

## **Mental health in Scotland: Information sources and selected insights**

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## Executive summary

### Scotland-wide consistent data are already available on:

- Available psychiatric beds
- Diagnoses of those being cared for as psychiatric inpatients
- Those admitted to general hospitals after episodes of self-harm
- Aggregate activity (headcounts) for outpatients, daypatients and community contacts
- Prescription drugs associated with mental health dispensed in the community
- Frequency of visits to GPs for mental health reasons
- The workforce available to deliver mental health care
- Cause of death (including suicide)

### Headline points from the report:

- Available general psychiatry beds in Scotland have reduced three fold since 1980. This is in line with the change in emphasis towards community care.
- ...but the number of consultant psychiatrists and psychologists has risen since 1990
- 40% more per head is spent on prescriptions for anti-depressants in Scotland than in England
- ...but surveys suggest that people in Scotland are no more prone to depression. (Perhaps proportionately more Scots visit their doctor, and receive more modern medications?)
- Depression was the commonest contributing diagnosis for Scots visiting their GP in 2000
- Schizophrenia in those aged 16-65 on 31 December 2000 showed a 20 year prevalence rate of 4.3 per 1000 (5.4 for men, 3.2 for women)
- Suicide was the leading cause of death among young men in 2000, and the numbers appear to be rising. The male suicide rate for Scotland in 1998 (26 per 100 000) was more than double the UK average (12 per 100 000)
- Ritalin (methylphenidate) prescribing per young person shows a seven-fold variation across Scottish NHS boards

### Areas we need to explore further:

- **We need to have fuller information on the care being delivered in community settings.** This applies not only to mental health, and is particularly important in allowing the delivery of **complete and integrated packages of care** where different types of interventions are delivered by different members of a multi-disciplinary, multi-agency team. Although the care recipient/ service user is a key member of the care team they should not have to coordinate communication among other team members. The Improving Mental Health Information Project team have already embarked on a series of endeavours to improve information sharing among care providers. These include the development of a **draft information core for integrated care (ICIC)**, intended to provide the basic shared description of encounters and interventions that care providers will need in order to deliver 'joined-up care'.
- **We also require better information on the quality of care.** At present we do not have good measures of outcomes, and in any case have poor knowledge of interventions being delivered in the community. It is often therefore very challenging to know whether the correct care is being delivered. The core information gathered by the ICIC can also be used to deliver consistent data for quality improvement, service planning and management.
- We need to document more fully the **mental health problems of those primarily in contact with services for physical problems.** We believe that the current data stream from general hospitals (SMR01) considerably under-records the mental health problems of their patients.
- Confidentiality and security are important. In all cases personal information must only be procured and processed in full compliance with the Human Rights Act, Data Protection Act and CSAGS guidance.

## Chapter 1: Introduction and context

### Aim of this report

The aim of this document is to illustrate the range of sources of national mental health information in Scotland, and demonstrate potential uses of this information. It also gives some insights into current services, and how well they can be described, and provides pointers to where information can be improved in future.

Nationally consistent information on 'physical' health has been relatively well developed in Scotland. However, we recognise that for mental health further improvements to the accessibility and quality of information are urgently required, to support improvements in services for people with mental health problems.

### What this document covers and what it doesn't

We hope that this document will be of interest to care professionals, and managers who need information for needs assessment, planning services, or formulating policy. However we have not set out here to conduct a full epidemiological needs assessment of mental health in Scotland, as this would require considerable additional detailed work.

This document covers the main data sources, and provides insights into various aspects of mental health, including: suicide; psychoses; anxiety and depression; and child and adolescent mental health. It does not set out to be encyclopaedic: if you have particular questions that we do not address we would be happy to work with you to try to answer them.

Drug misuse, alcohol misuse and dependence and learning disability are not covered. However we recognise that many of those with mental health problems also fall into these categories. Further information on these topics is available elsewhere, as shown below:

#### Drug misuse

- Drug misuse information in Scotland<sup>1</sup>

#### Alcohol misuse/dependence

- Alcohol misuse in Scotland: trends and costs<sup>2</sup>
- Statistics on alcohol in Scotland<sup>3</sup>
- Alcohol misuse information in Scotland: a report to the Scottish Advisory Committee on Alcohol Misuse<sup>4</sup>

#### Learning disability

- Learning disability website at ISD Online<sup>5</sup>

While the majority of the document is concerned with NHS information, it is recognised that many other agencies and aspects of society are important in mental health care. These have been included where possible.

### Introducing the Improving Mental Health Information Project

This report has been produced as part of the 'Improving Mental Health Information Project', which is based at the Information and Statistics Division, NHSScotland. Brief details of this project are given below. For more information please visit the project web site<sup>6</sup>

<sup>1</sup> See <http://www.drugmisuse.isdscotland.org/index.shtml>

<sup>2</sup> See <http://www.scotland.gov.uk/health/alcoholproblems/docs/rfrco-00.asp>

<sup>3</sup> See <http://www.scotland.gov.uk/health/alcoholproblems/docs/paap1-00.asp>

<sup>4</sup> See [http://www.show.scot.nhs.uk/isd/mental\\_health/alcoholmisuse.pdf](http://www.show.scot.nhs.uk/isd/mental_health/alcoholmisuse.pdf)

<sup>5</sup> See [http://www.show.scot.nhs.uk/isd/Joint\\_futures/learning\\_disabilities/learning\\_disabilities.htm](http://www.show.scot.nhs.uk/isd/Joint_futures/learning_disabilities/learning_disabilities.htm)

<sup>6</sup> See [http://www.show.scot.nhs.uk/isd/mental\\_health/mhipbase.htm](http://www.show.scot.nhs.uk/isd/mental_health/mhipbase.htm)



### Who is ISD? What do we do?

The Information and Statistics Division (ISD) of the Common Services Agency is a central NHSScotland support service. ISD collect, collate, maintain and distribute a wide range of National Health Service data sets, which collectively form the national corporate database for NHSScotland that is used for public health surveillance and health service provision and planning. We also provide contract research, analysis and information consultancy services to NHSScotland, research agencies, universities, other public sector organisations, members of the public and companies. Further information is available from our website- ISD Online<sup>7</sup>.

### What are the aims of the Improving Mental Health Information Project?

The Scottish Executive vision for mental health in NHSScotland is to “*provide modern, responsive mental health services that meet individually assessed needs*”<sup>8</sup>. This will only be realized if we have better timely, targeted information to improve care in three key areas:

- Integrated person-centred care
- Quality improvement and clinical governance
- Public Health, performance management, planning and research

However, mental health information is currently weak & fragmented, particularly in primary and community care. The Improving Mental Health Information Project (IMHIP) aims to increase the provision of the right information, at the right time, in the right place. We are doing this in partnership with champions within the Scottish Executive and across the service, through a combination of improvements in processes, cultural change and introduction of technology.

### Other current activities of the project

The **first phase** of the project (August 2001 to June 2002) had three strands. In addition to this report illustrating what national information is available, we also:

- Commissioned a consultation to address what information the service have and what their priorities for change were (see end of this chapter); and
- Initiated a survey of which information technology systems were in use in each area (in conjunction with the Information Management & Technology Strategy team at the Scottish Executive Health Department<sup>9</sup>).

In the **second phase** of the project (March 2002 to March 2003) we are addressing three objectives:

- Improving knowledge sharing among currently existing information projects
  - By networking project managers and other local pioneers
  - By holding a national meeting (24 September 2002 in Glasgow)<sup>10</sup>
  - Through our website and monthly newsletters<sup>11</sup>
- Making current data more helpful
  - Converting data into information and feeding it back as knowledge
  - Facilitating research and epidemiology
  - Enhancing current data capture/ streams
- Promoting information sharing in care teams and exploring how to fill information gaps
  - Building an information culture where information is seen to support care provision
  - National audits
  - An ‘information core for integrated care’<sup>12</sup>

<sup>7</sup> See <http://www.show.scot.nhs.uk/isd/index.htm>

<sup>8</sup> See <http://www.scotland.gov.uk/news/2001/04/se0939a.asp>

<sup>9</sup> See <http://www.show.scot.nhs.uk/imt/>

<sup>10</sup> See [http://www.show.scot.nhs.uk/isd/mental\\_health/imhip2002.htm](http://www.show.scot.nhs.uk/isd/mental_health/imhip2002.htm)

<sup>11</sup> See [http://www.show.scot.nhs.uk/isd/mental\\_health/newsarchive.htm](http://www.show.scot.nhs.uk/isd/mental_health/newsarchive.htm)

<sup>12</sup> See [http://www.show.scot.nhs.uk/isd/mental\\_health/icic.htm](http://www.show.scot.nhs.uk/isd/mental_health/icic.htm)



## Background

### Definitions of mental health and illness

This document is about information to improve mental health care in Scotland. Mental health is one of the three key aspects of health as defined by the World Health Organisation, the other two being physical health and social health. These concepts are clearly closely inter-related. Importantly, the term mental health signifies both mental illness and positive aspects of mental well-being [SNAP, 1997].

Mental illness encompasses a range of conditions from anxiety to depression and psychotic states. In different sources the definition of mental health problems may include or exclude different conditions, e.g. learning disability, epilepsy and dementia. A complete list of mental and behavioural disorders is given in the Tenth Revision of the International Classification of Diseases (ICD-10), Chapter V [WHO, 1992]<sup>13</sup>.

Mental health care may also cover aspects of preventing mental illness, as well as treatments and support. This may include health promotion activity, primary care, secondary care, local authority services, other statutory agencies and voluntary services.

### Determinants of health and mental health

There are a number of well-described determinants of health, including physical or environmental factors, biological factors including genetics, and social factors. A body of research has shown that patterns of disease or poor health are not distributed randomly in industrialised societies. On the contrary, consistent patterns emerge, which demonstrate inequalities in health according to variables such as socio-economic status [Acheson, 1998]. These affect both physical and mental health, which are in turn closely related to one another.

Adverse social and psychological circumstances can affect mental health through creating long-term stress. Anxiety, insecurity, low self-esteem, social isolation and lack of control over work and home life have powerful effects on health, increasing the chance of poor mental health and premature death. Often the poorest in society are at greatest risk. Belonging to strong social networks can have a protective effect on mental health, as can regular physical activity [WHO, 1998].

### Vulnerable groups

Certain groups at risk of social exclusion are more likely to experience ill health. Relative poverty, as well as absolute poverty leads to worse physical and mental health. People who are ill, disabled or emotionally vulnerable, such as those who have been in prisons or psychiatric facilities, may be marginalised by society. Stigmatising conditions such as HIV add to stress. Ethnic minority groups or refugees, and unemployed people are at particular risk. Homeless people have a particularly poor health record [WHO, 1998]. For example, a special survey of homeless people in Glasgow revealed that 6% had a psychotic disorder, 44% a psychological disorder, and 22% reported long-standing mental illness.<sup>14</sup>

Current routinely collected mental health information may be limited in identifying mental health problems in vulnerable groups. For example, health service data is currently not available broken down by ethnic group in Scotland. Furthermore service-derived information cannot identify mental health problems in those who are not in touch with services.

### Mental Health Policy Background: Scotland

The Scottish Executive (formerly the Scottish Office) has repeatedly identified mental health as one of three key clinical priority areas for the health service in Scotland<sup>15</sup>, and has introduced a number of initiatives designed to improve the delivery of mental health services. Links to the documents cited in this section, and a good many more, are available in the 'key documents'<sup>16</sup> section of the Improving mental health information project website. There is, as yet, no mental health information strategy although there is an information management and technology (IM&T) strategy<sup>17</sup>.

<sup>13</sup> See <http://www.informatik.fh-luebeck.de/icd/List.html>

<sup>14</sup> See [http://www.statistics.gov.uk/ssd/surveys/survey\\_homeless\\_people\\_glasgow.asp](http://www.statistics.gov.uk/ssd/surveys/survey_homeless_people_glasgow.asp)

<sup>15</sup> See <http://www.scotland.gov.uk/library3/health/onh-09.asp>

<sup>16</sup> See [http://www.show.scot.nhs.uk/isd/mental\\_health/keydocs.htm#scotshealthpolicy](http://www.show.scot.nhs.uk/isd/mental_health/keydocs.htm#scotshealthpolicy)

<sup>17</sup> See <http://www.show.scot.nhs.uk/imt/imt2001strategy.pdf>

The three most important mental health policy documents are:

### ***The Framework for Mental Health Services in Scotland (1997)***

This was produced by the Scottish Office and the UK Parliament's Scottish Affairs Committee's "*Enquiry into Implementation of Community Care*" and was launched in September 1997.<sup>18</sup> The framework outlined plans for the delivery of mental health services in Scotland in the coming years and sets out the essential features of a local mental health strategy and ways of developing and implementing that strategy.

An update to the Framework for Mental Health Services in Scotland provides guidance for how psychological interventions, and services for eating disorders should be delivered.<sup>19</sup>

### ***Towards a Healthier Scotland - A White Paper on Health (1999)***

This White Paper<sup>20</sup> addressed measures to tackle the big preventable diseases that kill and disable Scots. In particular it confirms that mental health will continue to be a leading priority for NHSScotland and reports on the successful development of The Framework for Mental Health Services in Scotland.

*"Action: Mental Health will be a leading priority for the NHS in Scotland..."*

### ***Our National Health: a plan for action, a plan for change (2000)***

In this most recent policy document<sup>21</sup> outlining plans for NHSScotland the Scottish Executive stated (in section 7: meeting specific needs):

- *"The NHS has three agreed clinical priorities - coronary heart disease, cancer and mental health. These priorities have been established for good reason. They must be translated into practical effect both in national policy and investment and in local action and change."*<sup>22</sup>
- *"We will accelerate the implementation of the Framework for Mental Health..."*
- *"People want modern mental health services that make a difference by improving the speed, responsiveness and the quality of care"*
- *"We will support further development of extended mental health services in primary care settings and encourage the development of crisis services and community health initiatives"*

### **Mental Health Information Policy in England**

The NHS in England is slightly more advanced in mental health information strategy development, but is encountering similar problems to Scotland in implementation. Their *Mental Health Information Strategy*<sup>23</sup> document sets out a wide programme to deliver in the mental health area the needs identified in the NHSIA's *Information for Health* document<sup>24</sup> (1999) and updated in *Building the Information Core- Implementing the NHS Plan*<sup>25</sup> (2001). The mental health information strategy is designed to support the National Service Framework for mental health<sup>26</sup>.

In summary the English Mental Health Information Strategy aims to provide information:

- To support **integrated and co-ordinated care** by providing an electronic patient record, in this case the Integrated Mental Health Electronic Record<sup>27</sup> (IMHER).
- To improve **access** by allowing people with mental health problems to know what services are available to them locally and how such services can be accessed.

<sup>18</sup> See [http://www.show.scot.nhs.uk/publications/mental\\_health\\_services/index.htm](http://www.show.scot.nhs.uk/publications/mental_health_services/index.htm)

<sup>19</sup> See [http://www.show.scot.nhs.uk/mhwbsg/Documents/Psych\\_Int\\_final.pdf](http://www.show.scot.nhs.uk/mhwbsg/Documents/Psych_Int_final.pdf)

<sup>20</sup> See <http://www.scotland.gov.uk./library/documents-w7/tahs-00.htm>

<sup>21</sup> See <http://www.scotland.gov.uk/library3/health/onh-00.asp>

<sup>22</sup> See <http://www.scotland.gov.uk/library3/health/onh-09.asp>

<sup>23</sup> See <http://www.doh.gov.uk/nhsexipu/whatnew/mhis/mhisdoc.htm>

<sup>24</sup> See <http://www.doh.gov.uk/nhsexipu/strategy/index.htm>

<sup>25</sup> See <http://www.doh.gov.uk/ipu/strategy/update/>

<sup>26</sup> See <http://www.doh.gov.uk/nsf/mentalhealth.htm>

<sup>27</sup> See <http://www.doh.gov.uk/nhsexipu/strategy/nsf/imhercb.pdf> for a consultant's brief

- To **inform the public** about mental health conditions through high quality web resources such as NHS Direct On-line<sup>28</sup>. Information on depression<sup>29</sup> and schizophrenia<sup>30</sup> and suicide<sup>31</sup> are already available.
- To generate an up-to-date **evidence base** about effective treatments and care for clinical decision support. This is already under way through the National Electronic Library for Mental Health (a collaboration among the Centre for Evidence-Based Mental Health<sup>32</sup>, the e-library for social care<sup>33</sup> and NHS Direct).
- To allow continuous **quality improvement and effective planning**. Eventually the data from the IMHER will be used to allow this. However in the short to medium term information to allow clinical governance and planning will be derived from the mental health minimum dataset (MHMDS). Unlike the IMHER the MHMDS is not intended to be used directly for individual-centred care.

### Policy background: World Health Organisation (WHO)

In 2001, WHO published a landmark World Health Report '*Mental Health: New Understanding, New Hope*' [WHO, 2001].<sup>34</sup> This comprehensive report describes advances in scientific understanding of mental health problems, as well as outlining prevention, treatment, service planning and policy. It also aims to address the barriers of stigma, discrimination, and poor services around the globe, and emphasizes that mental health and well-being are as important as physical health: mental disorders represent four of the ten leading causes of disability worldwide. Their key recommendations include: the provision of treatment in primary care and the community, rather than in institutions; increasing availability of psychotropic drugs; educating the public; and involving people and families in their own care. Monitoring mental health of communities is highlighted, along with the need for new indicators for mental health in the community. Action plans are described for countries depending on their economic resources, stressing the importance of governments in developing appropriate policies.

<sup>28</sup> See <http://www.nhsdirect.nhs.uk/>

<sup>29</sup> See <http://cebmh.warne.ox.ac.uk/cebmh/elmh/depression/index.html>

<sup>30</sup> See <http://cebmh.warne.ox.ac.uk/cebmh/elmh/schizophrenia/index.html>

<sup>31</sup> See <http://cebmh.warne.ox.ac.uk/cebmh/nelmh/suicide/index.html>

<sup>32</sup> See <http://www.cebmh.com/>

<sup>33</sup> See <http://www.elsc.org.uk/>

<sup>34</sup> See <http://www.who.int/whr/2001/main/en/index.htm>

## Information needs

### Who needs information? What sort of information

This provides only a summary and is partially based on the NHS England Mental Health Information Strategy<sup>35</sup> (see previous section) and on a consultation run for the Improving mental health information project (iMHIP) by the Scottish Development Centre for Mental Health (SDC) over the summer of 2001. Further details of the outputs from the SDC consultation are available at the end of this section or at the iMHIP web site<sup>36</sup>.

Multiple groups require information in order to discharge their responsibilities. In all cases confidentiality and security of personal information are very important. Such sensitive data must only be procured and processed in full compliance with the Human Rights Act, Data Protection Act and CSAGS guidance<sup>37</sup>.

However, the information requirements of the different groups differ. Some brief considerations of their needs are set out below:

#### Users and carers

People with mental health problems and their families, friends, carers and the public need information to:

- Help them understand their illness and difficulties
- Explain what types of treatment and other help are available
- Tell them where and how they can get help in their locality
- Promote mental health and well-being

Good information systems are necessary for users and carers to ensure that care is as safe and effective as possible.

#### Care/service providers

Care providers - nurses, specialist doctors, general practitioners, psychologists, community psychiatric nurses (CPNs), social workers, voluntary agencies, occupational therapists and other care professionals - need information about:

- Colleagues' current assessments of users' problems and risks
- Service users' previous treatment and care
- Recent developments in treatments and current evidence about what works best
- The range and volume of facilities locally available
- The services they work in and they relate to
- Service availability locally to ensure care plans can be delivered.
- Housing available for those they are helping

#### Clinical governance facilitators and clinical leads require information to address the following:

- What interventions are being delivered?
- Are patients being looked after according to current best practice?
- Is the care compliant with national standards and guidelines (e.g. Clinical Standards Board for Scotland Schizophrenia standards)?
- Are outcomes and the quality of care improving?

<sup>35</sup> See <http://www.doh.gov.uk/nhsexipu/whatnew/mhis/mhisapp.htm> - APPENDIX 1

<sup>36</sup> See [http://www.show.scot.nhs.uk/isd/mental\\_health/mhipbase.htm](http://www.show.scot.nhs.uk/isd/mental_health/mhipbase.htm)

<sup>37</sup> See <http://www.dataprotection.gov.uk/dpr/dpdoc.nsf> and <http://www.show.scot.nhs.uk/csags/>

**Health Board managers and planners responsible for overseeing and planning mental health care need information on:**

- The pattern of mental health care needs in the population of their area, and how these needs are likely to change and develop
- Service availability to ensure services can be delivered in a timely way
- Whether available money and staff are being focused where need is greatest
- Whether the quality of care services is being assessed and improved

**Epidemiologists and public health researchers require information to assist in:**

- Assessing needs for care
- Determining patterns of illness over time and place
- Investigating associations between illness and possible causative factors

**The Scottish Executive needs information on mental health for:**

- Policy development and analysis
- Securing and allocating resources
- Accounting to the public and the Scottish Parliament for resources
- Strategic planning
- Performance management
- Publication of national statistics.

Further details of who needs information for what are elaborated in appendix 1 of the NHS England Mental Health Info Strategy<sup>38</sup>.

## Summary of results from the SDC consultation with the service on information needs

### Method

Using a key contact in each primary care trust as a central link, local views were sought from a variety of perspectives within mental health services, health boards, local authorities and associated voluntary agencies. National regulatory and review bodies and key interest groups were also consulted. The research was carried out in five phases comprising: local briefings; a postal survey to local services; feedback and exploration of emerging themes; thematic discussions with interest groups; and consultation with national bodies.

### Key findings

- The current focus of mental health information does not reflect modern mental health service delivery
- It is dominated by hospital, activity based data with the majority of resources concentrated on national information demands
- Current information systems do not allow interdisciplinary multi-agency working to deliver integrated individual-centred care
- Awareness and coordination of local and national initiatives is poor
- Data is not fully exploited to generate information

<sup>38</sup> See <http://www.doh.gov.uk/nhsexipu/whatnew/mhis/mhisapp.htm> - APPENDIX 1

**Recommendations for future endeavours**

- Initiatives must be led by care providers and involve integration or linkage of separate systems
- Cultural change is required to promote information sharing including leadership from professional bodies and local management, and trust among and respect for colleagues. Creating change will depend on better recognition of the value of information as a care delivery tool.
- Consistent approach and definitions are required to allow comparisons
- A nationally consistent minimal information core
- We need more than just headcounts: quality + outcomes

**We will know we are succeeding when mental health information:**

- First and foremost assists communication in and between care settings
- Facilitates care-provider access to reliable information at any point of a care journey
- Allows greater leadership and ownership by care staff
- Provides real time information to permit the quality of care to be assessed and improved
- Can be shared with confidence according to agreed parameters

Copies (in PDF format) of the executive summary<sup>39</sup> (3 pages) and of the full report<sup>40</sup> (60 pages) of the findings from the SDC consultation are available at the Improving Mental Health Information Project web site<sup>41</sup>.

**Local/ developing systems to aid documentation of care**

Through initial survey work for the Improving Mental Health Information Project we are aware of the systems that a number of primary care trusts are already using, or plan to implement over the next few months, to manage their mental health information. For example:

- Glasgow, Lanarkshire, Lothian and Forth Valley are using iSOFT's PIMS (Fife and Grampian plan to)
- Borders have been using Protechnic's ePex since 1991
- West Lothian combined trust are using CIS (a self-built system)
- FACE software has been procured and is about to be introduced into North Ayrshire to support an integrated care pathway for treatment of those with severe mental illness
- Renfrewshire and Inverclyde are using the Torex system
- Dumfries and Galloway are using a networked Access database

The social care data standards project<sup>42</sup> has done a similar systems audit for social work departments in Scotland.

Over the next 6 months (to end 2002) a Scottish Executive funded exercise, in collaboration with the improving mental health information project, will develop our understanding of the capabilities of local systems by asking selected trusts whether their systems, for example:

- Allow information sharing and joint working among primary care and specialist health, and social care professionals, to support integrated care pathways
- Allow them to measure quality improvement and document compliance with CSBS standards for schizophrenia
- Maintain a record of current medication to allow recognition and monitoring of side effects.
- Generate a summary for each client including clinical and social/ major life events

<sup>39</sup> See [http://www.show.scot.nhs.uk/isd/mental\\_health/sdcexecsumm.pdf](http://www.show.scot.nhs.uk/isd/mental_health/sdcexecsumm.pdf)

<sup>40</sup> See [http://www.show.scot.nhs.uk/isd/mental\\_health/sdcinfooneeds.pdf](http://www.show.scot.nhs.uk/isd/mental_health/sdcinfooneeds.pdf)

<sup>41</sup> See [http://www.show.scot.nhs.uk/mental\\_health/mhipbase.htm](http://www.show.scot.nhs.uk/mental_health/mhipbase.htm)

<sup>42</sup> See <http://www.scds.org.uk/>

- Allow them to document dependents of clients/care recipients with mental health problems, whose health may be impaired by illness of that client/care recipient
- Allow care providers to extract client details and reports themselves
- Share information with other systems (e.g. SCI Store or similar)
- Provide data for quality improvement, audit and needs assessment work
- Allow them to measure outcomes for individuals
- Share information with voluntary agencies



## Chapter 2: Current national information sources

### Categories of information available

This chapter is organised into several sections that cover:

1. Information on mental health in the population
2. Information about how health services are delivering care to those with mental health problems
3. Information from other sources.

Health service information falls into several categories, as mental health often crosses traditional boundaries of care. Many people with mental health problems are seen by the local practice team (GPs, practice and district nurses, and health visitors). Specialist care is provided in the community, and also in a hospital setting as an outpatient, day patient or inpatient. There are some additional, more general sources of health service information, including on prescriptions of drugs, and workforce.

Information is also available on services provided by local authorities, other statutory agencies, and voluntary agencies.

Currently, Scotland-wide comparable information sources do not exist in a number of areas e.g. community mental health teams, and other community specialist mental health services.

The confidentiality and security of patient-identifiable data are obviously a major issue for NHSScotland, and for care-providing partners. These are ensured by application of a system of processes and standards, which address the requirements of the Data Protection Act 1998<sup>43</sup>, the common law, the Human Rights Act and published guidance<sup>44</sup>.

### Information on mental health in the population

Information about the health or mental health status of the population is best measured using community surveys. This is because people with health problems may not seek or have access to health services. Consequently there may be people, sometimes with fairly severe problems, that services will not reach if the level of need (both met and unmet) in the community is not known.

#### National Surveys

##### *ONS (OPCS) surveys of psychiatric morbidity*

Surveys were carried out across Great Britain by the Office of Population, Censuses and Surveys (OPCS) in 1993/4<sup>45</sup> and 2000<sup>46</sup> leading to reports covering: the prevalence of psychiatric disorders among people living in private households and the consequences of such disorders for them; similar topics for people living in institutions and prisons; data on the prevalence of psychiatric disorders, and the social and physical health of the homeless; and characteristics associated with differences in the circumstances and health related behaviour of adults with psychosis. OPCS is now part of the Office for National Statistics (ONS).

In 1999 ONS conducted a survey of *Mental Health of Children and Adolescents in Great Britain*<sup>47</sup>. Among children aged 5-15: 5% had clinically significant conduct disorders; 4% were assessed as having emotional disorders (anxiety and depression); and 1% were rated as hyperactive. Autistic disorders, tics and eating disorders were present in 0.5% of children. Overall 10% of children had a mental disorder: this rate includes some children with more than one type of disorder.

The 2000 survey of private households showed that in Great Britain 164 per 1000 of those surveyed had a neurotic disorder in the week before survey, of which: 88 per 1000 had mixed anxiety and depression; 44 per 1000 generalised anxiety disorder; and 26 per 1000 a depressive episode.

