Alcohol misuse imposing “considerable strain” on NHS in Tayside

Alcohol excess and dependency are imposing a “considerable strain” on the workload and resources of the NHS in the Tayside, says Marlyn Glen, the Dundee-based MSP.

To raise awareness of the scale of “this growing public health concern” on the NHS locally, Ms. Glen released figures today, from government sources, that estimate the cost last year of alcohol harm to four services in NHS Tayside.

These were emergency ambulance call outs, Accident and Emergency attendances, outpatient appointments, and hospital beds occupied by those with alcohol related conditions.

Ambulance emergency call outs

There were 27,825 emergency ambulance call outs in NHS Tayside last year.

Government research indicates that 25 per cent of all such ambulance call outs are alcohol-related.

The average cost of an emergency ambulance call out is £244.

The cost of alcohol misuse to ambulance resources in NHS Tayside is estimated by:

The number of emergency call outs in a health board area $\times$ 25 per cent $\times$ £244

$= 25$ per cent of $27,825 \times £244 = £1.66$ million

The cost of alcohol misuse to ambulance resources in NHS Tayside is estimated at £1.66 million last year.

Accident and Emergency attendances

There were 73,967 attendances at A&E departments within large hospitals in NHS Tayside last year.

Government research indicates that 25 per cent of all such attendances are alcohol-related.

The average cost of an A&E attendance is £100.

The cost of alcohol misuse to A&E resources in NHS Tayside is estimated by:

The annual number of attendances at core sites $\times$ 25 per cent $\times$ £100

$= 73,967 \times 25$ per cent $\times £100 = £1.84$ million
The cost of alcohol misuse to A&E resources in NHS Tayside is estimated at £1.84 million last year.

**Outpatient attendances**

The number of outpatient attendances in NHS Tayside last year was 131,046

Government research indicates that 10 per cent of all such attendances are alcohol-related.

The average cost of an outpatient attendance is £112

Cost of alcohol misuse to the outpatient resources in the NHS Tayside area in 2008-09 is

number of attendances x 10 per cent x £112 = £1.47 million

The cost of alcohol misuse to outpatient resources in NHS Tayside last year is estimated at £1.47 million

**Beds occupied by those with alcohol-related conditions**

The number of days last year that beds in NHS Tayside acute hospitals were occupied by those with an alcohol-related condition where alcohol was either a primary or secondary factor was 14,705

The average cost of occupying a bed in an acute hospital is £569 a day.

The cost of alcohol misuse from the hospitalisation of those with alcohol-related conditions (either a primary and secondary diagnosis) to hospital bed resources in NHS Tayside last year is estimated by:

the number of occupied bed days x the average cost of a bed day

= 14,705 x 569 = £8.00 million

The cost of alcohol misuse from the hospitalisation of those with alcohol-related conditions (either a primary and secondary diagnosis) to hospital bed resources in NHS Tayside in 2008-09 is £8.00 million.
These estimates deal only with these four services and do not take account of the cost of alcohol excess on psychiatric bed use, prescribed drugs, or laboratory testing.

Neither do they taking into account the number of GP consultations for alcohol abuse. The latest annual Scotland-wide figure is 102,000.

Ms. Glen said,

“ These figures clearly illustrate the impact that excessive drinking has on the limited resources of the NHS by consuming vital hospital and ambulance services.

“Moderate drinking is socially acceptable; heavy drinking should not be, since its inevitable consequence, serious ill-health, is preventable.

“Attitudes towards smoking have changed.

“ Attitudes towards the dangers of inappropriate drinking must change as well.

“ Highlighting the spiralling cost of alcohol misuse provides support for the use of resources being spent on reducing the damage associated with it.”

ends

Calculating the annual costs of alcohol misuse
The calculations use the same estimates (and assumptions) made by Scottish Government researchers in calculating the cost of alcohol misuse in Scotland to society at:
http://www.scotland.gov.uk/Publications/2008/05/06091510/0 (May 2008)

Assuming that these percentages at a Scottish level reflect the same level of misuse of alcohol in the NHS in Tayside, then the following estimated costs to the NHS could occur.

Ambulance call outs
The data obtained from the Scottish Ambulance Service indicates that the number of emergency call outs in NHS Tayside in 2008-09 has been 27,825

See:

Marlyn Glen : To ask the Scottish Executive how many emergency ambulance incidents there were in NHS Tayside in the last year for which information is available.
Answered by Nicola Sturgeon (Thursday, February 11, 2010): The Scottish Ambulance Service have advised that in 2008-09 there were 27,825 emergency
ambulance incidents in NHS Tayside. This is made up of 10,872 category A calls (life threatening) and 16,953 category B calls (serious but not life threatening).

