

WORKFORCE DEMOGRAPHIC 2021

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Introduction

Under the Health Practitioners Competence Assurance Act 2003:

- 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 Council's obligations under the Health Practitioners Competence Assurance Act is used to monitor and report on the demographic and geographic spread of pharmacists across New Zealand.

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

This report is prepared using data collected on 30 June 2021. However, the [public register](#), available through our website, changes as new data comes to hand.

The report first overviews the register in terms of practising, non-practising and intern pharmacists and then presents more detailed geographic and demographic analysis of practising pharmacists and additions to the register.

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



Michael A Pead
Chief Executive



Dr Owain George
Registrar

Overview of the Register

As at 30 June 2021, across New Zealand, the key statistical highlights are:

Total Register	5401
Practising - Pharmacists & Pharmacist Prescribers	4062
Practising - Pharmacists	4025
Practising - Pharmacist Prescribers	37
Practising - Intern Prescribers	256
Non-Practising - Pharmacists & Pharmacist Prescribers	1074
Non-Practising - Pharmacists	1071
Non-Practising - Pharmacist Prescribers	3
Suspended Pharmacists	9

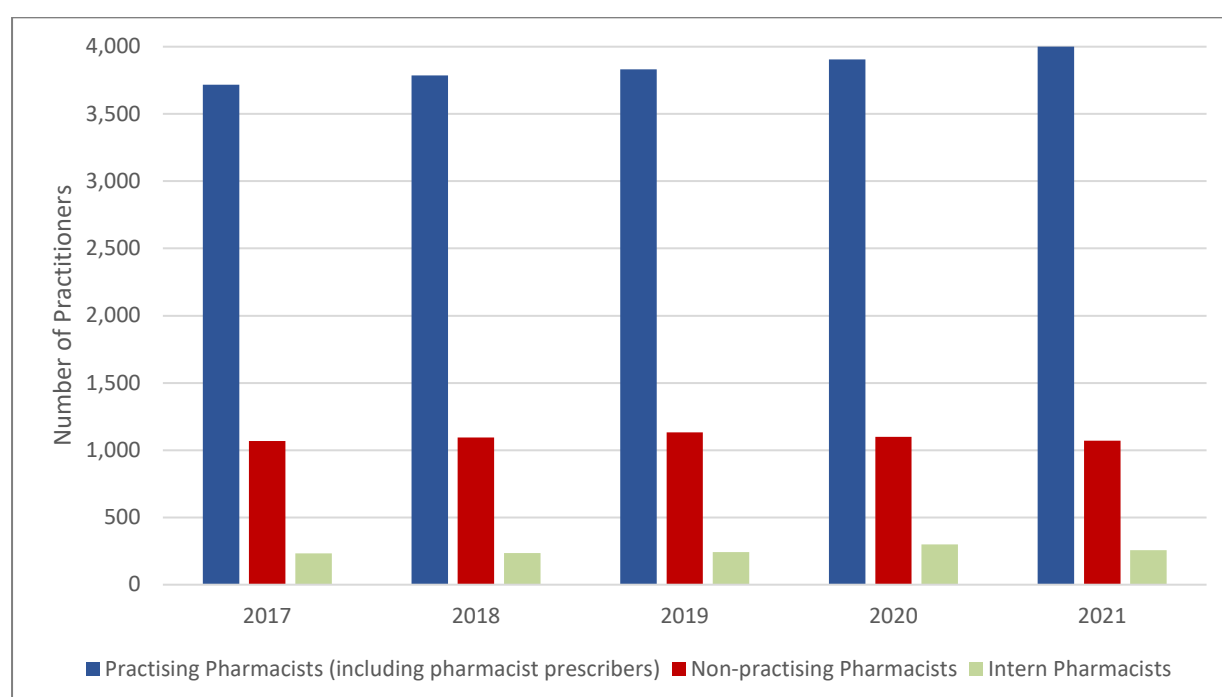
264 pharmacists registered for the first time with the Pharmacy Council in the period 1 July 2020 to 30 June 2021

