Activity in Acute Public Hospitals in Ireland

2020 ANNUAL REPORT

Healthcare Pricing Office

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Summary Description
This is a report on in-patient and day patient discharges from acute public hospitals participating in the Hospital In-Patient Enquiry (HIPE) scheme in 2020. 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 public 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, Fiachra Bane (HPO), Lorna Collins (HPO), Jacqui Curley (HPO), Jonathan Dunne (HPO), Paul Linn (HPO), Brian McCarthy (HPO), and Deirdre Murphy (HPO) for reviewing and commenting on earlier drafts of this report and the HIPE Software Development team for their technical assistance.

Inevitably, a number of individuals have to carry most of the responsibility for producing a report of this type. In this case, Karen Kearns, Laura Metcalfe, Sinead O'Hara and Rory O'Reilly were to the fore in the preparation of the report for publication. We wish to express our sincere thanks to these colleagues for all of their hard work on the report. Their commitment, enthusiasm, and professionalism are gratefully acknowledged and sincerely appreciated.

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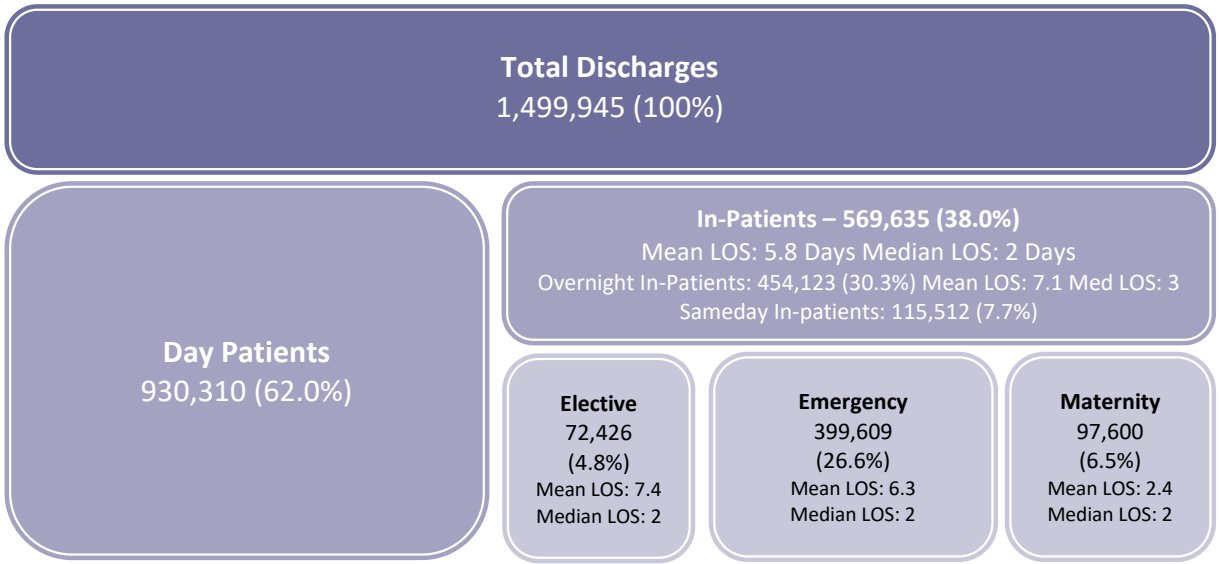
EXECUTIVE SUMMARY

The Hospital In-Patient Enquiry (HIPE) scheme, established in 1971, is a health information system designed to collect clinical and administrative data on discharges from, and deaths in, acute public 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.

The aim of this report is to present an overview of discharge activity in acute public hospitals in Ireland in 2020. From the first quarter of 2020, Coronavirus disease 2019 (COVID-19) affected the ability of hospitals to perform their usual levels of activity. Therefore, any comparisons with earlier years needs to take this into account.

TOTAL DISCHARGES, 2020



Discharge Overview

- Almost 1.5 million discharges were reported by participating hospitals in 2020, a decrease of 15.3 per cent over the period 2019–2020.
- Day patients accounted for 62.0 per cent of total discharges, a decrease of 17.0 per cent since 2019.
- In-patients accounted for 38.0 per cent of total discharges, a decrease of 12.4 per cent since 2019 and a decrease of 11.5 per cent from 2016–2020.

- Over the period 2016–2020, the number of elective in-patient discharges decreased by 24.5 per cent, maternity in-patients decreased by 15.5 per cent, while emergency in-patients decreased by 7.6 per cent.

Length of Stay

- In-patient average length of stay was 5.8 days in 2020, a slight increase on previous years in-patient average length of stay of 5.7 days over the period 2016–2019.
- Over the period 2016–2020, the average length of stay remained relatively constant for emergency in-patients at 6.3 days. The average length of stay increased for elective in-patients from 6.9 days to 7.4 days, and decreased for maternity in-patients from 2.7 days to 2.4 days over the same period.

Sex

- Similar to previous years, females accounted for 52.4 per cent of total discharges with males accounting for 47.6 per cent.
- Excluding maternity discharges, females accounted for 48.3 per cent of discharges with males accounting for 51.7 per cent.

Age

- Discharges aged 65 years and over accounted for 39.1 per cent of total discharges, representing a decrease of 13.9 per cent since 2019 and a decrease of 5.0 per cent since 2016.
- Discharges aged 65 years and over accounted for 55.9 per cent of total in-patient bed days, a decrease of 11.9 per cent since 2019 and a decrease of 5.8 per cent since 2016.

Public/Private Status

- Over 87 per cent of total discharges were treated on a public basis. Private patients accounted for 13.7 per cent of total discharges.
- The 25–34 years age group had the largest proportion of total discharges treated publicly (90.5 per cent) with only 9.5 per cent treated on a private basis.

Hospital Group

- The largest proportion of total discharges were hospitalised in the Ireland East Hospital Group (19.5 per cent).
- Total in-patient discharges were highest in the Ireland East Hospital Group where 21.2 per cent of discharges were hospitalised, while the Dublin Midlands Hospital Group accounted for the highest proportion of day patients (21.7 per cent).

Admission Source

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

Discharge Destination

- The majority of total discharges were discharged home (94.8 per cent).
- Of total emergency in-patients, 5.4 per cent were transferred to long stay accommodation, and 6.1 per cent were transferred to another hospital.

Day of Admission

- Almost 60 per cent of elective in-patients were admitted between Monday and Wednesday, with only 7.0 per cent admitted at the weekend.

Day of Discharge

- The proportion of elective in-patients discharged increased throughout the week, from 11.6 per cent on Monday to 22.1 per cent on Friday, falling to 10.1 per cent on Saturday and 4.8 per cent on Sunday.

Month of Discharge

- Emergency in-patient hospital discharges peaked in January (37,996 discharges), while the smallest number of emergency in-patients were discharged in April with 25,423 discharges.

MORBIDITY ANALYSIS

Day Patients

- Day patients with a principal diagnosis of *Other medical care* (includes Chemotherapy and Radiotherapy encounters) and those with a principal diagnosis of *Care involving dialysis* accounted for 22.5 and 19.3 per cent of day patient discharges respectively.
- At least one procedure was recorded for 92.0 per cent of day patient discharges.
- The highest principal procedure block reported was *Haemodialysis*, accounting for 21.0 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 4.4 per cent of in-patients.
- At least one procedure was recorded for 59.4 per cent of in-patient discharges.
- The highest principal procedure block reported was *Generalised allied health interventions* which accounted for 30.6 per cent of in-patient discharges with at least one procedure recorded.[1]

Elective In-Patients

- Elective in-patients with a principal diagnosis of *Coxarthrosis [arthrosis of hip]* accounted for 3.4 per cent of elective in-patient discharges.
- At least one procedure was recorded for 89.2 per cent of elective in-patient discharges.
- The highest principal procedure block reported for elective in-patients was *Generalised allied health interventions,* accounting for 13.3 per cent of elective in-patients who had at least one procedure reported.

Emergency In-Patients

- The highest principal diagnosis reported for emergency in-patients was *Pain in throat and chest*, accounting for 4.4 per cent of emergency in-patient discharges.

[1] This block includes interventions such as physiotherapy, pharmacy, dietetics, occupational therapy, speech pathology, social work and diabetes education. Together, these six interventions accounted for 97.5 per cent of cases within this procedure block.

- At least one procedure was recorded for 52.6 per cent of emergency in-patient discharges.
- The highest principal procedure block reported for emergency in-patients was *Generalised allied health interventions,* accounting for 44.1 per cent of emergency in-patient discharges who had at least one procedure reported.

Maternity In-Patients – by Delivery Status[2]

- Delivery discharges with a principal diagnosis of *Single spontaneous delivery* accounted for 45.7 per cent of delivery in-patient discharges.
- For delivery discharges who had a procedure reported, 45.6 per cent reported the principal procedure block *Spontaneous vertex delivery*.
- Non-delivery discharges with a principal diagnosis of *Other maternal diseases classifiable elsewhere but complicating pregnancy; childbirth and the puerperium* accounted for 25.2 per cent of non-delivery in-patient discharges.
- For non-delivery discharges who had a procedure reported, 28.1 per cent reported the principal procedure block *Curettage and evacuation of uterus*.

[2] 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.[3]

- The MDC with the largest proportion of day patients reported was *Neoplastic disorders (haematological and solid neoplasms)* (MDC 17), which accounted for 239,995 discharges or 25.8 per cent of day patients .
    - *Chemotherapy* (AR-DRG R63Z) accounted for 45.3 per cent of day patients within this MDC, and 11.7 per cent of total day patients*; Other Neoplastic Disorders, Minor Complexity* (AR-DRG R62C) accounted for 39.1 per cent of day patients within this MDC and 10.1 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 17.0 per cent of in-patients.
    - *Vaginal Delivery* (AR-DRGs O60A, O60B and O60C) accounted for 36.0 per cent of in-patients within this MDC and 6.1 per cent of total in-patient discharges.
    - *Antenatal and Other Obstetric Admission* (AR-DRGs O66A and O66B) accounted for 34.2 per cent of in-patients within this MDC and 5.8 per cent of total in-patient discharges.

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

Overview SECTION

One

Table of Contents

1.1 INTRODUCTION

This report aims to present an overview of discharge activity in acute public hospitals in Ireland during 2020 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 2020 report. It outlines briefly the background of the HIPE scheme, and highlights other data sources used throughout the report. Given the impact of COVID-19 on hospitals in 2020, its effects on HIPE data are briefly discussed in this section, and data relating to COVID-19 admissions are analysed in further detail in this year's annex. 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 2016–2020. This analysis must take into account the effect of COVID-19 on hospitals ability to be able to perform their usual levels of activity in 2020.

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]

At the start of 2020, the classification used to code clinical information was updated from the 8th Edition to the 10th 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).[5,6,7] Ireland updates the clinical classification every four to five years to ensure the classifications remain current

1 See Appendix I for a list of hospitals participating in HIPE in 2020.

2 From 1990 to 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 For more information on the work of the HPO please see www.hpo.ie

5 Australian Consortium for Classification Development (ACCD) 2017. The *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modific*ation (ICD-10-AM), and *Australian Classification of Health Interventions* (ACHI) and *Australian Coding Standards* (ACS) – ICD-10-AM/ACHI/ACS (10th Ed) Adelaide: Independent Hospital Pricing Authority (IHPA), Lane Publishing.

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

7 HIPE data for 2020 is coded using the 10th edition of ICD-10-AM.

for national and international use. Extensive training of all HIPE staff is undertaken when the classification is updated to ensure understanding of changes in the new classification. Use of ICD-10-AM/ACHI/ACS is complemented by the Irish Coding Standards (ICS).[8] 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 2020 onwards compared to previous reports, due to changes in sequencing of codes within a HIPE record, addition of new codes, deletion of codes, and updates to ACS and ICS.[9]

In 2015, the Australian Refined Diagnosis Related Groups (AR-DRG) classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0.[10,11] The update to AR-DRG Version 8.0 included a revision of the complexity model used to assign AR-DRGs to discharges. In addition to this, it included a review of existing AR-DRGs, the removal of some AR-DRGs and the inclusion of new AR-DRGs. The naming convention for AR-DRGs was also updated.

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 COVID-19

From the first quarter of 2020, COVID-19 had a substantial impact on the ability of hospitals to deliver their normal level of services due to the reconfiguration and re-designation of wards to accommodate COVID-19 discharges. As a result of this, the HSE entered into a Service Level Agreement ("SLA") with private hospitals to allow some public patients to be treated in private hospitals for the duration of the COVID-19 pandemic. This data is not presented in this report.[13]

Based on guidelines published by the Independent Hospital Pricing Authority (IHPA) which incorporates guidance from the WHO regarding the HIPE coding of Novel Coronavirus, the HPO published Irish Coding Standard (ICS) 22X2 V1.3

8 Irish Coding Standards (ICS) provide guidelines for the collection of HIPE data for all discharges and are to be used in conjunction with 10th 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 8th edition (in use from 2015–2019) to 10th Edition (in use from 1st January 2020).

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

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 While data is submitted by private hospitals to validate claims for activity performed, this data is deemed not robust for analysis due to non-specificity within the data returned and low levels of coverage. It is also based on a reduced HIPE record and does not form part of the main HIPE dataset.

Novel Coronavirus (COVID-19) (initially published in January 2020 and updated in March 2020). The Annex is this report presents data based on the codes advised in this ICS to identify COVID-19 discharges.

The availability, reliability and coverage of the HIPE dataset during this pandemic was, and continues to be, of national and international importance. A process was developed by the HPO in March 2020 to prioritise the coding of COVID-19 discharges to facilitate automatic nightly exports of cases with this diagnosis. In this manner, the Department of Health, the HSE and other health agencies had access to this important activity data to track, monitor and support the health system.

1.4 Data Sources for Annual Report 2020

HIPE: The Hospital In-Patient Enquiry (HIPE) scheme, established in 1971, is a health information system designed to collect clinical and administrative data on discharges from, and deaths in, acute hospitals in Ireland.[14,15] In 2020, 53 public hospitals in Ireland participated in HIPE (see Appendix I).[16]

Population Estimates: Population estimates for 2016–2020 are based on Census 2016 data published by the Central Statistics Office.

1.5 Structure of Annual Report 2020

The remainder of this 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 2020. Section Two includes many of the administrative variables reported to HIPE, including age, sex, marital/civil status, GMS status, and discharge status. The regional analysis uses Hospital Group to see where discharges are being hospitalised, while the temporal analysis looks at day of admission, day of discharge, and month of discharge.

Section Three

Section Three focuses on the diagnoses and procedures recorded for discharges reported to HIPE. Section Three presents analysis of hospital activity by patient type with top 20 principal diagnoses and procedure blocks presented for day

14 See Appendix II for details of data collected by HIPE, see also the HIPE Data Dictionary 2020 Version 12.1 available at www.hpo.ie

15 A copy of the HIPE data entry form for 2020 is contained in Appendix III.

16 For historical reasons, a small number of non-acute hospitals also reported to HIPE in 2020. Discharges from these hospitals have been included in this report.

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

Section Four

Section Four provides analysis of all HIPE data by case mix. Each Major Diagnostic Category (MDC) is presented with its associated Australian Refined Diagnosis Related Groups (AR-DRG) for total discharges. The analyses provide a breakdown of MDCs and AR-DRGs by patient type, with in-patient mean and median length of stay also provided. The version of the AR-DRG Classification used from 2016-2020 is Version 8.0.[17]

Annex

The annex is designed to highlight particular topics of interest that merit further analysis. This year's topic of interest is a discussion and analysis of HIPE data relating to admissions with the Coronavirus Disease 2019 (COVID-19) in 2020.

Glossary and Abbreviations

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

[17] Further information on AR-DRG Version 8.0 can be found on the IHPA website https://www.ihpa.gov.au/publications/ar-drg-version-80 [Accessed 19th October 2021].

1.6 SCOPE OF HIPE DATA

- *Each HIPE discharge record represents one episode of care.* Patients may be admitted to hospital more than once in any given time period with the same or different diagnoses. In the absence of a unique health identifier, therefore, the data reported to HIPE facilitate analysis of hospital discharge activity but do not permit analysis of certain parameters, such as the number of hospital encounters per patient; or 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 2020 indicate that for day patient and in-patient discharges appropriate for inclusion in the HIPE data set, 98.9 per cent of the discharges reported from hospital systems were coded and returned for inclusion in the national HIPE data set.

1.7 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. [18] Deliveries are not included.
- An in-patient is admitted to hospital for treatment or investigation on an elective or emergency basis. Sameday in-patients are admitted as in-patients and discharged on the same day, while overnight in-patients stay at least one night in hospital.

In-Patient Length of Stay: In line with current reporting for Activity Based Funding, since the 2018 report the length of stay assigned for sameday in-patients has changed from one bed day to 0.5 bed days. This is based on an analysis of hospital data which shows that, on average, 0.5 days is a more appropriate measure of length of stay for this cohort of patients. This change will impact on the total in-patient length of stay resulting in a lower average length of stay compared to years prior to 2018. Therefore, caution must be taken if comparing the average length of stay data presented in this report to HIPE annual reports prior to 2018.

Diagnosis Related Groups: *"Local DRG's" presented in report.* The official classification for AR-DRG's (Version 8.0) has been slightly modified by the addition of two local DRG's specific to Ireland to account for differences in the provision of care between Ireland and Australia. While this practice has been used for Activity Based Funding, this modification to the official classification has only been published in the HIPE Annual Report since 2018.

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

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

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

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

1.8 DISCHARGES REPORTED TO HIPE, 2016-2020

In 2020, 1,499,945 discharges were reported to HIPE by participating acute public hospitals,[19] representing a decrease of 12.0 per cent over the period 2016–2020 and a decrease of 15.3 per cent over the period 2019–2020. From the first quarter of 2020, Coronavirus disease 2019 (COVID-19) affected the ability of hospitals to perform their usual levels of activity. Therefore, any comparisons with earlier years needs to take this into account.

Table 1.1 and Figures 1.1 to 1.2 show the distribution of discharges over the period 2016–2020 by selected variables. The following points provide a summary of changes over the period 2016–2020:

- The male-female split in 2020 has remained consistent with previous years, with a larger proportion of female discharges (52.4 per cent).
- The 65 years and over age group accounted for the largest proportion of total discharges in 2020 (39.1 per cent), representing a decrease of 13.9 per cent for this age group from 2016–2020.
- From 2016–2020 there was a decrease of 8.3 per cent for public discharges and a decrease of 31.0 per cent for private discharges.[20]
- The number of day patient discharges decreased from 1,060,602 in 2016 to 930,310 in 2020, a decrease of 12.3 per cent.
- The number of in-patient discharges decreased from 643,850 in 2016 to 569,635 in 2020, a decrease of 11.5 per cent.
- Emergency in-patient discharges comprised 67.2 per cent of total in-patient discharges in 2016, increasing to 70.2 per cent of all discharges in 2020.
- Maternity in-patient discharges decreased by 15.5 per cent over the period 2016–2020 from 115,490 to 97,600 discharges.
- Sameday in-patient discharges decreased by 6.9 per cent over the period 2016–2020 from 124,112 to 115,512 discharges.
- Over the period 2016–2020, the average length of stay remained relatively constant for emergency in-patients at 6.3 days. The average length of stay increased for elective in-patients from 6.9 days to 7.4 days, and decreased for maternity in-patients from 2.7 days to 2.4 days over the same period.
- Overnight in-patient discharges stayed on average 6.8 days in 2016 which has increased to 7.1 days in 2020, an increase of 4.4 per cent. The median has remained constant at 3 days over the period.

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[19] In 2020 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.

[20] 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.

TABLE 1.1 Acute Public Hospital Discharges in HIPE (N, %), 2016-2020

	2016	2017	2018	2019	2020	% Change	% Change
	N (%)	N (%)	N (%)	N (%)	N (%)	2016–2020	2019–2020
Total Discharges	**1,704,452 100**	**1,718,523 100**	**1,737,212 100**	**1,771,022 100**	**1,499,945 100**	**-12.0**	**-15.3**
Discharge Rate[a]	**359.6**	**358.6**	**357.7**	**359.9**	**301.4**	**-16.2**	**-16.3**
Sex							
Males	788,702 46.3	800,443 46.6	817,851 47.1	837,916 47.3	714,171 47.6	-9.4	-14.8
Females	915,750 53.7	918,080 53.4	919,361 52.9	933,106 52.7	785,774 52.4	-14.2	-15.8
Age Group							
Under 15 Years	132,677 7.8	127,545 7.4	129,137 7.4	124,716 7.0	92,537 6.2	-30.3	-25.8
15–44 Years	471,123 27.6	465,383 27.1	456,062 26.3	457,073 25.8	389,864 26.0	-17.2	-14.7
45–64 Years	483,587 28.4	490,964 28.6	495,211 28.5	508,747 28.7	431,326 28.8	-10.8	-15.2
65 Years and Over	617,065 36.2	634,631 36.9	656,802 37.8	680,486 38.4	586,218 39.1	-5.0	-13.9
Public/Private Status[b]							
Public Discharges	1,424,290 83.6	1,454,057 84.6	1,488,034 85.7	1,528,698 86.3	1,306,683 87.1	-8.3	-14.5
Private Discharges	280,162 16.4	264,466 15.4	249,178 14.3	242,324 13.7	193,262 12.9	-31.0	-20.2
GMS Status							
GMS	942,022 55.3	953,030 55.5	971,882 55.9	995,063 56.2	790,465 52.7	-16.1	-20.6
Non-GMS	744,344 43.7	740,996 43.1	740,522 42.6	723,922 40.9	644,414 43.0	-13.4	-11.0
Unknown	18,086 1.1	24,497 1.4	24,808 1.4	52,037 2.9	65,066 4.3	259.8	25.0
Hospital Group							
Ireland East	325,110 19.1	329,543 19.2	338,603 19.5	354,669 20.0	292,944 19.5	-9.9	-17.4
RCSI	254,227 14.9	258,768 15.1	258,954 14.9	263,641 14.9	230,758 15.4	-9.2	-12.5
Dublin Midlands[c]	318,725 18.7	319,373 18.6	325,230 18.7	333,923 18.9	286,770 19.1	-10.0	-14.1
South/South West	329,632 19.3	331,619 19.3	329,610 19.0	325,579 18.4	283,315 18.9	-14.1	-13.0
UL	106,749 6.3	111,771 6.5	113,077 6.5	114,679 6.5	100,268 6.7	-6.1	-12.6
Saolta	310,448 18.2	309,209 18.0	312,651 18.0	320,246 18.1	259,591 17.3	-16.4	-18.9
Children's	54,234 3.2	53,211 3.1	53,795 3.1	52,404 3.0	42,150 2.8	-22.3	-19.6
No group	5,327 0.3	5,029 0.3	5,292 0.3	5,881 0.3	4,149 0.3	-22.1	-29.5
Day Patients[c]	**1,060,602 100**	**1,077,014 100**	**1,086,312 100**	**1,120,675 100**	**930,310 100**	**-12.3**	**-17.0**
Dialysis/Radiotherapy/ Chemotherapy[c]	399,895 37.7	396,925 36.9	394,397 36.3	405,990 36.2	388,246 41.7	-2.9	-4.4
Maternity	20,763 2.0	20,831 1.9	20,601 1.9	22,336 2.0	21,867 2.4	5.3	-2.1
Other	639,944 60.3	659,258 61.2	671,314 61.8	692,349 61.8	520,197 55.9	-18.7	-24.9
In-Patients	**643,850 100**	**641,509 100**	**650,900 100**	**650,347 100**	**569,635 100**	**-11.5**	**-12.4**
Elective	95,870 14.9	96,100 15.0	96,893 14.9	94,256 14.5	72,426 12.7	-24.5	-23.2
Emergency[d]	432,490 67.2	434,214 67.7	443,313 68.1	448,313 68.9	399,609 70.2	-7.6	-10.9
Maternity	115,490 17.9	111,195 17.3	110,694 17.0	107,778 16.6	97,600 17.1	-15.5	-9.4

Contd. overleaf

TABLE 1.1 Acute Public Hospital Discharges in HIPE (N, %), 2016–2020 (contd.)

		2016	2017	2018	2019	2020	% Change	% Change
		N (%)	N (%)	N (%)	N (%)	N (%)	2016–2020	2019–2020
Overnight In-Patients		519,738	518,756	522,003	515,196	454,123	-12.6	-11.9
		80.7	80.9	80.2	79.2	79.7		
Sameday In-Patients		124,112	122,753	128,897	135,151	115,512	-6.9	-14.5
		19.3	19.1	19.8	20.8	20.3		
In-Patient Length of Stay								
In-Patients	**Mean**	**5.7**	**5.7**	**5.7**	**5.7**	**5.8**	**1.8**	**1.8**
	Median	**2**	**2**	**2**	**2**	**2**		
Elective	Mean	6.9	6.7	6.8	6.9	7.4	7.2	7.2
	Median	2	2	2	2	2		
Emergency[e]	Mean	6.2	6.3	6.2	6.3	6.3	1.6	0.0
	Median	2	2	2	2	2		
Maternity	Mean	2.7	2.7	2.6	2.6	2.4	-11.1	-7.7
	Median	2	2	2	2	2		
Overnight	**Mean**	**6.8**	**6.9**	**7.0**	**7.1**	**7.1**	**4.4**	**0.0**
In-Patients	**Median**	**3**	**3**	**3**	**3**	**3**		
In-Patient Bed Days[e]								
Total In-Patients		**3,651,438**	**3,679,625**	**3,711,417**	**3,727,639**	**3,282,359**	**-10.1**	**-11.9**
		100	**100**	**100**	**100**	**100**		
Under 15 Years		284,997	276,584	270,757	254,537	213,764	-25.0	-16.0
		7.8	7.5	7.3	6.8	6.5		
15 to 44 Years		717,761	709,097	670,925	666,872	576,821	-19.6	-13.5
		19.7	19.3	18.1	17.9	17.6		
45 to 64 Years		702,640	712,827	720,392	725,846	658,253	-6.3	-9.3
		19.2	19.4	19.4	19.5	20.1		
65 Years and Over		1,946,040	1,981,117	2,049,343	2,080,384	1,833,520	-5.8	-11.9
		53.3	53.8	55.2	55.8	55.9		
Overnight In-Patients		**3,527,326**	**3,556,872**	**3,646,968**	**3,660,063**	**3,224,603**	**-8.6**	**-11.9**
		96.6	**96.7**	**98.3**	**98.2**	**98.2**		

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 300.8 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.

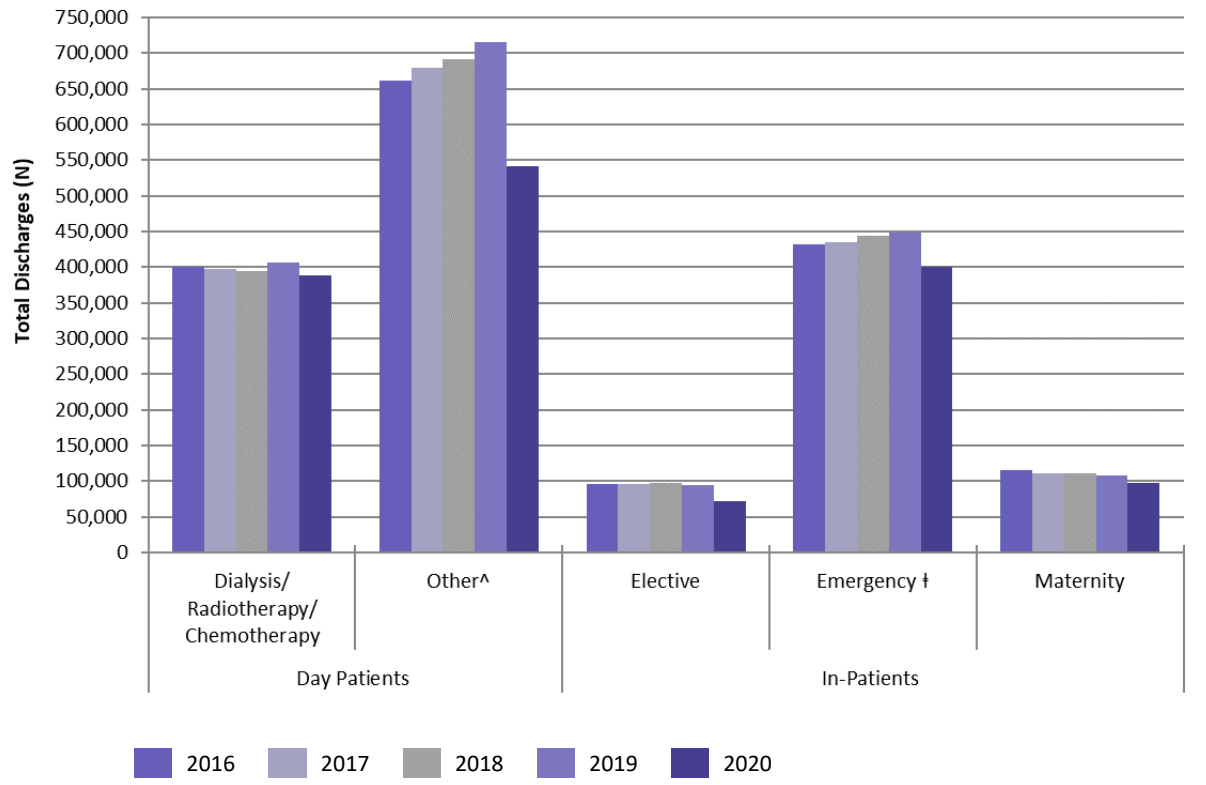
c The Dialysis category includes day patient discharges with a principal procedure of *haemodialysis* (ACHI procedure block 1060), the Chemotherapy category includes day patient discharges with a principal diagnosis of *pharmacotherapy session for neoplasm* (ICD-10-AM diagnosis code Z51.1), the Radiotherapy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

d 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.

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

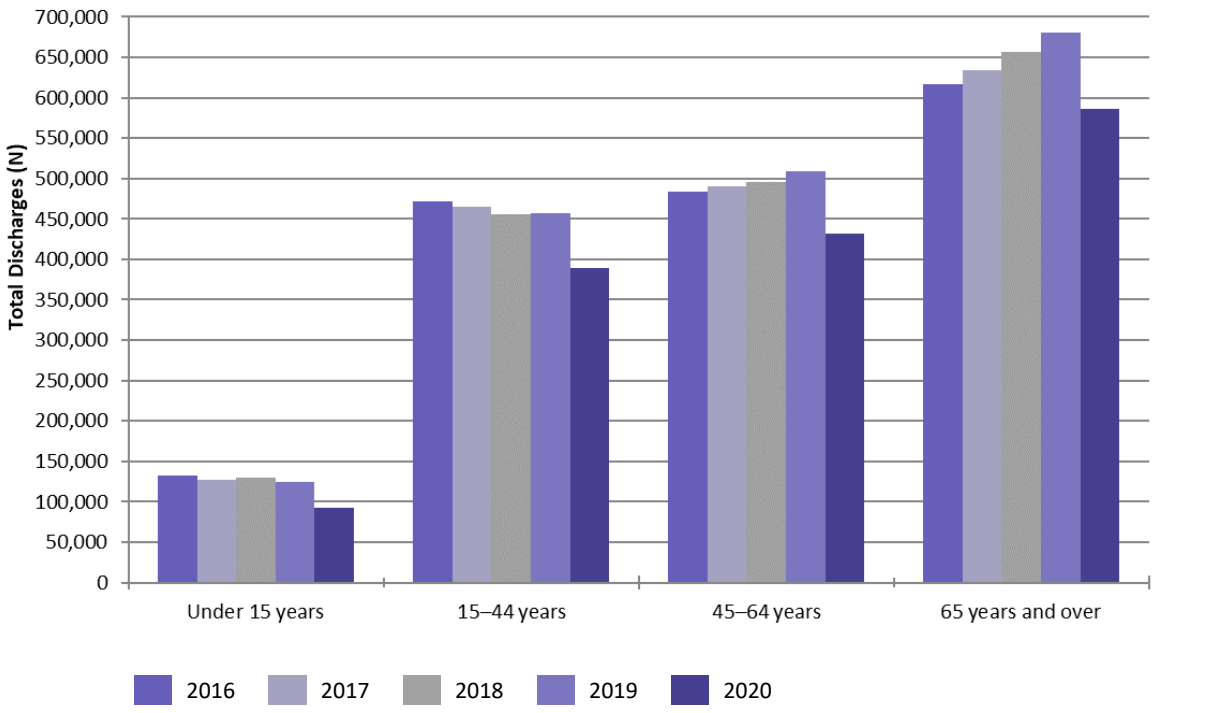
Sources: Data on discharges, length of stay and bed days for 2016-2020 were obtained from HIPE.
Population estimates for 2016-2020 were obtained from the Central Statistics Office.
https://data.cso.ie/ (Table PEA01) [Accessed 15th July 2021].

FIGURE 1.1 Total Discharges by Patient Type and Admission Type (N), 2016–2020



Notes: See Appendix I for a list of hospitals that participated in HIPE in 2020.
^ 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 2016–2020 were obtained from HIPE.

FIGURE 1.2 Total Discharges by Age Group (N), 2016–2020



Source: Data for 2016–2020 were obtained from HIPE.

Discharge Overview 2020

SECTION TWO

Table of Contents

2.1 INTRODUCTION

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

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

[1] The calculation of total in-patient length of stay differs in this report compared to reports prior to 2018. Since 2018, the length of stay assigned for sameday in-patients has changed from one bed day to 0.5 bed days. This will impact on the total in-patient length of stay resulting in a lower average length of stay compared to years prior to 2018 (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 2020, day patient discharges accounted for 62.0 per cent of total discharges. In-patient discharges accounted for the remaining 38.0 per cent of total discharges with 70.2 per cent of in-patients admitted on an emergency basis, 12.7 per cent admitted on an elective basis and 17.1 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 (19.6 per cent). This age group accounted for the largest proportion of day patient discharges (22.8 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 35.0 per cent of in-patient discharges and 55.9 per cent of in-patient bed days.

Length of Stay

- Discharges aged 25–34 years accounted for 17.1 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 3.1 days for discharges aged 1–14 years to 12.9 days for discharges aged 85 years and over. Median length of stay ranged between 2 to 7 days across all age groups.

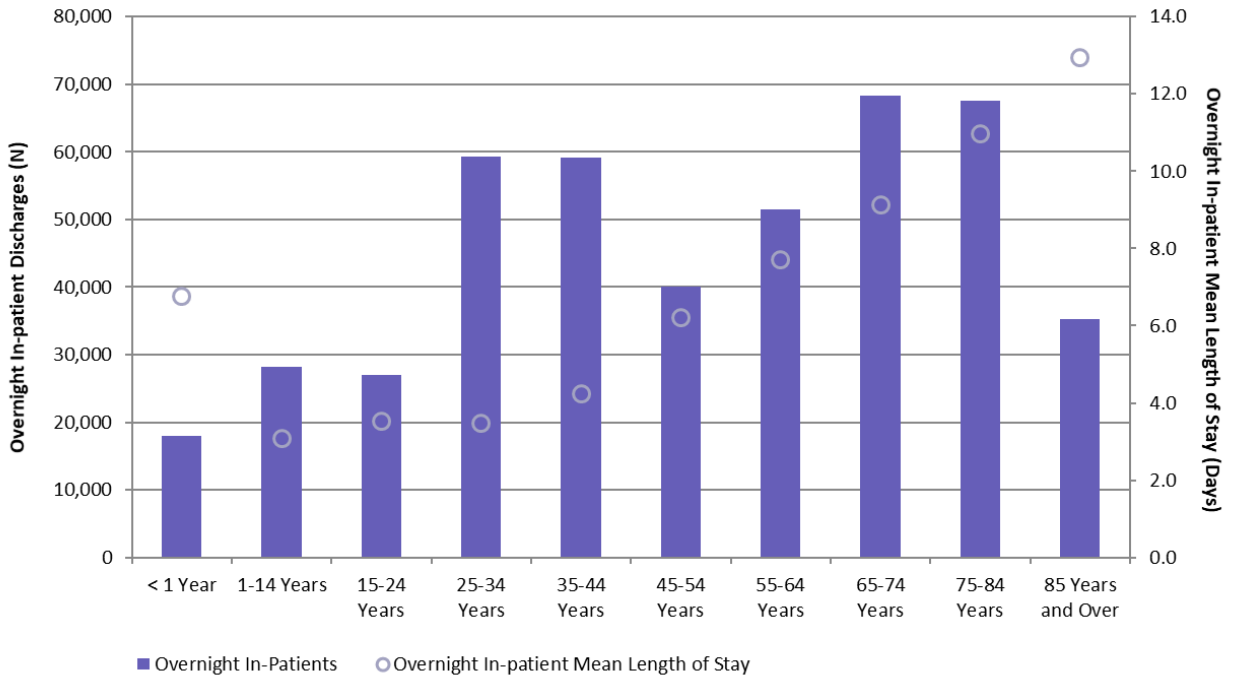
TABLE 2.1a Total Discharges: Patient Type by Age Group (N, %, Bed Days, %, and In-Patient Length of Stay)

	Discharges and Bed Days							
	Day Patients		In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
< 1 Year	2,777	0.3	20,639	3.6	122,525	3.7	23,416	1.6
1–14 Years	32,748	3.5	36,373	6.4	91,239	2.8	69,121	4.6
15–24 Years	32,074	3.4	38,135	6.7	101,024	3.1	70,209	4.7
25–34 Years	59,411	6.4	79,055	13.9	216,278	6.6	138,466	9.2
35–44 Years	103,149	11.1	78,040	13.7	259,520	7.9	181,189	12.1
45–54 Years	134,633	14.5	53,652	9.4	255,399	7.8	188,285	12.6
55–64 Years	178,496	19.2	64,545	11.3	402,855	12.3	243,041	16.2
65–74 Years	212,461	22.8	82,118	14.4	630,338	19.2	294,579	19.6
75–84 Years	140,819	15.1	78,015	13.7	745,489	22.7	218,834	14.6
85 Years and Over	33,742	3.6	39,063	6.9	457,693	13.9	72,805	4.9
Total Discharges	**930,310**	**100**	**569,635**	**100**	**3,282,359**	**100.0**	**1,499,945**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
< 1 Year	2,735	17,904	6.8	3	20,639	5.9	2
1–14 Years	8,157	28,216	3.1	2	36,373	2.5	1
15–24 Years	11,130	27,005	3.5	2	38,135	2.6	1
25–34 Years	19,794	59,261	3.5	2	79,055	2.7	2
35–44 Years	18,901	59,139	4.2	3	78,040	3.3	2
45–54 Years	13,626	40,026	6.2	3	53,652	4.8	2
55–64 Years	13,091	51,454	7.7	4	64,545	6.2	3
65–74 Years	13,766	68,352	9.1	5	82,118	7.7	4
75–84 Years	10,474	67,541	11.0	6	78,015	9.6	5
85 Years and Over	3,838	35,225	12.9	7	39,063	11.7	6
Total Discharges	**115,512**	**454,123**	**7.1**	**3**	**569,635**	**5.8**	**2**

Note: Percentage and bed day 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 2020, there were 785,774 female discharges, and of these 15.2 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, 23.4 per cent and 19.1 per cent respectively.
- Discharges aged 65 years and over accounted for 42.2 per cent of male in-patient discharges and 58.4 per cent of male in-patient bed days, while for females (excl. maternity) this group accounted for 42.2 per cent of female in-patient discharges and 62.2 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 (24.0 per cent) and females (excl. maternity) (25.0 per cent).
- Females aged between 25 and 34 years accounted for just over half of maternity in-patient discharges (51.4 per cent), while those aged 35–44 years accounted for 36.5 per cent of in-patient discharges in this group.

Length of Stay

- Male overnight in-patient discharges had a mean length of stay of 8.1 days and female (excl. maternity) overnight in-patient discharges had a mean length of stay of 7.8 days. As displayed in Figure 2.2, apart from the youngest age group aged less than 1 year, overnight in-patient mean length of stay generally increased with age for both sexes.
- For all age groups aged between 15 and 74 years, females (excl. maternity) had a lower overnight in-patient mean length of stay compared to males. Median overnight in-patient length of stay was similar across all age groups, ranging between 2 to 7 days for males and 2 to 8 days for females.
- For maternity discharges, total overnight in-patient mean length of stay was 2.9 days, increasing with age, from 2.7 days for females aged less than 25 years to 4.1 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	1,493	0.3	11,519	4.8	66,911	4.2	13,012	1.8
1–14 Years	18,996	4.0	19,418	8.1	46,619	2.9	38,414	5.4
15–24 Years	15,488	3.3	12,678	5.3	38,752	2.4	28,166	3.9
25–34 Years	22,482	4.7	13,397	5.6	50,838	3.2	35,879	5.0
35–44 Years	40,540	8.6	20,033	8.3	86,414	5.4	60,573	8.5
45–54 Years	60,108	12.7	26,994	11.2	141,039	8.8	87,102	12.2
55–64 Years	94,106	19.9	34,997	14.5	236,443	14.7	129,103	18.1
65–74 Years	122,408	25.8	44,997	18.7	358,365	22.3	167,405	23.4
75–84 Years	80,471	17.0	39,951	16.6	385,056	24.0	120,422	16.9
85 Years and Over	17,503	3.7	16,592	6.9	194,200	12.1	34,095	4.8
Total Discharges	**473,595**	**100.0**	**240,576**	**100**	**1,604,637**	**100**	**714,171**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
< 1 Year	1,564	9,955	6.6	3	11,519	5.8	2
1–14 Years	4,571	14,847	3.0	2	19,418	2.4	1
15–24 Years	3,820	8,858	4.2	2	12,678	3.1	1
25–34 Years	3,982	9,415	5.2	2	13,397	3.8	1
35–44 Years	5,681	14,352	5.8	3	20,033	4.3	1
45–54 Years	6,367	20,627	6.7	3	26,994	5.2	2
55–64 Years	6,570	28,427	8.2	4	34,997	6.8	3
65–74 Years	7,049	37,948	9.4	5	44,997	8.0	4
75–84 Years	4,960	34,991	10.9	6	39,951	9.6	5
85 Years and Over	1,528	15,064	12.8	7	16,592	11.7	6
Total Discharges	**46,092**	**194,484**	**8.1**	**4**	**240,576**	**6.7**	**3**

Note: Percentage and bed day 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	1,284	0.3	9,120	3.9	55,615	3.9	10,404	1.6
1–14 Years	13,751	3.2	16,944	7.3	44,582	3.1	30,695	4.6
15–24 Years	14,646	3.4	14,182	6.1	38,797	2.7	28,828	4.3
25–34 Years	26,023	6.0	15,471	6.7	47,258	3.3	41,494	6.2
35–44 Years	53,774	12.4	22,429	9.7	79,764	5.5	76,203	11.4
45–54 Years	74,340	17.1	26,109	11.3	112,416	7.8	100,449	15.1
55–64 Years	84,390	19.4	29,548	12.8	166,412	11.6	113,938	17.1
65–74 Years	90,053	20.7	37,121	16.0	271,972	18.9	127,174	19.1
75–84 Years	60,348	13.9	38,064	16.4	360,433	25.0	98,412	14.8
85 Years and Over	16,239	3.7	22,471	9.7	263,493	18.3	38,710	5.8
Total Discharges	**434,848**	**100**	**231,459**	**100**	**1,440,741**	**100**	**666,307**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
< 1 Year	1,171	7,949	6.9	3	9,120	6.1	2
1–14 Years	3,583	13,361	3.2	2	16,944	2.6	1
15–24 Years	4,234	9,948	3.7	2	14,182	2.7	1
25–34 Years	5,149	10,322	4.3	2	15,471	3.1	1
35–44 Years	6,717	15,712	4.9	2	22,429	3.6	1
45–54 Years	7,175	18,934	5.7	3	26,109	4.3	2
55–64 Years	6,521	23,027	7.1	4	29,548	5.6	2
65–74 Years	6,717	30,404	8.8	5	37,121	7.3	3
75–84 Years	5,514	32,550	11.0	6	38,064	9.5	5
85 Years and Over	2,310	20,161	13.0	8	22,471	11.7	7
Total Discharges	**49,091**	**182,368**	**7.8**	**4**	**231,459**	**6.2**	**2**

Note: Percentage and bed day columns are subject to rounding.

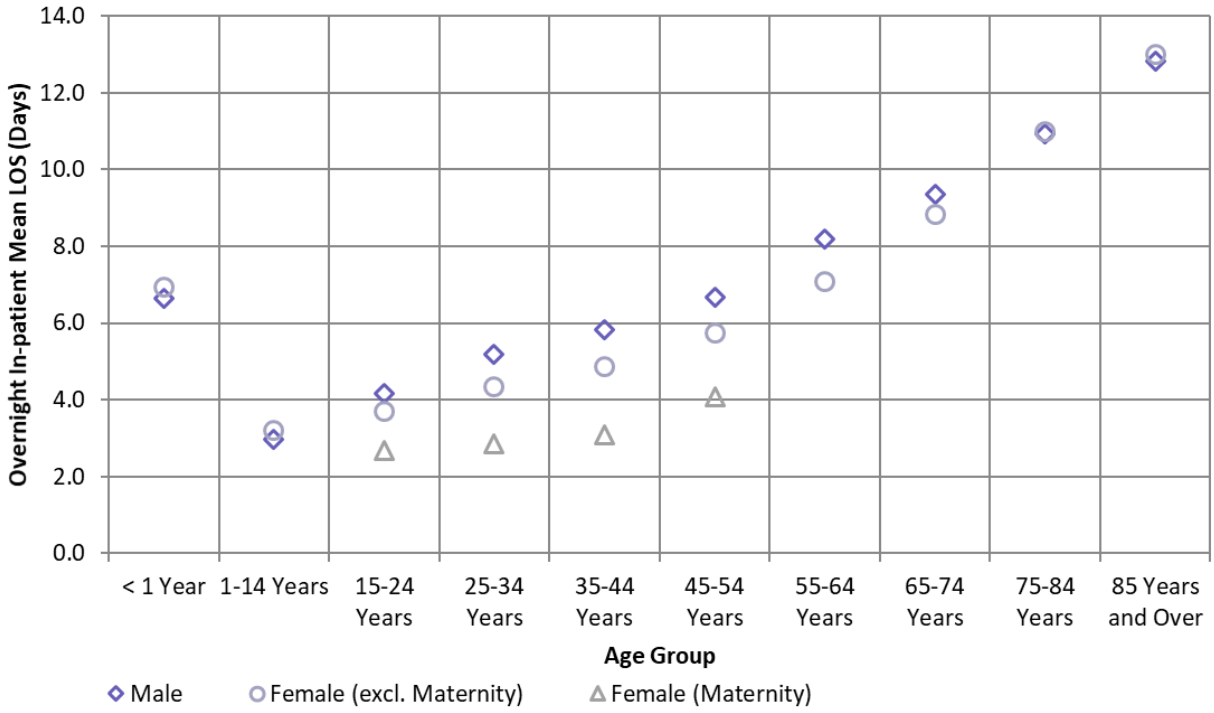
TABLE 2.1d Female Discharges (Maternity): Patient Type by Age Group (N, %, Bed Days, % and In-Patient Length of Stay)

	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
<25 Years	1,941	8.9	11,286	11.6	23,513	9.9	13,227	11.1
25–34 Years	10,906	49.9	50,187	51.4	118,183	49.9	61,093	51.1
35–44 Years	8,835	40.4	35,578	36.5	93,342	39.4	44,413	37.2
45 Years and Over	185	0.8	549	0.6	1,945	0.8	734	0.6
Total Discharges	**21,867**	**100**	**97,600**	**100**	**236,982**	**100**	**119,467**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
<25 Years	3,079	8,207	2.7	2	11,286	2.1	2
25–34 Years	10,663	39,524	2.9	2	50,187	2.4	2
35–44 Years	6,503	29,075	3.1	3	35,578	2.6	2
45 Years and Over	84	465	4.1	4	549	3.5	3
Total Discharges	**20,329**	**77,271**	**2.9**	**2**	**97,600**	**2.4**	**2**

Note: Percentage and bed day columns are subject to rounding.

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



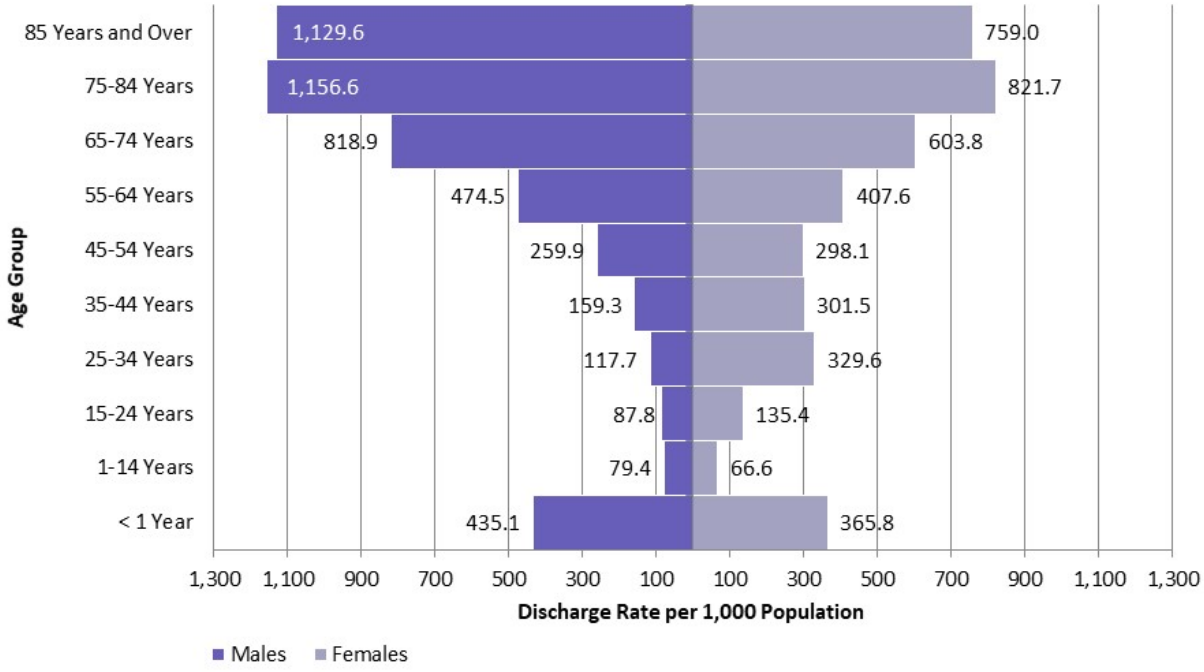
Note: Mean length of stay is not presented for female maternity discharges where there were a small number of discharges reported within a particular age group.

