

UPDATE ON GROWTH IN PRESCRIPTION VOLUME AND COST IN THE YEAR TO MARCH 2007

INTRODUCTION

This report explores trends in prescription volume and cost over the year to March 2007. Comparisons are available over a range of time periods; current month, last 3 months, financial year and rolling 12 months and are always compared to the same period in the previous year (unless otherwise stated). In this report the current month is March 2007, last 3 months covers the period January to March 2007, financial year examines April 2006 to March 2007 and rolling 12 months includes the 12 months to March 2007 (which for this report covers the same period as the financial year).

The report aims to identify whether there have been changes to the main drivers for growth in volume and cost and to estimate likely future growth in volume. Data are from PACT (Prescribing Analysis and Cost) and relate to general practice prescribing in England. Prescription volume has been analysed using the item as the measure; net ingredient cost has been used to express cost.

KEY FINDINGS

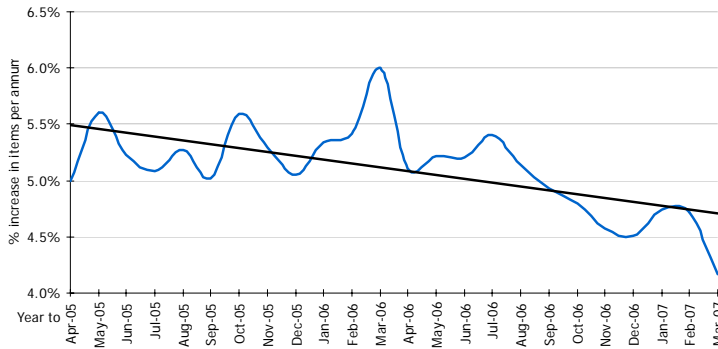
<ul style="list-style-type: none">• Prescription volume in the year to March 2007 increased by 4.2%. Growth has been below 5.0% and showing a declining trend since September 2006. When considering items prescribed per dispensing day volume has increased by 4.8% in the year to March 2007.	Page 2
<ul style="list-style-type: none">• Prescription cost has increased by 2.9 % in the year to March 2007 compared to the same period in the previous year. Annual growth has remained relatively stable since October 2006 which coincides with a significant number of price changes made to drugs in Category M at that time.	Page 3
<ul style="list-style-type: none">• Repeat dispensing continues to increase. 97 PCTs have an activity level of less than 1% of all items being supplied on repeat forms. It is likely that the current trend will continue in 2007/08.	Page 8
<ul style="list-style-type: none">• Forecast of growth in volume for financial year 2007/08 is expected to be 4.5%. Repeat dispensing is expected to increase volume by 0.3%.	Page 9
<ul style="list-style-type: none">• Prescribing by nurses (7.3 million items; +69.9%) and pharmacists (37,966 items; +150%) continues to increase in the year to March 2007. The NHSBSA PPD now has 10 physiotherapists and 4 podiatrists on its database of prescribers. August 2006 saw the first prescriptions received from allied health professionals. Since that time 107 items have been received from physiotherapists.	Page 9
<ul style="list-style-type: none">• As at 7th March 2007 there are over 2,700 private prescribers (including 1 private nurse) on the NHSBSA PPD database of prescribers. In the quarter to March 2007, 13,744 private prescriptions were received for controlled drugs, all from doctors, an increase on the previous quarter of 31.5%.	Page 11

PRESCRIPTION VOLUME

The number of monthly items prescribed continues to grow year on year with few exceptions. The tables and charts below show how total prescribing has changed over a range of time periods. More detailed consideration will be given to why changes have taken place later in the report.

	2006/07	2005/06	Difference	% Change
Current Month	66.26	64.37	1.89	2.9%
Last 3 months	190.60	179.83	10.77	6.0%
Financial year	752.50	722.41	30.09	4.2%
Rolling 12 months	752.50	722.41	30.09	4.2%

*Data is shown in Millions



- In the year to March 2007 prescription volume increased by 4.2% to 752 million items. This is a much smaller growth figure than seen in previous years; 5.0% in March 2005 and 6.0% in March 2006.

- Previous financial years has seen growth fluctuate between 5.0% and 6.0% throughout the year, however, the latter half of 2006/07 saw growth consistently below 5.0%.

- The chart to the left shows that the trend in prescription growth over the last two financial years shows a decline in growth in prescription volume.

Dispensing Days

Dispensing days includes weekdays and Saturdays but excludes Sundays and bank holidays. When the number of items in a month is divided by the number of dispensing days, there is less variation than for items alone.

