

2016

**WORKFORCE
DEMOGRAPHIC**



Table of contents

Introduction	3
1. Pharmacist registrations nationally	4
2. Pharmacist regional statistics	8
3. Pharmacists workforce demographics	11
4. Pharmacist type of work	14
Appendix 1: Registration data.....	15
Appendix 2: Regional statistics.....	22
Appendix 3: Gender, age and ethnicity.....	23
Appendix 4: Type of work.....	25

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Introduction

This is the Workforce Demographic Report as at 30 June 2016.

Under the Health Practitioners Competence Assurance Act 2003 (HPCAA):

- all practising pharmacists are required to hold an annual practising certificate (APC) regardless of the number of hours they practise each year, and
- the Pharmacy Council is required to maintain a register of pharmacists.

The data collected as part of our obligations under the HPCAA is also used to monitor and report on the demographic and geographic spread of pharmacists across New Zealand. It enables us to make annual comparisons and monitor workforce trends.

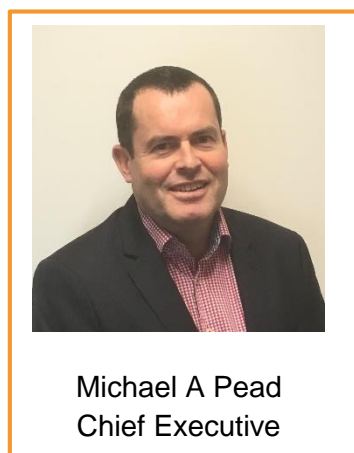
To help in developing the sector each year, the collected data is made available in an annual report – referred to as the *Workforce Demographic Report*.

This report is prepared for the year ending 30 June 2016. However, the [public register](#), available through our website, changes as new data comes to hand and is updated each evening.

The key findings from the collected data is structured under four key themes:

1. Pharmacist registration nationally
2. Pharmacist workforce by region
3. Pharmacist workforce demographics
4. Pharmacists work type

The supporting data for all the findings is detailed in the attached appendices.



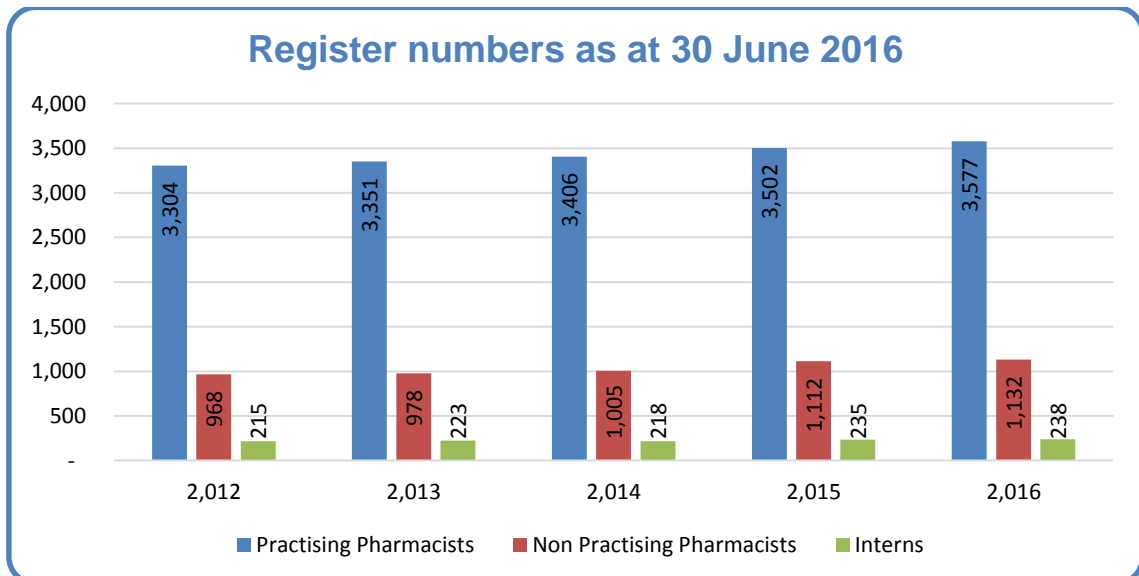
1. Pharmacist registrations nationally

As at 30 June 2016, across New Zealand, the key highlights in terms of registration were:

- 3,577** practising pharmacists
- 1,132** non-practising pharmacists
- 16** pharmacists also registered as prescribers
- 230** new pharmacists registered over the last year
- 238** intern pharmacists registered over the last year
- 7.46** practising pharmacists per 10,000 population

3,577 practising pharmacists

The number of practising pharmacists (3,577) is 2.1 percent (75) higher than 2015. This increase is slightly higher than the annual average increase of 2.0 percent since 2012 (range 1.4-2.8 percent). The trend in registrations is shown in the graph below:



The specific types of registrations as at 30 June 2016 are as follows:

Register numbers as at 30 June	2016
Practising (includes 15 pharmacist prescribers)	3,577
Non practising ¹ (includes 1 pharmacist prescriber)	1,132
Intern practising	238
SUB TOTAL	4,947
Suspended ²	4
TOTAL	4,951

1,132 non-practising pharmacists

The number of non-practising pharmacists has grown from 968 in 2012 to 1,132 in 2016. The increase from 2015, of 1,112 to 1,132 in 2016, is explained by the revised definition, i.e. including pharmacists who have not renewed their status by 30 June 2016. The reasons identified for non-practising at 30 June 2016 are:

- 32.4 percent are practising overseas
- 16.8 percent are overseas, but not practising
- 12.7 percent are working but do not need a practising certificate
- 8.7 percent are on parenting or maternity leave
- 7.4 percent have retired
- 8.3 percent have not defined why they are not practising
- 11.5 percent failed to renew their registration status before 30 June 2016.