There are **7.99** practising pharmacists (annual practising certificate holders) per 10,000 population

Table 1 Register Composition 2017-2021

Register numbers as at 30 June 2021	2017	2018	2019	2020	2021
Practising Pharmacist Prescribers	14	19	20	34	37
Practising Pharmacists	3,718	3,787	3,832	3,906	4,025
Non-practising Pharmacists (including Pharmacist Prescribers)	1,068	1,095	1,133	1,100	1,074
Intern Pharmacists	234	236	243	300	256
Totals	5,034	5,137	5,228	5,340	5,392

Figure 1 Register Composition 2017-2021



Practising Pharmacists

At 30 June 2021 there were 4,062 pharmacists who held a practising certificate. Of these pharmacists 37 were also registered in the Pharmacist Prescriber scope of practice.

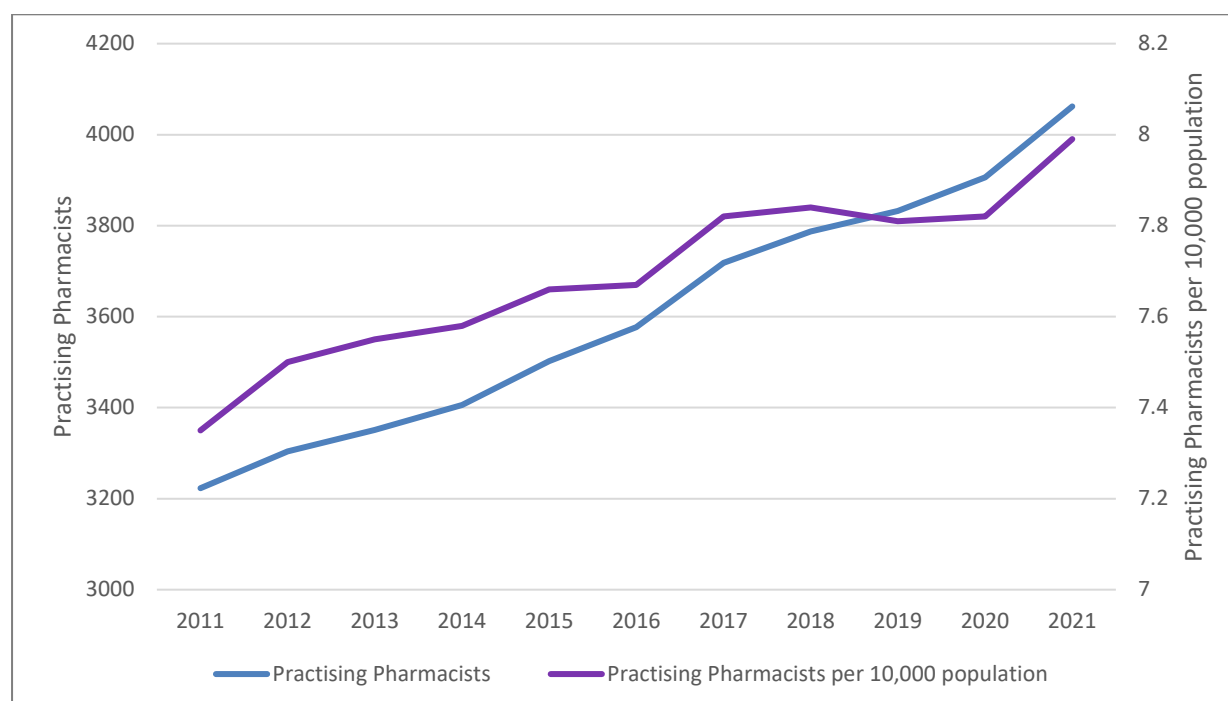
Table 2 Number of Practising Pharmacists 2017-2021

Year	Practising Pharmacists	Percent change
2021	4,062	4.0%
2020	3,906	1.9%
2019	3,832	1.2%
2018	3,787	1.9%
2017	3,718	

In the 12 months to 30 June 2021 the number of practising pharmacists in New Zealand grew by 156 (4%) - a larger number than previous years. There is a twofold explanation for this slight boost in practising pharmacist numbers in 2021:

- An Assessment Centre was not held in May 2020 due to COVID-19 restrictions. Intern pharmacists who may have registered in the Pharmacist scope in June 2020 instead attended the December 2020 event. This caused an anomaly where there was an increased number of intern pharmacists in the year to 30 June 2021. This has corrected by flowing through to a greater number of first-time registrations this year.