<sup>43</sup> See <http://www.show.scot.nhs.uk/dataprotection>

<sup>44</sup> See <http://www.dataprotection.gov.uk/dpr/dpdoc.nsf> and <http://www.show.scot.nhs.uk/csags/>

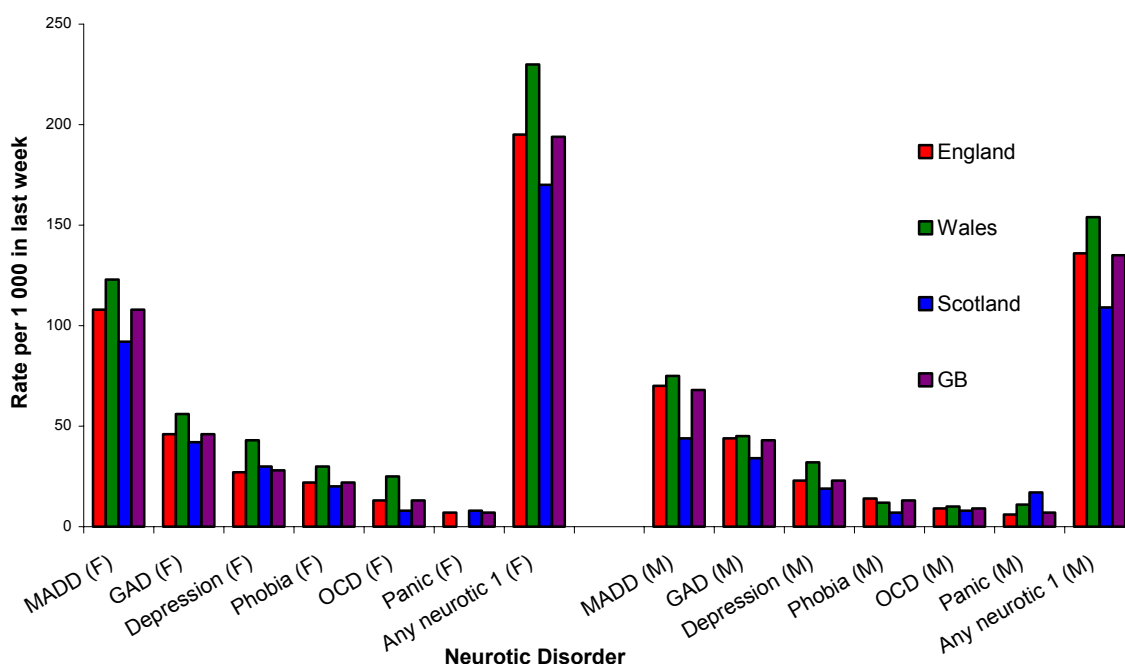
<sup>45</sup> See <http://www.statistics.gov.uk/statbase/Product.asp?vlnk=2194>

<sup>46</sup> See <http://www.statistics.gov.uk/products/p8258.asp>

<sup>47</sup> See <http://www.statistics.gov.uk/products/p3983.asp>

The breakdown for each of England, Wales and Scotland is shown in Figure 2.1 below, which is adapted from Table 2.9 of the ONS report on the 2000 survey. However the regional variations in prevalence are not statistically significant<sup>48</sup>.

**Figure 2.1: Prevalence of neurotic disorders by area and sex (rate per thousand population) in ONS survey 2000.**



Source: ONS survey of population psychiatric morbidity 2000.<sup>49</sup> Total sample size= 4728

#### Notes

1 People may have more than one disorder

F Female; M Male; MADD Mixed anxiety and depressive disorder; GAD Generalised anxiety disorder;

OCD Obsessive Compulsive disorder

### General Household Survey

The General Household Survey (GHS)<sup>50</sup> is a multi-purpose survey based on interviews with people living in private households in Great Britain. The main aim of the survey is to collect data on topics including housing, employment, education, health and family circumstances. The GHS has documented some of the major social changes that have occurred over the last 30 years. These include the decline in average household size, the growth in the proportion of the population who live alone, the increase in the proportion of families headed by a lone parent and the increased percentage of unmarried people who are cohabiting. This information is used by government for planning, policy and monitoring purposes.

In 2000, 67% of an initial sample of 13,250 people took part. Questions were asked about long-standing illness or conditions, limiting long-standing illness and restricted activities. Although there is a question relating to the nature of any long-standing illness there is no specific question about mental health. 32% of respondents reported long-standing conditions, and 19% stated that this limited their activities. The proportion increased with age, and was higher in manual social classes. Mental health problems were ranked seventh in describing the long-standing condition, with musculo-skeletal problems being most often reported. Mental health problems were cited most frequently in the 45-64 age group, at 36/1000, compared to an overall rate of 27/1000. As this survey excludes institutions (and the homeless) it is likely to considerably under-estimate mental health problems in the community.

<sup>48</sup> See p25 of <http://www.statistics.gov.uk/products/p8258.asp>

<sup>49</sup> See <http://www.statistics.gov.uk/products/p8258.asp>

<sup>50</sup> See [http://www.statistics.gov.uk/ssd/surveys/general\\_household\\_survey.asp](http://www.statistics.gov.uk/ssd/surveys/general_household_survey.asp)

### Scottish Health Survey

This survey<sup>51</sup> conducted in 2000 included a representative sample of the general population of Scotland living in private households. It focused on measures of self-assessed general health, health related behaviours, and the prevalence<sup>52</sup> of cardiovascular and respiratory disease.

The survey achieved a response rate of around 80%, which is regarded as excellent in surveys of this kind, and over 90% of respondents consented to record linkage, which is also very high by comparison with similar questions in other surveys. Respondents were also asked at the end of their interview whether they would be willing to be re-contacted and to allow their records to be checked against NHS registers.

'Psycho-social Health' is assessed using the General Health Questionnaire (GHQ 12) which asks 12 questions about general levels of happiness, anxiety, depression, stress and sleep disturbance over 'the past few weeks' prior to the interview. All adults and children aged 13 to 15 are included. A score of four or more has been used to identify individuals with a potential psychiatric disorder.

Women were more likely to have a high score than men (18% v 13%) and higher scores were associated with younger age, unemployment, being separated or widowed and with poor self-assessed health status. GHQ12 scores in adults in Scotland and England did not differ significantly. However girls (13-15) in Scotland were significantly less likely to have high scores (13% v 8%) than their counterparts in England.

### Health service information

The use of health services can provide information about those in contact with services. However such information may be skewed towards those with more severe problems. It may also reflect historical trends in supply of services, rather than accurately reflecting the mental health status of those in the community.

Health service information is traditionally presented by NHS Board (equivalent to Health Board) areas. However, health service information by Scottish local authority areas is also available from ISD<sup>53</sup> (in PDF format).

### Primary care:

#### **Primary care: CMR and the practice team**

##### *How did the system develop? What does it collect?*

Continuous Morbidity Recording (CMR) is a system for the collection of primary care morbidity data from general practices in Scotland. It became recognised as part of the Scottish National Dataset from 1 April 1998. At April 2002 there were 81 GP practices participating in CMR. These allow a representative sample of the Scottish population in terms of age, sex, deprivation and rural/urban mix. All GP face-to-face contacts by practice patients are captured. Contacts are recorded by every doctor acting for the practice (including locums and out of hours doctors).

Up to ten presenting problems (morbidity) can be recorded for each contact and these are entered into the GPASS system. Each diagnosis is given a Read code along with a modifier to indicate whether the problem is a first ever diagnosis, a recurrence of a previous condition, or a persistent condition. By using these modifiers, proxies for incidence and prevalence rates for specific conditions/diseases can be calculated. Practice workload can also be assessed by, for example, individual clinician or by contact type (for example, out of hours contacts). The data fields are listed in appendix A. Monthly extractions are sent to ISD for analysis and each participating practice receives regular quarterly feedback reports<sup>54</sup>.

A recent initiative has been the development of the collection of nurse information from practice and community nurses (district nurse, health visitor and community midwife). Together, CMR and nurse data collection constitute Practice Team Information (PTI). At each nurse contact, information is collected on both the presenting problem (morbidity) and what intervention is carried out (activity; see also appendix A). This information is entered into the practice's computer system, given Read codes and extracted monthly for return to ISD. Although the practices receive regular feedback, nurse information is not yet published. As of March 2002 41 CMR practices are collecting practice nurse information and 29 collect community nurse information.

<sup>51</sup> See <http://www.show.scot.nhs.uk/scottishhealthsurvey>

<sup>52</sup> See glossary

<sup>53</sup> See [http://www.show.scot.nhs.uk/isd/Scottish\\_Health\\_Statistics/subject/SLACS/2000/2000.pdf](http://www.show.scot.nhs.uk/isd/Scottish_Health_Statistics/subject/SLACS/2000/2000.pdf)

<sup>54</sup> See [http://www.show.scot.nhs.uk/isd/CMR/Monthly\\_report/cmr\\_monthly\\_reports.htm](http://www.show.scot.nhs.uk/isd/CMR/Monthly_report/cmr_monthly_reports.htm)

***What about data quality?***

Data quality is assessed through a data quality assurance programme. This is carried out by: routine data monitoring (on the data returned to ISD); individual practice visits to measure data completeness and coding accuracy; and by reporting of quality indicators in the regular feedback reports. The first round of practice visits was carried out in 1999/2000. Results for the Scotland-wide sample were 91% for both Read code accuracy and data completeness. The round of visits for 2001/2002 includes assessment of data quality of nurse information.

***How are the data currently used?***

Estimates based on Continuous Morbidity Recording (CMR) in general practice indicate that a mental health diagnosis was recorded at approximately 10% of all GP/patient consultations in 2000. The information derived is put to a wide range of uses: answering parliamentary questions; conducting needs assessments; and to inform policy and planning at practice, health board and Scottish Executive level.

***Future developments***

It is hoped in future to add more practices and improve the balance for each NHS Board area.

***Prescribing Information******How did the system develop? What does it collect?***

A Scotland-wide system exists to pay independent contractors (such as community pharmacists) for drugs and appliances dispensed in the community. In April 1999 the Minister for Health approved the transfer of responsibility for the functions associated with Primary Care Administration from Health Boards to the Common Services Agency (CSA) for the NHS in Scotland. Practitioner Services, a new division within the CSA, was created to take on this responsibility. Practitioner Services provides administrative support and processes payments to all Primary Care practitioners including family doctors, dentists, community pharmacists, appliance suppliers, and opticians on behalf of Primary Care Trusts and Island Health Boards.

Practitioner Services Division (PSD) pay individual contractors based on the information on dispensed drugs supplied on prescription forms submitted by contractors on a monthly basis. After pricing and payment the data is passed to the Prescribing Information System (PIS) data warehouse maintained by the Primary Care Information Group (PCIG). PIS was launched during 2000 and holds prescription data down to the level of formulation, strength, quantity and cost of individual prescription items. At present the data available go back to April 1998, but in future will be available for the most recent 7 years. Archived data prior to this, back to 1992, can be extracted from the earlier (FoxPro) system.

***What about data quality?***

The information collected by PSD is subject to a variety of in-process checks with respect to accuracy of data captured. The data is also subject to an external checking process run by the representative body for pharmacy contractors. The quality of data is subject to the accuracy of reference data provided by Trusts and Boards to PSD. This includes changes in prescriber information, such as locums, registrars and GP moves or retirements. We believe that since the information is collected as a by-product of the payment process it is of high quality.

***How are the data currently used?***

ISD's Primary Care Information Group are responsible for extracting and analysing prescribing and dispensing data, including producing a series of routine reports, for a range of customers, notably Primary Care Trusts, Health Boards and the Scottish Executive. Data is available on all items dispensed in the community. This includes all drugs prescribed by GPs and in hospitals that are dispensed in the community, but not items that are both prescribed and dispensed in hospital.

Two information products are currently available:

- SPA (Scottish Prescribing Analysis) is made available to all practices and prescribers. This is a paper-based record, available in a variety of levels. It is regarded as an important source of information for evaluating use of medicines in, and supporting prescribing in, the community.
  - SPA Level 1 is sent automatically to GPs: a breakdown of total costs and number of items dispensed for major therapeutic categories compared against averages for the Practice/Health Board/Scotland
  - SPA Level 2 is produced on request for GP/Practice/Health Board and shows all items dispensed in a 3-month period

- PRISMS (The Prescription Information System for Scotland) is available to the prescribing advisors in each primary care trust and provides:
  - Comparisons of frequency of prescribing
  - Trend analysis and
  - Comparison of practices within a Local Healthcare Cooperative (LHCC)

The information is a combination of GP prescribing detail from Scottish Prescribing Analysis (SPA) together with cost detail from the Indicative Prescribing Scheme.

The main PIS data warehouse is also used to answer 'ad hoc' enquiries from a variety of customers, including questions in the Scottish parliament, the Scottish Executive and academic research institutions.

### ***Future developments***

Prescribed items held on PIS are not systematically linked to patient identifying information. Although this was envisaged as a future development when the PIS was first launched, any such development will be subject to current and future legislation and guidance around the area of patient confidentiality. The electronic transmission of prescription data from both GP and dispenser, currently being piloted, is another area of possible development.

The recently launched *Strategy for Pharmaceutical Care in Scotland* includes a commitment that a Medicines Utilisation Unit will be set up within ISD in the coming year. This will look at recording uptake data for secondary care and 'over the counter' sales, with a view to taking an overall look at how medicines are used within Scotland.

## **Child Health Systems**

### ***How did the systems develop? What do they collect?***

Child health systems comprises four operational systems, which were developed to support the surveillance, care and follow up of children in the community. Pre-school, School and Special Needs systems have the capacity to record problems, which may include mental health, & behavioural problems. The four systems are:

- *Standard Immunisation and Recall System (SIRS) & Grampian Immunisation Record System (GIRS)* which provide a call/recall and scheduling system and record immunisations for each child for immunisations carried out as part of the pre-school immunisation programme.
- The *Pre-School* system, which provides call/recall & scheduling for the programme of child health surveillance contacts. The results of physical health and development checks are hard coded. The system allows the recording of any problems or concerns noted during the contact (Read coded) and associated follow up. Outcome may be updated at subsequent contacts.
- The *School* system, which performs a similar function for school age children.
- The *Special Needs* system, which provides care management support to community paediatricians. It holds information on diagnoses, problems and multidimensional disability status, services and professionals in contact with the child. It facilitates the sharing of information with those involved with the child, and allows scheduling of assessments.

Currently these systems are not in use Scotland-wide. Pre-school is most widespread, covering everywhere but Grampian, Highland, Orkney, Shetland and Western Isles. The Special Needs system is in use in parts of 9 NHS board areas, and the School system in 3 NHS Board areas and one integrated NHS Trust. The SEHD IM&T<sup>55</sup> strategy sets out the timetable of when these systems should be implemented by across Scotland.

### ***What about data quality?***

In each NHS Board area the child health department is responsible for the administration of the system. It is at this level that quality assurance occurs.

### ***How are the data currently used?***

All the above systems are used to support the clinical care & management of individual children. In addition various reports are available from the system. Extracts from the system are passed to ISD's Child Health

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<sup>55</sup> See <http://www.show.scot.nhs.uk/imt/IMT2001Strategy.pdf>

Information Team (CHIT)<sup>56</sup> for analysis purposes. Output is disseminated to stakeholders to inform surveillance practice and add to existing descriptions of the health status of local child populations.

### *Future developments*

All systems will be implemented nationally as described in the national IM&T strategy.

The clinical effectiveness of the Special Needs system is currently being evaluated via a two-year project funded by the Scottish Executive Clinical Resource and Audit Group<sup>57</sup>. The indicator conditions highlighted for more detailed examination include autism, Down's syndrome, visual impairment, sensorineural hearing loss, neural tube defect and cerebral palsy.

### **Specialist care:**

#### **Aggregated secondary care activity- ISD(S)1**

##### *How did the system develop? What does it collect?*

ISD(S)1 is a monthly or quarterly data collection that provides comprehensive information on the total amount of secondary care activity in each trust over a three-month period. The information is only collected at summary level i.e. no details of the individual episodes are collected. Information recorded on ISD(S)1 is regarded as the definitive source for reporting on the volume of hospital activity. It has been in use since 1974, when it replaced an earlier system.

Information is available by specialty and by location. The information covers:

- Available and occupied bed numbers
- Inpatients and day cases treated (see below for the difference between a day case and a day patient)
- Outpatients and ward attendees, including Accident and Emergency
- Day patient places and day patients seen
- Haemodialysis patients
- Patients seen by professions allied to medicine (PAMS; Occupational Therapists. Psychologists, physiotherapists) and other technical departments. There is an optional facility to separately record and differentiate activity by PAMS in outpatients, direct access and the community. This is little used.
- Hospital cancellations (since 1999)

Statistics are collected for both new patients and all (new and return) attendances during the year. This allows calculation of the number of patients 'on the books', and the number of day places available at the end of the year.

### **Day patients and day cases**

A **day patient** is a person attending a **day hospital** on a regular basis, usually one or more times a week for at least half a day. Services provided include assessment, rehabilitation and treatment for specific patient groups such as the elderly and those with mental health problems.

Day hospitals are distinct from **day bed** units, which are for **day case** admissions. **Day cases** are generally patients admitted for specific treatment, e.g. surgery, which requires use of a bed, but not an overnight stay in hospital.

### *What about data quality?*

ISD(S)1 is generally produced 3 months after the time period that it covers. It is subject to validation checks and yearly reports to Trusts for quality checking. Historically doubts have been expressed about the consistency, quality and completeness of the data but it is believed that more recent data is more robust.

<sup>56</sup> See [http://www.show.scot.nhs.uk/isd/child\\_health/child\\_health.htm](http://www.show.scot.nhs.uk/isd/child_health/child_health.htm)

<sup>57</sup> See <http://www.show.scot.nhs.uk/crag/>



***How are the data currently used?***

Information drawn from ISD(S)1 is used widely throughout the NHS and the dataset is generally regarded as the definitive source for reporting absolute volumes of activity. The wide range of information recorded on ISD(S)1 includes many data items that are not currently recorded on any other central returns. The historic and current ISD(S)1 datasets held by ISD Scotland are used to monitor trends across different time periods and to compare activity between locations and NHS providers. Information from ISD(S)1 is regularly used to answer Parliamentary Questions and ministerial enquiries, and is issued via a variety of publications and other outlets. Ad hoc analyses of the data held by ISD Scotland are available on request.

***Future developments***

There are no major developments of ISD(S)1 planned.

***Outpatients SMR00******How did the system develop? What does it collect?***

Attendances at NHS hospitals, clinics and other settings for consultant-led outpatient treatment are an important source of contact with the health service for patients with a mental illness. During the last 20 years an increasing number of patients have been seen as outpatients and the number of both new and total outpatient attendances for psychiatric specialties has increased.

SMR00, which underwent revision in 1996, collects patient-based data on first attendances at consultant-led outpatient clinics in all specialties (except A&E and GUM clinics). Although it is possible to record the following this is not universally-observed consistent practice across Scotland:

- Second and subsequent outpatient appointments,
- Outpatient attendances at non-consultant led clinics
- Diagnoses and procedures (none of relevance to mental illness, however)
- Consultations outwith an outpatient clinic session including the patient's home and 'other community premises'
- Type of referral, referral reason and referral source
- Type of follow-up care
- Whether the patient attended

***What about data quality?***

SMR00 data quality is checked by ISD's Data Intelligence Group. They assess completeness and submission rates and compare with ISD(S)1 for overall levels of activity.

***How is the data currently used?***

Information from SMR00 can be used to answer questions tabled in the Scottish Parliament and to examine service delivery across Scotland. However it is acknowledged that the variable interpretation of rules and the inconsistent submission of data compromise the utility of SMR00, particularly in community-based specialties such as mental health.

***Future developments***

In recent years it has become apparent that, as measured by SMR00, outpatient activity is falling. A major initiative has been established to examine whether this 'data deficit' is genuinely the result of less activity or whether it is rather a failure to capture care being delivered in novel ways (i.e. team-based rather consultant led). This matter is also being examined by Audit Scotland. However the model of hospital- and clinic-based care is poorly applicable to mental health where much of the activity in the community cannot conveniently be placed in a conventional 'outpatient' context: i.e. it is delivered over long periods of time in patients' homes, GP practices, resource centres, cars etc. A new approach is therefore required to document basic details such as who saw who, where, when, why, what happened and what's to happen next. This is the basis for the proposed 'Information Core for Integrated Care'<sup>58</sup> that the Improving Mental Health Information Project is developing.

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<sup>58</sup> See [http://www.show.scot.nhs.uk/isd/mental\\_health/icic.htm](http://www.show.scot.nhs.uk/isd/mental_health/icic.htm)



**Inpatient:**

Information on people in hospitals has been collected since the 1960s as part of the Scottish Morbidity Record (SMR) system. This covers all hospital inpatient and day case activity in Scottish hospitals. It is collected from mental health/acute psychiatric facilities by the SMR04 scheme and from other inpatient facilities (excluding maternity services) on the SMR01 form.

**Psychiatric hospitals- SMR04*****How did the system develop? What does it collect?***

SMR04 was introduced in April 1996. The previous SMR4 had been in use for about 20 years. Two parts are used because of the length of time that some patients may remain in hospital. An initial SMR04 record is filed to ISD for each patient at the beginning of an episode of care i.e. when they are admitted as an inpatient or day case (the latter account for fewer than 50 per year in Scotland). The second part of the record is submitted to ISD at the end of each episode, when a patient is either discharged to the community, transferred to another consultant, specialty or hospital, or is on 'pass' for over 28 days.

As well as demographic information, a main diagnosis is reported, together with provision for up to three further diagnoses on admission and five further diagnoses at the end of the episode. In some cases a specific diagnosis may not be recorded on admission. The diagnosis may also change during the episode. For these reasons statistics on diagnosis are based on diagnosis at the end of the episode. The main diagnosis recorded should come from Chapter V (Mental and behavioural disorders) of the International Classification of Diseases 10th Revision (ICD-10)<sup>59</sup>. In order to aid interpretation and analysis ISD usually combines the diagnostic codes into 10 major groups. However, information on individual diagnoses is available if required. Details of the code groups in use can be found at section C11 of the hitherto annual publication Scottish Health Statistics<sup>60</sup>. From May 2002 the data previously published on paper and the web as Scottish Health Statistics will instead be published in the relevant sections of an enhanced ISD Online web site (<http://www.show.scot.nhs.uk/isd>).

When the most recent revision of the SMR04 mental health record came into effect on 1st April 1996, one of the notable changes was introduction of the facility to subdivide the psychiatric specialty. Five specialties are currently available: general psychiatry; psychiatry of old age; adolescent psychiatry; child psychiatry; and forensic psychiatry. However, age of the patient is not a fixed indicator of which specialty a patient may be under: specialty refers to the consultant supervising care. A new classification of liaison psychiatry has recently been added.

Appendix A shows details of the data fields collected.

***What about data quality?***

In 1998, the Data Quality Assurance Team in ISD undertook an assessment of the quality of SMR04 information. Data was sampled from 22 trusts and 1046 episodes were extracted and compared with the relevant medical records. The exercise highlighted a number of areas for improvement and we advise that, as with any data, potential limitations are taken into account when interpreting them. The findings of the data quality audit can be summarized as follows:

- In most cases coders derived information from forms and ward returns, rather than the discharge summary or medical record
- Patient identity data items were recorded to a very high standard
- For main diagnosis at the end of the episode, records were correct in over 90% of cases for dementia, alcohol misuse, drug misuse, mental handicap and 'other' conditions. Records were 80-90% correct for schizophrenia and general mood disorders, other psychotic disorders, neurotic disorders, and personality disorders. Records were 70-80% correct for bipolar disorder, depressive episode, and recurrent depressive disorder.
- For main diagnosis at the end of the episode, diagnoses were most likely to be over-recorded for depressive episode, schizophrenia and mood disorder, other psychotic disorder, and personality disorder. With the exception of depressive episode at 20%, over-reporting occurred in less than 10% of cases.
- Additional psychiatric disorders are frequently under-recorded. At the end of the episode alcohol misuse was under-recorded in 24% of cases, drug misuse in 19% of cases, mood disorder in 13% of cases and

<sup>59</sup> See <http://www.informatik.fh-luebeck.de/icd/List.html>

<sup>60</sup> See [http://www.show.scot.nhs.uk/isd/Scottish\\_Health\\_Statistics/SHS2000/home.htm](http://www.show.scot.nhs.uk/isd/Scottish_Health_Statistics/SHS2000/home.htm)

'other' conditions in 14% of cases. Other additional diagnoses were under-recorded in less than 10% of cases.

- Additional physical or non-psychiatric diagnoses were under-recorded. At the end of the episode, poisoning was under-recorded in 27% of cases, and diseases of the nervous system in 13% of cases. Other categories were under-recorded in less than 10% of cases.
- 4 items in episode management were areas for concern. Admission type was affected in 86% of Trusts, discharge type in 91% of Trusts, and source of admission or location of discharge in 27% of Trusts.
- Recording of arrangements for aftercare gave concern in 27% of Trusts
- In the general clinical section, omitted 'other' diagnoses were highlighted in 91% of Trusts. Recording issues were highlighted for the main diagnosis on admission and discharge in 23% of Trusts.
- Recording issues with respite admissions were highlighted in 64% of Trusts

**Several recommendations** for improving SMR04 information **were made**. These included:

- Raising awareness of good coding practice with all staff in the data collection process (i.e. from clinician to coder)
- Providing short training/awareness sessions in ICD10 coding
- Encouraging clinicians to record specific text for all diagnoses, including non-psychiatric co-morbidities which are relevant to that episode of care
- Providing a comprehensive final discharge summary and/or the full medical record to coding staff to allow them to complete SMR04 returns

This quality assessment exercise has not yet been repeated. Practical difficulties with SMR04 include comparatively slow computerization compared to acute services and the potential for error increases with manual transcription of data. Also, mental health services may be spread over numerous peripheral locations, which may create logistical difficulties for Trusts.

#### *How are the data currently used?*

SMR04 has been relatively little used compared with SMR01 (see below), which may be partly because information was previously somewhat out of date. In recent years timeliness has improved, and information is available within 6-12 months of the episode. SMR04 does have great potential to be used further in needs assessment, epidemiology and planning.

#### *Future developments*

New significant facility codes may be developed to reflect patient flow and distinguish among: acute admission wards, acute wards, rehabilitation wards, long-stay facilities and specialist facilities such as intensive psychiatric care units, locked wards, forensic care, eating disorder units, inpatient detoxification units, therapeutic communities/group living units.

We are also looking at splitting the general psychiatry specialty code to reflect the diversity of types of patient treated by consultants in that specialty.

Recently we have been able to link together all SMR01 (acute inpatient episodes) with all SMR04 (inpatient episodes in psychiatric facilities), all SMR06 records (cancer notifications) and the GROS death records (recording date and cause of death). This **linked database** contains 5.4 million grouped records from the last 20 years and has proved invaluable for some of the analyses we report in chapter 3.

#### **Acute (general) hospitals- SMR01**

When looking at hospital information for patients with a mental illness it is important to look at information from non-psychiatric hospitals. This is because patients may arrive at a non-psychiatric hospital as a result of self-harm, such as a drug overdose, or may present with an acute medical condition that may or may not be related to a mental illness. For example, a patient with alcohol dependence might develop liver disease requiring admission to hospital. The mental illness may be recorded as the main reason for admission to hospital or, more usually as a secondary reason for admission.

A main diagnosis of a mental or behavioural disorder accounted for less than one per cent of all non-psychiatric hospital discharges during the year ending March 1999. Information on patients with a mental

health problem who are discharged from non-psychiatric hospitals is published by ISD in the annual publication *Scottish Health Statistics*<sup>61</sup>.

The psychological needs of patients presenting with what are conventionally regarded as purely somatic health problems are increasingly recognised but poorly met. For example mental health problems are likely to be under-recorded as secondary diagnoses on SMR01, although many general hospital inpatients experience anxiety or depression. It is important therefore to encourage documentation of coexisting mental health problems through reporting streams (such as SMR01) already present for 'physical health' facilities.

For example, alcohol related problems are recorded in many SMR01 episodes and *Scottish Health Statistics* includes a detailed section on hospital discharges for patients with an alcohol-related problem<sup>62</sup>. Detailed information on discharges from non-psychiatric hospitals for patients with a drug misuse problem can be found in ISD's annual publication *Drug Misuse Statistics Scotland*<sup>63</sup>.

#### ***How did the system develop? What does it collect?***

All episodes in acute hospitals in Scotland are reported to ISD on a SMR01 return. SMR01 was the first Scottish morbidity record (set up over 30 years ago) and collects information on every inpatient and daycase episode, and the diagnoses and procedures performed during that episode for all patients admitted to NHSScotland hospitals. An episode begins by an admission as an inpatient or daycase or transfer, and ends with discharge to the community, or transfer to another specialty, consultant or hospital.

The information contained in SMR01 is taken at the end of the episode from either the case notes, or the hospital discharge letters and is usually reviewed and coded in the Trust medical records department. In a small minority of cases, consultants perform coding themselves. For each episode on SMR01, up to 6 diagnoses may be entered, as well as procedures and demographic information. In most Trusts, there are basic data quality checks before information is passed to ISD. However, some Trusts pass data straight to ISD who perform the data checks. As for SMR04, the coding system used is ICD-10.

#### ***What about data quality?***

Because of the uses to which it is put (see below), it is important that the diagnostic and procedural information is as accurate and comprehensive as possible, and this depends on both good quality clinical information, expert coding by Trust staff, and regular quality checks.

For the main procedure or diagnosis, SMR01 has accuracy of over 90%, and this is higher in many Trusts. For secondary diagnoses and procedures, the information is generally less complete and accurate. The data quality assurance and data intelligence groups at ISD monitor quality.

