Mental Health Hospital Inpatient Care:
Trends up to 31 March 2014

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Key points

This publication presents information on mental health (psychiatric) hospital inpatients, including time trends up to 31 March 2014. The key findings are:

- During the financial year 2013/14, around 1 in 370 of the Scottish population was discharged from a psychiatric hospital in Scotland at least once. At 31 March 2014, nearly 3,500 people were resident in psychiatric hospitals.

- Some measures of mental health inpatient care activity increased between 1983/84 and 1997/98 (see figure below). Between 1997/98 and 2013/14, however, the annual numbers of admissions, discharges, stays and patients all fell by around a third, while hospital residents on 31 March fell by over half. These patterns reflect the shift in recent years in the care of people with mental health problems away from inpatient treatment towards various forms of care in the community.

![Graph showing trends in psychiatric hospital care activity]

- The more deprived an area, the higher its rate of psychiatric inpatient discharges. In 2013/14, the rate in the most deprived fifth of the population was over three times that of the least deprived (649 compared with 197 per 100,000 population respectively).

- ‘Accessible rural’ and ‘remote rural’ areas had lower discharge rates than more urban areas.

- Approximately half of all discharges from mental health hospitals were female. In 2013/14, schizophrenia and conditions related to drug and alcohol misuse accounted for a higher proportion of hospital discharges for male patients compared with female patients, whilst females had higher proportions of hospital discharges for mood (affective) disorders and personality disorders compared to males. Dementia accounted for a similar percentage of diagnoses in each gender (around 11%).
Background

The data are derived from Scottish Morbidity Record 04 (SMR04) records submitted to ISD by NHS boards in Scotland. Nearly all records are for mental health (psychiatric) hospital inpatients, but there are a few for day cases, and some care is provided in care homes rather than psychiatric hospitals or units.
## Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admission</td>
<td>A new admission record (or episode) is created whenever a patient is admitted or experiences a change of specialty, consultant, significant facility or hospital.</td>
</tr>
<tr>
<td>Age-sex standardised rate</td>
<td>European age-sex standardised rate or EASR, usually expressed per 100,000 population. Standardising for age and sex allows comparisons between different populations and over time where population structures change. In this report, all rates are directly standardised to the European Standard Population (ESP) 2013. For further details on standardising, see ScotPHO Methodology.</td>
</tr>
<tr>
<td>Community Health Index (CHI)</td>
<td>The Community Health Index or CHI number is the unique Scottish number for any health communication for a given patient. It is a ten-digit number created from a patient’s date of birth and four other numbers. All patients who register with a GP will be allocated a CHI number.</td>
</tr>
<tr>
<td>Confidence interval for an EASR</td>
<td>The difference between the upper and lower confidence limit defines the confidence interval. The 95% confidence interval indicates the degree of uncertainty around the EASR; 95 times out of 100, the interval will include the true underlying rate. The width of the confidence interval depends on the size of the population and the underlying variability in the data.</td>
</tr>
<tr>
<td>Continuous inpatient stay (CIS or ‘stay’)</td>
<td>An unbroken period of time that a patient spends as an inpatient. A patient may change consultant, significant facility, specialty and/or hospital during a continuous inpatient stay.</td>
</tr>
<tr>
<td>Crude rate</td>
<td>The number of events relative to the size of the population, usually expressed per 100,000 population. The crude rate takes no account of differences between populations with regard to age and gender composition.</td>
</tr>
<tr>
<td>Day case</td>
<td>A patient who makes a planned attendance to a specialty for clinical care, sees a doctor or dentist or nurse (as the consultant’s representative) and requires the use of a bed or trolley in lieu of a bed. The patient is not expected to, and does not, remain overnight.</td>
</tr>
<tr>
<td>Deterministic matching</td>
<td>Used to link datasets for an individual when there is a common unique identifier in both datasets, for example the CHI number.</td>
</tr>
<tr>
<td>Discharge</td>
<td>A hospital discharge marks the end of an episode of care. Discharges include deaths, transfers to other specialties/significant facilities and hospitals, and discharges home or to other regular place of residence.</td>
</tr>
<tr>
<td>Episode (of care)</td>
<td>An episode of care runs from a hospital admission until the discharge.</td>
</tr>
</tbody>
</table>
European age-sex standardised rate (EASR) See age-sex standardised rate above.

Forensic psychiatry A specialised branch of clinical psychiatry which relates to mentally disordered offenders and others with similar problems.

Formal admission A formal admission to psychiatric inpatient facilities under the jurisdiction of the Mental Health (Scotland) acts 1960 and 1984 or the Mental Health (Care and Treatment) (Scotland) Act 2003.

Hospital resident In this report, a hospital resident is defined as an individual who is an inpatient in a mental health specialty at a given point in time. The figure is not a direct count but rather is calculated from the number of people with an admission record but no discharge record, at midnight on 31 March (before the beginning of the next financial year on 1 April). Although the term ‘hospital resident’ is used for simplicity, some people will be looked after in care homes (under contract to the local NHS board).

ICD-10 The International Classification of Diseases and Related Health Problems, Tenth Revision (World Health Organization).

Informal admission A voluntary admission to psychiatric inpatient facilities, not under the jurisdiction of any Mental Health act.

Inpatient A patient who generally occupies an available staffed bed in a hospital and is expected to remain overnight; or is admitted as an emergency or urgent case, regardless of length of stay.

Note that a psychiatric patient who is on leave of absence from the hospital must, for legal reasons, be regarded as an inpatient for the duration of their absence which may be for up to 6 months. During the first 28 days, a patient will be regarded as a 'patient on pass' for statistical purposes (i.e. SMR04 returns). Such patients will be discharged from SMR04 when their period of absence exceeds 28 days. If the patient returns for readmission after 28 days, a new SMR04 will be generated.

For full definition, see ISD data dictionary.

ISD Information Services Division of NHS National Services Scotland. (From 1 June 2013, ISD became part of the Public Health and Intelligence Strategic Business Unit.)

NHS board of residence One of the 14 territorial NHS boards in Scotland (‘health boards’) in which patients live (based on the postcode of their home address). The population of nine of the NHS boards of residence was affected by the boundary changes on 1 April 2014.
**NHS board of treatment**

One of the 14 territorial NHS boards in Scotland ('health boards') with facilities in which patients are treated. Note that NHS boards of treatment for SMR04 activity were unaffected by the boundary changes on 1 April 2014, as no hospitals moved between boards. There are no SMR04 data by NHS board of treatment for Orkney and Shetland because these boards do not have mental health inpatient facilities.

**NRS**

National Records of Scotland (established on 1 April 2011, following the merger of the General Register Office for Scotland (GROS) and the National Archives of Scotland).

**Outpatient**

A patient who attends a consultant or other medical clinic, or has an arranged meeting with a consultant or a senior member of his team outwith a clinic session. Outpatients are categorised as new outpatients or follow-up (return) outpatients.

**Patient**

In this report, a patient is defined as an individual discharged from a mental health specialty at least once during the financial year.

**Probability matching**

In linking data from different datasets for an individual, probability matching uses a set of identifiers to estimate the probability that two records correspond.

**Quintile**

Refers in this report to a fifth of the Scottish population, defined by the SIMD (see above) so that the five groups of data zones range from the most deprived to the least deprived.

**Significant facility**

A type of clinical facility which is identified for clinical and/or costing purposes. (Some examples of psychiatric significant facilities are: 1R - intensive psychiatric care unit (IPCU), 1T - psychiatric rehabilitation unit (PRU), 1Q - secure psychiatric inpatient facility.)

**Scottish Index of Multiple Deprivation (SIMD)**

The SIMD uses a wide range of information for small areas (data zones) to identify concentrations of multiple deprivation across Scotland. See ‘quintile’ above.

**SMR04**

Scottish Morbidity Record 04 – an episode-based patient record relating to all inpatients and day cases admitted to and discharged from NHS mental health (psychiatric) specialties in Scotland. For further details see SMR04 records and the ISD data dictionary.

