Alcohol-Related Hospital Statistics
Scotland 2015/16
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A National Statistics Publication for Scotland
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Introduction

This publication provides an annual update to figures on the alcohol-related inpatient and day case activity taking place within general acute hospitals and psychiatric hospitals in Scotland. This release covers general acute hospital activity for the financial years 1981/82 to 2015/16 and psychiatric hospital admissions from 1997/98 to 2014/15.

Using this publication

For the first time, data accompanying this report is published in a Tableau electronic dashboard format. This interactive dashboard has been designed to allow users to visualise figures included in this report. An Excel workbook is also available for users wishing to directly access detailed data that has been used to create the dashboard.

Background

Excessive consumption of alcohol can result in a wide range of health problems. Some may occur after drinking over a relatively short period, such as acute intoxication (drunkenness) or poisoning (toxic effect). Others develop more gradually, only becoming evident after long-term heavy drinking, such as damage to the liver and brain. In addition to causing physical problems, excessive alcohol consumption can lead to mental health problems such as alcohol dependency. This publication reports on conditions that are entirely due to alcohol. Alcohol can also play a factor in a range of other conditions such as injuries; epilepsy; cancer. Estimates of the number of inpatient and day case hospitalisations are based on counts where alcohol-related conditions are diagnosed during the hospital stay (see diagnostic codes Appendix A1). Attendances at Accident and Emergency that do not result in an admission are not included.

There are two types of hospitals where patients with alcohol-related conditions can be admitted. General acute hospitals are facilities in which patients receive care under specialties other than mental health, maternity, neonatal and geriatric long stays. A small proportion of patients receive treatment for alcohol-related mental health conditions in a psychiatric hospital. Hospitalisations data from these two settings come from two sources, both of which are included in this report (see data sources Appendix A1).

This publication includes reporting of three types of hospital activity measures; continuous inpatient stays (referred to as ‘stays’), patient counts and new patient counts. Stays are distinct alcohol-related hospital admissions which occur within a year. Counts of patients are the number of people who have had at least one alcohol-related hospital admission during a particular year. New patient counts describe how many people each year have an alcohol-related admission that have not had an alcohol-related admission in the past 10 years (see Glossary for additional detail).

European Age-sex Standardised Rates (EASR)

This publication includes rates of activity presented as European Age-sex Standardised Rates (EASR). Comparisons of rates that have not been standardised can be misleading when the age structures of populations differ between geographical areas or where they have changed over time. For example alcohol-related hospital admissions are more common in males and older people. Adjustment for age and sex using the EASR prevents misleading comparisons between areas that may have populations with different age or gender structures.

Main points

- In 2015/16 there were almost 35,000 alcohol-related inpatient hospital admissions in Scotland. Over this period around 23,400 Scottish residents had at least one admission to hospital with an alcohol-related condition, of whom around 11,400 had not been admitted in the previous 10 years or were admitted for the first time.

- In 2015/16 the rate of alcohol-related inpatient stays are similar to the previous year, reducing by under 2%. Overall, there has been a steady decline in alcohol-related hospital stays since 2008/09 both in general acute hospitals and in psychiatric hospitals.

- In recent years, there has been an increase in hospital admissions for alcoholic liver disease and alcohol withdrawal state during a period where overall alcohol-related admissions have been decreasing.

- In recent years, there has been an increase in the number of people having multiple alcohol-related admissions within a year. This may be contributing to the slowing of the overall decreasing trend in alcohol-related admissions.

- There continues to be an inequality gap for alcohol-related admissions between those living in the most and least deprived parts of Scotland.
Results and Commentary

Overall hospital admissions

Around 90% of the alcohol-related admissions in Scotland are to general acute hospitals and around 10% to psychiatric hospitals.

There has been a steady decline in alcohol-related hospital stays since 2008/09 both in general acute hospitals and in psychiatric hospitals.

The European Age-Sex Standardised Rate (EASR) for alcohol-related general acute hospital stays was 664.5 stays per 100,000 population in 2015/16. This was 1.4% lower than the previous year, an absolute reduction of 9.6 stays per 100,000.

The EASR for alcohol-related psychiatric hospital stays was 53.3 stays per 100,000 population in 2014/15. This was 4.7% lower than the previous year, an absolute reduction of 2.6 stays per 100,000.

