

# Publication Report



## Medicines for Mental Health

Financial Years 2003/04 to 2012/13

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## Contents

About ISD.....	2
Official Statistics.....	2
Introduction .....	3
Hypnotics & Anxiolytics .....	3
Antipsychotics and related drugs.....	5
Antidepressants.....	6
Drugs used for Attention Deficit Hyperactivity Disorder (ADHD) .....	7
Drugs for Dementia .....	8
Patient Based Analysis & Defined Daily Doses .....	9
References .....	11
Key points .....	12
Results and Commentary.....	13
Hypnotics and Anxiolytics.....	13
Antipsychotics and related drugs.....	17
Antidepressants.....	20
Drugs used for Attention Deficit Hyperactivity Disorder (ADHD) .....	24
Drugs for Dementia .....	27
Glossary.....	30
List of Tables.....	31
Contact.....	32
Further Information.....	32
Rate this publication.....	32
A1 – Background Information .....	33
A2 – Publication Metadata (including revisions details).....	34
A3 – Early Access details (including Pre-Release Access) .....	37
A4 – ISD and Official Statistics .....	38

## 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 Mental Health Strategy 2012-15](#) aims to improve mental health services and to promote mental wellbeing and prevent mental illness. There are seven key themes to the strategy:

- Working more effectively with families and carers
- Embedding more peer to peer work and support
- Increasing the support for self-management and self help approaches
- Extending the anti-stigma agenda forward to include further work on discrimination
- Focusing on the rights of those with mental illness
- Developing the outcomes approach to include personal, social and clinical outcomes
- Ensuring that we use new technology effectively as a mechanism for providing information and delivering evidence based services

Five main categories of medicines for the treatment of mental health problems are covered within this publication; Hypnotics & Anxiolytics, Antipsychotics and related drugs, Antidepressants, Drugs used for Attention Deficit Hyperactivity Disorder (ADHD) and Drugs for Dementia.

Please note: ISD is not responsible for the contents of external Internet sites

## Hypnotics & Anxiolytics

### Background

Hypnotics and anxiolytics are used to treat insomnia and anxiety respectively. Insomnia is difficulty getting to sleep or staying asleep for long enough to feel refreshed the next morning, despite there being 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.

Anxiety is a feeling of unease, such as worry or fear, that can be mild or severe. Everyone experiences feelings of anxiety at some point in their life and 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 insomnia and anxiety can be found at <http://www.nhsinform.co.uk/mentalhealth>

### Treatment

Hypnotics and Anxiolytics are indicated for the treatment of anxiety and insomnia as 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.

## Antipsychotics and related drugs

### Background

Antipsychotic drugs are used to treat psychoses and related disorders. These 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](#)

### Treatment

Section 4.2 of the [British National Formulary \(BNF\)](#) lists 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 were 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 Extrapyrimal (EPS) side effects (tremors, muscle spasms, irregular muscle movements etc.). EPS side effects are less evident with the low potency drugs.
- 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 was withdrawn in 2001 after concern was expressed about cardiac effects), Amisulpride and Quetiapine in 1997, Zolopine in 1998, with the latest drug, Aripiprazole, coming on to the market in 2004.

## Antidepressants

### Background

Antidepressant drugs are used to treat depression. Health professionals use the words depression, depressive illness or clinical depression to refer to depression. It is a serious illness and very different from the common experience of feeling unhappy, miserable or fed up for a short period of time. Depressed people may have feelings of extreme sadness that can last for a long time. These feelings are severe enough to interfere with daily life, and can last for weeks or months, rather than days.

Information on depression, its treatment and prevalence, can be found at

[Depression Alliance](#).

### 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, but also have 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 high risk 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) and a range of other conditions). There is therefore no guarantee that the statistics on these drugs relate solely to prescribing for depression.

## Drugs used for 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; behaviours that often prevent children from learning and socialising. ADHD is sometimes referred to as Hyperkinetic Disorder (HD).

The prevalence of ADHD among males is thought to be four times that of females<sup>1</sup>, which concurs with the published figures of patients by gender in this report. [NHS Healthcare Improvement Scotland](#) have recently completed a follow-up review of services for children and young people 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>)
- Amfetamines (Dexafetamine Sulphate (Dexedrine<sup>®</sup>) & Lisdexamfetamine (Elvanse<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>).

## Drugs for 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> 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 Scotland](#) web site and that of [Alzheimer's Society](#).

### 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. The [Scottish Medicines Consortium](#) had recommended that Memantine should not be used within the NHS in Scotland but this was superseded by [National Institute for Health and Clinical Excellence \(NICE\) guidance](#) issued in March 2011. The NICE Guidance recommended Memantine for managing both moderate and severe Alzheimer's in certain circumstances.

## Patient Based Analysis & Defined Daily Doses

Patient Based Analysis was published in this report at Scotland level for the first time in September 2012. DDD trend data at NHS Board level has been retained to allow comparisons between NHS Boards (and with other countries) and to show longer trends over time. The inclusion of patient information is intended to further inform health decision-making in NHS Scotland.

### Patient Based Analysis

Patient based analysis has been made possible through the recent availability of comprehensive patient identifiable data. All NHS patients have a unique Community Health Index (CHI) number which makes it possible to identify which prescription items have been dispensed for individual patients. Prior to April 2009, the proportion of prescriptions with a valid CHI number recorded was not high enough to make patient based analysis possible. For medicines used in mental health, CHI capture rates have improved, becoming high enough to permit accurate patient analyses since financial year 2009/10. The CHI capture rate for each topic contained within this report is as follows:

**Table 1: CHI Completeness rates for Scotland by drug type 2009/10 to 2012/13**

Topic	2009/10	2010/11	2011/12	2012/13
Hypnotics & Anxiolytics	90.8%	92.7%	93.2%	94.5%
Psychoses & related disorders	91.1%	93.8%	94.3%	95.1%
Antidepressants	93.4%	95.4%	95.9%	97.0%
ADHD	87.6%	91.0%	91.8%	91.4%
Dementia	84.0%	87.4%	87.0%	88.3%

The CHI completeness table shows the percentage of dispensed items that have a valid CHI number attached and are therefore included in the patient analysis. This rate should be considered when interpreting any trends in patient data (see comments on this in the Interpretation of Results section below). CHI completeness is highest for GP prescribing. The rate is lower for some types of drugs (such as dementia drugs) because these are often prescribed through clinics rather than GPs.

The patient count for any given year shows the total number of patients who have been dispensed at least one prescription item during the course of that year.

### Defined Daily Doses

Defined Daily Doses 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 adults”. The WHO states that “It should be emphasised that the defined daily dose is a unit of measurement and does not necessarily reflect the recommended or Prescribed Daily Dose”. DDDs do not provide an exact picture of drug use, but can be used to give a rough estimate of levels of drug consumption. By providing a fixed unit of measurement they allow the trend of drug consumption over time or for other areas or countries to be compared. Occasionally the WHO recommended DDD for a drug will change. The data is presented by current DDD for all years in order to allow meaningful trend analysis.

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

### Advantages of Patient Analyses

In the past, the number of daily maintenance doses dispensed was used to provide an estimation of the proportion of population making daily use of these drugs. For example, 10 DDDs per 1,000 population per day correspond to a daily use of the drug by 1% of the population. This is an estimate based on the assumed daily maintenance dose and so does not show the actual proportion of the population being prescribed a particular medicine. Due to the development of CHI capture rates, it is now possible to carry out accurate patient based analyses, thereby making available information on the actual number of patients who have been dispensed a particular drug.

### Interpretation of Results

When interpreting trends in patient counts over time, the underlying CHI completeness rate must also be considered. It is difficult to identify with certainty how much impact an increasing CHI completeness has on the number of patients identified. However, the evidence available suggests that the impact is small when considering the scale of change in CHI completeness presented in this report. This should not generally be significantly affecting trends in patient counts. CHI capture is based on number of items with a valid CHI attached; in reality, a single patient will have some items with a valid CHI and others without. The count of patients looks for 'at least one' item dispensed in a given period and analysis shows that most patients will be counted, even if not all items dispensed to them had a valid CHI attached.

**It should be noted that patient counts and DDDs are measuring different things.** The patient based figure counts the number of people who have been prescribed the drug within the time period (in this case a year), whereas the DDD is an estimate of the average number of people taking it on any one day during the year. The patient based figure will usually be higher, since some people might only be on the drugs for a short period or at a low dose.

For example, in the DDD analysis, one person on a maintenance dose for 12 months will count the same as six people taking this for 2 months each. The patient based analysis will count all six people.

It should also be noted that National Records of Scotland (NRS) population estimates are taken from a fixed point in time (as at 30<sup>th</sup> June), while patients counts are based on the total number of patients that were dispensed an item over the course of a full year. It is not appropriate to use the GRO population estimates and the patient counts to derive the proportion of the population receiving drug treatment for a particular condition.

The population estimates for mid-2011 and mid-2012 are based on the 2011 census. Estimates prior to this are currently only available based on the 2001 census. Consequently caution should be taken when comparing data from 2003 to 2010 with data for 2011 and 2012.

## 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 CHI capture rate in 2012/13 for each topic contained within this report is:
  - Hypnotics and Anxiolytics – 94.5%
  - Psychoses and Related Disorders – 95.1%
  - Antidepressants – 97.0%
  - ADHD – 91.4%
  - Dementia – 88.3%
- In 2012/13, 358,273 patients were dispensed a hypnotic, anxiolytic or barbiturate, 1.5% fewer than in 2011/12.
- The total cost of dispensing a hypnotic, anxiolytic or barbiturate increased from £7.11 million to £8.77 million (an increase of 23.3%) between 2011/12 and 2012/13.
- In Scotland a total of 80,479 patients were prescribed drugs for psychoses and related disorders in 2012/13, an increase of 2.6% compared to 2011/12.
- The total number of prescription items dispensed for psychoses and related disorders increased by 2.3% between 2011/12 and 2012/13, while the gross ingredient cost fell by 43.0% over the same time period.
- In 2012/13, 747,158 patients in Scotland were dispensed an antidepressant, an increase of 4.0% compared to 2011/12.
- The total cost of dispensing antidepressants was £29.5m, a fall of 5.9% on the cost in 2011/12.
- In 2012/13, 7,918 patients were dispensed a drug for ADHD, of which 81% were male and 19% female.
- In Scotland a total of 19,763 patients were dispensed a drug for dementia in 2012/13. This is an increase of 12.6% compared to 2011/12 (17,546 patients) and an increase of 39.9% since 2009/10 (14,122 patients).

