1	2	1	1	1	1	1	1	1	1	1	1	1
Dental services	**0450–0490**	**3.3**	**2.7**	**11.5**	**15.2**	**5.7**	**1.5**	**3.8**	**6.2**	**14.8**	**4.1**	**2.5**	**3.3**	**9.0**	**15.1**	**5.0**
		1	**1**	**3**	**8**	**1**	**1**	**1**	**2**	**5**	**1**	**1**	**1**	**2**	**7**	**1**
Procedures on respiratory system	**0520–0571**	**19.2**	**14.4**	**17.5**	**17.0**	**17.2**	**21.5**	**13.5**	**14.6**	**16.2**	**16.6**	**20.2**	**14.1**	**16.3**	**16.6**	**16.9**
		9	**6**	**8**	**10**	**8**	**12**	**7**	**8**	**10**	**9**	**10**	**7**	**8**	**10**	**9**
Bronchoscopy with/without biopsy	0543–0544, 41892-1 [0545]	26.8	12.5	16.0	15.8	16.0	23.6	11.3	13.2	14.9	14.6	25.3	12.0	14.9	15.4	15.4
		5	8	9	11	10	5	8	9	10	9	5	8	9	10	9
Procedures on cardiovascular system	**0600–0777**	**12.4**	**6.8**	**6.7**	**8.6**	**7.9**	**15.1**	**8.6**	**5.9**	**8.7**	**8.2**	**13.7**	**7.6**	**6.4**	**8.6**	**8.0**
		6	**3**	**3**	**4**	**3**	**6**	**2**	**2**	**4**	**3**	**6**	**2**	**3**	**4**	**3**
Coronary angiography	0668	6.3	4.9	5.0	6.0	5.5	14.0	4.8	4.1	6.1	5.4	10.3	4.8	4.7	6.0	5.5
		4	2	2	3	3	1	2	2	3	3	1	2	2	3	3
Transluminal coronary angioplasty with/without stenting	0670–0671	-	3.1	3.3	4.2	3.7	^	2.5	3.4	4.6	4.1	^	3.0	3.3	4.3	3.8
		-	2	2	2	2	^	1	2	2	2	^	2	2	2	2
CABG	0672–0679	-	12.3	14.7	17.1	16.0	-	^	14.5	19.4	17.8	-	13.1	14.7	17.5	16.3
		-	8	10	12	11	-	^	11	14	13	-	8	10	12	11
Leg varicose vein ligation	0727–0728	-	1.0	1.3	1.4	1.3	-	1.0	1.1	2.1	1.3	-	1.0	1.2	1.8	1.3
		-	1	1	1	1	-	1	1	1	1	-	1	1	1	1
Procedures on blood and blood-forming organs	**0800–0817**	**15.0**	**16.1**	**15.4**	**14.7**	**15.2**	**12.6**	**12.3**	**12.2**	**15.7**	**13.5**	**13.9**	**14.2**	**13.9**	**15.1**	**14.4**
		6	**7**	**10**	**8**	**8**	**6**	**4**	**5**	**9**	**6**	**6**	**6**	**8**	**9**	**7**
Procedures on digestive system	**0850–1011**	**4.9**	**5.0**	**8.7**	**12.3**	**9.0**	**5.3**	**4.9**	**8.4**	**13.3**	**8.9**	**5.0**	**5.0**	**8.5**	**12.8**	**8.9**
		3	**2**	**4**	**7**	**4**	**3**	**2**	**4**	**8**	**4**	**3**	**2**	**4**	**7**	**4**
Fibreoptic colonoscopy with/without excision	0905, 0911	11.1	7.0	7.7	11.1	9.5	3.9	6.1	7.2	11.8	9.5	7.3	6.6	7.5	11.4	9.5
		3	5	5	6	5	1	4	4	7	6	1	5	5	7	5
Appendicectomy	0926	3.0	2.7	3.9	7.2	3.0	3.2	2.9	3.8	6.5	3.2	3.1	2.8	3.9	6.8	3.1
		2	2	3	5	2	3	2	3	5	3	2	2	3	5	2
Procedures for haemorrhoids	0941	-	2.4	2.5	4.1	2.9	-	1.7	2.3	6.8	3.3	-	2.0	2.4	5.4	3.1
		-	1	1	2	1	-	1	1	2	1	-	1	1	2	1

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

Principal Procedure	Procedure Block	Male					Female					Total In-Patient Discharges				
		< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total	< 15	15–44	45–64	≥65	Total
Cholecystectomy	0965	2.7 3	3.4 1	4.3 2	5.5 3	4.6 2	2.6 3	2.5 1	2.8 1	4.5 2	3.0 1	2.6 3	2.7 1	3.3 1	5.0 2	3.5 1
Division of abdominal adhesions	0986	6.5 7	9.7 6	16.0 9	22.0 14	16.9 10	20.5 8	4.0 2	10.5 6	16.7 11	10.3 5	15.5 8	5.1 2	12.5 8	18.7 12	12.4 7
Repair of inguinal and obstructed hernia	0990, 0997	2.3 1	1.7 1	2.0 1	3.5 1	2.7 1	1.6 1	2.8 2	4.1 3	7.4 4	5.4 3	2.3 1	1.9 1	2.3 1	4.0 1	3.1 1
Panendoscopy with/without excision	1005–1008	3.2 2	5.1 3	9.0 5	12.8 7	10.3 5	3.0 3	5.4 3	8.3 5	13.1 8	10.3 6	3.1 3	5.3 3	8.7 5	12.9 7	10.3 6
Procedures on urinary system	**1040–1129**	**5.3** **3**	**4.5** **2**	**6.5** **3**	**9.9** **5**	**7.9** **4**	**5.7** **3**	**5.1** **3**	**5.6** **3**	**10.9** **5**	**7.3** **3**	**5.4** **3**	**4.8** **2**	**6.1** **3**	**10.2** **5**	**7.7** **4**
Examination procedures on bladder (includes cystoscopy)	1089	1.6 1	5.2 1	8.1 3	11.8 6	10.4 4	^ ^	4.5 2	5.1 2	15.0 8	9.9 4	1.9 1	4.8 1	7.1 3	12.5 6	10.2 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	ǂ ǂ	**1.3** **1**	**2.5** **1**	**4.4** **4**	**5.7** **4**	**3.8** **2**
Prostatectomy	1165–1167	- -	^ ^	4.9 4	5.6 4	5.4 4	- -	- -	- -	- -	- -	- -	^ ^	4.9 4	5.6 4	5.4 4
Circumcision	30653-00 [1196]	1.6 1	2.5 1	1.8 1	2.6 1	2.0 1	- -	- -	- -	- -	- -	1.6 1	2.5 1	1.8 1	2.6 1	2.0 1
Gynaecological procedures	**1240–1299**	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	**2.6** **2**	**2.1** **1**	**3.8** **3**	**5.5** **4**	**3.1** **2**
Oophorectomy and salpingo-oophorectomy	1243, 1252	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	ǂ ǂ	2.9 3	3.3 3	3.0 2	4.1 3	3.3 2
Salpingectomy	1251	- -	- -	- -	- -	- -	^ ^	2.6 2	1.9 1	^ ^	2.5 2	^ ^	2.6 2	1.9 1	^ ^	2.5 2
Examination procedures on uterus	1259	- -	- -	- -	- -	- -	- -	2.0 1	2.8 1	6.1 2	3.4 1	- -	2.0 1	2.8 1	6.1 2	3.4 1
Curettage and evacuation of uterus	1265	- -	- -	- -	- -	- -	- -	1.4 1	1.6 1	6.5 1	1.5 1	- -	1.4 1	1.6 1	6.5 1	1.5 1
Hysterectomy	1268–1269	- -	- -	- -	- -	- -	- -	4.7 4	4.8 4	5.6 4	5.0 4	- -	4.7 4	4.8 4	5.6 4	5.0 4
Repair of prolapse of uterus, pelvic floor or enterocele	1283	- -	- -	- -	- -	- -	- -	2.8 3	3.0 3	3.4 3	3.1 3	- -	2.8 3	3.0 3	3.4 3	3.1 3
Obstetric procedures	**1330–1347**	**-** **-**	**-** **-**	**-** **-**	**-** **-**	**-** **-**	^ ^	**3.7** **3**	**5.7** **4**	**-** **-**	**3.7** **3**	^ ^	**3.7** **3**	**5.7** **4**	**-** **-**	**3.7** **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	3.1 3	- -	3.2 3	- -	3.2 3	3.1 3	- -	3.2 3
Medical or surgical augmentation of labour	1335	- -	- -	- -	- -	- -	- -	2.2 2	3.0 3	- -	2.2 2	- -	2.2 2	3.0 3	- -	2.2 2
Forceps delivery	1337	- -	- -	- -	- -	- -	- -	3.7 3	^ ^	- -	3.7 3	- -	3.7 3	^ ^	- -	3.7 3
Vacuum extraction	1338	- -	- -	- -	- -	- -	- -	3.3 3	3.3 3	- -	3.3 3	- -	3.3 3	3.3 3	- -	3.3 3
Breech delivery and extraction	1339	- -	- -	- -	- -	- -	- -	4.5 3	- -	- -	4.5 3	- -	4.5 3	- -	- -	4.5 3

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

Principal Procedure	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	6.4	-	5.2	^	5.2	6.4	-	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	3.7	-	2.5	-	2.5	3.7	-	2.5
		-	-	-	-	-	-	2	3	-	2	-	2	3	-	2
Procedures on musculoskeletal system	**1360–1580**	**2.2**	**3.7**	**6.5**	**14.3**	**7.3**	**2.5**	**4.1**	**5.2**	**11.7**	**7.9**	**2.3**	**3.8**	**5.9**	**12.7**	**7.6**
		1	**1**	**3**	**6**	**2**	**1**	**2**	**3**	**6**	**4**	**1**	**1**	**3**	**6**	**3**
Arthroplasty of hip	1489	^	6.1	5.0	13.7	10.5	^	5.3	6.0	12.8	10.9	8.4	5.8	5.5	13.2	10.7
		^	4	4	6	5	^	4	4	7	6	3	4	4	7	5
Arthroplasty of knee	1518–1519	^	5.1	4.6	6.5	5.7	-	3.5	4.7	5.9	5.5	^	4.4	4.6	6.1	5.6
		^	5	4	5	4	-	3	4	5	5	^	4	4	5	5
Dermatological and plastic procedures	**1600–1718**	**3.0**	**3.3**	**7.4**	**11.7**	**5.6**	**3.2**	**3.3**	**6.2**	**13.0**	**6.0**	**3.0**	**3.3**	**6.9**	**12.2**	**5.8**
		1	**1**	**2**	**3**	**2**	**1**	**1**	**2**	**5**	**2**	**1**	**1**	**2**	**4**	**2**
Excision of lesion(s) of skin and subcutaneous tissue	1620	1.5	2.1	3.5	7.5	5.8	1.2	1.8	2.4	7.1	4.8	1.4	2.0	3.0	7.3	5.4
		1	1	1	1	1	1	1	1	2	1	1	1	1	2	1
Other debridement of skin and subcutaneous tissue	1628	1.6	4.9	9.2	16.1	7.7	2.2	4.9	12.7	18.6	11.1	1.8	4.9	10.3	17.3	8.8
		1	1	3	7	2	1	1	5	10	4	1	1	4	8	2
Skin graft	1640–1650	5.2	7.2	12.9	17.2	11.4	9.2	12.7	9.0	15.6	12.7	7.0	8.7	11.6	16.5	11.9
		2	4	7	8	7	7	7	8	9	7	2	6	7	8	7
Procedures on breast	**1740–1759**	**^**	**1.8**	**4.4**	**3.6**	**3.0**	**2.9**	**3.5**	**3.0**	**4.7**	**3.6**	**3.1**	**3.5**	**3.0**	**4.7**	**3.6**
		^	**2**	**3**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**2**	**2**	**2**	**2**
Breast biopsy	1743–1744	-	^	^	^	^	^	1.7	2.0	4.7	2.9	^	1.7	2.0	4.7	3.0
		-	^	^	^	^	^	1	1	2	1	^	1	1	2	1
Mastectomy	1747–1748	-	2.2	^	2.9	2.8	-	6.2	3.9	4.8	4.7	-	6.1	3.9	4.7	4.7
		-	2	^	2	2	-	4	3	4	3	-	3	3	4	3
Radiation oncology procedures	**1786–1799**	**-**	**10.0**	**19.0**	**22.8**	**20.5**	**-**	**10.3**	**18.5**	**19.7**	**17.7**	**-**	**10.2**	**18.7**	**21.3**	**19.1**
		-	**4**	**13**	**16**	**15**	**-**	**5**	**14**	**15**	**12**	**-**	**5**	**13**	**16**	**14**
Non-invasive, cognitive and other interventions, not elsewhere classified	**1820–1922**	**4.8**	**7.3**	**9.2**	**12.6**	**10.4**	**5.2**	**5.1**	**9.0**	**13.4**	**10.5**	**5.0**	**5.9**	**9.1**	**13.1**	**10.5**
		3	**4**	**5**	**7**	**6**	**3**	**2**	**5**	**8**	**6**	**3**	**3**	**5**	**7**	**6**
Administration of blood and blood products	1893	4.1	6.7	9.8	11.2	9.9	4.6	6.1	8.2	11.0	9.2	4.3	6.3	9.0	11.1	9.6
		2	4	6	6	6	2	3	5	7	5	2	3	5	6	5
Conduction anaesthesia	1909	^	3.7	^	^	5.6	-	3.4	^	^	5.3	^	3.5	9.5	10.7	5.4
		^	4	^	^	5	-	3	^	^	3	^	3	6	10	3
Cerebral anaesthesia	1910	5.7	4.9	11.4	7.7	8.1	^	3.0	12.1	16.2	9.7	7.1	3.7	11.7	10.9	8.8
		4	4	3	7	4	^	3	2	9	4	5	3	3	7	4
Imaging services	**1940–2016**	**4.6**	**6.9**	**7.7**	**13.0**	**9.2**	**6.0**	**5.2**	**7.0**	**13.1**	**9.1**	**5.3**	**6.1**	**7.4**	**13.1**	**9.1**
		2	**3**	**4**	**7**	**4**	**2**	**1**	**3**	**7**	**4**	**2**	**2**	**3**	**7**	**4**
Computerised tomography scan	1952-1966	3.1	1.8	1.5	6.3	3.7	6.2	1.7	4.9	7.6	5.2	4.7	1.7	3.6	6.9	4.5
		1	1	1	1	1	2	1	1	1	1	1	1	1	1	1
Magnetic resonance imaging	2015	5.6	1.7	5.5	19.5	5.9	6.9	1.9	2.6	3.8	5.4	6.2	1.8	3.7	11.0	5.7
		3	1	1	7	2	2	1	1	1	1	3	1	1	1	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	-	**71,441**	**146,470**	**238,466**	**344,066**	**800,443**	**56,104**	**318,913**	**252,498**	**290,565**	**918,080**	**127,545**	**465,383**	**490,964**	**634,631**	**1,718,523**
All Procedures	0001–2016	93,294	201,690	350,905	526,898	1,172,787	70,567	442,810	375,161	453,243	1,341,781	163,861	644,500	726,066	980,141	2,514,568
Procedures on nervous system	**0001–0086**	**1,992**	**4,681**	**6,171**	**4,250**	**17,094**	**1,437**	**6,416**	**8,621**	**7,048**	**23,522**	**3,429**	**11,097**	**14,792**	**11,298**	**40,616**
Lumbar puncture	0030	1,570	921	715	531	3,737	1,138	1,455	830	506	3,929	2,708	2,376	1,545	1,037	7,666
Procedures on endocrine system	**0110–0129**	**27**	**117**	**215**	**194**	**553**	**22**	**483**	**619**	**345**	**1,469**	**49**	**600**	**834**	**539**	**2,022**
Procedures on eye and adnexa	**0160–0256**	**839**	**2,066**	**6,568**	**16,489**	**25,962**	**718**	**1,647**	**4,598**	**21,076**	**28,039**	**1,557**	**3,713**	**11,166**	**37,565**	**54,001**
Lens extraction	0195–0202	36	140	1,032	4,202	5,410	33	116	1,013	6,167	7,329	69	256	2,045	10,369	12,739
Procedures on ear and mastoid process	**0300–0333**	**2,874**	**1,265**	**966**	**831**	**5,936**	**2,097**	**1,246**	**921**	**686**	**4,950**	**4,971**	**2,511**	**1,887**	**1,517**	**10,886**
Myringotomy	0309	1,625	137	90	58	1,910	1,100	142	74	47	1,363	2,725	279	164	105	3,273
Procedures on nose, mouth and pharynx	**0370–0422**	**2,730**	**3,571**	**2,931**	**2,329**	**11,561**	**2,032**	**3,494**	**2,583**	**1,643**	**9,752**	**4,762**	**7,065**	**5,514**	**3,972**	**21,313**
Tonsillectomy or adenoidectomy	0412	1,498	365	31	20	1,914	1,237	872	47	14	2,170	2,735	1,237	78	34	4,084
Dental services	**0450–0490**	**4,418**	**2,244**	**508**	**215**	**7,385**	**3,547**	**1,815**	**482**	**132**	**5,976**	**7,965**	**4,059**	**990**	**347**	**13,361**
Procedures on respiratory system	**0520–0571**	**3,362**	**3,080**	**6,364**	**9,735**	**22,541**	**2,481**	**2,207**	**5,016**	**7,181**	**16,885**	**5,843**	**5,287**	**11,380**	**16,916**	**39,426**
Bronchoscopy with/without biopsy	0543–0544, 41892-01[0545]	321	942	2,188	2,953	6,404	210	810	1,987	2,439	5,446	531	1,752	4,175	5,392	11,850
Procedures on cardiovascular system	**0600–0777**	**3,019**	**7,331**	**24,634**	**24,505**	**59,489**	**2,718**	**4,060**	**11,486**	**12,655**	**30,919**	**5,737**	**11,391**	**36,120**	**37,160**	**90,408**
Coronary angiography	0668	252	837	6,488	7,422	14,999	285	314	2,913	4,150	7,662	537	1,151	9,401	11,572	22,661
Transluminal coronary angioplasty with/without stenting	0670–0671	0	224	2,310	2,565	5,099	~	*	505	943	1,489	~	*	2,815	3,508	6,588
CABG	0672–0679	~	*	723	945	1,704	0	7	78	181	266	~	*	801	1,126	1,970
Leg varicose vein ligation	0727–0728	0	408	698	333	1,439	0	1,021	1,143	511	2,675	0	1,429	1,841	844	4,114
Procedures on blood and blood-forming organs	**0800–0817**	**347**	**694**	**1,575**	**2,111**	**4,727**	**290**	**1,261**	**2,917**	**2,615**	**7,083**	**637**	**1,955**	**4,492**	**4,726**	**11,810**
Procedures on digestive system	**0850–1011**	**3,193**	**27,128**	**41,937**	**42,871**	**115,129**	**2,220**	**34,918**	**41,630**	**38,105**	**116,873**	**5,413**	**62,046**	**83,567**	**80,976**	**232,002**
Fibreoptic colonoscopy with/without excision	0905, 0911	165	9,541	16,806	17,340	43,852	103	11,554	17,034	15,145	43,836	268	21,095	33,840	32,485	87,688
Appendicectomy	0926	1,188	1,867	361	120	3,536	887	1,974	443	163	3,467	2,075	3,841	804	283	7,003
Procedures for haemorrhoids	0941	~	1,674	1,813	*	4,224	0	1,719	1,546	817	4,082	~	3,393	3,359	*	8,306
Cholecystectomy	0965	7	383	629	489	1,508	7	1,702	1,459	528	3,696	14	2,085	2,088	1,017	5,204
Division of abdominal adhesions	0986	41	243	364	400	1,048	37	1,257	702	491	2,487	78	1,500	1,066	891	3,535
Repair of inguinal and obstructed hernia	0990, 0997	426	748	1,346	1,359	3,879	102	75	110	172	459	528	823	1,456	1,531	4,338
Panendoscopy with/without excision	1005–1008	318	8,464	12,964	13,523	35,269	295	11,023	14,213	13,852	39,383	613	19,487	27,177	27,375	74,652
Procedures on urinary system	**1040–1129**	**1,024**	**16,759**	**40,710**	**77,399**	**135,892**	**1,003**	**14,179**	**27,273**	**39,114**	**81,569**	**2,027**	**30,938**	**67,983**	**116,513**	**217,461**
Examination procedures on bladder (includes cystoscopy)	1089	101	1,204	3,169	6,351	10,825	53	1,461	2,530	2,760	6,804	154	2,665	5,699	9,111	17,629
Procedures on male genital organs	**1160–1203**	**ǂ**	**ǂ**	**ǂ**	**ǂ**	**ǂ**	**ǂ**	**ǂ**	**ǂ**	**ǂ**	**ǂ**	**3,679**	**1,715**	**2,932**	**3,155**	**11,481**
Prostatectomy	1165–1167	0	7	410	752	1,169	0	0	0	0	0	0	7	410	752	1,169
Circumcision	30653-00[1196]	1,530	544	261	160	2,495	0	0	0	0	0	1,530	544	261	160	2,495
Gynaecological procedures	**1240–1299**	**ǂ**	**ǂ**	**ǂ**	**ǂ**	**ǂ**	**ǂ**	**ǂ**	**ǂ**	**ǂ**	**ǂ**	**98**	**42,593**	**22,208**	**4,616**	**69,515**
Oophorectomy and salpingo-oophorectomy	1243, 1252	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	9	388	476	162	1,035
Salpingectomy	1251	0	0	0	0	0	*	827	71	~	908	*	827	71	~	908
Examination procedures on uterus	1259	0	0	0	0	0	~	4,473	5,641	*	11,107	~	4,473	5,641	*	11,107
Curettage and evacuation of uterus	1265	0	0	0	0	0	~	7,560	4,683	*	13,107	~	7,560	4,683	*	13,107
Hysterectomy	1268–1269	0	0	0	0	0	0	517	1,331	627	2,475	0	517	1,331	627	2,475
Repair of prolapse of uterus, pelvic floor or enterocele	1283	0	0	0	0	0	~	*	638	617	1,396	~	*	638	617	1,396