General acute hospital admissions

The section below focuses on general acute hospitals only, where the majority of alcohol-related hospital admissions take place; psychiatric hospital admissions are covered in a later section.

National trends from 1981/82 to 2015/16

The rate of alcohol-related hospital stays and patients consistently increased from 1981/82 to a peak in 2007/08 and have reduced since then (Figure 1).

Despite reductions over the past 8 years, the 2015/16 rate of stays per 100,000 population remains substantially (4.2 times) higher than it was in 1981/82. In 2015/16 around three times as many people were admitted to hospital at least once for an alcohol-related condition compared to 35 years ago. Over this time the average number of admissions per patient per year increased from 1.1 in 1981/82 to 1.5 in 2015/16.
In 1991/92 (the first year such figures were calculated) over two thirds (69%) of patients with an alcohol-related admission were classified as new patients (patients who had not been admitted for an alcohol-related condition in the previous 10 years). Latest figures show that currently just under half (49%) of the patients admitted in 2015/16 are classified as new. The number of new patients (per 100,000 population) has shown a much smaller rise and subsequent fall than either all patients or all stays.

The relative size and direction of the changes in measures of hospital activity suggest that over time fewer new patients are being admitted to hospital with an alcohol related condition whereas there has been an increase in the number of patients having multiple alcohol-related hospital admissions.

**Gender and Age**

Alcohol-related hospital admissions are around three times more common in males compared to females. The rate of hospital stays in 2015/16 was 960.8 per 100,000 for males compared to 368.2 per 100,000 for females. Males accounted for 71% of alcohol-related hospital stays in 2015/16.

Over time the rates of hospitalisation have shown broadly similar patterns for both males and females. Since 2007/08 the hospital stays rate has decreased by 23% for males and 20% for females (Figure 2).

**Figure 2: Alcohol-related hospital stay rates by gender**

*Scotland, general acute hospitals, financial years 1981/82 to 2015/16*

Alcohol-related admission rates increase with age, tailing off in those aged 65 years and over (Figure 3).

In 2015/16, the highest rate of stays for males was 1672.3 per 100,000 in the 55-64 year age group. The highest rate for females was in a slightly younger age group; 653.2 per 100,000 in the 45-54 year old age group. The average number of stays per patient increases with age, indicating that higher admission rates in older age groups are partly explained by multiple admissions (see Excel data).

Since 2007/08 the rate of alcohol-related hospital stays has decreased in all age groups for both males and females. However, the size of these reductions has not been equal. The
largest reductions in the rate of hospital stays were seen in those aged less than 25 years, where rates have dropped by around 50% or more since 2007/08.

Reductions in stay rates have been smaller in the older age groups. For example males aged 65 years or more had an 11% reduction and for females the rate reduced by only 1%.

Figure 3: Alcohol-related hospital stay rates\(^1\) by gender and age
Scotland, general acute hospitals, financial years 2007/08 and 2015/16\(^p\)

Psychiatric hospital admissions

Alcohol-related psychiatric hospital activity data is not available for the same time period as for general acute hospitals. This publication reports on trends from financial year 1997/98 up to the end of financial year 2014/15.

Although alcohol-related admissions to psychiatric hospitals make up the minority of all alcohol-related admissions around one in six of all psychiatric hospitalisations have at least one alcohol-related diagnosis.\(^2\)

National trends from 1997/98 to 2014/15

Alcohol-related hospital admissions to psychiatric hospitals have decreased since 1997/98 (Figure 4). The age and sex adjusted rate of stays fell by 48% between 1997/98 and 2014/15, from 102.5 to 53.3 stays per 100,000 population. This does not necessarily reflect falls in the prevalence of alcohol related problems, since similar reductions have been seen for all psychiatric hospitalisations. These falls have occurred over a time period where there has been a shift away from delivering care for patients with mental health problems within a hospital setting to providing these services in the community.

In contrast to the acute hospital setting, where the average number of admissions per patient has increased, the average admissions per patient within the psychiatric setting fell from 1.3 in 1997/98 to 1.2 in 2014/15.