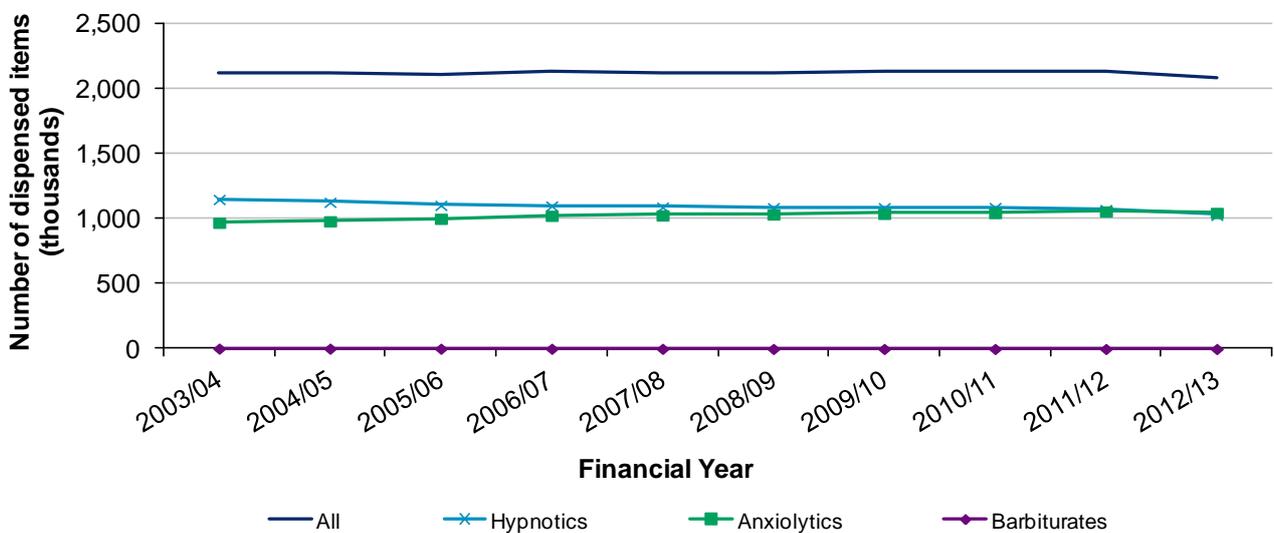
## Results and Commentary

### Hypnotics and Anxiolytics

#### NHS Scotland

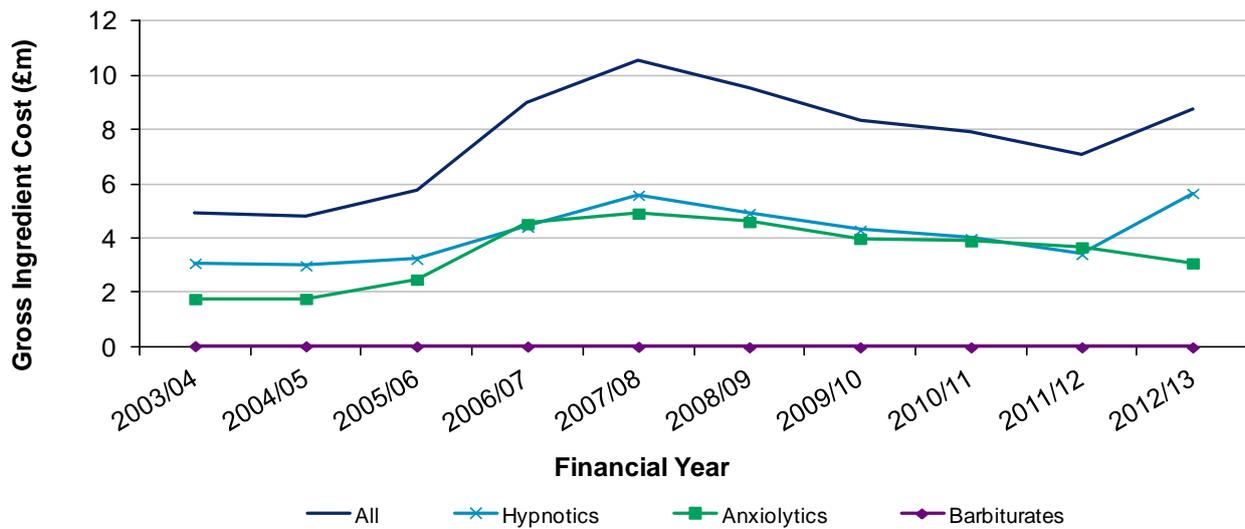
The total number of hypnotic and anxiolytic prescription items dispensed fell slightly between 2011/12 and 2012/13 (from 2.13 to 2.08 million items; a decrease of 2.6%). However, the overall number of items dispensed has remained largely stable over the last ten years (Figure 1).

**Figure 1: Number of dispensed items (thousands) – Hypnotics and Anxiolytics – 2003/04 to 2012/13**



The gross ingredient cost for hypnotics and anxiolytics has shown a lot more fluctuation than the number of dispensed items. The total gross ingredient cost for hypnotics and anxiolytics increased from £7.11m to £8.77m (an increase of 23.3%) between 2011/12 and 2012/13. Prior to 2012/13, the gross ingredient cost had been falling since 2007/08 (Figure 2). The increase this year is due in part to the higher price of Temazepam because it was in short supply during 2012/13. The sharp movement shown between 2005/06 and 2007/08 was due to the process of price re-alignment (Figure 2).

**Figure 2: Gross Ingredient Cost (£) – Hypnotics and Anxiolytics – 2003/04 to 2012/13**



The total number of Defined Daily Doses per 1000 population dispensed hypnotics and anxiolytic drugs has fallen in Scotland over the past ten years: from 37.3 in 2003/04 to 29.1 in 2012/13.

As mentioned in the introduction, patient level data is available for the past four years only. The CHI capture rate for hypnotics and anxiolytics in 2012/13 was 94.5%. It has been increasing year on year since 2009/10 (Table 2).

**Table 2: CHI Capture rate – Hypnotics and Anxiolytics**

Topic	2009/10	2010/11	2011/12	2012/13
Hypnotics & Anxiolytics	90.8%	92.7%	93.2%	94.5%

In Scotland a total of 358,273 patients were prescribed a hypnotic or anxiolytic drug in 2012/13. This is slightly less than in 2011/12, a fall of 1.5% (from 363,823 patients in 2011/12) (Table 3). The patient level data demonstrates a similar trend to the data on the total number of items dispensed shown in Figure 1.

**Table 3: Patients by Gender – Hypnotics and Anxiolytics – 2009/10 to 2012/13**

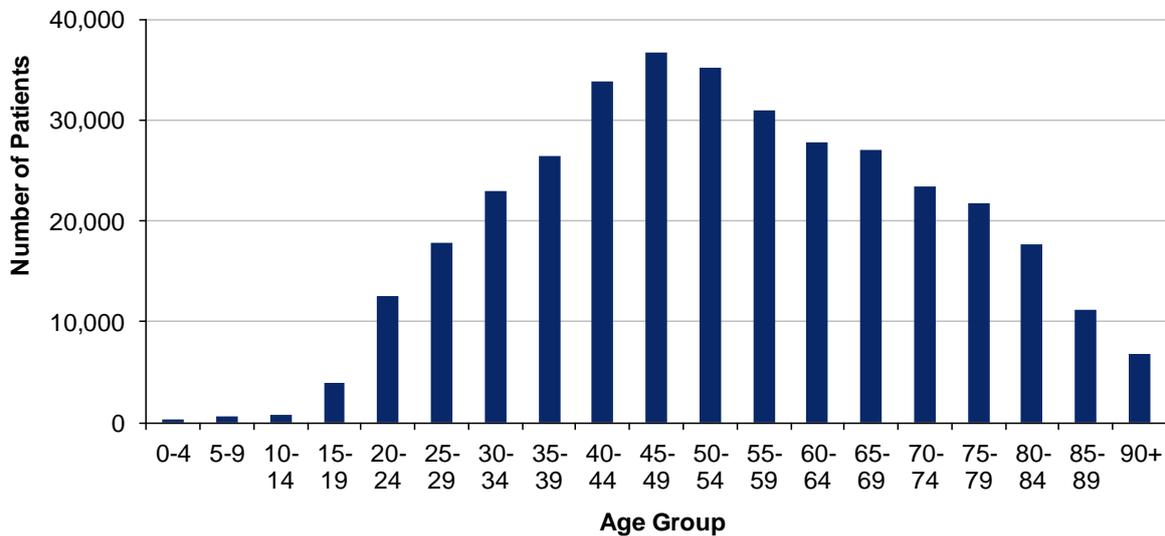
Financial Year	Total	Male	Female
2009/10	350,357	126,341	224,016
2010/11	358,588	129,294	229,294
2011/12	363,823	131,659	232,164
2012/13	358,273	130,326	227,947

In 2012/13, 63.6% (227,947) of patients who received treatment with a hypnotic and anxiolytic drugs were female while 36.4% (130,326) were male. This is consistent with previous years for which data are available (Table 3).

Hypnotics and anxiolytics are, in general, licensed for patients aged 15 years and over, however items can be prescribed 'off label' based on specialist recommendation. Figure 3

shows that from the age of license (15yrs +) the age profile of patients who received a hypnotic or anxiolytic in 2012/13 peaks at the age group '45-49' (36,783 patients) and then steadily decreases as patients get older (Figure 3). This pattern by age group is also seen for previous years.

**Figure 3: Patients by Age Group – Hypnotics and Anxiolytics – 2012/13**

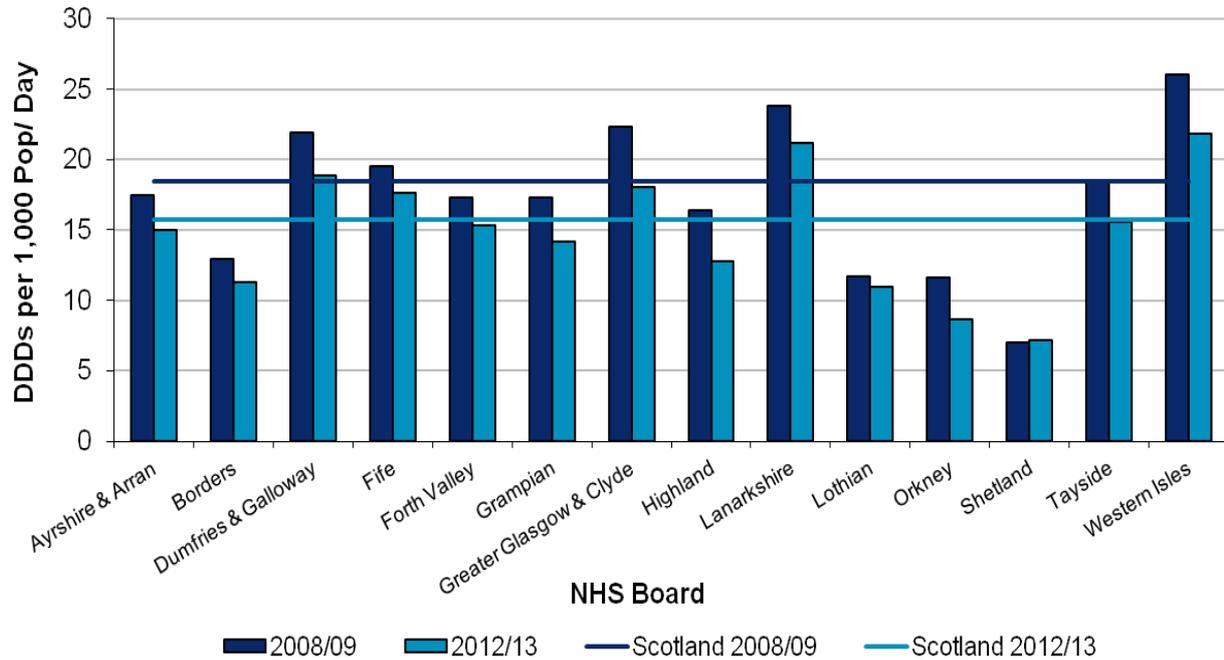


### NHS Board

Information on prescribing for hypnotics and anxiolytic drugs at NHS Board level 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 of insomnia and anxiety, respectively.