#### ***How are the data currently used?***

The SMR01 dataset is vital for health service planning, descriptive studies of disease trends in Scotland, clinical outcome indicators, and production of health service costs. It is also exploited by some clinical specialties in assessing and improving the quality of clinical care (for example in surgery on joints).

#### ***Future developments***

SMR01 is being made available to hospital consultants electronically, so that they can review their caseloads for the purpose of clinical governance, and review the accuracy of their data. This is known as eSCRIPS (electronic Scottish Clinical Review of Inpatient Statistics)<sup>64</sup>.

SMR01 does not include attendance at Accident and Emergency Departments. Further work is needed to capture information Scotland-wide relating to A&E.

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<sup>61</sup> See [http://www.show.scot.nhs.uk/isd/Scottish\\_Health\\_Statistics/SHS2000/home.htm](http://www.show.scot.nhs.uk/isd/Scottish_Health_Statistics/SHS2000/home.htm)

<sup>62</sup> See [http://www.show.scot.nhs.uk/isd/Scottish\\_Health\\_Statistics/SHS2000/H3.pdf](http://www.show.scot.nhs.uk/isd/Scottish_Health_Statistics/SHS2000/H3.pdf)

<sup>63</sup> See <http://www.drugmisuse.isdscotland.org/publications/abstracts/ISDbull.htm>

<sup>64</sup> See [http://www.show.scot.nhs.uk/isd/isd\\_services/escrips.htm](http://www.show.scot.nhs.uk/isd/isd_services/escrips.htm)

## Additional health service information

### Workforce statistics

#### *How did the system develop? What does it collect?*

Workforce information has been collected centrally in Scotland for over 10 years. NHSScotland employs approximately 135,000 staff, and these account for 70% of the total NHS budget. Data are collected from payroll systems; direct from Trusts; and from other sources e.g. NHS Education (formerly the Scottish Council for Postgraduate Medical and Dental Education). Data fields collected include: age; sex; grade; discipline; staff group; pay; whole time equivalent commitment; ethnic origin; and vacancies.

#### *What about data quality?*

Quality is generally good, and quality checks are carried out from year to year. Very detailed information e.g. classification of nursing grades may be less accurate.

#### *How are the data currently used?*

The data are used primarily for establishing staff numbers and costs. It is also important for workforce planning and modelling supply of staff in the future.

#### *Future developments*

Systems are being developed to capture information relating to locum (temporary) staff, including agency and bank nurses. New systems are also being set up in relation to clinical psychologists, and occupational health and safety. In future it may be possible to link workforce databases using a unique identifier, to provide a more complete picture of staffing patterns and career paths.

### Cost of mental health services

#### *How did the system develop? What does it collect?*

Health service costs are collated and disseminated by ISD.<sup>65</sup> While it is not possible to separate out costs for mental health problems in primary care, costs incurred by provision of hospital services for mental health problems are available in some detail. These are based on financial and statistical information derived from Trusts and Boards.

Information available includes Trust level summaries of expenditure on psychiatric specialties, including inpatients, outpatients, day patients and community psychiatric teams. Number and costs of cases or attendances are also given. Some information by hospital is also available. Calculation of costs is complex, and the data need to be interpreted with care, including consideration of local circumstances. The latest (2001) Scottish Health Services Costs publication (often referred to as 'The Blue Book') is published on the internet as a PDF file<sup>66</sup>.

#### *What about data quality?*

Service expenditure is derived from trust audited annual accounts. There are a number of sources of reference material, including costing guidance and patient activity definition manuals. Local systems support data validation and provide trusts with a year on year review. Regular checks on quality, including an external review prior to publication, ensure consistency.

#### *How are the data currently used?*

Data are used in commissioning between Boards and Trusts, and in planning and decision making by managers.

#### *Future developments*

*Scottish Health Service Costs* presents comparative cost information by specialty and patient type. One of the main factors contributing to cost differences between hospitals is casemix. Healthcare Resource Groups (HRGs) were developed by the NHS Executive Casemix Office as a tool with which to categorise hospital patients. Each HRG has clinically similar cases that use a similar amount of resource.

<sup>65</sup> See [http://www.show.scot.nhs.uk/isd/NHSis\\_resource/Costs/costs.htm](http://www.show.scot.nhs.uk/isd/NHSis_resource/Costs/costs.htm)

<sup>66</sup> See [http://www.show.scot.nhs.uk/isd/Scottish\\_Health\\_Statistics/subject/Costs/2001/Costs2001.pdf](http://www.show.scot.nhs.uk/isd/Scottish_Health_Statistics/subject/Costs/2001/Costs2001.pdf)

Costing of hospital activity at patient level is well established in England but in Scotland it is still under consideration. ISD Scotland has used HRGs for a number of years as a casemix measure for the SMR1/SMR01 inpatient and daycase dataset.

### **Dependency needs in long-term care (SHRUGS and SCRUGS)**

#### *How did the system develop? What does it collect?*

These are relatively new systems developed by ISD, which collect information on care and dependency needs. SHRUGS refers to Scottish Health Resource Utilisation Groups, and applies to older people in long stay hospital care. Data is also available for patients in psychiatry of old age facilities. SCRUGS refers to Scottish Care Resource Utilisation Groups. This information is relevant to those in residential care and private nursing home care in Scotland. The information is obtained by interviewing staff familiar with the patients.

The purpose of the information is to derive relative needs that determine the relative amount of staffing resources used by patients. This information can be applied to the cost base of the organization, but not to derive total costs of individuals. Diagnostic information is not collected, although questions on behaviour, emotional and psychological needs reflect manifestations of mental health.

#### *What about data quality?*

Data quality is high, due to the data collection being through interviews. Additional checking processes are also in place.

#### *How are the data currently used?*

Data are used to compare trends in dependency needs in a location over time, in planning services, and, with caution, to allow comparison of dependency needs among different locations.

#### *Future developments*

Some projects relating to potential developments of this type of information have been undertaken; including one that examined how behaviour, emotional and psychological needs that reflect manifestations of mental health might better be assessed. The Resource Use Measure (RUM) to allow planning of free personal care for older people was developed from SHRUGS and SCRUGS.

### **Scottish National Audit of Electroconvulsive Therapy (ECT)**

#### *How did the system develop? What does it collect?*

Electroconvulsive therapy (ECT) involves the use of electricity to treat patients with severe mental illness, which is resistant to other forms of therapy. It is undertaken in a hospital setting and under tight specialist supervision.

The National Audit of ECT in Scotland was a specific project funded by CRAG (Clinical Resource and Audit Group, Scottish Executive) to investigate aspects of who, where is using ECT for what, and to examine outcomes in Scotland. Further information can be found at the Scottish ECT Audit Network (SEAN) Web Site.<sup>67</sup>

#### *What about data quality?*

All ECT centres in Scotland participated, and data were carefully reviewed.

#### *How are the data currently used?*

The data were used to produce an audit report. In general the standard of ECT treatment was found to be high, and the rate of ECT usage was low compared to previous British audits. It was found that ECT was not given disproportionately to the elderly, women, or ethnic minority groups. There was clinical improvement in the majority of patients treated.

#### *Future developments*

The methods of the audit are now being integrated into routine clinical practice.

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<sup>67</sup> See <http://www.sean.org.uk/report/report00.htm>



## Information from other sources (non NHS)

Many services other than health are involved in aspects of the care of those with mental health problems. These include social work, the voluntary sector, and the criminal justice system. Ideally services should work in partnership to provide comprehensive care.

### Social care and community care data

The Scottish Executive publishes Community Care Statistics, bringing together information from social work, health and housing. The latest version was published in 2000.<sup>68</sup> Chapter 3 of that document deals with adults with mental health problems.

#### *How did the system develop? What does it collect?*

Each local authority makes returns to the Scottish Executive relating to services being provided in their area. This information covers: domiciliary care, day centres, special needs housing, residential care and nursing homes (derived from ISD(S)34), and expenditure data.

There is no standard definition of mental health, and no specific diagnostic information collected. For residential care homes respondents choose the category that suits the primary description of the home, e.g. older people, physically disabled people, people with learning disabilities, mental health problems, alcohol problems, other.

For home-care returns, people are classified according to their main disability, although they may have more than one problem. The categories include: people with dementia; mental health problems; learning disabilities; physical disabilities including frailty due to old age; alcohol problems; drug problems; people with HIV/AIDS; carers of dependent people; and people in other vulnerable groups.

Information is generally available by age and local authority. Returns generally record number of places, or number of people attending or receiving care at a given time or within a given period. This is different to some NHS information, which is often reported by discrete episodes of care, rather than numbers of people.

#### *What about data quality?*

Data quality is checked, and the data are generally of high quality. However, participation is voluntary. Local authority run homes have response rates of close to 100%, although the response from private and voluntary homes is less than this. Prior to 1998, where data were missing, estimates from the previous year were used. After 1998, where returns are missing, an estimate is made based on returns from similar establishments.

There is a serious limitation to the usefulness of these statistics. A significant proportion of data is collected under the 'catch-all' heading of "all community care client groups". This was introduced in 1994 to record someone who could be categorised as falling under more than one heading e.g. elderly person with dementia. While this initially made sense it has been increasingly used and thus obscures the true extent of community care spending on individual care groups.

#### *How are the data currently used?*

They are predominantly used by local authorities and central government in planning services.

### Future developments

The Social Work Information Review Group (SWIRG<sup>69</sup>) is reviewing current community care information to take account of changes in services, such as the move towards individual care packages. This is happening specifically under the Data Standards for Community Care Project<sup>70</sup>, which aims to produce a Data Standards Manual for Community Care.

In addition, Audit Scotland regularly publish statutory performance indicator information from Councils on their website<sup>71</sup>. One recent report<sup>72</sup> concerns counts of people receiving a community care assessment - the client-group breakdown includes people aged 18-64 with mental health problems/dementia, and those 65+ with dementia.

<sup>68</sup> See <http://www.scotland.gov.uk/stats/bulletins/00104-00.asp>

<sup>69</sup> See [http://www.swsig.org.uk/swirg/swirg\\_index.htm](http://www.swsig.org.uk/swirg/swirg_index.htm)

<sup>70</sup> See <http://www.scds.org.uk/>

<sup>71</sup> See <http://www.audit-scotland.gov.uk/>

<sup>72</sup> See <http://www.audit-scotland.gov.uk/publications/pdf/02pi0916ac.pdf>

## Mental Welfare Commission

### *How did the system develop? What does it collect?*

The system developed from a need to record the data from completed forms received by the Mental Welfare Commission (MWC) when patients are subject to the provisions of the Mental Health (Scotland) Act 1984, the Criminal Procedure (Scotland) Act 1995 and the Adults with Incapacity Act (Scotland) Act 2000. The first database was developed around 1986.

The system collects information to produce the following statistics: visits made by the commission; complaints; suicides; accidents and incidents; guardianship; social circumstance reports; reviews by the commission of detention and community care orders; welfare guardianship and intervention orders under the Adults with Incapacity Act; number of detentions under sections 18, 24, 25, 26 of the Mental Health (Scotland) Act; episodes of leave of absence over 28 days; consent to detention under sections of the Mental Health Act; non-consents; and initiation of detentions under the Criminal Procedure (Scotland) Act. Fuller details are available from the Commission<sup>73</sup> or from the Improving Mental Health Information Project web site<sup>74</sup>.

### *What about data quality?*

The data quality is dependent on the accuracy of the forms received from medical records officers and clinicians. Data entry is audited. Generally the quality is high on the forms received from mental health, learning disability and local authority services. We have a suspicion, however, that some forms arising from the detention of patients in general hospitals are not sent (these are a very small proportion of all detentions).

### *How are the data currently used?*

The data is used to monitor use of the Mental Health (Scotland) Act, 1984 and to identify trends in the use of the Act. Statistics are reported in the Mental Welfare Commission annual report which is read by: NHS staff and local authority social service practitioners and managers; by voluntary sector workers; by academia and government; and by service users and carers. The annual report is available at the Commission's web site<sup>75</sup>.

### *Future developments*

An outline business case for a new patient record management system has just been completed. This will allow additional data categories (reviews of detention and age/sex breakdowns of visits, guardianship and consent to detention) to be reported.

## General Registrar for Scotland (GROS) cause-of-death recording

### *How did the system develop? What does it collect?*

Recording of deaths was formalised in Scotland by the introduction of statutory civil registration from 1 January 1855. The primary purpose is support of civil law (for example, in matters of inheritance) and the criminal law (ensuring that every death is explained and irregularities investigated by the prosecuting authorities). However death registration also serves a secondary healthcare purpose - allowing epidemiology (mapping of cholera deaths recorded by the corresponding English system was an early success in the field).

For every death, a medical practitioner must complete a medical certificate of cause-of-death (Form 11), which is given to the 'informant' (generally a relative) who has the statutory duty to take it to the appropriate local registration office. At the registration office the registrar transcribes the cause-of-death information on to the computerised register death entry. Information from the 300+ local registers is collated weekly and stored permanently as an all-Scotland database by the General Register Office for Scotland (GROS).

All the information on the register page is entirely in the public domain. However at the time when the medical practitioner signs the Form 11, he/she may not feel in a position to certify full information about the cause-of-death (for example, autopsy results may not be to hand). Consequently the Form 11 offers a tick-box to indicate that further information may later be available about the death. Every Form 11 with this tick-box completed generates a letter from the Registrar General's Medical Adviser to the certifying doctor asking him/her, *in confidence*, to supply the extra information. This extra information is used to correct or augment the cause-of-death information on the version of the all-Scotland database used for statistical analysis, but it is not used to amend the register-entry in the public domain.

<sup>73</sup> See <http://www.mwscot.org.uk/>

<sup>74</sup> See [http://www.show.scot.nhs.uk/isd/mental\\_health/MWCstats.doc](http://www.show.scot.nhs.uk/isd/mental_health/MWCstats.doc)

<sup>75</sup> See <http://www.mwscot.org.uk/publications.htm>



***What about data quality?***

Information is certified by a medical practitioner in a position to know cause-of-death and is consequently generally reliable. However the Registrar General's Medical Adviser has given much attention in recent years to improving its quality. For example, young doctors in training have been encouraged to view the task of completing the Form 11 as one that will generate information of epidemiological value to professional colleagues, rather than as a bureaucratic chore. As regards the downstream classifying and coding, data-quality comparisons with other countries have shown Scotland's figures to match the best in the world.

***How are the data currently used?***

The data are used to publish on the Web and on paper cause-of-death statistics for Scotland; to enable comparisons of mortality with other parts of the UK and other countries, and comparisons over time; to answer Parliamentary Questions (for example, on drug-related deaths, accidents, suicides); and generally to facilitate epidemiology and public-health research both in the healthcare community and academia.

***Future developments***

Improvement of comparative data quality will also be assisted by the use by more and more countries of the automatic-coding software developed by the National Institutes of Health in the USA (which applies internationally-agreed protocols to civil-registration text-entries and assigns causes-of-death to the International Classification of Diseases in a more consistent manner than would individual manual coding in each country).

**Voluntary sector**

Many community and voluntary organisations provide invaluable support to people with mental health problems. One example is the Samaritans.<sup>76</sup> In Scotland in 2000, they received 283,000 calls, 50% of which were from men. In 16% of calls the caller expressed suicidal thoughts. In addition there were 2,100 drop-ins to local branches.

Further details on other voluntary agencies are available at the websites shown in Table 2.1:

**Table 2.1 Voluntary agencies providing services to those with mental health needs**

<b>Organisation</b>	<b>Website</b>
Advocacy 2000	<a href="http://website.lineone.net/~advocacy2000/">http://website.lineone.net/~advocacy2000/</a>
Advocacy Service Aberdeen	<a href="http://www.advocacy.org.uk">http://www.advocacy.org.uk</a>
Alzheimer Scotland - Action on Dementia	<a href="http://www.alzscot.org.uk/">http://www.alzscot.org.uk/</a>
Alzheimer's Society	<a href="http://www.alzheimers.org.uk/">http://www.alzheimers.org.uk/</a>
Ayr Action on Mental Health	<a href="http://www.ayractionmentalhealth.co.uk/">http://www.ayractionmentalhealth.co.uk/</a>
Community Care Providers Scotland	<a href="http://www.ccpScotland.org/">http://www.ccpScotland.org/</a>
Depression Alliance	<a href="http://www.depressionalliance.org/scotland/">http://www.depressionalliance.org/scotland/</a>
Down's Syndrome Scotland	<a href="http://www.dssScotland.org.uk/">http://www.dssScotland.org.uk/</a>
Dunfermline Advocacy Initiative	<a href="http://www.dunfermlineadvocacyinitiative.btinternet.co.uk">http://www.dunfermlineadvocacyinitiative.btinternet.co.uk</a>
Enable	<a href="http://www.enable.org.uk/">http://www.enable.org.uk/</a>
Equal Say	<a href="http://www.equalsay.org">http://www.equalsay.org</a>
Fife Advocacy project	<a href="http://www.fifeadvocacy.btinternet.co.uk">http://www.fifeadvocacy.btinternet.co.uk</a>
Flourish House	<a href="http://www.ashleyst.demon.co.uk/">http://www.ashleyst.demon.co.uk/</a>
Friendset	<a href="http://www.livingbook.co.uk/orgsccindividual.htm">http://www.livingbook.co.uk/orgsccindividual.htm</a> - MENTAL HEALTH

<sup>76</sup> See <http://www.samaritans.co.uk/know/calls.html> - Scotland

Headway	<a href="http://www.headway.org.uk/">http://www.headway.org.uk/</a>
International Centre for Clubhouse Development	<a href="http://www.iccd.org/">http://www.iccd.org/</a>
Let's Make it Better	<a href="http://www.letsmakeitbetter.co.uk/">http://www.letsmakeitbetter.co.uk/</a>
Little Wing	<a href="http://www.littlewing.org.uk/">http://www.littlewing.org.uk/</a>
MDF	<a href="http://www.mdf.org.uk/">http://www.mdf.org.uk/</a>
Mental Health Association for Ireland	<a href="http://mhai.healthyirish.com/index.html">http://mhai.healthyirish.com/index.html</a>
Mental Health Foundation	<a href="http://www.mhf.org.uk/">http://www.mhf.org.uk/</a>
Midlothian Voluntary Action	<a href="http://www.midlothianvoluntaryaction.co.uk/">http://www.midlothianvoluntaryaction.co.uk/</a>
mindOUT for mental health	<a href="http://www.mindout.net/">http://www.mindout.net/</a>
National Schizophrenia Fellowship	<a href="http://www.nsfscot.org.uk/text/main.htm">http://www.nsfscot.org.uk/text/main.htm</a>
Partners in Advocacy	<a href="http://www.partnersinadvocacy.co.uk">http://www.partnersinadvocacy.co.uk</a>
PASS	<a href="http://www.show.scot.nhs.uk/dghc/">http://www.show.scot.nhs.uk/dghc/</a> (click on 'People's Advocacy')
Penumbra	<a href="http://www.penumbra.org.uk/">http://www.penumbra.org.uk/</a>
People First, [Scotland]	<a href="http://www.firstscotland.fsnet.co.uk/">http://www.firstscotland.fsnet.co.uk/</a>
Perth Association for Mental Health	<a href="http://www.pamh.ndirect.co.uk/">http://www.pamh.ndirect.co.uk/</a>
Powerful Partnerships (c/o Enable)	<a href="http://www.enable.org.uk/">http://www.enable.org.uk/</a>
Scottish Association for Mental Health (SAMH)	<a href="http://www.samh.org.uk/">http://www.samh.org.uk/</a>
Scottish Community Care Forum	<a href="http://www.sccfonline.org.uk/">http://www.sccfonline.org.uk/</a>
Scottish Council for Voluntary Organisations	<a href="http://www.scvo.org.uk/">http://www.scvo.org.uk/</a>
Scottish Health Advisory Service ('Connnects')	<a href="http://www.show.scot.nhs.uk/shas/">http://www.show.scot.nhs.uk/shas/</a> (Click on 'Links', then scroll down to 'Connnects' portal, under 'Mental Health')
Scottish Refugee Council	<a href="http://www.scottishrefugeecouncil.org.uk/">http://www.scottishrefugeecouncil.org.uk/</a>
Stresswatch Scotland	<a href="http://www.stresswatchscotland.com/">http://www.stresswatchscotland.com/</a>
The Richmond Fellowship Scotland	<a href="http://www.trfs.org.uk/">http://www.trfs.org.uk/</a>
Turning Point Scotland	<a href="http://www.turningpointscotland.com/">http://www.turningpointscotland.com/</a>
Young Minds	<a href="http://www.youngminds.org.uk/">http://www.youngminds.org.uk/</a>

### National Confidential Inquiry into Suicide and Homicide by People with Mental Illness

#### *How did the system develop? What does it collect?*

This UK wide audit published a five-year report in March 2001.<sup>77</sup> The inquiry covered all those who died by suicide or committed homicide in the UK and collected detailed clinical data on those who were determined to have been in contact with mental health services. For example the report concluded that about 25% of suicides in Scotland (as for UK as a whole) had been in contact with mental health services in the year before death. One third of all perpetrators of homicide had a diagnosis of mental disorder based on life history. The report also made recommendations on practice and policy to reduce the risks of suicide and homicide by those in contact with mental health services.

<sup>77</sup> See <http://www.confidentialinquiry.man.ac.uk/>

***What about data quality?***

Considered to be fairly good, but reliant on consultant questionnaires and court records/ psychiatric reports being reliable. The inquiry team did not examine clinical case records.

***How are the data currently used?***

To publish the five year report and inform policy and service development and clinical guidance.

***Future developments***

The confidential inquiry team will continue to collect and collate data for a further three years. They have also made valuable inputs to the development of the Scottish Executive suicide reduction strategy.

## Further reading

### Compilations of health statistics

***United Kingdom Health Statistics (2001)***

This report<sup>78</sup> brings together in one volume information on health care systems and health outcomes for the UK and for its constituent countries. This is the first edition in a planned series.

***Geographic Variations in Health - Decennial Supplement DS16***

This report<sup>79</sup> builds on the tradition started in the nineteenth century of in-depth analyses of mortality by area - extending the coverage and range of analyses of health outcomes to include reviews of variations in congenital anomalies, cancer incidence, infant mortality, births, conceptions, and abortions. Maps are used more extensively to illustrate statistically significant variations. Separate chapters summarise demographic and socio-economic influences behind the geographic variations. For the first time, analyses of local variation are presented on a comparable basis for all parts of the UK.

***Scottish Health Statistics 2000***

The official, comprehensive and enduring record of health and health services in Scotland, published by ISD Scotland<sup>80</sup>. From May 2002 the data previously published on paper and the web as Scottish Health Statistics will instead be published in the relevant sections of an enhanced ISD Online web site (<http://www.show.scot.nhs.uk/isd>).

<sup>78</sup> See <http://www.statistics.gov.uk/products/p6637.asp>

<sup>79</sup> See <http://www.statistics.gov.uk/products/p6638.asp>

<sup>80</sup> See [http://www.show.scot.nhs.uk/isd/Scottish\\_Health\\_Statistics/SHS2000](http://www.show.scot.nhs.uk/isd/Scottish_Health_Statistics/SHS2000)

## Chapter 3: What does the information we have tell us: selected insights

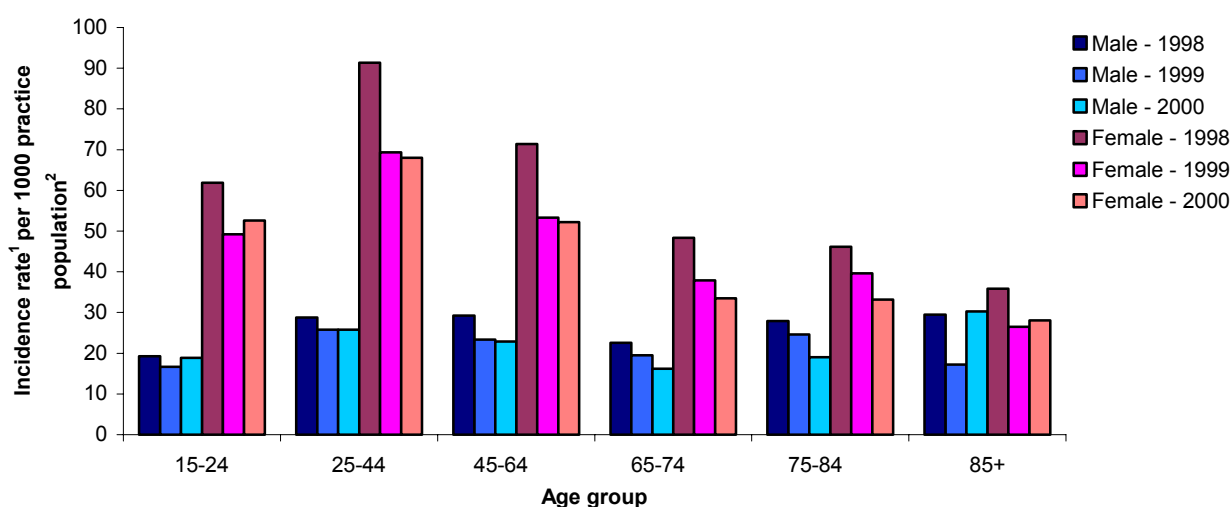
### Anxiety and depression in primary care

In Scotland, GP consultation data, available from the CMR practices (see chapter 2) gives an indication of the workload of GPs in relation to mental health problems. Depression and anxiety are both particularly common reasons for consultation in adults. For example, depression was the most common condition recorded at GP consultations in Scotland in 2000, and anxiety was also in the top ten.<sup>81</sup> GPs can record up to 10 diagnoses at a single consultation. As none of these is flagged as being the main reason for consultation, a diagnosis may occur in any of the 10 positions. A wide range of detailed Read codes are included within the overall categories; for example, 'depression' encompasses conditions ranging from a bereavement reaction to a suicide attempt.

Occurrence of disease is measured in terms of incidence and prevalence. Incidence measures the number of new cases of a particular disease arising in a population over a specific time period. Prevalence measures all cases of a disease occurring at a point in time (a snapshot), or alternatively over a period of time. Prevalence results from two factors: the size of the previous incidence, and the duration of the condition [Donaldson and Donaldson, 1993].

CMR data allows calculations of proxies for population incidence and prevalence of disorders encountered in general practice. However, population-based epidemiological studies may give considerably higher estimates of incidence and prevalence than CMR data, for example depression in the elderly [Wood and Bain, 2002].<sup>82</sup> Analysis of CMR data for anxiety and depression by deprivation category has previously been undertaken [McLaren and Bain, 1998]. Data are presented for three years in the following graphs, however inferences regarding trends should be made with extreme caution from this data.

**Figure 3.1: Depressive illness in males and females; annual incidence rates<sup>1,3</sup> per 1 000 population<sup>2</sup> in CMR practices by age and sex, 1998-2000**



Source: CMR

Notes:

1 Based on the number of first or recurrence diagnoses recorded during the time period

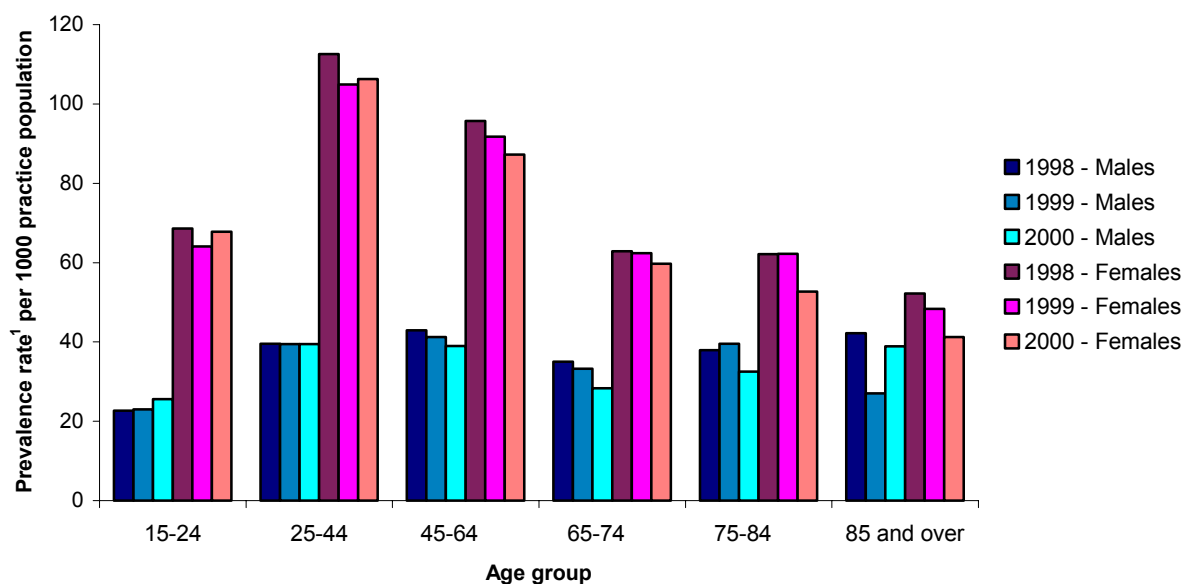
2 Population source: General Medical Practitioner database, ISD Scotland (as at 1 October each year).

