

# Publication Report



## Annual Acute Hospital Activity and NHS Beds Information in Scotland

Year ending 31 March 2015

Publication date – 22 December 2015

**Revised – 24 May 2016**



## Contents - refresh

Annual Acute Hospital Activity .....	1
and NHS Beds Information in Scotland .....	1
Year ending 31 March 2015 .....	1
Publication date – 22 December 2015.....	1
Introduction .....	3
Points to Note - Revised .....	3
Key points - Revised .....	6
Outpatients and inpatients/day cases - Revised .....	6
Bed statistics.....	6
Operations .....	6
Children.....	6
Emergency admissions.....	6
Results and commentary .....	7
1. Summary of hospital activity and bed provision.....	7
1.1 Historic and recent trends in outpatient, inpatient and day case activity .....	7
1.1.1 Outpatient Attendances for All Specialties - Revised .....	8
1.1.2 Inpatients & Day Case Activity .....	9
1.2 NHS Hospital Beds Statistics – Acute Clinical Specialties .....	11
1.2.1 Historic and recent trends in NHS bed statistics .....	11
2. Detailed examination of hospital data.....	12
2.1 All ages .....	12
2.1.1 Information about specialties .....	13
2.1.2 Information about diagnoses.....	13
2.1.3 Information about procedures .....	17
2.1.4 Emergency admissions.....	17
2.2 Children and young people (aged 0 to 18 years) .....	19
2.2.1 Inpatient and day case admissions for children and young people .....	19
2.2.2 Health conditions diagnosed in children and young people admitted to hospital .....	19
2.2.3 Procedures performed for children and young people admitted to hospital ....	20
2.3 Older people .....	20
2.3.1 Emergency admissions and readmissions in older people .....	20
3 Scottish Government Performance (HEAT) targets.....	21

Glossary.....	23
List of Tables.....	26
Contact.....	28
Further Information.....	28
NHS Performs.....	28
Rate this publication.....	28
Appendix.....	29
A1 – Background Information.....	29
Data sources.....	29
Key definitions.....	29
Estimations / provisional data.....	30
Outpatient.....	30
Revisions - Revised.....	32
Data Quality.....	33
A2 – Publication Metadata (including revisions details).....	35
A3 – Early Access details (including Pre-Release Access).....	38
A4 – ISD and Official Statistics.....	39

## Introduction

Scottish NHS hospitals provide a wide range of specialist care and treatment for patients. Typically, services offered in NHS secondary care settings (usually in an acute, general or community hospital) are diverse. They include: consultation with specialist clinicians (consultants, nurses, dieticians, physiotherapists and a wide range of other professionals); emergency treatment following transfer from emergency departments; routine, complex and life saving surgery; specialist diagnostic procedures; and close observation and short-term care of patients.

This publication summarises information on different aspects of hospital care, sourced from hospital administrative systems across Scotland. The release includes detailed annual information on inpatient, day case and outpatient activity, medical diagnoses, surgical procedures and operations, emergency hospital admissions and childhood hospital activity for the year ending March 2015.

As with previous publications, this report also summarises high level activity and trends in Scotland's hospitals, bed statistics and information on [Scottish Government Performance Targets](#) (HEAT targets).

It should be noted that there is some information which remains affected by the implementation of the new TrakCare patient management system (PMS) for some of the NHS Boards. ISD has clearly identified statistics which are affected by the ongoing data issues. The main issues are also detailed within the [data issues and completeness document](#) which accompanies this publication with additional information included within the [background section](#) of this report

Note that the term 'Acute Hospital Care' in the context of national data sources excludes clinical specialties covering obstetric, psychiatric and long stay care services. National information for these services is available elsewhere on the ISD website.

## Points to Note - Revised

### Revisions to the December 2015 Annual Release

Errors were found in four tables and along with an update to the Summary and Report all errors have now been corrected.

The tables concerned are:

- 1) The Emergency admissions table, which had an error in the lookups for East Renfrewshire and Fife Local Authorities
- 2) The Childhood Admissions Summary table, which had an error in the all Scottish Residents and Other /Out with Scotland lookups in the Admissions tab
- 3) The Summary Inpatient and Day Case table, which had an error in the patient type lookup in the Treatment tab (number 4)
- 4) The Annual Trend in Outpatient Activity table, in which calculations errors were found for the Did Not Attend (DNA) rate.

## Estimations / provisional data

It should be noted that outpatient, inpatient, day case and beds figures may include an element of estimation for any incomplete or outstanding data submissions. Therefore, data for the latest time period should be treated as provisional as subsequent data submissions could be lower or higher than the estimated values. The data tables which accompany this report identify statistics where estimation has been used. Specific issues are as follows:

### Outpatient – **Table Revised**

- There are occasions when some NHS Boards are not able to submit ISD(S)1 outpatients data to ISD. Where possible, data gaps have been filled using SMR00. Please note that SMR00 data are provisional and may be revised in future publications, in particular for most recent quarters.
- In areas where it has not been possible to use SMR00 as an alternative data source, data have been estimated using the last complete data submission.
- Recently NHS Highland has experienced difficulties in submitting their data, as a result Sep-10 data were used as an estimate. Further details can be found in the 'outpatients estimates' sheet of the following table [Annual Trends in Outpatient Activity](#)
- New, return and total attendances for NHS Lanarkshire and NHS Grampian have been replaced by SMR00 data to be in line with the December 2015 quarterly release.

## Beds

### NHS Grampian

- This publication contains bed statistics submitted by NHS Grampian from their local system. Between March 2011 and June 2014, NHS Grampian was unable to submit beds statistics to ISD due to system implementation problems.
- After exploring several methods trying to tie up ISD(S)1 data with SMR01 data for bed days, all of which proved unsuccessful, we have taken a very simple approach to estimate the numbers of available beds for All Acute Specialties, All Acute Surgical combined and All Acute Medical combined for Grampian to cover the period December 2010 – June 2014.
- For these three groups of specialty codes, we fitted straight lines joining up the last and first known data points for each of the four quarters. For example, we joined up September 2010 with September 2014 to estimate the same quarter in intervening years (i.e. this line provided estimates for September 2011, September 2012 and September 2013).
- We then replicated this for the other three quarters (i.e. December 2009 with December 2014 to estimate the December figures; March 2010 with March 2015 to estimate the March figures; and June 2010 with June 2015 to estimate the June figures).
- We used this method to maintain the known seasonality effects through the year. We then averaged across the four quarters to provide estimates for annual data.
- However, for all other individual specialties (and all specialties combined) we have suppressed the figures for the period December 2010 – June 2014 for Grampian because we have not estimated these missing data.

### NHS Highland

- Similarly NHS Highland has been unable to submit complete data to ISD since quarter ending March 2014. As a result NHS Highland data have been suppressed for quarters ending March 2014 to September 2015. NHS Highland is working with Data

Management to try and resolve data submission issues. They have recently undertaken a bed audit which will help to identify and address any outstanding issues with the ISD(S)1 hospital beds data extract. Further information about this can be found in the [data issues and completeness document](#) which accompanies this report.

- We are still suppressing data for Mar 2014 onwards because we have not yet received enough known data to attempt to fill in the gap.

## Key points - Revised

### Outpatients and inpatients/day cases - Revised

- There were around 4.46 million outpatient attendances for all specialties at consultant clinics in 2014/15 in Scotland. This is similar to the numbers in previous years.
- Around a third of the outpatient attendances in 2014/15 were new appointments and these have increased by nearly 10% from 1.34 million in 2005/06 in all specialties.
- The percentage of new outpatient who did not attend their appointment (10.1%) is back to being very similar to the level it was in 2005/06 (10.3%).
- There were around 1.57 million hospital discharges from acute specialties in 2014/15. This is an increase of nearly 2% since 2013/14, and of 23% since 2005/06, when there were 1.28 million hospital discharges ( inpatients and day cases).
- Around 570,000 emergency inpatient discharges were reported in 2014/15, an increase of around 18% from around 480,000 in 2005/06, and of around 1% since 2013/14.

### Bed statistics

- The average number of available staffed beds in acute specialties for Scotland excluding Grampian and Highland NHS Boards has remained at around 13,700 since 2011/12, although there was a 6% reduction in the numbers from 14,500 in 2005/06. A long term trend in these figures is not available for Scotland due to problems of submission from their patient admission systems.

### Operations

- Nearly 1.2 million main operations were carried out in Scotland in 2014/15, with around 648,000 of them carried out as inpatient and day cases.

### Children

- Around 88,400 children were admitted to hospital in 2014/15 during 128,000 stays (CIS) in all specialties in Scotland in 2014/15. The majority of admissions were as an emergency.

### Emergency admissions

- The rate of emergency bed days per 1,000 patients aged 75 and over in Scotland has reduced by 10.3% since 2009/10.

## Results and commentary

### 1. Summary of hospital activity and bed provision

Long term and recent trends in hospital activity give an overview of the volume of secondary care delivered by health boards across Scotland. Changes in annual activity over time reflect variation in levels of demand, evolving clinical practice and the effects of changing demography (e.g. ageing population). Intelligence gained from analysing activity statistics allow the health service to better plan their resources and thereby improve efficiency and patient outcomes.

It should be noted that some of the figures may include an element of estimation for any incomplete or missing data submissions. The estimation process uses previous complete data submissions where required. Any revisions are expected to be relatively small, with details given within the relevant Excel files and in the Data Completeness document.

