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2010 Annual Report  
Pharmaceutical and Laboratory Test Utilisation

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# 2010 Annual Report

## Pharmaceutical and Laboratory Test Utilisation

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Dear Colleague

Welcome to the 2010 bpac<sup>nz</sup> annual report. This report provides an overview of patterns of prescribing and laboratory test ordering for the year to March 2010.

A number of comparisons are made throughout the report which we hope will provide the opportunity to reflect on the way in which pharmaceuticals and laboratory tests are used in day-to-day practice. This information may be useful for considering potential areas for audit, identifying learning opportunities, and initiating peer group discussions.

This report includes the following information:

**General summary**

This includes a comparison of volume of prescriptions and laboratory tests between 2009 and 2010, as well as an overview of the pharmaceuticals and laboratory tests used most often.

**Key clinical messages**

This provides information specific to key clinical areas and provides an opportunity for revisiting key messages relevant to everyday prescribing and testing.

**Details of pharmaceutical and laboratory tests**

A comprehensive list of all pharmaceuticals and laboratory tests requested over the report time period. To allow for comparison, figures are supplied, along with the national average per GP. Note, the “average GP” does approximately 100-110 consultations per week.

We hope you find this report useful, and would welcome your feedback

Regards

The bpac<sup>nz</sup> team  
[www.bpac.org.nz](http://www.bpac.org.nz)



## Summary of prescribing for 2009 and 2010

	Number of Prescriptions		Average Prescription Cost		Total Cost	
	April 2009 - March 2010	April 2008 - March 2009	April 2009 - March 2010	April 2008 - March 2009	April 2009 - March 2010	April 2008 - March 2009
<b>You</b>						
<b>Your DHB (per GP)</b>						
<b>National (per GP)</b>	7,640	7,367	\$16.16	\$18.38	\$123,448.45	\$135,388.82

### Most commonly used pharmaceuticals

You		Number of Prescriptions	
		April 09 - March 10	April 08 - March 09
<b>1</b>	Aspirin		
<b>2</b>	Omeprazole		
<b>3</b>	Paracetamol		
<b>4</b>	Amoxicillin		
<b>5</b>	Metoprolol succinate		
<b>6</b>	Simvastatin		
<b>7</b>	Enalapril		
<b>8</b>	Prednisone		
<b>9</b>	Salbutamol		
<b>10</b>	Amitriptyline		
<b>11</b>	Zopiclone		
<b>12</b>	Amoxicillin clavulanate		
<b>13</b>	Atorvastatin		
<b>14</b>	Bendrofluazide		
<b>15</b>	Candesartan		
<b>16</b>	Naproxen sodium		
<b>17</b>	Fluoxetine hydrochloride		
<b>18</b>	Flucloxacillin sodium		
<b>19</b>	Levothyroxine		
<b>20</b>	Budesonide		

National (per GP)		Number of Prescriptions	
		April 09 - March 10	April 08 - March 09
<b>1</b>	Paracetamol	411	392
<b>2</b>	Aspirin	306	294
<b>3</b>	Simvastatin	294	275
<b>4</b>	Omeprazole	216	235
<b>5</b>	Amoxicillin	205	201
<b>6</b>	Metoprolol succinate	189	181
<b>7</b>	Salbutamol	174	167
<b>8</b>	Amoxicillin clavulanate	154	168
<b>9</b>	Cilazapril	130	120
<b>10</b>	Diclofenac sodium	120	116
<b>11</b>	Zopiclone	118	108
<b>12</b>	Prednisone	106	100
<b>13</b>	Bendrofluazide	97	99
<b>14</b>	Ibuprofen	97	85
<b>15</b>	Quinapril	95	94
<b>16</b>	Flucloxacillin sodium	94	87
<b>17</b>	Felodipine	92	88
<b>18</b>	Fluticasone	89	88
<b>19</b>	Levothyroxine	89	86
<b>20</b>	Metformin hydrochloride	89	83

## Summary of laboratory testing for 2009 and 2010

	Number of Tests	
	April 2009 - March 2010	April 2008 - March 2009
<b>You</b>		
<b>Your DHB (per GP)</b>		
<b>National (per GP)</b>	4,714	4,702