3 Data based on: 55; 51; 48 General Practices with complete data for year ending December 2000; 1999; 1998.

<sup>81</sup> See [http://www.show.scot.nhs.uk/isd/primary\\_care/gmp/gmp.htm](http://www.show.scot.nhs.uk/isd/primary_care/gmp/gmp.htm)

<sup>82</sup> See also [http://www.show.scot.nhs.uk/isd/scottish\\_health\\_statistics/subject/older\\_people/2001/index.htm](http://www.show.scot.nhs.uk/isd/scottish_health_statistics/subject/older_people/2001/index.htm)

**Figure 3.2: Depressive illness in males and females; annual prevalence rates<sup>1,3</sup> per 1 000 population<sup>2</sup> in GMR practices by age and sex, 1998-2000**



Source: GMR

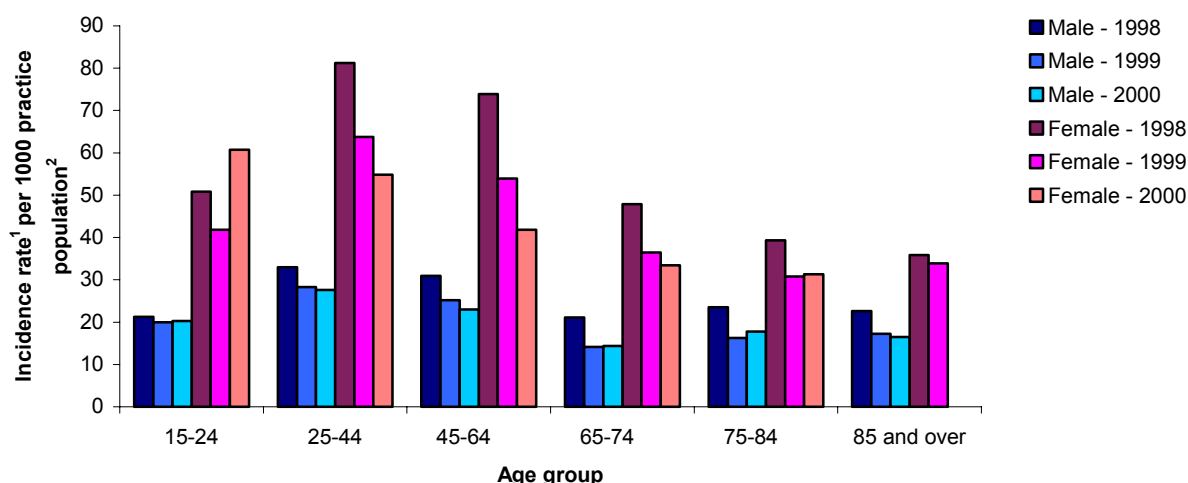
Notes:

1 Based on the number of patients with at least one first, recurrence or persistent diagnosis of the specified condition during the time period. (Note: Prevalence may tend to be an overestimate because of population movements during the year).

2 Population source: General Medical Practitioner database, ISD Scotland (as at 1 October each year).

3 Data based on: 55; 51; 48 General Practices with complete data for year ending December 2000; 1999; 1998.

**Figure 3.3: Anxiety in males and females; annual incidence rates<sup>1,3</sup> per 1 000 population<sup>2</sup> in GMR practices by age and sex, 1998-2000**



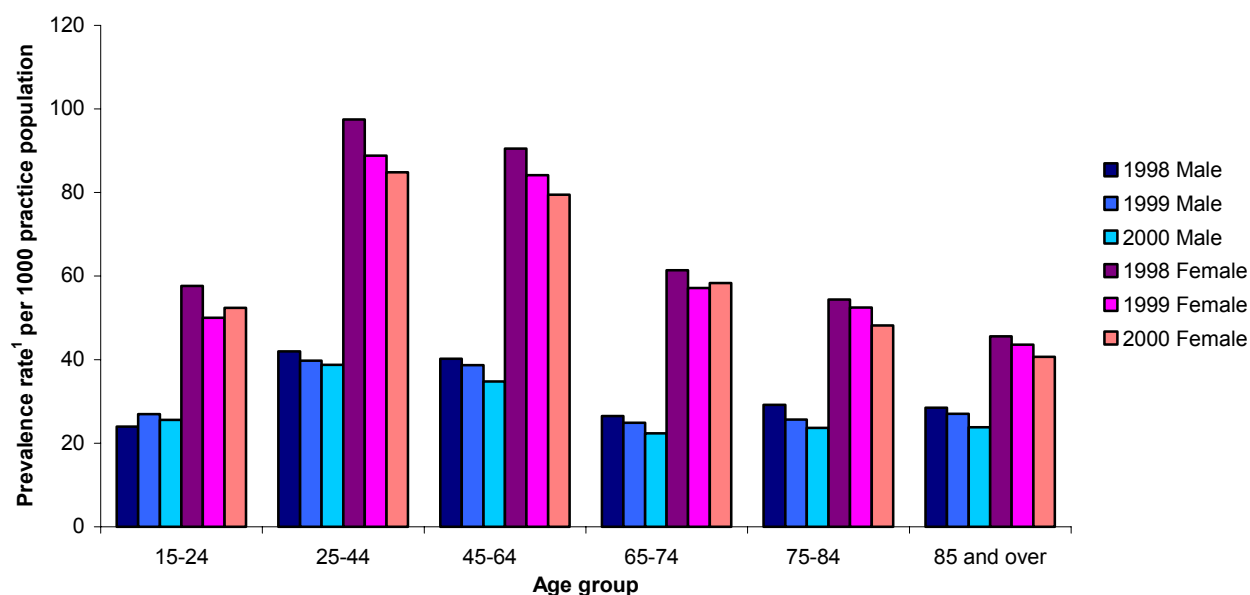
Source: GMR

1 Based on the number of first or recurrence diagnoses recorded during the time period.

2 Population source: General Medical Practitioner database, ISD Scotland (as at 1 October each year).

3 Data based on: 55; 51; 48 General Practices with complete data for year ending December 2000; 1999; 1998.

**Figure 3.4: Anxiety in males and females; annual prevalence rates<sup>1,3</sup> per 1 000 population<sup>2</sup> in GMR practices by age and sex, 1998-2000**



Source: GMR

1 Based on the number of patients with at least one first, recurrence or persistent diagnosis of the specified condition during the time period. (Note: Prevalence may tend to be an overestimate because of population movements during the year).

2 Population source: General Medical Practitioner database, ISD Scotland (as at 1 October each year).

3 Data based on: 55; 51; 48 General Practices with complete data for year ending December 2000; 1999; 1998.

## Postnatal depression

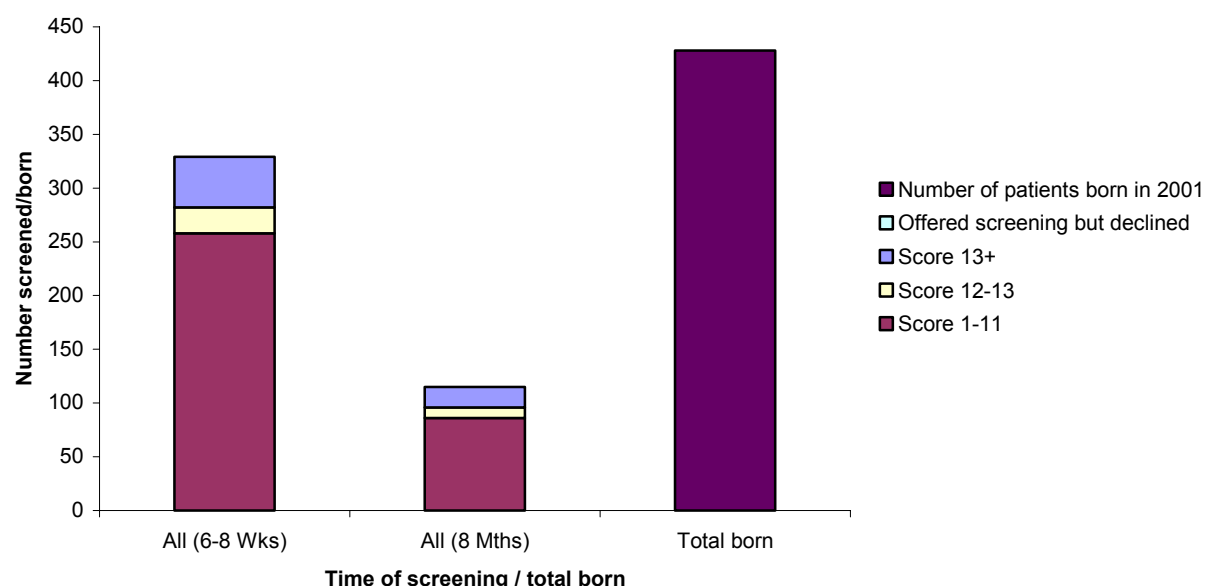
Using the Edinburgh postnatal depression scale (EPDS)<sup>83</sup> it is possible to identify those women who might be at risk of developing postnatal depression following the birth of their baby. Postnatal depression is thought to affect around 15% of women giving birth, and can have further health implications for both mother and baby.

Although data relating to postnatal depression not yet collected on a Scotland-wide basis, work is underway to establish the means of producing such data for the whole of Scotland.<sup>84</sup> And a Scottish Intercollegiate Guidelines Network (SIGN) guideline has recently been published<sup>85</sup>.

Figure 3.5 shows an example of data from Irvine, Kilwinning and Dundonald local healthcare cooperative (LHCC) in 2001. Screening was carried out at 6-8 weeks after birth and at 8 months. For comparison the total number of babies born in the same area is shown. The number of women screened corresponds to 77% of the number of births.

78% of women screened at 6-8 weeks were not likely to be depressed (scores 1-11), 7% were potentially depressed (scores 12-13) and 14% probably depressed (scores of 13+). No women who were approached refused the screening questionnaire. Identifying and treating women at risk of postnatal depression depends upon good integrated care pathways, and giving staff appropriate training.

**Figure 3.5: Scores of those screened using the EPDS tool, Irvine, Kilwinning and Dundonald LHCC, 2001**



Source: PTI, ISD by kind permission of LHCC

<sup>83</sup> Clinical Outcome Indicators. Clinical Outcomes Working Group, Scottish Executive. December 2000.

<sup>84</sup> Clinical Outcome Indicators. Clinical Outcomes Working Group, Scottish Executive. May 2002.

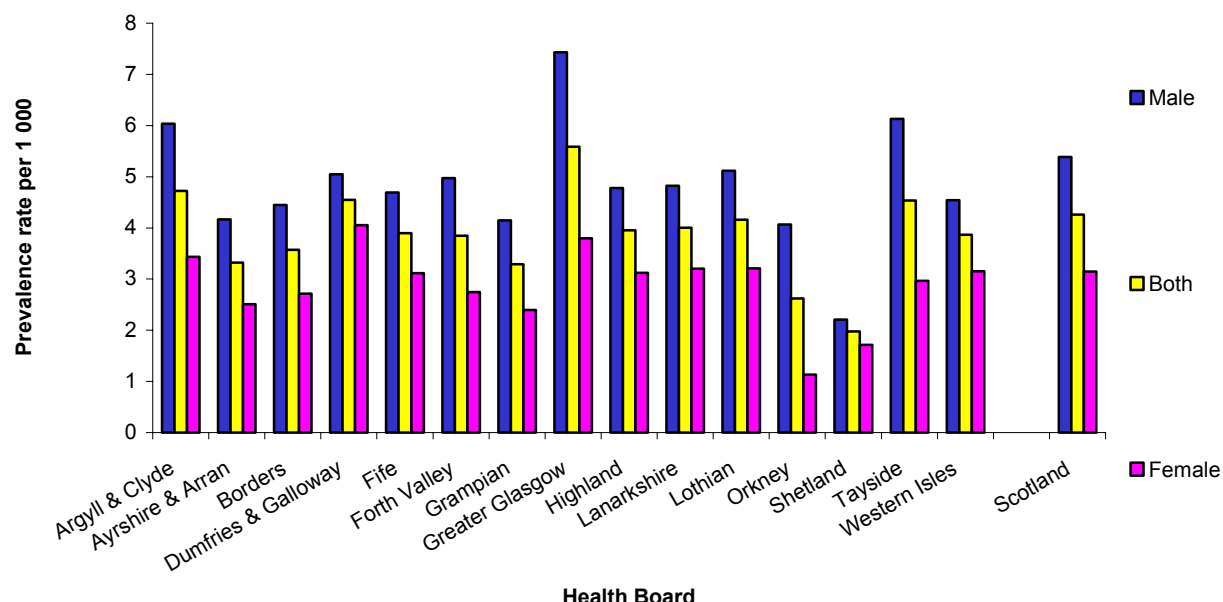
<sup>85</sup> See <http://www.sign.ac.uk/pdf/sign60.pdf> (PDF)



## Schizophrenia

A full understanding of schizophrenia is hampered by several difficulties including: changing diagnostic criteria; the heterogeneity of study populations; and the variability of illness courses. Estimates in published literature of the numbers of cases therefore vary according to which study or population is being examined. The incidence (number of new cases per year) from different studies appears to be between 0.1 and 0.3 per 1 000 population. The prevalence (numbers present at a given time) in published studies varies from about one to ten per 1 000.

**Figure 3.6: Number of people aged 16-65 with a diagnosis of schizophrenia per 1 000 population by Health Board area at 31 December 2000 (with at least one in-patient stay in period 1981-2000)**



Source: SMR04 linked data. (1981-2000)

These data indicate the numbers of people (aged 16-65 at 31 December 2000) per 1000 in each area who have had an inpatient admission in the last 20 years (to any in patient facility in Scotland) in which schizophrenia was identified as a diagnosis. How closely this approximates to the total population of patients who have ever had a diagnosis of schizophrenia will depend on how many people with this diagnosis are cared for exclusively in primary care. However, we expect that over the 20 year period most people with a diagnosis of schizophrenia will have had at least one inpatient episode.

This also raises the issue of how certain we can be that patients once diagnosed remain at risk and hence need to remain either actually or potentially in contact with appropriate services. Views on this differ between primary and specialist care, partly due to the different populations served.

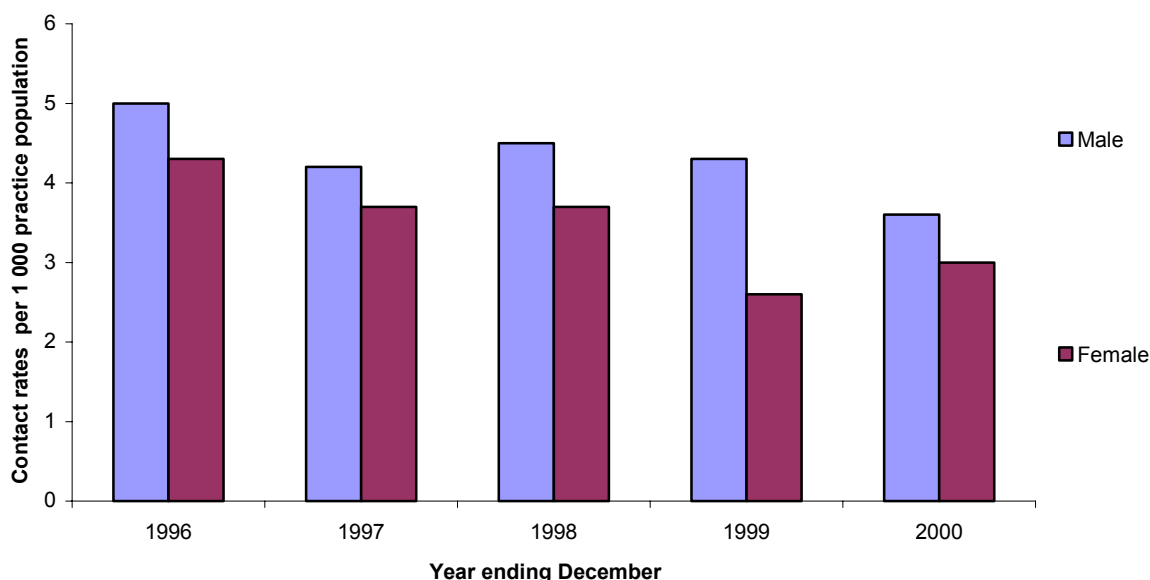
Schizophrenia appears by this method of estimation to be commoner in males. The apparent prevalence varies between health boards. Some of this variation will be 'real' whilst a proportion will be due to the variations in approaches to diagnosis and to different care provision in each area. There is obviously no 'right' number but current exploration through the Improving Mental Health Information Project of the discrepancies between ISD and health board data should clarify these differences, and improve our estimates of the prevalence.

For some conditions, most notably schizophrenia, a small number of cases may require a relatively large number of spells in hospital. For example, during the year ending March 2001, males with a diagnosis of schizophrenia accounted for 20.8% of all male admissions but only 7.2% of first admissions.<sup>86</sup>

<sup>86</sup> See [http://www.show.scot.nhs.uk/isd/mental\\_health/inp\\_diagnosis.htm](http://www.show.scot.nhs.uk/isd/mental_health/inp_diagnosis.htm)

Patients with a diagnosis of schizophrenia are also seen in primary care.

*Figure 3.7: Schizophrenia recorded at GP consultations (all ages) per 1 000 population for CMR practices in Scotland, 1996-2000*



Source CMR

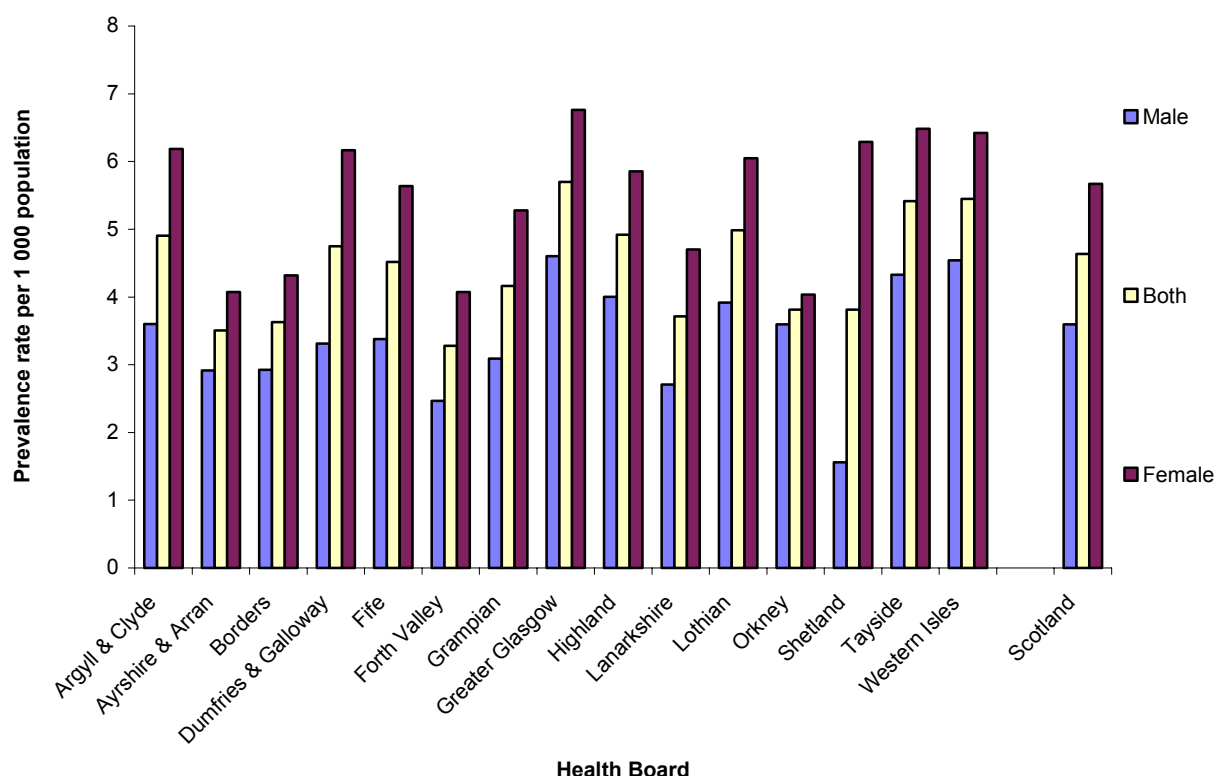
Males present slightly more commonly in primary care. An average GP would typically have around 8 to 10 contacts annually involving a diagnosis of schizophrenia (incidence). He or she would be likely to have around 10 to 15 patients with this diagnosis in a practice list of 1500 (prevalence).

Since these data are not linked we do not know whether the distribution of GP contacts are spread evenly across the patient group, and how many patients the total number of contacts represents. For example one GP who has 15 contacts a year may see one patient 15 times, while another GP in another part of Scotland may see 3 patients, each with very different needs (the first patient consulting 5 times, the second 8 times and the third twice).

## Bipolar disorder

The category 'mood (affective) disorders' covers a range of conditions of which the 3 main ones are: bipolar affective disorder, depressive episodes and recurrent depressive disorders. Within the category of mood affective disorders, the proportion of hospital patients diagnosed with each of these conditions is similar for males and females. By far the biggest reported condition is 'depressive episode' - accounting for more than half of all cases with mood (affective) disorders.

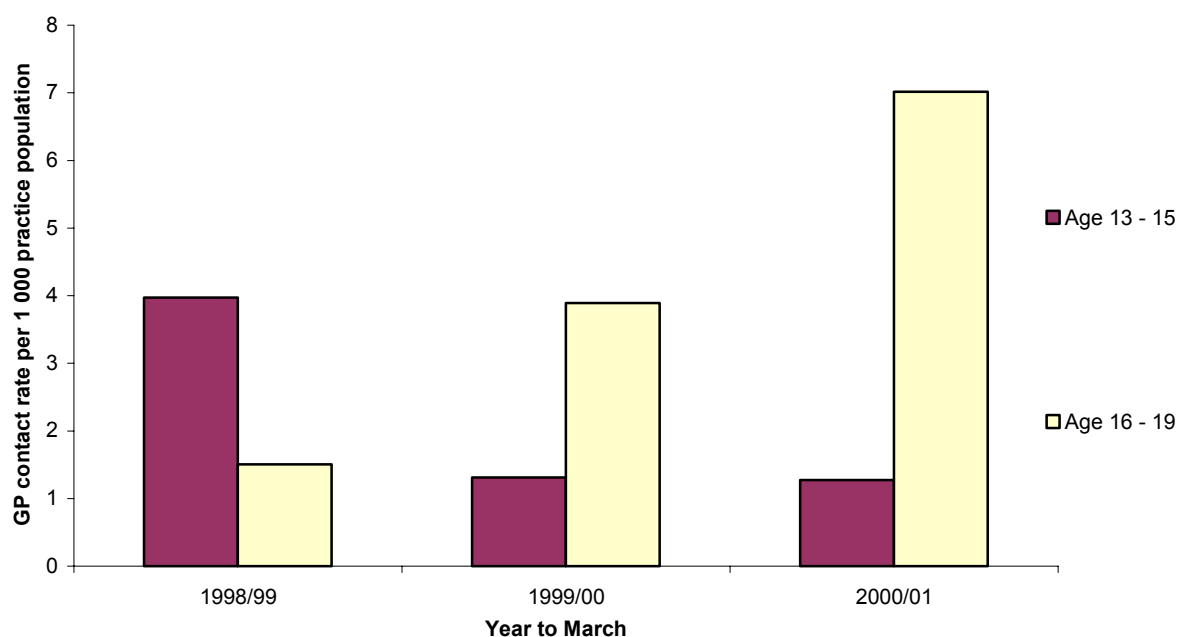
**Figure 3.8: Number of people aged 16-65 with diagnosis of bipolar disorder by Health Board area per 1 000 population at 31 December 2000 (with at least one in-patient stay in period 1981-2000)**



Source: SMR04 linked data (1981-2000)

Figure 8 shows the point prevalence rate per 1000 for people aged 16-65 on 31 December 2000 in each area who have had an inpatient admission in the last 20 years (to any in patient facility in Scotland) in which bipolar disorder was identified as a diagnosis. It is immediately clear that there are more women than men in this category. This is the opposite of what is seen for schizophrenia (see Figure 3.6). There is no obvious link to urban or rural health boards.

**Figure 3.9: Eating disorders recorded at GP consultations per 1 000 population, females, aged 13-15, 16-19, 1998/99-2000/01**

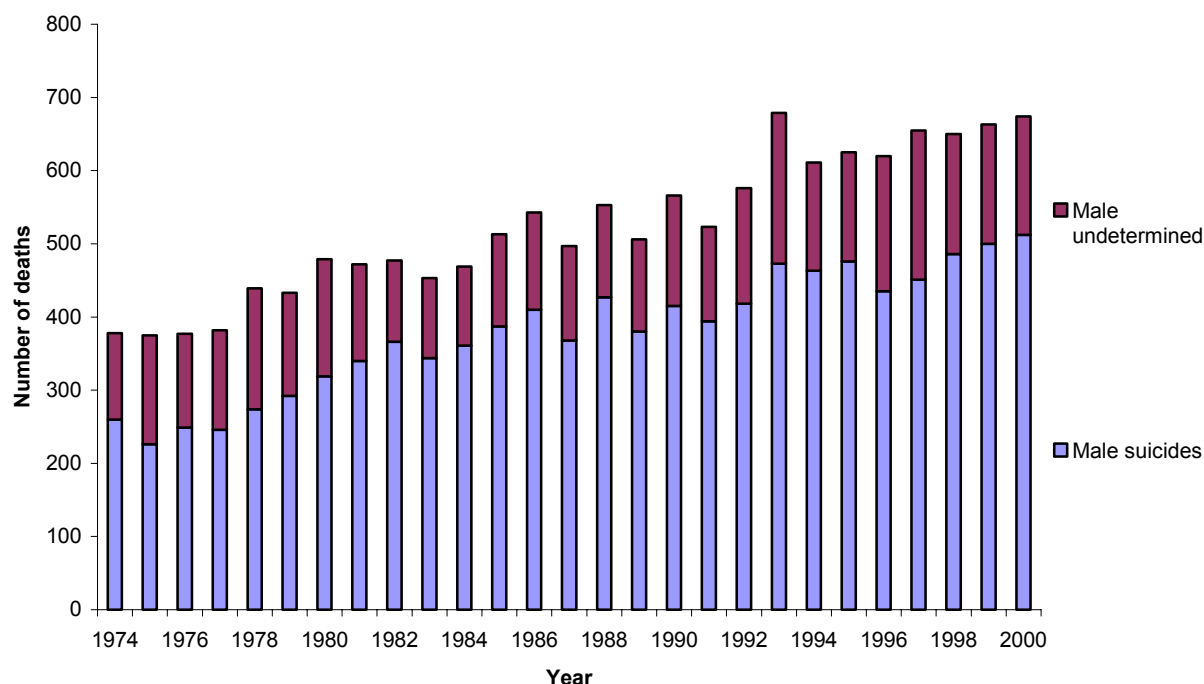


Source: CMR

More girls in the older than the younger age group visit GPs and receive a diagnosis of eating disorder. This difference appears to be becoming more pronounced.