#### 1.1 Historic and recent trends in outpatient, inpatient and day case activity

**Outpatients** are those patients who attend (outpatient attendance) a consultant or other medical clinic or have an arranged meeting with a consultant or a senior member of their team out with a clinic session. Outpatients are not admitted to a hospital and do not use a hospital bed.

**Day cases** are for episodes where a person makes a planned admission to an available staffed bed in a hospital for clinical care, and requires the use of a bed (or trolley in lieu of a bed) but do not spend the night in that bed.

**Inpatients** are people who have been admitted to an available staffed bed in a hospital and who either remain overnight or are expected to remain overnight but are discharged earlier.

**Emergency inpatient** admissions occur when, for clinical reasons, a patient needs to be seen at the earliest possible time after seeing a doctor

**Elective inpatient** admissions are planned and agreed with the patient in advance.

**Transfers** occur when a patient needs to be moved to another doctor, clinical specialty, facility within the hospital or another hospital altogether to receive the specialist care they require after they have been admitted to hospital. The majority of these transfers are planned (elective) transfers.

An inpatient can be admitted as an emergency, an elective or as a transfer.

See Appendix 1 for further details.

**Table 1** provides a summary of the overall numbers of outpatient attendances (all specialties), day cases (acute specialties) and inpatients (acute specialties).

**Table 1: Number of outpatient attendances (all specialties), day case discharges (acute specialties) and inpatient discharges (acute specialties) Revised**

Thousands	Financial Year				
	2010/11	2011/12	2012/13	2013/14	2014/15 <sup>P</sup>
<b>All Specialties</b>					
<b>Total Outpatient Attendances</b>	4,485	4,487	4,530	4,582	4,456
<b>  New Outpatient Attendances</b>	1,447	1,448	1,460	1,480	1,475
<b>  Return Outpatient Attendances</b>	3,037	3,039	3,070	3,102	2,981
<b>All Acute Specialties</b>					
<b>  Total IP/DC Discharges</b>	1,424	1,450	1,486	1,546	1,574
<b>  Total Day Case Discharges</b>	443	454	461	457	463
<b>  Total Inpatient Discharges</b>	981	996	1,025	1,089	1,111
<b>  Total Inpatient Transfers</b>	263	270	292	342	360
<b>  Total Emergency Inpatients</b>	534	548	553	563	569
<b>  Total Elective Inpatients</b>	185	178	179	184	182

Sources: ISD(S)1 (Outpatient), SMR01 (Inpatient and day case)

p - provisional

### 1.1.1 Outpatient Attendances for All Specialties - Revised

#### **Consultant outpatient clinics - Revised**

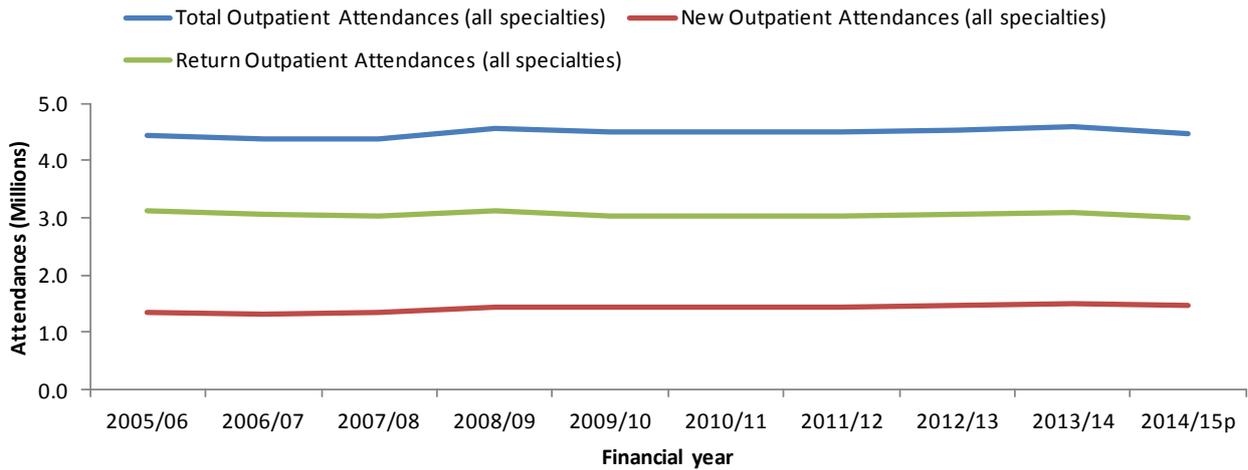
There were around 4.5 million outpatient attendances for all specialties at consultant clinics in 2014/15 in Scotland. ([Annual trends in Outpatient Activity](#)).

Around a third of the outpatient attendances in 2014/15 were new appointments (1.5 million), an increase of nearly 10% from 1.3 million in 2005/06.

10.1% of patients did not attend their new outpatient appointment in 2014/15. This figure is very similar to 2005/06 when the level of patients who did not attend was 10.3%.

The ratio of return to new outpatient attendances has reduced gradually over the last ten years to 2 return patients for each new patient in 2014/15.

**Figure 1: Number of outpatient attendances, Scotland, 2005/06-2014/15<sup>p,R</sup>**



Source: ISD(S)1, ISD Scotland

p – provisional

**R - Revision** NHS Grampian and NHS Lanarkshire data have been replaced with SMR00 for both new and return attendances.

***Nurse-led and other Allied Health Professional outpatient clinics, direct access clinics and community-based activity given by hospital-based staff***

Although some information is captured by some Boards, data from Nurse-led and AHP clinics are still considered to be developmental because of the issues relating to data completeness and quality. Scotland-wide figures are not available for either set of figures because of the missing data, and caution should be shown when making comparisons for the data which have been supplied.

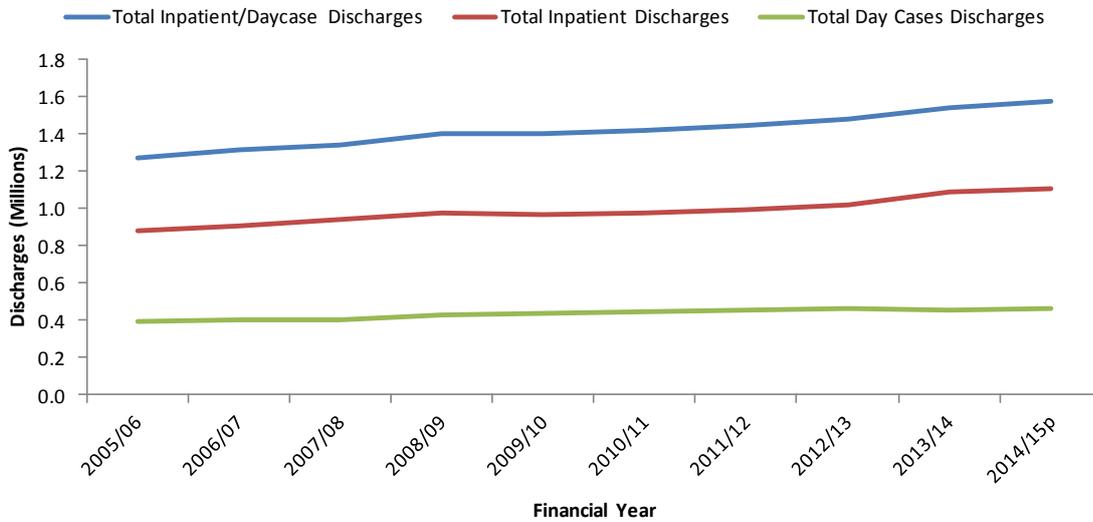
Information from the nurse-led outpatient clinics for both new and all attendances are presented in [Annual Nurse Led Outpatient Activity](#) for those boards able to supply data. The last year all Boards supplied data for appointments at AHP clinics was 2010/11, when there were around 1.9 million new attendances in Scotland. Since then, neither Ayrshire & Arran nor Western Isles NHS Boards have supplied any data ([Annual Allied Health Professional Outpatient Activity](#)). For the boards who have supplied data in 2014/15, the most frequent service used continued to be Radiography services.

Further information on all outpatient activity is available within the ISD website subtopic: [Outpatient Activity](#).

**1.1.2 Inpatients & Day Case Activity**

There were around 1.57 million hospital discharges from acute specialties in 2014/15. This is an increase of nearly 2% since 2013/14, and of 23% since 2005/06, when there were 1.28 million hospital discharges from being either an inpatient or a day case (**Figure 2**).