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**	**~**	**122,600**	**445**	**~**	**123,050**	**~**	**122,600**	**445**	**~**	**123,050**
Analgesia and anaesthesia during labour and delivery procedure	1333	0	0	0	0	0	~	24,008	*	0	24,049	~	24,008	*	0	24,049
Medical or surgical induction of labour	1334	0	0	0	0	0	~	19,750	*	0	19,824	~	19,750	*	0	19,824
Medical or surgical augmentation of labour	1335	0	0	0	0	0	0	10,363	11	0	10,374	0	10,363	11	0	10,374
Forceps delivery	1337	0	0	0	0	0	0	*	~	0	2,417	0	*	~	0	2,417
Vacuum extraction	1338	0	0	0	0	0	0	7,592	17	0	7,609	0	7,592	17	0	7,609
Breech delivery and extraction	1339	0	0	0	0	0	0	134	0	0	134	0	134	0	0	134
Caesarean section	1340	0	0	0	0	0	~	19,365	*	0	19,586	~	19,365	*	0	19,586
Episiotomy associated with delivery	90472-00[1343]	0	0	0	0	0	0	10,492	20	0	10,512	0	10,492	20	0	10,512
Postpartum suture	1344	0	0	0	0	0	0	18,451	32	0	18,483	0	18,451	32	0	18,483
Procedures on musculoskeletal system	**1360–1579**	**5,009**	**13,974**	**13,331**	**11,432**	**43,746**	**4,643**	**9,045**	**16,861**	**19,404**	**49,953**	**9,652**	**23,019**	**30,192**	**30,836**	**93,699**
Arthroplasty of hip	1489	~	*	836	1,583	2,545	*	*	775	2,342	3,203	10	202	1,611	3,925	5,748
Arthroplasty of knee	1518–1519	~	*	385	594	996	0	11	444	937	1,392	~	*	829	1,531	2,388
Dermatological and plastic procedures	**1600–1718**	**5,002**	**21,123**	**17,814**	**23,265**	**67,204**	**3,981**	**20,053**	**17,027**	**17,938**	**58,999**	**8,983**	**41,176**	**34,841**	**41,203**	**126,203**
Excision of lesion(s) of skin and subcutaneous tissue	1620	555	5,940	7,188	10,933	24,616	523	8,111	7,547	7,883	24,064	1,078	14,051	14,735	18,816	48,680
Other debridement of skin and subcutaneous tissue	1628	475	1,673	1,099	906	4,153	316	786	598	722	2,422	791	2,459	1,697	1,628	6,575
Skin graft	1640–1650	58	212	274	783	1,327	51	101	155	520	827	109	313	429	1,303	2,154
Procedures on breast	**1740–1759**	**~**	**74**	**48**	*****	**172**	*****	**4,317**	**5,654**	*****	**12,426**	**20**	**4,391**	**5,702**	**2,485**	**12,598**
Breast biopsy	1743–1744	0	19	27	19	65	7	2,598	3,062	1,616	7,283	7	2,617	3,089	1,635	7,348
Mastectomy	1747–1748	~	*	6	12	46	0	214	460	296	970	~	*	466	308	1,016
Radiation oncology procedures[a]	**1786–1799**	**684**	**6,008**	**38,611**	**65,361**	**110,664**	**745**	**15,413**	**49,205**	**34,596**	**99,959**	**1,429**	**21,421**	**87,816**	**99,957**	**210,623**
Non-invasive, cognitive and other interventions, not elsewhere classified	**1820–1922**	**52,064**	**87,887**	**140,801**	**235,835**	**516,587**	**39,897**	**154,493**	**153,546**	**238,122**	**586,058**	**91,961**	**242,380**	**294,347**	**473,957**	**1,102,645**
Administration of blood and blood products	1893	3,283	2,456	5,583	13,126	24,448	2,422	4,616	4,718	10,602	22,358	5,705	7,072	10,301	23,728	46,806
Conduction anaesthesia	1909	510	1,647	3,511	6,073	11,741	131	16,914	4,110	8,123	29,278	641	18,561	7,621	14,196	41,019
Cerebral anaesthesia	1910	22,244	39,728	52,609	54,692	169,273	15,268	54,265	59,933	50,482	179,948	37,512	93,993	112,542	105,174	349,221
Imaging services[b]	**1940–2016**	**3,027**	**1,974**	**4,789**	**6,876**	**16,666**	**2,618**	**2,569**	**4,069**	**5,526**	**14,782**	**5,645**	**4,543**	**8,858**	**12,402**	**31,448**
Computerised tomography scan	1952–1966	309	481	1,082	1,543	3,415	256	297	972	1,220	2,745	565	778	2,054	2,763	6,160
Magnetic resonance imaging	2015	1,812	197	114	91	2,214	1,409	177	151	90	1,827	3,221	374	265	181	4,041

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 2017

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 2017.[1] Hospital case mix may be defined as 'the proportion of cases of each disease and health problem treated in the hospital'.[2]

- Section 4.2 presents background to the applied case mix classification and details of the assignment of discharges to Major Diagnostic Categories (MDC) and Australian Refined Diagnosis Related Groups (AR-DRG). The AR-DRG Classification System has been updated from Version 6.0 to Version 8.0 for 2016 onwards. The update to AR-DRG Version 8.0 included a revision of the complexity model used to assign AR-DRGs to episodes of care. In addition to this, it included a review of existing AR-DRGs, the removal of some AR-DRGs and the inclusion of new AR-DRGs. The naming convention for AR-DRGs was also updated. Due to the update in this classification, DRGs in this report are not comparable with those in reports prior to 2016.[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, length of stay, admission weight, sameday status and patient destination on discharge from hospital.
- Since the inception of the national case mix programme, the DRG classification scheme has been adopted as the national standard for Ireland.[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,

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

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

3 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 2009-2015.[6] In 2016, 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

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

- 'M' is either a letter (indicating the broad group of the DRG) or an '8' or a '9' (indicating an unrelated operating room procedure DRG or an error DRG, respectively).[9]
- 'AA' 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 See Appendix VIII for an overview of changes between AR-DRG Version 6.0 and 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.

- 'D' is a complexity split indicator that ranks DRGs within adjacent DRGs on the basis of their level of complexity/resource use. It is either 'A', 'B', 'C', 'D' or 'Z' with 'A' being the most complex or 'Z' indicating that there is no complexity split.[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. For in-patient discharges, 27.0 per cent were assigned to complexity group A *'Highest consumption of resources'*, and 57.8 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	36,731	3.4	15,144	12.3	157,937	30.4	173,081	27.0	209,812	12.2
B Second highest consumption of resources	416,942	38.7	90,748	73.9	279,997	54.0	370,745	57.8	787,687	45.8
C Third highest consumption of resources	190,376	17.7	4,883	4.0	56,904	11.0	61,787	9.6	252,163	14.7
D Fourth highest consumption of resources	312	0.0	882	0.7	6,510	1.3	7,392	1.2	7,704	0.4
Z No complexity split	432,653	40.2	11,096	9.0	17,408	3.4	28,504	4.4	461,157	26.8
Total Discharges	**1,077,014**	**100**	**122,753**	**100**	**518,756**	**100**	**641,509**	**100**	**1,718,523**	**100**

Notes: Percentage columns are subject to rounding.

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

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

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.' Australian Consortium for Classification Development, 2015, *Australian Refined Diagnosis Related Groups, Version 8.0, Definitions Manual*, Volume 1. Independent Hospital Pricing Authority. p. 8.

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

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.

4.3 Analysis of HIPE Data by Case Mix

The analysis presented in this section includes all discharges reported to HIPE. Analysis of 2017 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 249,639 discharges or 23.2 per cent of day patients (see Tables 4.2 and 4.19 and Figure 4.3).
    - *Chemotherapy* (AR-DRG R63Z) accounted for 46.1 per cent of day patients within this MDC, and 10.7 per cent of total day patients; *Other Neoplastic Disorders, Minor Complexity* (AR-DRG R62C) accounted for 42.4 per cent of day patients within this MDC and 9.8 per cent of total day patients.[15]

- *Diseases and disorders of the kidney and urinary tract* (MDC 11), with 199,291 discharges, accounted for 18.5 per cent of day patients (see Tables 4.2 and 4.13 and Figure 4.3).
    - *Haemodialysis* (AR-DRG L61Z) accounted for 86 per cent of day patients within this MDC and 15.9 per cent of total day patients.

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

- The MDC with the largest proportion of in-patient discharges was *Pregnancy, Childbirth and the Puerperium* (MDC 14), with 110,576 discharges, which accounted for 17.2 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 37.1 per cent of in-patients within this MDC and 6.4 per cent of total in-patient discharges.
    - *Vaginal Delivery* (AR-DRGs O60A, O60B and O60C) accounted for 36.2 per cent of in-patients within this MDC and 6.2 per cent of total in-patient discharges.

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[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.

- *Caesarean Delivery* (AR-DRGs O01A, O01B and O01C) accounted for 17.7 per cent of in-patients within this MDC, with *Caesarean Delivery, Minor Complexity* (AR-DRG O01C) accounting for the majority of these cases (57.7 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 4.8 days for *Vaginal Delivery, Major Complexity* (AR-DRG O60A).
- For *Caesarean Delivery* (AR-DRGs O01A, O01B and O01C), the in-patient mean length of stay ranged from 4.1 days for *Caesarean Delivery, Minor Complexity* (AR-DRG O01C) to 10.9 days for *Caesarean Delivery, Major Complexity* (AR-DRG O01A).

- *Diseases and Disorders of the Circulatory System* (MDC 5), with 78,847 in-patient discharges, accounted for 12.3 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 72,877 discharges, accounted for 11.4 per cent of total in-patients (see Tables 4.2 and 4.6 and Figure 4.3).

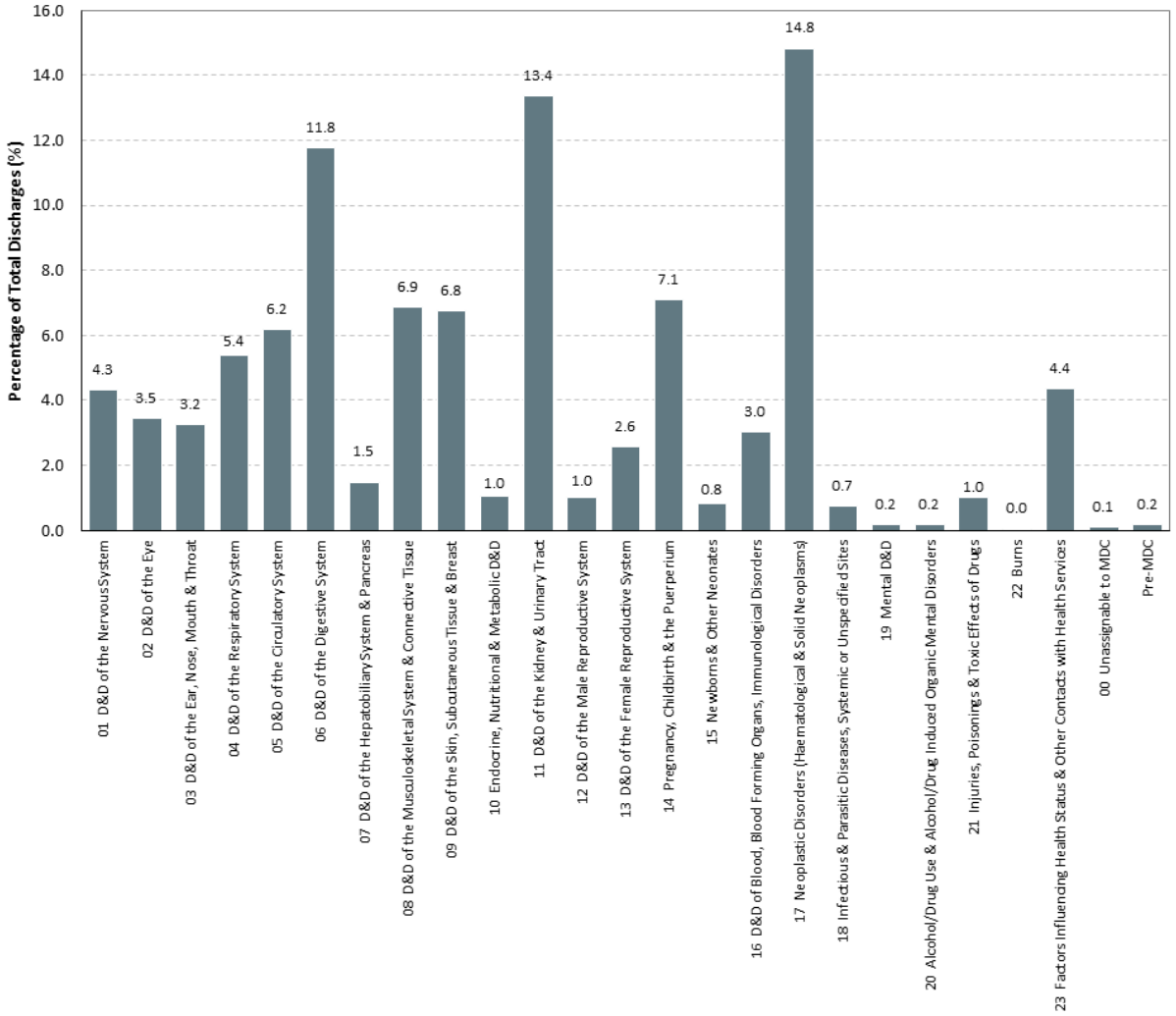
TABLE 4.2 Total Discharges: MDC by Patient Type (N, %)

Major Diagnostic Category	Day Patients		In-Patients		Total Discharges	
	N	%	N	%	N	%
01 Diseases and disorders of the nervous system	22,934	2.1	51,232	8.0	74,166	4.3
02 Diseases and disorders of the eye	53,271	4.9	6,066	0.9	59,337	3.5
03 Diseases and disorders of the ear, nose, mouth and throat	26,514	2.5	29,184	4.5	55,698	3.2
04 Diseases and disorders of the respiratory system	19,883	1.8	72,877	11.4	92,760	5.4
05 Diseases and disorders of the circulatory system	27,678	2.6	78,847	12.3	106,525	6.2
06 Diseases and disorders of the digestive system	135,489	12.6	66,844	10.4	202,333	11.8
07 Diseases and disorders of the hepatobiliary system and pancreas	8,496	0.8	16,472	2.6	24,968	1.5
08 Diseases and disorders of the musculoskeletal system and connective tissue	64,483	6.0	53,517	8.3	118,000	6.9
09 Diseases and disorders of the skin, subcutaneous tissue and breast	96,343	8.9	19,919	3.1	116,262	6.8
10 Endocrine, nutritional and metabolic diseases and disorders	6,326	0.6	11,640	1.8	17,966	1.0
11 Diseases and disorders of the kidney and urinary tract	199,291	18.5	30,235	4.7	229,526	13.4
12 Diseases and disorders of the male reproductive system	13,092	1.2	4,506	0.7	17,598	1.0
13 Diseases and disorders of the female reproductive system	32,544	3.0	11,587	1.8	44,131	2.6
14 Pregnancy, childbirth and the puerperium	11,279	1.0	110,576	17.2	121,855	7.1
15 Newborns and other neonates	447	0.0	13,987	2.2	14,434	0.8
16 Diseases and disorders of blood, blood forming organs, immunological disorders	43,973	4.1	7,912	1.2	51,885	3.0
17 Neoplastic disorders (haematological and solid neoplasms)[a]	249,639	23.2	5,263	0.8	254,902	14.8
18 Infectious and parasitic diseases, systemic or unspecified sites	1,001	0.1	11,697	1.8	12,698	0.7
19 Mental diseases and disorders	655	0.1	2,436	0.4	3,091	0.2
20 Alcohol/drug use and alcohol/drug induced organic mental disorders	9	0.0	2,749	0.4	2,758	0.2
21 Injuries, poisonings and toxic effects of drugs	1,432	0.1	15,813	2.5	17,245	1.0
22 Burns	165	0.0	596	0.1	761	0.0
23 Factors influencing health status and other contacts with health services	61,575	5.7	13,433	2.1	75,008	4.4
Unassignable to MDC	342	0.0	1,296	0.2	1,638	0.1
Pre-MDC	153	0.0	2,825	0.4	2,978	0.2
Total Discharges	**1,077,014**	**100**	**641,509**	**100**	**1,718,523**	**100**

Notes: Percentage columns are subject to rounding.