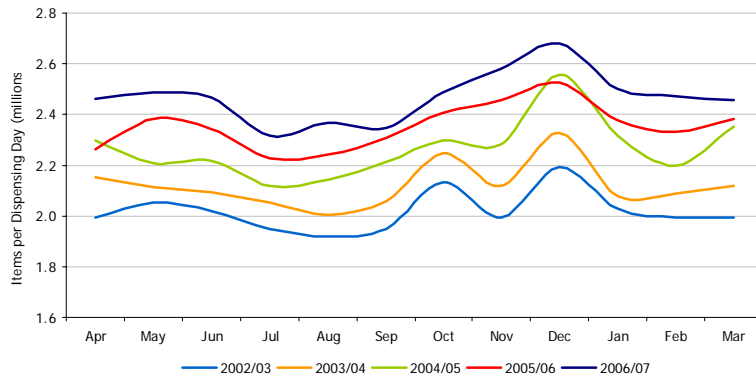
- Taking dispensing days into consideration, the growth in volume for the year to March 2007 is 4.8% compared to an increase of 3.9% in the previous year.

- This increase in growth year on year, which contradicts the trend in prescription volume, can be attributed to a larger number of dispensing days in 2005/06 than in 2006/07.

- The chart to the right shows a similar trend over the last five years with less prescribing in the summer months and peaks usually in December. Monthly numbers of items prescribed in 2006/07 ranged between 2.3 million and 2.7 million items per dispensing day.

	2006/07	2005/06	Difference	% Change
Current Month	2.45	2.38	0.07	2.9%
Last 3 months	2.48	2.37	0.11	4.6%
Financial year	2.47	2.35	0.11	4.8%
Rolling 12 months	2.47	2.35	0.11	4.8%

*Data is shown in Millions

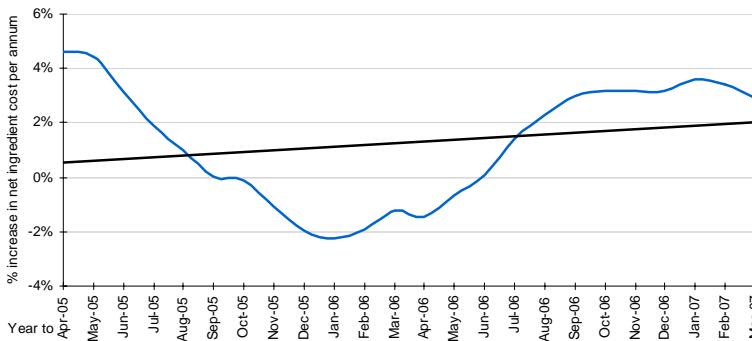


PRESCRIPTION COST

The growth rate in Net Ingredient Cost of prescriptions has changed quite significantly over the last couple of years and can be explained by the implementation of Department of Health policies to control spending on the drugs bill in primary care including the Pharmaceutical Price Regulation Scheme and Category M. The tables and charts below show how total prescribing has changed over a range of time periods. More detailed consideration will be given to why changes have taken place later in the report.

	2006/07	2005/06	Difference	% Change
Current Month	703.01	697.17	5.84	0.8%
Last 3 months	2010.65	1958.54	52.10	2.7%
Financial year	8050.52	7822.95	227.57	2.9%
g 12 months	8050.52	7822.95	227.57	2.9%

*Data is shown in Millions (£)

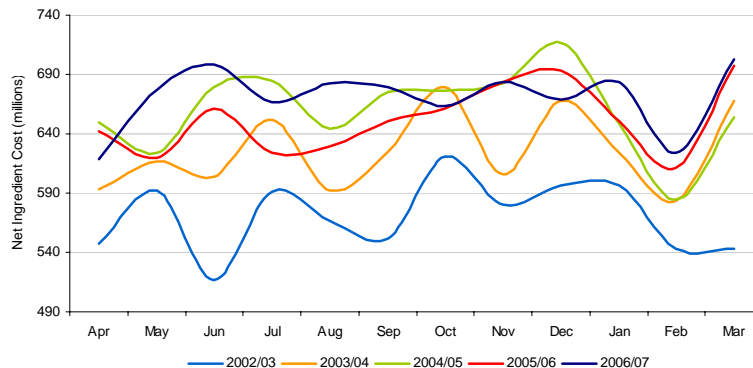


- Prescription cost has risen to £8,051 million in the year to March 2007, a 2.9% increase compared to the previous year.

- The chart to the left shows that prior to 2006 the rate of growth in prescribing cost steadily slowed down. Decreases were originally due to the implementation of Department of Health (DH) policies to control spending on the drugs bill in primary care including the Pharmaceutical Price Regulation Scheme (PPRS) and Category M. However, the trend changed in January 2006 which coincided with the policies running for 12 months and growth started to increase.