**Figure 2: Annual inpatient activity for all acute specialties, NHSScotland, 2005/06 - 2014/15<sup>p</sup>**

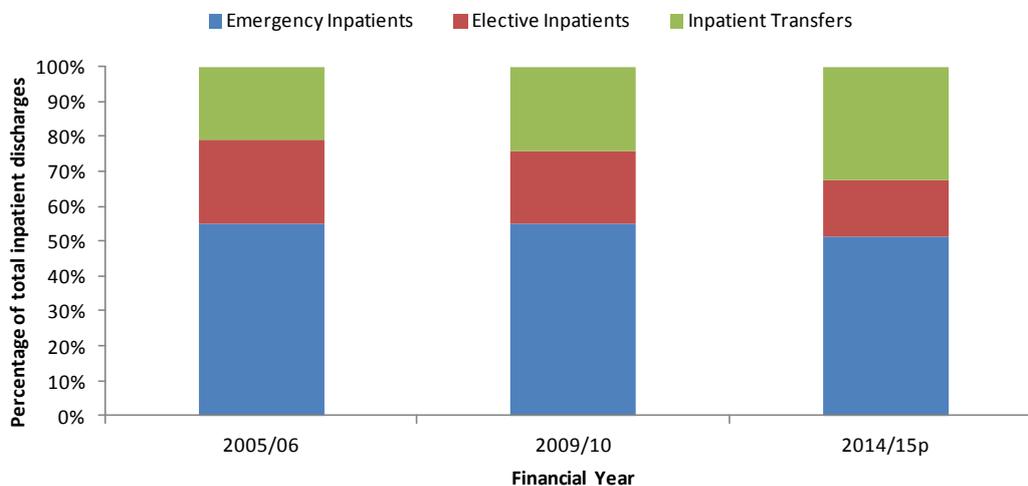


Source: SMR01, ISD Scotland  
p - provisional

Around 30% of discharges are day cases every year, and there were around 460,000 of them in 2014/15.

Of the 1.1 million inpatient hospital discharges in 2014/15, just over half of them (570,000) were emergency inpatient discharges, an increase of around 18% from 480,000 in 2005/06, and of around 1% since 2013/14. In contrast there have been around 40,000 fewer elective inpatient discharges as a result of patients transferring within the health system in 2014/15 compared to the previous year, though this is still almost double the numbers of transfers (360,000) compared with 187,000 in 2005/06 ([Annual Inpatient Activity](#)). **Figure 3** shows the change in the proportion within the inpatient discharges.

**Figure 3: Annual inpatient activity for all acute specialties, NHS Scotland, 2005/06 - 2014/15<sup>p</sup>**



Source: SMR01, ISD Scotland

p - provisional

Other information on inpatients and day cases is available at NHS Board level for patient, continuous inpatient stay and episodes in the following tables

- [Summary Inpatient and Day Case Activity Tables by NHS Board of Residence](#) for HB of residence
- [Summary Inpatient and Day Case Activity Tables by NHS Board of Treatment](#) for HB of Treatment.

### ***Length of stay in hospital***

Of the 1.1 million inpatient discharge episodes in 2014/15, the average length of stay was 4.3 days, showing a steady year-on-year decrease from 5.0 days in 2010/11. The average length of stay for inpatient routine discharge episodes has fallen from 7.0 to 6.0 days between 2010/11 and 2014/15, whilst for non-routine discharge episodes the average has reduced from 3.3 to 2.8 days over the same period.

Further information on Inpatient & Day Case hospital activity and average length of stay is available under the ISD website subtopic: [Inpatient & Day Case Activity](#).

## 1.2 NHS Hospital Beds Statistics – Acute Clinical Specialties

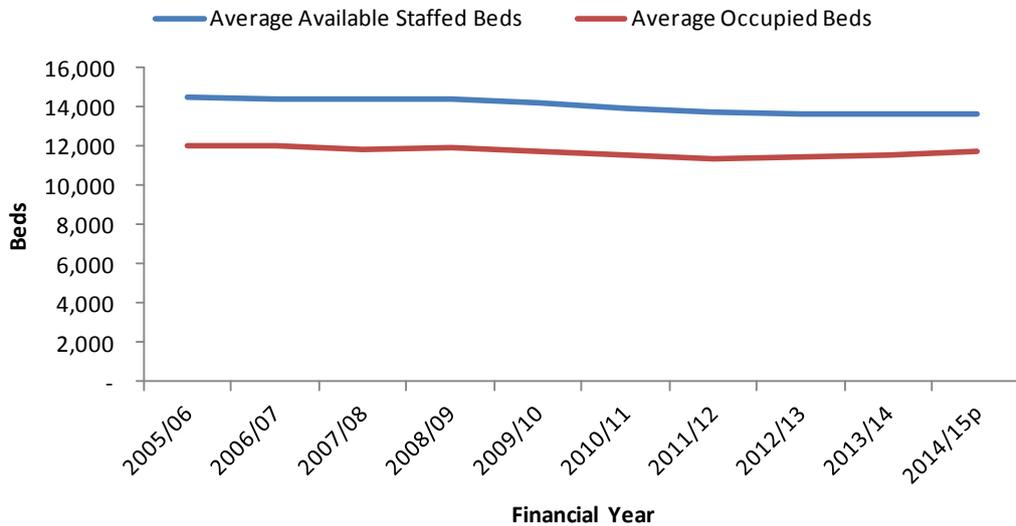
To provide an effective, safe and efficient service to patients, hospitals must balance the provision of staffed beds against anticipated demand. The main unit of measuring bed provision within this publication is an Available Staffed Bed. This is a bed which is resourced for inpatient or day case care.

### 1.2.1 Historic and recent trends in NHS bed statistics

A long term trend in these figures is not available for Scotland due to problems of submission from the patient admission systems for several NHS Boards ([data issues and completeness document](#)). The only data which can be reported for the whole time period is for Scotland excluding Grampian and Highland NHS Boards.

The average number of available staffed beds for Scotland excluding Grampian and Highland NHS Boards for all acute specialties has remained at around 13,700 since 2011/12, although there was a 6% reduction in the numbers from 14,500 in 2005/06. The corresponding occupancy rate for all acute beds was 86%, an increase of about three percentage points since 2005/06 ([Annual Trends in Available Beds](#); **Figure 4**).

**Figure 4: Annual average available staffed beds and average occupied beds for acute specialties, NHSScotland excluding NHS Grampian and NHS Highland, 2005/06-2014/15<sup>p</sup>**



Source: ISD(S)1, ISD Scotland

p - provisional

Of the 13,700 acute specialty beds in Scotland excluding Grampian and Highland NHS Boards in 2014/15, around 3,800 (28%) were acute surgical beds, with 9,900 beds for acute medical specialties. The percentage of all acute specialty beds which are acute surgical beds has fallen slightly from 33% since 2005/06.

Further information is available on the ISD website subtopic: [Beds](#) and in [Annual trends in Available Beds - NHS Board of Treatment Comparison](#). Technical information on how bed statistics are calculated can be found on the ISD data dictionary under [available staffed bed](#) and [bed complement](#).

## 2. Detailed examination of hospital data

This section presents information about specialties, as well as results on diagnoses (including long term conditions), procedures, and re-admissions for various age groups – all ages, children and young people, and older people. Information on emergency admissions by deprivation will also be presented.

### 2.1 All ages

**Continuous Inpatient Stay (CIS)** in hospital – patients’ history are created by linking together individual SMR01 hospitals episodes for each patient. When showing information by CIS the admission type (elective or emergency) is determined by the first admitting

episode. As a result transfers will generally not appear within the CIS analysis. For more information on these please see Appendix 1.

**Main diagnosis** - This item should be seen as describing the main medical (or social) condition managed/investigated during the patients stay.

**Patients** - This relates to individual patients. However, the same patient can be counted more than once, if they change subgroup (e.g. specialty, type of admission, NHS Board etc.). In these cases a patient will be counted once within each subtotal, but only once in the overall total. The same patient will also be counted for each of the financial year they were admitted in hospital, for example if a patient was admitted in 2010/11 and 2012/13 they would be counted in each of these years.

**Procedure** - If a surgical procedure is carried out in an outpatient setting the appropriate OPCS4 code must be included on the associated SMR00.

**Specialty** - A specialty is defined as a division of medicine or dentistry covering a specific area of clinical activity and identified within one of the Royal Colleges or Faculties

For more information on these please see Appendix 1.

### 2.1.1 Information about specialties

In 2014/15 in Scotland 718,000 patients were admitted for 1.22 million stays (CIS) in acute specialties. Due to patients moving between specialties and consultants etc, these covered 1.57 million hospital episodes ([Summary Inpatient and Day Case Activity Tables by NHS Board of Treatment](#)).

Of the 1.22 million stays, the most common specialties patients were admitted to were General Medicine (302,000) and General Surgery (212,000), with Trauma & orthopaedic surgery (96,000) and Urology (66,000) being the two most common specific specialties.

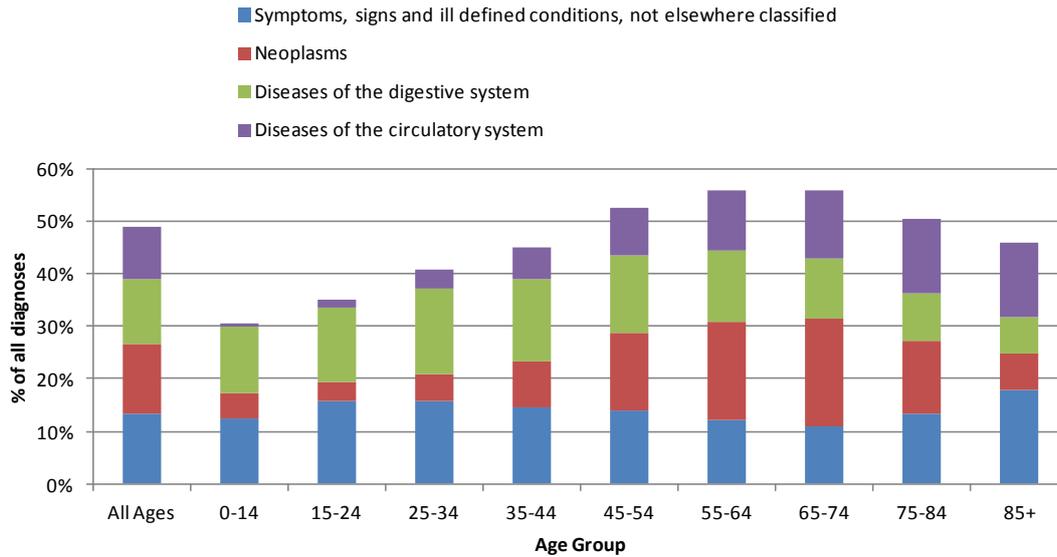
Information for both NHS Board of residence and of treatment are available ([Summary Inpatient and Day Case Activity Tables by NHS Board of Treatment](#) and [Summary Inpatient and Day Case Activity Tables by NHS Board of Residence](#)).