2.2.1.2 Discharge Rates by Age and Sex

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

- Apart from the youngest age group, for both males and females, the discharge rate generally increased with age. Those aged 75 to 84 years recorded the highest discharge rate for both males and females (1,156.6 per 1,000 population of males and 821.7 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 2020 by sex and age group were obtained from the CSO. https://data.cso.ie/#PEA11 [accessed 15th July 2021]

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 48.9 per cent of total discharges.
- Discharges who were widowed accounted for 9.1 per cent of total in-patient discharges, and 15.3 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 5.9 days, compared to 11.1 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	277,484	29.8	228,120	40.0	1,076,844	32.8	505,604	33.7
Married	487,341	52.4	246,003	43.2	1,376,394	41.9	733,344	48.9
Widowed	72,525	7.8	51,646	9.1	502,313	15.3	124,171	8.3
Other*	39,841	4.3	21,109	3.7	148,840	4.5	60,950	4.1
Unknown	35,214	3.8	13,722	2.4	119,577	3.6	48,936	3.3
Divorced	17,905	1.9	9,035	1.6	58,391	1.8	26,940	1.8
Total Discharges	**930,310**	**100**	**569,635**	**100**	**3,282,359**	**100**	**1,499,945**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
Single	50,718	177,402	5.9	3	228,120	4.7	2
Married	49,605	196,398	6.9	3	246,003	5.6	2
Widowed	6,636	45,010	11.1	6	51,646	9.7	5
Other*	3,835	17,274	8.5	4	21,109	7.1	3
Unknown	2,747	10,975	10.8	4	13,722	8.7	3
Divorced	1,971	7,064	8.1	4	9,035	6.5	3
Total Discharges	**115,512**	**454,123**	**7.1**	**3**	**569,635**	**5.8**	**2**

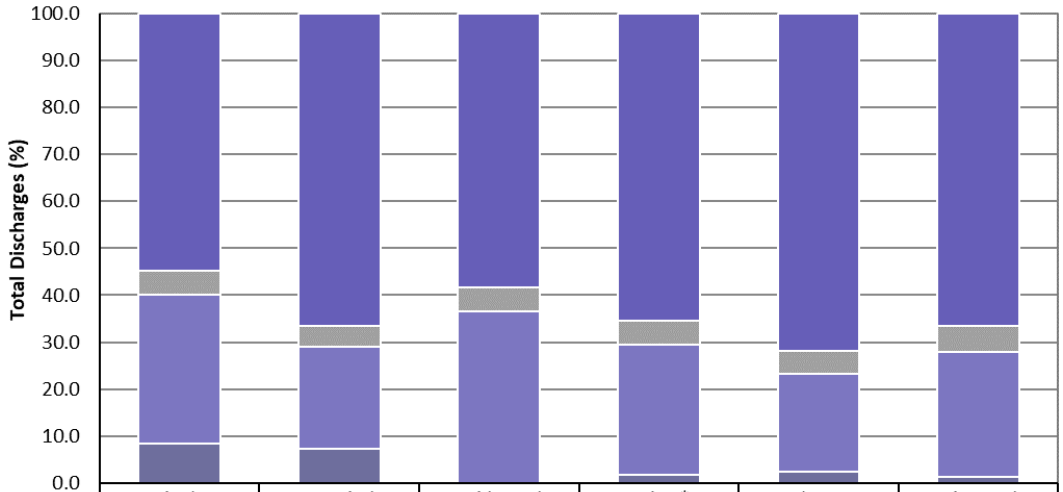
Notes: Percentage and bed day columns are subject to rounding.
* Other includes Separated, Civil Partner, Formal Civil Partner, and Surviving Civil Partner

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 (36.6 per cent and 31.7 per cent respectively).
- Over eight per cent of total discharges with a marital/civil status of single and 7.2 per cent with a marital/civil status of married were admitted as maternity in-patients.

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



	Single	Married	Widowed	Other*	Unknown	Divorced
Day Patient	54.9	66.5	58.4	65.4	72.0	66.5
In-Patients Elective	5.1	4.6	5.0	5.1	4.7	5.5
In-Patients Emergency	31.7	21.8	36.6	27.8	20.9	26.8
In-Patients Maternity	8.4	7.2	0.0	1.7	2.4	1.2

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

2.2.3 Public/Private Status

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

Table 2.3 and Figure 2.5 disaggregate total discharges by public/private status and age group. Of total discharges, 87.1 per cent were discharged on a public basis.

- Over 87 per cent of total discharges were treated on a public basis. Private patients in public hospitals accounted for 12.9 per cent of total discharges.
- The 25–34 years age group had the largest proportion of total discharges treated publicly (90.4 per cent) with only 9.6 per cent treated on a private basis.
- The 35–44 years age group had the largest proportion of total discharges that were treated on a private basis, accounting for 15.0 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 1.8 days longer than their private counterparts (see Table 2.3 and Figure 2.6). Median length of stay for public overnight in-patients in this age group was 4 days; 1 day longer than private overnight in-patients.

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	2,589	93.2	188	6.8	18,145	87.9	2,494	12.1	20,734	88.5	2,682	11.5
1–14 Years	28,790	87.9	3,958	12.1	30,427	83.7	5,946	16.3	59,217	85.7	9,904	14.3
15–24 Years	28,384	88.5	3,690	11.5	34,836	91.3	3,299	8.7	63,220	90.0	6,989	10.0
25–34 Years	53,514	90.1	5,897	9.9	71,598	90.6	7,457	9.4	125,112	90.4	13,354	9.6
35–44 Years	89,470	86.7	13,679	13.3	64,609	82.8	13,431	17.2	154,079	85.0	27,110	15.0
45–54 Years	116,249	86.3	18,384	13.7	46,465	86.6	7,187	13.4	162,714	86.4	25,571	13.6
55–64 Years	155,275	87.0	23,221	13.0	54,979	85.2	9,566	14.8	210,254	86.5	32,787	13.5
65–74 Years	184,840	87.0	27,621	13.0	69,652	84.8	12,466	15.2	254,492	86.4	40,087	13.6
75–84 Years	124,459	88.4	16,360	11.6	67,179	86.1	10,836	13.9	191,638	87.6	27,196	12.4
85 Years and Over	30,732	91.1	3,010	8.9	34,491	88.3	4,572	11.7	65,223	89.6	7,582	10.4
Total Discharges	**814,302**	**87.5**	**116,008**	**12.5**	**492,381**	**86.4**	**77,254**	**13.6**	**1,306,683**	**87.1**	**193,262**	**12.9**

	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	2,512	223	15,633	6.8	3	2,271	6.3	2	6.0	2	5.7	2
1–14 Years	7,148	1,009	23,279	3.2	2	4,937	2.8	2	2.5	1	2.4	1
15–24 Years	10,642	488	24,194	3.5	2	2,811	3.7	2	2.6	1	3.2	2
25–34 Years	18,551	1,243	53,047	3.5	2	6,214	3.4	3	2.7	2	2.9	2
35–44 Years	17,037	1,864	47,572	4.3	2	11,567	3.8	3	3.3	2	3.3	2
45–54 Years	12,722	904	33,743	6.4	3	6,283	4.9	3	4.8	2	4.4	2
55–64 Years	12,130	961	42,849	8.0	4	8,605	6.2	3	6.4	3	5.6	3
65–74 Years	12,766	1,000	56,886	9.4	5	11,466	7.9	4	7.7	3	7.3	4
75–84 Years	9,816	658	57,363	11.2	6	10,178	9.6	6	9.6	5	9.1	5
85 Years and Over	3,615	223	30,876	13.1	7	4,349	11.8	7	11.8	6	11.2	7
Total Discharges	**106,939**	**8,573**	**385,442**	**7.3**	**3**	**68,681**	**6.2**	**3**	**5.8**	**2**	**5.6**	**3**

Note: Percentage columns are subject to rounding.

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

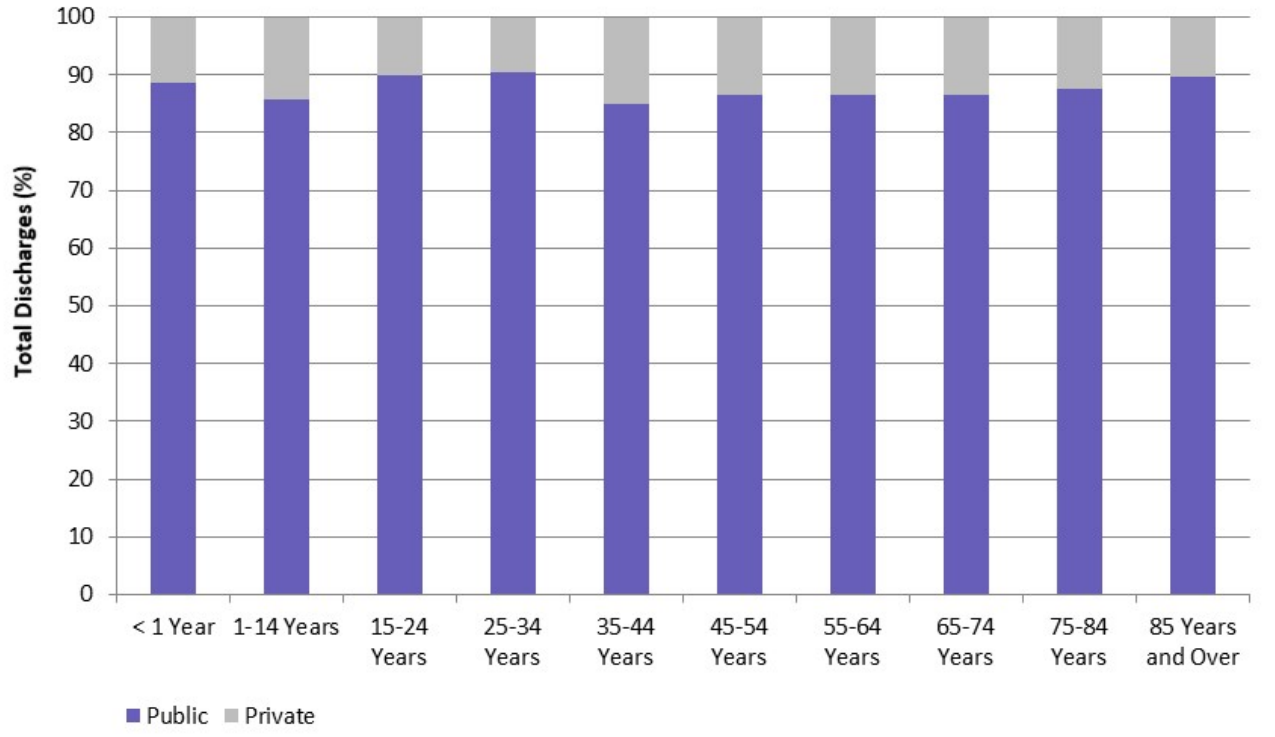
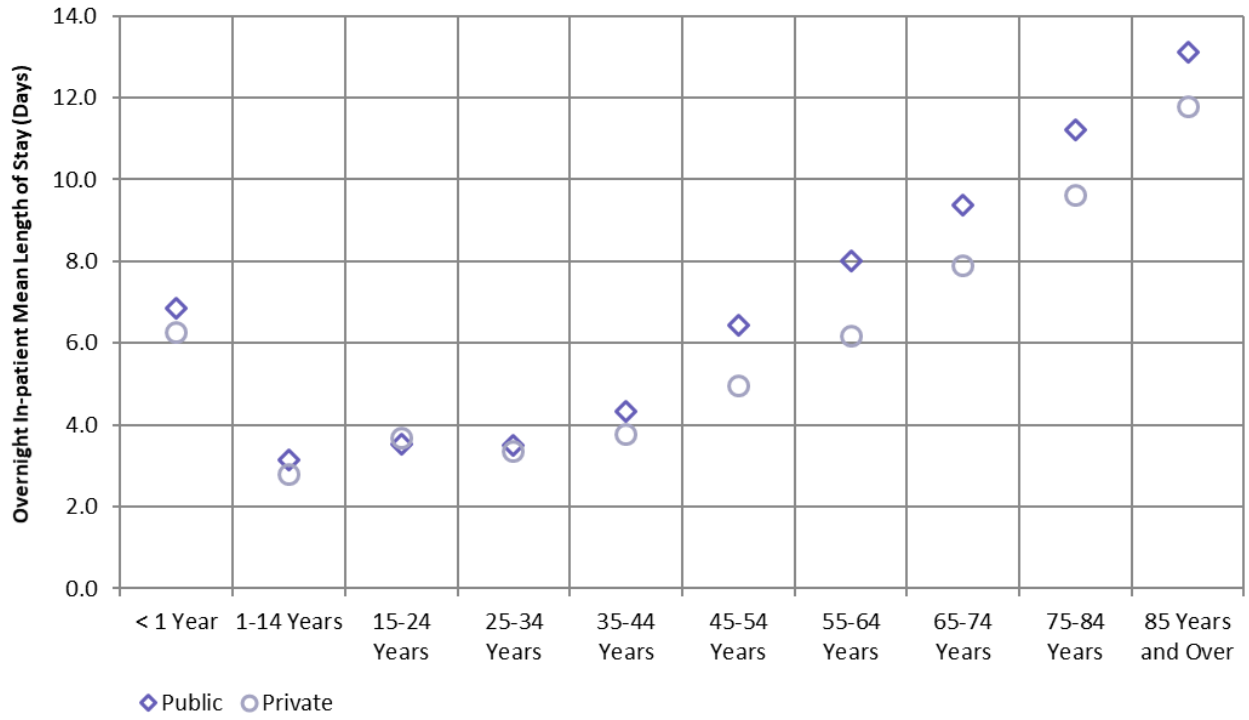


FIGURE 2.6 Overnight In-Patients: Mean Length of Stay (Days) by Age Group and Public/Private Status



2.2.4 GMS Status

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

2.2.4.1 GMS Status by Age Group

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

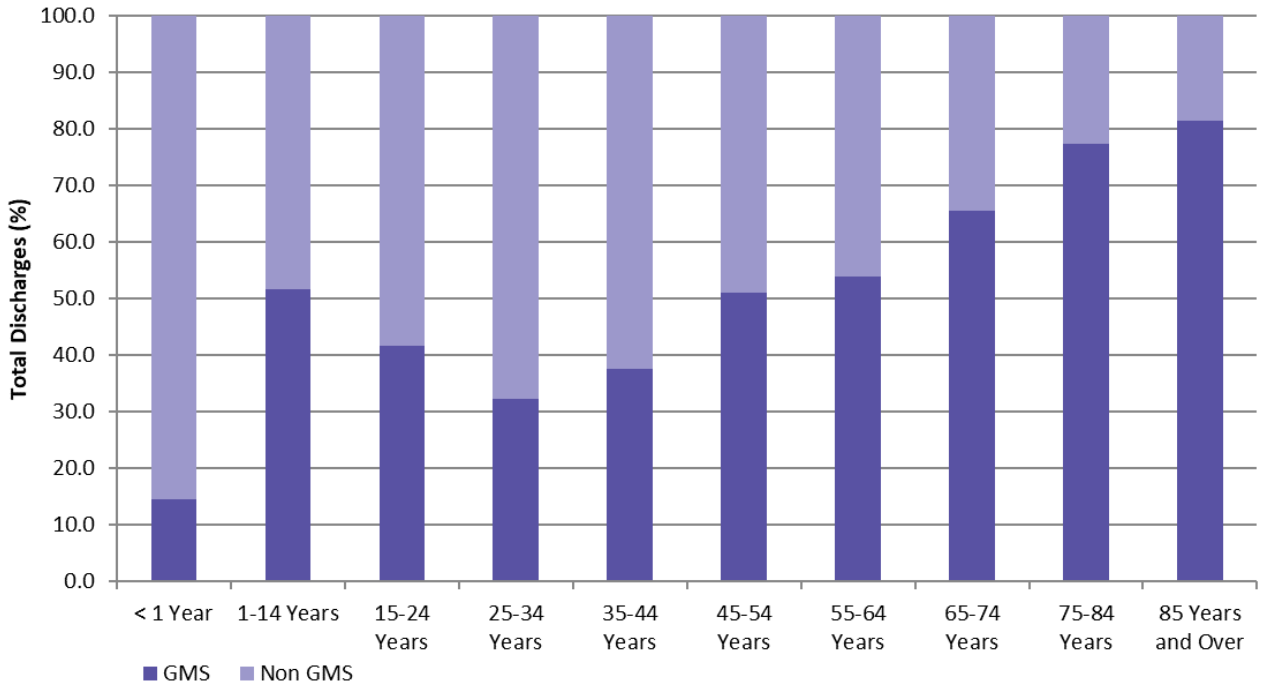
- Of total discharges, those aged 65–74 years accounted for the largest proportion of GMS discharges (19.6 per cent).
- Apart from those aged less than 25, the proportion of total discharges that were GMS discharges generally increased with age, with the largest proportion in the 85 years and over age group (81.5 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	3,406	0.4	19,919	3.1	91	0.1	23,416	1.6
1–14 Years	35,506	4.5	33,254	5.2	361	0.6	69,121	4.6
15–24 Years	28,999	3.7	40,605	6.3	605	0.9	70,209	4.7
25–34 Years	44,115	5.6	92,681	14.4	1,670	2.6	138,466	9.2
35–44 Years	65,905	8.3	109,624	17.0	5,660	8.7	181,189	12.1
45–54 Years	91,115	11.5	87,701	13.6	9,469	14.6	188,285	12.6
55–64 Years	122,793	15.5	105,324	16.3	14,924	22.9	243,041	16.2
65–74 Years	180,047	22.8	95,108	14.8	19,424	29.9	294,579	19.6
75–84 Years	161,164	20.4	47,166	7.3	10,504	16.1	218,834	14.6
85 Years and Over	57,415	7.3	13,032	2.0	2,358	3.6	72,805	4.9
Total Discharges	**790,465**	**100**	**644,414**	**100**	**65,066**	**100**	**1,499,945**	**100**

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

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



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

2.3 WHERE

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

2.3.1 Hospital Group

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

Discharges

- The largest proportion of total discharges were hospitalised in the Ireland East Hospital Group (19.5 per cent).
- Total in-patient discharges were also highest in the Ireland East Hospital Group where 21.8 per cent of discharges were hospitalised, while the Dublin Midlands Hospital Group accounted for the highest proportion of day patients (21.7 per cent).

Length of Stay

- The overnight in-patient mean length of stay ranged from 5.4 days (Children's) to 8.0 days (Dublin Midlands) – see Figure 2.8.

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

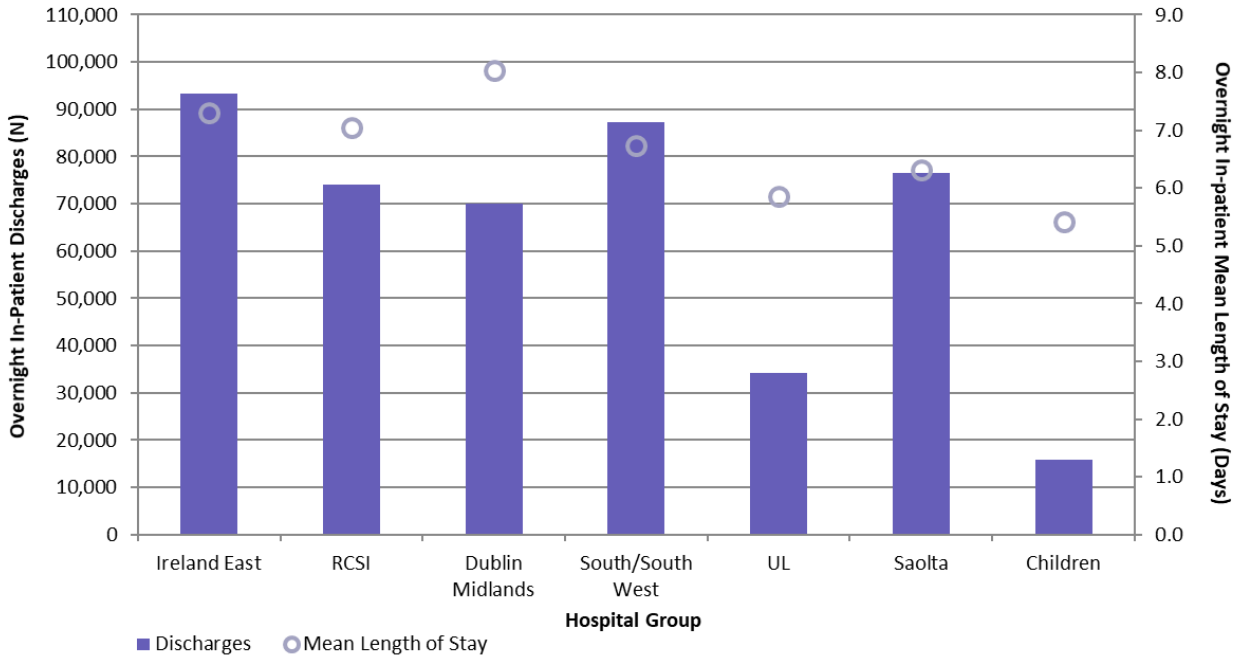
	Discharges and Bed Days							
	Day Patients		Total In-Patients				Total Discharges	
	N	%	N	%	Bed Days	%	N	%
Ireland East	168,534	18.1	124,410	21.8	696,269	21.2	292,944	19.5
RCSI	142,366	15.3	88,392	15.5	528,602	16.1	230,758	15.4
Dublin Midlands	201,907	21.7	84,863	14.9	570,887	17.4	286,770	19.1
South/South West	179,447	19.3	103,868	18.2	595,477	18.1	283,315	18.9
UL	51,160	5.5	49,108	8.6	208,143	6.3	100,268	6.7
Saolta	162,095	17.4	97,496	17.1	493,033	15.0	259,591	17.3
Children's	23,740	2.6	18,410	3.2	87,295	2.7	42,150	2.8
No group^	1,061	0.1	3,088	0.5	102,653	3.1	4,149	0.3
Total Discharges	**930,310**	**100**	**569,635**	**100**	**3,282,359**	**100**	**1,499,945**	**100**

	In-Patient Length of Stay						
	Sameday In-Patients	Overnight In-Patients			Total In-Patients		
	N	N	Mean	Median	N	Mean	Median
Ireland East	31,141	93,269	7.3	3	124,410	5.6	2
RCSI	14,339	74,053	7.0	3	88,392	6.0	3
Dublin Midlands	14,821	70,042	8.0	4	84,863	6.7	3
South/South West	16,693	87,175	6.7	3	103,868	5.7	3
UL	14,875	34,233	5.9	3	49,108	4.2	2
Saolta	21,088	76,408	6.3	3	97,496	5.1	2
Children's	2,547	15,863	5.4	2	18,410	4.7	2
No group^	8	3,080	33.3	21	3,088	33.2	21
Total Discharges	**115,512**	**454,123**	**7.1**	**3**	**569,635**	**5.8**	**2**

Notes: Percentage and bed day 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 2020.

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



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

2.3.1.1 Hospital Group by Admission Type

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

Discharges

- The largest proportion of elective in-patients were treated in the South/South West Hospital Group (21.8 per cent), accounting for 16.0 per cent of total elective in-patient bed days.
- The Ireland East Hospital Group treated the largest proportion of both emergency in-patients (22.0 per cent) and maternity in-patients (22.2 per cent) compared to other groups.

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

	Discharges and Bed Days															
	Day Patients		In-Patients												Total Discharges	
			Elective				Emergency[a]				Maternity					
	N	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%	Bed Days	%	N	%
Ireland East	168,534	18.1	14,877	20.5	94,743	17.7	87,878	22.0	553,009	22.0	21,655	22.2	48,516	20.5	292,944	19.5
RCSI	142,366	15.3	8,815	12.2	52,939	9.9	59,937	15.0	425,997	17.0	19,640	20.1	49,666	21.0	230,758	15.4
Dublin Midlands	201,907	21.7	9,877	13.6	78,029	14.6	56,201	14.1	454,718	18.1	18,785	19.2	38,140	16.1	286,770	19.1
South/South West	179,447	19.3	15,803	21.8	85,596	16.0	71,652	17.9	462,816	18.4	16,413	16.8	47,066	19.9	283,315	18.9
UL	51,160	5.5	4,018	5.5	25,529	4.8	39,087	9.8	163,120	6.5	6,003	6.2	19,494	8.2	100,268	6.7
Saolta	162,095	17.4	10,513	14.5	68,772	12.9	71,880	18.0	390,162	15.5	15,103	15.5	34,099	14.4	259,591	17.3
Children's	23,740	2.6	5,436	7.5	25,544	4.8	12,973	3.2	61,750	2.5	~	–	^	–	42,150	2.8
No group[ǂ]	1,061	0.1	3,087	4.3	102,637	19.2	~	–	^	–	0	0.0	–	0.0	4,149	0.3
Total Discharges	**930,310**	**100**	**72,426**	**100**	**533,789**	**100**	**399,609**	**100**	**2,511,589**	**100**	**97,600**	**100**	**236,982**	**100**	**1,499,945**	**100**

Notes:

Percentage and bed day 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 2020.

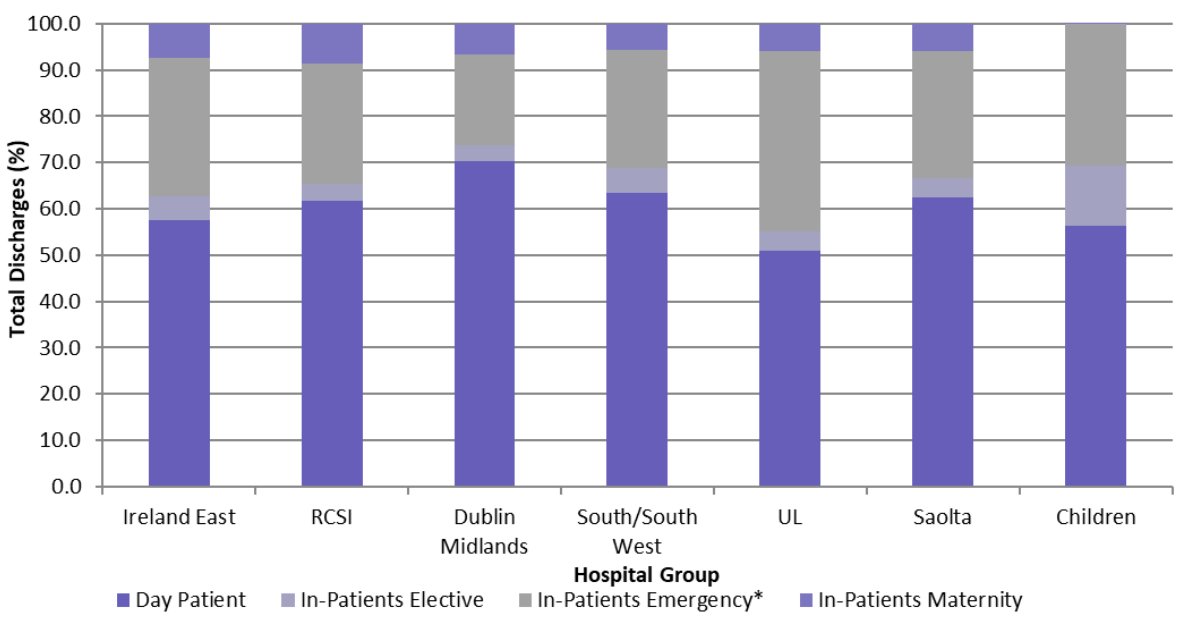
~ Denotes five or fewer discharges reported to HIPE.

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

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

- Across all hospital groups, the largest proportion of total discharges were treated as day patients, ranging from 51.0 per cent in the UL Hospital Group to 70.4 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 UL Hospital Group treated the highest proportion of total discharges as emergency in-patients (39.0 per cent), followed by the Children's Hospital Group (30.8 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 (91.7 per cent), while the UL Hospital Group treated the smallest proportion of total discharges on a public basis (81.0 per cent).
- Over 90 per cent of total day patients were treated as public day patients in the Ireland East, RCSI and Saolta Hospital Groups. The smallest proportion was in the UL Hospital Group where 77.6 per cent of total day patients were treated on a public basis.
- The proportion of total in-patients treated on a public basis was highest in the Saolta Hospital Group (90.8 per cent) and was lowest in the South/South West Hospital Group (82.2 per cent).

Length of Stay

- Overnight in-patient mean length of stay was 7.3 days for public discharges compared to 6.2 days for private discharges.
- The Dublin Midlands Hospital Group recorded the longest overnight in-patient mean length of stay for both public (8.2 days) and private discharges (7.4 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	155,186	92.1	13,348	7.9	107,515	86.4	16,895	13.6	262,701	89.7	30,243	10.3
RCSI	132,715	93.2	9,651	6.8	78,972	89.3	9,420	10.7	211,687	91.7	19,071	8.3
Dublin Midlands	171,036	84.7	30,871	15.3	71,692	84.5	13,171	15.5	242,728	84.6	44,042	15.4
South/South West	147,646	82.3	31,801	17.7	85,333	82.2	18,535	17.8	232,979	82.2	50,336	17.8
UL	39,720	77.6	11,440	22.4	41,520	84.5	7,588	15.5	81,240	81.0	19,028	19.0
Saolta	145,849	90.0	16,246	10.0	88,490	90.8	9,006	9.2	234,339	90.3	25,252	9.7
Children's	21,210	89.3	2,530	10.7	16,122	87.6	2,288	12.4	37,332	88.6	4,818	11.4
No group[ǂ]	940	88.6	121	11.4	2,737	88.6	351	11.4	3,677	88.6	472	11.4
Total Discharges	**814,302**	**87.5**	**116,008**	**12.5**	**492,381**	**86.4**	**77,254**	**13.6**	**1,306,683**	**87.1**	**193,262**	**12.9**

	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	28,269	2,872	79,246	7.6	3	14,023	5.4	3	5.8	2	4.6	2
RCSI	13,647	692	65,325	7.1	3	8,728	6.7	4	5.9	3	6.3	3
Dublin Midlands	13,517	1,304	58,175	8.2	3	11,867	7.4	4	6.7	3	6.7	3
South/South West	14,951	1,742	70,382	6.9	3	16,793	6.2	3	5.8	2	5.6	3
UL	14,437	438	27,083	6.0	3	7,150	5.5	3	4.1	1	5.2	3
Saolta	19,800	1,288	68,690	6.3	3	7,718	6.2	3	5.0	2	5.4	2
Children's	2,310	237	13,812	5.6	2	2,051	4.5	2	4.8	2	4.1	2
No group[ǂ]	8	0	2,729	35.8	23	351	14.2	7	35.7	23	14.2	7
Total Discharges	**106,939**	**8,573**	**385,442**	**7.3**	**3**	**68,681**	**6.2**	**3**	**5.8**	**2**	**5.6**	**3**

Notes: Percentage columns are subject to rounding.

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 2020.

2.3.2 Admission Source

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

- The majority of total discharges were admitted from home (96.4 per cent).
- Of total emergency in-patients, 4.5 per cent were transferred in from another hospital.
- Over 13 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	923,404	99.3	62,281	86.0	362,904	90.8	96,854	99.2	1,445,443	96.4
Long stay accommodation	981	0.1	281	0.4	9,235	2.3	~	–	10,498	0.7
Transfer from other hospital	5,446	0.6	9,767	13.5	17,893	4.5	632	0.6	33,738	2.2
Other	479	0.1	97	0.1	9,577	2.4	*	–	10,266	0.7
Total	**930,310**	**100**	**72,426**	**100**	**399,609**	**100**	**97,600**	**100**	**1,499,945**	**100**

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

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

~ Denotes five or fewer discharges reported to HIPE.

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

2.3.3 Discharge Destination

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

- The majority of total discharges were discharged home (94.8 per cent).
- Of total emergency in-patients, 5.4 per cent were transferred to long stay accommodation, and 6.1 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	922,612	99.2	66,271	91.5	336,751	84.3	95,978	98.3	1,421,612	94.8
Long stay accommodation	1,638	0.2	1,962	2.7	21,384	5.4	*	–	24,994	1.7
Transfer to other hospital	5,737	0.6	3,178	4.4	24,525	6.1	544	0.6	33,984	2.3
Died	0	–	*	–	9,957	2.5	~	–	10,516	0.7
Other	323	0.0	457	0.6	6,992	1.7	1,067	1.1	8,839	0.6
Total Discharges	**930,310**	**100**	**72,426**	**100**	**399,609**	**100**	**97,600**	**100**	**1,499,945**	**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.

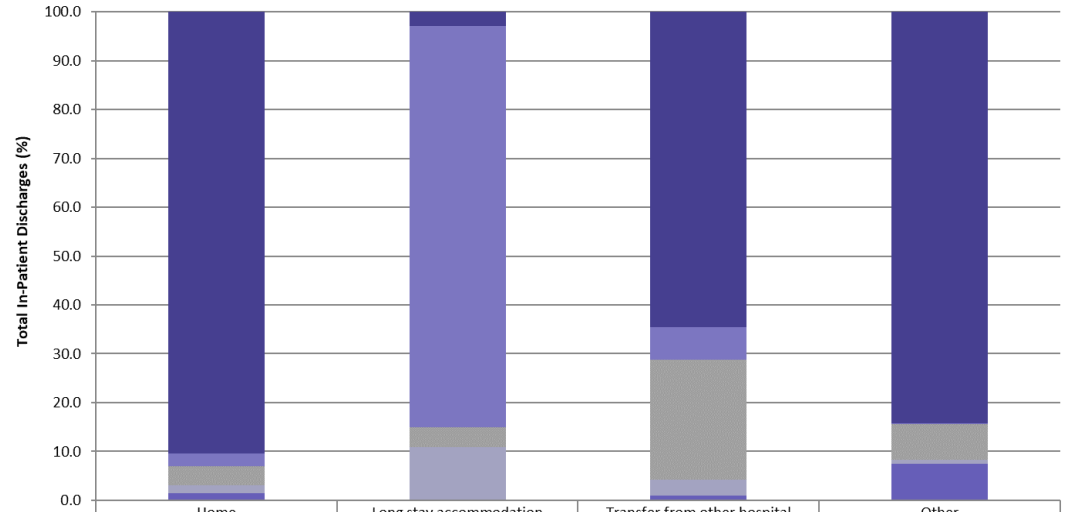
* Further suppression required to prevent disclosure of five or fewer discharges.

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, 90.5 per cent were discharged home.
- In-patients admitted from long stay accommodation were primarily discharged back to long stay accommodation (82.2 per cent).
- Just under a quarter of in-patients (24.6 per cent) who were admitted from another hospital were transferred to another hospital, while 64.5 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	90.5	2.9	64.5	84.2
Long stay accommodation	2.6	82.2	6.7	0.2
Transfer to other hospital	3.9	4.0	24.6	7.4
Died	1.6	10.8	3.2	0.8
Other	1.4	0.1	0.9	7.5

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

2.4 WHEN

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

2.4.1 Day of Admission

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

Discharges

- Almost 60 per cent of elective in-patients were admitted between Monday and Wednesday, with only 7.0 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 20.3 per cent on Wednesday to 3.0 per cent on Saturday and 1.2 per cent on Sunday.

Length of Stay[2]

- Mean length of stay for elective in-patients ranged from 6.8 days for those admitted on a Tuesday to 12.4 days for those admitted on a Saturday.
- Mean length of stay for emergency in-patients ranged from 5.9 days for those admitted on a Monday to 6.8 days for those admitted on a Saturday.

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

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

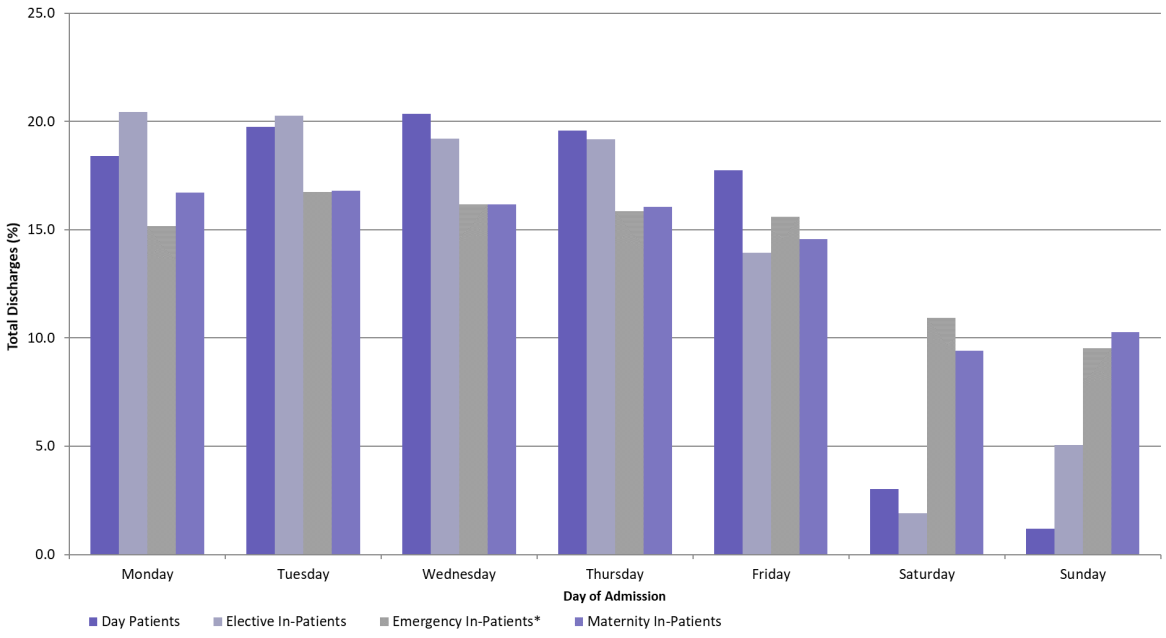
	Discharges									
	Day Patients		In-Patients						Total Discharges	
			Elective		Emergency[a]		Maternity			
	N	%	N	%	N	%	N	%	N	%
Monday	171,096	18.4	14,808	20.4	60,641	15.2	16,320	16.7	262,865	17.5
Tuesday	183,623	19.7	14,673	20.3	66,949	16.8	16,390	16.8	281,635	18.8
Wednesday	189,177	20.3	13,909	19.2	64,617	16.2	15,778	16.2	283,481	18.9
Thursday	182,150	19.6	13,890	19.2	63,379	15.9	15,667	16.1	275,086	18.3
Friday	165,027	17.7	10,089	13.9	62,279	15.6	14,223	14.6	251,618	16.8
Saturday	28,097	3.0	1,390	1.9	43,665	10.9	9,194	9.4	82,346	5.5
Sunday	11,140	1.2	3,667	5.1	38,079	9.5	10,028	10.3	62,914	4.2
Total Discharges	**930,310**	**100**	**72,426**	**100**	**399,609**	**100**	**97,600**	**100**	**1,499,945**	**100**

	In-Patient Length of Stay								
	Elective		Emergency[a]		Maternity		Total In-Patients		
	Mean	Median	Mean	Median	Mean	Median	N	Mean	Median
Monday	7.0	2	5.9	2	2.5	2	91,769	5.5	2
Tuesday	6.8	2	6.2	2	2.5	2	98,012	5.6	2
Wednesday	7.2	2	6.1	2	2.5	2	94,304	5.7	2
Thursday	7.1	2	6.3	2	2.5	2	92,936	5.8	2
Friday	8.3	3	6.6	3	2.4	2	86,591	6.1	3
Saturday	12.4	5	6.8	3	2.1	2	54,249	6.2	3
Sunday	8.9	4	6.3	3	2.3	2	51,774	5.7	3
In-Patient Discharges	**7.4**	**2**	**6.3**	**2**	**2.4**	**2**	**569,635**	**5.8**	**2**

Notes: Percentage columns are subject to rounding.

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

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



Note: * See note under Table 2.10

2.4.2 Day of Discharge

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

Discharges

- The proportion of elective in-patients discharged increased throughout the week, from 11.6 per cent on Monday to 22.1 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 (20.0 per cent), with the smallest proportion discharged on Sunday (5.7 per cent).

Length of Stay[3]

- Elective in-patients discharged on a Monday had the longest in-patient mean length of stay (10.3 days).
- Emergency in-patient mean length of stay generally fell throughout the week from 7.0 days for those discharged on a Monday to 4.1 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	171,096	18.4	8,371	11.6	62,101	15.5	14,305	14.7	255,873	17.1
Tuesday	183,623	19.7	11,250	15.5	67,075	16.8	13,200	13.5	275,148	18.3
Wednesday	189,177	20.3	12,808	17.7	68,974	17.3	13,298	13.6	284,257	19.0
Thursday	182,150	19.6	13,169	18.2	68,670	17.2	14,925	15.3	278,914	18.6
Friday	165,027	17.7	16,032	22.1	79,753	20.0	15,770	16.2	276,582	18.4
Saturday	28,097	3.0	7,298	10.1	30,303	7.6	13,670	14.0	79,368	5.3
Sunday	11,140	1.2	3,498	4.8	22,733	5.7	12,432	12.7	49,803	3.3
Total Discharges	**930,310**	**100**	**72,426**	**100**	**399,609**	**100**	**97,600**	**100**	**1,499,945**	**100**

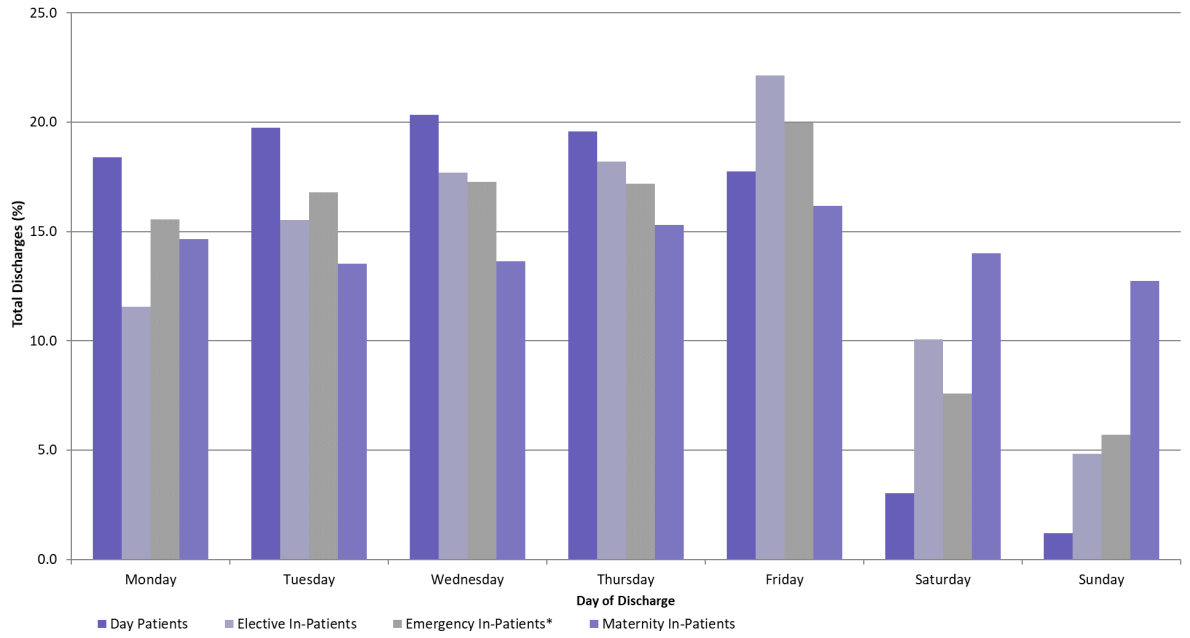
	In-Patient Length of Stay								
	Elective		Emergency[a]		Maternity		Total In-Patients		
	Mean	Median	Mean	Median	Mean	Median	N	Mean	Median
Monday	10.3	5	7.0	3	2.6	2	84,777	6.6	3
Tuesday	7.6	2	6.5	3	2.4	2	91,525	6.0	2
Wednesday	8.0	2	6.7	3	2.2	2	95,080	6.2	2
Thursday	6.9	2	6.5	2	2.2	2	96,764	5.9	2
Friday	7.3	2	6.3	3	2.3	2	111,555	5.9	2
Saturday	4.1	2	4.5	2	2.6	2	51,271	3.9	2
Sunday	6.2	3	4.1	2	2.6	2	38,663	3.8	2
In-Patient Discharges	**7.4**	**2**	**6.3**	**2**	**2.4**	**2**	**569,635**	**5.8**	**2**

Notes: Percentage columns are subject to rounding.

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

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

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



Note: * See note under Table 2.10

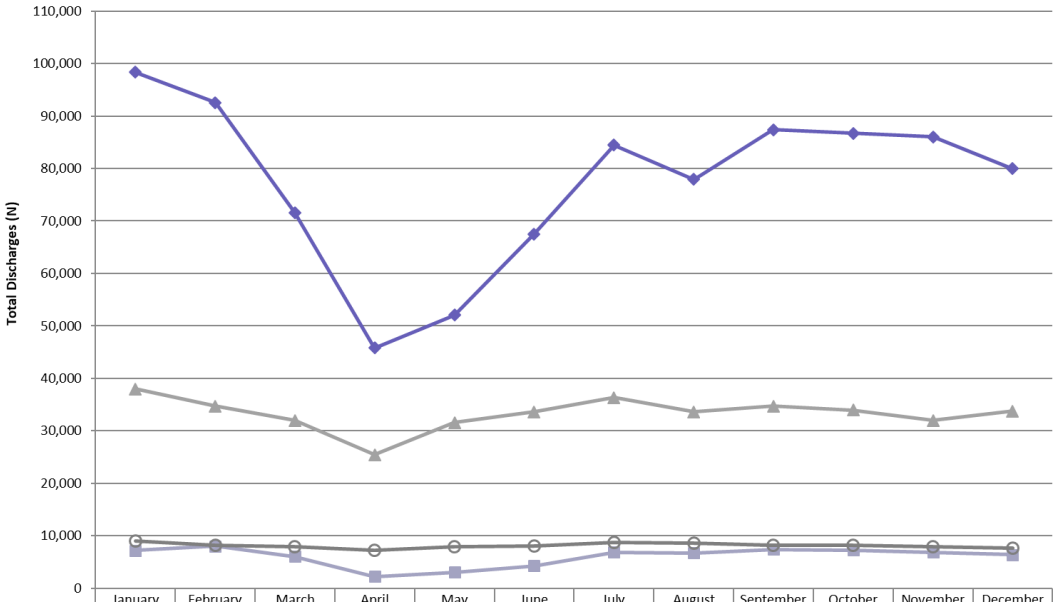
2.4.3 Month of Discharge

Figure 2.13 shows total discharges by month of discharge disaggregated by patient type and admission type. The data presented here highlights the fluctuations in discharges that were affected by COVID-19 in 2020. [4]

- Hospital discharges peaked in February for elective in-patients (8,029 discharges), while April recorded the smallest number of elective in-patients with only 2,242 elective in-patients discharged in this month.
- Emergency in-patient hospital discharges peaked in January (37,996 discharges), while the smallest number of emergency in-patients were discharged in April with 25,423 discharges.
- Maternity in-patient discharges were highest in January (8,951 discharges) and lowest in April (7,195 discharges).

4 The Annex of this report includes a discussion and analysis of COVID-19 admissions in 2020.

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	98,360	92,530	71,601	45,773	52,033	67,509	84,438	77,907	87,409	86,727	86,041	79,982
Elective In-Patients	7,216	8,029	6,054	2,242	3,037	4,298	6,879	6,709	7,391	7,287	6,864	6,420
Emergency In-Patients	37,996	34,680	31,988	25,423	31,563	33,620	36,312	33,626	34,718	33,958	31,956	33,769
Maternity	8,951	8,247	7,939	7,195	7,911	7,997	8,775	8,613	8,148	8,170	7,957	7,697

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 9,473 discharges admitted prior to 2020 and discharged in 2020.

Morbidity Analysis 2020

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 clinical coder performs an essential function in providing high quality, accurate, and uniform medical information. The HPO is responsible for the training of all clinical coders nationally.[3,4] Since 2014, the HPO have delivered certification courses for clinical coders in collaboration with, and accredited by, the School of Computing in the Technological University Dublin (formally Dublin Institute of Technology). To date, over 100 clinical coders have achieved this certification.

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

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

2 The calculation of total in-patient length of stay differs in this report compared to reports prior to 2018. Since 2018, the length of stay assigned for sameday in-patients has changed from one bed day to 0.5 bed days. This will impact on the total in-patient length of stay resulting in a lower average length of stay compared to years prior to 2018 (see Section 1.6).

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

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

include; nursing notes, consultation reports, 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 2020, which details the information that is collected and coded for each hospital discharge. No interpretation of test results may be undertaken by the clinical coder and all diagnoses and procedures recorded must be documented by a clinician in the chart.[5]

All HIPE data are entered in the hospital using the HIPE Portal data entry system which runs an extensive number of validation edit checks to ensure the quality of the data. Other data quality activities and data quality tools are in use at local and national HPO level.[6,7]

At the start of 2020, the classification used to code clinical information was updated from the 8th Edition to the 10th 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).[8,9,] 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 as required to reflect changing clinical practice and to ensure the classification and its application are relevant to the Irish Healthcare system.[10]

Due to the update in the classification, caution must be exercised when comparing procedure and diagnosis categories presented in reports from 2020 onwards to previous reports. Updates may include changes in sequencing of codes, addition of new codes, deletion of codes, and updates to ACS and ICS.[11]

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5 This instruction is covered in ICS 0048: General Abstraction Guidelines, see www.hpo.ie for the current version of the Irish Coding Standards.

6 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

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

8 Australian Consortium for Classification Development (ACCD), 2017: The *International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification* (ICD-10-AM), and *Australian Classification of Health Interventions* (ACHI) and *Australian Coding Standards* (ACS) – ICD-10-AM/ACHI/ACS (10th Ed)- Adelaide: Independent Hospital Pricing Authority (IHPA), Lane Publishing.

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

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

11 See Appendix VII for an overview of changes from ICD-10-AM/ACHI/ACS 8th edition (in use from 2015–2019) to 10th Edition (in use from 1st January 2020).

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. Emergency use codes from U00-U99 have been used to identify Covid-19; including, but not limited to, U07.1 *Emergency use of U07.1 [COVID-19, virus identified]* and U07.2 *Emergency use of U07.2 (COVID-19, virus not identified).*

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: Australian Consortium for Classification Development (ACCD), 2017: Australian Coding Standards (ACS) – ICD-10-AM/ACHI/ACS (10th Ed)- Adelaide: Independent Hospital Pricing Authority (IHPA), Lane Publishing.p. xiv.

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.[12]
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: Australian Consortium for Classification Development (ACCD), 2017: Australian Coding Standards (ACS) (10th Ed) - Adelaide: Independent Hospital Pricing Authority (IHPA), Lane Publishing p. xv.
Australian Consortium for Classification Development (ACCD), 2017: *Australian Classification of Health Interventions* (ACHI) (10th Ed) - Adelaide: Independent Hospital Pricing Authority (IHPA), Lane Publishing. p. iii.

