

# Publication Report



## Prescribing & Medicines: Medicines used in Mental Health

Financial years 2001/02 – 2010/11

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## About ISD

Scotland has some of the best health service data in the world combining high quality, consistency, national coverage and the ability to link data to allow patient based analysis and follow up.

Information Services Division (ISD) is a business operating unit of NHS National Services Scotland and has been in existence for over 40 years. We are an essential support service to NHSScotland and the Scottish Government and others, responsive to the needs of NHSScotland as the delivery of health and social care evolves.

**Purpose:** To deliver effective national and specialist intelligence services to improve the health and wellbeing of people in Scotland.

**Mission:** Better Information, Better Decisions, Better Health

**Vision:** To be a valued partner in improving health and wellbeing in Scotland by providing a world class intelligence service.

## Official Statistics

Information Services Division (ISD) is the principal and authoritative source of statistics on health and care services in Scotland. ISD is designated by legislation as a producer of 'Official Statistics'. Our official statistics publications are produced to a high professional standard and comply with the Code of Practice for Official Statistics. The Code of Practice is produced and monitored by the UK Statistics Authority which is independent of Government. Under the Code of Practice, the format, content and timing of statistics publications are the responsibility of professional staff working within ISD.

ISD's statistical publications are currently classified as one of the following:

- National Statistics (ie assessed by the UK Statistics Authority as complying with the Code of Practice)
- National Statistics (ie legacy, still to be assessed by the UK Statistics Authority)
- Official Statistics (ie still to be assessed by the UK Statistics Authority)
- other (not Official Statistics)

Further information on ISD's statistics, including compliance with the Code of Practice for Official Statistics, and on the UK Statistics Authority, is available on the [ISD website](#).

## Introduction

The [Governments policy on Mental Health](#) is to maintain the mental well-being of the people in Scotland, and improve the situation of those with mental ill-health, by working with others to:

- promote attitudes and behaviour in the general public which lead to mental well-being
- to ensure that good quality mental health services are available for everyone that needs them at all levels of need
- The Government works with all stakeholders including users, carers and service providers in health, local Government and the voluntary sector.

There are five distinct areas within mental health: Insomnia & Anxiety, Psychoses & related disorders, Depression, Attention Deficit Hyperactivity Disorder (ADHD) and Dementia.

## Insomnia and Anxiety

### Background

Insomnia is difficulty getting to sleep or staying asleep for long enough to feel refreshed the next morning. This happens despite having enough opportunity to sleep. The most common problem with insomnia is difficulty falling asleep (sleep-onset insomnia). An insomniac may also experience:

- waking in the night
- not feeling refreshed after sleep and not being able to function normally during the day
- feeling irritable and tired and finding it difficult to concentrate
- waking when they have been disturbed from sleep by pain or noise
- waking early in the morning.

Further information about insomnia can be found at [NHS Inform](#) and [BUPA](#).

Anxiety is a feeling of unease, such as worry or fear, which can be mild or severe. Everyone experiences feelings of anxiety at some point in their life. Feeling anxious is sometimes perfectly normal. However, people with generalised anxiety disorder (GAD) find it hard to control their worries. Their feelings of anxiety are more constant and often affect their daily life. There are several conditions for which anxiety is the main symptom. Panic disorder, phobias and post-traumatic stress disorder can all cause severe anxiety.

Further information about anxiety can be found at [NHS Inform](#) and [The National Institute for Health and Clinical Excellence \(NICE\)](#).

### Treatment

Hypnotics and Anxiolytics are indicated for the treatment of Anxiety and Insomnia is described by the [British National Formulary \(BNF\)](#) section 4.1.

- BNF 4.1.1 - Hypnotics are indicated for the relief of Insomnia but only after the underlying causes have been established and treated. Long-term use of these drugs, especially Benzodiazepines, should be avoided.
- BNF 4.1.2 - Anxiolytics are indicated for short-term relief (two to four weeks only) of Anxiety that is severe, disabling or causing unacceptable distress to the patient. Using these drugs to treat short-term mild Anxiety should be avoided. In those instances

where the patient has chronic Anxiety, that is lasting more than four weeks, it may be more appropriate to use an antidepressant (BNF section 4.3).

- BNF 4.1.3 - The intermediate-acting Barbiturates have a place only in the treatment of severe intractable Insomnia in patients already taking Barbiturates. Their use should be avoided in the elderly.

## Psychoses and related disorders

### Background

Psychoses and related disorders are an abnormal condition of the mind. People experiencing psychoses may report hallucinations or delusional beliefs, and may exhibit personality changes and thought disorder. Depending on its severity, this may be accompanied by unusual or bizarre behaviour, as well as difficulty with social interaction and impairment in carrying out daily life activities. Information on psychoses and related disorders, including treatment and prevalence can be found on the following web sites:

- [Royal College of Psychiatry](#)
- [Mind, a mental health charity](#)
- [Scottish Association for Mental Health](#)
- [Office of National Statistics \(ONS\)](#)
- [NHS Inform](#)

### Treatment

Section 4.2 of the [British National Formulary \(BNF\)](#) list the drugs licensed for the treatment of psychoses and related disorders. This section contains three sub-sections:

- BNF 4.2.1 - Antipsychotic drugs, also known as Neuroleptics. Severe anxiety attacks can also be treated, in the short term with Antipsychotics.
- BNF 4.2.2 - Antipsychotic Depot Injections. Long-acting injections used for maintenance therapy, especially when compliance with oral treatment is unreliable.
- BNF 4.2.3 - Antimanic drugs - Used to control acute attacks and prevent their recurrence.

Antipsychotic drugs (BNF 4.2.1) can be divided into two classes:

- The older Typical (or conventional) Antipsychotics developed in the 1950s, principally to treat Schizophrenia. These can be further divided into the low and high potency drugs. For example, Fluphenazine and Haloperidol are examples of high-potency Antipsychotics, and Chlorpromazine is an example of a low-potency Antipsychotic. The high-potency drugs tend to be associated with Extrapiramidal (EPS) side effects (tremors, muscle spasms, irregular muscle movements etc.). EPS side effects are less evident in the low potency drugs.
- The Atypical Antipsychotics are used principally to treat Schizophrenia, but can be used to treat other conditions. The first Atypicals, (Clozapine and Risperidone) were introduced in 1994, followed by Olanzapine and Sertindole in 1996 (the latter withdrawn in 2001 after concern was expressed about cardiac effects), Amisulpride and Quetiapine in 1997, Zotepine in 1998, with the latest drug, Aripiprazole, coming on to the market in 2004.

## Depression

### Background

Depression is a serious illness. Health professionals use the words depression, depressive illness or clinical depression to refer to it. It is very different from the common experience of feeling unhappy, miserable or fed up for a short period of time. When you are depressed, you may have feelings of extreme sadness that can last for a long time. These feelings are severe enough to interfere with your daily life, and can last for weeks or months, rather than days. The main treatment for depression is antidepressants.

Information on depression, its treatment and prevalence, can be found at [NHS Inform](#) and [Depression Alliance Scotland](#).

### Treatment

There are four types of antidepressant drugs, as described in the [British National Formulary \(BNF\)](#) section 4.3, which are used in the treatment of depression:

- BNF 4.3.1 - Tricyclic antidepressants are used to treat depression as well as, but also having a role to play in the treatment of migraine, panic disorder, obsessive compulsive disorder, recurrent headaches and in the relief of neuropathic pain.
- BNF 4.3.2 - MAOIs - Monoamine-oxidase inhibitors are used less frequently than either the tricyclics or Selective Serotonin Re-uptake Inhibitors (SSRIs) and related antidepressants because of the dangers of dietary and drug interactions.
- BNF 4.3.3 - SSRIs - Selective serotonin re-uptake inhibitors are a group of drugs used to treat depression and other conditions such as bulimia, panic disorder and obsessive-compulsive disorder.
- BNF 4.3.4 - Others - Drugs that do not fit any of the above categories. For example, Duloxetine inhibits the re-uptake of both serotonin and noradrenaline and is therefore termed a Serotonin and Noradrenaline Re-uptake Inhibitor (SNRI). Other drugs in this group are Flupentixol (also used in the treatment of psychoses), Mirtazapine, Reboxetine, Tryptophan and Venlafaxine.

It should be noted that antidepressant drugs are used for indications other than depression (e.g. migraine, chronic pain, myalgic encephalomyelitis (ME) etc.) therefore no guarantee can be given that the statistics in relation to these drugs relate solely to depression.

## Attention Deficit Hyperactivity Disorder (ADHD)

### Background

Attention Deficit Hyperactivity Disorder (ADHD) and Attention Deficit Disorder (ADD) refer to a range of problem behaviours associated with poor attention span. These may include impulsiveness, restlessness and hyperactivity, as well as inattentiveness. These behaviours often prevent children from learning and socialising well. ADHD is sometimes referred to as Hyperkinetic Disorder (HD). More information can be found at [NHS Inform](#).

The prevalence of ADHD among males is thought to be four times that of females<sup>1</sup>. [NHS Quality Improvement Scotland](#) is to fund a national audit, based on the SIGN guideline, of the care and treatment provided throughout Scotland for children with ADHD.

## Treatment

Treatment of ADHD or Attention Deficit Disorder (ADD) should involve social, pharmacological, psychological, educational and behavioural interventions, used alone or in combination. There are three drugs, as described in the [British National Formulary \(BNF\)](#) section 4.4, which are used in the treatment of ADHD or ADD:

- Atomoxetine (Strattera<sup>®</sup>)
- Dexamfetamine Sulphate (Dexedrine<sup>®</sup>)
- Methylphenidate Hydrochloride (Ritalin<sup>®</sup>, Concerta XL<sup>®</sup>, Equasym<sup>®</sup>, Equasym XL<sup>®</sup>, Medikinet<sup>®</sup>, Medikinet XL<sup>®</sup>, Tranquilyn<sup>®</sup>).

There was a drug which was used in the 1990's – Pemoline. This drug was withdrawn in September 1997 because of reports of serious hepatotoxicity.

## Dementia

### Background

Dementia is a disease that leads to a progressive loss of brain function typified by memory loss, confusion, speech difficulties and problems in understanding. There are over 100 different types of dementia. The most common forms are:

- Alzheimer's disease
- Vascular dementia
- Dementia with lewy bodies
- Pick's disease
- Huntington's disease
- Alcohol-related dementia
- HIV/AIDS related dementia

It has been estimated that 75% of people diagnosed with dementia will either have Alzheimer's or vascular dementia or a combination of the two. ([Alzheimer Scotland - Dementia Factsheet](#)) Dementia mainly affects older people, but can also occur in people as young as thirty due to either alcohol abuse or HIV/AIDS. Roth et al<sup>2</sup> have estimated that 30% of people diagnosed with dementia have the mild form of the disease, 42% are at the moderate stage and 28% have severe dementia.

Detailed information on the various types of dementia can be found on the [Alzheimer's Society](#) web site, that of [Alzheimer Scotland](#) and [NHS Inform](#).

### Treatment

No cure for dementia currently exists. However, drugs are available that will inhibit, albeit temporarily, the progress of the disease. The [British National Formulary \(BNF\)](#) lists four drugs that are licensed for the treatment of dementia:

- Donepezil hydrochloride (Aricept<sup>®</sup> & Aricept Evess<sup>®</sup>)
- Galantamine (Reminyl<sup>®</sup> & Reminyl XL<sup>®</sup>)
- Memantine hydrochloride (Ebixa<sup>®</sup>)
- Rivastigmine (Exelon<sup>®</sup>)

Memantine is the only drug licensed to treat moderate to severe dementia; all others are for use in the mild to moderate form of the disease. However, the [Scottish Medicines Consortium](#) has recommended that Memantine should not be used within the NHS in Scotland due to its effect being small and its clinical effectiveness unclear. This recommendation does not, however, override the individual responsibility of health professionals to make appropriate decisions in the circumstances of the individual patient, in consultation with the patient and/or carer.

ISD is not responsible for the contents of external Internet sites.