Figure 2 Number of Practising Pharmacists and per capita analysis



Non-Practising Pharmacists

The registration status of non-practising means a pharmacist is not allowed to practise but is allowed to refer to themselves as a registered pharmacist. Of the 1,071 pharmacists on the non-practising register 131 did not submit an application during the registration renewal round in March 2021. These pharmacists are now within the register revision process. Despite the growth in the total register, the number of non-practising pharmacists has remained relatively static at approximately 1,100 pharmacists.

Table 3 Number of Non-Practising Pharmacists 2017-2021

Year	Non-Practising Pharmacists	Percent change
2021	1,071	-2.6%
2020	1,100	-2.91%
2019	1,133	3.47%
2018	1,095	2.53%
2017	1,068	

Table 4 Reason Provided by Pharmacists for not Practising

Reason for not practising	2021	Percentage
Overseas - practising	350	33%
Overseas - not practising	133	12%
Working in a non-health role	115	11%
Parenting/maternity leave	114	11%
Other	101	9%
Retired	94	9%
Working in another health profession	84	8%
Full-time study	28	3%
Seeking employment in a non-pharmacy profession	23	2%
Seeking employment as a pharmacist	9	1%
Total	1051	98%
Status not renewed at 30 June 2021	131	12%
<i>Number of applicants who selected multiple reasons</i>	111	10%
Total	1071	100%

Intern Pharmacists

The increase in the number of intern pharmacists in 2020 was caused by the deferral of the mid-year assessment centre (due to the COVID-19 pandemic). This resulted in fewer transfers from the Intern Pharmacist to the Pharmacist scope of practice. The number of intern pharmacists in 2021 has reverted to a level before the COVID-19 pandemic.

Table 5 Number of Intern Pharmacists 2017-2021

Year	Intern Pharmacists	Percent change
2021	256	-15.00%
2020	300	23.46%
2019	243	2.97%
2018	236	0.85%
2017	234	

Table 6 Origin of Pharmacy Qualification for Intern Pharmacists

Number of interns by university or country of university		
New Zealand and Australian Pharmacy Graduates	University:	
	• Auckland	90
	• Otago	152
	• Australia	0
Overseas (Non-REQR ¹) Pharmacists	Total Non-REQR	14
Total		256

¹ The Non-Recognised Equivalent Qualifications Route (Non-REQR) is for overseas registered pharmacists (who qualified in countries other than Australia, Canada, Ireland, the United Kingdom and the USA), who are completing pharmacist registration in New Zealand

Removal from the Register

A pharmacist who has been removed from the register may not:

- practice within any of the scopes of practice prescribed by the Council,
- refer to themselves as a pharmacist, or
- use the designation RegPharmNZ.

Removal from the register need not be permanent; the reinstatement process facilitates return to the register.

If a pharmacist fails to renew their registration status (either practising or non-practising) Council attempts to contact the practitioner. If there is still no response the pharmacist is removed from the register in line with section 144 of the Health Practitioners Competence Assurance Act 2003.

Table 7 Removals from the Register of Pharmacists

Removals	Numbers
Revision of register	51
Removed at own request	84
Total	135

Table 8 Reason Provided by Pharmacists Requesting Removal from the Register

Reason for requesting removal	2021	Percentage
Retired	47	53%
Overseas - practising	8	9%
Working in a non-health role	12	14%
Overseas - not practising	3	3%
Parenting/maternity leave	3	3%
Seeking employment in a non-pharmacy profession	3	3%
Working in another health profession	6	7%
Other	4	5%
Full time study	2	2%
Total	88	100%

Practising Pharmacists in Detail

Analysis of Demographic Makeup

Regional Council

In the first instance, region is assigned to a pharmacist based on their primary (highest percentage) workplace. Failing this, the postal address provided is used as the basis. This data is collected at time of annual practising certificate renewal. As such, this data is current only at the time of collection, i.e., March 2021.

