



Health & Social Care
Information Centre

Prescribing by Dentists:

England, 2013

Published 24 April 2014

This publication may be of interest to stakeholders, policy officials and members of the public to support the understanding of generic prescribing patterns in dentistry.

**We are the
trusted source of authoritative
data and information relating to
health and care.**

**www.hscic.gov.uk
enquiries@hscic.gov.uk**

Author:	Gemma Ramsay, Section Head, Prescribing and Primary Care Team, Health and Social Care Information Centre
Responsible statistician:	Oliver Smith, Service Manager
Version:	V1.0
Date of publication	24 April 2014

Contents

Executive Summary	4
Key Findings	4
Introduction	5
Overview since 2005	6
British National Formulary (BNF) Chapters	7
British National Formulary (BNF) Sections	12
By leading Sections	12
Leading BNF Sections by Paragraph	19
BNF Section 5.1 Antibacterial Drugs	19
BNF Section 9.5 Minerals	22
BNF Section 12.3 Drugs acting on the Oropharynx	23
Major Changes in 2013	26
BNF Section 5.1 Antibacterial Drugs	26
BNF Section 9.5 Minerals	28
BNF Section 10.1 Drugs Used In Rheumatic Disease and Gout	29
BNF Section 4.1 Hypnotics and Anxiolytics	30
BNF Section 21.21 Dry Mouth Products	31
BNF Section 6.3 Corticosteroids (Endocrine)	32
Controlled Drugs	33
Controlled Drugs by Schedule	36
Sources and Definitions	39
List of Annexes	41
Other Publications	41

Executive Summary

This yearly report, *Prescribing by Dentists: England, 2013*, includes information on the items prescribed by dentists, the Net Ingredient Cost (NIC) of those items and generic prescribing rates. It presents some of the main trends for leading British National Formulary (BNF) chapters and sections for dental prescribing. The data are final.

The figures shown represent calendar years, January – December, rather than financial years and a time series dated back to 2005 is included. The collection records NHS prescriptions by dentists dispensed in the community in England; no further breakdown is available.

The data are provided by NHS Prescription Services, part of the NHS Business Services Authority (NHSBSA), who process prescriptions in order to reimburse dispensers. The specific source of these statistics is the Prescription Cost Analysis (PCA) database.

Key Findings

- 5.6 million prescription items, at a Net Ingredient Cost (NIC) of approximately £22 million, were dispensed in 2013. This represents a 0.7 per cent decrease in prescription items from 2012 and a 24.7 per cent rise in NIC. This noteworthy increase can, for the most part, be attributed to a rise in drug tariff prices.
- Dental prescription items represent 0.5 per cent of the 1 billion items dispensed overall in 2013. Dental NIC was 0.3 per cent of the overall 2013 total of approximately £8.6 billion.
- There were approximately 1 million *Minerals* items (BNF 9.5) representing 19.3 per cent of all items prescribed by dentists. These were prescribed at a NIC of approximately £13.5 million, accounting for 61.2 per cent of NIC prescribed by dentists. This represents a 12.8 per cent increase in prescription items from 2012 and a 40.1 per cent rise in NIC.
- In 2013 prescribing of Controlled Drugs (Schedules 1-5) by dentists represented 0.08 per cent of all Controlled Drug items (consistent with figures from 2011 onwards) and 0.01 per cent of the total NIC for Controlled Drugs (consistent with figures from 2008 onwards).

Fluoride is the only paragraph to appear in the *Minerals* section as prescribed by dentists. The Department of Health's *Delivering Better Oral Health*¹ toolkit advocates the use of fluoride to improve dental health, including the provision of high fluoride toothpastes for the prevention and treatment of caries (tooth decay) in adults.

Prescriptions dispensed in hospitals, private prescriptions or prescriptions written in England but prescribed outside England are not included.

¹ *Delivering Better Oral Health – An evidence based toolkit for prevention, second edition* published by Department of Health at http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_102982.pdf

Introduction

This report presents a summary of NHS prescriptions by dentists dispensed in the community in England during 2013. Figures for 2013 are shown and compared against previous years, with significant changes highlighted. The figures shown represent calendar years (January – December) rather than financial years.

This is the seventh annual report published by the Health and Social Care Information Centre (HSCIC) to focus on prescribing by dentists.

Dental prescribing data are only available at a national (England) level as the prescription forms do not identify the Clinical Commissioning Group (CCG) of the prescriber or patient. Neither the number of dentists prescribing nor the number of patients treated is available.

All costs given in this report are Net Ingredient Cost (NIC). This is the basic price of a drug, i.e. the price listed in the national Drug Tariff or in standard price lists. It standardises cost throughout prescribing nationally, and allows comparisons of data from different sources.

This report includes figures on generic prescribing rates in dentistry. Generic prescribing refers to the prescribing of non-proprietary preparations as these are generally less expensive than proprietary brands. Not all preparations have a generic alternative, and it is not always possible or appropriate to prescribe a generic preparation. See [Sources and Definitions](#) for further details.

Within this report the use of the term ‘items’ refers to prescription items. Each single item written on the form is counted as a prescription item.

This report contains information which includes Class 4 preparations (dressing and appliances); this is the first time that it has been included in the ‘Prescribing by Dentists’ publication.

For more information on this publication and other dental data published by the Health and Social Care Information Centre we recommend our [Beginner’s Guide to Dental Data](#).

Any comments/suggestions for improvements are welcomed and can be submitted via the ‘Have your say’ link on the [publication webpage](#) or by email: dentalstatistics@hscic.gov.uk.

Overview since 2005

There were 5,580,812 items prescribed by dentists in 2013, a slight decrease of 0.7 per cent (36,607) from 2012; the first decrease since 2006. Net Ingredient Cost (NIC) increased by £4,364,020 (24.7 per cent). Having remained relatively stable at over £10 million from 2006 to 2009, successive significant increases since, have raised this to £22,032,245. This is examined in further detail in subsequent chapters.

93.1 per cent of items were prescribed generically in 2013; continuing the steady increase apparent since 2005.

Table 1.1: Number of items prescribed by dentists and all prescribers, 2005-2013

Year	Items by dentists	Change in items by dentists on previous year	Per cent change in items by dentists on previous year	Per cent of items prescribed generically by dentists	Items by all prescribers (includes dentists)	Number
						Items prescribed by dentists as a per cent of all prescriber items
2005	4,651,236	-	-	89.7	720,283,164	0.6
2006	4,481,437	-169,799	-3.7	90.2	751,954,058	0.6
2007	4,568,576	87,139	1.9	90.5	796,298,021	0.6
2008	4,647,127	78,551	1.7	90.6	842,502,224	0.6
2009	4,909,496	262,369	5.6	90.9	885,999,283	0.6
2010	5,146,158	236,662	4.8	91.5	926,657,637	0.6
2011	5,398,946	252,788	4.9	92.0	961,528,633	0.6
2012	5,617,419	218,473	4.0	92.5	1,000,502,416	0.6
2013	5,580,812	-36,607	-0.7	93.1	1,030,079,389	0.5

Source: PCA database

Table 1.2: NIC prescribed by dentists and by all prescribers, 2005-2013

Year	NIC by dentists	Change in NIC by dentists on previous year	Per cent change in NIC by dentists on previous year	NIC by all prescribers (includes dentists)	Pounds
					NIC prescribed by dentists as a per cent of all prescriber NIC
2005	9,185,690	-	-	7,936,564,031	0.1
2006	10,078,492	892,802	9.7	8,196,832,389	0.1
2007	10,656,797	578,305	5.7	8,372,667,329	0.1
2008	10,303,814	-352,983	-3.3	8,325,492,244	0.1
2009	10,372,771	68,957	0.7	8,539,421,190	0.1
2010	12,415,972	2,043,200	19.7	8,834,379,813	0.1
2011	13,649,453	1,233,482	9.9	8,805,067,360	0.2
2012	17,668,226	4,018,772	29.4	8,523,131,186	0.2
2013	22,032,245	4,364,020	24.7	8,625,076,755	0.3

Source: PCA database

Notes:

1. Figures presented for NIC are rounded. Calculations have been carried out using unrounded figures, which are available in *Annex 2*.

British National Formulary (BNF) Chapters

The same five leading BNF chapters shown in table 2.1 have led in terms of items and NIC since 2006. These chapters have constituted the overwhelming majority (over 99.0 per cent) of items and NIC of NHS dental prescriptions over this period.

With the exception of *Nutrition and Blood*, which increased in both items and NIC, the leading BNF Chapters have decreased in terms of the number of items prescribed and increased in NIC. The rate of change was greater for NIC compared with items for *Infections*, *Nutrition and Blood* and *Central Nervous System*, whereas the opposite is true for *Ear, nose and oropharynx* and *Musculoskeletal and joint diseases*. *Infections* remain the dominant chapter in terms of items dispensed since 2005, accounting for 68.4 per cent of items in 2013, although this is a decrease from 2012. *Nutrition and Blood* is accountable for the highest percentage of NIC again in 2013, with a 61.2 per cent share.

Nutrition and Blood has seen the greatest rise in its share of total dental prescribing items and NIC since 2005 with both measures increasing year on year, as highlighted in figure 2.2. From only 12,015 items in 2005, *Nutrition and Blood* is now, in 2013, the chapter with the second highest number of items prescribed by dentists with 1,075,479 items. Items increased by 122,217 (12.8 per cent) in 2013; a steadier rate when compared with 2012. Figure 2.3 shows how NIC for this chapter has increased its percentage share of all dental NIC at a rate considerably faster than number of items prescribed.

Ear, nose and oropharynx items decreased, for a second year, by 4.6 per cent following a rise in 2011. *Musculoskeletal and Joint Diseases* and *Central Nervous System* have continued a downward trajectory, after showing an increase in 2009, as highlighted in table 2.2 and figure 2.1.

The generic prescribing rate for *Ear, nose and oropharynx* was considerably lower than for other leading chapters with 58.6 per cent, as shown in table 2.1. Further details are provided at section and paragraph level, see tables 3.3 and 5.1.

Table 2.1: Number of items dispensed and NIC by leading five BNF chapters, 2013

BNF Chapter	Items	Per cent of items	Per cent of items	NIC (pounds)	Per cent of NIC
			prescribed generically		
05 Infections	3,817,549	68.4	99.8	5,982,239	27.2
09 Nutrition & blood	1,075,479	19.3	83.9	13,481,137	61.2
12 Ear, nose & oropharynx	493,373	8.8	58.6	2,257,351	10.2
10 Musculoskeletal & joint diseases	100,576	1.8	99.8	116,214	0.5
04 Central nervous system	73,489	1.3	99.7	86,518	0.4
Other	20,346	0.4	92.5	108,788	0.5
Total	5,580,812	100.0	93.1	22,032,245	100.0

Source: PCA database

Notes:

1. Figures presented for NIC are rounded. Calculations have been carried out using unrounded figures, which are available in Annex 2.