### References

1. Gaub M, Carlson CL. Gender Differences in ADHD: a meta-analysis and critical review. *J Am Acad of Child Adolescent Psychiatry* 1997; 36: 1036-45
2. Roth et al. (1998) CAMDEX, the Cambridge Examination for Mental Disorders of the Elderly. Cambridge University Press

## Key points

- The prescribing of Hypnotics, Anxiolytics and Barbiturates increased between 2009/10 and 2010/11, from 2.13 million items to 2.14 million items, a rise of 0.37%.
- A total of 785,741 items for drugs used in psychoses and related disorders were dispensed during 2010/11, an increase of 29,786 (3.93%) items over the previous financial year.
- A total of 4.66 million antidepressant items were dispensed during 2010/11, an increase of 350,372 from the previous financial year. It is estimated 11.3% of the Scottish population aged between 15 and over make daily use of antidepressant drugs.
- Prescribing of drugs indicated for ADHD grew by 3.8 % between 2009/10 and 2010/11, up from 75,768 to 78,679 dispensed items.
- Prescribing of dementia drugs in Scotland has continued to increase year upon year, from 121,833 dispensed items in 2009/10 to 135,822 dispensed items in 2010/11.

## Results and Commentary

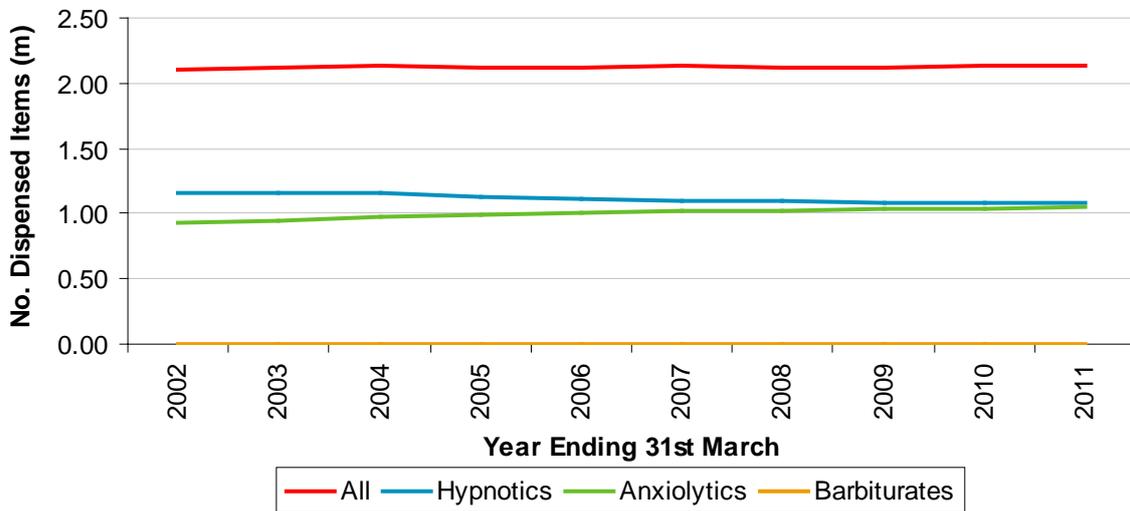
Medicines used in mental health for 2010/11 have been reviewed. Each condition (Insomnia & Anxiety, Psychoses and related disorders, Depression, ADHD and Dementia) have all been reviewed independently and analysis has been completed at NHS Scotland, NHS Board and Drug level.

### Hypnotics and Anxiolytics (Insomnia and Anxiety)

#### NHS Scotland

Figure 1 shows the number of items dispensed in Scotland, in total and by BNF sub-section for financial years 2001/02 to 2010/11.

**Figure 1 – Number of Dispensed Items – Hypnotics and Anxiolytics – 2001/02 to 2010/11**



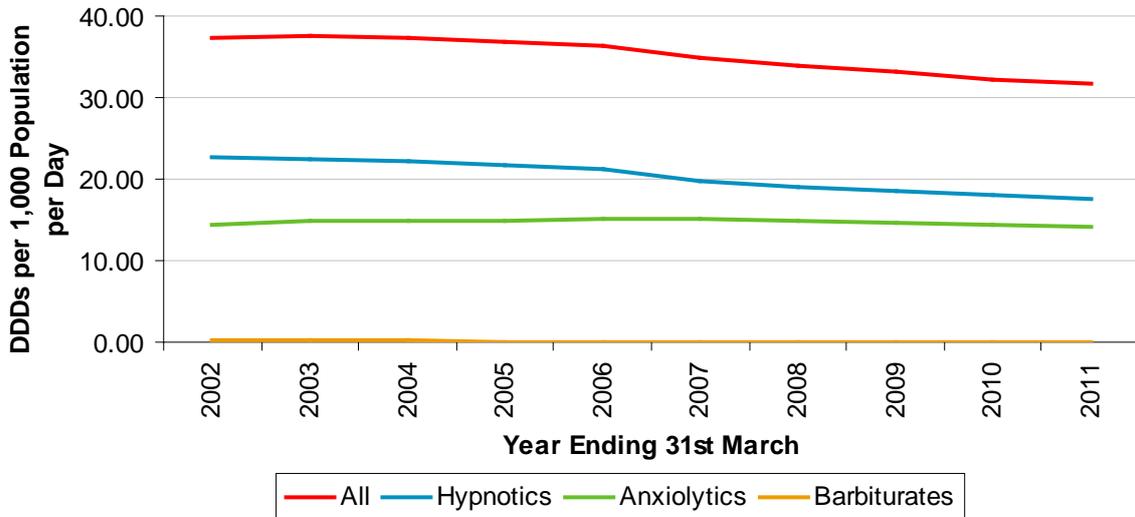
Source: Prescribing Information System, ISD Scotland

The prescribing of drugs within BNF section 4.1 has been stable at around 2.1 million items per year since 2001/02. Prescribing of Hypnotics has declined from 1.16 million items in 2001/02 to 1.09 million items in 2010/11. This reduction, however, has been partially offset by a rise in the prescribing of Anxiolytics, up from 0.93 million items to 1.05 million items in the same period. Prescribing of Barbiturates, which forms less than 0.01% of the total volume in BNF 4.1, has declined from 3,854 items in 2001/02 to 57 items in 2010/11.

The best indicator of what proportion of the population may receive a certain drug treatment is the Defined Daily Doses. Defined Daily Doses (DDD) are a statistical measure derived from the international use of the substance in question. They were developed by [the World Health Organisation \(WHO\)](#) and are defined as “the assumed average maintenance dose per day used on its main indication in adult”. To look at the number of DDDs per 1,000 population per day corresponds to the daily use of the drugs by the population. For example, 10 DDDs per 1,000 population per day correspond to a daily use of the drug by 1% of the population.

Figure 2 shows the Defined Daily Dose given as the number of Defined Daily Doses per 1,000 population per day.

**Figure 2 – Number of Defined Daily Doses per 1,000 Population (aged 15+) per day – Hypnotics and Anxiolytics – 2001/02 to 2010/11**



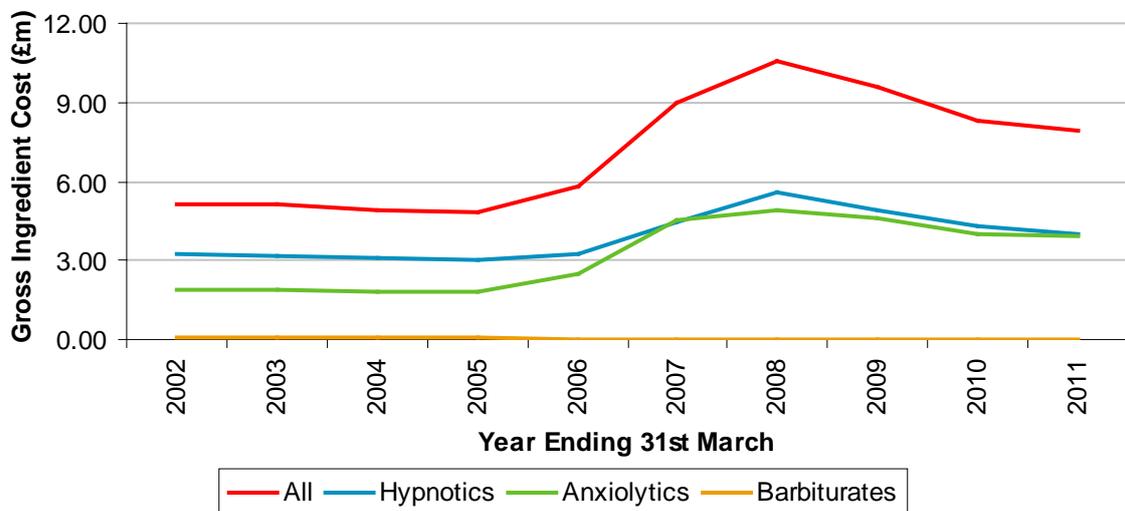
Source: Prescribing Information System, ISD Scotland

The data presented in Figure 2 follows the same pattern as Figure 1; a decline in the prescribing of Hypnotics, offset by a slow (and slowing), rise in the prescribing of Anxiolytics. The percentage of the population using Hypnotics, Anxiolytics and Barbiturates daily has declined from 3.7% in 2001/02 to 3.2% in 2010/11. It must be emphasised that the figures presented here are estimates only as the actual patient base is unknown.

- Daily use of Hypnotics has declined from 2.3% of the population to 1.8%
- Daily use of Anxiolytics has declined from 1.5% of the population to 1.4%
- Daily use of Barbiturates has declined from 0.02% of the population to less than 0.01%

Figure 3 show the Gross Ingredient Cost, in total and by individual drug for the financial years 2001/02 to 2010/11.

**Figure 3 – Gross Ingredient Cost (£) – Hypnotics and Anxiolytics – 2001/02 to 2010/11**



Source: Prescribing Information System, ISD Scotland

The total Gross Ingredient Cost for hypnotic and anxiolytic decreased from £8.31 million to £7.91 million between 2009/10 and 2010/11. The sharp movement shown between 2005/06 and 2007/08 was due to the process of price re-alignment.

## NHS Board

Information on the NHS Board of prescribing for hypnotics and anxiolytic drugs has also been analysed. Figures 4 and 5 show prescribing of drugs by NHS Board in terms of the number of DDDs per 1,000 population per day for drugs used in the treatment insomnia and anxiety, respectively.

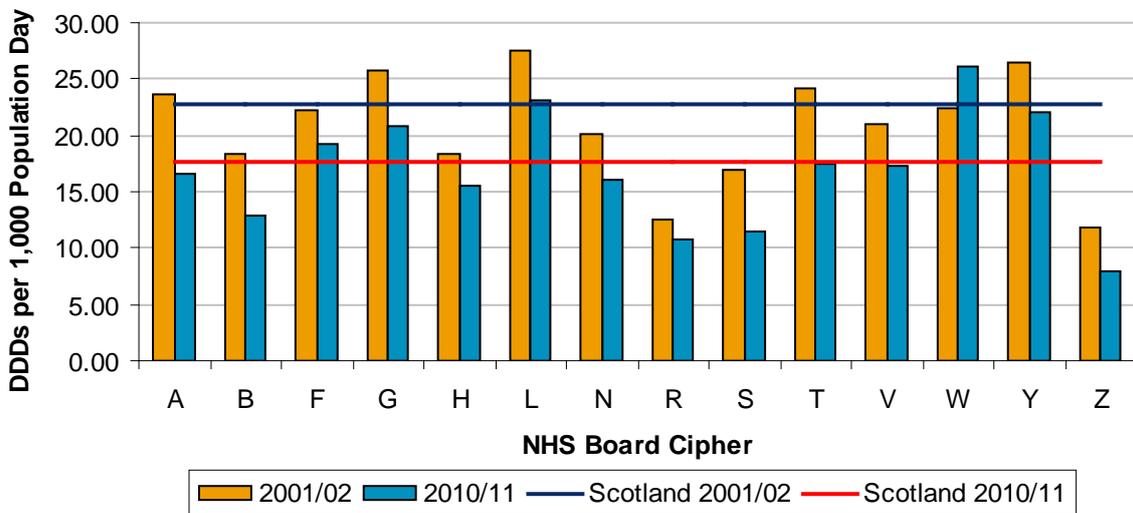
NHS Board ciphers are displayed on the Figures 4 and 5 for reason of clarity. Table 1 provides a translation between the cipher and the NHS Board name. Please note that NHS Argyll and Clyde ceased to exist as a single entity from April 2006. Argyll and Bute was absorbed into NHS Highland and the remainder into NHS Greater Glasgow to become NHS Greater Glasgow and Clyde.

