

Publication Report



Drug-Related Hospital Statistics Scotland 2013/14 (revision)



Publication date – 28 October 2014

Contents

Introduction	1
Key points	2
Results and Commentary	3
General Hospital Discharges	3
Latest year (2013/14)	3
Trend analysis	7
Glossary	12
List of Tables	14
Contact	15
Further Information	15
Rate this publication	15
Appendices	16
A1 – Changes to the European Standard Population	16
A2 – Background Information	19
A3 – Publication Metadata (including revisions details)	22
A4 – Early Access details (including Pre-Release Access)	25
A5 – ISD and Official Statistics	26

Introduction

This publication reports on hospital stays in relation to a drug misuse diagnosis and the patients admitted to hospital for such treatment. It includes information on inpatients and day cases discharged from general acute hospitals in Scotland, where drug misuse was mentioned in the records at some point during the patients' hospital stay. In doing so, it tells us about some health impacts of drug misuse.

The information reported in this publication has been collated using data obtained from the following source:

- Hospital data from ISD General Acute Inpatient / Day case Records (SMR01) years 1996/97 to 2013/14.

This report describes, for Financial Year 2013/14, the number of drug-related hospital stays, the number and characteristics of patients admitted to hospital, the substances used and the geographical variations within Scotland. Analyses of trends from 1996/97 to 2013/14 are also included in order to contextualise these data.

The Mental Health (Psychiatric) Hospital Activity Statistics publication has been delayed for the second consecutive year due to incomplete Mental Health Inpatient and Day Case (SMR04) discharge records, so the psychiatric discharges section of this report has been omitted. ISD are working closely with NHS Boards to ensure submission of SMR04 discharge data.

Methods

Since publication of 2012/13 data in February 2014, this series of reports has used the 2013 European Standard Population (ESP2013) to calculate European Age-Sex Standardised Rates (EASRs) for all years (including those before 2012/13). The European Standard Population (ESP), which was first used in 1976, was revised in 2013. Before 2014, previous reports in this series used ESP1976 to calculate EASRs. Figures using ESP1976 and ESP2013 are not comparable. Therefore, findings from the 2012/13 and 2013/14 publications are not comparable with previous ISD reports. See [Appendix A1](#) for further details.

Certain figures (commonly small numbers, for small areas or populations) are not shown. This is as a result of 'statistical disclosure control' (SDC) which aims to prevent the release of information that can lead to the identification of individuals. Further information on the SDC methods applied by ISD Scotland is available from the [ISD website](#).

While attempts have been made to ensure the terminology used is as clear as possible, the statistical nature of this report means that the use of technical/statistical terms is unavoidable. For further explanation of these words or phrases, please refer to the [Glossary](#). Further background information is available in [Appendix A2](#).

Key points

General Hospital Stays:

- The European Age-Sex Standardised Rate (hereafter referred to as 'rate') of general hospital stays with a diagnosis of drug misuse has shown a general upward trend from 1996/97 (41 per 100,000 population) to 2013/14 (125 per 100,000 population).
- In 2013/14, the majority of drug-related general hospital stays were associated with opioids (66%), followed by multiple/other drugs (13%) and cannabinoids (12%).
- In 2013/14, 92% (6,059) of general hospital stays were as a result of an emergency admission rather than a planned (i.e. elective) admission and 93% of stays (6,140) were for less than one week.
- Patients admitted to hospital in relation to a drug misuse diagnosis were more likely to live in the most deprived areas in Scotland than in the least deprived areas. In 2013/14, around a third (32%, 1,637/5,057) of patients staying in hospital for treatment in relation to a drug misuse diagnosis lived in the most deprived areas in Scotland (SIMD decile 1).
- In the period 1996/97 to 2013/14, the rate of patients admitted to hospital for treatment in relation to a drug misuse diagnosis increased among older age range groups (rising from 36 to 301 patients per 100,000 population for 35-39 years, and from 20 to 214 for those aged 40-44 years and over) and decreased among younger age groups (reducing from 91 to 74 patients per 100,000 population for 15-19 year olds and from 137 to 122 for 20-24 year olds).

Results and Commentary

General Hospital Stays

Latest year (2013/14)

- During 2013/14, there were 6,571 general hospital stays with a diagnosis of drug misuse. These stays related to 5,075 patients and of these, 2,760 were new patients ([Table 1.1](#)).

Stays

- In 2013/14, the European Age-Sex Standardised Rate (EASR, hereafter referred to as 'rate') for general hospital stays with a diagnosis of drug misuse was 125 stays per 100,000 population.(Table 1.2)
- Seventy per cent of stays with a diagnosis of drug misuse were amongst males (4,578, rate: 176) compared with thirty per cent of stays among females (1,993, rate: 74). Individuals in the 35-39 year old age group had the highest rate of stays with a diagnosis of drug misuse - 388 stays per 100,000 population ([Table 1.3](#)).
- The average number of stays per patient was 1.3. Individuals in the 50-54 and 55-59 year old age groups had the highest numbers of stays per patient (1.53 and 1.45 respectively) ([Table 1.1](#)).

Patients

- The 2013/14 rate for patients discharged following a stay related to drug misuse was 96 patients per 100,000 population ([Table 1.4](#)).
- Seventy per cent of patients discharged in 2013/14 following a stay related to drug misuse were males (3,551, rate: 136) (females:1,524, rate: 56). Among patients, the highest rate of drug-related stays was observed in the 35-39 year old age group (301 patients per 100,000 population) ([Table 1.4](#)).
- Patients from more deprived areas were more likely to be admitted to hospital with a drug-related diagnosis. Those in the two most deprived SIMD deciles (one and two) had the highest rates with 297 and 174 per 100,000 population respectively ([Table 1.10](#)).

New Patients¹

- The 2013/14 rate for new patients discharged following a stay related to drug misuse was 52 patients per 100,000 population ([Table 1.5](#)). These are individuals who had not previously been admitted to hospital as a result of drug misuse.
- 71 per cent of new patients discharged in 2013/14 following a stay related to drug misuse were males (1,971, rate:74) (females: 789, rate: 29). Among new patients, the highest rate of drug-related stays was observed in the 35-39 year old age group (138 per 100,000 population) ([Table 1.5](#)).

¹ It should be noted that this new statistic, based on a ten-year look back of SMR01 (acute hospital inpatient) records, does not include stays in psychiatric hospitals as SMR04 data are not available. Therefore, this statistic should not be regarded as an accurate proxy for incidence of new, acute drug misuse issues – it reflects only those patients admitted within an acute general hospital setting.