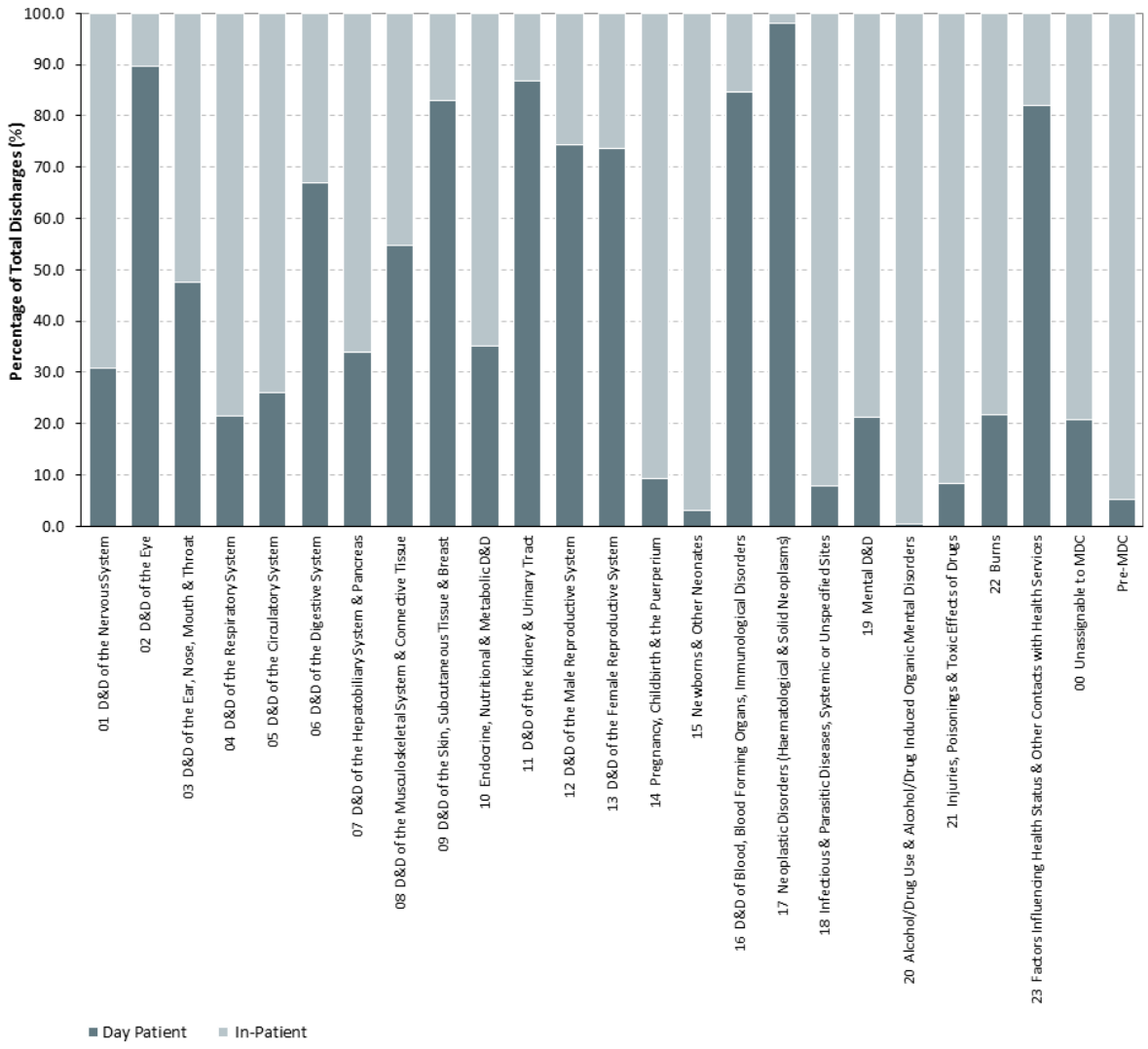
a From 2015 this data includes activity from St. Luke's Radiation Oncology Network centres located in Beaumont and St. James's Hospitals. These centres are operational since 2011, but data has only been included in HIPE from 2015.

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



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

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



Note: D&D = Diseases and disorders

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

MDC 1 Diseases and Disorders of the Nervous System	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
B01A Ventricular Shunt Revision, Major Complexity	0	29	4.5	3
B01B Ventricular Shunt Revision, Minor Complexity	~	86	4.7	3
B02A Cranial Procedures, Major Complexity	0	167	28.7	17
B02B Cranial Procedures, Intermediate Complexity	~	704	10.8	8
B02C Cranial Procedures, Minor Complexity	~	1,049	5.8	5
B03A Spinal Procedures, Major Complexity	~	56	24.6	10
B03B Spinal Procedures, Intermediate Complexity	~	96	4.9	3
B03C Spinal Procedures, Minor Complexity	29	81	4.5	2
B04A Extracranial Vascular Procedures, Major Complexity	0	58	22.8	15
B04B Extracranial Vascular Procedures, Intermediate Complexity	0	102	10.8	10
B04C Extracranial Vascular Procedures, Minor Complexity	~	200	4.8	4
B05Z Carpal Tunnel Release	1,820	40	1.9	1
B06A Procedures for Cerebral Palsy, Muscular Dystrophy and Neuropathy, Major Comp	7	36	41.2	21
B06B Procedures for Cerebral Palsy, Muscular Dystrophy and Neuropathy, Interm Comp	9	54	12.9	5
B06C Procedures for Cerebral Palsy, Muscular Dystrophy and Neuropathy, Minor Comp	225	143	4.0	1
B07A Cranial or Peripheral Nerve and Other Nervous System Procedures, Major Comp	~	77	27.6	10
B07B Cranial or Peripheral Nerve and Other Nervous System Procedures, Minor Comp	179	325	2.1	1
B40Z Plasmapheresis W Neurological Disease, Sameday	36	~	^	^
B41Z Telemetric EEG Monitoring	12	257	6.8	6
B42A Nervous System Disorders W Ventilator Support, Major Complexity	0	63	24.4	12
B42B Nervous System Disorders W Ventilator Support, Minor Complexity	0	137	6.8	3
B60A Acute Paraplegia and Quadriplegia W or W/O OR Procedures, Major Complexity	0	29	48.4	21
B60B Acute Paraplegia and Quadriplegia W or W/O OR Procedures, Minor Complexity	8	68	23.6	8
B61A Spinal Cord Conditions W or W/O OR Procedures, Major Complexity	~	71	28.5	15
B61B Spinal Cord Conditions W or W/O OR Procedures, Minor Complexity	17	125	7.7	4
B62Z Apheresis	250	~	^	^
B63A Dementia and Other Chronic Disturbances of Cerebral Function, Major Complexity	79	545	45.1	21
B63B Dementia and Other Chronic Disturbances of Cerebral Function, Minor Complexity	216	420	19.8	9
B64A Delirium, Major Complexity	10	955	15.7	8
B64B Delirium, Minor Complexity	31	987	4.8	2
B65A Cerebral Palsy, Major Complexity	57	34	4.7	4
B65B Cerebral Palsy, Minor Complexity	204	18	23.2	1
B66A Nervous System Neoplasms, Major Complexity	59	470	16.8	10
B66B Nervous System Neoplasms, Minor Complexity	1,941	708	8.1	5
B67A Degenerative Nervous System Disorders, Major Complexity	135	873	21.0	11
B67B Degenerative Nervous System Disorders, Intermediate Complexity	384	698	6.8	4
B67C Degenerative Nervous System Disorders, Minor Complexity	673	163	5.3	4
B68A Multiple Sclerosis and Cerebellar Ataxia, Major Complexity	200	479	11.7	5
B68B Multiple Sclerosis and Cerebellar Ataxia, Minor Complexity	5,016	450	4.5	3
B69A TIA and Precerebral Occlusion, Major Complexity	~	1,066	7.2	5
B69B TIA and Precerebral Occlusion, Minor Complexity	39	1,951	3.2	2
B70A Stroke and Other Cerebrovascular Disorders, Major Complexity	~	948	39.2	25
B70B Stroke and Other Cerebrovascular Disorders, Intermediate Complexity	~	2,280	15.6	9
B70C Stroke and Other Cerebrovascular Disorders, Minor Complexity	30	2,503	8.1	6
B70D Stroke and Other Cerebrovascular Disorders, Transferred <5 Days	~	346	1.6	1
B71A Cranial and Peripheral Nerve Disorders, Major Complexity	1,640	1,380	5.5	2
B71B Cranial and Peripheral Nerve Disorders, Minor Complexity	3,119	309	4.3	1
B72A Nervous System Infection Except Viral Meningitis, Major Complexity	7	237	20.3	13
B72B Nervous System Infection Except Viral Meningitis, Minor Complexity	122	235	8.8	6
B73Z Viral Meningitis	11	330	5.0	4
B74A Nontraumatic Stupor and Coma, Major Complexity	10	73	8.8	3
B74B Nontraumatic Stupor and Coma, Minor Complexity	17	155	2.8	1
B75Z Febrile Convulsions	24	675	1.7	1
B76A Seizures, Major Complexity	100	2,355	7.6	4
B76B Seizures, Minor Complexity	875	4,671	2.5	1
B77A Headaches, Major Complexity	132	2,348	3.3	2
B77B Headaches, Minor Complexity	1,496	8,048	1.6	1
B78A Intracranial Injuries, Major Complexity	0	336	25.4	12
B78B Intracranial Injuries, Minor Complexity	~	707	6.2	3
B78C Intracranial Injuries, Transferred <5 Days	0	65	1.7	1
B79A Skull Fractures, Major Complexity	0	161	8.3	4

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

MDC 1 Diseases and Disorders of the Nervous System	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
B79B Skull Fractures, Minor Complexity	~	184	2.2	1
B80A Other Head Injuries, Major Complexity	0	434	7.8	3
B80B Other Head Injuries, Minor Complexity	12	3,029	1.3	1
B81A Other Disorders of the Nervous System, Major Complexity	55	1,111	15.8	8
B81B Other Disorders of the Nervous System, Minor Complexity	3,345	3,766	4.0	1
B82A Chronic & Unspec Para/Quadriplegia W or W/O OR Proc, Major Complexity	0	109	59.4	30
B82B Chronic & Unspec Para/Quadriplegia W or W/O OR Proc, Intermediate Complexity	35	312	32.4	10
B82C Chronic & Unspec Para/Quadriplegia W or W/O OR Proc, Minor Complexity	234	248	12.4	4
Total Discharges	**22,934**	**51,232**	**7.6**	**2**

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

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	~	57	4.6	4
C01B Procedures for Penetrating Eye Injury, Minor Complexity	10	51	3.3	3
C02Z Enucleations and Orbital Procedures	37	100	3.8	2
C03A Retinal Procedures, Major Complexity	3,474	1,151	2.9	2
C03B Retinal Procedures, Minor Complexity	24,799	309	1.4	1
C04A Major Corneal, Scleral and Conjunctival Procedures, Major Complexity	~	71	4.6	3
C04B Major Corneal, Scleral and Conjunctival Procedures, Minor Complexity	18	93	2.0	2
C05Z Dacryocystorhinostomy	70	129	1.2	1
C10Z Strabismus Procedures	640	82	1.0	1
C11Z Eyelid Procedures	920	102	1.9	1
C12Z Other Corneal, Scleral and Conjunctival Procedures	335	113	4.6	3
C13Z Lacrimal Procedures	422	17	1.5	1
C14A Other Eye Procedures, Major Complexity	106	111	4.2	3
C14B Other Eye Procedures, Minor Complexity	1,466	105	1.5	1
C15Z Glaucoma and Complex Cataract Procedures	723	297	2.0	1
C16Z Lens Procedures	11,735	313	1.7	1
C60A Acute and Major Eye Infections, Major Complexity	~	55	11.9	9
C60B Acute and Major Eye Infections, Minor Complexity	52	166	5.4	4
C61A Neurological and Vascular Disorders of the Eye, Major Complexity	301	425	4.1	2
C61B Neurological and Vascular Disorders of the Eye, Minor Complexity	685	450	2.9	1
C62A Hyphaema and Medically Managed Trauma to the Eye, Major Complexity	53	192	10.3	3
C62B Hyphaema and Medically Managed Trauma to the Eye, Minor Complexity	62	366	1.8	1
C63A Other Disorders of the Eye, Major Complexity	329	272	6.0	3
C63B Other Disorders of the Eye, Intermediate Complexity	2,724	911	2.1	1
C63C Other Disorders of the Eye, Minor Complexity	4,302	128	1.9	1
Total Discharges	**53,271**	**6,066**	**3.1**	**1**

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

TABLE 4.5 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	~	158	2.4	2
D02A Head and Neck Procedures, Major Complexity	~	75	16.7	11
D02B Head and Neck Procedures, Intermediate Complexity	~	57	9.5	6
D02C Head and Neck Procedures, Minor Complexity	24	142	3.2	2
D03Z Surgical Repair for Cleft Lip and Palate Disorders	19	149	2.6	2
D04A Maxillo Surgery, Major Complexity	41	438	2.7	2
D04B Maxillo Surgery, Minor Complexity	42	288	2.3	2
D05Z Parotid Gland Procedures	~	177	2.7	2
D06Z Sinus and Complex Middle Ear Procedures	323	647	1.8	1
D10Z Nasal Procedures	490	539	1.3	1
D11Z Tonsillectomy and Adenoidectomy	747	3,815	1.3	1
D12A Other Ear, Nose, Mouth and Throat Procedures, Major Complexity	83	121	7.8	3
D12B Other Ear, Nose, Mouth and Throat Procedures, Minor Complexity	1,196	412	1.9	1
D13Z Myringotomy W Tube Insertion	2,139	119	2.2	1
D14A Mouth and Salivary Gland Procedures, Major Complexity	268	316	3.9	2
D14B Mouth and Salivary Gland Procedures, Minor Complexity	744	76	1.6	1
D15Z Mastoid Procedures	37	280	2.0	1
D40Z Dental Extractions and Restorations	5,242	238	1.7	1
D60A Ear, Nose, Mouth and Throat Malignancy, Major Complexity	42	325	23.2	15
D60B Ear, Nose, Mouth and Throat Malignancy, Minor Complexity	1,178	439	10.7	4
D61A Dysequilibrium, Major Complexity	17	904	4.6	2
D61B Dysequilibrium, Minor Complexity	241	3,787	1.9	1
D62A Epistaxis, Major Complexity	8	139	8.2	5
D62B Epistaxis, Minor Complexity	484	823	2.5	2
D63A Otitis Media and Upper Respiratory Infections, Major Complexity	197	2,253	3.9	2
D63B Otitis Media and Upper Respiratory Infections, Minor Complexity	1,633	7,414	1.6	1
D64A Laryngotracheitis and Epiglottitis, Major Complexity	~	114	2.3	1
D64B Laryngotracheitis and Epiglottitis, Minor Complexity	22	846	1.2	1
D65A Nasal Trauma and Deformity, Major Complexity	19	135	6.2	3
D65B Nasal Trauma and Deformity, Minor Complexity	960	313	1.5	1
D66A Other Ear, Nose, Mouth and Throat Disorders, Major Complexity	718	584	5.4	2
D66B Other Ear, Nose, Mouth and Throat Disorders, Minor Complexity	8,104	1,706	1.5	1
D67A Oral and Dental Disorders, Major Complexity	87	428	4.8	2
D67B Oral and Dental Disorders, Minor Complexity	1,398	927	1.8	1
Total	**26,514**	**29,184**	**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	78	24.5	19
E01B Major Chest Procedures, Intermediate Complexity	0	336	13.8	10
E01C Major Chest Procedures, Minor Complexity	29	656	8.6	7
E02A Other Respiratory System OR Procedures, Major Complexity	9	228	19.8	13
E02B Other Respiratory System OR Procedures, Intermediate Complexity	207	245	8.0	5
E02C Other Respiratory System OR Procedures, Minor Complexity	129	56	1.8	1
E40A Respiratory System Disorders W Ventilator Support, Major Complexity	0	84	25.8	17
E40B Respiratory System Disorders W Ventilator Support, Minor Complexity	0	196	12.1	8
E41A Respiratory System Disorders W Non-Invasive Ventilation, Major Complexity	0	490	24.5	17
E41B Respiratory System Disorders W Non-Invasive Ventilation, Minor Complexity	0	1,248	12.8	9
E42A Bronchoscopy, Major Complexity	550	1,009	17.5	12
E42B Bronchoscopy, Minor Complexity	6,214	539	6.0	4
E60A Cystic Fibrosis, Major Complexity	346	689	13.5	14
E60B Cystic Fibrosis, Minor Complexity	1,996	297	8.0	7
E61A Pulmonary Embolism, Major Complexity	~	683	10.0	7
E61B Pulmonary Embolism, Minor Complexity	17	833	4.3	3
E62A Respiratory Infections and Inflammations, Major Complexity	36	8,121	13.5	8
E62B Respiratory Infections and Inflammations, Minor Complexity	66	5,788	5.2	4
E63A Sleep Apnoea, Major Complexity	10	533	1.8	1
E63B Sleep Apnoea, Minor Complexity	43	1,447	1.1	1
E64A Pulmonary Oedema and Respiratory Failure, Major Complexity	~	244	11.0	7
E64B Pulmonary Oedema and Respiratory Failure, Minor Complexity	~	269	6.3	3
E65A Chronic Obstructive Airways Disease, Major Complexity	115	5,523	11.0	7
E65B Chronic Obstructive Airways Disease, Minor Complexity	821	8,738	4.9	4
E66A Major Chest Trauma, Major Complexity	0	275	10.5	7
E66B Major Chest Trauma, Minor Complexity	0	318	3.5	2
E67A Respiratory Signs and Symptoms, Major Complexity	279	1,409	3.6	1
E67B Respiratory Signs and Symptoms, Minor Complexity	1,004	4,382	1.6	1
E68A Pneumothorax, Major Complexity	~	303	8.9	6
E68B Pneumothorax, Minor Complexity	12	493	3.8	3
E69A Bronchitis and Asthma, Major Complexity	65	558	5.9	4
E69B Bronchitis and Asthma, Minor Complexity	3,316	3,952	2.1	1
E70A Whooping Cough and Acute Bronchiolitis, Major Complexity	8	465	4.4	3
E70B Whooping Cough and Acute Bronchiolitis, Minor Complexity	17	2,236	2.6	2
E71A Respiratory Neoplasms, Major Complexity	114	874	14.1	9
E71B Respiratory Neoplasms, Minor Complexity	3,025	1,114	6.9	4
E72Z Respiratory Problems Arising from Neonatal Period	10	88	5.6	2
E73A Pleural Effusion, Major Complexity	~	205	16.5	12
E73B Pleural Effusion, Intermediate Complexity	37	447	7.4	6
E73C Pleural Effusion, Minor Complexity	100	302	4.2	2
E74A Interstitial Lung Disease, Major Complexity	116	450	9.4	7
E74B Interstitial Lung Disease, Minor Complexity	502	336	4.4	2
E75A Other Respiratory System Disorders, Major Complexity	87	9,301	8.7	5
E75B Other Respiratory System Disorders, Minor Complexity	556	6,917	2.7	1
E76A Respiratory Tuberculosis, Major Complexity	~	58	25.2	12
E76B Respiratory Tuberculosis, Minor Complexity	28	64	7.2	5
Total	**19,883**	**72,877**	**7.1**	**4**