## Suicide and self-harm

Figure 3.10: Deaths in Scotland due to suicide or cause undetermined - 1974 to 2001 (males)



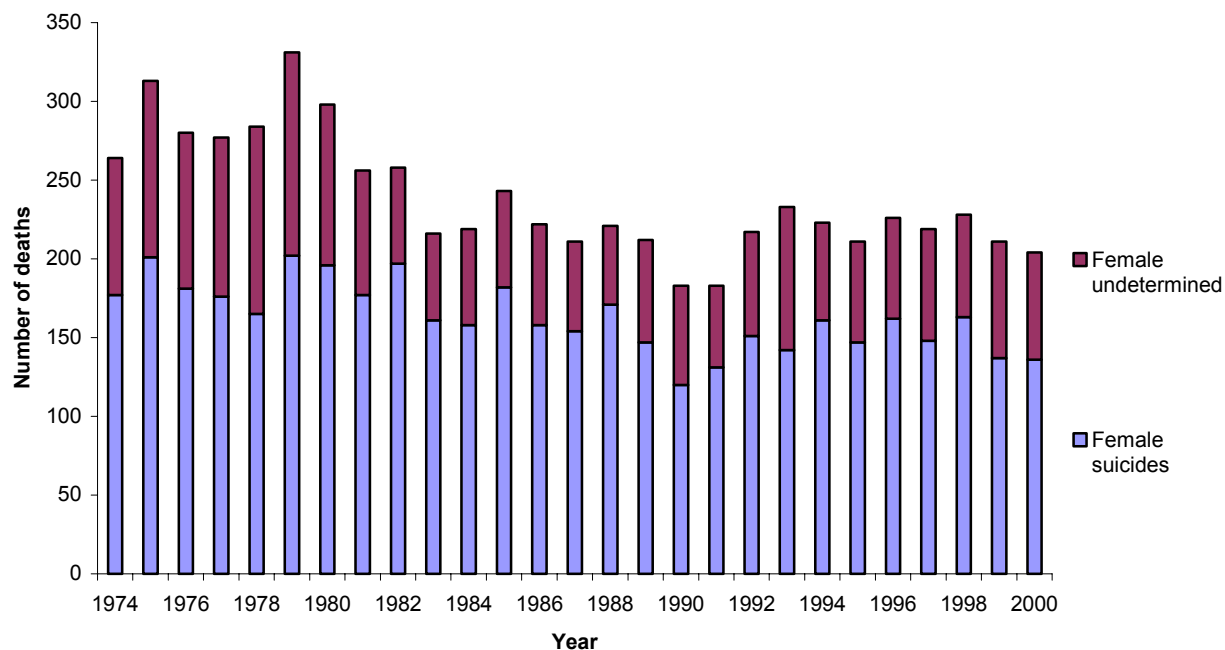
Source: GROS

Male deaths from suicide and undetermined causes fluctuate year on year but have steadily risen by about 50% in total over this period.

As the General Register Office for Scotland (GROS) point out at their website<sup>87</sup>: “it is not known to what extent, if any, intentional self-harm is under-reported. When international comparisons are made, deaths classified as events of undetermined intent (ICD Codes Y10-34) are normally added to intentional self-harm (ICD Codes X60-84) to allow for the possibility of undercounting.”

<sup>87</sup> See <http://www.gro-scotland.gov.uk/grosweb/grosweb.nsf/pages/00sect6>

**Figure 3.11: Deaths in Scotland due to suicide or cause undetermined - 1974 to 2001 (females)**

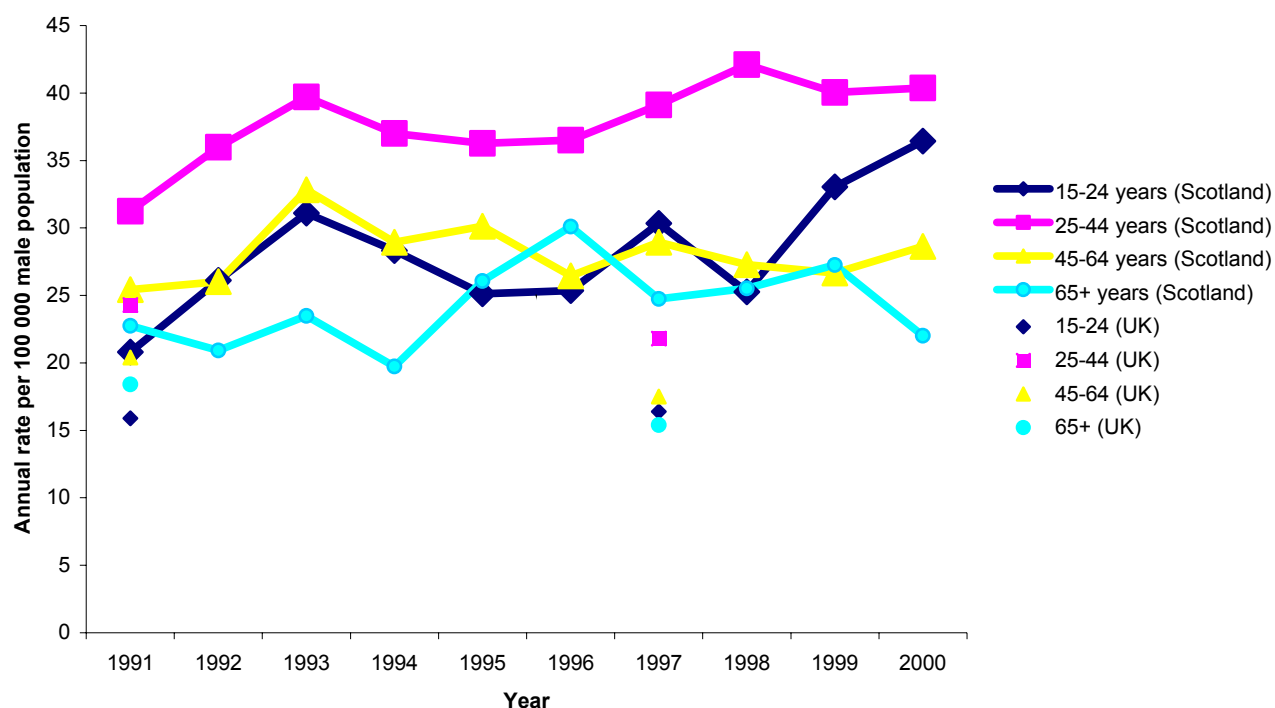


Source: GROS

Although male deaths from suicide and undetermined causes have steadily risen since 1981, this has not been the case with females: total numbers are much lower and have fallen over the same period.



Figure 3.12: Male rates of suicide by age group, Scotland and UK (1991-2000)

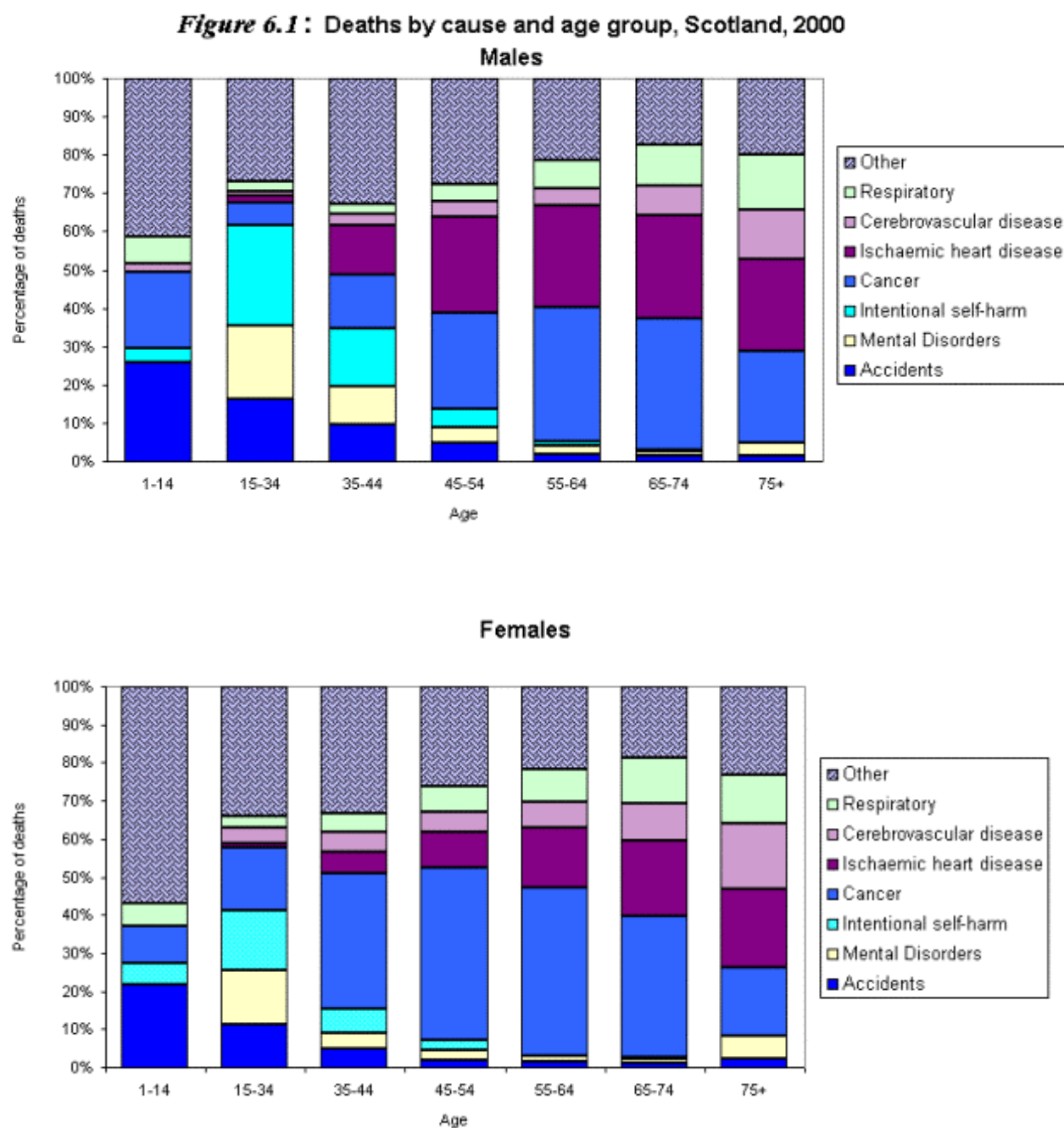


Source GROS, ONS

Rates are highest in young men but rates in males are rising at all ages. Male suicide rates remain higher in Scotland than in England again at all ages but are lower than in many other countries (see Figure 3.15).

Overall the suicide rate for men in 1998 was over twice as high in Scotland (26 per 100 000) as the UK average (12 per 100 000).

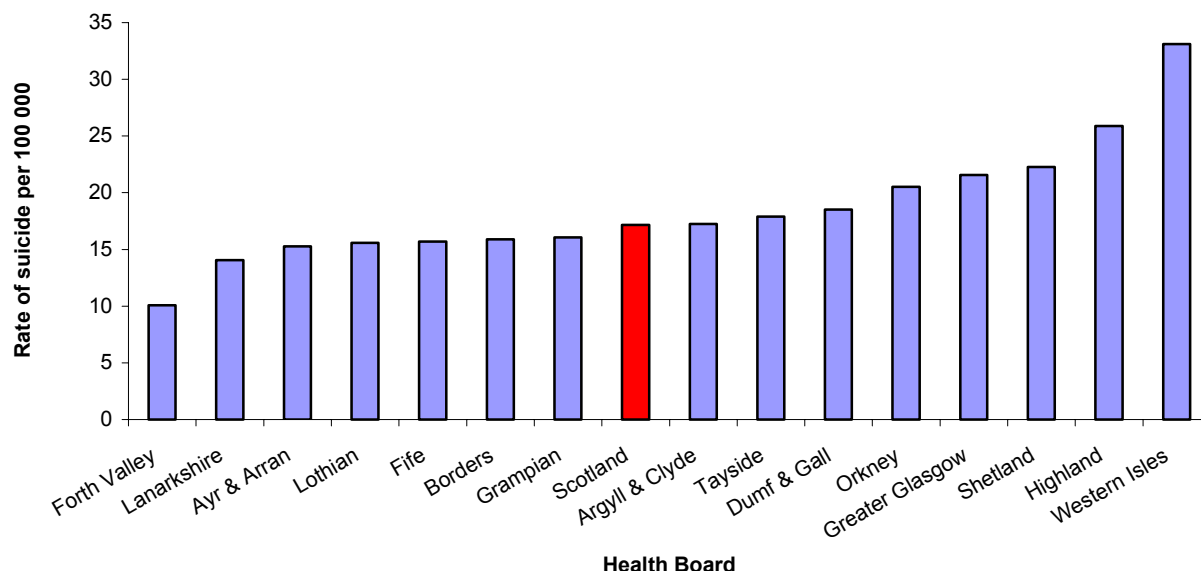
Figure 3.13: Causes of death by age group (male and female)



Source: GROS (copied from their web site<sup>88</sup> with permission)

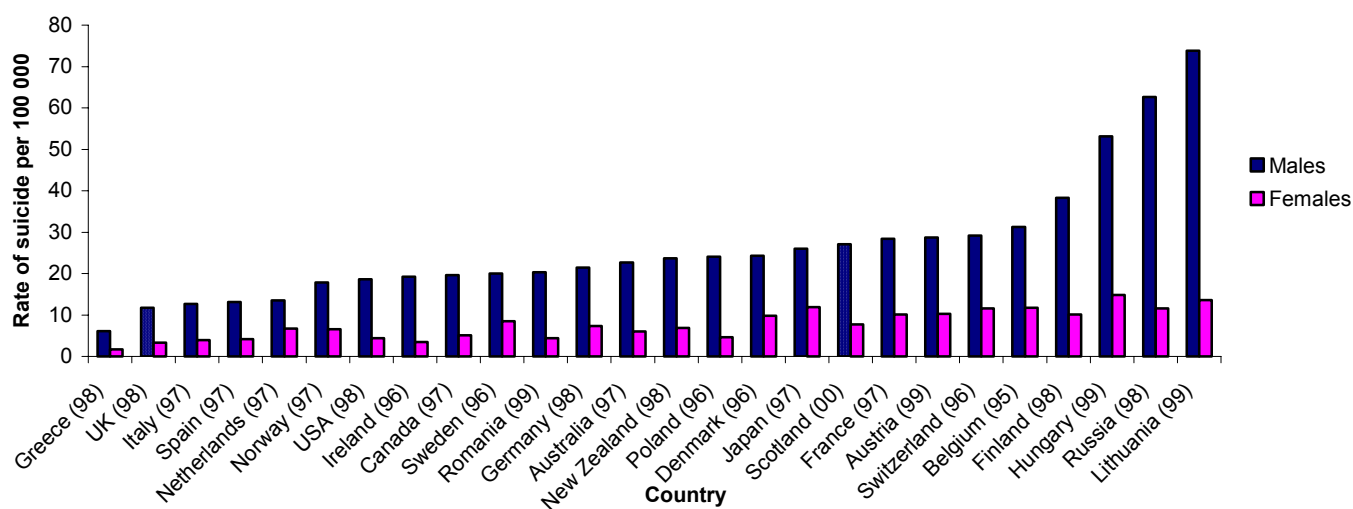
Accidents, suicide and mental disorders (includes substance misuse) account for a high proportion of deaths in males and females under 44, more so in males. In those under 35 these causes are much more significant than heart disease or cancer, the other major Scottish national health priorities.

<sup>88</sup> See <http://www.gro-scotland.gov.uk/grosweb/grosweb.nsf/pages/00sect6>

**Figure 3.14: Suicide rate by Health Board (per 100 000 population) in 2000 (male and female, all ages)**

Source: GROS

The suicide rate varies considerably across Scotland. The reasons for this are not fully explained. Why for example does Lanarkshire, which contains considerable areas of deprivation, have such a low rate if deprivation is a major trigger factor?

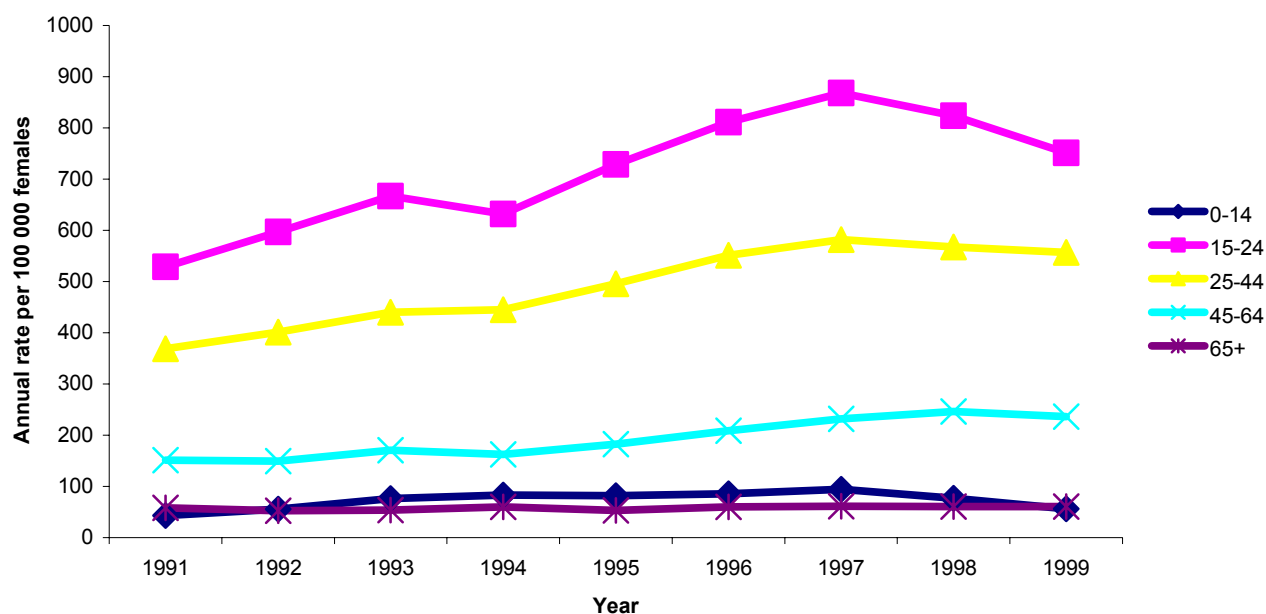
**Figure 3.15: Suicide rates per 100 000 population in selected countries**

Source: WHO<sup>89</sup>

As can be seen from this comparison Scotland is towards the top of the distribution although a number of other European countries have higher suicide rates (particularly in males).

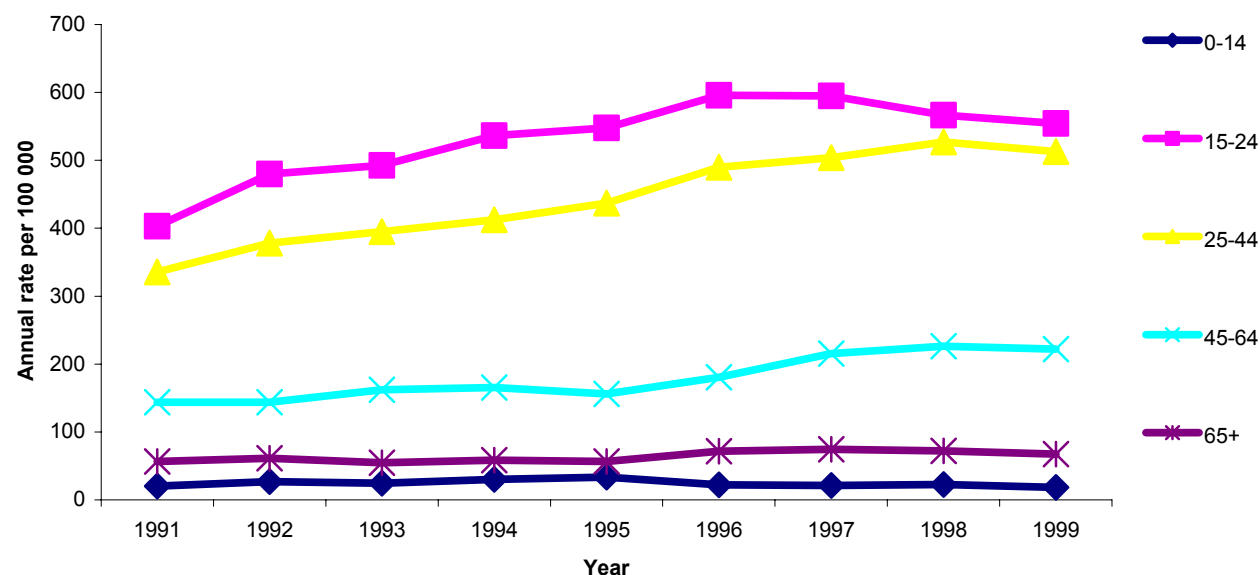
<sup>89</sup> See [http://www.who.int/mental\\_health/Topic\\_Suicide/suicide\\_rates.html](http://www.who.int/mental_health/Topic_Suicide/suicide_rates.html)

**Figure 3.16: Rates of deliberate self-harm requiring hospital admission by age band (female) for Scotland 1991-1999**



Source: SMR01

**Figure 3.17: Rates of deliberate self-harm requiring hospital admission by age band (male) Scotland 1991-1999**



Source: SMR01

It is immediately clear that self-harm is more often seen in women than in men. This may reflect the fact that the methods associated with suicide attempts in men are more likely to lead to death, while those in women are not as likely to be lethal, resulting in self-harm. Rates of self-harm have been increasing in both males and females mainly in younger age groups but this trend appears to be reversing since 1996/7. These cases present a significant workload to accident and emergency departments and to acute admission wards.

## Bed provision

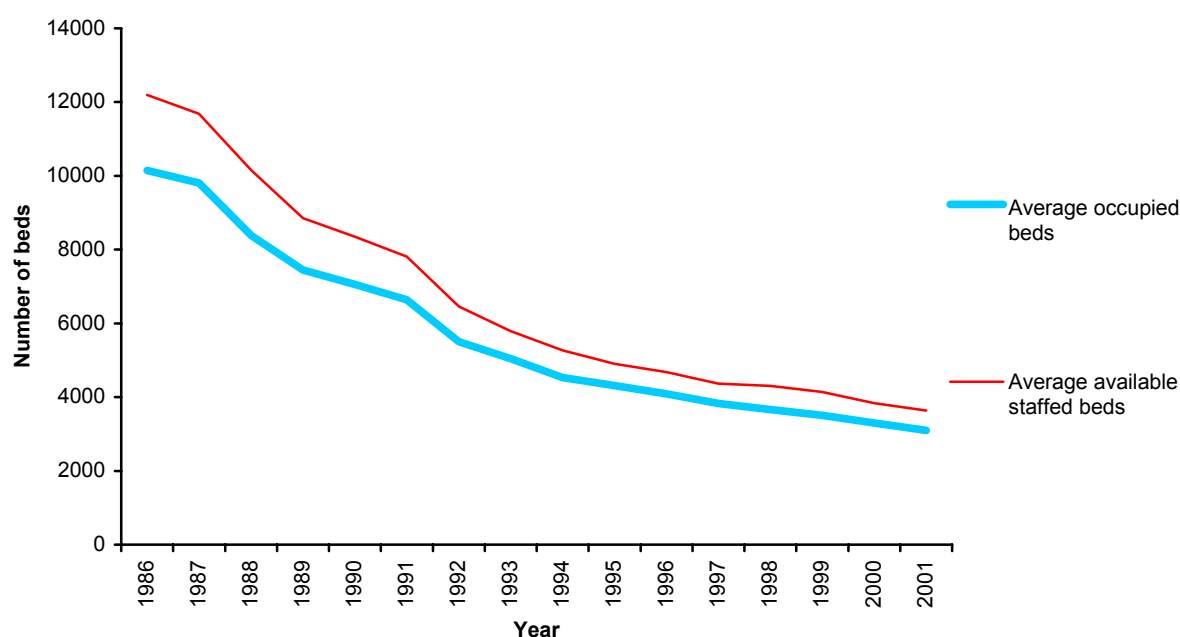
A fundamental change in policy relating to care of people with mental health problems has occurred over the last two decades. This has been the shift in emphasis from looking after people in large institutions towards caring for people in the community, and in their own homes, where possible. Documents such as *'Modernising Community Care, An Action Plan'* (Scottish Executive, 1998)<sup>90</sup> have continued to emphasise this approach, and joint working between health and social work has been undertaken to redesign appropriate services to anticipate and deal with these changes.

The most common way of looking at bed numbers is to consider the average daily number of beds (including borrowed and temporary beds) that are staffed and are available for the reception of inpatients (known as 'average available staffed beds'). Together, psychiatric specialties (excluding learning disability) currently account for approximately a quarter of the average available staffed beds in hospitals in Scotland, a greater proportion than either acute medical or acute surgical specialties taken separately.

However, during the last 20 years there has been a substantial reduction in the number of beds available for psychiatric specialties in Scotland. Figure 3.18 shows beds available for general psychiatry from 1986-2001. The average available staffed beds count has fallen three-fold. This follows a halving between 1953 (the peak) and 1980. Average daily-occupied beds have also fallen, although the relative proportion of occupied beds has risen. This fall can be seen in all parts of Scotland (Figure 3.19).

The picture for old age psychiatry is somewhat different (Figures 3.20 and 3.21). While overall there appears to have been a rise and subsequent fall in bed availability, this pattern varies throughout Scotland. Increasing specialisation and changes in classification over time are likely to contribute to these varying patterns. However, since 1992 there has been a consistent reduction in bed numbers.

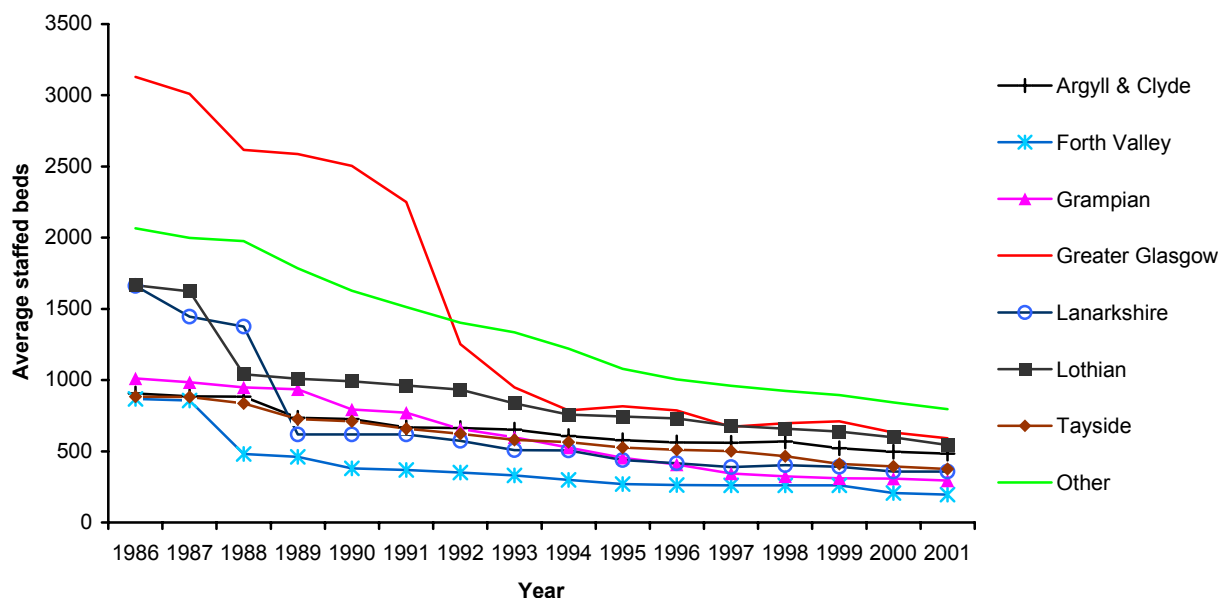
**Figure 3.18: General psychiatry: average available staffed beds and average daily occupied beds, Scotland 1986-2001, years ending 31 March**



Source ISD(S)1

<sup>90</sup> See <http://www.scotland.gov.uk.../library/documents-w3/mcc-00.htm>

**Figure 3.19: General psychiatry: average available staffed beds by health board of treatment<sup>1</sup> 1986-2001, years ending 31 March<sup>2</sup>**



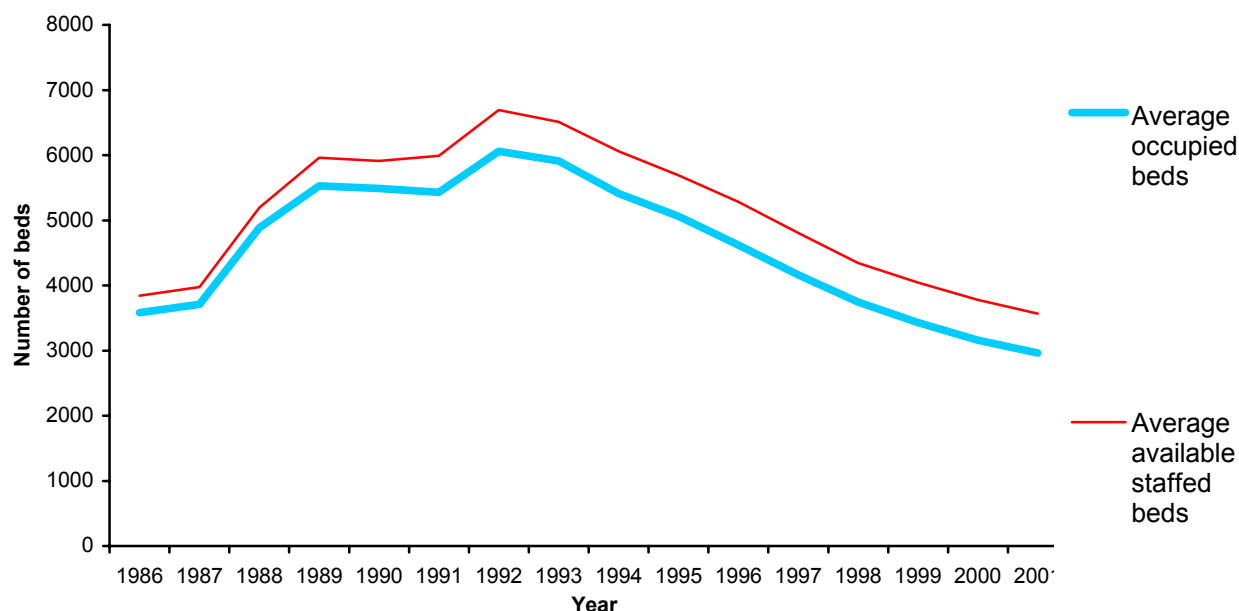
Source ISD(S)1

Notes:

1 'Other' health boards include Ayrshire & Arran, Borders, Dumfries & Galloway, Fife, Highland, Orkney, Shetland and Western Isles.