**Specialty**

A division of medicine or dentistry covering a specific area of clinical activity.

**Urban rural classification**

This classification was devised by the Scottish Government from two main criteria: settlement size (as defined by NRS); and accessibility (based on drive time analysis to differentiate between accessible and remote areas).
Introduction

This publication presents information on mental health (psychiatric) hospital inpatients and day cases derived from Scottish Morbidity Record 04 (SMR04) records submitted to ISD by NHS boards in Scotland. As the vast majority of records (over 99.9%) are for inpatients rather than day cases, for brevity the report is entitled Mental Health Hospital Inpatient Care.

The publication presents long-term trends up to 2013/14 (i.e. the year to 31 March 2014) in numbers of psychiatric admissions, discharges, continuous inpatient stays, patients and residents in Scottish hospitals (see SMR04 records). The trends start in 1983/84 or 1997/98, and are presented for a range of geographical breakdowns, patient and clinical characteristics.

The last publication (July 2014) was interim and minimal in nature (data up to 2012/13 for selected NHS boards of residence only, with no Scotland totals) because of problems with the completeness of SMR04 data submitted. Most known data issues have now been resolved, and this report includes information as at the end of January 2015 for all NHS boards of residence and treatment and Scotland totals. There are still minor completeness issue for NHS Highland and Ayrshire & Arran, due to a change of recording system, and further details are given in Appendix 1.

It should be noted that an increasing amount of healthcare for mental illness takes place in the community, e.g. through specialist community mental health teams and general practice. Psychiatric hospital outpatient care is another key service. Further details on these services are given in Links to related information sources and publications. This publication does not include data on such services.

Information on the population prevalence of common mental health problems, and indicators of mental wellbeing, can be found on the ScotPHO Mental Health web pages accessible from the above link.

Developments in this report

The recent improvements in SMR04 data completeness have allowed ISD to revise the structure, scope and content of the report. Several considerations have informed this development, including the following:

- A strategic shift in the care of people with mental health problems away from inpatient treatment towards various forms of care in the community in recent decades. This reflects the evolution of policy (see most recently Scotland’s Mental Health Strategy: 2012-15). As this trend has led to large long-term reductions in the numbers of mental health hospital admissions and the size of the inpatient population (‘hospital residents’), it was decided to present longer-term trends.

- An intention to balance the previous focus on numbers of admissions and discharges with long-term trends in the size and characteristics of the hospital resident population.

- The results of a consultation exercise by ISD in 2013 on the future structure and content of the report.
The assessment of the 2012 report by the United Kingdom Statistics Authority in 2013, leading to a series of recommendations to facilitate progress towards National Statistics accreditation. These were implemented in the July 2014 report wherever possible, and are also incorporated in this full, revised report.

A desire to minimise duplication of information published elsewhere by ISD, e.g. as part of the Mental Health Benchmarking Toolkit. As a result, this report does not contain information on, for example, length of stay or readmission rates.
SMR04 records

A Scottish Morbidity Record 04 (SMR04) should be submitted for every episode of inpatient or day case care in a mental health specialty in a psychiatric hospital or unit, or in a facility treating people with learning disabilities. In addition, if the NHS contracts out psychiatric care to a private care home or hospital, an SMR04 record should be generated for each inpatient or day case episode.

When the SMR04 scheme was originally developed, inpatient stays in mental health specialties were often quite lengthy – perhaps several years – and this is still sometimes the case. To enable up-to-date monitoring of activity, the SMR04 record was developed with two elements: one completed and submitted on admission; and one completed and submitted on discharge. This was to ensure that it was not necessary to wait until discharge for information on the admission to become available (but if the stay is short, the admission and discharge information can be submitted together).

The SMR04 record allows patients to be allocated to the following specialties: general psychiatry; child psychiatry; adolescent psychiatry; child and adolescent psychiatry; forensic psychiatry; psychiatry of old age; and learning disability. (Statistical information on people with learning disability in Scotland is collated on the ISD website.)

Note that although records of episodes of care in the learning disability specialty/facilities are collected using SMR04, they have been excluded from this publication. This is because this publication focuses on inpatient psychiatric care of patients with mental illness.

Also excluded are any SMR04 records from the State Hospital (Carstairs). These records may be analysed in a future report.

Five key SMR04 parameters

Admission: The first element of the SMR04 record is submitted as soon as possible after the patient is admitted to hospital. A new SMR04 admission record (or episode) is created whenever a patient is admitted or experiences a change of specialty, consultant, significant facility or hospital. In this report, admissions are assigned to the appropriate financial year according to date of admission.

Discharge: The discharge represents the end of an SMR04 episode. Discharges include: deaths; transfers to other specialties, consultants, significant facilities and hospitals; and discharges home or to other regular place of residence. In this report, discharges are assigned to financial year according to the date of discharge.

Stay (Continuous inpatient stay): SMR04 episodes are combined into a continuous inpatient stay to help examine patterns of hospital usage. Therefore one continuous stay in hospital involving a change of specialty, consultant, significant facility or hospital, will contain more than one SMR04 episode. There will be fewer stays than there are admissions or discharges. In this report, stays are assigned to financial year according to the date of discharge of the final episode in the stay.

Patients (individuals discharged during the year): In this report, a patient is defined as an individual discharged from a mental health specialty at least once during the financial year.

Hospital residents (individuals in hospital on 31 March each year): In this report, a hospital resident is an individual who is an inpatient at midnight on 31 March, before the beginning of the next financial year (1 April). The number is recorded against the financial year which is ending; for example for financial year 2013/14, the number of hospital residents is at 31 March 2014.
**Methods**

The basic SMR04 data used in this report (admissions and discharges) are collected in individual psychiatric hospitals or units in Scotland, and some care homes contracted to offer this care by NHS boards (see Figure 1).

**Figure 1: Map showing locations of hospitals and care homes in Scotland recording SMR04 mental health inpatient episodes (as at 1 January 2014)**

The SMR04 records are sent by NHS boards to ISD for central collation and analysis. Hospital episodes are combined into continuous inpatient stays, and then aggregated up to patient level, using record linkage. Historically ISD did this using probability matching, but increasingly we use deterministic (exact) matching based on the assigned Community Health Index (CHI) number. (See Glossary for explanation of terms.)
Further details on the SMR04 scheme and fields available for analysis are included in the [ISD Data dictionary](#).

While data completeness has greatly improved since the last publication, please bear in mind that at the time of data extraction there were minor issues affecting recent data for NHS Highland and NHS Ayrshire & Arran (see [Appendix 1](#)).
Results
Please note that improvements in the completeness of SMR04 records over time may result in differences to previously published information.

Section 1 – Scotland overview

Figure 2 illustrates long-term trends for Scotland for the five SMR04 parameters: admissions, discharges, continuous inpatient stays (CISs or ‘stays’), patients and hospital residents (see Glossary for definitions). The time trend spans 31 years in order to visualise historic patterns, from financial year 1983/84 (after data linkage became well established) until 2013/14 (the most recent year available).

Figure 2. Numbers of mental health inpatient admissions, discharges, continuous inpatient stays, patients and residents in Scottish hospitals, 1983/84 to 2013/14

As expected, the numbers of admissions and discharges each financial year are the highest of the five parameters, and these lines are very similar. There are slightly fewer stays per year than admissions and discharges, because a stay may include more than one SMR04 episode. It is noticeable that the CIS line diverges from the admissions and discharges lines over time, indicating an increasing tendency for stays to include more than one SMR04 episode. The number of patients discharged each year is lower again, as clearly a patient may have more than one stay each year. Finally, the lowest line shows how many people were resident in hospital at midnight on 31 March each year; for example, for 2013/14 the figure relates to 31 March 2014.

In financial year 2013/14, there were around 20,500 admissions in Scotland, a similar number of discharges, around 18,500 stays and over 14,500 patients. At 31 March 2014, it was calculated that there were nearly 3,500 people resident in psychiatric hospitals. Each
of these figures included a small number of records for people from outwith Scotland, but for each parameter the non-resident activity only accounted for around 2% of the total. After allowing for this, and to give context, approximately 1 in 370 of the Scottish population was discharged from a psychiatric hospital at least once during the year.