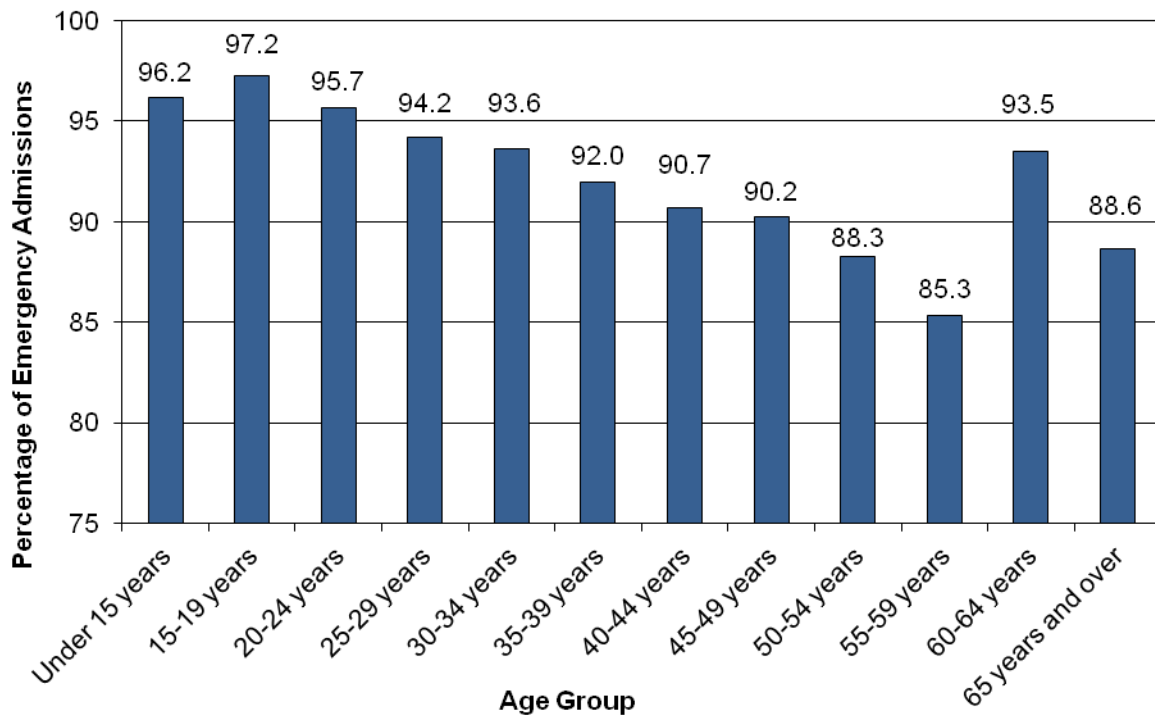
Drugs

- In 2013/14, the majority of drug-related hospital stays were associated with opioids (66%), followed by multiple/other drugs² (13%) and cannabinoids (12%) ([Table 1.6](#)).
- In all age groups except 'under 15 years' and '15-19 years', opioid-related stays were most prevalent. Around three quarters of stays involving patients aged 30-34 (75%), 35-39 (78%), 40-44 (76%), 45-49 (72%) and 55-59 (74%) involved opioids. Those aged 20-24 had the highest percentage of stays related to cocaine (18%) ([Table 1.6](#)).
- Stays involving those aged 15 to 19 years showed considerable variation with cannabinoids recorded in 35% of stays, 'other stimulants'³ involved in 37% of stays, 'multiple/other drugs' involved in 18% of stays and cocaine involved in 16% of stays ([Table 1.6](#)).

Nature of stay

- Ninety-two per cent (6,059) of general hospital stays were as a result of an emergency admission rather than a planned (i.e. elective) admission ([Table 1.8](#)).
- Stays relating to individuals aged 55-59 and 50-54 years were least likely to have been an emergency admission (85% and 88% respectively) (Figure 1.1).
- Ninety-three per cent of stays (6,140) were for less than one week ([Table 1.9](#)).
- Stays related to opioids and 'multiple/other' drugs were associated with the highest percentage of hospital stays of one week or more (8% and 6% respectively) ([Table 1.9](#)).

Figure 1.1: Percentage of general acute hospital stays with a diagnosis of drug misuse (in any position) resulting from emergency admissions, by age group (2013/14p)



Note:
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² This category includes hallucinogens, volatile solvents, multiple drug use and use of other psychoactive substances (e.g. ecstasy). This category may be used to indicate poly drug use when individual substances are not known or cannot be coded using existing diagnosis (ICD10) codes.

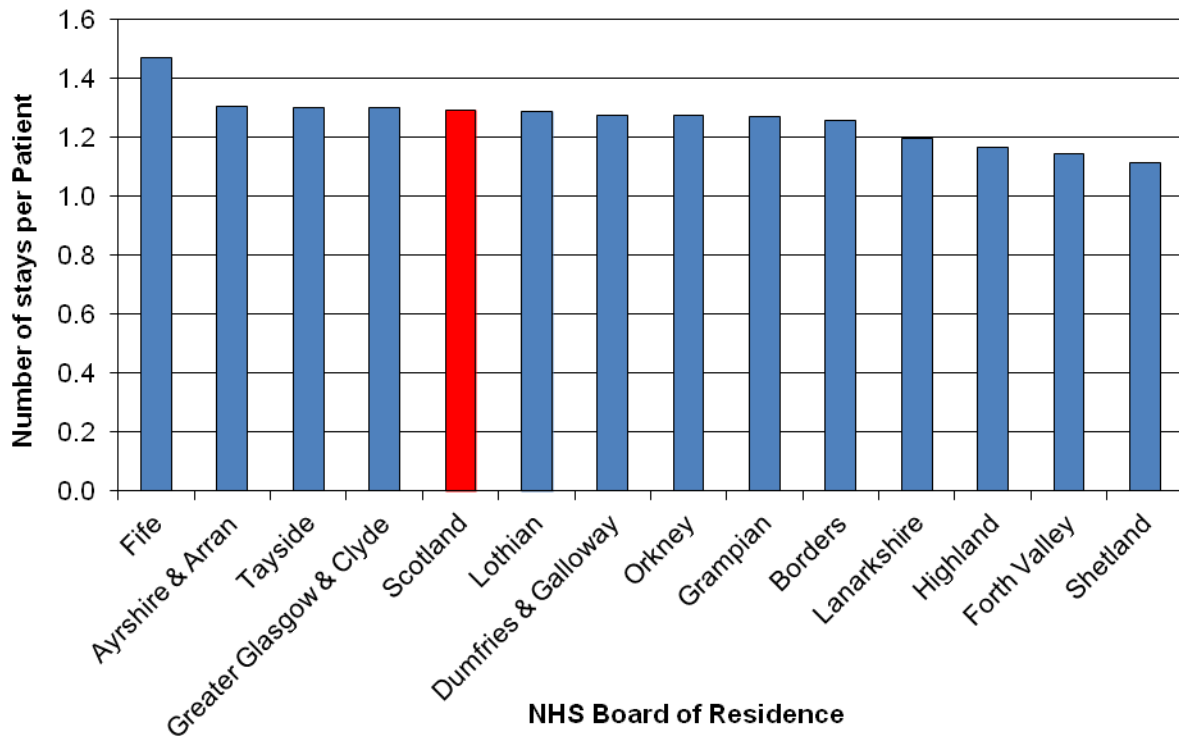
³ This category includes stimulants other than cocaine (e.g. caffeine, amphetamine, methamphetamine, BZP, PMA).

Geographical profile

NHS Boards

- The rate of drug-related general hospital stays varied widely across Scotland. In 2013/14 the highest rates were seen in NHS Ayrshire & Arran (217 stays per 100,000 population), NHS Fife (205) and NHS Dumfries & Galloway (146) ([Table 1.3](#)).
- NHS Fife had the highest number of stays per patient (1.5), compared to the Scottish average of 1.3. NHS Western Isles and NHS Shetland had the fewest stays per patient (1.0 and 1.1 respectively). Of the mainland Health Boards, NHS Forth Valley had the lowest number of stays per patient (1.1) ([Table 1.1](#) and Figure 1.2).
- In all drug-related stays in NHS Borders, NHS Shetland and NHS Western Isles, patients were admitted as emergencies. The percentage of stays admitted as an emergency was lowest in NHS Grampian (87%) ([Table 1.8](#) and Figure 1.3).
- NHS Grampian (85%), NHS Dumfries and Galloway (81%), NHS Tayside (78%) and NHS Ayrshire & Arran (77%) had the highest percentage of stays with an opioid-related diagnosis ([Table 1.6](#)).