**Table 1 – NHS Board Cipher - Translation**

NHS Board Cipher	Name
A	Ayrshire & Arran
B	Borders
F	Fife
G	Greater Glasgow and Clyde
H	Highland
L	Lanarkshire
N	Grampian
R	Orkney
S	Lothian
T	Tayside
V	Forth Valley
W	Western Isles
Y	Dumfries & Galloway
Z	Shetland

Source: Prescribing Information System, ISD Scotland

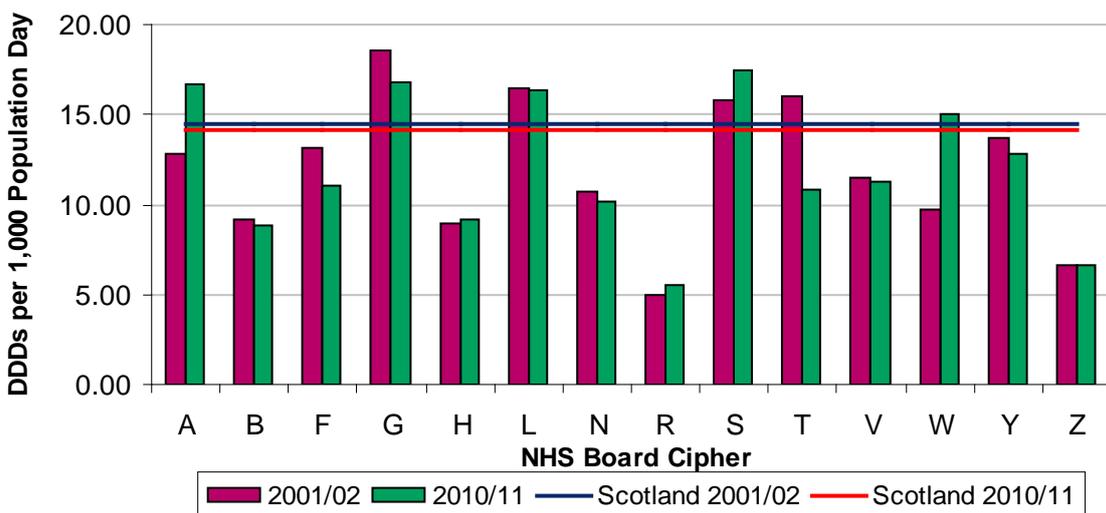
**Figure 4 – Hypnotics – Number of Defined Daily Doses per 1,000 Population (aged 15+) per day– 2001/02 and 2010/11**



Source: Prescribing Information System, ISD Scotland

Most NHS Boards show a reduction in the prescribing of Hypnotics, with the largest reduction being recorded by NHS Ayrshire & Arran, down from 2.4% of the population with daily access to a Hypnotic drug in 2001/02 to 1.7% by 2010/11. NHS Shetland is consistently the lowest 'user' of Hypnotics at 0.8% of the population with daily access to these drugs in 2010/11, down from 1.2% in 2001/02.

**Figure 5 – Anxiolytics – Number of Defined Daily Doses per 1,000 Population (aged 15+) per day – 2001/02 and 2010/11**



Source: Prescribing Information System, ISD Scotland

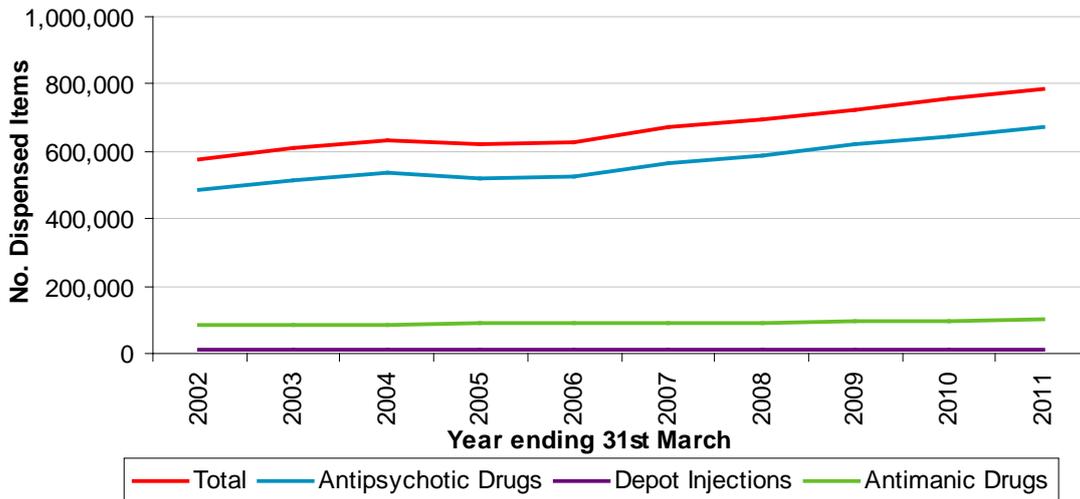
Health Boards show a varying trend in the prescribing of Anxiolytics in the last ten years. The largest increase occurred in NHS Western Isles, where the percentage of the population having daily access to an Anxiolytic rose by 0.5%, from 1.0% in 2001/02 to 1.5% in 2010/11. In contrast NHS Tayside's usage fell from 16.1 to 10.8 Defined Daily Doses per 1,000 population per day (0.5%).

## Psychoses and related disorders

### NHS Scotland

Figure 6 shows the number of items dispensed in Scotland, in total and by BNF sub-section for financial years 2001/02 to 2010/11.

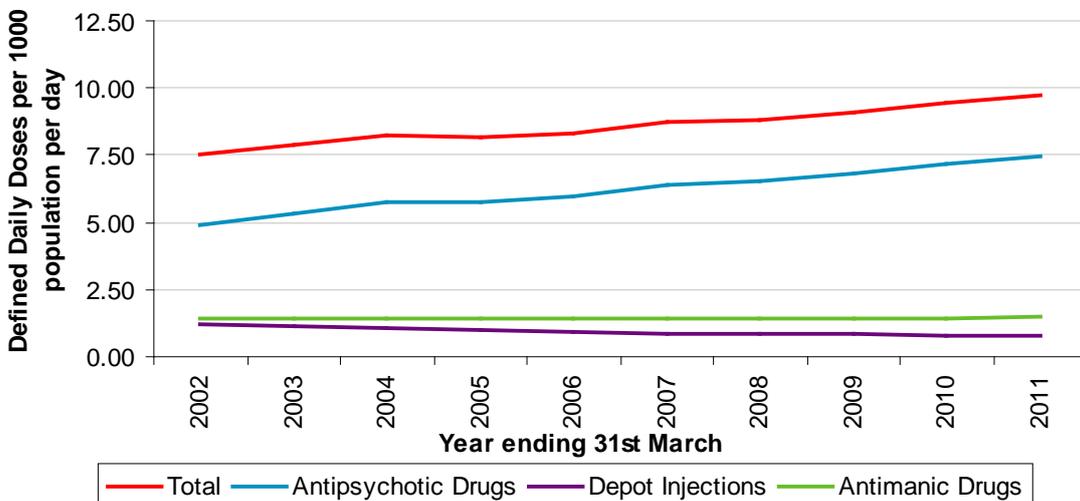
**Figure 6 – Number of Dispensed Items – Psychoses and related disorders – 2001/02 to 2010/11**



Source: Prescribing Information System, ISD Scotland

Prescribing of antipsychotics and antimanic drugs has increased from 2001/02 to 2010/11 at a steady rate. Depot injections have remained static over the ten year period. The largest growth between 2009/10 and 2010/11, was recorded for antimanic drugs, a rise of 5.18%, while antipsychotic increased by 3.81% and depot injections decreased by 0.06%. Figure 7 shows the Defined Daily Dose given as the number of Defined Daily Doses per 1,000 population per day for financial years 2001/02 to 2010/11.

**Figure 7 – Number of Defined Daily Doses per 1,000 Population (aged 15+) per day – Psychoses and related disorders – 2001/02 to 2010/11**



Source: Prescribing Information System, ISD Scotland

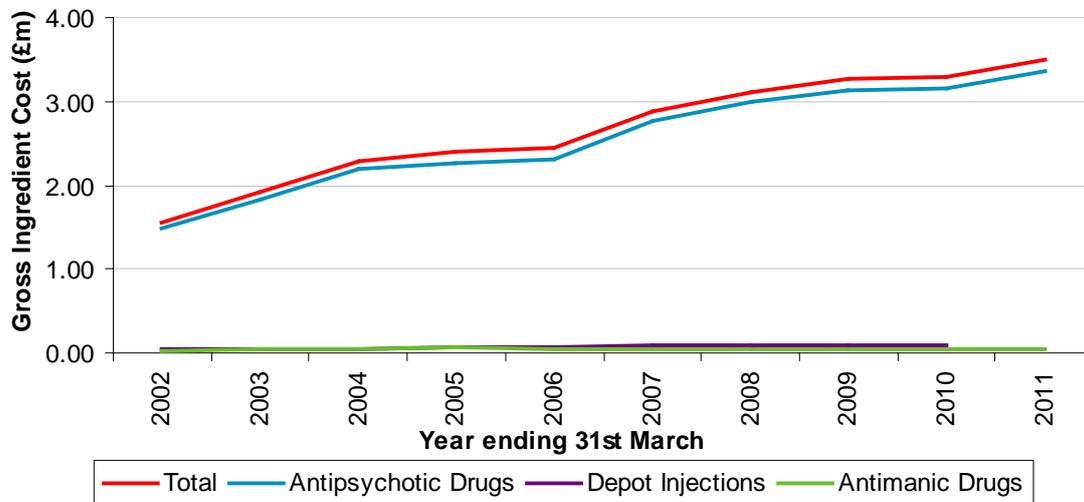
When looking at the Defined Daily Doses by drug category, it follows a similar pattern to that of dispensed items (Figure 6). When comparing 2010/11 with 2009/10, antipsychotics rose by 4.34% and antimanic drugs rose by 3.00%. Depot injections rose by 0.20% compared to the previous year, and this differs to dispensed items where they decreased by 0.06%.

It is estimated from these data that the percentage of the Scottish population aged 15 and over using antipsychotic drugs (BNF 4.2) daily has risen from 0.78% in 2001/02 to 0.97% by 2010/11.

- daily use of Antipsychotic drugs (BNF 4.2.1) has increased from 0.49% of the population in 2001/02 to 0.74% by 2010/11
- daily use of Antipsychotic Depot Injections (BNF 4.2.2) has decreased from 0.12% in 2001/02 to 0.08% of the population in 2010/11
- daily use of Antimanic drugs (BNF 4.2.3) has remained almost constant at 0.14% of the population.

Figure 8 shows the Gross Ingredient Cost, in total and by BNF Sub section for the financial years 2001/02 to 2010/11.