12 HIPE collects data on discharges from, and deaths in, acute public hospitals.

3.2.1 Definition of a Diagnosis

In 2020, 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'.[13]

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.[14]

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 2.9.
- The mean number of diagnoses recorded for in-patient discharges was 4.2, compared to 2.0 for day patients.
- The mean number of diagnoses recorded for in-patient discharges was higher for males (4.5) compared with females (4.0).
- The mean number of diagnoses recorded for in-patient discharges increased with age ranging from 2.9 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**	**4.2**	**2.9**
Sex			
Male	2.0	4.5	2.9
Female	2.0	4.0	2.9
Maternity	2.0	3.9	3.6
Non-Maternity	2.0	4.1	2.7
Age Group			
< 15 Years	1.7	2.9	2.5
15–44 Years	1.8	3.6	2.7
45–64 Years	2.1	4.1	2.6
65 Years and Over	2.1	5.3	3.2

13 Australian Consortium for Classification Development (ACCD), 2017: Australian Coding Standards (ACS) (10th Ed) - Adelaide: Independent Hospital Pricing Authority (IHPA), Lane Publishing. p. 1.

14 Australian Consortium for Classification Development (ACCD), op. cit., p. 4.

3.2.2 Definition of a Procedure

In 2020, 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).[15] 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.[16]

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.[17] 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.[18]

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 1,499,945 total discharges, principal procedures were recorded for 1,194,248 discharges (79.6 per cent).
- 92 per cent of day patient discharges had a principal procedure recorded.
- Over 59 per cent of in-patient discharges had a principal procedure recorded, with 89.2 per cent of elective in-patients, 52.6 per cent of emergency in-patients, and 65.5 per cent of maternity in-patients undergoing a principal procedure.

15 Australian Consortium for Classification Development (ACCD), 2017: Australian Classification of Health Interventions (ACHI) (10th Ed) - Adelaide: Independent Hospital Pricing Authority (IHPA), Lane Publishing.

16 Australian Consortium for Classification Development (ACCD), 2017: Australian Coding Standards (ACS) (10th Ed) - Adelaide: Independent Hospital Pricing Authority (IHPA), Lane Publishing.

17 Australian Consortium for Classification Development (ACCD), 2017: Australian Classification of Health Interventions (ACHI) (10th Ed) - Adelaide: Independent Hospital Pricing Authority (IHPA), Lane Publishing.

18 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	**1,499,945**	**1,194,248**	**79.6**
Day Patients	930,310	855,714	92.0
In-Patients	569,635	338,534	59.4
Elective In-Patients	72,426	64,571	89.2
Emergency In-Patients	399,609	210,014	52.6
Maternity In-Patients	97,600	63,949	65.5

3.2.2.2 Mean Number of Procedures Reported

Table 3.5 outlines the mean number of procedures reported for day patients, in-patients and total discharges, by sex and age group. The calculation of mean procedures is based on discharges with at least one procedure reported to HIPE.[19]

- For those discharges who underwent at least one procedure, in-patient discharges had a mean number of 3.0 procedures recorded, compared to a mean of 1.4 procedures for day patients.
- While the mean number of procedures increased with age for in-patient discharges, the day patient pattern differed. For those undergoing a procedure, day patient discharges aged less than 15 years recorded a mean of 1.8 procedures, which was larger than that reported for older age groups.

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

	Day Patients	In-Patients	Total Discharges
Total	**1.4**	**3.0**	**1.9**
Sex			
Male	1.4	3.0	1.8
Female	1.5	3.0	2.0
Maternity	1.5	3.2	3.1
Non-Maternity	1.5	2.9	1.8
Age Group			
< 15 Years	1.8	2.8	2.3
15–44 Years	1.4	2.9	2.0
45–64 Years	1.4	3.0	1.7
65 Years and Over	1.4	3.1	1.8

[19] Includes all anaesthesia except local anaesthesia. See ACS 0031 *Anaesthesia* in Australian Consortium for Classification Development (ACCD), 2017: Australian Coding Standards (ACS) (10th Ed) - Adelaide: Independent Hospital Pricing Authority (IHPA), Lane Publishing p.36.

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 62.0 per cent of total discharges.
- Day patients aged 65 years or over accounted for 41.6 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) and those with a principal diagnosis of *Care involving dialysis* accounted for 22.5 and 19.3 per cent of day patient discharges respectively.

Day Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 92.0 per cent of day patient discharges (see Table 3.4).
- Procedures from the block *Haemodialysis* were reported as a principal procedure for 21.0 per cent of day patients with at least one procedure recorded.

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

- The top three AR-DRGs accounted for 41.1 per cent of day patient discharges reported to HIPE when analysed by diagnosis related group.[20]
- *Haemodialysis* accounted for 19.3 per cent, while *Chemotherapy* and *Other Neoplastic Disorders, Minor Complexity* accounted for 11.7 per cent and 10.1 per cent of day patient discharges respectively.

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

TABLE 3.6 Day Patient Activity (N, %)

Top 20 Principal Diagnoses[a]		N	%
Z51	Other medical care[c]	209,664	22.5
Z49	Care involving dialysis	179,909	19.3
H35	Other retinal disorders	25,968	2.8
E83	Disorders of mineral metabolism	16,448	1.8
K50	Crohn's disease [regional enteritis]	13,021	1.4
K51	Ulcerative colitis	11,089	1.2
Z13	Special screening examination for other diseases and disorders	10,741	1.2
C44	Other malignant neoplasms of skin	10,715	1.2
L40	Psoriasis	8,338	0.9
K29	Gastritis and duodenitis	8,187	0.9
D12	Benign neoplasm of colon, rectum, anus and anal canal	8,116	0.9
M54	Dorsalgia	6,894	0.7
Z48	Other surgical follow-up care	6,866	0.7
C50	Malignant Neoplasms of Breast	6,832	0.7
Z08	Follow-up examination after treatment for malignant neoplasm	6,539	0.7
R10	Abdominal and pelvic pain	5,938	0.6
G35	Multiple sclerosis	5,806	0.6
K57	Diverticular disease of intestine	5,768	0.6
Z09	Follow-up examination after treatment for conditions other than malignant neoplasms	5,547	0.6
M25	Other joint disorders, not elsewhere classified	5,511	0.6

Day Patients

930,310

Sex	N	%
Male	473,595	50.9
Female	456,715	49.1

Age Group	N	%
< 1 Year	2,777	0.3
1–14 Years	32,748	3.5
15–24 Years	32,074	3.4
25–34 Years	59,411	6.4
35–44 Years	103,149	11.1
45–54 Years	134,633	14.5
55–64 Years	178,496	19.2
65–74 Years	212,461	22.8
75–84 Years	140,819	15.1
85 Years and Over	33,742	3.6

Top 20 Principal Procedure Blocks[b]		N	%
1060	Haemodialysis	179,767	21.0
1920	Administration of pharmacotherapy	161,610	18.9
1788	Megavoltage radiation treatment	94,618	11.1
1008	Panendoscopy with excision	32,677	3.8
0209	Application, insertion or removal procedures on retina, choroid or posterior chamber	31,804	3.7
0911	Fibreoptic colonoscopy with excision	29,725	3.5
1620	Excision of lesion of skin and subcutaneous tissue	26,328	3.1
0905	Fibreoptic colonoscopy	19,514	2.3
1893	Administration of blood and blood products	19,362	2.3
0725	Other incision procedures on veins	16,110	1.9
1552	Administration of agent into other musculoskeletal s sites	15,888	1.9
1089	Examination procedures on bladder	11,717	1.4
1610	Ultraviolet B [UVB] light therapy of skin	10,278	1.2
0200	Extraction of crystalline lens	7,897	0.9
1798	Radiation field setting	6,789	0.8
0668	Coronary angiography	6,379	0.7
1618	Biopsy of skin and subcutaneous tissue	6,076	0.7
1005	Panendoscopy	5,759	0.7
1259	Examination procedures on uterus	4,745	0.6
1824	Other assessment, consultation, interview, examination or evaluation	4,626	0.5

Hospital Group	N	%
Ireland East	168,534	18.1
RCSI	142,366	15.3
Dublin Midlands	201,907	21.7
South/South West	179,447	19.3
UL	51,160	5.5
Saolta	162,095	17.4
Children's	23,740	2.6
No group	1,061	0.1

Top 10 AR-DRGs		N	%
L61Z	Haemodialysis	179,667	19.3
R63Z	Chemotherapy	108,796	11.7
R62C	Other Neoplastic Disorders, Minor Complexity	93,868	10.1
G48B	Colonoscopy, Minor Complexity	37,219	4.0
C03B	Retinal Procedures, Minor Complexity	30,494	3.3
Z64B	Other Factors Influencing Health Status, Minor Complexity	30,236	3.2
I40Z	Infusions for Musculoskeletal Disorders, Sameday	27,835	3.0
G47C	Gastroscopy, Minor Complexity	25,822	2.8
J11B	Other Skin, Subcutaneous Tissue and Breast Procedures, Minor Complexity	25,511	2.7
G64B	Inflammatory Bowel Disease, Minor Complexity	20,831	2.2

Notes: Percentage columns are subject to rounding.

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

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

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

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 38.0 per cent of total discharges.
- Overnight in-patient discharges accounted for 79.7 per cent of in-patient discharges and had a mean length of stay of 7.1 days.

In-Patients – Top 20 Principal Diagnoses

- In-patient discharges with a principal diagnosis of *Single spontaneous delivery* accounted for 4.4 per cent of in-patient discharges.
- In-patient discharges with a principal diagnosis of *Pain in throat and chest* accounted for 3.2 per cent of in-patient discharges while those with a principal diagnosis of *Single delivery by caesarean section* accounted for 3.0 per cent of in-patient discharges.

In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 59.4 per cent of total in-patient discharges (see Table 3.4).
- Procedures from the block *Generalised allied health interventions* were reported for 30.6 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 9.7 per cent of in-patient discharges when analysed by diagnosis related group.[22,23]
- *Antenatal and Other Obstetric Admissions, Minor Complexity* accounted for 4.2 per cent of in-patient discharges. *Vaginal Delivery, Intermediate Complexity* and *Chest Pain, Minor Complexity* accounted for 2.9 per cent and 2.6 per cent of in-patient discharges respectively.

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21 This block includes interventions such as physiotherapy, pharmacy, dietetics, occupational therapy, speech pathology, social work and diabetes education. Together, these seven interventions accounted for 97.5 per cent of cases within this procedure block.

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

23 In 2015, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. 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	25,300	4.4	2.3	2
R07	Pain in throat and chest	18,245	3.2	1.5	1
O82	Single delivery by caesarean section	17,328	3.0	4.0	4
N39	Other disorders of urinary system	12,073	2.1	8.7	5
J44	Other chronic obstructive pulmonary disease	11,156	2.0	7.5	5
O99	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium	10,828	1.9	1.3	1
J18	Pneumonia, organism unspecified	9,323	1.6	10.6	6
R10	Abdominal and pelvic pain	9,153	1.6	1.8	1
J22	Unspecified acute lower respiratory infection	8,993	1.6	7.0	4
R55	Syncope and collapse	8,272	1.5	4.4	2
O81	Single delivery by forceps and vacuum extractor	7,385	1.3	3.0	3
I50	Heart failure	6,633	1.2	10.3	7
R51	Headache	6,118	1.1	1.8	1
I21	Acute myocardial infarction	5,877	1.0	6.1	4
R06	Abnormalities of breathing	5,871	1.0	2.1	1
I48	Atrial fibrillation and flutter	5,778	1.0	4.0	2
K35	Acute appendicitis	5,608	1.0	3.4	2
S72	Fracture of femur	5,410	0.9	17.0	11
K80	Cholelithiasis	5,401	0.9	5.6	3
I63	Cerebral Infarction	5,299	0.9	16.8	8

In-Patients
569,635

Discharges	N	%
Total	**569,635**	**100**
Sameday	115,512	20.3
Overnight	454,123	79.7

Length of Stay	Mean	Median
Total	**5.8**	**2**
Overnight	7.1	3

Bed Days	N
Total	**3,282,359**
Overnight	3,224,603

Top 20 Principal Procedure Blocks[b]		N	%	Mean LOS	Med LOS
1916	Generalised allied health interventions	103,454	30.6	10.9	6
1336	Spontaneous vertex delivery[c]	25,232	7.5	2.4	2
1340	Caesarean section	19,554	5.8	4.6	4
1920	Administration of pharmacotherapy	8,779	2.6	7.8	4
1893	Administration of blood and blood products	8,729	2.6	9.5	5
1338	Vacuum assisted delivery	5,958	1.8	3.1	3
1008	Panendoscopy with excision	5,904	1.7	10.1	6
0570	Noninvasive ventilatory support	5,653	1.7	15.0	9
0926	Appendicectomy	5,517	1.6	3.2	2
1489	Arthroplasty of hip	4,439	1.3	9.6	5
0668	Coronary angiography	4,325	1.3	5.2	3
0030	Lumbar puncture	3,925	1.2	10.0	5
0671	Transluminal coronary angioplasty with stenting	3,434	1.0	3.8	2
0569	Ventilatory support	3,259	1.0	23.4	11
1265	Curettage and evacuation of uterus	2,694	0.8	1.2	1
0911	Fiberoptic colonoscopy with excision	2,581	0.8	9.6	6
1005	Panendoscopy	2,435	0.7	12.7	7
1872	Alcohol and drug rehabilitation and detoxification	2,324	0.7	7.1	3
0965	Cholecystectomy	2,212	0.7	4.2	2
1823	Mental, behavioural or psychosocial assessment	2,169	0.6	6.7	2

Hospital Group	N	%
Ireland East	124,410	21.8
RCSI	88,392	15.5
Dublin Midlands	84,863	14.9
South/South West	103,868	18.2
UL	49,108	8.6
Saolta	97,496	17.1
Children's	18,410	3.2
No group	3,088	0.5

Sex	N	%
Male	240,576	42.2
Female	329,059	57.8

Age Group	N	%
< 1 Year	20,639	3.6
1–14 Years	36,373	6.4
15–24 Years	38,135	6.7
25–34 Years	79,055	13.9
35–44 Years	78,040	13.7
45–54 Years	53,652	9.4
55–64 Years	64,545	11.3
65–74 Years	82,118	14.4
75–84 Years	78,015	13.7
85 Years and Over	39,063	6.9

Top 10 AR-DRGs		N	%	Mean LOS	Med LOS
O66B	Antenatal and Other Obstetric Admissions, Minor Complexity	24,071	4.2	1.0	1
O60B	Vaginal Delivery, Intermediate Complexity	16,465	2.9	2.7	3
F74B	Chest Pain, Minor Complexity	14,723	2.6	1.2	1
O60C	Vaginal Delivery, Minor Complexity	14,385	2.5	2.0	2
O01C	Caesarean Delivery, Minor Complexity	10,776	1.9	3.6	3
E62A	Respiratory Infections and Inflammations, Major Complexity	9,068	1.6	12.6	8
O66A	Antenatal and Other Obstetric Admissions, Major Complexity	9,055	1.6	1.8	1
B77B	Headaches, Minor Complexity	7,767	1.4	1.3	1
O01B	Caesarean Delivery, Intermediate Complexity	7,309	1.3	5.0	4
F73B	Syncope and Collapse, Minor Complexity	7,209	1.3	2.5	1

Notes: Percentage columns are subject to rounding.

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

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

c See Appendix VII for an overview of changes from 8th Edition to 10th Edition ICD-10-AM/ACHI/ACS.

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 4.8 per cent of total discharges and 12.7 per cent of in-patients.
- Elective in-patient bed days accounted for 533,789 in-patient bed days, or 16.3 per cent of total in-patient bed days.
- Elective overnight in-patient discharges accounted for 93.3 per cent of total elective in-patient discharges and had a mean length of stay of 7.9 days.

Elective In-Patients – Top 20 Principal Diagnoses

- Elective in-patients with a principal diagnosis of *Coxarthrosis [arthrosis of hip]* accounted for 3.4 per cent of elective in-patient discharges.
- *Gonarthrosis [arthrosis of knee]* accounted for 2.6 per cent of elective in-patient discharges while *Other surgical follow-up care* accounted for 2.4 per cent of elective in-patient discharges.

Elective In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 89.2 per cent of elective in-patient discharges (see Table 3.4).
- The procedure block *Generalised allied health interventions* was reported for 13.3 per cent of elective in-patients who had a principal procedure reported.
- The procedure blocks *Administration of pharmacotherapy* and *Arthroplasty of hip* were reported for 4.4 per cent and 3.9 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 8.1 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 3.3 per cent and 2.5 per cent of elective in-patient discharges respectively. *Knee Replacement, Minor Complexity* accounted for 2.3 per cent of elective in-patient discharges.

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

25 In 2015, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. 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]	2,486	3.4	4.8	4
M17	Gonarthrosis [arthrosis of knee]	1,885	2.6	5.1	4
Z48	Other surgical follow-up care	1,733	2.4	14.4	6
J35	Chronic diseases of tonsils and adenoids	1,726	2.4	1.1	1
K80	Cholelithiasis	1,417	2.0	2.7	1
C50	Malignant neoplasms of breast	1,411	1.9	4.0	2
I25	Chronic ischaemic heart disease	1,386	1.9	4.8	1
G47	Sleep disorders	1,119	1.5	1.7	1
Z51	Other medical care	1,100	1.5	23.8	16
N81	Female genital prolapse	835	1.2	3.0	3
C34	Malignant neoplasm of bronchus and lung	829	1.1	10.2	7
K40	Inguinal hernia	815	1.1	1.4	1
R06	Abnormalities of breathing	764	1.1	1.6	1
C67	Malignant neoplasm of bladder	751	1.0	4.9	3
C18	Malignant neoplasm of colon	746	1.0	10.5	7
S72	Fracture of femur	694	1.0	28.1	18
R07	Pain in throat and chest	683	0.9	0.9	1
C61	Malignant neoplasm of prostate	634	0.9	6.1	3
C83	Non-follicular lymphoma	620	0.9	8.6	5
N20	Calculus of kidney and ureter	588	0.8	2.8	1

Elective In-Patients

72,426

Discharges	N	%
Total	**72,426**	**100**
Sameday	4,871	6.7
Overnight	67,555	93.3

Length of Stay	Mean	Median
Total	**7.4**	**2**
Overnight	7.9	3

Bed Days	N
Total	**533,789**
Overnight	531,353

Top 20 Principal Procedure Blocks[b]		N	%	Mean LOS	Med LOS
1916	Generalised allied health interventions	8,611	13.3	23.0	12
1920	Administration of pharmacotherapy	2,814	4.4	8.6	4
1489	Arthroplasty of hip	2,517	3.9	4.5	4
0412	Tonsillectomy or adenoidectomy	1,819	2.8	1.1	1
1518	Arthroplasty of knee	1,747	2.7	4.5	4
1828	Sleep Study	1,743	2.7	1.3	1
0965	Cholecystectomy	1,499	2.3	2.2	1
1893	Administration of blood and blood products	1,342	2.1	5.8	2
1268	Abdominal hysterectomy	1,188	1.8	4.7	4
0990	Repair of inguinal hernia	785	1.2	1.5	1
0913	Colectomy	768	1.2	11.0	8
0671	Transluminal coronary angioplasty with stenting	707	1.1	2.1	1
1166	Closed prostatectomy	701	1.1	3.3	3
1620	Excision of lesion of skin and subcutaneous tissue	677	1.0	3.3	1
1744	Excision of lesion of breast	668	1.0	1.4	1
1748	Simple mastectomy	632	1.0	3.1	2
1100	Endoscopic resection of bladder lesion or tissue	562	0.9	3.7	2
0114	Thyroidectomy	549	0.9	2.4	2
1788	Megavoltage radiation treatment	542	0.8	26.3	23
0911	Fibreoptic colonoscopy with excision	481	0.7	5.1	2

Hospital Group	N	%
Ireland East	14,877	20.5
RCSI	8,815	12.2
Dublin Midlands	9,877	13.6
South/South West	15,803	21.8
UL	4,018	5.5
Saolta	10,513	14.5
Children's	5,436	7.5
No group	3,087	4.3

Sex	N	%
Male	36,241	50.0
Female	36,185	50.0

Age Group	N	%
< 1 Year	1,446	2.0
1–14 Years	6,561	9.1
15–24 Years	3,387	4.7
25–34 Years	3,476	4.8
35–44 Years	6,699	9.2
45–54 Years	9,432	13.0
55–64 Years	12,797	17.7
65–74 Years	15,139	20.9
75–84 Years	10,389	14.3
85 Years and Over	3,100	4.3

Top 10 AR-DRGs		N	%	Mean LOS	Med LOS
I03B	Hip Replacement, Minor Complexity	2,379	3.3	4.1	3
D11Z	Tonsillectomy and Adenoidectomy	1,812	2.5	1.1	1
I04B	Knee Replacement, Minor Complexity	1,648	2.3	4.0	4
Z63A	Other Follow Up After Surgery or Medical Care, Major Complexity	1,323	1.8	23.6	14
Z63B	Other Follow Up After Surgery or Medical Care, Minor Complexity	1,316	1.8	13.0	4
H08B	Laparoscopic Cholecystectomy, Minor Complexity	1,299	1.8	1.5	1
J06B	Major Procedures for Breast Disorders, Minor Complexity	1,209	1.7	1.9	1
G10B	Hernia Procedures, Minor Complexity	1,150	1.6	1.5	1
N04B	Hysterectomy for Non-Malignancy, Minor Complexity	1,059	1.5	3.5	3
R61B	Lymphoma and Non-Acute Leukaemia, Minor Complexity	1,042	1.4	4.0	3

Notes: Percentage columns are subject to rounding.

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

b ACHI Procedure codes are analysed at block level. The percentage (%) is based on 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 26.6 per cent of total discharges and 70.2 per cent of in-patients.
- Emergency in-patient bed days accounted for 2,511,589 in-patient bed days, or 76.5 per cent of total in-patient bed days
- Just over 65 per cent of emergency in-patient discharges were admitted from an Emergency Department, with 6.9 per cent admitted via a medical assessment unit (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 4.4 per cent of emergency in-patients.
- Emergency in-patient discharges with a principal diagnosis of *Other disorders of urinary system* and those with a principal diagnosis of *Other chronic obstructive pulmonary disease* accounted for 2.9 per cent and 2.7 per cent of emergency in-patient discharges respectively.

Emergency In-Patients – Top 20 Principal Procedure Blocks

- A principal procedure was recorded for 52.6 per cent of emergency in-patient discharges (see Table 3.4).
- Procedures from the block *Generalised allied health interventions* were reported for 44.1 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 7.7 per cent of emergency in-patient discharges reported to HIPE when analysed by diagnosis related group.[27,28]
- *Chest Pain, Minor Complexity* accounted for 3.5 per cent of emergency in-patient discharges. *Respiratory Infections and Inflammations, Major Complexity* and *Headaches, Minor Complexity* accounted for 2.2 per cent and 1.9 per cent of emergency in-patient discharges respectively.

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

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

28 In 2015, the AR-DRG classification was updated from AR-DRG Version 6.0 to AR-DRG Version 8.0. 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	17,557	4.4	1.5	1
N39	Other disorders of urinary system	11,703	2.9	8.6	5
J44	Other chronic obstructive pulmonary disease	10,668	2.7	7.3	5
J18	Pneumonia, organism unspecified	9,110	2.3	10.4	6
R10	Abdominal and pelvic pain	8,966	2.2	1.8	1
J22	Unspecified acute hower respiratory infection	8,766	2.2	6.9	4
R55	Syncope and collapse	8,148	2.0	4.3	2
I50	Heart failure	6,377	1.6	10.2	7
R51	Headache	6,040	1.5	1.8	1
I21	Acute myocardial infarction	5,561	1.4	6.1	4
K35	Acute appendicitis	5,536	1.4	3.4	2
I48	Atrial fibrillation and flutter	5,297	1.3	4.1	2
R06	Abnormalities of breathing	5,100	1.3	2.2	1
I63	Cerebral infarction	4,891	1.2	14.6	8
L03	Cellulitis	4,723	1.2	6.7	4
S72	Fracture of femur	4,716	1.2	15.4	10
A09	Other gastroenteritis and colitis of infectious and unspecified origin	4,166	1.0	4.3	2
K80	Cholelithiasis	3,982	1.0	6.7	5
S52	Fracture of forearm	3,880	1.0	2.4	1
R00	Abnormalities of heart beat	3,848	1.0	1.7	1

Emergency In-Patients

399,609

Discharges	N	%
Total	**399,609**	**100**
Sameday	90,312	22.6
Overnight	309,297	77.4

Length of Stay	Mean	Median
Total	**6.3**	**2**
Overnight	8.0	4

Bed Days	N
Total	**2,511,589**
Overnight	2,466,433

Top 20 Principal Procedure Blocks[b]		N	%	Mean LOS	Med LOS
1916	Generalised allied health interventions	92,700	44.1	9.9	6
1893	Administration of blood and blood products	7,237	3.4	10.4	6
1920	Administration of pharmacotherapy	5,532	2.6	8.0	4
0570	Noninvasive ventilatory support	5,513	2.6	14.8	9
1008	Panendoscopy with excision	5,453	2.6	10.3	6
0926	Appendicectomy	5,366	2.6	3.2	2
0668	Coronary angiography	3,857	1.8	5.3	3
0030	Lumbar puncture	3,754	1.8	10.1	5
0569	Ventilatory support	3,168	1.5	22.8	11
0671	Transluminal coronary angioplasty with stenting	2,727	1.3	4.2	3
1005	Panendoscopy	2,247	1.1	12.8	7
1872	Alcohol and drug rehabilitation and detoxification	2,244	1.1	6.7	3
0911	Fibreoptic colonoscopy with excision	2,091	1.0	10.7	7
1823	Mental, behavioural or psychosocial psychosocial assessment	2,071	1.0	6.4	2
1489	Arthroplasty of hip	1,922	0.9	16.3	10
1479	Fixation of fracture of pelvis or femur	1,907	0.9	17.0	11
1060	Haemodialysis	1,631	0.8	12.0	7
0560	Application, insertion or removal procedures on chest wall, mediastinum or diaphragm	1,576	0.8	14.9	10
1539	Open reduction of fracture of ankle or toe	1,553	0.7	4.1	2
1628	Other debridement of skin and subcutaneous tissue	1,550	0.7	9.1	2

Hospital Group	N	%
Ireland East	87,878	22.0
RCSI	59,937	15.0
Dublin Midlands	56,201	14.1
South/South West	71,652	17.9
UL	39,087	9.8
Saolta	71,880	18.0
Children's	12,973	3.2
No Group	~	-

Mode of Emergency Admission	N	%
Emergency Department	261,342	65.4
Medical assessment unit - admitted as in-patient	27,759	6.9
Medical assessment unit only	49,832	12.5
Other[c]	60,663	15.2
Unknown	13	0.0

Sex	N	%
Male	204,335	51.1
Female	195,274	48.9

Age Group	N	%
< 1 Year	19,193	4.8
1–14 Years	29,801	7.5
15–24 Years	23,473	5.9
25–34 Years	25,392	6.4
35–44 Years	35,763	8.9
45–54 Years	43,671	10.9
55–64 Years	51,748	12.9
65–74 Years	66,979	16.8
75–84 Years	67,626	16.9
85 Years and Over	35,963	9.0

Top 10 AR-DRGs		N	%	Mean LOS	Med LOS
F74B	Chest Pain, Minor Complexity	14,166	3.5	1.2	1
E62A	Respiratory Infections and Inflammations, Major Complexity	8,844	2.2	12.4	8
B77B	Headaches, Minor Complexity	7,658	1.9	1.3	1
F73B	Syncope and Collapse, Minor Complexity	7,123	1.8	2.5	1
L63B	Kidney and Urinary Tract Infections, Minor Complexity	6,789	1.7	4.2	3
G66B	Abdominal Pain and Mesenteric Adenitis, Minor Complexity	6,579	1.6	1.3	1
E75A	Other Respiratory System Disorders, Major Complexity	6,568	1.6	8.1	5
L63A	Kidney and Urinary Tract Infections, Major Complexity	6,393	1.6	11.7	7
G70B	Other Digestive System Disorders, Minor Complexity	6,276	1.6	1.9	1
I82Z	Other Sameday Treatment for Musculoskeletal Disorders	6,060	1.5	0.5	1

Notes: Percentage columns are subject to rounding.

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

b ACHI Procedure codes are analysed at block level. The percentage (%) is based on 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 any listed diagnosis of Z37 *Outcome of Delivery*. 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 17.1 per cent of in-patients.
- Of maternity in-patient discharges, 56.7 per cent reported a diagnosis of *Outcome of delivery* i.e. delivery discharges; while 43.3 per cent were non-delivery discharges.
- Single deliveries accounted for 98.1 per cent of delivery discharges.
- Over 60 per cent of delivery discharges were multiparous deliveries. [30]
- Of delivery discharges, 34.5 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 45.7 per cent of delivery in-patient discharges.
- Non-delivery discharges with a principal diagnosis of *Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium* accounted for 25.2 per cent of non-delivery in-patient discharges.

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

- A principal procedure was recorded for 65.5 per cent of maternity in-patient discharges (see Table 3.4).
- For delivery discharges who had a procedure reported, 45.6 per cent reported the principal procedure block *Spontaneous vertex delivery*[31].
- For non-delivery discharges who had a procedure reported, 28.1 per cent reported the principal procedure block *Curettage and evacuation of uterus*.

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

- The top three AR-DRGs accounted for 56.3 per cent of maternity in-patient discharges reported to HIPE when analysed by diagnosis related group.[32,33]
- *Antenatal and Other Obstetric Admissions, Minor Complexity* accounted for 24.7 per cent of maternity in-patient discharges.

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29 See Hospital In-Patient Enquiry Scheme (HIPE) Data Dictionary 2020 Version 12.1 available at www.hpo.ie.

30 See Table 3.10 notes for definition of multiparous deliveries.

31 See Appendix VII for an overview of changes from 8th Edition to 10th Edition ICD-10-AM/ACHI/ACS.

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

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

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

	Top 10 Principal Diagnoses[a]		N	%	Mean	Med
Delivery	O80	Single spontaneous delivery	25,300	45.7	2.3	2
	O82	Single delivery by caesarean section	17,328	31.3	4.0	4
	O81	Single delivery by forceps and vacuum extractor	7,385	13.4	3.0	3
	O83	Other assisted single delivery	1,020	1.8	2.9	3
	O42	Premature rupture of membranes	905	1.6	6.6	4
	O83	Multiple delivery	875	1.6	5.1	4
	O36	Maternal care for other known or suspected fetal problems	638	1.2	6.4	4
	O14	Pre-eclampsia not elsewhere classified	394	0.7	8.2	6
	O13	Gestational [pregnancy-induced] Hypertension	215	0.4	6.8	6
Non-Delivery	O99	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth & the puerperium	10,650	25.2	1.2	1
	Z36	Antenatal screening	3,902	9.2	0.6	1
	O47	False labour	3,409	8.1	1.0	1
	O36	Maternal care for other known or suspected fetal problems	3,027	7.2	1.0	1
	O03	Spontaneous abortion	2,138	5.1	1.1	1
	O02	Other abnormal products of conception	2,068	4.9	1.0	1
	O21	Excessive vomiting in pregnancy	1,880	4.4	1.5	1
	O46	Antepartum haemorrhage, not elsewhere classified	1,793	4.2	1.3	1
	O13	Gestational [pregnancy-induced] hypertension	1,191	2.8	1.5	1
	O23	Infections of genitourinary tract in pregnancy	1,060	2.5	1.9	1

Maternity In-Patients

97,600

Delivery Status	N	%	Mean	Med
Total	97,600	100	2.4	2
Delivery[b]	55,303	56.7	3.3	3
Non-Delivery[c]	42,297	43.3	1.3	1
Delivery Discharges				
Delivery Outcome[b]	N	%	Mean	Med
Single	54,279	98.1	3.3	3
Multiple	1,017	1.8	6.1	4
Unspecified	7	0.0	4.1	3
Parity[d]	N	%	Mean	Med
Primiparous	21,917	39.6	3.8	3
Multiparous	33,308	60.2	3.0	3
Unknown	78	0.1	3.4	3
Age Group	N	%	Mean	Med
< 20 Years	856	1.5	3.3	3
20-24 Years	4,260	7.7	3.2	3
25-29 Years	9,416	17.0	3.1	3
30-34 Years	19,055	34.5	3.2	3
35-39 Years	17,204	31.1	3.4	3
40-44 Years	4,202	7.6	3.8	3
45 Years and Over	310	0.6	5.0	4
Discharge Status	N	%	Mean	Med
Public	45,713	82.7	3.3	3
Private	9,590	17.3	3.5	3

	Top 10 Principal Procedure Blocks[e]		N	%	Mean	Med
Delivery	1336	Spontaneous vertex delivery[h]	25,232	45.6	2.4	2
	1340	Caesarean section[f]	19,553	35.4	4.6	4
	1338	Vacuum assisted delivery	5,958	10.8	3.1	3
	1337	Forceps rotation and delivery	1,965	3.6	3.4	3
	1344	Postpartum suture	927	1.7	2.4	2
	1334	Medical or surgical induction of labour	667	1.2	3.1	3
	1335	Medical or surgical augmentation of labour	395	0.7	2.3	2
	1343	Other procedures associated with delivery[g]	317	0.6	2.8	3
	1345	Postpartum evacuation of uterus	114	0.2	3.6	3
	1333	Analgesia and anaesthesia during labour and delivery procedure	66	0.1	2.8	3
Non-Delivery	1265	Curettage and evacuation of uterus	2,433	28.1	1.1	1
	1916	Generalised allied health interventions	2,139	24.7	2.8	2
	1884	Immunisation	808	9.3	1.1	1
	1256	Procedures for management of ectopic pregnancy	656	7.6	2.4	1
	1334	Medical or surgical induction of labour	580	6.7	1.2	1
	1920	Administration of pharmacotherapy	431	5.0	0.9	1
	1330	Antepartum application, insertion or removal procedures	247	2.9	1.7	1
	1274	Application, insertion or removal procedures on cervix	214	2.5	1.4	1
	1893	Administration of blood and blood products	147	1.7	2.1	1
	1345	Postpartum evacuation of uterus	145	1.7	2.3	2

Top 10 AR-DRG's		N	%	Mean	Med
O66B	Antenatal and Other Obstetric Admissions, MINC	24,060	24.7	1.0	1
O60B	Vaginal Delivery, Intermediate Complexity	16,465	16.9	2.7	3
O60C	Vaginal Delivery, Minor Complexity	14,385	14.7	2.0	2
O01C	Caesarean Delivery, Minor Complexity	10,776	11.0	3.6	3
O66A	Antenatal and Other Obstetric Admissions, MAJC	9,048	9.3	1.8	1
O01B	Caesarean Delivery, Intermediate Complexity	7,309	7.5	5.0	4
O60A	Vaginal Delivery, Major Complexity	4,065	4.2	4.2	3
O05Z	Abortion W OR Procedures	2,393	2.5	1.0	1
O61B	Postpartum and Post Abortion W/O OR Proc, MINC	2,229	2.3	1.7	1
O63B	Abortion W/O OR Procedures, Minor Complexity	2,163	2.2	1.1	1

Notes:

Percentage columns are subject to rounding.

~ Denotes five or fewer discharges reported to HIPE.

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

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

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

d 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).

e 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 100.0 per cent of delivery in-patient discharges and 20.5 per cent of non-delivery in-patient discharges.

f 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.

g Includes episiotomy.

h See Appendix VII for an overview of changes from 8th Edition to 10th Edition ICD-10-AM/ACHI/ACS.

3.4 Morbidity Analysis: Total Discharge Activity

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

3.4.1 Total Discharges by Principal Diagnosis, Sex and Age Group

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

- Over 30 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*).
- The chapter *Diseases of the digestive system* had the second largest number of principal diagnoses, with 9.2 per cent of total discharges.
- Diagnoses from the chapter *Factors influencing health status and contact with health services* were the most common principal diagnoses for discharges in the less than 15 years, 45-64 years and 65 years and over age groups. The most common principal diagnosis chapter for discharges aged 15-44 was *Pregnancy, childbirth and the puerperium.*

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, and excludes day patients. It should also be noted that the analysis by length of stay does not take into account the discharge destination of the patient. For example, a patient with a length of stay of one day for a diagnosis of chronic ischaemic heart disease may be transferred to another facility on discharge. Care must be taken, therefore, in interpreting the data on length of stay presented in Table 3.12, in the absence of information on discharge destination.[34]

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

34 See Section Two for details of discharge destination.

- The longest in-patient mean length of stay was recorded for in-patient discharges with a principal diagnosis from the chapter *Mental and behavioural disorders* (11.1 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 8.3 days.
- The longest in-patient mean length of stay for discharges aged 15–44 years was reported for those with a principal diagnosis from the *Neoplasms* chapter (7.4 days). When this diagnosis is analysed by sex, male discharges reported 9.2 days and females reported 6.3 days.
- The shortest in-patient mean length of stay for all ages was recorded for in-patient discharges with a principal diagnosis from the chapter *Diseases of the ear and mastoid process* (2.2 days).

3.4.3 All-Listed Diagnoses by Sex and Age Group

Table 3.13 provides details of all-listed diagnoses reported by sex and age group. Over 4.2 million diagnoses were recorded for total discharges reported to HIPE. As one principal diagnosis and up to 29 secondary diagnoses may be collected per discharge, the number of diagnoses will not equal the number of discharges.

- With the exception of females aged 15-44 years, the chapter *Factors influencing health status and contact with health services* had the most frequently reported diagnoses across both sexes and all age groups for total discharges. It accounted for 1,114,990 diagnoses, or 26.1 per cent of all-listed diagnoses reported.[35]
- *Neoplasms* accounted for 536,083 diagnoses or 12.5 per cent of all-listed diagnoses reported for total discharges.

[35] This chapter includes diagnoses such as Z51 *Other medical care* (includes Chemotherapy and Radiotherapy encounters) 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	–	**51,426**	**124,618**	**216,205**	**321,922**	**714,171**	**41,111**	**265,246**	**215,121**	**264,296**	**785,774**	**92,537**	**389,864**	**431,326**	**586,218**	**1,499,945**
Certain infectious and parasitic diseases	**A00–B99**	**1,902**	**2,330**	**1,811**	**2,700**	**8,743**	**1,692**	**2,365**	**1,979**	**3,176**	**9,212**	**3,594**	**4,695**	**3,790**	**5,876**	**17,955**
Intestinal infectious diseases (including diarrhoea)	A00–A09	984	1,036	872	1,157	4,049	876	1,389	1,189	1,831	5,285	1,860	2,425	2,061	2,988	9,334
Tuberculosis	A15–A19	~	70	26	*	117	~	65	11	*	90	6	135	37	29	207
Septicaemia	A40–A41	51	83	323	1,056	1,513	48	105	323	842	1,318	99	188	646	1,898	2,831
Human immunodeficiency virus [HIV] disease	B20–B24	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	43
Neoplasms	**C00–D48**	**2,772**	**6,172**	**19,990**	**34,997**	**63,931**	**2,455**	**10,618**	**20,151**	**24,295**	**57,519**	**5,227**	**16,790**	**40,141**	**59,292**	**121,450**
Malignant neoplasms	C00–C96	2,319	3,588	14,704	27,036	47,647	1,974	4,797	13,996	18,495	39,262	4,293	8,385	28,700	45,531	86,909
Malignant neoplasms of colon, rectum and anus	C18–C21	0	169	1,431	2,126	3,726	0	237	802	1,249	2,288	0	406	2,233	3,375	6,014
Malignant neoplasms of trachea, bronchus and lung	C33–C34	0	62	993	2,037	3,092	0	128	957	1,804	2,889	0	190	1,950	3,841	5,981
Melanoma and other malignant neoplasms of skin	C43–C44	~	*	1,791	5,827	7,965	~	*	1,319	3,286	5,041	~	*	3,110	9,113	13,006
Malignant neoplasms of breast	C50	0	~	*	22	33	0	*	*	3,114	8,526	0	1,438	3,985	3,136	8,559
Malignant neoplasms of female genital organs	C51–C58	0	0	0	0	0	24	332	1,192	1,164	2,712	24	332	1,192	1,164	2,712
Malignant neoplasm of prostate	C61	19	29	1,880	3,757	5,685	0	0	0	0	0	19	29	1,880	3,757	5,685
Malignant neoplasm of bladder	C67	17	37	353	1,212	1,619	0	19	188	349	556	17	56	541	1,561	2,175
Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81–C96	1,279	1,472	3,537	5,525	11,813	892	1,129	2,170	3,608	7,799	2,171	2,601	5,707	9,133	19,612
In situ neoplasms	D00-D09	~	*	342	1,032	1,425	~	*	662	1,066	2,029	6	346	1,004	2,098	3,454
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10–D48	448	2,538	4,944	6,929	14,859	480	5,521	5,493	4,734	16,228	928	8,059	10,437	11,663	31,087
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	**D50–D89**	**1,935**	**2,510**	**3,216**	**6,272**	**13,933**	**1,227**	**3,819**	**3,712**	**5,994**	**14,752**	**3,162**	**6,329**	**6,928**	**12,266**	**28,685**
Endocrine, nutritional and metabolic diseases	**E00–E89**	**1,034**	**5,477**	**8,891**	**7,263**	**22,665**	**1,089**	**3,630**	**4,855**	**5,097**	**14,671**	**2,123**	**9,107**	**13,746**	**12,360**	**37,336**
Diabetes mellitus	E10–E14	259	961	2,111	2,682	6,013	251	696	866	1,325	3,138	510	1,657	2,977	4,007	9,151
Cystic fibrosis	E84	158	1,037	*	~	1,330	198	888	*	~	1,186	356	1,925	229	6	2,516
Mental and behavioural disorders	**F00–F99**	**447**	**1,653**	**1,365**	**1,570**	**5,035**	**352**	**1,179**	**876**	**1,533**	**3,940**	**799**	**2,832**	**2,241**	**3,103**	**8,975**
Mental and behavioural disorders due to use of alcohol	F10	22	906	1,010	366	2,304	28	352	452	121	953	50	1,258	1,462	487	3,257
Mental and behavioural disorders due to use of other psychoactive substance	F11–F19	~	277	41	*	332	0	69	19	16	104	~	346	60	*	436
Diseases of nervous system	**G00–G99**	**1,472**	**3,827**	**4,132**	**4,637**	**14,068**	**1,299**	**7,179**	**5,946**	**4,429**	**18,853**	**2,771**	**11,006**	**10,078**	**9,066**	**32,921**
Multiple sclerosis	G35	*	1,172	694	*	1,960	~	2,720	1,628	*	4,545	8	3,892	2,322	283	6,505
Epilepsy	G40, G41	560	768	483	310	2,121	538	747	343	262	1,890	1,098	1,515	826	572	4,011
Transient cerebral ischaemic attacks and related syndromes	G45	0	53	365	1,152	1,570	~	*	283	1,139	1,466	~	*	648	2,291	3,036
Diseases of the eye and adnexa	**H00–H59**	**519**	**1,739**	**5,289**	**16,144**	**23,691**	**451**	**1,697**	**4,565**	**21,130**	**27,843**	**970**	**3,436**	**9,854**	**37,274**	**51,534**
Cataracts	H25-H26	14	105	910	3,483	4,512	14	88	962	4,786	5,850	28	193	1,872	8,269	10,362
Other retinal disorders	H35	51	509	2,261	8,870	11,691	19	398	1,592	12,532	14,541	70	907	3,853	21,402	26,232
Diseases of the ear and mastoid process	**H60–H95**	**1,218**	**910**	**862**	**785**	**3,775**	**829**	**1,080**	**1,067**	**872**	**3,848**	**2,047**	**1,990**	**1,929**	**1,657**	**7,623**
Diseases of the circulatory system	**I00–I99**	**643**	**3,148**	**13,284**	**22,951**	**40,026**	**584**	**2,703**	**6,536**	**16,475**	**26,298**	**1,227**	**5,851**	**19,820**	**39,426**	**66,324**
Hypertensive diseases	I10–I15	35	274	540	372	1,221	20	233	485	775	1,513	55	507	1,025	1,147	2,734
Angina pectoris	I20	0	85	921	1,214	2,220	0	25	390	643	1,058	0	110	1,311	1,857	3,278
Acute myocardial infarction	I21–I22	0	217	1,778	2,281	4,276	0	58	434	1,230	1,722	0	275	2,212	3,511	5,998
Other ischaemic heart disease	I23–I25	~	*	2,710	3,412	6,308	~	*	851	1,475	2,378	~	*	3,561	4,887	8,686
Pulmonary heart disease and diseases of pulmonary circulation	I26–I28	~	*	398	482	1,026	*	*	273	540	1,040	41	332	671	1,022	2,066
Conduction disorders and cardiac arrhythmias	I44–I49	119	574	2,110	3,929	6,732	95	424	866	2,847	4,232	214	998	2,976	6,776	10,964
Heart failure	I50	12	54	534	3,422	4,022	17	31	225	2,655	2,928	29	85	759	6,077	6,950
Cerebrovascular disease	I60–I69	53	273	1,363	3,133	4,822	49	236	810	2,651	3,746	102	509	2,173	5,784	8,568
Atherosclerosis (non-coronary)	I70	0	15	300	709	1,024	0	11	87	330	428	0	26	387	1,039	1,452
Diseases of the respiratory system	**J00–J99**	**4,274**	**4,417**	**7,617**	**16,849**	**33,157**	**3,361**	**5,365**	**7,514**	**14,897**	**31,137**	**7,635**	**9,782**	**15,131**	**31,746**	**64,294**
Acute upper respiratory infections and influenza	J00–J11	1,502	641	311	516	2,970	1,232	864	377	613	3,086	2,734	1,505	688	1,129	6,056
Pneumonia	J12–J18	196	637	1,606	4,555	6,994	163	569	1,196	3,707	5,635	359	1,206	2,802	8,262	12,629
Unspecified lower acute respiratory infection	J22	367	453	932	3,039	4,791	337	563	876	2,692	4,468	704	1,016	1,808	5,731	9,259
Chronic diseases of tonsils and adenoids	J35	631	267	33	15	946	594	607	43	18	1,262	1,225	874	76	33	2,208
Chronic obstructive pulmonary disease and bronchiectasis	J40–J44, J47	29	191	1,406	4,867	6,493	13	221	1,644	4,746	6,624	42	412	3,050	9,613	13,117
Asthma	J45–J46	556	560	1,315	684	3,115	298	1,166	1,702	793	3,959	854	1,726	3,017	1,477	7,074

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**	**4,655**	**22,373**	**22,863**	**19,552**	**69,443**	**3,323**	**23,184**	**22,129**	**19,194**	**67,830**	**7,978**	**45,557**	**44,992**	**38,746**	**137,273**
Diseases of oesophagus, stomach and duodenum	K20–K31	373	3,292	5,176	4,786	13,627	307	3,563	5,566	4,862	14,298	680	6,855	10,742	9,648	27,925
Diseases of appendix	K35–K38	1,052	1,729	367	178	3,326	857	1,526	401	147	2,931	1,909	3,255	768	325	6,257
Inguinal hernia	K40	304	442	937	891	2,574	63	41	47	72	223	367	483	984	963	2,797
Noninfective enteritis and colitis	K50–K52	902	8,532	4,328	1,455	15,217	483	7,523	3,794	1,500	13,300	1,385	16,055	8,122	2,955	28,517
Diverticular Disease of Intestine	K57	~	*	1,701	1,879	4,202	0	395	1,900	2,741	5,036	~	*	3,601	4,620	9,238
Alcoholic liver disease	K70	0	183	508	162	853	0	109	248	72	429	0	292	756	234	1,282
Cholelithiasis	K80	8	413	811	1,544	2,776	~	1,816	*	1,592	4,872	*	2,229	*	3,136	7,648
Diseases of the skin and subcutaneous tissue	**L00–L99**	**1,097**	**8,264**	**6,447**	**6,001**	**21,809**	**966**	**7,525**	**6,057**	**5,715**	**20,263**	**2,063**	**15,789**	**12,504**	**11,716**	**42,072**
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02–L03	247	843	1,009	1,418	3,517	212	538	579	1,331	2,660	459	1,381	1,588	2,749	6,177
Decubitus ulcer and pressure area	L89	~	*	43	58	118	*	*	20	71	111	9	28	63	129	229
Diseases of the musculoskeletal system and connective tissue	**M00–M99**	**1,347**	**5,233**	**10,065**	**9,383**	**26,028**	**1,657**	**6,916**	**13,856**	**14,770**	**37,199**	**3,004**	**12,149**	**23,921**	**24,153**	**63,227**
Rheumatoid arthritis	M05–M06	0	225	656	681	1,562	~	*	1,518	1,294	3,222	~	*	2,174	1,975	4,784
Coxarthrosis and Gonarthrosis	M16–M17	~	*	1,464	1,906	3,530	~	*	1,725	2,931	4,821	~	*	3,189	4,837	8,351
Intervertebral disc disorders	M50–M51	~	*	593	261	1,296	~	*	656	442	1,611	~	*	1,249	703	2,907
Dorsalgia (back pain)	M54	51	784	1,524	1,114	3,473	69	1,366	2,381	2,044	5,860	120	2,150	3,905	3,158	9,333
Diseases of the genitourinary system	**N00–N99**	**2,658**	**4,260**	**5,850**	**9,815**	**22,583**	**1,734**	**12,715**	**13,009**	**10,150**	**37,608**	**4,392**	**16,975**	**18,859**	**19,965**	**60,191**
Chronic kidney disease	N18	12	136	288	407	843	11	157	180	214	562	23	293	468	621	1,405
Urolithiasis	N20–N23	48	1,229	1,565	688	3,530	37	686	756	328	1,807	85	1,915	2,321	1,016	5,337
Hyperplasia of prostate	N40	0	32	657	1,394	2,083	0	0	0	0	0	0	32	657	1,394	2,083
Disorders of breast	N60–N64	~	26	15	*	56	~	1,280	1,334	*	2,914	8	1,306	1,349	307	2,970
Inflammatory diseases of female pelvic organs	N70–N77	0	0	0	0	0	21	749	223	67	1,060	21	749	223	67	1,060
Noninflammatory disorders of female genital tract	N80–N98	0	0	0	0	0	164	7,002	7,473	2,221	16,860	164	7,002	7,473	2,221	16,860
Pregnancy, childbirth and the puerperium	**O00–O99**	**0**	**0**	**0**	**0**	**0**	**12**	**102,830**	**635**	**0**	**103,477**	**12**	**102,830**	**635**	**0**	**103,477**
Pregnancy with abortive outcome	O00-O09	0	0	0	0	0	0	7,797	81	0	7,878	0	7,797	81	0	7,878
Gestational [pregnancy-induced] hypertension	O13	0	0	0	0	0	0	2,669	46	0	2,715	0	2,669	46	0	2,715
Diabetes mellitus in pregnancy	O24	0	0	0	0	0	0	1,951	24	0	1,975	0	1,951	24	0	1,975
Single spontaneous delivery	O80	0	0	0	0	0	~	25,250	*	0	25,300	~	25,250	*	0	25,300
Single delivery by forceps and vacuum extractor	O81	0	0	0	0	0	~	7,367	*	0	7,385	~	7,367	*	0	7,385
Single delivery by caesarean section	O82	0	0	0	0	0	0	17,138	190	0	17,328	0	17,138	190	0	17,328
Other assisted single delivery	O83	0	0	0	0	0	0	*	~	0	1,020	0	*	~	0	1,020
Multiple delivery	O84	0	0	0	0	0	0	853	22	0	875	0	853	22	0	875
Certain conditions originating in the perinatal period	**P00–P96**	*	~	**0**	**0**	**5,429**	**4,371**	**0**	**0**	**0**	**4,371**	*	~	**0**	**0**	**9,800**
Congenital malformations, deformations and chromosomal abnormalities	**Q00–Q99**	**3,407**	**462**	**186**	**63**	**4,118**	**2,441**	**549**	**192**	**86**	**3,268**	**5,848**	**1,011**	**378**	**149**	**7,386**
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	**R00–R99**	**5,271**	**12,338**	**17,347**	**21,274**	**56,230**	**4,591**	**18,004**	**18,586**	**20,236**	**61,417**	**9,862**	**30,342**	**35,933**	**41,510**	**117,647**
Pain in throat and chest	R07	72	2,704	4,552	3,257	10,585	84	2,345	3,904	2,886	9,219	156	5,049	8,456	6,143	19,804
Abdominal and pelvic pain	R10	617	1,873	1,540	1,074	5,104	852	4,861	2,676	1,598	9,987	1,469	6,734	4,216	2,672	15,091
Injury, poisoning and certain other consequences of external causes	**S00–T98**	**5,457**	**10,814**	**7,040**	**8,645**	**31,956**	**4,055**	**6,406**	**5,919**	**11,998**	**28,378**	**9,512**	**17,220**	**12,959**	**20,643**	**60,334**
Intracranial injury	S06	160	489	386	660	1,695	100	225	208	545	1,078	260	714	594	1,205	2,773
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	1,285	1,427	609	1,073	4,394	930	541	324	1,288	3,083	2,215	1,968	933	2,361	7,477
Fracture of femur	S72	108	124	252	1,402	1,886	45	51	320	3,113	3,529	153	175	572	4,515	5,415
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36–T65	220	1,220	469	154	2,063	379	1,601	627	264	2,871	599	2,821	1,096	418	4,934
Factors influencing health status and contact with health services[a]	**U00–U49, Z00–Z99**	**5,890**	**28,690**	**79,950**	**133,021**	**247,551**	**4,622**	**47,482**	**77,537**	**84,249**	**213,890**	**10,512**	**76,172**	**157,487**	**217,270**	**461,441**
Care involving dialysis	Z49	201	14,971	36,522	61,036	112,730	538	10,733	21,491	34,576	67,338	739	25,704	58,013	95,612	180,068
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	2,514	6,106	35,031	60,332	103,983	1,574	15,228	47,943	42,106	106,851	4,088	21,334	82,974	102,438	210,834