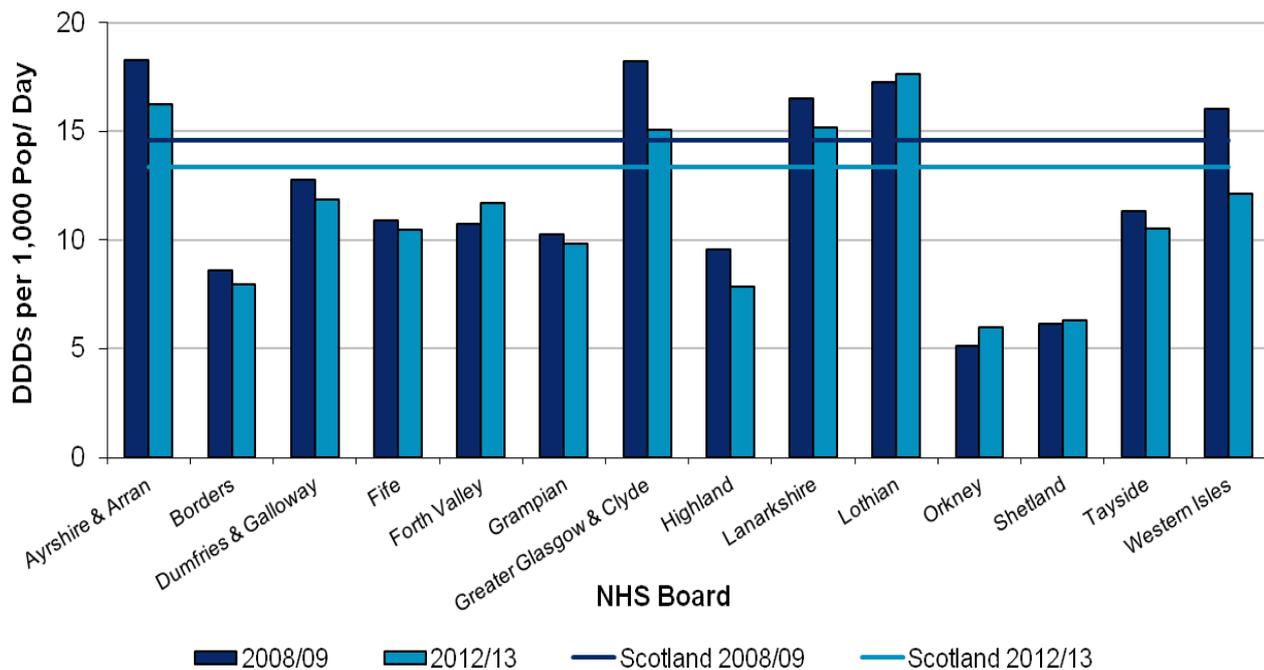
All NHS Boards apart from NHS Shetland showed a reduction in the prescribing of Hypnotics when comparing the number of DDDs per 1,000 population per day for the period 2008/09 and 2012/13. The largest reduction was recorded by NHS Greater Glasgow & Clyde (down from 22.3 DDDs per 1,000 population per day in 2008/09 to 18.0 DDDs in 2012/13). NHS Shetland has been, and remains the lowest 'user' of Hypnotics, dispensing 7.2 DDDs per 1,000 population per day in 2012/13, although this is a slight increase from 7.0 DDDs in 2008/09 (Figure 4).

**Figure 4: Hypnotics – Number of Defined Daily Doses per 1,000 Population (aged 15+) per Day– 2008/09 and 2012/13**



NHS Boards show a varying trend in the prescribing of Anxiolytics in the last five years, with most boards showing a slight fall. The largest fall occurred in NHS Western Isles, where the number of DDDs dispensed per 1,000 population per day fell from 16.0 daily doses to 12.1 daily doses between 2008/09 and 2012/13. In contrast NHS Forth Valley’s usage increased from 10.8 to 11.7 DDDs per 1,000 population per day over the same period (Figure 5).

**Figure 5: Anxiolytics – Number of Defined Daily Doses per 1,000 Population (aged 15+) per Day – 2008/09 and 2012/13**



## Antipsychotics and related drugs

### NHS Scotland

The total number of prescription items dispensed for psychoses and related disorders increased between 2011/12 and 2012/13 (from 817,937 to 836,756 items; an increase of 2.3%). Over the last ten years the total number of dispensed items has increased by 31.8% (from 634,702 items in 2003/04) (Figure 6).

**Figure 6: Number of dispensed items (thousands) – Psychoses and related disorders – 2003/04 to 2012/13**

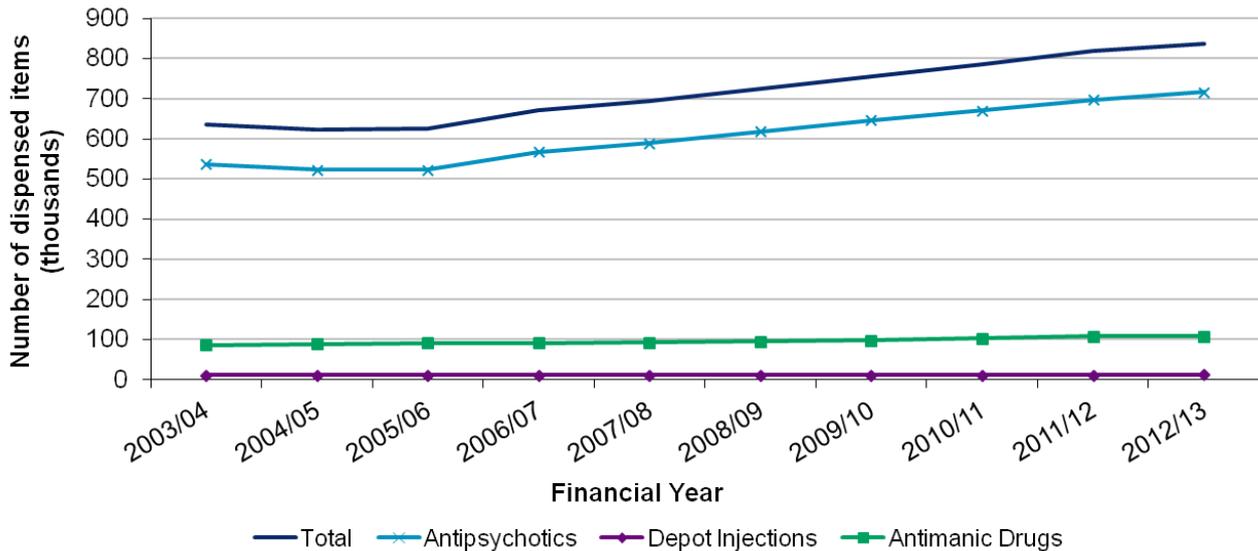
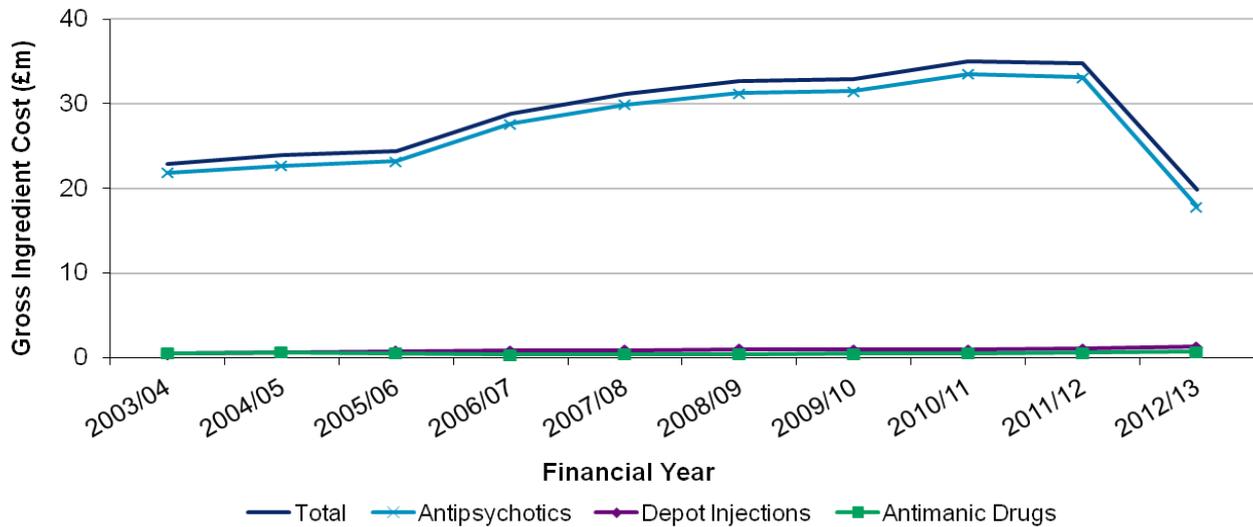


Figure 7 shows that the Gross Ingredient Cost of drugs for Psychoses and related disorders (BNF 4.2) has decreased by 43.0% from £34.7 million in 2011/12 to £19.8 million in 2012/13. This decrease is due to the cost of antipsychotic drugs (BNF 4.2.1) reducing from £33.1 million in 2011/12 to £17.8 million in 2012/13 (Figure 7). This large decrease is not in line with the trend for the number of items dispensed, which is rising (Figure 6), but is due to the drugs Olanzapine and Quetiapine coming out of patent. Olanzapine came out of patent in September 2011 and generic prices applied from January 2012, while Quetiapine came out of patent in March 2012 and generic prices applied from July 2012. The Gross Ingredient cost of Olanzapine fell from £10.5 million in 2011/12 to £1.6 million in 2012/13 while Quetiapine fell from £14.7 million in 2011/12 to £7.9 million in 2012/13.

The gross ingredient cost for depot injections (BNF 4.2.2) increased by 24.5% from £1.0m in 2011/12 to £1.3m in 2012/13, while the antimanic drugs (BNF 4.2.3) increased by 15.6% from £0.6m to £0.7m during the same time period (Figure 7).

**Figure 7: Gross Ingredient Cost (£) – Psychoses and related disorders – 2003/04 to 2012/13**



The total number of Defined Daily Doses per 1,000 population dispensed of drugs for psychoses and related disorders has increased in Scotland over the past ten years: from 8.4 in 2003/04 to 10.3 in 2012/13.