### Most commonly ordered tests

You		Number of Tests		National (per GP)		Number of Tests	
		April 09 - March 10	April 08 - March 09			April 09 - March 10	April 08 - March 09
<b>1</b>	Complete blood count (CBC)			<b>1</b>	Complete blood count (CBC)	421	413
<b>2</b>	Liver function group			<b>2</b>	Creatinine, serum	375	360
<b>3</b>	Creatinine, serum			<b>3</b>	Sodium & Potassium, serum	314	298
<b>4</b>	Sodium & Potassium, serum			<b>4</b>	Fasting lipid group test	285	271
<b>5</b>	Thyroid stimulating hormone, serum (TSH)			<b>5</b>	Liver function group	280	273
<b>6</b>	Serum glucose			<b>6</b>	Serum glucose	268	263
<b>7</b>	Ferritin, serum			<b>7</b>	Thyroid stimulating hormone, serum (TSH)	217	215
<b>8</b>	Plasma prothrombin ratio (INR)			<b>8</b>	Plasma prothrombin ratio (INR)	207	199
<b>9</b>	Urine culture			<b>9</b>	Ferritin, serum	189	187
<b>10</b>	Fasting lipid group test			<b>10</b>	C-reactive protein test	159	154
<b>11</b>	C-reactive protein test			<b>11</b>	Urine culture	150	153
<b>12</b>	Folate plus Vitamin B12, serum			<b>12</b>	Glycosylated haemoglobin	126	116
<b>13</b>	Erythrocyte sedimentation rate (ESR)			<b>13</b>	Folate plus Vitamin B12, serum	103	102
<b>14</b>	Glycosylated haemoglobin			<b>14</b>	Iron, serum	90	90
<b>15</b>	Calcium, serum			<b>15</b>	Urate or uric acid, serum	84	80
<b>16</b>	Phosphate, serum			<b>16</b>	Prostate Specific Antigen	79	73
<b>17</b>	Free thyroxine index or free T4			<b>17</b>	Free thyroxine index or free T4	66	67
<b>18</b>	Immunoglobulins (IgA, IgE, IgG, or IgM)			<b>18</b>	Iron binding capacity, serum	65	66
<b>19</b>	Swab, vaginal			<b>19</b>	Urea, serum	62	63
<b>20</b>	Creatine kinase, serum (CK)			<b>20</b>	Microalbumin, early morning urine	61	56



## Key clinical messages

The purpose of this section is to provide an opportunity for you to reflect on your practice in some key clinical areas

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### Self monitoring of blood glucose (SMBG) for people not on insulin

You have xx patients using SMBG, who are not on insulin

**TARGET:** Very few of your patients who are not on insulin should be performing SMBG.

Although SMBG remains an important component in the management of people with insulin dependent diabetes, it is not routinely recommended for patients who are controlled by diet or metformin alone. There is an increasing body of evidence showing a lack of benefit for SMBG in people with non-insulin dependent diabetes and it is associated with higher costs and a lower quality of life.

Sometimes newly diagnosed patients may benefit from a short period of SMBG, to increase awareness of the effect of diet on blood glucose levels. For these patients, monitoring should continue for a short time only and it is not recommended SMBG should continue long term.

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### Use of long acting beta agonists (LABAs) without concurrent inhaled corticosteroids (ICS)

xx of your patients who have had a LABA prescribed have not received an ICS

**TARGET:** None of your patients with asthma should be treated with a LABA without an ICS.

LABAs are useful drugs in asthma management however they should only be prescribed for patients who are already on an ICS. LABAs control symptoms but do not control the underlying inflammation associated with asthma. Monotherapy has been associated with increased asthma exacerbations.

It is important to check LABAs are always used concurrently with ICS in patients with asthma, and patients are reminded of the importance of continuing their ICS. In COPD, LABA therapy may be used for symptom control without an ICS.

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## Venlafaxine prescribing

xx% of your patients receiving antidepressant therapy\* are being prescribed the SNRI venlafaxine

**TARGET: Only a very small percentage of your patients receiving antidepressant therapy for depression, should be receiving venlafaxine.**

Venlafaxine is no more effective than the first line SSRIs but is more expensive. Therefore, venlafaxine should only be prescribed for patients who have failed to respond to adequate trials of two other antidepressants.