**Figure 8 – Gross Ingredient Cost (£) – Psychoses and related disorders – 2001/02 to 2010/11**



Source: Prescribing Information System, ISD Scotland

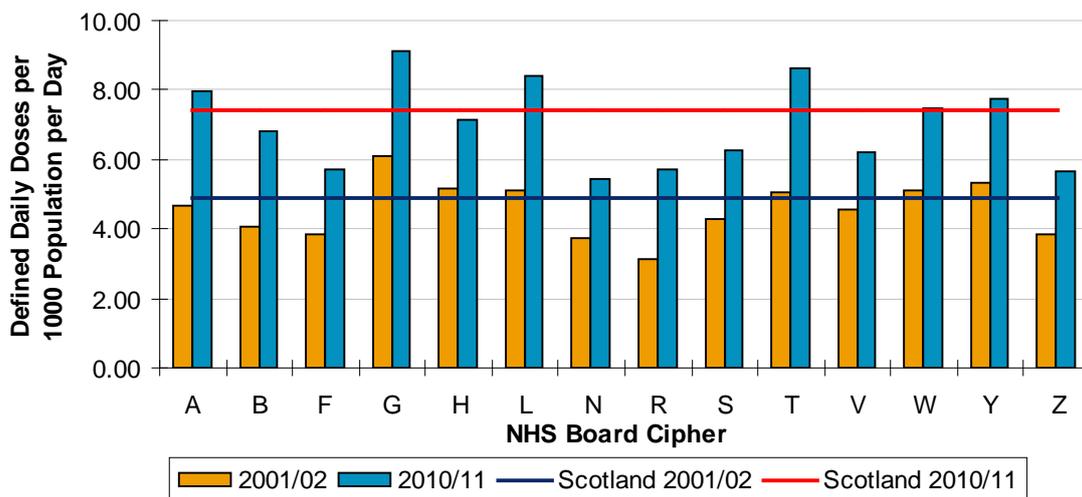
Figure 8 shows the Gross Ingredient Cost of drugs for Psychoses and related disorders (BNF 4.2) has increased from £32.88 million in 2009/10 to £34.99 million in 2010/11. This increase is almost largely attributable to the use of antipsychotic drugs (BNF 4.2.1) up from £31.45 million in 2009/10 to £33.50 million in 2010/11. The Gross Ingredient Cost for depot injections (BNF 4.2.2) remained constant at £0.96 million, while the antimanic drugs (BNF 4.2.3) increased from £0.46 million to £0.53 million between 2009/10 and 2010/11.

The average cost of a single daily dose for a typical (or conventional) Antipsychotic is £0.65; for an Atypical Antipsychotic the cost decreases to £3.34. In prescription terms this equates to an annual cost of £238 and £1,220 respectively.

## NHS Board

As the majority of the drugs used in the treatment of psychoses and related disorders are antipsychotic drugs, a comparison by NHS Board for 2001/02 to 2010/11 is given in Figure 9. Please refer to Table 1 that provides a translation between the NHS name and the cipher.

**Figure 9 – Antipsychotic Drugs (BNF 4.2.1) – Number of Defined Daily Doses per 1000 Population (age 15+) per day – 2001/02 and 2010/11**



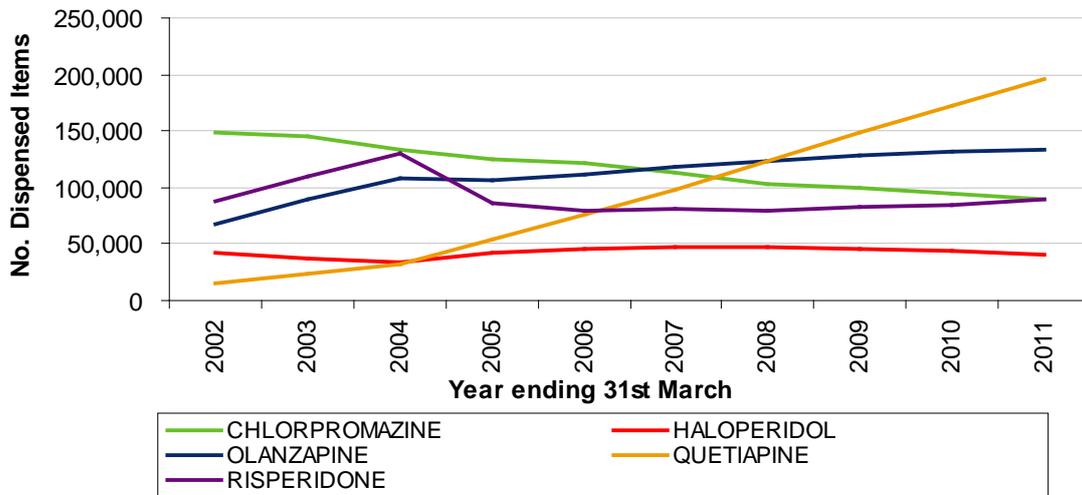
Source: Prescribing Information System, ISD Scotland

All NHS Boards show increased prescribing of Antipsychotic drugs since 2001/02. The use of Antipsychotic drugs (BNF 4.2.1) has increased from 4.88 to 7.44 Defined Daily Doses per 1,000 population per day. Six of the fourteen NHS Boards prescribe above the 2010/11 national averages for Antipsychotic drugs (BNF 4.2.1), with NHS Greater Glasgow & Clyde being the highest prescriber at 9.14 Defined Daily Doses per 1,000 population per day (where the population is that aged 15 and over). This figure equates to an estimated 9,220 people aged 15 and over in NHS Greater Glasgow and Clyde having daily access to an Antipsychotic drug. NHS Grampian returns the lowest Antipsychotic usage figure for 2010/11 at 5.46 Defined Daily Doses per 1,000 population per day equivalent to 2,518 people over the age of 15 having daily access to an Antipsychotic.

## Drugs

Figure 10 and 11 below shows the top 5 antipsychotic drugs based on the number of dispensed items from 2001/02 to 2010/11. Figure 10 looks at the number of dispensed items and Figure 11 the number of Defined Daily Doses.

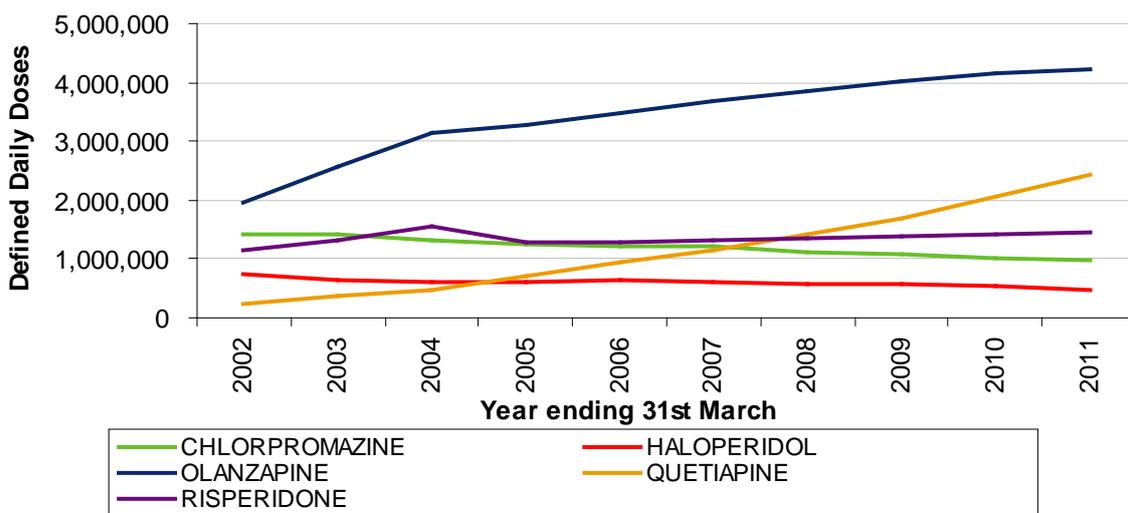
**Figure 10 – Top 5 Antipsychotic Drugs - Number of Dispensed items – 2001/02 to 2010/11**



Source: Prescribing Information System, ISD Scotland

The top 5 drugs all show a varied pattern between 2001/02 and 2010/11. Chlorpromazine although in the top 5 has decreased over time falling from a peak of 149,003 items in 2001/02 to 89,243 in 2010/11. Haloperidol has remained stagnant over the ten year period. By comparison Quetiapine has risen sharply from 2004/05, rising from 54,557 items to 195,829 in 2010/11. This could be due to Risperidone, which shows a drop in prescribing during 2004/05, probably due to the [Medicines and Healthcare products Regulatory Agency \(MHRA\)](#) stopping its use in controlling behavioural symptoms of dementia as the drug was linked to increased risk of stroke in elderly patients with dementia.

**Figure 11 – Top 5 Antipsychotic Drugs – Number of Defined Daily Doses – 2001/02 to 2010/11**



Source: Prescribing Information System, ISD Scotland

Figure 11 shows that Olanzapine has the highest number of doses, whilst their numbers of items are not the highest within Figure 10. This could be due to prescribers issuing the same prescriptions, but for higher quantities or higher strength drugs. Quetiapine, which showed a rise in the number of items, is consistent with a rise in the doses as well.

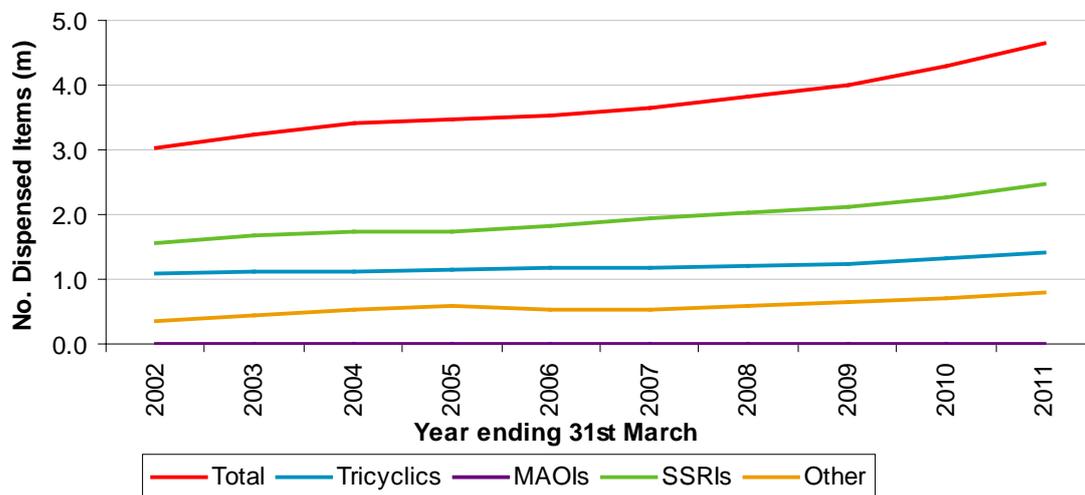
The average number of Defined Daily Doses per Olanzapine prescription has increased from 29.40 in 2001/02 to 31.63 by 2010/11. A similar situation exists for Risperidone where the number of Defined Daily Doses per prescription increased from 12.91 to 16.18 by 2010/11. Of the remaining drugs, Quetiapine dropped from 15.97 to 12.38 and Haloperidol has dropped from 17.65 to 12.07 by 2010/11. Surprisingly Chlorpromazine has increased from 9.59 to 10.89 Defined Daily Doses per prescription during the period 2001/02 to 2010/11, given the decrease in both doses and number of items dispensed over the period.

## Antidepressants (Depression)

### NHS Scotland

Figure 12 shows the number of items dispensed in Scotland, in total and by BNF sub-section for financial years 2001/02 to 2010/11.

**Figure 12 – Number of Dispensed Items – Antidepressants – 2001/02 to 2010/11**



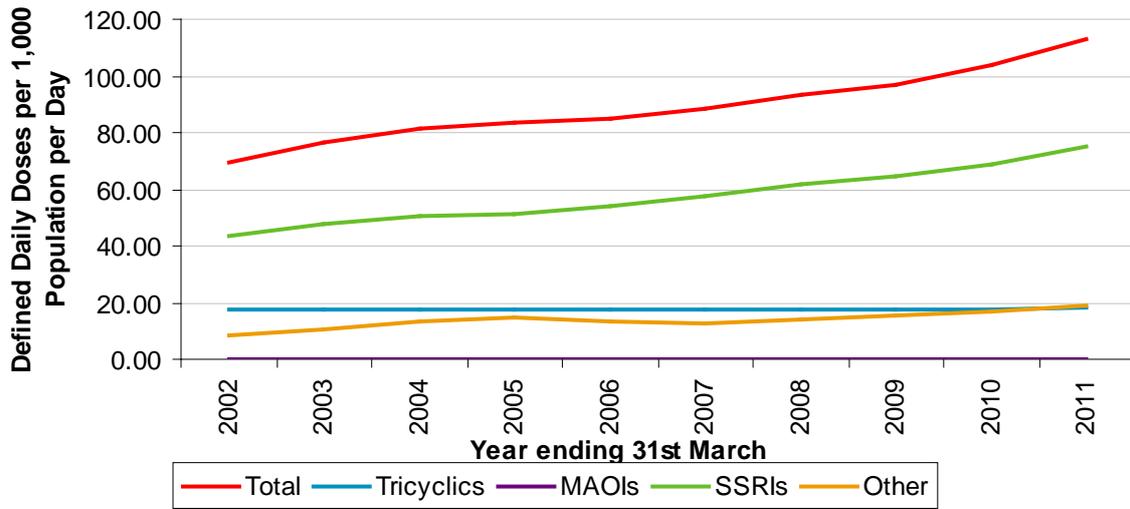
Source: Prescribing Information System, ISD Scotland

The prescribing on antidepressants continues to rise between 2009/10 and 2010/11, the rate of growth has increased from an annual growth of 7.6% in 2009/10 to 8.1% in 2010/11. Prescribing of antidepressant drugs in England follows the same trend, from 8.9% in 2009 to 9.3% in 2010 (calendar years).