### 2.1.2 Information about diagnoses

#### ***Main diagnoses by age group***

The four most common main diagnoses for day case and inpatient discharges in 2014/15 were those with “Symptoms, signs & ill defined conditions, not elsewhere classified” (211,000; 14%) as the main diagnosis; “Neoplasms including cancer” (207,000; 13%); “Diseases of the Digestive System” (190,000; 12%) and “Diseases of the circulatory system” (158,000; 10%), respectively ([Diagnosis Data by NHS Board of Residence](#)). The percentages of discharges within these four diagnostic groups changes substantially by age (**Figure 5**). It should be noted, however, that 2% of admissions, including those with external causes such as accidents, falls, suicide, self-harm and pregnancy are not included in these numbers ([Diagnosis Data by NHS Board of Residence](#)).

**Figure 5: Hospital episodes by main diagnosis group, NHSScotland, 2014/15<sup>p</sup>**



Source: SMR01, ISD Scotland  
 p - provisional

The percentages of discharges within the different diagnostic groups vary markedly by age. For example, “Injuries, poisonings and other external causes” accounts for as much as 15% of total main diagnosis in young adults (15-24 years) which is higher than in the very elderly (85+ years; 12%). By contrast, “Neoplasms” accounts for less than 5% in children and young adults (0-24 years), is as high as 21% in older adults (65 to 74 years) and represents 7% in the very elderly (85+ years). For more information see the data in Figures\_and\_tables.xlsx and [Diagnosis Data by NHS Board of Residence](#). The top four main diagnoses in the different age groups are given in **Table 2**.

**Table 2: Hospital episodes by main diagnosis group, NHSScotland, 2014/15p**

		Age Group				
		All Ages	0-14	15-24	25-34	35-44
<b>Top 4 are:</b>	Symptoms (14%)	Respiratory (18%)	Symptoms (16%)	Digestive (16%)	Digestive (16%)	
	Neoplasms (13%)	Symptoms (13%)	Injuries (15%)	Symptoms (16%)	Symptoms (15%)	
	Digestive (12%)	Digestive (12%)	Digestive (14%)	Injuries (11%)	Injuries (9%)	
	Circulatory (10%)	Infectious (10%)	Respiratory (8%)	Genitourinary (8%)	Neoplasms (9%)	
<b>Missing chapters:</b>	2%	6%	9%	7%	3%	

		Age Group				
		45-54	55-64	65-74	75-84	85+
<b>Top 4 are:</b>	Digestive (15%)	Neoplasms (19%)	Neoplasms (21%)	Circulatory (14%)	Symptoms (18%)	
	Neoplasms (15%)	Digestive (14%)	Circulatory (13%)	Neoplasms (14%)	Circulatory (14%)	
	Symptoms (14%)	Symptoms (12%)	Digestive (11%)	Symptoms (13%)	Respiratory (14%)	
	Circulatory (9%)	Circulatory (12%)	Symptoms (11%)	Respiratory (12%)	Injuries (12%)	
<b>Missing chapters:</b>	0.3%	0.1%	<0.1%	<0.1%	<0.1%	

Key

- Symptoms Symptoms, signs and ill defined conditions, not elsewhere classified
- Digestive Diseases of the digestive system
- Circulatory Diseases of the circulatory system
- Respiratory Diseases of the respiratory system
- Injuries Injury, poisoning and certain other consequences of external causes
- Genitourinary Diseases of the genitourinary system
- Infectious Certain infectious and parasitic diseases

Source: SMR01, ISD Scotland

p - provisional

Diagnostic data for Local Authorities are also available in [Diagnosis Data by Local Authority](#).

Note that more reliable and detailed data for people with a neoplasm should be sourced from the Scottish Cancer Registry data. Information on cancer in Scottish people including incidence, prevalence, mortality and survival rates is available on the ISD website topic: Cancer.

**Long term conditions**

It is estimated that one in four adults over the age of 16 report some form of long term condition (LTC), health problem or disability and by the age of 65 nearly two thirds will have

developed a LTC ([Improving the Health & Wellbeing of People with Long Term Conditions in Scotland: A National Action Plan](#)). Examples of common long term conditions include diabetes mellitus, asthma and chronic obstructive pulmonary disease (COPD). Some of these people will need to be hospitalised at some point (either as an emergency or elective) as a result of their LTC.

**Table 3: Hospital episodes, bed days and average length of stay by main diagnosis for long term conditions, Scottish residents, 2010/11 - 2014/15<sup>P</sup>**

Episodes	Long Term Condition	2010/11	2011/12	2012/13	2013/14	2014/15 <sup>P</sup>
	COPD	26,705	27,792	30,372	29,914	32,222
Heart failure	11,746	12,129	12,072	13,002	13,542	
Diabetes	7,397	7,712	8,064	8,522	8,632	
Asthma	8,261	7,879	8,830	8,182	9,193	
Bed Days	Long Term Condition	2010/11	2011/12	2012/13	2013/14	2014/15 <sup>P</sup>
	COPD	125,070	132,022	137,560	125,310	128,859
Heart failure	90,199	91,871	83,462	81,718	81,349	
Diabetes	34,807	34,536	34,923	33,098	33,670	
Asthma	16,558	15,741	17,927	16,105	17,620	
Average length of stay	Long Term Condition	2010/11	2011/12	2012/13	2013/14	2014/15 <sup>P</sup>
	COPD	4.7	4.8	4.5	4.2	4.0
Heart failure	7.7	7.6	6.9	6.3	6.0	
Diabetes	4.7	4.5	4.3	3.9	3.9	
Asthma	2.0	2.0	2.0	2.0	1.9	

Source: SMR01, ISD Scotland

p - provisional

In 2014/15, the number of hospital discharges with a main diagnosis of diabetes mellitus was around 8,600, an increase of around 17% since 2010/11. The corresponding total bed days spent in hospital for these episodes actually decreased by 3% over the same period, resulting in a general decrease in the average length of stay per episode, from 4.7 to 3.9 bed days per episode. An identical pattern was seen for heart failure, with a 15% increase in the number of episodes but a 11% fall in the number of bed days, thus leading to an average length of stay per episode dropping from 7.7 to 6.0 bed days per episode (**Table 3**).

A similar conclusion was reached for COPD, with the number of hospital discharges increasing by around 21% since 2010/11 to 32,200 in 2014/15. With the corresponding total bed days for these COPD episodes increasing by only 3% over the same period, there was a general decrease in the average length of stay per episode, from 4.7 to 4.0 bed days per episode.

The findings for asthma were not as noticeable, with an 11% increase in the number of hospital discharges between 2010/11 and 2014/15, a 6% increase in the total bed days for

these asthma episodes over the same period, and a very slight decrease in the average length of stay per episode, from 2.0 to 1.9 bed days per episode.

Findings for all LTCs by Health Board and Local Authority are given in [Long Term Conditions Data by NHS Board of Residence](#) and [Long Term Conditions Data by Local Authority](#).

### 2.1.3 Information about procedures

In 2014/15 there were around 1.18 million main procedures reported as being undertaken in all settings, with around 970,000 main procedures excluding imaging, injections, infusions, x-ray. Due to inconsistent submission of data on outpatient procedures from several of the NHS boards, however, these figures are underestimations, and it is not possible to comment on the total number of procedures undertaken in the outpatient setting ([Inpatient, Day Case and Outpatient Procedures](#)).

#### ***Inpatient and day case procedures***

There were 648,000 procedures recorded on inpatient and day case records in 2014/15. Although this appears to be a 1% decrease on the number performed in 2013/14, caution should be taken with this as data from NHS Highland, NHS Lanarkshire and NHS Western Isles are known to be incomplete in 2014/15. Of the 648,000 hospital discharges, 513,000 (79%) were known to be elective admissions, with 90,000 (14%) emergency procedures, and the rest being transfers.

#### ***Day surgery***

In recent years, clinical practice has been evolving to put more emphasis on surgical procedures occurring in outpatient or day case settings (so-called day surgery). This change has been supported through recommendations of the British Association of Day Surgery (BADs) based on evidence that a wider range of elective procedures can be done safely without the need for inpatient admission and therefore overnight stays in hospital. There were 248,000 elective procedures undertaken which were included in the BADs list. Of these, only 43,000 were known to have required an overnight stay, but given the known data completeness issues with the outpatient procedure data these numbers are likely to be underestimates ([Annual Trends in BADs Procedures by NHS Board of Treatment](#)).

Further information on Inpatient, Day Case and Outpatient Procedures is available under the ISD website sub topic: [Operations/Procedures](#).