230 new pharmacists

Council processed 230 new registrations in the year ending 30 June 2016, up 18 from 2015. Of these new registrations:

- 18 pharmacists were from countries regarded as having similar pharmacy practice standards as New Zealand, whether this was by registration, by a legislative arrangement (TTMRA³ for Australia) or because they held recognised equivalent qualifications (Canada, Ireland, United Kingdom and United States)

¹ who are registered but do not hold an APC

² who have been suspended because of competence, health or conduct concerns

³ Trans-Tasman Mutual Agreement Act (1997)

- 212 were transfers from the intern pharmacist scope of practice; New Zealand and Australian graduates and overseas pharmacists, (Non REQR⁴ route: six new pharmacists, about half the numbers for 2012 and 2013).

238 intern pharmacists

Intern numbers remain similar to last year but the difference in student numbers between the two universities (Auckland and Otago) increased significantly. Overseas pharmacists registering in the intern scope is at its lowest level for the last five years.

7.46 practising pharmacists per 10,000 population

Based on the number of practising pharmacists (3,577) and the Statistics NZ population estimation, the ratio of practising pharmacists per 10,000 (as at 30 June 2016) is 7.46.

Most countries with similar jurisdictions have higher workforce densities (source: 2015 Global Pharmacy Workforce Intelligence: Trends Report)⁵:

- Australia (11.64)
- Ireland (10.46)
- Canada (10.17)
- UK (8.08)

For the 2013 population census figures and practising pharmacists figures as of 30 June 2013, the average number of registered pharmacists per 10,000 people (7.9) compares at the lower end of international benchmarks. This suggests that New Zealand has an opportunity to expand workforce capacity so it can continue to ensure public safety.

⁴ Non REQR- Non-'Recognised Equivalent Qualification' Route

⁵ Available on https://www.fip.org/files/FIPEd_Trends_report_2015_web.pdf (Accessed 2/11/2016)

Appendix 1 – data tables relating to pharmacist registrations nationally

More specific detail supporting the above findings, and additional data, is outlined in the tables shown in Appendix 1.

- 1.1 Pharmacy register movements: 2012-2016
- 1.2 Practising pharmacists by country of first registration
- 1.3 Transfers from the intern pharmacist scope of practice
- 1.4 Total additions to the register by registrations route
- 1.5 Additions to the register for overseas pharmacists with recognised qualifications
- 1.6 Additions to the pharmacist register (historic data)
- 1.7 Returns to practice
- 1.8 Practising pharmacists' accreditations
- 1.9 Reason for not practising: 2015-2016
- 1.10 Removals from the register
- 1.11 Pharmacist removals from the register: 2012-2016
- 1.12 Requests for certificates of identity
- 1.13 Intern register
- 1.14 Intern registration: 2012-2016

2. Pharmacist regional statistics

As at 30 June 2016, across New Zealand, the key highlights in terms of regional statistics for practising pharmacists were:

75 percent of pharmacists work in five regions

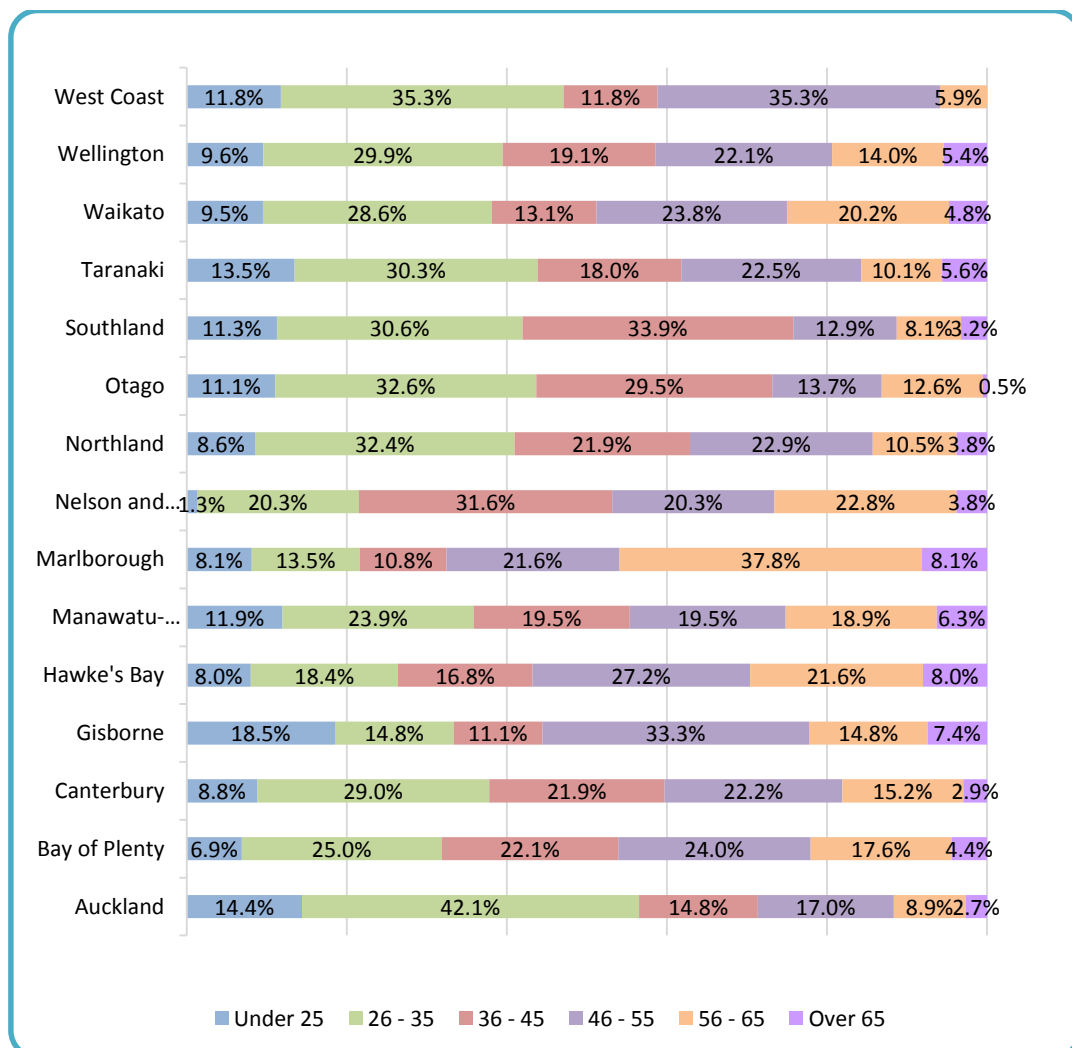
56.5 percent of Auckland pharmacists are 35 years' old or below