Note that recent admission and discharge figures will be slightly underestimated for Scotland (by around 0.7% in 2013/14, and a smaller percentage in 2012/13). This is because at the time of data extraction there were some missing SMR04 records for NHS Highland and/or Ayrshire & Arran (see Appendix 1). As these are small underestimations (and the effect on stays and patients is likely to be even smaller) no attempt has been made to apply a correction.

Figure 2 shows that the numbers of psychiatric admissions, discharges and CISs tended to increase from 1983/84 until around 1997/98, but then to decrease steadily until 2013/14. Patient numbers also fell from around 1997/98, while hospital residents on 31 March each year tended to fall throughout the whole period.

Considering the scale of the decreases between 1997/98 and 2013/14: the discharges, admissions, CISs and patient numbers all fell by around a third, while hospital residents on 31 March fell by over half. These falls will reflect the fact that between 1997/98 and 2006/7 the total number of psychiatric inpatient beds reduced by a third (Audit Scotland report, 2009) and the decline in bed numbers has continued (see ISD hospital bed numbers currently published for 2004/05 to 2013/14).

Alongside the decline in psychiatric inpatient activity, there has been a general shift away from inpatient care to care in the community over recent years.

The patterns shown above for numbers are very similar to those for either crude rates or age-sex standardised rates per 100,000 population (see Glossary for definitions, and Section 1 & 2 spreadsheet accompanying this report for all the data).

Section 2 – NHS board and local authority areas

In this section and the rest of the results, we focus on time trends from financial year 1997/98 to 2013/14; the period where psychiatric hospital activity (admissions, discharges, stays, patients and hospital residents) tended to fall steadily as community care increased.

The SMR04 data have been analysed by NHS board and local authority of residence. These geographies are based on the patient’s home postcode in Scotland and are useful for epidemiological purposes, e.g. looking at areas with high or low rates. Some variation in rates may be due to differences in risk, but other factors may also influence rates, for example patterns of service provision, deprivation patterns (Section 4) and urban rural status (Section 5).

Analyses by NHS board of treatment are useful when considering service use and workload in the 14 board areas. These figures will include non-residents of Scotland who are treated in Scotland. Only numbers can be presented, not rates, as the ‘catchment populations’ are not known. The data do not relate to a discrete population – people can travel to a hospital from another board area.

Please note that the NHS board boundaries are as defined on 1 April 2014.
NHS board of residence

Numbers and age-sex standardised rates per 100,000 population are presented for two contrasting parameters – discharges and hospital residents – in Table 1 below, allowing a comparison of the most recent data for the 14 NHS boards. A patient may be discharged from a hospital or resident in a hospital which is outwith their board of residence, and clearly this is what happens with patients from Orkney and Shetland.

Table 1. Numbers and European age-sex standardised rates (EASRs) of mental health inpatient discharges from Scottish hospitals during 2013/14, and hospital residents as at 31 March 2014, by NHS board of residence

<table>
<thead>
<tr>
<th>NHS board of residence</th>
<th>Discharges¹</th>
<th>Hospital residents²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>EASR per 100,000 population</td>
</tr>
<tr>
<td>Ayrshire &amp; Arran¹</td>
<td>1,295</td>
<td>361.5</td>
</tr>
<tr>
<td>Borders</td>
<td>423</td>
<td>398.7</td>
</tr>
<tr>
<td>Dumfries &amp; Galloway</td>
<td>647</td>
<td>439.4</td>
</tr>
<tr>
<td>Fife</td>
<td>1,455</td>
<td>405.0</td>
</tr>
<tr>
<td>Forth Valley</td>
<td>1,088</td>
<td>378.8</td>
</tr>
<tr>
<td>Grampian</td>
<td>1,738</td>
<td>305.1</td>
</tr>
<tr>
<td>Greater Glasgow &amp; Clyde</td>
<td>4,824</td>
<td>431.7</td>
</tr>
<tr>
<td>Highland²</td>
<td>1,195</td>
<td>384.5</td>
</tr>
<tr>
<td>Lanarkshire</td>
<td>2,193</td>
<td>346.3</td>
</tr>
<tr>
<td>Lothian</td>
<td>3,097</td>
<td>371.5</td>
</tr>
<tr>
<td>Orkney</td>
<td>33</td>
<td>160.2</td>
</tr>
<tr>
<td>Shetland</td>
<td>45</td>
<td>210.1</td>
</tr>
<tr>
<td>Tayside</td>
<td>1,957</td>
<td>482.9</td>
</tr>
<tr>
<td>Western Isles</td>
<td>52</td>
<td>189.5</td>
</tr>
<tr>
<td>Scotland residents total¹</td>
<td>20,042</td>
<td>382.8</td>
</tr>
<tr>
<td>Other³</td>
<td>452</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: SMR04.

* indicates values that have been suppressed due to the potential risk of disclosure and to help maintain patient confidentiality.

¹ Due to data completeness issues in NHS Ayrshire & Arran and Highland (see Appendix 1), the number of discharges will be slightly underestimated for anyone treated in these board areas (mainly Ayrshire & Arran and Highland residents respectively).

² In the case of Highland hospitals, the hospital residents will be calculated at the end of February 2014, as no SMR04 admission or discharge records had been received by ISD for March 2014 at the time of data extraction.

³ ‘Other’ includes people resident outwith Scotland or with no fixed abode, and is excluded from the Scotland residents total.

⁴ LCL = lower confidence limit. UCL = upper confidence limit.

Comparisons of discharge rates must be made with care due to the incomplete data on patients treated in NHS Ayrshire & Arran and Highland, but the table suggests slightly different geographical patterns for rates of discharges compared with rates of hospital residents. On the basis of overlapping 95% confidence intervals (see Glossary), residents...
of Tayside, Dumfries & Galloway and Greater Glasgow & Clyde had discharge rates significantly higher than the Scottish average. For hospital residents, only Greater Glasgow & Clyde had significantly higher rates than Scotland. Rates for hospital residents are mapped in Figure 3 below.

**Figure 3: Map showing age-sex standardised rates of residents in mental health hospitals in Scotland on 31 March 2014**, by NHS board of residence

Source: SMR04.

1 In the case of Highland NHS Board, the hospital residents will be calculated at the end of February 2014, as no admissions or discharges were recorded for March 2014.

The full time trends for numbers, crude and age-sex standardised rates per 100,000 population for each of the five activity parameters for each NHS board area of residence are presented in Section 1 & 2 spreadsheet. Note that there will be a slight degree of undercounting in 2012/13 and 2013/14 for admissions, discharges, stays and patients due to incomplete admission and discharge data for NHS Ayrshire & Arran and/or Highland.

**Local authority of residence**

The full time trends for numbers, crude and age-sex standardised rates per 100,000 population for each of the five activity parameters for each of the 32 local authority areas of
residence in Scotland are presented in Section 1 & 2 spreadsheet. Note that there will be a slight degree of undercounting in 2012/13 and 2013/14 for admissions, discharges, stays and patients due to incomplete admission and discharge data for NHS Ayrshire & Arran and/or Highland.

NHS board of treatment

The full time trends for numbers for each of the five activity parameters in an NHS board area of treatment are presented in Section 1 & 2 spreadsheet. Note that there are no data for Orkney or Shetland because these boards do not have mental health inpatient facilities. Also, there will be a slight degree of undercounting in 2012/13 and 2013/14 for admissions, discharges, stays and patients due to incomplete admission and discharge data for NHS Ayrshire & Arran and/or Highland.

Rates are not presented by NHS board of treatment because the data do not relate to a discrete population; people can travel to a hospital from another board area.

Section 3 – Age and gender

Section 1 showed that in general there were similar numbers and patterns over time for admissions and discharges, and slightly lower numbers for CISs. Numbers for individual patients were lower than these, while hospital residents had the lowest numbers and a different historical pattern. Therefore only two contrasting parameters have been selected to be examined in the rest of this report; discharges and hospital residents.