### 2.1.4 Emergency admissions

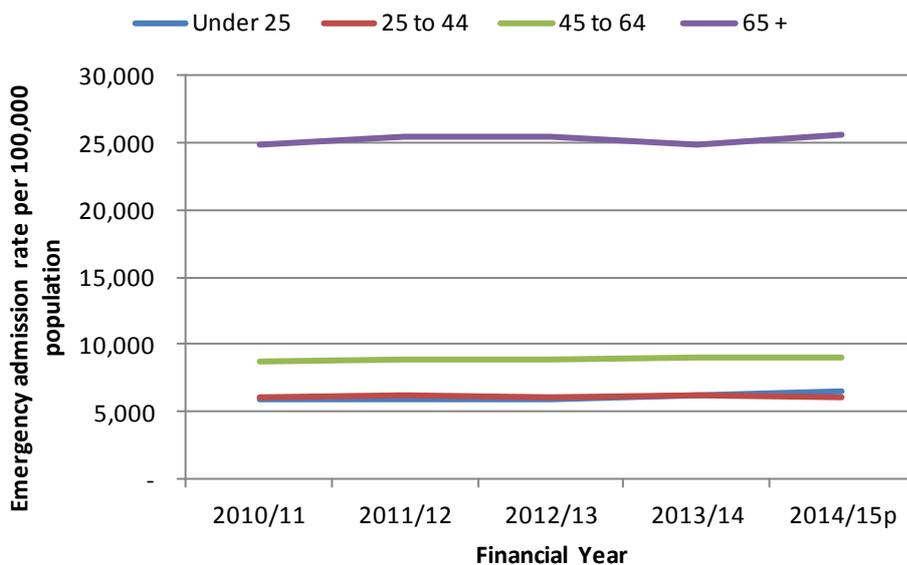
The numbers of emergency admissions for patients of all ages in 2014/15 was 558,000 (an increase of 18% since 2005/06), with a corresponding 13% increase in the rates per 100,000 from 9,200 per 100,000 in 2005/06 to 10,400 per 100,000 emergency admissions in 2014/15 ([Emergency Admissions by NHS Board of Residence](#)).

#### ***By age group***

The emergency admission rate is strongly related to patient age. With the exception of the very young (ages 0-4) who have higher rates than all age groups up to the age of 70-74,

rates rise with increasing age with patients aged 65+ having 4 times more emergency admissions per 100,000 than the under 25s or the 25-44 year olds ([Emergency Admissions by NHS Board of Residence including Deprivation/Sex Rates](#) ; **Figure 6**). The highest rate is seen in the 85+ group with 51,300 emergency admissions per 100,000 population, although the 0-4 year olds have a rate of 14,300 emergency admissions per 100,000 ([Emergency Admissions by NHS Board of Residence](#)).

**Figure 6: Emergency admission rates per 100,000 population, Scottish residents, 2010/11 - 2014/15<sup>p</sup>**



Source: SMR01, ISD Scotland

p - provisional

Mirroring the fact that the chances of having an emergency admission increases with age, so does the chance of a patient having multiple emergency admissions (again, with the exception of the 0-4 year olds). For example, patients aged 65 years and over are 10 times more likely to have 3 or more emergency admissions in 2014/15 than those aged 0-25. Again, the very young have very high rates of multiple emergency admissions, with them having similar rates of 3 or more emergency admissions as those aged 55-59 ([Multiple Emergency Admissions by NHS Board of Residence](#)).

**By deprivation**

There were also considerable differences in the emergency admission rates between the least and most deprived areas. For example, patients aged 0-25 living in the most deprived areas (SIMD1) had almost twice as many emergency admissions per 100,000 population as those in the least deprived area (SIMD5), with 8,400 per 100,000 emergency admissions compared with 4,500 (1.8 times). Similarly, those aged 65 and over had rates of 34,200 per 100,000 in the most deprived areas compared with 19,800 emergency admissions per 100,000 population in the least deprived areas (1.7 times) ([Emergency Admissions by NHS Board of Residence including Deprivation/Sex Rates](#)).

## 2.2 Children and young people (aged 0 to 18 years)

This section focuses on information relating to hospital activity for children and young people. Note that following recent customer feedback, the age groups focussed on in the childhood publication tables are adjusted to better align with paediatric care provision (namely: 0-4, 5-9, 10-15 and 16-18).

### 2.2.1 Inpatient and day case admissions for children and young people

There were 138,000 hospital discharges (episodes) for those aged 18 years and under in 2014/15, an increase of 8% from 2010/11, and a 2% increase from 2013/14. The biggest changes between 2010/11 and 2014/15 were in the 0-4 and 5-9 age groups (15% and 13% increase, respectively) whereas there was no change in the numbers for the 10-15 year olds and a 7% decrease in the number of discharge episodes in 16-18 year olds.

Of the 138,000 episodes in 2014/15, 27% were day cases, 55% were emergency inpatients and 11% were elective admissions, with the rest being transfers in 2014/15; similar to the figures in 2013/14. The 138,000 hospital discharges (episodes) were made for 88,400 children and young adults admitted during 128,000 stays (CIS) in all specialties in Scotland in 2014/15.

The most common clinical specialty that children were admitted to was paediatrics (59,700 episodes), which accounted for 43% of all hospital discharges ([Childhood Admissions Summary by NHS Board of Residence](#)).

### 2.2.2 Health conditions diagnosed in children and young people admitted to hospital

For the 75,700 emergency admissions for children and young people in 2014/15, the four most common main diagnosis groupings were:

- a. 'Diseases of the respiratory system' (23%), primarily upper and lower respiratory infections
- b. 'Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified' (19%) which covers non-specific symptoms such as abdominal pain, coughs / wheezing and fever
- c. 'Injury, poisoning and certain other consequences of external causes' (17%)
- d. 'Certain infectious and parasitic disease' (15%). This category includes tuberculosis, viral meningitis, chicken pox and measles.

In contrast, for the 14,700 elective admissions, the four most common main diagnosis groupings in 2014/15 were:

- a. 'Factors influencing health status and contact with health services (includes admissions for examination, observation, immunisation, stoma care, respite care, disrupted family/home circumstances, awaiting fostering)' (15%)
- b. 'Diseases of the respiratory system' (15%), primarily upper and lower respiratory infections
- c. 'Congenital malformations, deformations and chromosomal abnormalities' (13%)
- d. 'Diseases of the digestive system' (9%).

Further details are available in [Childhood Diagnosis](#).

### 2.2.3 Procedures performed for children and young people admitted to hospital

There were 60,300 procedures as a day case or inpatient performed on children and young adults (aged 0-18 years) in Scotland in 2014/15. Of these, 33,100 (55%) were day cases, 12,800 (21%) were emergency procedures, 12,100 (20%) were elective procedures and the rest were transfer admissions.

Procedures to the mouth were the most commonly performed procedure for elective inpatients and day cases (11,600; 26% of all the elective and day case procedures). Within this group, the majority were either 'Extraction of Tooth' or 'Excision of Tonsil'.

For the 12,800 emergency admissions, the most common procedures related to those for bones and joints (not skull or spine), with the majority of these (2,700) being 'reduction of fracture or dislocation of bone (not skull or face)' - around 21% of all emergency procedures in children and young adults. A further 18% of all emergency procedures were related to the respiratory tract ([Childhood Procedures](#)).

Information relating to other child health matters can be found on the ISD website in topic: [Child Health](#).

## 2.3 Older people

As people grow older the chance of requiring healthcare interventions from a variety of sources increases.

### 2.3.1 Emergency admissions and readmissions in older people

A number of national policies<sup>1,2</sup> specifically target improvements in the provision of integrated care (primary, secondary and community) for older people, particularly in relation to safely reducing the number and duration of unplanned admissions to hospital. It is recognised that by making such improvements patient outcomes (in terms of ongoing health, patient choice and dignity) can be significantly enhanced. Implementing and sustaining these changes represents a significant challenge to the NHS as the Scottish population of people aged 65 or more is estimated to increase by 22% by 2020 and 50% by 2030 (based on projected change from 2010<sup>3</sup>).

For patients aged 65 and over, the numbers of emergency admission have risen by 26% from 193,000 in 2005/06 to 243,000 in 2014/15. However, a large part of this is simply mirroring the increasing ageing population with the number per 100,000 population only increasing by 8% over that time period, with 25,600 emergency admissions per 100,000

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<sup>1</sup> [Improving the Health & Wellbeing of People with Long Term Conditions in Scotland: A National Action Plan](#)

<sup>2</sup> [Achieving Sustainable Quality In Scotland's Healthcare - A '20:20' Vision](#)

<sup>3</sup> [GRO\(S\) population projections 2010](#)

population in 2014/15 in the over 65s. Although the numbers of bed days for these emergency admissions has not changed since 2005/06 (still around 2.82 million per year), the numbers of bed days per 100,000 population has fallen from around 339,000 to 291,000 per 100,000 population, or an average of 3.4 to 2.9 bed days per admission in 2014/15 ([Emergency Admissions Over 65s](#)).

Section 2.1.4 has already shown that patients aged 65 and over have some of the highest rates of emergency admissions and multiple admissions.