Venlafaxine has not been evaluated in patients with a recent history of myocardial infarction or unstable heart disease and needs to be used with caution in these patients. Increases in blood pressure and serum cholesterol can occur with venlafaxine and monitoring is recommended. Like the SSRIs, venlafaxine has been associated with increased risk of bleeding, including upper gastrointestinal bleeding.

Vocationally trained GPs can prescribe extended release venlafaxine (Efexor-XR) under special authority for people who have trialled and failed to respond to two antidepressants for an adequate time (usually at least four weeks).

\* This does not include TCAs, as these are used for indications other than depression

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## Oxycodone prescribing

xx% of your prescriptions for a strong opioid (morphine or oxycodone) were for oxycodone

**TARGET: The percentage of your patients on oxycodone should be low.**

In patients requiring a strong opioid, morphine remains the first option. Oxycodone can be considered for the small number of patients who experience allergy or ongoing neurotoxic adverse effects to morphine, such as hallucinations.

Clinical trials indicate that oxycodone is as effective as morphine at controlling cancer pain but with no significant difference in overall tolerability. There is no evidence that oxycodone is superior to morphine for chronic, non-cancer pain.

Oxycodone is not a safer alternative to other opioid analgesics and it has the same spectrum of adverse effects. Of greatest concern is the potential for respiratory depression when used at too high a dose or when combined with other CNS depressants such as benzodiazepines and alcohol. Combination with other opioids is potentially lethal and care should be taken to avoid this, especially if people might have access to a supply of both, e.g. after switching from morphine.xx

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## Requesting of urea tests

xx% of your renal function tests include urea

**TARGET:** Only a small percentage of your renal tests should include urea.

There are few indications for requesting urea. Its role as a renal function test has been superseded by creatinine and more recently by the estimated glomerular filtration rate (eGFR). In most situations these tests should be used for assessing renal function. Requests for urea should be limited to the management of patients on dialysis in end-stage renal failure, and very rarely for the assessment of hydration status in elderly people.

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## Chlamydia testing in young adults

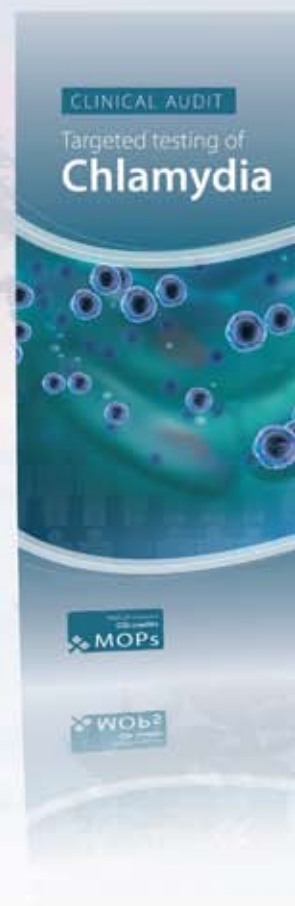
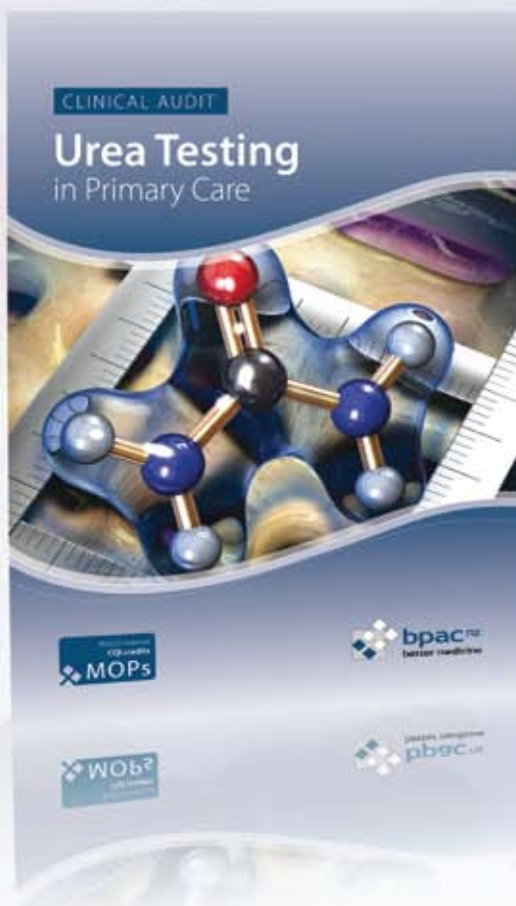
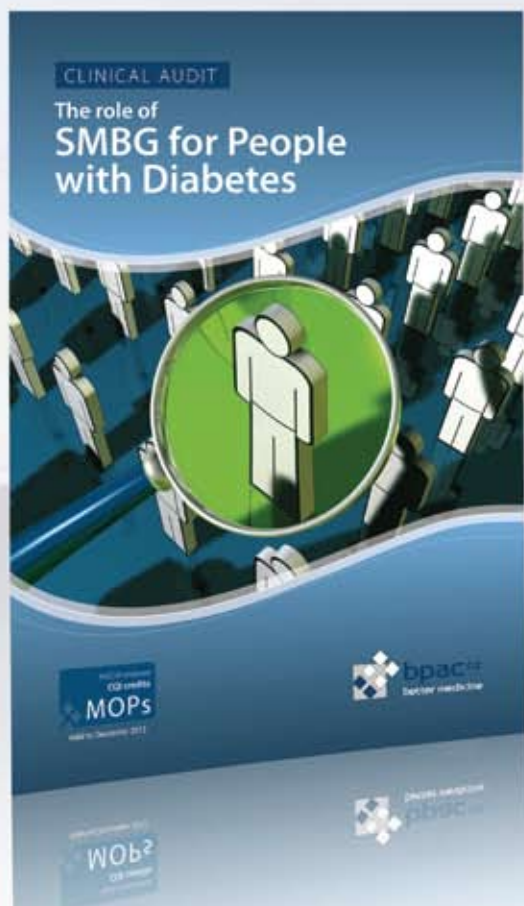
xx of your 15-24 year old patients have had a test for Chlamydia