\(^1\) European age sex standardised rates (EASR). The EASR is calculated using 2013 European Standard Population
\(^p\) Provisional

\(^2\) Mental Health Hospital Inpatient Care: Trends up to 31st March 2014
https://isdscotland.scot.nhs.uk/Health-Topics/Mental-Health/Publications/2016-05-10/Section-2-2-Age-Gender.xls?99403018
Figure 4: Alcohol-related hospitalisation rates\(^1\) for psychiatric hospitals, Scotland, financial years 1997/98 to 2014/15

As with general acute hospital admissions, the rate of alcohol-related psychiatric hospital stays is consistently greater in males compared to females. The rate of hospital stays in 2014/15 was 74.7 per 100,000 for males, over twice the rate for females at 32.0 per 100,000. Psychiatric admissions are generally more common in males compared to females, though the male predominance is more pronounced for alcohol-related conditions than for other conditions.\(^2\)

As with general acute hospitals, overall hospital stay rates across all ages and genders are lower than they were in 2007/08 (Figure 5). The falls in rates are largest for younger age groups, a pattern also seen for general acute hospitals.

Figure 5: Alcohol-related hospital stay rates\(^1\) by gender and age
Scotland, psychiatric hospitals, financial years 2007/08 and 2014/15

Admissions rates for alcohol-related conditions are higher in younger age groups within psychiatric hospitals but higher in older age groups in the general acute setting. The highest rate of alcohol-related stays within psychiatric hospitals are seen in those aged 35-44 years for males and 45-54 years for females.

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\(^1\) European age sex standardised rates (EASR). The EASR is calculated using 2013 European Standard Population

\(^2\) As with general acute hospitals, overall hospital stay rates across all ages and genders are lower than they were in 2007/08 (Figure 5). The falls in rates are largest for younger age groups, a pattern also seen for general acute hospitals.
**Geographical variation**

There is variation in the rate of alcohol-related admissions by NHS Board and local authority. Differences in service delivery models, local policy and relative levels of deprivation across Scotland are likely to account for some of this variation. Figure 6 shows the latest alcohol-related stay rates for general acute admissions and psychiatric admissions for each of the Scottish NHS boards.

**Figure 6: Alcohol-related hospital stay rates\(^1\) by NHS board and hospital setting**

<table>
<thead>
<tr>
<th>General acute hospitals 2015/16(^*)</th>
<th>Psychiatric hospitals 2014/15</th>
</tr>
</thead>
</table>

1 European age sex standardised rates (EASR). The EASR is calculated using 2013 European Standard Population

\(^*\) Provisional

Trends observed in Scotland overall are largely repeated within local areas, although often showing more variable patterns from year to year. All NHS Boards have seen a reduction in the rate of alcohol-related stays in general acute hospitals since the peak of activity in 2007/08.

In general, areas with higher admission rates in the general acute setting also have higher rates of admissions to psychiatric hospitals.

Variation between the NHS boards with the highest and lowest rates of alcohol-related hospital stays has persisted over time. In 2015/16, the highest general acute hospital stay rate (in NHS
Greater Glasgow and Clyde was a little over double the lowest rate (NHS Dumfries and Galloway).

In general NHS boards have had reductions in psychiatric alcohol-related stays and patient rates since 2007/08. The size of the reduction has been smaller in NHS boards where rates are higher, leading to an increase in differences between areas with highest and lowest admission rates. In 2007/08 (discounting Island boards where admission rates are very low) the stay rate was 3.6 times greater in the NHS board with the highest admission rate and in 2014/15 the rate was 7.5 times greater.

NHS Island boards (Orkney, Shetland and Western Isles) have lower psychiatric hospital admission rates for alcohol-related conditions; this is likely to reflect models of service delivery rather than levels of harm.

**Deprivation**

The following section shows variations in admissions by deprivation in Scotland.\(^3\)

In both the general acute and psychiatric setting there is a clear correlation between levels of deprivation in an area and rates of alcohol-related admissions. All activity measures (stays, patients and new patients) increase with increased levels of deprivation. Figure 7 illustrates how alcohol-related stay rates have varied over time across each of the deprivation deciles.

