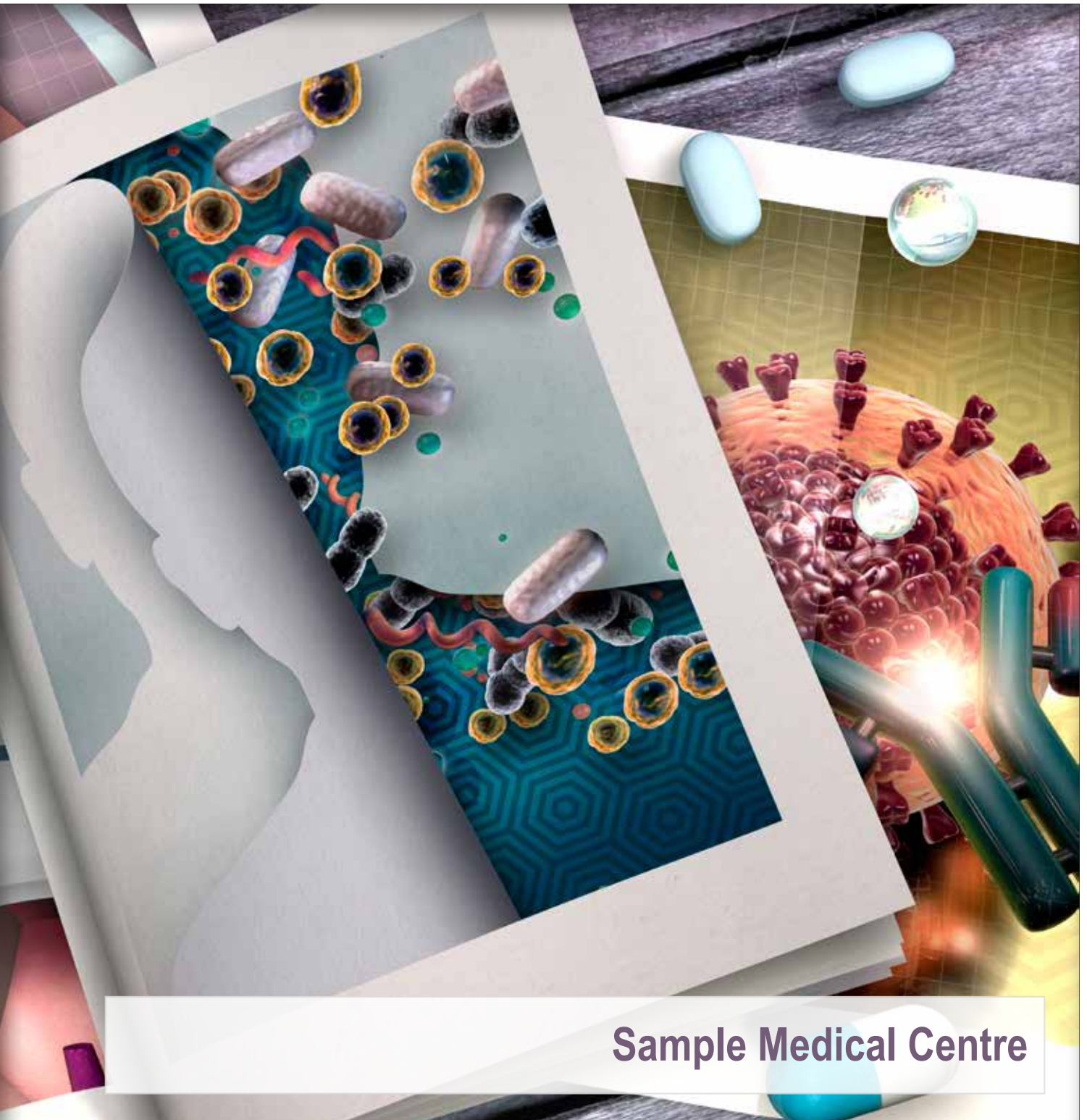


2017 ANNUAL REPORT

Pharmaceutical Utilisation July, 2016 - June, 2017



Sample Medical Centre

Welcome to your annual practice report

This report provides you with an opportunity to reflect on the pharmacological treatment received by patients **registered at your practice** in the past year. It summarises the most commonly dispensed medicines for these patients between 1 July, 2016 and 30 June, 2017 by any prescriber.

Methods

The data in this report is based on two of the Ministry of Health's National Collections. The collections used in this report contain data provided to Sector Services (formerly HealthPAC) and National Collections and Reporting through the General Transaction Processing System:

- The Pharmaceutical Collection holds claim data submitted by pharmacies for all community dispensings of subsidised medicines.
- The Primary Health Organisation Enrolment Collection holds patient enrolment data for 4.48 million patients registered to 997 New Zealand general practices.

As our data is provided by the Ministry of Health, bpac^{nz} has no control over data errors which may occur at the pharmacy, Sector Services or Ministry of Health. Some errors may also be due to rounding.

In this report, cost is the standard price at which a medicine is supplied to wholesalers, exclusive of GST, dispensing fees, markup and rebates. Therefore the cost listed is not necessarily the actual cost of the medicine.

Data has been excluded for patients who are not registered to a practice in the PHO Enrolment Collection. Enrolled patients accounted for 99% of pharmaceutical dispensings recorded in the National Collections. Data has also been excluded when a National Health Index (NHI) number was not recorded for the patient.

This report includes data on dispensed subsidised medicines. Any medicines prescribed to your patients that were not dispensed by a community pharmacy, or are unsubsidised, will not appear on this report.

Important Note

Some medicines dispensed for your registered patients will have been prescribed by New Zealand healthcare professionals who do not work at your practice, e.g. secondary care doctors, midwives, doctors working at after hours or urgent clinics. If you audit your Practice Management System these medicines will not necessarily be listed, but they are included in this report to provide you with an overall view of the care received by your registered patients.



Individual prescribing reports

If you would like to review your annual **individual prescribing report** please log in to 'My bpac' at www.bpac.org.nz. You can then find your report by navigating to 'Your personalised reports'.

What is in your practice report

1. Number of medicines reported

Instead of listing dispensing rates for all 825 subsidised medicines available, we have included the 250 most commonly dispensed medicines. These make up 94% of all dispensings in the community in New Zealand.

2. Number of items

Item numbers refer to stat dispensings (entire three month supply) and initial dispensings only – these numbers do not include repeat dispensings, e.g. if a patient is taking a long-term medicine and was compliant they should have four initial dispensings per year for that medicine. This eliminates the ‘over-counting’ of medicines that have more frequent dispensing rates, e.g. methadone which may be dispensed daily or weekly.

3. Comparator Groups

To allow you to make comparisons with practices whose patient demographics are similar to yours we have created comparator groups. These comparator groups are made up of ten practices whose patient populations are similar to yours in:

- Gender
- Age
- Ethnicity
- Deprivation

This report will show data for your practice and your comparator practices.

You will see in the data tables throughout the report that numbers are reported for your practice, your comparator group and the national data (all practices grouped together). See Page 4 for more information about comparator groups.

4. Cost data

This report includes cost data (Pages 7 – 9). This is to provide you with a general understanding of the highest cost medicines used each year in New Zealand and for patients in your practice.



Feedback

We are always trying to improve our reports therefore we would like to know how useful you find them. We would also like to hear if you have any further suggestions for presenting and comparing annual prescribing data. Email us at: contact@bpac.org.nz

Using comparator practices to make your reports more meaningful

The problem with national comparisons

We understand that no two practice populations are the same and therefore it can be difficult to compare your practice's prescribing to national prescribing levels.

The development of comparator practices

To help combat this problem and make these reports more relevant to you, we have developed comparator groups. In these reports your practice's prescribing will be compared to **ten practices** from across New Zealand whose patient populations are similar to yours in:

- Gender
- Age
- Ethnicity
- Deprivation

We will account for the size of your registered practice population by using proportions or standardised formats e.g. prescribing per 1000 practice population.

Eliminating some demographic differences mean you will be able to more easily determine meaningful differences in your prescribing practices compared with your comparator practices.