67.5 percent of Marlborough pharmacists are 46 years' old or above

4.71 fewer pharmacists per 10,000 population in the West Coast (least dense) than Auckland (densest)

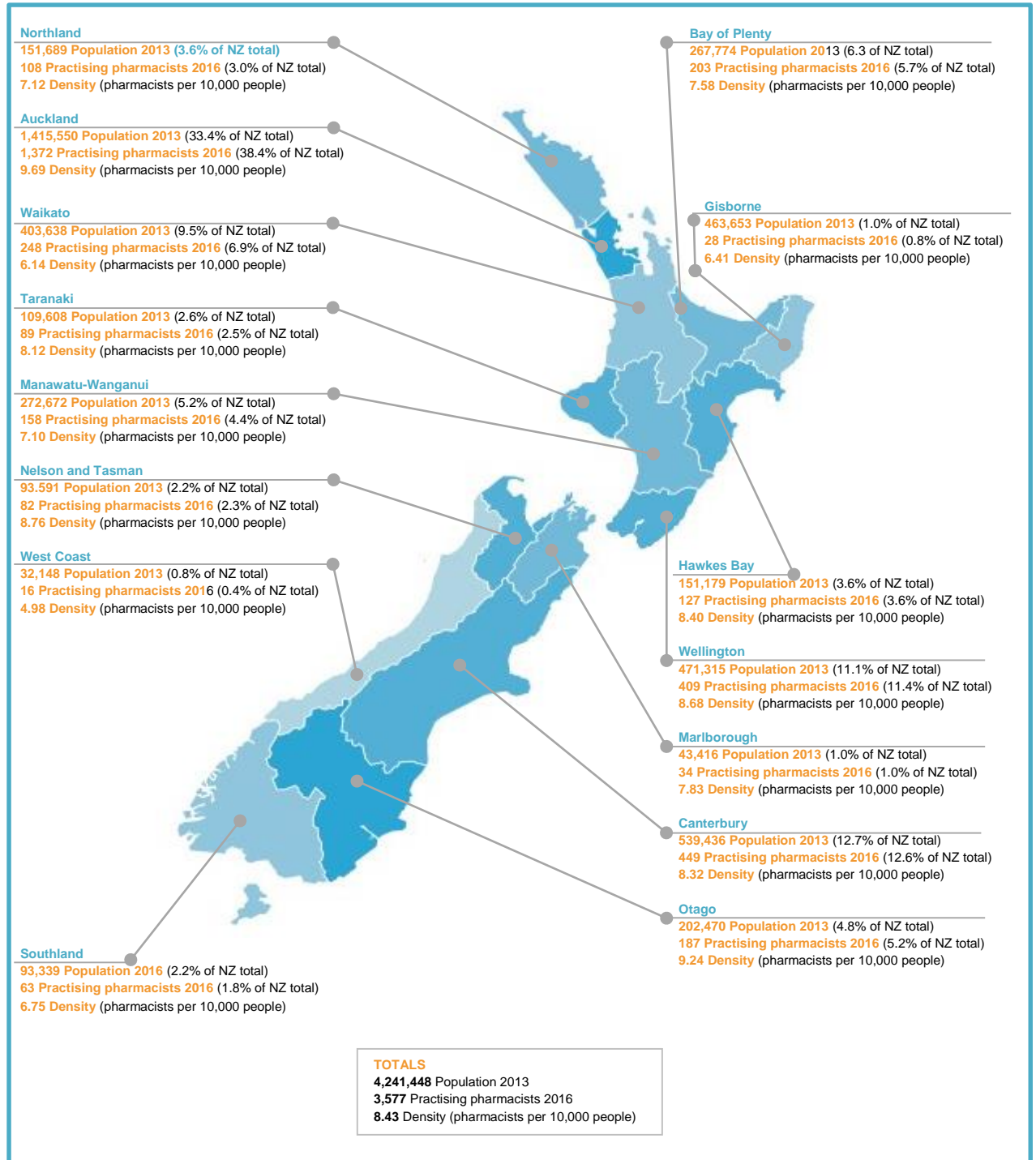
Age distribution by region

The following graph shows the Age distribution for pharmacists within each region.



Demographic profile of the pharmacy workforce

As demonstrated on the following heat map of New Zealand, throughout the regions⁶, there is considerable variation in the indicative workforce density. This could be further exacerbated given lower population density in the more rural regions.



⁶ Ratio of pharmacists per 10,000 population based on postal addresses of pharmacists (by region) and 2013 census population data by region. The national figure (8.43) is higher than that indicated in section 1. The census data at 2013 is used rather than the population estimation at 2016. The Pharmacy Council plans to use work address information combined with projected or actual population data in the future.

Appendix 2 – data tables relating to pharmacist regional statistics

More specific detail supporting the above findings, and additional data, is outlined in the tables shown in Appendix 2.