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\(^1\) European age sex standardised rates (EASR). The EASR is calculated using 2013 European Standard Population

\(^2\) Provisional

In the general acute setting, there were around eight times as many stays (per 100,000 population) and around seven times as many people (per 100,000 population) with at least one alcohol-related admission during each year, when comparing those living in the most deprived areas of Scotland to those living in the least deprived areas. For psychiatric alcohol-related

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\(^3\) The Scottish Index of Multiple Deprivation (SIMD) ranking can be used to divide the Scottish population into ten groups (deciles). Each decile represents the same number of people; those living in areas in decile 1 live in the most deprived areas of Scotland and those in decile 10 live in the least deprived.
admissions the inequality is even more pronounced, as rates in the most deprived areas of Scotland are around 14 times higher than those in the least deprived areas.

Over time the increases and subsequent reductions in alcohol-related stays have been more marked in the more deprived areas. There continues to be an inequality gap for alcohol related admissions between those living in the most and least deprived parts of Scotland.

Since 2007/08 the largest reductions in the rate of stays, patients and new patient admissions to general acute hospitals have been seen in the more deprived deciles. These reductions have levelled off in recent years and 2015/16 figures show small increases for the most deprived deciles (Figure 8).

Figure 8: New patient rates for alcohol-related admissions to general acute hospitals by SIMD decile, Scotland, Financial years 2007/08 to 2015/16

Type of admission

Given that emergency admissions are by definition unplanned they can lead to unpredictable demands on hospital resources such as staff or available beds.

In 2015/16, within the general acute setting, 92% of the alcohol-related inpatient stays resulted from emergency admissions. The percentage of alcohol-related admissions that were emergencies has not varied significantly since 1997/98 and has consistently been above 90%.

A smaller proportion of alcohol-related admissions to psychiatric hospital were emergencies. In 2014/15, within the psychiatric hospital setting, 51% of the stays were emergencies.

Specific alcohol related conditions

The conditions most commonly recorded during alcohol-related hospital admissions are those within the category ‘mental and behavioural disorders due to the use of alcohol’. This category covers a range of diagnoses such acute intoxication and harmful use of alcohol. It also includes some conditions generally associated with longer term alcohol misuse such as alcohol dependence and withdrawal states.

The second most prevalent group of diagnoses are those associated with alcoholic liver disease, followed by toxic effects of alcohol.
Figure 9 shows the inpatient stay rates for all conditions and the three most common conditions recorded during alcohol-related admissions. The rates for all conditions and mental and behavioural disorders are split to show activity within general acute and psychiatric hospitals combined and the general acute hospital activity alone.

Hospital records can include up to six diagnostic codes; this publication reports on hospitalisations that include one or more alcohol-related diagnostic codes in any of the diagnostic code positions.

**Figure 9: Alcohol-related hospital stay rates** by diagnosis group  
*Scotland, Financial years 2007/08 to 2015/16*

***Provisional***

European age sex standardised rates (EASR). The EASR is calculated using 2013 European Standard Population

**Figure 10** shows how the rate of stays, for specific conditions within mental and behavioural disorders due to the use of alcohol, compare over time. Harmful use and acute intoxication are the most common diagnoses.

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**Mental and behavioural disorders due to use of alcohol**

There are a number of separate diagnostic codes that form the category ‘mental and behavioural disorders due to the use of alcohol’.

The relative proportions of these diagnoses vary between the acute and psychiatric setting. Within general acute hospitals, stays with a diagnosis of harmful use or acute intoxication are the most common of the mental and behavioural disorders due to use of alcohol. Within the psychiatric setting stays with diagnosis of alcohol dependence are the most common, followed by harmful use, then psychotic and amnesic disorders.

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Harmful use, acute intoxication and toxic effects of alcohol

Local variation in coding of medical records can make understanding the changing patterns of activity more difficult. Patterns of hospital activity for conditions such as harmful use, acute intoxication and toxic effects of alcohol, in particular, can be influenced by the interpretation and application of national coding and terminology guidance.

Hospital admissions with a diagnosis of harmful use reduced markedly from 2010/11 to 2011/12 at the same time as the rates with a diagnosis of acute intoxication increased. These changes coincided with the issue of national coding guidance relating to these conditions.4 This guidance is likely to have influenced the application of these diagnostic codes contributing to the increase in admissions for acute intoxication and reduction in harmful use.