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**	**3.7**	**3.8**	**6.1**	**9.2**	**6.7**	**3.8**	**2.7**	**5.0**	**9.2**	**5.1**	**3.7**	**3.0**	**5.6**	**9.2**	**5.8**
	Median	**1**	**1**	**2**	**5**	**3**	**2**	**2**	**2**	**5**	**2**	**1**	**2**	**2**	**5**	**2**
Certain infectious and parasitic diseases	**A00–B99**	**2.0**	**5.3**	**8.0**	**11.9**	**7.2**	**2.1**	**4.0**	**6.8**	**10.9**	**6.7**	**2.1**	**4.6**	**7.4**	**11.4**	**7.0**
		1	**2**	**4**	**7**	**3**	**1**	**2**	**4**	**6**	**3**	**1**	**2**	**4**	**6**	**3**
Intestinal infectious diseases (including diarrhoea)	A00–A09	1.7	2.8	3.9	7.8	4.2	1.8	2.8	4.3	8.6	5.1	1.7	2.8	4.1	8.3	4.7
		1	2	2	4	2	1	2	3	5	2	1	2	2	5	2
Tuberculosis	A15–A19	^	16.0	19.0	30.5	18.9	^	11.4	^	^	14.2	^	14.0	18.4	33.5	17.3
		^	13	11	18	13	^	7	^	^	7	^	10	11	16	10
Septicaemia	A40–A41	6.5	16.0	12.8	14.7	14.2	7.8	9.1	12.5	14.7	13.5	7.1	12.2	12.6	14.7	13.9
		4	7	7	9	8	4	5	8	9	8	4	6	8	9	8
Human immunodeficiency virus [HIV] disease	B20–B24	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	27.0
		ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	11
Neoplasms	**C00–D48**	**5.6**	**9.2**	**10.2**	**11.4**	**10.6**	**5.1**	**6.3**	**8.7**	**10.6**	**9.0**	**5.3**	**7.4**	**9.5**	**11.1**	**9.8**
		3	**4**	**5**	**7**	**6**	**3**	**3**	**4**	**6**	**5**	**3**	**4**	**5**	**6**	**5**
Malignant neoplasms	C00–C96	6.0	9.9	10.5	11.8	11.0	5.3	8.4	9.8	11.2	10.1	5.7	9.1	10.2	11.5	10.6
		3	5	5	7	6	3	4	5	7	5	3	4	5	7	6
Malignant neoplasm of colon, rectum and anus	C18–C21	-	9.3	12.0	13.6	12.9	-	8.6	9.8	12.7	11.5	-	8.9	11.2	13.3	12.4
		-	6	8	9	8	-	7	7	9	8	-	7	7	9	8
Malignant neoplasm of trachea, bronchus and lung	C33–C34	-	7.4	10.4	12.3	11.6	-	8.4	9.8	12.8	11.8	-	7.9	10.1	12.5	11.7
		-	7	7	9	8	-	5	6	9	7	-	5	7	9	8
Melanoma and other malignant neoplasms of skin	C43–C44	-	4.0	6.8	6.4	6.4	-	5.1	3.5	5.3	4.8	-	4.5	5.5	6.1	5.8
		-	2	2	2	2	-	1	1	2	2	-	1	2	2	2
Malignant neoplasms of breast	C50	-	^	^	^	3.3	-	4.0	5.2	5.7	5.2	-	4.0	5.2	5.7	5.2
		-	^	^	^	2	-	2	2	2	2	-	2	2	2	2
Malignant neoplasms of female genital organs	C51–C58	-	-	-	-	-	-	7.9	9.8	11.0	10.1	-	7.9	9.8	11.0	10.1
		-	-	-	-	-	-	4	5	7	6	-	4	5	7	6
Malignant neoplasm of prostate	C61	3.0	3.0	4.3	11.3	8.0	-	-	-	-	-	3.0	3.0	4.3	11.3	8.0
		2	2	3	5	3	-	-	-	-	-	2	2	3	5	3
Malignant neoplasm of bladder	C67	^	5.1	5.2	8.1	7.4	-	5.3	6.6	8.6	7.8	^	5.2	5.7	8.2	7.5
		^	3	3	4	4	-	4	4	4	4	^	3	3	4	4
Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81–C96	7.3	15.6	12.1	12.5	12.4	7.1	15.2	15.3	13.7	13.9	7.2	15.4	13.3	12.9	13.0
		3	5	6	6	6	3	6	6	7	6	3	5	6	6	6
In situ neoplasms	D00-D09	-	^	3.8	5.2	4.7	-	2.6	3.4	4.3	3.6	-	2.6	3.5	4.7	3.9
		-	^	2	2	2	-	2	1	2	2	-	2	1	2	2
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10–D48	3.6	5.3	7.8	8.4	7.4	4.5	3.4	5.1	6.7	4.9	4.1	3.8	6.0	7.5	5.7
		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**	**3.2**	**5.2**	**5.9**	**6.4**	**5.8**	**3.7**	**2.8**	**3.7**	**5.7**	**4.6**	**3.5**	**3.6**	**4.7**	**6.1**	**5.1**
		2	**2**	**3**	**3**	**3**	**2**	**1**	**1**	**3**	**2**	**2**	**1**	**2**	**3**	**2**
Endocrine, nutritional and metabolic diseases	**E00–E89**	**4.2**	**6.2**	**8.1**	**10.7**	**8.4**	**4.0**	**5.3**	**6.2**	**9.4**	**7.1**	**4.1**	**5.8**	**7.2**	**10.1**	**7.8**
		3	**3**	**3**	**5**	**4**	**3**	**2**	**2**	**5**	**3**	**3**	**2**	**3**	**5**	**3**
Diabetes mellitus	E10–E14	4.1	3.8	8.4	13.8	9.3	4.3	3.7	7.7	13.7	8.1	4.2	3.8	8.2	13.8	8.9
		4	2	4	7	4	4	2	3	6	4	4	2	4	7	4
Cystic fibrosis	E84	9.4	15.5	16.1	-	14.6	9.2	16.5	16.2	^	14.7	9.3	15.9	16.1	^	14.6
		10	14	14	-	14	10	14	16	^	13	10	14	14	^	14
Mental and behavioural disorders	**F00–F99**	**6.8**	**4.9**	**7.0**	**19.6**	**10.4**	**7.7**	**7.1**	**8.4**	**18.6**	**12.0**	**7.3**	**5.8**	**7.6**	**19.1**	**11.1**
		2	**2**	**3**	**8**	**3**	**2**	**2**	**2**	**9**	**4**	**2**	**2**	**3**	**9**	**3**
Mental and behavioural disorders due to use of alcohol	F10	1.0	3.0	5.9	11.5	5.6	1.3	2.9	4.8	10.1	4.7	1.2	3.0	5.6	11.1	5.3
		1	2	3	4	2	1	2	3	6	3	1	2	3	5	2
Mental and behavioural disorders due to use of other psychoactive substance	F11–F19	^	6.3	6.7	18.8	6.9	-	9.9	8.0	12.7	10.0	^	7.1	7.1	15.4	7.6
		^	2	4	6	2	-	5	4	8	5	^	2	4	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
Diseases of nervous system	**G00–G99**	**3.9**	**5.8**	**8.4**	**10.5**	**8.0**	**4.0**	**3.7**	**5.7**	**9.4**	**6.0**	**3.9**	**4.5**	**7.0**	**10.0**	**6.9**
		1	**1**	**2**	**4**	**2**	**2**	**1**	**2**	**4**	**2**	**2**	**1**	**2**	**4**	**2**
Multiple sclerosis	G35	^	5.7	5.5	11.6	6.3	-	4.6	5.7	11.5	5.7	^	4.9	5.7	11.5	5.9
		^	2	2	7	3	-	2	2	4	3	^	2	2	5	3
Epilepsy	G40, G41	3.6	3.0	6.7	11.3	5.3	4.1	4.2	6.3	9.2	5.3	3.9	3.5	6.6	10.3	5.3
		2	2	2	4	2	2	2	2	5	2	2	2	2	4	2
Transient cerebral ischaemic attacks and related syndromes	G45	-	3.2	3.7	4.5	4.3	^	2.5	3.0	4.3	4.0	^	2.9	3.4	4.4	4.1
		-	2	2	3	3	^	1	2	3	3	^	2	2	3	3
Diseases of the eye and adnexa	**H00–H59**	**3.4**	**2.7**	**2.5**	**3.6**	**3.0**	**2.4**	**2.4**	**2.8**	**2.8**	**2.7**	**2.9**	**2.5**	**2.6**	**3.2**	**2.9**
		1	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Cataracts	H25-H26	^	2.4	3.2	2.2	2.4	^	^	2	1.4	1.5	1.2	1.9	2.7	1.7	1.9
		^	2	1	1	1	^	^	1	1	1	1	1	1	1	1
Other retinal disorders	H35	2.4	3.2	1.4	2.1	2.1	2.5	^	1.8	1.8	1.8	2.5	2.6	1.7	1.9	2
		1	3	1	1	1	1	^	1	1	1	1	2	1	1	1
Diseases of the ear and mastoid process	**H60–H95**	**1.4**	**1.6**	**2.2**	**3.7**	**2.3**	**1.4**	**1.6**	**2.1**	**3.1**	**2.2**	**1.4**	**1.6**	**2.2**	**3.3**	**2.2**
		1	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**2**	**1**
Diseases of the circulatory system	**I00–I99**	**3.3**	**6.5**	**7.0**	**9.1**	**8.1**	**6.8**	**5.6**	**6.8**	**9.1**	**8.2**	**4.9**	**6.1**	**6.9**	**9.1**	**8.2**
		1	**2**	**3**	**5**	**4**	**1**	**2**	**3**	**5**	**4**	**1**	**2**	**3**	**5**	**4**
Hypertensive diseases	I10–I15	4.7	2.0	2.5	4.4	3.1	3.1	1.4	2.1	3.1	2.5	4.1	1.8	2.3	3.5	2.8
		3	1	1	1	1	2	1	1	1	1	3	1	1	1	1
Angina pectoris	I20	-	2.2	3.7	3.8	3.7	-	2.5	2.7	3.7	3.3	-	2.3	3.4	3.8	3.6
		-	1	2	2	2	-	2	2	2	2	-	2	2	2	2
Acute myocardial infarction	I21–I22	-	3.6	4.5	6.9	5.7	-	3.7	5.9	7.6	7.1	-	3.6	4.8	7.1	6.1
		-	3	3	4	3	-	3	3	5	4	-	3	3	4	4
Other ischaemic heart disease	I23–I25	^	4.4	5.1	5.9	5.5	^	4.9	4.3	5.4	5.1	^	4.5	4.9	5.8	5.4
		^	1	2	3	2	^	2	2	3	2	^	2	2	3	2
Pulmonary heart disease and diseases of pulmonary circulation	I26–I28	^	5.3	5.3	9.4	7.2	^	5.2	8.5	10.4	9.0	18.1	5.2	6.6	9.9	8.1
		^	4	4	6	5	^	4	5	7	6	5	4	4	6	5
Conduction disorders and cardiac arrhythmias	I44–I49	4.1	3.0	3.6	4.7	4.2	3.0	3.5	3.1	5.1	4.5	3.6	3.2	3.4	4.9	4.3
		2	1	2	2	2	2	1	1	3	2	2	1	2	2	2
Heart failure	I50	5.0	10.2	10.0	10.0	10.0	72.8	12.2	8.2	10.5	10.7	41.5	11.0	9.4	10.2	10.3
		3	7	6	7	7	3	4	6	7	7	3	6	6	7	7
Cerebrovascular disease	I60–I69	7.6	22.4	17.3	17.1	17.4	17.8	16.8	15.4	16.3	16.1	12.5	19.8	16.6	16.7	16.8
		4	8	7	8	7	6	7	6	8	8	4	7	6	8	7
Atherosclerosis (non-coronary)	I70	-	9.0	17.1	17.2	17.0	-	13.3	20.3	15.2	16.2	-	10.7	17.9	16.5	16.7
		-	7	8	9	8	-	7	6	9	9	-	7	7	9	8
Diseases of the respiratory system	**J00–J99**	**2.5**	**4.1**	**8.6**	**10.3**	**8.1**	**2.6**	**3.1**	**6.1**	**10.0**	**7.3**	**2.5**	**3.6**	**7.4**	**10.2**	**7.7**
		1	**2**	**4**	**6**	**4**	**1**	**1**	**3**	**6**	**4**	**1**	**1**	**4**	**6**	**4**
Acute upper respiratory infections and influenza	J00–J11	1.6	2.2	4.9	10.7	3.6	1.7	1.8	4.0	11.0	3.8	1.6	2.0	4.4	10.9	3.7
		1	1	2	6	1	1	1	1	7	1	1	1	1	6	1
Pneumonia	J12–J18	7.6	7.6	12.1	13.0	12.2	3.6	7.0	9.2	12.7	11.1	5.7	7.3	10.9	12.9	11.7
		3	5	7	8	7	3	4	6	8	7	3	4	6	8	7
Unspecified lower acute respiratory infection	J22	3.4	3.2	5.5	8.7	7.2	3.8	2.7	5.1	8.6	6.8	3.6	2.9	5.3	8.6	7
		2	1	3	5	4	2	1	3	5	4	2	1	3	5	4
Chronic diseases of tonsils and adenoids	J35	1.1	1.1	1.2	1.1	1.1	1.1	1.2	1.4	^	1.1	1.1	1.2	1.3	1.1	1.1
		1	1	1	1	1	1	1	1	^	1	1	1	1	1	1
Chronic obstructive pulmonary disease and bronchiectasis	J40–J44, J47	6.8	6.3	5.8	8.0	7.5	7.9	4.5	5.3	8.3	7.5	7.2	5.3	5.5	8.2	7.5
		3	3	3	5	5	4	2	3	5	5	3	3	3	5	5
Asthma	J45–J46	1.7	2.2	3.2	3.7	2.4	1.9	2.5	3.2	4.8	3.0	1.8	2.4	3.2	4.5	2.8
		1	1	2	2	1	2	1	2	3	2	1	1	2	3	2
Diseases of the digestive system	**K00–K93**	**2.8**	**4.2**	**6.0**	**8.3**	**6.0**	**3.0**	**3.7**	**5.7**	**8.7**	**6.0**	**2.9**	**4.0**	**5.8**	**8.5**	**6.0**
		2	**2**	**3**	**5**	**3**	**2**	**2**	**3**	**5**	**3**	**2**	**2**	**3**	**5**	**3**
Diseases of oesophagus, stomach and duodenum	K20–K31	1.9	2.7	4.3	7.4	4.7	2.2	2.6	3.8	6.9	4.6	2.1	2.6	4.0	7.1	4.7
		1	1	2	4	2	1	1	2	4	2	1	1	2	4	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
Diseases of appendix	K35–K38	3.1	2.9	4.6	6.6	3.3	3.4	2.9	4.1	7.1	3.4	3.2	2.9	4.4	6.8	3.4
		2	2	3	5	2	3	2	3	5	2	2	2	3	5	2
Inguinal hernia	K40	1.6	1.2	1.5	3.0	2.2	2.3	4.2	2.5	4.8	3.9	1.7	1.5	1.6	3.2	2.3
		1	1	1	1	1	2	1	1	2	1	1	1	1	1	1
Noninfective enteritis and colitis	K50–K52	5.6	7.1	7.0	9.4	7.4	4.4	5.6	6.7	8.2	6.5	5.1	6.4	6.9	8.7	6.9
		3	5	4	5	5	3	4	4	5	4	3	4	4	5	5
Diverticular Disease of Intestine	K57	^	4.3	4.9	6.5	5.4	-	3.7	4.4	7.8	6.1	^	4.1	4.7	7.3	5.8
		^	3	3	4	3	-	2	3	4	3	^	3	3	4	3
Alcoholic liver disease	K70	-	10.3	15.1	14.5	13.9	-	13.6	15.8	16.7	15.4	-	11.6	15.3	15.2	14.4
		-	6	9	9	8	-	7	10	11	9	-	6	9	10	9
Cholelithiasis	K80	3.2	5.8	4.7	8.1	6.7	^	3.1	3.7	8.1	4.9	3.0	3.6	4.1	8.1	5.6
		3	2	3	6	4	^	2	2	5	3	3	2	2	6	3
Diseases of the skin and subcutaneous tissue	**L00–L99**	**2.4**	**3.1**	**6.9**	**9.1**	**6.1**	**2.8**	**2.5**	**5.4**	**10.0**	**6.3**	**2.6**	**2.9**	**6.3**	**9.5**	**6.2**
		2	**2**	**3**	**5**	**3**	**2**	**1**	**3**	**5**	**3**	**2**	**1**	**3**	**5**	**3**
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02–L03	2.8	4.0	5.7	8.5	6.3	3.1	2.9	5.4	8.8	6.4	2.9	3.6	5.6	8.7	6.3
		2	2	3	5	3	2	2	3	5	3	2	2	3	5	3
Decubitus ulcer and pressure area	L89	^	11.5	35.2	22.8	25.8	^	10.9	32.2	29.4	27.7	19.5	11.2	34.2	26.4	26.7
		^	4	15	8	9	^	11	11	15	13	7	8	14	11	10
Diseases of the musculoskeletal system and connective tissue	**M00–M99**	**4.2**	**3.2**	**5.3**	**7.3**	**5.7**	**4.2**	**3.4**	**3.4**	**6.8**	**5.0**	**4.2**	**3.3**	**4.3**	**7.0**	**5.3**
		2	**1**	**2**	**3**	**2**	**2**	**1**	**1**	**3**	**2**	**2**	**1**	**2**	**3**	**2**
Rheumatoid arthritis	M05–M06	-	3.5	4.1	4.9	4.4	^	5.7	4.7	5.8	5.5	^	5.0	4.5	5.5	5.2
		-	3	3	4	3	^	4	1	4	3	^	3	2	4	3
Coxarthrosis and Gonarthrosis	M16–M17	^	2.8	3.9	5.4	4.8	^	3.4	4.0	5.9	5.2	^	3.0	3.9	5.7	5.0
		^	2	3	4	3	^	3	3	4	4	^	3	3	4	4
Intervertebral disc disorders	M50–M51	^	2.5	5.2	6.6	4.6	-	3.0	3.7	7.8	4.4	^	2.7	4.5	7.3	4.5
		^	2	3	4	2	-	2	2	4	2	^	2	2	4	2
Dorsalgia (back pain)	M54	2.0	1.8	2.4	5.0	3.2	2.5	1.9	2.2	6.5	3.7	2.3	1.9	2.3	5.9	3.5
		1	1	1	1	1	1	1	1	2	1	1	1	1	2	1
Diseases of the genitourinary system	**N00–N99**	**2.5**	**2.6**	**4.6**	**9.7**	**6.3**	**2.7**	**2.7**	**4.2**	**9.6**	**5.8**	**2.6**	**2.7**	**4.4**	**9.7**	**6.0**
		2	**1**	**3**	**5**	**3**	**2**	**2**	**3**	**5**	**3**	**2**	**2**	**3**	**5**	**3**
Chronic kidney disease	N18	5.5	9.2	7.7	10.4	9.3	10.1	6.7	9.7	9.1	8.8	7.6	8.0	8.4	10.0	9.1
		3	6	6	5	6	9	6	5	6	6	5	6	6	6	6
Urolithiasis	N20–N23	3.2	1.9	2.3	3.7	2.4	2.6	2.3	3.0	4.0	2.9	3.0	2.1	2.5	3.8	2.6
		2	1	2	2	2	2	2	2	2	2	2	1	2	2	2
Hyperplasia of prostate	N40	-	^	3.4	4.2	4.0	-	-	-	-	-	-	^	3.4	4.2	4.0
		-	^	3	3	3	-	-	-	-	-	-	^	3	3	3
Disorders of breast	N60–N64	^	2.4	^	^	3.9	^	2.0	2.1	5.9	2.5	^	2.0	2.1	6.3	2.5
		^	3	^	^	2	^	1	1	3	1	^	1	1	2	1
Inflammatory diseases of female pelvic organs	N70–N77	-	-	-	-	-	3.5	2.4	3.5	7.0	2.9	3.5	2.4	3.5	7.0	2.9
		-	-	-	-	-	2	2	2	3	2	2	2	2	3	2
Noninflammatory disorders of female genital tract	N80–N98	-	-	-	-	-	1.9	2.0	2.6	3.6	2.5	1.9	2.0	2.6	3.6	2.5
		-	-	-	-	-	1	1	2	3	2	1	1	2	3	2
Pregnancy, childbirth and the puerperium	**O00–O99**	**-**	**-**	**-**	**-**	**-**	**3.4**	**2.5**	**3.7**	**-**	**2.5**	**3.4**	**2.5**	**3.7**	**-**	**2.5**
		-	**-**	**-**	**-**	**-**	**3**	**2**	**3**	**-**	**2**	**3**	**2**	**3**	**-**	**2**
Pregnancy with abortive outcome	O00-O09	-	-	-	-	-	-	1.3	1.2	-	1.3	-	1.3	1.2	-	1.3
		-	-	-	-	-	-	1	1	-	1	-	1	1	-	1
Gestational [pregnancy-induced] hypertension	O13	-	-	-	-	-	-	2.3	2.4	-	2.3	-	2.3	2.4	-	2.3
		-	-	-	-	-	-	1	2	-	1	-	1	2	-	1
Diabetes mellitus in pregnancy	O24	-	-	-	-	-	-	2.4	1.3	-	2.4	-	2.4	1.3	-	2.4
		-	-	-	-	-	-	1	1	-	1	-	1	1	-	1
Single spontaneous delivery	O80	-	-	-	-	-	^	2.3	2.9	-	2.3	^	2.3	2.9	-	2.3
		-	-	-	-	-	^	2	3	-	2	^	2	3	-	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
Single delivery by forceps and vacuum extractor	O81	-	-	-	-	-	^	3.0	4.0	-	3.0	^	3.0	4.0	-	3.0
		-	-	-	-	-	^	3	4	-	3	^	3	4	-	3
Single delivery by caesarean section	O82	-	-	-	-	-	-	4.0	4.5	-	4.0	-	4.0	4.5	-	4.0
		-	-	-	-	-	-	4	4	-	4	-	4	4	-	4
Other assisted single delivery	O83	-	-	-	-	-	-	2.9	^	-	2.9	-	2.9	^	-	2.9
		-	-	-	-	-	-	3	^	-	3	-	3	^	-	3
Multiple delivery	O84	-	-	-	-	-	-	5.1	5.7	-	5.1	-	5.1	5.7	-	5.1
		-	-	-	-	-	-	4	5	-	4	-	4	5	-	4
Certain conditions originating in the perinatal period	**P00–P96**	7.7	^	-	-	7.7	8.4	-	-	-	8.4	8.0	^	-	-	8.0
		3	^	-	-	3	3	-	-	-	3	3	^	-	-	3
Congenital malformations, deformations and chromosomal abnormalities	**Q00–Q99**	**8.9**	**4.8**	**6.0**	**5.9**	**8.3**	**7.6**	**6.9**	**6.6**	**4.0**	**7.4**	**8.3**	**5.9**	**6.3**	**4.8**	**7.8**
		2	**2**	**3**	**3**	**2**	**2**	**2**	**4**	**3**	**2**	**2**	**2**	**3**	**3**	**2**
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	**R00–R99**	**1.7**	**1.6**	**2.4**	**4.8**	**3.1**	**1.8**	**1.6**	**2.2**	**4.7**	**2.8**	**1.8**	**1.6**	**2.3**	**4.7**	**2.9**
		1	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**2**	**1**
Pain in throat and chest	R07	1.1	1.0	1.5	2.1	1.5	1.3	1.0	1.3	2.0	1.5	1.2	1.0	1.4	2.1	1.5
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Abdominal and pelvic pain	R10	1.2	1.4	2.1	2.9	1.8	1.4	1.5	2.1	3.2	1.8	1.3	1.4	2.1	3.1	1.8
		1	1	1	1	1	1	1	1	2	1	1	1	1	1	1
Injury, poisoning and certain other consequences of external causes	**S00–T98**	**1.7**	**3.3**	**5.9**	**12.6**	**6.3**	**1.7**	**2.9**	**5.2**	**12.4**	**7.4**	**1.7**	**3.2**	**5.6**	**12.5**	**6.9**
		1	**1**	**2**	**6**	**2**	**1**	**1**	**2**	**7**	**2**	**1**	**1**	**2**	**6**	**2**
Intracranial injury	S06	4.2	11.1	11.6	15.9	12.6	5.5	6.6	12.1	12.7	10.7	4.8	9.7	11.8	14.5	11.8
		1	1	3	6	3	1	1	2	6	3	1	1	2	6	3
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	1.2	1.8	3.7	7.6	3.4	1.0	1.6	3.2	8.1	4.4	1.1	1.7	3.6	7.9	3.9
		1	1	1	2	1	1	1	1	3	1	1	1	1	2	1
Fracture of femur	S72	3.3	10.4	13.1	19.9	17.4	2.8	8.9	12.4	17.6	16.8	3.2	10.0	12.7	18.3	17.0
		2	5	8	13	11	2	6	7	11	11	2	5	7	12	11
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36–T65	1.2	2.8	3.9	7.8	3.3	1.8	2.7	3.4	6.5	3.1	1.6	2.7	3.6	7.0	3.1
		1	1	2	4	1	1	1	2	3	1	1	1	2	3	1
Factors influencing health status and contact with health services[b]	**U00–U49, Z00–Z99**	**2.6**	**7.8**	**8.0**	**13.4**	**9.0**	**2.7**	**1.0**	**5.6**	**18.6**	**4.9**	**2.7**	**1.5**	**6.9**	**16.0**	**6.1**
		2	**1**	**2**	**5**	**2**	**2**	**1**	**2**	**9**	**1**	**2**	**1**	**2**	**6**	**1**
Care involving dialysis	Z49	-	1.5	1.5	1.8	1.7	-	1.9	1.6	2.1	1.9	-	1.7	1.6	1.9	1.7
		-	1	1	1	1	-	1	1	2	1	-	1	1	1	1
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	8.9	9.3	11.8	23.5	18.7	11.0	3.1	9.9	33.5	25.5	10.0	4.8	11.1	29.5	22.6
		4	3	3	17	11	3	1	4	25	17	3	1	3	21	15

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	–	51,426	124,618	216,205	321,922	714,171	41,111	265,246	215,121	264,296	785,774	92,537	389,864	431,326	586,218	1,499,945
All Conditions	–	126,568	297,543	586,601	1,026,776	2,037,488	103,316	746,415	549,296	842,283	2,241,310	229,884	1,043,958	1,135,897	1,869,059	4,278,798
Certain infectious and parasitic diseases	**A00-B99**	**5,229**	**9,243**	**11,477**	**20,616**	**46,565**	**4,725**	**10,679**	**9,288**	**21,568**	**46,260**	**9,954**	**19,922**	**20,765**	**42,184**	**92,825**
Intestinal infectious diseases (including diarrhoea)	A00–A09	1,299	1,867	2,228	3,727	9,121	1,163	3,190	2,711	5,275	12,339	2,462	5,057	4,939	9,002	21,460
Tuberculosis	A15–A19	~	107	44	*	192	~	84	22	*	136	7	191	66	64	328
Septicaemia	A40–A41	121	457	1,413	4,406	6,397	108	545	1,106	3,464	5,223	229	1,002	2,519	7,870	11,620
Human immunodeficiency virus [HIV] disease	B20–B24	†	†	†	†	†	†	†	†	†	†	†	†	†	†	495
Neoplasms	**C00–D48**	**6,435**	**17,676**	**88,156**	**146,765**	**259,032**	**5,347**	**39,776**	**120,652**	**111,276**	**277,051**	**11,782**	**57,452**	**208,808**	**258,041**	**536,083**
Malignant neoplasms	C00–C96	5,787	14,141	78,904	130,474	229,306	4,698	31,200	108,735	99,723	244,356	10,485	45,341	187,639	230,197	473,662
Malignant neoplasm of colon, rectum and anus	C18–C21	~	*	7,198	9,955	18,078	0	1,116	4,659	5,492	11,267	~	*	11,857	15,447	29,345
Malignant neoplasm of trachea, bronchus and lung	C33–C34	0	309	5,513	9,440	15,262	0	367	5,202	8,472	14,041	0	676	10,715	17,912	29,303
Melanoma and other malignant neoplasms of skin	C43–C44	~	*	3,044	11,616	15,228	~	*	2,091	5,353	8,142	~	*	5,135	16,969	23,370
Malignant neoplasms of breast	C50	0	8	70	162	240	0	11,142	31,406	18,583	61,131	0	11,150	31,476	18,745	61,371
Malignant neoplasms of female genital organs	C51–C58	0	0	0	0	0	28	1,809	7,293	6,909	16,039	28	1,809	7,293	6,909	16,039
Malignant neoplasm of prostate	C61	40	82	8,526	24,550	33,198	0	0	0	0	0	40	82	8,526	24,550	33,198
Malignant neoplasm of bladder	C67	43	71	899	3,218	4,231	0	28	464	820	1,312	43	99	1,363	4,038	5,543
Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81–C96	3,147	3,371	9,660	17,735	33,913	1,904	2,528	6,170	11,302	21,904	5,051	5,899	15,830	29,037	55,817
In situ neoplasms	D00-D09	36	89	472	1,736	2,333	~	*	2,823	2,418	6,401	*	*	3,295	4,154	8,734
Benign neoplasms and neoplasms of uncertain or unknown behaviour	D10–D48	612	3,446	8,780	14,555	27,393	647	7,418	9,094	9,135	26,294	1,259	10,864	17,874	23,690	53,687
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	**D50–D89**	**2,732**	**4,095**	**7,123**	**16,116**	**30,066**	**1,964**	**9,622**	**7,207**	**14,666**	**33,459**	**4,696**	**13,717**	**14,330**	**30,782**	**63,525**
Endocrine, nutritional and metabolic diseases	**E00–E89**	**2,594**	**12,833**	**42,398**	**79,483**	**137,308**	**2,507**	**15,387**	**24,482**	**59,012**	**101,388**	**5,101**	**28,220**	**66,880**	**138,495**	**238,696**
Diabetes mellitus	E10–E14	356	5,685	28,241	57,492	91,774	534	6,596	14,266	35,346	56,742	890	12,281	42,507	92,838	148,516
Cystic fibrosis	E84	211	1,176	*	~	1,543	229	1,037	*	*	1,377	440	2,213	258	9	2,920
Mental and behavioural disorders	**F00–F99**	**1,877**	**9,448**	**10,349**	**15,583**	**37,257**	**1,327**	**7,262**	**6,131**	**15,751**	**30,471**	**3,204**	**16,710**	**16,480**	**31,334**	**67,728**
Mental and behavioural disorders due to use of alcohol	F10	37	3,910	6,243	3,420	13,610	34	1,620	2,503	1,289	5,446	71	5,530	8,746	4,709	19,056
Mental and behavioural disorders due to use of other psychoactive substance	F11–F19	20	2,871	1,051	117	4,059	~	1,355	394	*	1,863	*	4,226	1,445	*	5,922
Diseases of nervous system	**G00–G99**	**2,776**	**5,867**	**8,142**	**12,632**	**29,417**	**2,371**	**9,755**	**8,919**	**11,071**	**32,116**	**5,147**	**15,622**	**17,061**	**23,703**	**61,533**
Multiple sclerosis	G35	7	1,246	942	242	2,437	8	2,920	2,011	475	5,414	15	4,166	2,953	717	7,851
Epilepsy	G40, G41	798	1,139	852	616	3,405	762	1,157	560	540	3,019	1,560	2,296	1,412	1,156	6,424
Transient cerebral ischaemic attacks and related syndromes	G45	0	62	410	1,276	1,748	~	*	338	1,244	1,634	~	*	748	2,520	3,382
Diseases of the eye and adnexa	**H00–H59**	**1,005**	**2,642**	**7,141**	**21,164**	**31,952**	**857**	**3,161**	**6,200**	**26,636**	**36,854**	**1,862**	**5,803**	**13,341**	**47,800**	**68,806**
Cataracts	H25-H26	16	117	976	3,755	4,864	18	99	1,027	5,113	6,257	34	216	2,003	8,868	11,121
Other retinal disorders	H35	121	611	2,808	10,427	13,967	79	502	1,975	14,344	16,900	200	1,113	4,783	24,771	30,867
Diseases of the ear and mastoid process	**H60–H95**	**1,732**	**1,285**	**1,250**	**1,382**	**5,649**	**1,212**	**1,475**	**1,428**	**1,427**	**5,542**	**2,944**	**2,760**	**2,678**	**2,809**	**11,191**
Diseases of the circulatory system	**I00–I99**	**1,245**	**6,297**	**29,777**	**69,505**	**106,824**	**1,461**	**7,065**	**14,548**	**52,920**	**75,994**	**2,706**	**13,362**	**44,325**	**122,425**	**182,818**
Hypertensive diseases	I10–I15	88	1,071	4,043	6,671	11,873	379	2,070	2,452	7,808	12,709	467	3,141	6,495	14,479	24,582
Angina pectoris	I20	0	101	1,166	1,667	2,934	0	30	465	875	1,370	0	131	1,631	2,542	4,304
Acute myocardial infarction	I21–I22	0	265	2,348	3,354	5,967	~	*	568	1,973	2,613	~	*	2,916	5,327	8,580
Other ischaemic heart disease	I23–I25	*	*	5,769	8,977	15,195	~	*	1,661	3,806	5,600	9	573	7,430	12,783	20,795
Pulmonary heart disease and diseases of pulmonary circulation	I26–I28	42	283	793	1,401	2,519	73	337	574	1,558	2,542	115	620	1,367	2,959	5,061
Conduction disorders and cardiac arrhythmias	I44–I49	218	988	4,899	17,290	23,395	189	837	1,949	12,388	15,363	407	1,825	6,848	29,678	38,758

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
Heart failure	I50	32	172	1,473	9,174	10,851	44	112	712	7,446	8,314	76	284	2,185	16,620	19,165
Cerebrovascular disease	I60–I69	94	406	2,125	5,367	7,992	81	363	1,273	4,341	6,058	175	769	3,398	9,708	14,050
Atherosclerosis (non-coronary)	I70	~	*	534	1,541	2,110	0	19	203	805	1,027	~	*	737	2,346	3,137
Diseases of the respiratory system	**J00–J99**	**5,800**	**7,528**	**15,609**	**39,336**	**68,273**	**4,541**	**8,656**	**13,597**	**34,552**	**61,346**	**10,341**	**16,184**	**29,206**	**73,888**	**129,619**
Acute upper respiratory infections and influenza	J00–J11	1,954	895	550	969	4,368	1,582	1,415	619	1,066	4,682	3,536	2,310	1,169	2,035	9,050
Pneumonia	J12–J18	240	972	2,739	8,319	12,270	197	829	1,979	6,795	9,800	437	1,801	4,718	15,114	22,070
Unspecified lower acute respiratory infection	J22	498	853	1,907	6,636	9,894	437	1,004	1,548	5,909	8,898	935	1,857	3,455	12,545	18,792
Chronic diseases of tonsils and adenoids	J35	810	301	41	21	1,173	751	637	55	24	1,467	1,561	938	96	45	2,640
Chronic obstructive pulmonary disease and bronchiectasis	J40–J44, J47	66	388	2,581	9,432	12,467	52	392	2,701	9,046	12,191	118	780	5,282	18,478	24,658
Asthma	J45–J46	678	750	1,541	912	3,881	392	1,633	2,041	1,152	5,218	1,070	2,383	3,582	2,064	9,099
Diseases of the digestive system	**K00–K93**	**6,262**	**34,957**	**49,088**	**54,351**	**144,658**	**4,478**	**39,018**	**45,542**	**51,421**	**140,459**	**10,740**	**73,975**	**94,630**	**105,772**	**285,117**
Diseases of oesophagus, stomach and duodenum	K20–K31	577	7,914	14,172	14,918	37,581	476	8,026	13,753	14,230	36,485	1,053	15,940	27,925	29,148	74,066
Diseases of appendix	K35–K38	1,101	1,786	400	210	3,497	886	1,626	441	177	3,130	1,987	3,412	841	387	6,627
Inguinal hernia	K40	400	456	998	1,074	2,928	64	45	51	91	251	464	501	1,049	1,165	3,179
Noninfective enteritis and colitis	K50–K52	959	9,171	4,944	1,954	17,028	524	8,309	4,469	2,075	15,377	1,483	17,480	9,413	4,029	32,405
Diverticular Disease of Intestine	K57	~	*	3,821	5,581	10,353	0	682	3,879	6,516	11,077	~	*	7,700	12,097	21,430
Alcoholic liver disease	K70	0	495	1,673	694	2,862	0	256	691	272	1,219	0	751	2,364	966	4,081
Cholelithiasis	K80	13	473	1,013	2,125	3,624	7	2,071	1,687	2,173	5,938	20	2,544	2,700	4,298	9,562
Diseases of the skin and subcutaneous tissue	**L00–L99**	**1,690**	**9,611**	**9,710**	**14,937**	**35,948**	**1,520**	**10,084**	**8,584**	**13,580**	**33,768**	**3,210**	**19,695**	**18,294**	**28,517**	**69,716**
Cutaneous abscess, furuncle and carbuncle and cellulitis	L02–L03	364	1,217	1,771	3,242	6,594	291	882	1,065	2,930	5,168	655	2,099	2,836	6,172	11,762
Decubitus ulcer and pressure area	L89	14	155	685	2,744	3,598	32	104	311	2,472	2,919	46	259	996	5,216	6,517
Diseases of the musculoskeletal system and connective tissue	**M00–M99**	**1,832**	**7,370**	**14,333**	**17,407**	**40,942**	**2,226**	**13,158**	**18,957**	**24,825**	**59,166**	**4,058**	**20,528**	**33,290**	**42,232**	**100,108**
Rheumatoid arthritis	M05–M06	0	251	758	911	1,920	~	*	1,714	1,673	3,874	~	*	2,472	2,584	5,794
Coxarthrosis and Gonarthrosis	M16–M17	~	*	1,578	2,323	4,107	~	*	1,880	3,518	5,596	6	398	3,458	5,841	9,703
Intervertebral disc disorders	M50–M51	~	*	794	517	1,839	~	*	857	767	2,281	~	*	1,651	1,284	4,120
Dorsalgia (back pain)	M54	86	1,088	2,063	1,969	5,206	109	3,274	3,108	3,278	9,769	195	4,362	5,171	5,247	14,975
Diseases of the genitourinary system	**N00–N99**	**4,116**	**15,997**	**36,513**	**81,064**	**137,690**	**3,336**	**31,309**	**36,449**	**56,434**	**127,528**	**7,452**	**47,306**	**72,962**	**137,498**	**265,218**
Chronic kidney disease	N18	296	9,590	24,882	49,172	83,940	646	7,442	13,984	26,962	49,034	942	17,032	38,866	76,134	132,974
Urolithiasis	N20–N23	74	1,370	1,822	1,047	4,313	50	855	928	483	2,316	124	2,225	2,750	1,530	6,629
Hyperplasia of prostate	N40	0	69	1,135	3,184	4,388	0	0	0	0	0	0	69	1,135	3,184	4,388
Disorders of breast	N60–N64	8	33	21	32	94	8	1,752	1,806	518	4,084	16	1,785	1,827	550	4,178
Inflammatory diseases of female pelvic organs	N70–N77	0	0	0	0	0	56	2,434	649	333	3,472	56	2,434	649	333	3,472
Noninflammatory disorders of female genital tract	N80–N98	0	0	0	0	0	272	12,978	11,769	3,984	29,003	272	12,978	11,769	3,984	29,003
Pregnancy, childbirth and the puerperium	**O00–O99**	**0**	**0**	**0**	**0**	**0**	**26**	**247,812**	**1,686**	**0**	**249,524**	**26**	**247,812**	**1,686**	**0**	**249,524**
Pregnancy with abortive outcome	O00-O09	0	0	0	0	0	~	21,560	*	0	21,786	~	21,560	*	0	21,786
Gestational [pregnancy-induced] hypertension	O13	0	0	0	0	0	0	4,440	75	0	4,515	0	4,440	75	0	4,515
Diabetes mellitus in pregnancy	O24	0	0	0	0	0	~	11,457	*	0	11,593	~	11,457	*	0	11,593
Single spontaneous delivery	O80	0	0	0	0	0	~	26,429	*	0	26,481	~	26,429	*	0	26,481
Single delivery by forceps and vacuum extractor	O81	0	0	0	0	0	~	7,823	*	0	7,842	~	7,823	*	0	7,842
Single delivery by caesarean section	O82	0	0	0	0	0	0	18,648	213	0	18,861	0	18,648	213	0	18,861
Other assisted single delivery	O83	0	0	0	0	0	0	*	~	0	1,098	0	*	~	0	1,098
Multiple delivery	O84	0	0	0	0	0	0	994	27	0	1,021	0	994	27	0	1,021
Certain conditions originating in the perinatal period	**P00–P96**	**14,830**	**~**	**~**	**0**	**14,833**	**12,000**	**0**	**0**	**0**	**12,000**	**26,830**	**~**	**~**	**0**	**26,833**
Congenital malformations, deformations and chromosomal abnormalities	**Q00–Q99**	**8,685**	**1,519**	**1,070**	**586**	**11,860**	**7,030**	**1,894**	**1,055**	**311**	**10,290**	**15,715**	**3,413**	**2,125**	**897**	**22,150**
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	**R00–R99**	**10,575**	**25,395**	**41,236**	**74,794**	**152,000**	**9,024**	**51,138**	**40,666**	**68,221**	**169,049**	**19,599**	**76,533**	**81,902**	**143,015**	**321,049**
Pain in throat and chest	R07	119	3,308	5,578	4,473	13,478	125	3,695	4,922	4,053	12,795	244	7,003	10,500	8,526	26,273
Abdominal and pelvic pain	R10	796	2,625	2,447	2,014	7,882	1,052	11,100	3,904	2,850	18,906	1,848	13,725	6,351	4,864	26,788
Injury, poisoning and certain other consequences of external causes	**S00–T98**	**7,415**	**20,640**	**14,831**	**19,211**	**62,097**	**5,367**	**11,753**	**10,562**	**22,364**	**50,046**	**12,782**	**32,393**	**25,393**	**41,575**	**112,143**

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
Intracranial injury	S06	255	912	759	1,163	3,089	135	383	378	977	1,873	390	1,295	1,137	2,140	4,962
Other injuries to the head (including skull fracture)	S00–S05, S07–S09	1,595	3,061	1,782	3,017	9,455	1,148	1,070	864	3,252	6,334	2,743	4,131	2,646	6,269	15,789
Fracture of femur	S72	128	171	279	1,598	2,176	51	59	351	3,408	3,869	179	230	630	5,006	6,045
Poisonings by drugs, medicaments and biological substances and toxic effects of substances chiefly nonmedicinal as to source	T36–T65	271	2,495	1,012	348	4,126	513	3,132	1,262	601	5,508	784	5,627	2,274	949	9,634
External causes of morbidity and mortality	**U50–Y98**	**17,928**	**38,262**	**30,454**	**49,687**	**136,331**	**13,418**	**26,404**	**25,109**	**57,864**	**122,795**	**31,346**	**64,666**	**55,563**	**107,551**	**259,126**
Transport accidents	V01–V99	609	1,513	807	375	3,304	362	790	378	249	1,779	971	2,303	1,185	624	5,083
Factors influencing health status and contact with health services[a]	**U00–U49, Z00–Z99**	**21,810**	**66,876**	**167,943**	**292,157**	**548,786**	**18,579**	**201,007**	**148,234**	**198,384**	**566,204**	**40,389**	**267,883**	**316,177**	**490,541**	**1,114,990**
Care involving dialysis	Z49	201	14,971	36,534	61,048	112,754	538	10,734	21,494	34,579	67,345	739	25,705	58,028	95,627	180,099
Other medical care (including radiotherapy and chemotherapy sessions)	Z51	2,638	6,583	37,814	67,554	114,589	1,682	15,922	50,777	48,257	116,638	4,320	22,505	88,591	115,811	231,227

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

3.4.4 Total Discharges by Principal Procedure, Sex and Age Group

In 2020, 79.6 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 29.0 per cent of total discharges with a principal procedure reported. Over 41 per cent of discharges aged less than 15 years, 24.4 per cent aged between 15–44 years, 27.3 per cent aged between 45–64 years and 31.4 per cent aged 65 years and over had a procedure from this chapter recorded as a principal procedure.
- Almost 63 per cent of total discharges with a principal procedure from the chapter *Procedures on urinary system* were males. Procedures from this chapter accounted for 17.6 per cent of total discharges with a principal procedure reported.
- Almost 32 per cent of female discharges aged between 15–44 years who underwent a procedure recorded a principal procedure from the chapter *Obstetric procedures*.
- Procedures from the chapter *Procedures on digestive system* accounted for 11.5 per cent of total discharges with a principal procedure reported, over 72 per cent of these were aged 45 years and over.

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

Table 3.15 presents the in-patient mean and median length of stay for principal procedure by sex and age group. The analysis presented here includes total in-patient (sameday and overnight) discharges, 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.[36]

- At chapter level, *Radiation oncology procedures* reported the longest in-patient mean length of stay at 20.1 days. It should be noted that the majority of discharges with *Radiation oncology procedures* recorded as a principal procedure were day patients and are therefore not included in Table 3.15.

