

Publication Report



Alcohol-related Hospital Statistics Scotland

2014/15

Publication date – 13 October 2015



Contents

| | |
|--|----|
| Introduction | 3 |
| Key points | 4 |
| Results and Commentary | 5 |
| Statistics from acute medical specialties (SMR01) | 5 |
| General trend from 1981/82 to 2014/15 | 5 |
| Age and gender | 6 |
| Deprivation effects | 8 |
| Geographical profile | 9 |
| Specific alcohol-related diagnoses | 9 |
| Admission types | 11 |
| Statistics from Mental Health specialties | 12 |
| General trend from 1997/98 to 2013/14 | 12 |
| Age and gender | 12 |
| Deprivation effects | 12 |
| Geographical profile | 13 |
| Specific alcohol-related diagnoses | 13 |
| Statistics from acute medical and mental health specialties combined | 13 |
| Glossary | 14 |
| List of Tables | 15 |
| Contact | 16 |
| Further Information | 16 |
| Rate this publication | 16 |
| Appendix | 17 |
| A1 – Background Information | 17 |
| SMR01 – General and acute inpatients and day cases | 17 |
| SMR04 – Mental health inpatient and day cases | 17 |
| Analytical definitions | 17 |
| Clinical codes for alcohol-related conditions | 18 |
| Data Quality and Completeness | 20 |
| Note of Revisions | 20 |
| Revision of the European Standard Population | 20 |
| Further information | 21 |

A2 – Publication Metadata (including revisions details) 22
A3 – Early Access details (including Pre-Release Access) 24
A4 – ISD and Official Statistics 25

Introduction

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.

The information reported in this publication is based on hospital activity data routinely drawn from hospital administrative systems across all NHS hospitals in Scotland. This report primarily presents statistics derived from General Acute Inpatient / Day cases Records (Scottish Morbidity Records 01 or SMR01; see [SMR01](#) section in Appendix A1), which includes all inpatient and day cases discharged from acute medical specialties (all specialties other than mental health, maternity, neonatal and geriatric long stay specialties). In this report the hospital stays recorded in SMR01 are referred to as 'general acute stays'.

This year the report also includes statistics derived from the Mental Health Inpatient and Day Case Records (SMR04; see [SMR04](#) section in Appendix A1). SMR04 collects episode level data on patients who are receiving care in mental health specialties at the point of both admission and discharge. In this publication these records are referred to as 'psychiatric stays'.

This report also shows some information based on the combined data sets. The purpose of further expanding the information provided is to give a fuller picture of health service use (see [Note of Revisions](#) in Appendix A1 for further background).

Previous annual reports have focused on continuous inpatient stays (CIS) for alcohol-related conditions, which were referred to as 'discharges'. From last year the scope of this report widened to include more detail on patient counts. Continuous inpatient stays are now simply referred to as 'stays' and the same level of detail is now provided for the numbers of patients, as well as numbers of 'new' patients (defined as not having been hospitalised for an alcohol condition in the previous 10 years). (see [Analytical definitions](#) in Appendix A1). High-level information on stays and patients is reported going back to 1981/82 for acute medical specialties and back to 1997/98 for mental health specialties.

The figures are broken down in various ways; by age, gender, deprivation, individual condition and area of residence (NHS Board – using the 2014 boundaries - and local authority area). Because some of these break-downs are not available prior to 1997/98, all general acute stays break-downs are reported back to 1997/98 whereas the high-level general acute stays go back to 1981/82.

To allow comparisons between geographical areas that may be different in size and age structure of the population, figures are presented as European age-sex standardised rates (EASR) using the 2013 European Standard Population (see [Revision of the European Standard Population](#) in Appendix A1).

As in all previous publications, figures for the latest year (2014/15 for general acute stays; 2013/14 for psychiatric stays) are as yet provisional and subject to minor changes due to data incompleteness (see [Data Quality and Completeness](#) in Appendix A1).

Key points

- In 2014/15, there were 35,059 alcohol-related general acute hospital stays in Scotland; a standardised rate of 672 stays per 100,000 population. This is a continuation of the fall in rates seen since 2007/08. However, in 2014/15 rates for stays were still more than four times higher than at the beginning of the time trend.
- The decrease since 2007/08 has been predominantly driven by the more 'acute' conditions, such as Harmful Use and Toxic Effect, whereas the more 'chronic' conditions, such as Alcohol-related Liver Disease and Alcohol Psychosis have remained stable or have increased.
- The increase in hospital stays seen up to 2007/08 has been driven to a large extent by repeat visits rather than new patients being admitted to hospital.
- The trend for alcohol-related psychiatric stays has been downwards over the full time period 1997/98 to 2013/14; the rate has almost halved (from 103 to 56 per 100,000 population). This decrease coincides with shifts in patterns of service delivery to more community based services. Psychiatric stays formed just 7% of the alcohol-related general acute and psychiatric stays in 2013/14.
- In 2014/15, alcohol-related stays in general hospitals were nearly 8 times more frequent for individuals living in the most deprived areas compared to the least deprived areas. In 2013/14, the standardised rates for alcohol-related psychiatric stays were more than 16 times higher for patients living in the most deprived areas compared to the least deprived areas; the largest difference seen since the beginning of the time trend.

Results and Commentary

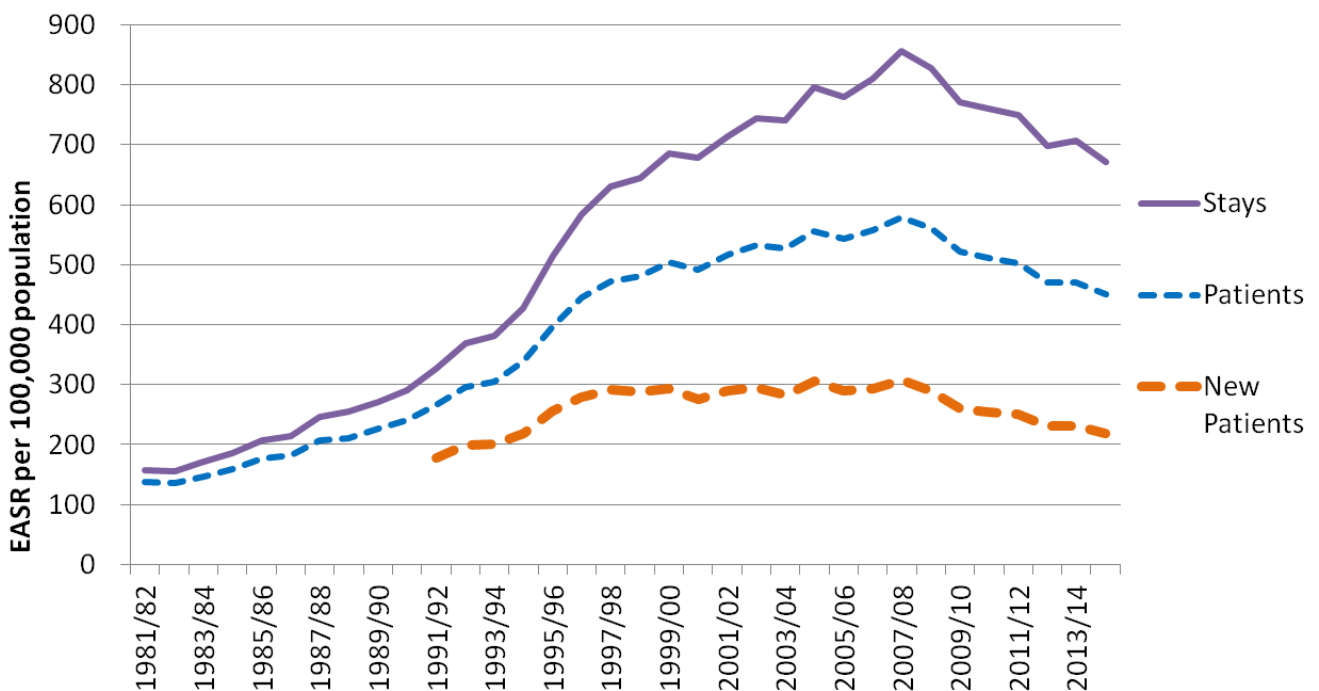
Statistics from acute medical specialties (SMR01)