To identify those at risk of repeated admission to acute hospitals ISD has developed the Scottish Patients at Risk of Readmission and Admission (SPARRA) algorithm. This service offered to health boards and their partners provides predictive intelligence which enables healthcare providers to target at risk patients with appropriate interventions to reduce their likelihood of being admitted to hospital. Further information can be found on the SPARRA sub-topic of ISD's [Health and Social Community Care](#) web pages.

A range of other factors not necessarily related to a patient's health influence the frequency and duration with which older people are admitted to hospital in an emergency. For example:

- Poor weather in winter can lead to an increase in the number of emergency admissions generally and particularly for older people. Health boards anticipate this increased demand by reducing planned admissions over the winter period and adjusting bed capacity. Some effects of this in terms of national statistics reporting can be seen in the quarterly [inpatient and day case activity](#) and [beds](#) information published under the Hospital Care topic.
- When an older person is judged clinically able to be discharged from hospital to a more appropriate healthcare setting (e.g. in the patient's home or in a care home) but the patient focussed healthcare plan is not yet in place this can lead to a delayed discharge and therefore an inappropriately extended hospital stay. Further information on Delayed Discharges and Care Home residency can be found under the ISD topic [Health and Social Community Care](#)

### 3 Scottish Government Performance (HEAT) targets

The HEAT performance management system sets out the targets and measures against which NHS Boards are publicly monitored and evaluated. Information on HEAT can be found on the [Scotland Performs Website](#).

One of the HEAT targets was to examine emergency admissions bed days in patients aged 75 and over with a view to reducing them (see Appendix 1 for more details).

This target was:

*Reducing the need for emergency hospital care, NHS Boards will achieve agreed reductions in emergency inpatient bed days rates for people aged 75 and over between 2009/10 and 2011/12 through improved partnership working between the acute, primary and community care sectors.*

An additional target for this measure to make further reductions in emergency bed days for patients aged 75 or more was agreed in March 2012.

*Reduce the rate of emergency inpatient bed days for people aged 75 and over per 1,000 population by at least 12% between 2009/10 and 2014/15.*

Across Scotland the rate of emergency bed days per 1,000 patients aged 75 and over reduced by 10.3% from 5,423 in 2009/10 to a 4,867 in 2014/15; thus the HEAT target has not been met ([Emergency Admissions Over 75s](#)).

[Data](#) for this measure is available for 2003/04 to 2014/15 can be found under the ISD website subtopic: [Inpatient and Day Case Activity](#).

## Glossary

Acute Hospital Care/Activity	includes services such as: consultation with specialist clinicians; emergency treatment; routine, complex and life saving surgery; specialist diagnostic procedures; close observation and short-term care of patients. 'Acute' hospital care includes activity occurring in major teaching hospitals, district general hospitals and community hospitals but excludes obstetric, psychiatric and long stay care services.
Average available staffed beds	the average daily number of beds, which are staffed and are available for the reception of inpatients (borrowed and temporary beds are included).
Average length of stay	mean stay per episode (in days) experienced by inpatients within a specialty/significant facility etc over any period of time.
Continuous inpatient stay	A continuous inpatient stay is an unbroken period of time that a patient spends as an inpatient.
Day case	this is when a patient makes a planned attendance to a specialty for clinical care, and requires the use of a bed or trolley in lieu of a bed.
Discharge	a discharge marks the end of an episode of care. Discharges include deaths and transfers to other specialties/significant facilities and hospitals as well as routine discharges home.
Elective Admission	this is when the patient has already been given a date to come to hospital for a planned procedure or treatment.
Emergency Admission	occurs when, for clinical reasons, a patient is admitted at the earliest possible time after seeing a doctor.
Episode	an SMR01 episode is generated when a patient is discharged from hospital but also when a patient is transferred between hospitals, significant facilities, specialties or to the care of a different consultant.
Incidence	this looks for the first occurrence of a diagnosis within a given time period. The time period used for published data is a 5 year incidence look back. For example, a

patient is admitted in 2004 and again in 2005 for the same diagnosis. For the purpose of counting incidence, only the hospital episode in 2004 is counted. The 2005 episode would not be counted because the previous episode occurred within 5 years.

Inpatient	this is when a patient occupies an available staffed bed in a hospital and either; remains overnight whatever the original intention or is expected to remain overnight but is discharged earlier.
Non-routine admission	are those inpatients discharged following an emergency, unplanned admission (Includes emergency transfers).
Occupancy (%)	the percentage of available staffed beds that were occupied by inpatients during the period.
Occupied Bed	an occupied bed is an available staffed bed, which is either being used to accommodate an inpatient or reserved for a patient on pass.
OPCS4	Office of Population Censuses and Surveys Classification of Surgical Operations and Procedures (4th revision).
Outpatient	is a patient who attends (outpatient attendance) a consultant or other medical clinic or has an arranged meeting with a consultant or a senior member of their team outwith a clinic session. Outpatients are categorised as new outpatients or follow-up (return) outpatients.
Patient	This relates to an individual person.
Routine Admission	occurs when a patient is admitted as planned (Includes planned transfers).
Specialty	is defined as a division of medicine or dentistry covering a specific area of clinical activity. A full listing of specialties covered by the data sets used in this publication is available on the NHSScotland Health & Social Care data dictionary <a href="#">Specialty Listing</a> web page.
Transfer	occurs when a patient needs to be moved to another doctor, clinical specialty, and facility within the hospital or another hospital altogether to receive the specialist care they require after they have been admitted to hospital.

The majority of these transfers are planned (elective) transfers.

Further details are available in the [NHS Scotland Health & Social Care data dictionary](#).

## List of Tables

Table No.	Name	Time period	File & size
1	<a href="#">Figures and tables</a>	2005/06-2014/15	Excel [53KB]
2	<a href="#">Annual Inpatient Activity</a>	2005/06-2014/15	Excel [51KB]
3	<a href="#">Annual Trends in Available Beds</a>	2005/06-2014/15	Excel [510KB]
4	<a href="#">Annual Trends in Available Beds - NHS Board of Treatment Comparison</a>	2005/06-2014/15	Excel [700KB]
5	<a href="#">Annual Trends in BADS Procedures by NHS Board of Treatment</a>	2010/11-2014/15	Excel [128KB]
6	<a href="#">Annual Trends in Outpatient Activity</a> Revised	2005/06-2014/15	Excel [1,623KB]
7	<a href="#">Average Length of Stay</a>	2010/11-2014/15	Excel [37KB]
8	<a href="#">Childhood Admissions Summary by NHS Board of Residence</a> Revised	2010/11-2014/15	Excel [7,340KB]
9	<a href="#">Childhood Diagnosis</a>	2010/11-2014/15	Excel [8,307KB]
10	<a href="#">Childhood Procedures</a>	2010/11-2014/15	Excel [7,636KB]
11	<a href="#">Annual Allied Health Professional Outpatient Activity</a>	2010/11-2014/15	Excel [49KB]
12	<a href="#">Annual Nurse Led Outpatient Activity</a>	2010/11-2014/15	Excel [26KB]
13	<a href="#">Emergency Admissions by NHS Board of Residence including Deprivation/Sex Rates</a> Revised	2010/11-2014/15	Excel [4,990KB]
14	<a href="#">Diagnosis Data by NHS Board of Residence</a>	2010/11-2014/15	Excel [30,349KB]
15	<a href="#">Diagnosis Data by Local Authority</a>	2010/11-2014/15	Excel [30,354KB]
16	<a href="#">Emergency Admissions by NHS Board of Residence</a>	2005/06-2014/15	Excel [1,046KB]
17	<a href="#">Emergency Admissions Over 75s</a>	2005/06-2014/15	Excel [1,569KB]
18	<a href="#">Inpatient, Day Case and Outpatient Procedures</a>	2010/11-2014/15	Excel [3,858KB]
19	<a href="#">Long Term Conditions Data by NHS Board of Residence</a>	2010/11-2014/15	Excel [954KB]

20	<a href="#">Long Term Conditions Data by Local Authority</a>	2010/11-2014/15	Excel [1,770KB]
21	<a href="#">Multiple Emergency Admissions by NHS Board of Residence</a>	2005/06-2014/15	Excel [3,102KB]
22	<a href="#">Emergency Admissions Over 65s</a>	2005/06-2014/15	Excel [1,313KB]
23	<a href="#">Summary Inpatient and Day Case Activity Tables by NHS Board of Residence</a>	2010/11-2014/15	Excel [5,696KB]
24	<a href="#">Summary Inpatient and Day Case Activity Tables by NHS Board of Treatment</a> Revised	2010/11-2014/15	Excel [5,965KB]

Note: to view these documents, your macro security settings will need to be set to medium. To change macro security settings using Tools, Macro, Security - set security level to Medium and re-open the report.

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## Further Information

Further information on Acute Hospital Activity can be found on the [Hospital Care](#) pages of the ISD website.

Further information can be found on the [ISD website](#)

## NHS Performs

A selection of information from this publication is included in [NHS Performs](#). NHS Performs is a website that brings together a range of information on how hospitals and NHS Boards within NHSScotland are performing.

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## Appendix

### A1 – Background Information

#### Data sources

Outpatient, inpatient and day case activity data are collected across NHSScotland and are based on nationally available information routinely drawn from hospital administrative systems across the country. The principal data sources are

- SMR00 (patient-level outpatients records) - source for outpatients DNAs for and outpatients when ISD(S)1 not available,
- SMR01 (inpatients and day cases discharges from non-obstetric and non-psychiatric specialties) - source for acute inpatients and day cases, and
- ISD(S)1 (aggregate hospital activity) - source for outpatients and bed data returns.