Table 2.2: Number of prescription items by dentists shown by leading five BNF chapters, 2005-2013

Year							Number
	05 Infections	09 Nutrition & blood	12 Ear, nose & oropharynx	10 Musculoskeletal & joint diseases	04 Central nervous system	Other	Total
2005	3,863,744	12,015	495,887	162,633	99,173	17,784	4,651,236
2006	3,693,264	66,470	477,881	141,950	86,613	15,259	4,481,437
2007	3,713,338	154,342	476,050	126,128	83,988	14,730	4,568,576
2008	3,677,668	268,620	481,817	122,918	80,837	15,267	4,647,127
2009	3,738,896	426,234	510,354	136,435	81,251	16,326	4,909,496
2010	3,860,540	546,336	507,437	133,455	79,315	19,075	5,146,158
2011	3,947,075	707,685	519,934	127,024	77,766	19,462	5,398,946
2012	3,936,737	953,262	516,945	115,186	76,112	19,177	5,617,419
2013	3,817,549	1,075,479	493,373	100,576	73,489	20,346	5,580,812
Change 2012 to 2013	-119,188	122,217	-23,572	-14,610	-2,623	1,169	-36,607
Per cent change 2012 to 2013	-3.0	12.8	-4.6	-12.7	-3.4	6.1	-0.7

Source:
PCA
database

Figure 2.1: Number of prescription items shown by leading five BNF chapters, 2005-2013 (note break in vertical axis)

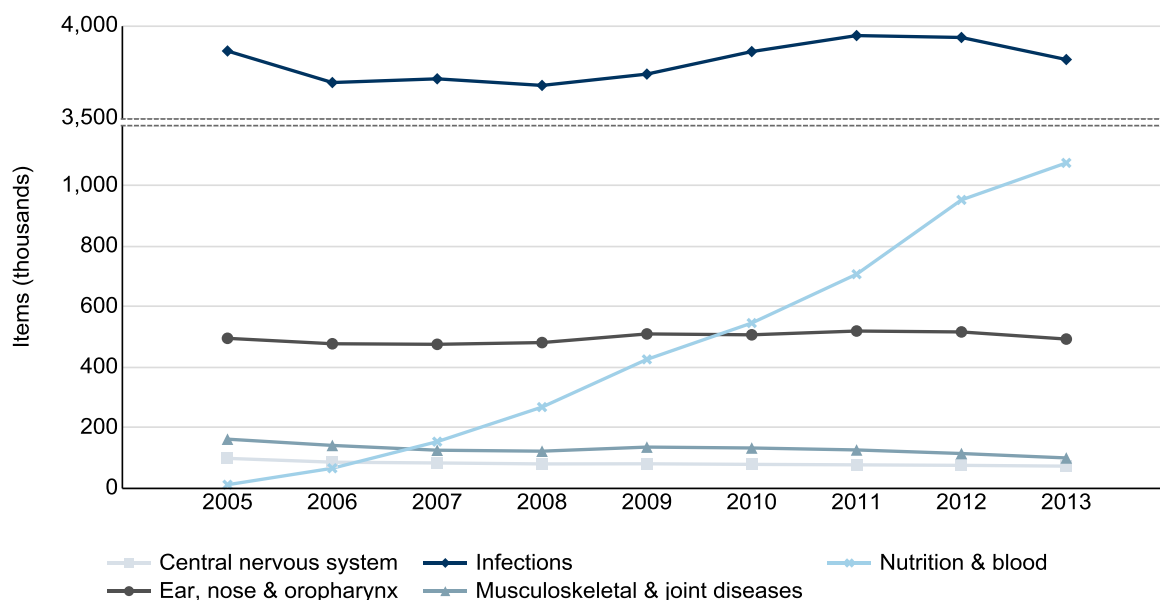


Table 2.3: Percentage share of prescription items by dentists in leading five BNF chapters, 2005-2013

							Per cent
Year	05 Infections	09 Nutrition & blood	12 Ear, nose & oropharynx	10 Musculoskeletal & joint diseases	04 Central nervous system	Other	Total
2005	83.1	0.3	10.7	3.5	2.1	0.4	100.0
2006	82.4	1.5	10.7	3.2	1.9	0.3	100.0
2007	81.3	3.4	10.4	2.8	1.8	0.3	100.0
2008	79.1	5.8	10.4	2.6	1.7	0.3	100.0
2009	76.2	8.7	10.4	2.8	1.7	0.3	100.0
2010	75.0	10.6	9.9	2.6	1.5	0.4	100.0
2011	73.1	13.1	9.6	2.4	1.4	0.4	100.0
2012	70.1	17.0	9.2	2.1	1.4	0.3	100.0
2013	68.4	19.3	8.8	1.8	1.3	0.4	100.0
Per cent point change 2012 to 2013	-1.7	2.3	-0.4	-0.2	0.0	0.0	0.0

Source:
PCA
database

Table 2.4: NIC by leading five BNF chapters, 2005-2013

							Pounds
Year	05 Infections	09 Nutrition & blood	12 Ear, nose & oropharynx	10 Musculoskeletal & joint diseases	04 Central nervous system	Other	Total
2005	7,277,171	22,729	1,578,352	166,939	82,300	58,199	9,185,690
2006	7,867,224	274,335	1,613,935	181,531	92,321	49,146	10,078,492
2007	7,935,119	815,205	1,613,905	140,280	104,914	47,374	10,656,797
2008	6,911,512	1,613,708	1,562,909	102,670	77,564	35,452	10,303,814
2009	5,822,684	2,715,783	1,610,608	110,714	73,814	39,169	10,372,771
2010	6,052,060	4,419,834	1,717,072	98,953	77,584	50,469	12,415,972
2011	5,372,147	6,097,097	1,954,846	89,897	69,420	66,046	13,649,453
2012	5,581,604	9,625,409	2,207,657	105,772	74,754	73,030	17,668,226
2013	5,982,239	13,481,137	2,257,351	116,214	86,518	108,788	22,032,245
Change 2012 to 2013	400,634	3,855,728	49,693	10,442	11,764	35,758	4,364,020
Per cent change 2012 to 2013	7.2	40.1	2.3	9.9	15.7	49.0	24.7

Source:
PCA
database

Notes:

1. Figures presented for NIC are rounded. Calculations have been carried out using unrounded figures, which are available in *Annex 2*.

Table 2.5: Percentage share of NIC by leading five BNF chapters, 2005-2013

							Per cent
Year	05 Infections	09 Nutrition & blood	12 Ear, nose & oropharynx	10 Musculoskeletal & joint diseases	04 Central nervous system	Other	Total
2005	79.2	0.2	17.2	1.8	0.9	0.6	100.0
2006	78.1	2.7	16.0	1.8	0.9	0.5	100.0
2007	74.5	7.6	15.1	1.3	1.0	0.4	100.0
2008	67.1	15.7	15.2	1.0	0.8	0.3	100.0
2009	56.1	26.2	15.5	1.1	0.7	0.4	100.0
2010	48.7	35.6	13.8	0.8	0.6	0.4	100.0
2011	39.4	44.7	14.3	0.7	0.5	0.5	100.0
2012	31.6	54.5	12.5	0.6	0.4	0.4	100.0
2013	27.2	61.2	10.2	0.5	0.4	0.5	100.0
Per cent point change 2012 to 2013	-4.4	6.7	-2.2	-0.1	0.0	0.1	-

Source:
PCA
database

Figure 2.2: Growth of items prescribed and NIC for *Nutrition and Blood* chapter since 2005

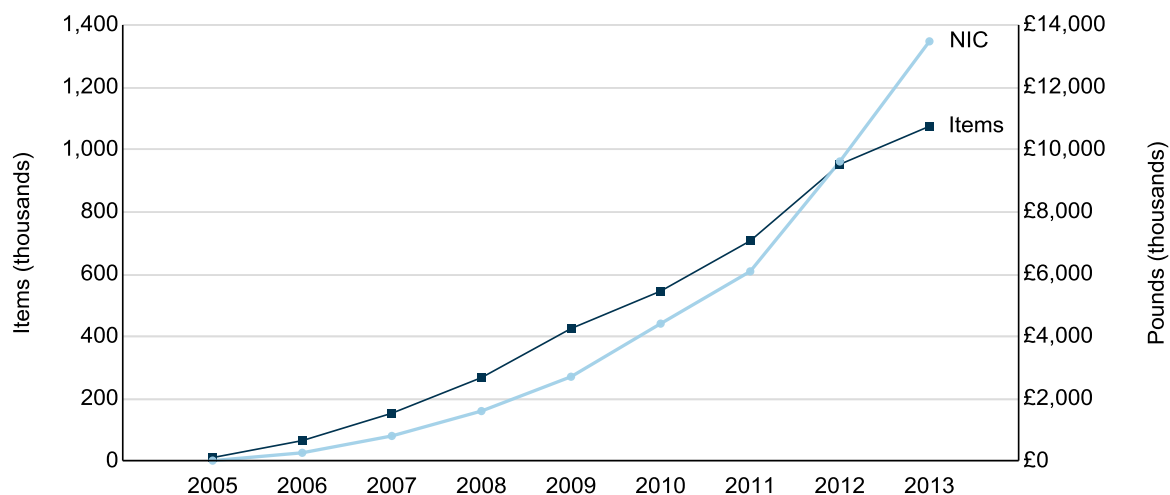
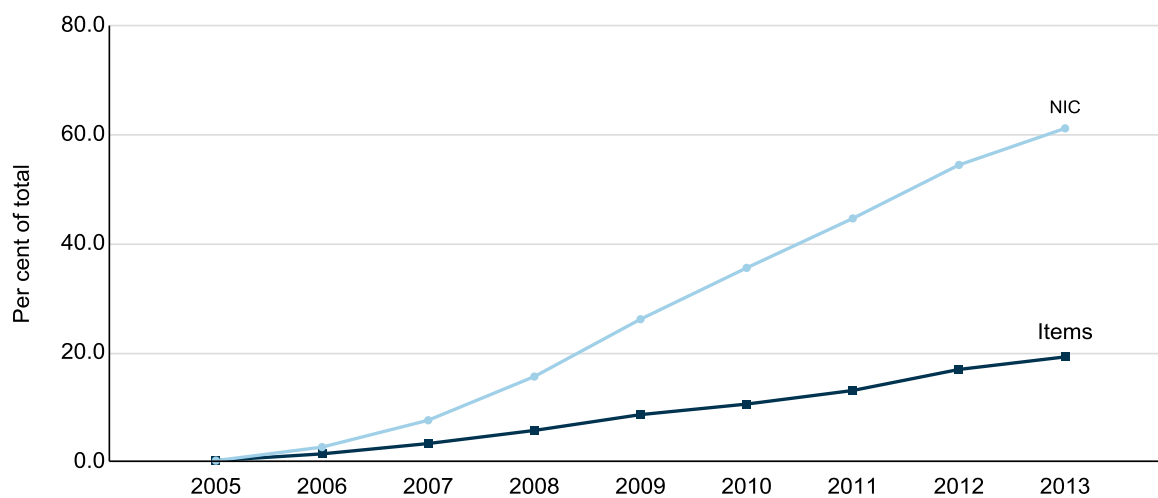


Figure 2.3: Items prescribed and NIC for *Nutrition and Blood* chapter as percentage of all dental prescribing since 2005



British National Formulary (BNF) Sections

By leading Sections

In 2013 the items dispensed came from 22 BNF sections, the same as in 2012. In terms of items dispensed, eight of the ten leading sections retained the same order as last year, with no changes within the top eight. *Corticosteroids (Endocrine)* rose in the number of items dispensed and now appear as the tenth leading BNF chapter, whilst *Skin Cleansers*, *Antiseptics and Desloughing* no longer appear in the top ten.