General trend from 1981/82 to 2014/15

In 2014/15, there were 35,059 alcohol-related stays recorded in SMR01 for patients resident in Scotland; resulting in a European Age-sex Standardised Rate (EASR, hereafter referred to as 'rate') of 671.7 stays per 100,000 population. These figures are down from the previous year (2013/14), when there were 36,714 alcohol-related stays (a rate of 706.5 stays per 100,000 population).

Figure 1 shows the rates for alcohol-related stays (discharges) and patients for the time period from 1981/82 to 2014/15, and new patients (based on a 10-year look-back, and therefore calculated back to 1991/92) (see also [Excel sheet 1.1](#)). The rate for alcohol-related stays has increased from the lowest recorded in the time series, which was in 1982/83, of 155.0 stays per 100,000 population to a peak of 855.7 stays overall per 100,000 population in 2007/08, a more than five-and-a-half-fold increase (Figure 1 and [Excel sheet 1.1](#)). The absolute number of stays increased more than six-fold from 7,174 in 1982/83 to 43,052 in 2007/08. The rate of stays subsequently decreased again to 671.7 stays per 100,000 population in the latest year (2014/15; a decrease of 22%). Despite the recent decrease, the rate in the latest year (2014/15) was still almost four-and-a-half times higher than at its lowest point (in 1982/83).

Figure 1: Standardised rates per 100,000 population¹ - general acute hospital stays, patients and new patients with an alcohol-related diagnosis; financial years 1981/82 to 2014/15^P



1. The population estimates used in the calculation of rates above are based on the 2011 Census results. Rates are age-sex standardised using the 2013 European standard population (see Appendix A1 for more information).

^P Provisional; figures for 2014/15 will increase slightly in future publications due to a small data backlog.

The patient rate has followed a very similar pattern to the rate of hospital stays and also peaked in 2007/08, to decline after that. From the lowest point of 136.2 per 100,000 in 1982/83, the patient rate increased more than 4 times to 578.3 per 100,000 in 2007/08, to then decrease to 450.6 per 100,000 in 2014/15 (a 22% decrease). The patient rate was 3.3 times higher in 2014/15 compared to the lowest recording in these time series (in 1982/83; Figure 1).

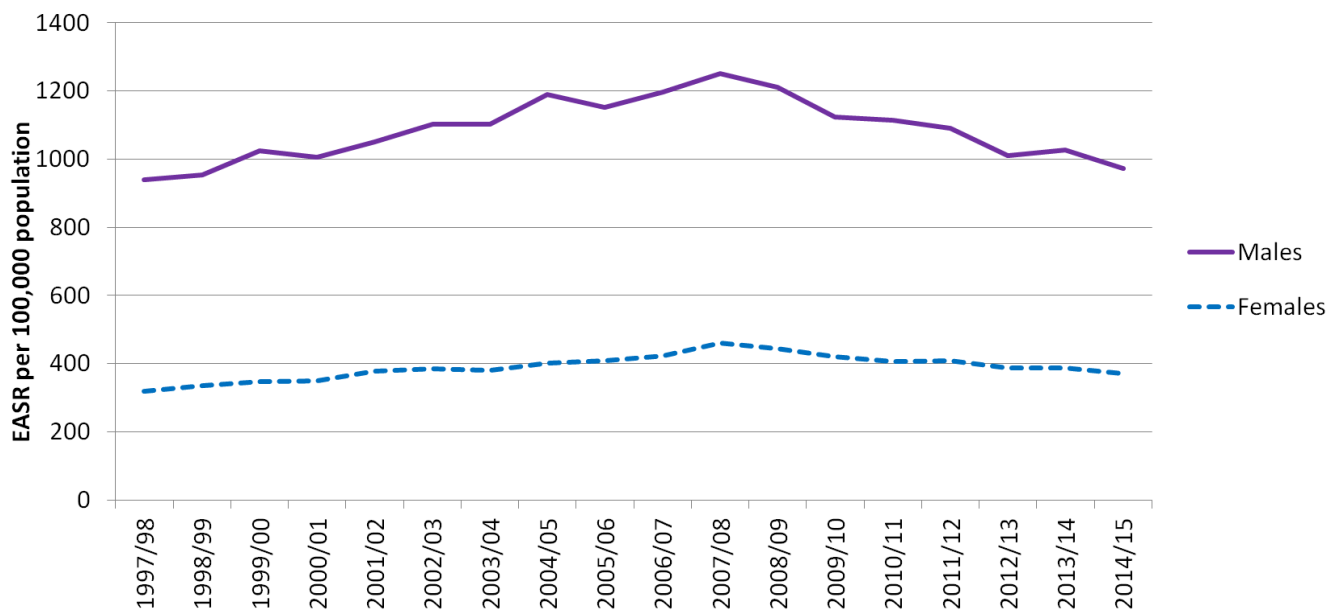
The new-patient rate showed an initial marked rise but changed very little from around 1997/98 to 2007/08. Since then the rate has been declining and in 2014/15 is at a level similar to 1994/95.

The rates of patients presenting each year and stays are much higher than the new patient rates, and have increased (and decreased) at a far greater rate over time. In 2014/15 the overall burden of alcohol-related hospital stays is made up of around a third completely new hospital patients, a third patients from previous years being re-admitted and a third repeat stays within the year. By contrast, in 1991/92 around half of hospital stays were completely new patients and the rest were repeat stays within the year or in patients who had been hospitalised in previous years. This indicates that the increase in hospital stays seen up to 2007 has been driven to a large extent by repeat visits in previous patients rather than new patients presenting to hospital.

Age and gender

Figure 2 shows that from 1997/98 to 2007/08 the rates for alcohol-related stays rose for both men and women. Between 2007/08 to 2014/15, the rate of alcohol-related stays decreased by 22% for men overall (from 1,249.6 to 973.4 per 100,000; to 24,860 men) and by 20% for women (from 461.7 to 370.0 per 100,000; to 10,199 women). Overall, 71% of alcohol-related stays were in males. (Figure 2 and [Excel sheet 1.3](#)).

Figure 2: Standardised rates per 100,000 population¹ - general acute hospital stays with an alcohol-related diagnosis, by gender; financial years 1997/98 to 2014/15^P



1. The population estimates used in the calculation of rates above are based on the 2011 Census results. Rates are age-sex standardised using the 2013 European standard population (see Appendix A1 for more information).