If the prescribing from your practice is different compared to other practices in your comparator group, this may be explained by:

- Your prescribing practice and decision making being different to your peers
- The region you live in, e.g. medicines to treat sore throats and rheumatic fever in the far north of New Zealand will be higher than in the south
- Someone in your practice may specialise in a particular area of medicine that uses certain medicines more than others, e.g. dermatology and isotretinoin prescribing



Further investigation of your prescribing

Undertaking an audit or peer group discussion may provide more detail to help identify similarities and differences in prescribing practice compared to other primary care practitioners. If any issues have been identified these resources can help instigate change, leading to more appropriate use of medicines and facilitate best practice.

www.bpac.org.nz

Demographics of your practice patients

This section describes the demographics of the registered population of your practice, compared to the demographics of all registered patients for the ten practices in your comparator group (comparator data) and to the demographics of all registered patients in New Zealand (national data). The data in this section are taken from the first quarter 2017 enrolment registers provided to bpac^{nz} by the Ministry of Health.

The volume and cost of prescribing are influenced by the demography and morbidity of the population served, e.g. elderly patients have a greater need for medicines than younger adult patients. We have tried to minimise these differences in patient characteristics by providing you with a comparator group, however, some variations may still exist. These differences should be taken into account when comparing data either between practices in your comparator group or nationally.



Use the data to determine if your practice demography varies compared with practices in your comparator group or nationally – this may help to explain any differences you see throughout your report

Number of patients

Patients registered to your practice

3,368

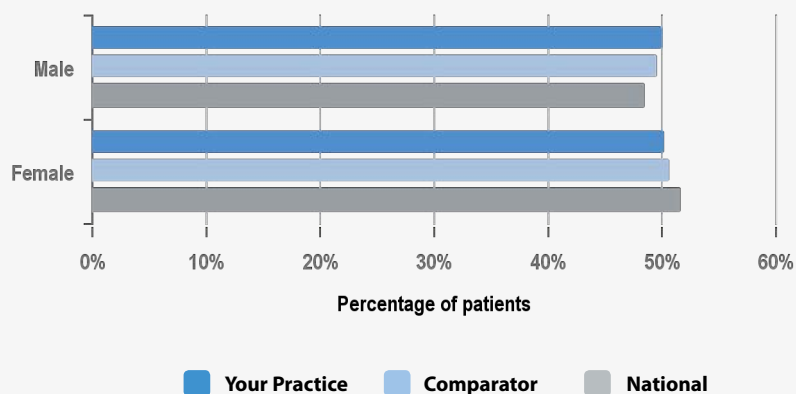
Average number of registered patients per practice in your comparator group

4,665

Average number of registered patients per practice in New Zealand

4,494

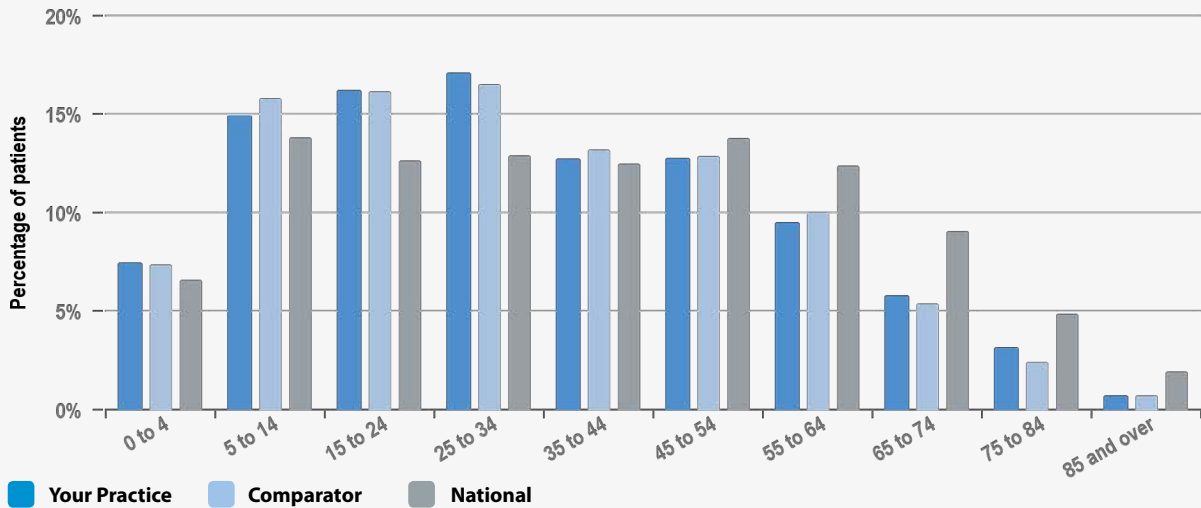
Gender



Demographics of your practice patients

Age group

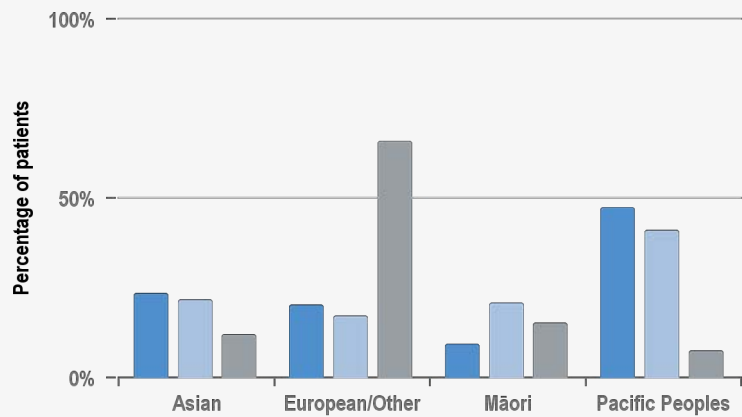
This is based on the recorded date of birth for each patient



Ethnic group

This is based on the patient's self-identified ethnic group. A patient may specify up to three ethnic groups which are then prioritised: if any of the three ethnic groups is Māori or Pacific peoples, the patient is identified in this group.

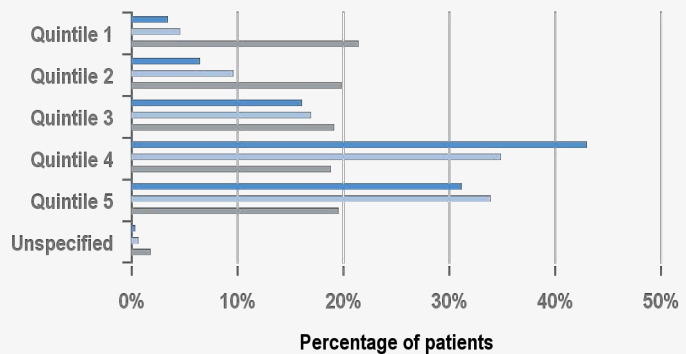
- Your Practice
- Comparator
- National



Deprivation quintile

Deprivation quintile is a score representing the level of socio-economic deprivation of the area where the person resides. Quintile 1 is the least deprived and quintile 5 is the most deprived. Unspecified deprivation refers to an address that could not be geocoded.

- Your Practice
- Comparator
- National



Practice overview



Sample Medical Centre

Between July, 2016 and June, 2017

Number of subsidised medicines prescribed for your patients

431

Number of prescription items dispensed

29,645

Total medicine cost

\$528,496.93

Summary of prescribers

Most patients will receive a prescription from at least two healthcare professionals in any given year. This section summarises the different prescribers that have prescribed for patients in your practice.