Over recent months growth in cost appears to be stabilising at around 3.2%. This effect coincides with significant price changes to drugs in Drug Tariff Part VIII category M implemented in October 2006. Category M prices are set by the Department of Health based on the average manufacturers' market prices after discount, rather than being based on the Category A system of basket prices before discount.

The chart to the right shows the total spending on prescribed drugs in general practice year on year for the last 5 years. Costs in 2006/07 were greater than the previous year for the first half of the year; however, the price changes to category M influenced costs to remain stable on last year in the latter half of 2006/07. In fact, an average of growth taken over the last six month reveals that cost increased by 0.8% when compared to the previous year.



GROWTH IN THERAPEUTIC AREAS

Prescription Volume

The table below compares the prescription volume per annum for the six largest therapeutic areas in the year to March 2007 with the previous year. These six areas make up 77.0% of prescribing in the year to March 2007.

Therapeutic Area	2006/07	2005/06	Difference	% Change
Cardiovascular system	238.77	222.99	15.78	7.1%
Central nervous system	128.32	123.30	5.02	4.1%
Endocrine system	63.63	59.38	4.25	7.2%
Gastro-intestinal system	56.82	54.36	2.46	4.5%
Respiratory system	52.56	52.31	0.25	0.5%
Infections	39.12	38.61	0.51	1.3%
All others	173.28	171.46	1.82	1.1%
Total	752.50	722.41	30.09	4.2%

*Data is shown in Millions

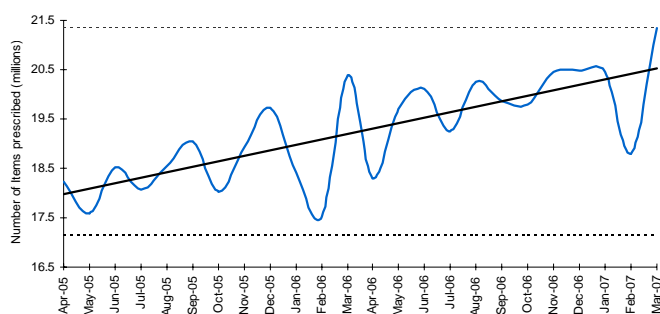
Prescription Cost

The table below compares the prescription cost per annum for the six largest therapeutic areas (based on prescription volume) in the year to March 2007 with the previous year. These six areas make up 73.4% of prescribing cost in the year to March 2007.

Therapeutic Area	2006/07	2005/06	Difference	% Change
Cardiovascular system	1,885.96	1,827.25	58.71	3.2%
Central nervous system	1,552.41	1,446.98	105.43	7.3%
Endocrine system	889.63	843.21	46.43	5.5%
Gastro-intestinal system	521.76	649.70	-127.94	-19.7%
Respiratory system	845.32	813.74	31.58	3.9%
Infections	212.28	218.36	-6.08	-2.8%
All others	2,143.16	2,023.72	119.44	5.9%
Total	8,050.52	7,822.95	227.57	2.9%

*Data is shown in Millions (£)

Cardiovascular System



- The chart to the left shows that the monthly trend in prescribing is increasing, however, the rate of growth for items has slowed between the year to March 2006 and March 2007 from 9.2% to 7.1% per annum. Growth in volume in drugs to treat the cardiovascular system has remained below 8.0% since September 2006.

- The increase in drugs to treat the cardiovascular system account for 52.4% of the increase in total prescribing over the year to March 2007.

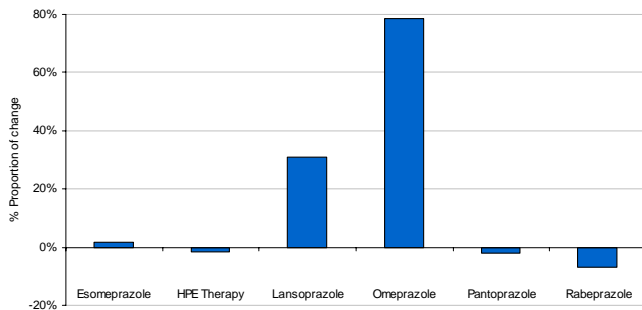
The increase observed in the cardiovascular system area can mainly be attributed to the increased prescribing of simvastatin. The number of simvastatin items prescribed increased by 6.5 million (+36.7%) in financial year 2006/07 when compared to the previous year. This increase is responsible for 41.5% of the total increase observed in prescribing of drugs for the

cardiovascular system. Over the same time periods prescribing of the more expensive atorvastatin has decreased (736,196: -5.5%). These changes have been influenced by the NICE technology appraisal for statins published in January 2006 that estimated 1.7 million additional people in England and Wales should receive treatment with statins. Furthermore, PCTs are urging the prescribing of simvastatin rather than the more expensive atorvastatin to keep costs down. Compared to a 7.1% increase in volume, prescribing costs have increased by only 3.2%.