Figure 1.2: Average number of general acute inpatient and day case stays with a diagnosis of drug misuse (in any position) per patient, by NHS Board (2013/14)¹

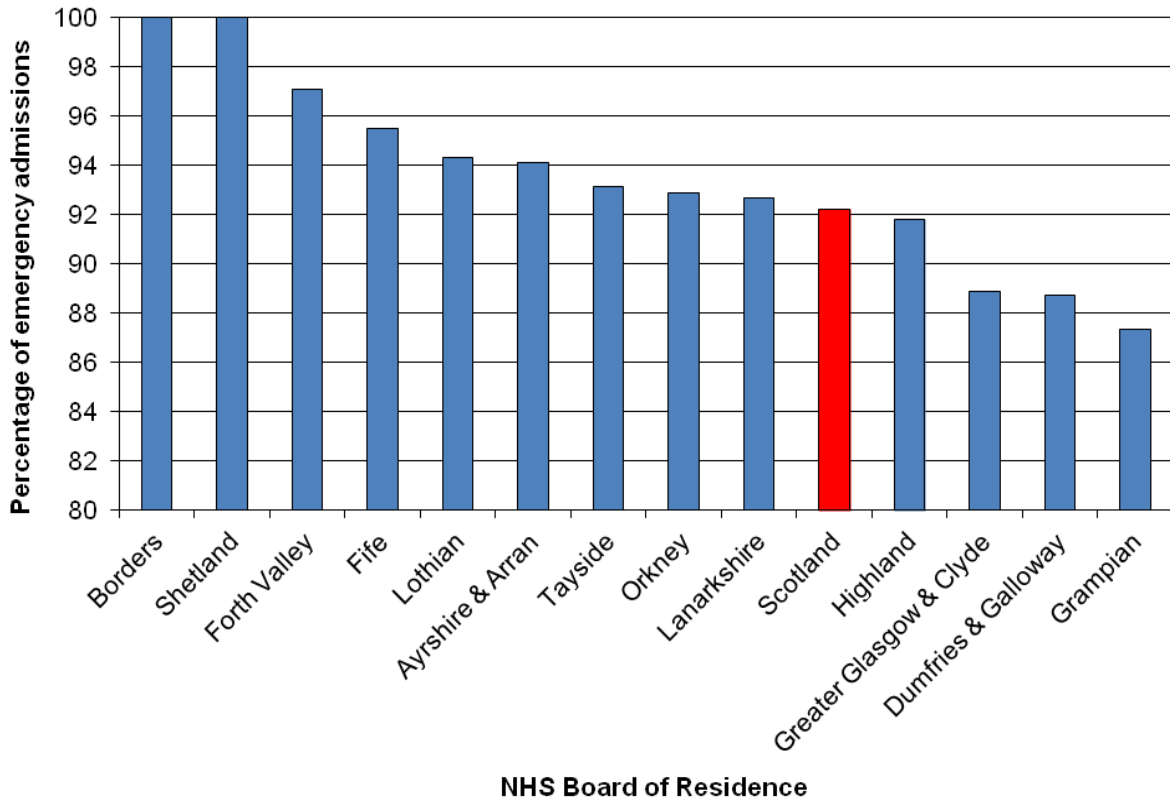


Notes:

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1. Data from NHS Western Isles are excluded due to small numbers.

Figure 1.3: Percentage of general acute inpatient and day case stays with a diagnosis of drug misuse (in any position) admitted as emergency, by NHS Board (2013/14p)¹



Notes:
 p Provisional
 1. Data from NHS Western Isles are excluded due to small numbers.

Council Areas

- In relation to council areas, the highest rates of drug-related stays in 2013/14 were observed in Ayrshire North (243 stays per 100,000 population), Inverclyde (240) and Ayrshire East (239) ([Table 1.3](#)).
- Fife and Renfrewshire council areas had the highest number of stays per patient (1.5 and 1.4 respectively), compared to a Scottish average of 1.3. Eilean Siar (1.0) had the fewest stays per patient ([Table 1.1](#)).
- Aberdeen City (87%), Dundee City (84%), Moray (83%) and Dumfries and Galloway (81%) council areas had the highest percentage of stays with an opioid-related diagnosis ([Table 1.6](#)).

Trend analysis (1996/97 – 2013/14)⁴**Stays**

- The rate of general hospital stays with a diagnosis of drug misuse has increased steadily since 1996/97. An increase of 208% occurred over the period 1996/97 (41 per 100,000) to 2013/14 (125 per 100,000). Despite the long-term increases evident, rates of stays have fluctuated considerably over the last five years. The 2013/14 rate (125 per 100,000 population) was the highest rate observed throughout this period ([Table 1.2](#) and Figure 1.4).

Patients

- The rate of patients admitted to hospital for treatment in relation to a drug misuse diagnosis has increased since 1996/97, the pattern roughly corresponding with changes in the rate of stays. An increase of 186% in the patient rate occurred over the period 1996/97 (34 per 100,000) to 2013/14 (96 per 100,000) ([Table 1.2](#) and Figure 1.4).

New Patients⁵

- The rate of new patients admitted to hospital for treatment in relation to a drug misuse diagnosis has increased slowly since 2006/07. An increase of 19% in the rate of new patients occurred over the period 2006/07 (43 per 100,000) to 2013/14 (52 per 100,000) ([Table 1.2](#) and Figure 1.4).
- The indicators shown in Figure 1.4 show the impact on NHS acute hospitals resulting from admissions associated with drug misuse. The rate of new patients per year has increased only slightly over time, in contrast to a greater increase in patient and stay rates. The higher patient rate compared to new patient rate indicates that around half of patients treated in relation to drug misuse each year had been admitted for drug misuse in previous years.

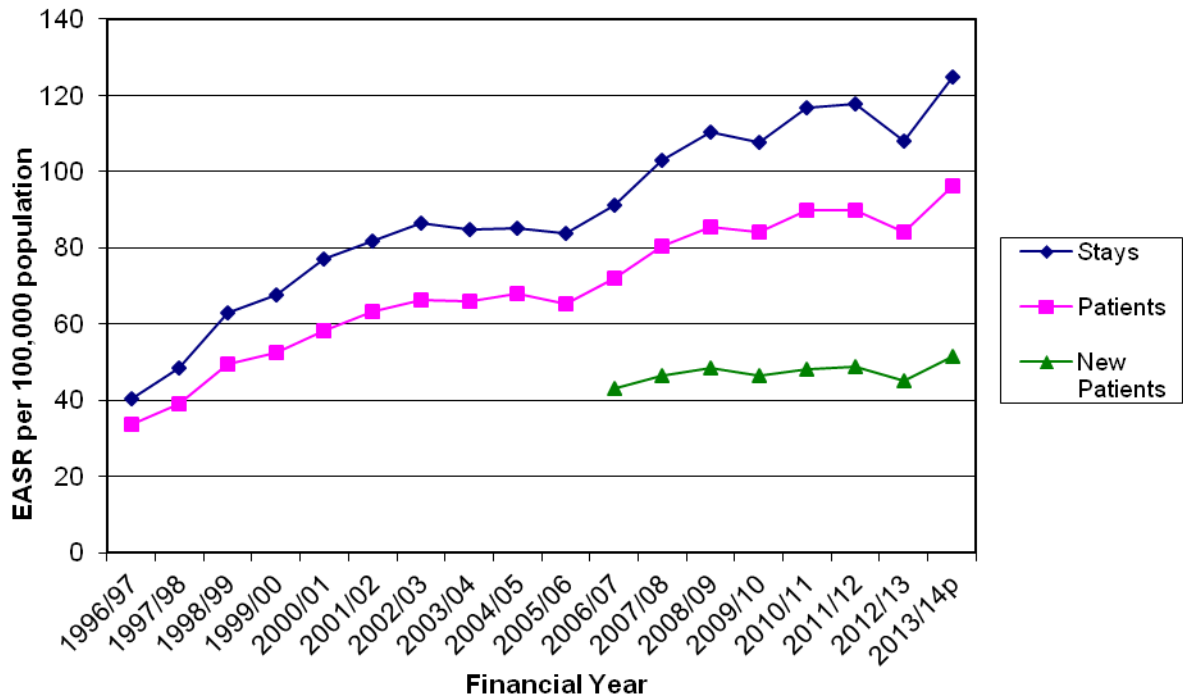
Demographic characteristics of patients

- The ratio of male and female patients remained stable over the period 1996/97 to 2013/14, with numbers and rates per 100,000 population for males consistently more than double that of females ([Table 1.4](#)).
- In the period 1996/97 to 2013/14, the rate of patients staying in hospital for treatment in relation to a drug misuse diagnosis increased among older age groups, rising from 36 to 301 patients per 100,000 population for 35-39 years, and from 20 to 214 for those aged 40-44 years and over ([Table 1.4](#) and Figure 1.5).
 - The rate of patients staying in hospital for treatment in relation to a drug misuse diagnosis decreased overall among younger age groups in the period 1996/97 to 2013/14, reducing by 19% (from 91 to 74 patients per 100,000 population) for 15-19 year olds and 11% (from 137 to 122) for 20-24 year olds ([Table 1.4](#) and Figure 1.5).