2.1 Practising pharmacists by Regional Council

3. Pharmacists workforce demographics

As at 30 June 2016:

45 percent of practising pharmacists are under the age of 36

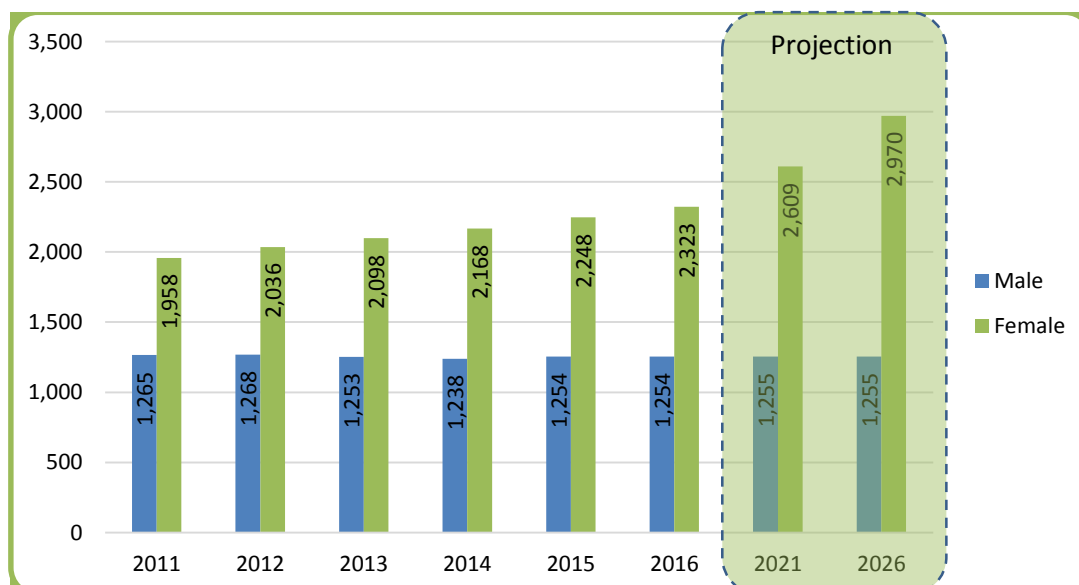
65 percent of practising pharmacists are female

Age and gender of practising pharmacists

There is an increasing trend towards a female bias in pharmacy, particularly in the younger age brackets where 68.4 percent of registered pharmacists aged under 36 are female.

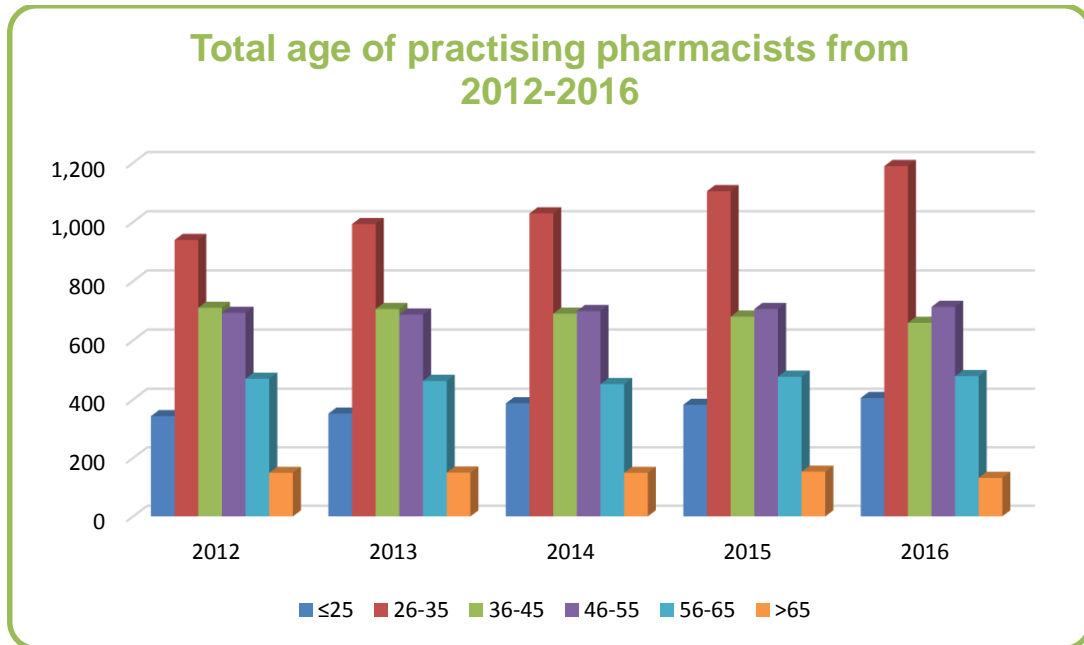
Age	Male	Female	Total
<25	118	287	405
26-35	385	804	1,189
36-45	201	458	659
46-55	226	487	713
56-65	226	252	479
65>	97	35	132
TOTAL	1,253	2,323	3,577

Continuing the trend in terms of gender five and ten years from now it is possible to predict practising pharmacists will be made up of 2,609 females (67.5 percent) in 2021 and 2,970 females (70.3 percent) in 2026 respectively, as shown in the graph below:



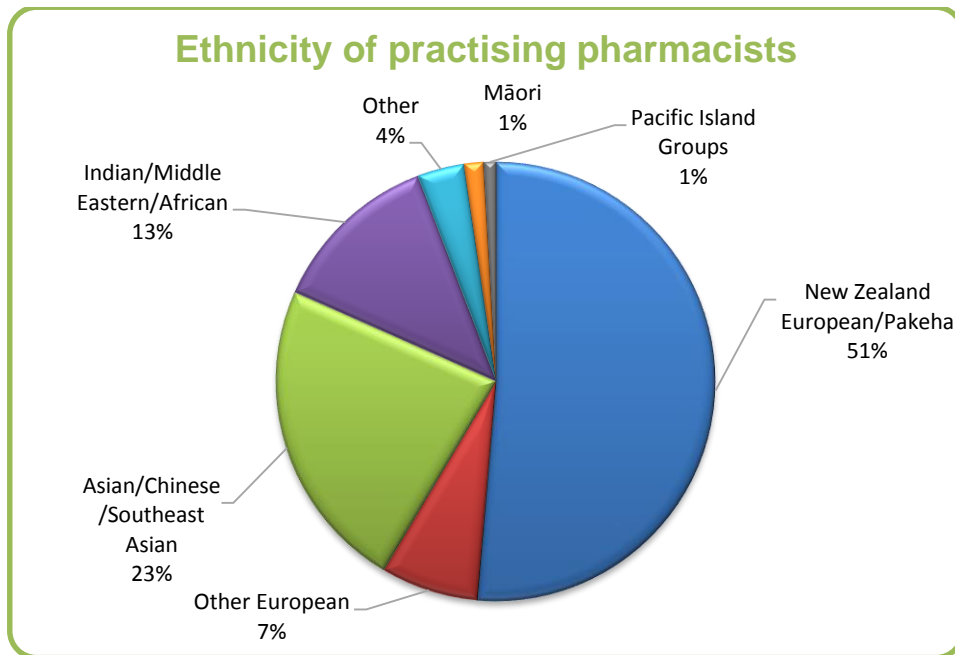
Age of practising pharmacists

The growth in the pharmacist population is more evident within age bands, 26-35 years old, as shown below:



Ethnicity of practising pharmacists

While NZ European/Pakeha remain the dominant ethnic group (51 percent) amongst registered pharmacists, Asians represent the fastest growing ethnic group (23 percent) on the register. It is of concern given the relatively poorer health outcomes for Māori and Pacific Islanders, that these groups are not well represented. A further 48 pharmacists identify their secondary ethnicity as Māori or a Pacific Island Group. Therefore, 3.7 percent of pharmacists identified with Māori or at least one Pacific ethnicity; yet 22 percent of total New Zealand population identified as Māori or Pacific Island ethnicity (2013 census).



Appendix 3 – data tables relating to pharmacists’ workforce demographics

More specific detail, supporting the above findings, and additional data, is outlined in the tables shown in Appendix 3.

- 3.1 Gender Distribution of Practising Pharmacists: 2011-2016
- 3.2 Ethnicity
- 3.3 Age and Ethnicity

4. Pharmacist type of work

Community-based pharmacy continues to be the largest field of employment (74.8 percent) for the industry, meaning it is likely to remain a key part of future pharmacy planning, particularly as the industry transitions towards a greater patient care model:

Type of work	Number of pharmacists	Percent
Community	2,774	74.8
Hospital	491	13.2
Pharmacy related	110	3.0
Other	114	3.1
Teaching/research	91	2.3
Independent Pharmacists Association, Primary Health Organisation, District Health Board	91	2.3
Pharmaceutical industry	40	1.1
	3,711	100
<i>Number worked in two or more areas of pharmacy</i>	-303	
TOTAL RESPONSES	3,360	

Appendix 4 – tables relating to pharmacist type of work

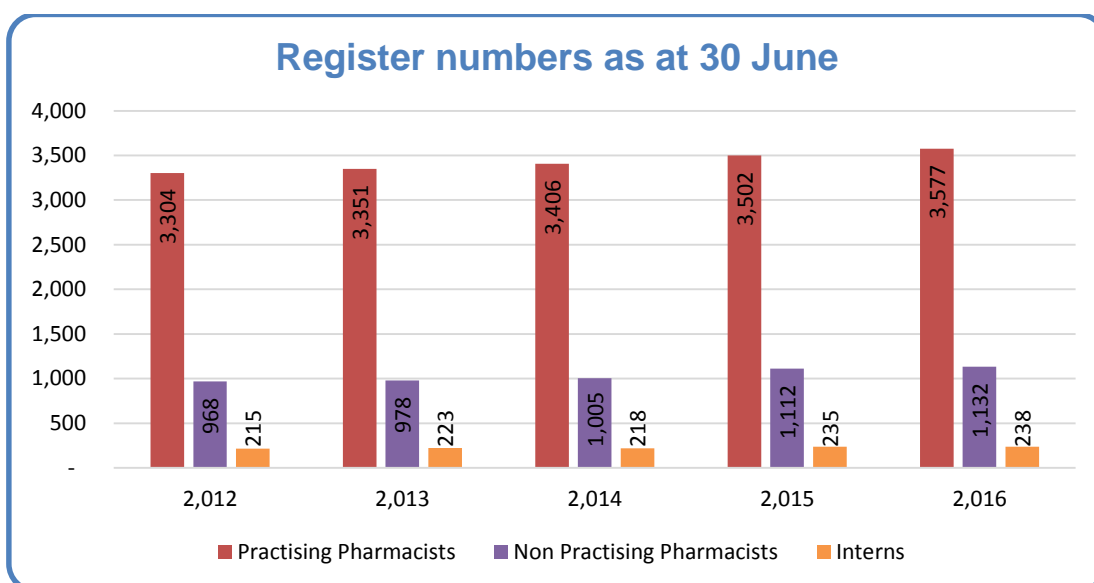
More specific detail, supporting the above findings, and additional data, is outlined in the tables shown in Appendix 4.

4.1 Hours/Weeks Worked

Appendix 1: Registration data

1.1 Pharmacy register movements: 2012-2016

Register numbers as at 30 June	2012	2013	2014	2015	2016
Pharmacists- practising	3,304	3,351	3,406	3,502	3,577
Pharmacists- non practising status	968	978	1,005	1,112	1,132
Intern Pharmacists	215	223	218	235	238
TOTAL	4,487	4,552	4,629	4,849	4,947



1.2 Practising pharmacists by country of first registration

Country first registered	Number	%
New Zealand	3,143	(87.9)
Non-REQR Countries		
• South Africa	81	(2.3)
• Other	126	(3.5)
REQR Countries		
• United Kingdom	155	(4.3)
• Other	21	(0.6)
Australia	51	(1.4)
TOTAL	3,577	100%

1.3 Transfers from the intern pharmacist scope of practice

206 intern pharmacists (including 205 New Zealand University graduates and one Australian graduate) transferred from the intern pharmacist scope of practice in the year ended 30 June 2016.