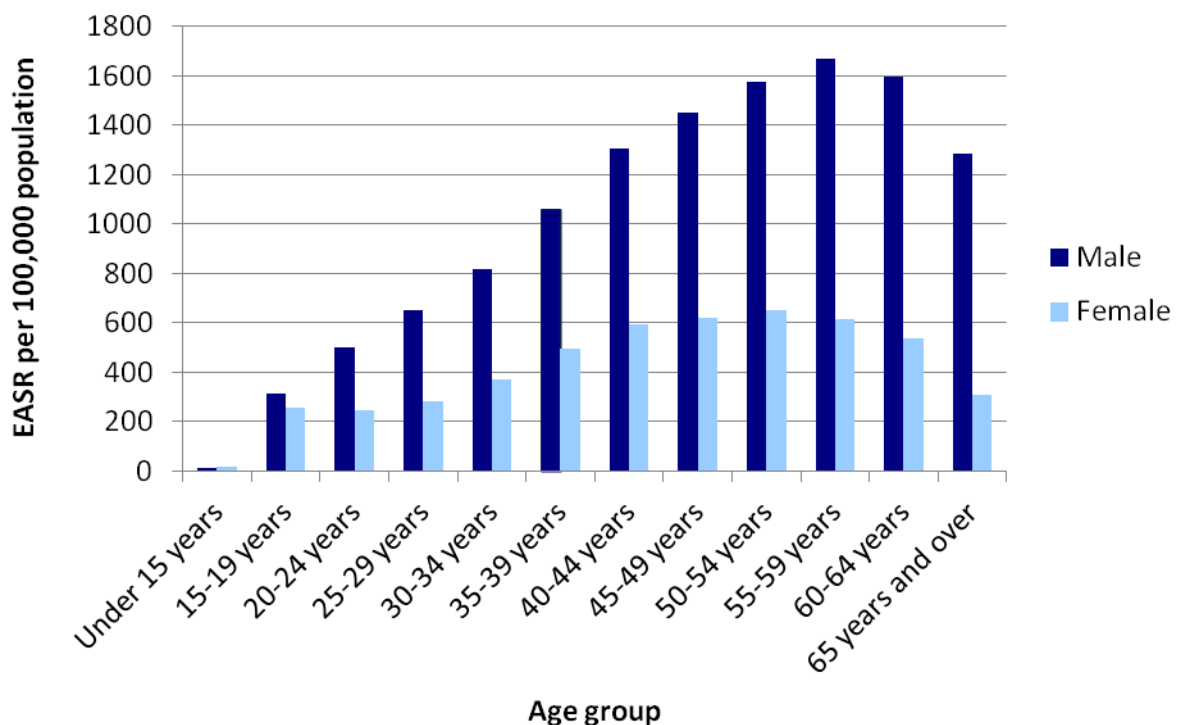
^P Provisional; figures for 2014/15 will increase slightly in future publications due to a small data backlog.

Differences between males and females generally increased with age (Figure 3); in the latest year (2014/15), in patients aged 65 and over, the stay rate for males was 4.2 times higher than in females. For males, the rate of alcohol-related stays was highest in the 55-59 years age group in 2014/15, whereas for females the rate was highest in the 50-54 age group. Only in the youngest age group (under 15) was the alcohol-related stay rate slightly lower in males compared to females, but note these rates are based on very small numbers.

Time trends for all age groups are shown in [Excel sheet 1.4](#). Comparing the trends for age groups, the largest increases in stay rates over time were seen in the 50-54 year age group. However, when looking at the annual rates by age and gender ([Excel sheet 1.2](#)) for the year 2007/08 (when the overall highest rates of stays were seen), the 60-64 year age group had the highest rates, while in that year among females the 45-49 year age group had the highest rates.

For all age groups the downward trend in rates of stays started in 2007/08 has continued over the last year, except in the 55-59 year age group, where rates have increased over the last two years ([Excel sheet 1.4](#)). When looking at the patient rate, there are other age groups where the decrease appears to have halted; the 60-64 year and the 65 year and over age group.

Figure 3: Standardised rates per 100,000 population¹ - general acute hospital stays with an alcohol-related diagnosis, by age group and gender; financial year 2014/15^P



1. The population estimates used in the calculation of rates above are based on the 2011 Census results. Rates are age-sex standardised using the 2013 European standard population (see Appendix A1 for more information).

^P Provisional; figures for 2014/15 will increase slightly in future publications due to a small data backlog.

The alcohol-related new-patient rates show a somewhat different trend compared to the stay rates and patient rates. The new-patient rate changed very little from around 1997/98

to 2007/08, for both males and females. Since then rates have decreased for both genders but particularly in males ([Excel sheet 1.3](#)). This pattern is not necessarily repeated within age groups; in particular in older age groups new-patients rates have gone up in the latest year (in 60-64 year olds the new-patient rate rose from 291.3 per 100,000 in 2013/14 to 316.0 per 100,000 in 2014/15, and there was a small rise in the 65 and over age group from 275.1 to 280.9 per 100,000). Where in males the new-patient rates were typically highest in the older age groups (see annual figures in [Excel sheet 1.2](#)), in females the 15-19 year old age band was typically highest in previous years (particularly striking in 2007/08). However in 2014/15 the female new-patient rate for 15-19 year olds (200.1 per 100,000) is very similar to the rate in 50-54 year old females (198.3 per 100,000).

The [Excel sheet 1.2](#) also shows the average number of stays per patient for 2014/15 by age group and gender, and it can be seen that the number of stays per patient is highest in 40-44 and 45-49 year old males. For males of all age groups the average number of stays increased from 1.35 in 1997/98 to 1.52 in 2014/15, and for females from 1.26 to 1.42 ([Excel sheet 1.3](#)), so the number of stays per patient per year has increased markedly.

The ratio that can be calculated between 'patients' and 'new patients' (not shown) has increased over the years from around 1.5 in 1991/92 to 2.1 in 2014/15. This suggests that the increased workload reflected by the rising numbers of patients is increasingly due to repeat admissions rather than due to new patients not having stayed in hospital for alcohol-related conditions before. Although the younger age groups have also contributed to the increasing rates of patients (particularly for women), the older age groups contributed far more to the increasing numbers of stays and present the largest burden on the hospital system.