Withdrawal state

Alcohol withdrawal is a group of symptoms which can occur when an individual reduces or stops alcohol use after long periods of use. It can be accompanied by convulsions. Although rates of inpatient stays and patients with a diagnosis of withdrawal state are comparatively low, the rate of stays featuring this diagnosis code has increased year on year since 1997/98 in the general acute setting (Figure 10). Psychiatric hospital stays which include a diagnosis of withdrawal state are also low compared with the other alcohol-related psychiatric diagnoses but have shown reductions since 1997/98.

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Alcohol dependence

Inpatient stay rates for alcohol dependence have remained comparatively low since 1997/98, fluctuating little in general acute hospitals but showing a steady decline in psychiatric hospitals. Despite their comparatively low rate in 2014/15, 73% of the alcohol-related psychiatric stays included a diagnosis of alcohol dependence syndrome.

Alcoholic liver disease

There are several diagnostic codes that make up the classification alcoholic liver disease; these include reversible conditions such as fatty liver disease as well as conditions where damage to the liver may be longer lasting, such as cirrhosis and hepatitis. Hepatic (liver) failure is an end-stage event that results from severe liver damage.

Over time, admissions with a diagnosis of alcoholic liver disease have not shown the same pronounced increase then decrease that has been seen for total alcohol-related conditions (Figure 11). Figure 9 shows that the rate of hospital stays for this condition are low compared to other alcohol related problems. However they have increased by 59% since 1997/98, from 83.2 to 132.4 stays per 100,000 population in 2015/16.

Between 2007/08 and 2012/13 the rate declined slightly. However over the last three years the rate has begun rising again, increasing by 7% since 2013/14.

Figure 11: Alcoholic Liver Disease stay rates to general acute hospitals by specific diagnosis code
Scotland, Financial years 2007/08 to 2015/16\(^p\)

In 2015/16 cirrhosis was the most commonly recorded of the alcoholic liver disease diagnoses. Rates of hospitals stays which include a diagnosis of cirrhosis show a relatively consistent increase since 2007/08. Over the same time period the rate of new patient admissions has increased substantially, from 3.5 per 100,000 in 2007/08 to 8.1 per 100,000 in 2015/16. In addition, since 2007/08 the average number of stays per patient, for patients with a diagnosis of cirrhosis, has increased from 1.5 stays to 1.8 stays per patient.

\(^p\) Provisional
\(^1\) European age sex standardised rates (EASR). The EASR is calculated using 2013 European Standard Population
Since 2007/08 stays including a diagnosis of unspecified alcoholic liver disease have reduced. This may be linked to increased use of less invasive diagnostic procedures, such as liver scanning, and is likely to some degree to account for the increases seen with cirrhosis admissions.

Over the last three years, hospital activity figures show small increases in the numbers of new patients and more patients having multiple admissions with a diagnosis of alcoholic liver disease.

**Toxic effect of alcohol**

Admissions with a diagnosis of toxic effect of alcohol are low: the rate of stays in 2015/16 was 48.0 stays per 100,000 population. However, this is the only condition where activity is consistently higher for females compared to males. There were 52.8 stays per 100,000 females and 43.1 stays per 100,000 males.
Glossary

Admissions  This term is used as a generic description of various measures of hospital activity which cover stays, patients and new patients.

Alcohol-related diagnosis  This refers to conditions known to be a direct consequence of alcohol consumption. Codes used in the analyses are provided in Appendix A1.

Continuous Inpatient Stay (CIS) or Stay  Refers to a continuous period of health care in a hospital setting from initial admission to discharge. This may include a number of ‘episodes’ recorded back-to-back for the same patient. Each stay is initiated by a referral (including re-referral) or admission and is ended by a discharge from hospital.

Deprivation  The Scottish Index of Multiple Deprivation (SIMD) is used to calculate deprivation rates. SIMD has 38 indicators in 7 domains (income, employment, housing, health, education, skills and training, geographical access and crime), which have been combined into an overall index calculated for each datazone. Rates are reported by deciles with 1 being most deprived and 10 least deprived. Deciles divide the population into ten equal proportions so that 10% of the population falls into each quintile. SIMD 2009 has been applied for years 2007/08 to 2009/10 and SIMD 2012 has from the year 2010/11 to 2011/12 and SIMD2016 from 2012/13 onwards.

EASR  European Age-sex Standardised Rate. For more information see Appendix A1.