2 Data for years ending 31 March 2000 and 2001 are provisional

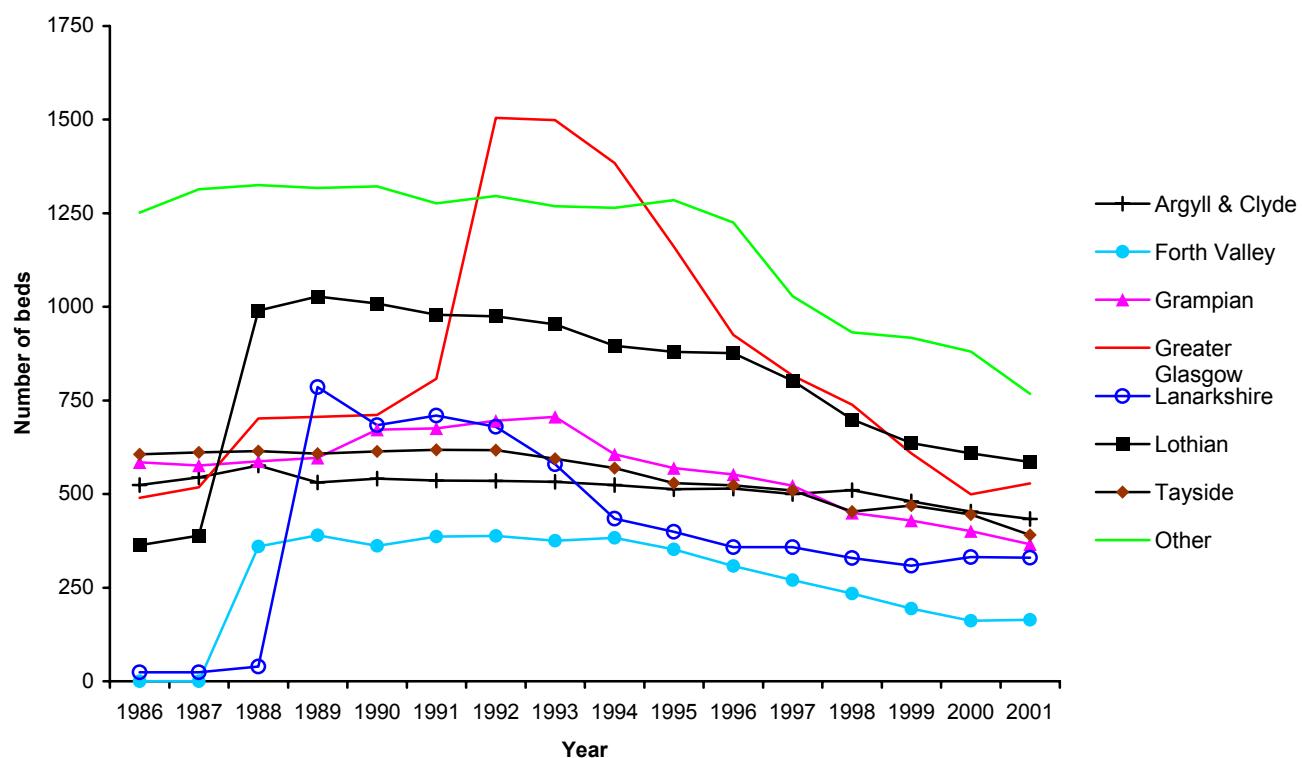
**Figure 3.20: Psychiatry of old age; average available staffed beds and average daily occupied beds, Scotland 1986-2001, years ending 31 March**



Source ISD(S)1



**Figure 3.21: Psychiatry of old age; average available staffed beds by Health Board, 1986-2001, years ending 31 March**

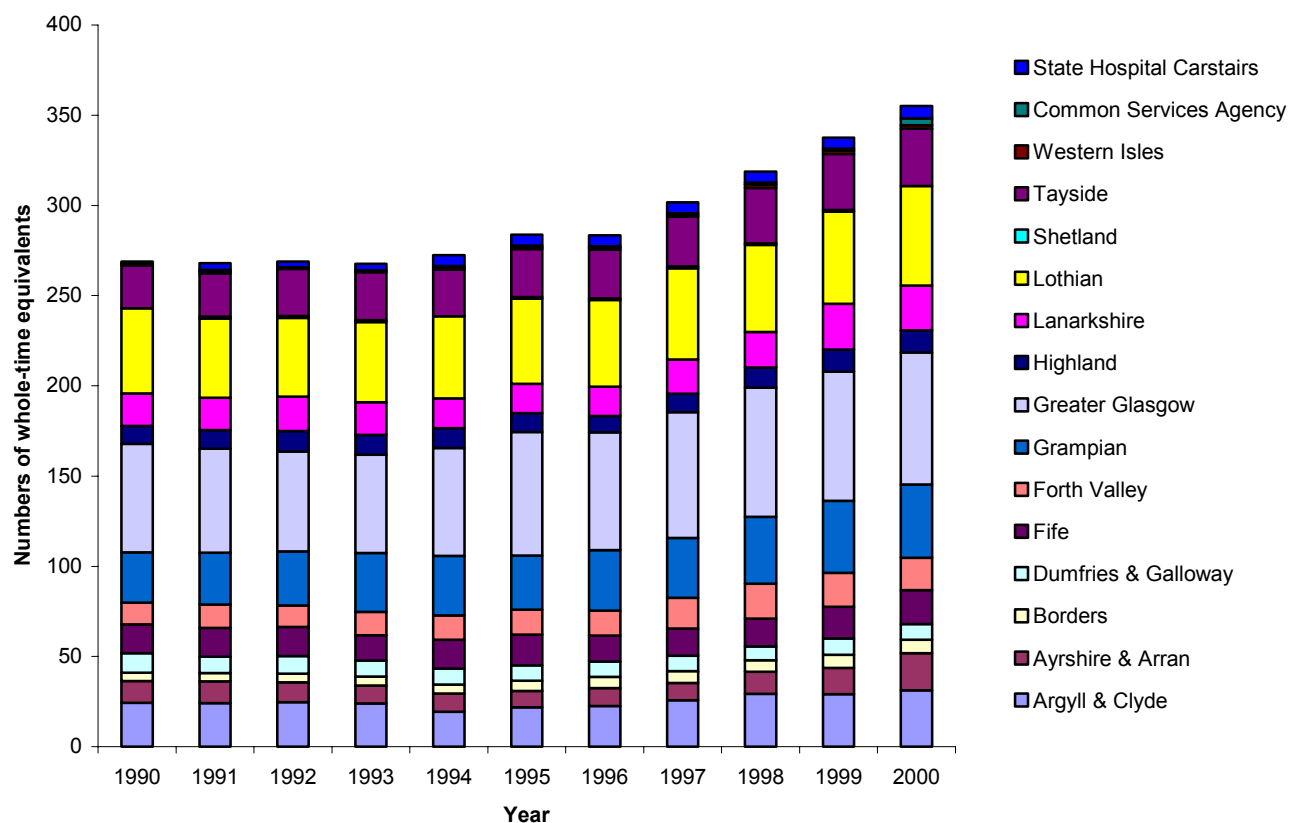


Source ISD(S)1

## Workforce

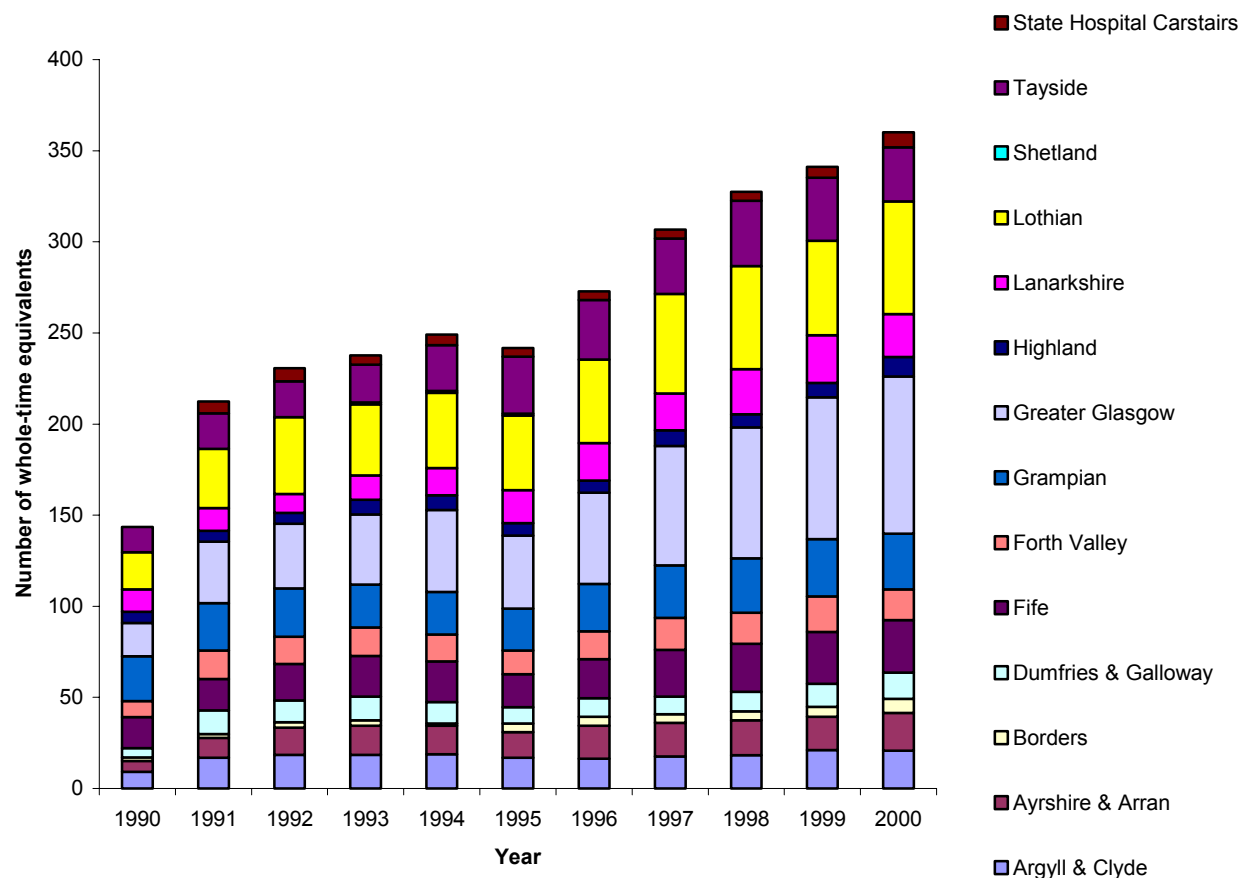
Figure 3.22 shows that the number of whole-time equivalent consultant psychiatrists has risen over the last twenty years in Scotland. This has been in line with a general increase in consultant numbers across most clinical specialties. The number of clinical psychologists employed by the NHS has also risen (Figure 3.23).

**Figure 3.22: Consultant Psychiatrists (whole-time equivalent) employed by NHSScotland by Health Board, 1990-2000**



Source: SKIPPER/ ISD workforce data

**Figure 3.23: Clinical psychologists (whole-time equivalent) employed by NHSScotland by Health Board, 1990-2000**

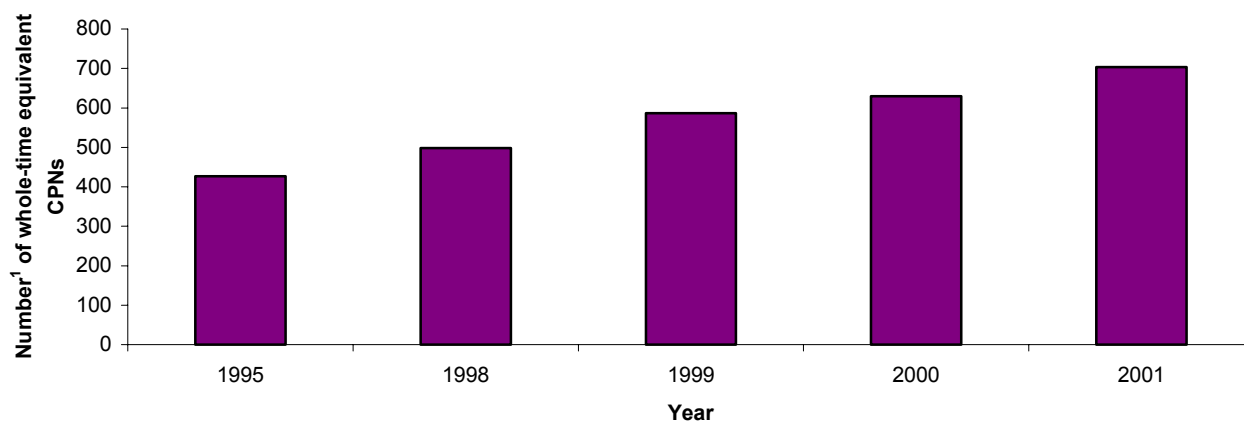


Source: SKIPPER/ ISD workforce data

## Mental Health Nurses

Data relating to nurses working in mental health in hospitals and the community can be found at the ISD Online web site<sup>91</sup>. Information is available by health board area, by grade and sex. Data on vacancies is also available.

**Figure 3.24: Numbers of Community Psychiatric Nurses in Scotland (1995-2001)**

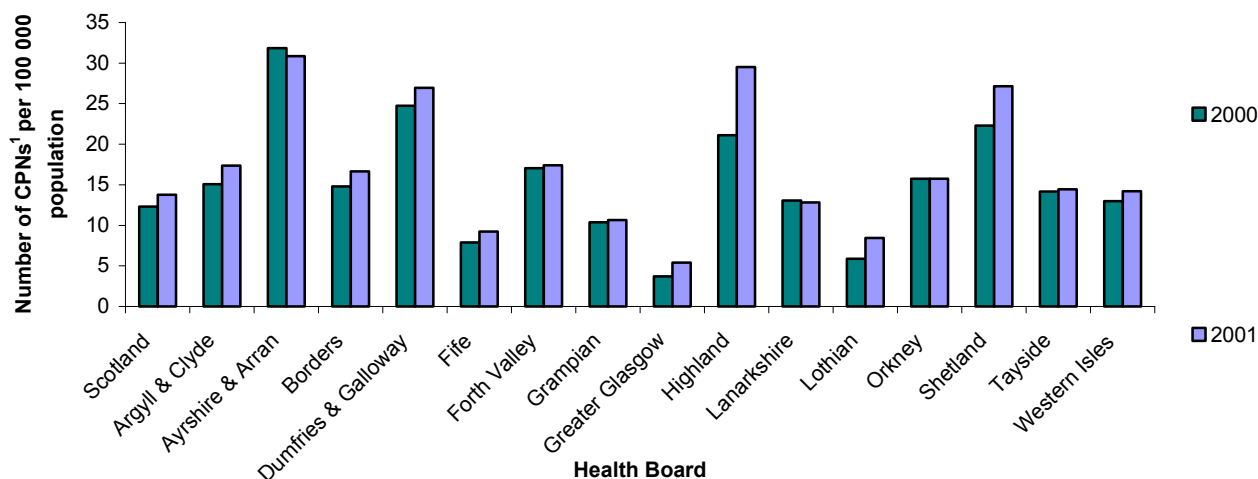


Source: ISD

### Notes

1 It is likely that some psychiatric nurses who are involved in community care are not recorded as such on payroll. Therefore they are likely to be under recorded.

**Figure 3.25: Community Psychiatric Nurses per 100 000 population, by Health Board (2000 and 2001)**



Source: ISD

### Notes:

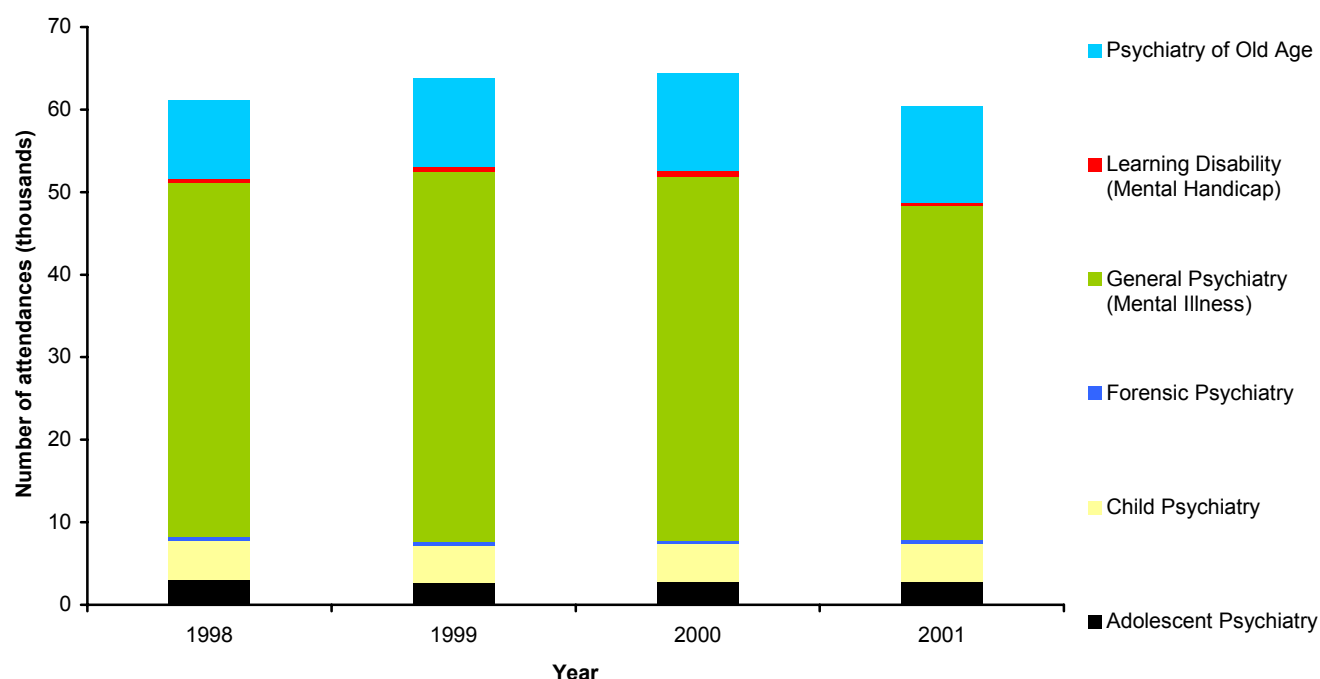
1 It is likely that some psychiatric nurses who are involved in community care are not recorded as such on payroll. Therefore they are likely to be under recorded. Such under-recording will vary from Health Board to Health Board.

<sup>91</sup> See [http://www.show.scot.nhs.uk/isd/NHSIS\\_resource/Workforce/workforce\\_statistics.htm](http://www.show.scot.nhs.uk/isd/NHSIS_resource/Workforce/workforce_statistics.htm)

## Outpatients

Attendances at NHS hospitals, clinics and other settings for consultant outpatient treatment are an important source of contact with the health service for patients with a mental illness. In 2000/01 there were 58 309 new outpatient attendances in psychiatric specialties compared with 34 098 in 1985/86. In order to put these figures into context it is worth noting that 1.4 million new outpatients were seen in Scotland during 2000/01 and there were just fewer than 5 million outpatient attendances in total. Further information is available at the ISD Online web site<sup>92</sup>.

**Figure 3.26: New psychiatric outpatient attendances (thousands) by psychiatric specialty, 1998-2001**



Source: ISD(S)1.

In recent years it has become apparent that, as measured by SMR00, outpatient activity is falling. A major initiative has been established to examine whether this 'data deficit' is genuinely the result of less activity or whether it is rather a failure to capture care being delivered in novel ways (i.e. team-based rather consultant led). This matter is also being examined by Audit Scotland. However the model of hospital- and clinic-based care is poorly applicable to mental health where much of the activity in the community cannot conveniently be placed in a conventional 'outpatient' context: i.e. it is delivered over long periods of time in patients' homes, GP practices, resource centres, cars etc. A new approach is therefore required to document basic details such as who saw who, where, when, why, what happened and what's to happen next. This is the basis for the proposed 'Information Core for Integrated Care'<sup>93</sup> that the Improving Mental Health Information Project is developing.

<sup>92</sup> See [http://www.show.scot.nhs.uk/isd/mental\\_health/outp.htm](http://www.show.scot.nhs.uk/isd/mental_health/outp.htm)

<sup>93</sup> See [http://www.show.scot.nhs.uk/isd/mental\\_health/icic.htm](http://www.show.scot.nhs.uk/isd/mental_health/icic.htm)

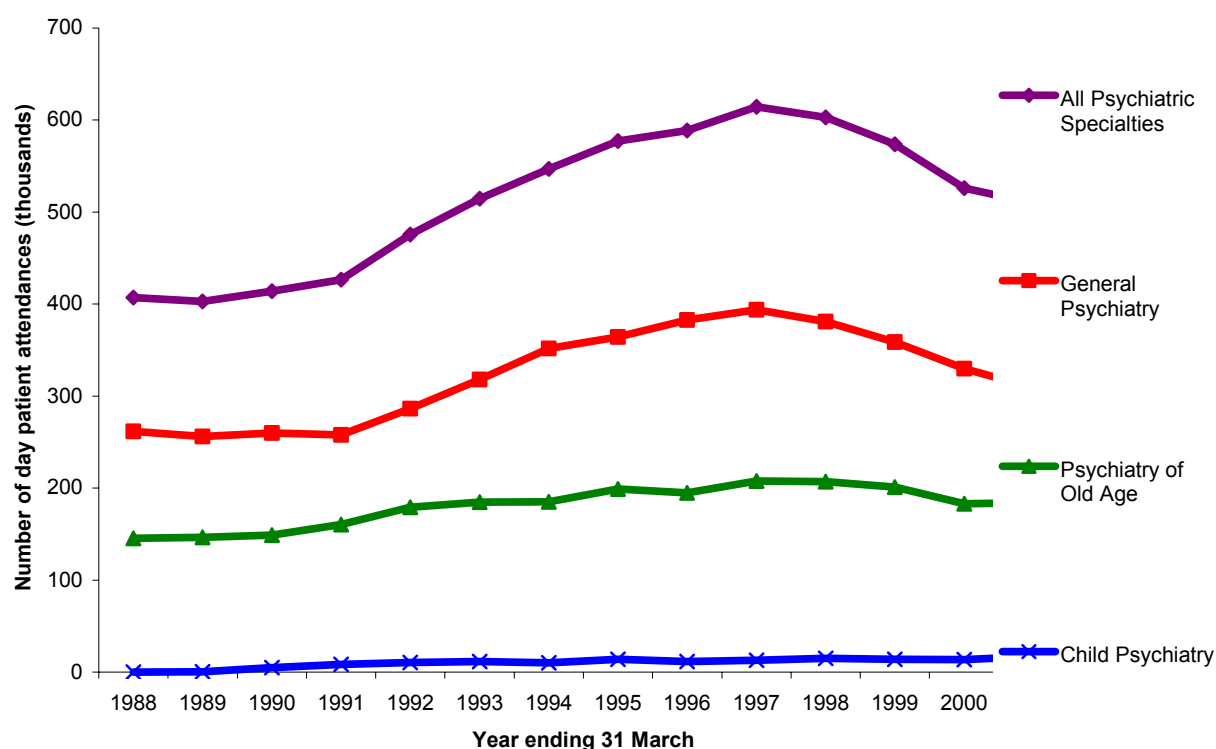
## Day patients

Many patients requiring hospital care for mental illness will receive treatment on a 'day patient' basis. Day patients commonly attend on a regular basis and an attendance will often last for at least half a day.

Psychiatric specialties account for a significant proportion of overall day patient numbers. For example, in 2000/01, 41.3% (11 000) of all new day patients were in psychiatric specialties - the equivalent figure for total day patient attendances was 68.7% (509 781).

Figure 3.27 below presents trends in total day patient attendances in psychiatric specialties in Scotland from 1987/88 to 2000/01. The figures indicate that, following a steady increase since the early 1990s, the number of attendances peaked in 1996/97. The reasons for the subsequent decrease are unclear but may reflect a move to other types of (non-NHS) care (e.g. treatment in residential care homes, in day centres or other community programmes).

**Figure 3.27: Trends in day patient total attendances for psychiatric specialties: 1988-2000**



Source: ISD(S)<sup>1</sup>

Note: Information for the specialty Child and Adolescent Psychiatry was recorded under specialty General Psychiatry prior to 1989.

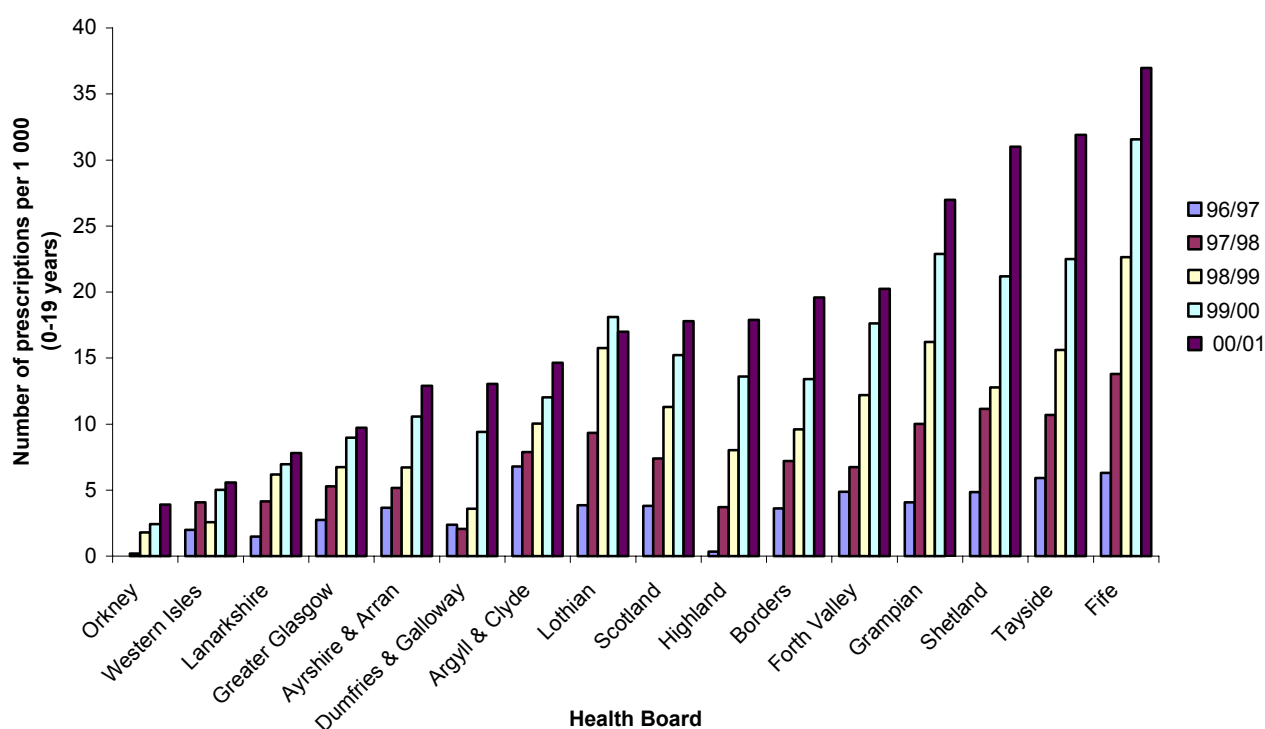


## Child and adolescent mental health

### Trends in Ritalin use

Over the last five years the rates of Ritalin prescribing has risen dramatically. Figure 3.28 shows the rate of community dispensing of methylphenidate (Ritalin and Equasym) in each NHS board area. The statistics are derived from the Scotland-wide national scheme reimbursing community pharmacists, and prescribing doctors, and do not include prescriptions dispensed in hospitals. There appears to be a seven-fold variation in prescription rate across Scotland. The variation in gross ingredient cost (cost before any discount is applied) per head of the 0-19 year old population is even more dramatic: it varies between 7.5p and 83.5p per head. We are working with others, including the Scottish Needs Assessment Programme<sup>94</sup> Child and Adolescent Mental Health Project, to understand the reasons for these differences.