**TARGET:** Aim for testing as many 15-24 year old patients as possible.

It is recommended that all sexually active people between the ages of 15-24 years should have at least one record of a Chlamydia test. More frequent testing is recommended if there has been a partner change.

When women are attending for a cervical smear or contraceptive advice, it is often a useful time to talk about sexual health. Men generally attend less frequently, so Chlamydia testing can be considered at any presentation.

# bpac<sup>nz</sup> clinical audits



Review your clinical practice by undertaking continuous quality improvement (CQI) activities. bpac<sup>nz</sup> has a range of RNZCGP endorsed clinical audits to help you achieve the requirement of thirty credits per triennium from CQI activities.

Each audit has a clinical focus, and provides you with the opportunity to benchmark "where you are now", and then provides an overview of the steps required to make changes. Each cycle of assessment and making improvements has an allocation of ten credits.

All bpac audits are available online from our website: [www.bpac.org.nz](http://www.bpac.org.nz)



## Your prescribing

This section focuses on your prescribing. All prescriptions associated with your NZMC number are presented regardless of where the prescription was generated e.g. an after hours clinic, rest home or on a practitioner supply order.

<b>Diuretics</b>	<b>You</b>	<b>National (per GP)</b>
Bendrofluazide		97
Furosemide		84
Spirolactone		17
Indapamide		5
Bumetanide		2
Chlorthalidone		1

<b>ACE</b>	<b>You</b>	<b>National (per GP)</b>
Cilazapril		130
Quinapril		95
Enalapril		25
Lisinopril		6
Captopril		2
Perindopril		1

<b>ACE &amp; Diuretic</b>	<b>You</b>	<b>National (per GP)</b>
Cilazapril with hydrochlorothiazide		51
Quinapril with hydrochlorothiazide		24
Enalapril with hydrochlorothiazide		1

<b>ARBs</b>	<b>You</b>	<b>National (per GP)</b>
Candesartan		41
Losartan		15

<b>Beta Adrenoceptor Blockers</b>	<b>You</b>	<b>National (per GP)</b>
Metoprolol succinate		189
Atenolol		30
Celiprolol		10
Carvedilol		9
Propranolol		7
Sotalol		7
Nadolol		5
Metoprolol tartrate		4
Labetalol		3
Pindolol		1

<b>Combination Diuretics</b>	<b>You</b>	<b>National (per GP)</b>
Amiloride with hydrochlorothiazide		5
Amiloride with frusemide		1
Triamterene with hydrochlorothiazide		0