ICD  International Classification of Diseases and Related Health Problems 10th revision is used to classify hospital admissions and deaths from 1996 onwards. Before this ISD used ICD-9.

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.

New Patient  An individual admitted to hospital as an inpatient within a given time period (e.g. financial year) who was found not to have received another inpatient admission for the same condition within the preceding ten years.

Provisional data  An indication that the data is provisional means that returns from hospitals are not yet complete and the final figure may be different to that reported once all returns are received.
## List of Tables

<table>
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<th>Table No.</th>
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<td>1981/82-2015/16</td>
<td></td>
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</table>
Contact
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0131 275 6335

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Principal Information Analyst
victoria.elliott@nhs.net
0131 275 7446

Further Information
Further information can be found on the ISD website

If you would like further information on hospital activity relating to alcohol-related conditions, please contact the ISD Health Improvement Drug and Alcohol Team at nss.isdsubstancemisuse@nhs.net

The next update of this publication will be in October 2017

Rate this publication
Please provide feedback on this publication to help us improve our services.
Appendices

A1 – Background Information

Data sources

The hospital activity data included in this publication are sourced from routinely collected national datasets.

- SMR01 (Scottish Morbidity Records 01) is the source for general acute inpatient and day case hospital activity for specialties other than mental health, maternity, neonatal and geriatric long-stay.

- SMR04 (Scottish Morbidity Records 01) is the source for psychiatric inpatient and day case hospital activity.

Analysis combining SMR01 and SMR04 activity is presented for mental and behavioural conditions associated with the use of alcohol to enable a better estimate of the total hospital activity.

General acute inpatients and day cases – SMR01

SMR01 is an episode based patient record relating to all inpatient and day cases discharged from acute medical, i.e. specialties other than mental health, maternity, neonatal and geriatric long stay specialties in NHS Scotland. A record is generated for each inpatient and day case episode, of which there are about 1,200,000 each year. Attendances at Accident and Emergency that do not result in an admission are not included. Each individual patient may have more than one stay and hence the number of people discharged within a year will be less than the total number of stays. The SMR01 basic data set encompasses patient identification and demographic information, episode management information and general clinical information. Items such as waiting time for inpatient or day case admission and length of stay may be derived from the episode management information. On the SMR01 form up to six separate diagnoses can be recorded for discharge episode record. A diagnosis in the first position is regarded as the main diagnosis. A diagnosis ‘in any position’ refers to the occurrence of a diagnosis in any of the six positions (including main and supplementary).

Mental health inpatient and day cases – SMR04

The second section of this report shows data derived from the Mental Health Inpatient and Day Case return (SMR04), which collects episode level data at the point of both admission and discharge on patients who are receiving care in mental health specialties. In this publication these records are referred to as ‘psychiatric stays’. On the SMR04 form up to six separate diagnoses can be recorded on both the admission and the discharge parts of the record. Diagnosis on discharge may differ from diagnosis on admission. A diagnosis in the first position is regarded as the main diagnosis. A diagnosis ‘in any position’ refers to the occurrence of a diagnosis in any of the six positions (including main and supplementary).
Analytical definitions

Stay

For this report, a hospital stay (also described as a continuous inpatient stay or CIS), is defined as an unbroken period of time that a patient spends as an inpatient or day case. During a stay a patient may have numerous episodes as they change consultant, significant facility, speciality and/or hospital. Stays are counted at the point of discharge, when all diagnostic information regarding the full stay is available. Therefore a 'stay' and a 'discharge' are equivalent in this report. However, the demographic information (age, gender, SIMD decile, NHS Board or local authority of residence) is taken from the first episode of the stay, thus most closely corresponding to the circumstances of the patient at the point of entering the hospital.

Patient

Where numbers of patients are reported, this refers to the number of unique individuals treated within the financial year. Patients are counted only once in the financial year in which they have an alcohol-related stay, even though the same patient may be admitted to hospital several times in a year.

New Patient

New patients are defined as patients who have not been previously admitted to hospital with an alcohol diagnosis within the last 10 years. If a patient has several alcohol-related stays over a number of years, this patient will be counted only in the year of the first alcohol-related hospital stay within a 10 year period.