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

TABLE 4.7 Total Discharges: MDC 5 Diseases and Disorders of the Circulatory System: AR-DRG 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	~	71	19.1	15
F01B Implantation and Replacement of AICD, Total System, Minor Complexity	237	294	4.4	1
F02Z Other AICD Procedures	16	46	7.9	5
F03A Cardiac Valve Procedures W CPB Pump W Invasive Cardiac Investigation, Major Comp	0	56	30.1	27
F03B Cardiac Valve Procedures W CPB Pump W Invasive Cardiac Investigation, Minor Comp	~	99	14.8	9
F04A Cardiac Valve Procedures W CPB Pump W/O Invasive Cardiac Invest, Major Comp	0	36	27.2	20
F04B Cardiac Valve Procedures W CPB Pump W/O Invasive Cardiac Invest, Interm Comp	0	202	16.7	13
F04C Cardiac Valve Procedures W CPB Pump W/O Invasive Cardiac Invest, Minor Comp	~	344	11.0	9
F05A Coronary Bypass W Invasive Cardiac Investigation, Major Complexity	0	42	30.5	24
F05B Coronary Bypass W Invasive Cardiac Investigation, Minor Complexity	0	106	20.7	20
F06A Coronary Bypass W/O Invasive Cardiac Investigation, Major Complexity	0	76	23.1	17
F06B Coronary Bypass W/O Invasive Cardiac Investigation, Minor Complexity	0	575	11.5	9
F07A Other Cardiothoracic/Vascular Procedures W CPB Pump, Major Complexity	0	39	18.1	15
F07B Other Cardiothoracic/Vascular Procedures W CPB Pump, Intermediate Complexity	0	63	13.8	11
F07C Other Cardiothoracic/Vascular Procedures W CPB Pump, Minor Complexity	0	79	11.4	9
F08A Major Reconstructive Vascular Procedures W/O CPB Pump, Major Complexity	0	113	31.8	19
F08B Major Reconstructive Vascular Procedures W/O CPB Pump, Intermediate Complexity	0	407	12.9	10
F08C Major Reconstructive Vascular Procedures W/O CPB Pump, Minor Complexity	23	279	6.9	5
F09A Other Cardiothoracic Procedures W/O CPB Pump, Major Complexity	~	*	^	^
F09B Other Cardiothoracic Procedures W/O CPB Pump, Intermediate Complexity	~	33	9.9	8
F09C Other Cardiothoracic Procedures W/O CPB Pump, Minor Complexity	23	87	4.1	2
F10A Interventional Coronary Procedures, Admitted for AMI, Major Complexity	~	266	10.8	7
F10B Interventional Coronary Procedures, Admitted for AMI, Minor Complexity	106	2,026	3.1	3
F11A Amputation, Except Upper Limb and Toe, for Circulatory Disorders, Major Comp	0	100	64.4	44
F11B Amputation, Except Upper Limb and Toe, for Circulatory Disorders, Minor Comp	0	123	27.4	22
F12A Implantation and Replacement of Pacemaker, Total System, Major Complexity	23	310	12.0	8
F12B Implantation and Replacement of Pacemaker, Total System, Minor Complexity	539	538	4.0	2
F13A Amputation, Upper Limb and Toe, for Circulatory Disorders, Major Complexity	0	74	27.5	16
F13B Amputation, Upper Limb and Toe, for Circulatory Disorders, Minor Complexity	~	68	8.6	7
F14A Vascular Procedures, Except Major Reconstruction, W/O CPB Pump, Major Complexity	28	215	20.4	12
F14B Vascular Procedures, Except Major Reconstruction, W/O CPB Pump, Interm Comp	32	510	7.6	5
F14C Vascular Procedures, Except Major Reconstruction, W/O CPB Pump, Minor Complexity	185	434	3.8	2
F15A Interventional Coronary Procs, Not Adm for AMI, W Stent Implant, Major Comp	18	391	8.1	4
F15B Interventional Coronary Procs, Not Adm for AMI, W Stent Implant, Minor Comp	1,008	2,178	2.2	1
F16A Interventional Coronary Procs, Not Adm for AMI, W/O Stent Implant, Major Comp	~	~	^	^
F16B Interventional Coronary Procs, Not Adm for AMI, W/O Stent Implant, Minor Comp	32	70	3.0	1
F17A Insertion and Replacement of Pacemaker Generator, Major Complexity	25	37	9.7	4
F17B Insertion and Replacement of Pacemaker Generator, Minor Complexity	248	59	1.6	1
F18A Other Pacemaker Procedures, Major Complexity	~	32	9.7	7
F18B Other Pacemaker Procedures, Minor Complexity	34	52	3.3	2
F19A Trans-Vascular Percutaneous Cardiac Intervention, Major Complexity	69	59	9.5	2
F19B Trans-Vascular Percutaneous Cardiac Intervention, Minor Complexity	181	62	1.2	1
F20Z Vein Ligation and Stripping	4,485	251	1.5	1
F21A Other Circulatory System OR Procedures, Major Complexity	0	51	31.0	15
F21B Other Circulatory System OR Procedures, Intermediate Complexity	8	59	9.0	6
F21C Other Circulatory System OR Procedures, Minor Complexity	~	39	5.6	2
F40A Circulatory Disorders W Ventilator Support, Major Complexity	0	56	14.6	7
F40B Circulatory Disorders W Ventilator Support, Minor Complexity	0	42	7.1	3

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

MDC 5 Diseases and Disorders of the Circulatory System	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
F41A Circulatory Disorders, Adm for AMI W Invasive Cardiac Inves Proc, Major Comp	~	201	8.2	6
F41B Circulatory Disorders, Adm for AMI W Invasive Cardiac Inves Proc, Minor Comp	77	442	3.8	3
F42A Circulatory Dsrds, Not Adm for AMI W Invasive Cardiac Inves Proc, Major Comp	586	1,228	8.7	6
F42B Circulatory Dsrds, Not Adm for AMI W Invasive Cardiac Inves Proc, Minor Comp	9,636	2,881	2.9	2
F43A Circulatory Disorders W Non-Invasive Ventilation, Major Complexity	0	97	27.2	20
F43B Circulatory Disorders W Non-Invasive Ventilation, Minor Complexity	0	146	12.6	10
F60A Circulatory Dsrd, Adm for AMI W/O Invas Card Inves Proc	~	2,429	8.4	6
F60B Circulatory Dsrd, Adm for AMI W/O Invas Card Inves Proc, Transf <5 Days	8	614	1.9	1
F61A Infective Endocarditis, Major Complexity	~	61	30.9	26
F61B Infective Endocarditis, Minor Complexity	23	66	17.0	10
F62A Heart Failure and Shock, Major Complexity	0	2,313	14.5	10
F62B Heart Failure and Shock, Minor Complexity	87	3,545	6.3	5
F62C Heart Failure and Shock, Transferred <5 Days	0	105	2.0	1
F63A Venous Thrombosis, Major Complexity	7	533	7.7	5
F63B Venous Thrombosis, Minor Complexity	51	1,363	2.0	1
F64A Skin Ulcers in Circulatory Disorders, Major Complexity	~	157	18.1	12
F64B Skin Ulcers in Circulatory Disorders, Intermediate Complexity	77	236	9.2	7
F64C Skin Ulcers in Circulatory Disorders, Minor Complexity	8	58	6.4	4
F65A Peripheral Vascular Disorders, Major Complexity	56	591	11.0	7
F65B Peripheral Vascular Disorders, Minor Complexity	1,017	908	3.8	1
F66A Coronary Atherosclerosis, Major Complexity	59	402	8.2	5
F66B Coronary Atherosclerosis, Minor Complexity	656	1,998	3.1	1
F67A Hypertension, Major Complexity	10	387	5.0	3
F67B Hypertension, Minor Complexity	145	2,038	1.8	1
F68A Congenital Heart Disease, Major Complexity	527	93	3.8	2
F68B Congenital Heart Disease, Minor Complexity	364	52	2.3	1
F69A Valvular Disorders, Major Complexity	67	361	9.0	5
F69B Valvular Disorders, Minor Complexity	811	3,116	1.8	1
F72A Unstable Angina, Major Complexity	~	299	7.0	5
F72B Unstable Angina, Minor Complexity	30	1,136	3.7	2
F73A Syncope and Collapse, Major Complexity	29	3,072	9.1	5
F73B Syncope and Collapse, Minor Complexity	2,342	7,711	2.7	1
F74A Chest Pain, Major Complexity	55	3,327	2.9	1
F74B Chest Pain, Minor Complexity	667	14,480	1.4	1
F75A Other Circulatory Disorders, Major Complexity	23	338	14.4	9
F75B Other Circulatory Disorders, Intermediate Complexity	32	583	7.8	6
F75C Other Circulatory Disorders, Minor Complexity	557	1,707	3.3	2
F76A Arrhythmia, Cardiac Arrest and Conduction Disorders, Major Complexity	181	2,795	6.8	4
F76B Arrhythmia, Cardiac Arrest and Conduction Disorders, Minor Complexity	2,135	5,800	2.4	1
Total	**27,678**	**78,847**	**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 4.8 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	97	38.5	32
G01B Rectal Resection, Intermediate Complexity	0	203	22.1	18
G01C Rectal Resection, Minor Complexity	~	800	10.3	8
G02A Major Small and Large Bowel Procedures, Major Complexity	0	281	43.8	31
G02B Major Small and Large Bowel Procedures, Intermediate Complexity	0	871	18.8	15
G02C Major Small and Large Bowel Procedures, Minor Complexity	54	1,540	9.8	8
G03A Stomach, Oesophageal and Duodenal Procedures, Major Complexity	0	197	21.8	16
G03B Stomach, Oesophageal and Duodenal Procedures, Intermediate Complexity	11	236	12.6	10
G03C Stomach, Oesophageal and Duodenal Procedures, Minor Complexity	41	285	6.4	4
G04A Peritoneal Adhesiolysis, Major Complexity	0	85	25.6	20
G04B Peritoneal Adhesiolysis, Intermediate Complexity	~	264	10.1	8
G04C Peritoneal Adhesiolysis, Minor Complexity	94	509	4.1	3
G05A Minor Small and Large Bowel Procedures, Major Complexity	~	92	17.6	11
G05B Minor Small and Large Bowel Procedures, Minor Complexity	17	308	6.3	5
G06Z Pyloromyotomy	0	50	3.5	3
G07A Appendicectomy, Major Complexity	~	541	6.0	5
G07B Appendicectomy, Minor Complexity	32	5,685	2.7	2
G10A Hernia Procedures, Major Complexity	68	507	7.8	5
G10B Hernia Procedures, Minor Complexity	3,366	2,301	1.9	1
G11A Anal and Stomal Procedures, Major Complexity	49	327	5.8	3
G11B Anal and Stomal Procedures, Minor Complexity	1,393	1,116	2.2	1
G12A Other Digestive System OR Procedures, Major Complexity	0	102	29.5	20
G12B Other Digestive System OR Procedures, Intermediate Complexity	36	346	11.2	8
G12C Other Digestive System OR Procedures, Minor Complexity	304	342	5.0	3
G46A Complex Endoscopy, Major Complexity	612	1,205	12.1	8
G46B Complex Endoscopy, Minor Complexity	12,164	587	5.0	4
G47A Gastroscopy, Major Complexity	253	1,769	10.8	7
G47B Gastroscopy, Intermediate Complexity	2,109	1,651	4.3	3
G47C Gastroscopy, Minor Complexity	38,143	1,899	2.9	2
G48A Colonoscopy, Major Complexity	2,451	1,566	8.9	6
G48B Colonoscopy, Minor Complexity	48,734	1,496	3.9	3
G60A Digestive Malignancy, Major Complexity	335	765	12.4	8
G60B Digestive Malignancy, Minor Complexity	3,692	626	6.2	3
G61A Gastrointestinal Haemorrhage, Major Complexity	36	689	7.2	4
G61B Gastrointestinal Haemorrhage, Minor Complexity	395	1,003	2.6	1
G64A Inflammatory Bowel Disease, Major Complexity	205	362	6.9	5
G64B Inflammatory Bowel Disease, Minor Complexity	12,683	729	3.6	3
G65A Gastrointestinal Obstruction, Major Complexity	~	479	10.5	7
G65B Gastrointestinal Obstruction, Minor Complexity	11	927	4.3	3
G66A Abdominal Pain and Mesenteric Adenitis, Major Complexity	108	2,916	2.8	1
G66B Abdominal Pain and Mesenteric Adenitis, Minor Complexity	934	7,405	1.6	1
G67A Oesophagitis and Gastroenteritis, Major Complexity	62	3,390	5.9	3
G67B Oesophagitis and Gastroenteritis, Minor Complexity	753	7,994	1.9	1
G70A Other Digestive System Disorders, Major Complexity	1,112	6,229	5.4	3
G70B Other Digestive System Disorders, Minor Complexity	5,219	6,072	2.1	1
Total	**135,489**	**66,844**	**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	31	38.2	24
H01B Pancreas, Liver and Shunt Procedures, Intermediate Complexity	~	301	10.3	7
H01C Pancreas, Liver and Shunt Procedures, Minor Complexity	6	112	5.8	4
H02A Major Biliary Tract Procedures, Major Complexity	~	110	19.5	17
H02B Major Biliary Tract Procedures, Minor Complexity	25	178	9.8	8
H05A Hepatobiliary Diagnostic Procedures, Major Complexity	8	64	14.8	12
H05B Hepatobiliary Diagnostic Procedures, Minor Complexity	50	37	4.4	3
H06A Other Hepatobiliary and Pancreas OR Procedures, Major Complexity	0	74	24.4	17
H06B Other Hepatobiliary and Pancreas OR Procedures, Intermediate Complexity	17	92	8.1	4
H06C Other Hepatobiliary and Pancreas OR Procedures, Minor Complexity	14	127	1.9	1
H07A Open Cholecystectomy, Major Complexity	~	24	15.5	11
H07B Open Cholecystectomy, Intermediate Complexity	0	25	9.8	8
H07C Open Cholecystectomy, Minor Complexity	19	127	5.8	5
H08A Laparoscopic Cholecystectomy, Major Complexity	23	324	8.7	6
H08B Laparoscopic Cholecystectomy, Minor Complexity	1,739	2,580	2.3	1
H40A Endoscopic Procedures for Bleeding Oesophageal Varices, Major Complexity	0	53	18.8	18
H40B Endoscopic Procedures for Bleeding Oesophageal Varices, Intermediate Complexity	~	54	7.4	6
H40C Endoscopic Procedures for Bleeding Oesophageal Varices, Minor Complexity	30	21	4.7	4
H43A ERCP Procedures, Major Complexity	11	238	17.3	13
H43B ERCP Procedures, Intermediate Complexity	275	398	9.2	7
H43C ERCP Procedures, Minor Complexity	1,387	833	4.6	2
H60A Cirrhosis and Alcoholic Hepatitis, Major Complexity	0	385	18.6	13
H60B Cirrhosis and Alcoholic Hepatitis, Intermediate Complexity	58	593	7.8	5
H60C Cirrhosis and Alcoholic Hepatitis, Minor Complexity	354	133	4.3	2
H61A Malignancy of Hepatobiliary System and Pancreas, Major Complexity	41	492	14.2	11
H61B Malignancy of Hepatobiliary System and Pancreas, Minor Complexity	1,197	691	6.3	3
H62A Disorders of Pancreas, Except Malignancy, Major Complexity	~	446	11.1	9
H62B Disorders of Pancreas, Except Malignancy, Minor Complexity	398	1,369	4.7	4
H63A Other Disorders of Liver, Major Complexity	28	537	12.3	8
H63B Other Disorders of Liver, Intermediate Complexity	404	736	4.7	2
H63C Other Disorders of Liver, Minor Complexity	1,741	490	2.2	1
H64A Disorders of the Biliary Tract, Major Complexity	135	2,139	7.9	6
H64B Disorders of the Biliary Tract, Minor Complexity	525	2,658	3.7	3
Total	**8,496**	**16,472**	**6.6**	**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	81	49.3	16
I01B Bilateral and Multiple Major Joint Procedures of Lower Limb, Minor Complexity	0	17	6.8	5
I02A Microvascular Tissue Transfers or Skin Grafts, Excluding Hand, Major Complexity	0	25	61.0	48
I02B Microvascular Tissue Transfers or Skin Grafts, Excluding Hand, Intermediate Comp	7	65	19.0	13
I02C Microvascular Tissue Transfers or Skin Grafts, Excluding Hand, Minor Complexity	23	24	5.5	2
I03A Hip Replacement, Major Complexity	0	555	25.4	16
I03B Hip Replacement, Minor Complexity	~	4,991	8.2	5
I04A Knee Replacement, Major Complexity	0	184	12.6	8
I04B Knee Replacement, Minor Complexity	~	2,186	4.9	4
I05A Other Joint Replacement, Major Complexity	0	64	13.0	8
I05B Other Joint Replacement, Minor Complexity	~	256	3.7	3
I06Z Spinal Fusion for Deformity	43	202	10.2	7
I07Z Amputation	~	61	36.0	20
I08A Other Hip and Femur Procedures, Major Complexity	~	650	28.7	17
I08B Other Hip and Femur Procedures, Minor Complexity	61	2,071	11.8	9
I09A Spinal Fusion, Major Complexity	0	36	47.4	20
I09B Spinal Fusion, Intermediate Complexity	~	146	9.9	7
I09C Spinal Fusion, Minor Complexity	~	327	5.2	4
I10A Other Back and Neck Procedures, Major Complexity	~	146	10.4	5
I10B Other Back and Neck Procedures, Minor Complexity	689	1,029	3.2	2
I11Z Limb Lengthening Procedures	~	29	5.0	4
I12A Misc Musculoskeletal Procs for Infect/Inflam of Bone/Joint, Major Complexity	~	119	34.5	25
I12B Misc Musculoskeletal Procs for Infect/Inflam of Bone/Joint, Intermediate Comp	8	266	15.2	11
I12C Misc Musculoskeletal Procs for Infect/Inflam of Bone/Joint, Minor Complexity	145	249	7.1	3
I13A Humerus, Tibia, Fibula and Ankle Procedures, Major Complexity	6	700	10.5	6
I13B Humerus, Tibia, Fibula and Ankle Procedures, Minor Complexity	311	3,884	3.0	2
I15A Cranio-Facial Surgery, Major Complexity	0	45	4.6	4
I15B Cranio-Facial Surgery, Minor Complexity	0	26	3.7	3
I16Z Other Shoulder Procedures	308	750	1.4	1
I17A Maxillo-Facial Surgery, Major Complexity	~	40	8.2	5
I17B Maxillo-Facial Surgery, Minor Complexity	8	56	2.8	2
I18A Other Knee Procedures, Major Complexity	106	324	5.7	3
I18B Other Knee Procedures, Minor Complexity	1,755	257	1.5	1
I19A Other Elbow and Forearm Procedures, Major Complexity	~	251	7.0	3
I19B Other Elbow and Forearm Procedures, Minor Complexity	557	3,104	1.8	1
I20A Other Foot Procedures, Major Complexity	12	163	6.8	3
I20B Other Foot Procedures, Minor Complexity	401	1,101	1.6	1
I21Z Local Excision and Removal of Internal Fixation Devices of Hip and Femur	54	56	4.6	2
I23A Local Excision & Removal of Internal Fixation Device, Except Hip & Fmr, Maj Comp	152	146	3.4	1
I23B Local Excision & Removal of Internal Fixation Device, Except Hip & Fmr, Min Comp	2,238	298	1.4	1
I24A Arthroscopy, Major Complexity	49	55	4.2	2
I24B Arthroscopy, Minor Complexity	488	115	1.8	1
I25A Bone and Joint Diagnostic Procedures Including Biopsy, Major Complexity	28	60	19.8	11
I25B Bone and Joint Diagnostic Procedures Including Biopsy, Minor Complexity	186	66	4.1	2
I27A Soft Tissue Procedures, Major Complexity	19	152	22.9	11
I27B Soft Tissue Procedures, Minor Complexity	707	636	2.5	1
I28A Other Musculoskeletal Procedures, Major Complexity	7	113	20.1	13
I28B Other Musculoskeletal Procedures, Intermediate Complexity	151	436	4.2	2
I28C Other Musculoskeletal Procedures, Minor Complexity	113	190	2.5	1
I29Z Knee Reconstructions, and Revisions of Reconstructions	57	369	1.4	1
I30Z Hand Procedures	2,060	1,871	1.5	1
I31A Revision of Hip Replacement, Major Complexity	0	66	33.9	28
I31B Revision of Hip Replacement, Intermediate Complexity	0	153	16.2	12
I31C Revision of Hip Replacement, Minor Complexity	0	282	9.3	6
I32A Revision of Knee Replacement, Major Complexity	0	30	39.2	29
I32B Revision of Knee Replacement, Minor Complexity	0	129	8.4	5
I40Z Infusions for Musculoskeletal Disorders, Sameday	39,175	88	1.0	1
I60Z Femoral Shaft Fractures	0	52	5.0	3
I61A Distal Femoral Fractures, Major Complexity	0	13	11.7	8
I61B Distal Femoral Fractures, Minor Complexity	0	55	4.5	3
I63A Sprains, Strains and Dislocations of Hip, Pelvis and Thigh, Major Complexity	0	58	9.1	7

