Important Changes to how we present our data

What has changed and why?

We have changed the way we analyse and present data from the Scottish Morbidity Records 01 (SMR01) database.

An SMR01 record relating to an episode of care is generated when a patient is discharged from hospital but also when a patient is transferred between hospitals, significant facilities, specialties or to the care of a different consultant. As a result a continuous stay in hospital may consist of more than one SMR01 episode. For example one episode might be the admission episode and be followed by a transfer to a different specialty thus generating a second SMR01 record. Both episodes belong to the same continuous stay in hospital.

In presenting data on drug-related or alcohol-related discharges from hospital, we only want to count each stay once - no matter how many SMR01 episodes it might include. Previously this was achieved by excluding any SMR01 episode coded as beginning with a transfer. However, to bring our data into line with practice in the rest of ISD, stays are now identified using the Continuous Inpatient Stay (CIS) marker generated by record linkage. This stay marker identifies all episodes belonging to the same continuous stay in hospital.

What constitutes a Continuous Inpatient Stay (CIS)?

Continuous stays are built by examining the intervals between records for a patient, and also looking at the type of discharge for a record and the type of admission for the subsequent record.

If there is a negative interval between episodes then these episodes are always regarded as forming part of the same stay. This can happen if a patient is transferred, and the receiving ward admits them before the original ward discharges them.

When a patient is discharged from a ward and admitted to another ward either on the same day, or where there is only 1 day separating their discharge and next admission, providing either the discharge or the admission is coded as a transfer, these episodes will be regarded as forming part of the same stay.

Where there are 2 or more days separating the patients discharge and their next admission, this will always be coded as a different stay.

What effect does the change have on the data?

Since the previous method of counting stays worked by excluding transfer episodes, by definition no episodes beginning with a transfer appeared in the tabulation. However under the new method, a small number of stays beginning with a transfer are identified. There are several reasons for this, for example, a patient may have been transferred from a hospital not included in the SMR01 scheme such as a psychiatric hospital. Tables 1 and 2 below indicate that the size of the impact on the number of discharges is marginal.

Table 1 General Acute Inpatient Discharges with a diagnosis of drug misuse in any position; 2003/04 – 2007/08.

Scotland Totals	2003/04 [r]	2004/05 [r]	2005/06 [r]	2006/07 [r]	2007/08 [r]
Old Method	4,436	4,451	4,367	4,766	5,411
New Method	4,504	4,489	4,432	4,822	5,461
Percentage Difference	1.5%	0.9%	1.5%	1.2%	0.9%

[r] Revised

Table 2 General Acute Inpatient Discharges with an alcohol-related diagnosis in any position; 2003/04 – 2007/08.

Scotland Totals	2003/04 [r]	2004/05 [r]	2005/06 [r]	2006/07 [r]	2007/08 [r]
Old Method	35,403	38,021	37,837	39,729	42,648
New Method	36,066	38,488	38,331	40,173	43,031
Percentage Difference	1.9%	1.2%	1.3%	1.1%	0.9%

[r] Revised

The new method will also have an effect on the calculated length of stay. Under the previous method, length of stay was calculated as episode length of stay for each non-transfer drug-related or alcohol-related episode. Under the new method, length of stay is not an episode length of stay, but a CIS length of stay. To calculate this, we sum up the individual lengths of any drug-related or alcohol-related episodes within a stay.

The implications of including only drug-related or alcohol-related episodes.
As mentioned above, our analysis relates only to drug-related or alcohol-related episodes of care. This may cause slight differences compared to the more general definition of a continuous stay in other ISD data. For example, it might be the case that the first episode in a stay contains a drug or alcohol diagnosis and the second does not. In that case only the first episode is included in our length of stay calculation. Similarly, if the first record in a stay does not contain a drug or alcohol diagnosis but the second one does, only the second one will-be included (and will probably be tabulated as a stay beginning in a transfer).

Table 3 General Acute Inpatient Discharges with a diagnosis of drug misuse in any position; length of stay: 2007/08 [r].

Scotland Totals	0 Days	Less than 1 week	Between 1 week and 1 month	More than 1 month
Old Method	1,741	3,251	394	25
New Method	1,530	3,191	655	85
Percentage Difference	-12.1%	-1.8%	66.2%	240%

[r] Revised

The actual impact of this change on the final data is shown in table 3 above. The change for the cases that have a length of stay over 1 week appears large when expressed as a percentage because there are so few cases in these categories. Caution is therefore recommended when interpreting differences in percentages.

When will these changes take place?
We will make theses changes from 1 December 2009. Therefore any data published on/after 1 December 2009 and any information requests received on/after 1 December 2009 will be calculated using our new method unless explicitly specified.

What if I have further questions?
If you have any further questions please contact Lorne Robertson in our analytical team on 0131 275 7552 or lorne.robertson@nhs.net