Number of prescribers that prescribed for your patients

1,310

Average number of prescribers per patient in your practice

2.4

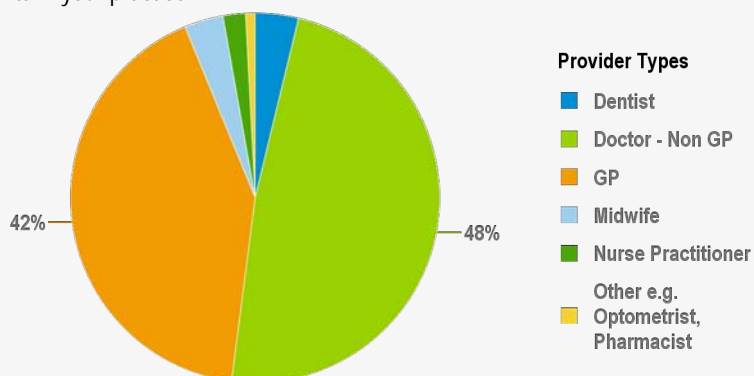


Figure 1. Proportion of prescribing by different provider types for your practice population July, 2016 - June, 2017

Summary of prescribing

	Your Practice	Your Comparator (avg per practice)	National (avg per practice)
Average number of prescription items per patient	9	9	9
Percentage of registered patients dispensed at least one medicine	80%	77%	78%
Average medicine cost per item	\$17.83	\$18.48	\$21.91
Average cost per patient	\$156.92	\$172.19	\$204.42

Most used and highest cost medicines – Nationally

The table on the left below shows the top 20 highest volume medicines dispensed (initial/stat) nationally between July, 2016 and June, 2017.

The table on the right below shows the top 20 highest cost[#] medicines dispensed nationally between July, 2016 and June, 2017.

Below the top 20 tables, there is a box showing how the number of items per 1,000 patients was calculated using paracetamol as an example.

National				National			
Top 20 highest volume medicines - Nationally		Items per 1000 patients	Rank change*	Top 20 highest cost medicines - Nationally		Medicine cost per 1000 patients	Rank Change*
1	Paracetamol	563	-	1	Dabigatran	\$7,817	-
2	Omeprazole	282	-	2	Fluticasone with salmeterol	\$6,225	-
3	Atorvastatin	270	↑ 2	3	Insulin glargine	\$5,356	-
4	Aspirin	261	↓ 1	4	Budesonide with eformoterol	\$3,871	-
5	Amoxicillin	252	↓ 1	5	Blood glucose diagnostic test strip	\$2,787	↑ 1
6	Ibuprofen	221	-	6	Lamotrigine	\$2,242	↑ 1
7	Metoprolol succinate	207	-	7	Sodium valproate	\$1,983	↑ 1
8	Salbutamol	191	-	8	Mesalazine	\$1,982	↑ 1
9	Cilazapril	168	↑ 1	9	Tiotropium bromide	\$1,886	↓ 4
10	Colecalciferol	155	↑ 1	10	Metoprolol succinate	\$1,831	↑ 10
11	Amoxicillin with clavulanic acid	140	↓ 2	11	Olanzapine	\$1,799	-
12	Prednisone	139	↑ 1	12	Salbutamol	\$1,589	↑ 1
13	Metformin hydrochloride	124	↑ 1	13	Venlafaxine	\$1,515	↓ 1
14	Simvastatin	123	↓ 2	14	Insulin aspart	\$1,472	↑ 2
15	Zopiclone	120	-	15	Varenicline tartrate	\$1,454	↓ 5
16	Levothyroxine	120	-	16	Fluticasone	\$1,412	↓ 2
17	Loratadine	116	-	17	Methylphenidate hydrochloride extended-release	\$1,109	↑ 2
18	Codeine phosphate	102	-	18	Atorvastatin	\$1,070	↓ 3
19	Felodipine	99	-	19	Solfifenacin succinate	\$1,058	New
20	Cetirizine hydrochloride	99	New	20	Risperidone	\$972	↓ 2

* Rank is compared to last year, - no change

Paracetamol	Nationally, 2,522,519 items of paracetamol were dispensed to registered patients, divide this by the national number of registered patients, 4,480,182, and multiply by 1,000
	$(2,522,519 / 4,480,182) * 1,000$
	563 items per 1,000 registered patients

In this report, cost is the standard price at which a medicine is supplied to wholesalers, exclusive of GST, dispensing fees, markup and rebates. Therefore the actual supply cost listed is not necessarily the actual cost of the medicine.

Most used and highest cost medicines – Your Practice

This table shows the top 20 highest volume medicines dispensed (initial/stat) for **your practice** between July, 2016 and June, 2017. To enable comparisons, we have also provided the number of items per 1,000 patients for the ten practices in your comparator group and nationally of these medicines. These values will help you to gauge if your practice prescribes more or less of each medicine compared with other practices.

If your practice is different to that of your comparator or nationally, this may be due to the difference in the clinical needs of your population

This table shows the top 20 highest cost medicines dispensed for **your practice** between July, 2016 and June, 2017. To enable comparisons, we have also provided the cost per 1,000 patients for the ten practices in your comparator group and nationally.

Although medicines have a fixed cost, the cost per patient may vary due to different dosing regimens or length of treatment

Top 20 highest volume medicines - Your Practice		Your Practice	Comparator	National
		Items per 1000 patients	Items per 1000 patients	Items per 1000 patients
1	Paracetamol	874	869	563
2	Amoxicillin	314	312	252
3	Colecalciferol	272	106	155
4	Ibuprofen	241	256	221
5	Aspirin	236	291	261
6	Omeprazole	223	214	282
7	Salbutamol	219	228	191
8	Atorvastatin	209	286	270
9	Metformin hydrochloride	202	246	124
10	Diclofenac sodium	197	129	98
11	Metoprolol succinate	171	177	207
12	Simvastatin	169	156	123
13	Amoxicillin with clavulanic acid	165	206	140
14	Cilazapril	150	220	168
15	Felodipine	139	100	99
16	Quinapril	124	34	77
17	Loratadine	105	197	116
18	Prednisone	105	115	139
19	Cetirizine hydrochloride	100	78	99
20	Blood glucose diagnostic test strip	96	140	66

Top 20 highest cost medicines - Your Practice		Your Practice	Comparator	National
		Medicine cost per 1000 patients	Medicine cost per 1000 patients	Medicine cost per 1000 patients
1	Fluticasone with salmeterol	\$8,110	\$6,827	\$6,225
2	Olanzapine	\$6,953	\$2,895	\$1,799
3	Insulin glargine	\$3,732	\$5,217	\$5,356
4	Blood glucose diagnostic test strip	\$3,590	\$4,168	\$2,787
5	Dabigatran	\$3,502	\$3,947	\$7,817
6	Budesonide with eformoterol	\$1,957	\$3,503	\$3,871
7	Insulin aspart with insulin aspart protamine	\$1,880	\$3,226	\$887
8	Metoprolol succinate	\$1,855	\$1,519	\$1,831
9	Mesalazine	\$1,815	\$344	\$1,982
10	Salbutamol	\$1,632	\$1,923	\$1,589
11	Risperidone	\$1,492	\$3,088	\$972
12	Insulin isophane	\$1,071	\$1,424	\$697
13	Morphine sulphate	\$1,039	\$241	\$601
14	Lamotrigine	\$996	\$1,770	\$2,242
15	Paracetamol	\$978	\$1,142	\$939
16	Quinapril	\$966	\$220	\$457
17	Enoxaparin sodium	\$938	\$992	\$953
18	Sodium valproate	\$932	\$1,946	\$1,983
19	Fluticasone	\$911	\$1,409	\$1,412
20	Varenicline tartrate	\$843	\$1,113	\$1,454

Key Messages – Antibiotics

Antimicrobial resistance is increasing: what can primary care do?

1. Antibiotic use in New Zealand is higher per head of population than in many similar developed countries, e.g. United Kingdom.¹
2. Primary health care professionals in New Zealand need to be proactive about antimicrobial stewardship.
3. Select the first-line indicated antibiotic at the recommended dose and duration and only prescribe antibiotics where they are likely to provide clinical benefit.
4. Reserve broad-spectrum antibiotics for indicated conditions only.
5. Educate patients about the responsible use of antibiotics, e.g. if they have a viral respiratory tract infection an antibiotic is not indicated.
6. There are few indications, if any, for topical antibiotic and they should be used sparingly or not at all. Consider a topical antiseptic, or if severe infection, prescribe an oral antibiotic.

Current prescribing trends – National

1. The use of oral antibacterials is increasing every year. In Q1 2014, 15% of the population were dispensed an antibacterial. This increased to 20% in Q1 2017. Figure 1 shows large seasonal variations in antibiotic dispensing, especially for penicillins. The peaks between July-September are likely to reflect inappropriate antibiotic prescribing for respiratory viral infections which are more prevalent in winter.
2. Encouragingly, over the past 12 months there was a 37% decrease in the use of fusidic acid and a corresponding increase in topical antiseptic use. The decrease in mupirocin use may be a reflection of recent supply issues, however, the increase in prescribing since the beginning of 2017 is a concern (Figure 2).