As mentioned in the introduction, patient level data is available for the past four years. The CHI capture rate for drugs used in the treatment of psychoses and related disorders in 2012/13 was 95.1%. It has been increasing year on year since 2009/10 (Table 4).

**Table 4: CHI Capture rate – Psychoses and Related Disorders**

Topic	2009/10	2010/11	2011/12	2012/13
Psychoses & related disorders	91.1%	93.8%	94.3%	95.1%

In Scotland a total of 80,479 patients received treatment for psychoses and related disorders in 2012/13. This is an increase of 2.6% compared to 2011/12 (78,471 patients) and an increase of 10.5% since 2009/10 (72,881 patients) (Table 5)

**Table 5: Patients by Gender – Psychoses and Related Disorders – 2009/10 to 2012/13**

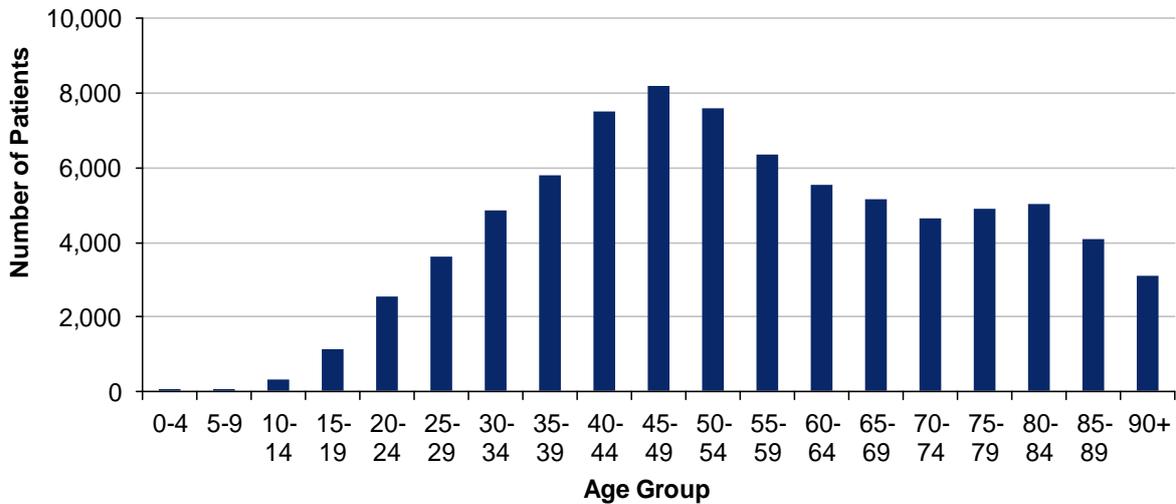
Financial Year	Total	Male	Female
2009/10	72,811	32,937	39,874
2010/11	75,770	34,513	41,257
2011/12	78,471	35,879	42,592
2012/13	80,479	36,920	43,559

In 2012/13, 54% (43,559) of patients who received treatment with a hypnotic and anxiolytics were female while 46% (36,920) were male. This is consistent with previous years

From the age of license (15yrs +) the age profile of patients who received a drug for psychoses and related disorders in 2012/13 peaks at the age group '45-49' (8,195 patients)

and then generally decreases as patients get older (Figure 8). This pattern by age group is also seen for previous years.

**Figure 8: Patients by Age Group – Psychoses & Related Disorders – 2012/13**

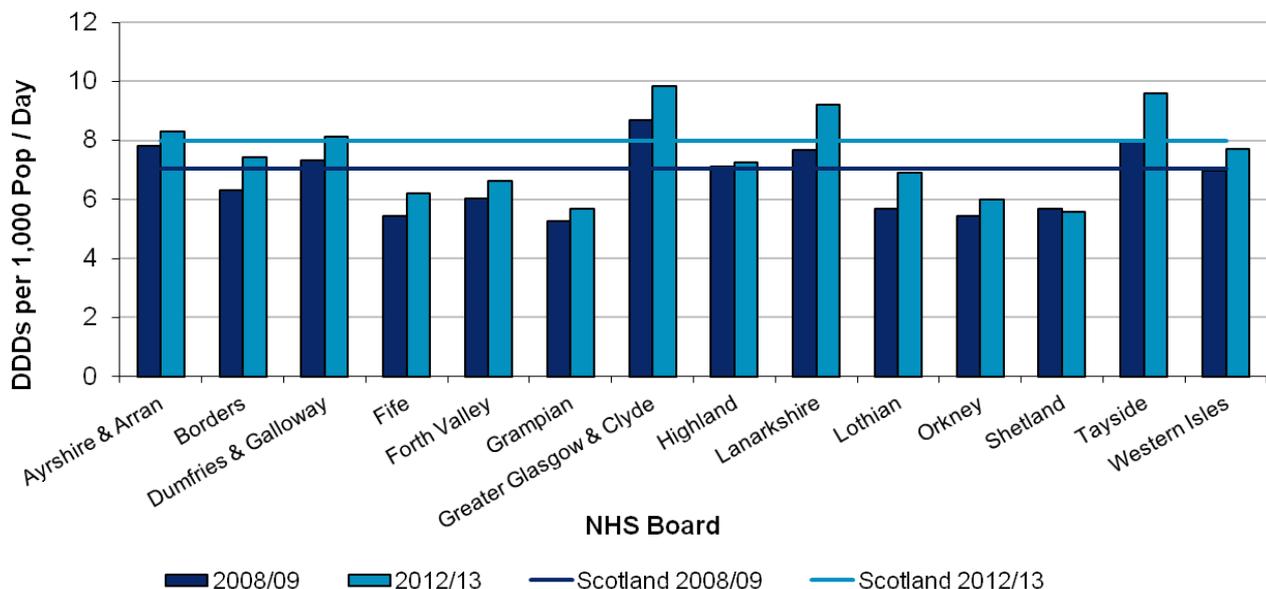


### NHS Board

As the majority of the drugs used in the treatment of psychoses and related disorders are antipsychotic drugs (BNF section 4.2.1), only these drugs are presented by NHS Boards for 2008/09 and 2012/13 in Figure 9.

All NHS Boards except NHS Shetland show increased prescribing of Antipsychotic drugs since 2008/09. The use of Antipsychotic drugs (BNF 4.2.1) has increased from 7.0 to 8.0 DDDs per 1,000 population per day between 2008/09 and 2012/13. Five of the fourteen NHS Boards prescribed above the 2012/13 national averages for Antipsychotic drugs (BNF 4.2.1), with NHS Greater Glasgow & Clyde being the highest prescriber at 9.8 DDDs per 1,000 population per day (where the population is that aged 15 and over) (Figure 9).

**Figure 9: Antipsychotic Drugs (BNF 4.2.1) – Number of Defined Daily Doses per 1,000 Population (age 15+) per Day – 2008/09 and 2012/13**

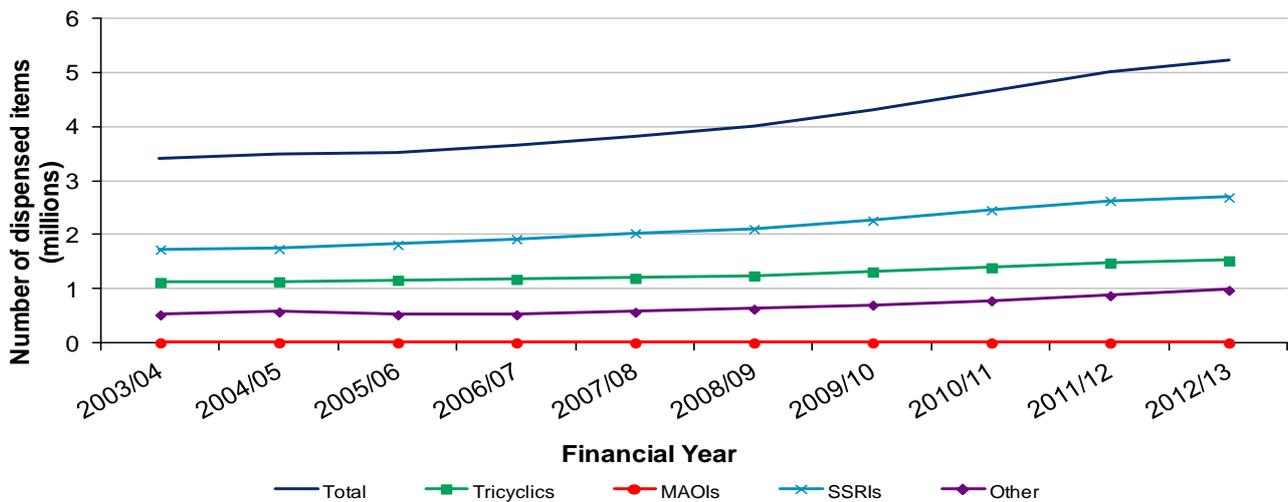


## Antidepressants

### NHS Scotland

The total number of antidepressant prescription items dispensed increased by 4.1% between 2011/12 (5.0 million items) and 2012/13 (5.2 million items). It has been increasing fairly consistently over the last ten years, rising by 53.3% overall (from 3.4 million items in 2003/04) (Figure 10).

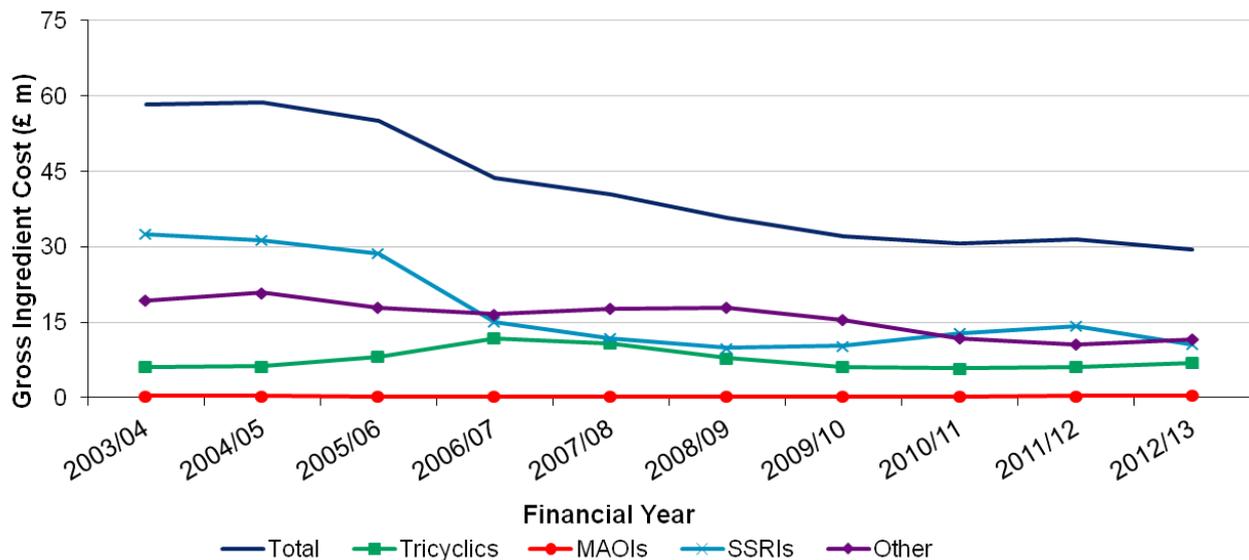
**Figure 10: Number of dispensed items (thousands) – Antidepressants – 2003/04 to 2012/13**



While the total number of prescription items dispensed has increased over the last ten years, the gross ingredient cost for antidepressants has fallen. Overall it fell by 49% from £58.2m in 2003/04 to £29.5m in 2012/13 (Figures 10 & 11).