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	3.0	2
I64A Osteomyelitis, Major Complexity	0	150	26.2	16
I64B Osteomyelitis, Minor Complexity	0	296	12.3	9
I65A Musculoskeletal Malignant Neoplasms, Major Complexity	0	159	18.7	12
I65B Musculoskeletal Malignant Neoplasms, Minor Complexity	0	695	7.1	4
I66A Inflammatory Musculoskeletal Disorders, Major Complexity	0	89	19.1	12
I66B Inflammatory Musculoskeletal Disorders, Intermediate Complexity	0	227	9.7	7
I66C Inflammatory Musculoskeletal Disorders, Minor Complexity	0	623	4.9	4
I67A Septic Arthritis, Major Complexity	0	81	18.3	13
I67B Septic Arthritis, Minor Complexity	0	96	7.3	6
I68A Non-surgical Spinal Disorders, Major Complexity	0	1,571	14.0	7
I68B Non-surgical Spinal Disorders, Minor Complexity	0	2,164	4.6	3
I69A Bone Diseases and Arthropathies, Major Complexity	0	432	12.2	7
I69B Bone Diseases and Arthropathies, Minor Complexity	0	628	4.3	3
I71A Other Musculotendinous Disorders, Major Complexity	0	568	11.0	6
I71B Other Musculotendinous Disorders, Minor Complexity	0	1,163	3.7	2
I72A Specific Musculotendinous Disorders, Major Complexity	0	225	10.4	7
I72B Specific Musculotendinous Disorders, Minor Complexity	0	563	4.3	3
I73A Aftercare of Musculoskeletal Implants or Prostheses, Major Complexity	0	114	27.3	16
I73B Aftercare of Musculoskeletal Implants or Prostheses, Minor Complexity	0	235	9.7	4
I74A Injuries to Forearm, Wrist, Hand and Foot, Major Complexity	0	295	15.7	7
I74B Injuries to Forearm, Wrist, Hand and Foot, Minor Complexity	0	1,111	1.8	1
I75A Injuries to Shoulder, Arm, Elbow, Knee, Leg and Ankle, Major Complexity	0	545	19.4	10
I75B Injuries to Shoulder, Arm, Elbow, Knee, Leg and Ankle, Minor Complexity	0	1,261	3.3	2
I76A Other Musculoskeletal Disorders, Major Complexity	0	132	30.8	14
I76B Other Musculoskeletal Disorders, Intermediate Complexity	0	309	8.1	5
I76C Other Musculoskeletal Disorders, Minor Complexity	0	380	3.7	2
I77A Fractures of Pelvis, Major Complexity	0	433	24.5	15
I77B Fractures of Pelvis, Minor Complexity	0	470	8.8	6
I78A Fractures of Neck of Femur, Major Complexity	0	81	21.4	13
I78B Fractures of Neck of Femur, Minor Complexity	0	131	9.5	5
I79A Pathological Fractures, Major Complexity	0	109	21.8	16
I79B Pathological Fractures, Minor Complexity	0	308	9.6	7
I80Z Femoral Fractures, Transferred to Acute Facility <2 Days	0	42	1.0	1
I81Z Musculoskeletal Injuries, Sameday	764	1,825	1.0	1
I82Z Other Sameday Treatment for Musculoskeletal Disorders	13,757	5,934	1.0	1
Total	**64,483**	**53,517**	**6.5**	**2**

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

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

MDC 9 Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
J01A Microvas Tiss Transf for Skin, Subcut Tiss & Breast Dsrds, Major Complexity	0	~	^	^
J01B Microvas Tiss Transf for Skin, Subcut Tiss & Breast Dsrds, Minor Complexity	~	54	7.7	7
J06A Major Procedures for Breast Disorders, Major Complexity	44	327	5.2	4
J06B Major Procedures for Breast Disorders, Minor Complexity	1,073	1,618	2.4	2
J07A Minor Procedures for Breast Disorders, Major Complexity	765	167	1.9	1
J07B Minor Procedures for Breast Disorders, Minor Complexity	1,256	83	1.2	1
J08A Other Skin Grafts and Debridement Procedures, Major Complexity	~	95	21.3	11
J08B Other Skin Grafts and Debridement Procedures, Intermediate Complexity	42	144	5.3	3
J08C Other Skin Grafts and Debridement Procedures, Minor Complexity	1,366	251	3.0	1
J09Z Perianal and Pilonidal Procedures	541	247	1.7	1
J10A Plastic OR Procs for Skin, Subcutaneous Tissue and Breast Disorders, Major Comp	102	99	8.6	2
J10B Plastic OR Procs for Skin, Subcutaneous Tissue and Breast Disorders, Minor Comp	1,111	141	1.7	1
J11A Other Skin, Subcutaneous Tissue and Breast Procedures, Major Complexity	1,458	478	5.9	2
J11B Other Skin, Subcutaneous Tissue and Breast Procedures, Minor Complexity	37,319	528	1.5	1
J12A Lower Limb Procedures W Ulcer or Cellulitis, Major Complexity	~	51	36.7	19
J12B Lower Limb Procedures W Ulcer or Cellulitis, Minor Complexity	19	80	11.2	9
J13A Lower Limb Procedures W/O Ulcer or Cellulitis, Major Complexity	13	*	^	^
J13B Lower Limb Procedures W/O Ulcer or Cellulitis, Minor Complexity	144	84	3.2	1
J14Z Major Breast Reconstructions	21	224	4.5	4
J60A Skin Ulcers, Major Complexity	~	219	22.6	13
J60B Skin Ulcers, Intermediate Complexity	31	259	8.7	6
J60C Skin Ulcers, Minor Complexity	1,238	143	4.8	3
J62A Malignant Breast Disorders, Major Complexity	54	199	11.9	8
J62B Malignant Breast Disorders, Minor Complexity	5,776	405	12.2	7
J63A Non-Malignant Breast Disorders, Major Complexity	288	300	3.2	2
J63B Non-Malignant Breast Disorders, Minor Complexity	3,215	53	1.5	1
J64A Cellulitis, Major Complexity	23	2,764	10.7	6
J64B Cellulitis, Minor Complexity	597	5,409	3.2	2
J65A Trauma to Skin, Subcutaneous Tissue and Breast, Major Complexity	~	488	12.5	7
J65B Trauma to Skin, Subcutaneous Tissue and Breast, Minor Complexity	64	1,197	2.2	1
J67A Minor Skin Disorders, Major Complexity	1,434	573	4.7	2
J67B Minor Skin Disorders, Minor Complexity	14,401	1,772	1.7	1
J68A Major Skin Disorders, Major Complexity	936	887	5.1	2
J68B Major Skin Disorders, Minor Complexity	20,209	321	2.2	1
J69A Skin Malignancy, Major Complexity	44	74	20.2	14
J69B Skin Malignancy, Intermediate Complexity	570	92	12.1	8
J69C Skin Malignancy, Minor Complexity	2,179	51	10.3	7
Total	**96,343**	**19,919**	**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	67	49.4	31
K01B OR Procedures for Diabetic Complications, Intermediate Complexity	0	80	22.3	15
K01C OR Procedures for Diabetic Complications, Minor Complexity	~	91	12.4	10
K02A Pituitary Procedures, Major Complexity	0	15	20.7	19
K02B Pituitary Procedures, Minor Complexity	~	62	7.1	5
K03Z Adrenal Procedures	~	64	7.0	4
K05A Parathyroid Procedures, Major Complexity	0	45	5.1	3
K05B Parathyroid Procedures, Minor Complexity	18	151	2.2	2
K06A Thyroid Procedures, Major Complexity	0	75	6.4	4
K06B Thyroid Procedures, Minor Complexity	34	609	2.5	2
K08Z Thyroglossal Procedures	7	62	1.7	1
K09A Other Endocrine, Nutritional and Metabolic OR Procedures, Major Complexity	7	37	26.7	19
K09B Other Endocrine, Nutritional and Metabolic OR Procedures, Minor Complexity	25	42	9.0	7
K10A Revisional and Open Bariatric Procedures, Major Complexity	0	~	^	^
K10B Revisional and Open Bariatric Procedures, Minor Complexity	0	*	^	^
K11A Major Laparoscopic Bariatric Procedures, Major Complexity	0	31	3.9	3
K11B Major Laparoscopic Bariatric Procedures, Minor Complexity	0	22	2.8	3
K12B Other Bariatric Procedures, Minor Complexity	~	0	-	-
K13Z Plastic OR Procedures for Endocrine, Nutritional and Metabolic Disorders	9	36	3.3	3
K40A Endoscopic and Investigative Procedures for Metabolic Disorders, Major Comp	14	313	16.7	10
K40B Endoscopic and Investigative Procedures for Metabolic Disorders, Minor Comp	910	108	6.8	6
K60A Diabetes, Major Complexity	~	941	9.5	5
K60B Diabetes, Minor Complexity	325	2,781	4.1	2
K61A Severe Nutritional Disturbance, Major Complexity	0	25	32.0	21
K61B Severe Nutritional Disturbance, Minor Complexity	~	21	25.4	7
K62A Miscellaneous Metabolic Disorders, Major Complexity	32	680	12.2	7
K62B Miscellaneous Metabolic Disorders, Intermediate Complexity	136	1,603	5.3	3
K62C Miscellaneous Metabolic Disorders, Minor Complexity	1,226	1,898	2.7	1
K63A Inborn Errors of Metabolism, Major Complexity	331	183	5.5	3
K63B Inborn Errors of Metabolism, Minor Complexity	550	59	2.6	1
K64A Endocrine Disorders, Major Complexity	702	888	6.5	4
K64B Endocrine Disorders, Minor Complexity	1,985	639	2.0	1
Total	**6,326**	**11,640**	**6.0**	**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.
- 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	~	40	8.2	7
L02B Operative Insertion of Peritoneal Catheter for Dialysis, Minor Complexity	39	49	4.4	3
L03A Kidney, Ureter and Major Bladder Procedures for Neoplasm, Major Complexity	0	88	27.9	19
L03B Kidney, Ureter and Major Bladder Procedures for Neoplasm, Intermediate Comp	~	235	11.7	9
L03C Kidney, Ureter and Major Bladder Procedures for Neoplasm, Minor Complexity	17	328	6.1	5
L04A Kidney, Ureter and Major Bladder Procedures for Non-Neoplasm, Major Complexity	~	210	23.5	13
L04B Kidney, Ureter and Major Bladder Procedures for Non-Neoplasm, Intermediate Comp	69	779	7.0	4
L04C Kidney, Ureter and Major Bladder Procedures for Non-Neoplasm, Minor Complexity	587	1,139	3.2	2
L05A Transurethral Prostatectomy for Urinary Disorder, Major Complexity	0	21	12.0	10
L05B Transurethral Prostatectomy for Urinary Disorder, Minor Complexity	~	100	5.6	4
L06A Minor Bladder Procedures, Major Complexity	~	67	16.1	11
L06B Minor Bladder Procedures, Intermediate Complexity	14	116	6.6	5
L06C Minor Bladder Procedures, Minor Complexity	101	182	3.4	2
L07A Other Transurethral Procedures, Major Complexity	25	315	9.6	5
L07B Other Transurethral Procedures, Minor Complexity	657	908	3.2	2
L08A Urethral Procedures, Major Complexity	8	34	6.7	3
L08B Urethral Procedures, Minor Complexity	92	125	2.4	2
L09A Other Procedures for Kidney and Urinary Tract Disorders, Major Complexity	0	45	37.3	23
L09B Other Procedures for Kidney and Urinary Tract Disorders, Intermediate Complexity	11	65	12.0	9
L09C Other Procedures for Kidney and Urinary Tract Disorders, Minor Complexity	262	134	3.4	1
L40Z Ureteroscopy	94	77	3.1	2
L41Z Cystourethroscopy for Urinary Disorder, Sameday	11,116	54	1.0	1
L42Z ESW Lithotripsy	2,191	107	3.7	3
L60A Kidney Failure, Major Complexity	~	685	18.0	12
L60B Kidney Failure, Intermediate Complexity	179	1,990	7.6	5
L60C Kidney Failure, Minor Complexity	1,269	442	3.1	2
L61Z Haemodialysis	171,418	15	3.4	1
L62A Kidney and Urinary Tract Neoplasms, Major Complexity	60	240	14.3	9
L62B Kidney and Urinary Tract Neoplasms, Minor Complexity	1,191	322	4.8	3
L63A Kidney and Urinary Tract Infections, Major Complexity	37	6,900	12.1	7
L63B Kidney and Urinary Tract Infections, Minor Complexity	1,184	7,367	4.5	3
L64A Urinary Stones and Obstruction, Major Complexity	98	947	4.1	2
L64B Urinary Stones and Obstruction, Minor Complexity	330	1,723	2.0	1
L65A Kidney and Urinary Tract Signs and Symptoms, Major Complexity	50	662	8.9	6
L65B Kidney and Urinary Tract Signs and Symptoms, Minor Complexity	2,152	1,606	3.1	2
L66Z Urethral Stricture	128	104	3.3	2
L67A Other Kidney and Urinary Tract Disorders, Major Complexity	515	977	8.3	4
L67B Other Kidney and Urinary Tract Disorders, Intermediate Complexity	2,418	855	3.1	2
L67C Other Kidney and Urinary Tract Disorders, Minor Complexity	2,860	182	2.3	1
L68Z Peritoneal Dialysis	101	0	-	-
Total	**199,291**	**30,235**	**7.1**	**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	56	8.9	7
M01B Major Male Pelvic Procedures, Minor Complexity	0	280	5.0	4
M02A Transurethral Prostatectomy for Reproductive System Disorder, Major Complexity	~	95	9.6	5
M02B Transurethral Prostatectomy for Reproductive System Disorder, Minor Complexity	~	547	3.9	3
M03A Penis Procedures, Major Complexity	33	61	4.0	3
M03B Penis Procedures, Minor Complexity	587	116	1.7	1
M04Z Testes Procedures	1,473	749	2.1	1
M05Z Circumcision	2,003	189	1.6	1
M06A Other Male Reproductive System OR Procedures, Major Complexity	62	42	9.8	7
M06B Other Male Reproductive System OR Procedures, Minor Complexity	73	*	^	^
M40Z Cystourethroscopy for Male Reproductive System Disorder, Sameday	1,716	0	-	-
M60A Male Reproductive System Malignancy, Major Complexity	451	439	10.2	5
M60B Male Reproductive System Malignancy, Minor Complexity	3,652	183	19.2	6
M61A Benign Prostatic Hypertrophy, Major Complexity	35	46	6.7	5
M61B Benign Prostatic Hypertrophy, Minor Complexity	1,342	66	2.7	1
M62A Male Reproductive System Inflammation, Major Complexity	~	197	7.7	5
M62B Male Reproductive System Inflammation, Minor Complexity	769	801	2.4	2
M63Z Male Sterilisation Procedures	200	~	^	^
M64A Other Male Reproductive System Disorders, Major Complexity	54	106	4.7	2
M64B Other Male Reproductive System Disorders, Minor Complexity	635	506	1.5	1
Total	**13,092**	**4,506**	**4.7**	**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 4.15 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	35	22.3	14
N01B Pelvic Evisceration and Radical Vulvectomy, Minor Complexity	0	155	6.9	5
N04A Hysterectomy for Non-Malignancy, Major Complexity	0	248	6.6	6
N04B Hysterectomy for Non-Malignancy, Minor Complexity	~	1,498	4.1	4
N05A Oophorectomy and Complex Fallopian Tube Procedures for Non-Malignancy, Maj Complexity	~	78	5.9	5
N05B Oophorectomy and Complex Fallopian Tube Procedures for Non-Malignancy, Min Complexity	179	534	2.8	2
N06A Female Reproductive System Reconstructive Procedures, Major Complexity	~	100	4.9	4
N06B Female Reproductive System Reconstructive Procedures, Minor Complexity	207	1,343	2.5	2
N07A Other Uterus and Adnexa Procedures for Non-Malignancy, Major Complexity	1,165	1,178	2.5	2
N07B Other Uterus and Adnexa Procedures for Non-Malignancy, Minor Complexity	1,746	162	1.3	1
N08Z Endoscopic and Laparoscopic Procedures, Female Reproductive System	925	420	2.5	1
N09Z Other Vagina, Cervix and Vulva Procedures	12,249	737	5.1	2
N10Z Diagnostic Curettage and Diagnostic Hysteroscopy	8,478	573	2.7	1
N11A Other Female Reproductive System OR Procedures, Major Complexity	19	113	13.4	7
N11B Other Female Reproductive System OR Procedures, Minor Complexity	8	7	3.6	3
N12A Uterus and Adnexa Procedures for Malignancy, Major Complexity	0	41	19.8	16
N12B Uterus and Adnexa Procedures for Malignancy, Intermediate Complexity	0	157	6.9	6
N12C Uterus and Adnexa Procedures for Malignancy, Minor Complexity	28	371	4.1	4
N60A Female Reproductive System Malignancy, Major Complexity	8	207	18.6	12
N60B Female Reproductive System Malignancy, Minor Complexity	1,398	453	7.9	4
N61A Female Reproductive System Infections, Major Complexity	~	104	7.9	5
N61B Female Reproductive System Infections, Minor Complexity	196	326	2.6	2
N62A Menstrual and Other Female Reproductive System Disorders, Major Complexity	110	580	3.3	2
N62B Menstrual and Other Female Reproductive System Disorders, Minor Complexity	5,817	2,167	1.8	1
Total	**32,544**	**11,587**	**3.9**	**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 4.16 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	1,382	10.9	8
O01B Caesarean Delivery, Intermediate Complexity	0	6,899	5.8	5
O01C Caesarean Delivery, Minor Complexity	0	11,293	4.1	4
O02A Vaginal Delivery W OR Procedures, Major Complexity	0	157	4.9	4
O02B Vaginal Delivery W OR Procedures, Minor Complexity	0	723	3.3	3
O03A Ectopic Pregnancy, Major Complexity	0	130	3.0	2
O03B Ectopic Pregnancy, Minor Complexity	26	551	2.0	2
O04A Postpartum and Post Abortion W OR Procedures, Major Complexity[b]	~	75	6.1	4
O04B Postpartum and Post Abortion W OR Procedures, Minor Complexity[b]	16	143	2.6	2
O05Z Abortion W OR Procedures[b]	1,518	2,625	1.3	1
O60A Vaginal Delivery, Major Complexity	0	3,856	4.8	4
O60B Vaginal Delivery, Intermediate Complexity	0	18,219	3.0	3
O60C Vaginal Delivery, Minor Complexity	0	17,949	2.1	2
O61A Postpartum and Post Abortion W/O OR Procedures, Major Complexity[b]	15	540	3.5	3
O61B Postpartum and Post Abortion W/O OR Procedures, Minor Complexity[b]	1,012	2,637	2.1	1
O63A Abortion W/O OR Procedures, Major Complexity[b]	~	158	2.7	2
O63B Abortion W/O OR Procedures, Minor Complexity[b]	254	2,180	1.3	1
O66A Antenatal and Other Obstetric Admissions, Major Complexity	1,274	11,033	2.1	1
O66B Antenatal and Other Obstetric Admissions, Minor Complexity	7,160	30,026	1.3	1
Total	**11,279**	**110,576**	**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 Faclity <5Days	~	41	2.1	2
P02Z Cardiothoracic and Vascular Procedures for Neonates	0	52	33.9	17
P03A Neonate, AdmWt 1000-1499g W Significant OR Proc/Vent>=96hrs, Major Complexity	0	66	65.9	68
P03B Neonate, AdmWt 1000-1499g W Significant OR Proc/Vent>=96hrs, Minor Complexity	0	160	39.7	41
P04A Neonate, AdmWt 1500-1999g W Significant OR Proc/Vent>=96hrs, Major Complexity	0	22	72.0	45
P04B Neonate, AdmWt 1500-1999g W Significant OR Proc/Vent>=96hrs, Minor Complexity	0	119	29.8	28
P05A Neonate, AdmWt 2000-2499g W Significant OR Proc/Vent>=96hrs, Major Complexity	0	16	148.4	47
P05B Neonate, AdmWt 2000-2499g W Significant OR Proc/Vent>=96hrs, Minor Complexity	0	88	21.5	18
P06A Neonate, AdmWt >=2500g W Significant OR Proc/Vent>=96hrs, Major Complexity	0	98	38.2	22
P06B Neonate, AdmWt >=2500g W Significant OR Proc/Vent>=96hrs, Minor Complexity	~	189	11.6	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	85	2.1	2
P60B Neonate W/O Sig OR/Vent>=96hrs, Died/Transfer Acute Facility <5 Days, MinC	9	520	1.4	1
P61Z Neonate, AdmWt <750g W/O Significant OR procedure	0	71	71.0	71
P62A Neonate, AdmWt 750-999g W/O Significant OR Procedures, Major Complexity	0	41	89.0	88
P62B Neonate, AdmWt 750-999g W/O Significant OR Procedures, Minor Complexity	0	82	47.3	43
P63A Neonate, AdmWt 1000-1249g W/O Significant OR Proc/Vent>=96hrs, Major Complexity	0	26	45.6	44
P63B Neonate, AdmWt 1000-1249g W/O Significant OR Proc/Vent>=96hrs, Minor Complexity	0	22	33.1	35
P64A Neonate, AdmWt 1250-1499g W/O Significant OR Proc/Vent>=96hrs, Major Complexity	0	31	41.3	39
P64B Neonate, AdmWt 1250-1499g W/O Significant OR Proc/Vent>=96hrs, Minor Complexity	0	88	30.9	30
P65A Neonate, AdmWt 1500-1999g W/O Significant OR Proc/Vent>=96hrs, Extreme Comp	0	47	32.1	32
P65B Neonate, AdmWt 1500-1999g W/O Significant OR Proc/Vent>=96hrs, Major Complexity	0	99	25.6	24
P65C Neonate, AdmWt 1500-1999g W/O Significant OR Proc/Vent>=96hrs, Intermediate Comp	0	321	19.1	18
P65D Neonate, AdmWt 1500-1999g W/O Significant OR Proc/Vent>=96hrs, Minor Complexity	~	177	12.0	11
P66A Neonate, AdmWt 2000-2499g W/O Significant OR Proc/Vent>=96hrs, Extreme Comp	~	94	18.9	17
P66B Neonate, AdmWt 2000-2499g W/O Significant OR Proc/Vent>=96hrs, Major Complexity	~	339	13.5	13
P66C Neonate, AdmWt 2000-2499g W/O Significant OR Proc/Vent>=96hrs, Intermediate Comp	~	669	8.6	7
P66D Neonate, AdmWt 2000-2499g W/O Significant OR Proc/Vent>=96hrs, Minor Complexity	18	484	3.8	3
P67A Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, <37 Comp Wks Gest, Extr Comp	~	87	14.7	12
P67B Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, <37 Comp Wks Gest, Maj Comp	8	181	9.0	8
P67C Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, <37 Comp Wks Gest, Int Comp	10	200	8.0	7
P67D Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, <37 Comp Wks Gest, Min Comp	21	304	5.3	3
P68A Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Comp Wks Gest, Ext Comp	11	502	10.3	7
P68B Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Comp Wks Gest, Maj Comp	23	1,094	5.0	3
P68C Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Comp Wks Gest, Int Comp	64	1,480	3.6	3
P68D Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Comp Wks Gest, Min Comp	270	6,081	2.2	2
Total	**447**	**13,987**	**7.9**	**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	~	69	23.3	10
Q02B Blood and Immune System Disorders W Other OR Procedures, Minor Complexity	423	179	4.9	2
Q60A Reticuloendothelial and Immunity Disorders, Major Complexity	569	1,280	6.8	4
Q60B Reticuloendothelial and Immunity Disorders, Minor Complexity	3,264	437	2.8	1
Q61A Red Blood Cell Disorders, Major Complexity	814	2,173	7.6	5
Q61B Red Blood Cell Disorders, Intermediate Complexity	12,579	2,517	2.6	1
Q61C Red Blood Cell Disorders, Minor Complexity	22,077	52	1.0	1
Q62A Coagulation Disorders, Major Complexity	*	536	5.4	2
Q62B Coagulation Disorders, Minor Complexity	4,184	628	2.2	1
Total	**43,973**	**7,912**	**5.1**	**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 4.19 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	0	74	31.3	17
R01B Lymphoma and Leukaemia W Major OR Procedures, Minor Complexity	14	57	6.7	4
R02A Other Neoplastic Disorders W Major OR Procedures, Major Complexity	~	32	16.2	12
R02B Other Neoplastic Disorders W Major OR Procedures, Intermediate Complexity	~	100	8.0	7
R02C Other Neoplastic Disorders W Major OR Procedures, Minor Complexity	49	144	3.9	3
R03A Lymphoma and Leukaemia W Other OR Procedures, Major Complexity	~	69	45.6	32
R03B Lymphoma and Leukaemia W Other OR Procedures, Intermediate Complexity	20	115	13.5	12
R03C Lymphoma and Leukaemia W Other OR Procedures, Minor Complexity	205	155	4.9	3
R04A Other Neoplastic Disorders W Other OR Procedures, Major Complexity	20	66	17.8	11
R04B Other Neoplastic Disorders W Other OR Procedures, Minor Complexity	901	103	4.9	3
R60A Acute Leukaemia, Major Complexity	175	431	23.3	15
R60B Acute Leukaemia, Minor Complexity	4,191	498	5.3	3
R61A Lymphoma and Non-Acute Leukaemia, Major Complexity	982	1,451	14.1	8
R61B Lymphoma and Non-Acute Leukaemia, Minor Complexity	17,348	1,678	4.5	3
R62A Other Neoplastic Disorders, Major Complexity[b]	711	153	13.8	10
R62B Other Neoplastic Disorders, Intermediate Complexity[b]	4,028	110	6.9	4
R62C Other Neoplastic Disorders, Minor Complexity[b]	105,929	27	6.6	3
R63Z Chemotherapy	115,060	0	-	-
Total	**249,639**	**5,263**	**10.6**	**5**