Prescribing of Tricyclics has increased from 5.8% in 2009/10 to 5.9% in 2010/11. MAOI's has decreased from -0.8% to -6.7% between 2009/10 and 2010/11. SSRIs have increased from 7.4% in 2009/10 to 8.5% in 2010/11. Finally the 'other' antidepressants have seen its annual rate of growth decrease, from 11.7% in 2009/10 to 11.3% in 2010/11.

Figure 13 shows the defined daily dose given as the number of DDDs per 1,000 population per day for financial years 2001/02 to 2010/11.

**Figure 13 – Number of Defined Daily Doses per 1,000 Population (aged 15+) per day – Antidepressants – 2001/02 to 2010/11**

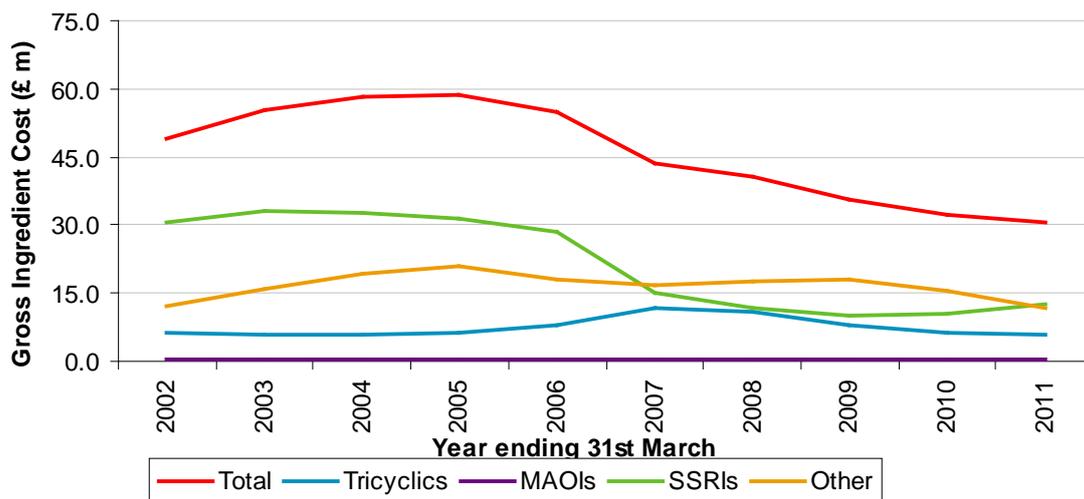


Source: Prescribing Information System, ISD Scotland

The prescribing pattern exhibited in Figure 13 is similar to that of Figure 12, with SSRIs being the main choice of antidepressant by prescribers. Daily use of antidepressants has grown from 6.9% in 2001/02 to 11.3% of the population (aged 15+) by 2010/11 that is 492,372 people. It should be emphasised that these figures are estimates as the actual patient base is unknown.

Figure 14 shows the Gross Ingredient Cost, in total and by BNF Sub section for the financial years 2001/02 to 2010/11.

**Figure 14 – Gross Ingredient Cost (£) – Antidepressants – 2001/02 to 2010/11**



Source: Prescribing Information System, ISD Scotland

The total Gross Ingredient Cost of antidepressant drugs during 2010/11 was £30.6 million, down £1.6 million from the previous year. Looking at the drug by type, the main contributor to this decrease is the ‘other’ antidepressants, in particular two drugs; Mirtazipine and Venlafaxine. These two drugs lost their patent within 2009/10 and the effects are now just being seen in 2010/11. With regards to Venlafaxine, price reductions also contribute to the

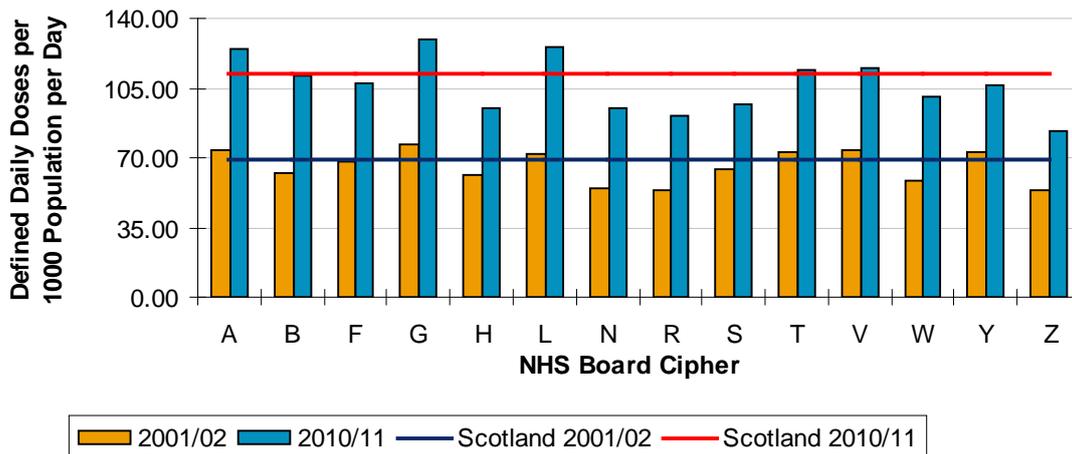
overall reduction. For the other drugs types, MAOI's and Tricyclics also reduced in cost while SSRIs increased by £2.5 million compared to the previous year. The reason for this vast increase is to do with two drugs; Citalopram and Sertaline. Both of these drugs were in short supply throughout 2010/11. As they were in short supply, pharmacists were required to pay a greater price for these drugs. The pharmacists were then reimbursed for the full amount paid so the additional cost is ultimately passed on to the NHS.

The cost per defined daily dose for 2010/11 is £0.17 or £62 per annum, down from £0.20 (£71 per annum). Taking the GRO mid-year population estimate for 15 and over, the cost per head is calculated as £7.00 in 2010/11, down from £7.41 in the previous financial year.

### NHS Boards

The number of Defined Daily Doses per 1,000 population aged 15 and over has been used to permit comparison in dispensing of antidepressant drugs between NHS boards, as shown in Figure 15. Please refer to Table 1 that provides a translation between the NHS name and the cipher.

**Figure 15 – Number of Defined Daily Doses per 1,000 Population (aged 15+) per day – Antidepressants – 2001/02 and 2010/11**



Source: Prescribing Information System, ISD Scotland

The percentage of the population in 2010/11 using antidepressants daily varies from 8.3% in Shetland (Z) to 12.9% Greater Glasgow and Clyde (G). Five boards are above the Scottish average (11.3%):

- NHS Greater Glasgow (G) – 12.9%
- NHS Lanarkshire (L) – 12.6%
- NHS Ayrshire and Arran (A) – 12.5%
- NHS Forth Valley (V) – 11.5%
- NHS Tayside (T) – 11.4%

### Drugs

The top five antidepressant drugs prescribed in Scotland, in terms of the number of dispensed items are:

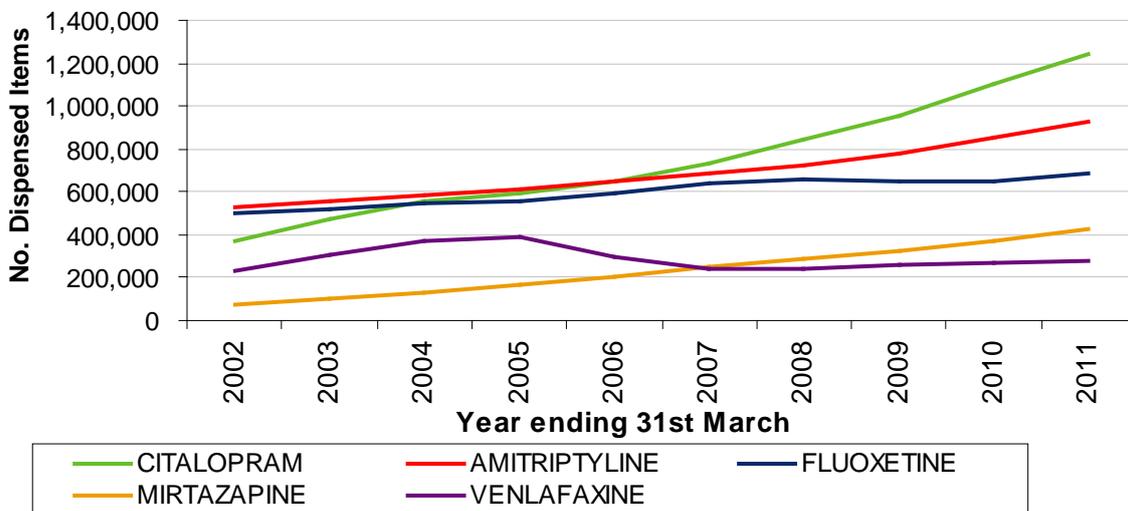
**Table 2 – Top five antidepressant drugs**

Approved Name	Brand Name	Type
Citalopram	Cipramil <sup>®</sup>	SSRI
Amitriptyline	Generic only	Tricyclic
Fluoxetine	Prozac <sup>®</sup>	SSRI
Mirtazapine	Zispin SolTab <sup>®</sup>	Other
Venlafaxine	Efexor <sup>®</sup>	Other

Source: Prescribing Information System, ISD Scotland

Figure 16 below shows the top 5 antidepressant drugs based on the number of dispensed items from 2001/02 to 2010/11.

**Figure 16 – Top Five Antidepressants – Number of Dispensed Items – 2001/02 to 2010/11**

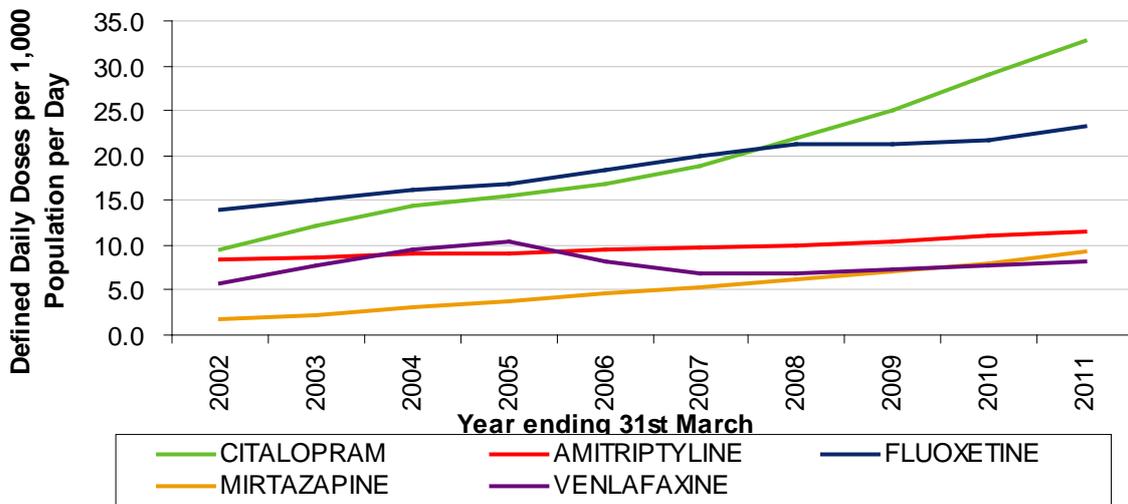


Source: Prescribing Information System, ISD Scotland

All of the top 5 drugs show an increase on the previous financial year. Mirtazapine shows the largest increase, up 53,423 items in 2010/11. The top 5 drugs in 2010/11 are the same as top 5 drugs in 2009/10. Venlafaxine has declined between 2005/06 and 2008/09, probably due to adverse publicity, e.g. [BBC Panorama](#), regarding addiction fears and unpleasant withdrawal symptoms. Concerns were raised in December 2004 about potential for cardiotoxicity and toxicity in overdose with Venlafaxine. [The Medicines and Healthcare Regulatory Agency](#) (MHRA) issued guidelines restricting use of Venlafaxine to specialist initiation and contraindications in patients with heart disease; with an adverse effect on prescribing. New guidelines issued in May 2006 saw these restrictions being largely lifted.