The data contained within this publication are predominantly based on ISD(S)1 aggregate data returns. ISD(S)1 contains summarised data by NHS Board of Treatment, hospital and specialty. This data return is in place to allow NHS Boards to report activity more frequently than that recorded on SMRs. ISD(S)1 is also the only source of bed occupancy and availability data. Where possible, missing or incomplete ISD(S)1 data have been estimated for affected NHS Boards. Estimates are based on an average of the last three submissions from the relevant NHS Boards, except for NHS Grampian.

The majority of outpatient attendances figures are sourced from ISD(S)1. In some areas where NHS Boards have been unable to submit ISD(S)1 outpatients data, SMR00 has been used as an alternative data source.

Outpatient DNA rates are obtained from SMR00.

#### Key definitions

**Outpatients** are those patients who attend (outpatient attendance) a consultant or other medical clinic or have an arranged meeting with a consultant or a senior member of their team out with a clinic session. Outpatients are not admitted to a hospital and do not use a hospital bed.

**Day cases** are for episodes where a person makes a planned admission to an available staffed bed in a hospital for clinical care, and requires the use of a bed (or trolley in lieu of a bed) but do not spend the night in that bed.

**Inpatients** are people who have been admitted to an available staffed bed in a hospital and who either remain overnight or are expected to remain overnight but are discharged earlier.

**Emergency inpatient** admissions occur when, for clinical reasons, a patient needs to be seen at the earliest possible time after seeing a doctor

**Elective inpatient** admissions are planned and agreed with the patient in advance.

**Transfers** occur when a patient needs to be moved to another doctor, clinical specialty, facility within the hospital or another hospital altogether to receive the specialist care they require after they have been admitted to hospital. The majority of these transfers are planned (elective) transfers.

An inpatient can be admitted as an emergency, an elective or as a transfer.

**Episodes:** An SMR01 episode is generated when a patient is discharged from hospital. However, an episode is also generated when a patient is transferred between hospitals, significant facilities, specialties or to the care of a different consultant.

**Continuous Inpatient Stay (CIS)** in hospital: Probability matching methods have been used to link together individual SMR01 hospitals episodes for each patient, thereby creating "linked" patient histories. Within these patient histories, SMR01 episodes are grouped according to whether they form part of a continuous spell of treatment (whether or not this involves transfer between hospitals or even Health Boards).

When showing information by CIS the admission type e.g. elective/emergency is determined by the first admitting episode. As a result transfers will generally not appear within the CIS analysis. When a transfer does appear it is often the result of a patient being transferred from another provider unit e.g. outwith Scotland. However there will also be instances where the admission type has been incorrectly coded, unfortunately it is not possible to fully ascertain what the correct admission type should have been. As a result a small proportion of transfers do appear within the various tables.

**Patients:** This relates to individual patients. However, the same patient can be counted more than once, if they change subgroup (e.g. specialty, type of admission, NHS Board etc.). In these cases a patient will be counted once within each subtotal, but only once in the overall total.

For example if a patient was admitted three times in a single year, twice as an emergency admission and once as an elective admission, they would be counted once in each sub-total of emergency and elective admissions, and once in the overall total of admission types.

The same patient will also be counted for each of the financial year they were admitted in hospital, for example if a patient was admitted in 2010/11 and 2012/13 they would be counted in each of these years.

## Estimations / provisional data

It should be noted that outpatient, inpatient, day case and beds figures may include an element of estimation for any incomplete or outstanding data submissions. Therefore, data for the latest time period should be treated as provisional as subsequent data submissions could be lower or higher than the estimated values. The data tables which accompany this report identify statistics where estimation has been used. Specific issues are as follows:

## Outpatient

- There are occasions when some NHS Boards are not able to submit ISD(S)1 outpatients data to ISD. Where possible, data gaps have been filled using SMR00. Please note that SMR00 data are provisional and it may be revised in future publications, in particular for most recent quarters.
- In areas where it has not been possible to use SMR00 as an alternative data source, data have been estimated using the last complete data submission.

- Recently NHS Highland has experienced difficulties in submitting their data, as a result Sep-10 data were used as an estimate. Further details can be found in the 'outpatients estimates' sheet of the following table [Annual Trends in Outpatient Activity](#)
- New, return and total attendances for NHS Lanarkshire and NHS Grampian have been replaced by SMR00 data to be in line with the December 2015 quarterly release.

## Beds

### NHS Grampian

- This publication contains bed statistics submitted by NHS Grampian from their local system. Between March 2011 and June 2014, NHS Grampian was unable to submit beds statistics to ISD due to system implementation problems.
- After exploring several methods trying to tie up ISD(S)1 data with SMR01 data for bed days, all of which proved unsuccessful, we have taken a very simple approach to estimate the numbers of available beds for All Acute Specialties, All Acute Surgical combined and All Acute Medical combined for Grampian to cover the period December 2010 – June 2014.
- For these three groups of specialty codes, we fitted straight lines joining up the last and first known data points for each of the four quarters. For example, we joined up September 2010 with September 2014 to estimate the same quarter in intervening years (i.e. this line provided estimates for September 2011, September 2012 and September 2013).
- We then replicated this for the other three quarters (i.e. December 2009 with December 2014 to estimate the December figures; March 2010 with March 2015 to estimate the March figures; and June 2010 with June 2015 to estimate the June figures).
- We used this method to maintain the known seasonality effects through the year. We then averaged across the four quarters to provide estimates for annual data.
- However, for all other individual specialties (and all specialties combined) we have suppressed the figures for the period December 2010 – June 2014 for Grampian because we have not estimated these missing data.

### NHS Highland

- Similarly NHS Highland has been unable to submit complete data to ISD since quarter ending March 2014. As a result NHS Highland data have been suppressed for financial year 2014/15. NHS Highland is working with Data Management to try and resolve data submission issues. They have recently undertaken a bed audit which will help to identify and address any outstanding issues with the ISD(S)1 hospital beds data extract. Further information about this can be found in the [data issues and completeness document](#) which accompanies this report.

## SMR completeness

Information on SMR data completeness can be found on the [Hospital Records Data Monitoring SMR Completeness web page](#), while information on the timeliness of SMR data submissions can be found on the [SMR Timeliness web page](#). Details on completeness can also be found within the Excel data files.

Inpatient and day case 'acute specialties' figures are sourced from SMR01 records if the levels of completeness of the SMR01 data are deemed to be fit for publication (97.5% of the expected figure). If SMR01 records are not deemed to be fit for publication then ISD(S)1 data are used. ISD(S)1 data may be adjusted to account for shortfalls/inaccuracies.

ISD are working with NHS Boards to resolve ongoing data submission issues. The majority of these issues have resulted from implementation of the new PMS TrakCare system and other existing system issues. Further details of these issues can be found [here](#) or within the [data issues and completeness document](#) which accompanies this publication.

### Revisions - Revised

Errors were found in four tables and along with an update to the Summary and Report all errors have now been corrected.

The tables concerned are:

- 1) The Emergency admissions table, which had an error in the lookups for East Renfrewshire and Fife Local Authorities
- 2) The Childhood Admissions Summary table, which had an error in the all Scottish Residents and Other /Out with Scotland lookups in the Admissions tab
- 3) The Summary Inpatient and Day Case table, which had an error in the patient type lookup in the Treatment tab (number 4)
- 4) The Annual Trend in Outpatient Activity table, in which calculations errors were found for the Did Not Attend (DNA) rate.

For tables 1-3, the impact is minimal and does not affect Scotland results.

For Table 4 the revision of the Annual Trend in Outpatient Activity table includes:

1. A revision of the **DNA rates**. The new rates are now in line with the September 2014 annual release.
  - At Scotland level the overall average change for the 10 year period is -1 for all specialties (excluding A&E) and all acute specialties compared to the December 2015 release. Most groups (Acute Medical, Acute Surgical, Non-Acute, Obstetrics and Psychiatry) are similar to this, the only noticeable difference is for Learning Disability, which shows an average difference over the 10 years of +3.4.
  - At Board level the changes to the rate range from
    - -3.1 for NHS Lanarkshire to +9.7 for the Golden Jubilee hospital for All specialties (excluding A&E)
    - -3.3 for NHS Lanarkshire to +9.7 for the Golden Jubilee hospital for the All Acute group
    - -3.9 for NHS Lanarkshire to +14.6 for the Golden Jubilee hospital for the Acute Medical group
    - -3.0 for NHS Lanarkshire to +9.9 for the Golden Jubilee hospital for the All Acute Surgical group
2. A revision of the NHS Lanarkshire, NHS Grampian and NHS Scotland **Outpatient attendance figures**. For this revision we replaced the estimates used in the past for NHS Lanarkshire using SMR00 data. This is consistent with the approach used in the December 2015 quarterly release. We also replaced ISD(S)1 data by SMR00 data for NHS Grampian following a query from NHS Grampian about trends in their

data. As a result the attendance figures for these two NHS Boards and NHS Scotland have changed as follows:

All Acute specialties - percentage	NHS Scotland	NHS Grampian	NHS Lanarkshire*
Total	-1.5 (n=60,700)	-2.6 (n=8,500)	-14.6 (n=52,200)
New	-0.4 (n=6,200)	-3.5 (n=3,700)	-1.9 (n=2,400)
Return	-2.1 (n=54,500)	-2.1 (n=4,700)	-21.5 (n=49,800)

\*The high percentage changes for NHS Lanarkshire is attributed to the use of estimated data for seven years in ISD(S)1.