Over the last year the gross ingredient cost for antidepressants has fallen by 5.9% from £31.4m in 2011/12 to £29.5m in 2012/13 (Figure 11).

**Figure 11: Gross Ingredient Cost (£) – Antidepressants – 2003/04 to 2012/13**



The total number of DDDs per 1,000 population of antidepressants dispensed has increased in Scotland in the last ten years: from 81.0 in 2003/04 to 122.9 in 2012/13.

As mentioned in the introduction, patient level data is available for the past four years. Data on the total number of patients dispensed an antidepressant should be interpreted with great caution - it does not equate to people being treated for depression. This is because many drugs classified as antidepressants can also be used for conditions other than depression; including neuropathic pain, post-traumatic stress disorder and anxiety disorders.

In Scotland a total of 747,158 patients received treatment with an antidepressant in 2012/13. The CHI capture rate for Antidepressants in 2012/13 was 97.0%. It has been increasing year on year since 2009/10 (Table 6).

**Table 6: CHI Capture rate – Antidepressants**

Topic	2009/10	2010/11	2011/12	2012/13
Antidepressants	93.4%	95.4%	95.9%	97.0%

This is an increase of 4.0% compared to 2011/12 (718,330 patients), and an increase of 17.9% since 2009/10 (633,791 patients) (Table 7).

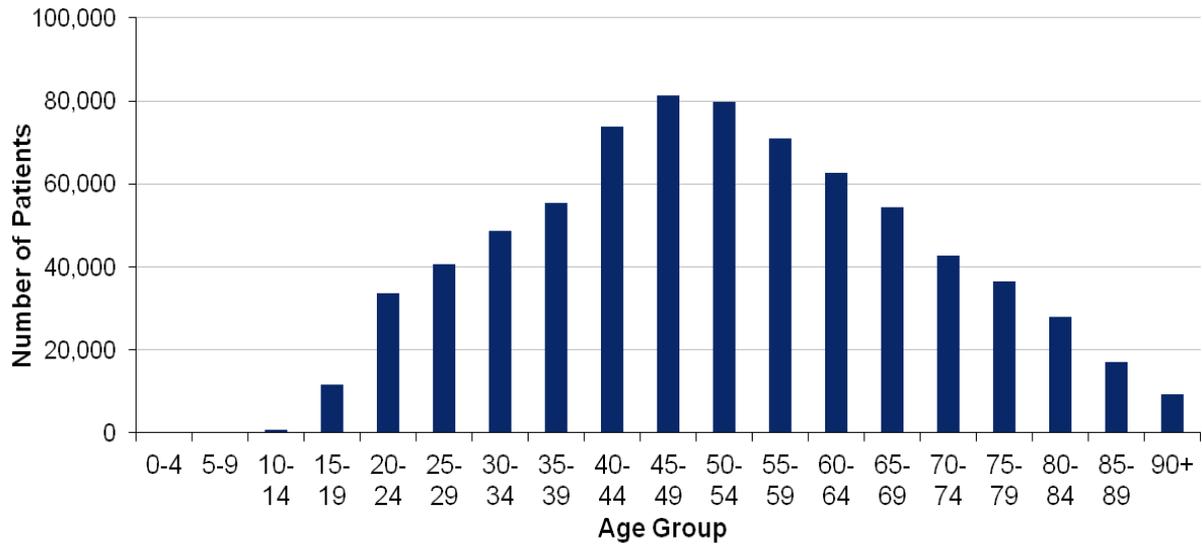
**Table 7: Patients by Gender – Antidepressants – 2009/10 to 2011/12**

Financial Year	Total	Male	Female
2009/10	633,791	204,119	429,672
2010/11	675,948	219,071	456,877
2011/12	718,330	234,899	483,431
2012/13	747,158	246,925	500,233

In 2012/13, 67.0% of patients who received antidepressant treatment were female (500,233 patients) while 33.0% were male (246,925 patients). This is consistent with previous years.

From the age of license (15 yrs +) the age profile of patients who received an antidepressant in 2012/13 peaks at the age group '45-49' (81,321 patients) and then steadily decreases as patients get older. This is closely followed by the age grouping '50-54' (79,867 patients) and '40-44' (73,913 patients) during the same year (Figure 12). This pattern by age group is also seen for previous years.

**Figure 12: Patients by Age Group – Antidepressants – 2009/10 to 2011/12**

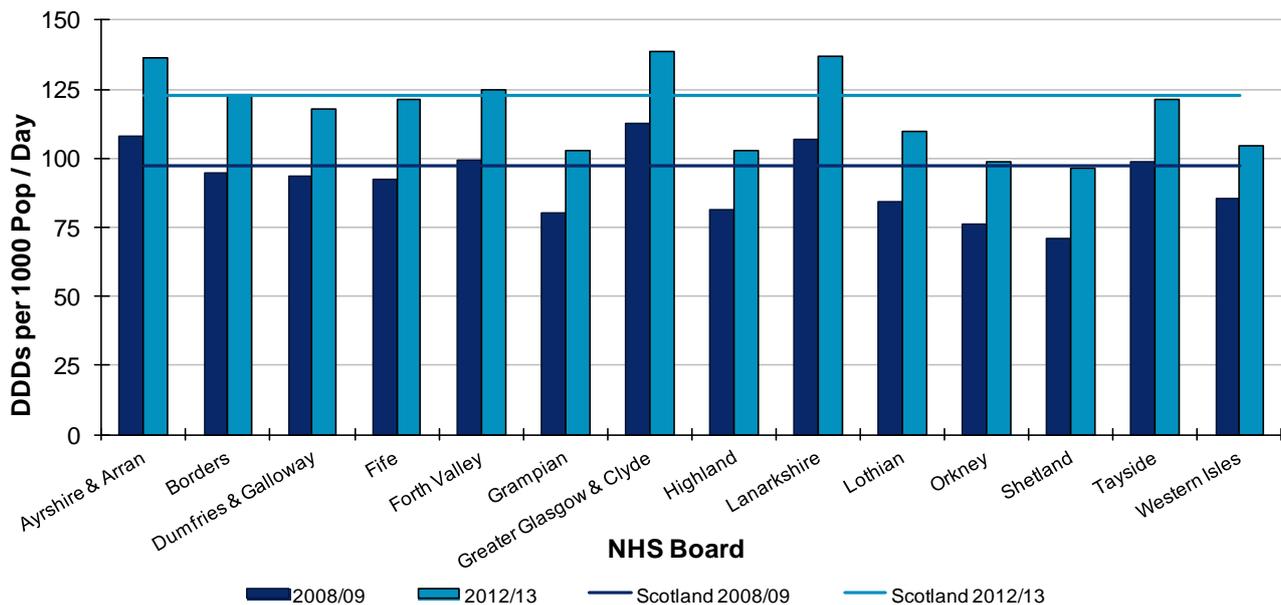


### NHS Boards

Information on the NHS Board of prescribing for antidepressants has also been analysed. Figure 13 shows prescribing of drugs by NHS Board in terms of the number of DDDs per 1,000 population per day.

In Scotland an average of 122.9 DDDs were dispensed per 1,000 population per day during 2012/13. Five NHS Boards prescribed above the national average for antidepressants in 2012/13, of which NHS Greater Glasgow & Clyde prescribed the highest with 138.9 DDDs per 1,000 population per day. NHS Lanarkshire had the second highest antidepressant prescribing rate (136.7) whilst NHS Shetland once again had the lowest rate, with 96.3 DDDs per 1,000 population per day (Figure 13).

**Figure 13: Number of Defined Daily Doses per 1,000 Population (aged 15+) per Day – Antidepressants – 2008/09 and 2012/13**



## Drugs

All of the top 5 drugs show an increase in dispensed items when comparing 2003/04 to 2012/13. Citalopram shows the largest increase, up 658,540 items from 2003/04 (Table 8). The top 5 drugs in 2012/13 are the same as the top 5 drugs in 2011/12.

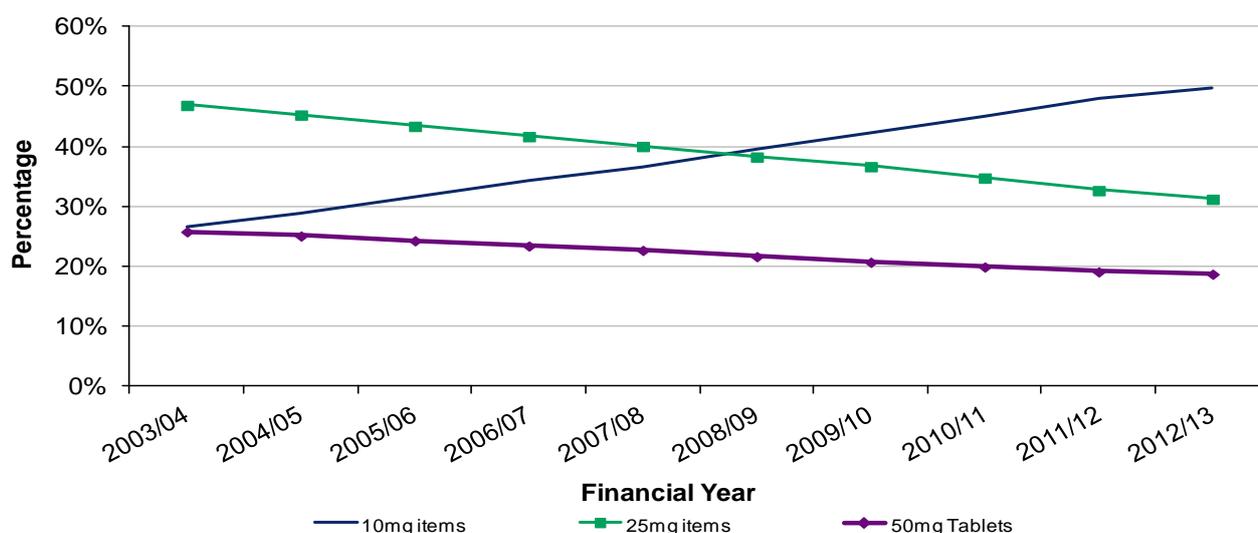
**Table 8: Top Five Antidepressants – Number of Dispensed Items – 2003/04 to 2012/13**

Approved Name	Type	Dispensed Items 2003/04	Dispensed Items 2012/13
Citalopram	SSRI	555,534	1,241,074
Amitriptyline	Tricyclic	586,380	1,072,681
Fluoxetine	SSRI	545,026	768,999
Mirtazipine	Other	131,378	524,454
Sertraline	Other	233,460	454,602

The BNF states that use of Amitriptyline is not recommended to treat depression, particularly in lower dosage strengths (less than 30mg). Lower dosage strengths of Amitriptyline are however used to treat neuropathic pain and for migraine prophylaxis (unlicensed indications). In both conditions the typical starting dose is 10mg which can be increased to 75mg daily if needed. It may also be used for bed-wetting in children, although this is an unlicensed indication.