In Section 3, patterns in SMR04 activity are examined by the patient characteristics of age group on admission to hospital, and gender. Table 2 provides an overview for discharges, based on four broad age groups and showing that males aged 25-44 accounted for the largest percentage of all discharges.

Table 2: Numbers and percentages of mental health inpatient discharges from Scottish hospitals: Scottish residents, by age group on admission and gender, 2013/14

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Males</th>
<th></th>
<th>Females</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Number</td>
<td>%</td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>&lt;25</td>
<td>989</td>
<td>4.9</td>
<td>1,085</td>
<td>5.4</td>
<td>2,074</td>
<td>10.3</td>
</tr>
<tr>
<td>25-44</td>
<td>4,039</td>
<td>20.2</td>
<td>3,209</td>
<td>16.0</td>
<td>7,248(^1)</td>
<td>36.2</td>
</tr>
<tr>
<td>45-64</td>
<td>3,181</td>
<td>15.9</td>
<td>2,982</td>
<td>14.9</td>
<td>6,163</td>
<td>30.8</td>
</tr>
<tr>
<td>65 plus</td>
<td>2,122</td>
<td>10.6</td>
<td>2,434</td>
<td>12.1</td>
<td>4,556</td>
<td>22.7</td>
</tr>
<tr>
<td>All Ages</td>
<td>10,331</td>
<td>51.5</td>
<td>9,710</td>
<td>48.5</td>
<td>20,041(^1)</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: SMR04.

\(^1\) Excludes one discharge record with gender unknown.
Age

Figure 4 shows patterns in the numbers of psychiatric hospital discharges over time by the four broad age groups.

Figure 4: Numbers of mental health inpatient discharges from Scottish hospitals: Scottish residents, by age group on admission, 1997/98 to 2013/14

While all age groups showed a decline in discharges over time, the 25-44 year age group showed the greatest absolute fall in numbers (from 12,272 in 1997/98 to 7,249 in 2013/14) but remained the largest group overall. The oldest (65+) age group decreased most in percentage terms (by 51%, from around 9,350 in 1997/98 to around 4,550 in 2013/14).

When the results are expressed as crude rates, the 65+ age group showed both the greatest absolute fall and the greatest percentage fall over the period. By 2013/14, the crude rate was broadly similar for the 65+, 45-64 and 25-44 year age groups (around 400-500 per 100,000 population: Figure 5).
Figure 5: Crude rates per 100,000 population for mental health inpatient discharges from Scottish hospitals: Scottish residents, by age group on admission, 1997/98 to 2013/14

Source: SMR04.

Section 3 spreadsheet also shows the number and crude rate trends by age group by NHS board of residence.

In addition, the spreadsheet allows the selection of hospital residents rather than discharges.

Gender

Approximately half of all discharges from mental health hospitals are female, and have been since 1997/98. The corresponding crude rates are slightly higher for males than females (e.g. 399 compared to 354 per 100,000 respectively in 2013/14). By contrast, crude rates for hospital residents show a switch in 1999/2000 from a slightly higher rate for females in previous years, to a slight higher rate for males in the period to 2013/14 (Figure 6).
Figure 6: Crude rates per 100,000 population for mental health hospital residents in Scottish hospitals on 31 March each year: Scottish residents, by gender, 1997/98 to 2013/14

Source: SMR04.

The full set of figures and charts for discharges and hospital residents can be found in Section 3 spreadsheet, along with the corresponding trends by gender by NHS board of residence.

Section 4 – Deprivation

The relationship between SMR04 activity and deprivation was examined by means of the Scottish Index of Multiple Deprivation (SIMD) based on the patient’s home postcode. In order to look at any patterns in inequality over time, the most appropriate release of the index was used for a particular year’s SMR04 data.

Although each quintile has experienced a drop in the European age-sex standardised rate (EASR) over time, there is a strong and consistent relationship with deprivation. The more deprived an area, the higher its rate of psychiatric inpatient discharges (Figure 7).
In 1997/98, the absolute difference in rates between the most and least deprived quintiles was 654 discharges per 100,000 population. By 2013/14, this inequality gap had closed to 451 discharges per 100,000 population. By contrast, the ratio of the rates for the most deprived to least deprived quintile (relative inequality) widened from 2.6 in 1997/98 to 3.9 in 2008/09, before settling at around 3.3 over the most recent years after the switch to SIMD 2012 (Figure 8). There is a school of thought that, in general, it is more realistic to reduce absolute inequalities in health than relative inequalities; few countries have managed to reduce relative inequalities (Mackenbach JP. Should we aim to reduce relative or absolute inequalities in mortality? The European Journal of Public Health 2015; 25: 185–185).
Figure 8: Ratio and absolute difference of most to least deprived SIMD quintile\(^1\), for age-sex standardised rates per 100,000 population for mental health inpatient discharges from Scottish hospitals: Scottish residents, 1997/98 to 2013/14

Source: SMR04.

\(^1\) The dotted lines indicate when a different SIMD version was applied. SIMD 2004 was used from 1997/98 to 2002/03; SIMD 2006 from 2003/04 to 2005/06; SIMD 2009 from 2006/07 to 2008/09 and SIMD 2012 from 2009/10 to 2013/14.

Section 4 & 5 spreadsheet allows the selection of hospital residents rather than discharges. The patterns are broadly similar for hospital residents, although the ratios of most deprived to least deprived quintile are all lower, at around 2.0 to 2.5.

Section 5 – Urban rural status

The relationship between rurality and SMR04 activity was examined by means of the Scottish Government's urban rural classification, based on the postcode of the patient’s home/place of residence within Scotland. The six-fold classification was considered sufficiently detailed for the purpose (Table 3).
Table 3. Six-fold urban rural classification for Scotland: percentage of population in each category compared to the percentage and rate of SMR04 hospital discharges\(^1,2\), 2013/14

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>% of population in category</th>
<th>SMR04 hospital discharges(^1,2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Settlement size</td>
<td></td>
<td>Nos.</td>
</tr>
<tr>
<td></td>
<td>Drive time to a settlement of 10,000+ people</td>
<td></td>
<td>% of discharges in a category</td>
</tr>
<tr>
<td></td>
<td>EASR per 100,000 population</td>
<td></td>
<td>EASR per 100,000 population</td>
</tr>
<tr>
<td>1 Large Urban Areas</td>
<td>125,000+</td>
<td>-</td>
<td>34.5%</td>
</tr>
<tr>
<td>2 Other Urban Areas</td>
<td>10,000-124,999</td>
<td>-</td>
<td>35.1%</td>
</tr>
<tr>
<td>3 Accessible Small Towns</td>
<td>3,000-9,999</td>
<td>&lt;30 mins</td>
<td>9.3%</td>
</tr>
<tr>
<td>4 Remote Small Towns</td>
<td>3,000-9,999</td>
<td>&gt;30 mins</td>
<td>3.4%</td>
</tr>
<tr>
<td>5 Accessible Rural</td>
<td>&lt;3,000</td>
<td>&lt;30 mins</td>
<td>11.7%</td>
</tr>
<tr>
<td>6 Remote Rural</td>
<td>&lt;3,000</td>
<td>&gt;30 mins</td>
<td>6.1%</td>
</tr>
<tr>
<td>All categories</td>
<td>-</td>
<td>-</td>
<td>100%</td>
</tr>
<tr>
<td>Unallocated(^2)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Scotland</td>
<td>-</td>
<td>-</td>
<td>20,042</td>
</tr>
</tbody>
</table>

Sources: [Scottish Government Urban rural classification 2013-2014](#); SMR04.

\(^1\) There may be a slight undercount of hospital discharges, particularly in ‘other urban areas’ and ‘remote rural areas’, due to incomplete data in NHS Highland and Ayrshire & Arran in 2013/14, but the impact cannot be quantified.

\(^2\) A few records with an incorrect or invalid postcode could not be allocated to an urban rural category.