**Figure 3.28: Methylphenidate prescribing - no of prescriptions dispensed by community pharmacists, by Health Board, per 1 000 population aged 0-19 years 1996-2001**



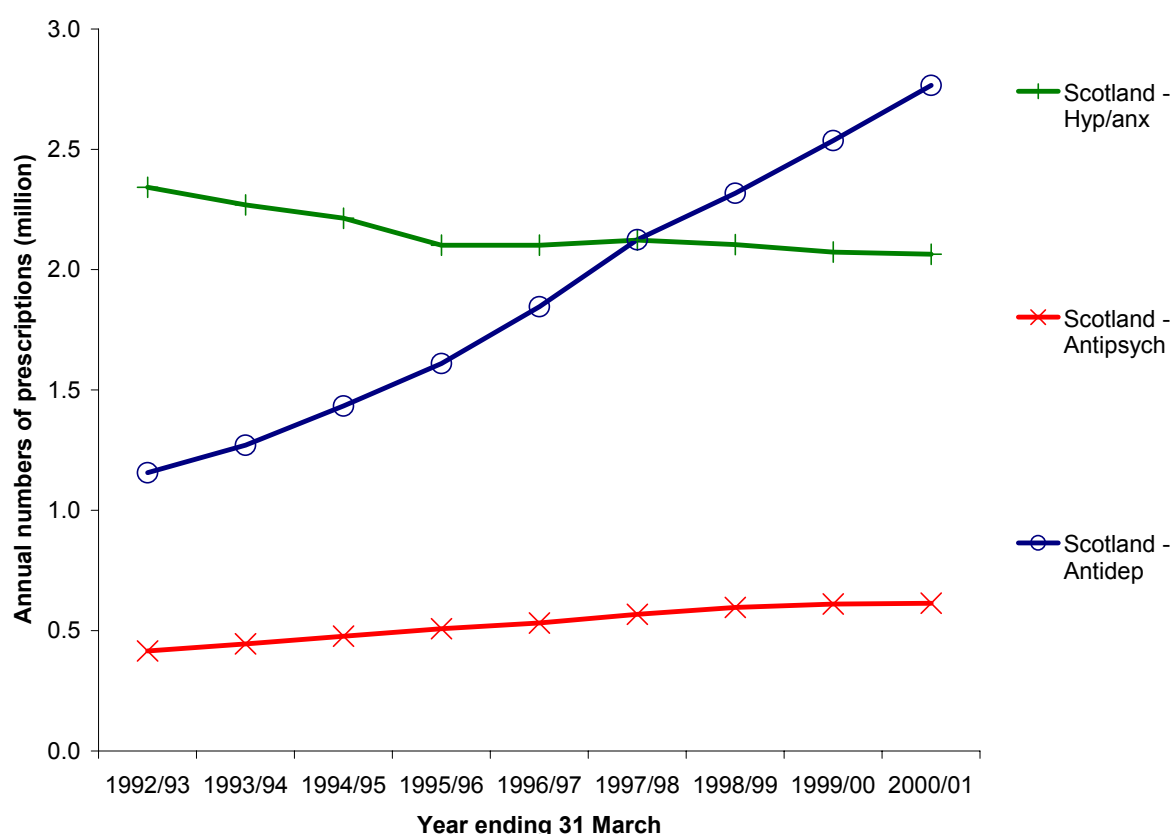
<sup>94</sup> See <http://www.gla.ac.uk/external/ophis/Home.htm>

## Prescriptions dispensed in the community

Of the £685 million of drugs dispensed in the community in 2000/2001 around 9% (£60.6 million) was spent on drugs associated with mental health problems. This represents around 9% of the total mental health spend (see costs section below).

Figures 3.29 to 3.34 show trends in prescriptions dispensed in primary care (i.e. drugs dispensed in hospitals are excluded, although drugs prescribed in hospital but dispensed in the community are included) for three classes of drugs associated with mental health problems (**hypnotics/anxiolytics (+)**; **antipsychotics (x)** and **antidepressants (o)**). Data is also available for each health board separately, upon request.

**Figure 3.29: Numbers of prescriptions of drugs associated with mental health problems dispensed in the community, Scotland 1992-2001**



Source ISD/PPD

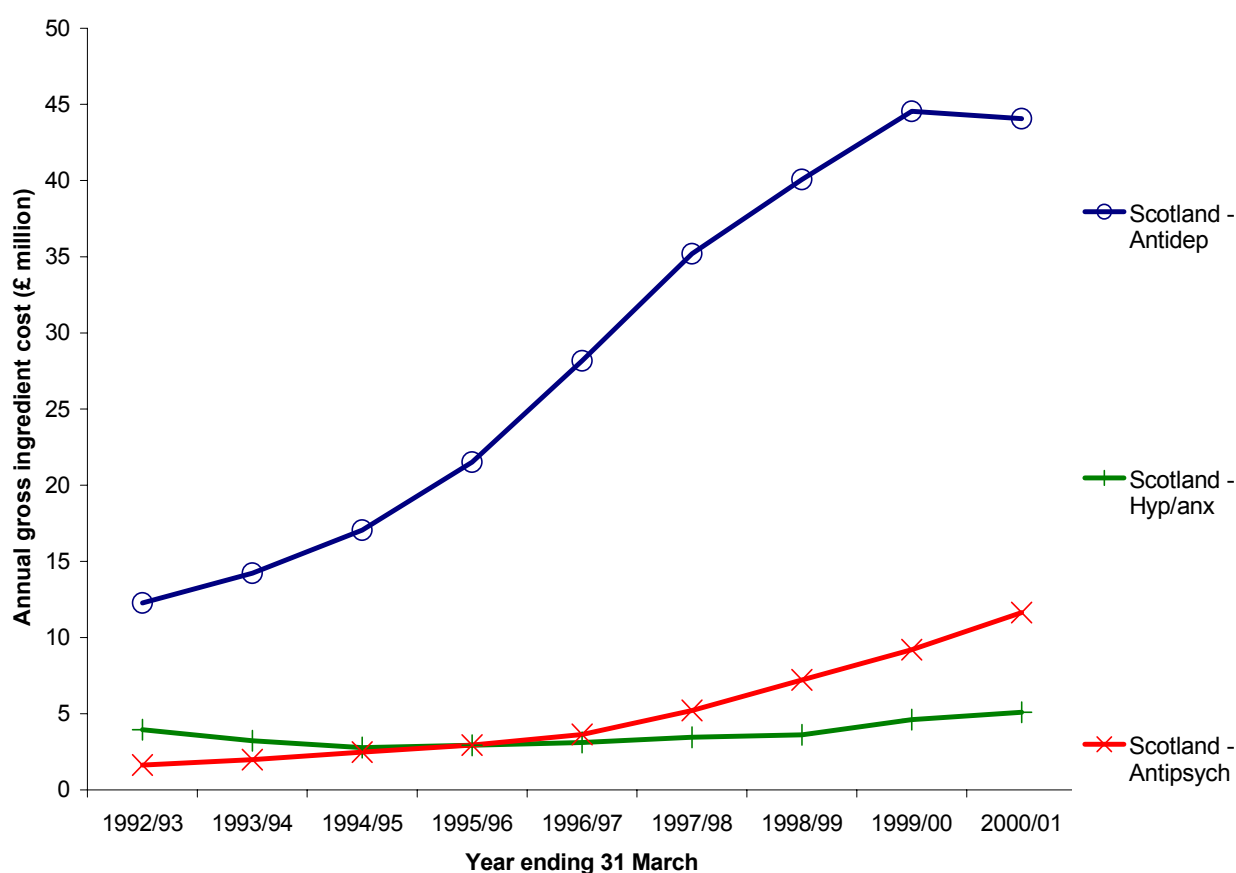
Over the time period there has been a shift in prescribing that has seen the largest class of mental health drug prescribed change from anxiolytics/tranquillisers to anti-depressants.

The number of prescriptions dispensed for hypnotics/anxiolytics has declined slowly (from 2.3 to 2 million per year). Conversely, there has been an increase in prescriptions dispensed for anti-depressants (1.2 to 2.8 million a year over the period). The number of prescriptions dispensed for anti-psychotics has risen slightly (0.4 to 0.6 million per year) but appears to be levelling off.

These trends do not show any effect of changes in prescribing practice involving substitution of one drug in a class for another (e.g. switch to an atypical anti-psychotic). However this change in prescribing practice is readily apparent in Figures 3.30 to 3.32.

Note: Some of these drugs have uses in treating conditions other than in mental health, e.g. epilepsy.

**Figure 3.30: Gross ingredient costs of prescription drugs associated with mental health problems dispensed in the community, Scotland 1992-2001 (£ million)**



Source: ISD/PPD

Note: Gross ingredient cost is cost of drugs and appliances before deduction of any discount<sup>95</sup>

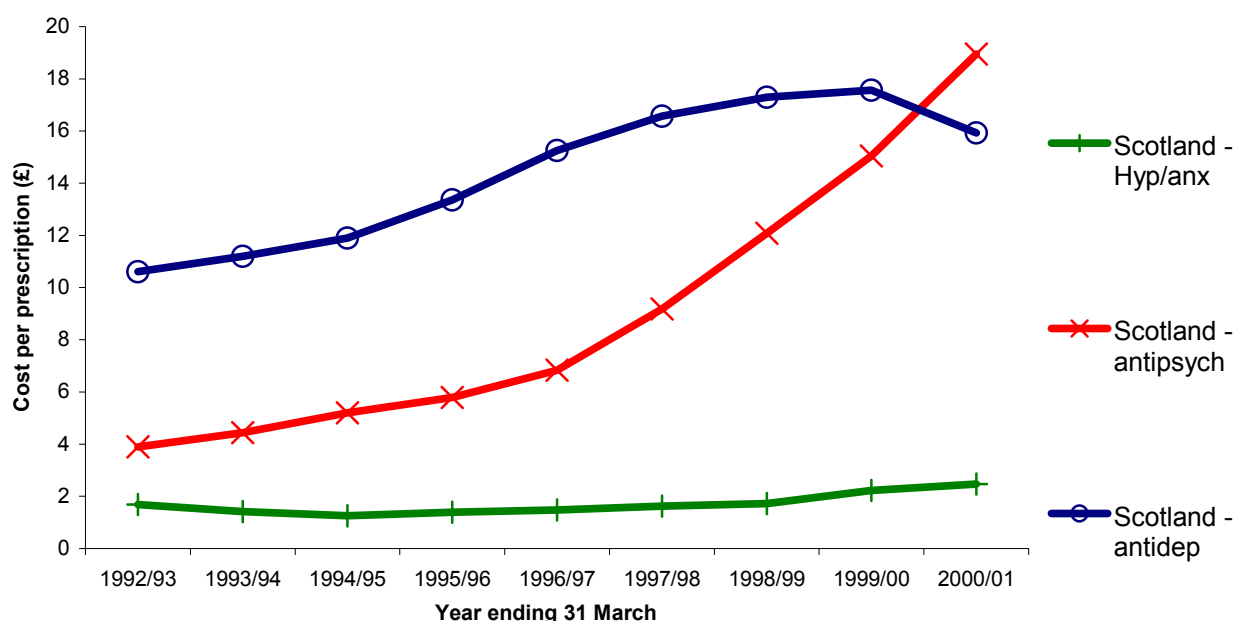
The major contributor to the cost of drugs associated with mental health problems in the community comes from anti-depressants (now 44 million of the £60.6 million total for mental health drugs). The cost of anti-depressants rose rapidly until 99/00 (an over £30 million increase over 8 years; £12.2 million to £44.5 million) but has now peaked. This is in large part because Prozac has come off patent and cheaper generics are now available.

The cost of hypnotics/anxiolytics initially declined over the period (from £4 million to £2.7 million) but has now climbed back to just over £5 million. This is due to the introduction of more expensive types.

The cost of anti-psychotics continues to rise rapidly (£1.6 million to 11.6 million; see also Figure 3.31 and 3.32) because of the adoption of more expensive atypical drugs.

<sup>95</sup> For further details on community prescribing see [http://www.show.scot.nhs.uk/isd/primary\\_care/pservices/pcare\\_pservices.htm](http://www.show.scot.nhs.uk/isd/primary_care/pservices/pcare_pservices.htm)

**Figure 3.31: Cost per prescription of prescription drugs associated with mental health problems dispensed in the community, Scotland 1992-2001 (£)**



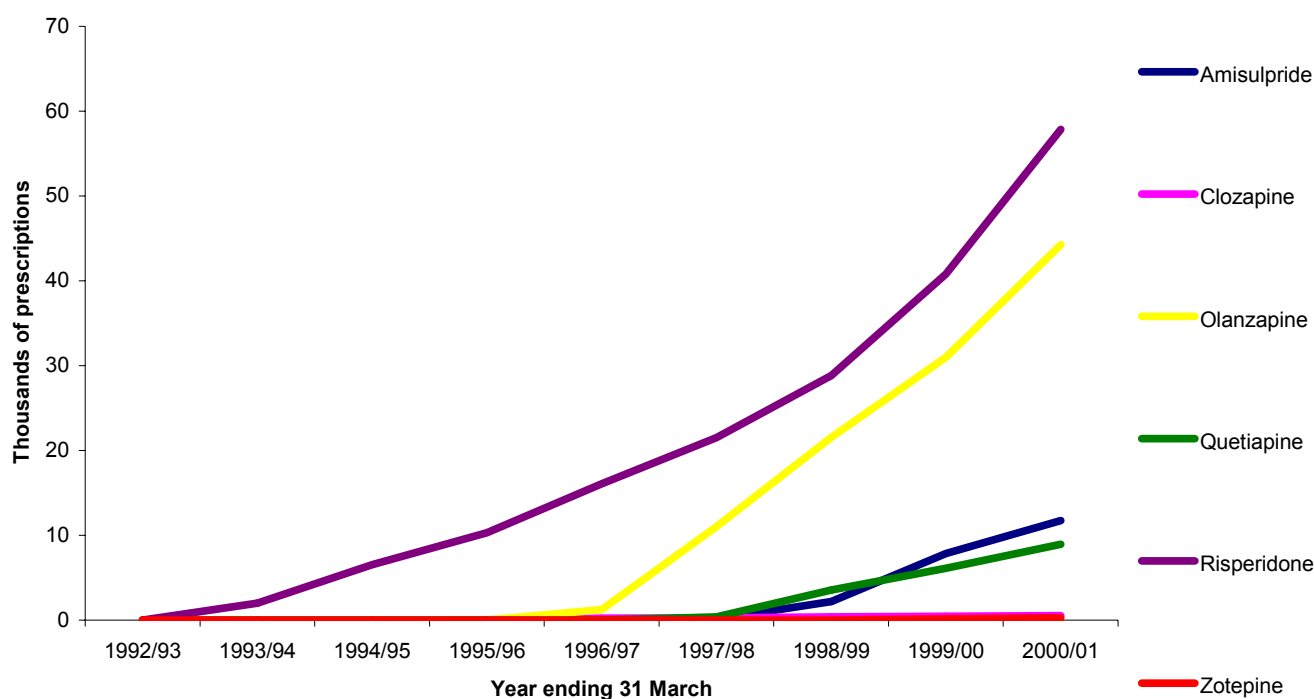
Source ISD/PPD

As Figure 3.31 shows, after an initial decline (£1.69 to £1.25 per item) between 92/93 and 94/95, the introduction of new varieties of hypnotics and anxiolytics has resulted in a doubling of cost per item since 1994/95 (£1.25 to £2.47).

The average cost per prescription for anti-depressants also rose between 92/93 and 99/00 (£10.61 to £17.56) but has since fallen (to £15.93). This fall is almost entirely due, apparently, to Prozac (Fluoxetine) coming off patent and cheaper generics becoming available. We believe this trend will continue, with other commonly-prescribed anti-depressants also reaching the end of their patent lives over the next few years.

The most striking trend, however, is the sharp increase in cost per item for anti-psychotics (£3.90 to £18.96 over the last 9 years). The increase has been especially apparent since 96/97, with a 2.8 fold rise in cost per item since then. This is due to the increasing practice of prescribing more expensive atypical anti-psychotics (see Figure 3.32).

**Figure 3.32: Annual prescriptions of novel antipsychotic drugs dispensed in the community, Scotland 1992-2001 (thousands)**

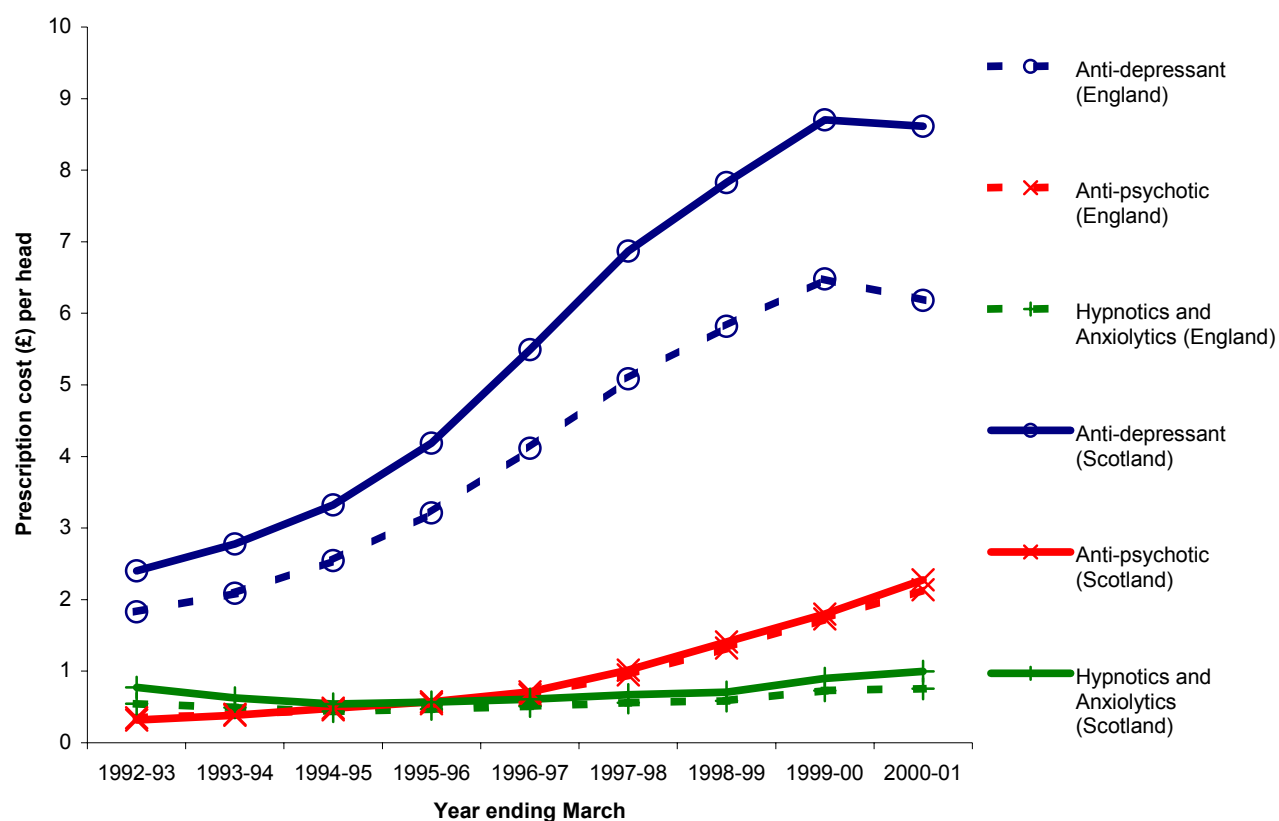


Source ISD/PPD

Figure 3.32 provides an explanation for the trend in cost per item for anti-psychotics shown in Figure 3.31. As can readily be seen, the number of prescriptions per year of novel (atypical) anti-psychotic drugs dispensed in the community has risen dramatically over the last nine years, particularly with the adoption into clinical practice of Risperidone (beginning in 93/94) and Olanzapine (96/97).

Although the adoption of atypicals is increasing the NHSScotland drug budget it is pertinent to note that, even so, the proportion of the mental health budget spent on drugs is still less than 10%.

**Figure 3.33: Comparison of cost per head (£) of prescription drugs associated with mental health problems dispensed in Scotland and England 1992-2001**



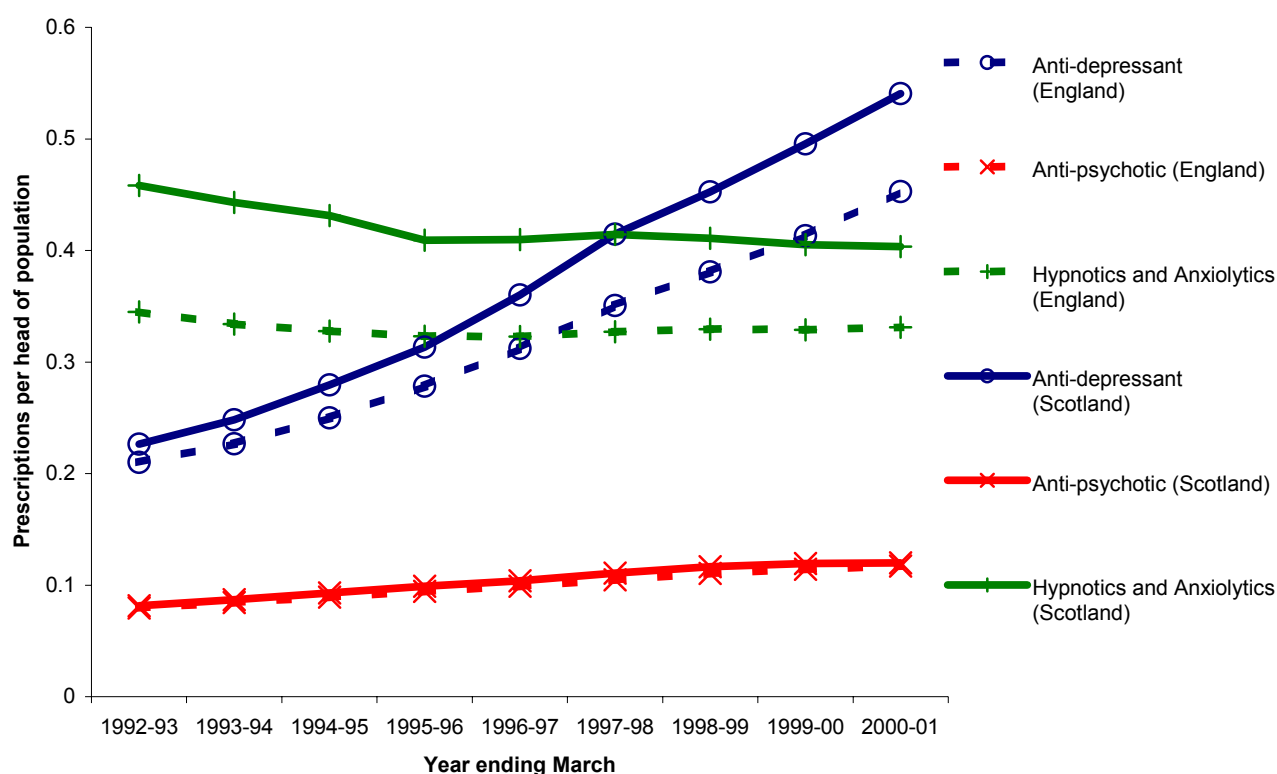
Source: ISD/PPD and DoH

About 40% more is spent per head on anti-depressants and 30% more per head spent on anxiolytics in Scotland than in England. Only 6% more is spent on anti-psychotics.

This is despite data from the Office of National Statistics that does not show significant differences in prevalence of neurotic disorders (mostly anxiety and/or depression) between Scotland and England. See Figure 2.1, which is adapted from Table 2.9 of the 2000 ONS report on population psychiatric morbidity<sup>96</sup>.

<sup>96</sup> See table 2.9 in [http://www.statistics.gov.uk/downloads/theme\\_health/psychmorb.pdf](http://www.statistics.gov.uk/downloads/theme_health/psychmorb.pdf)

**Figure 3.34: Comparison of dispensed prescriptions per head of prescription drugs associated with mental health problems in Scotland and England 1992-2001**



Source: ISD/PPD and DoH

Roughly 20% more anti-depressants and anxiolytics/tranquillisers are dispensed per head in Scotland than England. For reference the population psychiatric morbidity figures for Scotland and England are shown in Figure 2.1, which is adapted from Table 2.9 of the 2000 ONS report on population psychiatric morbidity<sup>97</sup>. This report shows no significant differences between prevalence of neurotic disorders in Scotland and England.

<sup>97</sup> See table 2.9 in [http://www.statistics.gov.uk/downloads/theme\\_health/psychmorb.pdf](http://www.statistics.gov.uk/downloads/theme_health/psychmorb.pdf)

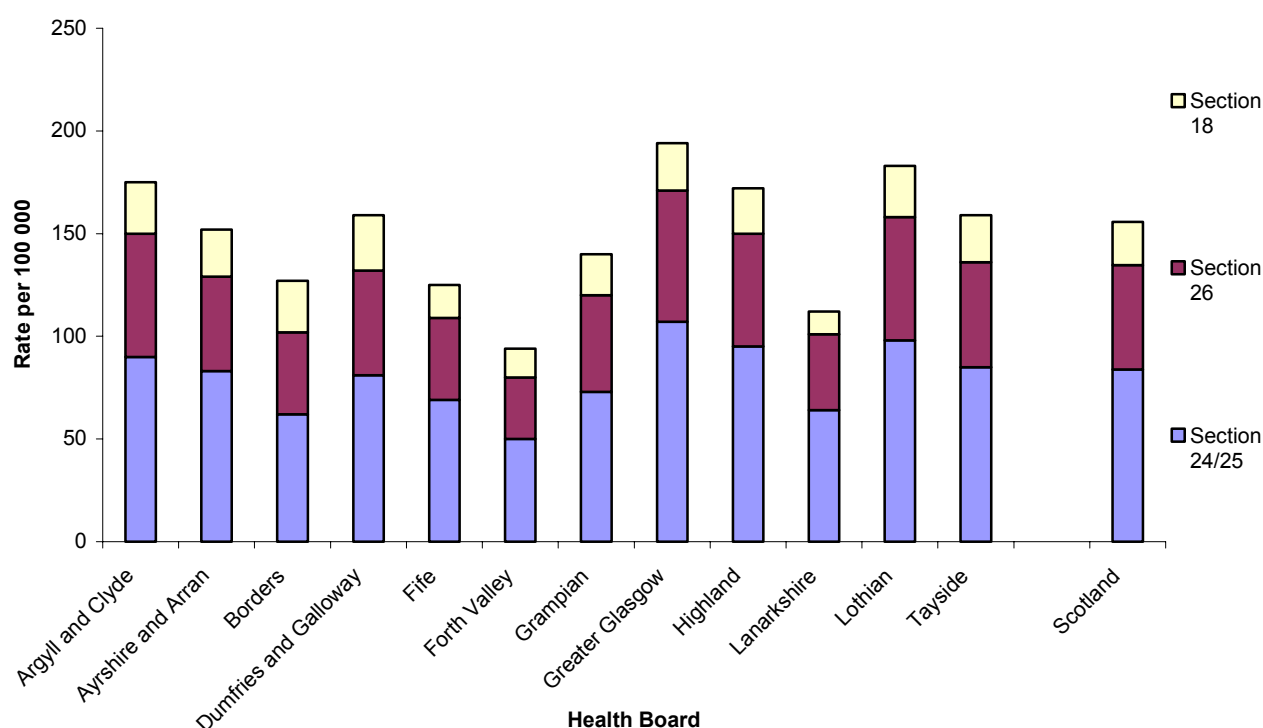
### Compulsory detention under the Mental Health (Scotland) Act 1984

In the vast majority of cases patients with mental health problems requiring hospitalisation give consent voluntarily. The Mental Health (Scotland) Act 1984 gives provision for instances where compulsory detention is necessary for the welfare of the person concerned, or where there is concern for public safety, the latter being in a minority of cases. The situations in which the Act is used are specific and well defined.