Gastro-Intestinal System

The rate of prescribing for drugs for the gastro-intestinal system has increased in the year to March 2007 by 4.5% when compared to the previous year. The increase in the number of drugs prescribed to treat the gastro-intestinal system accounts for 8.2% of the increase in total prescribing over the year to March 2007.

'Compound alginates & proprietary indigestion preparations' and H2-receptor antagonists have both seen significant decreases. However, the number of proton pump inhibitors has increased (2.96 million) more than the increase observed overall in drugs for the gastro-intestinal system (2.46 million). Proton pump inhibitors account for 120.0% of the overall increase in drugs for the gastro-intestinal system; this is possible since other drugs in the section have decreased.



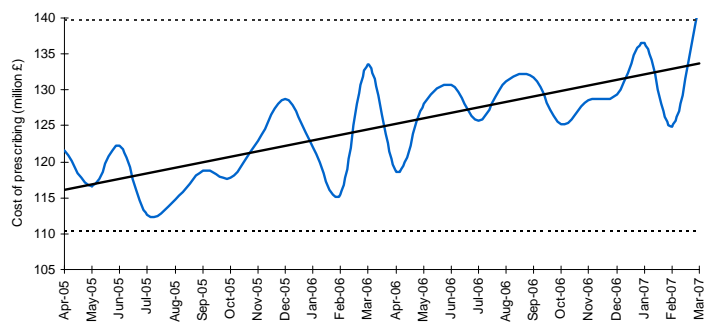
• The chart to the left shows the proportion of the change in proton pump inhibitors by each drug. Clearly, the increase is due to lansoprazole and omeprazole, the less expensive drugs in the proton pump inhibitor group.

Proton pump inhibitor prescribing has also had a significant effect on the cost for drugs to treat the gastro-intestinal system (-19.7%). The pack reimbursement price of 28 lansoprazole 30mg gastro resistant capsules reduced from £23.63 in February 2006 to £6.73 by March 2006 and has further reduced to £4.72 by April 2007. These price reductions have reduced the cost of prescribing lansoprazole by over £130 million to £80 million in the year to March 2007 when compared to the previous year.

Central Nervous System

• The rate of growth for items has increased slightly between the year to March 2006 and March 2007 to 4.1% per annum. However, the change in growth in cost has increased from 4.5% to 7.3% over the same time period. The chart to the left shows a continuing upward trend in the monthly cost of items to treat the central nervous system.

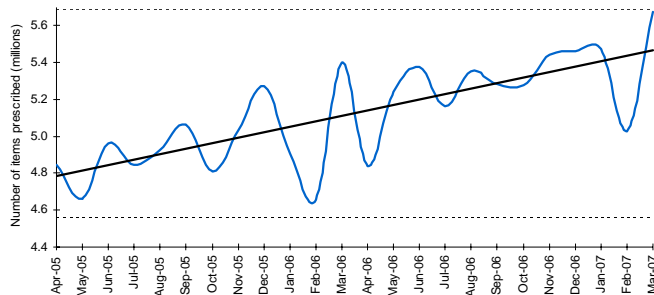
• The increase in cost of drugs to treat the central nervous system account for 46.3% of the increase in cost of total prescribing over the year to March 2007.



In the year to March 2007, nearly 30% of the increase in cost for drugs to treat the central nervous system was for non-opioid analgesics (BNF section), in particular co-codamol and paracetamol. The prices of these drugs have not changed significantly over the time period; therefore such a large increase is attributed to increasing prescription volume. The reason behind this could be the proposal from the MHRA to remove co-proxamol from the list of licensed medicines to come into effect later in the year. Prescribers have been gradually switching current patients taking co-proxamol or prescribing new patients paracetamol or co-codamol. Paracetamol and co-codamol have been listed in Drug Tariff Part VIII category M since April 2005 and the cost of some packs has increased more than 100%.

Endocrine

Drugs prescribed for the treatment of diabetes mellitus continue to increase, above all in the area of oral anti-diabetic drugs, in particular increased prescribing of metformin. Metformin is the only available biguanide and is first choice for use in overweight patients. Research tells us that the proportion of the population being overweight and those diagnosed with diabetes mellitus continues to increase and this may be where the increase in prescribing of metformin is realised.