Figure 17 looks number of Defined Daily Doses per 1,000 population per day (aged 15+) from 2001/02 to 2010/11.

**Figure 17 – Top Five Antidepressants – Defined Daily Doses per 1,000 population (aged 15+) per day – 2001/02 to 2010/11**



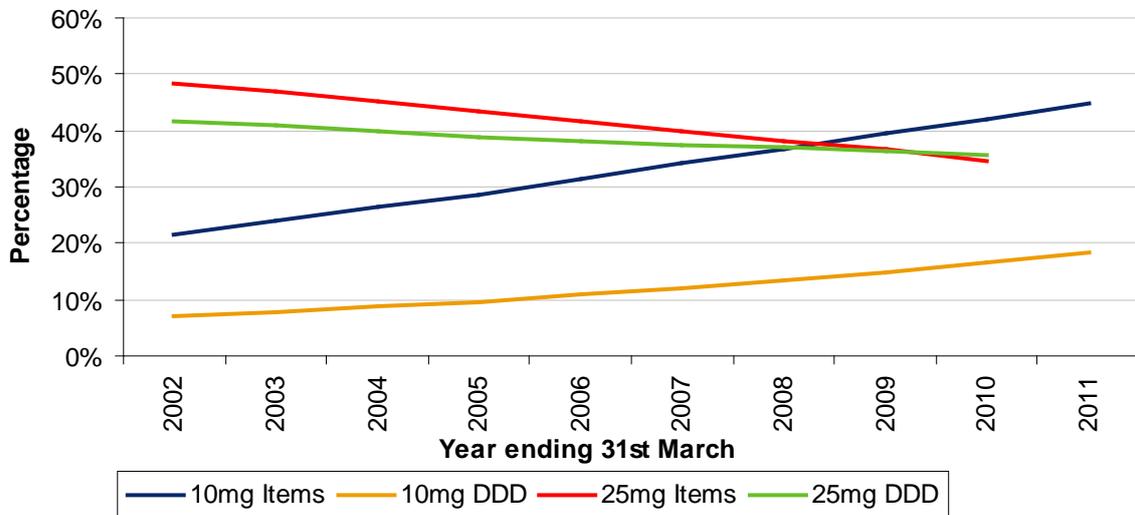
Source: Prescribing Information System, ISD Scotland

Data displayed in Figure 17 indicate that daily use is made of:

- Amitriptyline by an estimated 1.15% of the population
- Fluoxetine by an estimated 2.33% of the population
- Citalopram by an estimated 3.29% of the population
- Mirtazapine by an estimated 0.92% of the population
- Venlafaxine by an estimated 0.82% of the population.

Figure 17 shows an anomaly where Amitriptyline exhibits a low growth rate. The number of Defined Daily Doses per prescription, a function of quantity and tablet strength, has dropped from 24.1 Defined Daily Doses in 2001/02 to 19.7 Defined Daily Doses by 2010/11. This indicates either a reduction in dosage for its main licensed indication or increased prescribing for indications other than depression, where a lower dose is normally given, such as the relief of neuropathic pain, an unlicensed indication. Figure 18 looks at Amitriptyline in more detail.

**Figure 18 – Amitriptyline – Comparison of prescribed strength 10mg and 25mg tablets – 2001/02 to 2010/11**



Source: Prescribing Information System, ISD Scotland

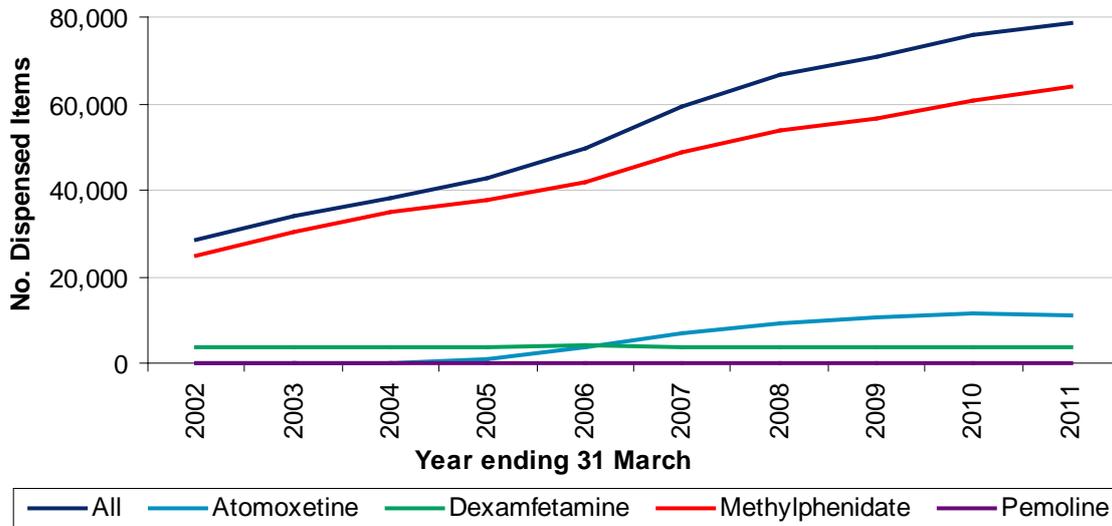
Figure 18 shows that the number of prescriptions dispensed for 10mg Amitriptyline tablets has increased from 21.6% of dispensed items in 2001/02 to 44.9% by 2010/11. At the same time prescribing of the 25mg Amitriptyline tablets declined from 49.2% to 34.8% of dispensed items. Prescribing of 50mg has also declined from 25.7% in 2001/02 to 19.9% by 2010/11. It can be inferred, therefore, that a change in practice has occurred with Amitriptyline being used to treat other indications. The data is, however, insufficient to arrive at a definitive conclusion.

## Attention Deficit Hyperactivity Disorder (ADHD)

### NHS Scotland

Figure 19 below shows the number of items dispensed in Scotland, in total and for each drug by financial year from 2001/02 to 2010/11.

**Figure 19 – Number of Dispensed Items – ADHD Drugs – 2001/02 to 2010/11**

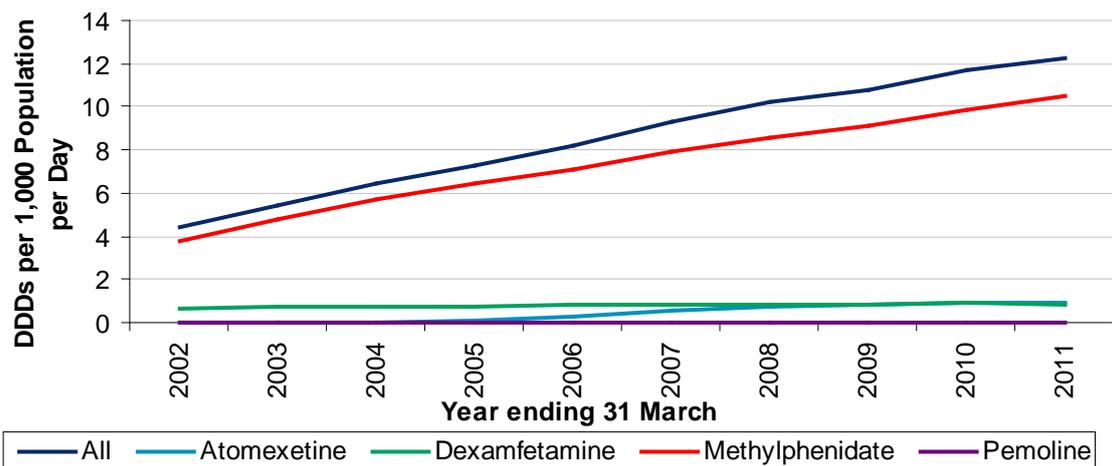


Source: Prescribing Information System, ISD Scotland

Prescribing of Methylphenidate dominates with an average year-on-year growth in the past year of 5.4%. In total the prescribing of ‘ADHD drugs’ increased by 3.8% between 2009/10 and 2010/11.

Figure 20 shows the defined daily dose given as the number of Defined Daily Doses per 1,000 population per day aged 5-14, for financial years 2001/02 to 2010/11.

**Figure 20 – Number of Defined Daily Doses per 1,000 Population (aged 5-14) per Day – ADHD Drugs – 2001/02 to 2010/11**

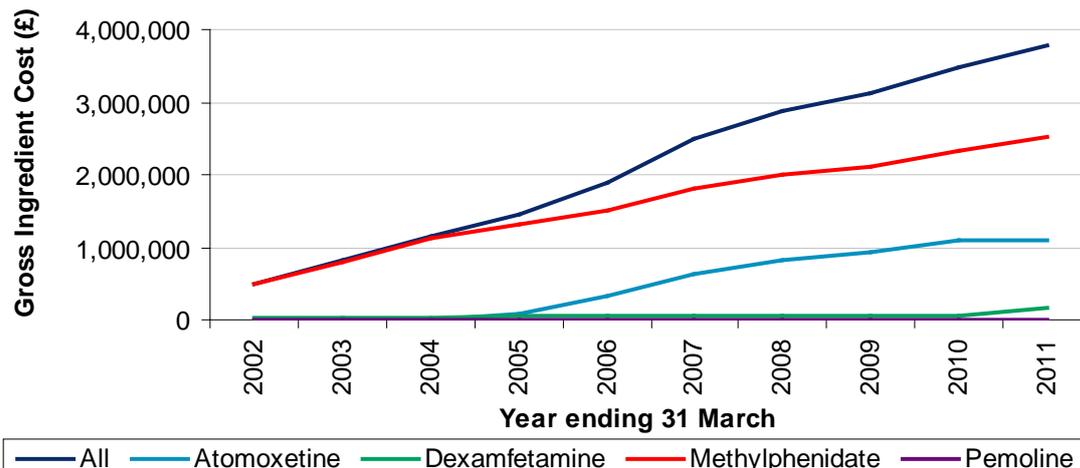


Source: Prescribing Information System, ISD Scotland

The data presented in Figure 20 indicates that that the percentage of the 'target' population making daily use of Methylphenidate has risen from 0.38% in 2001/02 to 1.05% (5,838 children) by 2010/11.

Figure 21, below, shows the Gross Ingredient Cost in total and by individual drug for the financial years 2001/02 to 2010/11.

**Figure 21 – Gross Ingredient Cost (£) – ADHD Drugs – 2001/02 to 2010/11**



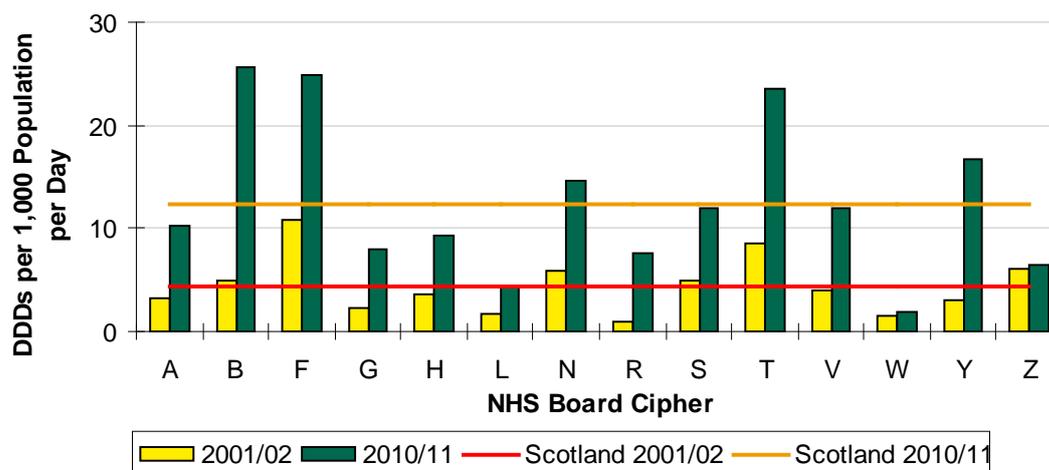
Source: Prescribing Information System, ISD Scotland

The Gross Ingredient Cost of Methylphenidate shows a marked upward shift after 2001/02. The cause of this abrupt change is the introduction in March 2002 of a Modified Release (MR) preparation of Methylphenidate - Concerta XL, followed by Equasym XL in March 2005, and Medikinet XL in February 2007. The new release mechanism offers the advantage of once-daily dose for children, compared to three previously. However, the patient benefit comes with a cost penalty as the new formulation is three to four times more expensive than the original.