⁴ Before 1996/97, diagnosis coding within SMR records was based on ICD9. ISD introduced ICD10 coding into SMR from 1996 onwards. The coding of drug misuse diagnoses changed markedly between these two ICD versions, therefore a considerable increase in the number of drug-related hospital stays was observed between 1995/96 and 1996/97. As this change was likely to be a coding artefact rather than a real increase in drug-related stays, years prior to 1996/97 have been excluded from analyses presented in this report. As the new patients measure incorporates a ten-year look back of SMR01 records, numbers of new patients in the period from 1996/97 to 2005/06 were based partly on ICD9 codes and were likely to overestimate the number of new patients throughout this period. Therefore, new patient figures are not provided for years prior to 2006/07.

⁵ It should be noted that this new statistic, based on a ten-year look back of SMR01 (acute hospital inpatient) records, does not include stays in psychiatric hospitals as SMR04 data are not available. Therefore, this statistic should not be regarded as an accurate proxy for incidence of new, acute drug misuse issues – it reflects only those patients admitted within an acute general hospital setting.

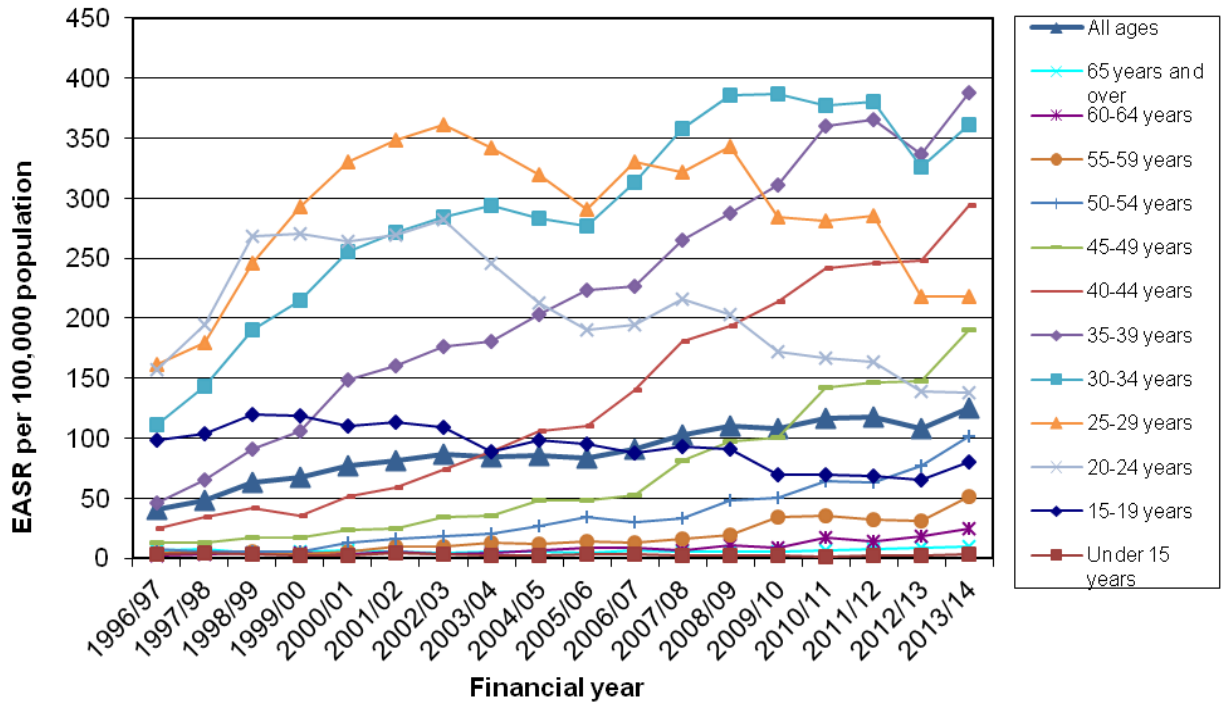
Figure 1.4: European Age-Sex Standardised Rate per 100,000 population (using ESP2013^{1,2}) of general acute inpatient and day case stays, patients and new patients³ with a diagnosis of drug misuse (in any position) (1996/97–2013/14p)



Notes:

1. The European Standard Population (ESP), which was first used in 1976, was revised in 2013. Figures using ESP1976 and ESP2013 are not comparable. See Appendix A1 for further details.
 2. The population estimates used in the calculation of rates above are based on the 2011 Census results.
 3. Period from 1996/97 to 2005/06 censored due to inclusion of ICD9 codes in ten-year look back of SMR01 records.
- p Provisional

Figure 1.5: European Age-Sex Standardised Rate per 100,000 population (using ESP2013^{1,2}) of general acute inpatient and day case patients with a diagnosis of drug misuse (in any position), by age group (1996/97–2013/14p)



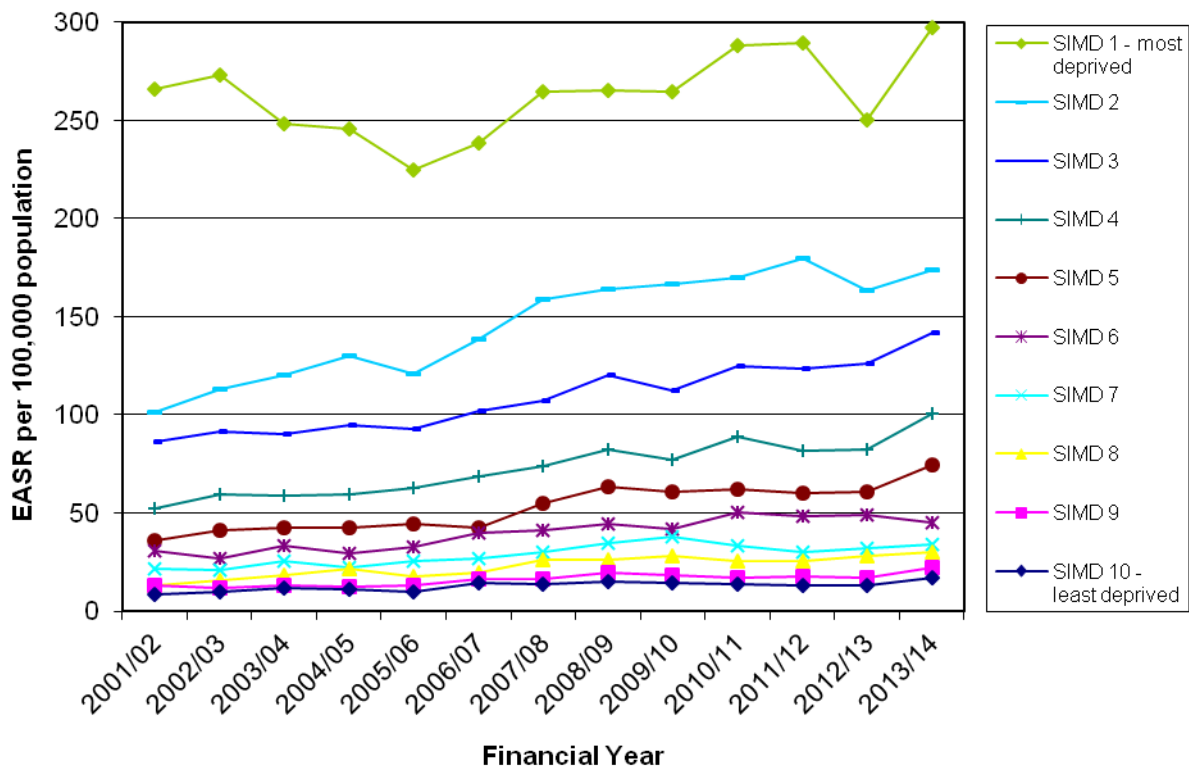
Notes:

1. The European Standard Population (ESP), which was first used in 1976, was revised in 2013. Figures using ESP1976 and ESP2013 are not comparable. See Appendix A1 for further details.
2. The population estimates used in the calculation of rates above are based on the 2011 Census results.

p Provisional

- Patients admitted to hospital in relation to a drug misuse diagnosis were more likely to live in the most deprived areas in Scotland than in the least deprived areas. In 2013/14, around a third (32%, 1,637/5,057) of patients staying in hospital for treatment in relation to a drug misuse diagnosis lived in the most deprived areas in Scotland (SIMD decile 1). This percentage has decreased steadily since 2001/02 when 42% (1,435/3,423) of patients lived in decile 1 areas ([Table 1.10](#)).
- Although increases in patient rates were observed across all SIMD deciles from 2001/02 to 2013/14, decile 1 rates fluctuated considerably within this period and increased the least overall (12% from 266 to 297 patients per 100,000 population)⁶. The largest increases were observed in deciles 8 (increasing 133% from 13 to 30 patients per 100,000 population) and 5 (increasing 107% from 36 to 75 patients per 100,000 population) ([Table 1.10](#) and Figure 1.6).

Figure 1.6: European Age-Sex Standardised Rate per 100,000 population (using ESP2013^{1,2}) of general acute inpatient and day case patients with a diagnosis of drug misuse (in any position) by SIMD deprivation decile (2001/02–2013/14p)



Notes:

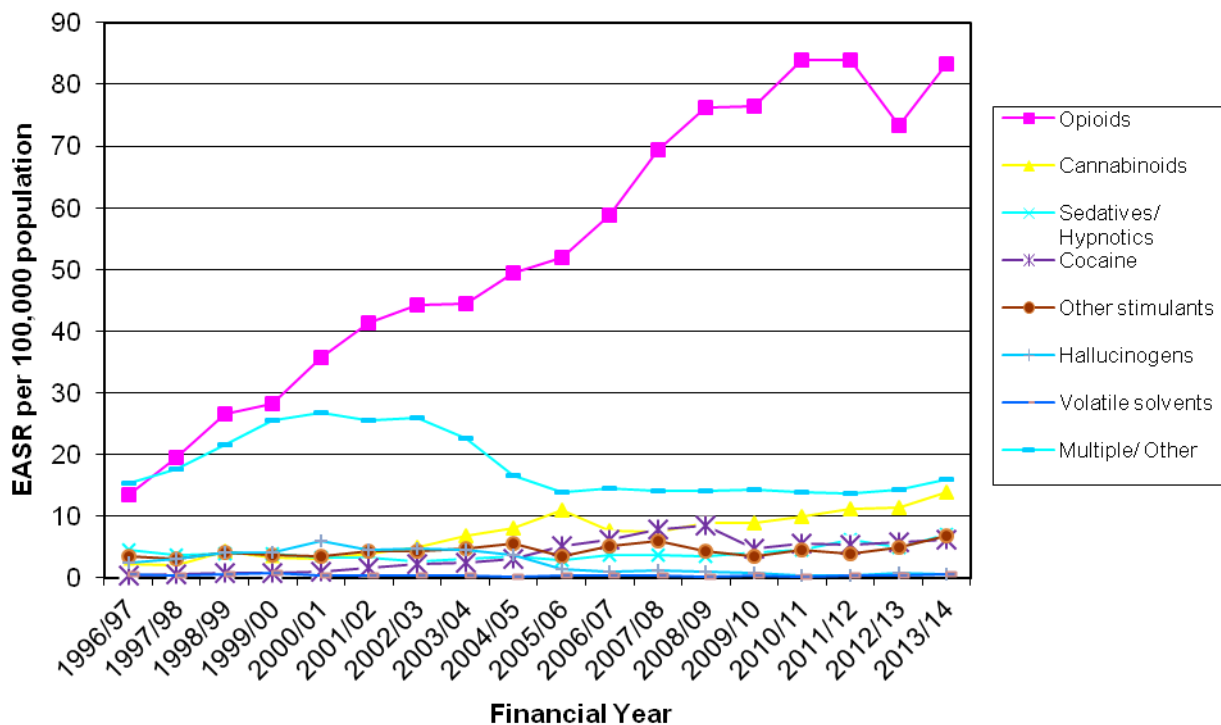
1. The European Standard Population (ESP), which was first used in 1976, was revised in 2013. Figures using ESP1976 and ESP2013 are not comparable. See Appendix A1 for further details.
 2. The population estimates used in the calculation of rates above are based on the 2011 Census results.
- p Provisional

⁶ The decrease in stays/patients observed in 2012/13 appears to have been associated specifically with decile 1. At that point, this was the only decile where the rate (250) was lower than that observed in 2001/02 (266) ([Table 1.10](#) and Figure 1.6).

Drugs⁷

- The substances most commonly indicated in drug-related stays were opioids – in 2013/14 they were reported in 66% of stays (4,364), a large increase since 1996/7 (34%, 791) (Table 1.7 and Figure 1.7).
- The next most frequently recorded specific drug category was ‘multiple/other drugs’ (13%); the percentage of stays involving ‘multiple/other drugs’ has remained stable at 12-13% from 2008/09 to 2013/14 (Table 1.7 and Figure 1.7).
- The percentage of stays involving cannabinoids has increased in recent years from 7% (406) in 2007/08 to 12% (756) in 2013/14 (Table 1.7 and Figure 1.7).
- The percentage of stays where cocaine was indicated has been relatively stable over time (5%, 347 in 2013/14) (Table 1.7 and Figure 1.7).
- Discharges involving sedatives/hypnotics and other stimulants remained at roughly the same level throughout the period (between 3% and 6% of stays) (Table 1.7 and Figure 1.7).

Figure 1.7: European Age-Sex Standardised Rate per 100,000 population (using ESP2013^{1,2}) of general acute inpatient and day case stays with a diagnosis of drug misuse (in any position), by drug type (1996/97–2013/14p)



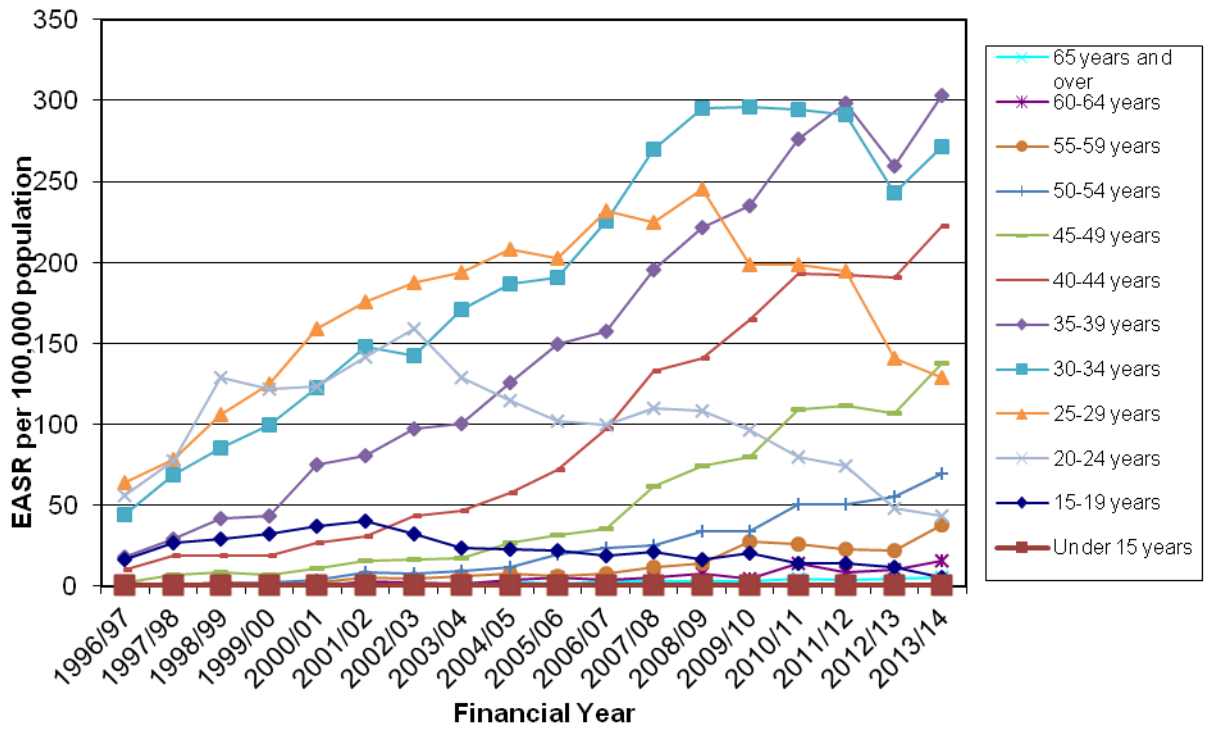
Notes:

1. The European Standard Population (ESP), which was first used in 1976, was revised in 2013. Figures using ESP1976 and ESP2013 are not comparable. See Appendix A1 for further details.
 2. The population estimates used in the calculation of rates above are based on the 2011 Census results.
- p Provisional

- Analysis of opioid-related stays by age group provides further evidence for an ageing cohort of opioid users. Figure 1.8 shows that opioid-related admissions were most prevalent among the 20-24 age group in 1998/99, among the 25-29 age group between 1999/00 and 2006/07, the 30-34 age group 2007/08 and 2010/11 and 35-39 age group from 2011/12 to the present.

⁷ Please note that the sum of the drug categories is not equal to the total because more than one type of drug can be indicated in a single stay.

Figure 1.8: European Age-Sex Standardised Rate per 100,000 population (using ESP2013^{1,2}) of general acute inpatient and day case stays with a diagnosis of opioid misuse (in any position), by age group (1996/97–2013/14p)



Notes:

1. The European Standard Population (ESP), which was first used in 1976, was revised in 2013. Figures using ESP1976 and ESP2013 are not comparable. See Appendix A1 for further details.
 2. The population estimates used in the calculation of rates above are based on the 2011 Census results.
- p Provisional

Glossary

EASR	Since publication of 2012/13 data in February 2014, this series of reports has used the 2013 European Standard Population (ESP2013) to calculate European Age-Sex Standardised Rates (EASRs) for all years (including those before 2012/13). The European Standard Population (ESP), which was first used in 1976, was revised in 2013. Before 2014, previous reports in this series used ESP1976 to calculate EASRs. Figures using ESP1976 and ESP2013 are not comparable. Therefore, <u>findings from the 2012/13 and 2013/14 publications are not comparable with previous ISD reports</u> . See Appendix A1 for further details.
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) at datazone level, which have been combined into an overall index. Rates are reported by deciles. Deciles divide the population into ten equal proportions so that 10% of the population falls into each decile. The SIMD is updated roughly every three years and the version used depends on the year when the patient was discharged from hospital.
Discharge	This refers to the end of a given period of health care in a hospital setting known as a continuous inpatient stay (CIS) or Stay (see below). Each stay is initiated by a referral (including re-referral) or admission and is ended by a discharge.
ICD	The International Statistical Classification of Diseases and Related Health Problems (ICD) revision is used to classify hospital admissions and deaths. The 10th revision is used in analysis.
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 similar treatment over a specific time period before that admission.
Patient	An individual admitted to hospital as an inpatient within a given time period (e.g. Financial Year).
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 recorded when all returns are in.

Stay

This refers to a given period of health care in a hospital setting known as a continuous inpatient stay (CIS). A CIS is composed of individual episodes (where the patient is under the care of an individual consultant). An individual (patient) may account for a number of stays during a given reporting period. Each stay is initiated by a referral (including re-referral) or admission and is ended by a discharge.

List of Tables

Table No.	Name	Time period	File & size
	Drug-related Hospital Statistics 2014		Excel [788kb]
1.1	General acute inpatient & day case stays with a diagnosis of drug misuse in any position; number of stays, patients, average stays per patient and new patients (2013/14)	2013/14	
1.2	General acute inpatient & day case stays with a diagnosis of drug misuse in any position; number and rate of stays, patients and new patients (1996/97-2013/14)	1996/97 - 2013/14	
1.3	General acute inpatient & day case stays with a diagnosis of drug misuse in any position; number and rate of stays (1996/97-2013/14)	1996/97 - 2013/14	
1.4	General acute inpatient & day case patients with a diagnosis of drug misuse in any position; number and rate of patients (1996/97-2013/14)	1996/97 - 2013/14	
1.5	General acute inpatient & day case new patients with a diagnosis of drug misuse in any position; number and rate of new patients (1996/97-2013/14)	1996/97 - 2013/14	
1.6	General acute inpatient & day case stays with a diagnosis of drug misuse in any position; drug type (2013/14)	2013/14	
1.7	General acute inpatient & day case stays with a diagnosis of drug misuse in any position; drug type (1996/97-2013/14)	1996/97 - 2013/14	
1.8	General acute inpatient & day case stays with a diagnosis of drug misuse in any position; type of admission (2013/14)	2013/14	
1.9	General acute inpatient & day case stays with a diagnosis of drug misuse in any position; length of stay (2013/14)	2013/14	
1.10	General acute inpatient & day case patients with a diagnosis of drug misuse in any position; deprivation category (2001/02-2013/14)	2001/02 - 2013/14	

Contact

Lee Barnsdale

Principal Information Analyst

leebarndale@nhs.net

0131 275 6055

Stephen Simmons

Information Analyst

stephen.simmons@nhs.net

0131 275 7572

Further Information

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

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Appendices

A1 – Changes to the European Standard Population

Since publication of 2012/13 data in February 2014, this series of reports has used the 2013 European Standard Population (ESP2013) to calculate European Age-Sex Standardised Rates (EASRs) for all years (including those before 2012/13). The European Standard Population (ESP) is an artificial population structure which is used in the weighting of mortality or incidence data to produce standardised rates comparable to other countries. The European Standard Population (ESP), which was first used in 1976, was revised in 2013. Before 2014, previous reports in this series used ESP1976 to calculate EASRs. EASRs calculated using ESP1976 cannot be compared with EASRs calculated using ESP2013. This section contains a worked example of EASRs using both ESP1976 and ESP2013 to show how the rates differ and why they cannot be compared.

Example: General acute inpatient and day case stays in Scotland with a diagnosis of drug misuse in any position (1996/97-2013/14)

Based on the number of stays observed in each of the financial years, the following rates were calculated:

Crude Rate

The crude rate is the total number of people with an illness or who die in a country or region, divided by the total population of that country or region, and is normally expressed 'per 1,000', 'per 10,000' or 'per 100,000'.

Making comparisons on the crude rate can be misleading if the age structures of the populations of the countries or regions are quite different. Areas with larger percentages of younger people are unlikely to have as high levels of death as areas with larger percentages of older people – and therefore if we don't adjust for these differences we may draw the wrong conclusion about the health of an area simply because of the age-structure of the population. EASRs allow us to make 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.

European Age-Sex Standardised Rate (EASR) using ESP1976

For each 5 year age group, the crude rate is calculated and then the weighted average of all age groups is taken based on the weightings of the 1976 European Standard Population, to give the overall EASR.

European Age-Sex Standardised Rate (EASR) using ESP2013

For each 5 year age group, the crude rate is calculated and then the weighted average of all age groups is taken based on the weightings of the 2013 European Standard Population, to give the overall EASR.

The table and chart below are for illustrative purposes to show how the rates differ.