Country of Qualification	Number of pharmacists
New Zealand	
• Auckland	95
• Otago	110
South Africa	2
Australia	1
Egypt	1
Fiji	1
Malta	1
Germany	1
TOTAL	212

1.4 Total additions to the register by registrations route

The following table shows the change in the numbers registered according to registration route from 2012 -2016:

Registrations route	2012	2013	2014	2015	2016
Graduates (New Zealand and Australia)	197	186	200	194	206
TTMRA	4	10	8	4	9
REQR	11	8	11	12	9
Non REQR	12	11	6	7	6
TOTAL	224	215	225	217	230

1.5 Additions to the register for overseas pharmacists with recognised qualifications

Country of first registration	2012	2013	2014	2015	2016
Australia	4	10	8	4	9
Ireland and the United Kingdom	8	5	9	11	7
Canada and the United States of America	3	3	2	1	2
TOTAL	15	18	19	16	18

1.6 Additions to the pharmacist register (historic data)

From the data for registration via all routes below 5 years and 10 years ago, it is noticeable that with the introduction of a registration exam in 2007 for the REQR process, the numbers registering from Ireland and the United Kingdom have dropped significantly. Pharmacists registered in the United States and Canada are eligible to register under this route, but the numbers registering each year are low.

	2006	2011
NZ and Australian Graduates	156	170
Overseas		
• Australia - TTMR	13	4
• Ireland and UK ⁷	53	12
• Canada and USA ⁸	0	2
• Other	11	10
TOTAL	233	198

1.7 Returns to practice

The length of time pharmacists are away from pharmacy practice in New Zealand is as follows:

Number of years out of practice	2012	2013	2014	2015	2016
Less than 3 years	81	90	85	95	68
3 - 8 years	24	24	17	16	24
More than 8 years	1	0	1	2	0
TOTAL	106	114	103	113	92

⁷ In 2006, pharmacists from the United Kingdom and Ireland could register in New Zealand under a reciprocal arrangement. By 2011, pharmacists from these countries registered under the REQR process.

⁸ In 2006, pharmacists from the United States and Canada followed a process common to pharmacists from all overseas countries except for Australia, United Kingdom and Ireland. Since 2007, US and Canadian pharmacists are eligible to apply for registration under the REQR process.

1.8 Practising pharmacists' accreditations

The following table shows the number of pharmacists accredited to dispense the Emergency Contraceptive Pill (ECP) and/or conduct Medicines Use Review (MUR) since 2012:

Accreditation	2012	2013	2014	2015	2016*
Emergency Contraceptive Pill	146	231	195	214	78
Medicines Use Review	79	61	21	27	15
TOTAL	225	292	216	241	93

* This data is collated annually over a calendar year and therefore the information at 30 June 2016 is for the first six months.

1.9 Reason for not practising: 2015-2016

Pharmacists on the non-practising register as at 30 June 2016 gave the following reasons for not practising:

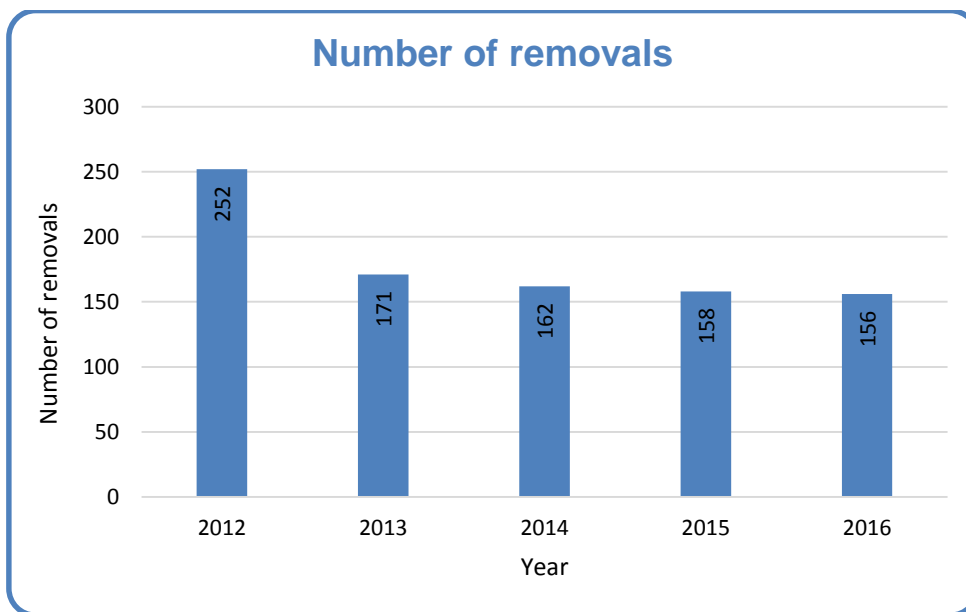
Reason for not practising	2015	2016
Overseas - practising	398	369
Overseas - not practising	160	191
Parenting/maternity leave	98	99
Working in a non-health role	88	86
Retired	72	84
Working in another health profession	45	59
Full-time study	24	13
Seeking employment in a non-pharmacy profession	9	7
Seeking employment as a pharmacist	5	5
Other – reason not specified <i>(Pharmacists who have not renewed their registration status are also included)</i>	213	225
TOTAL	1,112	1,138

1.10 Removals from the register

The following reasons for removal from the register are identified:

Removals	Number	Total
Practising status prior to removal:		
• Removed at own request	44	46
• Deceased	2	
Non practising status prior to removal:		
• Revision of Register	82	110
• Removed at own request	22	
• Deceased	5	
• Removed – HPDT	1	
TOTAL		156

1.11 Pharmacist removals from the register: 2012-2016



1.12 Requests for certificates of identity

The table below outlines the number of certificates of identity, (also called certificates of current professional status, statements of good standing and verification requests) processed by Council staff. In most situations pharmacists wishing to obtain registration in overseas jurisdictions or seeking formal information for other professional organisations make these requests. Australia continues to be the main destination for New Zealand pharmacists, accounting for a majority of the statements issued in the 12 months to 30 June 2016.