36 See Section Two for details of discharge destination.

- The longest in-patient mean length of stay for those aged less than 15 years and those aged between 15–44 years was reported for the chapter *Procedures on respiratory system* at 16.8 days and 15.0 days respectively. For the two older age groups the longest in-patient mean length of stay was reported for the chapter *Radiation oncology procedures* at 20.7 days for those aged between 45–64 years and 20.9 days for those aged 65 years and over.
- The shortest in-patient mean lengths of stay were reported for the chapters *Procedures on ear and mastoid process* at 2.2 days and *Gynaecological procedures* at 2.8 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 2.2 million procedures were reported for total discharges.
- Procedures within the chapter *Non-invasive, cognitive and other interventions, not elsewhere classified* accounted for 1,013,762 of all-listed procedures or 45.3 per cent of all procedures reported for total discharges.
- Males accounted for 66.1 per cent of procedures from the chapter *Procedures on cardiovascular system*.
- Total discharges aged less than 15 years accounted for just over 60 per cent of procedures from the chapter *Dental Services* and for 35.1 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	-	51,426	124,618	216,205	321,922	714,171	41,111	265,246	215,121	264,296	785,774	92,537	389,864	431,326	586,218	1,499,945
All Principal Procedures	0001–2016	32,590	97,322	181,556	276,402	587,870	24,452	178,016	180,504	223,406	606,378	57,042	275,338	362,060	499,808	1,194,248
Procedures on nervous system	**0001–0086**	**698**	**2,371**	**3,570**	**2,614**	**9,253**	**598**	**3,611**	**4,847**	**3,723**	**12,779**	**1,296**	**5,982**	**8,417**	**6,337**	**22,032**
Lumbar puncture	0030	473	611	503	450	2,037	402	1,162	699	413	2,676	875	1,773	1,202	863	4,713
Procedures on endocrine system	**0110–0129**	**11**	**110**	**179**	**138**	**438**	**15**	**400**	**484**	**265**	**1,164**	**26**	**510**	**663**	**403**	**1,602**
Procedures on eye and adnexa	**0160–0256**	**436**	**1,584**	**5,411**	**15,505**	**22,936**	**374**	**1,117**	**3,993**	**19,692**	**25,176**	**810**	**2,701**	**9,404**	**35,197**	**48,112**
Extraction of crystalline lens	200	20	67	729	2,736	3,552	28	66	777	3,714	4,585	48	133	1,506	6,450	8,137
Procedures on ear and mastoid process	**0300–0333**	**1,130**	**803**	**582**	**499**	**3,014**	**783**	**814**	**674**	**447**	**2,718**	**1,913**	**1,617**	**1,256**	**946**	**5,732**
Application insertion or removal procedures on retina choroid or posterior chamber	0209	18	691	3,330	11,004	15,043	4	444	2,168	14,237	16,853	22	1,135	5,498	25,241	31,896
Myringotomy	0309	553	66	52	44	715	324	74	54	27	479	877	140	106	71	1,194
Procedures on nose, mouth and pharynx	**0370–0422**	**1,298**	**2,068**	**1,846**	**1,449**	**6,661**	**1,041**	**2,190**	**1,635**	**1,097**	**5,963**	**2,339**	**4,258**	**3,481**	**2,546**	**12,624**
Tonsillectomy or adenoidectomy	0412	651	244	40	*	952	609	564	24	~	1,202	1,260	808	64	22	2,154
Dental services	**0450–0490**	**994**	**472**	**166**	**97**	**1,729**	**805**	**605**	**146**	**64**	**1,620**	**1,799**	**1,077**	**312**	**161**	**3,349**
Procedures on respiratory system	**0520–0572**	**1,783**	**1,620**	**3,544**	**5,609**	**12,556**	**1,345**	**1,168**	**2,971**	**4,579**	**10,063**	**3,128**	**2,788**	**6,515**	**10,188**	**22,619**
Bronchoscopy with/without biopsy	0543–0544, 90163-01 [0545]	81	434	1,020	1,435	2,970	54	362	950	1,215	2,581	135	796	1,970	2,650	5,551
Procedures on cardiovascular system	**0600–0777**	**718**	**4,405**	**12,819**	**11,879**	**29,821**	**708**	**2,140**	**6,360**	**6,369**	**15,577**	**1,426**	**6,545**	**19,179**	**18,248**	**45,398**
Coronary angiography	0668	56	377	2,976	3,390	6,799	38	160	1,526	2,181	3,905	94	537	4,502	5,571	10,704
Transluminal coronary angioplasty with/without stenting	0670–0671	~	*	1,608	1,668	3,421	~	*	331	607	974	~	*	1,939	2,275	4,395
CABG	0672–0679	0	*	*	309	564	0	~	*	65	96	0	7	279	374	660
Leg varicose vein ligation	0727–0728	0	229	385	188	802	0	457	598	276	1,331	0	686	983	464	2,133
Procedures on blood and blood-forming	**0800–0817**	**106**	**423**	**921**	**1,277**	**2,727**	**99**	**471**	**775**	**938**	**2,283**	**205**	**894**	**1,696**	**2,215**	**5,010**
Procedures on digestive system	**0850–1011**	**2,179**	**15,530**	**24,699**	**26,689**	**69,097**	**1,505**	**18,884**	**24,165**	**23,727**	**68,281**	**3,684**	**34,414**	**48,864**	**50,416**	**137,378**
Fibreoptic colonoscopy with/without excision	0905, 0911	55	5,650	10,164	11,028	26,897	30	6,747	10,087	9,483	26,347	85	12,397	20,251	20,511	53,244
Appendicectomy	0926	974	1,545	305	118	2,942	789	1,409	325	96	2,619	1,763	2,954	630	214	5,561
Procedures for haemorrhoids	0941	~	578	596	*	1,413	0	556	501	250	1,307	~	1,134	1,097	*	2,720
Cholecystectomy	0965	~	230	397	*	961	~	1,100	862	*	2,329	6	1,330	1,259	695	3,290
Division of abdominal adhesions	0986	~	28	45	*	140	~	139	94	*	324	12	167	139	146	464
Repair of inguinal and obstructed hernia	0990, 0997	299	431	913	812	2,455	60	51	83	106	300	359	482	996	918	2,755
Panendoscopy with/without excision	1005–1008	256	5,054	8,259	8,901	22,470	252	6,276	9,218	9,077	24,823	508	11,330	17,477	17,978	47,293
Procedures on urinary system	**1040–1129**	**513**	**17,488**	**42,264**	**71,369**	**131,634**	**743**	**13,164**	**25,566**	**38,654**	**78,127**	**1,256**	**30,652**	**67,830**	**110,023**	**209,761**
Haemodialysis	1060	206	15,033	36,806	61,653	113,698	549	10,829	21,688	34,970	68,036	755	25,862	58,494	96,623	181,734
Examination procedures on bladder (includes cystoscopy)	1089	24	783	2,398	4,664	7,869	24	934	1,698	1,907	4,563	48	1,717	4,096	6,571	12,432
Procedures on male genital organs	**1160–1203**	†	†	†	†	†	†	†	†	†	†	**2,008**	**1,081**	**1,919**	**1,881**	**6,889**
Prostatectomy	1166–1167	0	10	395	444	849	0	0	0	0	0	0	10	395	444	849
Circumcision	30653-00[1196]	837	317	162	101	1,417	0	0	0	0	0	837	317	162	101	1,417
Gynaecological procedures	**1240–1299**	†	†	†	†	†	†	†	†	†	†	**64**	**11,904**	**8,680**	**2,321**	**22,969**
Oophorectomy and salpingo-oophorectomy	1243, 1252	0	0	0	0	0	~	287	339	*	725	~	287	339	*	725
Salpingectomy	1251	0	0	0	0	0	~	194	27	*	231	~	194	27	*	231
Examination procedures on uterus	1259	0	0	0	0	0	~	1,702	2,903	*	5,179	~	1,702	2,903	*	5,179
Curettage and evacuation of uterus	1265	0	0	0	0	0	~	5,010	1,931	*	7,260	~	5,010	1,931	*	7,260
Hysterectomy	1268–1269	0	0	0	0	0	0	309	933	446	1,688	0	309	933	446	1,688
Repair of prolapse of uterus, pelvic floor or enterocele	1283	0	0	0	0	0	0	53	189	205	447	0	53	189	205	447
Obstetric procedures	**1330–1347**	**0**	**0**	**0**	**0**	**0**	~	**56,476**	*	**0**	**56,801**	~	**56,476**	*	**0**	**56,801**
Analgesia and anaesthesia during labour and delivery procedure	1333	0	0	0	0	0	0	73	0	0	73	0	73	0	0	73

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	~	1,438	*	0	1,445	~	1,438	*	0	1,445
Medical or surgical augmentation of labour	1335	0	0	0	0	0	0	396	0	0	396	0	396	0	0	396
Spontaneous vertex delivery	1336	0	0	0	0	0	~	25,181	*	0	25,232	~	25,181	*	0	25,232
Forceps rotation and delivery	1337	0	0	0	0	0	~	1,960	~	0	1,965	~	1,960	~	0	1,965
Vacuum extraction	1338	0	0	0	0	0	0	5,944	14	0	5,958	0	5,944	14	0	5,958
Breech delivery and extraction	1339	0	0	0	0	0	0	*	~	0	61	0	*	~	0	61
Caesarean section	1340	0	0	0	0	0	0	19,315	239	0	19,554	0	19,315	239	0	19,554
Episiotomy associated with delivery	90472-00[1343]	0	0	0	0	0	0	119	0	0	119	0	119	0	0	119
Postpartum suture	1344	0	0	0	0	0	0	*	~	0	1,064	0	*	~	0	1,064
Procedures on musculoskeletal system	**1360–1580**	**3,029**	**7,189**	**7,577**	**7,082**	**24,877**	**2,601**	**4,564**	**9,264**	**11,571**	**28,000**	**5,630**	**11,753**	**16,841**	**18,653**	**52,877**
Arthroplasty of hip	1489	~	*	580	1,252	1,903	~	*	600	1,904	2,567	~	*	1,180	3,156	4,470
Arthroplasty of knee	1518–1519	0	7	296	459	762	0	8	352	664	1,024	0	15	648	1,123	1,786
Dermatological and plastic procedures	**1600–1718**	**2,541**	**10,269**	**9,337**	**12,076**	**34,223**	**1,953**	**9,977**	**8,642**	**9,078**	**29,650**	**4,494**	**20,246**	**17,979**	**21,154**	**63,873**
Excision of lesion of skin and subcutaneous tissue	1620	257	2,930	4,103	6,803	14,093	227	4,017	4,097	4,815	13,156	484	6,947	8,200	11,618	27,249
Other debridement of skin and subcutaneous tissue	1628	168	626	476	339	1,609	104	237	218	221	780	272	863	694	560	2,389
Skin graft	1640–1650	13	35	32	50	130	11	24	35	49	119	24	59	67	99	249
Procedures on breast	**1740–1759**	**~**	**26**	**26**	*****	**71**	*****	**3,230**	**3,799**	*****	**8,909**	**8**	**3,256**	**3,825**	**1,891**	**8,980**
Breast biopsy	1743–1744	0	6	17	16	39	~	2,359	2,608	*	6,461	~	2,365	2,625	*	6,500
Mastectomy	1747–1748	0	~	6	~	13	0	*	319	*	753	0	204	325	237	766
Radiation oncology procedures	**1786–1800**	**420**	**2,905**	**18,961**	**34,733**	**57,019**	**252**	**7,171**	**22,610**	**19,859**	**49,892**	**672**	**10,076**	**41,571**	**54,592**	**106,911**
Non-invasive, cognitive and other interventions, not elsewhere classified	**1820–1923**	**13,215**	**27,937**	**45,407**	**80,131**	**166,690**	**10,213**	**39,120**	**53,560**	**76,726**	**179,619**	**23,428**	**67,057**	**98,967**	**156,857**	**346,309**
Administration of blood and blood products	1893	1,676	1,975	3,196	7,862	14,709	936	2,704	3,399	6,343	13,382	2,612	4,679	6,595	14,205	28,091
Conduction anaesthesia	1909	0	~	~	~	11	0	~	~	~	10	0	*	9	~	21
Cerebral anaesthesia	1910	13	12	15	16	56	10	12	14	10	46	23	24	29	26	102
Imaging services[a]	**1940–2016**	**1,511**	**1,042**	**2,329**	**3,356**	**8,238**	**1,341**	**1,009**	**2,011**	**2,423**	**6,784**	**2,852**	**2,051**	**4,340**	**5,779**	**15,022**
Computerised tomography scan	1952–1966	181	304	758	1,353	2,596	117	175	734	807	1,833	298	479	1,492	2,160	4,429
Magnetic resonance imaging	2015	1,054	71	60	40	1,225	863	87	74	47	1,071	1,917	158	134	87	2,296

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 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**	**3.7**	**3.8**	**6.1**	**9.2**	**6.7**	**3.8**	**2.7**	**5.0**	**9.2**	**5.1**	**3.7**	**3.0**	**5.6**	**9.2**	**5.8**
	Median	**1**	**1**	**2**	**5**	**3**	**2**	**2**	**2**	**5**	**2**	**1**	**2**	**2**	**5**	**2**
All Principal Procedures	**0001–2016**	**5.7**	**5.9**	**9.0**	**12.2**	**9.7**	**6.2**	**3.7**	**7.6**	**12.3**	**7.4**	**5.9**	**4.2**	**8.3**	**12.3**	**8.3**
		2	**2**	**4**	**7**	**5**	**2**	**3**	**4**	**7**	**3**	**2**	**3**	**4**	**7**	**4**
Procedures on nervous system	**0001–0086**	**6.5**	**7.7**	**10.0**	**15.7**	**10.3**	**6.5**	**5.9**	**9.9**	**14.1**	**8.9**	**6.5**	**6.6**	**9.9**	**14.9**	**9.6**
		4	**3**	**5**	**8**	**5**	**4**	**3**	**4**	**8**	**4**	**4**	**3**	**5**	**8**	**5**
Lumbar puncture	0030	5.4	7.0	12.0	21.6	11.0	5.3	5.5	11.1	20.0	9.3	5.4	6.0	11.5	20.9	10.0
		4	4	6	14	5	4	3	5	12	4	4	4	5	13	5
Procedures on endocrine system	**0110–0129**	**6.5**	**5.5**	**3.8**	**8.9**	**5.8**	**2.9**	**4.0**	**3.7**	**4.0**	**3.9**	**4.5**	**4.4**	**3.8**	**5.8**	**4.5**
		2	**2**	**2**	**4**	**3**	**3**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**3**	**2**
Procedures on eye and adnexa	**0160–0256**	**2.8**	**2.5**	**2.4**	**4.4**	**3.2**	**2.2**	**2.2**	**2.3**	**3.3**	**2.7**	**2.5**	**2.4**	**2.4**	**3.8**	**3.0**
		1	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Extraction of crystalline lens	0200	1.6	3.4	2.9	2.4	2.6	1.2	1.0	2.1	2.9	2.4	1.3	2.4	2.5	2.7	2.5
		1	3	1	1	1	1	1	1	1	1	1	1	1	1	1
Application insertion or removal procedures on retina choroid or posterior chamber	0209	^	0.7	1.5	2.2	1.9	^	^	1.4	1.9	1.9	^	0.8	1.4	2	1.9
		^	1	1	1	1	^	^	1	1	1	^	1	1	1	1
Procedures on ear and mastoid process	**0300–0333**	**1.7**	**2.1**	**2.9**	**4.2**	**2.4**	**1.2**	**1.7**	**2.4**	**4.3**	**2.0**	**1.5**	**1.9**	**2.6**	**4.2**	**2.2**
		1	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**2**	**1**
Myringotomy	0309	1.4	^	^	^	1.4	1.4	2.7	^	^	1.7	1.4	2.4	^	^	1.6
		1	^	^	^	1	1	2	^	^	1	1	1	^	^	1
Procedures on nose, mouth and pharynx	**0370–0422**	**1.2**	**1.7**	**4.9**	**8.9**	**3.4**	**1.2**	**2.0**	**3.2**	**7.2**	**2.6**	**1.2**	**1.9**	**4.3**	**8.2**	**3.0**
		1	**1**	**1**	**3**	**1**	**1**	**1**	**1**	**2**	**1**	**1**	**1**	**1**	**3**	**1**
Tonsillectomy or adenoidectomy	0412	1.1	1.2	1.3	2.3	1.2	1.1	1.8	1.8	^	1.5	1.1	1.6	1.5	2.2	1.3
		1	1	1	1	1	1	1	1	^	1	1	1	1	1	1
Dental services	**0450–0490**	**3.6**	**3.0**	**6.6**	**9.3**	**4.6**	**1.4**	**2.0**	**5.1**	**11.1**	**2.7**	**2.6**	**2.5**	**5.9**	**9.7**	**3.7**
		1	**2**	**2**	**5**	**1**	**1**	**1**	**2**	**3**	**1**	**1**	**1**	**2**	**4**	**1**
Procedures on respiratory system	**0520–0572**	**16.2**	**14.2**	**19.8**	**17.8**	**17.5**	**17.7**	**16.5**	**13.9**	**16.7**	**16.2**	**16.8**	**15.0**	**17.3**	**17.3**	**16.9**
		7	**7**	**10**	**11**	**9**	**8**	**7**	**8**	**11**	**9**	**8**	**7**	**9**	**11**	**9**
Bronchoscopy with/without biopsy	0543–0544, 90163-01 [0545]	8.9	11.4	13.2	15.6	13.9	36	8.9	12.1	15	14.5	21.9	10.5	12.7	15.3	14.2
		3	9	9	11	10	7	6	9	12	10	5	7	9	11	10
Procedures on cardiovascular system	**0600–0777**	**13.7**	**7.5**	**6.6**	**8.3**	**7.9**	**16.3**	**7.2**	**5.9**	**8.5**	**8.2**	**14.9**	**7.4**	**6.4**	**8.4**	**8.0**
		7	**3**	**3**	**4**	**4**	**7**	**2**	**3**	**4**	**4**	**7**	**3**	**3**	**4**	**4**
Coronary angiography	0668	3.7	4.2	4.8	5.9	5.3	8.4	4.8	4.1	5.6	5.1	5.8	4.4	4.6	5.8	5.2
		1	2	2	3	3	2	3	2	3	3	1	3	2	3	3
Transluminal coronary angioplasty with/without stenting	0670–0671	-	3.3	3.2	4.3	3.7	-	2.8	3.8	5.1	4.6	-	3.2	3.3	4.5	3.9
		-	2	2	2	2	-	2	2	3	2	-	2	2	2	2
CABG	0672–0679	-	12.3	14.5	17.4	16.1	-	^	13.6	19.1	17.3	-	12.0	14.4	17.7	16.3
		-	11	11	13	12	-	^	9	15	12	-	10	11	13	12
Leg varicose vein ligation	0727–0728	-	1.0	1.1	1.1	1.1	-	1.0	1.0	4.2	1.9	-	1.0	1.1	2.7	1.5
		-	1	1	1	1	-	1	1	1	1	-	1	1	1	1
Procedures on blood and blood-forming organs	**0800–0817**	**13.1**	**15.7**	**18.8**	**15.2**	**16.3**	**11.0**	**13.6**	**14.7**	**17.4**	**15.3**	**12.0**	**14.7**	**16.9**	**16.1**	**15.9**
		7	**6**	**11**	**9**	**8**	**6**	**4**	**5**	**11**	**7**	**6**	**5**	**8**	**9**	**8**
Procedures on digestive system	**0850–1011**	**5.5**	**5.5**	**9.3**	**12.9**	**9.7**	**5.6**	**5.2**	**8.9**	**13.7**	**9.6**	**5.5**	**5.3**	**9.2**	**13.3**	**9.6**
		2	**3**	**5**	**7**	**5**	**3**	**3**	**5**	**8**	**5**	**3**	**3**	**5**	**8**	**5**
Fibreoptic colonoscopy with/without excision	0905, 0911	5.4	6.5	10.6	11.8	10.4	^	6.2	8.3	12.2	9.9	5.9	6.3	9.5	12.0	10.2
		4	5	5	7	6	^	4	5	7	6	6	5	5	7	6
Appendicectomy	0926	3.0	2.8	4.3	6.1	3.2	3.2	2.9	3.9	6.6	3.2	3.1	2.8	4.1	6.3	3.2
		2	2	3	5	2	3	2	3	4	2	2	2	3	4	2
Procedures for haemorrhoids	0941	^	2.0	2.7	3.1	2.5	-	2.3	2.1	4.1	2.9	^	2.1	2.4	3.7	2.7
		^	1	2	2	1	-	1	1	3	2	^	1	1	2	2

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	^	7.7	3.7	6.6	5.6	^	2.8	3.1	5.9	3.5	2.8	3.6	3.3	6.2	4.2
		^	2	2	3	2	^	1	1	2	1	3	1	2	3	2
Division of abdominal adhesions	0986	8.8	8.6	11.7	12.1	11.1	^	6.5	9.0	16.7	10.9	8.3	7.1	10.1	14.8	11.0
		7	7	8	8	8	^	1	5	10	5	7	3	6	9	6
Repair of inguinal and obstructed hernia	0990, 0997	8.1	1.6	2.1	3.6	3.4	3.2	4.5	4.3	13.5	8.6	7.6	2.1	2.4	5.1	4.1
		1	1	1	1	1	2	2	3	6	3	2	1	1	1	1
Panendoscopy with/without excision	1005–1008	4.6	6.5	9.0	12.7	10.6	6.2	6.0	9.6	12.8	10.8	5.5	6.2	9.3	12.8	10.7
		3	3	5	7	6	2	3	5	8	6	2	3	5	8	6
Procedures on urinary system	**1040–1129**	**4.8**	**5.6**	**5.9**	**10.3**	**8.1**	**7.6**	**5.0**	**7.2**	**10.8**	**8.1**	**6.1**	**5.4**	**6.4**	**10.4**	**8.1**
		3	**3**	**3**	**6**	**4**	**4**	**3**	**4**	**6**	**4**	**3**	**3**	**3**	**6**	**4**
Haemodialysis	1060	^	9.5	9.5	12.4	11.2	2.7	6.7	12.3	14	12.3	2.4	8.1	10.6	13	11.6
		^	4	6	8	7	1	3	6	8	7	1	4	6	8	7
Examination procedures on bladder (includes cystoscopy)	1089	^	5.2	10.4	11.9	10.9	^	4.8	4.0	13.5	8.5	3.6	5.0	7.9	12.2	10.2
		^	2	2	6	5	^	2	2	7	3	2	2	2	7	5
Procedures on male genital organs	**1160–1203**	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	**1.2**	**1.9**	**4.2**	**6.0**	**3.6**
		ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	**1**	**1**	**3**	**3**	**2**
Prostatectomy	1166–1167		3.1	3.3	5.3	4.4	-	-	-	-	-	-	3.1	3.3	5.3	4.4
			2	3	3	3	-	-	-	-	-	-	2	3	3	3
Circumcision	30653-00 [1196]	1.3	1.0	4.5	2.8	2.2	-	-	-	-	-	1.3	1.0	4.5	2.8	2.2
		1	1	1	1	1	-	-	-	-	-	1	1	1	1	1
Gynaecological procedures	**1240–1299**	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	**3.9**	**1.9**	**3.6**	**5.0**	**2.8**
		ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	ǂ	**3**	**1**	**3**	**3**	**2**
Oophorectomy and salpingo-oophorectomy	1243, 1252	-	-	-	-	-	^	3.3	3.5	5.0	3.7	^	3.3	3.5	5.0	3.7
		-	-	-	-	-	^	2	2	3	2	^	2	2	3	2
Salpingectomy	1251	-	-	-	-	-	^	2.3	2.0	4.4	2.4	^	2.3	2.0	4.4	2.4
		-	-	-	-	-	^	2	2	3	2	^	2	2	3	2
Examination procedures on uterus	1259	-	-	-	-	-	-	1.8	2.0	5.7	2.9	-	1.8	2.0	5.7	2.9
		-	-	-	-	-	-	1	1	1	1	-	1	1	1	1
Curettage and evacuation of uterus	1265	-	-	-	-	-	-	1.1	2.2	3.7	1.2	-	1.1	2.2	3.7	1.2
		-	-	-	-	-	-	1	1	1	1	-	1	1	1	1
Hysterectomy	1268–1269	-	-	-	-	-	-	3.9	4.5	5.7	4.7	-	3.9	4.5	5.7	4.7
		-	-	-	-	-	-	3	4	4	4	-	3	4	4	4
Repair of prolapse of uterus, pelvic floor or enterocele	1283	-	-	-	-	-	-	2.6	2.6	3.1	2.9	-	2.6	2.6	3.1	2.9
		-	-	-	-	-	-	3	3	3	3	-	3	3	3	3
Obstetric procedures	**1330–1347**	**-**	**-**	**-**	**-**	**-**	**^**	**3.3**	**4.9**	**-**	**3.3**	**^**	**3.3**	**4.9**	**-**	**3.3**
		-	**-**	**-**	**-**	**-**	**^**	**3**	**4**	**-**	**3**	**^**	**3**	**4**	**-**	**3**
Analgesia and anaesthesia during labour and delivery procedure	1333	-	-	-	-	-	-	2.8	-	-	2.8	-	2.8	-	-	2.8
		-	-	-	-	-	-	3	-	-	3	-	3	-	-	3
Medical or surgical induction of labour	1334	-	-	-	-	-	^	2.2	2.0	-	2.2	^	2.2	2.0	-	2.2
		-	-	-	-	-	^	2	2	-	2	^	2	2	-	2
Medical or surgical augmentation of labour	1335	-	-	-	-	-	-	2.3	-	-	2.3	-	2.3	-	-	2.3
		-	-	-	-	-	-	2	-	-	2	-	2	-	-	2
Spontaneous vertex delivery	1336	-	-	-	-	-	^	2.4	2.9	-	2.4	^	2.4	2.9	-	2.4
		-	-	-	-	-	^	2	3	-	2	^	2	3	-	2
Forceps rotation and delivery	1337	-	-	-	-	-	^	3.4	^	-	3.4	^	3.4	^	-	3.4
		-	-	-	-	-	^	3	^	-	3	^	3	^	-	3
Vacuum extraction	1338	-	-	-	-	-	-	3.1	4.2	-	3.1	-	3.1	4.2	-	3.1
		-	-	-	-	-	-	3	4	-	3	-	3	4	-	3
Breech delivery and extraction	1339	-	-	-	-	-	-	5.1	^	-	5.0	-	5.1	^	-	5.0
		-	-	-	-	-	-	3	^	-	3	-	3	^	-	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	-	-	-	-	-	-	4.5	5.6	-	4.6	-	4.5	5.6	-	4.6
		-	-	-	-	-	-	4	4	-	4	-	4	4	-	4
Episiotomy associated with delivery	90472-00	-	-	-	-	-	-	2.9	-	-	2.9	-	2.9	-	-	2.9
	[1343]	-	-	-	-	-	-	3	-	-	3	-	3	-	-	3
Postpartum suture	1344	-	-	-	-	-	-	2.3	^	-	2.3	-	2.3	^	-	2.3
		-	-	-	-	-	-	2	^	-	2	-	2	^	-	2
Procedures on musculoskeletal system	**1360–1580**	**2.1**	**3.3**	**7.8**	**13.4**	**7.5**	**2.3**	**4.5**	**5.2**	**11.2**	**7.7**	**2.2**	**3.7**	**6.5**	**12.1**	**7.6**
		1	**1**	**3**	**6**	**2**	**1**	**2**	**2**	**6**	**3**	**1**	**1**	**2**	**6**	**3**
Arthroplasty of hip	1489	^	5.2	5.3	11.5	9.4	^	5.5	5.7	11.2	9.7	^	5.3	5.5	11.3	9.6
		^	3	3	6	4	^	3	4	7	6	^	3	3	7	5
Arthroplasty of knee	1518–1519	-	4.6	3.9	5.4	4.8	-	4.4	4.0	4.8	4.5	-	4.5	3.9	5.1	4.7
		-	3	3	4	3	-	4	3	4	4	-	4	3	4	4
Dermatological and plastic procedures	**1600–1718**	**2.8**	**3.4**	**6.9**	**11.6**	**5.7**	**3.0**	**3.0**	**6.9**	**15.0**	**6.2**	**2.9**	**3.2**	**6.9**	**12.9**	**5.9**
		1	**1**	**2**	**3**	**2**	**2**	**2**	**2**	**5**	**2**	**1**	**1**	**2**	**4**	**2**
Excision of lesion of skin and subcutaneous tissue	1620	1.1	2.0	2.7	6.6	5.1	0.9	1.6	1.8	8.4	5.3	1.0	1.8	2.3	7.2	5.2
		1	1	1	2	1	1	1	1	2	1	1	1	1	2	1
Other debridement of skin and subcutaneous tissue	1628	1.4	3.2	10.8	16.4	8.3	2.2	4.5	12.6	19.8	11.0	1.7	3.6	11.4	17.7	9.2
		1	1	2	9	2	1	2	5	11	3	1	2	3	9	2
Skin graft	1640–1650	24.3	8.1	11.5	13.8	12.5	3.3	9.9	9.3	10.1	9.0	12.8	8.9	10.4	11.8	10.8
		7	7	6	7	7	2	6	7	8	6	3	7	6	7	7
Procedures on breast	**1740–1759**	**^**	**2.2**	**^**	**29.0**	**5.9**	**^**	**2.7**	**2.6**	**4.3**	**3.1**	**^**	**2.7**	**2.6**	**4.4**	**3.1**
		^	**2**	**^**	**3**	**2**	**^**	**2**	**1**	**2**	**2**	**^**	**2**	**1**	**2**	**2**
Breast biopsy	1743–	-	^	-	^	^	-	1.4	2.0	4.6	3.0	-	1.5	2.0	4.8	3.1
	1744	-	^	-	^	^	-	1	1	1	1	-	1	1	1	1
Mastectomy	1747–	-	^	^	^	1.6	-	3.6	2.9	3.4	3.2	-	3.5	2.9	3.4	3.2
	1748	-	^	^	^	1	-	3	2	2	2	-	3	2	2	2
Radiation oncology procedures	**1786–1800**	**-**	**11.4**	**21.9**	**21.3**	**20.7**	**^**	**16.0**	**19.7**	**20.5**	**19.5**	**^**	**14.5**	**20.7**	**20.9**	**20.1**
		-	**5**	**17**	**15**	**15**	**^**	**8**	**14**	**15**	**14**	**^**	**5**	**16**	**15**	**14**
Non-invasive, cognitive and other interventions, not elsewhere classified	**1820–1923**	**5.1**	**7.2**	**9.0**	**12.3**	**10.3**	**5.4**	**4.8**	**8.3**	**12.5**	**10.0**	**5.2**	**5.8**	**8.7**	**12.4**	**10.2**
		3	**3**	**5**	**7**	**6**	**3**	**2**	**5**	**7**	**6**	**3**	**3**	**5**	**7**	**6**
Administration of blood and blood products	1893	3.5	6.0	9.4	11.4	10.0	3.4	4.7	7.5	11.4	9.0	3.4	5.1	8.4	11.4	9.5
		2	3	5	7	6	2	2	4	6	5	2	3	5	6	5
Conduction anaesthesia	1909	-	^	^	^	^	-	^	^	^	5.4	-	6.2	^	^	5.8
		-	^	^	^	^	-	^	^	^	3	-	3	^	^	3
Cerebral anaesthesia	1910	^	6.3	8.7	9.2	8.9	2.3	^	2.5	12.5	5.1	6.3	5.1	5.9	10.5	7.2
		^	7	3	4	5	1	^	1	7	2	1	5	2	5	3
Imaging services[b]	**1940–2016**	**6.7**	**13.0**	**9.9**	**12.3**	**10.9**	**8.8**	**9.4**	**10.3**	**11.1**	**10.3**	**7.5**	**11.2**	**10.0**	**11.8**	**10.7**
		3	**5**	**5**	**7**	**6**	**2**	**3**	**6**	**6**	**5**	**3**	**4**	**6**	**7**	**5**
Computerised tomography scan	1952-1966	4.9	10.0	6.6	4.1	5.9	27.4	1.9	4.3	11.3	10.6	11.3	7.1	5.5	6.5	7.5
		2	2	1	1	1	1	1	1	1	1	2	1	1	1	1
Magnetic resonance imaging	2015	7.3	61.9	8.5	14.3	12.9	7.1	32.7	9.6	15.9	11.5	7.2	46.4	9.1	15.1	12.2
		3	6	5	6	3	3	3	2	5	3	3	4	4	6	3

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.
b See Appendix V for information on updated Australian Coding Standard (ACS) 0042 *Procedures normally not coded* in ICD-10-AM 10th edition.

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	-	51,426	124,618	216,205	321,922	714,171	41,111	265,246	215,121	264,296	785,774	92,537	389,864	431,326	586,218	1,499,945
All Procedures	0001–2016	74,291	164,108	312,868	502,741	1,054,008	57,023	396,688	310,700	421,537	1,185,948	131,314	560,796	623,568	924,278	2,239,956
Procedures on nervous system	**0001–0086**	**1,757**	**3,576**	**5,438**	**4,173**	**14,944**	**1,261**	**5,101**	**7,366**	**5,999**	**19,727**	**3,018**	**8,677**	**12,804**	**10,172**	**34,671**
Lumbar puncture	0030	1,308	790	662	691	3,451	894	1,286	837	584	3,601	2,202	2,076	1,499	1,275	7,052
Procedures on endocrine system	**0110–0129**	**11**	**119**	**202**	**160**	**492**	**15**	**418**	**513**	**288**	**1,234**	**26**	**537**	**715**	**448**	**1,726**
Procedures on eye and adnexa	**0160–0256**	**619**	**2,047**	**7,284**	**20,322**	**30,272**	**515**	**1,535**	**5,601**	**25,968**	**33,619**	**1,134**	**3,582**	**12,885**	**46,290**	**63,891**
Extraction of crystalline lens	200	23	74	748	2,772	3,617	30	70	791	3,758	4,649	53	144	1,539	6,530	8,266
Application insertion or removal procedures on retina choroid or posterior chamber	0209	40	779	3,819	11,979	16,617	10	527	2,417	15,611	18,565	50	1,306	6,236	27,590	35,182
Procedures on ear and mastoid process	**0300–0333**	**1,437**	**964**	**685**	**626**	**3,712**	**1,025**	**947**	**797**	**532**	**3,301**	**2,462**	**1,911**	**1,482**	**1,158**	**7,013**
Myringotomy	0309	691	83	63	55	892	437	86	61	29	613	1,128	169	124	84	1,505
Procedures on nose, mouth and pharynx	**0370–0422**	**1,570**	**2,823**	**2,620**	**2,095**	**9,108**	**1,249**	**2,713**	**2,131**	**1,387**	**7,480**	**2,819**	**5,536**	**4,751**	**3,482**	**16,588**
Tonsillectomy or adenoidectomy	0412	709	252	43	21	1,025	646	569	27	7	1,249	1,355	821	70	28	2,274
Dental services	**0450–0490**	**2,758**	**1,114**	**327**	**159**	**4,358**	**1,842**	**998**	**277**	**99**	**3,216**	**4,600**	**2,112**	**604**	**258**	**7,574**
Procedures on respiratory system	**0520–0572**	**3,120**	**2,787**	**6,128**	**9,117**	**21,152**	**2,380**	**2,046**	**4,683**	**6,872**	**15,981**	**5,500**	**4,833**	**10,811**	**15,989**	**37,133**
Bronchoscopy with/without biopsy	0543–0544, 90163-01[0545]	180	577	1,375	1,918	4,050	131	451	1,170	1,536	3,288	311	1,028	2,545	3,454	7,338
Procedures on cardiovascular system	**0600–0777**	**2,797**	**5,094**	**16,910**	**17,294**	**42,095**	**2,482**	**2,671**	**7,669**	**8,739**	**21,561**	**5,279**	**7,765**	**24,579**	**26,033**	**63,656**
Coronary angiography	0668	232	515	4,412	4,909	10,068	231	209	1,835	2,787	5,062	463	724	6,247	7,696	15,130
Transluminal coronary angioplasty with/without stenting	0670–0671	~	*	1,757	1,862	3,770	~	*	366	681	1,084	~	*	2,123	2,543	4,854
CABG	0672–0679	0	*	*	742	1,359	0	~	*	153	222	0	13	673	895	1,581
Leg varicose vein ligation	0727–0728	0	255	441	215	911	0	547	691	303	1,541	0	802	1,132	518	2,452
Procedures on blood and blood-forming organs	**0800–0817**	**313**	**635**	**1,477**	**1,988**	**4,413**	**261**	**1,043**	**2,199**	**2,211**	**5,714**	**574**	**1,678**	**3,676**	**4,199**	**10,127**
Procedures on digestive system	**0850–1011**	**2,651**	**19,141**	**32,070**	**36,019**	**89,881**	**1,859**	**24,528**	**31,328**	**31,622**	**89,337**	**4,510**	**43,669**	**63,398**	**67,641**	**179,218**
Fibreoptic colonoscopy with/without excision	0905, 0911	147	7,047	12,830	14,129	34,153	99	8,376	12,729	12,165	33,369	246	15,423	25,559	26,294	67,522
Appendicectomy	0926	999	1,563	337	152	3,051	808	1,474	439	171	2,892	1,807	3,037	776	323	5,943
Procedures for haemorrhoids	0941	~	901	1,105	*	2,480	0	921	884	436	2,241	~	1,822	1,989	*	4,721
Cholecystectomy	0965	~	244	450	*	1,104	~	1,120	902	*	2,431	8	1,364	1,352	811	3,535
Division of abdominal adhesions	0986	65	218	328	411	1,022	45	1,362	628	453	2,488	110	1,580	956	864	3,510
Repair of inguinal and obstructed hernia	0990, 0997	318	436	931	842	2,527	60	55	87	118	320	378	491	1,018	960	2,847
Panendoscopy with/without excision	1005–1008	291	5,741	9,902	11,441	27,375	280	7,168	10,710	11,225	29,383	571	12,909	20,612	22,666	56,758
Procedures on urinary system	**1040–1129**	**621**	**18,429**	**44,110**	**74,275**	**137,435**	**819**	**14,021**	**26,964**	**40,049**	**81,853**	**1,440**	**32,450**	**71,074**	**114,324**	**219,288**
Haemodialysis	1060	212	15,205	37,267	62,430	115,114	557	10,947	21,946	35,377	68,827	769	26,152	59,213	97,807	183,941
Examination procedures on bladder (includes cystoscopy)	1089	41	824	2,511	4,971	8,347	30	1,031	1,877	2,066	5,004	71	1,855	4,388	7,037	13,351
Procedures on male genital organs	**1160–1203**	†	†	†	†	†	†	†	†	†	†	**2,302**	**1,265**	**2,092**	**2,158**	**7,817**
Prostatectomy	1166–1167	0	11	416	522	949	0	0	0	0	0	0	11	416	522	949
Circumcision	30653-00[1196]	885	328	170	116	1,499	0	0	0	0	0	885	328	170	116	1,499
Gynaecological procedures	**1240–1299**	†	†	†	†	†	†	†	†	†	†	**94**	**20,757**	**16,461**	**3,738**	**41,050**
Oophorectomy and salpingo-oophorectomy	1243, 1252	0	0	0	0	0	6	332	388	138	864	6	332	388	138	864
Salpingectomy	1251	0	0	0	0	0	~	978	62	*	1,052	~	978	62	*	1,052
Examination procedures on uterus	1259	0	0	0	0	0	~	3,597	5,061	*	9,536	~	3,597	5,061	*	9,536
Curettage and evacuation of uterus	1265	0	0	0	0	0	~	6,647	4,175	*	11,561	~	6,647	4,175	*	11,561
Hysterectomy	1268–1269	0	0	0	0	0	0	351	965	481	1,797	0	351	965	481	1,797
Repair of prolapse of uterus, pelvic floor or enterocele	1283	0	0	0	0	0	0	77	361	391	829	0	77	361	391	829

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**	**~**	**143,042**	**543**	*****	**143,601**	**~**	**143,042**	**543**	*****	**143,601**
Analgesia and anaesthesia during labour and delivery procedure	1333	0	0	0	0	0	~	23,953	*	0	24,018	~	23,953	*	0	24,018
Medical or surgical induction of labour	1334	0	0	0	0	0	~	20,233	*	0	20,318	~	20,233	*	0	20,318
Medical or surgical augmentation of labour	1335	0	0	0	0	0	~	8,209	*	0	8,219	~	8,209	*	0	8,219
Spontaneous vertex delivery	1336	0	0	0	0	0	~	27,407	*	0	27,463	~	27,407	*	0	27,463
Forceps rotation and delivery	1337	0	0	0	0	0	~	2,196	~	0	2,201	~	2,196	~	0	2,201
Vacuum extraction	1338	0	0	0	0	0	~	6,780	*	0	6,797	~	6,780	*	0	6,797
Breech delivery and extraction	1339	0	0	0	0	0	0	*	~	0	126	0	*	~	0	126
Caesarean section	1340	0	0	0	0	0	0	19,357	239	0	19,596	0	19,357	239	0	19,596
Episiotomy associated with delivery	90472-00[1343]	0	0	0	0	0	~	9,796	*	0	9,813	~	9,796	*	0	9,813
Postpartum suture	1344	0	0	0	0	0	~	17,056	34	~	17,093	~	17,056	34	~	17,093
Procedures on musculoskeletal system	**1360–1579**	**4,010**	**9,691**	**10,138**	**9,125**	**32,964**	**3,868**	**6,287**	**12,210**	**14,619**	**36,984**	**7,878**	**15,978**	**22,348**	**23,744**	**69,948**
Arthroplasty of hip	1489	~	*	584	1,275	1,931	~	*	602	1,922	2,591	6	133	1,186	3,197	4,522
Arthroplasty of knee	1518–1519	0	7	296	462	765	0	8	353	665	1,026	0	15	649	1,127	1,791
Dermatological and plastic procedures	**1600–1718**	**3,921**	**12,827**	**12,666**	**18,230**	**47,644**	**2,981**	**13,815**	**11,395**	**13,051**	**41,242**	**6,902**	**26,642**	**24,061**	**31,281**	**88,886**
Excision of lesion of skin and subcutaneous tissue	1620	276	3,647	5,175	9,026	18,124	245	5,023	5,184	6,145	16,597	521	8,670	10,359	15,171	34,721
Other debridement of skin and subcutaneous tissue	1628	358	1,454	1,272	1,076	4,160	234	2,198	652	779	3,863	592	3,652	1,924	1,855	8,023
Skin graft	1640–1650	51	144	225	676	1,096	28	78	150	421	677	79	222	375	1,097	1,773
Procedures on breast	**1740–1759**	**~**	**27**	**27**	*****	**76**	*****	**3,677**	**4,510**	*****	**10,302**	**8**	**3,704**	**4,537**	**2,129**	**10,378**
Breast biopsy	1743–1744	0	6	17	17	40	~	2,475	2,773	*	6,861	~	2,481	2,790	*	6,901
Mastectomy	1747–1748	0	~	6	~	13	0	*	320	*	756	0	204	326	239	769
Radiation oncology procedures	**1786–1800**	**947**	**5,725**	**37,486**	**67,953**	**112,111**	**511**	**13,199**	**39,257**	**34,561**	**87,528**	**1,458**	**18,924**	**76,743**	**102,514**	**199,639**
Non-invasive, cognitive and other interventions, not elsewhere classified	**1820–1923**	**43,462**	**76,282**	**129,246**	**233,080**	**482,070**	**34,074**	**138,430**	**133,751**	**225,437**	**531,692**	**77,536**	**214,712**	**262,997**	**458,517**	**1,013,762**
Administration of blood and blood products	1893	2,857	3,231	6,503	13,883	26,474	1,849	5,294	5,845	11,111	24,099	4,706	8,525	12,348	24,994	50,573
Conduction anaesthesia	1909	355	1,799	3,442	5,819	11,415	212	16,424	3,860	7,348	27,844	567	18,223	7,302	13,167	39,259
Cerebral anaesthesia	1910	15,629	27,780	39,615	44,235	127,259	10,857	39,174	44,443	40,806	135,280	26,486	66,954	84,058	85,041	262,539
Imaging services[a]	**1940–2016**	**1,996**	**1,561**	**3,963**	**5,946**	**13,466**	**1,763**	**1,461**	**3,044**	**4,256**	**10,524**	**3,759**	**3,022**	**7,007**	**10,202**	**23,990**
Computerised tomography scan	1952–1966	230	387	924	1,599	3,140	150	230	914	998	2,292	380	617	1,838	2,597	5,432
Magnetic resonance imaging	2015	1,313	100	82	61	1,556	1,065	105	91	65	1,326	2,378	205	173	126	2,882

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 See Appendix V for information on updated Australian Coding Standard (ACS) 0042 *Procedures normally not coded* in ICD-10-AM 10th edition.

Case Mix Analysis 2020

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 2020.[1] Hospital case mix may be defined as 'the proportion of cases of each disease and health problem treated in the hospital'.[2]

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

4.2 OVERVIEW

4.2.1 Case Mix Classification

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

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

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

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

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

5 Wiley, M.M., 2005. 'Diagnosis Related Groups (DRGs): Measuring Hospital Case Mix', in P. Armitage and T. Colton (eds.) *Encyclopaedia of Biostatistics*. Chichester: Wiley and Sons. See also Department of Health and Children, 2004, *The Modernisation of the National Case Mix Programme in Ireland.* Dublin: Department of Health and Children, for information on development of case mix in Ireland.

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

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

4.2.2 Assignment of Discharges to MDC and AR-DRG

Figure 4.1 shows the steps in AR-DRG assignment;

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

FIGURE 4.1 Steps in AR-DRG Assignment

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

- 'M' is either a letter (indicating the broad group of the DRG) or an '8' or a '9' (indicating an unrelated operating room procedure DRG or an error DRG, respectively).[10]
- 'AA' identifies the partition to which the adjacent DRG belongs.[11] Both characters are numbers whose values indicate whether the code is surgical,

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

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

9 'Some episodes involving procedures that are particularly resource-intensive may be assigned to the *Pre-MDC* category, irrespective of the MDC that would have been assigned on the basis of the principal diagnosis.' Australian Institute of Health and Welfare (2009) Australian Hospital Statistics 2007–08. Canberra: Australian Institute of Health and Welfare. p. 276.

10 'Episodes that contain clinically atypical or invalid information are assigned Error DRGs.' Australian Institute of Health and Welfare (2009) Australian hospital statistics 2007–08. Canberra: Australian Institute of Health and Welfare. p 276.

medical or other.[12] Discharges with a surgical procedure performed are assigned to the surgical AR-DRGs where classification is based on the most resource intensive procedure performed. Medical discharges are assigned to an AR-DRG on the basis of principal diagnosis.

- 'D' is a complexity split indicator that ranks DRGs within adjacent DRGs on the basis of their level of complexity/resource use. It is either 'A', 'B', 'C', 'D' or 'Z' with 'A' being the most complex or 'Z' indicating that there is no complexity split.[13] The complexity of the case is determined by particular variables, such as the presence of complications and/or comorbidities (CC), age, or discharge status, which influence the treatment process and/or the pattern of resource utilisation.[14]

4.2.2.1 AR-DRG Complexity Split

The AR-DRG complexity split for total discharges is presented in Table 4.1. Over 29 per cent of total discharges had no complexity split. For in-patient discharges, 27.9 per cent were assigned to complexity group A *'Highest consumption of resources'*, and 57.2 per cent were assigned to complexity group B *'Second highest consumption of resources'.*

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

	Discharges									
	Day Patients		In-Patients[a]						Total Discharges	
			Sameday In-Patients		Overnight In-Patients		Total In-Patients			
	N	%	N	%	N	%	N	%	N	%
A Highest consumption of resources	25,981	2.8	13,003	11.3	145,694	32.1	158,697	27.9	184,678	12.3
B Second highest consumption of resources	333,453	35.8	85,432	74.0	240,191	52.9	325,623	57.2	659,076	43.9
C Third highest consumption of resources	156,652	16.8	4,587	4.0	51,352	11.3	55,939	9.8	212,591	14.2
D Fourth highest consumption of resources	233	0.0	924	0.8	5,517	1.2	6,441	1.1	6,674	0.4
Z No complexity split	413,991	44.5	11,566	10.0	11,369	2.5	22,935	4.0	436,926	29.1
Total Discharges	**930,310**	**100**	**115,512**	**100**	**454,123**	**100**	**569,635**	**100**	**1,499,945**	**100**

Notes: Percentage columns are subject to rounding.

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

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

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

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

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

4.3 Analysis of HIPE Data by Case Mix

The analysis presented in this section includes all discharges reported to HIPE. Analysis of 2020 HIPE data by MDC is presented in Table 4.2 and Figures 4.2 and 4.3. Tables 4.3 to 4.27 represent each MDC (including unassignable to MDC and pre-MDC) and their associated AR-DRGs.[15,16,17]

4.3.1 Analysis of Day Patients by MDC and AR-DRG

- The MDC with the largest proportion of day patients reported was Neoplastic disorders (haematological and solid neoplasms) (MDC 17), which accounted for 239,995 discharges or 25.8 per cent of day patients (see Tables 4.2 and 4.19 and Figure 4.3).
    - *Chemotherapy* (AR-DRG R63Z) accounted for 45.3 per cent of day patients within this MDC, and 11.7 per cent of total day patients; *Other Neoplastic Disorders, Minor Complexity* (AR-DRG R62C) accounted for 39.1 per cent of day patients within this MDC and 10.1 per cent of total day patients.[18]

- Diseases and disorders of the kidney and urinary tract (MDC 11), with 200,630 discharges, accounted for 21.6 per cent of day patients (see Tables 4.2 and 4.13 and Figure 4.3).
    - *Haemodialysis* (AR-DRG L61Z) accounted for 89.6 per cent of day patients within this MDC and 19.3 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 96,929 discharges, which accounted for 17.0 per cent of in-patients (see Tables 4.2 and 4.16 and Figure 4.3).
    - *Vaginal Delivery* (AR-DRGs O60A, O60B and O60C) accounted for 36.0 per cent of in-patients within this MDC and 6.1 per cent of total in-patient discharges.

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

16 The official classification for AR-DRG's (Version 8.0) has been slightly modified by the addition of two local DRG's specific to Ireland to account for differences in the provision of care between Ireland and Australia. While this practice has been used for Activity Based Funding, this modification to the official AR-DRG classification has only been published in the HIPE Annual Report since 2018. See MDC 9 (Table 4.11) for a description of J98Z (*UV Therapy*) and MDC 17 (Table 4.19) for a description of R99Z (*Oncology Repeat Attendance*).

17 The calculation of total in-patient length of stay differs in this report compared to reports prior to 2018. Since 2018, the length of stay assigned for sameday in-patients has changed from one bed day to 0.5 bed days. This will impact on the total in-patient length of stay resulting in a lower average length of stay compared to years prior to 2018 (see Section 1.6).

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

- *Antenatal and Other Obstetric Admission* (AR-DRGs O66A and O66B) accounted for 34.2 per cent of in-patients within this MDC and 5.8 per cent of total in-patient discharges.
- *Caesarean Delivery* (AR-DRGs O01A, O01B and O01C) accounted for 20.2 per cent of in-patients within this MDC, with *Caesarean Delivery, Minor Complexity* (AR-DRG O01C) accounting for the majority of these cases (55.0 per cent).
- For *Vaginal Delivery* (AR-DRGs O60A, O60B and O60C), the in-patient mean length of stay ranged from 2.0 days for *Vaginal Delivery, Minor Complexity* (AR-DRG O60C) to 4.2 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 3.6 days for *Caesarean Delivery, Minor Complexity* (AR-DRG O01C) to 9.5 days for *Caesarean Delivery, Major Complexity* (AR-DRG O01A).