Antibacterial Drugs continues to lead in terms of total items dispensed. However, it continues to reduce in terms of its share of all dental items prescribed; a 1.7 percentage point drop from 2012. *Minerals* was the only chapter to increase its percentage share of dental items in 2013, and has done so since 2007, with a further increase of 2.3 percentage points.

Table 3.3 shows that generic prescribing for *Drugs Acting on the Oropharynx* remains considerably lower than for other sections. This is discussed at paragraph level in table 5.1.

Table 3.1: Number of items by leading ten BNF sections, 2013

BNF Section	Items	Per cent of dental items	Per cent of dental items in 2012
5. 1 Antibacterial Drugs	3,805,256	68.2	69.9
9. 5 Minerals	1,075,479	19.3	17.0
12. 3 Drugs Acting On The Oropharynx	492,569	8.8	9.2
10. 1 Drugs Used In Rheumatic Diseases & Gout	100,576	1.8	2.1
4. 7 Analgesics	64,021	1.1	1.2
5. 2 Antifungal Drugs	10,484	0.2	0.2
4. 1 Hypnotics And Anxiolytics	9,132	0.2	0.2
13.10 Anti-Infective Skin Preparations	5,511	0.1	0.1
21.21 Dry Mouth Products	4,709	0.1	0.1
6. 3 Corticosteroids (Endocrine)	3,170	0.1	0.1

Source: PCA database

Table 3.2: Number of items by remaining ten BNF Sections, 2013

BNF Section	Total items
13.11 Skin Cleansers,Antiseptics & Desloughing	3,136
5. 3 Antiviral Drugs	1,809
15. 2 Local Anaesthesia	1,671
13. 4 Topical Corticosteroids	804
12. 2 Drugs Acting On The Nose	804
1. 3 Antisecretory Drugs+Mucosal Protectants	727
3. 4 Antihist, Hyposensit & Allergic Emergen	364
4. 8 Antiepileptics	336
3. 8 Aromatic Inhalations	111
2. 9 Antiplatelet Drugs	70
3. 2 Corticosteroids (Respiratory)	65
19. 2 Selective Preparations	8

Source: PCA database

The use of *antiepileptics* in dental practice may seem surprising but all of these prescriptions were for *carbamazepine* and may have been to treat trigeminal neuralgia.

Table 3.3 shows the number of dentists' prescription items as percentages of all prescriber items. The 5.6 million items prescribed by dentists represented 0.5 per cent of the total number of items prescribed by all prescribers (1 billion) in all BNF sections. This percentage had been unchanged, at 0.6 per cent, since 2005.

Minerals continued as the section where the percentage of items prescribed by dentists is greatest. The percentage in 2013 at 53.4 per cent is more than triple the 2007 value of 16.7 per cent, and represents a rise of 5.0 percentage points since 2012. This increase in percentage indicates dentists have increased their prescribing of *Minerals* items at a faster rate than all prescribers, although the rate of increase in this measure had appeared to be slowing, *Minerals* now exceed 1 million items.

Table 3.3: Number of dentist' prescription items as a percentage of all items, 2013

BNF Section	Items by dentists	Items by all prescribers (includes dentists)	Items prescribed by dentists as a per cent of all prescriber items	Number
				Per cent of items prescribed generically by dentists
5. 1 Antibacterial Drugs	3,805,256	41,617,596	9.1	99.8
9. 5 Minerals	1,075,479	2,012,771	53.4	83.9
12. 3 Drugs Acting On The Oropharynx	492,569	2,178,565	22.6	58.5
10. 1 Drugs Used In Rheumatic Diseases & Gout	100,576	24,195,527	0.4	99.8
4. 7 Analgesics	64,021	66,541,264	0.1	99.6
5. 2 Antifungal Drugs	10,484	2,152,224	0.5	96.7
4. 1 Hypnotics And Anxiolytics	9,132	16,485,835	0.1	100.0
13.10 Anti-Infective Skin Preparations	5,511	4,436,037	0.1	92.7
21.21 Dry Mouth Products	4,709	127,212	3.7	n/a
6. 3 Corticosteroids (Endocrine)	3,170	7,914,502	0.0	84.5
n/a Other	9,905	862,417,856	0.0	n/a
Total	5,580,812	1,030,079,389	0.5	93.1

Source: PCA database

Table 3.4 shows that *Minerals* accounted for the largest percentage NIC with a 61.2 per cent share of dental prescribing, an increase of 6.7 percentage points from 2012.

Table 3.4: NIC by leading BNF sections, 2013

BNF Section	NIC	Pounds	
		Per cent of dental NIC	Per cent of dental NIC in 2012
9. 5 Minerals	13,481,137	61.2	54.5
5. 1 Antibacterial Drugs	5,766,838	26.2	30.3
12. 3 Drugs Acting On The Oropharynx	2,256,007	10.2	12.5
5. 2 Antifungal Drugs	202,117	0.9	1.2
10. 1 Drugs Used In Rheumatic Diseases & Gout	116,214	0.5	0.6
4. 7 Analgesics	68,729	0.3	0.4
6. 3 Corticosteroids (Endocrine)	37,614	0.2	0.1
21.21 Dry Mouth Products	33,964	0.2	0.1
13.10 Anti-Infective Skin Preparations	18,918	0.1	0.1
4. 1 Hypnotics And Anxiolytics	14,827	0.1	0.0

Source: PCA database

Notes:

1. Figures presented for NIC are rounded. Calculations have been carried out using unrounded figures, which are available in *Annex 2*.

The NIC of prescribing by dentists accounted for 0.3 per cent of the total NIC of prescribing by all prescribers, as seen in Table 3.5.

Minerals now accounts for the greatest percentage of NIC in relation to the NIC of all prescribers at 31.6 per cent in 2013; a substantial increase from 2007, where NIC accounted for 4.9 per cent.

Table 3.5: NIC of prescriptions by dentists as a percentage of all prescribers NIC, 2013

BNF Section	NIC by dentists	NIC by all prescribers (inc dentists)	Pounds
			NIC prescribed by dentists as a per cent of all prescriber NIC
9. 5 Minerals	13,481,137	42,704,669	31.6
5. 1 Antibacterial Drugs	5,766,838	191,984,217	3.0
12. 3 Drugs Acting On The Oropharynx	2,256,007	11,384,831	19.8
5. 2 Antifungal Drugs	202,117	21,854,729	0.9
10. 1 Drugs Used In Rheumatic Diseases & Gout	116,214	150,693,903	0.1
4. 7 Analgesics	68,729	514,383,409	0.0
6. 3 Corticosteroids (Endocrine)	37,614	73,876,261	0.1
21.21 Dry Mouth Products	33,964	821,479	4.1
13.10 Anti-Infective Skin Preparations	18,918	23,533,542	0.1
4. 1 Hypnotics And Anxiolytics	14,827	104,640,443	0.0
n/a Other	35,881	7,489,199,274	0.0
Total	22,032,245	8,625,076,755	0.3

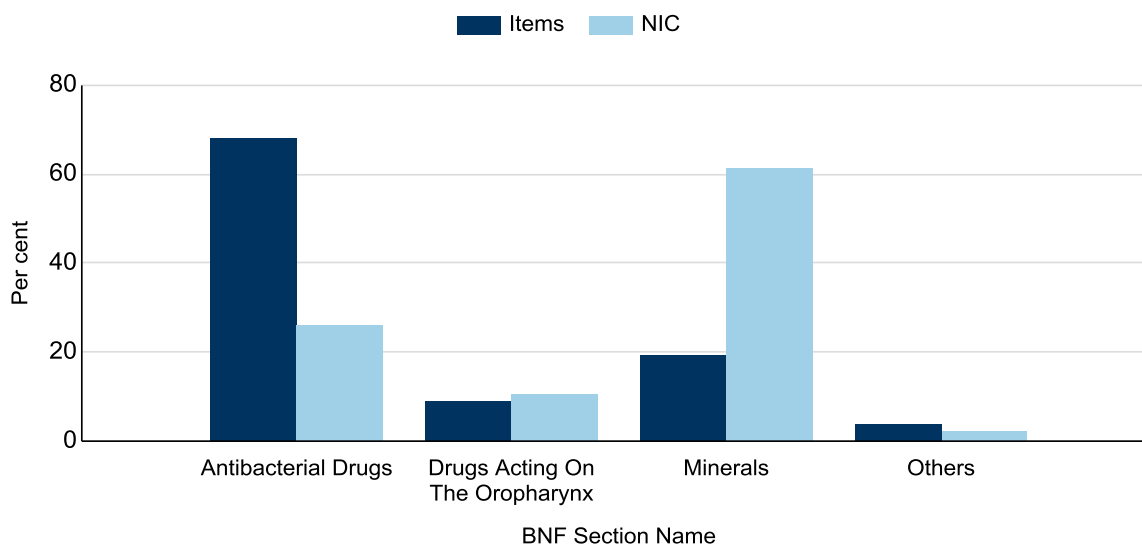
Source: PCA database

Notes:

1. Figures presented for NIC are rounded. Calculations have been carried out using unrounded figures, which are available in *Annex 2*.

Figure 3.1 demonstrates higher percentages of NIC attributed to *Minerals* and *Drugs acting on the Oropharynx*, compared with their respective percentages of items, reflecting their higher overall cost per item.

Figure 3.1: Percentage of items and NIC prescribed by dentists, by leading BNF sections, 2013



Tables 3.6 and 3.7 demonstrate notable year on year percentage increases in terms of items and NIC for *Minerals*, *Corticosteroids (Endocrine)* and *Dry Mouth Products*.