Country	Number
Australia	39
Canada	8
Fiji	1
Hong Kong	2
Malaysia	2
Netherlands	1
Other	2
Tonga	1
United Arab Emirates	1
United Kingdom	3
TOTAL	60

1.13 Intern register

The table below shows the number of graduates from each university in New Zealand or country of graduation registered:

Number of interns by university or country of university		
New Zealand and Australian Graduates	University:	
	• Auckland	88
	• Otago	145
	• Queensland	1
	• Western Australia	1
Overseas (Non-REQR) Graduates	Country:	
	• Malaysia	1
	• South Africa	1
	• Fiji	1
TOTAL		238

1.14 Intern registration: 2012-2016

Number of interns by graduating university					
University	2012	2013	2014	2015	2016
• Auckland	86	94	85	104	88
• Otago	121	121	122	124	145
• Overseas	11	8	11	7	5
TOTAL	218	223	218	235	238

Appendix 2: Regional statistics

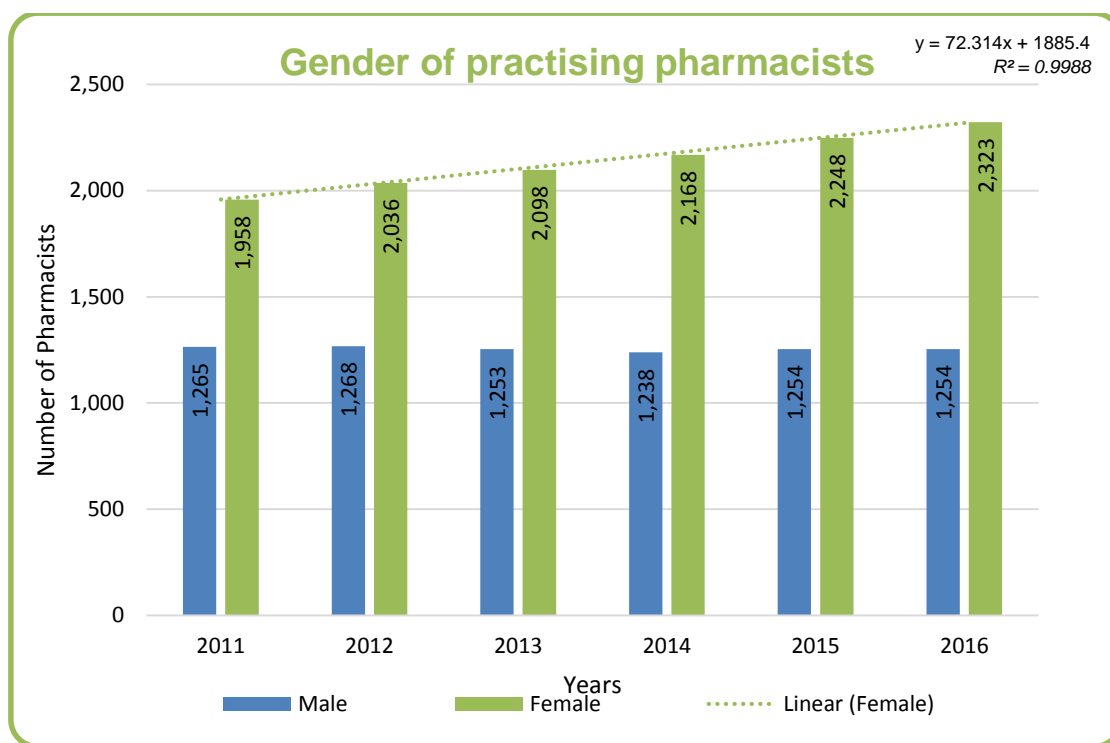
2.1 Practising pharmacists by Regional Council

The following table and graph shows the number of practising pharmacists in each Regional Council area, as defined by the registered postal address:

Regional Council	Number	Percent
Auckland	1,372	38.4
Canterbury	449	12.4
Wellington	409	11.4
Waikato	248	7.0
Bay of Plenty	203	5.7
Otago	187	5.3
Manawatu-Wanganui	158	4.4
Hawke's Bay	127	3.5
Northland	108	2.9
Taranaki	89	2.5
Nelson and Tasman	82	2.2
Southland	63	1.7
Marlborough	34	1.0
Gisborne	28	0.8
West Coast	16	0.5
Not defined	4	0.2
TOTAL	3,577	100