Note that there is a very uneven spread of categories across Scotland. Only three NHS board areas (Grampian, Lothian and Tayside) include all six categories, and for example the three island boards each comprise only two categories (remote rural areas and remote small towns). The table shows that around 70% of the Scottish population live in the two urban categories, and these also had the bulk of the psychiatric hospital discharges. The EASRs were generally highest there too. By contrast, the EASRs were lowest in remote rural and accessible rural areas.

In looking at time trends in hospital discharges by urban rural category, the most appropriate release of the classification was used for a particular year’s SMR04 data (Figure 9).
Figure 9: Age-sex standardised rates of mental health inpatient discharges from Scottish hospitals: Scottish residents, by urban rural categories, 1997/98 to 2013/14

Source: SMR04.

1 The dotted lines indicate when a different release of urban rural classification was applied. The first (2003/04) release of the classification was used from 1997/98 to 2003/04; the 2005/06 release from 2004/05 to 2005/06; the 2007/08 release from 2006/07 to 2007/08; the 2009/10 release from 2008/09 to 2009/10; the 2011/12 release from 2010/11 to 2011/12; and the 2013/14 release from 2012/13 to 2013/14.

2 There may be a slight undercount of hospital discharges, particularly in ‘other urban areas’ and ‘remote rural areas’, due to incomplete data in NHS Highland and/or Ayrshire & Arran in 2012/13 and 2013/14, but the impact cannot be quantified.

3 Fewer than 30 records each year had an incorrect or invalid postcode and could not be allocated to an urban rural category. This is a maximum of 0.1% of the total hospital discharges each year.

All categories experienced a drop in the European age-sex standardised rate (EASR) of psychiatric discharges over time (by around 40-50% between 1997/98 and 2013/14). The rankings of the categories varied a little over time, and there was less spread between categories than there was for deprivation quintile. The highest rates were in the ‘large urban areas’, ‘other urban areas’ and ‘remote small towns’ while the lowest were in the ‘accessible rural’ and ‘remote rural’ areas. This pattern may be influenced by prevalence of different mental health problems, patterns of socioeconomic deprivation, patterns of service provision, ease of access to services, stigma associated with mental health problems, and other factors.

The full set of data is held in Section 4 & 5 spreadsheet.
Section 6 – Specialty

The SMR04 record allows patients to be allocated to the following specialties: general psychiatry; child psychiatry; adolescent psychiatry; child and adolescent psychiatry; forensic psychiatry; psychiatry of old age; and learning disability. Child psychiatry and adolescent psychiatry are considered together in this report. This publication does not include records from the State Hospital (Carstairs) or the SMR04 specialty of learning disability.

While general psychiatry accounted for over three-quarters of all psychiatric discharges in 2013/14, it accounted for less than half the hospital residents at 31 March 2014 (Figure 10). Conversely, psychiatry of old age accounted for 21% of discharges but 44% of hospital residents. This indicates that, on average, patients in general psychiatry had shorter lengths of stay than those admitted under psychiatry of old age.

Figure 10: Mental health inpatient activity in Scottish hospitals\(^1\), numbers by specialty, 2013/14

<table>
<thead>
<tr>
<th>a) Discharges</th>
<th>b) Hospital residents at 31 March 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n = 20,494)</td>
<td>(n = 3,456)</td>
</tr>
</tbody>
</table>

![Pie charts showing discharges and hospital residents]

Source: SMR04.

\(^1\) Includes a small proportion of records for people from outwith Scotland.

Section 6, 7 & 8 spreadsheet shows that between 1997/98 and 2013/14, the numbers and crude rates of discharges and of hospital residents have decreased steadily for the specialties of general psychiatry and psychiatry of old age. However, forensic psychiatry hospital residents have increased steadily over this period, as have child and adolescent psychiatry discharges since about 2006/07. The overall pattern in Scotland is a fall over time because of the far greater numbers in general psychiatry and psychiatry of old age.

Section 7 – Status on admission

A patient can be admitted to a psychiatric hospital either on a ‘formal’ or ‘informal’ basis (see Glossary). The latest figures indicate that 19% of all discharges during 2013/14, and 31% of all hospital residents at 31 March 2014, had been admitted formally.
Figure 11 shows that in counting hospital discharges, formal admissions have remained fairly constant over the past 16 years (at around 4,000 per annum), whereas informal admissions have declined steadily. The picture for hospital residents is similar, but with smaller numbers throughout (Section 6, 7 & 8 spreadsheet). This pattern suggests that the need for formal inpatient detention has changed little over this time period, despite changes in mental health legislation.

Figure 11: Numbers of mental health inpatient discharges from Scottish hospitals¹, by status on admission, 1997/98 to 2013/14

Source: SMR04.

¹ Includes a small proportion of records for people from outwith Scotland.

More detailed information on patients admitted under the relevant Mental Health Acts is held by the Mental Welfare Commission for Scotland.

Section 8 – Diagnosis

Each SMR04 record can have up to six diagnoses coded on discharge. The data in this section are based on the principal discharge diagnosis. (Although diagnosis may also be recorded on the admission part of the patient’s record, it is a more provisional and less robust diagnosis which could simply be ‘under observation’, and may therefore differ from the diagnosis on discharge.)

Therefore this analysis of diagnosis focuses on hospital discharges rather than hospital residents. (For hospital residents, we will only have a discharge diagnosis after they leave hospital, so recent data will be incomplete).

Diagnoses are coded using the World Health Organization's ICD-10. Discharges from mental illness specialties generally have a principal diagnosis drawn from Chapter V (Mental and behavioural disorders: F00-F99). We have grouped the diagnoses into seven broad categories of these F codes (and the remainder as ‘other diagnoses’) as outlined in
Appendix 2. Please note that these groups differ from those used in the last SMR04 report to include diagnosis information (December 2012).

Figure 12 shows that in 2013/14 there were gender differences in the diagnostic breakdown of hospital discharges. Schizophrenia and conditions related to drug and alcohol misuse accounted for a higher proportion of hospital discharges for male patients compared with female patients, whilst females had higher proportions of hospital discharges for mood (affective) disorders and personality disorders compared to males. Dementia accounted for a similar percentage of diagnoses in each gender (around 11%).

Note that particularly for conditions such as schizophrenia, discharge numbers may be boosted by a small number of patients requiring a relatively large number of spells in hospital.

Figure 12: Numbers of mental health inpatient discharges from Scottish hospitals\(^1\), by broad diagnostic group\(^2\), 2013/14

<table>
<thead>
<tr>
<th></th>
<th>Males (n = 10,603)</th>
<th>Females (n = 9,890)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schizophrenia etc.</td>
<td>27.2%</td>
<td>17.1%</td>
</tr>
<tr>
<td>Drug/alcohol misuse</td>
<td>23.0%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Mood (affective) disorders</td>
<td>19.9%</td>
<td>30.2%</td>
</tr>
<tr>
<td>Dementia</td>
<td>11.3%</td>
<td>11.5%</td>
</tr>
<tr>
<td>Neurotic disorders</td>
<td>5.5%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Personality disorders</td>
<td>3.0%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Eating disorders/disorders of childhood</td>
<td>1.2%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Other diagnoses</td>
<td>8.6%</td>
<td>7.8%</td>
</tr>
</tbody>
</table>

Source: SMR04.

\(^1\) Includes a small proportion of records for people from outwith Scotland. Excludes one record with gender unknown.

\(^2\) See Appendix 2 for ICD-10 codes used.

Figure 13 shows time trends for the same broad diagnostic groups, for both genders. Since 1997/98, numbers have fallen for most of these groups, particularly ‘dementia’ which decreased by 64% over the 16-year period. By contrast, ‘personality disorders’ increased, and ‘eating disorders/disorders of childhood’ remained fairly constant.
Figure 13: Numbers of mental health inpatient discharges from Scottish hospitals\(^1\), by broad diagnostic group\(^2\), 1997/98 to 2013/14

[Graph showing numbers of mental health inpatient discharges from Scottish hospitals by broad diagnostic group from 1997/98 to 2013/14.]

Source: SMR04.

\(^1\) Includes a small proportion of records for people from outwith Scotland.