Other revisions to data within this publication are planned and are due to incomplete data returns at the time of publication. All tables will be revised annually or quarterly. In general these revisions have minimal affect on the statistics. If missing/incomplete data is significant and is due to be submitted and published in subsequent releases this will be highlighted within the notes on the affected table and the [data issues and completeness document](#). Please see the [ISD revisions policy](#) for further details.

## Data Quality

The ISD Data Quality Assurance (DQA) team is responsible for evaluating and ensuring SMR datasets are accurate, consistent and comparable across time and between sources.

The DQA team's [assessments](#) web page contains details of past Data Quality Assurance Assessments of inpatient/day case data, including findings on the accuracy of submitted SMR01 data items used in our analysis (specialty, admission type, main condition, main operation etc). A data quality assurance assessment of SMR01 data items is under way throughout 2014/15 and will be reported back in 2016.

Currently it is difficult to describe and quantify accurately the level of operations and clinical procedures carried out in an outpatient setting. This is particularly relevant for monitoring how changes in clinical practice have enabled the transfer of certain clinical activities, previously requiring inpatient or day case admission, to outpatient clinics. Whilst outpatient procedure recording has improved in recent years, gaps in the completeness and coverage remain.

It should be noted that that there are apparent differences between activity figures published within the Hospital Care, Waiting Times and Finance web pages:

The figures for elective admissions and new outpatients in the Acute Hospital Activity publication are considerably higher than the equivalent information published on the [Inpatient, Day Case and Outpatient waiting times web pages](#). This is largely due to the use of different definitions for the two sets of figures.

The figures for inpatient and day case activity in the Acute Hospital Activity publication differ slightly when compared to the equivalent information released in the [Finance web pages](#). This is largely due to the use of different definitions for the two sets of figures. The Finance publication also excludes consultant-only transfers from the inpatient figures.

ISD Scotland is carrying out further detailed investigations into these differences.

For further information on the data sources and clinical coding used in this publication please refer to the following [Data Sources and Clinical Coding document](#).

## A2 – Publication Metadata (including revisions details)

Metadata Indicator	Description
Publication title	Annual Acute Hospital Activity and NHS Beds Information in Scotland, December 2015
Description	Summary of inpatient, day case and outpatient activity, including details about specialties, diagnoses, procedures; emergency admissions, long term conditions, and bed statistics for NHSScotland
Theme	Health and Social Care
Topic	Hospital Care
Format	Excel, PDF
Data source(s)	ISD(S)1 aggregated data returns, Scottish Morbidity Records SMR01 (inpatient/day case), SMR00 (outpatient)
Date that data are acquired	September 2015
Release date	22 December 2015 <b>Revised 24 May 2016</b>
Frequency	Annual  December 2015 publication includes the publication of annual Hospital Activity and Bed statistics up to March 2015. Some ongoing data completeness issues remain. See 'Completeness' section below.
Timeframe of data and timeliness	Detailed Annual Acute Hospital Activity Information up to March 2015 (Annual).
Continuity of data	Reports include annual data from 2005/06 to 2014/15.  Due to problems with the implementation of a new patient administration system, no data were successfully extracted for NHS Grampian between March 2011 and June 2014. NHS Highland has had similar problems since quarter ending March 2014. NHS Grampian's missing data were estimated and are presented in <a href="#">Table 13</a> . More details on this estimating process can be found in the <a href="#">Beds Methodology</a> section found in the Appendix. As no new data have been submitted for NHS Highland it has not been possible to apply the same estimation process.
Revisions statement	All revisions to data within this publication are planned and are due to incomplete data returns at the time of publication. All tables will be revised annually. In general these revisions have minimal effect on the statistics. If missing/incomplete data is significant and is due to be submitted and published in subsequent releases this will be highlighted within the notes on the affected table. Please see the <a href="#">ISD revisions policy</a> for further details.
Revisions relevant to this	More details on the revisions made to the December 2015 release and their impact can be found in the Revision

publication	Section of this report.
Concepts and definitions	See Hospital Care: <a href="#">Background Information</a>
Relevance and key uses of the statistics	<p>To allow NHS Board employees to compare activity levels nationally, e.g. NHS clinical consultants interested in their specialty figures by NHS Board, NHS information managers planning capacity, to assist in the development of Service Agreements between NHS boards.</p> <p>To investigate the implications of common systemic diseases in Scotland as a basis for assessing health demands in the future.</p> <p>To provide activity and incidence data for NHS Board Needs Assessments for specific diseases such as Chronic Obstructive Pulmonary Disease (COPD).</p> <p>To monitor National and NHS Board performance against the HEAT target for Emergency Admission Bed days for Over 75s.</p> <p>To allow members of the public to readily access information on the number of hospital admissions for specific diagnoses or procedures that may be of personal interest to them.</p> <p>To assist students and universities conducting medical studies in areas such as asthma and diabetes.</p> <p>Private companies interested in hospital activity levels in Scotland such as pharmaceutical companies, consultancy companies employed by NHS Trusts in England, advertising/media companies on behalf of clients.</p> <p>To provide statistical information for political campaigns, e.g. to halt reductions in acute NHS beds.</p>
Accuracy	Please refer to <a href="#">Appendix A1</a> of this report. Summary data within this publication is also compared to previously published figures.
Completeness	Details of data submission issues are available on the <a href="#">Hospital Records Data Monitoring SMR Completeness web page</a> , while details of the associated backlogs can be found on the <a href="#">SMR Timeliness web page</a> . <a href="#">Additional detail can also be found</a> within the <a href="#">data issues and completeness document</a> which accompanies this publication.
Comparability	See Hospital Care <a href="#">Introduction</a> .
Accessibility	It is the policy of ISD Scotland to make its web sites and products accessible according to <a href="#">published guidelines</a> .
Coherence and clarity	The Acute Hospital Activity and NHS Scotland Beds information released for each publication is listed on the <a href="#">Hospital Care Publication page</a> . Detailed information on how emergency admissions, multiple emergency admissions and bed days are defined and calculated is available in the <a href="#">Multiple and All Emergency Admissions</a>

	<a href="#">Interpretation document.</a>
Value type and unit of measurement	In general, figures are shown as numbers, percentages or rates.
Disclosure	Data has a low/medium risk of disclosure. The ISD protocol on <a href="#">Statistical Disclosure Protocol</a> is followed.
Official Statistics designation	The majority of information in this publication is currently classed as National Statistics. Data on Bed Statistics are classed as Official Statistics. Currently the statistics are produced in line with the Code of Practice for Official Statistics, available on the <a href="#">UK Statistics Authority website</a> .
UK Statistics Authority Assessment	The Hospital Care information was assessed by the UK Statistics Authority in September 2011 and successfully received confirmation of designation as National Statistics.
Last published	30/09/2014
Next published	04/10/2016
Date of first publication	
Help email	<a href="mailto:sophie.david@nhs.net">sophie.david@nhs.net</a> , <a href="mailto:catherine.thomson@nhs.net">catherine.thomson@nhs.net</a>
Date form completed	14/12/2015 Revised 24/05/2016

## **A3 – Early Access details (including Pre-Release Access)**

### **Pre-Release Access**

Under terms of the "Pre-Release Access to Official Statistics (Scotland) Order 2008", ISD are obliged to publish information on those receiving Pre-Release Access ("Pre-Release Access" refers to statistics in their final form prior to publication). The standard maximum Pre-Release Access is five working days. Shown below are details of those receiving standard Pre-Release Access.

### **Standard Pre-Release Access:**

- Scottish Government Health Department
- NHS Board Chief Executives
- NHS Board Communication leads

## A4 – ISD and Official Statistics

### About ISD

Scotland has some of the best health service data in the world combining high quality, consistency, national coverage and the ability to link data to allow patient based analysis and follow up.

Information Services Division (ISD) is a business operating unit of NHS National Services Scotland and has been in existence for over 40 years. We are an essential support service to NHSScotland and the Scottish Government and others, responsive to the needs of NHSScotland as the delivery of health and social care evolves.

**Purpose:** To deliver effective national and specialist intelligence services to improve the health and wellbeing of people in Scotland.

**Mission:** Better Information, Better Decisions, Better Health

**Vision:** To be a valued partner in improving health and wellbeing in Scotland by providing a world class intelligence service.

### Official Statistics

Information Services Division (ISD) is the principal and authoritative source of statistics on health and care services in Scotland. ISD is designated by legislation as a producer of 'Official Statistics'. Our official statistics publications are produced to a high professional standard and comply with the Code of Practice for Official Statistics. The Code of Practice is produced and monitored by the UK Statistics Authority which is independent of Government. Under the Code of Practice, the format, content and timing of statistics publications are the responsibility of professional staff working within ISD.

ISD's statistical publications are currently classified as one of the following:

- National Statistics (ie assessed by the UK Statistics Authority as complying with the Code of Practice)
- National Statistics (ie legacy, still to be assessed by the UK Statistics Authority)
- Official Statistics (ie still to be assessed by the UK Statistics Authority)
- other (not Official Statistics)

Further information on ISD's statistics, including compliance with the Code of Practice for Official Statistics, and on the UK Statistics Authority, is available on the [ISD website](#).

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics. Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.