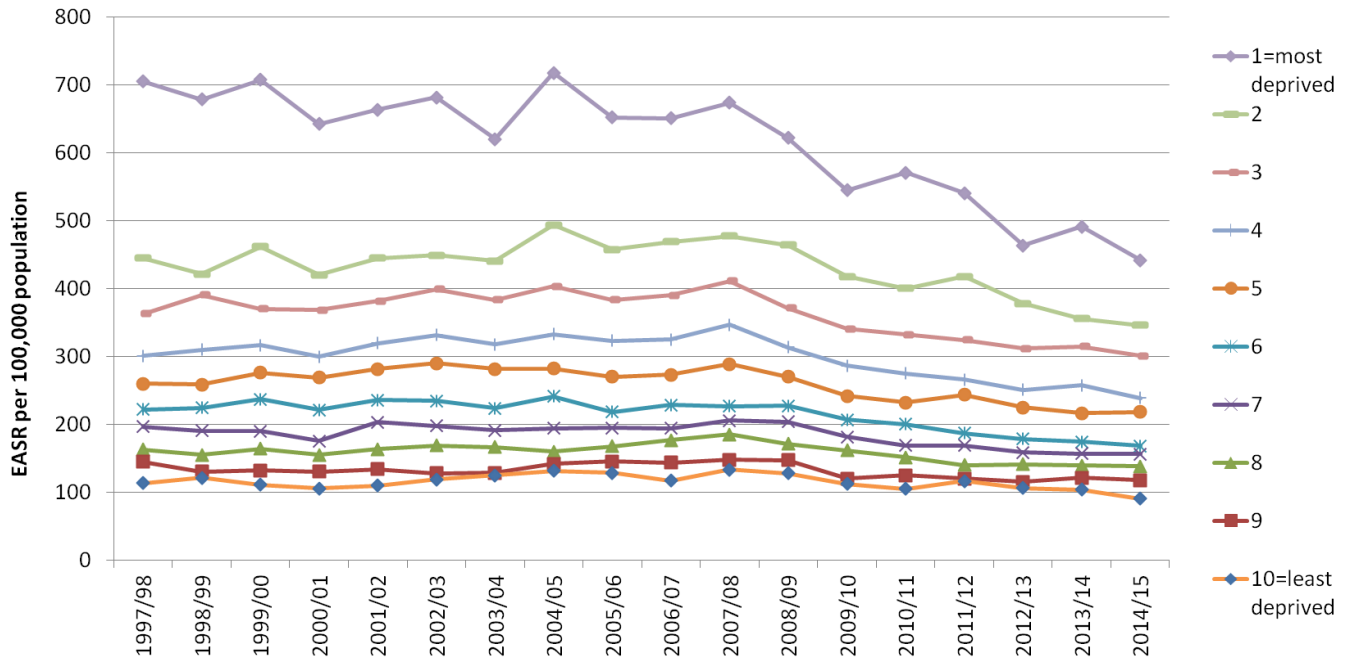
Deprivation effects

In 2014/15, the general acute hospital stay rate was nearly 8 times greater for individuals living in the most deprived areas (decile 1 of the [Scottish Index of Multiple Deprivation \(SIMD\)](#)) compared to the least deprived areas (decile 10); 1,701.5 compared to 220.7 per 100,000 population ([Excel sheet 1.4](#)). Across the full time period 1997/98 to 2014/15 the hospital stay rates were approximately eight to ten times greater for those in the most compared to the least deprived areas. Over this period the rate of hospital stays changed more in the most deprived decile, showing a larger rise and subsequent drop compared to the least deprived decile.

Similar to stays, the most deprived category also had the highest patient rates in 2014/15 ([Excel sheet 1.4](#)); rates were more than seven times higher for the most deprived compared to the least deprived decile (1,105.1 compared to 154.4 per 100,000).

The new-patient rate was nearly five times higher for patients living in the most deprived areas compared to those living in the least deprived areas in 2014/15; 441.8 compared to 91.0 per 100,000 (Figure 4 and [Excel sheet 1.4](#)). The difference has decreased over the period from 1997/98 to 2014/15, with the rate in 1997/98 being six times higher in the most deprived areas (705.3 per 100,000) compared to the least deprived (113.8 per 100,000). The most deprived decile also showed the largest drop for new-patient rates from 1997/98 to 2014/15; from 705.3 to 441.8 per 100,000 population— a drop of 37%. The least deprived decile showed a drop of 20% (from 113.8 to 91.0 per 100,000 population). Unlike the rates for stays and patients, the new-patient rates did not rise from 1997/98 to 2007/08 prior to decreasing again, but instead showed a general decrease over the full time period.

Figure 4: Standardised rates per 100,000 population¹ - general acute hospital new patients with an alcohol-related diagnosis, by deprivation (SIMD) decile; financial years 2001/02 to 2014/15^P



1. The population estimates used in the calculation of rates above are based on the 2011 Census results. Rates are age-sex standardised using the 2013 European standard population (see Appendix A1 for more information).

^P Provisional; figures for 2014/15 will increase slightly in future publications due to a small data backlog.

Geographical profile

Trends observed in Scotland overall are generally repeated in local areas (NHS Board areas and local council areas), although often showing some more fluctuating patterns. The [Excel sheet 1.5](#) shows the alcohol-related hospital stay, patient and new-patient rates for local areas. Some areas that do show a somewhat different pattern include South Lanarkshire local authority and NHS Forth Valley; where the drop in the alcohol-related hospital stay rate does not seem to have been sustained.

The rates for alcohol-related stays (overall) are published in the ScotPHO Alcohol Profiles, which is an easy to use tool to compare local areas.