Figure 14 shows that the number of prescriptions dispensed for 10mg Amitriptyline tablets has increased from 26.4% of dispensed items in 2003/04 to 49.8% by 2012/13. At the same time, prescribing of the 25mg Amitriptyline tablets declined from 46.9% to 31.2% of dispensed items. Prescribing of 50mg tablets has also declined from 25.8% in 2003/04 to 18.7% by 2012/13. From the increase in low dose Amitriptyline, but decrease of high dose, it can be inferred that a change in practice has occurred with Amitriptyline being used to treat indications other than depression (for which the high dose would be recommended).

**Figure 14: Amitriptyline – Comparison of prescribed strength 10mg, 25mg and 50mg tablets – 2003/04 to 2012/13**



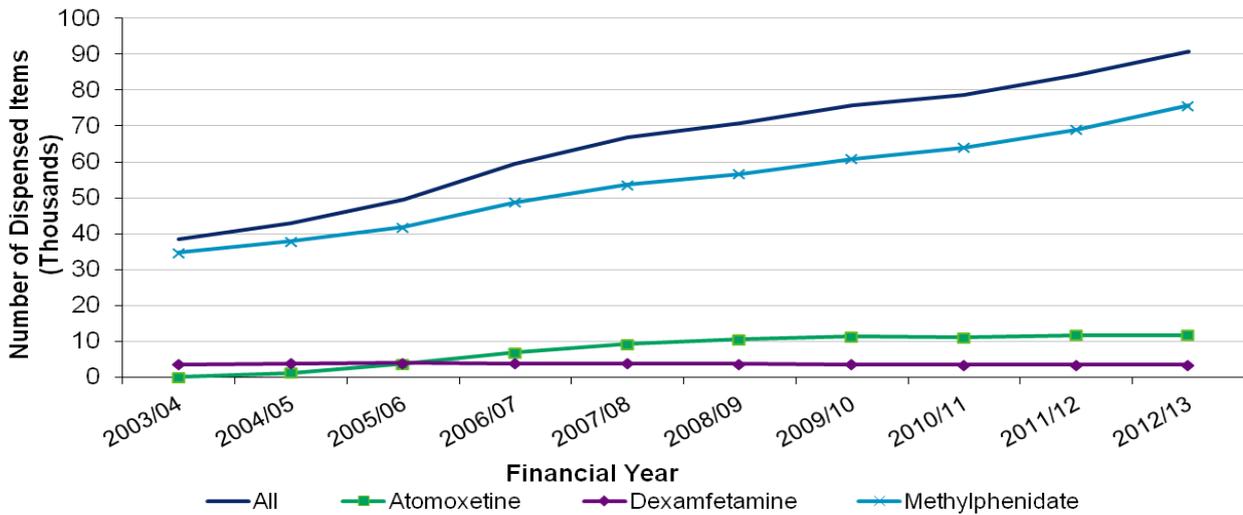
In Scotland a total of 747,158 patients received treatment with an antidepressant medicine (BNF 4.3) in 2012/13. In the same year 213,575 patients were dispensed Amitriptyline, accounting for 28.6% of all patients being prescribed antidepressant drugs.

## Drugs used for Attention Deficit Hyperactivity Disorder (ADHD)

### NHS Scotland

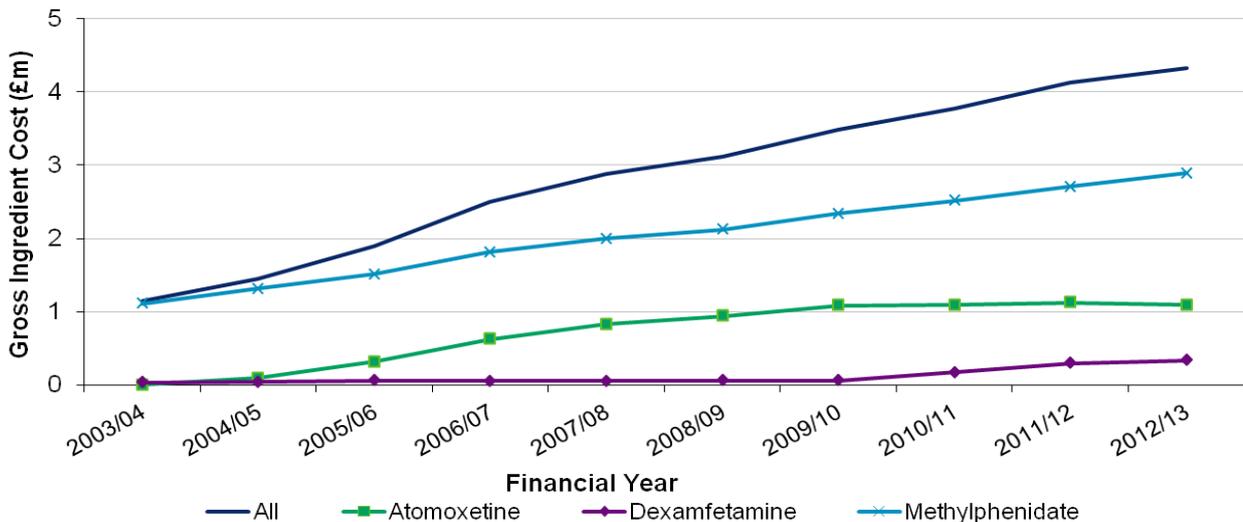
The total number of ADHD prescription items dispensed rose by 7.9% between 2011/12 (84,269 items) and 2012/13 (90,885 items). The number of items dispensed has been increasing consistently over the last ten years, rising by 137.0% overall (from 38,350 items in 2003/04). Prescribing of Methylphenidate continues to dominate in BNF section 4.4, accounting for 83.4% of ADHD drug dispensed items in 2012/13 (Figure 15).

**Figure 15: Total number of items dispensed (thousands) – ADHD Drugs – 2003/04 to 2012/13**



Over the last ten years the gross ingredient cost for ADHD drugs has shown a similar, though steeper, trend to the number of items dispensed, rising by 277.6% from £1.15million in 2003/04 to £4.3 million in 2012/13. Over the last year it rose by 4.8% from £4.1 million in 2011/12 (Figure 16).

**Figure 16: Gross Ingredient Cost (£) – ADHD Drugs – 2003/04 to 2012/13**



The total number of Defined Daily Doses per 1,000 population per day of drugs for ADHD has increased in Scotland over the past ten years: from 3.3 in 2003/04 to 6.7 in 2012/13.

As mentioned in the introduction, patient level data is available for the most recent four years. The CHI capture rate for drugs used for Attention Deficit Hyperactivity Disorder in 2012/13 was 91.4%. This is a slight drop compared to 2011/12, but generally the rate has been increasing since 2009/10 (Table 9).

**Table 9: CHI Capture rate – Attention Deficit Hyperactivity Disorder**

Topic	2009/10	2010/11	2011/12	2012/13
ADHD	87.6%	91.0%	91.8%	91.4%

In Scotland a total of 7,918 patients received treatment for ADHD in 2012/13. This is an increase of 5.4% compared to 2011/12 (7,511 patients) and an increase of 18.0% since 2009/10 (6,711 patients) (Table 10).

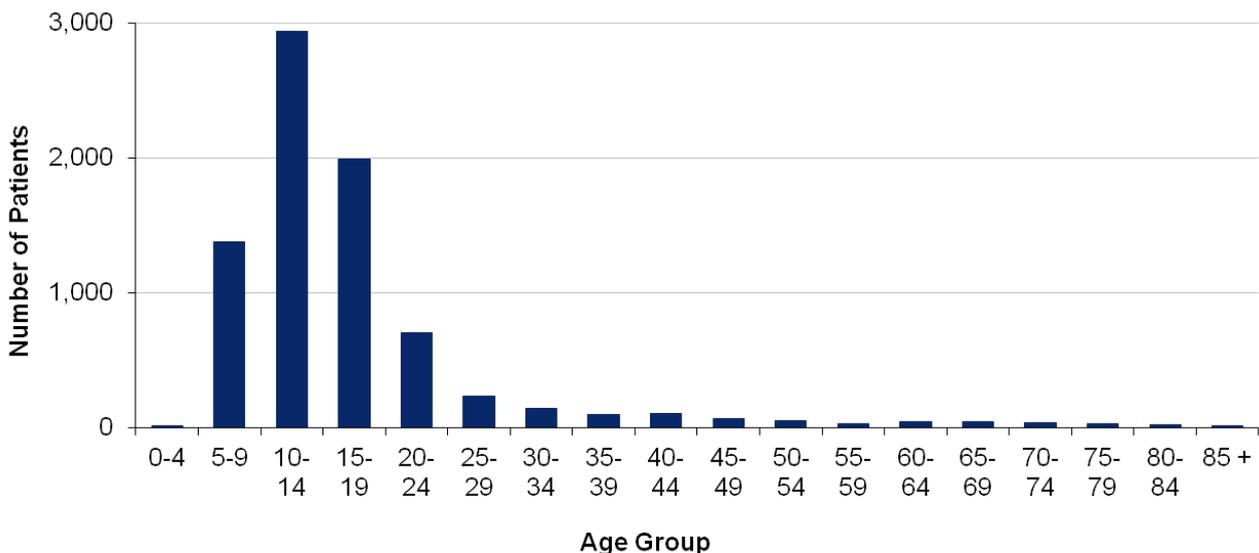
**Table 10: Patients by Gender – ADHD Drugs – 2009/10 to 2012/13**

Financial Year	Total	Male	Female
2009/10	6,711	5,500	1,211
2010/11	7,138	5,860	1,278
2011/12	7,511	6,103	1,408
2012/13	7,918	6,413	1,505

In 2012/13, 81.0% (6,413) of patients who received treatment for ADHD were male while 19.0% (1,505) were female. This is consistent with previous years (Table 10)

Figure 17 shows that the age grouping with the greatest number of patients who received drug treatment for ADHD was '10-14', with 2,937 patients in that age group in 2012/13. ADHD Drugs are in general licensed for the ages 5–18; however one of the drugs, Dexamphetamine Sulphate is also licensed for use to treat narcolepsy in the elderly. Initiating treatment of ADHD in adulthood is unlicensed, however for those who were initially prescribed ADHD drugs when younger treatment may continue into adulthood (Figure 17).