* Scottish Government researchers estimate that 25 per cent of ambulance incidents in Scotland are alcohol-related. (See “Scottish Government Research “PDF file Section 3.3 Ambulance journeys…” a figure of 25% is used here)

* Estimated cost per call out
The estimated cost of an emergency ambulance call out in 2008-09 in the East Central area (which includes Tayside) is £244.19p (see attached Excel file |ISD Scotland under Accident and Emergency - North)
The estimated costs of alcohol misuse to the NHS through emergency call outs in NHS Tayside is calculated as follows:
\[ \text{The number of emergency call outs in a health board area} \times \text{25 per cent} \times \£244.19 \times \text{(the average cost of each call out)} \]
25 per cent of 27,825 x £244 = £1.69 million

**Attendances at Accident & Emergency Units**
The number of A&E attendances in NHS Tayside in 2009 was **73,967** at “core” hospitals.
(Those A&E units within large hospitals)
See:

Marlyn Glen:

To ask the Scottish Executive how many attendances at accident and emergency units there were in NHS Tayside in the last year for which information is available.
**Answered by Nicola Sturgeon (Thursday, February 25, 2010):** There were 109,109 accident and emergency (A&E) attendances in NHS Tayside between 1 January 2009 and 31 December 2009. The following table includes core and non-core subtotals.

<table>
<thead>
<tr>
<th>A&amp;E Department Type</th>
<th>Number of A&amp;E Attendances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total for core sites</td>
<td>73,967</td>
</tr>
<tr>
<td>Total for non-core sites</td>
<td>35,142</td>
</tr>
<tr>
<td>Total for all sites</td>
<td>109,109</td>
</tr>
</tbody>
</table>

Source: A&E data mart, ISD Scotland.
A&E departments are classified as either core or non-core sites. Core sites include all A&E departments within large hospitals. Non-core sites include minor injury units, small hospitals with manual systems and health centers in rural areas that carry out A&E type activity.

*Scottish Government researchers use an estimate of 25 per cent of all cases in Scotland being related to alcohol (See “Scottish Government research Section 3.8 A&E attendances … “A figure of 25%...is used in these estimates”)
(Note also: “At peak times seven out of 10 accident and emergency admissions stem from alcohol abuse and the Department of Health estimates that about £1 in every £3 spent in A and E is alcohol-related.” Hansard, referring to the English Department of Health http://www.publications.parliament.uk/pa/cm200607/cmhansrd/cm070515/halltext/70515h0001.htm
The average cost of an attendance at an A&E unit in 2008-09 was £100.

**Marlyn Glen**: To ask the Scottish Executive what the average cost was of an attendance at an accident and emergency unit in the last year for which information is available.

**Answered by Nicola Sturgeon (Thursday, February 25, 2010)**: The average cost of an attendance at a hospital providing accident and emergency outpatient care in financial year 2008-09 was £100.

Using just the figure from the “core” hospitals, the estimated annual cost of alcohol misuse to Accident & Emergency resources in NHS Tayside is:

The annual number of attendances \( \times 25 \text{ per cent} \times £100 \)

\[ 73,967 \times 25 \text{ per cent} \times £100 = £1.85 \text{ million} \]

**Outpatient appointments**

The number of outpatient attendances in NHS Tayside in 2008-2009 was **131,046**

**Marlyn Glen**: To ask the Scottish Executive how many new outpatient attendances there were in NHS Tayside in the last year for which information is available.

**Answered by Nicola Sturgeon (Thursday, February 25, 2010)**: Provisional, published statistics show that the number of new outpatient attendances in NHS Tayside for the financial year ending 31 March 2009 was **131,046**.

As a result of changes to the Patient Administration System in NHS Tayside this figure includes some estimation and may be subject to revision.

**The estimated percentage of outpatient appointments connected with alcohol-related conditions is 10 per cent** (See Scottish Government researchers - Section 3.10 “… The number of OP visits associated with alcohol related disease (both direct and indirect) is estimated at 10%”)

*The estimated cost of an outpatient attendance in 2008-09 is £112.*

Cost of alcohol misuse to the outpatient resources in the NHS Tayside area in 2008-09 is

\[ 131,046 \times 10 \text{ per cent} \times £112 = £1.47 \text{ million} \]
Days in which hospital beds are occupied
The number days in 2008-09 that beds in H&I hospitals were occupied by those with an alcohol-related condition where alcohol was either a primary or secondary factor was 14,705
See:

Alcohol Misuse

Marlyn Glen: To ask the Scottish Executive how many acute occupied bed days in hospitals in NHS Tayside were directly connected with alcohol-related conditions in the last year for which information is available.