Table 3.6: Number of prescription items by dentists shown by leading ten BNF sections (in terms of items), 2005-2013

										Number
Year	Antibacterial Drugs	Minerals	Drugs Acting On The Oropharynx	Drugs Used In Rheumatic Diseases & Gout	Analgesics	Antifungal Drugs	Hypnotics And Anxiolytics	Anti-Infective Skin Preparations	Dry Mouth Products	Corticosteroids (Endocrine)
2005	3,857,798	11,539	495,191	162,633	84,083	3,953	14,373	11,467	-	-
2006	3,687,259	66,116	477,227	141,950	73,538	4,212	12,537	9,037	-	-
2007	3,706,014	154,063	475,386	126,122	71,359	5,579	12,100	7,754	-	7
2008	3,669,862	268,284	481,149	122,918	69,314	6,097	11,067	7,074	97	410
2009	3,731,080	426,084	509,545	136,435	70,132	6,147	10,675	6,244	217	1,175
2010	3,850,773	546,325	506,564	133,455	68,783	7,969	10,074	6,105	686	2,210
2011	3,935,698	707,684	519,116	127,024	67,394	9,545	9,983	6,128	2,245	2,210
2012	3,924,397	953,262	516,029	115,186	66,412	10,445	9,337	6,109	3,015	2,854
2013	3,805,256	1,075,479	492,569	100,576	64,021	10,484	9,132	5,511	4,709	3,170
Change 2012 to 2013	-119,141	122,217	-23,460	-14,610	-2,391	39	-205	-598	1,694	316
Per cent change 2012 to 2013	-3.0	12.8	-4.5	-12.7	-3.6	0.4	-2.2	-9.8	56.2	11.1

Source: PCA
database

Table 3.7: NIC by dentists shown by leading ten BNF sections (in terms of NIC), 2005-2013

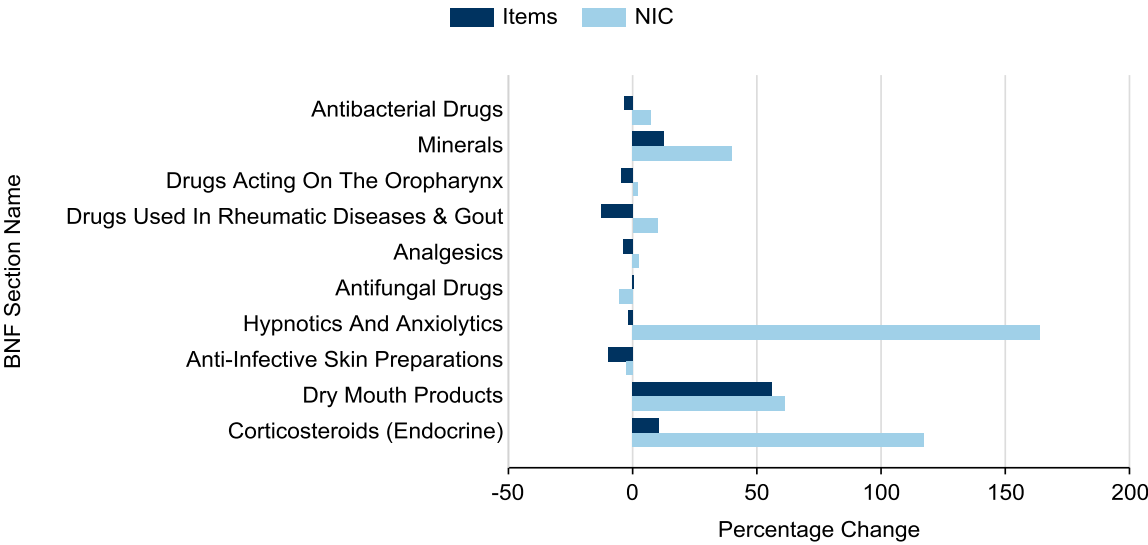
										Pounds
Year	Minerals	Antibacterial Drugs	Drugs Acting On The Oropharynx	Antifungal Drugs	Drugs Used In Rheumatic Diseases & Gout	Analgesics	Corticosteroids (Endocrine)	Dry Mouth Products	Anti-Infective Skin Preparations	Hypnotics And Anxiolytics
2005	21,163	7,231,848	1,577,390	22,813	166,939	75,731	-	-	50,587	4,728
2006	272,640	7,829,421	1,613,072	18,398	181,531	85,534	-	-	37,340	5,367
2007	813,637	7,896,556	1,612,470	18,665	140,158	97,682	14	-	33,403	5,666
2008	1,611,589	6,876,018	1,562,017	17,959	102,670	71,383	1,677	493	22,717	4,810
2009	2,714,772	5,786,839	1,609,447	17,335	110,714	66,024	4,427	1,232	21,761	5,905
2010	4,419,784	5,964,711	1,715,786	64,899	98,953	69,608	7,712	4,670	21,890	5,962
2011	6,097,094	5,204,929	1,953,599	147,302	89,897	62,563	11,949	16,896	19,909	5,150
2012	9,625,409	5,351,022	2,206,209	213,092	105,772	66,687	17,332	21,050	19,474	5,620
2013	13,481,137	5,766,838	2,256,007	202,117	116,214	68,729	37,614	33,964	18,918	14,827
Change 2012 to 2013	3,855,728	415,816	49,799	-10,976	10,442	2,043	20,282	12,914	-555	9,207
Per cent change 2012 to 2013	40.1	7.8	2.3	-5.2	9.9	3.1	117.0	61.3	-2.9	163.8

Source: PCA
database

Figure 3.2 highlights the relative changes in items and NIC from 2012 to 2013 for the leading sections. One of the most prominent changes is for the *Hypnotics and Anxiolytics* section, which has seen an increase in its NIC whilst the number of items prescribed, decreased. Although to a lesser extent, the following sections also have noteworthy changes: *Minerals*, *Dry Mouth Products* and *Corticosteroids (Endocrine)*.

These changes are examined in further detail in '[Major Changes in 2013](#)' of this bulletin.

Figure 3.2: Leading BNF Sections in terms of items dispensed 2013; percentage change in items and NIC from 2012



Source: PCA database

Leading BNF Sections by Paragraph

The following section examines the three leading BNF sections – *Antibacterial Drugs*, *Minerals* and *Drugs acting on the Oropharynx*– at paragraph level. Dental prescribing is also compared to overall national prescribing figures.

BNF Section 5.1 Antibacterial Drugs

Antimicrobial resistance is a major public health concern. The recently published strategy² clearly states the need to control the use of antimicrobials and avoid inappropriate use. The number of *Antibacterial Drugs* items prescribed by dentists has reduced by 3.0 per cent (119,141) from 2012 to 2013, although NIC increased by 7.8 per cent (415,816).

Penicillins had both the highest number of items and NIC in 2013, 2,511,889 and £3,657,242 respectively, within the *Antibacterial Drug* Section. Despite the number of items falling by 2.9 per cent, the associated NIC rose by 15.8 per cent. This difference can, in part, be attributed to: *Amoxicillin Cap 250mg* and *Amoxicillin Cap 500mg*. The number of items changed at a slower rate than the increase in the NIC; the *250mg* presentation fell by 7.3 per cent in terms of items whilst the NIC rose 22.0 per cent and similarly, the *500mg* presentation NIC increased by 28.8 per cent, whilst the associated number of items rose by just 0.3 per cent. These changes are examined in further detail in '[Major Changes in 2013](#)' of this bulletin.

The largest relative change in items was for *Cephalosporins and other Betalactams*; decreasing by 20.0 per cent between 2012 and 2013.

Generic prescribing rates were shown to be high across all paragraphs in this section (over 99.0 per cent).

Table 4.1: Antibacterial Drugs; items and NIC as prescribed by dentists, 2013

BNF Paragraph	Items	Per cent of Antibacterial Drug items	Per cent of items prescribed generically	NIC (pounds)	Per cent of Antibacterial Drug NIC
Penicillins	2,511,889	66.0	99.8	3,657,242	63.4
Metronidazole and Tinidazole	1,068,871	28.1	100.0	1,374,380	23.8
Macrolides	177,676	4.7	99.1	496,788	8.6
Clindamycin	20,415	0.5	99.2	171,093	3.0
Cephalosporins and other Betalactams	15,735	0.4	96.8	36,121	0.6
Tetracyclines	10,670	0.3	99.7	31,215	0.5
Total	3,805,256	100.0	99.8	5,766,838	100.0

Source: PCA database

Notes:

1. Figures presented for NIC are rounded. Calculations have been carried out using unrounded figures, which are available in Annex 2.

Table 4.2: Antibacterial Drugs; items as prescribed by dentists 2005-2013

Year								Number
	Penicillins	Metronidazole and Tinidazole	Macrolides	Clindamycin	Cephalosporins and other Betalactams	Tetracyclines	Others	Total
2005	2,582,124	950,107	199,761	65,061	37,464	23,281	-	3,857,798
2006	2,454,880	927,198	183,746	66,908	33,422	21,105	-	3,687,259
2007	2,458,549	951,976	178,811	67,365	29,750	19,558	4	3,706,013
2008	2,419,884	976,929	176,314	52,556	26,978	17,201	-	3,669,862
2009	2,448,930	1,026,943	179,535	35,294	24,945	15,433	-	3,731,080
2010	2,537,061	1,059,496	184,811	31,364	23,478	14,563	-	3,850,773
2011	2,595,753	1,089,447	187,207	26,939	22,579	13,773	-	3,935,698
2012	2,585,692	1,096,742	185,683	24,118	19,665	12,497	-	3,924,397
2013	2,511,889	1,068,871	177,676	20,415	15,735	10,670	-	3,805,256
Change 2012 to 2013	-73,803	-27,871	-8,007	-3,703	-3,930	-1,827	-	-119,141
Per cent change 2012 to 2013	-2.9	-2.5	-4.3	-15.4	-20.0	-14.6	n/a	-3.0

Source:
PCA
database

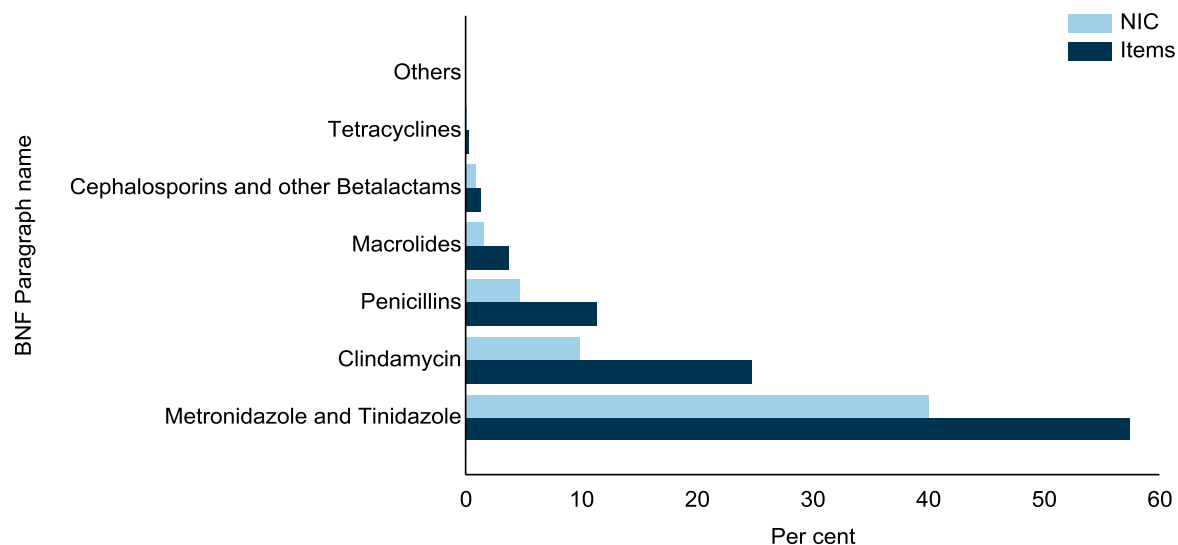
Table 4.3: Antibacterial Drugs; NIC as prescribed by dentists, 2005-2013