<b>Calcium Channel Blockers</b>	<b>You</b>	<b>National (per GP)</b>
Felodipine		92
Diltiazem hydrochloride		52
Amlodipine		32
Verapamil hydrochloride		8
Nifedipine		4
Perhexiline maleate		1

<b>Lipid Modifying Agents</b>	<b>You</b>	<b>National (per GP)</b>
Simvastatin		294
Atorvastatin		56
Bezafibrate		20
Ezetimibe		6
Nicotinic acid		2
Ezetimibe with simvastatin		1

<b>Asthma Preventative Medicines</b>	<b>You</b>	<b>National (per GP)</b>
Fluticasone		89
Budesonide		13
Beclomethasone dipropionate		12
Nedocromil		1

<b>SABA / Other</b>	<b>You</b>	<b>National (per GP)</b>
Salbutamol		174
Salbutamol with ipratropium bromide		27
Terbutaline sulphate		13
Tiotropium bromide		10
Ipratropium bromide		7
Theophylline		2

<b>LABA</b>	<b>You</b>	<b>National (per GP)</b>
Budesonide with eformoterol		24
Fluticasone with salmeterol		19
Salmeterol		13
Eformoterol fumarate		7

**SAMPLE DATA**

<b>H2 Antagonists</b>	<b>You</b>	<b>National (per GP)</b>
Ranitidine hydrochloride		19
Famotidine		3
Cimetidine		0

<b>Proton Pump Inhibitors</b>	<b>You</b>	<b>National (per GP)</b>
Omeprazole		216
Pantoprazole		29
Lansoprazole		9

<b>Oral Hypoglycaemic Agents</b>	<b>You</b>	<b>National (per GP)</b>
Metformin hydrochloride		89
Gliclazide		28
Glipizide		15
Pioglitazone		3
Glibenclamide		2

<b>Insulin</b>	<b>You</b>	<b>National (per GP)</b>
Insulin isophane		15
Insulin isophane with insulin neutral		12
Insulin aspart		8
Insulin glargine		5
Insulin lispro		4
Insulin neutral		2
Insulin lispro with insulin lispro protamine		2

<b>Glucose/Blood Testing</b>	<b>You</b>	<b>National (per GP)</b>
Blood glucose diagnostic test strip		69
Blood glucose diagnostic test meter		1

<b>Antibacterials</b>	<b>You</b>	<b>National (per GP)</b>
Amoxicillin		205
Amoxicillin clavulanate		154
Flucloxacillin sodium		94
Doxycycline hydrochloride		55
Erythromycin ethyl succinate		50
Roxithromycin		43
Cefaclor monohydrate		36
Co-trimoxazole		35
Phenoxymethylpenicillin (Penicillin V)		25
Ciprofloxacin		16
Azithromycin		8
Minocycline hydrochloride		3
Erythromycin stearate		1
Clindamycin		1
Clarithromycin		0

<b>Urinary Tract Infections</b>	<b>You</b>	<b>National (per GP)</b>
Norfloxacin		30
Trimethoprim		29
Nitrofurantoin		11

<b>Vitamins</b>	<b>You</b>	<b>National (per GP)</b>
Cholecalciferol		87
Vitamins		42
Hydroxocobalamin		20
Calcitriol		5
Thiamine hydrochloride		5
Vitamin B complex		4
Pyridoxine hydrochloride		4
Ascorbic acid		3
Vitamin A with vitamins D and C		1
Alfacalcidol		0
Alpha tocopheryl acetate		0



**SAMPLE DATA**

<b>Antifungals</b>	<b>You</b>	<b>National (per GP)</b>
Terbinafine		7
Itraconazole		2
Fluconazole		2
Nystatin		1

<b>SSRIs</b>	<b>You</b>	<b>National (per GP)</b>
Citalopram hydrobromide		70
Fluoxetine hydrochloride		55
Paroxetine hydrochloride		34
Venlafaxine		16

<b>Other Antidepressants</b>	<b>You</b>	<b>National (per GP)</b>
Amitriptyline		51
Nortriptyline hydrochloride		22
Dothiepin hydrochloride		9
Doxepin hydrochloride		8
Imipramine hydrochloride		2
Moclobemide		2
Clomipramine hydrochloride		2
Trimipramine maleate		1