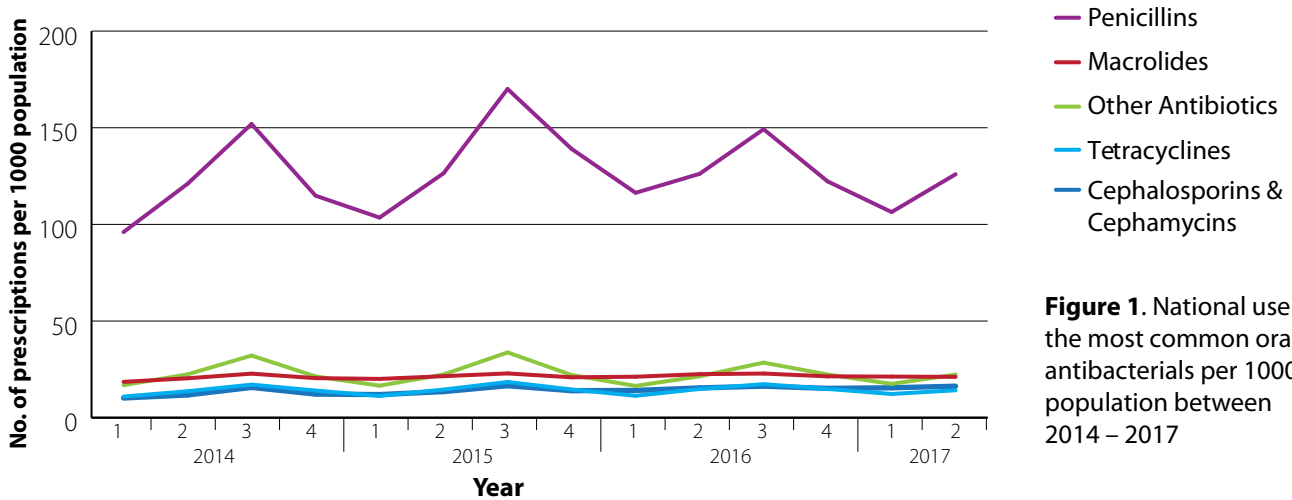


Figure 1. National use of the most common oral antibacterials per 1000 population between 2014 – 2017

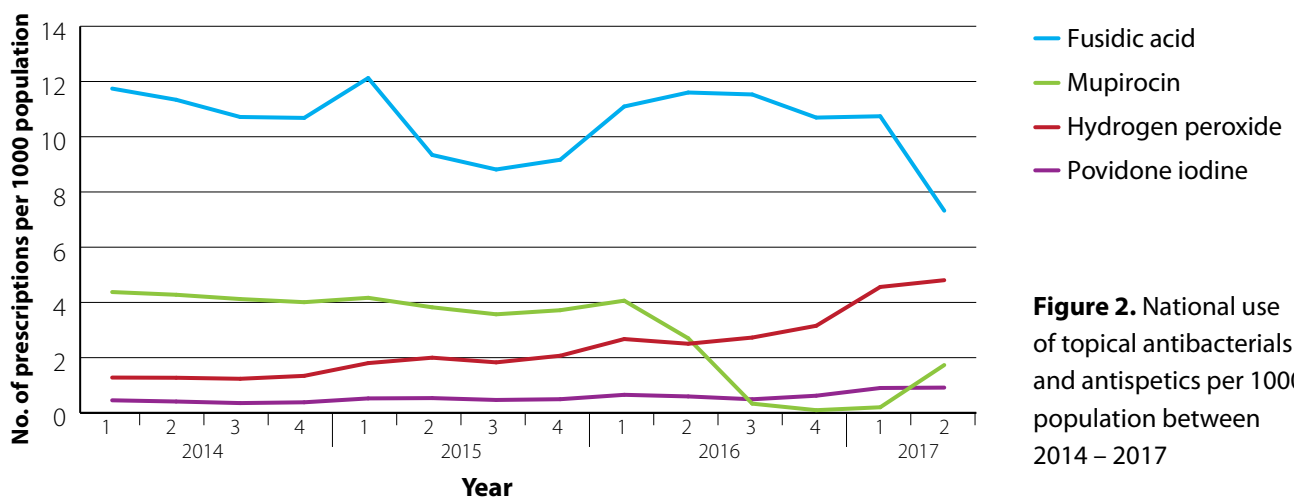


Figure 2. National use of topical antibacterials and antiseptics per 1000 population between 2014 – 2017

1. Williamson DA, Roos RF, Verrall A. 2016. Antibiotic Consumption in New Zealand, 2006–2014. Available from surv.esr.cri.nz/PDF_surveillance/AntibioticConsumption/2014/Antibiotic_Consumption_Report_Final.pdf (Accessed Dec, 2017)

Resources Available

We have developed a number of resources promoting rational prescribing of antibiotics, a sample of these are provided below.



Antibiotics: choices for common infections

- The bpac^{nz} antibiotic choices guide is the most popular resource on our website. This is a consensus guide. It is intended to aid selection of an appropriate antibiotic for typical patients with infections commonly seen in general practice.
- This year the bpac^{nz} team completed a full revision of the guide and also added new conditions:
 - Dental infections – dental abscess and prophylaxis of infective endocarditis
 - Diverticulitis

👁 For more information, see: bpac.org.nz/antibiotics/guide.aspx



Prescribing antibiotics for respiratory tract infections: do you?

This article focuses on appropriate antibiotic prescribing for a respiratory tract infection. It also has some helpful consultation points and reminders for prescribers for managing respiratory tract, ear, nose and throat infections.

👁 For more information, see: Prescribing antibiotics for respiratory tract infections: do you? In: bpac.org.nz/2017/abguide.aspx



Topical antibiotics

In early 2017, bpac^{nz} focused on limiting the use and resistance of topical antibiotics as part of the dermatology theme - included in this was a number of articles and a prescribing report.

- Topical antibiotics for skin infections: should they be prescribed at all?
- Topical antibiotics for skin infections: when are they appropriate?
- Prescribing topical medicines for skin infection (prescribing report)

👁 For more information, see: bpac.org.nz/category.aspx?CategoryId=15

Undertaking a prescribing audit or downloading your prescribing report may help you identify situations where you could improve your antibiotic prescribing.

👁 For more information on antibiotic prescribing in your practice for the past 12 months see pages 19 and 20.

Key Messages - Hepatitis C

Hepatitis C is currently under-diagnosed in New Zealand

It is estimated that approximately half of the 50,000 people with hepatitis C virus (HCV) infection in New Zealand are unaware they have it. Patients with risk factors for HCV should undergo testing; a blood sample for HCV serology is the first step for most patients.

Hepatitis C is currently under-treated in New Zealand

It is estimated that approximately 9000 people have a diagnosis of hepatitis C that may or may not have received previous treatment.¹ These patients could benefit from new treatments. Routinely asking risk factor questions or an audit of your practice management system could help to identify these people.

Primary care clinicians can now prescribe medicines for Hepatitis C (Viekira Pak)

The direct-acting antiviral (DAA) medicines Viekira Pak and Viekira Pak with ribavirin (Viekira Pak-RBV) were subsidised in July, 2016 and can be prescribed by general practitioners to treat patients with hepatitis C genotypes 1a and 1b.

These have high rates of cure (>95%), fewer adverse effects than previous HCV treatments and patients can now be responsible for self-administering their medicines in the community, with monitoring by their general practitioner.

Treatment can reduce the risk of long-term complications and improve a patient's quality of life.

Chronic HCV infection can cause symptoms such as fatigue and depression. HCV also increases the risk of liver disease, developing type 2 diabetes, cardiovascular disease, liver cancer and liver transplant.



Treatment of hepatitis C (HCV) has changed

This resource provides prescribers in primary care with comprehensive guidance on the management of patients with hepatitis C.

👁 For more information, see: bpac.org.nz/2016/hepc/default.aspx



Hepatitis C: you can't treat it if you don't test for it

Patients with risk factors for HCV, e.g. injectable drug use, tattoo acquired using unsafe practices, migration from or travel to a region with high HCV prevalence, should undergo testing; a blood sample for HCV serology is the first step for most patients.