\(^2\) See Appendix 2 for ICD-10 codes used.

Section 6, 7 & 8 spreadsheet includes the option to select a more detailed breakdown of each of the seven broad diagnostic groups into selected sub-categories of interest. While most of these have decreased over time, a few such as eating disorders do appear to have increased.

One of the sub-categories of ‘eating disorders/disorders of childhood’ is learning disabilities. Note that this publication is focused on the treatment of mental illness and as such excludes the vast majority of episodes of care for learning disabilities (specifically all discharges from a special learning disability unit or specialty). That is why there are relatively few ‘learning disabilities’ discharges in the results.
Links to related information sources and publications

ISD

SMR01 – inpatients and day cases in acute specialties

In addition to the SMR04 recording scheme for inpatients and day cases cared for in mental health specialties, activity for patients with mental and behavioural disorders cared for in acute (general hospital) specialties is recorded on the SMR01 scheme. Such information is not included in this report, but can be found on the ISD website at Hospital Care – Diagnoses. As an example, the spreadsheet Diagnosis Data - NHS Board of Residence (published in September 2014) indicates that in 2013/14 there were 16,005 episodes among Scottish residents of all ages with a principal diagnosis of Mental and behavioural disorders (ICD-10 Chapter V). This compares with 20,042 discharges recorded in SMR04 (for a slightly wider set of diagnoses) (Table 1). Therefore, around 44% of the total “mental illness” hospital inpatient/day case activity is recorded outwith SMR04, on SMR01. Future reports may explore this further.

ISD(S)1 – outpatient attendances

Psychiatric outpatient attendances are recorded on the ISD(S)1 scheme (aggregated summary statistics on activity in hospitals and other health care settings in Scotland). Outpatient information is not included in this report, but can be found on the ISD website at Hospital care – Outpatient activity. As an example, the spreadsheet Annual trends in outpatient activity (published in September 2014) indicates that in 2013/14 there were 366,057 new and return outpatient attendances at psychiatric clinics in NHS Scotland. Diagnostic information is not available from ISD(S)1 (or from the SMR00 outpatient appointment/attendance record scheme).

Other sources and information

Information on the following topics which include mental health data is also available on the Mental Health section of the ISD website:

- Child health
- General Practice
- Health and social community care
- Psychiatric bed provision
- SPARRA MD (Scottish Patients at Risk of Readmission and Admission Mental Disorder) report
- Substance misuse.

In addition, the following are available under Mental health – Related publications:

- Adult mental health benchmarking
- Alcohol related discharges from psychiatric hospitals
- Child and adolescent (CAMHS) benchmarking
- Child and Adolescent Mental Health Services (CAMHS) waiting times
- Child and Adolescent Mental Health Services (CAMHS) workforce
- Dementia
- Electroconvulsive therapy (ECT)
- Medicines for mental health
- Psychological therapies waiting times
- Psychology workforce.

There is also a collation of statistical and other information on people with learning disabilities in Scotland.

Regarding data on community mental health, the Community Health Activity Data project is underway to develop a robust community health activity and cost dataset. Phase two will look at community mental health. A multi-disciplinary team dataset will be implemented alongside a Community Psychiatric Nurse (CPN) dataset.

ScotSID - suicide

The Scottish Suicide Information Database (ScotSID) provides a central repository for information on all recent probable suicide deaths in Scotland, and links these deaths to records of prior health service contact including psychiatric inpatients (SMR04) and outpatients (SMR00).

ScotPHO

The Scottish Public Health Observatory (ScotPHO) website includes a Mental health topic with extensive information on the background and policy context; and data on mental wellbeing and mental health problems for adults and children, specific conditions, vulnerable groups, deprivation, and international comparisons, etc.

The ScotPHO website also includes a topic on Suicide which includes the background and policy context, and data on time trends.

Scottish Government

Mental Health and Learning Disability Bed Census: One Day Audit

The Scottish Government’s Mental Health Strategy for Scotland: 2012-2015 includes 36 commitments. Commitment 26 stated that “We will undertake an audit of who is in hospital on a given day and for what reason to give a better understanding of how the inpatient estate is being used and the degree to which that differs across Scotland”.

To meet this commitment, the ‘Mental Health and Learning Disability Bed Census: One Day Audit’ and the ‘Mental Health and Learning Disability Patients: Out of Scotland and Out of NHS Placements Census’ were carried out at midnight, 29 October 2014. Findings from the
audit will be published later this year. ISD and the Scottish Government (Health Analytical Services Division) are working together to use the information collected in SMR04 in order to quality assure the results of the audit. Further information about the audit can be found on the Scottish Government’s website or by e-mailing SWStat@scotland.gsi.gov.uk.

Scottish Health Survey Topic Report: Mental Health and Wellbeing

This report, published in January 2015, explores factors associated with mental wellbeing and mental health among adults in Scotland using data from the Scottish Health Survey. Analyses are based on survey years 2012 to 2013.

Mental Welfare Commission for Scotland

The Mental Welfare Commission for Scotland aims to ensure that care, treatment and support are lawful and respect the rights and promote the welfare of individuals with mental illness, learning disability and related conditions.

The Commission produces annual statistical monitoring reports based on an independent overview of the operation of the Mental Health (Care & Treatment) (Scotland) Act 2003 and the Adults with Incapacity (Scotland) Act 2000. This is a legal requirement and is embedded in legislation.

The Commission receives notifications of most interventions under the Mental Health (Care & Treatment) (Scotland) Act 2003. It uses these to report on how the Act is used and to monitor trends over time and geographical variations. A range of data is held, including emergency detentions and short term detentions under the Act, for which certificates are issued. These detentions include cases of formal admission to hospital, about which each NHS board notifies the Commission.

Differences between SMR04 and Mental Welfare Commission for Scotland data

Formal admission records on the SMR04 mental health inpatient record scheme will overlap with the Commission’s records on emergency and short term detention certificates which relate to hospital care. Note, however, that:

- most SMR04 records relate to informal admissions, which the Commission does not routinely record
- the Commission’s records include those relating to formal community-based care as well as hospital-based care. SMR04 is purely for hospital care.

It is therefore not advisable to try and compare the two data sources.
Health and Social Care Information Centre (English mental health data)

The Health and Social Care Information Centre (HSCIC) publishes the following mental health data for England:

- The Mental Health Bulletin, which contains annual data on specialist mental health provider activity, e.g. the Mental Health Bulletin, Annual Report from MHMDS Returns - 2013-14. This contains information from the Mental Health Minimum Data Set (MHMDS) which covers people using adult specialist mental health services in England. This is not comparable with the hospital discharge data in this report as it is not limited solely to hospital inpatient care, and only contains information on people using adult mental health services.

- The National Statistics report on uses of the Mental Health Act 1983 and detained patients, e.g. Inpatients Formally Detained in Hospitals Under the Mental Health Act 1983 and Patients Subject to Supervised Community Treatment, England - 2013-2014, Annual figures.