Year								Pounds
	Penicillins	Metronidazole and Tinidazole	Macrolides	Clindamycin	Cephalosporins and other Betalactams	Tetracyclines	Others	Total
2005	4,720,228	1,222,941	555,614	536,124	139,465	57,476	-	7,231,848
2006	4,877,528	1,391,504	532,376	806,821	150,797	70,395	-	7,829,421
2007	4,442,731	1,404,802	551,146	1,283,008	133,110	81,749	8	7,896,554
2008	3,400,113	923,663	590,912	1,779,391	97,775	84,164	-	6,876,018
2009	3,303,539	1,074,090	464,803	809,636	68,682	66,088	-	5,786,839
2010	3,555,311	1,255,501	492,811	519,706	60,264	81,120	-	5,964,711
2011	3,043,477	1,342,322	465,205	229,273	50,058	74,594	-	5,204,929
2012	3,157,347	1,391,356	497,905	200,585	46,917	56,911	-	5,351,022
2013	3,657,242	1,374,380	496,788	171,093	36,121	31,215	-	5,766,838
Change 2012 to 2013	499,894	-16,976	-1,118	-29,492	-10,796	-25,697	-	415,816
Per cent change 2012 to 2013	15.8	-1.2	-0.2	-14.7	-23.0	-45.2	n/a	7.8

Source:
PCA
database

While taken as whole, overall dentists' prescribing accounts for only a small percentage of items prescribed, figure 4.1 shows that dental prescribing of *Metronidazole* and *Tinidazole* and *Clindamycin* account for substantial percentages of both items and cost of prescriptions of these items by all prescribers.

Figure 4.1: Percentage of *Antibacterial Drugs* items and NIC prescribed by dentists as a percentage of items and NIC by all prescribers at paragraph level, 2013



BNF Section 9.5 Minerals

Fluoride was the only paragraph to appear in the *Minerals* section as prescribed by dentists; 86.0 per cent of which can be attributed to presentations of *Duraphat Fluoride*.

Fluoride prescription items and NIC have risen continuously since 2005, though Table 6.2 shows that NIC continues to increase at a significantly faster rate than items.

These changes are examined in further detail in '[Major Changes in 2013](#)' of this bulletin.

Table 5.1: *Minerals*; as prescribed by dentists, 2013

BNF Paragraph	Items	Per cent of Mineral items	Per cent of items prescribed generically	NIC	Per cent of Mineral NIC
Fluoride	1,075,479	100.0	83.9	13,481,137	100.0
Total	1,075,479	100.0	83.9	13,481,137	100.0

Source: PCA database

Table 5.2: *Minerals*; items and NIC as prescribed by dentists, 2005-2013

Year	Fluoride	
	Items	NIC
2005	11,539	21,163
2006	66,116	272,640
2007	154,063	813,637
2008	268,284	1,611,589
2009	426,084	2,714,772
2010	546,325	4,419,784
2011	707,684	6,097,094
2012	953,262	9,625,409
2013	1,075,479	13,481,137
Change 2012 to 2013	122,217	3,855,728
Per cent change 2012 to 2013	12.8	40.1

Source: PCA database

BNF Section 12.3 Drugs acting on the Oropharynx

Drugs Acting on the Oropharynx items dropped for a second year, by 4.5 per cent in 2013. NIC continued to rise, but at a slower rate than previous years, by £49,799 (2.3 per cent) to £2,256,007.

Generic prescribing for this section was particularly low at 58.5 per cent. Table 5.1 shows that *Mouthwashes, gargles and dentifrices* continues as the main contributor to total items and NIC within this section. More than half (53.0 per cent) the *Mouthwashes, gargles and dentifrices* items dispensed within this paragraph were for *Corsodyl* products.

Table 6.1: Drugs acting on the Oropharynx; as prescribed by dentists, 2013

BNF Paragraph	Items	Per cent of Drugs acting on the Oropharynx Items	Per of items prescribed generically	NIC (pounds)	Per cent of Drugs acting on the Oropharynx NIC
Mouth-Washes, Gargles, And Dentifrices	401,230	81.5	58.9	1,529,438	67.8
Drugs For Oral Ulceration & Inflammation	67,247	13.7	55.5	594,096	26.3
Oropharyngeal Anti-Infective Drugs	16,107	3.3	84.8	63,689	2.8
Treatment Of Dry Mouth	7,985	1.6	10.0	68,784	3.0
Total	492,569	100.0	58.5	2,256,007	100.0

Source: PCA database

Table 6.2: Drugs acting on the Oropharynx; items as prescribed by dentists, 2005-2013

Year					Number
	Mouth-Washes, Gargles, And Dentifrices	Drugs For Oral Ulceration & Inflammation	Oropharyngeal Anti-Infective Drugs	Treatment Of Dry Mouth	Total
2005	376,035	90,915	24,541	3,700	495,191
2006	364,590	87,141	21,562	3,934	477,227
2007	364,990	87,449	18,535	4,412	475,386
2008	375,224	83,098	17,622	5,205	481,149
2009	409,888	74,025	18,921	6,711	509,545
2010	419,147	63,804	16,376	7,237	506,564
2011	430,585	66,312	15,671	6,548	519,116
2012	423,129	68,606	16,119	8,175	516,029
2013	401,230	67,247	16,107	7,985	492,569
Change 2012 to 2013	-21,899	-1,359	-12	-190	-23,460
Per cent change 2012 to 2013	-5.2	-2.0	-0.1	-2.3	-4.5

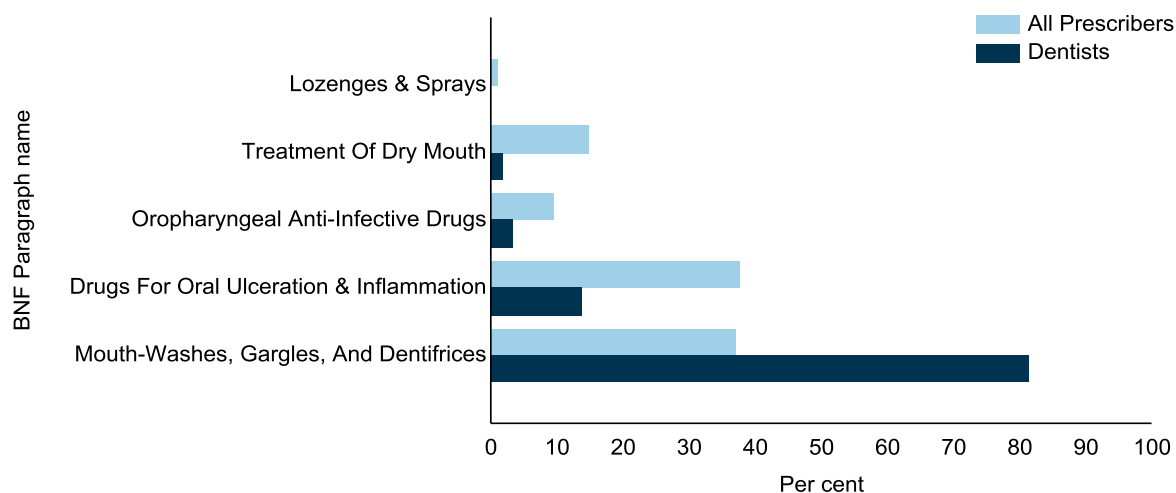
Source: PCA
database

Table 6.3: *Drugs acting on the Oropharynx*; NIC as prescribed by dentists, 2005-2013

Year	Mouth-Washes, Gargles, And Dentifrices	Drugs For Oral Ulceration & Inflammation	Oropharyngeal Anti-Infective Drugs	Treatment Of Dry Mouth	Pounds
					Total
2005	931,233	529,580	92,246	24,331	1,577,390
2006	920,335	589,007	78,448	25,282	1,613,072
2007	914,761	604,906	64,565	28,238	1,612,470
2008	933,262	533,831	60,677	34,247	1,562,017
2009	1,013,691	477,620	68,804	49,332	1,609,447
2010	1,163,670	437,344	59,851	54,922	1,715,786
2011	1,366,539	480,856	58,151	48,053	1,953,599
2012	1,520,527	560,237	61,571	63,874	2,206,209
2013	1,529,438	594,096	63,689	68,784	2,256,007
Change 2012 to 2013	8,911	33,859	2,118	4,910	49,799
Per cent change 2012 to 2013	0.6	6.0	3.4	7.7	2.3

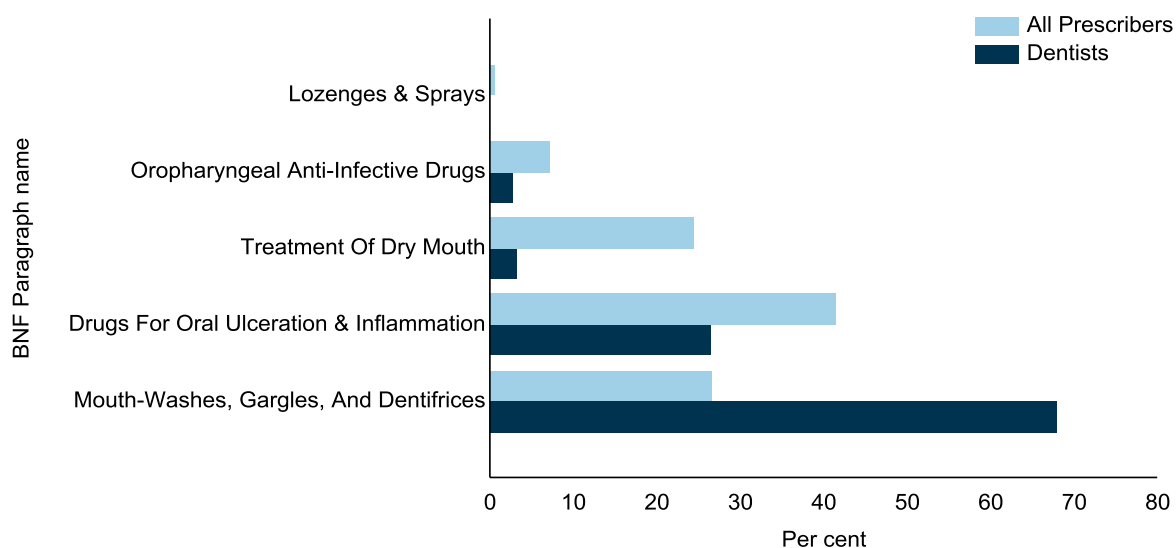
Source: PCA
database

Figure 6.1: Percentage of *Drugs acting on the Oropharynx* items prescribed by dentists compared with *Drugs acting on the Oropharynx* items by all prescribers at paragraph level, 2013



Source: PCA database

Figure 6.2: Percentage of *Drugs acting on the Oropharynx* NIC of items prescribed by dentists compared with *Drugs acting on the Oropharynx* NIC of items by all prescribers at paragraph level, 2013



Major Changes in 2013

This section examines major changes between 2012 and 2013 at presentation level.