- The rate of growth for items to treat the endocrine system has slowed between the year to March 2006 and March 2007 from 8.5% to 7.2% per annum. Similarly, growth in cost has decreased from 8.8% to 5.5% over the same time period. However, these drugs still account for 14.1% of the increase observed in total prescribing and 20.4% of the increase in net ingredient cost for all prescribing.

- Although growth is slowing the chart to the left shows the overall trend is increasing.

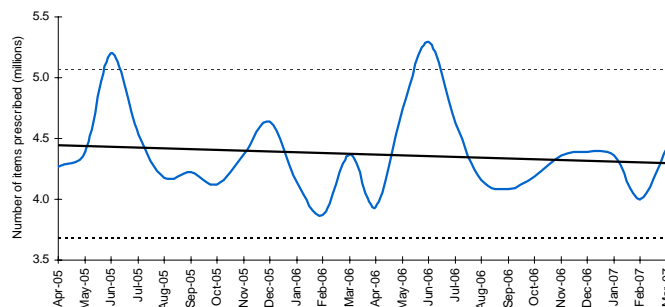
Another area showing a significant increase in volume of prescribing of drugs in the endocrine system is related to thyroid hormones, in particular levothyroxine. The year to March 2007 has seen the prescribing of levothyroxine increase by 1.4 million items (+9.1%) when compared to the year to March 2006. The increase in prescribing of levothyroxine accounts for 34.5% of the increase in all drugs to treat the endocrine system.

Respiratory

- The rate of growth for items to treat the respiratory system is only 0.5% in the year to March 2007. This area has observed the lowest growth of all therapeutic areas over the time period. This compares to national growth of 4.2% and a decrease from 2.8% in the previous year.

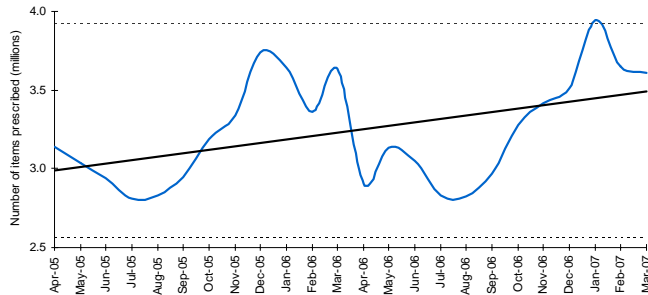
- Respiratory drugs only account for 0.8% of the total increase observed for all prescribing.

- The chart to the right shows the overall trend in prescribing of respiratory drugs is relatively stable.



A large reduction in the number of prescriptions for oxygen items has been observed in the year to March 2007 compared to the previous year. This is due to the new home oxygen therapy service contract. The new oxygen supply model has transferred responsibility for prescribing oxygen therapy to specialist consultants. The new process was implemented in February 2006 and relieved GPs of the burden of writing prescriptions. Since then the number of items prescribed for oxygen per month has continued to decrease.

Infections

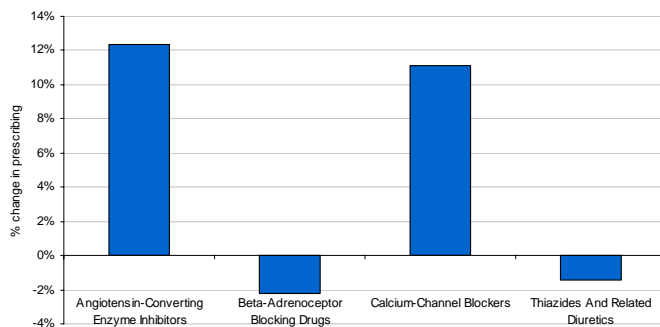


- The rate of growth in volume for items prescribed to treat infections is 1.3% in the year to March 2007, which compares to national growth of 4.2% and a decrease from 2.3% in the previous year.
- The change in prescribing of drugs for infections makes up only 1.7% of the change observed in total prescribing.
- The greatest decrease in prescribing of drugs to treat infection is for antifungal drugs, which have decreased by -4.4% in the year to March 2007 compared to the previous year.