### NHS Boards

Figure 22 shows prescribing of ADHD drugs by NHS Board in terms the number of Defined Daily Doses per 1,000 population per day (aged 5-14). Please refer to Table 1 that provides a translation between the NHS name and the cipher.

**Figure 23 – Number of Defined Daily Doses per 1,000 Population (aged 5-14) per Day – ADHD Drugs – 2001/02 and 2010/11**



Source: Prescribing Information System, ISD Scotland

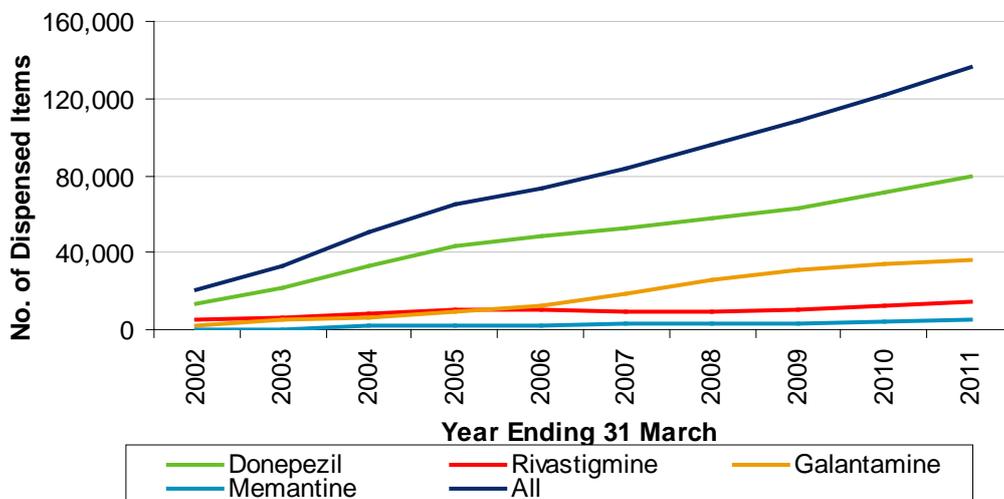
Among the NHS Boards, the highest recorded rate was in NHS Borders at 25.6 Defined Daily Doses per 1,000 population per day, equivalent to 2.56% of the 'target' population and Western Isles the lowest at 1.9 Defined Daily Doses per 1,000 population per day, equivalent to 0.19% of the 'target' population. NHS Greater Glasgow & Clyde, the largest NHS Board in Scotland, has one of the lowest prescribing rates at 7.95 Defined Daily Doses per 1,000 population per day, 0.8% of the population aged 5 to 14.

## Dementia

### NHS Scotland

Figure 23 shows the number of dispensed items, for each of the four drugs and in total for financial years 2001/02 to 2010/11.

**Figure 23 – Number of Dispensed Items – Dementia Drugs – 2001/02 to 2010/11**

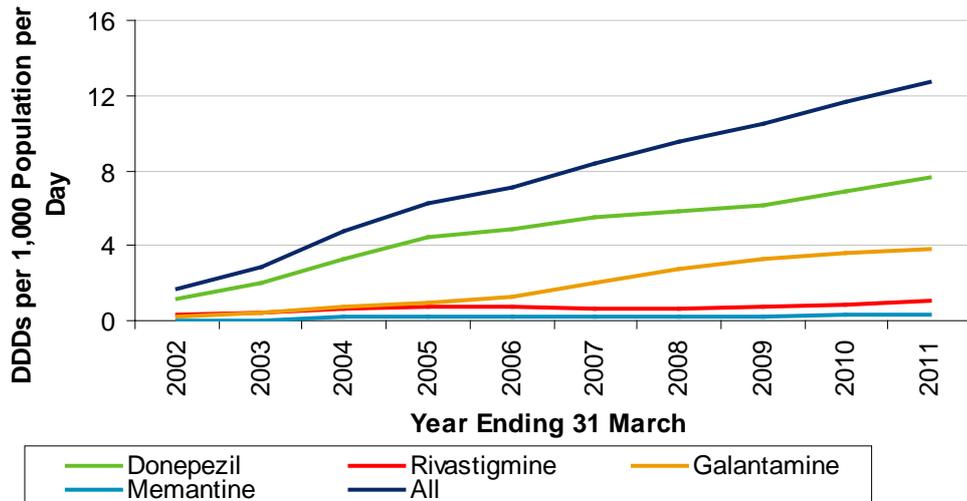


Source: Prescribing Information System, ISD Scotland

Figure 23 shows that the prescribing of dementia drugs has increased from 20,841 prescribed items in 2001/02 to 135,822 prescribed items by 2010/11. It can be seen from Figure 23 that the most commonly prescribed drug is Donepezil which has continued to rise over the last ten years.

Figure 24 shows the defined daily dose given as the number of Defined Daily Doses per 1,000 population per day aged 60+, for financial years 2001/02 to 2010/11.

**Figure 24 – Number of Defined Daily Doses per 1,000 Population (aged 60+) per day – Dementia Drugs – 2001/02 and 2010/11**

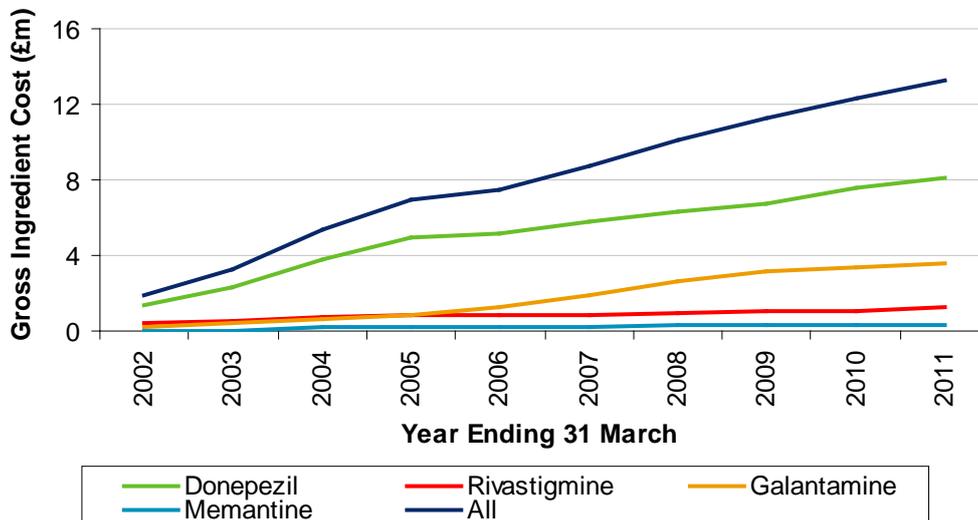


Source: Prescribing Information System, ISD Scotland

Figure 24 shows that prescribing of the drugs used in the treatment of dementia has grown from 1.7 in 2001/02 to 12.7 Defined Daily Doses per 1,000 population aged 60 or over per day in 2010/11. This equates to 1.3% of the target population being in daily receipt of one of the 'dementia drugs', that is 15,380 people.

Figure 25 below, show the Gross Ingredient Cost in total and by individual drug for the financial years 2001/02 to 2010/11.

**Figure 25 – Gross Ingredient Cost (£) – Dementia Drugs – 2001/02 to 2010/11**



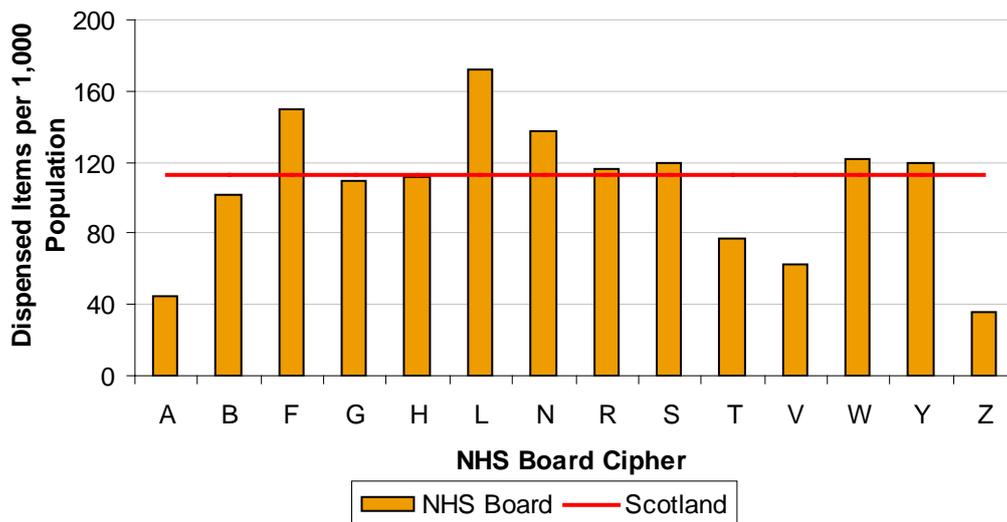
Source: Prescribing Information System, ISD Scotland

When looking at Figure 25, it has a similar pattern to that of Figure 23. The total Gross Ingredient Cost for all Dementia drugs has grown from £1.9m in 2001/02 to reach £13.3 by 2010/11. This could be attributed to the cost of Donepezil, which is still on patent, or it could be due to the associated rise in items.

## NHS Boards

Figures 26 and 27 shows prescribing of the drugs used in the treatment of dementia by NHS Board in terms the number of dispensed items per 1,000 population (ages 60+) and the number of Defined Daily Doses per 1,000 population (aged 60+) per day, respectively. Please refer to Table 1 that provides a translation between the NHS name and the cipher.

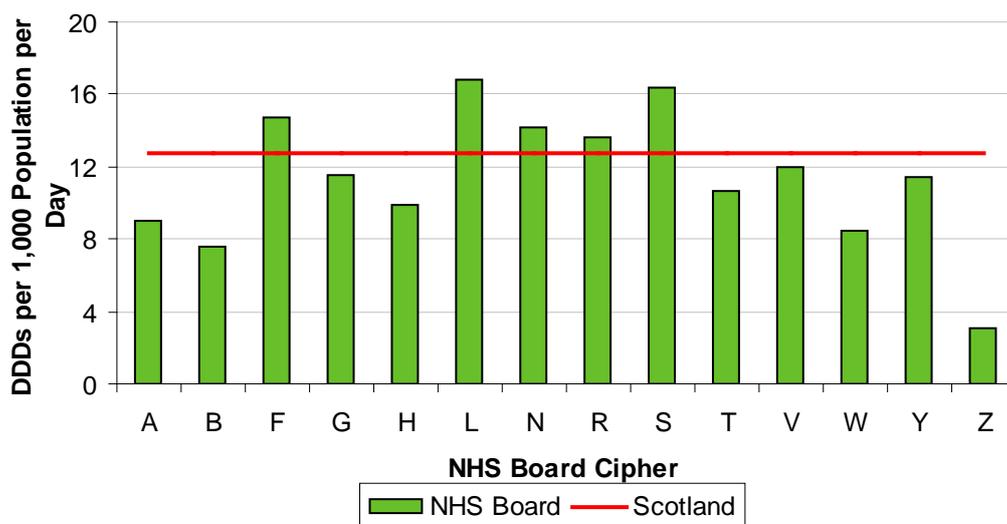
**Figure 26 – Number of Dispensed Items per 1,000 population (aged 60+) – Dementia Drugs – 2010/11**



Source: Prescribing Information System, ISD Scotland

Significant variation in prescribing occurs between the NHS Boards as shown in Figure 28, ranging from a low of 35 items per person in NHS Shetland (Z) to a high of 172 items per person for NHS Lanarkshire (L).