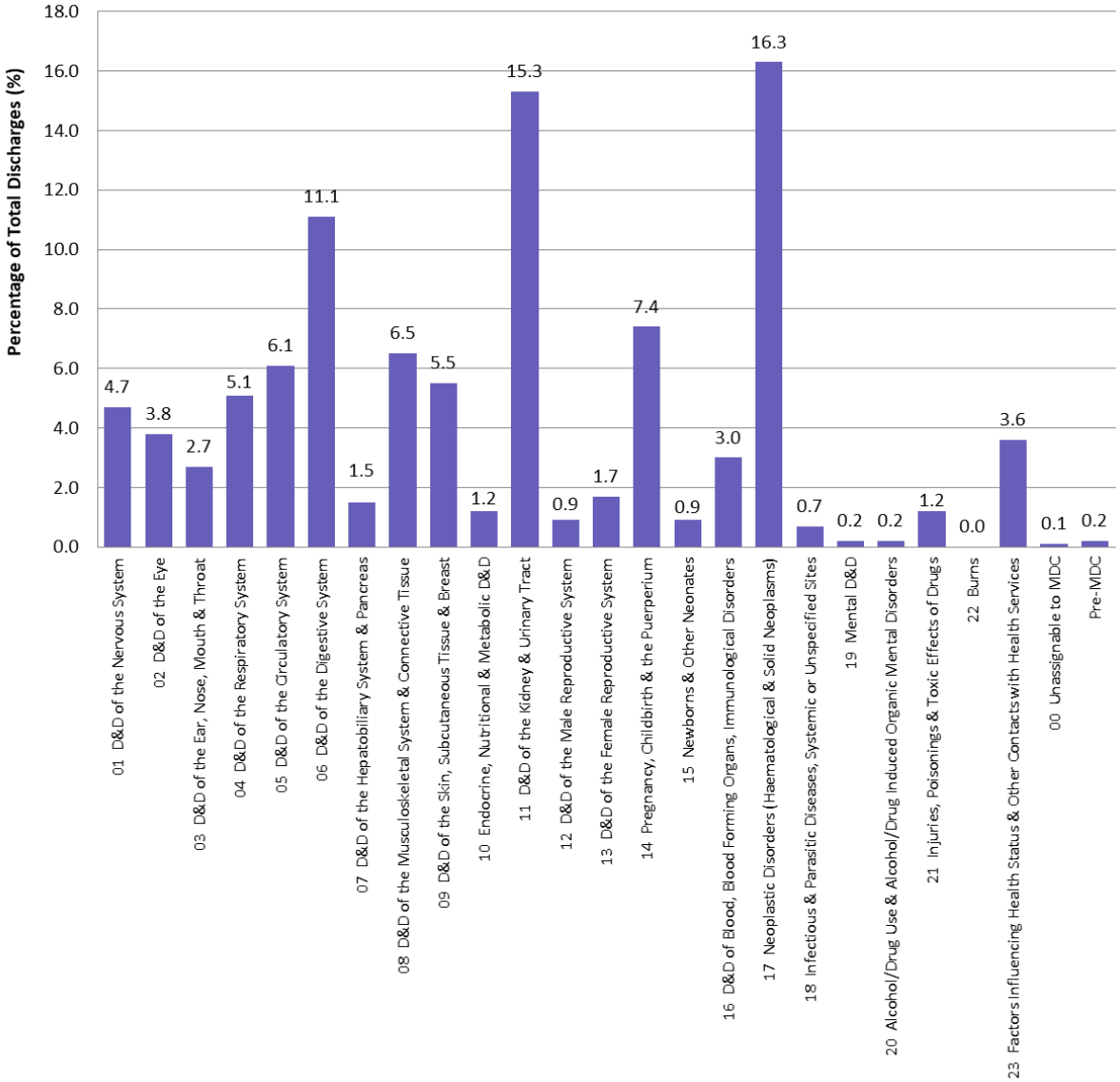
- *Diseases and Disorders of the Circulatory System* (MDC 5), with 73,598 in-patient discharges, accounted for 12.9 per cent of total in-patients (see Tables 4.2 and 4.7 and Figure 4.3).
- *Diseases and Disorders of the Respiratory System* (MDC 4), with 59,645 discharges, accounted for 10.5 per cent 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	19,747	2.1	50,515	8.9	70,262	4.7
02 Diseases and disorders of the eye	52,063	5.6	5,074	0.9	57,137	3.8
03 Diseases and disorders of the ear, nose, mouth and throat	18,906	2.0	21,079	3.7	39,985	2.7
04 Diseases and disorders of the respiratory system	17,362	1.9	59,645	10.5	77,007	5.1
05 Diseases and disorders of the circulatory system	18,212	2.0	73,598	12.9	91,810	6.1
06 Diseases and disorders of the digestive system	109,747	11.8	57,457	10.1	167,204	11.1
07 Diseases and disorders of the hepatobiliary system and pancreas	7,081	0.8	15,763	2.8	22,844	1.5
08 Diseases and disorders of the musculoskeletal system and connective tissue	47,596	5.1	49,839	8.7	97,435	6.5
09 Diseases and disorders of the skin, subcutaneous tissue and breast	66,989	7.2	16,174	2.8	83,163	5.5
10 Endocrine, nutritional and metabolic diseases and disorders	6,133	0.7	11,998	2.1	18,131	1.2
11 Diseases and disorders of the kidney and urinary tract	200,630	21.6	29,258	5.1	229,888	15.3
12 Diseases and disorders of the male reproductive system	9,354	1.0	4,468	0.8	13,822	0.9
13 Diseases and disorders of the female reproductive system	16,151	1.7	8,686	1.5	24,837	1.7
14 Pregnancy, childbirth and the puerperium	13,497	1.5	96,929	17.0	110,426	7.4
15 Newborns and other neonates	337	0.0	12,532	2.2	12,869	0.9
16 Diseases and disorders of blood, blood forming organs, immunological disorders	36,724	3.9	7,525	1.3	44,249	3.0
17 Neoplastic disorders (haematological and solid neoplasms)	239,995	25.8	4,903	0.9	244,898	16.3
18 Infectious and parasitic diseases, systemic or unspecified sites	1,340	0.1	8,745	1.5	10,085	0.7
19 Mental diseases and disorders	575	0.1	2,809	0.5	3,384	0.2
20 Alcohol/drug use and alcohol/drug induced organic mental disorders	7	0.0	3,402	0.6	3,409	0.2
21 Injuries, poisonings and toxic effects of drugs	1,305	0.1	16,372	2.9	17,677	1.2
22 Burns	98	0.0	557	0.1	655	0.0
23 Factors influencing health status and other contacts with health services	46,148	5.0	8,391	1.5	54,539	3.6
Unassignable to MDC	231	0.0	1,106	0.2	1,337	0.1
Pre-MDC	82	0.0	2,810	0.5	2,892	0.2
Total Discharges	**930,310**	**100**	**569,635**	**100**	**1,499,945**	**100**

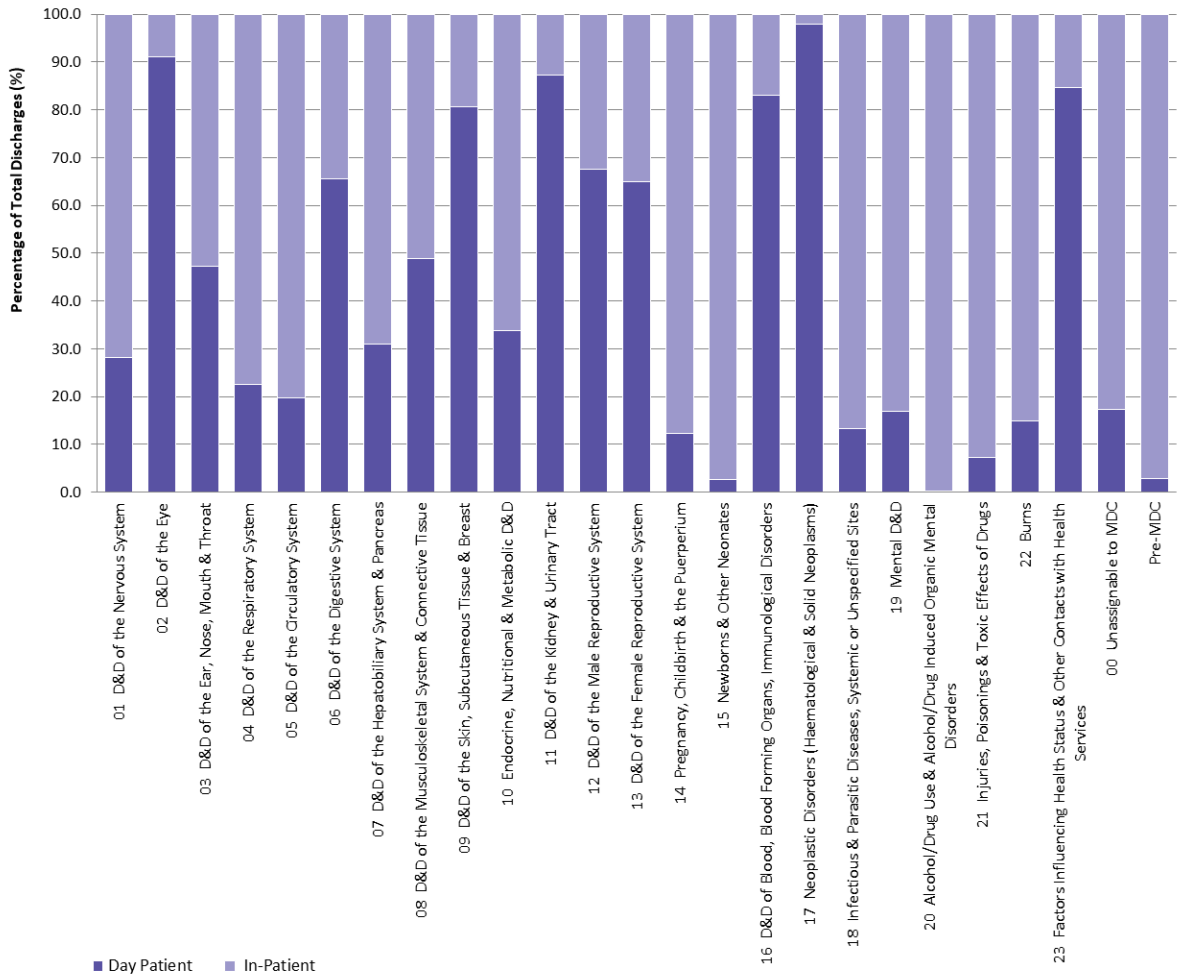
Note: Percentage columns are subject to rounding.

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	20	7.7	4
B01B Ventricular Shunt Revision, Minor Complexity	0	50	4.4	4
B02A Cranial Procedures, Major Complexity	0	210	25.3	16
B02B Cranial Procedures, Intermediate Complexity	~	658	11.7	8
B02C Cranial Procedures, Minor Complexity	14	1,301	6.1	5
B03A Spinal Procedures, Major Complexity	0	54	17.9	9
B03B Spinal Procedures, Intermediate Complexity	9	135	4.0	2
B03C Spinal Procedures, Minor Complexity	15	78	4.3	3
B04A Extracranial Vascular Procedures, Major Complexity	0	36	18.7	17
B04B Extracranial Vascular Procedures, Intermediate Complexity	0	111	10.5	9
B04C Extracranial Vascular Procedures, Minor Complexity	0	188	5.4	4
B05Z Carpal Tunnel Release	1,087	27	1.1	1
B06A Procedures for Cerebral Palsy, Muscular Dystrophy and Neuropathy, Major Comp	~	32	49.0	15
B06B Procedures for Cerebral Palsy, Muscular Dystrophy and Neuropathy, Interm Comp	8	40	10.8	5
B06C Procedures for Cerebral Palsy, Muscular Dystrophy and Neuropathy, Minor Comp	171	79	4.6	1
B07A Cranial or Peripheral Nerve and Other Nervous System Procedures, Major Comp	~	34	22.2	11
B07B Cranial or Peripheral Nerve and Other Nervous System Procedures, Minor Comp	121	333	1.7	1
B40Z Plasmapheresis W Neurological Disease, Sameday	73	~	^	^
B41Z Telemetric EEG Monitoring	~	168	6.8	6
B42A Nervous System Disorders W Ventilator Support, Major Complexity	0	72	31.4	19
B42B Nervous System Disorders W Ventilator Support, Minor Complexity	0	132	6.6	3
B60A Acute Paraplegia and Quadriplegia W or W/O OR Procedures, Major Complexity	0	43	65.0	26
B60B Acute Paraplegia and Quadriplegia W or W/O OR Procedures, Minor Complexity	~	135	29.4	7
B61A Spinal Cord Conditions W or W/O OR Procedures, Major Complexity	~	79	44.0	16
B61B Spinal Cord Conditions W or W/O OR Procedures, Minor Complexity	15	112	9.5	5
B62Z Apheresis	12	*	^	^
B63A Dementia and Other Chronic Disturbances of Cerebral Function, Major Complexity	27	819	37.9	22
B63B Dementia and Other Chronic Disturbances of Cerebral Function, Minor Complexity	122	701	17.0	9
B64A Delirium, Major Complexity	~	1,042	16.1	9
B64B Delirium, Minor Complexity	15	1,112	4.3	2
B65A Cerebral Palsy, Major Complexity	23	26	18.7	4
B65B Cerebral Palsy, Minor Complexity	239	10	4.5	2
B66A Nervous System Neoplasms, Major Complexity	65	545	16.4	9
B66B Nervous System Neoplasms, Minor Complexity	1,645	779	7.1	4
B67A Degenerative Nervous System Disorders, Major Complexity	56	902	24.6	12
B67B Degenerative Nervous System Disorders, Intermediate Complexity	483	654	6.2	4
B67C Degenerative Nervous System Disorders, Minor Complexity	848	119	5.1	3
B68A Multiple Sclerosis and Cerebellar Ataxia, Major Complexity	227	346	10.2	5
B68B Multiple Sclerosis and Cerebellar Ataxia, Minor Complexity	5,728	492	3.1	1
B69A TIA and Precerebral Occlusion, Major Complexity	0	771	7.8	5
B69B TIA and Precerebral Occlusion, Minor Complexity	26	2,060	3.2	2
B70A Stroke and Other Cerebrovascular Disorders, Major Complexity	0	846	50.2	33
B70B Stroke and Other Cerebrovascular Disorders, Intermediate Complexity	17	2,231	20.0	11
B70C Stroke and Other Cerebrovascular Disorders, Minor Complexity	19	3,349	9.2	6
B70D Stroke and Other Cerebrovascular Disorders, Transferred <5 Days	12	353	1.4	1
B71A Cranial and Peripheral Nerve Disorders, Major Complexity	1,223	1,352	5.9	2
B71B Cranial and Peripheral Nerve Disorders, Minor Complexity	2,734	408	2.5	1
B72A Nervous System Infection Except Viral Meningitis, Major Complexity	6	211	24.1	15
B72B Nervous System Infection Except Viral Meningitis, Minor Complexity	121	198	8.9	7
B73Z Viral Meningitis	~	157	6.4	5
B74A Nontraumatic Stupor and Coma, Major Complexity	~	40	8.6	7
B74B Nontraumatic Stupor and Coma, Minor Complexity	12	123	2.7	1
B75Z Febrile Convulsions	27	289	1.7	1
B76A Seizures, Major Complexity	44	2,032	7.9	4
B76B Seizures, Minor Complexity	743	4,854	2.3	1
B77A Headaches, Major Complexity	77	1,901	3.3	2
B77B Headaches, Minor Complexity	1,166	7,767	1.3	1
B78A Intracranial Injuries, Major Complexity	0	374	32.1	17
B78B Intracranial Injuries, Minor Complexity	30	794	8.8	4
B78C Intracranial Injuries, Transferred <5 Days	0	91	1.1	1
B79A Skull Fractures, Major Complexity	~	141	8.7	4

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

MDC 1 Diseases and Disorders of the Nervous System	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
B79B Skull Fractures, Minor Complexity	0	179	1.9	1
B80A Other Head Injuries, Major Complexity	0	439	8.6	4
B80B Other Head Injuries, Minor Complexity	~	2,342	1.1	1
B81A Other Disorders of the Nervous System, Major Complexity	29	1,007	19.2	10
B81B Other Disorders of the Nervous System, Minor Complexity	2,341	4,106	4.0	1
B82A Chronic & Unspec Para/Quadriplegia W or W/O OR Proc, Major Complexity	0	106	120.6	42
B82B Chronic & Unspec Para/Quadriplegia W or W/O OR Proc, Intermediate Complexity	6	165	22.2	10
B82C Chronic & Unspec Para/Quadriplegia W or W/O OR Proc, Minor Complexity	80	148	6.2	4
Total	**19,747**	**50,515**	**8.5**	**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 4.4 Total Discharges: MDC 2 Diseases and Disorders of the Eye: AR-DRG Version 8.0 by Patient Type (N, In-Patient Length of Stay)

MDC 2 Diseases and Disorders of the Eye	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
C01A Procedures for Penetrating Eye Injury, Major Complexity	~	34	4.8	3
C01B Procedures for Penetrating Eye Injury, Minor Complexity	7	51	3.0	2
C02Z Enucleations and Orbital Procedures	24	71	2.4	1
C03A Retinal Procedures, Major Complexity	3,167	961	2.2	2
C03B Retinal Procedures, Minor Complexity	30,494	190	1.7	1
C04A Major Corneal, Scleral and Conjunctival Procedures, Major Complexity	~	41	5.4	2
C04B Major Corneal, Scleral and Conjunctival Procedures, Minor Complexity	17	90	1.6	2
C05Z Dacryocystorhinostomy	38	52	1.1	1
C10Z Strabismus Procedures	481	42	1.0	1
C11Z Eyelid Procedures	785	55	1.1	1
C12Z Other Corneal, Scleral and Conjunctival Procedures	352	67	4.6	3
C13Z Lacrimal Procedures	238	6	1.5	1
C14A Other Eye Procedures, Major Complexity	66	57	4.2	3
C14B Other Eye Procedures, Minor Complexity	1,010	47	1.1	1
C15Z Glaucoma and Complex Cataract Procedures	642	202	2.2	1
C16Z Lens Procedures	8,530	130	2.5	1
C60A Acute and Major Eye Infections, Major Complexity	~	49	10.1	7
C60B Acute and Major Eye Infections, Minor Complexity	25	156	4.9	4
C61A Neurological and Vascular Disorders of the Eye, Major Complexity	212	464	5.5	3
C61B Neurological and Vascular Disorders of the Eye, Minor Complexity	603	558	2.3	1
C62A Hyphaema and Medically Managed Trauma to the Eye, Major Complexity	16	169	8.3	4
C62B Hyphaema and Medically Managed Trauma to the Eye, Minor Complexity	40	341	1.5	1
C63A Other Disorders of the Eye, Major Complexity	152	173	5.6	3
C63B Other Disorders of the Eye, Intermediate Complexity	1,892	931	2.1	1
C63C Other Disorders of the Eye, Minor Complexity	3,263	137	1.7	1
Total	**52,063**	**5,074**	**3.0**	**1**

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

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

MDC 3 Diseases and Disorders of the Ear, Nose, Mouth and Throat	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
D01Z Cochlear Implant	~	82	2.0	2
D02A Head and Neck Procedures, Major Complexity	~	62	23.4	14
D02B Head and Neck Procedures, Intermediate Complexity	~	41	7.9	6
D02C Head and Neck Procedures, Minor Complexity	22	71	3.2	2
D03Z Surgical Repair for Cleft Lip and Palate Disorders	20	116	2.4	2
D04A Maxillo Surgery, Major Complexity	20	248	3.0	2
D04B Maxillo Surgery, Minor Complexity	17	188	2.3	2
D05Z Parotid Gland Procedures	~	128	2.1	2
D06Z Sinus and Complex Middle Ear Procedures	342	524	1.5	1
D10Z Nasal Procedures	439	317	1.3	1
D11Z Tonsillectomy and Adenoidectomy	403	2,047	1.2	1
D12A Other Ear, Nose, Mouth and Throat Procedures, Major Complexity	43	96	7.9	4
D12B Other Ear, Nose, Mouth and Throat Procedures, Minor Complexity	946	295	1.8	1
D13Z Myringotomy W Tube Insertion	964	46	3.2	1
D14A Mouth and Salivary Gland Procedures, Major Complexity	205	189	3.9	2
D14B Mouth and Salivary Gland Procedures, Minor Complexity	442	50	1.9	1
D15Z Mastoid Procedures	11	192	1.7	1
D40Z Dental Extractions and Restorations	2,823	254	1.7	1
D60A Ear, Nose, Mouth and Throat Malignancy, Major Complexity	11	260	24.4	18
D60B Ear, Nose, Mouth and Throat Malignancy, Minor Complexity	923	288	10.2	4
D61A Dysequilibrium, Major Complexity	15	846	4.5	3
D61B Dysequilibrium, Minor Complexity	449	4,273	1.7	1
D62A Epistaxis, Major Complexity	~	121	7.2	5
D62B Epistaxis, Minor Complexity	458	718	2.2	2
D63A Otitis Media and Upper Respiratory Infections, Major Complexity	185	2,193	5.0	2
D63B Otitis Media and Upper Respiratory Infections, Minor Complexity	1,432	3,886	1.4	1
D64A Laryngotracheitis and Epiglottitis, Major Complexity	~	30	2.8	2
D64B Laryngotracheitis and Epiglottitis, Minor Complexity	22	213	0.9	1
D65A Nasal Trauma and Deformity, Major Complexity	6	149	7.3	3
D65B Nasal Trauma and Deformity, Minor Complexity	581	284	1.1	1
D66A Other Ear, Nose, Mouth and Throat Disorders, Major Complexity	423	411	3.8	1
D66B Other Ear, Nose, Mouth and Throat Disorders, Minor Complexity	6,831	1,267	1.4	1
D67A Oral and Dental Disorders, Major Complexity	42	361	6.8	3
D67B Oral and Dental Disorders, Minor Complexity	821	833	1.6	1
Total	**18,906**	**21,079**	**2.8**	**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	60	29.1	27
E01B Major Chest Procedures, Intermediate Complexity	~	251	14.5	12
E01C Major Chest Procedures, Minor Complexity	21	487	7.8	7
E02A Other Respiratory System OR Procedures, Major Complexity	~	198	20.8	15
E02B Other Respiratory System OR Procedures, Intermediate Complexity	105	201	7.4	5
E02C Other Respiratory System OR Procedures, Minor Complexity	85	64	1.7	1
E40A Respiratory System Disorders W Ventilator Support, Major Complexity	0	100	19.8	14
E40B Respiratory System Disorders W Ventilator Support, Minor Complexity	0	152	11.8	8
E41A Respiratory System Disorders W Non-Invasive Ventilation, Major Complexity	0	649	24.2	16
E41B Respiratory System Disorders W Non-Invasive Ventilation, Minor Complexity	0	1,552	13.2	9
E42A Bronchoscopy, Major Complexity	285	763	15.6	12
E42B Bronchoscopy, Minor Complexity	4,696	414	5.2	4
E60A Cystic Fibrosis, Major Complexity	28	381	14.4	14
E60B Cystic Fibrosis, Minor Complexity	1,890	195	9.3	9
E61A Pulmonary Embolism, Major Complexity	~	766	11.3	8
E61B Pulmonary Embolism, Minor Complexity	21	974	4.3	4
E62A Respiratory Infections and Inflammations, Major Complexity	22	9,068	12.6	8
E62B Respiratory Infections and Inflammations, Minor Complexity	49	4,113	5.4	4
E63A Sleep Apnoea, Major Complexity	~	332	2.9	1
E63B Sleep Apnoea, Minor Complexity	55	657	1.2	1
E64A Pulmonary Oedema and Respiratory Failure, Major Complexity	0	228	12.8	8
E64B Pulmonary Oedema and Respiratory Failure, Minor Complexity	~	230	5.6	4
E65A Chronic Obstructive Airways Disease, Major Complexity	50	4493	10.1	7
E65B Chronic Obstructive Airways Disease, Minor Complexity	630	6248	4.4	3
E66A Major Chest Trauma, Major Complexity	0	275	14.0	9
E66B Major Chest Trauma, Minor Complexity	~	361	3.8	2
E67A Respiratory Signs and Symptoms, Major Complexity	144	3,691	3.6	1
E67B Respiratory Signs and Symptoms, Minor Complexity	972	4,136	1.2	1
E68A Pneumothorax, Major Complexity	~	341	8.6	6
E68B Pneumothorax, Minor Complexity	~	386	3.7	3
E69A Bronchitis and Asthma, Major Complexity	40	565	5.4	4
E69B Bronchitis and Asthma, Minor Complexity	4,168	2,335	2.0	1
E70A Whooping Cough and Acute Bronchiolitis, Major Complexity	~	141	3.7	3
E70B Whooping Cough and Acute Bronchiolitis, Minor Complexity	9	735	2.4	2
E71A Respiratory Neoplasms, Major Complexity	35	934	14.2	10
E71B Respiratory Neoplasms, Minor Complexity	2,368	1,044	6.2	4
E72Z Respiratory Problems Arising from Neonatal Period	~	55	5.5	3
E73A Pleural Effusion, Major Complexity	~	181	15.8	11
E73B Pleural Effusion, Intermediate Complexity	26	427	7.9	6
E73C Pleural Effusion, Minor Complexity	67	240	4.2	2
E74A Interstitial Lung Disease, Major Complexity	96	507	10.8	7
E74B Interstitial Lung Disease, Minor Complexity	895	324	4.1	3
E75A Other Respiratory System Disorders, Major Complexity	43	6,763	8.3	5
E75B Other Respiratory System Disorders, Minor Complexity	503	3,557	2.3	1
E76A Respiratory Tuberculosis, Major Complexity	~	38	18.2	12
E76B Respiratory Tuberculosis, Minor Complexity	33	33	11.3	8
Total	**17,362**	**59,645**	**7.4**	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	~	59	20.5	15
F01B Implantation and Replacement of AICD, Total System, Minor Complexity	229	199	5.0	2
F02Z Other AICD Procedures	7	24	6.3	5
F03A Cardiac Valve Procedures W CPB Pump W Invasive Cardiac Investigation, Major Comp	0	38	41.1	29
F03B Cardiac Valve Procedures W CPB Pump W Invasive Cardiac Investigation, Minor Comp	0	54	21.4	20
F04A Cardiac Valve Procedures W CPB Pump W/O Invasive Cardiac Invest, Major Comp	0	39	29.9	19
F04B Cardiac Valve Procedures W CPB Pump W/O Invasive Cardiac Invest, Interm Comp	0	199	12.5	10
F04C Cardiac Valve Procedures W CPB Pump W/O Invasive Cardiac Invest, Minor Comp	~	305	8.4	7
F05A Coronary Bypass W Invasive Cardiac Investigation, Major Complexity	0	36	31.3	29
F05B Coronary Bypass W Invasive Cardiac Investigation, Minor Complexity	0	128	19.9	17
F06A Coronary Bypass W/O Invasive Cardiac Investigation, Major Complexity	0	49	19.0	17
F06B Coronary Bypass W/O Invasive Cardiac Investigation, Minor Complexity	0	405	10.9	9
F07A Other Cardiothoracic/Vascular Procedures W CPB Pump, Major Complexity	0	24	20.0	16
F07B Other Cardiothoracic/Vascular Procedures W CPB Pump, Intermediate Complexity	0	60	13.5	9
F07C Other Cardiothoracic/Vascular Procedures W CPB Pump, Minor Complexity	0	92	10.5	9
F08A Major Reconstructive Vascular Procedures W/O CPB Pump, Major Complexity	0	73	38.2	26
F08B Major Reconstructive Vascular Procedures W/O CPB Pump, Intermediate Complexity	0	310	14.2	11
F08C Major Reconstructive Vascular Procedures W/O CPB Pump, Minor Complexity	14	272	8.4	7
F09A Other Cardiothoracic Procedures W/O CPB Pump, Major Complexity	~	22	19.7	16
F09B Other Cardiothoracic Procedures W/O CPB Pump, Intermediate Complexity	~	49	8.3	5
F09C Other Cardiothoracic Procedures W/O CPB Pump, Minor Complexity	11	63	4.8	2
F10A Interventional Coronary Procedures, Admitted for AMI, Major Complexity	0	233	10.9	7
F10B Interventional Coronary Procedures, Admitted for AMI, Minor Complexity	64	1,626	2.9	3
F11A Amputation, Except Upper Limb and Toe, for Circulatory Disorders, Major Comp	0	69	77.2	51
F11B Amputation, Except Upper Limb and Toe, for Circulatory Disorders, Minor Comp	0	116	28.4	23
F12A Implantation and Replacement of Pacemaker, Total System, Major Complexity	~	257	11.6	7
F12B Implantation and Replacement of Pacemaker, Total System, Minor Complexity	382	529	3.8	3
F13A Amputation, Upper Limb and Toe, for Circulatory Disorders, Major Complexity	0	35	28.7	22
F13B Amputation, Upper Limb and Toe, for Circulatory Disorders, Minor Complexity	~	76	10.2	9
F14A Vascular Procedures, Except Major Reconstruction, W/O CPB Pump, Major Complexity	15	167	18.6	12
F14B Vascular Procedures, Except Major Reconstruction, W/O CPB Pump, Interm Comp	13	324	8.5	7
F14C Vascular Procedures, Except Major Reconstruction, W/O CPB Pump, Minor Complexity	145	310	4.8	2
F15A Interventional Coronary Procs, Not Adm for AMI, W Stent Implant, Major Comp	8	343	8.7	5
F15B Interventional Coronary Procs, Not Adm for AMI, W Stent Implant, Minor Comp	631	1,415	2.3	1
F16A Interventional Coronary Procs, Not Adm for AMI, W/O Stent Implant, Major Comp	~	25	8.4	5
F16B Interventional Coronary Procs, Not Adm for AMI, W/O Stent Implant, Minor Comp	37	104	2.4	1
F17A Insertion and Replacement of Pacemaker Generator, Major Complexity	~	29	7.2	3
F17B Insertion and Replacement of Pacemaker Generator, Minor Complexity	258	37	2.4	1
F18A Other Pacemaker Procedures, Major Complexity	~	31	20.3	7
F18B Other Pacemaker Procedures, Minor Complexity	19	35	3.5	2
F19A Trans-Vascular Percutaneous Cardiac Intervention, Major Complexity	24	60	6.2	2
F19B Trans-Vascular Percutaneous Cardiac Intervention, Minor Complexity	104	75	1.2	1
F20Z Vein Ligation and Stripping	2,284	121	1.8	1
F21A Other Circulatory System OR Procedures, Major Complexity	0	35	24.5	18
F21B Other Circulatory System OR Procedures, Intermediate Complexity	11	40	6.4	4
F21C Other Circulatory System OR Procedures, Minor Complexity	18	24	4.1	3
F40A Circulatory Disorders W Ventilator Support, Major Complexity	0	49	18.6	13
F40B Circulatory Disorders W Ventilator Support, Minor Complexity	0	54	5.4	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	~	126	11.4	8
F41B Circulatory Disorders, Adm for AMI W Invasive Cardiac Inves Proc, Minor Comp	42	568	3.7	2
F42A Circulatory Dsrds, Not Adm for AMI W Invasive Cardiac Inves Proc, Major Comp	215	1,011	8.8	6
F42B Circulatory Dsrds, Not Adm for AMI W Invasive Cardiac Inves Proc, Minor Comp	5,917	2,536	2.8	2
F43A Circulatory Disorders W Non-Invasive Ventilation, Major Complexity	0	90	27.2	19
F43B Circulatory Disorders W Non-Invasive Ventilation, Minor Complexity	0	137	16.4	13
F60A Circulatory Dsrd, Adm for AMI W/O Invas Card Inves Proc	~	2,570	7.6	5
F60B Circulatory Dsrd, Adm for AMI W/O Invas Card Inves Proc, Transf <5 Days	~	511	1.7	1
F61A Infective Endocarditis, Major Complexity	6	79	26.1	20
F61B Infective Endocarditis, Minor Complexity	22	54	15.3	12
F62A Heart Failure and Shock, Major Complexity	~	2,420	14.9	10
F62B Heart Failure and Shock, Minor Complexity	217	3,589	6.3	5
F62C Heart Failure and Shock, Transferred <5 Days	6	130	1.7	1
F63A Venous Thrombosis, Major Complexity	~	510	7.7	5
F63B Venous Thrombosis, Minor Complexity	92	1,475	1.5	1
F64A Skin Ulcers in Circulatory Disorders, Major Complexity	0	134	19.3	12
F64B Skin Ulcers in Circulatory Disorders, Intermediate Complexity	51	209	8.4	6
F64C Skin Ulcers in Circulatory Disorders, Minor Complexity	~	68	8.3	5
F65A Peripheral Vascular Disorders, Major Complexity	99	486	14.2	7
F65B Peripheral Vascular Disorders, Minor Complexity	1,111	792	5.3	2
F66A Coronary Atherosclerosis, Major Complexity	67	318	8.0	6
F66B Coronary Atherosclerosis, Minor Complexity	386	1,912	3.4	2
F67A Hypertension, Major Complexity	~	373	6.9	4
F67B Hypertension, Minor Complexity	71	2,147	1.6	1
F68A Congenital Heart Disease, Major Complexity	216	82	6.3	2
F68B Congenital Heart Disease, Minor Complexity	371	63	2.1	1
F69A Valvular Disorders, Major Complexity	29	330	9.2	6
F69B Valvular Disorders, Minor Complexity	516	3,583	1.5	1
F72A Unstable Angina, Major Complexity	0	159	9.3	6
F72B Unstable Angina, Minor Complexity	10	932	3.6	2
F73A Syncope and Collapse, Major Complexity	42	2,612	10.1	6
F73B Syncope and Collapse, Minor Complexity	1,724	7,210	2.5	1
F74A Chest Pain, Major Complexity	35	2,664	3.0	2
F74B Chest Pain, Minor Complexity	435	14,723	1.2	1
F75A Other Circulatory Disorders, Major Complexity	~	343	14.7	9
F75B Other Circulatory Disorders, Intermediate Complexity	23	542	6.8	5
F75C Other Circulatory Disorders, Minor Complexity	567	1,617	3.3	2
F76A Arrhythmia, Cardiac Arrest and Conduction Disorders, Major Complexity	47	2,182	7.5	5
F76B Arrhythmia, Cardiac Arrest and Conduction Disorders, Minor Complexity	1,580	5,592	2.4	1
Total	**18,212**	**73,598**	**4.7**	**2**

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

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	71	38.3	28
G01B Rectal Resection, Intermediate Complexity	0	185	20.5	18
G01C Rectal Resection, Minor Complexity	~	612	10.0	8
G02A Major Small and Large Bowel Procedures, Major Complexity	0	243	44.7	34
G02B Major Small and Large Bowel Procedures, Intermediate Complexity	0	710	20.4	16
G02C Major Small and Large Bowel Procedures, Minor Complexity	42	1,315	9.5	7
G03A Stomach, Oesophageal and Duodenal Procedures, Major Complexity	~	152	23.0	17
G03B Stomach, Oesophageal and Duodenal Procedures, Intermediate Complexity	11	199	11.3	9
G03C Stomach, Oesophageal and Duodenal Procedures, Minor Complexity	39	217	5.6	4
G04A Peritoneal Adhesiolysis, Major Complexity	0	68	26.5	21
G04B Peritoneal Adhesiolysis, Intermediate Complexity	~	261	9.2	8
G04C Peritoneal Adhesiolysis, Minor Complexity	61	485	4.2	3
G05A Minor Small and Large Bowel Procedures, Major Complexity	0	62	19.9	14
G05B Minor Small and Large Bowel Procedures, Minor Complexity	8	238	6.5	6
G06Z Pyloromyotomy	0	51	3.8	3
G07A Appendicectomy, Major Complexity	~	616	6.0	4
G07B Appendicectomy, Minor Complexity	41	4,564	2.7	2
G10A Hernia Procedures, Major Complexity	31	313	7.8	6
G10B Hernia Procedures, Minor Complexity	2,076	1,544	1.9	1
G11A Anal and Stomal Procedures, Major Complexity	42	300	7.3	3
G11B Anal and Stomal Procedures, Minor Complexity	943	863	2.1	2
G12A Other Digestive System OR Procedures, Major Complexity	0	98	32.9	24
G12B Other Digestive System OR Procedures, Intermediate Complexity	12	286	10.9	9
G12C Other Digestive System OR Procedures, Minor Complexity	224	288	4.9	3
G46A Complex Endoscopy, Major Complexity	501	1,166	12.5	8
G46B Complex Endoscopy, Minor Complexity	9,137	543	4.8	3
G47A Gastroscopy, Major Complexity	146	1,742	11.1	7
G47B Gastroscopy, Intermediate Complexity	1764	1,464	3.9	3
G47C Gastroscopy, Minor Complexity	25,822	1,360	3.2	2
G48A Colonoscopy, Major Complexity	1,905	1,448	9.4	7
G48B Colonoscopy, Minor Complexity	37,219	1,254	4.2	3
G60A Digestive Malignancy, Major Complexity	218	742	13.1	8
G60B Digestive Malignancy, Minor Complexity	2,202	592	5.0	3
G61A Gastrointestinal Haemorrhage, Major Complexity	11	710	7.7	5
G61B Gastrointestinal Haemorrhage, Minor Complexity	388	1,100	2.4	1
G64A Inflammatory Bowel Disease, Major Complexity	210	319	7.0	5
G64B Inflammatory Bowel Disease, Minor Complexity	20,831	768	3.3	2
G65A Gastrointestinal Obstruction, Major Complexity	~	440	9.7	7
G65B Gastrointestinal Obstruction, Minor Complexity	13	1,083	3.8	3
G66A Abdominal Pain and Mesenteric Adenitis, Major Complexity	110	2,444	2.7	1
G66B Abdominal Pain and Mesenteric Adenitis, Minor Complexity	591	6,653	1.3	1
G67A Oesophagitis and Gastroenteritis, Major Complexity	53	2,824	6.3	4
G67B Oesophagitis and Gastroenteritis, Minor Complexity	638	4,367	1.9	1
G70A Other Digestive System Disorders, Major Complexity	870	6,148	5.8	3
G70B Other Digestive System Disorders, Minor Complexity	3,578	6,549	2.0	1
Total	**109,747**	**57,457**	**5.0**	**2**

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

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

MDC 7 Diseases and Disorders of the Hepatobiliary System and Pancreas	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
H01A Pancreas, Liver and Shunt Procedures, Major Complexity	0	21	37.5	28
H01B Pancreas, Liver and Shunt Procedures, Intermediate Complexity	~	303	12.8	8
H01C Pancreas, Liver and Shunt Procedures, Minor Complexity	12	105	5.1	3
H02A Major Biliary Tract Procedures, Major Complexity	~	114	23.6	20
H02B Major Biliary Tract Procedures, Minor Complexity	36	171	12.1	10
H05A Hepatobiliary Diagnostic Procedures, Major Complexity	~	58	14.4	11
H05B Hepatobiliary Diagnostic Procedures, Minor Complexity	58	33	4.6	4
H06A Other Hepatobiliary and Pancreas OR Procedures, Major Complexity	0	82	28.0	21
H06B Other Hepatobiliary and Pancreas OR Procedures, Intermediate Complexity	10	83	9.8	6
H06C Other Hepatobiliary and Pancreas OR Procedures, Minor Complexity	12	99	2.3	1
H07A Open Cholecystectomy, Major Complexity	0	22	22.8	17
H07B Open Cholecystectomy, Intermediate Complexity	0	13	10.2	8
H07C Open Cholecystectomy, Minor Complexity	23	89	6.0	5
H08A Laparoscopic Cholecystectomy, Major Complexity	17	264	10.6	7
H08B Laparoscopic Cholecystectomy, Minor Complexity	1,035	1,783	2.5	1
H40A Endoscopic Procedures for Bleeding Oesophageal Varices, Major Complexity	0	28	14.8	13
H40B Endoscopic Procedures for Bleeding Oesophageal Varices, Intermediate Complexity	0	27	9.0	6
H40C Endoscopic Procedures for Bleeding Oesophageal Varices, Minor Complexity	30	23	6.0	4
H43A ERCP Procedures, Major Complexity	8	219	17.8	14
H43B ERCP Procedures, Intermediate Complexity	226	398	9.3	8
H43C ERCP Procedures, Minor Complexity	1,742	677	5.7	5
H60A Cirrhosis and Alcoholic Hepatitis, Major Complexity	0	541	19.6	14
H60B Cirrhosis and Alcoholic Hepatitis, Intermediate Complexity	151	595	7.7	5
H60C Cirrhosis and Alcoholic Hepatitis, Minor Complexity	133	73	5.5	4
H61A Malignancy of Hepatobiliary System and Pancreas, Major Complexity	22	510	14.1	11
H61B Malignancy of Hepatobiliary System and Pancreas, Minor Complexity	799	762	6.1	4
H62A Disorders of Pancreas, Except Malignancy, Major Complexity	0	456	12.9	11
H62B Disorders of Pancreas, Except Malignancy, Minor Complexity	357	1,531	5.0	4
H63A Other Disorders of Liver, Major Complexity	12	593	11.2	7
H63B Other Disorders of Liver, Intermediate Complexity	394	693	4.6	3
H63C Other Disorders of Liver, Minor Complexity	1,390	477	2.2	1
H64A Disorders of the Biliary Tract, Major Complexity	86	2,218	8.6	6
H64B Disorders of the Biliary Tract, Minor Complexity	519	2,702	3.7	3
Total	**7,081**	**15,763**	**7.4**	**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	70	45.1	14
I01B Bilateral and Multiple Major Joint Procedures of Lower Limb, Minor Complexity	0	25	4.4	4
I02A Microvascular Tissue Transfers or Skin Grafts, Excluding Hand, Major Complexity	0	17	142.9	75
I02B Microvascular Tissue Transfers or Skin Grafts, Excluding Hand, Intermediate Comp	8	52	15.3	14
I02C Microvascular Tissue Transfers or Skin Grafts, Excluding Hand, Minor Complexity	19	28	9.2	3
I03A Hip Replacement, Major Complexity	0	388	23.9	16
I03B Hip Replacement, Minor Complexity	32	3,925	7.3	5
I04A Knee Replacement, Major Complexity	0	112	12.1	7
I04B Knee Replacement, Minor Complexity	~	1,653	4.0	4
I05A Other Joint Replacement, Major Complexity	~	28	9.3	5
I05B Other Joint Replacement, Minor Complexity	~	240	3.0	2
I06Z Spinal Fusion for Deformity	28	195	8.9	5
I07Z Amputation	0	92	38.2	16
I08A Other Hip and Femur Procedures, Major Complexity	~	641	27.5	18
I08B Other Hip and Femur Procedures, Minor Complexity	46	2,060	10.8	8
I09A Spinal Fusion, Major Complexity	0	41	25.8	12
I09B Spinal Fusion, Intermediate Complexity	~	136	8.2	6
I09C Spinal Fusion, Minor Complexity	6	313	4.4	3
I10A Other Back and Neck Procedures, Major Complexity	~	122	14.4	7
I10B Other Back and Neck Procedures, Minor Complexity	808	875	2.9	2
I11Z Limb Lengthening Procedures	~	42	4.3	4
I12A Misc Musculoskeletal Procs for Infect/Inflam of Bone/Joint, Major Complexity	0	103	38.5	28
I12B Misc Musculoskeletal Procs for Infect/Inflam of Bone/Joint, Intermediate Comp	9	220	16.6	13
I12C Misc Musculoskeletal Procs for Infect/Inflam of Bone/Joint, Minor Complexity	82	191	7.3	4
I13A Humerus, Tibia, Fibula and Ankle Procedures, Major Complexity	~	636	10.1	6
I13B Humerus, Tibia, Fibula and Ankle Procedures, Minor Complexity	310	3,312	2.7	2
I15A Cranio-Facial Surgery, Major Complexity	0	32	5.1	4
I15B Cranio-Facial Surgery, Minor Complexity	0	23	5.4	4
I16Z Other Shoulder Procedures	211	472	1.5	1
I17A Maxillo-Facial Surgery, Major Complexity	~	23	5.5	3
I17B Maxillo-Facial Surgery, Minor Complexity	~	34	3.1	2
I18A Other Knee Procedures, Major Complexity	41	267	4.2	2
I18B Other Knee Procedures, Minor Complexity	895	201	1.5	1
I19A Other Elbow and Forearm Procedures, Major Complexity	~	194	7.1	4
I19B Other Elbow and Forearm Procedures, Minor Complexity	529	2,667	1.6	1
I20A Other Foot Procedures, Major Complexity	9	139	5.3	2
I20B Other Foot Procedures, Minor Complexity	294	715	1.5	1
I21Z Local Excision and Removal of Internal Fixation Devices of Hip and Femur	46	37	4.3	2
I23A Local Excision & Removal of Internal Fixation Device, Except Hip & Fmr, Maj Comp	87	114	3.7	1
I23B Local Excision & Removal of Internal Fixation Device, Except Hip & Fmr, Min Comp	1,338	270	1.3	1
I24A Arthroscopy, Major Complexity	20	28	9.4	6
I24B Arthroscopy, Minor Complexity	222	51	1.7	1
I25A Bone and Joint Diagnostic Procedures Including Biopsy, Major Complexity	20	54	17.2	12
I25B Bone and Joint Diagnostic Procedures Including Biopsy, Minor Complexity	131	76	5.4	2
I27A Soft Tissue Procedures, Major Complexity	14	141	18.6	11
I27B Soft Tissue Procedures, Minor Complexity	496	567	2.8	1
I28A Other Musculoskeletal Procedures, Major Complexity	~	93	22.1	15
I28B Other Musculoskeletal Procedures, Intermediate Complexity	134	362	4.6	2
I28C Other Musculoskeletal Procedures, Minor Complexity	109	143	1.6	1
I29Z Knee Reconstructions, and Revisions of Reconstructions	56	264	1.6	1
I30Z Hand Procedures	1,680	1,536	1.2	1
I31A Revision of Hip Replacement, Major Complexity	0	48	35.8	23
I31B Revision of Hip Replacement, Intermediate Complexity	0	133	18.5	12
I31C Revision of Hip Replacement, Minor Complexity	0	242	8.1	6
I32A Revision of Knee Replacement, Major Complexity	0	34	28.2	21
I32B Revision of Knee Replacement, Minor Complexity	0	88	7.3	6
I40Z Infusions for Musculoskeletal Disorders, Sameday	27,835	88	0.5	1
I60Z Femoral Shaft Fractures	0	91	15.5	3
I61A Distal Femoral Fractures, Major Complexity	0	24	41.0	28
I61B Distal Femoral Fractures, Minor Complexity	0	82	15.2	10

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
I63A Sprains, Strains and Dislocations of Hip, Pelvis and Thigh, Major Complexity	0	39	10.4	6
I63B Sprains, Strains and Dislocations of Hip, Pelvis and Thigh, Minor Complexity	0	113	3.9	2
I64A Osteomyelitis, Major Complexity	0	178	26.9	17
I64B Osteomyelitis, Minor Complexity	0	346	11.8	9
I65A Musculoskeletal Malignant Neoplasms, Major Complexity	0	192	19.5	13
I65B Musculoskeletal Malignant Neoplasms, Minor Complexity	0	663	6.6	4
I66A Inflammatory Musculoskeletal Disorders, Major Complexity	0	107	23.3	15
I66B Inflammatory Musculoskeletal Disorders, Intermediate Complexity	0	207	9.4	7
I66C Inflammatory Musculoskeletal Disorders, Minor Complexity	0	536	5.1	4
I67A Septic Arthritis, Major Complexity	0	55	25.3	15
I67B Septic Arthritis, Minor Complexity	0	61	10.1	7
I68A Non-surgical Spinal Disorders, Major Complexity	0	1,533	15.3	8
I68B Non-surgical Spinal Disorders, Minor Complexity	0	2,202	4.8	3
I69A Bone Diseases and Arthropathies, Major Complexity	0	359	12.4	8
I69B Bone Diseases and Arthropathies, Minor Complexity	0	765	7.9	4
I71A Other Musculotendinous Disorders, Major Complexity	0	500	11.9	6
I71B Other Musculotendinous Disorders, Minor Complexity	0	1,403	4.1	2
I72A Specific Musculotendinous Disorders, Major Complexity	0	225	15.4	9
I72B Specific Musculotendinous Disorders, Minor Complexity	0	498	4.2	3
I73A Aftercare of Musculoskeletal Implants or Prostheses, Major Complexity	0	127	23.3	17
I73B Aftercare of Musculoskeletal Implants or Prostheses, Minor Complexity	0	231	8.2	4
I74A Injuries to Forearm, Wrist, Hand and Foot, Major Complexity	0	385	11.5	7
I74B Injuries to Forearm, Wrist, Hand and Foot, Minor Complexity	0	930	2.2	1
I75A Injuries to Shoulder, Arm, Elbow, Knee, Leg and Ankle, Major Complexity	0	646	20.5	12
I75B Injuries to Shoulder, Arm, Elbow, Knee, Leg and Ankle, Minor Complexity	0	1,396	5.0	2
I76A Other Musculoskeletal Disorders, Major Complexity	0	124	21.5	14
I76B Other Musculoskeletal Disorders, Intermediate Complexity	0	294	10.5	5
I76C Other Musculoskeletal Disorders, Minor Complexity	0	393	4.9	2
I77A Fractures of Pelvis, Major Complexity	0	439	22.7	15
I77B Fractures of Pelvis, Minor Complexity	0	531	9.7	6
I78A Fractures of Neck of Femur, Major Complexity	0	279	34.2	24
I78B Fractures of Neck of Femur, Minor Complexity	0	681	17.1	12
I79A Pathological Fractures, Major Complexity	0	135	22.1	18
I79B Pathological Fractures, Minor Complexity	0	308	10.0	7
I80Z Femoral Fractures, Transferred to Acute Facility <2 Days	0	41	0.8	1
I81Z Musculoskeletal Injuries, Sameday	711	1,833	0.5	1
I82Z Other Sameday Treatment for Musculoskeletal Disorders	11,344	6,234	0.5	1
Total	**47,596**	**49,839**	**6.8**	**2**

Note: 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	~	64	6.6	6
J06A Major Procedures for Breast Disorders, Major Complexity	19	172	4.4	3
J06B Major Procedures for Breast Disorders, Minor Complexity	743	1,252	2.0	1
J07A Minor Procedures for Breast Disorders, Major Complexity	640	137	1.9	1
J07B Minor Procedures for Breast Disorders, Minor Complexity	923	93	0.7	1
J08A Other Skin Grafts and Debridement Procedures, Major Complexity	~	87	24.8	13
J08B Other Skin Grafts and Debridement Procedures, Intermediate Complexity	26	92	4.7	3
J08C Other Skin Grafts and Debridement Procedures, Minor Complexity	1,107	228	2.5	1
J09Z Perianal and Pilonidal Procedures	305	147	1.9	1
J10A Plastic OR Procs for Skin, Subcutaneous Tissue and Breast Disorders, Major Comp	85	59	4.5	2
J10B Plastic OR Procs for Skin, Subcutaneous Tissue and Breast Disorders, Minor Comp	843	103	1.6	1
J11A Other Skin, Subcutaneous Tissue and Breast Procedures, Major Complexity	1,103	350	7.9	3
J11B Other Skin, Subcutaneous Tissue and Breast Procedures, Minor Complexity	25,511	426	1.3	1
J12A Lower Limb Procedures W Ulcer or Cellulitis, Major Complexity	0	48	44.8	28
J12B Lower Limb Procedures W Ulcer or Cellulitis, Minor Complexity	40	71	10.5	9
J13A Lower Limb Procedures W/O Ulcer or Cellulitis, Major Complexity	10	*	^	^
J13B Lower Limb Procedures W/O Ulcer or Cellulitis, Minor Complexity	145	74	3.3	2
J14Z Major Breast Reconstructions	32	142	3.6	3
J60A Skin Ulcers, Major Complexity	~	195	26.4	13
J60B Skin Ulcers, Intermediate Complexity	8	251	13.3	6
J60C Skin Ulcers, Minor Complexity	566	166	4.3	2
J62A Malignant Breast Disorders, Major Complexity	43	164	15.7	11
J62B Malignant Breast Disorders, Minor Complexity	4,981	296	9.3	6
J63A Non-Malignant Breast Disorders, Major Complexity	189	201	3.5	2
J63B Non-Malignant Breast Disorders, Minor Complexity	3,197	54	1.3	1
J64A Cellulitis, Major Complexity	14	2,036	10.7	7
J64B Cellulitis, Minor Complexity	435	4,311	2.9	2
J65A Trauma to Skin, Subcutaneous Tissue and Breast, Major Complexity	~	552	15.1	8
J65B Trauma to Skin, Subcutaneous Tissue and Breast, Minor Complexity	54	1,134	2.0	1
J67A Minor Skin Disorders, Major Complexity	461	466	4.5	3
J67B Minor Skin Disorders, Minor Complexity	9,931	1,598	1.3	1
J68A Major Skin Disorders, Major Complexity	614	676	5.3	3
J68B Major Skin Disorders, Minor Complexity	1,008	284	2.1	1
J69A Skin Malignancy, Major Complexity	33	80	16.7	11
J69B Skin Malignancy, Intermediate Complexity	498	68	7.9	5
J69C Skin Malignancy, Minor Complexity	2,019	53	6.3	1
J98Z UV Therapy[b]	11,398	0	-	-
Total	**66,989**	**16,174**	**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.
- Mean and median length of stay cannot be calculated as no in-patients are reported.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.
b The official classification for AR-DRG's (Version 8.0) has been slightly modified by the addition of two local DRG's specific to Ireland to account for some differences between Ireland and Australia in the provision of care. While this practice has been used for Activity Based Funding, this modification to the official classification has only been published in the HIPE Annual Report since 2018.
In general UV therapy is not administered in the acute hospital setting in Australia whereas it is in a number of Irish hospitals. In order to differentiate this activity from other skin disorder treatments the local DRG J98Z (*UV Therapy*) has been created which isolates this activity so it can be costed and reimbursed appropriately.