FACTORS AFFECTING GROWTH IN VOLUME AND COST

NICE Guidelines

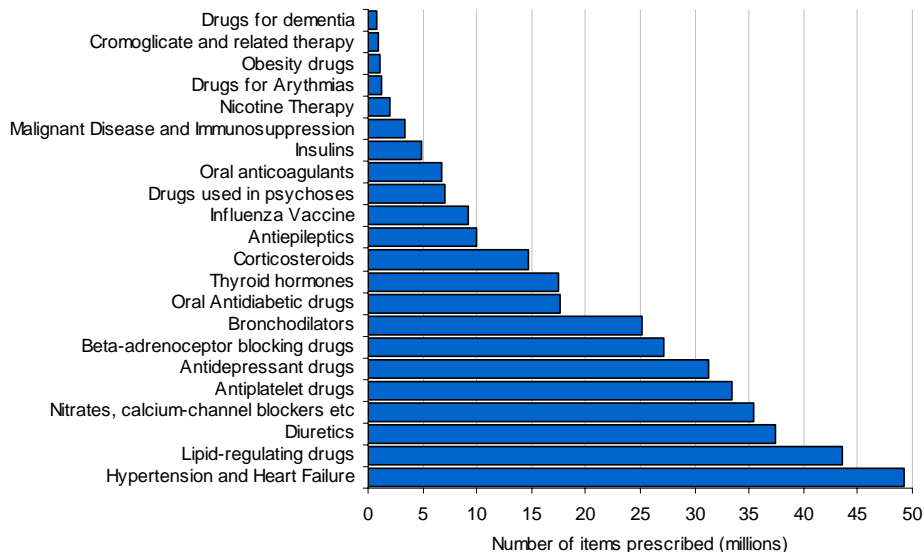
Newly marketed drugs that represent therapeutic advances are often referred to the National Institute for Health and Clinical Excellence (NICE) for the provision of national guidance on their use. Previous reports have shown that NICE technology appraisals are not usually a major driver of growth in volume. Technology appraisals often focus on choice of drugs therefore volume should not change appreciably as a result. Clinical guidelines focus on appropriate prescribing for specific diseases or conditions and are more likely to affect volume.



- The NICE clinical guideline for the management of hypertension in adults in primary care was published June 2006 and recommended a change in prescribing from beta-blockers to either thiazide diuretics, calcium channel blockers, ACE inhibitors or a combination of these drugs. The year to March 2007 shows that the number of prescriptions for beta blockers has decreased (623,384 items; -2.3%) whilst total items for the three replacement drugs have increased by 5.6 million (7.8%). Overall cost for the management of hypertension has decreased by 6.8% (approximately £39.9 million).

Quality and Outcomes Framework

In financial year 2006/07 eight new clinical domains including dementia, depression and obesity were added to the Quality and Outcomes Framework (QOF) that forms part of the General Medical Services (GMS) contract. The QOF rewards practices for improving patient care in the areas of each clinical domain and as such has the potential to increase prescription volume and cost. Most of the areas of prescribing covered by the QOF are already areas of high growth including coronary heart disease, stroke, hypertension, diabetes mellitus, chronic obstructive pulmonary disease, epilepsy, cancer, mental health, and asthma.



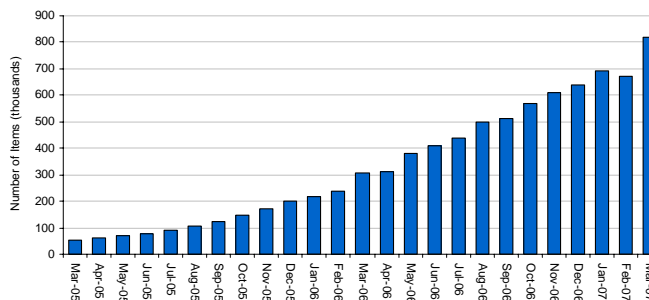
• The drugs that fall into these clinical domains made up 50.5% of overall prescribing and 53.8% of cost in the year to March 2007.

Repeat Dispensing

Repeat dispensing is now an essential service that should be provided by all pharmacies that hold a national pharmacy contract. The chart below shows the increase in repeat dispensing items between March 2005 and March 2007.

• Repeat dispensing in the year to March 2007 has substantially increased over the last year (4.7 million items: +261.3%) to 6.5 million items.

• Repeat Dispensing has rolled out at a slower rate than initially predicted with the proportion of repeat dispensing in the quarter to March 2007 being less than 1% in 97 of 152 PCTs.



Bristol Teaching PCT has the highest rate of repeat dispensing of all items at 14.8% in the quarter to March 2007 compared to 1.1% at the national level. A PCT reorganisation took place from October 2006 and the new Bristol Teaching PCT is made up from Bristol North and Bristol South and West PCTs.

It is likely that the number of items dispensed on repeat forms will continue to increase at a similar rate in 2007/08 unless PCTs actively promote the service to GP practices. Repeat dispensing activity as at March 2007 has been used to project possible uptake of the service at March 2008 (see table below).