Table A1.1: Comparison of European Age-Sex Standardised Rates (EASRs) of general acute inpatient and day case stays with a diagnosis of drug misuse in any position using both 1976 and 2013 European Standard Populations, and crude rates, by financial year (1996/97-2013/14)

	Financial Year																
	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14
Number of discharges	2 765	3 521	3 758	4 217	4 435	4 634	4 491	4 511	4 444	4 832	5 480	5 870	5 706	6 187	6 269	5 718	6 571
Crude Rate per 100,000 population	54	69	74	83	88	91	89	89	87	94	106	113	109	118	118	108	123
EASR per 100,000 population (using ESP1976)	54	70	76	85	91	96	93	93	91	99	111	118	115	123	124	113	130
EASR per 100,000 population (using ESP2013)	49	63	68	77	82	86	85	85	84	91	103	110	108	117	118	108	125

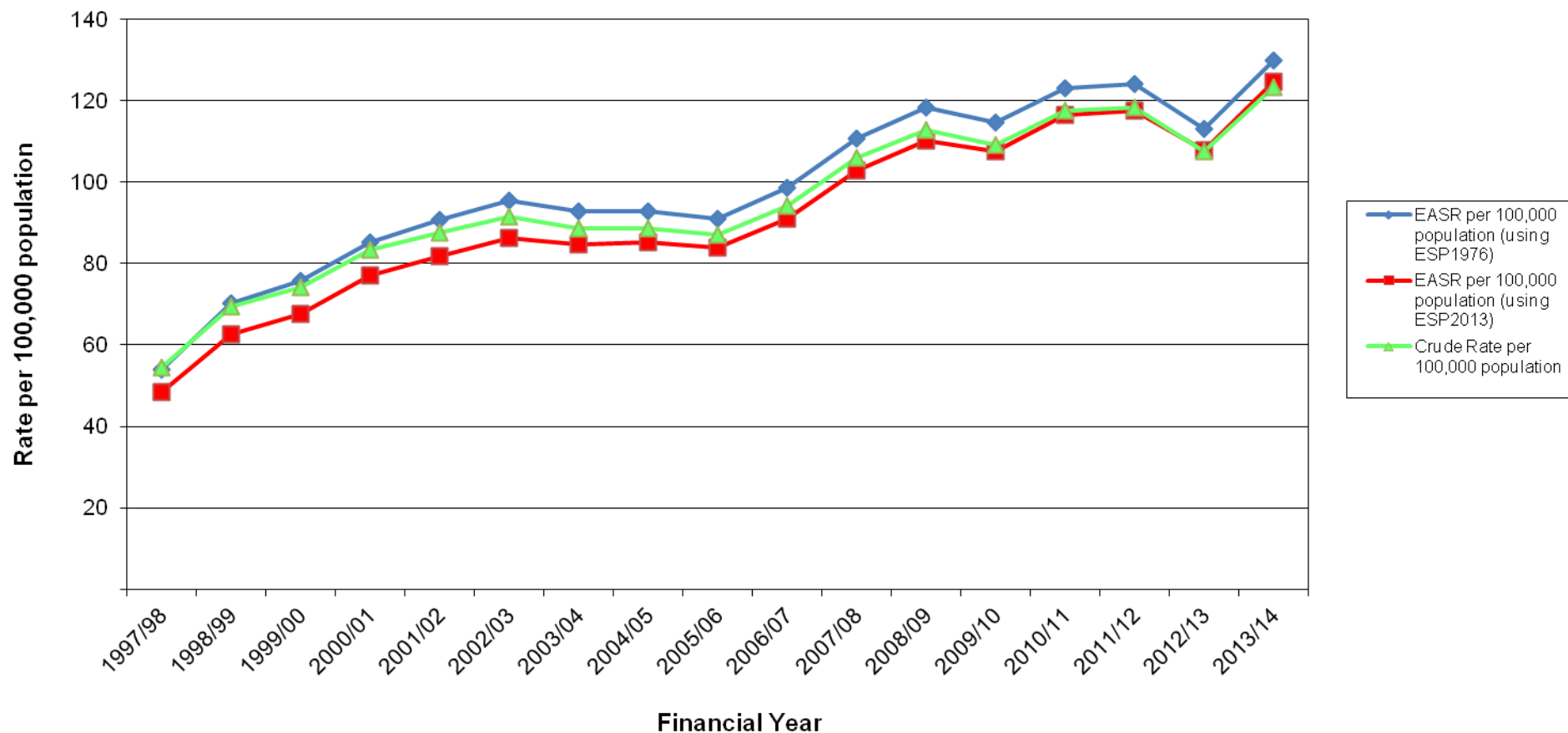
From this example (see Table A1.1 and Figure A1.1 below), it can be seen that the EASR (using ESP2013) is the lowest of the three rates. The Crude Rate is slightly higher than this, and the EASR (using ESP1976) is a little higher still. Despite changes to the age profile of those using illicit drugs, drug-related stays continue to be most prevalent among younger age groups rather than older age groups. ESP2013 differs from ESP1976 by its inclusion of fewer young people and more people from older age groups. Therefore, in this example, the EASRs calculated using ESP2013 are lower than those calculated using ESP1976. The trends shown for each method of calculating rates are similar, giving confidence to trend analysis. EASRs (using ESP1976) are not comparable with EASRs (using ESP2013). For example, comparing the EASR (using ESP1976) for 09/10 in a report issued in 2013, to an EASR (using ESP2013) relating to the same financial year 09/10, in a report issued in 2014, is meaningless. On this basis, findings from the 2012/13 and 2013/14 publications are not comparable with previous ISD reports

Further Information can be obtained from:

ISD Website: <http://www.isdscotland.org/Products-and-Services/GPD-Support/>

ONS website: <http://www.ons.gov.uk/ons/about-ons/get-involved/consultations/consultations/implementation-of-the-2013-european-standard-population/index.html>

Figure A1.1: Comparison of European Age-Sex Standardised Rates (EASRs)^{1,2} of general acute inpatient and day case stays with a diagnosis of drug misuse in any position using both 1976³ and 2013^{4,5} European Standard Populations, and crude rates, by financial year (1996/97-2013/14)



- Notes:
- (1) The population estimates used in the calculation of rates above are based on the 2011 Census results.
 - (2) The European Standard Population (ESP), which was first used in 1976, was revised in 2013. European Age-Sex Standardised Rates (EASRs) using ESP1976 and ESP2013 are not comparable.
 - (3) European Age-Sex Standardised Rate (EASR), calculated using ESP1976 and using 5 year age groups 0-4, 5-9 up to an upper age group of 85+.
 - (4) European Age-Sex Standardised Rate (EASR), calculated using ESP2013 and using 5 year age groups 0-4, 5-9 up to an upper age group of 90+. The upper age group for the 2013 European Standard Population structure is 95+. However, due to Scotland population estimates data being unavailable for the 95+ age group for all required geographies, the upper age group used is 90+. This is an amalgamated age group containing both the 90-94 and 95+ age groups.

A2 – 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 sources are the SMR01 (acute inpatient and daycase) and SMR04 (psychiatric inpatient and daycase) returns.

The Mental Health (Psychiatric) Hospital Activity Statistics publication has been delayed for the second consecutive year due to incomplete Mental Health Inpatient and Day Case (SMR04) discharge records, so the psychiatric discharges section of this report has been omitted. ISD are working closely with NHS Boards to ensure submission of SMR04 discharge data.