👁 For more information, see: bpac.org.nz/2017/hepc.aspx

1. PHARMAC. Treating hepatitis C in New Zealand. Available from www.pharmac.govt.nz/news/feature-2017-11-23-treating-hepatitis-c/ (Accessed Nov, 2017).

Current prescribing trends

Figure 1 shows the current prescribing trends for Viekira Pak and Viekira Pak-RBV in New Zealand since its introduction in July 2016 by each DHB. This displays the number of people per 1000 population of each DHB that have been dispensed one of the medicines. In total 2,295 people have received treatment and only 24% of those people received the prescription from primary care. The pie charts show the proportion of primary care prescribing in each DHB.

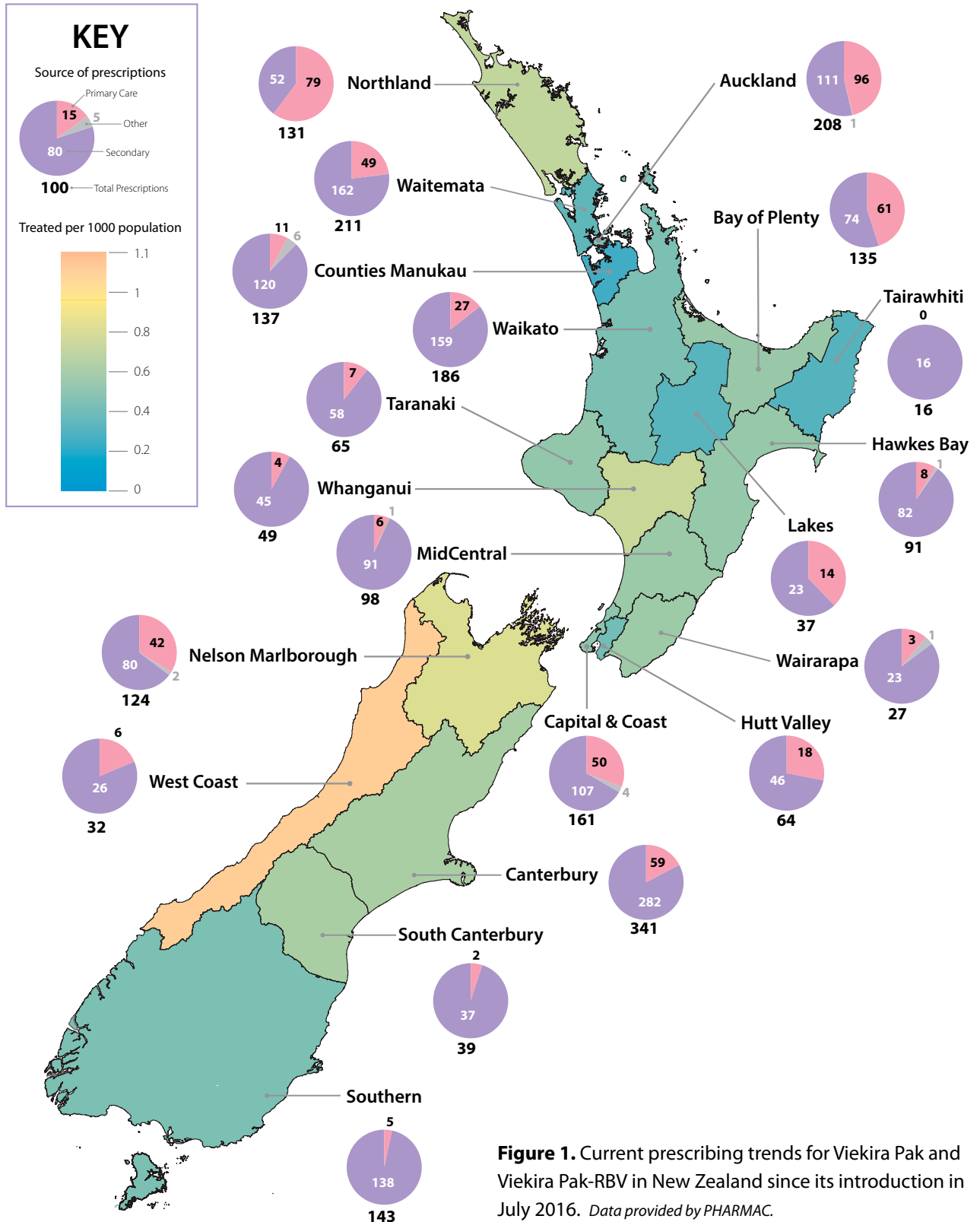


Figure 1. Current prescribing trends for Viekira Pak and Viekira Pak-RBV in New Zealand since its introduction in July 2016. Data provided by PHARMAC.

Top 250 – Dispensed subsidised medicines

This section shows the number of patients dispensed a prescription item, the number of initial or stat prescription items dispensed and the number of items per 1,000 registered patients. For comparison:

- The comparator data shows the average number of items per practice for ten practices in your comparator group and the number of items per 1,000 registered patients in your comparator group.
- The national data shows the average number of items per practice and the number of items per 1,000 registered patients in New Zealand. The box below shows how the number of items of a medicine per 1,000 patients was calculated using paracetamol as an example.

Paracetamol	Your registered patients were dispensed 2,942 items of paracetamol, divide this by your practice's number of registered patients, 3,368, and multiply by 1,000
	$(2,942 / 3,368) * 1,000$
	874 items per 1,000 registered patients

Alimentary Tract and Metabolism

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Antacids and Antiflatulants	Your Practice			Comparator Practices		National	
Sodium alginate	11	12	3.6	23.3	5	22.1	4.9
Antidiarrhoeals	Your Practice			Comparator Practices		National	
Loperamide hydrochloride	83	96	28.5	92.6	19.8	120.5	26.8
Mesalazine	5	20	5.9	5.9	1.3	38.6	8.6
Sulphasalazine	1	9	2.7	17.7	3.8	20.5	4.6
Antispasmodics and Other Agents Altering Gut Motility	Your Practice			Comparator Practices		National	
Hyoscine N-butylbromide	22	22	6.5	73.9	15.8	78.9	17.6
Antulcerants	Your Practice			Comparator Practices		National	
Lansoprazole	3	6	1.8	19.2	4.1	49	10.9
Omeprazole	323	752	223.3	1,000.2	214.4	1,269.5	282.5
Pantoprazole	20	58	17.2	117.6	25.2	188.2	41.9
Ranitidine	13	23	6.8	62.3	13.4	99.8	22.2
Diabetes	Your Practice			Comparator Practices		National	
Gliclazide	32	93	27.6	231.1	49.5	144.9	32.3
Glipizide	54	165	49	236.6	50.7	68.1	15.1
Insulin aspart	16	41	12.2	67.8	14.5	60.3	13.4
Insulin aspart with insulin aspart protamine	10	38	11.3	81.5	17.5	23	5.1
Insulin glargine	21	73	21.7	142.7	30.6	127.9	28.5
Insulin isophane	23	66	19.6	97.4	20.9	47.5	10.6
Insulin isophane with insulin neutral	6	20	5.9	56.6	12.1	23.2	5.2
Insulin lispro	1	5	1.5	18.2	3.9	22.2	4.9
Metformin hydrochloride	229	682	202.5	1,145.9	245.6	559	124.4
Diabetes Management	Your Practice			Comparator Practices		National	
Blood glucose diagnostic test strip	143	324	96.2	655.4	140.5	296.5	66