**Figure 27 – Number of Defined Daily Doses per 1,000 population (aged 60+) per day – Dementia Drugs – 2010/11**



Source: Prescribing Information System, ISD Scotland

The percentage of the population in 2010/11 using a dementia drug daily varies from 0.3% in NHS Shetland (Z) to 1.6% NHS Lanarkshire (L). Five boards are above the Scottish

average (1.3%):

- NHS Lanarkshire (L) – 1.7%
- NHS Lothian (S) – 1.6%
- NHS Fife (F) – 1.5%
- NHS Grampian (N) – 1.4%
- NHS Orkney (R) – 1.4%

**Table 3 – Average number of Defined Daily Doses per item**

NHS Board	Average DDD
NHS Ayrshire and Arran (A)	73.0
NHS Forth Valley (V)	67.6
NHS Tayside (T)	51.1
NHS Lothian (S)	50.0

Source: Prescribing Information System, ISD Scotland

Examining the number of defined daily doses per item shows that most boards prescribed between 33 and 41 days supply. However, four boards, as shown in table 3, prescribe in excess of this number, Ayrshire and Arran being top with an average of 73 treatment days. The extended treatment time per prescription offers an explanation as to why these Boards issue the fewest number of prescriptions (figure 26).

Protocols are in place in all Board areas for the treatment of patients with dementia. These protocols may differ in detail but are essentially the same, with all patients assessed by a specialist to determine suitability for drug treatment. Drugs may be contra-indicated in patients with certain other medical conditions or hypersensitivity to the active ingredient or inactive filler. Patients undergo regular reviews to check on the progress of the disease and to ensure that the correct dosage is being prescribed. Drug treatment may be withdrawn and replaced by alternative therapies if serious side effects develop or if the patient deteriorates to a point where treatment is no longer effective.

## Glossary

Gross Ingredient Cost (GIC)	Cost of drugs and appliances reimbursed before deduction of any dispenser discount (nb this definition differs from other parts of the UK).
Prescription item	An item is an individual product prescribed e.g.100 aspirin tablets of 300mg.
Prescription form	A prescription form that can contain up to three items.
Quantity	Quantity dispensed of an individual item e.g. 100 tablets
Defined Daily Dose (DDD)	Assumed average maintenance dose per day for a drug when used for its main indication in adults, as defined by World Health Organisation.
Approved Drug Name	As listed in BNF, being the recognised official non-proprietary title (recommended International Non-Proprietary Name - rINN).
Prescribable Item Name	The drug name written on the prescription - can be by approved name or a brand name.
British National Formulary (BNF)	A standard classification of drugs into conditions of primary therapeutic use, the aim is to provide prescribers, pharmacists and other healthcare professionals with sound up-to-date information about the use of medicines.
Prescribed Health Board	The NHS Board with which the prescriber holds a contract to prescribe, i.e. GP, Dentist, Non-medical prescriber.

## List of Tables

Table No.	Name	Time period	File & size
1	<a href="#">Hypnotics and Anxiolytics</a>	Financial Years 1993/94 to 2010/11	Excel [680kb]
2	<a href="#">Psychoses and related disorders</a>	Financial Years 1993/94 to 2010/11	Excel [3,795kb]
3	<a href="#">Antidepressants</a>	Financial Years 1993/94 to 2010/11	Excel [932kb]
4	<a href="#">Attention Deficit Hyperactivity Disorder</a>	Financial Years 1995/96 to 2010/11	Excel [3,800kb]
5	<a href="#">Dementia</a>	Financial Years 1996/97 to 2010/11	Excel [1,312kb]

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## Further Information

Further information can be found on the [Prescribing and Medicines](#) area of the ISD website.

Further information on other ISD publications and datasets can be found the on the [ISD website](#).

## Appendix

### A1 – Background Information

#### How the data is obtained

[Practitioner Services](#), a division of NHS National Services Scotland, processes all NHS prescriptions for payment of pharmacists, dispensing doctors and appliance suppliers. This gives a full record from which trends in prescribing can be investigated at a detailed level. The data includes prescribing by GPs, nurses, dentists, pharmacists and hospitals, where the latter was dispensed in the community. Hospital dispensed prescriptions are NOT included in the figures. The Information Services Division (ISD) cannot say what proportion of the drug dispensed is actually consumed. These data do NOT include products purchased "over the counter". Prescriptions processed internally by Boards for payment purposes are NOT included in these data.

#### Defined daily doses

A method of examining prescribing levels using different formulations of products (for example chewing gum, patches and tablets) are [Defined Daily Dose \(DDD\)](#) as developed by [the World Health Organisation \(WHO\)](#).

A Defined daily dose is defined as “the assumed average maintenance dose per day for a drug used on its main indication in adults”. DDD’s are a statistical measure derived from the international use of the substance in question. As British prescribing patterns may differ from the accepted international value, each DDD should be regarded as a technical value, a close approximation of an average of the actually used doses. The DDD’s are therefore not necessarily the most frequently prescribed or used doses. Each drug is assigned a DDD value, based on its active ingredient. It should be noted, however, that it is an arbitrary unit for measurement purposes and makes no pretence to be a therapeutic recommendation. The value is derived from literature, manufacturer’s recommendations and experience gained in the field. An international committee from twelve countries, including Britain, consider the evidence and assign a DDD value for a drug in its main indication. All new DDDs are reviewed after three years; existing DDDs after five years.

## A2 – Publication Metadata (including revisions details)

Metadata Indicator	Description
Publication title	NHS Scotland Prescribing – Medicines used in mental health
Description	Summary and detailed statistics on prescribing and dispensing in the community in Scotland including: Medicines used in mental health (based on BNF section 4.1, 4.2, 4.3, 4.4 and 4.11) presented for NHS Scotland and by NHS board. The number of items, gross ingredient cost and defined daily doses are shown.
Theme	Health and Social Care
Topic	Health Care Personnel, Finance and Performance
Format	Excel workbooks
Data source(s)	Prescribing Information System (PIS). All data held in PIS is sourced from Practitioner Services Division (PSD) within NHS National Services Scotland who are responsible for the remuneration and reimbursement of dispensing contractors within Scotland.
Date that data is acquired	Data is acquired on a monthly basis from PSD following payment approximately 2 calendar months after the end of the month being claimed for payment by contactors
Release date	27 September 2011
Frequency	Annual
Timeframe of data and timeliness	Data covering year to 31 March 2011
Continuity of data	Data is held in PIS for the most recent 10 years and is stored in archive files back to 1993/94. The definition of the main measures such as gross ingredient cost and number of items are unchanged over this period. Types and value of dispensing fees are agreed the Scottish Government and set annually. Details can be found in the Scottish Drug Tariff and in <a href="#">Primary Care circulars</a> issued by the Government. Drug products are first licensed as proprietary medicines but generic versions often appear once the original patent expires. This can affect the price and uptake of these drugs. The Scottish Government sets the reimbursement price of generic drug products via the <a href="#">Scottish Drug Tariff</a> which is updated and issued quarterly.
Revisions statement	Data are sourced from monthly pharmacy payments data on an ongoing basis therefore once published there is no routine requirement to revise historical data. However occasionally adjustments are made to pharmacy payments retrospectively by PSD for example due to an administrative error. Retrospective revisions can also occur the classification of drugs in the <a href="#">British National Formulary</a> (BNF). Where either of these occur and are deemed to be significant in line with ISD's Revisions policy, a revision will be made to published data. This will be notified on the website.

<p>Concepts and definitions</p>	<p>The data published in all these releases correspond to prescriptions that have been dispensed in the community in Scotland, i.e. dispensed by a pharmacy, dispensing doctor or appliance supplier. This includes prescriptions which were issued in another UK country but dispensed in Scotland. These data do not include prescription drugs that were supplied and administered to patients in a hospital setting. Prescriptions issued in hospital to patients on discharge and dispensed in the community are included. Each excel workbook contains further detailed definitions of the main measures and links to a glossary.</p>
<p>Relevance and key uses of the statistics</p>	<p>These statistics are the primary source of data used to monitor the national community drugs bill within Scotland and the pharmacy contract agreed with dispensing contractors. They are also used to monitor national and local prescribing indicators covering both the quality and efficiency of prescribing in general practice.</p>
<p>Accuracy</p>	<p>The data is sourced from a payment system and routine monthly checks are carried out by PSD on a random sample of approximately 5% of prescription payments. These check all data captured for payment and the accuracy of the payment calculation and have a target accuracy of 98% which is routinely met. Data that is captured but is not mandatory for payment purposes can be of lower quality; principally this includes the prescriber code which links a prescription back to the individual prescriber e.g. GP and their organisation including NHS Board. Routine monitoring of unallocated prescriptions is carried out and correct codes are applied before publication. This ensures that unallocated prescriptions account for under 2% of all prescriptions. For remaining unallocated prescriptions, the prescribing NHS Board is assumed to be the same as the dispensing NHS Board.</p>
<p>Completeness</p>	<p>The Prescribing Information System holds information on 100% of NHS Scotland prescriptions dispensed within the community and claimed for payment by a pharmacy contractor (i.e. pharmacy, dispensing doctor or appliance supplier). It does not include data on prescriptions dispensed but not claimed (likely to be very small) or prescriptions prescribed but not submitted for dispensing by a patient. Some research has estimated these latter prescriptions to account for around 6% of all prescriptions issued to patients. Of course it is not possible to determine from payment data how much of the medicine dispensed to patients is actually taken in accordance with dosage instructions.</p>
<p>Comparability</p>	<p>The main measures of drug ingredient cost and volumes of items dispensed in the community are comparable across the UK countries. However it should be noted that the Gross Ingredient Cost (GIC) within Scotland is equivalent to the Net Ingredient Cost (NIC) in England, i.e. the reimbursement cost of drugs before any pharmacy discounts</p>

	are applied. Also each country determines its own dispensing fees based on separate contractual arrangements with dispensing contractors in each country. A common formulary called the <a href="#">British National Formulary (BNF)</a> is used to classify drugs based on therapeutic use.
Accessibility	It is policy of ISD Scotland to make its websites and products accessible according to <a href="#">published guidelines</a> .
Coherence and clarity	All prescribing tables are accessible via the <a href="#">ISD website</a> . Prescribing statistics are presented within excel spreadsheets for NHS Scotland and where appropriate broken down by NHS Board.
Value type and unit of measure	The main units of measure of drug reimbursement costs are Gross Ingredient Cost (GIC) and Net ingredient cost (NIC) quantity. The latter takes account of pharmacy discounts, the rates for which are set by the Scottish Government in the Scottish Drug Tariff. There are a large number of individual dispensing remuneration fees paid to dispensing contractors details of which can be found in the Scottish Drug Tariff. The main measures of drug volume are items (the number of individual drug items on a prescription form), quantity (the total number of tablets, capsules etc), and defined daily doses (DDDs - estimated average daily maintenance doses for a total quantity of prescribed). Further details and definitions can be found in the glossary.
Official Statistics designation	National Statistics (Legacy designation, awaiting final designation by UK statistics Authority).
UK Statistics Authority Assessment	<a href="#">Assessment</a> by UK Statistics Authority completed and assessment report issued.
Help email	<a href="mailto:NSS.isdprescribing@nhs.net">NSS.isdprescribing@nhs.net</a>
Date form completed	8 September 2011

## **A3 – Early Access details (including Pre-Release Access)**

### **Pre-Release Access**

Under terms of the "Pre-Release Access to Official Statistics (Scotland) Order 2008", ISD are obliged to publish information on those receiving Pre-Release Access ("Pre-Release Access" refers to statistics in their final form prior to publication). The standard maximum Pre-Release Access is five working days. Shown below are details of those receiving standard Pre-Release Access and, separately, those receiving extended Pre-Release Access.

#### **Standard Pre-Release Access:**

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

#### **Extended Pre-Release Access**

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

Scottish Government Health Department (Analytical Services Division)