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

TABLE 4.20 Total Discharges: MDC 18 Infectious and Parasitic Diseases, Systemic or Unspecified Sites: AR-DRG 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	53	21.7	15
S65B Human Immunodeficiency Virus, Intermediate Complexity	~	119	9.7	6
S65C Human Immunodeficiency Virus, Minor Complexity	46	40	4.3	3
T01A Infectious and Parasitic Diseases W OR Procedures, Major Complexity	~	128	38.9	25
T01B Infectious and Parasitic Diseases W OR Procedures, Intermediate Complexity	7	199	22.4	13
T01C Infectious and Parasitic Diseases W OR Procedures, Minor Complexity	31	261	10.4	7
T40Z Infectious and Parasitic Diseases W Ventilator Support	0	33	15.8	9
T60A Septicaemia, Major Complexity	0	421	26.5	17
T60B Septicaemia, Intermediate Complexity	~	1,190	12.5	8
T60C Septicaemia, Minor Complexity	~	1,801	7.5	6
T61A Postoperative and Post-Traumatic Infections, Major Complexity	18	364	10.2	6
T61B Postoperative and Post-Traumatic Infections, Minor Complexity	58	781	4.7	3
T62A Fever of Unknown Origin, Major Complexity	~	185	8.7	5
T62B Fever of Unknown Origin, Minor Complexity	38	939	2.5	1
T63A Viral Illnesses, Major Complexity	25	596	4.4	2
T63B Viral Illnesses, Minor Complexity	618	4,152	1.8	1
T64A Other Infectious and Parasitic Diseases, Major Complexity	0	21	23.0	13
T64B Other Infectious and Parasitic Diseases, Intermediate Complexity	30	126	9.9	6
T64C Other Infectious and Parasitic Diseases, Minor Complexity	110	288	4.8	2
Total	**1,001**	**11,697**	**6.8**	**3**

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

TABLE 4.21 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	64	~	^	^
U60A Mental Health Treatment W/O ECT, Sameday, Major Complexity	366	332	1.0	1
U60B Mental Health Treatment W/O ECT, Sameday, Minor Complexity	225	483	1.0	1
U61A Schizophrenia Disorders, Major Complexity	0	43	59.2	22
U61B Schizophrenia Disorders, Minor Complexity	0	96	34.3	21
U62A Paranoia and Acute Psychotic Disorders, Major Complexity	0	39	17.0	10
U62B Paranoia and Acute Psychotic Disorders, Minor Complexity	0	106	12.9	7
U63A Major Affective Disorders, Major Complexity	0	40	25.9	18
U63B Major Affective Disorders, Minor Complexity	0	125	20.9	13
U64A Other Affective and Somatoform Disorders, Major Complexity	0	48	20.1	11
U64B Other Affective and Somatoform Disorders, Minor Complexity	0	130	9.0	4
U65A Anxiety Disorders, Major Complexity	0	140	12.2	6
U65B Anxiety Disorders, Minor Complexity	0	312	5.1	2
U66A Eating and Obsessive-Compulsive Disorders, Major Complexity	0	51	35.1	28
U66B Eating and Obsessive-Compulsive Disorders, Minor Complexity	0	152	13.4	6
U67A Personality Disorders and Acute Reactions, Major Complexity	0	110	17.2	6
U67B Personality Disorders and Acute Reactions, Minor Complexity	0	166	5.3	3
U68A Childhood Mental Disorders, Major Complexity	0	33	9.9	2
U68B Childhood Mental Disorders, Minor Complexity	0	*	^	^
Total	**655**	**2,436**	**10.2**	**2**

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

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

MDC 20 Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
V60A Alcohol Intoxication and Withdrawal, Major Complexity	0	434	8.6	5
V60B Alcohol Intoxication and Withdrawal, Minor Complexity	0	1,090	3.2	2
V61A Drug Intoxication and Withdrawal, Major Complexity	0	14	9.9	7
V61B Drug Intoxication and Withdrawal, Minor Complexity	0	95	5.9	2
V62A Alcohol Use and Dependence, Major Complexity	0	95	12.0	6
V62B Alcohol Use and Dependence, Minor Complexity	0	382	4.5	3
V63Z Opioid Use and Dependence	0	96	18.1	20
V64Z Other Drug Use and Dependence	0	51	12.8	7
V65Z Treatment for Alcohol Disorders, Sameday	*	442	1.0	1
V66Z Treatment for Drug Disorders, Sameday	~	50	1.0	1
Total	**9**	**2,749**	**5.0**	**2**

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

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

MDC 21 Injuries, Poisonings and Toxic Effects of Drugs	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
W01A Vent, Trac & Cran Procs for Mult Sig Trauma, Major Complexity	0	14	74.2	49
W01B Vent, Trac & Cran Procs for Mult Sig Trauma, Intermediate Complexity	0	39	47.2	33
W01C Vent, Trac & Cran Procs for Mult Sig Trauma, Minor Complexity	0	31	21.5	15
W02A Hip, Femur and Lower Limb Procedures for Multiple Sig Trauma, Major Complexity	0	22	30.3	22
W02B Hip, Femur and Lower Limb Procedures for Multiple Sig Trauma, Minor Complexity	0	81	25.1	15
W03Z Abdominal Procedures for Multiple Significant Trauma	0	18	52.4	13
W04A Multiple Significant Trauma W Other OR Procedures, Major Complexity	0	17	29.1	16
W04B Multiple Significant Trauma W Other OR Procedures, Minor Complexity	0	41	14.5	11
W60A Multiple Sig Trauma, Died or Transferred to Acute Facility <5 Days, Major Comp	0	29	2.3	2
W60B Multiple Sig Trauma, Died or Transferred to Acute Facility <5 Days, Minor Comp	0	24	2.2	2
W61A Multiple Significant Trauma W/O OR Procedures, Major Complexity	0	88	34.3	24
W61B Multiple Significant Trauma W/O OR Procedures, Minor Complexity	0	150	9.2	6
X02A Microvascular Tissue Transfer and Skin Grafts for Injuries to Hand, Major Comp	~	19	6.8	6
X02B Microvascular Tissue Transfer and Skin Grafts for Injuries to Hand, Minor Comp	8	79	1.8	1
X04A Other Procedures for Injuries to Lower Limb, Major Complexity	0	26	21.1	15
X04B Other Procedures for Injuries to Lower Limb, Minor Complexity	11	146	2.7	1
X05A Other Procedures for Injuries to Hand, Major Complexity	46	231	2.6	2
X05B Other Procedures for Injuries to Hand, Minor Complexity	299	955	1.1	1
X06A Other Procedures for Other Injuries, Major Complexity	~	150	16.6	11
X06B Other Procedures for Other Injuries, Intermediate Complexity	26	262	6.3	4
X06C Other Procedures for Other Injuries, Minor Complexity	163	926	2.3	1
X07A Skin Grafts for Injuries Excluding Hand, Major Complexity	~	30	23.1	16
X07B Skin Grafts for Injuries Excluding Hand, Intermediate Complexity	~	38	11.1	7
X07C Skin Grafts for Injuries Excluding Hand, Minor Complexity	13	54	5.6	3
X40A Injuries, Poisoning and Toxic Effects of Drugs W Ventilator Support, Major Comp	0	34	12.9	10
X40B Injuries, Poisoning and Toxic Effects of Drugs W Ventilator Support, Minor Comp	0	55	5.8	5
X60A Injuries, Major Complexity	8	994	10.1	5
X60B Injuries, Minor Complexity	357	3,495	1.8	1
X61A Allergic Reactions, Major Complexity	0	115	3.3	1
X61B Allergic Reactions, Minor Complexity	~	292	1.3	1
X62A Poisoning/Toxic Effects of Drugs and Other Substances, Major Complexity	~	1,019	6.2	3
X62B Poisoning/Toxic Effects of Drugs and Other Substances, Minor Complexity	108	3,175	1.8	1
X63A Sequelae of Treatment, Major Complexity	23	692	8.1	4
X63B Sequelae of Treatment, Minor Complexity	343	1,812	2.4	1
X64A Other Injuries, Poisonings and Toxic Effects, Major Complexity	0	172	12.9	7
X64B Other Injuries, Poisonings and Toxic Effects, Minor Complexity	9	488	3.1	1
Total	**1,432**	**15,813**	**4.2**	**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	10	50.6	38
Y02A Skin Grafts for Other Burns, Major Complexity	0	60	24.4	17
Y02B Skin Grafts for Other Burns, Intermediate Complexity	7	60	10.8	8
Y02C Skin Grafts for Other Burns, Minor Complexity	~	25	6.6	6
Y03A Other OR Procedures for Other Burns, Major Complexity	21	21	9.0	4
Y03B Other OR Procedures for Other Burns, Minor Complexity	~	14	3.1	1
Y60Z Burns, Transferred to Acute Facility <5 Days	0	48	1.3	1
Y61Z Severe Burns	0	52	11.7	3
Y62A Other Burns, Major Complexity	~	100	8.4	4
Y62B Other Burns, Minor Complexity	125	206	3.1	2
Total	**165**	**596**	**8.7**	**3**

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

TABLE 4.25 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	58	135	30.1	12
Z01B Other Contacts W Health Services W OR Procedures, Minor Complexity	870	192	3.3	1
Z40Z Other Contacts W Health Services W Endoscopy, Sameday	16,309	15	1.0	1
Z60A Rehabilitation, Major Complexity	612	1,352	43.5	31
Z60B Rehabilitation, Minor Complexity	746	2,324	28.1	19
Z61A Signs and Symptoms, Major Complexity	54	690	9.9	5
Z61B Signs and Symptoms, Intermediate Complexity	193	889	3.1	1
Z61C Signs and Symptoms, Minor Complexity	1,172	1,298	2.0	1
Z63A Other Follow Up After Surgery or Medical Care, Major Complexity	55	1,925	23.9	13
Z63B Other Follow Up After Surgery or Medical Care, Minor Complexity	1,985	1,838	10.3	3
Z64A Other Factors Influencing Health Status, Major Complexity	4,035	736	10.4	2
Z64B Other Factors Influencing Health Status, Minor Complexity	35,384	1,328	1.8	1
Z65Z Congenital Anomalies and Problems Arising from Neonatal Period	84	53	3.5	1
Z66Z Sleep Disorders	18	658	1.1	1
Total	**61,575**	**13,433**	**16.2**	**4**

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

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

Unassignable to MDC[b]	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
801A OR Procedures Unrelated to Principal Diagnosis, Major Complexity	~	423	49.2	31
801B OR Procedures Unrelated to Principal Diagnosis, Intermediate Complexity	*	504	16.8	12
801C OR Procedures Unrelated to Principal Diagnosis, Minor Complexity	300	369	5.1	3
Total	**342**	**1,296**	**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*. An example of when this may be assigned is when a patient is admitted for a medical treatment; they develop a complication unrelated to the principal diagnosis and later have an OR procedure performed for the additional diagnoses associated with the complication.
Error DRGs: Episodes that contain clinically atypical or invalid information are assigned to one of three error DRGs: 960Z *Ungroupable*, *961Z Unacceptable Principal Diagnosis* or 963Z *Neonatal Diagnosis Not Consistent W Age/Weight*.
Australian Consortium for Classification Development, 2015, *Australian Refined Diagnosis Related Groups, Version 8.0, Definitions Manual*, Volume 1. Independent Hospital Pricing Authority. p.11.