BNF Section 5.1 Antibacterial Drugs

Although the number of items prescribed for the *Antibacterial Drugs* section decreased (3.0 per cent) overall, there were some increases at presentation level.

Amoxicillin Cap 500mg continued to be the most common item within *Antibacterial Drugs* section with 1,418,007 items prescribed, and also accounted for the highest cost with a NIC of £1,992,309. Whilst the number of items rose slightly by 0.3 per cent (4,826), the NIC for this presentation rose by 28.8 per cent. This can be explained, in part, by increases to the drug price tariff which peaked in July 2013 at £1.82, an increase of 23.0 per cent from January 2013.

The NIC for *Clindamycin HCL Cap 300mg* rose considerably to £31,385; however the vast majority of this increase can be attributed to the large increase in the number of items prescribed which increased from 2 to 1,809. It should be noted that whilst the number of items prescribed for the *300mg* presentation rose, the number of items for the *150mg* presentation reduced. Both of these presentations are part of the Category M scheme, where the Department of Health sets the reimbursement price.

Table 7.1: Antibacterial Drugs presentations with the largest changes in items, 2012-2013

Drug Name	2012 Items	2013 Items	Per cent change in	
			Change in items	items
Amoxicillin_Cap 500mg	1,413,181	1,418,007	4,826	0.3
Amoxicillin_Oral Susp 250mg/5ml	41,505	45,140	3,635	8.8
Amoxicillin_Oral Susp 250mg/5ml S/F	22,832	25,304	2,472	10.8
Erythromycin_Tab E/C 250mg	146,583	139,054	-7,529	-5.1
Metronidazole_Tab 200mg	595,769	568,390	-27,379	-4.6
Amoxicillin_Cap 250mg	854,014	791,356	-62,658	-7.3

Source: PCA database

Table 7.2: Antibacterial Drugs presentations with the largest changes in NIC, 2012-2013

Drug Name	2012 NIC	2013 NIC	Per cent change in	
			Change in NIC	NIC
Amoxicillin_Cap 500mg	1,547,188	1,992,309	445,121	28.8
Amoxicillin_Cap 250mg	776,791	947,904	171,113	22.0
Metronidazole_Oral Susp 200mg/5ml	126,811	252,222	125,411	98.9
Phenoxymethylpenicillin_Soln 125mg/5ml	18,955	56,832	37,878	199.8
Clindamycin HCl_Cap 300mg	40	31,385	31,345	77,663.2
Clindamycin HCl_Cap 150mg	193,793	136,503	-57,290	-29.6
Amoxicillin_Oral Pdr Sach 3g S/F	276,683	194,135	-82,548	-29.8
Metronidazole_Tab 400mg	641,375	538,783	-102,592	-16.0

Source: PCA database

BNF Section 9.5 Minerals

Duraphat Fluoride toothpaste 2800ppm and 5000ppm continued to be the main drivers of growth in this section in 2013, as they have been since these items were first introduced into the market in 2006.

Duraphat Fluoride Toothpaste 5000ppm was the most commonly prescribed item from this section, and also accounted for the highest cost. Whilst the number of items rose 30.0 per cent to 545,381, the associated NIC rose by 52.4 per cent to £9,756,571.

Table 8.1: *Minerals* presentations with the largest changes in items, 2012-2013

Drug Name	2012 Items	2013 Items	Per cent change in	
			Change in items	items
Duraphat_Fluoride Toothpaste (5000ppm)	419,491	545,381	125,890	30.0
En-De-Kay_Daily Fluoride Mouthrinse	38,860	58,368	19,508	50.2
Duraphat_Fluoride Toothpaste (2800ppm)	369,243	379,480	10,237	2.8
Fluorigard Daily_Dental Rinse 0.05%	72,573	48,869	-23,704	-32.7

Source: PCA database

Table 8.2: *Minerals* presentations with the largest changes in NIC, 2012-13

Drug Name	2012NIC	2013 NIC	Per cent change in	
			Change in NIC	NIC
Duraphat_Fluoride Toothpaste (5000ppm)	6,400,649	9,756,571	3,355,923	52.4
Duraphat_Fluoride Toothpaste (2800ppm)	2,508,083	2,953,844	445,761	17.8
En-De-Kay_Daily Fluoride Mouthrinse	130,075	223,218	93,142	71.6
Fluorigard Daily_Dental Rinse 0.05%	312,307	270,101	-42,206	-13.5

Source: PCA database

BNF Section 10.1 Drugs Used In Rheumatic Disease and Gout

Despite the number of items prescribed decreasing by 12.7 per cent, the NIC for *Drugs Used in Rheumatic Disease and Gout* increased by 9.9 per cent. The majority of these changes can be attributed to presentations of Ibuprofen.

Ibuprofen Tab 400mg remained the most prescribed item in this section, and displayed the greatest absolute change; 8,961 (14.1 per cent) fewer items were prescribed in 2013. This presentation also has the greatest NIC, which rose by £5,460 (12.1 per cent) to £50,563. This can, in part, be explained by a 7.0 per cent increase in the drug price tariff between January and December 2013, as part of the Category M scheme.

A substantial increase in the drug tariff price was also seen for *Ibuprofen Tab 600mg*, which rose by 19.0 per cent between January and December 2013.

Table 9.1: *Drugs Used In Rheumatic Disease and Gout* presentations with the largest changes in items, 2012-2013

Drug Name	2012 Items	2013 Items	Per cent change in	
			Change in items	items
Ibuprofen_Tab 200mg	11,611	10,338	-1,273	-11.0
Ibuprofen_Tab 600mg	22,227	19,632	-2,595	-11.7
Ibuprofen_Tab 400mg	63,771	54,810	-8,961	-14.1

Source: PCA database

Table 9.2: *Drugs Used In Rheumatic Disease and Gout* presentations with the largest changes in NIC, 2012-13

Drug Name	2012 NIC	2013 NIC	Per cent change in	
			Change in NIC	NIC
Ibuprofen_Tab 400mg	45,103	50,563	5,460	12.1
Ibuprofen_Tab 600mg	34,682	37,619	2,937	8.5
Ibuprofen_Tab 200mg	8,895	11,350	2,455	27.6

Source: PCA database

BNF Section 4.1 Hypnotics and Anxiolytics

For a second consecutive year, *Hypnotics and Anxiolytics* showed a notable increase in NIC with a rise of £9,207 (163.8 per cent) to £14,827 from 2012 to 2013, this is despite the number of items prescribed slightly decreasing by 2.2 per cent to 9,132.

Diazepam Tab 5mg accounts for 39.2 per cent of items prescribed within this section. This presentation remains the most commonly prescribed item with 3,582 items in 2013 up 1.1 percentage points from 2012, whilst its associated NIC rose 7.3 per cent in the same period.

Despite a drop in its associated number of items, *Temazepam Tab 10mg* now leads in terms of NIC for *Hypnotics and Anxiolytics* due to a substantial price increase of £7,088 (506.4 per cent) from 2012 to 2013. This is due to several increases in the unit cost between January and December 2013, resulting in more than a five-fold increase (552.5 per cent) by the year end. Similarly, *Temazepam Tab 20mg* increased in terms of NIC by 735.5 per cent even with a 14.7 per cent drop in items. This was due to a unit price increase of 800 per cent between January and December 2013, within the Category M scheme.

Table 10.1 *Hypnotics and Anxiolytics* presentations with the largest changes in items, 2012-2013

Drug Name	2012 Items	2013 Items	Per cent change in	
			Change in items	items
Diazepam_Tab 10mg	1,454	1,517	63	4.3
Diazepam_Tab 5mg	3,542	3,582	40	1.1
Diazepam_Oral Soln 2mg/5ml S/F	10	20	10	100.0
Temazepam_Tab 10mg	1,876	1,858	-18	-1.0
Diazepam_Oral Soln 2mg/5ml	83	62	-21	-25.3
Temazepam_Oral Soln 10mg/5ml S/F	213	160	-53	-24.9
Temazepam_Tab 20mg	633	540	-93	-14.7
Diazepam_Tab 2mg	1,506	1,393	-113	-7.5

Source: PCA database

Table 10.2 *Hypnotics and Anxiolytics* presentations with the largest changes in NIC, 2012-2013

Drug Name	2012 NIC	2013 NIC	Per cent change in	
			Change in NIC	NIC
Temazepam_Tab 10mg	1,400	8,487	7,088	506.4
Temazepam_Tab 20mg	237	1,977	1,741	735.5
Temazepam_Oral Soln 10mg/5ml S/F	1,542	2,004	462	30.0
Diazepam_Oral Soln 2mg/5ml S/F	81	247	166	206.1
Diazepam_Tab 5mg	637	683	47	7.3
Diazepam_Tab 10mg	234	252	18	7.8
Diazepam_Tab 2mg	487	398	-89	-18.3
Diazepam_Oral Soln 2mg/5ml	932	777	-155	-16.6

Source: PCA database

BNF Section 21.21 Dry Mouth Products

Although a relatively small component of dental prescribing, *Dry Mouth Products* has gradually increased in terms of the number of items prescribed and NIC over recent years. This section now accounts for 4,709 items and has a NIC of £33,964 following increases of 56.2 per cent and 61.3 per cent, respectively, from 2012 to 2013.

Biotene Oralbalance Gel is the most commonly prescribed item, accounting for more than half (57.6 per cent) of the section. In 2013, there were 2,712 prescriptions with a NIC of £19,664.

Table 11.1: *Dry Mouth Products* presentations, changes in items, 2012-2013

Drug Name	2012 Items	2013 Items	Per cent change in	
			Change in items	items
Salivix Pastil (App)*	-	1,027	1,027	n/a
Biotene Oralbalance Gel	2,217	2,712	495	22.3
SST Saliva Stimulating Tab	364	471	107	29.4
Xerotin Saliva Rep P/Spy 100ml	434	498	64	14.7
Aquoral Prote Mth Spy 40ml (App)*	-	1	1	n/a

Source: PCA database

Table 11.2: *Dry Mouth Products* presentations, changes in NIC, 2012-2013

Drug Name	2012 NIC	2013 NIC	Per cent change in	
			Change in NIC	NIC
Salivix Pastil (App)*	-	7,023	7,023	n/a
Biotene Oralbalance Gel	15,262	19,664	4,402	28.8
SST Saliva Stimulating Tab	2,091	2,925	834	39.9
Xerotin Saliva Rep P/Spy 100ml	3,698	4,342	645	17.4
Aquoral Prote Mth Spy 40ml (App)*	-	10	10	n/a

Source: PCA database

*These presentations are of Class 4 (appliances and dressings) preparations, and are included for the first time in this report. Therefore, there is no 2012 data to compare them to.