<b>Sedatives and Hypnotics</b>	<b>You</b>	<b>National (per GP)</b>
Zopiclone		118
Triazolam		26
Temazepam		22
Midazolam		4
Nitrazepam		3
Lormetazepam		0

<b>Atypical Antipsychotics</b>	<b>You</b>	<b>National (per GP)</b>
Quetiapine		19
Risperidone		14
Olanzapine		6



<b>Other Antipsychotics</b>	<b>You</b>	<b>National (per GP)</b>
Lithium carbonate		5
Haloperidol		5
Methotrimeprazine		2
Chlorpromazine hydrochloride		2
Trifluoperazine hydrochloride		1

<b>Non-Opiate</b>	<b>You</b>	<b>National (per GP)</b>
Paracetamol		411
Paracetamol with codeine		63
Aspirin		15
Nefopam hydrochloride		1

<b>Opiate</b>	<b>You</b>	<b>National (per GP)</b>
Codeine phosphate		54
Dextropropoxyphene with paracetamol		32
Morphine sulphate		25
Oxycodone hydrochloride		24
Methadone hydrochloride		12
Dihydrocodeine tartrate		10
Morphine hydrochloride		5
Pethidine hydrochloride		2
Fentanyl		1
Morphine tartrate		0

<b>Antiepilepsy Drugs</b>	<b>You</b>	<b>National (per GP)</b>
Sodium valproate		21
Clonazepam		19
Carbamazepine		14
Phenytoin sodium		8
Gabapentin		7
Lamotrigine		5
Topiramate		2
Gabapentin (Neurontin)		2
Clobazam		1
Diazepam		1
Phenobarbitone		1
Primidone		1

**SAMPLE DATA**

Antimigraine Preparations	You	National (per GP)
Sumatriptan		12
Rizatriptan benzoate		6
Metoclopramide hydrochloride with paracetamol		5
Clonidine hydrochloride		3
Pizotifen		2
Ergotamine tartrate with caffeine		2

Anti-inflammatory Non Steroidal Drugs (NSAIDs)	You	National (per GP)
Diclofenac sodium		120
Ibuprofen		97
Naproxen sodium		22
Naproxen		17
Tenoxicam		7
Indomethacin		3
Piroxicam		2
Mefenamic acid		2
Ketoprofen		1
Tiaprofenic acid		0

Corticosteroids and Related Agents for Systemic Use	You	National (per GP)
Prednisone		106
Prednisolone sodium phosphate		22
Triamcinolone acetonide		3
Hydrocortisone		3
Fludrocortisone acetate		2
Dexamethasone		2
Dexamethasone sodium phosphate		0
Methylprednisolone acetate		0
Methylprednisolone		0

Antiandrogen Oral Contraceptives	You	National (per GP)
Cyproterone acetate with ethinyloestradiol		14

Contraceptives - Hormonal	You	National (per GP)
Ethinyloestradiol with levonorgestrel		55
Norethisterone		14
Ethinyloestradiol with norethisterone		12
Medroxyprogesterone acetate		8
Levonorgestrel		5
Ethinyloestradiol with desogestrel		3
Ethinyloestradiol with gestodene		1

<b>Contraceptives - Non-hormonal</b>	<b>You</b>	<b>National (per GP)</b>
Condoms		20
Intra-uterine device		0

<b>Hormone Replacement Therapy - Systemic</b>	<b>You</b>	<b>National (per GP)</b>
Oestradiol		6
Oestradiol with norethisterone		5
Oestrogens		5
Medroxyprogesterone acetate		4
Oestradiol valerate		2
Oestrogens with medroxyprogesterone		1

<b>Thyroid and Antithyroid Agents</b>	<b>You</b>	<b>National (per GP)</b>
Levothyroxine		89
Carbimazole		3





## Your testing

This section looks at your use of laboratory tests on the "laboratory schedule". All tests associated with your NZMC number and performed in a community laboratory are recorded here.