**Figure 17: Patients by Age Group – ADHD Drugs – 2012/13**



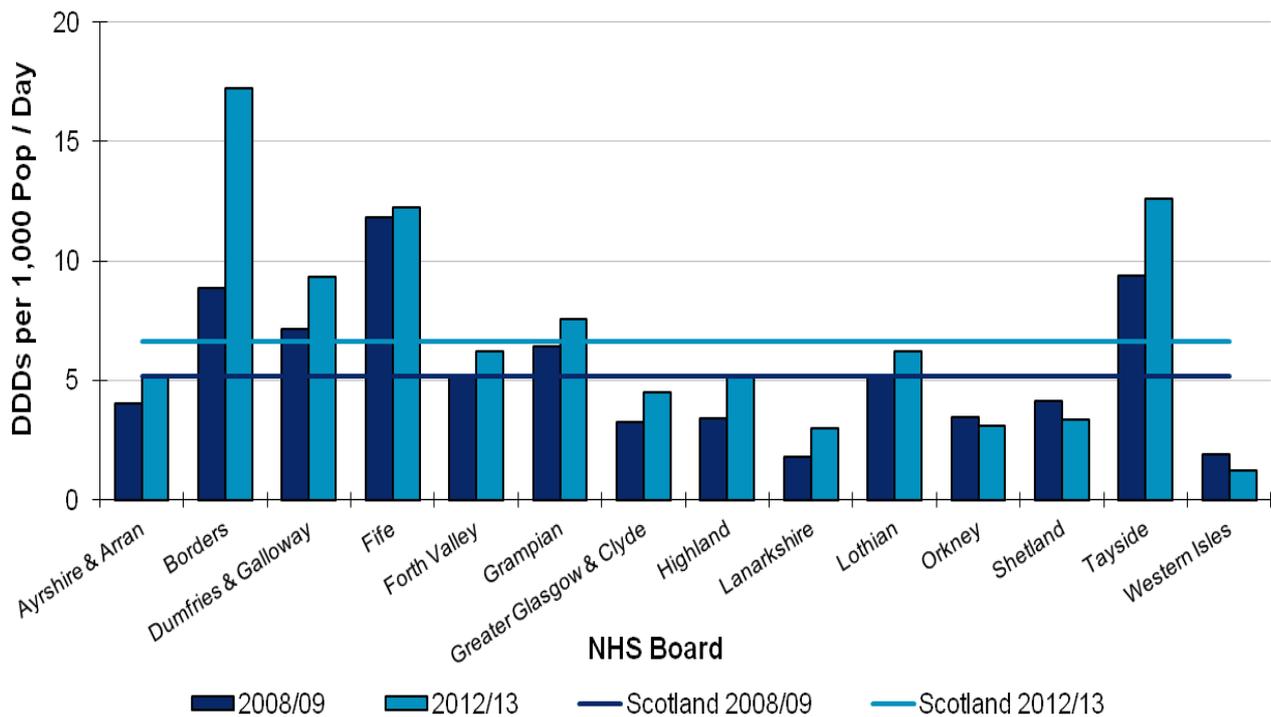
As the patient based analysis has shown that the ages of patients using ADHD drugs is more varied than the ages for which drugs are licensed, calculations of the number of DDDs per 1,000 population per day as follows are now based on NRS population estimates for ages 0-19.

### NHS Boards

Among the NHS Boards, the highest recorded rate of DDDs per 1,000 population per day for 2012/13 was in NHS Borders at 17.2 and Western Isles the lowest at 1.2 DDDs per 1,000 population per day. NHS Greater Glasgow & Clyde, the largest NHS Board in Scotland, has one of the lowest prescribing rates at 4.5 DDDs per 1,000 population per day (Figure 18).

Eleven of the fourteen NHS Boards showed an increase in prescribing of ADHD drugs between 2008/09 and 2012/13. The largest increase was recorded by NHS Borders who dispensed 8.9 DDDs per 1,000 population per day in 2008/09, increasing to 17.2 in 2012/13.

**Figure 18: Number of Defined Daily Doses per 1,000 Population (aged 0-19) per Day – ADHD Drugs – 2008/09 and 2012/13**

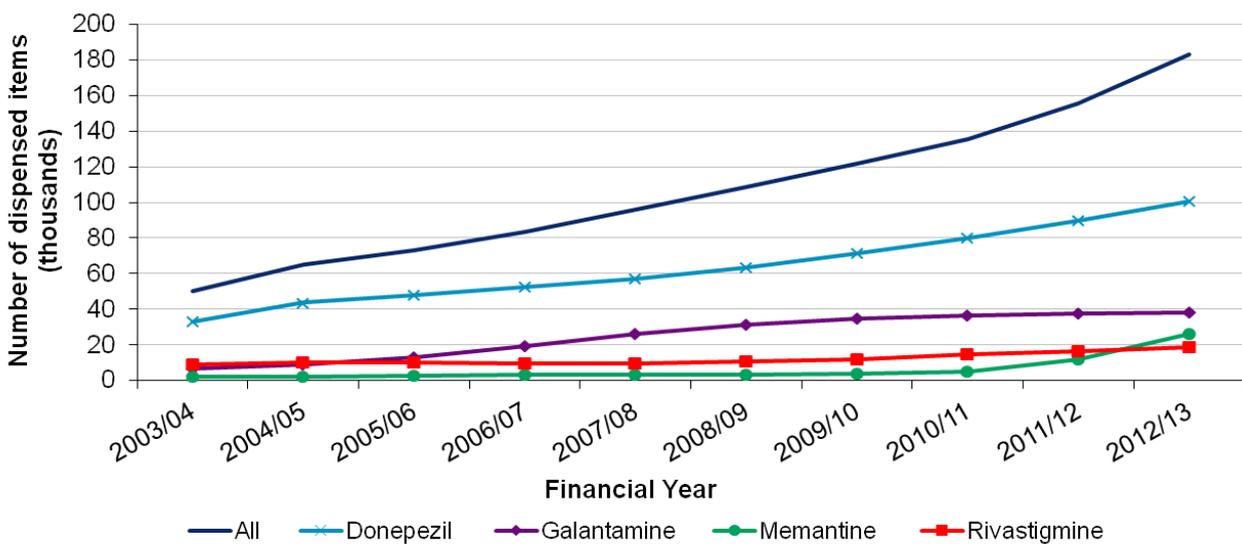


## Drugs for Dementia

### NHS Scotland

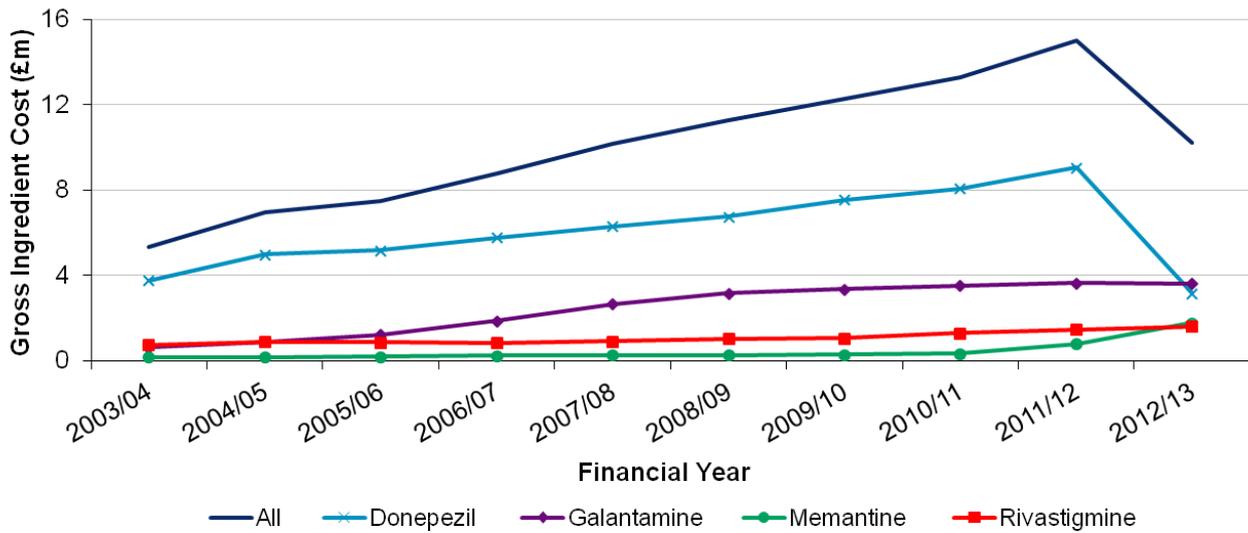
The total number of prescription items dispensed for dementia increased by 17.7% between 2011/12 (155,667 items) and 2012/13 (183,176 items). It has been increasing steadily over the last ten years, rising by 263.1% overall (from 50,448 items in 2003/04) (Figure 19). The number of prescription items for Memantine has increased sharply over the last two years (by 434% between 2010/11 and 2012/13). This is likely to be due to the change in guidance over its use mentioned in the Introduction.

**Figure 19: Number of dispensed items (thousands) – Dementia Drugs – 2003/04 to 2012/13**



The total Gross Ingredient Cost for dementia drugs had grown steadily from £5.3m in 2003/04 to £15.0m by 2011/12 (an increase of 181.1%). However, for the first time, there has been a decrease in the total cost of dementia drugs; the gross ingredient cost fell by 31.9% from £15.0m in 2011/12 to £10.2m in 2012/13 (Figure 20). The main reason for this is likely to be the availability of generic versions of Donepezil since the expiration of its UK patent in February 2012 – and costs for Donepezil fell by just under £6m from 2011/12 to 2012/13, despite an increase in the number of items dispensed.

**Figure 20: Gross Ingredient Cost (£) – Dementia Drugs – 2003/04 to 2012/13**



The total number of Defined Daily Doses per 1,000 population of drugs for Dementia has increased in Scotland over the past ten years: from 4.7 in 2003/04 to 15.6 in 2012/13.

As with the previous drugs, patient level data can now be reported on for Dementia drugs. The CHI capture rate for drugs for Dementia in 2012/13 was 88.3%. This is a slight increase on the previous year (Table 11). The CHI Capture rate for Dementia is lower than for other sections. This is due to the way Dementia services are set up in some Health Boards.

**Table 11: CHI Capture rate – Drugs for Dementia**

Topic	2009/10	2010/11	2011/12	2012/13
Dementia	84.0%	87.4%	87.0%	88.3%

In Scotland a total of 19,763 patients were dispensed a drug for dementia in 2012/13. This is an increase of 12.6% compared to 2011/12 (17,546 patients) and an increase of 39.9% since 2009/10 (14,122 patients) (Table 12). This is consistent with the increasing number of dementia drugs being dispensed over the last 4 years (Figure 19).