When figures are broken down by geographical area or age the numbers in some categories can be very small. In these cases both differences between categories and trends over time should be interpreted with caution because they may be misleading.

Clinical codes for alcohol-related conditions

Alcohol misuse is recorded using the International Classification of Diseases. In 1997, ISD moved from using the 9th revision to the 10th revision of the ICD. The change introduced a number of new alcohol-related ICD codes. However, mapping of codes from ICD9 to ICD10 is not exact and therefore the longer trends (back to 1981/82) are only used for reporting on ‘all’ alcohol codes combined, and time trends for individual alcohol-related conditions start in 1997/98. The following codes were used in the analysis presented in this report:
Diagnostic (ICD10) codes used for reporting alcohol-related stays in Scottish hospitals

<table>
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<tr>
<th>Condition</th>
<th>Sub-Condition</th>
<th>ICD-10 Code</th>
<th>ICD-10 Code</th>
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<tr>
<td>F10</td>
<td>Mental and behavioural disorders due to the use of alcohol</td>
<td>F10.0 Acute Intoxication</td>
<td>F10.5 Psychotic &amp; amnesic conditions</td>
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<td></td>
<td></td>
<td>F10.1 Harmful use</td>
<td>F10.6</td>
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<td></td>
<td></td>
<td>F10.2 Dependence syndrome</td>
<td>F10.7</td>
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<tr>
<td></td>
<td></td>
<td>F10.3 Withdrawal state</td>
<td>F10.8 Unspecified &amp; other conditions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>F10.4 Withdrawal state with delirium</td>
<td>F10.9</td>
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<td>K70</td>
<td>Alcoholic Liver Disease</td>
<td>K70.0 Alcoholic fatty liver</td>
<td>K70.4 Alcoholic hepatic failure</td>
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<td></td>
<td></td>
<td>K70.1 Alcoholic hepatitis</td>
<td>K70.9 Alcoholic Liver Disease, unspecified</td>
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<td></td>
<td>K70.2 Alcoholic liver disease: cirrhosis</td>
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<td>K70.3</td>
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<td>Alcohol-induced pseudo-Cushing syndrome</td>
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<td>E51.2</td>
<td>Wernicke encephalopathy</td>
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<td>G31.2</td>
<td>Degeneration of nervous system due to alcohol</td>
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<td>G62.1</td>
<td>Alcoholic polyneuropathy</td>
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<tr>
<td>G72.1</td>
<td>Alcoholic myopathy</td>
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<td>O35.4</td>
<td>Maternal care for (suspected) damage to fetus from alcohol</td>
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<td>P04.3</td>
<td>Fetus and newborn affected by maternal use of alcohol</td>
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<tr>
<td>Q86.0</td>
<td>Fetal alcohol syndrome (dysmorphic)</td>
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<tr>
<td>R78.0</td>
<td>Finding of alcohol in blood</td>
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<tr>
<td>X45</td>
<td>Accidental poisoning by and exposure to alcohol</td>
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<tr>
<td>X65</td>
<td>Intentional self-poisoning by and exposure to alcohol</td>
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<tr>
<td>Y15</td>
<td>Poisoning by and exposure to alcohol, undetermined intent</td>
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<tr>
<td>Y57.3</td>
<td>Alcohol deterrents</td>
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<tr>
<td>Y90</td>
<td>Evidence of alcohol involvement determined by blood alcohol level</td>
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</tr>
<tr>
<td>Y91</td>
<td>Evidence of alcohol involvement determined by level of intoxication</td>
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<td>Z50.2</td>
<td>Alcohol rehabilitation</td>
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<tr>
<td>Z71.4</td>
<td>Alcohol abuse counselling and surveillance</td>
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<tr>
<td>Z72.1</td>
<td>Alcohol use</td>
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Data Quality and Completeness

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. Details of the quality assurance process for SMRs are published on the DQA methodology webpage http://www.isdscotland.org/Products-and-Services/Data-Quality/Methodology/.

Information on SMR data completeness can be found on the Hospital records Data webpage http://www.isdscotland.org/Products-and-Services/Hospital-Records-Data-Monitoring/SMR-Completeness/, while information on the timeliness of SMR data submissions can be found on the SMR Timeliness webpage http://www.isdscotland.org/Products-and-Services/Hospital-Records-Data-Monitoring/SMR-Timeliness/.