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

MDC 10 Endocrine, Nutritional and Metabolic Diseases and Disorders	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
K01A OR Procedures for Diabetic Complications, Major Complexity	0	58	62.1	53
K01B OR Procedures for Diabetic Complications, Intermediate Complexity	0	109	27.1	19
K01C OR Procedures for Diabetic Complications, Minor Complexity	~	167	11.9	9
K02A Pituitary Procedures, Major Complexity	0	15	34.1	24
K02B Pituitary Procedures, Minor Complexity	~	58	7.4	6
K03Z Adrenal Procedures	0	63	7.1	4
K05A Parathyroid Procedures, Major Complexity	~	36	9.8	5
K05B Parathyroid Procedures, Minor Complexity	20	138	1.8	1
K06A Thyroid Procedures, Major Complexity	0	56	6.5	5
K06B Thyroid Procedures, Minor Complexity	21	498	2.0	1
K08Z Thyroglossal Procedures	~	27	2.0	2
K09A Other Endocrine, Nutritional and Metabolic OR Procedures, Major Complexity	~	39	20.9	15
K09B Other Endocrine, Nutritional and Metabolic OR Procedures, Minor Complexity	23	75	10.5	9
K10A Revisional and Open Bariatric Procedures, Major Complexity	0	0	-	-
K10B Revisional and Open Bariatric Procedures, Minor Complexity	0	*	^	^
K11A Major Laparoscopic Bariatric Procedures, Major Complexity	0	41	2.3	2
K11B Major Laparoscopic Bariatric Procedures, Minor Complexity	0	30	1.8	2
K12A Other Bariatric Procedures, Major Complexity	0	0	-	-
K12B Other Bariatric Procedures, Minor Complexity	~	~	^	^
K13Z Plastic OR Procedures for Endocrine, Nutritional and Metabolic Disorders	7	25	1.5	1
K40A Endoscopic and Investigative Procedures for Metabolic Disorders, Major Comp	25	295	17.9	11
K40B Endoscopic and Investigative Procedures for Metabolic Disorders, Minor Comp	851	135	5.8	4
K60A Diabetes, Major Complexity	~	952	12.2	6
K60B Diabetes, Minor Complexity	205	2,764	4.1	3
K61A Severe Nutritional Disturbance, Major Complexity	0	37	42.8	37
K61B Severe Nutritional Disturbance, Minor Complexity	~	24	22.6	8
K62A Miscellaneous Metabolic Disorders, Major Complexity	28	758	12.2	7
K62B Miscellaneous Metabolic Disorders, Intermediate Complexity	102	1,764	5.6	3
K62C Miscellaneous Metabolic Disorders, Minor Complexity	1,672	2,232	2.5	1
K63A Inborn Errors of Metabolism, Major Complexity	244	175	4.5	2
K63B Inborn Errors of Metabolism, Minor Complexity	205	29	1.7	1
K64A Endocrine Disorders, Major Complexity	641	839	7.2	4
K64B Endocrine Disorders, Minor Complexity	2,070	551	1.8	1
Total	**6,133**	**11,998**	**6.5**	**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	0	33	10.9	9
L02B Operative Insertion of Peritoneal Catheter for Dialysis, Minor Complexity	44	53	3.4	2
L03A Kidney, Ureter and Major Bladder Procedures for Neoplasm, Major Complexity	0	60	24.9	17
L03B Kidney, Ureter and Major Bladder Procedures for Neoplasm, Intermediate Comp	~	205	10.0	8
L03C Kidney, Ureter and Major Bladder Procedures for Neoplasm, Minor Complexity	9	344	5.8	5
L04A Kidney, Ureter and Major Bladder Procedures for Non-Neoplasm, Major Complexity	~	198	24.7	16
L04B Kidney, Ureter and Major Bladder Procedures for Non-Neoplasm, Intermediate Comp	43	674	7.4	5
L04C Kidney, Ureter and Major Bladder Procedures for Non-Neoplasm, Minor Complexity	716	1,477	2.9	2
L05A Transurethral Prostatectomy for Urinary Disorder, Major Complexity	0	23	13.6	14
L05B Transurethral Prostatectomy for Urinary Disorder, Minor Complexity	0	78	5.8	3
L06A Minor Bladder Procedures, Major Complexity	0	59	22.9	14
L06B Minor Bladder Procedures, Intermediate Complexity	~	83	8.8	7
L06C Minor Bladder Procedures, Minor Complexity	102	123	4.6	3
L07A Other Transurethral Procedures, Major Complexity	12	248	12.3	8
L07B Other Transurethral Procedures, Minor Complexity	505	915	3.0	2
L08A Urethral Procedures, Major Complexity	~	*	^	^
L08B Urethral Procedures, Minor Complexity	48	69	2.2	2
L09A Other Procedures for Kidney and Urinary Tract Disorders, Major Complexity	0	40	51.2	27
L09B Other Procedures for Kidney and Urinary Tract Disorders, Intermediate Complexity	6	53	11.6	8
L09C Other Procedures for Kidney and Urinary Tract Disorders, Minor Complexity	222	113	2.5	1
L40Z Ureteroscopy	40	79	3.0	2
L41Z Cystourethroscopy for Urinary Disorder, Sameday	8,780	66	0.5	1
L42Z ESW Lithotripsy	1,050	78	3.0	2
L60A Kidney Failure, Major Complexity	~	575	21.0	15
L60B Kidney Failure, Intermediate Complexity	70	1,772	7.5	5
L60C Kidney Failure, Minor Complexity	551	447	3.6	2
L61Z Haemodialysis	179,667	51	1.0	1
L62A Kidney and Urinary Tract Neoplasms, Major Complexity	19	200	12.6	9
L62B Kidney and Urinary Tract Neoplasms, Minor Complexity	862	295	4.5	2
L63A Kidney and Urinary Tract Infections, Major Complexity	34	6,578	11.9	7
L63B Kidney and Urinary Tract Infections, Minor Complexity	1000	6,958	4.3	3
L64A Urinary Stones and Obstruction, Major Complexity	63	870	4.4	3
L64B Urinary Stones and Obstruction, Minor Complexity	158	1,863	1.8	1
L65A Kidney and Urinary Tract Signs and Symptoms, Major Complexity	23	693	9.8	6
L65B Kidney and Urinary Tract Signs and Symptoms, Minor Complexity	1,353	1,735	2.9	2
L66Z Urethral Stricture	154	70	2.7	1
L67A Other Kidney and Urinary Tract Disorders, Major Complexity	320	986	8.5	5
L67B Other Kidney and Urinary Tract Disorders, Intermediate Complexity	1,600	935	3.0	2
L67C Other Kidney and Urinary Tract Disorders, Minor Complexity	3,164	138	1.8	1
L68Z Peritoneal Dialysis	~	~	^	^
Total	**200,630**	**29,258**	**6.9**	**4**

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 4.14 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	47	8.1	6
M01B Major Male Pelvic Procedures, Minor Complexity	~	435	2.9	3
M02A Transurethral Prostatectomy for Reproductive System Disorder, Major Complexity	0	37	12.6	6
M02B Transurethral Prostatectomy for Reproductive System Disorder, Minor Complexity	~	281	3.8	3
M03A Penis Procedures, Major Complexity	15	40	5.2	4
M03B Penis Procedures, Minor Complexity	295	71	2.2	1
M04Z Testes Procedures	910	716	1.7	1
M05Z Circumcision	1,180	124	2.1	1
M06A Other Male Reproductive System OR Procedures, Major Complexity	42	49	13.4	9
M06B Other Male Reproductive System OR Procedures, Minor Complexity	58	40	3.8	2
M40Z Cystourethroscopy for Male Reproductive System Disorder, Sameday	1,079	~	^	^
M60A Male Reproductive System Malignancy, Major Complexity	334	349	9.8	5
M60B Male Reproductive System Malignancy, Minor Complexity	3,527	156	13.9	5
M61A Benign Prostatic Hypertrophy, Major Complexity	10	34	5.3	5
M61B Benign Prostatic Hypertrophy, Minor Complexity	797	53	2.9	1
M62A Male Reproductive System Inflammation, Major Complexity	~	230	7.9	5
M62B Male Reproductive System Inflammation, Minor Complexity	198	880	2.3	1
M63Z Male Sterilisation Procedures	101	~	^	^
M64A Other Male Reproductive System Disorders, Major Complexity	20	99	3.8	1
M64B Other Male Reproductive System Disorders, Minor Complexity	783	819	0.9	1
Total	**9,354**	**4,468**	**3.7**	**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 4.15 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	36	18.8	15
N01B Pelvic Evisceration and Radical Vulvectomy, Minor Complexity	0	52	8.7	7
N04A Hysterectomy for Non-Malignancy, Major Complexity	0	140	7.3	6
N04B Hysterectomy for Non-Malignancy, Minor Complexity	~	1,102	3.7	3
N05A Oophorectomy and Complex Fallopian Tube Procedures for Non-Malignancy, Maj Comp	~	51	7.0	6
N05B Oophorectomy and Complex Fallopian Tube Procedures for Non-Malignancy, Min Comp	149	458	2.7	2
N06A Female Reproductive System Reconstructive Procedures, Major Complexity	~	32	5.6	4
N06B Female Reproductive System Reconstructive Procedures, Minor Complexity	127	483	2.7	3
N07A Other Uterus and Adnexa Procedures for Non-Malignancy, Major Complexity	996	885	2.7	2
N07B Other Uterus and Adnexa Procedures for Non-Malignancy, Minor Complexity	1,832	174	1.3	1
N08Z Endoscopic and Laparoscopic Procedures, Female Reproductive System	537	255	2.4	1
N09Z Other Vagina, Cervix and Vulva Procedures	1,561	557	4.3	2
N10Z Diagnostic Curettage and Diagnostic Hysteroscopy	7,247	509	2.1	1
N11A Other Female Reproductive System OR Procedures, Major Complexity	15	93	13.5	8
N11B Other Female Reproductive System OR Procedures, Minor Complexity	8	~	^	^
N12A Uterus and Adnexa Procedures for Malignancy, Major Complexity	0	*	^	^
N12B Uterus and Adnexa Procedures for Malignancy, Intermediate Complexity	~	142	8.1	7
N12C Uterus and Adnexa Procedures for Malignancy, Minor Complexity	41	319	4.0	4
N60A Female Reproductive System Malignancy, Major Complexity	~	205	18.5	14
N60B Female Reproductive System Malignancy, Minor Complexity	871	373	7.2	4
N61A Female Reproductive System Infections, Major Complexity	30	87	5.7	4
N61B Female Reproductive System Infections, Minor Complexity	38	276	2.4	2
N62A Menstrual and Other Female Reproductive System Disorders, Major Complexity	51	507	3.4	2
N62B Menstrual and Other Female Reproductive System Disorders, Minor Complexity	2,633	1,918	1.5	1
Total	**16,151**	**8,686**	**3.7**	**2**

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

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

MDC 14 Pregnancy, Childbirth and the Puerperium	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
O01A Caesarean Delivery, Major Complexity	0	1,503	9.5	6
O01B Caesarean Delivery, Intermediate Complexity	0	7,309	5.0	4
O01C Caesarean Delivery, Minor Complexity	0	10,776	3.6	3
O02A Vaginal Delivery W OR Procedures, Major Complexity	0	169	5.3	4
O02B Vaginal Delivery W OR Procedures, Minor Complexity	0	627	3.1	3
O03A Ectopic Pregnancy, Major Complexity	~	131	2.7	2
O03B Ectopic Pregnancy, Minor Complexity	37	522	2.4	1
O04A Postpartum and Post Abortion W OR Procedures, Major Complexity[b]	0	59	5.0	4
O04B Postpartum and Post Abortion W OR Procedures, Minor Complexity[b]	17	143	2.1	2
O05Z Abortion W OR Procedures[b]	1,330	2,393	1.0	1
O60A Vaginal Delivery, Major Complexity	0	4,065	4.2	3
O60B Vaginal Delivery, Intermediate Complexity	0	16,465	2.7	3
O60C Vaginal Delivery, Minor Complexity	0	14,385	2.0	2
O61A Postpartum and Post Abortion W/O OR Procedures, Major Complexity[b]	153	620	3.5	3
O61B Postpartum and Post Abortion W/O OR Procedures, Minor Complexity[b]	1,723	2,233	1.7	1
O63A Abortion W/O OR Procedures, Major Complexity[b]	*	240	1.7	1
O63B Abortion W/O OR Procedures, Minor Complexity[b]	467	2,163	1.1	1
O66A Antenatal and Other Obstetric Admissions, Major Complexity	1,419	9,055	1.8	1
O66B Antenatal and Other Obstetric Admissions, Minor Complexity	8,340	24,071	1.0	1
Total	**13,497**	**96,929**	**2.4**	**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.
b This includes spontaneous abortions and pregnancies with abortive outcome.

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

MDC 15 Newborns and Other Neonates	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
P01Z Neonate W Sig OR Proc/Vent>=96hrs, Died or Transfer to Acute Faclity <5Days	0	40	2.1	2
P02Z Cardiothoracic and Vascular Procedures for Neonates	0	51	26.3	15
P03A Neonate, AdmWt 1000-1499g W Significant OR Proc/Vent>=96hrs, Major Complexity	0	54	60.7	63
P03B Neonate, AdmWt 1000-1499g W Significant OR Proc/Vent>=96hrs, Minor Complexity	0	131	34.4	35
P04A Neonate, AdmWt 1500-1999g W Significant OR Proc/Vent>=96hrs, Major Complexity	0	20	78.7	49
P04B Neonate, AdmWt 1500-1999g W Significant OR Proc/Vent>=96hrs, Minor Complexity	0	102	30.6	30
P05A Neonate, AdmWt 2000-2499g W Significant OR Proc/Vent>=96hrs, Major Complexity	0	17	87.5	54
P05B Neonate, AdmWt 2000-2499g W Significant OR Proc/Vent>=96hrs, Minor Complexity	0	77	20.5	18
P06A Neonate, AdmWt >=2500g W Significant OR Proc/Vent>=96hrs, Major Complexity	0	112	42.7	25
P06B Neonate, AdmWt >=2500g W Significant OR Proc/Vent>=96hrs, Minor Complexity	~	237	13.2	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	~	94	2.1	2
P60B Neonate W/O Sig OR/Vent>=96hrs, Died/Transfer Acute Facility <5 Days, MinC	14	529	1.1	1
P61Z Neonate, AdmWt <750g W/O Significant OR procedure	0	66	60.5	52
P62A Neonate, AdmWt 750-999g W/O Significant OR Procedures, Major Complexity	0	36	81.4	81
P62B Neonate, AdmWt 750-999g W/O Significant OR Procedures, Minor Complexity	0	60	49.6	50
P63A Neonate, AdmWt 1000-1249g W/O Significant OR Proc/Vent>=96hrs, Major Complexity	0	15	42.9	45
P63B Neonate, AdmWt 1000-1249g W/O Significant OR Proc/Vent>=96hrs, Minor Complexity	~	28	30.4	32
P64A Neonate, AdmWt 1250-1499g W/O Significant OR Proc/Vent>=96hrs, Major Complexity	0	23	32.5	32
P64B Neonate, AdmWt 1250-1499g W/O Significant OR Proc/Vent>=96hrs, Minor Complexity	0	74	25.5	27
P65A Neonate, AdmWt 1500-1999g W/O Significant OR Proc/Vent>=96hrs, Extreme Comp	0	42	28.9	30
P65B Neonate, AdmWt 1500-1999g W/O Significant OR Proc/Vent>=96hrs, Major Complexity	0	92	24.9	25
P65C Neonate, AdmWt 1500-1999g W/O Significant OR Proc/Vent>=96hrs, Intermediate Comp	0	294	19.1	18
P65D Neonate, AdmWt 1500-1999g W/O Significant OR Proc/Vent>=96hrs, Minor Complexity	~	186	12.3	12
P66A Neonate, AdmWt 2000-2499g W/O Significant OR Proc/Vent>=96hrs, Extreme Comp	0	98	20.3	19
P66B Neonate, AdmWt 2000-2499g W/O Significant OR Proc/Vent>=96hrs, Major Complexity	0	280	13.5	13
P66C Neonate, AdmWt 2000-2499g W/O Significant OR Proc/Vent>=96hrs, Intermediate Comp	~	639	8.5	7
P66D Neonate, AdmWt 2000-2499g W/O Significant OR Proc/Vent>=96hrs, Minor Complexity	13	433	3.8	2
P67A Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, <37 Comp Wks Gest, Extr Comp	0	93	16.3	12
P67B Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, <37 Comp Wks Gest, Maj Comp	~	174	9.9	9
P67C Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, <37 Comp Wks Gest, Int Comp	0	205	6.6	5
P67D Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, <37 Comp Wks Gest, Min Comp	7	351	4.2	3
P68A Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Comp Wks Gest, Ext Comp	~	494	10.9	7
P68B Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Comp Wks Gest, Maj Comp	27	911	5.0	3
P68C Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Comp Wks Gest, Int Comp	59	1,350	3.4	3
P68D Neonate, AdmWt >=2500g W/O Sig OR Proc/Vent>=96hrs, >=37 Comp Wks Gest, Min Comp	200	5,118	2.0	2
Total	**337**	**12,532**	**7.6**	**3**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
^ Denotes that length of stay is suppressed where the number of discharges is not reported.
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	7	22.9	20
Q01B Splenectomy, Minor Complexity	0	19	7.0	4
Q02A Blood and Immune System Disorders W Other OR Procedures, Major Complexity	~	61	16.8	11
Q02B Blood and Immune System Disorders W Other OR Procedures, Minor Complexity	307	139	5.2	3
Q60A Reticuloendothelial and Immunity Disorders, Major Complexity	331	855	7.3	5
Q60B Reticuloendothelial and Immunity Disorders, Minor Complexity	3,629	381	2.3	1
Q61A Red Blood Cell Disorders, Major Complexity	795	2,234	7.6	5
Q61B Red Blood Cell Disorders, Intermediate Complexity	12,800	2,970	2.3	1
Q61C Red Blood Cell Disorders, Minor Complexity	15,502	24	0.8	1
Q62A Coagulation Disorders, Major Complexity	*	300	7.8	4
Q62B Coagulation Disorders, Minor Complexity	3,265	535	2.0	1
Total	**36,724**	**7,525**	**4.8**	**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 4.19 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	49	33.2	17
R01B Lymphoma and Leukaemia W Major OR Procedures, Minor Complexity	21	52	6.7	6
R02A Other Neoplastic Disorders W Major OR Procedures, Major Complexity	0	23	14.2	11
R02B Other Neoplastic Disorders W Major OR Procedures, Intermediate Complexity	6	48	7.6	7
R02C Other Neoplastic Disorders W Major OR Procedures, Minor Complexity	25	111	3.9	2
R03A Lymphoma and Leukaemia W Other OR Procedures, Major Complexity	~	62	48.8	36
R03B Lymphoma and Leukaemia W Other OR Procedures, Intermediate Complexity	*	113	16.7	15
R03C Lymphoma and Leukaemia W Other OR Procedures, Minor Complexity	166	169	5.5	3
R04A Other Neoplastic Disorders W Other OR Procedures, Major Complexity	29	57	14.0	9
R04B Other Neoplastic Disorders W Other OR Procedures, Minor Complexity	804	96	5.8	3
R60A Acute Leukaemia, Major Complexity	58	442	27.6	21
R60B Acute Leukaemia, Minor Complexity	2,690	384	5.2	3
R61A Lymphoma and Non-Acute Leukaemia, Major Complexity	497	1,309	14.7	8
R61B Lymphoma and Non-Acute Leukaemia, Minor Complexity	9,758	1,671	4.5	3
R62A Other Neoplastic Disorders, Major Complexity	681	170	14.1	8
R62B Other Neoplastic Disorders, Intermediate Complexity	5,313	123	6.4	4
R62C Other Neoplastic Disorders, Minor Complexity	93,868	24	7.6	4
R63Z Chemotherapy	108,796	0	-	-
R99Z Oncology Repeat Attendance[b]	17,276	0	-	-
Total	**239,995**	**4,903**	**11.1**	**5**

Notes: ~ Denotes five or fewer discharges reported to HIPE.
* Further suppression required to prevent disclosure of five or fewer discharges.
\- Mean and median length of stay cannot be calculated as no in-patients are reported.
a Based on total in-patients (sameday and overnight in-patients). Excludes day patients.
b The official classification for AR-DRG's (V8.0) has been slightly modified by the addition of two local DRG's specific to Ireland to account for some differences in the provision of care. While this practice has been used for Activity Based Funding, this modification to the official classification has only been published in the HIPE Annual Report since 2018.
There are many attendances at oncology day wards where patients undergo only very minor procedures (e.g. taking of bloods) which are generally of lower complexity than administration of chemotherapy or other oncology procedures. The local DRG R99Z (*Oncology Repeat Attendance*) is used to identify these cases and to ensure that they are costed and reimbursed appropriately.

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

MDC 18 Infectious and Parasitic Diseases, Systemic or Unspecified Sites	Day Patients	In-Patients[a]	In-Patient Length of Stay[a]	
	N	N	Mean	Median
S65A Human Immunodeficiency Virus, Major Complexity	0	42	30.8	19
S65B Human Immunodeficiency Virus, Intermediate Complexity	~	76	10.1	6
S65C Human Immunodeficiency Virus, Minor Complexity	18	22	4.8	6
T01A Infectious and Parasitic Diseases W OR Procedures, Major Complexity	0	106	43.7	28
T01B Infectious and Parasitic Diseases W OR Procedures, Intermediate Complexity	~	161	18.1	15
T01C Infectious and Parasitic Diseases W OR Procedures, Minor Complexity	13	206	10.1	7
T40Z Infectious and Parasitic Diseases W Ventilator Support	0	28	22.4	12
T60A Septicaemia, Major Complexity	0	359	26.6	17
T60B Septicaemia, Intermediate Complexity	~	1,129	12.1	9
T60C Septicaemia, Minor Complexity	18	1,134	8.1	6
T61A Postoperative and Post-Traumatic Infections, Major Complexity	6	281	9.7	6
T61B Postoperative and Post-Traumatic Infections, Minor Complexity	131	682	4.7	3
T62A Fever of Unknown Origin, Major Complexity	0	547	7.7	5
T62B Fever of Unknown Origin, Minor Complexity	30	1,309	2.6	1
T63A Viral Illnesses, Major Complexity	250	323	6.4	3
T63B Viral Illnesses, Minor Complexity	137	1,956	1.7	1
T64A Other Infectious and Parasitic Diseases, Major Complexity	0	54	32.1	21
T64B Other Infectious and Parasitic Diseases, Intermediate Complexity	7	136	11.9	7
T64C Other Infectious and Parasitic Diseases, Minor Complexity	723	194	5.6	3
Total	**1,340**	**8,745**	**7.8**	**4**

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

TABLE 4.21 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	23	0	-	-
U60A Mental Health Treatment W/O ECT, Sameday, Major Complexity	370	333	0.5	1
U60B Mental Health Treatment W/O ECT, Sameday, Minor Complexity	182	540	0.5	1
U61A Schizophrenia Disorders, Major Complexity	0	48	53.5	29
U61B Schizophrenia Disorders, Minor Complexity	0	91	25.4	15
U62A Paranoia and Acute Psychotic Disorders, Major Complexity	0	48	24.0	15
U62B Paranoia and Acute Psychotic Disorders, Minor Complexity	0	139	10.8	5
U63A Major Affective Disorders, Major Complexity	0	60	47.5	25
U63B Major Affective Disorders, Minor Complexity	0	149	15.2	9
U64A Other Affective and Somatoform Disorders, Major Complexity	0	62	17.0	8
U64B Other Affective and Somatoform Disorders, Minor Complexity	0	126	9.0	3
U65A Anxiety Disorders, Major Complexity	0	190	10.5	6
U65B Anxiety Disorders, Minor Complexity	0	391	3.8	2
U66A Eating and Obsessive-Compulsive Disorders, Major Complexity	0	67	31.4	21
U66B Eating and Obsessive-Compulsive Disorders, Minor Complexity	0	214	15.7	7
U67A Personality Disorders and Acute Reactions, Major Complexity	0	81	27.5	11
U67B Personality Disorders and Acute Reactions, Minor Complexity	0	186	5.9	3
U68A Childhood Mental Disorders, Major Complexity	0	47	9.1	3
U68B Childhood Mental Disorders, Minor Complexity	0	37	4.5	2
Total	**575**	**2,809**	**10.0**	**2**

Notes: - 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 4.22 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	588	9.2	5
V60B Alcohol Intoxication and Withdrawal, Minor Complexity	0	1,341	3.3	2
V61A Drug Intoxication and Withdrawal, Major Complexity	0	36	18.4	9
V61B Drug Intoxication and Withdrawal, Minor Complexity	0	170	4.5	2
V62A Alcohol Use and Dependence, Major Complexity	0	109	16.0	8
V62B Alcohol Use and Dependence, Minor Complexity	0	442	4.0	3
V63Z Opioid Use and Dependence	0	69	18.4	21
V64Z Other Drug Use and Dependence	0	58	6.9	3
V65Z Treatment for Alcohol Disorders, Sameday	7	509	0.5	1
V66Z Treatment for Drug Disorders, Sameday	0	80	0.5	1
Total	**7**	**3,402**	**4.9**	**2**

Note: 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	25	102.2	82
W01B Vent, Trac & Cran Procs for Mult Sig Trauma, Intermediate Complexity	0	33	68.8	31
W01C Vent, Trac & Cran Procs for Mult Sig Trauma, Minor Complexity	0	40	22.3	18
W02A Hip, Femur and Lower Limb Procedures for Multiple Sig Trauma, Major Complexity	0	23	30.3	24
W02B Hip, Femur and Lower Limb Procedures for Multiple Sig Trauma, Minor Complexity	0	77	21.0	12
W03Z Abdominal Procedures for Multiple Significant Trauma	0	26	15.5	11
W04A Multiple Significant Trauma W Other OR Procedures, Major Complexity	0	21	22.3	15
W04B Multiple Significant Trauma W Other OR Procedures, Minor Complexity	0	38	9.2	8
W60A Multiple Sig Trauma, Died or Transferred to Acute Facility <5 Days, Major Comp	0	32	2.1	2
W60B Multiple Sig Trauma, Died or Transferred to Acute Facility <5 Days, Minor Comp	0	39	1.7	2
W61A Multiple Significant Trauma W/O OR Procedures, Major Complexity	0	103	26.9	17
W61B Multiple Significant Trauma W/O OR Procedures, Minor Complexity	0	145	16.9	7
X02A Microvascular Tissue Transfer and Skin Grafts for Injuries to Hand, Major Comp	~	13	5.6	3
X02B Microvascular Tissue Transfer and Skin Grafts for Injuries to Hand, Minor Comp	7	65	1.2	1
X04A Other Procedures for Injuries to Lower Limb, Major Complexity	0	52	29.6	12
X04B Other Procedures for Injuries to Lower Limb, Minor Complexity	15	194	2.9	1
X05A Other Procedures for Injuries to Hand, Major Complexity	35	165	2.3	1
X05B Other Procedures for Injuries to Hand, Minor Complexity	260	675	0.8	1
X06A Other Procedures for Other Injuries, Major Complexity	0	114	18.8	12
X06B Other Procedures for Other Injuries, Intermediate Complexity	27	180	6.2	4
X06C Other Procedures for Other Injuries, Minor Complexity	215	727	1.9	1
X07A Skin Grafts for Injuries Excluding Hand, Major Complexity	~	12	32.5	26
X07B Skin Grafts for Injuries Excluding Hand, Intermediate Complexity	~	36	9.6	9
X07C Skin Grafts for Injuries Excluding Hand, Minor Complexity	11	39	5.4	4
X40A Injuries, Poisoning and Toxic Effects of Drugs W Ventilator Support, Major Comp	0	46	10.0	9
X40B Injuries, Poisoning and Toxic Effects of Drugs W Ventilator Support, Minor Comp	0	70	6.3	5
X60A Injuries, Major Complexity	7	1,244	11.0	5
X60B Injuries, Minor Complexity	492	3,670	1.6	1
X61A Allergic Reactions, Major Complexity	0	99	1.8	1
X61B Allergic Reactions, Minor Complexity	~	340	1.0	1
X62A Poisoning/Toxic Effects of Drugs and Other Substances, Major Complexity	0	1,220	5.5	3
X62B Poisoning/Toxic Effects of Drugs and Other Substances, Minor Complexity	23	3,714	1.8	1
X63A Sequelae of Treatment, Major Complexity	11	489	8.2	5
X63B Sequelae of Treatment, Minor Complexity	186	1,366	2.4	1
X64A Other Injuries, Poisonings and Toxic Effects, Major Complexity	~	405	15.4	10
X64B Other Injuries, Poisonings and Toxic Effects, Minor Complexity	~	835	2.8	1
Total	**1,305**	**16,372**	**4.5**	**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	16	47.8	28
Y02A Skin Grafts for Other Burns, Major Complexity	0	31	31.9	21
Y02B Skin Grafts for Other Burns, Intermediate Complexity	~	63	9.7	8
Y02C Skin Grafts for Other Burns, Minor Complexity	~	20	5.3	5
Y03A Other OR Procedures for Other Burns, Major Complexity	~	29	8.0	3
Y03B Other OR Procedures for Other Burns, Minor Complexity	~	45	3.5	2
Y60Z Burns, Transferred to Acute Facility <5 Days	~	48	1.1	1
Y61Z Severe Burns	~	68	7.7	3
Y62A Other Burns, Major Complexity	19	64	6.6	3
Y62B Other Burns, Minor Complexity	56	173	2.7	1
Total	**98**	**557**	**7.8**	**2**

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

TABLE 4.25 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	39	77	17.3	9
Z01B Other Contacts W Health Services W OR Procedures, Minor Complexity	605	193	2.2	1
Z40Z Other Contacts W Health Services W Endoscopy, Sameday	10,829	29	0.5	1
Z60A Rehabilitation, Major Complexity	0	~	^	^
Z60B Rehabilitation, Minor Complexity	0	~	^	^
Z61A Signs and Symptoms, Major Complexity	29	652	11.1	6
Z61B Signs and Symptoms, Intermediate Complexity	103	867	3.3	1
Z61C Signs and Symptoms, Minor Complexity	540	1,331	1.7	1
Z63A Other Follow Up After Surgery or Medical Care, Major Complexity	84	1,380	23.6	14
Z63B Other Follow Up After Surgery or Medical Care, Minor Complexity	1,117	1,391	12.5	3
Z64A Other Factors Influencing Health Status, Major Complexity	2,462	900	12.0	2
Z64B Other Factors Influencing Health Status, Minor Complexity	30,236	1,339	1.8	1
Z65Z Congenital Anomalies and Problems Arising from Neonatal Period	88	42	3.8	1
Z66Z Sleep Disorders	16	187	1.4	1
Total	**46,148**	**8,391**	**9.3**	**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 4.26 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	0	387	47.7	32
801B OR Procedures Unrelated to Principal Diagnosis, Intermediate Complexity	36	443	16.4	12
801C OR Procedures Unrelated to Principal Diagnosis, Minor Complexity	195	276	5.2	3
963Z Neonatal Diagnosis Not Consistent W Age/Weight	0	0	-	-
Total	**231**	**1,106**	**24.6**	**13**

Notes: - 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 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	40	44.9	26
A03Z Lung or Heart-Lung Transplant	0	16	46.6	30
A05Z Heart Transplant	0	9	68.6	50
A06A Tracheostomy and/or Ventilation >=96hours, Major Complexity	0	186	106.2	71
A06B Tracheostomy and/or Ventilation >=96hours, Intermediate Complexity	0	767	57.3	40
A06C Tracheostomy and/or Ventilation >=96hours, Minor Complexity	0	1267	27.7	20
A07A Allogeneic Bone Marrow Transplant, Age <=16 Years or Major Complexity	0	54	47.8	43
A07B Allogeneic Bone Marrow Transplant, Age >=17 Years and Minor Complexity	~	47	34.4	35
A08A Autologous Bone Marrow Transplant, Major Complexity	0	111	24.3	21
A08B Autologous Bone Marrow Transplant, Minor Complexity	15	51	8.2	4
A09A Kidney Transplant, Age <=16 Years or Major Complexity	0	15	15.3	15
A09B Kidney Transplant, Age >=17 Years and Minor Complexity	0	110	9.2	8
A10Z Insertion of Ventricular Assist Device	0	10	93.3	76
A11A Insertion of Implantable Spinal Infusion Device, Major Complexity	~	9	67.7	11
A11B Insertion of Implantable Spinal Infusion Device, Minor Complexity	~	6	8.8	9
A12Z Insertion of Neurostimulator Device	62	71	2.8	2
A40A ECMO, Major Complexity	0	14	118.8	80
A40B ECMO, Minor Complexity	0	27	19.1	15
Total	**82**	**2,810**	**40.8**	**25**

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

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

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ANALYSIS OF CORONAVIRUS DISEASE 2019 (COVID-19) ADMISSIONS[1]

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 Coronavirus disease 2019 (COVID-19), also known as novel coronavirus (COVID-19).

As of March 2020 the availability, reliability and coverage of HIPE data became of national and international importance in the reporting of COVID-19. The process of prioritising the coding of COVID-19 discharges was communicated by the HPO to all hospitals, and the software development team facilitated automatic nightly exports of cases with this diagnosis. The Department of Health, the HSE and other health agencies were given fast access to this data to track, monitor and support the health system.

A.1.1.1 What is Coronavirus disease 2019 (COVID-19)?

Coronavirus disease 2019 (COVID-19), also known as novel coronavirus (COVID-19), is a new (or 'novel') strain of coronavirus not previously identified in humans before the outbreak in Wuhan, Hubei Province, China. Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). Common signs of COVID-19 infection include respiratory symptoms such as cough, shortness of breath, breathing difficulties and fever. In severe cases, the infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and death.

Source: Irish Coding Standard 22X2 V1.3 Novel Coronavirus (COVID-19) published 1st Jan 2021

A.1.1.2 Criteria for selection of COVID-19 admissions

This annex is based on admissions to hospital between 29th February 2020 and 31st December 2020 inclusive, with a diagnosis of COVID-19.[1,2,3] Based on the Irish Coding Standard 22X2 V1.3 *Novel Coronavirus* (COVID-19) effective from 1st January 2021, the selection of admissions was based on those with any diagnosis of:

1 HIPE is a discharge based database, however, to more accurately reflect the trends over time in COVID-19 hospitalisations, basing this analysis on admission date is a more suitable reflection of the changes that occurred during this period.

2 A proportion of the admissions included in this annex were discharged in 2021, and only admissions who were discharged up to 31 March 2021 were included. Admissions who were admitted in 2020 and discharged in 2021 are based on provisional 2021 HIPE data and therefore may be subject to change (HIPE_2021_ASOF_0621_V07_PROVISIONAL).

3 Since the data is confined to 2020 admissions, the large surge in admissions which occurred at the end of 2020 and continued into 2021 is not fully captured. To capture the full picture of admissions due to the COVID-19 pandemic a study incorporating all of 2020 and 2021 data, and perhaps data beyond 2021, will be required.

- B97.2 *Coronavirus* as the cause of diseases classified to other chapters to identify the infectious agent or B34.2 *Coronavirus infection, unspecified site*

and either of the following two codes:

- U07.1 *Emergency use of U07.1 (COVID-19, virus identified)* assigned when COVID-19 has been documented as confirmed by laboratory testing
- U07.2 *Emergency use of U07.2 (COVID-19, virus not identified)* assigned when COVID-19 has been documented as clinically diagnosed COVID-19, including evidence supported by radiological imaging (i.e. where a clinical determination of COVID-19 is made but laboratory testing is inconclusive, not available or unspecified).[4,5]

A.1.1.3 Differences between HIPE COVID-19 data and other COVID-19 reporting systems (HPSC and ICU Bed Information System (ICU-BIS) (NOCA))

As described in the introduction, HIPE collects all COVID-19 admissions with the specified diagnoses in all acute public hospitals in Ireland. There are other official information sources on hospital related COVID-19 data which are presented in Ireland's COVID-19 Data Hub.[6] Due to reasons outlined in this section any comparison of these data sources, which were set up for different reporting purposes, must be treated with caution. The two systems which present data similar to HIPE are outlined below:[7]

The **Computerised Infectious Disease Reporting (CIDR)** system, managed by the Health Protection Surveillance Centre contains data on confirmed COVID-19 cases. As of February 2020, COVID-19 was added to the existing list of notifiable diseases which places a statutory obligation on doctors and clinical directors of diagnostic laboratories to routinely notify the Medical Officer of Health (MOH) of new COVID-19 cases.

The **ICU Bed Information System (ICU-BIS)** data managed by the National Office for Clinical Audit (NOCA). ICU-BIS provides a real-time overview of ICU bed occupancy and bed availability nationally. Data is provided for confirmed COVID-19 admissions and the number of new admissions and discharges.

Some of the known differences between these systems and HIPE are outlined below:

- Patients: in HIPE, 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. Each episode of care with a diagnosis code of COVID-19 is recorded on HIPE and these will appear on HIPE once the patient is discharged and the episode is clinically coded.

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4 Full detail of the coding guideline issued to hospitals is available online: https://hpo.ie/hipe/clinical_coding/irish_coding_standards/ICS_22X2_Novel_Coronavirus_(Covid-19)_and_Guidance_11MAY2020.pdf

5 It is important to note that a patient may or may not have COVID-19 on admission to hospital, so COVID-19 may not be the cause of admission.

6 https://covid19ireland-geohive.hub.arcgis.com/ (date accessed: 01 September 2021)

7 Information for this section was sourced directly from NOCA and HPSC, and also on the COVID-19 Data Hub website.

  - On CIDR the variable 'Patient Type' which includes the option 'hospital inpatient' is usually captured when the patient is first interviewed or supplied by the laboratory carrying out the test. If a patient is tested in the community, this case will be classified as 'GP patient' (or 'other' category). If the patient status changes, e.g. subsequently requires hospitalisation, even if they are tested again in the hospital, the 'Patient Type' field may not be updated. They may therefore not capture these hospital admissions in their data.
  - In the ICU data if a patient is no longer COVID-19 positive (when the person no longer tests positive for COVID-19 while in ICU) the case is de-notified and removed from the admission numbers, even if the patient is still being treated in ICU.
- Coverage: HIPE collects day patient and in-patient data from all acute public hospitals.[8]
  - CIDR data on hospitalised cases are based on cases notified in all public and private hospitals.
  - Data from the ICU-BIS system Data are based on an aggregate of all public and private ICU/HDU hospitals (including surge units).
- Readmissions: If a patient is admitted with COVID-19 and discharged but then subsequently re-admitted both of those episodes of care are recorded on HIPE. This differs from CIDR as CIDR is not a system for monitoring hospital discharge activity.
- Transfers: If a patient is transferred from one acute hospital to another both of these episodes of care are recorded on HIPE, again this differs from CIDR as CIDR is not a system for monitoring hospital discharge activity.

As described above, the three reporting systems discussed serve different purposes and use different methods for sourcing/collection of data. Therefore, any comparison of these reporting systems should be exercised with caution.

[8] See Appendix I for a list of hospitals that participated in HIPE in 2020.

A.1.2 Overview of 2020 COVID-19 Admissions

Section A.1.2 provides an overview of COVID-19 admissions in 2020 by sex, age group, ICU status and survival status, admission source, discharge destination and area of residence.

A.1.2.1 Total admissions by sex, age group, ICU status and survival status

Table A 1.1 provides information on total admissions by sex, age group, ICU status and survival status. Figure A 1.1 shows total admissions and mean length of stay by age group.

- A total of 9,164 COVID-19 admissions occurred in 2020 with an average length of stay of 19.7 days.
- There was a greater proportion of male admissions (54.0 per cent) compared to females (46.0 per cent).
- Mean length of stay increased with age, ranging from 3.8 days for those under 15 years to 27.7 days for those aged 85 and over.
- Just over 12 per cent of total admissions had a stay in ICU. Admissions with an ICU stay had an average length of stay of 34.1 days compared to 17.7 days for admissions without an ICU stay.

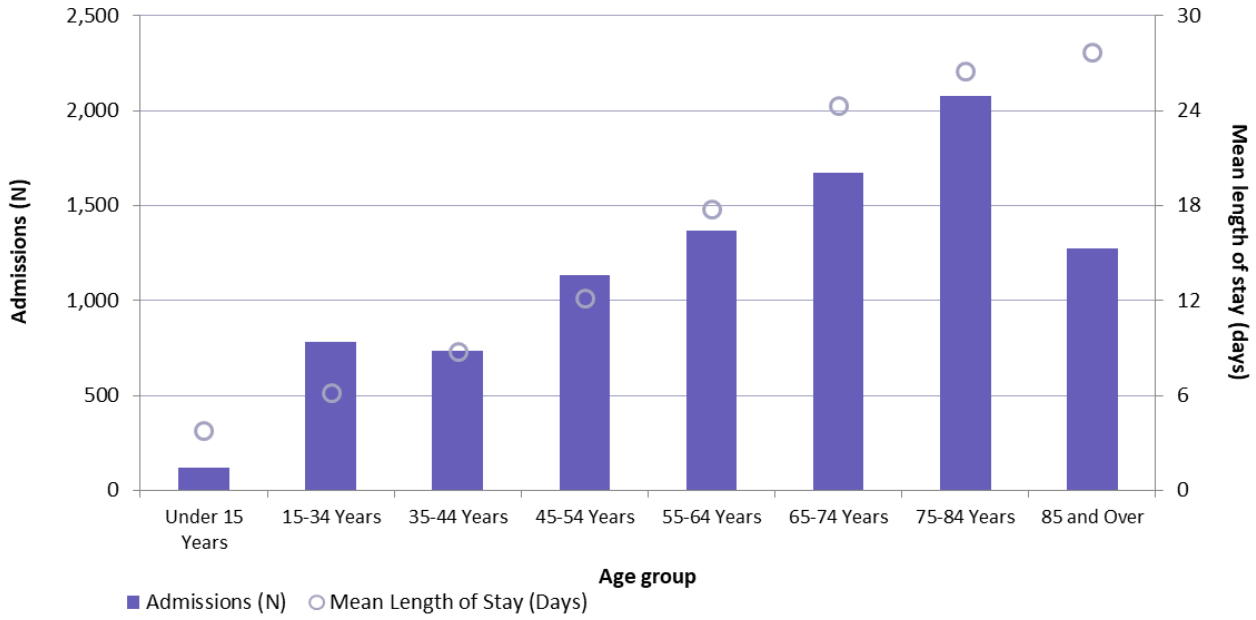
TABLE A 1.1 : COVID-19 admissions by sex, age group, ICU status and survival status (N, % and In-Patient Length of Stay)

	Total Admissions			
	N	%	Mean LOS	Median LOS
Total	**9,164**	**100**	**19.7**	**10**
Males	4,948	54.0	20.0	10
Females	4,216	46.0	19.4	9
Age Group				
Under 15 Years	119	1.3	3.8	2
15-34 Years	783	8.5	6.2	3
35-44 Years	736	8.0	8.8	4
45-54 Years	1,132	12.4	12.2	6
55-64 Years	1,370	14.9	17.8	9
65-74 Years	1,672	18.2	24.3	14
75-84 Years	2,079	22.7	26.5	16
85 and Over	1,273	13.9	27.7	19
ICU Visit Status[a]				
ICU Visit	1,129	12.3	34.1	24
No ICU Visit	8,035	87.7	17.7	8
Survival Status[b]				
Survived	7,759	84.7	19.0	9
Died	1,405	15.3	24.1	16

Notes: a ICU visit status is based on the variable ITU Days in HIPE with any value of >0 indicating an ICU stay. ITU Days identifies the number of days, or part thereof, the patient spent in an intensive care environment e.g. ICU/ITU/CCU/HDU/NITU.

b Survival Status is based on the HIPE discharge code variable. Patients who died during their episode of care have a discharge code of 6 or 7 (see Appendix II for full list of discharge codes in HIPE)

FIGURE A 1.1: Total COVID-19 admissions and mean length of stay, by age group



Note: See notes under Table A 1.1

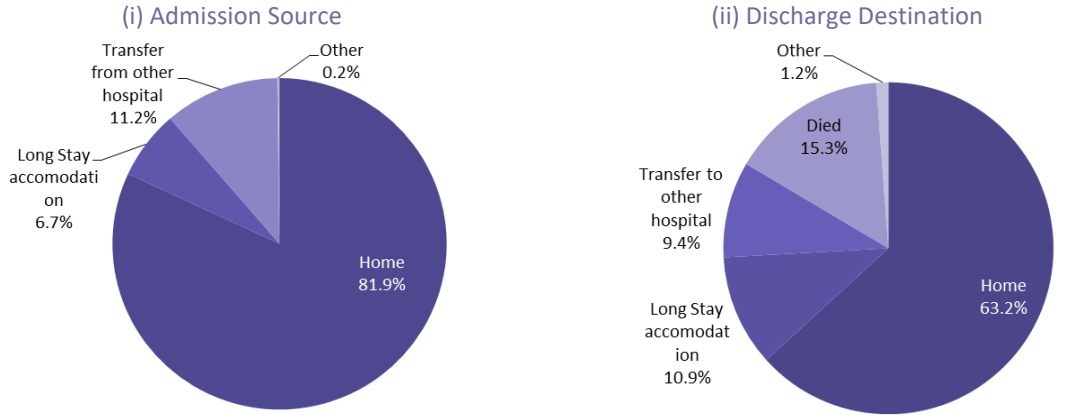
A.1.2.2 Total admissions by Admission Source and Discharge Destination

Table A 1.2 and Figures A 1.2.1 and A 1.2.2 provide information on COVID-19 admissions by Admission Source and Discharge Destination.

- Almost 82 per cent of total admissions were admitted from home (see Figure A 1.2.1). Of these admissions, over 70 per cent were discharged back home (see Table A 1.2).
- While only 6.7 per cent of total admissions were admitted from long stay accommodation, 36.2 per cent of those admitted from long stay accommodation died during their episode of care.[9]

[9] Admissions from 'Long Stay Accommodation' recorded the highest average age of all admission sources at approximately 79 years. This compares to an overall average age across all admissions of just under 64 years.

FIGURE A 1.2.1: Total COVID-19 admissions by (i) Admission Source and (ii) Discharge Destination



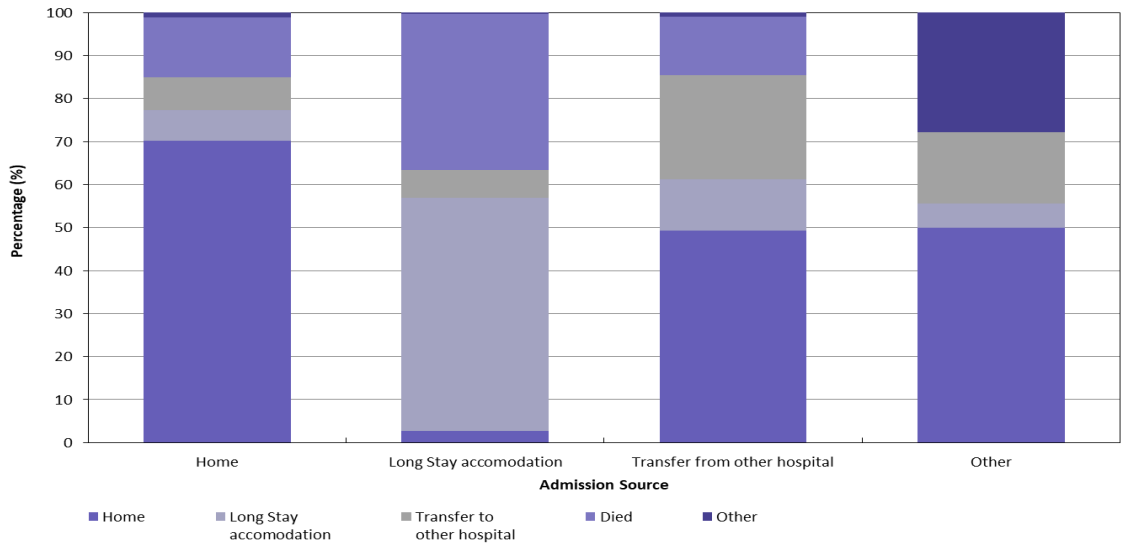
Note: Percentages are subject to rounding.

TABLE A 1.2: Total COVID-19 admissions by Admission Source and Discharge Destination

		Discharge Destination					
Admission Source		Home	Long Stay Accommodation	Transfer to other hospital	Died	Other	**Total**
Home	N	5,263	541	570	1,044	91	**7,509**
	%	70.1	7.2	7.6	13.9	1.2	**100**
Long Stay Accommodation	N	17	*	*	222	~	**614**
	%	2.8	-	-	36.2	-	**100**
Transfer from other hospital	N	506	122	246	139	10	**1,023**
	%	49.5	11.9	24.1	13.6	1.0	**100**
Other	N	9	~	~	0	~	**18**
	%	50.0	-	-	-	-	**100**
Total Admissions	**N**	**5,795**	**997**	**859**	**1,405**	**108**	**9,164**
	%	**63.2**	**10.9**	**9.4**	**15.3**	**1.2**	**100**

Notes: See Appendix IV for information on how the HIPE variable 'Admission Source' and 'Discharge Destination' were grouped for this report.
~ Denotes five or fewer discharges reported to HIPE. * Further suppression required to prevent disclosure of five or fewer discharges.
Percentage columns are subject to rounding.