<b>Renal Function</b>	<b>You</b>	<b>National (per GP)</b>
Sodium & Potassium, serum		314
Creatinine, serum		375
Urea, serum		62
Urate or uric acid, serum		84
Calcium, serum		43
Phosphate, serum		35
Magnesium, serum		6
Chloride, serum		1
Potassium, serum		6
Sodium, serum		4
Creatinine, 24 hr urine		2
Proteins, 24 hr. urine		2

<b>Liver Function</b>	<b>You</b>	<b>National (per GP)</b>
Liver function group		280
Albumin, serum		19
Alanine transaminase - ALT		13
Alkaline phosphatase, serum		6
Asparate amino transferase, serum - AST		6
Bilirubin total, conjugated & unconjugated serum		0
Bilirubin total, serum		2
Gamma glutamyl transferase, serum (GGT)		8
Proteins total, serum		10
Amylase		14

<b>Diabetes</b>	<b>You</b>	<b>National (per GP)</b>
Serum glucose		268
Glycosylated haemoglobin		126
Glucose Tolerance Test standard		14
Glucose Tolerance Test post-polydose		1
Microalbumin, early morning urine		61

<b>Anaemia</b>	<b>You</b>	<b>National (per GP)</b>
Iron, serum		90
Ferritin, serum		189
Iron binding capacity, serum		65
Transferrin, serum		26
Folate plus Vitamin B12, serum		103
Folate, red cell		1

<b>Lipids</b>	<b>You</b>	<b>National (per GP)</b>
Fasting lipid group test		285
Cholesterol total, serum		1
Lipoproteins, electrophoresis, serum		1

<b>Cardiac Markers</b>	<b>You</b>	<b>National (per GP)</b>
Creatine kinase, serum (CK)		21
Troponin T & Troponin I		14

<b>Proteins</b>	<b>You</b>	<b>National (per GP)</b>
Protein electrophoretic pattern, serum		10
Immunoglobulins (IgA, IgE, IgG, or IgM)		25
Paraprotein Identification		1
Electrophoresis concentrated urine		1

<b>Cancer</b>	<b>You</b>	<b>National (per GP)</b>
Prostate Specific Antigen		79
Faecal occult blood, human haemoglobin specific		25
Cytological examination of cervical smears		29
Cytological examination of fine needle aspiration		2
Cytological examination of smears from other sites		4
Histology		27

<b>Reproductive Health</b>	<b>You</b>	<b>National (per GP)</b>
Luteinising hormone (LH)		14
Follicle stimulating hormone (FSH)		17
Prolactin, serum		7
Progesterone, serum		7
Oestradiol, serum		9
Chorionic Gonadotrophin qualitative plus quantitative (HCG)		17
Serum Testosterone		6
Seminal fluid - fertility		1
Seminal fluid - post vasectomy		2

<b>Therapeutic Drug Monitoring</b>	<b>You</b>	<b>National (per GP)</b>
Digoxin		4
Lithium		2
Antiepileptics		6

<b>Thyroid</b>	<b>You</b>	<b>National (per GP)</b>
Thyroid stimulating hormone, serum (TSH)		217
Free thyroxine index or free T4		66
Serum free T3		23

<b>Antenatal</b>	<b>You</b>	<b>National (per GP)</b>
First antenatal group		10
Antenatal subsequent groups		1
HIV antenatal screening		4

**SAMPLE DATA**

Hepatitis	You	National (per GP)
Hepatitis A IgG antibody		7
Hepatitis A IgM antibody		6
Hepatitis B (anti HBc) antibody		7
Hepatitis B - (Anti HBs) antibody		19
Hepatitis B (HBe) e antigen		2
Hepatitis B - (HBsAg) surface antigen		20
Hepatitis C antibody		11

Auto-immune	You	National (per GP)
Auto-immune disease, anti-nuclear antibody		12
Auto-immune disease, anti-nuclear antibody titre		3
Auto-immune disease, thyroid		9
Autoantibodies, other		37
Rheumatoid factor - Rose Waaler test		13

Acute Phase Response	You	National (per GP)
C-reactive protein test		159
Erythrocyte sedimentation rate (ESR)		46

Other Immunology / Serology	You	National (per GP)
Antistreptococcal antibodies		2
Brucella antibodies		0
CM virus, specific antibody titre		6
Epstein-Barr virus IgG antibody		7
Epstein-Barr virus IgM antibody		8
Herpes virus direct antigen test		1
HIV Screen test		17
Leptospira agglutination screen test		0
Paul-Bunnell (or equivalent)		4
Rubella antibodies - IgG		3
Skin tests, immediate hypersensitivity		38
Syphilis - specific antibody test		10
Syphilis - VDRL or other reagin test		4
Toxoplasma antibodies IgG		1
Toxoplasma antibodies IgM		1
Tuberculin skin test		1
Blood Grouping - ABO/ Rhesus group		2