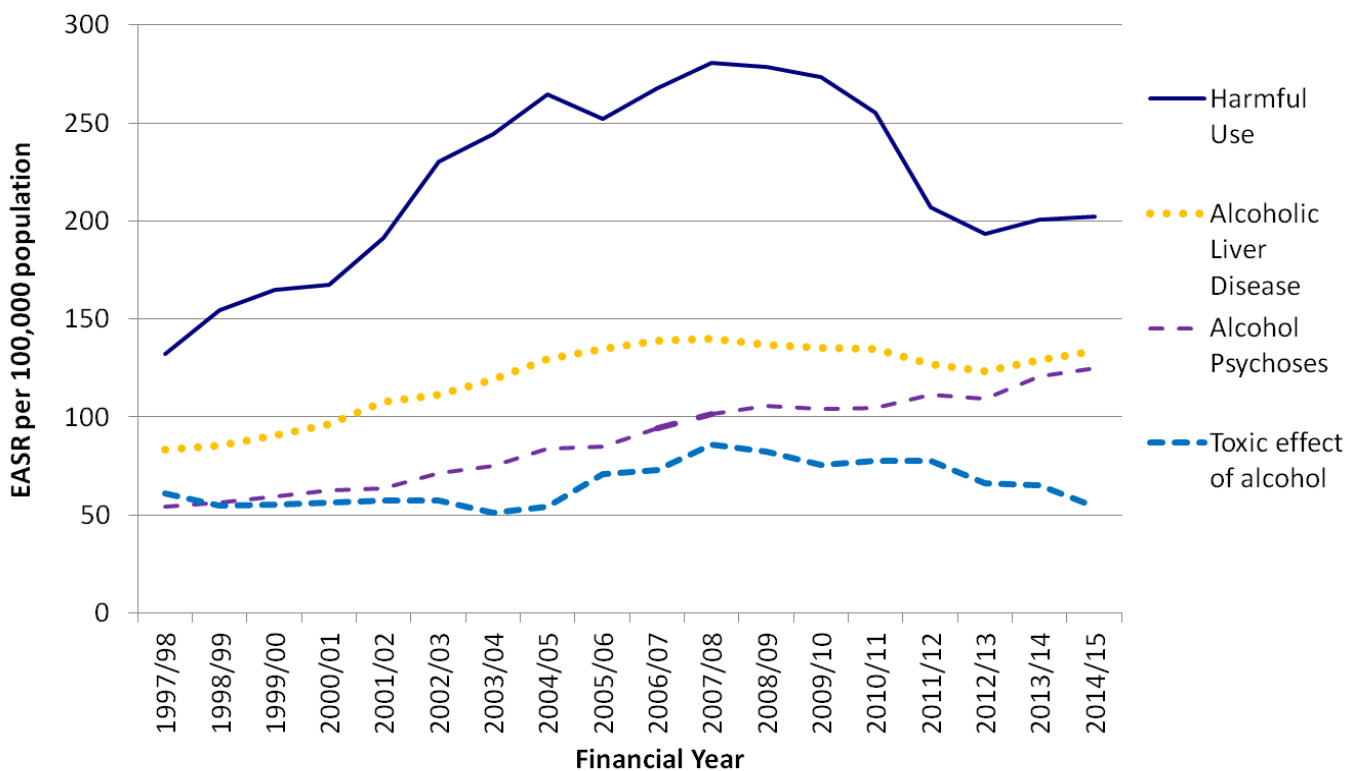
Specific alcohol-related diagnoses

During 2014/15, the most commonly recorded specific diagnoses relating to stays for alcohol misuse were harmful use (10,461 stays, equating to a rate of 202.1 stays per 100,000 population) and acute intoxication (8,423 stays; a rate of 160.1 stays per 100,000 population) (see the [Excel sheet 2.1](#)). These diagnoses dominate particularly in the youngest age groups and are relatively less common in older age groups, although the absolute number of discharges for these diagnoses is higher in older age groups. Other common diagnoses resulting in hospital stays (particularly in older age groups) were alcoholic liver disease (6,963 stays), alcoholic psychoses (6,479 stays) and alcohol dependence (4,747 stays).

The trends in rates over time for stays and patients show for some of the individual conditions a similar pattern to the rates for all alcohol-related conditions, with a rise up until 2007/08 followed by a decline. However, this pattern seems mainly driven by ‘acute’ conditions (in particular harmful use and toxic effect of alcohol), whereas most of the ‘chronic’ conditions do not show a decrease in recent years or even show an increase (see [Excel sheet 2.1](#)). For example, the rate for alcoholic liver disease increased over the last two years and showed a much flatter curve in the previous years than for alcohol-related conditions overall. Another example is alcohol dependence, for which the rates remained relatively stable. The trend for rates for alcohol psychosis stays shows a long-term upward trend without a clear decline in recent years.

Figure 5 shows the trends in stay rates for four conditions; harmful use, alcoholic liver disease, alcohol psychoses and toxic effect of alcohol. This illustrates that the decrease since 2007/08 has been predominantly driven by the more ‘acute’ conditions, such as Harmful Use and Toxic Effect, whereas the more ‘chronic’ conditions, such as Alcohol-related Liver Disease and Alcohol Psychosis have remained stable or have increased.

Figure 5: Standardised rates per 100,000 population¹ - general acute hospital stays for four alcohol-related conditions (harmful use, alcoholic liver disease, alcohol psychoses, toxic effect of alcohol); financial years 1997/98 to 2014/15^P



1. The population estimates used in the calculation of rates above are based on the 2011 Census results. Rates are age-sex standardised using the 2013 European standard population (see Appendix A1 for more information).

^P Provisional; figures for 2014/15 will increase slightly in future publications due to a small data backlog.

The [Excel sheet 2.2](#) gives the option to examine the stay, patient and new-patient rates for each diagnosis for each individual age group and gender. This shows, for example, that in earlier years the age group most commonly involved in hospital stays for acute intoxication was the 15-19 year olds, whereas in recent years the stay rates for acute intoxication in this age group were lower than for most other age groups.

The [Excel sheet 2.3](#) also shows that differences between genders and age groups vary between conditions; for example stays for alcohol psychoses are 3.3 times more common in males compared to females, whereas stays for alcoholic liver disease are 2.3 times more common in males compared to females.

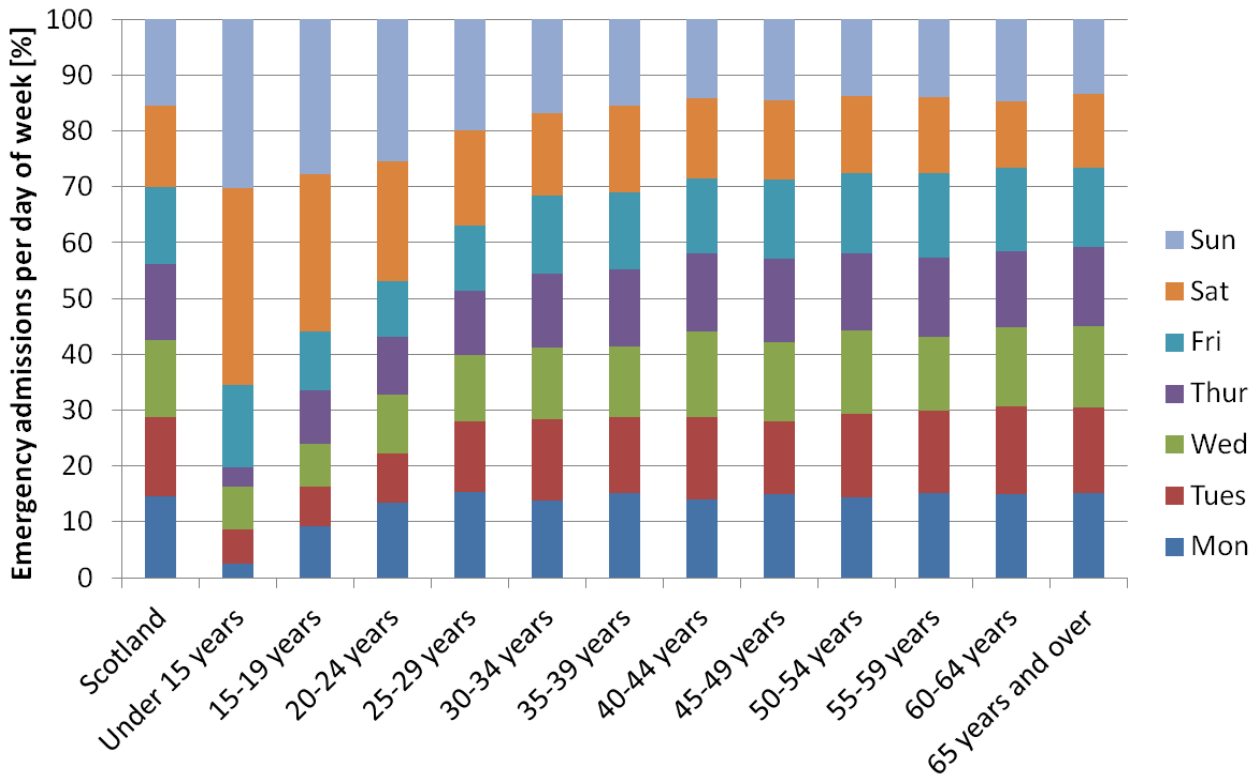
The [Excel sheet 2.4](#) also shows the number and rates of hospital stays for alcohol-related conditions by diagnosis for each NHS Board and local authority for the financial year 2014/15.

Admission types

Of the 35,059 alcohol-related stays in Scotland during 2014/15, 91% resulted from an emergency admission ([Excel sheet 1.6](#)). This varied between age groups with younger patients more commonly being admitted as an emergency compared to older patients. The percentage admitted as emergency varied between NHS Boards from 87% to 98%.