SMR01 – Hospital general and acute inpatients and day cases

SMR01 is an episode based patient record relating to all inpatient and day cases discharged from specialities other than mental health, maternity, neonatal and geriatric long stay specialities 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. A given period of health care in a hospital setting is known as a continuous inpatient stay (CIS). A CIS is composed of individual episodes (where the patient is under the care of an individual consultant). 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 discharges. 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 tables presented in the first section of this report are derived from SMR01, and contain information about patients admitted to general hospitals (mainly for emergency treatment), where drug misuse is diagnosed as a factor in the patient's treatment. Up to six diagnoses are recorded per episode. Episodes with either a main or a supplementary diagnosis of drug misuse are included. Poisonings and overdoses are not included unless a diagnosis of drug misuse is also recorded. For the purposes of this report, a CIS is counted as associated with drug misuse if any of the episodes of which it is comprised include a drug misuse diagnosis. In the tables of drug type ([1.6](#) and [1.7](#)), there is an element of double counting as stays may be associated with, for example, diagnoses of both opiate and cocaine misuse. Drugs misuse is recorded using the International Classification of Diseases 10th Revision (ICD10) Codes. The following codes were used in the analysis presented in this section:

ICD 10 Code	Description	ICD 10 Code	Description
F11	Opioids	F15	Other Stimulants
F12	Cannabinoids	F16	Hallucinogens
F13	Sedatives / Hypnotics	F18	Volatile Solvents
F14	Cocaine	F19	Multiple / Other Psychoactive Substances

When gathering information from stays for inclusion in this report, demographic data (age, gender, SIMD decile) are extracted from the first episode of the stay containing a valid

value for each field (thus corresponding most closely to the circumstances of the patient at the point they entered hospital). However, stays involving drug misuse are counted within specific years by the date of discharge. Therefore, a stay spanning two financial years (e.g. 2012/13 and 2013/14) will be counted as having occurred in the most recent of those years, or when the patient was discharged (2013/14 in this example).

Some caution is necessary when using these data as (a) drug misuse may only be suspected and may not always be recorded by the hospital, and (b) where drug misuse is recorded, it may not be possible to identify which drug(s) may be involved.

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.

Data Quality

The ISD Data Quality Assurance (DQA) team is responsible for evaluating and ensuring SMR datasets are accurate, consistent and comparable across time and between sources. 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. However, a number of significant changes adopted recently are described below:

For the previous publication of 25 February 2014 (2012/13 data), two main changes were made:

- Since publication of 2012/13 data in February 2014, this series of reports has used the 2013 European Standard Population (ESP2013) to calculate European Age-Sex Standardised Rates (EASRs) for all years (including those before 2012/13). The European Standard Population (ESP), which was first used in 1976, was revised in 2013. Before 2014, previous reports in this series used ESP1976 to calculate EASRs. Figures using ESP1976 and ESP2013 are not comparable. Therefore, findings from the 2012/13 and 2013/14 publications are not comparable with previous ISD reports. See [Appendix A1](#) for further details.
- Incorporation of revised small area mid-year population estimates based on results from the 2011 Census. These were made available by National Records of Scotland on 17 December 2013 (<http://www.nrscotland.gov.uk/news/2013/revised-population-estimates-for-2002-to-2010>)

A revision to the 2012/13 publication was issued on 2 September 2014 to bring the structure of the age breakdown by drug type shown in Table 1.4 into line with other drug-related publications.

The current 2013/14 publication incorporates changes in the following areas:

- The description of 'number of discharges' has been changed to 'stays'.
- Additional information concerning 'patients' and 'new patients' has been included within Tables 1.1 and 1.2. Tables 1.4 and 1.5 show new analyses for patients and new patients.

This revision to the 2013/14 publication, issued on 20 February 2015, corrects figures associated with geographies. Due to an issue processing population estimates following the change to Health Board boundaries on 1 April 2014, quality assurance identified inaccuracies in the figures associated with NHS Lanarkshire and NHS Greater Glasgow & Clyde. Although no other Health Boards were affected by this issue, a general update of the publication was undertaken at the point of revision, using the most recent available data. As a result, figures for other geographical areas and Scotland overall may have changed slightly.

Further information

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

www.isdscotland.org/isd/4306.html.

Further statistics on general acute hospital discharges are available at:

www.isdscotland.org/acute_hospital_care.

Further statistics on psychiatric admissions and discharges are available at

www.isdscotland.org/isd/962.html.

Further information on analysis methods used on the SMR01 dataset is available at:

www.drugmisuse.isdscotland.org/publications/abstracts/cis_faq.htm.

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

nss.isdsubstance misuse@nhs.net.

For information about the completeness, timeliness and other data quality issues regarding SMR01/SMR04 data submissions contact the Data Management Team at

nss.isdDMT@nhs.net.

A3 – Publication Metadata (including revisions details)

Metadata Indicator	Description
Publication title	Drug Misuse Hospital Statistics Scotland 2014
Description	Data relating to hospital (SMR01) stays with diagnosis of drug misuse. These data are presented at a national level and also broken down by demographic characteristics/local geographies.
Theme	Health and Social Care
Topic	Substance Misuse
Format	PDF report with Excel tables
Data source(s)	ISD SMR01
Date that data are acquired	September 2014
Release date	Tuesday 28 th October 2014
Frequency	Annual
Timeframe of data and timeliness	SMR01 – covers information from the period 01/04/1996 to 31/03/2014. Longer term trends (Fig 1.1/Table 1.2) cover period from 01/04/1996 to 31/03/2014.
Continuity of data	See background information.
Revisions statement	All tables 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 due to incomplete data returns at the time of the previous publication.
Revisions relevant to this publication	<ul style="list-style-type: none"> • This revision to the 2013/14 publication, issued on 23 February 2015, corrects figures associated with geographies. Due to an issue processing population estimates following the change to Health Board boundaries on 1 April 2014, quality assurance identified inaccuracies in the figures associated with NHS Lanarkshire and NHS Greater Glasgow & Clyde. Although no other Health Boards were affected by this issue, a general update of the publication was undertaken at the point of revision, using the most recent available data. As a result, figures for other geographical areas and Scotland overall may have changed slightly. • The Mental Health (Psychiatric) Hospital Activity Statistics publication has been delayed for the second consecutive year due to incomplete Mental Health Inpatient and Day Case (SMR04) discharge records, so the psychiatric discharges section of this report has been omitted. ISD are working closely with NHS Boards to ensure submission of SMR04 discharge data. • Since publication of 2012/13 data in February 2014, this series of reports has used the 2013 European Standard Population (ESP2013) to calculate European Age-Sex

	<p>Standardised Rates (EASRs) for all years (including those before 2012/13). The European Standard Population (ESP), which was first used in 1976, was revised in 2013. Before 2014, previous reports in this series used ESP1976 to calculate EASRs. Figures using ESP1976 and ESP2013 are not comparable. Therefore, <u>findings from the 2012/13 and 2013/14 publications are not comparable with previous ISD reports</u>. See Appendix A1 for further details.</p> <ul style="list-style-type: none"> • Incorporation of revised small area mid-year population estimates based on results from the 2011 Census. These were made available by National Records of Scotland on 17 December 2013 (http://www.nrscotland.gov.uk/news/2013/revised-population-estimates-for-2002-to-2010)
Concepts and definitions	<p>See Glossary.</p> <p>Also, refer to: Hospital Care - Background Information: http://www.isdscotland.org/Health-Topics/Hospital-Care/</p> <p>ScotPHO - Drug Misuse: http://www.scotpho.org.uk/behaviour/drugs/introduction</p>
Relevance and key uses of the statistics	Relevant to understanding problem drug use 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 for drug-related mental health and behavioural disorders in England 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 websites 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	Numbers, percentages and European Age-Sex Standardised Rates per 100,000.
Disclosure	The ISD protocol on Statistical Disclosure Protocol is followed and data relating to very small numbers is suppressed.
Official Statistics designation	Accredited National Statistic
UK Statistics Authority Assessment	Completed assessment by UK Statistics Authority, report published 4 th April 2012.
Last published	25 th February 2014

Next published	October 2015
Date of first publication	1998
Help email	mailto:nss.isdsubstance misuse@nhs.net
Date form completed	20 th February 2015

A4 – 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 and, separately, those receiving extended Pre-Release Access.

Standard Pre-Release Access:

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

Extended Pre-Release Access

Extended Pre-Release Access of 8 working days is given to a small number of named individuals in the Scottish Government Health Department (Analytical Services Division). This Pre-Release Access is for the sole purpose of enabling that department to gain an understanding of the statistics prior to briefing others in Scottish Government (during the period of standard Pre-Release Access).

Scottish Government Health Department (Analytical Services Division)

A5 – 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.