Note of Revisions

The Health Improvement Team aims to continually improve the interpretation of the data and therefore analysis methods are reviewed and sometimes updated. Analysis programs may be modified occasionally to reflect process changes and improvements.
A2 – Publication Metadata (including revisions details)

<table>
<thead>
<tr>
<th>Metadata Indicator</th>
<th>Description</th>
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<tr>
<td>Publication title</td>
<td>Alcohol-related Hospital Statistics Scotland 2015/16</td>
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<tr>
<td>Description</td>
<td>Publication reporting on general acute and psychiatric hospital stays with diagnosis of an alcohol related condition. These data are presented at a national level and also broken down by demographic characteristics and local geographies.</td>
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<tr>
<td>Theme</td>
<td>Health and Social Care</td>
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<tr>
<td>Topic</td>
<td>Alcohol Misuse</td>
</tr>
<tr>
<td>Format</td>
<td>PDF report with Excel tables and online Tableau dashboard</td>
</tr>
<tr>
<td>Data source(s)</td>
<td>ISD SMR01 &amp; SMR04</td>
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<tr>
<td>Date that data are acquired</td>
<td>August 2016</td>
</tr>
<tr>
<td>Release date</td>
<td>Tuesday 25th October 2016</td>
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<tr>
<td>Frequency</td>
<td>Annual</td>
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<td>Timeframe of data and timeliness</td>
<td>General acute hospital (SMR01): National summary figures for period 01/04/1981 to 31/03/2016. Detailed breakdowns for period 01/04/1997 to 31/03/2016. Psychiatric hospital (SMR04) 01/04/1997 to 31/03/2015.</td>
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<tr>
<td>Continuity of data</td>
<td>See background information</td>
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<tr>
<td>Revisions statement</td>
<td>All data are revised annually to reflect any changes to analysis and to ensure the most complete information is presented. Data for the most recent financial year are labelled as provisional and may be subject to change in forthcoming publications. Minor revisions of this nature are often due to incomplete data returns at the time of previous publication.</td>
</tr>
<tr>
<td>Revisions relevant to this publication</td>
<td>Population files have been updated from previous publications to use NRS mid-year population estimates 2012-2014 corrected in August 2016. The latest SIMD 2016 rankings have been used and applied to figures from 2012 onwards.</td>
</tr>
<tr>
<td>Concepts and definitions</td>
<td>See Glossary</td>
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<tr>
<td></td>
<td>See Hospital Care: Background Information</td>
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<td><a href="http://www.isdscotland.org/Health-Topics/Hospital-Care/">http://www.isdscotland.org/Health-Topics/Hospital-Care/</a></td>
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<tr>
<td>Relevance and key uses of the statistics</td>
<td>Relevant to understanding Alcohol misuse in Scotland. Statistics will be used for policy making and service planning.</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Quality checks are conducted by ISD. Figures are compared to previously published data and expected trends.</td>
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<tr>
<td>Completeness</td>
<td>Details of data submission issues are available on the SMR completeness webpage</td>
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<tr>
<td>Comparability</td>
<td>NHS Digital publish figures on hospital admissions in Statistics on Alcohol – England 2016 but these should not be directly compared with published data from Scotland.</td>
</tr>
<tr>
<td>Accessibility</td>
<td>It is the policy of ISD Scotland to make its web sites and products accessible according to published guidelines.</td>
</tr>
<tr>
<td>Coherence and clarity</td>
<td>The report is available as a PDF file with dashboard content and source data linked for ease of use.</td>
</tr>
<tr>
<td>Value type and unit of measurement</td>
<td>Rates are per 100,000 population, standardised for age and gender to the 2013 European Standard Population.</td>
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<td>Disclosure</td>
<td>The ISD Statistical Disclosure Protocol is followed.</td>
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<td>Official Statistics designation</td>
<td>National Statistic</td>
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<tr>
<td>UK Statistics Authority Assessment</td>
<td>Completed assessment by UK Statistics Authority preport published 4 April 2012</td>
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<tr>
<td>Last published</td>
<td>13 October 2015</td>
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<td>Next published</td>
<td>25 October 2017</td>
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<td>Date of first publication</td>
<td>1998</td>
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<td>Help email</td>
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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.