Figure 6 shows that Sunday was the day of the week with the highest number of alcohol-related emergency admissions, with 4,938 emergency admissions, although the variation in numbers is relatively small across all the days (see also [Excel sheet 1.6](#)). However, the number of admissions on Saturday and Sunday was much higher than on week days in the youngest age groups, with 64% of admissions of patients aged 15-19 taking place on Saturday and Sunday. In older age groups (35 and over) the admission rates by day of the week showed little variation and admissions on Saturday and Sunday were close to two-sevenths of the total (even slightly lower for patients aged 60-64, or over 65).

Figure 6: Distribution of alcohol-related admissions to acute medical specialties over days of the week (percentage); by age group (2014/15)



Statistics from Mental Health specialties

General trend from 1997/98 to 2013/14

The [Excel sheet 1.1](#) shows that from 1997/98 to 2013/14 (the latest year available for these data) the standardised rate for psychiatric stays has decreased from 102.6 to 56.0 per 100,000 population. This is a decrease in rate of 45% over 16 years and equates to a decrease in absolute numbers from 5,048 to 2,956 stays. The general trend has been downwards over the full time period reported on, which is unlike the rates for acute medical hospital stays where an upward trend was seen up to 2007/08. The decrease coincides with shifts in patterns of service delivery to more community based services.

The rate of patients treated in mental health specialties decreased by 37% from 78.3 to 49.1 per 100,000 from 1997/98 to 2013/14 (from 3,843 to 2,582 patients). Over this time period, the average number of stays per patient decreased from 1.31 to 1.14.

The rate for new patients decreased from 34.3 to 26.8 per 100,000 over the time period for which new patient rates could be calculated (from 2007/08 to 2013/14). This is a decrease in rate of 22%. The number of new patients decreased from 1,781 to 1,406 patients. The decrease in new patient rates over the 6-year time period is similar to the decrease seen in rates of stays over the same time period, but was larger than the decrease in patient rates (which was 18% over the same time period). Therefore the percentage of new patients out of all patients with a psychiatric hospital stay has decreased slightly; from 58 to 55% (based on standardised rates).

Age and gender

The [Excel sheet 1.2](#) shows that the alcohol-related discharge rates from psychiatric hospitals in 2013/14 were highest in the 40 to 44 and 45 to 49 year age groups with a rate of 127 per 100,000, closely followed by the 35 to 39 year olds with a rate of 118 per 100,000. These three age groups had the highest rates all through the time period reported here (from 1997/98 to 2013/14). Most age groups showed a decrease over this time period of at least 40%, although in the 50 to 54 year olds the decrease was somewhat less (36%) and for this age group rates have actually slightly increased for the last two years.

The rate for alcohol-related psychiatric stays showed a very similar trend over time for males and females, with the rate for males at least twice as high as for females ([Excel sheet 1.3](#)). In 2013/14 there were 2003 stays for males versus 953 stays for females.

Deprivation effects

In 2013/14, the rate for alcohol-related psychiatric stays was 17 times higher for patients living in the most deprived areas (SIMD decile 1) than in the least deprived areas (SIMD decile 10). The rate for psychiatric patients was 15 times higher and for new patients 11 times higher ([Excel sheet 1.4](#)).

The rate for psychiatric stays decreased substantially from 1997/98 to 2013/14 in all SIMD deciles; generally by between 46 and 51% but slightly less in the most deprived decile (39%). The most deprived decile shows a more fluctuating pattern over time with a slight rise in 2008/09 (followed by another decrease).

Geographical profile

The rate of alcohol-related stays varied substantially between NHS Boards and local authorities ([Excel sheet 1.5](#)). Generally rates have dropped over the reporting period; for Boards typically around 40-50% with some exceptions. For example, Dumfries and Galloway recorded a rise in rates of stays and patients, and Forth Valley recorded a small drop in stays but a rise in patients, but with a varied pattern over the reporting period. Particularly for the small Boards rates are based on very small numbers, which can lead to fluctuating patterns.

Of the NHS Boards, Ayrshire & Arran, Greater Glasgow & Clyde and Tayside recorded the highest alcohol-related psychiatric stay rates in 2013/14 with rates of 88, 82 and 75 stays per 100,000 population respectively.

Specific alcohol-related diagnoses

In 2013/14, the majority of all alcohol-related psychiatric stays was for alcohol dependence; this was recorded in 73% of stays (2,160 stays; a rate of 41 stays per 100,000 population) and 74% of patients (1,904 patients; a rate of 36 per 100,000) ([Excel sheet 2.1](#)). Other alcohol-related conditions recorded in mental health specialties are harmful use (the rate for stays in 2013/14 was 10 per 100,000) and alcohol psychoses (with a rate of 5.5 per 100,000). Hardly any other alcohol-related conditions are recorded in psychiatric specialties.

Statistics from acute medical and mental health specialties combined

Combining the data sets from both general acute and mental health specialties gives a more complete view of service use and allows us to investigate if patients are treated in both settings. The total number of acute stays relating to alcohol far exceeded the total number of psychiatric stays; in 2013/14 there were 36,714 acute stays (93% of the total) versus 2,956 psychiatric stays (7% of the total) ([Excel sheet 1.1](#)). Relatively few of these stays involved the same patients; 1,022 patients had a stay in both settings out of the 24,504 patients with acute stays and 2,582 patients with psychiatric stays.

Alcohol dependence is the only alcohol-related condition for which the psychiatric stays form a substantial part of all hospital stays. There were 5,169 acute stays and 2,160 psychiatric stays for alcohol dependence in 2013/14. This related to 3,693 and 1,904 patients, respectively ([Excel sheet 2.1](#)), and only 273 of those were treated in both settings. Even for this condition where psychiatric stays form a substantial part of all hospital stays (nearly 30%), relatively few patients are treated in both settings.

Glossary

| | |
|--|--|
| 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. |
| Stay, or Continuous Inpatient Stay (CIS) | This refers to a continuous period of health care in a hospital setting from initial admission to discharge from the same or another hospital. This may include a number of 'episodes' recorded back-to-back for the same patient. Each episode is initiated by a referral (including re-referral) or admission and is ended by a discharge. |
| 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 been applied from the year 2010/11 onwards. |
| EASR | European Age-sex standardised Rate. Standardised rates are used to allow comparisons across geographical areas by controlling for differences in the age and gender structure of local populations. Age-sex standardised rates can be compared across areas and time periods. They give the number of events that would occur in a standard population (here per 100,000) if that population had the age-gender specific rates of a given area. The rates in this report are standardised to the European Standard population (ESP) as revised in 2013. This is different from historic publications (prior to 2013/14), when the 1976 ESP was used. For more information see Appendix A1. |
| ICD-10 | 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. |
| 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 at this moment in time. |

List of Tables

| Table No. | Name | Time period | File & size |
|-----------|--|-------------------|--------------------|
| File 1 | 2015-10-13-ARHS-FY2014-15-Tables-AllAlc.xlsx (all alcohol conditions) | | Excel [1,079KB] |
| 1.1 | Summary trends | 1981/82 - 2014/15 | |
| 1.2 | Annual breakdown | 1981/82 - 2014/15 | |
| 1.3 | Gender trends | 1997/98 - 2014/15 | |
| 1.4 | Age group trends | 1997/98 - 2014/15 | |
| 1.5 | SIMD trends | 1997/98 - 2014/15 | |
| 1.6 | Geographic trends | 1997/98 - 2014/15 | |
| 1.7 | Admission type | 2014/15 | |
| File 2 | 2015-10-13-ARHS-FY2014-15-Tables-Conds.xlsx (individual alcohol-related conditions) | | Excel [5,705KB] |
| 2.1 | Summary trends | 1997/98 - 2014/15 | |
| 2.2 | Annual breakdown | 1997/98 - 2014/15 | |
| 2.3 | Demographic trends | 1997/98 - 2014/15 | |
| 2.4 | Geographic trends | 1997/98 - 2014/15 | |

Contact

Annemarie van Heelsum

Principal Information Analyst

a.vanheelsum@nhs.net

0131 275 7099

Kathryn Neill

Service Manager

kathryn.neill@nhs.net

0131 275 6581

Further Information

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

Rate this publication

Please [provide feedback](#) on this publication to help us improve our services.