% RD items of Total	Number of PCTs in quarter to March 2007	Projected number of PCTs in quarter to March 2008
> 12%	1	1
8% to 12%	2	3
4% to 8%	6	8
3% to 4%	8	7
2% to 3%	11	10
1% to 2%	27	33
0.5% to 1%	25	21
<0.5%	72	69

• It was expected that Repeat Dispensing would be best suited to patients with chronic conditions that are considered likely to remain stable for the duration of the repeatable prescription. It is no surprise then that the majority of items prescribed under repeat dispensing in the quarter to March 2007 are for the treatment of hypertension, hypercholesterolemia, diabetes mellitus and thyroid problems.

FORECAST OF GROWTH IN VOLUME FOR 2007/08

In the previous report 'update on growth in prescription volume and cost year to December 2006' growth in volume was forecast to be around 4.8% for financial year 2006/07, actual growth was 4.2%. The reduction in growth in the year to March 2007 can be partially attributed to the unusually mild winter and the new home oxygen service contract.

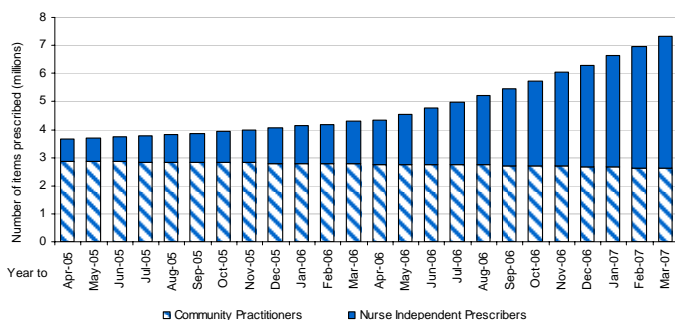
Growth will be maintained by the NICE guidance for prescribing of statins and by the Quality and Outcomes Framework of the GMS contract. Repeat dispensing will have an effect on growth although not at a significant level. Taking this into consideration and analysing past data, growth in financial year 2007/08 is expected to be 4.5%.

NON MEDICAL PRESCRIBING

The non-medical prescriber initiative has the potential to increase prescription volume however the DH anticipates that it will replace existing prescribing and take pressure off GPs by allowing them to focus on more complex cases thereby improving the availability of care for patients.

Nurses

Nurse independent prescribers (formerly known as extended formulary nurse prescribers) are now able to prescribe any licensed medicine for any medical condition within their competence, including some controlled drugs. As at 7th March 2007 there are 6,985 nurse independent prescribers and 22,763 community practitioners on the NHSBSA PPD database of prescribers.

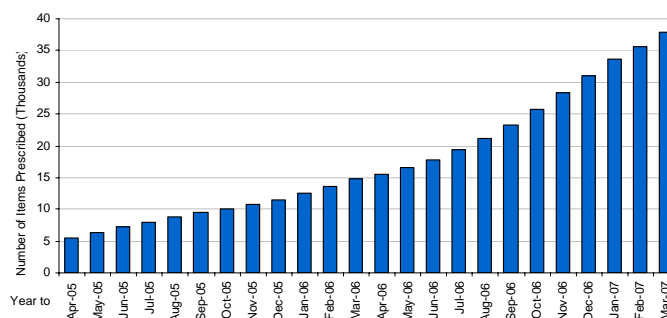


- The chart to the left shows the total number of items prescribed by community practitioners and nurse independent prescribers.
- In the year to March 2007 the NHSBSA PPD received 7.3 million items for processing from nurses, a 69.9% increase on the previous year.
- The PPD have received nurse prescriptions from every PCT in England in the year to March 2007.

Knowsley PCT has the greatest number of items prescribed by nurses (184,729) as well as the greatest proportion of nurse prescribing to total prescribing (6.1%). This is a huge increase on the previous year in which nurses in Knowsley PCT prescribed around 27,000 items.

Pharmacists

- The chart to the right shows the total number of items prescribed by supplementary and independent pharmacists.
- In the year to March 2007 the NHSBSA PPD received 37,966 items for processing from pharmacist prescribers. This is an increase of over 150% on the year to March 2006.



The NHSBSA PPD database of prescribers now contains the details of 380 pharmacist prescribers. Regulations were introduced on 1st May 2006 that allow pharmacists to independently prescribe any licensed medicine for any medical condition that a pharmacist prescriber is competent to treat, with the exception of controlled drugs and unlicensed medicines.

Pharmacy prescriptions have been received from only 76 (of 152) PCTs in the year to March 2007. Just over 40% of pharmacy prescribing is received from only three PCTs; North Lancashire (21.2%), Croydon (12.3%) and Walsall Teaching (6.7%). Pharmacy prescribing in Croydon has increased from 62 in the year to March 2006 to nearly 4,668 items this year.