<b>Cultures</b>	<b>You</b>	<b>National (per GP)</b>
Swab, cervical		19
Swab, ear		4
Swab, eye		4
Swab, nasal		2
Swab, skin/wound/pus		40
Swab, throat		24
Swab, urethral		4
Swab, vaginal		40
Urine culture		150
Enteric pathogens (faeces or rectal swab)		25
Aspirates, culture and sensitivities		1
Blood culture		1
Other, culture, sensitivities and identification		14
Sputum (excluding tuberculosis)		4

<b>Haematology</b>	<b>You</b>	<b>National (per GP)</b>
Complete blood count (CBC)		421
Plasma prothrombin ratio (INR)		207
Coagulation profile		3
Fibrinogen (quantitative)		1
Partial thromboplastin clotting time		1
Thrombin time		1
Haemoglobin pigments - qualitative		1
Haemoglobin pigments - quantitative		1
Bone marrow aspirate - (per site, not per slide)		0
Coagulation factors individual assays		4
Film (concentrated) examination for filaria		0
Red blood cell inclusion bodies		2

<b>Other Microbiology Tests</b>	<b>You</b>	<b>National (per GP)</b>
Ova and cysts		9
Film - examination for malaria, filaria, &/or gonococci		4
Mycology - skin		12
Tuberculosis - sputum		1
Chlamydia direct antigen test		50
Giardia / cryptosporidium		16
Rotavirus direct antigen test		6

# Notes

Report period is from 1 April 2009 to 31 March 2010.

Data has been excluded where the NZMC number was not recorded or the data was incomplete.

Some discrepancies may occur due to rounding.

## Pharmaceutical Notes

- ❖ National (per GP) 1 April 2009 to 31 March 2010 is based on 3971 GPs.  
National (per GP) 1 April 2008 to 31 March 2009 is based on 3946 GPs.
- ❖ Data are collected from prescriptions submitted by pharmacies to HealthPAC for reimbursement. NZHIS downloads the HealthPAC data into the PharmHouse database. This report is generated using data in the PharmHouse database.
- ❖ There is a potential for data entry errors at the pharmacy, HealthPAC and at NZHIS. These errors may include the incorrect NZMC number or dose and frequency information being entered in the wrong fields.
- ❖ A prescription item is defined as the first or stat dispensing of a medication i.e. a medication will be counted as one prescription irrespective of the number of repeats.
- ❖ Cost represents the standard price at which a pharmaceutical is supplied to the wholesalers. This excludes dispensing fees, mark-up, GST and rebates.
- ❖ If an item appears on your report that you did not prescribe please consider that there are a number of potential opportunities for error. On occasion a locum or hospital doctor may have prescribed items for your patient that subsequently were assigned to your NZMC number at the pharmacy. You may have written prescriptions for patients you do not regularly see, such as casual patients, patients seen at an after hours clinic, or provided repeat prescriptions to patients who usually see another GP. Most often items included in your report that are not familiar to you can be explained by one-off or unusual circumstances that do not immediately come to mind.
- ❖ Patients were assigned to you if you prescribed diabetic testing strips between 1 April 2009 – 31 March 2010. Patients that had testing strips dispensed and Metformin prescribed (by any doctor) or no diabetic medication have been displayed in this report.
- ❖ Patients were assigned to you if you prescribed a LABA between 1 April 2009 – 31 March 2010. Patients were then classified as to whether or not an ICS was prescribed (by any doctor), those patients that were not dispensed an ICS have been displayed in this report.
- ❖ Clozapine and Methadone hydrochloride have been excluded from this report.

## Laboratory Notes

- ❖ National (per GP) 1 April 2009 to 31 March 2010 is based on 3560 GPs.  
National (per GP) 1 April 2008 to 31 March 2009 is based on 3504 GPs.
- ❖ Every effort has been made to ensure the figures presented here are correct, however we cannot guarantee complete accuracy. Laboratory data is recorded by HealthPAC and then downloaded by NZHIS into the Lab data warehouse.
- ❖ Tests performed in hospitals will not appear in this report as we do not have access to this data set.





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