Appendix

A1 – Background Information

Hospital activity data are collected across the NHS in Scotland and are based on nationally available information routinely drawn from hospital administrative systems across the country. The principal data source for this publication is the SMR01 (general acute inpatient and day-case) and SMR04 (mental health inpatient and day-case) returns.

SMR01 – General and acute inpatients and day cases

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.

The first section of this report shows data derived from the SMR01, and contains information about patients admitted to general hospitals (mainly for emergency treatment), where alcohol misuse is diagnosed as a factor in the patient's treatment. Up to six diagnoses are recorded per admission, and episodes with either a main or a supplementary diagnosis of alcohol misuse are included.

SMR04 – Mental health inpatient and day cases

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

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.

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 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.

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 1996, 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:

ICD10 codes used for reporting alcohol-related stays in Scottish hospitals

ICD10 code *Description*

| | |
|-------|--|
| E24.4 | Alcohol induced Pseudo-Cushing's syndrome |
| E51.2 | Wernicke's Encephalopathy |
| F10 | Mental & behavioural disorders due to use of alcohol |
| G31.2 | Degeneration of nervous system due to alcohol |
| G62.1 | Alcoholic polyneuropathy |
| G72.1 | Alcoholic myopathy |
| I42.6 | Alcoholic cardiomyopathy |
| K29.2 | Alcoholic gastritis |
| K70 | Alcoholic liver disease |
| K85.2 | Alcohol-induced acute pancreatitis (<i>code introduced 1/4/2013</i>) |
| K86.0 | Alcohol-induced chronic pancreatitis |
| O35.4 | Maternal care for (suspected) damage to foetus from alcohol |
| P04.3 | Foetus and newborn affected by maternal use of alcohol |
| Q86.0 | Fetal alcohol syndrome (dysmorphic) |
| R78.0 | Finding of alcohol in blood |
| T51.0 | Toxic effect of ethanol |
| T51.1 | Toxic effect of methanol |
| T51.9 | Toxic effect of alcohol, unspecified |
| X45 | Accidental poisoning by and exposure to alcohol |
| X65 | Intentional self-poisoning by and exposure to alcohol |
| Y15 | Poisoning by and exposure to alcohol undetermined intent |
| Y57.3 | Alcohol deterrents |
| Y90 | Evidence of alcohol involvement determined by blood alcohol level |
| Y91 | Evidence of alcohol involvement determined by level intoxication |
| Z50.2 | Alcohol rehabilitation |
| Z71.4 | Alcohol abuse counselling and surveillance |
| Z72.1 | Alcohol Use |

ICD9 codes used for reporting alcohol-related stays in Scottish hospitals

| ICD9 code | Description |
|------------------|---|
| 2651 | Other and unspecified manifestations of thiamine deficiency |
| 3039 | Alcohol dependence syndrome |
| 3050 | Nondependent abuse of drugs - <i>alcohol</i> |
| 2918 | Alcoholic Psychosis – <i>Other (alcohol withdrawal syndrome)</i> |
| 2910 | Alcoholic Psychosis – <i>Delerium Tremens</i> |
| 2913 | Alcoholic Psychosis – <i>other alcoholic dementia</i> |
| 2915 | Alcoholic Psychosis – <i>Alcoholic jealousy</i> |
| 2919 | Alcoholic Psychosis – <i>unspecified</i> |
| 2911 | Alcoholic Psychosis – <i>Korsakov's psychosis, alcoholic</i> |
| 2912 | Alcoholic Psychosis – <i>Other alcoholic dementia</i> |
| 3575 | Inflammatory and Toxic Neuropathy – <i>Alcoholic polyneuropathy</i> |
| 4255 | Cardiomyopathy - <i>Alcoholic Cardiomyopathy</i> |
| 5353 | Gastritis and duodenitis - <i>Alcoholic Gastritis</i> |
| 5710 | Chronic Liver disease and cirrhosis - <i>Alcoholic fatty liver</i> |
| 5711 | Chronic Liver disease and cirrhosis - <i>Acute alcoholic hepatitis</i> |
| 5712 | Chronic Liver disease and cirrhosis - <i>Alcoholic cirrhosis of liver - Laennec's cirrhosis</i> |
| 5713 | Chronic Liver disease and cirrhosis - <i>Alcoholic liver damage (unspecified)</i> |
| 7607 | Fetus or newborn affected by maternal conditions which maybe unrelated to present pregnancy – <i>Noxious influences transmitted via placenta or breast milk</i> |
| 7598 | Other and unspecified congenital anomalies – <i>Other specified anomalies</i> |
| 7903 | Non-specific findings on examination of blood – <i>Excessive blood level of alcohol</i> |
| 9800 | Toxic effect of ethyl alcohol – <i>Ethyl alcohol</i> |
| 9801 | Toxic effect of ethyl alcohol – <i>Methyl alcohol</i> |
| 9809 | Toxic effect of ethyl alcohol – <i>Unspecified</i> |

External Alcohol codes

| | |
|-------|--|
| E8600 | Accidental poisoning by alcohol not elsewhere classified - <i>Alcoholic beverages</i> |
| E8601 | Accidental poisoning by alcohol not elsewhere classified - <i>Other and unspecified ethyl alcohol and its products</i> |
| E8602 | Accidental poisoning by alcohol not elsewhere classified – <i>Methyl alcohol</i> |
| E8609 | Accidental poisoning by alcohol not elsewhere classified - <i>Unspecified</i> |
| E9473 | Other and unspecified drugs and medicaments - <i>Alcohol deterrents</i> |

Codes that must appear with an external code

| | |
|------|---|
| 2550 | Disorders of adrenal glands – <i>Pseudo Cushing's syndrome</i> |
| 3594 | Muscular dystrophies and other myopathies – <i>Toxic myopathy</i> |
| 5709 | Acute and subacute necrosis of liver |
| 6554 | Known or suspected fetal abnormality affecting management of mother – <i>Suspected damage to fetus from other disease in the mother</i> |
| 3483 | Other conditions of brain – <i>Encephalopathy, unspecified</i> |
| 5771 | Diseases of pancreas – <i>Chronic pancreatitis</i> |

Paired codes

| | |
|---------------|--|
| D3039 + A3317 | Alcohol dependence syndrome + Cerebral degeneration in other diseases classified elsewhere |
| D3039 + A3344 | Alcohol dependence syndrome + Cerebral ataxia in diseases classified elsewhere |

Some caution is necessary when using these data as alcohol misuse may only be suspected and may not always be recorded by the hospital. The tables presented here are based on all alcohol-related diagnoses throughout the hospital stay.