- Routine statistics on hospital discharges from the Hospital Episode Statistics (HES) database. These data are not comparable to those in this publication as they are not restricted to Mental Health. HES covers all discharges, outpatient appointments and A&E attendances at NHS hospitals in England.
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<th>Time period</th>
<th>File &amp; size</th>
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<td>-</td>
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<tr>
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<td>Crude rates per 100,000 population for mental health inpatient discharges from Scottish hospitals: Scottish residents, by age group on admission</td>
<td>1997/98 to 2013/14</td>
<td>Section 3 spreadsheet [856kb]</td>
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<td>Crude rates per 100,000 population for mental health hospital residents in Scottish hospitals on 31 March each year: Scottish residents, by gender</td>
<td>1997/98 to 2013/14</td>
<td>Section 3 spreadsheet [856kb]</td>
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<tr>
<td>Figure 7</td>
<td>Age-sex standardised rates of mental health inpatient discharges from Scottish hospitals: Scottish residents, by SIMD quintile</td>
<td>1997/98 to 2013/14</td>
<td>Section 4 &amp; 5 spreadsheet [362kb]</td>
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<tr>
<td>Figure 8</td>
<td>Ratio and absolute difference of most to least deprived SIMD quintile, for age-sex standardised rates per 100,000 population for mental health inpatient discharges from Scottish hospitals: Scottish residents</td>
<td>1997/98 to 2013/14</td>
<td>Section 4 &amp; 5 spreadsheet [362kb]</td>
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<tr>
<td>Figure 9</td>
<td>Age-sex standardised rates of mental health inpatient discharges from Scottish hospitals: Scottish residents, by urban rural categories</td>
<td>1997/98 to 2013/14</td>
<td>Section 4 &amp; 5 spreadsheet [362kb]</td>
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<td>Mental health inpatient activity in Scottish hospitals, numbers by specialty – discharges and hospital residents</td>
<td>2013/14</td>
<td>Section 6, 7 &amp; 8 spreadsheet [442kb]</td>
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</tr>
</tbody>
</table>
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The SMR04 Working Group comprised the above individuals, Dr Steve Kendrick, Dr Kirsty Licence and Dr Catherine Thomson. Dr Rachael Wood led the planning at the early stages.

Further information

Further information can be found on the ISD website

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Appendices

Appendix 1: Data completeness

The SMR04 record is complicated by having a two-part structure (admission and discharge). It is necessary for ISD continually to monitor the number of residents, any duplicate records and overlapping stays, and feed back and help resolve any issues with the relevant boards.

Since July 2014 when the previous report (SMR04 trends up to 2012/13) was published, there has been a concerted effort by NHS boards and ISD to improve the completeness of the dataset. It is now vastly improved but outstanding issues in two areas, NHS Highland and NHS Ayrshire & Arran, need mention.

NHS Highland moved to a new patient management system at the start of March 2014. At the time the data for this publication were extracted (the end of January 2015), the board had not begun submission of data from this new system. Financial year 2013/14 is therefore estimated to be 91% complete regarding admissions and discharges in NHS Highland in this publication, with around 114 records outstanding. (Since the data were extracted, submission of data from the new system has started, and it is expected that the dataset for Highland will catch up before the next SMR04 publication, which will include data to 31 March 2015 and is due in December 2015).

NHS Ayrshire & Arran has an outstanding issue with submission of records associated with moving to a new patient management system. The 2012/13 dataset is estimated to be 91% complete regarding admissions and discharges in NHS Ayrshire & Arran in this publication, with around 113 records outstanding. The 2013/14 dataset is estimated to be 97% complete, with around 26 records outstanding. A ‘fix’ to resolve the issue is currently being tested by the board and is expected to be implemented in spring 2015, so once again the data should be complete in the next publication.

In 2013/14, the impact of the undercount of admissions and discharges in NHS Highland and Ayrshire & Arran on the Scotland total would be to increase it by 0.7% (an extra 140 records compared to the recorded total of 20,494). As this was a small effect, no attempt was made to correct the data for this year. Similarly, the 2012/13 data were not corrected for the missing Ayrshire & Arran records.

There is also likely to be a negligible affect on the Scottish estimate of hospital residents at 31 March 2014, as the estimate for Highland NHS Board will effectively be for the end of February rather than March.
# Appendix 2: ICD-10 codes used in Section 8 – Diagnosis

<table>
<thead>
<tr>
<th>Broad group</th>
<th>ICD-10 name</th>
<th>ICD-10 code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dementia</td>
<td>Organic, including symptomatic, mental disorders</td>
<td>F00 - F09</td>
</tr>
<tr>
<td></td>
<td><em>Dementia in Alzheimer’s disease</em></td>
<td>F00</td>
</tr>
<tr>
<td></td>
<td><em>Vascular dementia</em></td>
<td>F01</td>
</tr>
<tr>
<td></td>
<td><em>Unspecified dementia</em></td>
<td>F03</td>
</tr>
<tr>
<td>Drug/alcohol misuse</td>
<td>Mental &amp; behavioural disorders due to psychoactive substance use</td>
<td>F10 - F19</td>
</tr>
<tr>
<td></td>
<td><em>Mental and behavioural disorders due to use of alcohol</em></td>
<td>F10</td>
</tr>
<tr>
<td>Schizophrenia etc.</td>
<td>Schizophrenia, schizotypal &amp; delusional disorders</td>
<td>F20 - F29</td>
</tr>
<tr>
<td></td>
<td><em>Schizophrenia</em></td>
<td>F20</td>
</tr>
<tr>
<td></td>
<td><em>Persistent delusional disorders</em></td>
<td>F22</td>
</tr>
<tr>
<td></td>
<td><em>Acute and transient psychotic disorders</em></td>
<td>F23</td>
</tr>
<tr>
<td></td>
<td><em>Schizoaffective disorders</em></td>
<td>F25</td>
</tr>
<tr>
<td></td>
<td><em>Unspecified nonorganic psychosis</em></td>
<td>F29</td>
</tr>
<tr>
<td>Mood (affective) disorders</td>
<td>Mood (affective) disorders</td>
<td>F30 - F39</td>
</tr>
<tr>
<td></td>
<td><em>Manic episode</em></td>
<td>F30</td>
</tr>
<tr>
<td></td>
<td><em>Bipolar affective disorder</em></td>
<td>F31</td>
</tr>
<tr>
<td></td>
<td><em>Depressive episode</em></td>
<td>F32</td>
</tr>
<tr>
<td></td>
<td><em>Recurrent depressive disorder</em></td>
<td>F33</td>
</tr>
<tr>
<td>Neurotic disorders</td>
<td>Neurotic, stress-related &amp; somatoform disorders</td>
<td>F40 - F48</td>
</tr>
<tr>
<td></td>
<td><em>Phobic anxiety disorders</em></td>
<td>F40</td>
</tr>
<tr>
<td></td>
<td><em>Other anxiety disorders</em></td>
<td>F41</td>
</tr>
<tr>
<td></td>
<td><em>Reaction to severe stress, and adjustment disorders</em></td>
<td>F43</td>
</tr>
<tr>
<td>Personality disorders</td>
<td>Disorders of adult personality &amp; behaviour</td>
<td>F60- F69</td>
</tr>
<tr>
<td></td>
<td><em>Specific personality disorders</em></td>
<td>F60</td>
</tr>
<tr>
<td></td>
<td><em>Mixed and other personality disorders</em></td>
<td>F61</td>
</tr>
<tr>
<td>Eating disorders/disorders of childhood¹</td>
<td>Behavioural syndromes associated with physiological disturbances and physical factors</td>
<td>F50 - F59</td>
</tr>
<tr>
<td></td>
<td><em>Eating disorders</em></td>
<td>F50</td>
</tr>
<tr>
<td></td>
<td><em>Learning disabilities</em></td>
<td>F70 - F79</td>
</tr>
<tr>
<td></td>
<td><em>Disorders of psychological development</em></td>
<td>F80 - F89</td>
</tr>
<tr>
<td></td>
<td><em>Pervasive developmental disorders e.g. childhood autism</em></td>
<td>F84</td>
</tr>
<tr>
<td></td>
<td>Behavioural and emotional disorders with onset usually occurring in childhood and adolescence</td>
<td>F90 - F98</td>
</tr>
<tr>
<td></td>
<td><em>Unspecified mental disorder</em></td>
<td>F99</td>
</tr>
<tr>
<td>Other diagnoses²</td>
<td>A wide range of other conditions not included above as not in F chapter, including: Alzheimer’s disease (G30), Other degenerative diseases of nervous system, not elsewhere classified (G31) and some codes for general examination/investigation/observation/respite care (Z00, Z03, Z75, Z91) etc</td>
<td>various</td>
</tr>
</tbody>
</table>

¹ Note that (despite the name) patients of all ages were included in this group.