BNF Section 6.3 Corticosteroids (Endocrine)

The number of items for *Betnesol Tab 500mcg* dropped considerably by 77.7 per cent (1,714), with just 492 items prescribed in 2013, whilst the associated NIC displayed a 76.9 per cent decrease (£9,041) during the same period.

More striking are the 313 per cent rise in the number of items prescribed for *Betameth Sod Phos Tab 500mcg*, and the 525.2 per cent rise in NIC. The latter can, in part, be explained by the increase in drug tariff price between January and December 2013. The unit price increased 26.8 per cent between the months mentioned, from £14.95 in January to £18.95 in December.

However, given that the underlying drug for both presentations is Betamethasone, it is also likely that there has been a shift in prescribing patterns from the proprietary to the general presentation.

Table 12.1: Corticosteroids (Endocrine) presentations, changes in items, 2012-2013

Drug Name	2012 Items	2013 Items	Change in items	Per cent change in items
Betameth Sod Phos_Tab Solb 500mcg	648	2,678	2,030	313.3
Betnesol_Tab 500mcg	2,206	492	-1,714	-77.7

Source: PCA database

Table 12.2: Corticosteroids (Endocrine) presentations, changes in NIC, 2012-2013

Drug Name	2012NIC	2013 NIC	Change in NIC	Per cent change in NIC
Betameth Sod Phos_Tab Solb 500mcg	5,583	34,905	29,322	525.2
Betnesol_Tab 500mcg	11,749	2,708	-9,041	-76.9

Source: PCA database

Controlled Drugs

All NHS organisations have a responsibility to monitor their use of Controlled Drugs. For most prescribers this information is available from ePACT, the information system provided by NHS Prescription Services. However these figures do not include prescribing by dentists because the dental prescription forms do not uniquely identify them.

The following *Controlled Drug* Schedule definitions are taken from the British National Formulary 65 (March – September 2013). The Misuse of Drugs Regulations 2001 define the classes of person who are authorised to supply and possess controlled drugs while acting in their professional capacities and lay down the conditions under which these activities may be carried out. In the regulations drugs are divided into five schedules each specifying the requirements governing such activities as import, export, production, supply, possession, prescribing, and record keeping which apply to them.

Schedule 1 includes drugs such as lysergide which is not used medicinally. Possession and supply are prohibited except in accordance with Home Office authority.

Schedule 2 includes drugs such as diamorphine (heroin), morphine, nabilone, remifentanyl, pethidine, secobarbital, glutethimide, amphetamine, and cocaine and are subject to the full controlled drug requirements relating to prescriptions, safe custody (except for secobarbital), the need to keep registers, etc. (unless exempted in *Schedule 5*).

Schedule 3 includes the barbiturates (except secobarbital, now *Schedule 2*), buprenorphine, diethylpropion, mazindol, meprobamate, midazolam, pentazocine, phentermine, and temazepam. They are subject to the special prescription requirements (except for temazepam) and to the safe custody requirements (except for any 5,5 disubstituted barbituric acid (e.g. phenobarbital), mazindol, meprobamate, midazolam, pentazocine, phentermine, or any stereoisomeric form or salts of the above). Records in registers do not need to be kept (although there are requirements for the retention of invoices for 2 years).

Schedule 4 includes in Part I benzodiazepines (except temazepam and midazolam, which are in *Schedule 3*) and zolpidem, which are subject to minimal control. Part II includes androgenic and anabolic steroids, clenbuterol, chorionic gonadotrophin (HCG), non-human chorionic gonadotrophin, somatotropin, somatrem, and somatropin. Controlled drug prescription requirements do not apply and *Schedule 4 Controlled Drugs* are not subject to safe custody requirements.

Schedule 5 includes those preparations which, because of their strength, are exempt from virtually all *Controlled Drug* requirements other than retention of invoices for two years.

As shown in table 13.1, items for *Controlled Drugs* as prescribed by dentists have steadily reduced since 2005, with 40,357 items prescribed in 2013. This figure represented 0.7 per cent of the 5,580,812 total items prescribed by dentists. *Controlled Drugs* NIC of £45,773 represented a 0.2 per cent of dentists total NIC of £22,032,245.

Controlled Drugs by all prescribers in 2013 totalled 48,265,254 items with a NIC of £559,301,804. *Controlled Drugs* prescribed by dentists accounted for 0.08 per cent of items and 0.01 per cent of all *Controlled Drugs* in 2013.

Table 13.1: *Controlled Drugs*; items and NIC prescribed, 2005-2013

Year	Items by Dentists	Number			Pounds	
		Items by all prescribers (includes dentists)	Items prescribed by dentists as a per cent of all prescriber items	NIC of items by Dentists	NIC of items by all prescribers (includes dentist)	NIC of items prescribed by dentists as a per cent of all prescriber NIC
2005	56,548	43,294,481	0.13	55,383	310,420,172	0.02
2006	46,766	42,985,721	0.11	60,934	378,933,163	0.02
2007	45,297	44,470,790	0.10	68,819	435,982,804	0.02
2008	43,077	45,469,078	0.09	49,824	449,492,917	0.01
2009	41,834	46,566,491	0.09	39,362	475,296,647	0.01
2010	40,687	47,637,220	0.09	40,756	514,926,068	0.01
2011	40,232	48,102,480	0.08	36,840	501,481,826	0.01
2012	40,649	48,448,956	0.08	38,036	510,563,321	0.01
2013	40,357	48,265,254	0.08	45,773	559,301,804	0.01
Change 2012 to 2013	-292	-183,702	0.00	7,736	48,738,482	0.00
Per cent change 2012 to 2013	-0.7	-0.4	n/a	20.34	9.5	n/a

Source: PCA database

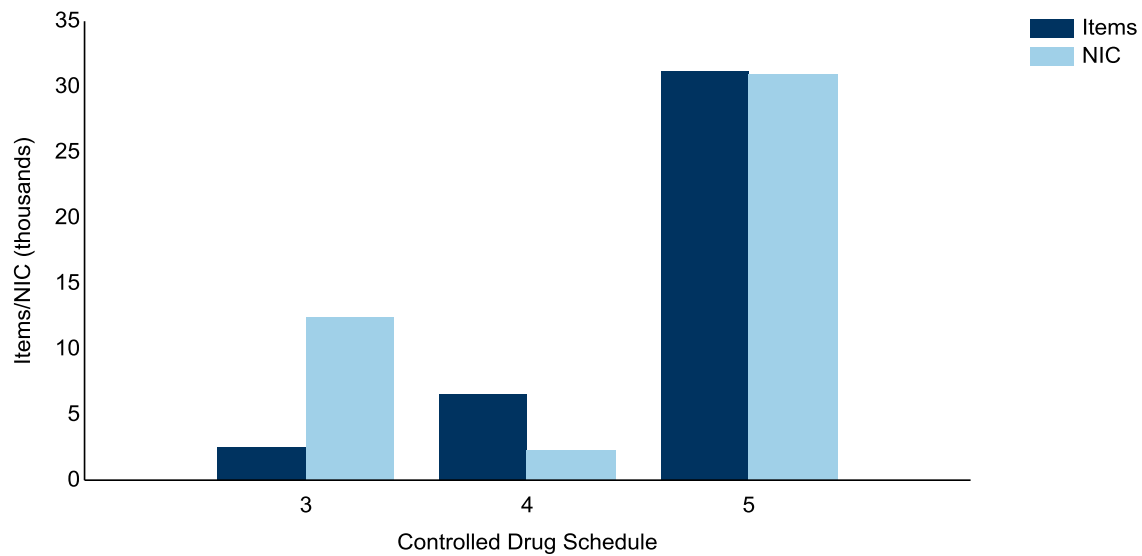
The number of items within each *Controlled Drug* Schedule has steadily reduced over the last three years, although there was a slight increase in Schedule 5 drugs in 2012 compared to 2011. Schedule 2 drugs had no items prescribed in 2013, for the fourth year in succession following a gradual decline prior to 2010.

Schedule 3 *Controlled Drugs* as prescribed by dentists from 2005 to date has comprised of three *Temazepam* presentations. These are *Temazepam 10mg/5ml sugar-free oral solution*, *Temazepam 10mg tablets* and *Temazepam 20mg tablets*. *Temazepam 10mg tablets* has consistently been the most commonly prescribed, accounting for 68 per cent of Schedule 3 items in 2013.

Schedule 4 has steadily declined items and NIC, from 2005 and 2006 respectively. In 2013 *Diazepam* preparations are accountable for all Schedule 4 items and NIC; *Diazepam 5mg tablets* remained the most common preparation with 3,582 items at a NIC of £683.26.

Figures 14.1 and 14.2 show that in each year since 2005, Schedule 5 drugs have accounted for the vast majority of *Controlled Drugs* items and NIC. The 31,225 Schedule 5 items and £30,945 Schedule 5 NIC in 2013, shown in Figures 13.1, can be attributed to one drug, *Dihydrocodeine Tartrate Tablets 30mg*.

Figure 13.1: Number of items and NIC prescribed by dentists for each *Controlled Drug* Schedule (3-5)¹, 2013



Source: PCA database

Notes:

No NIC for schedule 1 and 2 in 2013. See *Controlled Drugs by Schedule* for further information.

Controlled Drugs by Schedule

In light of the Shipman Inquiry monitoring of Schedule 2 *Controlled Drugs* is of particular interest. In previous years the only Schedule 2 drug prescribed by dentists was *Pethidine hydrochloride 50mg tablets*; no Schedule 2 drugs have been prescribed by dentists since 2010.

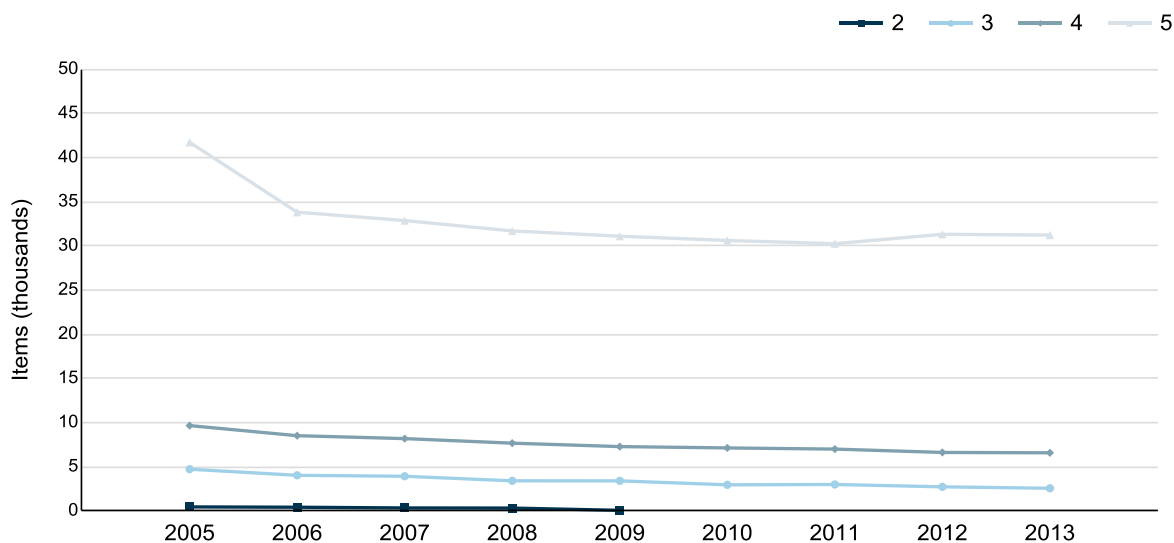
Table 14.1 and 14.2 show that whilst the items prescribed for Schedule 3 drugs dropped by 6.0 per cent the associated NIC rose by 292.3 per cent. The noteworthy change in NIC can be attributed to two drugs: *Temazepam Tab 10mg* and *Temazepam Tab 20mg*. In the Drug Price Tariff, *Temazepam Tab 10mg* rose (552.5 per cent) from £4.23 in January 2013 to £27.60 in December 2013, likewise *Temazepam Tab 20mg* rose (800 per cent) from £2.71 in January 2013 to £24.39 in December 2013.