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/>. There is a requirement for SMR01 data to be returned by hospitals within 6 weeks. After 7 months completeness is typically around 99%, however at the time of extraction from the SMR01 database the number of hospital episodes was regarded 98% complete, with in particular NHS Highland still expected to submit data. This NHS board has moved to a new data management system last year and has a board-level completeness of 76% for the last quarter of 2014/15 (where most other boards have more than 95% completeness for this quarter). The impact on the Scotland-level figures is very small but will need to be taken into account when interpreting Highland-specific 2014/15 figures in relation to other boards or previous years. The impact on the patient numbers reported is anticipated to be smaller than the impact on the number of stays.

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. The 2014/15 report has been expanded to include data from mental health specialties (SMR04 - mental health inpatient and day-case returns) as well as from acute medical specialties (SMR01 - general acute inpatient and day-case returns). In the last two editions of this report the SMR04 data could not be reported on due to data completeness issues, but now these have been largely resolved this section of the report has been re-introduced. A new section has been added reporting on statistics of both data sets combined. The addition of this information will give a fuller picture of health service use.

Revision of the European Standard Population

In the 2012/13 report published in February 2014 major changes were made to the calculation of rates as a result of the introduction by Eurostat (the statistical institute of the European Union) of a new European standard population (ESP) in 2013. European Age-sex standardised Rates (EASRs) allow making comparisons between different geographical areas as they allow the effects of having different age structures in either the same population over time or different geographies to be removed. The ESP was revised to more closely reflect the current age structure in Europe and was created based on an average of states' population projections for 2011 to 2030. The change had a substantial impact on the rates reported in this publication; in that due to the number of alcohol-related discharges affecting the older age groups more than the younger age groups, the EASRs using the new (2013) ESP will be higher than those using the old (1976) ESP. The new ESP is now routinely used in all publications.

EASRs based on ESP1976 are not comparable with EASRs based on ESP2013. More information regarding the ESP change can be obtained from the [ISD website](#) or the [ONS website](#).

Note that in this publication 2014 NHS Board boundaries have been used.

Further information

Further statistics on general acute hospital care are available at:

<http://www.isdscotland.org/Health-Topics/Hospital-Care/>.

Statistics on Emergency care are available at:

<http://www.isdscotland.org/Health-Topics/Emergency-Care/Accident-and-Emergency-Data-Mart/>

Statistics on Mental Health hospital inpatient care are available at:

<http://www.isdscotland.org/Health-Topics/Mental-Health/Psychiatric-Hospital-Activity/>.

Information on all ISD Scotland's national datamarts can be found on our website at:

<http://www.isdscotland.org/Products-and-Services/Datamarts/ISD-Datamarts/>.

If you would like further information on hospital discharges relating to drug misuse then please contact the Health Improvement – Drug & Alcohol Team at

nss.isdsubstancemisuse@nhs.net.

For information about the completeness, timeliness and other data quality issues regarding SMR01 data submissions contact the Data Management Team at nss.isdDMT@nhs.net.

Further information on alcohol-related hospital statistics in the United Kingdom is available at the following URLs:

England: [Statistics on Alcohol - England, 2014](#)

Wales: [Alcohol and Health in Wales 2014](#)

Northern Ireland: [Alcohol information](#)

A2 – Publication Metadata (including revisions details)

| Metadata Indicator | Description |
|--|--|
| Publication title | Alcohol-related Hospital Statistics Scotland 2014/15 |
| Description | <p>Data relating to hospital (SMR01) discharges with diagnosis of Alcohol misuse. These data are presented at a national level and also broken down by certain demographics.</p> <p>Information on the Mental Health Inpatient and Day Case Records (SMR04) that in the past was part of this publication is no longer included and will be published later in the Alcohol section on the ScotPHO website.</p> |
| Theme | Health and Social Care |
| Topic | Substance Misuse |
| Format | PDF report with Excel tables |
| Data source(s) | ISD SMR01, SMR04 |
| Date that data are acquired | August 2015 |
| Release date | Tuesday 13 th October 2015 |
| Frequency | Annual |
| Timeframe of data and timeliness | <p>SMR01: for Scotland overall - stays & patients: 01/04/1981 to 31/03/2015; for new patients 01/04/91 to 31/03/2015. Shorter time trend for Specific diagnoses, break-down by age group, gender, SIMD quintile, NHS Board and council area: 01/04/1997 to 31/03/2015 (stays and patients), 01/04/2007 to 31/03/2015 (new patients).</p> <p>For SMR04 and combined dataset: 01/04/1997 to 31/03/2014 (stays & patients); 01/04/2007 to 31/03/2014 (new patients)</p> |
| Continuity of data | See Appendix A1 (Background information) |
| Revisions statement | <p>These data are not subject to planned major revisions. However, the Health Improvement team aims to continually improve the interpretation of the data and therefore analysis methods may be updated in the future. In line with ISD standards agreed with NRS, the latest available population estimates and standard populations are used.</p> |
| Revisions relevant to this publication | <p>New for 2014/15 is that SMR04 figures are now included in this report. The two changes made in last year's publication are continued this year, so statistics are now shown for a much longer time period (back to 1981/82 rather than just the last 5 years); and more extensive information on Patients (in addition to Stays) and new statistics on "new" patients (not stayed in hospital in the last 10 years) are provided. All rates are age-sex standardised using the 2013 European standard population and the 2014 NHS Board boundaries are applied.</p> |

| | |
|--|---|
| Concepts and definitions | See Hospital Care: Background Information http://www.isdscotland.org/Health-Topics/Hospital-Care/ |
| Relevance and key uses of the statistics | Relevant to understanding Alcohol misuse in Scotland. Statistics will be used for policy making and service planning. |
| Accuracy | Quality checks are conducted by ISD. Figures are compared to previously published data and expected trends. |
| Completeness | Details of these data submissions issues are available on the Hospital Records Data Monitoring SMR Completeness web page |
| Comparability | The NHS Health and Social Care Information Centre (HSCIC) publishes figures on Hospital admissions in Statistics on Alcohol - England, 2014 but should not be directly compared with published data from Scotland. For more information see the Background information on the ISD Hospital Care website . |
| Accessibility | It is the policy of ISD Scotland to make its web sites and products accessible according to published guidelines . |
| Coherence and clarity | The report is available as a PDF file with tables clearly linked for ease of use. |
| Value type and unit of measurement | Rates are per 100,000 population, standardised for age and gender to the 2013 European Standard Population. |
| Disclosure | The ISD protocol on Statistical Disclosure Protocol is followed. |
| Official Statistics designation | National Statistic |
| UK Statistics Authority Assessment | Completed assessment by UK Statistics Authority, report published 4 th April 2012 |
| Last published | 27 th October 2015 |
| Next published | 11 th October 2016 |
| Date of first publication | 1998 |
| Help email | a.vanheelsum@nhs.net |
| Date form completed | 1 October 2015 |

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.