² This category is shown in the pie charts (Figure 12) to bring the total to 100%.
**Appendix 3: Publication metadata (including revisions details)**

<table>
<thead>
<tr>
<th>Metadata Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publication title</td>
<td>Mental Health Hospital Inpatient Care: Trends up to 31 March 2014</td>
</tr>
<tr>
<td>Description</td>
<td>Mental health hospital inpatient (and day case) information within Scotland, drawn from hospital administrative systems. The data source is the SMR04 (mental health) return for admissions to and discharges from NHS psychiatric hospitals in Scotland.</td>
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<tr>
<td>Theme</td>
<td>Health and Social Care</td>
</tr>
<tr>
<td>Topic</td>
<td>Mental Health</td>
</tr>
<tr>
<td>Format</td>
<td>Excel workbooks, PDF document</td>
</tr>
<tr>
<td>Data source(s)</td>
<td>Scottish Morbidity Record 04 (SMR04); NRS mid-year population estimates (with recent years rebased following the 2011 Census).</td>
</tr>
<tr>
<td>Date that data are acquired</td>
<td>January 2015</td>
</tr>
<tr>
<td>Release date</td>
<td>12 May 2015</td>
</tr>
<tr>
<td>Frequency</td>
<td>Annual</td>
</tr>
<tr>
<td>Timeframe of data and timeliness</td>
<td>SMR04 data up to 31 March 2014. Publication delayed from December 2014 due to data completeness issues.</td>
</tr>
<tr>
<td>Continuity of data</td>
<td>Report includes figures and tables showing time trends from financial year 1983/4 or 1997/98 to 2013/14.</td>
</tr>
<tr>
<td>Revisions statement</td>
<td>As with other SMR data collections, SMR04 is dynamic and each new publication includes revised data for previous years. In addition, planned revisions are a feature of this publication’s release.</td>
</tr>
<tr>
<td>Revisions relevant to this</td>
<td>Following improvements in the completeness of the SMR04 data, this publication has been expanded and revised. It includes long time trends for mental health inpatient discharges and hospital residents, for Scotland, its NHS board and local authority areas, deprivation quintiles and urban rural categories. Also included are analyses by patient age and gender, specialty, status on admission and diagnosis.</td>
</tr>
<tr>
<td>publication</td>
<td></td>
</tr>
<tr>
<td>Concepts and definitions</td>
<td>See SMR04 records and Glossary.</td>
</tr>
<tr>
<td>Relevance and key uses of the</td>
<td>See Appendix 4.</td>
</tr>
<tr>
<td>statistics</td>
<td></td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>The figures in this report are compared to previously published data and expected trends. An ISD data quality assurance exercise for SMR04 is being planned for 2015/16. The Data Quality Assurance team will assess agreed data items at submitting hospital sites across mainland Scotland.</td>
</tr>
<tr>
<td><strong>Completeness</strong></td>
<td>See Appendix 1. See also spreadsheet with SMR completeness estimates published on ISD website (but bear in mind that the data in this report were acquired in late January 2015).</td>
</tr>
<tr>
<td><strong>Comparability</strong></td>
<td>See Links to other information sources.</td>
</tr>
<tr>
<td><strong>Accessibility</strong></td>
<td>It is the policy of ISD to make its web sites and products accessible according to published guidelines.</td>
</tr>
<tr>
<td><strong>Coherence and clarity</strong></td>
<td>The report includes a hyperlinked contents page, a glossary, and links to the supporting Excel spreadsheets. These files, and a publication summary, are all available on ISD’s website under Mental health – publications.</td>
</tr>
<tr>
<td><strong>Value type and unit of measurement</strong></td>
<td>Numbers, percentages, ratios, crude rates and European age-sex standardised rates (EASRs) per 100,000 population.</td>
</tr>
<tr>
<td><strong>Disclosure</strong></td>
<td>The ISD protocol on Statistical Disclosure Protocol was followed. There was a medium risk of disclosure linked to the published data, and disclosure control methods were employed.</td>
</tr>
<tr>
<td><strong>Official Statistics designation</strong></td>
<td>Official Statistics</td>
</tr>
<tr>
<td><strong>Last published</strong></td>
<td>29 July 2014</td>
</tr>
<tr>
<td><strong>Next published</strong></td>
<td>December 2015</td>
</tr>
<tr>
<td><strong>Date of first publication</strong></td>
<td>Web publication from 2003</td>
</tr>
<tr>
<td><strong>Help email</strong></td>
<td><a href="mailto:nss.isdmentalhealth@nhs.net">nss.isdmentalhealth@nhs.net</a> and see contact details listed above</td>
</tr>
<tr>
<td><strong>Date form completed</strong></td>
<td>22 April 2015</td>
</tr>
</tbody>
</table>
Appendix 4: Use of published SMR04 statistics

There are many users of the annual Mental health hospital inpatient care publication and data. These include the Scottish Government, Scottish Parliament, NHS board Chief Executives and Information Departments, NHS clinical and medical staff, ISD, other NHS organisations (e.g. Health Protection Scotland, NHS 24), Audit Scotland, private research and pharmaceutical companies, charities, students and members of the public.

The information is used for many purposes, including:

- NHS boards benchmarking their performance against other boards.
- Scottish Government Health Department for a variety of purposes, including analytical support, briefing and advice to policy, ministerial and press colleagues and to support the development, implementation and monitoring of policy and performance.
- Suicide prevention work through ScotSID (the Scottish Suicide Information Database) which links recent probable suicide deaths to prior health service contact including psychiatric inpatients.
- ISD and Scottish Government to reply to questions raised in the Scottish Parliament (PQs).
- NRS (National Records of Scotland) to estimate populations in long-term care in psychiatric hospitals.
- SMR04 data is part of the ACaDMe datamart linking acute (SMR01), mental health (SMR04), cancer registration (SMR06) and deaths records from NRS (National Records of Scotland), and this is used for many purposes.
- Historically, national NHS performance targets (HEAT targets) were included in the mental health publication to allow NHS boards and the Scottish Government to monitor boards’ performance, e.g. for psychiatric readmissions within 12 months of discharge.
- Supporting local, regional and national planning and monitoring.
- Comparative data across Scotland and within the UK and for other European countries are included in databases collated by organisations such as ONS, OECD, WHO and ScotPHO (the Scotland and European Health for All Database).
- A range of users request information on the number of admissions with specific diagnoses and by particular geographic breakdowns.
- Individual researchers use the data for epidemiological studies and as baseline information.
- Press and media use the information to inform public debate and discussion.

Examples of particular requests from students, researchers and private companies:

- The number of patients with a mental illness by urban/rural description.
- The number of admissions to mental health hospitals with a diagnosis of autism spectrum disorder.
- Mental illness discharges by admission type, diagnosis, gender and age group; years 1979 to 2011.
- Anorexia & bulimia data for the past 5 years.
- Discharges from psychiatric hospitals in Scotland with a diagnosis of schizophrenia.
Users’ experience of the statistics

On the ISD website, users are invited to provide a rating and comment on the usefulness of the data presented in the publication. The product has been rated as ‘good’ but the number of replies was limited.

As of 1 May 2015, the last publication (July 2014) report had been downloaded 131 times and the publication summary 109 times. The publication report invites feedback on the publication, its statistics and data presentation, but so far there has been little response.

The analysis team reflects on the frequency of information requests and, should any appear regularly, consideration is given to including this information in future publications.

ISD ran a consultation exercise in summer 2013 on proposals for the redevelopment of the Mental Health publication. Responses have been collated and summarised in Results of the ISD Consultation on the ‘Mental Health (Psychiatric) Hospital Inpatient Care Statistics’ Publication. The feedback was taken into account in redeveloping this publication, and will be considered for future ‘special topic’ reports.
Appendix 5: 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](http://isddata.nhs.scot). These statistics are Official Statistics, currently under assessment by the United Kingdom Statistics Authority for designation as National Statistics.

User engagement

ISD is keen to seek the views of users of health statistics in Scotland to improve the quality, value, accessibility and impact of its outputs. A joint engagement event was arranged in 2014 with ISD, the UK Statistics Authority and health statistics users (see the [full report](http://isddata.nhs.scot)). Please [contact us](mailto:isddata@nhs.scot) if you wish, with your views of our statistics.
Appendix 6: 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.