Alimentary Tract and Metabolism

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Diabetes Management	Your Practice		Comparator Practices		National		
Insulin pen needles	44	108	32.1	217.2	46.6	115	25.6
Laxatives	Your Practice		Comparator Practices		National		
Docusate sodium with sennosides	112	190	56.4	329.9	70.7	386.6	86
Ispaghula (psyllium) husk	22	30	8.9	38.9	8.3	78.1	17.4
Lactulose	81	117	34.7	236.9	50.8	197.5	43.9
Macrogol 3350 with potassium chloride, sodium bicarbonate and sodium chloride	6	6	1.8	27.4	5.9	55.7	12.4
Sodium citrate with sodium lauryl sulphoacetate	5	8	2.4	18.5	4	22.3	5
Local preparations for Anal and Rectal Disorders	Your Practice		Comparator Practices		National		
Fluocortolone caproate with fluocortolone pivalate and cinchocaine	55	75	22.3	84.6	18.1	89.1	19.8
Hydrocortisone with cinchocaine	7	12	3.6	28.4	6.1	34	7.6
Minerals	Your Practice		Comparator Practices		National		
Calcium carbonate	18	68	20.2	66.4	14.2	66.6	14.8
Ferrous fumarate	59	96	28.5	157.6	33.8	118.2	26.3
Ferrous sulphate	105	137	40.7	145.2	31.1	113.8	25.3
Potassium iodate	63	91	27	126.7	27.2	96.7	21.5
Mouth and Throat	Your Practice		Comparator Practices		National		
Nystatin	13	16	4.8	28	6	39.3	8.7
Vitamins	Your Practice		Comparator Practices		National		
Ascorbic acid	9	11	3.3	65	13.9	34.2	7.6
Calcitriol	9	47	14	58.9	12.6	20.5	4.6
Colecalciferol	342	916	272	494.8	106.1	698.3	155.4
Hydroxocobalamin	27	28	8.3	36.6	7.8	95.4	21.2
Thiamine hydrochloride	7	14	4.2	39.1	8.4	42.6	9.5
Vitamin B complex	9	14	4.2	26.3	5.6	27.2	6.1
Vitamins	35	96	28.5	191.3	41	134.9	30

Blood and Blood Forming Organs

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Antianaemics	Your Practice		Comparator Practices		National		
Folic acid	61	118	35	174.9	37.5	189.7	42.2
Antifibrinolytics, Haemostatics and Local Sclerosants	Your Practice		Comparator Practices		National		
Tranexamic acid	25	32	9.5	54.2	11.6	36	8
Antithrombotic Agents	Your Practice		Comparator Practices		National		
Aspirin	250	794	235.7	1,356.9	290.9	1,174.5	261.4
Clopidogrel	18	63	18.7	116.6	25	127.9	28.5
Dabigatran	17	53	15.7	86	18.4	158.9	35.4
Dipyridamole	1	1	.3	15.9	3.4	21.8	4.9
Enoxaparin sodium	8	11	3.3	19.2	4.1	22.7	5.1

Blood and Blood Forming Organs

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Antithrombotic Agents	Your Practice			Comparator Practices		National	
Warfarin sodium	22	104	30.9	149.4	32	214.2	47.7
Fluids and Electrolytes	Your Practice			Comparator Practices		National	
Compound electrolytes	33	35	10.4	84.5	18.1	56.1	12.5
Dextrose with electrolytes	39	55	16.3	101.3	21.7	53.9	12
Potassium chloride	13	36	10.7	26.4	5.7	46.3	10.3

Cardiovascular System

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Agents Affecting the Renin-Angiotensin System	Your Practice			Comparator Practices		National	
Candesartan cilexetil	12	51	15.1	202.3	43.4	271.3	60.4
Cilazapril	165	504	149.6	1,024.3	219.6	755.4	168.1
Cilazapril with hydrochlorothiazide	33	107	31.8	391.6	83.9	234.3	52.1
Enalapril maleate	7	19	5.6	26.9	5.8	86	19.1
Lisinopril	9	32	9.5	83.9	18	51.6	11.5
Losartan potassium	30	108	32.1	168.2	36.1	190.1	42.3
Losartan potassium with hydrochlorothiazide	3	7	2.1	39	8.4	36.1	8
Quinapril	129	419	124.4	158.5	34	344	76.6
Quinapril with hydrochlorothiazide	4	16	4.8	75.4	16.2	100.5	22.4
Alpha Adrenoceptor Blockers	Your Practice			Comparator Practices		National	
Doxazosin	56	170	50.5	184	39.4	230	51.2
Terazosin	18	62	18.4	56.6	12.1	73.5	16.4
Antiarrhythmics	Your Practice			Comparator Practices		National	
Digoxin	9	30	8.9	43.9	9.4	73.9	16.4
Flecainide acetate	3	10	3	5.6	1.2	22.3	5
Beta Adrenoceptor Blockers	Your Practice			Comparator Practices		National	
Atenolol	8	30	8.9	52.3	11.2	58.6	13
Bisoprolol fumarate	8	34	10.1	39.4	8.4	101.2	22.5
Carvedilol	3	11	3.3	42.5	9.1	50	11.1
Celliprolol	8	28	8.3	4.9	1.1	20.7	4.6
Metoprolol succinate	152	575	170.7	826.8	177.2	928.9	206.7
Nadolol	2	7	2.1	10.2	2.2	21.7	4.8
Propranolol	8	25	7.4	10.4	2.2	39.9	8.9
Sotalol	3	11	3.3	14.1	3	25.2	5.6
Calcium Channel Blockers	Your Practice			Comparator Practices		National	
Amlodipine	50	153	45.4	423.8	90.8	347	77.2
Diltiazem hydrochloride	22	87	25.8	121.2	26	208.7	46.4
Felodipine	131	468	139	464.6	99.6	446.3	99.3

Cardiovascular System

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Calcium Channel Blockers	Your Practice		Comparator Practices		National		
Verapamil hydrochloride	3	12	3.6	9.7	2.1	27.5	6.1
Diuretics	Your Practice		Comparator Practices		National		
Bendroflumethiazide [Bendrofluazide]	29	98	29.1	106.5	22.8	279	62.1
Chlorthalidone [Chlorthalidone]	7	18	5.3	42.3	9.1	33.2	7.4
Furosemide [Frusemide]	65	205	60.9	264.4	56.7	346.5	77.1
Spirolactone	18	52	15.4	62.2	13.3	91.9	20.5
Lipid-Modifying Agents	Your Practice		Comparator Practices		National		
Atorvastatin	246	703	208.7	1,334.5	286.1	1,213.1	270
Bezafibrate	14	50	14.8	63.6	13.6	47	10.5
Ezetimibe	15	44	13.1	33.8	7.2	74.2	16.5
Pravastatin	3	9	2.7	17.2	3.7	50.8	11.3
Simvastatin	179	568	168.6	726.6	155.8	551.1	122.6
Nitrates	Your Practice		Comparator Practices		National		
Glyceryl trinitrate	23	41	12.2	64	13.7	81.7	18.2
Isosorbide mononitrate	8	35	10.4	62.5	13.4	101.4	22.6

Dermatologicals

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Antiacne Preparations	Your Practice		Comparator Practices		National		
Adapalene	8	9	2.7	26.5	5.7	23.1	5.1
Isotretinoin	5	10	3	25.7	5.5	48.2	10.7
Tretinoin	11	12	3.6	14.1	3	21.5	4.8
Antibacterials Topical	Your Practice		Comparator Practices		National		
Fusidic acid	129	149	44.2	249.6	53.5	181	40.3
Hydrogen peroxide*	139	174	51.7	92.3	19.8	68.5	15.2
Antifungals Topical	Your Practice		Comparator Practices		National		
Clotrimazole	123	174	51.7	124.9	26.8	64.9	14.5
Miconazole nitrate	25	31	9.2	65.5	14	71.4	15.9
Antipruritic Preparations	Your Practice		Comparator Practices		National		
Calamine	35	35	10.4	57.8	12.4	29.8	6.6
Crotamiton	18	18	5.3	68.8	14.7	21.8	4.8
Barrier Creams and Emollients	Your Practice		Comparator Practices		National		
Aqueous cream	30	37	11	80.9	17.3	84.8	18.9
Cetomacrogol	49	65	19.3	72.1	15.5	89.5	19.9
Cetomacrogol with glycerol	173	218	64.7	404.9	86.8	181.2	40.3
Emulsifying ointment	23	33	9.8	42.4	9.1	51.9	11.6
Oil in water emulsion	47	63	18.7	103.5	22.2	111.9	24.9

* N.B. This is an antiseptic, but is categorised under this heading in the pharmaceutical schedule