FIGURE A 1.2.2: Total COVID-19 admissions: Discharge Destination by Admission Source



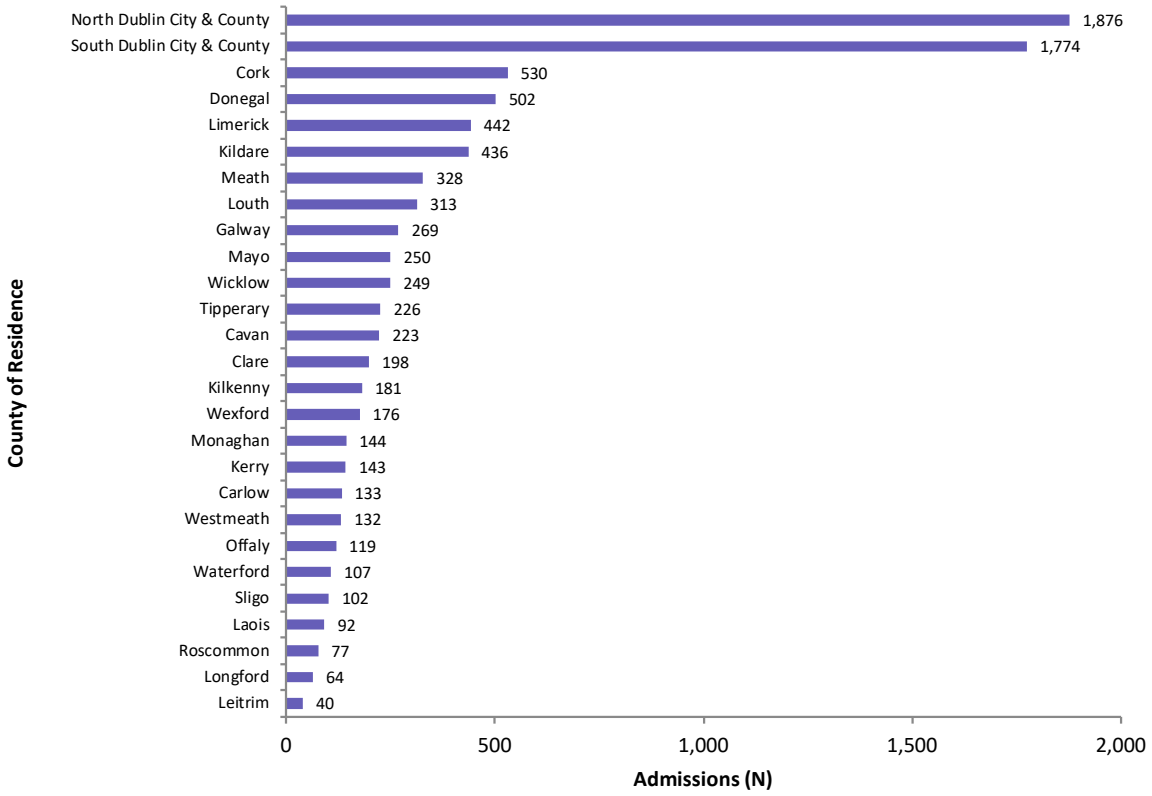
Note: See note under Table A 1.2

A.1.2.3 Total admissions by Area of Residence

Figure A 1.2.3 provides information on 2020 COVID-19 admissions by Area of Residence.

- Dublin North City and County and South City and County account for 40.0 per cent of total admissions.
- Cork accounts for 5.8 per cent of total admissions, Donegal 5.5 per cent and Limerick and Kildare both approximately 4.8 per cent.
- Leitrim had the lowest number of admissions, accounting for 0.4 per cent of total admissions.

FIGURE A 1.2.3: COVID-19 admissions by Area of Residence



Note: Admissions with area of residence of 'no fixed abode' or 'foreign' are excluded from this figure.

A.1.3 Trend Analysis of COVID-19 admissions

Section A.1.3 examines COVID-19 admissions by week of admission, Age and Length of Stay and shows the weekly percentage of admissions with an ICU visit in 2020.[10]

TABLE A 1.3 COVID-19 admissions by week of admission, length of stay, age and ICU visit status[a]

		Total Admissions				
		Length of Stay		Age		ICU visit[a]
Week of Admission	Admissions (N)	Mean	Median	Mean	Median	%
23/02/2020	~	-	-	-	-	-
01/03/2020	68	49.0	40	65.8	69	17.7
08/03/2020	165	29.8	19	63.8	70	10.3
15/03/2020	386	16.6	9	59.8	61	15.8
22/03/2020	710	15.6	8	62.4	64	14.5
29/03/2020	698	15.1	8	61.2	62	15.9
05/04/2020	663	16.2	8	65.3	68	12.1
12/04/2020	513	15.9	8	62.2	65	13.1
19/04/2020	383	13.6	8	63.2	66	10.2
26/04/2020	342	13.4	6	62.1	65	10.2
03/05/2020	262	16.6	9	67.0	73	5.7
10/05/2020	146	16.1	8	66.5	70	6.2
17/05/2020	123	15.8	7	62.7	64	7.3
24/05/2020	101	17.3	8	65.2	67	10.9
31/05/2020	53	18.2	10	64.8	65	3.8
07/06/2020	45	24.3	6	64.0	72	2.2
14/06/2020	27	10.2	6	59.6	60	7.4
21/06/2020	20	23.1	7	60.1	65	5.0
28/06/2020	23	30.2	14	49.9	53	13.0
05/07/2020	*	-	-	-	-	-
12/07/2020	19	43.6	7	57.9	66	10.5
19/07/2020	16	27.0	6	51.5	55	12.5
26/07/2020	19	38.8	6	52.0	62	10.5
02/08/2020	21	41.7	7	56.4	59	23.8
09/08/2020	26	34.8	15	63.7	69	7.7
16/08/2020	41	30.0	6	57.7	62	12.2
23/08/2020	43	32.3	12	59.1	61	9.3
30/08/2020	57	30.6	10	62.3	68	10.5
06/09/2020	65	31.0	13	62.2	66	16.9
13/09/2020	86	30.3	11	64.3	70	11.6
20/09/2020	112	25.9	10	64.0	65	13.4
27/09/2020	142	17.9	10	59.0	65	13.4
04/10/2020	215	20.4	10	63.2	67	14.0
11/10/2020	275	19.2	9	61.6	65	10.6
18/10/2020	356	17.2	8	63.4	67	9.0
25/10/2020	313	18.4	8	63.8	68	11.8
01/11/2020	268	19.3	9	63.8	69	14.6
08/11/2020	213	23.8	11	65.6	71	16.9
15/11/2020	194	25.8	13	65.9	70	11.3
22/11/2020	211	25.7	14	63.3	67	16.1
29/11/2020	213	30.4	22	69.3	73	16.4
06/12/2020	227	27.4	20	68.0	75	9.7
13/12/2020	284	27.2	22	68.6	74	14.8
20/12/2020	420	23.7	19	67.1	73	10.0
27/12/2020	581	18.1	13	66.6	71	11.4
Total	**9,164**	**19.8**	**10**	**63.8**	**68**	**12.3**

Notes: a ICU visit status is based on the variable ITU Days having a value of zero days or greater than zero days. ITU Days identifies the number of days, or part thereof, the patient spent in an intensive care environment e.g. ICU/ITU/CCU/HDU/NITU.
~ Denotes five or fewer discharges reported to HIPE.
* Further suppression required to prevent disclosure of five or fewer discharges.

[10] Week beginning 23/02/2020 consisted of one day of admissions since the data is based on admissions from 29/02/2020. Week beginning 27/12/2020 consisted of five days of admissions since the data is based on 2020 admissions.

Based on Table A 1.3, Figure A 1.3.1 provides information on total admissions and mean age by week of admission.

- Weekly admissions rose sharply from the first week, to reach a peak of 710 in March.
- From the end of May to mid-September the number of weekly admissions remained under 100. While admission fluctuated during October and November, admissions increased sharply to 581 in the last week of the year.
- Mean age ranged from 49.9 to 69.3 years for each week of admission. The average age of all COVID-19 admissions in 2020 was 63.8 years.
- Mean age appears to be lower between mid-June and mid-August. This coincides with low weekly admissions of less than 100.

FIGURE A 1.3.1: Total admissions and mean age by week of admission

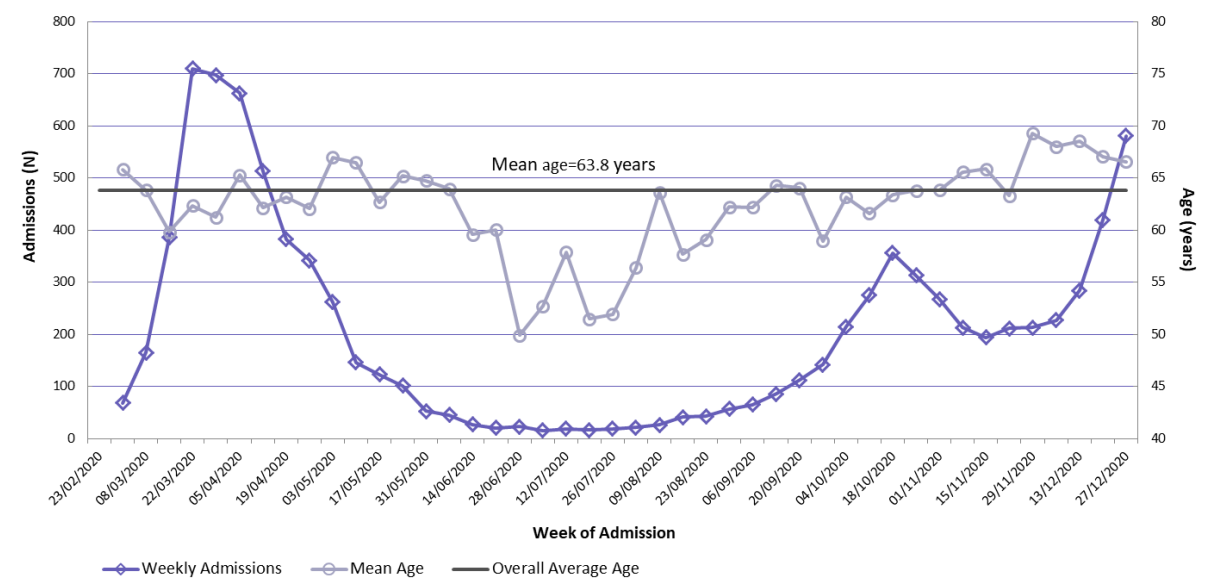
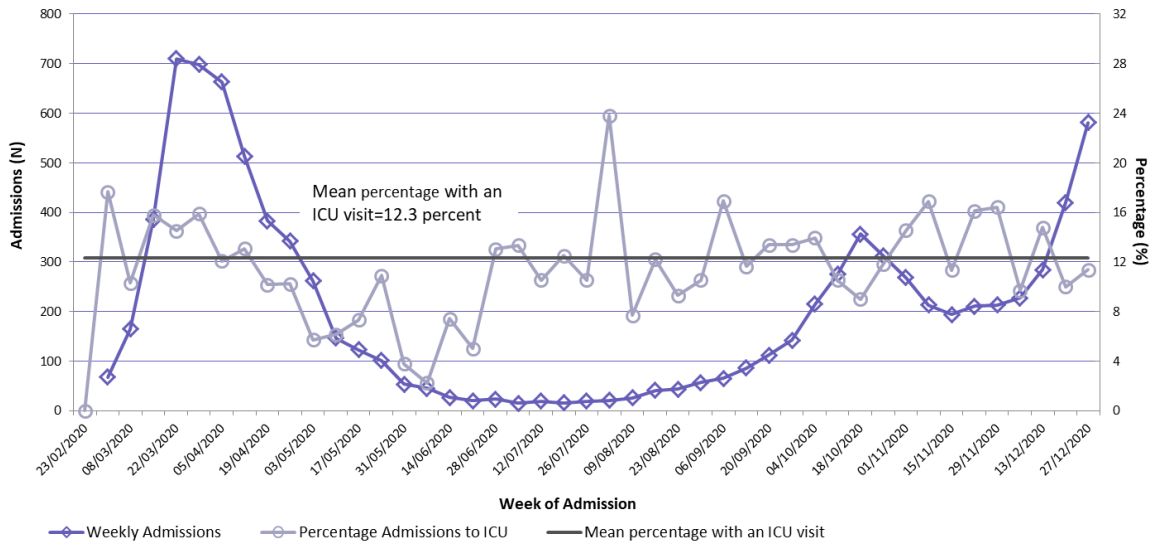


Figure A 1.3.2 provides information on the number of admissions by week of admission, and the percentage of admissions admitted in that week that had an ICU visit recorded in their episode of care.

- The proportion of admissions with an ICU visit recorded ranged from a low of 2.2 per cent in to a high of 23.8 per cent, however these outermost figures coincide with low admission numbers for these weeks.
- The overall mean percentage of admissions with an ICU visit was 12.3 per cent.

FIGURE A 1.3.2: Total admissions and percentage attending ICU by week of admission



Note: ICU visit status is based on the variable ITU Days having a value of zero days or greater than zero days. ITU Days identifies the number of days, or part thereof, the patient spent in an intensive care environment e.g. ICU/ITU/CCU/HDU/NITU.

A.1.4 Morbidity and Mortality

Section A.1.4 provides information on the morbidity and mortality of COVID-19 admissions, including mean and median length of stay, by ICU visit status, sex, age group and survival status.

TABLE A 1.4: COVID-19 admissions by ICU Visit Status (N, Length of Stay)

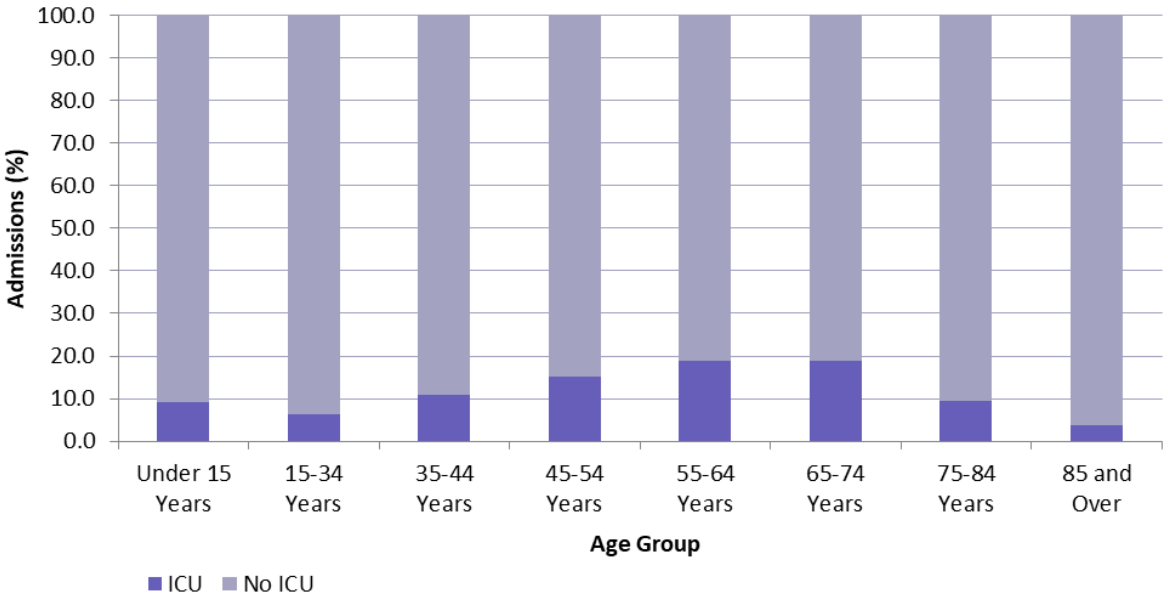
	No ICU Visit			ICU Visit					Total Admissions		
	N	Mean	Med	N	Total LOS		ICU LOS				
					Mean	Med	Mean	Med	N	Mean	Med
Total	**8,035**	**17.7**	**8**	**1,129**	**34.1**	**24**	**12.7**	**8**	**9,164**	**19.8**	**10**
Sex											
Male	4,216	17.7	9	732	33.3	22	13.4	8	4,948	20.0	10
Female	3,819	17.8	8	397	35.5	26	11.4	7	4,216	19.4	9
Age Group											
Under 15 Years	108	2.7	2	11	14.4	7	7.3	4	119	3.8	2
15-34 Years	734	5.2	2	49	21.6	11	6.7	3	783	6.2	3
35-44 Years	655	7.1	3	81	23.0	17	11.5	7	736	8.8	4
45-54 Years	962	9.2	5	170	29.6	19	12.5	9	1,132	12.2	6
55-64 Years	1,110	14.0	7	260	34.3	25	15.6	10	1,370	17.8	9
65-74 Years	1,358	21.5	12	314	36.6	27	13.2	9	1,672	24.3	14
75-84 Years	1,884	24.9	15	195	41.2	28	12.2	7	2,079	26.5	16
85 Years and Over	1,224	27.3	18	49	39.0	34	6.0	4	1,273	27.7	19
Survival Status											
Died	1,112	22.3	15	293	30.9	22	14.1	10	1,405	24.1	16
Survived	6,923	17.0	8	836	35.2	25	12.2	8	7,759	19.0	9

Note: ICU visit status is based on the variable ITU Days having a value of zero days (No ICU Visit) or greater than zero days. ITU Days identifies the number of days, or part thereof, the patient spent in an intensive care environment e.g. ICU/ITU/CCU/HDU/NITU.

Table A 1.4 and Figures A 1.4.1 and A 1.4.2 provide information on COVID-19 admissions and their lengths of stay by ICU visit status, age group, sex, and survival status.

- Admissions with an ICU visit had an average length of stay of 34.1 days for their complete episode of care, compared to an average length of stay of 17.7 days for non-ICU admissions
- The average length of an ICU stay was 12.7 days.
- For admissions with an ICU visit, those aged 85 years and over had the lowest length of ICU stay at 6.0 days.
- Almost one in five admissions in the 55–64 years age group and the 65-74 years age group had an ICU visit during their episode of care (19.0 per cent and 18.8 per cent respectively).
- The age group aged 85 years and over had the lowest percentage of admissions recording an ICU visit, at 3.8 per cent.

FIGURE A 1.4.1: Percentage of COVID-19 admissions by ICU visit status, by age group



Note: ICU visit status is based on the variable ITU Days having a value of zero days or greater than zero days. ITU Days identifies the number of days, or part thereof, the patient spent in an intensive care environment e.g. ICU/ITU/CCU/HDU/NITU.

FIGURE A 1.4.2: Admissions with an ICU visit and mean length of ICU stay, by age group

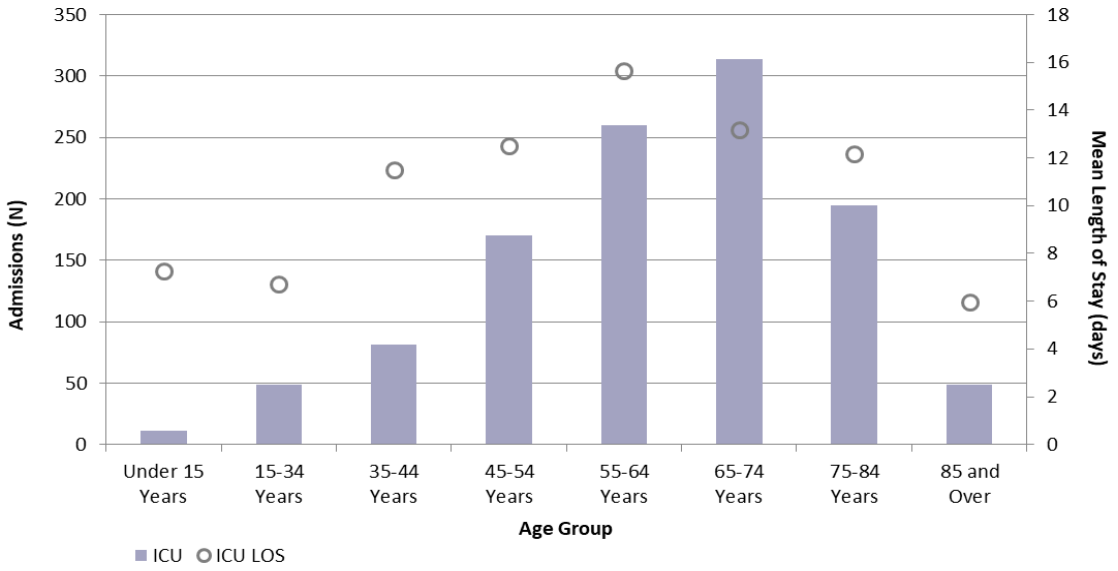
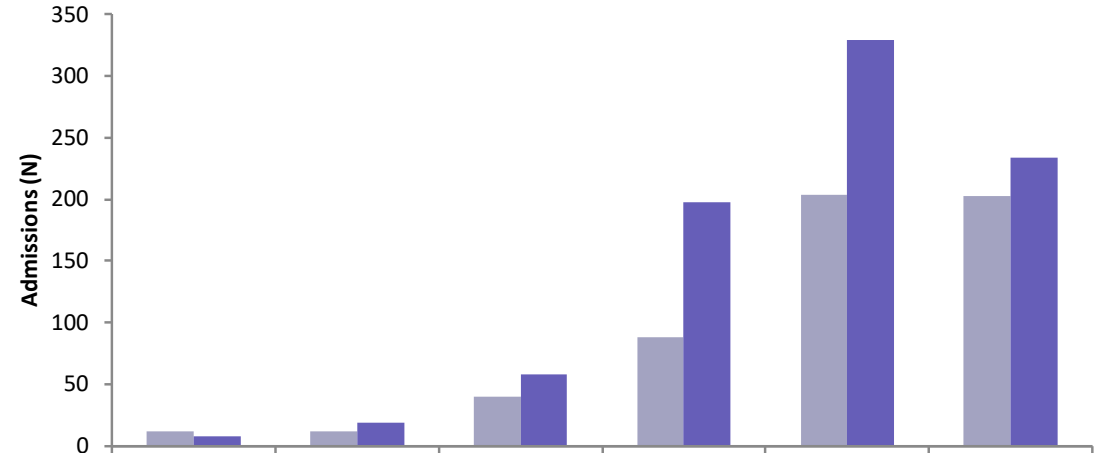


Figure A 1.4.3 provides information on admissions that had a Discharge Destination of 'Died', by sex and age group. A total of 1,405 admissions died during their episode of care, representing 15.3 per cent of total COVID-19 admissions in 2020.

- The 75–84 years age group recorded the highest number of admissions who died during their episode of care for both males and females.
- For each age group, except the 15–44 years age groups, the number of male admissions who died during their hospital stay exceeds the number of female admissions.

FIGURE A 1.4.3: Total admissions with Discharge Destination 'Died' by sex and age group



	15-44 Years	45-54 Years	55-64 Years	65-74 Years	75-84 Years	85 and Over
Female	12	12	40	88	204	203
Male	8	19	58	198	329	234

A.1.5 SUMMARY

The volume and lengths of stay for admissions recording a diagnosis of COVID-19 have had a significant impact on the ability of hospitals to perform their usual activity. The main points of this section are outlined below:

- 54 per cent of the total 9,164 COVID-19 admissions in 2020 were male, 46 per cent were female.
- COVID-19 in-patients had a longer length of stay (19.7 days) compared to the overall average in-patient length of stay reported on HIPE in 2020 (5.8 days).
- 12.3 per cent of total admissions had a stay in ICU. These admissions had an average total length of stay of 34.1 days.
- 15.3 per cent of total admissions died in hospital. Of these 60 per cent were male, 40 per cent were female.
- 81.9 per cent of COVID-19 admissions were from home. 70.1 per cent of these were discharged back home.

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 (ACCD,2017).

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 acquired complications (HACs)

Hospital acquired complications (HACs) are complications which occur during a hospital stay and for which clinical risk mitigation strategies may reduce (but not necessarily eliminate) the risk of that complication occurring. (IHPA)

A list of 16 HACs was developed by a Joint Working Party of the Australian Commission on Safety and Quality in Health Care (the Commission) and IHPA. The Commission is responsible for the ongoing curation of the HAC list to ensure it remains clinically relevant.

Hospital Acquired Diagnosis (HADx) Indicator

This indicator will allow the diagnoses acquired during the patient's episode of care that were not present prior to admission, to be identified. (Irish Coding Standards 2020)

Hospital Groups

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

Hospital In-Patient Enquiry (HIPE)

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

In-Patient

An in-patient is admitted to hospital for treatment or investigation on a planned or emergency basis.
Overnight In-Patient: These discharges are in-patient discharges who stayed at least one night in hospital.
Sameday In-Patient: These discharges are admitted as in-patients and discharged on the same day. They do not meet the criteria to be classified as a day patient. They are assigned a length of stay of 0.5 days

Irish Coding Standards

Irish Coding Standards (ICS) is a document which provides guidance and instruction on all aspects of HIPE data collection by addressing issues specific to the Irish hospital setting. It is revised regularly to reflect changing clinical practice. ICS is designed to complement the Australian Coding Standards. ICS 2020 V1.3 was used in the collection of HIPE data in 2020.

Length of stay

Length of stay refers to the time, expressed in days, between admission to and discharge from hospital. For day patients and same day in-patients where the dates of admission and discharge are the same, length of stay is set equal to 0.5 days.
Mean and median lengths of stay are provided for in-patients only.
Mean length of stay is computed by dividing the number of days stayed by the number of discharges.
The median length of stay is the middle value among the ordered lengths of stay, such that half of the values for length of stay are below the median and half the values for length of stay are above the median.

Major Diagnostic Category (MDC)

The MDC is a category generally based on a single body system or aetiology that is associated with a particular medical specialty. However, records assigned to MDCs 01, 15, 18 and 21 may have principal diagnoses associated with other categories. In AR-DRG Version 8.0, there are 23 MDCs.

Medical Assessment Unit

A medical assessment unit (MAU) also referred to as an Acute Medical Assessment Unit (AMAU) or an Acute Medical Unit (AMU), is a consultant led unit that accepts direct referrals from GPs. It offers priority access to diagnostic facilities.

Maternity discharges

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

Non-delivery

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

Parity

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

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

Patient type

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

Principal diagnosis

This is the diagnosis established after study to be chiefly responsible for occasioning an episode of admitted patient care, an episode of residential care, or an attendance at the health care establishment, as represented by a code (ACCD, 2017).

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 (ACCD, 2017).

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 and procedures see Australian Consortium for Classification Development (ACCD) 2017. The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM), and Australian Classification of Health Interventions (ACHI) and Australian Coding Standards (ACS) – ICD-10-AM/ACHI/ACS (10th Ed)- Adelaide: Independent Hospital Pricing Authority (IHPA), Lane Publishing.
Further information on AR-DRG Version 8.0 can be found on the IHPA website https://www.ihpa.gov.au/publications/ar-drg-version-80 [Accessed 19th October 2021].

ABBREVIATIONS

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

Appendices

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APPENDIX I: HIPE HOSPITALS

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

Hospital Name	County	Hospital Model	Hospital Type
Ireland East Hospital Group			
St. Columcille's Hospital	Dublin	Model 2	Non-Voluntary
Mater Misericordiae University Hospital	Dublin	Model 4	Voluntary
St. Vincent's University Hospital	Dublin	Model 4	Voluntary
Cappagh National Orthopaedic Hospital	Dublin	Specialist	Voluntary
St. Michael's Hospital, Dun Laoghaire	Dublin	Model 2	Voluntary
Royal Victoria Eye and Ear Hospital, Dublin	Dublin	Specialist	Voluntary
National Maternity Hospital, Holles St, Dublin	Dublin	Maternity	Voluntary
St. Luke's General Hospital, Kilkenny	Kilkenny	Model 3	Non-Voluntary
Wexford General Hospital	Wexford	Model 3	Non-Voluntary
Midland Regional Hospital, Mullingar	Westmeath	Model 3	Non-Voluntary
Our Lady's Hospital, Navan	Meath	Model 3	Non-Voluntary
RCSI Hospital Group			
Connolly Hospital, Blanchardstown	Dublin	Model 3	Non-Voluntary
Beaumont Hospital, Dublin	Dublin	Model 4	Voluntary
Rotunda Hospital, Dublin	Dublin	Maternity	Voluntary
St. Joseph's Hospital, Raheny	Dublin	Model 2	Voluntary
Our Lady of Lourdes Hospital, Drogheda	Louth	Model 3	Non-Voluntary
Cavan General Hospital	Cavan	Model 3	Non-Voluntary
Louth County Hospital, Dundalk	Louth	Model 2	Non-Voluntary
Monaghan Hospital	Monaghan	Model 2	Non-Voluntary
Dublin Midlands Hospital Group			
Naas General Hospital	Kildare	Model 3	Non-Voluntary
St. Luke's Hospital, Rathgar[a]	Dublin	Specialist	Non-Voluntary
St. James's Hospital, Dublin	Dublin	Model 4	Voluntary
Coombe Women & Infants University Hospital	Dublin	Maternity	Voluntary
Tallaght University Hospital[b]	Dublin	Model 4	Voluntary
Midland Regional Hospital, Tullamore	Offaly	Model 3	Non-Voluntary
Midland Regional Hospital, Portlaoise	Laois	Model 3	Non-Voluntary
South/South West Hospital Group			
University Hospital Waterford	Waterford	Model 4	Non-Voluntary
Kilcreene Orthopaedic Hospital	Kilkenny	Specialist	Non-Voluntary
South Tipperary General Hospital, Clonmel	Tipperary	Model 3	Non-Voluntary
Bantry General Hospital	Cork	Model 2	Non-Voluntary
Mercy University Hospital, Cork	Cork	Model 3	Voluntary
South Infirmary Victoria University Hospital	Cork	Model 2	Voluntary
Mallow General Hospital	Cork	Model 2	Non-Voluntary
Cork University Hospital	Cork	Model 4	Non-Voluntary
University Hospital Kerry	Kerry	Model 3	Non-Voluntary

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

Hospital Name	County	Hospital Model	Hospital Type
University of Limerick Hospital Group			
University Maternity Hospital Limerick	Limerick	Maternity	Non-Voluntary
University Hospital Limerick	Limerick	Model 4	Non-Voluntary
Croom Orthopaedic Hospital, Limerick	Limerick	Specialist	Non-Voluntary
St. John's Hospital, Limerick	Limerick	Model 2	Voluntary
UL Hospitals, Ennis Hospital	Clare	Model 2	Non-Voluntary
UL Hospitals, Nenagh Hospital	Tipperary	Model 2	Non-Voluntary
Saolta Hospital Group			
Roscommon County Hospital	Roscommon	Model 2	Non-Voluntary
Portiuncula Hospital, Ballinasloe	Galway	Model 3	Non-Voluntary
Galway University Hospitals	Galway	Model 4	Non-Voluntary
Mayo University Hospital	Mayo	Model 3	Non-Voluntary
Letterkenny University Hospital	Donegal	Model 3	Non-Voluntary
Sligo University Hospital	Sligo	Model 3	Non-Voluntary
Children's Hospital Group			
Our Lady's Children's Hospital, Crumlin	Dublin	Paediatric	Voluntary
Temple Street Children's University Hospital	Dublin	Paediatric	Voluntary
Tallaght University Hospital[b]	Dublin	Paediatric	Voluntary
No group			
Peamount Hospital	Dublin	Non-Acute	Voluntary
National Rehabilitation Hospital (NRH), Dun Laoghaire	Dublin	Non-Acute	Voluntary
Incorporated Orthopaedic Hospital, Clontarf	Dublin	Non-Acute	Voluntary
St. Finbarr's Hospital	Cork	Non-Acute	Non-Voluntary

Notes: Total number of hospitals participating in 2020: 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), 10th Edition, July 2017.
	Twenty-nine additional diagnoses	Uses the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM), 10th Edition, July 2017.
	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), 10th Edition, July 2017.
	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), 10th Edition, July 2017.
	Hospital Acquired Diagnosis	Condition not present prior to admission to hospital.
Administrative Data	Patient name	Is not exported outside the hospital.
	Hospital number	
	Chart number	Is unique to hospital of discharge.
	Admission and discharge dates	
	Dates of procedures	Collected for each procedure.
	Day case indicator	
	Day ward indicator	Indicates if a day case patient was admitted to a dedicated named day ward.
	Day ward identifier	If the answer to day ward indicator is 'Yes', the day ward identifier must be entered to identify where the patient was treated.
	Type of admission	Values include elective, elective readmission, emergency, emergency readmission, maternity, or newborn.
	Waiting list indicator	Indicates if an elective admission case is funded by the National Treatment Purchase Fund (NTPF).
	Mode of emergency admission	Indicates where the patient with admission codes emergency, emergency readmission, or newborn was treated prior to being admitted to the hospital as an in-patient, or when the patient was treated only in a registered Medical Assessment Unit (MAU). Values include Emergency Department of the admitting hospital, AMAU admitted as in-patient, other, unknown, AMAU only, Local Injury Unit ASAU admitted as in-patient and ASAU only.

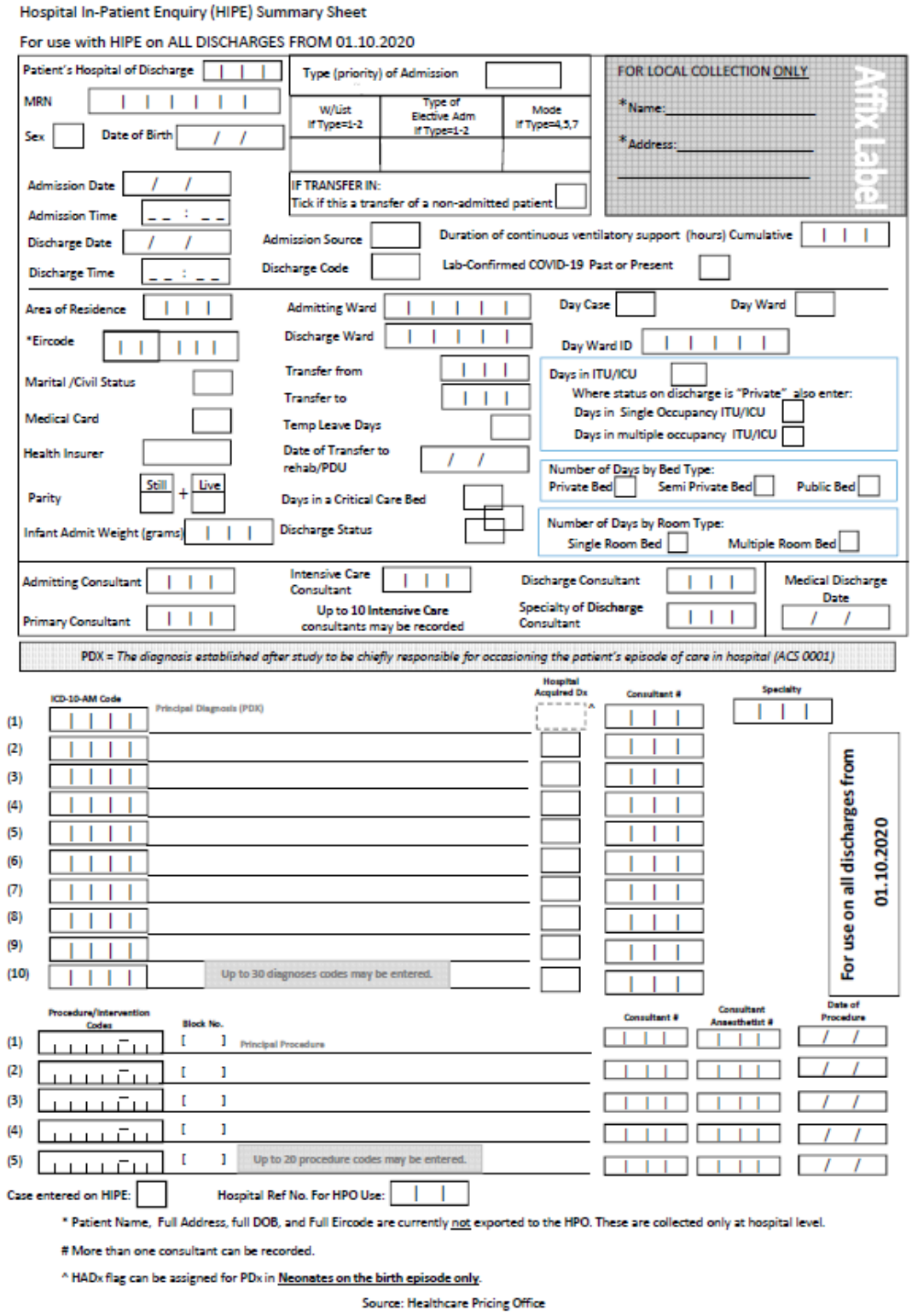
Data Collected by HIPE (contd.)

Type of Data	Parameters	Notes
	Source of admission	Values include home, transfer from nursing home/convalescent home or other long stay accommodation, transfer of admitted or non-admitted patient from hospital or COVID-19 facility in hospital code list or transfer from *any* acute hospital not specified in hospital code listing, transfer from other non-acute hospital, transfer from hospice, transfer from psychiatric hospital/unit, newborn, temporary place of residence, prison, or other.
Administrative Data (contd.)	Discharge destination	Values include self discharge, home, nursing home, convalescent home or long stay accommodation, emergency transfer to hospital in hospital code listing or transfer to *any* acute hospital not specified in hospital code listing, non-emergency transfer to hospital in hospital code listing, or COVID-19 facility, or transfer to *any* acute hospital not specified in hospital code listing, transfer to psychiatric hospital/unit, died with post-mortem, died without post-mortem, emergency transfer to non-acute hospital, non-emergency transfer to non-acute hospital, transfer to 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	Number of days patient spent in a private bed
	Days in a semi-private bed	Number of days patient spent in a semi-private bed
	Days in a public bed	Number of days patient spent in a public bed
	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.
	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 2020 Version 12.1.
Source: HIPE Data Dictionary 2020 Version 12.1, available at www.hpo.ie

APPENDIX III: HIPE DATA ENTRY FORM

FIGURE III.1 HIPE Data Entry Form, 01.10.2020[1]



Hospital In-Patient Enquiry (HIPE) Summary Sheet

For use with HIPE on ALL DISCHARGES FROM 01.10.2020

Patient's Hospital of Discharge | MRN | Sex | Date of Birth | Admission Date | Admission Time | Discharge Date | Discharge Time | Area of Residence | *Eircode | Marital /Civil Status | Medical Card | Health Insurer | Parity (Still + Live) | Infant Admit Weight (grams)

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

IF TRANSFER IN: Tick if this a transfer of a non-admitted patient

Admission Source | Discharge Code | Admitting Ward | Discharge Ward | Transfer from | Transfer to | Temp Leave Days | Date of Transfer to rehab/PDU | Days in a Critical Care Bed | Discharge Status

Duration of continuous ventilatory support (hours) Cumulative | Lab-Confirmed COVID-19 Past or Present

Day Case | Day Ward | Day Ward ID

Days in ITU/ICU

Where status on discharge is "Private" also enter:
Days in Single Occupancy ITU/ICU
Days in multiple occupancy ITU/ICU

Number of Days by Bed Type:
Private Bed | Semi Private Bed | Public Bed

Number of Days by Room Type:
Single Room Bed | Multiple Room Bed

FOR LOCAL COLLECTION ONLY
*Name:
*Address:
Affix Label

Admitting Consultant | Primary Consultant | Intensive Care Consultant | Up to 10 Intensive Care consultants may be recorded | Discharge Consultant | Specialty of Discharge Consultant | Medical Discharge Date

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

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

For use on all discharges from 01.10.2020

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

More than one consultant can be recorded.

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

Source: Healthcare Pricing Office

[1] Please note the HIPE data entry form was updated at the start of October 2020 for the collection of the Lab – Confirmed COVID-19 Past or Present variable. Prior to October, all other variables shown were collected in 2020.

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 of admitted or non-admitted patient from hospital or Covid -19 facility in hospital code list or transfer from *any* acute hospital not specified in hospital code listing'	3	'Transfer from other hospital' (3,4,6)
4	'Transfer from non-acute hospital'	4	'Other' (7, 8, 9, 0)
5	'Transfer from hospice'		
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	'Emergency transfer to hospital in hospital code listing or transfer to *any* acute hospital not specified in hospital code listing'	4	'Died' (06, 07)
04	'Non Emergency transfer to hospital in hospital code listing, or Covid-19 facility, or transfer to *any* acute hospital not specified in hospital code listing'	5	'Other' (00, 12, 13, 14, 15)
05	'Transfer to psychiatric hospital/unit'		
06	'Died with post mortem'		
07	'Died no post mortem'		
08	'Emergency transfer to non-acute hospital'		
09	'Non Emergency transfer to non-acute hospital'		
10	'Transfer to rehabilitation facility'		
11	'Hospice'		
12	'Prison'		
13	'Absconded'		
14	'Other (e.g. Foster care)'		
15	'Temporary Place of Residence'		

Note: For further information on all variables collected by HIPE see HIPE Data Dictionary 2020 Version 12.1 available at www.hpo.ie

APPENDIX V: AUSTRALIAN CODING STANDARD 0042

Australian Coding Standard 0042 Procedures normally not coded[2]

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 (e.g. elderly patients, those who live in remote locations).

1. Application of plaster
2. Bladder washout via indwelling catheter
   Exception(s): code:
   - endoscopic irrigation for removal of blood clot (36842-00 [1092])
   - endoscopically controlled hydrodilation of bladder (36827-00 [1108])
3. Cardiopulmonary resuscitation (mechanical or non-mechanical)
4. Cardiotocography (CTG) except internal fetal monitoring (eg fetal scalp

[2] Australian Consortium for Classification Development (ACCD) 2017. The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification (ICD-10-AM), and Australian Classification of Health Interventions (ACHI) and Australian Coding Standards (ACS) – ICD-10-AM/ACHI/ACS (10th Ed)- Adelaide: Independent Hospital Pricing Authority (IHPA), Lane Publishing.

electrodes) (16514-00 [1341])

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 diseases and interventions related to the sick neonate*)
   - urinary except if suprapubic

6. Doppler recordings

7. Dressings (eg autologous platelet-rich plasma (PRP) dressing), except vacuum (VAC) dressings (90686-01 [1628], 90686-00 [1627])

8. Drug treatment/pharmacotherapy/prescription of drugs (eg parental nutrition (TPN))
   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 0534 *Specific interventions related to mental health care services*, ACS 0943 *Thrombolytic therapy*, ACS 1316 *Cement spacer/beads* and ACS 1615 *Specific diseases and interventions related to the sick neonate*)

9. Electrocardiography (ECG) except patient-activated implantable cardiac event monitoring (loop recorder) (11722-00 [1854])

10. Electromyography (EMG)

11. Imaging services – all codes in ACHI Chapter 20 *Imaging services* and block [451] *Dental radiological examination and interpretation* except:
    - endoscopic ultrasound (EUS) (30688-00 [1949])
    - transoesophageal echocardiogram (TOE) (55118-00 [1942])

12. Monitoring: cardiac, electroencephalography (EEG), vascular pressure except radiographic/video EEG monitoring ≥ 24 hours (92011-00 [1825])

13. Nasogastric intubation, aspiration and feeding, except nasogastric feeding in neonates (96202-07 [1920]) (see ACS 1615 *Specific diseases and interventions related to the sick neonate*)

14. Primary suture of surgical and traumatic wounds
    Code only for traumatic wounds which are not associated with an underlying injury (see ACS 1217 *Repair of wound of skin and subcutaneous tissue*)

15. Stress test

16. 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 as outlined below 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. 2020 relates to discharges reported for 2020). It provides standard definitions for variables with the objective of ensuring that consistency and data quality are maintained.

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

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

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

VII.1 Introduction

Ireland updated to the 10th edition of ICD-10-AM/ACHI/ACS for all discharges from 1st January 2020. 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 9th and the 10th Edition of ICD-10-AM/ACHI/ACS. Extensive training on the update to 10th edition ICD-10-AM/ACHI/ACS was held for all HIPE staff throughout the country in a series of regional training workshops in 2019. Additional training on the update was also held in 2020.

A summary of the changes from the 8th edition to the 10th edition are outlined below.

- Number of codes in 10th Edition

  Number of valid disease codes: 16,953
  Number of ACHI Codes: 6,248

- Number of codes added and removed

Code Set	Added	Removed
Diagnosis from 8th to 10th	363	78
Procedures from 8th to 10th	178	317

- Number of Australian Coding Standards added and deleted

  17 New ACS
  36 Deleted ACS

The following lists include the areas in the classification and coding standards where the main changes occurred with some detail provided for illustration. For example, in 10th edition there were major changes to the coding of Obstetrics in terms of diagnosis codes, procedure codes and coding guidelines; also changes to the coding guidelines for Rehabilitation will impact the sequencing of codes. This is not an exhaustive list and if further details are required, these are available on application to the HPO.

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

ICD-10-AM Diagnoses

- Obstetrics
    - There were extensive changes to the coding of diagnoses in Obstetrics.
    - Examples of changes:
        - The term *complicating pregnancy* has been replaced by *in pregnancy* particularly for conditions not exclusive to the pregnant state—that is, non-obstetric conditions.
    - Many of the changes provide clarification for clinical coders.
        - Example: *O24.0 Pre-existing diabetes mellitus, type 1, in pregnancy* now contains an instructional note; *code also diabetes mellitus (E10.-)*. Therefore, an appropriate code from E10 *Type 1 diabetes mellitus* must be assigned with O24.0 *Pre-existing diabetes mellitus, Type 1, in pregnancy* to indicate the severity of the type 1 diabetes, including E10.9 *Type 1 diabetes mellitus without complication* if the pregnant patient does not have a diabetes complication.
    - Removal of *Excludes* notes that support single condition coding rather than multiple condition coding.
    - Some four character codes have been removed and there is addition of a *Code also* instruction at the 3-character code.
        - Example: O10 *Pre-existing hypertension in pregnancy, childbirth and the puerperium* is now a standalone code and is followed by an instructional note; *Code also specific type of hypertension* (I10 – I15), *if known*.
- Procedural complications
    - There are 160 new codes added throughout the classification for the coding of procedural complications in addition to amendments in existing codes and code titles and changes in the terminology.
- Sepsis
- Cystic fibrosis
- Chronic pain
- Pressure injuries
- Rehabilitation
    - ACS 2104 Rehabilitation
        - Amended sequencing of rehabilitation to additional diagnosis position
        - Z50.9 *Care involving use of rehabilitation procedure, unspecified* should never be assigned as a principal diagnosis. For admitted episodes of rehabilitation care, the principal diagnosis should reflect the underlying condition requiring rehabilitation (see ACS 0001 *Principal diagnosis*).
- Same day endoscopies
- Allergen Challenges

ACHI Procedures

- Ophthalmology interventions
    - Extensive revision of codes and code titles for ophthalmology procedures
        - Codes with similar procedural concepts have been combined into a single code
        - Certain codes have been deleted as the procedural concepts are already present in other codes or due to the low volume of assignment of the codes
        - Addition or amendment of *Instructional* notes
        - Deletion of old terminology e.g. "magnetic" vs "nonmagnetic"
        - Amendment of code titles for consistency within the classification
        - Review of cataract procedure codes in blocks [193] to [201] revealed that the codes were overly granular with many overlapping concepts
            - Coding of cataract procedures will now require a code from block [200] *Extraction of crystalline lens* to specify the type of lens extraction **and** assignment of a code from block [193] *Insertion of intraocular prosthesis* to specify the lens insertion

- Obstetrics
    - Block 1336 *Spontaneous vertex delivery*: Previously this code was not required for all spontaneous vertex deliveries as the delivery was assumed to be normal when there is an absence of procedure codes for interventions such as Caesarean Section etc. This has been updated and this code is now required for all spontaneous vertex deliveries.
    - Caesarean Section: Change in guidance on when to assign emergency and elective caesarean section codes. Note added at block 1340 to state that assignment of emergency or elective caesarean section is based on documentation of these terms in the clinical record.
- Cardiovascular interventions
- Ventilatory support
- Respiratory interventions e.g. bronchoscopy

Australian Coding Standards (ACS)

- Revision of conventions e.g. *code also* notes
- ACS 0042 *Procedures normally not coded*
- ACS 0002 *Additional Diagnoses*
- ACS 0943 *Thrombolytic Therapy*
- Obstetrics:
    - 3 new Australian Coding Standards
        - ACS 1500 *Diagnosis sequencing in delivery episodes of care*

        - ACS 1505 *Delivery and assisted delivery codes*
            - Provides guidelines regarding the assignment of ACHI delivery (or other) intervention codes with O80-O84 *Delivery*
            - This standard requires a corresponding ACHI code to be assigned for all episodes of delivery.
        - ACS 1552 *Premature rupture of membranes, labour delayed by therapy*
    - 15 Australian Coding Standards have been deleted
        - The guidelines are now included within the classification or within the general Australian Coding Standards.
    - 4 Australian Coding Standards have undergone major changes
        - ACS 1506 *Fetal presentation, disproportion and abnormality of maternal pelvic organs*
        - ACS 1511 *Termination of pregnancy*
        - ACS 1521 *Conditions and injuries in pregnancy*
        - ACS 1548 *Puerperal/Postpartum condition or complication*

- ACS 1904 Procedural Complications
    - Extensive revision of coding guidance in ACS 1904 Procedural complications including:
        - Clarification on qualifying terms
        - Intraoperative/postoperative medical conditions
            - Causal relationship must be clearly documented
            - Examples of common conditions listed
        - Routine postoperative care
            - Care beyond routine
        - New flow chart
        - 29 coding examples

Irish Coding Standards (ICS 2020 V1)

Five new Irish Coding Standards:

- ICS 0003 *Supplementary codes for chronic conditions* – supplementary codes for chronic conditions will not be collected in Ireland.
- ICS 0049 *Disease codes that must never be assigned* – code R65.0 SIRS of infectious origin without acute organ failure can be assigned in Ireland in accordance with ICS 0110 SIRS, Sepsis, Severe Sepsis and Septic Shock.
- ICS 0110 *SIRS, Sepsis, Severe Sepsis and Septic Shock* provides guidance on the coding of SIRS in Ireland in 10th edition.
- ICS 2116 *Palliative Care* – palliative care has been moved to Chapter 21 in 10th edition and also the content of the standard has changed. Palliative care can only be coded when there is documented evidence that the patient has been provided with palliative care.

- ICS 22X1 *Vaping Related Disorder* – advice issued by the WHO/IHPA instructs that code U07.0 *Emergency Use of U07.0* be used when there is documentation of vaping related disorders.
- Additionally, 3 Irish coding standards were updated and 4 were deleted.

COVID-19

ICD-10-AM diagnosis codes were introduced during 2020 following instruction from the WHO and IHPA. Initially code U07.1 *Emergency use of U07.1 (COVID-19 Virus identified)* was introduced to capture cases with laboratory confirmed COVID-19. The codes and associated guidance for capturing COVID-19 data expanded throughout the year.

The following resources relating to COVID-19 are available in the 2021 Irish Coding Standards (available at www.hpo.ie).

- ICS 22X2 Novel Coronavirus (COVID-19)
- Supplementary Guidance for classifying COVID-19
- HPO Coding Advisory: Unspecified pneumonia in COVID-19 cases
- Guidelines for Administrative Data: XII. Laboratory Confirmed COVID 19 Past or Present – Flag

The following resources relating to COVID-19 are also available.

- HPO's quarterly newsletter: Coding Notes – see articles in Coding Notes on COVID-19 (available at www.hpo.ie)
- Independent Hospital Pricing Authority (IHPA) COVID-19 Guidance (available at https://www.ihpa.gov.au/what-we-do/how-to-classify-covid-19)
- WHO classification of COVID-19 https://www.who.int/standards/classifications/classification-of-diseases/emergency-use-icd-codes-for-covid-19-disease-outbreak

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

VIII.1 Introduction

Ireland updated to Version 8.0 of the Australian Refined Diagnosis Related Group (AR-DRG) classification system in 2015.[3] 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.[4] 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

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

[4] Further information on AR-DRG Version 8.0 can be found on the IHPA website https://www.ihpa.gov.au/publications/ar-drg-version-80 [Accessed 19th October 2021].

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.[5] 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*

[5] 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]

ACTIVITY IN ACUTE PUBLIC HOSPITALS IN IRELAND – ANNUAL REPORT 2020

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