Whether pharmacist independent prescribers should be allowed to prescribe controlled drugs is currently the subject of a Home Office consultation with the aim of increasing accessibility to patients in receiving their medication, pain relief, post-operative care and treatment for substance misuse. The consultation that commenced in March 2007 not only considers prescribing of controlled drugs by pharmacists but also seek views on whether the array of CDs that nurse independent prescribers can currently prescribe should be extended. The consultation will close in June 2007.

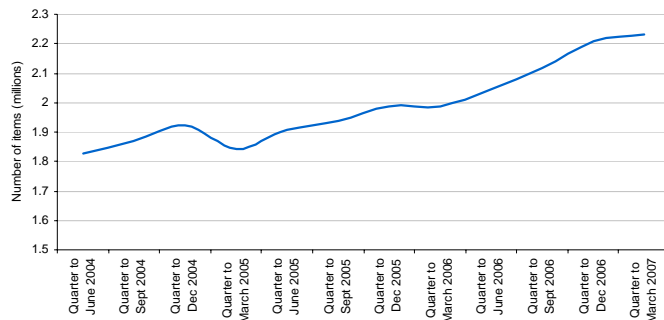
Other Health Professionals

Parliamentary approval for amendments to medicines legislation and NHS regulations was given in May 2005 to allow more health professionals to prescribe medicines as supplementary prescribers in partnership with a doctor. From July 2006 chiropodists/podiatrists, physiotherapists, radiographers and optometrists are also able to prescribe controlled drugs as supplementary prescribers, but only where there is a patient need and the doctor has agreed.

The NHSBSA PPD currently has 10 physiotherapists and 4 podiatrists registered on the database. The PPD received its first prescription from an allied health professional (a physiotherapist) in August 2006. Since that time 107 items have been prescribed by physiotherapists from three PCTs; Salford (79.4%), Medway Teaching (19.6%) and Nottingham (0.9%).

SAFER MANAGEMENT OF CONTROLLED DRUGS

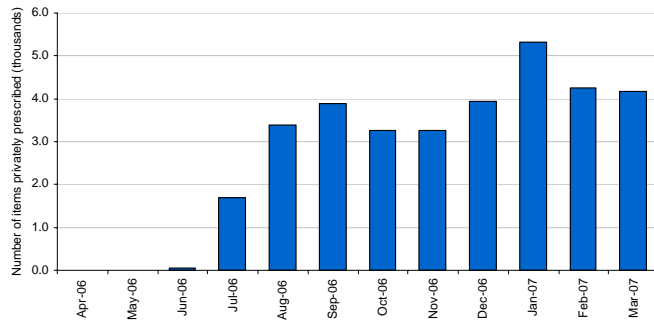
The Fourth Report of the Shipman Inquiry (The Regulation of Controlled Drugs in the Community) was published on 15 July 2004 and is concerned with the systems for ensuring the safe and appropriate use of controlled drugs whilst ensuring patients can easily access the treatment they need. The following sections examine the prescribing of controlled drugs both on the NHS FP10 form and private prescriptions.



- The chart to the left shows the trend of total schedule 2 and 3 prescribed Controlled Drugs on NHS FP10 forms. In the year to March 2007 temazepam is the controlled drug prescribed most frequently (3.3 million items) followed by methadone (1.6 million items). Over the same time period prescribing of temazepam decreased (-4.5%) whilst methadone significantly increased (+19.1%).

The Misuse of Drugs Regulations were amended 12th June 2006 and came into effect 7th July 2006 so that copies of private prescriptions for Schedule 2 and 3 controlled drugs dispensed in community pharmacies should be submitted to the NHSBSA PPD each month. As at 7th March

2007 there are 2,769 private prescribers (including 1 private nurse) on the NHSBSA PPD database of prescribers.



- In the quarter to March 2007, 13,744 private prescriptions for controlled drugs were received, all from doctors. This is an increase of 31.5% on the quarter to December 2006.

- PCTs are able to monitor prescribing of controlled drugs by private prescribers using ePACT.net.

Drug	Quarter to March 2007	Proportion
Methadone	7,579	55.1%
Dexamfetamine	2,525	18.4%
Temazepam	1,242	9.0%
Morphine	709	5.2%
Methylphenidate	508	3.7%
Buprenorphine	474	3.4%
All others	707	5.1%
Total	13,744	100.0%

Of the 13,744 prescriptions received this quarter the majority are for analgesics (65.2%) followed by CNS stimulants (22.1%). The table above shows the top six drugs privately prescribed. The greater proportion of private prescribing is for methadone that can fall into both the analgesic and drugs for substance misuse categories and makes up 55.1% of all private prescribing in the quarter to March 2007.