Answered by Shona Robison (Tuesday, March 09, 2010): Information on the number of acute occupied bed days which are directly attributable to alcohol-related conditions is not held centrally.

Information on acute occupied bed days is recorded on the SMR01 dataset. SMR01 has space for up to six diagnosis codes to be recorded, a main diagnosis and up to five secondary diagnoses. Alcohol-related problems will be recorded as either a main or a secondary diagnosis, so it is not possible to identify the cases where alcohol was directly attributed to the length of the admission.

Table 1 shows the total length of stay of patients treated in acute hospitals in NHS Tayside for alcohol-related conditions, recorded in any diagnosis position, 2008-09; the most recent year for which information is available. Due to the way alcohol-related conditions are recorded, it is not possible to determine whether the reason for admission is directly attributable to alcohol. Therefore this figure may be an overestimate.

Table 1: Total Length of Stay (Bed Days) of Patients Treated in General Acute Hospitals in NHS Tayside for Alcohol-Related Conditions: 2008-09

<table>
<thead>
<tr>
<th>NHS Tayside</th>
<th>14,075</th>
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Notes:
1. Excludes mental illness hospitals, psychiatric units and maternity hospitals. 2. Figures in this table relate only to those individuals who are treated as inpatients or day cases in an acute hospital. They do not include individuals managed as outpatients. 3. Note that these figures include residents from other health boards that were treated in Tayside hospitals but do not include Tayside residents treated in other health boards. 4. Discharges where alcohol-related diagnosis is recorded as primary or secondary reasons for admission to hospital. 5. Diseases recorded using the World Health Organization's International Classification of Diseases 10th Revision (ICD10). - Alcohol-related: F10, K70, X45, X65, Y15, Y90, Y91, E24.4, E51.2, G31.2, G62.1, G72.1, I42.6, K29.2, K86.0, O35.4, P04.3, Q86.0, T51.0, T51.1, T51.9, Y57.3, R78.0, Z50.2, Z71.4, Z72.1. These codes were defined in a recent in-depth review of ISO's core alcohol related code set. 6. Caution is necessary when interpreting these figures. The recording of alcohol-related problems may vary from hospital to hospital.

*The average cost of an acute occupied bed day in 2008-09 was £569
See

NHS Hospitals
Marlyn Glen: To ask the Scottish Executive what the average cost was of an acute occupied bed day in the last year for which information is available.

Answered by Nicola Sturgeon (Thursday, February 25, 2010): The average cost of an acute occupied bed day in an NHSScotland hospital in financial year 2008-09 was £569.

The cost of alcohol misuse from the hospitalisation of those with alcohol-related conditions (either a primary and secondary diagnosis) to hospital bed resources in NHS Tayside in 2008-09 is estimated by:

\[
\text{number of occupied bed days} \times \text{average cost of bed day} = 14,075 \times £569 = £8.00 \text{ million}
\]

Number of GP consultations

Alcohol Misuse

Marlyn Glen:
To ask the Scottish Executive how many GP consultations were directly connected with alcohol-related conditions in the last year for which information is available and what the estimated cost was.

Answered by Shona Robison (Wednesday, March 03, 2010): The exact number of GP consultations that were directly connected with alcohol-related conditions in Scotland, is not available centrally. However, national estimates can be given based on the number of consultations there have been relating to alcohol abuse, from a sample of Scottish general practices participating in PTI (Practice Team Information). Based on PTI data, the estimated number of consultations with a GP for alcohol abuse in Scotland, during the financial year 2007-08, was 102,268. This equates to a rate of 19 per 1,000 registered patients.

These figures are likely to considerably underestimate the true number of GP consultations connected with alcohol-related conditions in Scotland. The figures relate only to consultations with a GP where alcohol abuse was specifically recorded as an issue. Many other consultations may have been due to alcohol-related conditions even though alcohol abuse was not specifically recorded. Furthermore, other members of the practice team (such as nurses) will also see patients for alcohol-related problems. Information on estimated costs of consultations for alcohol-related conditions is not available centrally. Although figures on general practice expenditure are collected and published routinely, the data are not split down to provide a measure of costs associated with individual reasons for each GP consultation.