Dermatologicals

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Barrier Creams and Emollients		Your Practice		Comparator Practices		National	
Urea	6	10	3	30.8	6.6	55.9	12.4
Zinc and castor oil	17	18	5.3	38.3	8.2	29.9	6.7
Corticosteroids Topical		Your Practice		Comparator Practices		National	
Betamethasone valerate	111	167	49.6	129.1	27.7	86.2	19.2
Clobetasol propionate	51	93	27.6	91.3	19.6	101.7	22.6
Hydrocortisone	204	264	78.4	234.3	50.2	185.9	41.4
Hydrocortisone and paraffin liquid and lanolin	6	11	3.3	33.5	7.2	30.6	6.8
Hydrocortisone butyrate	138	209	62.1	382.5	82	218.9	48.7
Hydrocortisone with miconazole	108	132	39.2	295.4	63.3	180	40.1
Hydrocortisone with natamycin and neomycin	121	149	44.2	193.8	41.5	153.7	34.2
Methylprednisolone aceponate	5	5	1.5	23.7	5.1	31.7	7.1
Mometasone furoate	25	37	11	44.5	9.5	86.5	19.2
Triamcinolone acetonide	13	16	4.8	23.5	5	21.6	4.8
Other Skin Preparations		Your Practice		Comparator Practices		National	
Fluorouracil sodium	6	6	1.8	6.5	1.4	50	11.1
Parasiticial Preparations		Your Practice		Comparator Practices		National	
Permethrin	65	73	21.7	95.4	20.4	36.6	8.2
Psoriasis and Eczema Preparations		Your Practice		Comparator Practices		National	
Betamethasone dipropionate with calcipotriol	11	17	5	40.2	8.6	42.7	9.5
Pine tar with trolamine laurilsulfate and fluorescein	64	87	25.8	91.2	19.5	44.2	9.8
Scalp Preparations		Your Practice		Comparator Practices		National	
Hydrocortisone butyrate	9	17	5	29.5	6.3	25	5.6
Ketoconazole	33	39	11.6	67.4	14.4	52	11.6

Genito-Urinary System

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Antiandrogen Oral Contraceptives		Your Practice		Comparator Practices		National	
Cyproterone acetate with ethinyloestradiol	14	26	7.7	27.8	6	67	14.9
Contraceptives - Hormonal		Your Practice		Comparator Practices		National	
Ethinyloestradiol with levonorgestrel	66	110	32.7	106	22.7	219.8	48.9
Ethinyloestradiol with norethisterone	8	16	4.8	15.2	3.3	44.2	9.8
Norethisterone	32	46	13.7	47.4	10.2	74.2	16.5
Contraceptives - Non-hormonal		Your Practice		Comparator Practices		National	
Condoms	29	32	9.5	39.8	8.5	45.4	10.1
Gynaecological Anti-infectives		Your Practice		Comparator Practices		National	
Clotrimazole	62	74	22	105.6	22.6	100.4	22.3

Genito-Urinary System

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Myometrial and Vaginal Hormone Preparations	Your Practice		Comparator Practices		National		
Oestrinol	27	43	12.8	36.9	7.9	128.8	28.7
Urinary Agents	Your Practice		Comparator Practices		National		
Finasteride	3	8	2.4	22.2	4.8	42.8	9.5
Oxybutynin	8	21	6.2	27.6	5.9	57.7	12.8
Sodium citro-tartrate	51	58	17.2	85.3	18.3	49.9	11.1
Solifenacin succinate	3	8	2.4	14.6	3.1	43.3	9.6
Tamsulosin hydrochloride	1	1	.3	3.1	.7	23.1	5.1

Hormone Preparations - Systemic Excluding Contraceptive Hormones

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Corticosteroids and Related Agents for Systemic Use	Your Practice		Comparator Practices		National		
Dexamethasone	5	12	3.6	13.4	2.9	23.4	5.2
Prednisolone	54	78	23.2	88.8	19	103.4	23
Prednisone	198	353	104.8	537	115.1	625.5	139.2
Hormone Replacement Therapy - Systemic	Your Practice		Comparator Practices		National		
Medroxyprogesterone acetate	22	35	10.4	45.3	9.7	31.2	6.9
Oestradiol	1	6	1.8	2.9	.6	25.6	5.7
Oestradiol valerate	4	8	2.4	17.3	3.7	28.6	6.4
Thyroid and Antithyroid Agents	Your Practice		Comparator Practices		National		
Carbimazole	4	7	2.1	24.7	5.3	25.3	5.6
Levothyroxine	54	202	60	324.6	69.6	538.1	119.7

Infections - Agents for Systemic Use

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Antibacterials	Your Practice		Comparator Practices		National		
Amoxicillin	773	1,059	314.4	1,453.6	311.6	1,131	251.7
Amoxicillin with clavulanic acid	410	556	165.1	961.2	206	630.8	140.4
Azithromycin	11	15	4.5	29.5	6.3	45	10
Cefaclor monohydrate	38	56	16.6	129.9	27.8	134.1	29.9
Cefalexin	105	118	35	220.1	47.2	147.7	32.9
Ciprofloxacin	16	22	6.5	30.7	6.6	72.4	16.1
Co-trimoxazole	126	203	60.3	204.8	43.9	126.6	28.2
Doxycycline	164	191	56.7	157.3	33.7	256.2	57
Erythromycin ethyl succinate	105	127	37.7	149.1	32	158.2	35.2
Flucloxacillin	137	164	48.7	424.4	91	414.3	92.2

Infections - Agents for Systemic Use

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Antibacterials	Your Practice			Comparator Practices		National	
Phenoxymethylpenicillin (Penicillin V)	18	21	6.2	41.9	9	86.6	19.3
Roxithromycin	93	123	36.5	161.2	34.6	197.9	44
Trimethoprim	80	97	28.8	119.8	25.7	160.8	35.8
Antifungals	Your Practice			Comparator Practices		National	
Fluconazole	10	12	3.6	20.5	4.4	32.6	7.3
Terbinafine	48	56	16.6	27.2	5.8	32.1	7.1
Antitrichomonal Agents	Your Practice			Comparator Practices		National	
Metronidazole	71	83	24.6	131.8	28.3	110	24.5
Antivirals	Your Practice			Comparator Practices		National	
Aciclovir	23	44	13.1	44.8	9.6	93.8	20.9
Urinary Tract Infections	Your Practice			Comparator Practices		National	
Nitrofurantoin	36	46	13.7	70.8	15.2	77	17.1

Musculoskeletal System

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Antirheumatoid Agents	Your Practice			Comparator Practices		National	
Hydroxychloroquine	11	24	7.1	28.6	6.1	32.8	7.3
Drugs Affecting Bone Metabolism	Your Practice			Comparator Practices		National	
Alendronate sodium with colecalciferol	5	19	5.6	31.7	6.8	77.4	17.2
Risedronate sodium	4	5	1.5	22.5	4.8	23.4	5.2
Hyperuricaemia and Antigout	Your Practice			Comparator Practices		National	
Allopurinol	91	291	86.4	542.5	116.3	373.5	83.1
Colchicine	35	57	16.9	154.8	33.2	52.9	11.8
Muscle Relaxants	Your Practice			Comparator Practices		National	
Orphenadrine citrate	16	17	5	98.6	21.1	92.8	20.6
Non-Steroidal Anti-Inflammatory Drugs	Your Practice			Comparator Practices		National	
Diclofenac sodium	377	665	197.4	603.3	129.3	441.4	98.2
Ibuprofen	600	812	241.1	1,193.9	255.9	994.4	221.3
Naproxen	171	203	60.3	135.4	29	218.1	48.5

Nervous System

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Agents for Parkinsonism and Related Disorders	Your Practice			Comparator Practices		National	
Levodopa with carbidopa				15.9	3.4	38.9	8.6
Analgesics	Your Practice			Comparator Practices		National	
Aspirin	4	8	2.4	13	2.8	24.7	5.5
Codeine phosphate	211	289	85.8	470.7	100.9	457.4	101.8
Dihydrocodeine tartrate	1	2	.6	12.2	2.6	34.9	7.8