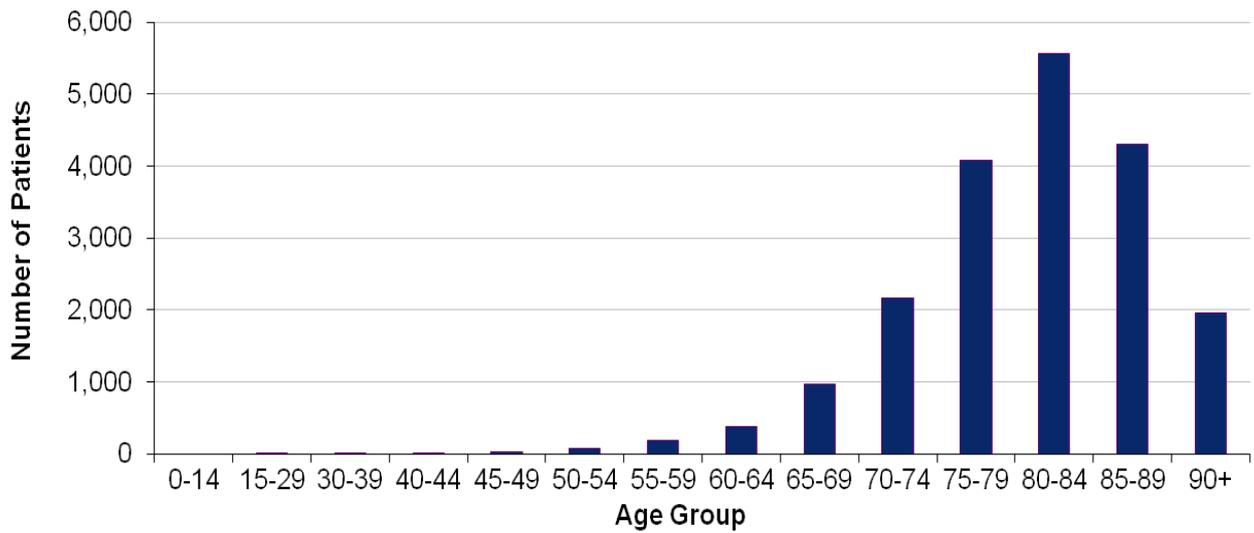
In 2012/13, 64.7% (12,789) of patients who were dispensed dementia drugs were female while 35.3% (6,974) were male. This is consistent with previous years.

**Table 12: Patients by Gender – Dementia Drugs – 2009/10 to 2012/13**

Financial Year	Total	Male	Female
2009/10	14,122	4,884	9,238
2010/11	15,886	5,486	10,400
2011/12	17,546	6,150	11,396
2012/13	19,763	6,974	12,789

The majority of patients being prescribed dementia drugs are aged 70 and above. This is due to the late onset of the condition in life. The age group with the greatest number of patients to receive a drug for dementia was '80-84', with 5,566 patients in 2012/13 (Figure 21).

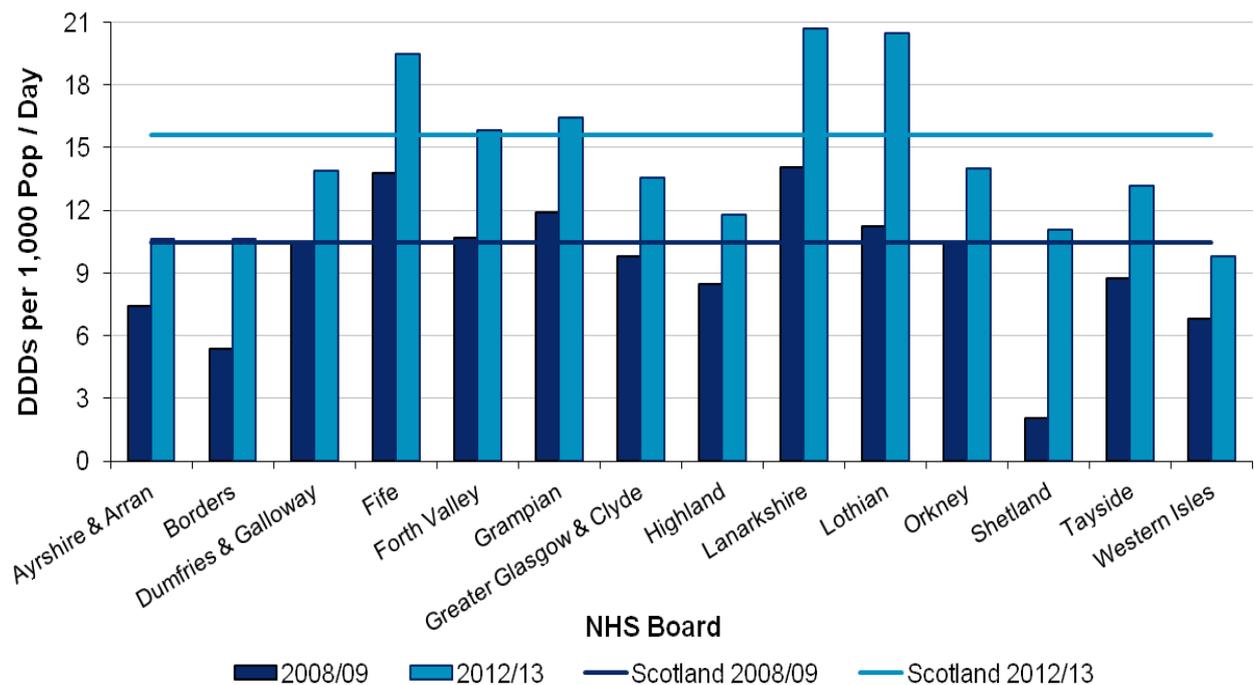
**Figure 21: Patients by Age Group – Drugs for Dementia - 2012/13**



**NHS Boards**

In Scotland, an average of 15.6 DDDs were dispensed per 1,000 population per day during 2012/13. Five NHS boards dispensed above the national average for dementia, of which NHS Lanarkshire prescribed the highest with 20.70 DDDs per 1,000 population per day. NHS Lothian had the second highest prescribing rate with 20.45 DDDs per 1,000 population per day, while NHS Western Isles had the lowest rate, with 9.82 DDDs per 1,000 population per day (Figure 22).

**Figure 22: Number of Defined Daily Doses per 1,000 Population (aged 60+) per Day – Dementia Drugs, 2008/09 and 2012/13**



## Glossary

Approved Drug Name	As listed in BNF, being the recognised official non-proprietary title (recommended International Non-Proprietary Name - rINN).
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.
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.
Gross Ingredient Cost (GIC)	Cost of drugs and appliances reimbursed before deduction of any dispenser discount (this definition differs from other parts of the UK).
Prescribable Item Name	The drug name written on the prescription - can be by approved name or a brand name.
Prescribed Health Board	The NHS Board with which the prescriber holds a contract to prescribe, i.e. GP, Dentist, Non-medical prescriber.
Prescription item	An item is an individual product prescribed e.g.100 aspirin tablets of 300mg.
Quantity	Quantity dispensed of an individual item e.g. 100 tablets

## List of Tables

Table No.	Name	Time period	File & size
1	<a href="#">Hypnotics and Anxiolytics</a>	Financial Years 2003/04 to 2012/13	Excel [478kb]
2	<a href="#">Psychoses and related disorders</a>	Financial Years 2003/04 to 2012/13	Excel [721kb]
3	<a href="#">Antidepressants</a>	Financial Years 2003/04 to 2012/13	Excel [684kb]
4	<a href="#">Attention Deficit Hyperactivity Disorder</a>	Financial Years 2003/04 to 2012/13	Excel [1,126kb]
5	<a href="#">Dementia</a>	Financial Years 2003/04 to 2012/13	Excel [1,217kb]

## Contact

### **Lucy Aitken**

Senior Information Analyst

[LucyAitken@nhs.net](mailto:LucyAitken@nhs.net)

0131 275 6801

### **Catriona Young**

Senior Information Analyst

[Catriona.Young@nhs.net](mailto:Catriona.Young@nhs.net)

0131 275 6599

## Further Information

Further information can be found on the [ISD website](#)

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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.

### Patient Based Analysis

Patient based analysis has been made possible through the recent availability of comprehensive patient identifiable data. All NHS patients have a unique Community Health Index (CHI) number which makes it possible to identify which prescription items have been dispensed for individual patients. Prior to April 2009, the proportion of prescriptions with a valid CHI number recorded was not comprehensive enough to make patient based analysis possible. For medicines used in mental health, CHI capture rates have improved, becoming high enough to permit accurate patient analyses for financial years 2009/10 to 2012/13. The patient count for any given year shows the total number of patients who have been dispensed at least one prescription item during the course of that year.

### 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. In order to allow for trend analysis over time, all data is updated to use the most recent DDD values.

## 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 patients, 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 are 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	24 September 2013
Frequency	Annual
Timeframe of data and timeliness	The publication includes data up to 2012/13.
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 with 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. Retrospective revisions can occur in the classification of drugs in the <a href="#">British National Formulary</a> (BNF). Where this occurs and is 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.
Revisions relevant to this publication	New 2011 mid-year population estimates were released by NRS in August 2013. The DDDs per 1,000 population calculations for financial year 2011/12 were adjusted

	accordingly.
Concepts and definitions	The data published in all these releases correspond to prescriptions that have been prescribed in Scotland and dispensed in the community in Scotland, or elsewhere in the UK i.e. dispensed by a pharmacy, dispensing doctor or appliance supplier. 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.
Relevance and key uses of the statistics	These statistics are the primary source of patient level data on prescribing for mental health within Scotland. They are also used to compare prescribing patterns across Health Boards and over time
Accuracy	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 fewer than 2% of all prescriptions. For remaining unallocated prescriptions, the prescribing NHS Board is assumed to be the same as the dispensing NHS Board.
Completeness	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. 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.
Comparability	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 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 the policy of ISD Scotland to make its web sites 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 measurement	The main unit of measure of drug reimbursement costs presented is Gross Ingredient Cost (GIC) quantity. The main measures of drug volume are items (the number of individual drug items on a prescription form), 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.
Disclosure	The <a href="#">ISD protocol on Statistical Disclosure Protocol</a> is followed.
Official Statistics designation	National Statistics
UK Statistics Authority Assessment	<a href="#">Assessment</a> by UK Statistics Authority completed and assessment report issued.
Last published	25 September 2012
Next published	30 September 2014
Date of first publication	December 2006
Help email	<a href="mailto:NSS.isdprescribing@nhs.net">NSS.isdprescribing@nhs.net</a>
Date form completed	2 <sup>nd</sup> September 2013

## **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  
Healthcare Improvement Scotland

#### **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)

## A4 – ISD and Official Statistics

### About ISD

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

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

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

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

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

### Official Statistics

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

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

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

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

The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics. Designation can be broadly interpreted to mean that the statistics:

- meet identified user needs;
- are well explained and readily accessible;
- are produced according to sound methods, and
- are managed impartially and objectively in the public interest.

Once statistics have been designated as National Statistics it is a statutory requirement that the Code of Practice shall continue to be observed.