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

Pre-MDC	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
A01Z Liver Transplant	0	58	27.4	17
A03Z Lung or Heart-Lung Transplant	0	40	32.6	20
A05Z Heart Transplant	0	12	71.1	30
A06A Tracheostomy and/or Ventilation >=96hours, Major Complexity	0	257	109.4	68
A06B Tracheostomy and/or Ventilation >=96hours, Intermediate Complexity	0	801	51.9	33
A06C Tracheostomy and/or Ventilation >=96hours, Minor Complexity	~	1,031	29.3	19
A07A Allogeneic Bone Marrow Transplant, Age <=16 Years or Major Complexity	0	50	55.7	44
A07B Allogeneic Bone Marrow Transplant, Age >=17 Years and Minor Complexity	~	86	25.2	30
A08A Autologous Bone Marrow Transplant, Major Complexity	0	115	26.5	22
A08B Autologous Bone Marrow Transplant, Minor Complexity	~	45	8.9	5
A09A Kidney Transplant, Age <=16 Years or Major Complexity	0	29	14.7	14
A09B Kidney Transplant, Age >=17 Years and Minor Complexity	0	155	9.6	9
A10Z Insertion of Ventricular Assist Device	0	~	^	^
A11A Insertion of Implantable Spinal Infusion Device, Major Complexity	0	9	4.9	4
A11B Insertion of Implantable Spinal Infusion Device, Minor Complexity	0	*	^	^
A12Z Insertion of Neurostimulator Device	148	102	5.6	1
A40A ECMO, Major Complexity	0	13	70.7	52
A40B ECMO, Minor Complexity	0	12	20.0	14
Total	**153**	**2,825**	**41.2**	**23**

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
2017

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DIABETES DISCHARGE PROFILE, 2017

A.1.1 INTRODUCTION

As noted in Section One, this Annex is designed to highlight particular topics of interest that merit more focused supplementary analysis. The focus of this year's Annex is discharges with a principal diagnosis[1,2] of diabetes. While recognising that services relating to diabetes are mostly delivered in the community, this Annex provides a snapshot of acute hospital services delivered for this condition in 2017.

What is Diabetes?[3]

Diabetes is a chronic disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces. Insulin is a hormone that regulates blood sugar. Hyperglycaemia, or raised blood sugar, is a common effect of uncontrolled diabetes and over time leads to serious damage to many of the body's systems, especially the nerves and blood vessels.

Type 1 diabetes (previously known as insulin-dependent, juvenile or childhood-onset) is characterized by deficient insulin production and requires daily administration of insulin. The cause of type 1 diabetes is not known and it is not preventable with current knowledge.

Type 2 diabetes (formerly called non-insulin-dependent or adult-onset) results from the body's ineffective use of insulin. Type 2 diabetes comprises the majority of people with diabetes around the world, and is largely the result of excess body weight and physical inactivity. Symptoms may be similar to those of type 1 diabetes, but are often less marked. As a result, the disease may be diagnosed several years after onset, once complications have already arisen. Until recently, this type of diabetes was seen only in adults but it is now also occurring increasingly frequently in children.

Other categories of diabetes include gestational diabetes (hyperglycaemia with blood glucose values above normal but below those diagnostic of diabetes, occurring during pregnancy) and impaired glucose tolerance and impaired fasting glycaemia (intermediate conditions in the transition between normality and diabetes). There are other rarer causes including genetic syndromes, acquired processes such as pancreatitis, diseases such as cystic fibrosis, exposure to certain drugs, viruses, and unknown causes.

This Annex will focus on the two main types of diabetes using ICD-10-AM diagnosis codes E10 *type 1 diabetes mellitus* and E11 *type 2 diabetes mellitus*. In 2017, 9,939 discharges had a principal diagnosis of either *type 1 diabetes mellitus*

1 A **principal diagnosis** is defined as, 'the diagnosis established after study to be chiefly responsible for occasioning an episode of admitted patient care, an episode of residential care or attendance at the healthcare establishment, as represented by a code'. Diabetes may be reported as a secondary diagnosis in HIPE but analysis of this activity is beyond the scope of this Annex. See Section Three for details of clinical coding and classifications.

2 In 2015 there were new guidelines in ICD-10-AM 8th Edition for coding Diabetes under ACS 0401. Diabetes Mellitus must always be coded when documented (see Appendix IX).

3 Source: http://www.who.int/en/news-room/fact-sheets/detail/diabetes [Accessed 8th August 2018].

(31.2 per cent) or *type 2 diabetes mellitus* (68.8 per cent) – referred to hereafter as diabetes discharges. Due to the implementation of new coding guidelines for diabetes in 8th Edition of the ICD-10-AM Classification the sequencing of codes has resulted in a higher proportion of diabetes discharges with an additional diagnosis of diabetes (see coding guidelines under *ACS 0401* in Appendix IX). In 2017, there were 101,736 discharges with an additional diagnosis of E10 *type 1 diabetes mellitus* and E11 *type 2 diabetes mellitus.*

A.1.2 DIABETES – DEMOGRAPHIC ANALYSIS

Table A 1.1 shows the distribution of diabetes discharges by selected variables. The following points are a brief summary of diabetes discharges in 2017:

- Males accounted for the majority of discharges (60.8 per cent) while females accounted for the remaining 39.2 per cent of discharges.
- The largest proportion of diabetes discharges were aged between 65 and 74 years (23.9 per cent).
- Discharges with Type 2 diabetes comprised the majority of total diabetes discharges (68.8 per cent) compared to 31.2 per cent of discharges with Type 1 diabetes.
- As per figure A 1.1, discharges with Type 1 diabetes were mainly treated as in-patients (61.5 per cent) compared to discharges with Type 2 diabetes who were mainly treated as day patients (62.3 per cent).
- Overnight in-patients with Type 1 diabetes stayed on average 6.1 days in hospital compared to 10.9 days for discharges with Type 2 diabetes.

TABLE A 1.1 Diabetes Discharges: Acute Public Hospital Discharges in HIPE (N, %, In-patient Length of Stay)

	Day Patients	In-patients					Total Discharges	
		Same Day In-patients	Overnight In-patients			Total In-patients		
	N	N	N	Mean LOS	Med LOS	N	N	%
Total	**5,453**	**650**	**3,836**	**8.7**	**4**	**4,486**	**9,939**	**100**
Sex								
Male	3,356	387	2,296	9.6	4	2,683	6,039	60.8
Female	2,097	263	1,540	7.4	4	1,803	3,900	39.2
Age Group								
0-16 Years	36	33	552	4.1	4	585	621	6.2
17-24 Years	85	34	256	2.9	2	290	375	3.8
25-34 Years	283	69	280	3.5	2	349	632	6.4
35-44 Years	316	84	337	5.6	3	421	737	7.4
45-54 Years	683	122	424	9.1	4	546	1,229	12.4
55-64 Years	1,282	119	526	9.2	5	645	1,927	19.4
65-74 Years	1,617	87	671	12.2	6	758	2,375	23.9
75 Years and Over	1,151	102	790	13.6	7	892	2,043	20.6
Public/Private Status[a]								
Public	4,778	608	3,295	8.8	4	3,903	8,681	87.3
Private	675	42	541	8.6	4	583	1,258	12.7
Hospital Group								
Ireland East	634	191	819	7.7	4	1,010	1,644	16.5
RCSI	50	97	539	8.7	4	636	686	6.9
Dublin Midlands	~	51	597	9.6	5	648	*	–
South/South West	1,464	110	691	9.4	4	801	2,265	22.8
UL	656	73	335	9.8	6	408	1,064	10.7
Saolta	2,638	114	681	9.5	5	795	3,433	34.5
Children's	*	14	174	3.4	3	188	*	–
Admission Type								
Type 1[b]	**1,192**	**196**	**1,708**	**6.1**	**3**	**1,904**	**3,096**	**100**
Day Patients	1,192	–	–	–	–	–	1,192	38.5
In-patients	–	196	1,708	6.1	3	1,904	1,904	61.5
Elective	–	~	117	5.7	3	*	*	–
Emergency	–	*	1,591	6.1	3	*	*	–
Type 2[c]	**4,261**	**454**	**2,128**	**10.9**	**6**	**2,582**	**6,843**	**100**
Day Patients	4,261	–	–	–	–	–	4,261	62.3
In-patients	–	454	2,128	10.9	6	2,582	2,582	37.7
Elective	–	9	248	11.8	4	257	257	3.8
Emergency	–	445	1,880	10.8	6	2,325	2,325	34.0

Note: Percentage columns are subject to rounding.

~ Denotes five or fewer discharges reported to HIPE.

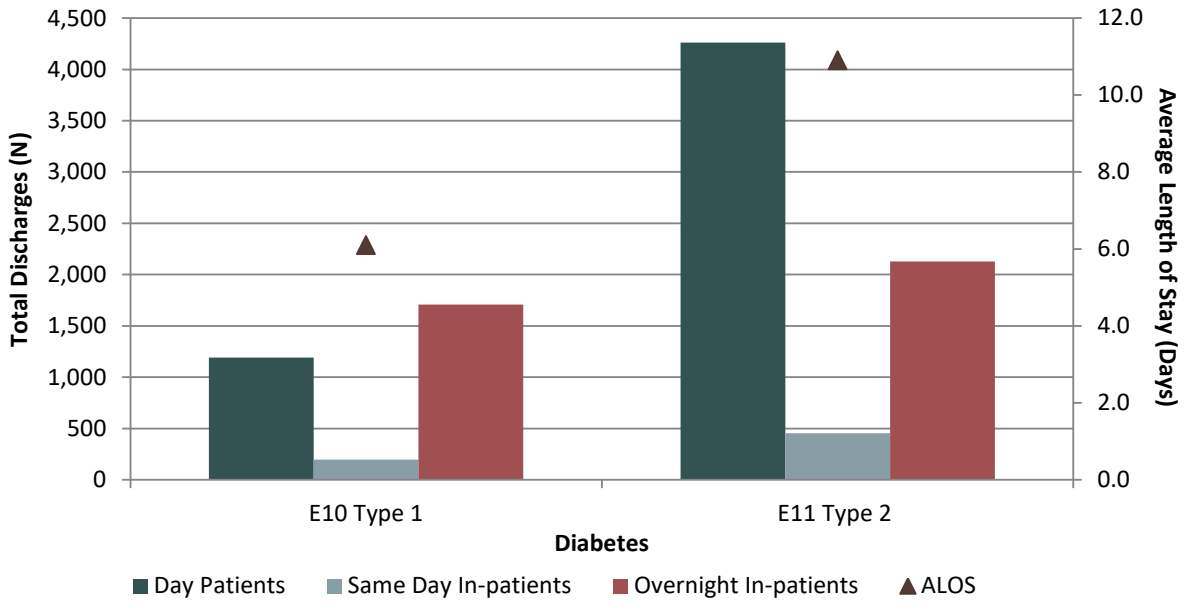
* Further suppression required to prevent disclosure of five or fewer discharges

a 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.

b Discharges with a principal diagnosis of E10 (type 1 diabetes mellitus)

c Discharges with a principal diagnosis of E11 (type 2 diabetes mellitus)

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



Note: See Table A 1.1 for data.

A.1.3 TYPE OF DIABETES

As shown in Table A 1.2, the distribution of diabetes discharges by type of diabetes differs by age:

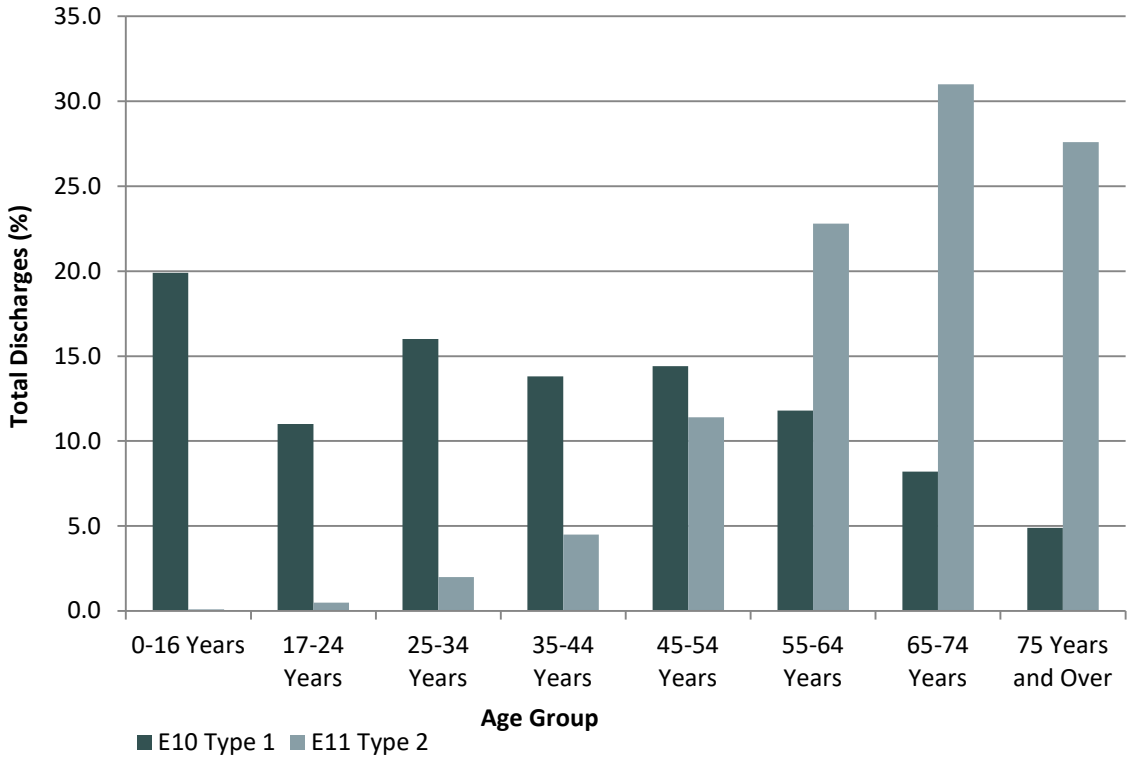
- For discharges with Type 1 Diabetes, the majority were aged between 0 and 16 years (19.9 per cent). When disaggregated by patient type the majority of these were in-patient discharges.
- For discharges with Type 2 diabetes, the majority were aged between 65 and 74 years, with the majority of these treated as day patients.

TABLE A 1.2 Diabetes Discharges: Type of Diabetes by Age Group (N, %)

		Day Patients		Total In-Patients		Total Discharges	
		N	%	N	%	N	%
Total Diabetes	0-16 Years	36	0.7	585	13.0	621	6.2
	17-24 Years	85	1.6	290	6.5	375	3.8
	25-34 Years	283	5.2	349	7.8	632	6.4
	35-44 Years	316	5.8	421	9.4	737	7.4
	45-54 Years	683	12.5	546	12.2	1,229	12.4
	55-64 Years	1,282	23.5	645	14.4	1,927	19.4
	65-74 Years	1,617	29.7	758	16.9	2,375	23.9
	75 Years and Over	1,151	21.1	892	19.9	2,043	20.6
	Total	**5,453**	**100**	**4,486**	**100**	**9,939**	**100**
E10 Type 1	0-16 Years	36	3.0	579	30.4	615	19.9
	17-24 Years	77	6.5	264	13.9	341	11.0
	25-34 Years	226	19.0	268	14.1	494	16.0
	35-44 Years	179	15.0	249	13.1	428	13.8
	45-54 Years	238	20.0	208	10.9	446	14.4
	55-64 Years	230	19.3	134	7.0	364	11.8
	65-74 Years	145	12.2	110	5.8	255	8.2
	75 Years and Over	61	5.1	92	4.8	153	4.9
	Total	**1,192**	**100**	**1,904**	**100**	**3,096**	**100**
E11 Type 2	0-16 Years	0	0.0	6	0.2	6	0.1
	17-24 Years	8	0.2	26	1.0	34	0.5
	25-34 Years	57	1.3	81	3.1	138	2.0
	35-44 Years	137	3.2	172	6.7	309	4.5
	45-54 Years	445	10.4	338	13.1	783	11.4
	55-64 Years	1,052	24.7	511	19.8	1,563	22.8
	65-74 Years	1,472	34.5	648	25.1	2,120	31.0
	75 Years and Over	1,090	25.6	800	31.0	1,890	27.6
	Total	**4,261**	**100**	**2,582**	**100**	**6,843**	**100**

Note: Percentage columns are subject to rounding.