Nervous System

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Analgesics		Your Practice		Comparator Practices		National	
Fentanyl	2	10	3	5.1	1.1	40.7	9.1
Methadone hydrochloride				100.3	21.5	90.7	20.2
Morphine hydrochloride				7.5	1.6	23.9	5.3
Morphine sulphate	28	131	38.9	75.7	16.2	154.3	34.3
Oxycodone hydrochloride	10	51	15.1	106.8	22.9	118.6	26.4
Paracetamol	1,467	2,942	873.5	4,051.9	868.6	2,530.1	563
Paracetamol with codeine	140	207	61.5	411.7	88.3	301.1	67
Tramadol hydrochloride	171	262	77.8	456.5	97.9	435.6	96.9
Antidepressants		Your Practice		Comparator Practices		National	
Amitriptyline	50	125	37.1	143.1	30.7	256.3	57
Citalopram hydrobromide	37	81	24	171.6	36.8	341.9	76.1
Doxepin hydrochloride				5.7	1.2	23.8	5.3
Escitalopram	13	30	8.9	60.3	12.9	139.1	31
Fluoxetine hydrochloride	24	71	21.1	91.8	19.7	246	54.7
Mirtazapine	7	33	9.8	28	6	52.2	11.6
Nortriptyline hydrochloride	15	31	9.2	103	22.1	151.8	33.8
Paroxetine	21	66	19.6	65.9	14.1	111	24.7
Sertraline	21	48	14.3	43.5	9.3	110.6	24.6
Venlafaxine	8	27	8	64.1	13.7	201.2	44.8
Antiepilepsy Drugs		Your Practice		Comparator Practices		National	
Carbamazepine	2	8	2.4	36.6	7.8	52.4	11.7
Gabapentin	8	26	7.7	89.1	19.1	146.1	32.5
Lamotrigine	3	10	3	42.5	9.1	52.4	11.7
Levetiracetam	3	12	3.6	32.5	7	32.7	7.3
Phenytoin sodium	2	10	3	19.2	4.1	23.3	5.2
Sodium valproate	10	32	9.5	121.2	26	105	23.4
Topiramate	2	6	1.8	8.3	1.8	23.7	5.3
Antimigraine Preparations		Your Practice		Comparator Practices		National	
Rizatriptan	9	11	3.3	32	6.9	54.9	12.2
Sumatriptan	7	11	3.3	22.6	4.8	41.1	9.2
Antinausea and Vertigo Agents		Your Practice		Comparator Practices		National	
Cyclizine hydrochloride	8	11	3.3	19.7	4.2	27.8	6.2
Domperidone	14	20	5.9	58.3	12.5	65	14.5
Metoclopramide hydrochloride	88	99	29.4	82.9	17.8	94.7	21.1
Ondansetron	87	111	33	199	42.7	176	39.2
Prochlorperazine	46	59	17.5	64.8	13.9	84	18.7

Nervous System

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Antipsychotics	Your Practice			Comparator Practices		National	
Clozapine	3	24	7.1	78.5	16.8	33.4	7.4
Lithium carbonate	1	4	1.2	25.6	5.5	31.6	7
Olanzapine	13	84	24.9	107.3	23	78.2	17.4
Quetiapine	17	56	16.6	190.2	40.8	218.5	48.6
Risperidone	10	34	10.1	93.2	20	78.5	17.5
Anxiolytics	Your Practice			Comparator Practices		National	
Clonazepam	11	30	8.9	42.5	9.1	85.6	19.1
Diazepam	31	67	19.9	59.3	12.7	109.1	24.3
Lorazepam	16	34	10.1	100.8	21.6	151.3	33.7
Sedatives and Hypnotics	Your Practice			Comparator Practices		National	
Temazepam	3	5	1.5	18.5	4	56	12.5
Triazolam	6	24	7.1	14.7	3.2	59.2	13.2
Zopiclone	105	244	72.4	331.7	71.1	541	120.4
Stimulants/ADHD Treatments	Your Practice			Comparator Practices		National	
Methylphenidate hydrochloride	3	13	3.9	69	14.8	106.6	23.7
Methylphenidate hydrochloride extended-release	2	9	2.7	28.6	6.1	82.7	18.4
Treatments for Dementia	Your Practice			Comparator Practices		National	
Donepezil hydrochloride	2	6	1.8	15.3	3.3	30	6.7
Treatments for Substance Dependence	Your Practice			Comparator Practices		National	
Nicotine	44	103	30.6	174.5	37.4	147.1	32.7
Varenicline tartrate	10	23	6.8	40.8	8.7	49.3	11

Oncology Agents and Immunosuppressants

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Chemotherapeutic Agents	Your Practice			Comparator Practices		National	
Methotrexate	9	31	9.2	58.1	12.5	83.6	18.6
Endocrine Therapy	Your Practice			Comparator Practices		National	
Tamoxifen citrate	2	7	2.1	14.5	3.1	22	4.9
Immunosuppressants	Your Practice			Comparator Practices		National	
Azathioprine	3	10	3	8.5	1.8	22.3	5

Respiratory System and Allergies

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Anticholinergic Agents	Your Practice			Comparator Practices		National	
Ipratropium bromide	17	37	11	25	5.4	27	6
Salbutamol with ipratropium bromide	3	6	1.8	33.8	7.2	65.1	14.5
Tiotropium bromide	2	6	1.8	46.8	10	63.7	14.2

Respiratory System and Allergies

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Antihistamines	Your Practice			Comparator Practices		National	
Cetirizine hydrochloride	255	338	100.4	364.3	78.1	443.3	98.6
Loratadine	231	354	105.1	920	197.2	523.4	116.5
Promethazine hydrochloride	28	47	14	152.6	32.7	86.6	19.3
Beta-Adrenoceptor Agonists	Your Practice			Comparator Practices		National	
Salbutamol	402	737	218.8	1,065.6	228.4	856.2	190.5
Terbutaline sulphate	40	59	17.5	32.2	6.9	33.7	7.5
Inhaled Corticosteroids	Your Practice			Comparator Practices		National	
Beclomethasone dipropionate	2	4	1.2	18.3	3.9	36.3	8.1
Budesonide	11	16	4.8	12.1	2.6	24.2	5.4
Fluticasone	78	123	36.5	239.7	51.4	251.8	56
Inhaled Long-acting Beta-adrenoceptor Agonists	Your Practice			Comparator Practices		National	
Budesonide with eformoterol	33	71	21.1	144	30.9	168.9	37.6
Fluticasone furoate with vilanterol	3	11	3.3	28.1	6	43.5	9.7
Fluticasone with salmeterol	107	263	78.1	326.5	70	282.1	62.8
Nasal Preparations	Your Practice			Comparator Practices		National	
Beclomethasone dipropionate	4	6	1.8	29.4	6.3	48.6	10.8
Budesonide	28	47	14	32.8	7	54.9	12.2
Fluticasone propionate	139	188	55.8	344.2	73.8	392.1	87.3
Ipratropium bromide	10	15	4.5	7.3	1.6	26.1	5.8

Sensory Organs

	Number of patients dispensed	Items	Items per 1000 patients	Average Items	Items per 1000 patients	Average Items	Items per 1000 patients
Ear/Eye Preparations	Your Practice			Comparator Practices		National	
Dexamethasone with framycetin and gramicidin	39	41	12.2	37.6	8.1	51.2	11.4
Ear Preparations	Your Practice			Comparator Practices		National	
Flumetasone pivalate	30	31	9.2	60.6	13	49.1	10.9
Triamcinolone acetonide with gramicidin, neomycin and nystatin	11	13	3.9	41.1	8.8	27.3	6.1
Eye Preparations	Your Practice			Comparator Practices		National	
Bimatoprost	11	37	11	18.5	4	24.6	5.5
Chloramphenicol	113	160	47.5	228.9	49.1	228.3	50.8
Fusidic acid	76	94	27.9	45.9	9.8	58	12.9
Hypromellose with Dextran	51	87	25.8	108.9	23.3	74.2	16.5
Latanoprost	12	28	8.3	31	6.6	82.3	18.3
Olopatadine	12	14	4.2	65.8	14.1	55.3	12.3
Prednisolone acetate	31	67	19.9	44.3	9.5	42.7	9.5
Sodium cromoglycate	6	6	1.8	10	2.1	23	5.1
Timolol	7	18	5.3	8.8	1.9	28	6.2



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