Table 14.1: *Controlled Drugs* change in items by schedule, 2005-2013

Year	Schedule			
	2	3	4	5
2005	448	4,717	9,656	41,727
2006	412	4,026	8,511	33,817
2007	331	3,917	8,182	32,867
2008	316	3,403	7,664	31,694
2009	60	3,397	7,278	31,099
2010	-	2,949	7,125	30,613
2011	-	2,989	6,994	30,249
2012	-	2,722	6,615	31,312
2013	-	2,558	6,574	31,225
Change 2012 to 2013	-	-164	-41	-87
Per cent change 2012 to 2013	n/a	-6.0	-0.6	-0.3

Source: PCA
database

Figure 14.1: Controlled Drugs items prescribed by schedule, 2005-2013



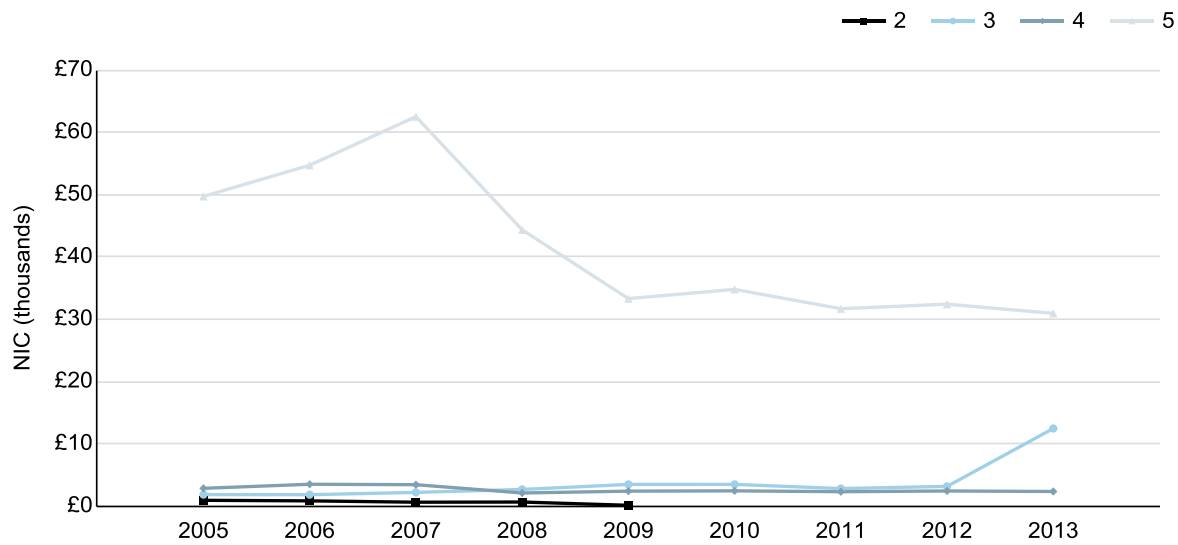
Source: PCA database

Table 14.2: Controlled Drugs change in NIC by schedule, 2005-2013

Year	Pounds			
	Schedule			
	2	3	4	5
2005	942	1,861	2,867	49,713
2006	854	1,846	3,521	54,713
2007	640	2,213	3,450	62,516
2008	668	2,689	2,121	44,346
2009	144	3,492	2,413	33,312
2010	-	3,500	2,462	34,795
2011	-	2,826	2,324	31,691
2012	-	3,178	2,442	32,417
2013	-	12,469	2,359	30,945
Change 2012 to 2013	-	9,291	-83	-1,471
Per cent change 2012 to 2013	n/a	292.3	-3.4	-4.5

Source: PCA database

Figure 14.2: Controlled Drugs NIC prescribed by dentists by schedule, 2005-2013



Source PCA database

Sources and Definitions

Sources

Statistics in this bulletin are for calendar years. All prescription statistics in this bulletin are based on information systems from NHS Prescription Services at the NHS Business Services Authority (NHSBSA). The system used is the Prescription Cost Analysis (PCA), which was introduced in January 1991. This system is based on an analysis of all prescriptions dispensed in the community, i.e. by community pharmacists and appliance contractors, dispensing doctors, and prescriptions submitted by doctors for items personally administered.

The analyses are based on prescriptions written by dentists that were dispensed in the community in England. Also included are prescriptions written by dentists in Wales, Scotland, Northern Ireland and the Isle of Man provided they were dispensed in England. The analyses do not include prescriptions dispensed in hospitals, private prescriptions or prescriptions written in England but dispensed outside England.

NHSBSA processes validate preparations prescribed by dentists against a list of substances which form the Dental Practitioner's Formulary (DPF). The DPF is part of the British National Formulary (<http://www.bnf.org/bnf/>) and covers all drugs which dentists can prescribe on the NHS. During the validation process for the 2013 publication, three preparations were identified where prescriptions issued by dentists had been paid by NHSBSA, but where the preparation was not listed on the DPF in 2013. In total these preparations accounted for 33 items and £43.30 NIC. This error was attributed to an inconsistency in NHSBSA processing routines, which has since been corrected. These preparations have been included in all relevant totals in this publication.

Definitions

Prescribers write prescriptions on a prescription form. Each single item written on the form is counted as a prescription item.

The net ingredient cost (NIC) refers to the cost (which the dispenser is reimbursed) of the drug before discounts and does not include any dispensing costs or fees. It does not include any adjustment for income obtained where a prescription charge is paid at the time the prescription is dispensed or where the patient has purchased a pre-payment certificate.

PCA uses the therapeutic classifications defined in the BNF (March - September edition in this report). The NHSBSA (Prescription Services) has created additional pseudo BNF chapters, which do not appear in the BNF, for items not included in BNF chapters 1 to 15. The majority of such items are dressings and appliances, which the NHSBSA (Prescription Services) has classified into four pseudo BNF chapters (20 to 23). A booklet on BNF classifications and the pseudo classifications used is available on the internet at: http://www.nhsbsa.nhs.uk/PrescriptionServices/Documents/PrescriptionServices/BNF_Classification_Booklet-2013.pdf

The classification of drugs and appliances used by the NHSBSA (Prescription Services) for PCA does not always equate exactly with the BNF. For example, the NHSBSA (Prescription Services) does not include stoma appliances in BNF section 1.8 but classifies them under a pseudo BNF chapter 23.

Generic Prescribing and Category M Scheme

Generic prescribing is encouraged and many drugs are prescribed generically even when they are not available in generic form (principally because the branded product is still in patent). Because of this within the PCA system prescriptions for drugs are classified in four ways:

Class 1 - Drugs prescribed and available generically and the dispenser is reimbursed at the Drug Tariff price or the price of the generic. It is possible in such circumstances for a branded drug or a parallel import to be dispensed against the prescription.

Class 2 - Drugs prescribed generically but because a generic is not available (for example the proprietary is still under patent) a proprietary product or a parallel import has been dispensed.

Class 3 - Drugs prescribed and dispensed by proprietary brand name

Class 4 - Dressings and appliances

Where a pharmacist has dispensed the generic form of the drug and has been reimbursed at the generic price, the data for the drug dispensed will be recorded against the class 1 (generic) form of the drug in PCA. Where a generic is not available and hence a pharmacist has been reimbursed at proprietary prices for dispensing the proprietary form, the data will be defined as class 2 but recorded in PCA against the class 3 (proprietary) form of the drug.

Where a drug is defined as class 2, the prescription items, NIC, etc. for it are allocated across the items for all equivalent proprietary brands. This is done pro rata on the basis of the number of proprietary prescription items dispensed. "Of which class 2" (Owc2) gives the number of prescription items resulting from this apportionment. There are a small number of preparations that are not linked to equivalent proprietary brands that appear separately with a class of 2.

For the purpose of these statistics generic prescribing is defined as the sum of drugs defined as class 1 and class 2, as a percentage of all drugs of classes 1 to 3.

The Category M scheme is an arrangement where the net ingredient cost for selected generic formulations is controlled, with the aim of reducing costs overall, and which are calculated to reflect market forces while ensuring delivery of pharmacy purchase profit income (margin) as part of the funding arrangements for the Community Pharmacy Contractual Framework (CPCF). The drugs subject to these arrangements are classified as Category M in Part VIII of the Drug Tariff. The majority of these formulations have fallen in price, although some formulations have increased in price.

List of Annexes

Annex 1 – Report tables and charts (Excel workbook)

All tables and charts presented in this report in Excel format.

Annex 2 – Source data (csv file)

A flat data file, suitable for further analysis.

Other Publications

A full list of Health and Social Care Information Centre reports produced on dentistry can be found at:

<http://www.hscic.gov.uk/primary-care>

For information on other data related to the dental sector, please see our Guide to Dental Data at:

<http://www.hscic.gov.uk/catalogue/PUB13531/nhs-dent-stat-eng-2013-14-sec-quar-rep-beg-gui.pdf>

A full list of Health and Social Care Information Centre reports produced on prescribing can be found at:

<http://www.hscic.gov.uk>

By Other UK countries

Scotland - <http://www.isdscotland.org/Publications/index.asp?ht=Prescribing-and-Medicines>

Wales - <http://wales.gov.uk/topics/statistics/theme/health/primary-care/prescribing/?lang=en>

Northern Ireland - <http://www.hscbusiness.hscni.net/services/1806.htm>

**Published by the Health and Social Care Information Centre
Part of the Government Statistical Service**

Responsible Statistician

Oliver Smith, Service Manager

ISBN 978-1-78386-100-2

This publication may be requested in large print or other formats.

For further information:

www.hscic.gov.uk

0845 300 6016

enquiries@hscic.gov.uk

Copyright © 2014 Health and Social Care Information Centre. All rights reserved.

This work remains the sole and exclusive property of the Health and Social Care Information Centre and may only be reproduced where there is explicit reference to the ownership of the Health and Social Care Information Centre.

This work may be re-used by NHS and government organisations without permission.