FIGURE A 1.2 Total Diabetes Discharges: Age Group by Type of Diabetes (%)



Note: See Table A 1.2 for data.

A.1.4 PRINCIPAL PROCEDURES

Table A 1.3 presents the top 20 principal procedures for total diabetes discharges based on the ICD-10-AM classification.[4]

- Over 96 per cent of day patient diabetes discharges had a principal procedure, compared to 69.3 per cent of in-patient diabetes discharges.
- Procedure block *Application, insertion or removal procedures on retina, choroid or posterior chamber* accounted for the highest proportion of day patient diabetes discharges (69.9 per cent).
- *Generalised allied health interventions* were reported as a principal procedure block for 52.3 per cent of in-patient discharges.[5]

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

[5] *Generalised allied health interventions* include interventions such as diabetes education, dietetics, physiotherapy, pharmacy, occupational therapy, and social work.

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

		Day Patients		In-patients					
				Same Day In-patients	Overnight In-patients			Total In-patients	
Procedure Block	Principal Procedure	N	%	N	N	Mean LOS	Med LOS	N	%
0209	Application insertion or removal procedures on retina choroid or posterior chamber	3,812	69.9	~	~	^	^	~	–
1916	Generalised allied health interventions	223	4.1	169	2,175	7	4	2,344	52.3
0211	Destruction procedures on retina choroid or posterior chamber	510	9.4	~	~	^	^	6	0.1
1940	Ultrasound of head or neck	268	4.9	0	0	–	–	0	0.0
1533	Amputation of ankle or foot[a]	~	–	0	162	21.2	11	162	3.6
1990	Other angiography	89	1.6	0	0	–	–	0	0.0
1954	Computerised tomography of orbit (and brain)	81	1.5	0	0	–	–	0	0.0
0197	Extracapsular crystalline lens extraction by phacoemulsification	68	1.2	0	6	1.7	2	6	0.1
1060	Haemodialysis	0	–	~	48	11.7	7	*	–
1008	Panendoscopy with excision	0	–	0	48	12	8	48	1.1
1628	Other debridement of skin and subcutaneous tissue	~	–	~	37	15.8	12	*	–
0207	Vitrectomy	13	0.2	0	29	2.2	2	29	0.6
0160	Examination procedures on eyeball	41	0.8	0	0	–	–	0	0.0
0754	Transluminal balloon angioplasty	~	–	0	39	19.8	8	39	0.9
1920	Administration of pharmacotherapy	35	0.6	0	~	^	^	~	–
1893	Administration of blood and blood products	0	–	0	33	15.9	11	33	0.7
0569	Ventilatory support	0	–	~	29	28.2	16	*	–
1505	Other excision procedures on knee or leg	0	–	0	27	59.2	47	27	0.6
1484	Amputation of pelvis or hip	0	–	0	23	37.7	28	23	0.5
1858	Diagnostic tests measures or investigations blood and blood-forming organs	11	0.2	~	8	4.9	3	*	–
Other Procedure		107	2.0	~	*	–	–	256	5.7
No Procedure		187	3.4	469	910	–	–	1,379	30.7
Total		**5,453**	**100**	**650**	**3,836**	**8.7**	**4**	**4,486**	**100**

Notes: Percentage columns are subject to rounding.

a Includes the following procedures; Amputation of toe, Amputation of toe including metatarsal bone, Transmetatarsal amputation and Amputation of ankle through malleoli of tibia and fibula

~ Denotes five or fewer discharges reported to HIPE.

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

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

A.1.5 DIAGNOSIS RELATED GROUPS

Table A 1.4 presents the top 20 AR-DRG's for total diabetes discharges by patient type.[6]

- *Retinal Procedures, Minor Complexity* (AR-DRG C03B) accounted for the majority of day patient discharges (61.1 per cent).
- *Diabetes, Minor Complexity* (AR-DRG K60B) accounted for the majority of in-patient discharges (61.5 per cent).

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

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

		Day Patients		In-patients					
				Same Day In-patients	Overnight In-patients			Total In-patients	
AR-DRG	AR-DRG Description	N	%	N	N	Mean LOS	Med LOS	N	%
C03B	Retinal Procedures, Minor Complexity	3,330	61.1	~	10	2.2	2	*	–
K60B	Diabetes, Minor Complexity	322	5.9	553	2,205	4.9	3	2,758	61.5
C03A	Retinal Procedures, Major Complexity	1,015	18.6	0	22	2.4	2	22	0.5
K60A	Diabetes, Major Complexity	~	–	40	883	9.9	6	923	20.6
C63C	Other Disorders of the Eye, Minor Complexity	496	9.1	~	~	^	^	8	0.2
C63B	Other Disorders of the Eye, Intermediate Complexity	90	1.7	~	~	^	^	~	–
K01C	OR Procedures for Diabetic Complications, Minor Complexity	~	–	~	90	12.5	10	*	–
K01B	OR Procedures for Diabetic Complications, Intermediate Complexity	0	–	0	80	22.3	15	80	1.8
C16Z	Lens Procedures	74	1.4	0	~	^	^	~	–
L67C	Other Kidney and Urinary Tract Disorders, Minor Complexity	44	0.8	10	22	3.1	2	32	0.7
K40A	Endoscopic and Investigative Procedures for Metabolic Disorders, Major Comp	0	–	0	69	17.4	12	69	1.5
K01A	OR Procedures for Diabetic Complications, Major Complexity	0	–	0	67	49.4	31	67	1.5
L67A	Other Kidney and Urinary Tract Disorders, Major Complexity	~	–	~	50	9.4	6	*	–
L67B	Other Kidney and Urinary Tract Disorders, Intermediate Complexity	8	0.1	9	38	7.5	5	47	1.0
B71B	Cranial and Peripheral Nerve Disorders, Minor Complexity	10	0.2	14	28	6.1	3	42	0.9
B71A	Cranial and Peripheral Nerve Disorders, Major Complexity	~	–	6	33	13.7	7	39	0.9
F65B	Peripheral Vascular Disorders, Minor Complexity	~	–	~	25	9.9	7	*	–
K09B	Other Endocrine, Nutritional and Metabolic OR Procedures, Minor Complexity	~	–	0	26	11.7	11	26	0.6
C15Z	Glaucoma and Complex Cataract Procedures	18	0.3	0	8	1.5	2	8	0.2
F65A	Peripheral Vascular Disorders, Major Complexity	0	–	0	19	18.5	13	19	0.4
Other AR-DRG		32	0.6	~	*	^	^	151	3.4
Total		**5,453**	**100**	**650**	**3,836**	**8.7**	**4**	**4,486**	**100**

Note: Percentage columns are subject to rounding.

~ Denotes five or fewer discharges reported to HIPE.

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

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

Glossary & Abbreviations

GLOSSARY

Acute hospital

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

Additional diagnosis

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

Admission type

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

Australian Coding Standards

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

Case mix

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

Complications

Complications may arise during the hospital stay.

Comorbidities

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

Day patient

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

Delivery discharges

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

Delivery status

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

Diagnosis Related Group (DRG)

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

Discharge rate

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

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

Age-specific discharge rates are calculated as the number of discharges within a particular age group divided by the population within that particular age group multiplied by 1,000. **Sex-specific discharge rates** are calculated as the number of male (female) discharges divided by the male (female) population multiplied by 1,000.

Age- and sex-specific discharge rates are calculated as the number of male (female) discharges within a particular age group divided by the number of males (females) in the population within that particular age group multiplied by 1,000.

Elective admission

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

Emergency admission — An emergency admission is unforeseen and requires urgent care. This term is used to refer to in-patient discharges.

GMS status — Refers to whether a patient holds a medical card.

Hospital Groups — The organisational structure of public hospitals was revised in 2013 with the establishment of hospital groups on a non-statutory administrative basis.

Hospital In-Patient Enquiry (HIPE) — HIPE is a health information system that collates data on discharges from, and deaths in, acute hospitals in Ireland.

In-Patient — An in-patient is admitted to hospital for treatment or investigation on a planned or emergency basis.
Overnight In-Patient: These discharges are in-patient discharges who stayed at least one night in hospital.
Sameday In-Patient: These discharges 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 V9.0 was used in the collection of HIPE data in 2017.

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 (Australian Institute of Health and Welfare (2012), National Health Data Dictionary, Version 16, AIHW).

Principal and additional procedure

A procedure is defined as a clinical intervention that

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

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

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

Public/private status

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

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

ABBREVIATIONS

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

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

Appendices

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 University Hospital[b]	Dublin	Voluntary
Midland Regional Hospital, Tullamore	Offaly	Non-Voluntary
Midland Regional Hospital, Portlaoise	Laois	Non-Voluntary
South/South West Hospital Group		
University Hospital Waterford	Waterford	Non-Voluntary
Kilcreene Orthopaedic Hospital	Kilkenny	Non-Voluntary
South Tipperary General Hospital, Clonmel	Tipperary	Non-Voluntary
Bantry General Hospital	Cork	Non-Voluntary
Mercy University Hospital, Cork	Cork	Voluntary
South Infirmary Victoria University Hospital	Cork	Voluntary
Mallow General Hospital	Cork	Non-Voluntary
Cork University Hospital	Cork	Non-Voluntary
University Hospital Kerry	Kerry	Non-Voluntary

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

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

Notes: Total number of hospitals participating in 2017: 53

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

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

APPENDIX II: HIPE DATA COLLECTED

TABLE II.1 Data Collected by HIPE*

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

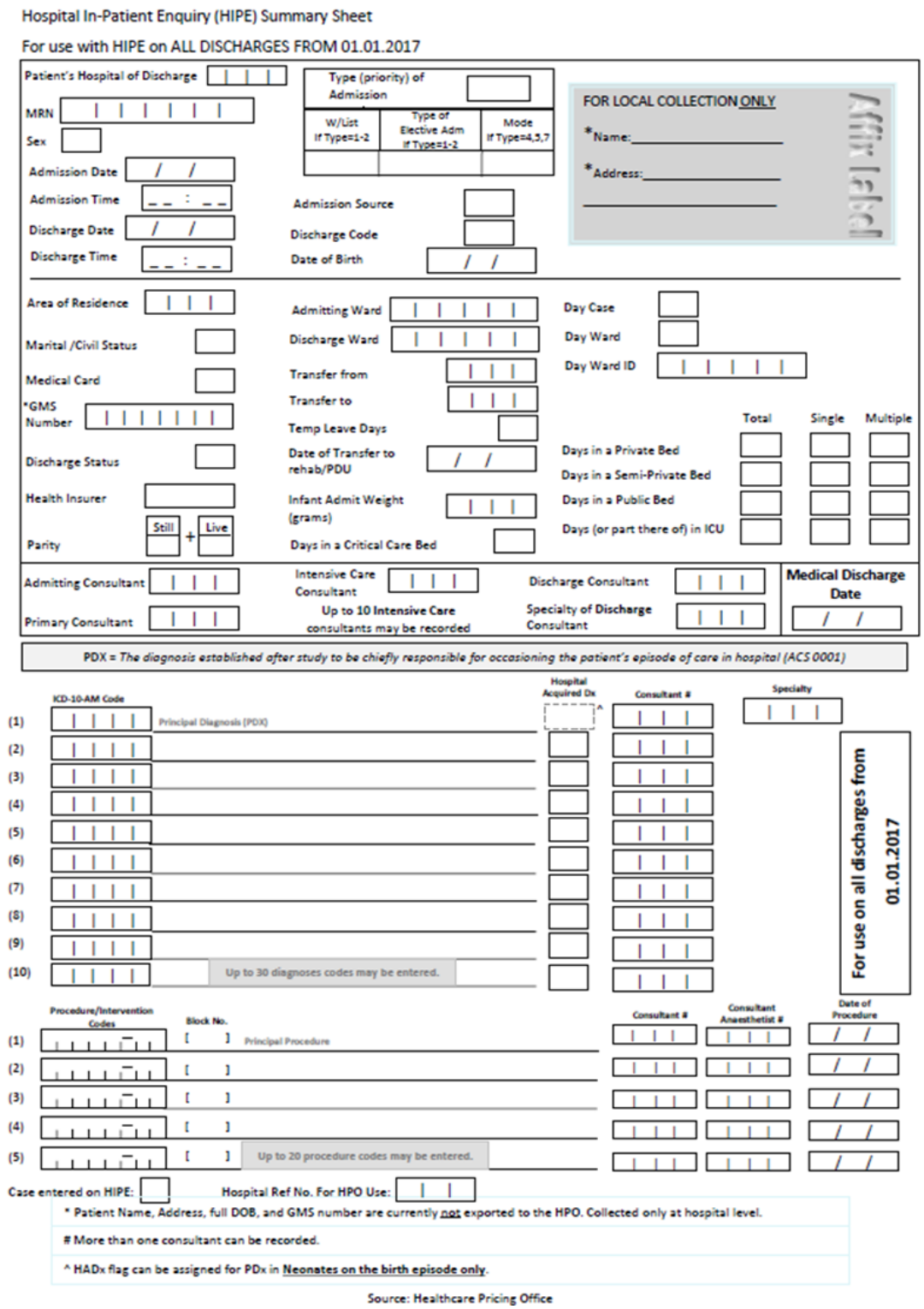
Type of Data	Parameters	Notes
		residence, prison, or other.
Administrative Data (contd.)	Discharge destination	Values include self discharge, home, nursing home, convalescent home or long stay accommodation, transfer to hospital (in HIPE) as emergency, transfer to hospital (in HIPE) as non-emergency, 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 2017 Version 9.1.

Source: HIPE Data Dictionary 2017 Version 9.1, available at www.hpo.ie

APPENDIX III: HIPE DATA ENTRY FORM

FIGURE III.1 HIPE Data Entry Form, 2017



Hospital In-Patient Enquiry (HIPE) Summary Sheet

For use with HIPE on ALL DISCHARGES FROM 01.01.2017

Patient's Hospital of Discharge | | | |

MRN | | | | | | |

Sex

Admission Date / /

Admission Time _ _ : _ _

Discharge Date / /

Discharge Time _ _ : _ _

Type (priority) of Admission

W/List If Type=1-2	Type of Elective Adm If Type=1-2	Mode If Type=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 | | | | | |

	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 | | |

Medical Discharge Date / /

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

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

For use on all discharges from 01.01.2017

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

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

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

More than one consultant can be recorded.

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

Source: Healthcare Pricing Office

APPENDIX IV: DERIVED VARIABLES

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

TABLE IV.1 Derived Variables

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

Note: For further information on all variables collected by HIPE see HIPE Data Dictionary 2017 Version 9.1 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 NCCC eBook, July 2013, General Standards for Interventions.

6. Doppler recordings

7. Dressings

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

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

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

11. Electromyography (EMG)

12. Hypothermia when associated with cardiac surgery

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

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

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

16. Perfusion when associated with cardiac surgery

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

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

19. Stress test

20. Traction if associated with another procedure

APPENDIX VI: FURTHER INFORMATION ON HIPE SCHEME

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

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

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

- *HIPE Data Dictionary:* This dictionary provides definitions and codes for data collected within HIPE as of a specified year (e.g. 2017 relates to discharges reported for 2017). 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

- 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 2016. 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.[2] 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] Further information on AR-DRG Version 8.0 can be found on the Australian Consortium for Classification Development website https://www.accd.net.au/ArDrg.aspx?page=2 [Accessed 26th July 2018].

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

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

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

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

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

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

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

VIII.2.3 Naming Convention of AR-DRGs

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

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

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

VIII.2.3 Changes in Complexity Split

All AR-DRG splits have been revised using the Episode Clinical Complexity (ECC) Model.[3] 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*

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

APPENDIX IX: AUSTRALIAN CODING STANDARD 0401

Australian Coding Standard: 0401 Diabetes Mellitus and Intermediate Hyperglycaemia [4]

Diabetes Mellitus

Categories of diabetes mellitus (DM) in this classification are:

- Type 1 diabetes mellitus (T1DM) previously referred to as insulin dependent diabetes mellitus (IDDM)
- Type 2 diabetes mellitus (T2DM) previously referred to as noninsulin dependent diabetes mellitus (NIDDM)
- Other specific forms of diabetes mellitus (includes diabetes mellitus secondary to other disorders)
- Unspecified diabetes mellitus

  Gestational diabetes mellitus (GDM) any degree of glucose intolerance during pregnancy

Intermediate Hyperglycaemia

Intermediate hyperglycaemia (IH), also described as impaired glucose regulation (IGR), prediabetes, impaired glucose tolerance (IGT) and impaired fasting glycaemia (IFG), refers to abnormal metabolic states, intermediate and transitional, between normal glucose homeostasis and DM that may remain static but may (infrequently) revert to normal.

[4] Extracted from NCCC eBook, July 2013, Endocrine, nutritional and metabolic diseases. This is an extract from the standard to illustrate the change to the general classification principles; it excludes coding guidelines relating to specific classification principles, features of insulin resistance and specific multiple complications.

General Classification Rules for DM and IH

Rule 1.	**DM and IH should always be coded when documented** (demonstrated in all examples).
Rule 2.	The terms 'diabetic', 'due to' or 'secondary to' infer a **causal** relationship between the DM and other conditions. Where such terms are used check the Alphabetic Index for appropriate codes indexed directly under *Diabetes, diabetic* or appropriate codes indexed under the lead term for the condition with a subterm *diabetic* (see example 1). If there is not an appropriate direct 'diabetic' entry in the Alphabetic Index for the 'diabetic' term, then follow *Rule 3* and *Rule 4a* to assign a DM code. An additional code for the 'other condition' may be assigned following *Rule 4b* and *Rule 6*.
Rule 3.	The classification includes conditions (often termed **'complications'**) which occur commonly **with** DM or IH. These conditions may or may not have been a direct consequence of the metabolic disturbance and are indexed under *Diabetes, with* or *Hyperglycaemia/intermediate/with.* Always refer to these index entries to classify DM or IH (see examples 2-7).
Rule 4a.	All complications of DM or IH **classified to category E09–E14** should **always** be coded to reflect the severity of DM or IH (see examples 3-6).
Rule 4b.	Complications or conditions associated with DM or IH **classified outside of category E09–E14** should only be coded when the condition meets the criteria in ACS 0001 *Principal diagnosis* or ACS 0002 *Additional diagnoses* (see examples 3 and 4).
Rule 5.	Where the classification (Alphabetic Index) has linked a condition with DM, yet a specific **cause other than DM is documented** as the cause of the condition, then a code for the causal condition should be sequenced before the DM code(s) (see examples 5 and 6).
Rule 6.	Multiple codes should not be used when the classification provides a combination code (see ACS 0015) for the DM or IH that clearly identifies all of the elements documented in the diagnosis (see examples 7 and 11).

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