Information on compulsory detention is collected in SMR04 under admission status. 'Informal' admissions are voluntary, 'formal' admissions are compulsory, under the Mental Health Act. All episodes of compulsory detention must also be reported to the Mental Welfare Commission for Scotland, which has a statutory role under the Act to record this information in addition to its overall protective functions. See also Chapter 2.

Detention may be under several Sections of the Act. In summary, Sections 24/25 are emergency detention orders for compulsory admission for 72 hours. Section 26 is for short-term detention (up to 28 days), to allow further assessment and treatment to be carried out, and Section 18 allows for a longer period of assessment and treatment.

**Figure 3.35: Detentions per 100 000 population (April 2000 to March 2001) under sections of the Mental Health (Scotland) Act 1984**



Source: Mental Welfare Commission Annual Report 2000-2001<sup>98</sup>

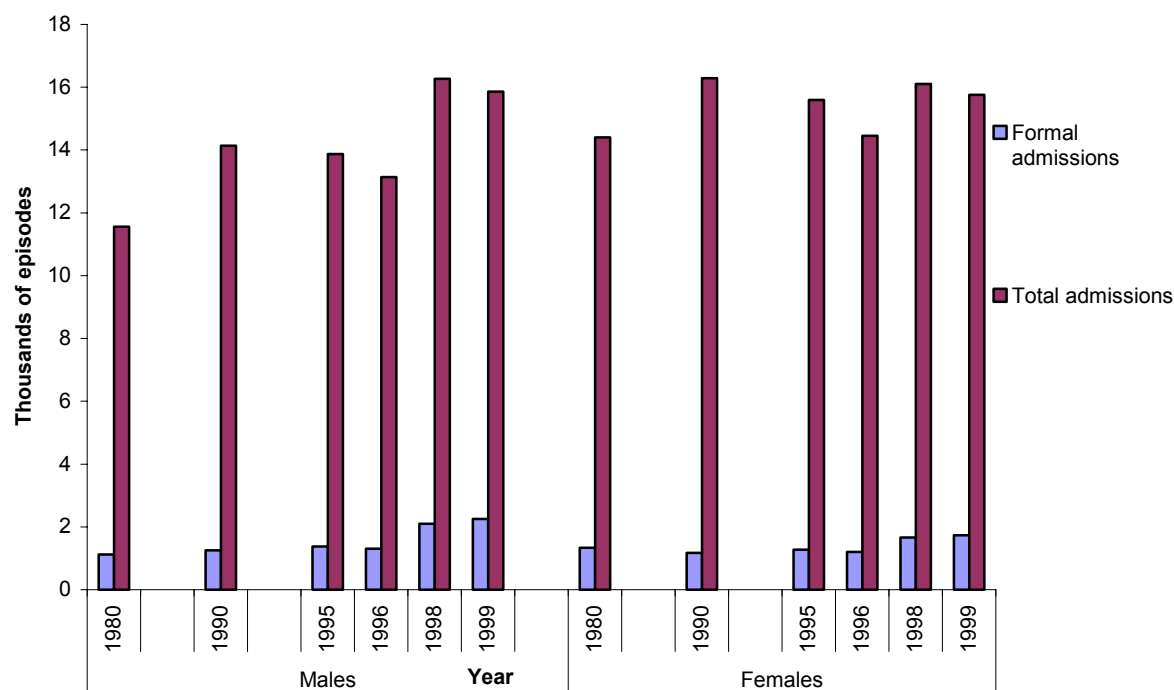
As can be seen there is quite some variation among health boards in the rates of use of detentions. Lanarkshire and Forth Valley, for example, show very low rates. The Mental Health (Scotland) Act 1984 was reviewed by the Millan committee in 2001, and one of their main recommendations to be implemented is the introduction of compulsory community treatment orders, which may allow a small number of patients currently detained in hospital to be treated in the community. A new Mental Health Bill will be laid before the Scottish Parliament later this year (2002).

<sup>98</sup> See <http://www.mwscot.org.uk/publications.htm>



Figure 3.36 shows that the number of males and females with formal admissions has risen between 1995-1999. The total number of admissions has also risen, particularly for males. For males, there has been an increase in the proportion of admissions that were formal in 1998-9, to 14%, compared with 9.6% in 1980. Further work is needed to determine the factors contributing to this. In women, there has been less marked change in proportions, with 9% in 1980, and 11% in 1999.

**Figure 3.36: Number of inpatient episodes with formal admission status under the Mental Health (Scotland) Act (thousands), Scotland, 1980, 1990, 1995-1999**



Source: SMR04

## Mentally disordered offenders

A mentally disordered offender is generally defined as someone suffering from a recognisable mental disorder who comes into contact with the criminal justice system [Bartlett et al. 2001]. Additional provision is made for those who fall into this class but need detention in a hospital, through the Criminal Procedure (Scotland) Act 1995, and the Mental Health (Scotland) Act 1984 part VI. A total of 369 episodes were recorded in 2000-2001, further details can be found at p70 of the Mental Welfare Commission for Scotland Annual Report<sup>99</sup>. See also section 1 of that report, mentally disordered offenders, for further information.

Agencies involved in dealing with mentally disordered offenders include the Scottish Prison Service, local authorities, the police, courts, the health service, the State Hospital and voluntary agencies. Although there is high turnover, there are around 6000 prisoners at any one time in Scotland (2000-2001).<sup>100</sup> Various studies have shown prisoners to have high rates of psychiatric morbidity including substance and alcohol abuse. Services should be equivalent to those available to the general population, recognizing the high levels of need in this population. The Scottish Executive has produced comprehensive guidance on services for mentally disordered offenders.<sup>101</sup>

Since such a wide range of service providers are involved we face major challenges in the provision of integrated information relating to this group.

<sup>99</sup> See <http://www.mwscot.org.uk/publications/annualreports/annualreport01.pdf>

<sup>100</sup> <http://www.sps.gov.uk/faqs/default.asp>

<sup>101</sup> <http://www.scotland.gov.uk/news/2001/02/se0309.asp>

### Costs of mental health services:

Table 3.1: Approximate costs of mental health services in 2000/2001

Cost (£ million)	Category	Per head of population (£)	Source	Notes
	All healthcare in Scotland	1100	1	
3 300	Total Hospital/Specialist community services	690	2	
1 400	Total Family Practitioner Services	275	2	
including 685	Community prescriptions	134	3	
	MH in hospital/specialist community services	102	4	15% of hospital/specialist services
160	MH in Family Practice	31	5	(Estimated at 15% - see below)
22.6	State Hospital	4.40	2	
<b>703.6</b>	<b>Total MH</b>	<b>137.40</b>		
44	anti-depressants	8.80	3	
11.6	anti-psychotics	2.40	3	
5	anxiolytics/tranquillisers	1.00	3	
<b>60.6</b>	<b>MH drugs</b>	<b>12.20</b>		<b>(8.8% of all drugs/ 9% of MH spend)</b>

## Sources:

- 1 Scottish Executive (<http://www.scotland.gov.uk/library3/finance/aers-07.asp>)
- 2 ISD Scottish Health Statistics ([http://www.show.scot.nhs.uk/isd/NHSiS\\_resource/Costs/costs.htm](http://www.show.scot.nhs.uk/isd/NHSiS_resource/Costs/costs.htm))
- 3 ISD Primary Care Information Group ([http://www.show.scot.nhs.uk/isd/primary\\_care/pservices/pcare\\_pservices.htm](http://www.show.scot.nhs.uk/isd/primary_care/pservices/pcare_pservices.htm))
- 4 Scottish Parliament written answer S1W-24398 ([http://www.scottish.parliament.uk/official\\_report/wa-02/wa0422.htm](http://www.scottish.parliament.uk/official_report/wa-02/wa0422.htm))
- 5 Estimate (see below)

**Notes on assumptions and costs...**

Table 3.1 shows some rough expenditure figures relevant to the delivery of mental health services. Clearly the costs are very dependent on what is included and what is not but we hope they give a general feel. About 15% of the hospital and specialist community services expenditure is spent on mental health services (outlined in written **S1W-24398** to the Scottish Parliament. We have assumed above that a similar proportion is spent on family practitioner services (GPs, dentists and prescriptions). This may not be correct: between 10 and 20% of GPs time is spent on mental health matters that are recorded as such. This will exclude unexplained physical symptoms that have a connection with anxiety and /or depression. On the other hand dentists are unlikely to spend much time on mental health interventions. Finally we know that only 9% of the prescription costs are attributable to mental health drugs. However those with mental health problems may have poorer physical health and so higher use of prescription medication.

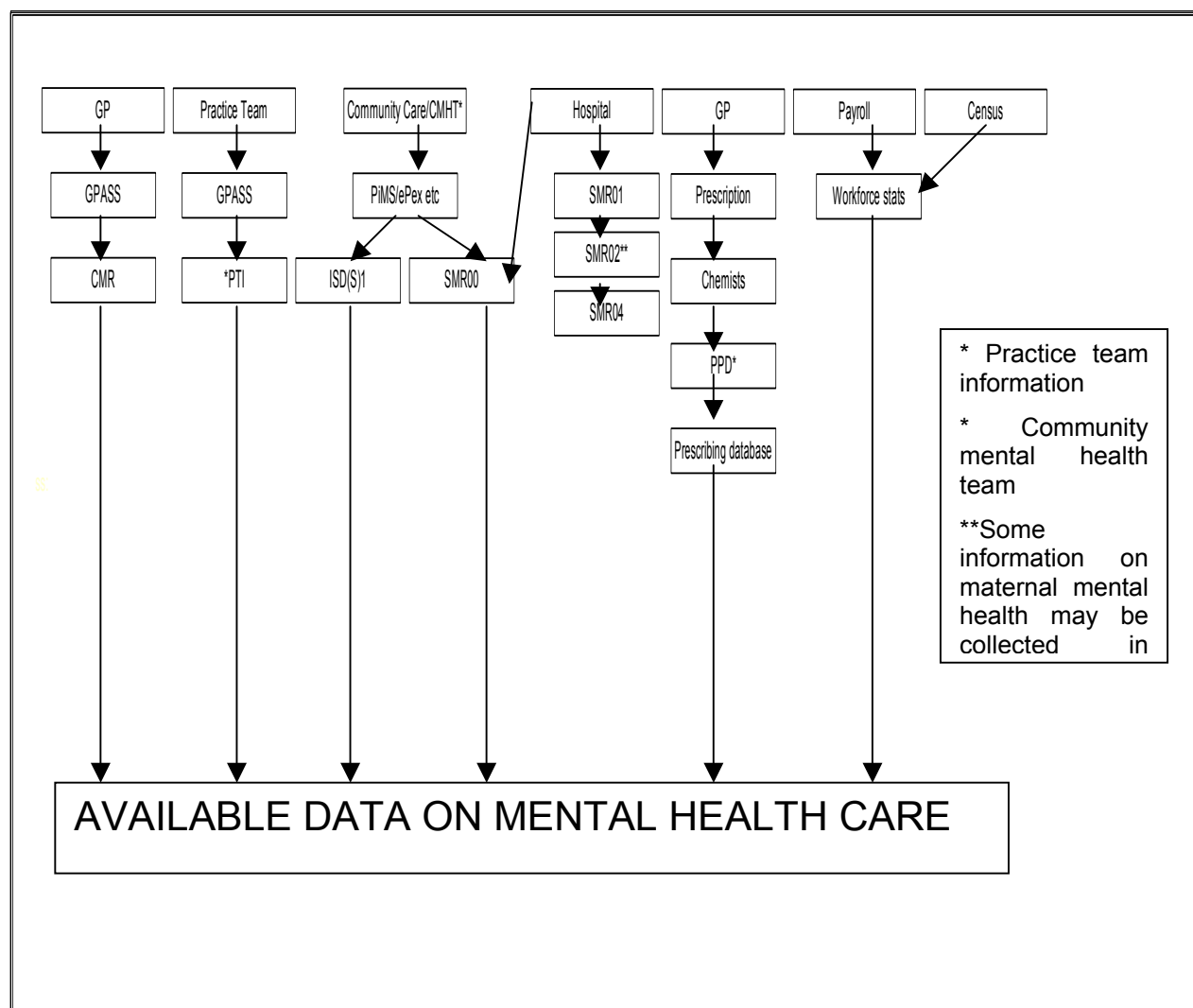
We do know that 9% of the total community prescription drug spend is on mental health drugs. This cost is also equivalent to 9% of the estimated total mental health spend. This illustrates that as for physical health specialties the major cost of care is on the care staff.

## Chapter 4: Conclusions

### Information flows

**Figure 4.1: Where the information comes from**

This figure illustrates where the data that forms the national datasets comes from.



### What we show information about in this report

**As this report shows, nationally consistent data is already available on:**

- Available psychiatric beds
- Diagnoses of those being cared for as psychiatric inpatients
- Those admitted to general hospitals after episodes of self-harm
- Aggregate activity (headcounts) for outpatients, daypatients and community contacts
- Prescription drugs associated with mental health dispensed in the community
- Frequency of visits to GPs for mental health reasons
- The workforce available to deliver mental health care
- Cause of death (including suicide)

### Headline points from the report

- Available general psychiatry beds in Scotland have reduced three fold since 1980. This is in line with the change in emphasis towards community care. However psychiatric beds still represent a quarter of all available staffed beds in Scotland.
- The number of consultant psychiatrists and psychologists in Scotland has risen since 1990
- 40% more is spent on prescriptions for anti-depressants per head in Scotland than in England
- ...but surveys suggest that people in Scotland are no more prone to depression. Perhaps proportionately more Scots visit their doctor, and receive more modern medications?
- Depression was the commonest contributing diagnosis listed for Scots visiting their GP in 2000
- Schizophrenia in those aged 16-65 on 31 December 2000 showed a 20 year prevalence rate of 4.3 per 1000 (5.4 for men, 3.2 for women)
- Suicide was the leading cause of death among young men in 2000, and the numbers appear to be rising. The male suicide rate for Scotland in 1998 (26 per 100 000) was more than double the UK average (12 per 100 000)
- Ritalin (methylphenidate) prescribing per young person shows a seven-fold variation across Scottish NHS boards, and total prescribing has risen dramatically

### Strengths and weaknesses of current systems/ data streams

Table 4.1 Strengths and weaknesses of current data streams

Strengths	SMR01	SMR04	SMR00	ISD(S)1	CMR
	Accurate consistent coding – completeness. Record linkage gives patient level data and total hospital stays.	Lots of detail, diagnosis, process etc...Now linked to other SMR data.	Useful for tracking activity.	Timely. Useful for tracking Inpatient/ Outpatient/ day patient activity.	Has diagnostic detail and differentiates new and chronic problems.
Weaknesses	Under-records mental health. Slow 'turn around.' Little clinical ownership.	Not timely, 90% accurate. Little clinical ownership.	Only captures consultant-led activity at hospital, no diagnosis/intervention so data "deficit."	Too aggregated and no information on interventions or diagnoses.	Limited coverage (it is only a representative sample.) No data on interventions or outcome.

### Information gaps and how we might fill them

As this document has shown, we have data on inpatients, prescriptions, workforce, GP contacts and outpatients attending clinics. However although improvements in these areas are still required, the SDC consultation and our own series of meetings with care providers across Scotland reinforce the view that the major area where information is lacking regards care delivered in the community.

Most specialist mental health interventions are delivered in the community and only bald overall numbers of contacts by health care workers from this sphere are collected. This reflects past and current thinking about health care that has patients becoming acutely ill, receiving care and rehabilitation in institutionalised settings, and being returned 'cured' to the community. However this paradigm is having to change since most disease is chronic. Exacerbation and restitution with frequent contact with a range of caring agencies across a variety of settings is now the norm. Interventions delivered by social care professionals, housing department workers, and voluntary agencies are not consistently recorded.

In addition we do not capture nationally consistent data on treatment delivered in accident and emergency departments or in prisons.

Further attention also needs to be given to documenting the mental health problems of those primarily in contact with services for physical problems. We believe that the current data stream from general hospitals considerably under-records such mental health problems.

Data on quality of care is difficult to capture in routine data systems. The data we have drawn on in the insights section often indicates that there is variation in outcomes. What we usually do not know are the detailed reasons for these variations especially at a local level. Gaining such understanding usually requires locally-collected data gathered to illuminate the processes of care as part of local clinical governance or quality improvement activity. There has tended to be a gap between local and national (or regional) data. Addressing the implications of this gap is a future challenge for those responsible for developing information systems. In future such information systems should make it easier for local care-providing teams to capture the local quality improvement data they need, and where appropriate link them to routinely-gathered nationally-consistent documentation of the care delivered.

The Improving Mental Health Information Project has already embarked on a series of endeavours to improve information sharing among the members of multi-agency care teams in the community and developed a draft “information core for integrated care” (ICIC). This encounter and intervention record is being developed in close consultation with care providers across Scotland and definitions specialists here at ISD. It is intended to provide some national consistency of definitions and agreement on the key items of information likely to require to be shared. This will improve communication among care workers and so allow integrated care to be more easily delivered. For example it would be possible to determine who had seen a particular care recipient in the previous week and get an idea of which intervention programmes were currently under way. The information gathered could also be used to deliver nationally consistent data for both local and national quality improvement, and for service planning and management.

## Acknowledgements

In particular our grateful thanks go to Katy Dimmock who spent many industrious hours formatting sections of this document, but did not want to be recorded as an author. We would also like to thank the many colleagues within ISD who provided analytical services and sage advice while this report was being written. It would be invidious to single any of them out for special thanks but rest assured we know who you are and we are very grateful for all your help. Brian Philp at the General Register Office for Scotland, John Loudon at the Scottish Executive and Peter Fairbrother at the Mental Welfare Commission all provided contributions to this report: thank you. Thanks are also due to the members of the Improving Mental Health Information Project steering group who provided comments on earlier drafts of the report.

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## Note on National Statistics

This publication is not classed as a *National Statistics* release. This is because this report might be more reasonably classed as a 'research' publication than a 'statistical' one. The fact that the report is not classed as a *National Statistics* release is not intended to imply that any of the statistics presented are known to be of poor or unknown quality. Further information about National Statistics is available from the National Statistics website (<http://www.statistics.gov.uk>). Details of National Statistics in relation to ISD Scotland are available at: [http://www.show.scot.nhs.uk/isd/National\\_statistics/index.htm](http://www.show.scot.nhs.uk/isd/National_statistics/index.htm).



## Appendix A SMR04 Data field names

(M=mandatory; L=local; O=optional; H=highly recommended)

Patient ID Data: -		
	Surname	M
	1st Forename	M
	2nd Forename	M (where applicable)
	Previous Surname	H
	Date of Birth	M
	Sex	M
	Marital Status	O
	CI/CHI Number	H
	NHS Number	H
	Patient Identifier	M
	Alternative Case Reference Number	L
	Patient's address	L
	Postcode	M
	Ethnic Group	O
	GP Practice Code	M
	Referring GP/GDP GMC Number	H
Episode Management Data: -		
	Spell/care package identifier	O
	Location	M
	Specialty	M
	Significant Facility	M
	Clinical Facility - Start	O
	Clinical Facility - End	O
	Consultant/HCP Responsible for Care	M
	Management of Patient	M
	Patient Category	M
	Waiting guarantee exception	H (where applicable)
	Waiting List Date	M (where applicable)
	Admission Date	M
	Waiting List Type	M
	Admission Type	M
	Admission Reason	O
	Admission/Transfer From	M
	Admission/Transfer From -Location	O
	GP referral letter number	O

	Ready for Discharge Date	H
	Discharge Date	M
	Discharge Type	M
	Discharge/Transfer To	M
	Discharge/Transfer To -Location	O
<b>General Clinical Data: -</b>		
	Main Condition	M
	Other Condition 1	M (where applicable)
	Other Condition 2	M (where applicable)
	Other Condition 3	M (where applicable)
<b>SMR04 Specific Data: -</b>		
	Status on Admission	M
	Admission - Referral From	M
	Previous Psychiatric Care	M
*	Admission - Main Condition	M
*	Admission - Other Condition 2	M (where applicable)
*	Admission - Other Condition 3	M (where applicable)
*	Admission - Other Condition 4	M (where applicable)
	Type of Psychiatric Care Provided	H
	ECT 1st Treatment - Date	H
	ECT Treatments - Number this Episode	H
	Arrangements for Aftercare 1	M
	Arrangements for Aftercare 2	M (where applicable)
	Arrangements for Aftercare 3	M (where applicable)
	Arrangements for Aftercare 4	M (where applicable)
	Care Plan Arrangements	O
	Date Last included in MHLS Census	H

\* These data items are reported under the General Clinical Section

## Appendix B: CMR and practice team data fields

### CMR dataset

Patient identifier (generated by the GPASS system)

Date of Birth

Sex

Postcode

Diagnosis (up to 10; see note 1 below)

Modifier (see note 2)

Date of consultation

Type of encounter (optional)

Clinician (optional)

**Note 1:** In CMR, a working diagnosis of each presenting condition/disease is recorded using the Read coding system. Up to ten diagnoses may be recorded at a single patient/doctor consultation.

**Note 2:** A code (modifier) is attached to each diagnosis to describe the type of diagnosis. There are three possible modifiers:

<i>First</i>	The first ever occurrence of a diagnosis for this patient with any GP
<i>Recurrence</i>	A repeat occurrence of, or representation of, a previous diagnosis that has been inactive for this patient with any GP
<i>Persistent</i>	A follow-up, review or other consultation of an on-going diagnosis with any GP.

By using these modifiers we are able to calculate proxy measures of prevalence rates for a specific condition/disease. Prevalence rates are calculated by dividing the number of patients with at least one diagnosis of the specified condition within the relevant time period by the practice population.

### Practice team dataset

Patient Identifier

Sex

Postcode

Date of birth

Date of contact

Activity (read code; up to 4)

Activity modifier (new, old, chronic)

Morbidity (read code; up to 4)

Morbidity modifier

Type of encounter

Clinician

## Appendix C: Glossary

**CMR:** Continuous Morbidity Recording. A Scotland-wide scheme to record every face-to-face GP consultation in selected practices. (<http://www.show.scot.nhs.uk/isd/CMR/index.htm>)

**CMHT:** Community mental health team

**CSA:** The Common Services Agency of NHSScotland (<http://www.show.scot.nhs.uk/csa>)

**CSAGS:** Confidentiality & Security Advisory Group for Scotland. An expert committee that has made recommendations on handling patient-identifiable information.

(<http://www.show.scot.nhs.uk/sehd/publications/ppcr/ppcr-01.htm>)

**EPDS:** Edinburgh postnatal depression scale

**ePex:** Protechnic software electronic patient index system

**FACE:** Software package about to be introduced to North Ayrshire. (<http://www.facecode.com>)

**GHS:** General Household Survey multi-purpose survey based on interviews with people living in private households in Great Britain, to collect data on topics including housing, employment, education, health and family circumstances.

**GHQ:** General Health Questionnaire. (GHQ12 asks 12 questions about general levels of happiness, anxiety, depression, stress and sleep disturbance over 'the past few weeks' prior to a Scottish Health Survey interview.)

**GIRS:** Grampian Immunisation Record System providing a call/recall and scheduling system and record of immunisations for each child for immunisations carried out as part of the pre-school immunisation programme. (See **SIRS**.)

**GP:** General Practitioner

**GPASS:** General Practice Administration System for Scotland: A computer system used by 85% of Scotland's GP practices. ([http://www.show.scot.nhs.uk/isd/isd\\_services/about/ISD/Org\\_GPASS.htm](http://www.show.scot.nhs.uk/isd/isd_services/about/ISD/Org_GPASS.htm))

**GROS:** General Register Office for Scotland; (<http://www.gro-scotland.gov.uk/>)

**ICD10:** 10th revision of the International classification of disease. A system for coding all diseases to allow international comparisons to be made. (<http://www.who.int/whosis/icd10>)

**IMHER:** Integrated Mental Health Electronic Record; (<http://www.doh.gov.uk/ipu/strategy/nsf/2.htm>)

**IMHIP:** The Improving Mental Health Information Project at ISD Scotland. ([http://www.show.scot.nhs.uk/isd/mental\\_health/mhipbase.htm](http://www.show.scot.nhs.uk/isd/mental_health/mhipbase.htm)).

**IM&T:** Information Management & Technology

**Incidence:** Incidence measures the number of new cases of a particular disease arising in a population over a specific time period [Donaldson and Donaldson, 1993].

**ISD:** The Information and Statistics Division of the Common Services Agency of NHSScotland (<http://www.show.scot.nhs.uk/isd>)

**ISD(S)1:** A recording scheme designed to capture healthcare activity across Scotland

**LHCC:** Local Healthcare Care Co-operative.

**MHMDs:** Mental Health Minimum Dataset;  
(<http://www.nhsia.nhs.uk/mentalhealth/dataset/pages/default.asp>)

**NHSIA:** National Health Service Information Authority; (<http://www.nhsia.nhs.uk/def/home.asp>)

**ONS:** Office for National Statistics; (<http://www.ons.gov.uk/>)

**OPCS:** Office of Population, Censuses and Surveys; (<http://www.ons.gov.uk/>)

**PCIG:** The Primary Care Information Group based within ISDScotland. ([http://www.show.scot.nhs.uk/isd/primary\\_care/primary\\_care.htm](http://www.show.scot.nhs.uk/isd/primary_care/primary_care.htm))

**PCT:** Primary Care Trust.

**PIMS:** Patient information Management System.

**PIS:** Prescribing Information System used by ISD's primary care information group ([http://www.show.scot.nhs.uk/isd/primary\\_care/p services/pcare\\_p services.htm](http://www.show.scot.nhs.uk/isd/primary_care/p services/pcare_p services.htm))

**Prevalence:** all cases of a condition that occur at a particular point of time or within a specified period of time (week, year, lifetime etc.). Prevalence results from two factors: the size of the previous incidence, and the duration of the condition [Donaldson and Donaldson, 1993].

**PRISMS:** Prescription Information System for Scotland (an information product from ISD's primary care information group; [http://www.show.scot.nhs.uk/isd/primary\\_care/p services/pcare\\_p services.htm](http://www.show.scot.nhs.uk/isd/primary_care/p services/pcare_p services.htm))

**PSD:** The Practitioner Services Division within the Common Services Agency of NHSScotland (<http://www.show.scot.nhs.uk/psd/>)

**PTI:** Practice Team Information. Collects information from practice nurses, district nurses and health visitors.

**Read codes:** Clinical terms originally developed by a GP, Dr Read. Now supported by the NHSIA ([http://www.nhsia.nhs.uk/terms/pages/readcodes\\_intro.asp?om=m1](http://www.nhsia.nhs.uk/terms/pages/readcodes_intro.asp?om=m1))

**SDC:** Scottish Development Centre for Mental Health. A consultancy body set up with initial funding from the Scottish Executive under the Framework for Mental health services in 1997. (<http://www.sdcmh.org.uk/>)

**SEHD:** Scottish Executive Health Department; ([http://www.scotland.gov.uk/who/dept\\_health.asp](http://www.scotland.gov.uk/who/dept_health.asp))

**SIGN:** Scottish Intercollegiate Guidelines Network, formed in 1993 to improve the quality of health care for patients in Scotland. Membership includes all the medical specialties, nursing, pharmacy, dentistry, professions allied to medicine, patients, health service managers, social services, and researchers. (<http://www.sign.ac.uk/index.html>)

**SIRS:** Standard Immunisation and Recall System provides (along with **GIRS**) a call/recall and scheduling system and record immunisations for each child for immunisations carried out as part of the pre-school immunisation programme.

**SKIPPER:** Scottish Key Indicators Package for Performance ([http://www.show.scot.nhs.uk/isd/scottish\\_health\\_statistics/subject/skipper/home.htm](http://www.show.scot.nhs.uk/isd/scottish_health_statistics/subject/skipper/home.htm))

**SMR00:** The Scottish Morbidity Recording scheme for consultant-led outpatient clinics

**SMR01:** The Scottish Morbidity Recording scheme for general hospital inpatients

**SMR02:** The Scottish Morbidity Recording scheme for maternity inpatients and day cases

**SMR04:** The Scottish Morbidity Recording scheme for psychiatric inpatients

**SNAP:** Scottish Needs Assessment Programme; (see <http://www.show.scot.nhs.uk/phis>)

**SPA:** Scottish Prescribing Analysis (an information product from ISD's primary care information group; [http://www.show.scot.nhs.uk/isd/primary\\_care/p services/pcare\\_p services.htm](http://www.show.scot.nhs.uk/isd/primary_care/p services/pcare_p services.htm))

**Trusts:** The NHS organisations that deliver care. In general, **acute trusts** are responsible for general hospitals and **Primary Care Trusts (PCTs)** for family practice, community specialist teams and psychiatric hospitals.

**WHO:** World Health Organisation; (<http://www.who.int/home-page/>)