Appendix 3: Gender, age and ethnicity

3.1 Gender Distribution of Practising Pharmacists: 2011-2016

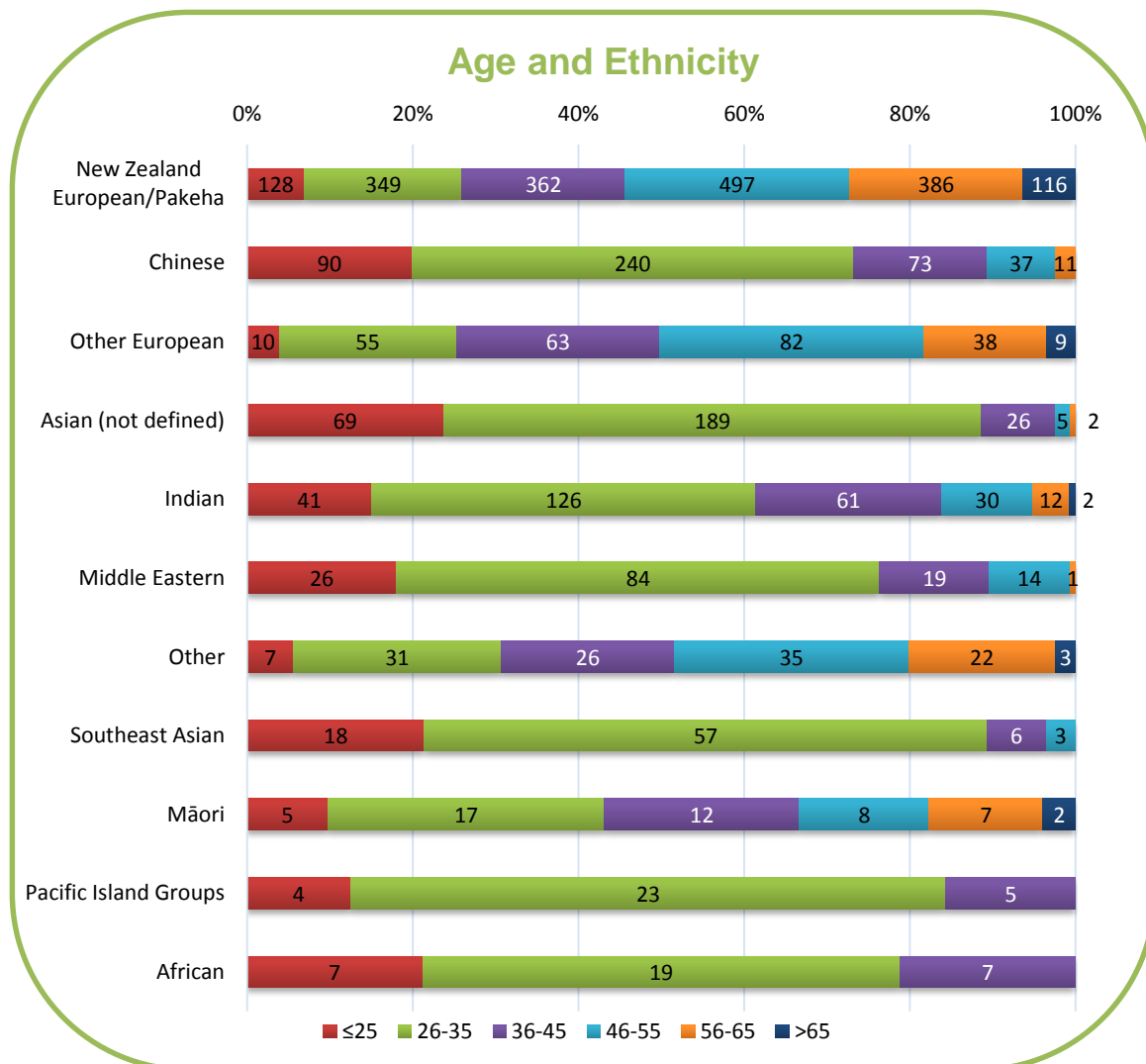


3.2 Ethnicity

Ethnicity	Number
New Zealand European/Pakeha	1,837
Chinese	451
Other European	257
Asian (not defined)	291
Indian	272
Middle Eastern	144
Other	124
Southeast Asian	84
Māori	51
Pacific Island Groups	32
African	33
TOTAL	3,577

3.3 Age and Ethnicity

Ethnicity	≤25	26-35	36-45	46-55	56-65	>65	Total
New Zealand European/ Pakeha	128	349	362	497	386	116	1837
Chinese	90	240	73	37	11	0	451
Other European	10	55	63	82	38	9	257
Asian (not defined)	69	189	26	5	2	0	291
Indian	41	126	61	30	12	2	272
Middle Eastern	26	84	19	14	1	0	144
Other	7	31	26	35	22	3	124
Southeast Asian	18	57	6	3	0	0	84
Māori	5	17	12	8	7	2	51
Pacific Island Groups	4	23	5	0	0	0	32
African	7	19	7	0	0	0	33
TOTAL	381	1106	677	708	476	154	3,577



Appendix 4: Type of work

3,360 pharmacists issued with an APC for the year 1 April 2015 to 31 March 2016 completed the 'type of work section' on their APC renewal form. This represents 90.5 percent of the pharmacists on the practising register at 30 June 2016.

The data collected relates to the previous APC year and has been used in this instance to provide an estimate of the number of pharmacists practising in the different areas of pharmacy.

303 of the pharmacists who completed this section of the APC renewal form worked in *two or more* (different) areas of pharmacy in the previous 12 months.

The following table and graph show the number of pharmacists working in the different types of pharmacy work:

4.1 Hours/weeks worked

Hours per week	Community	Hospital	Pharmacy Related	Other	Teaching/ Research	PHO/DHB	Industry	Total
50+	227	9	3	9	5	2	3	258
40-49	1,283	327	37	31	13	30	25	1,746
30-39	548	47	16	16	12	17	3	659
20-29	343	52	8	21	11	19	3	457
11-19	171	43	11	8	11	4	2	250
10 or less	202	13	35	29	39	19	4	341
TOTAL	2,774	491	110	114	91	91	40	3,711

Weeks per year	Community	Hospital	Pharmacy Related	Other	Teaching/ Research	PHO/DHB	Industry	Total
40+	2,263	382	63	66	40	67	31	2,912
30-39	135	21	4	15	5	4	0	184
20-29	123	29	9	8	14	4	2	189
11-19	121	32	6	5	4	8	4	180
10 or less	132	27	28	20	28	8	3	246
TOTAL	2,774	491	110	114	91	91	40	3,711