Figure 3 Distribution of Practising Pharmacists by Regional Council

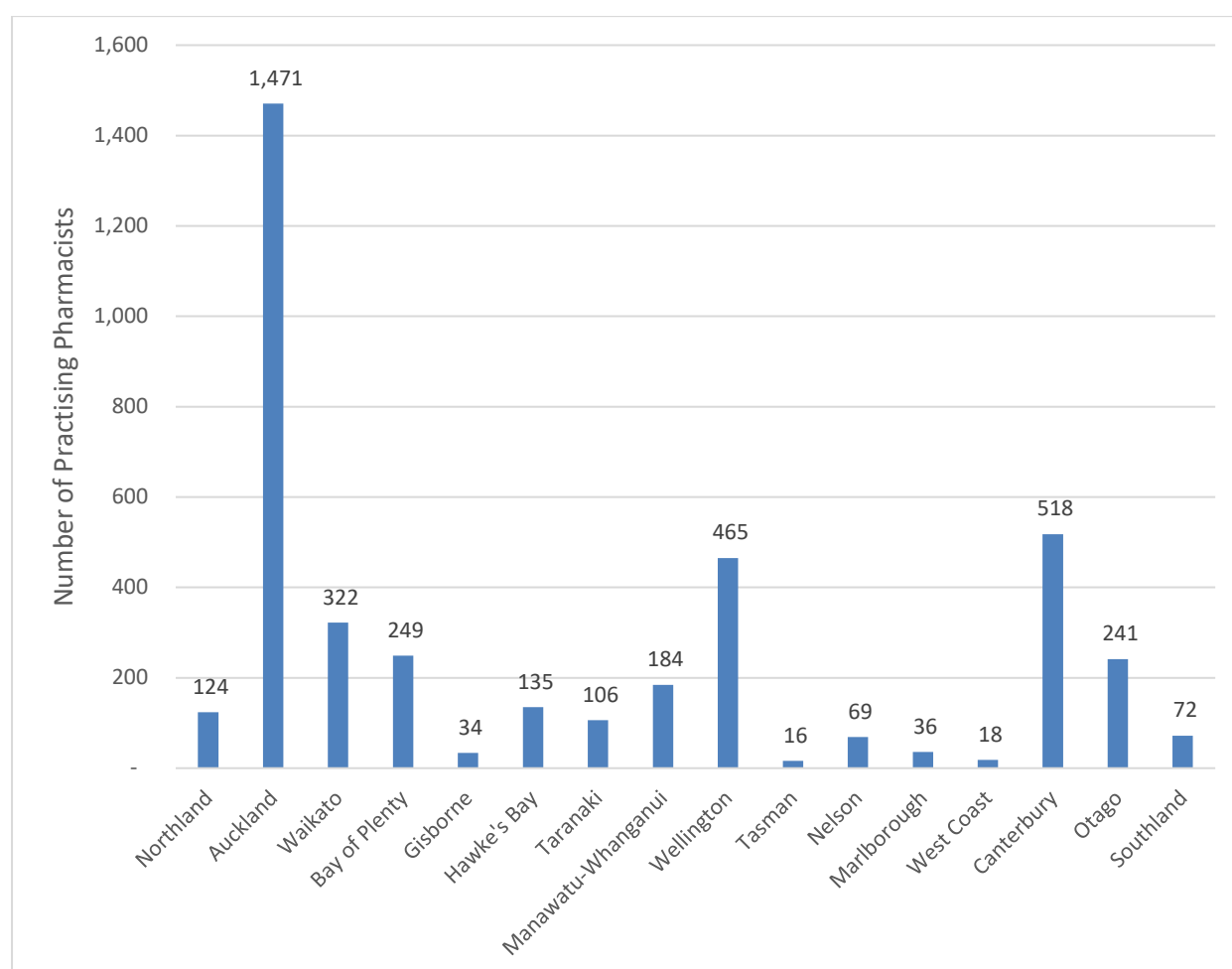
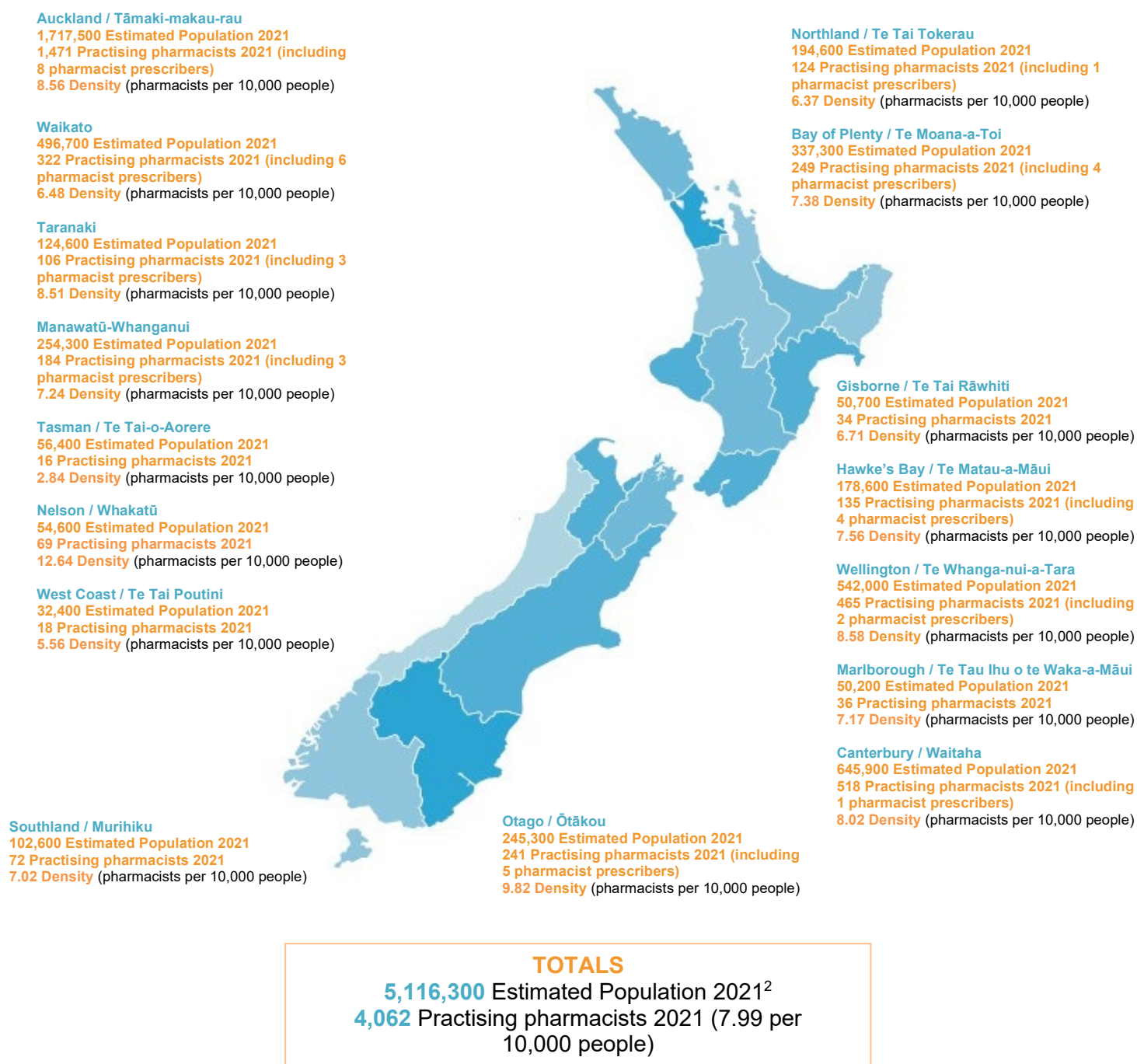


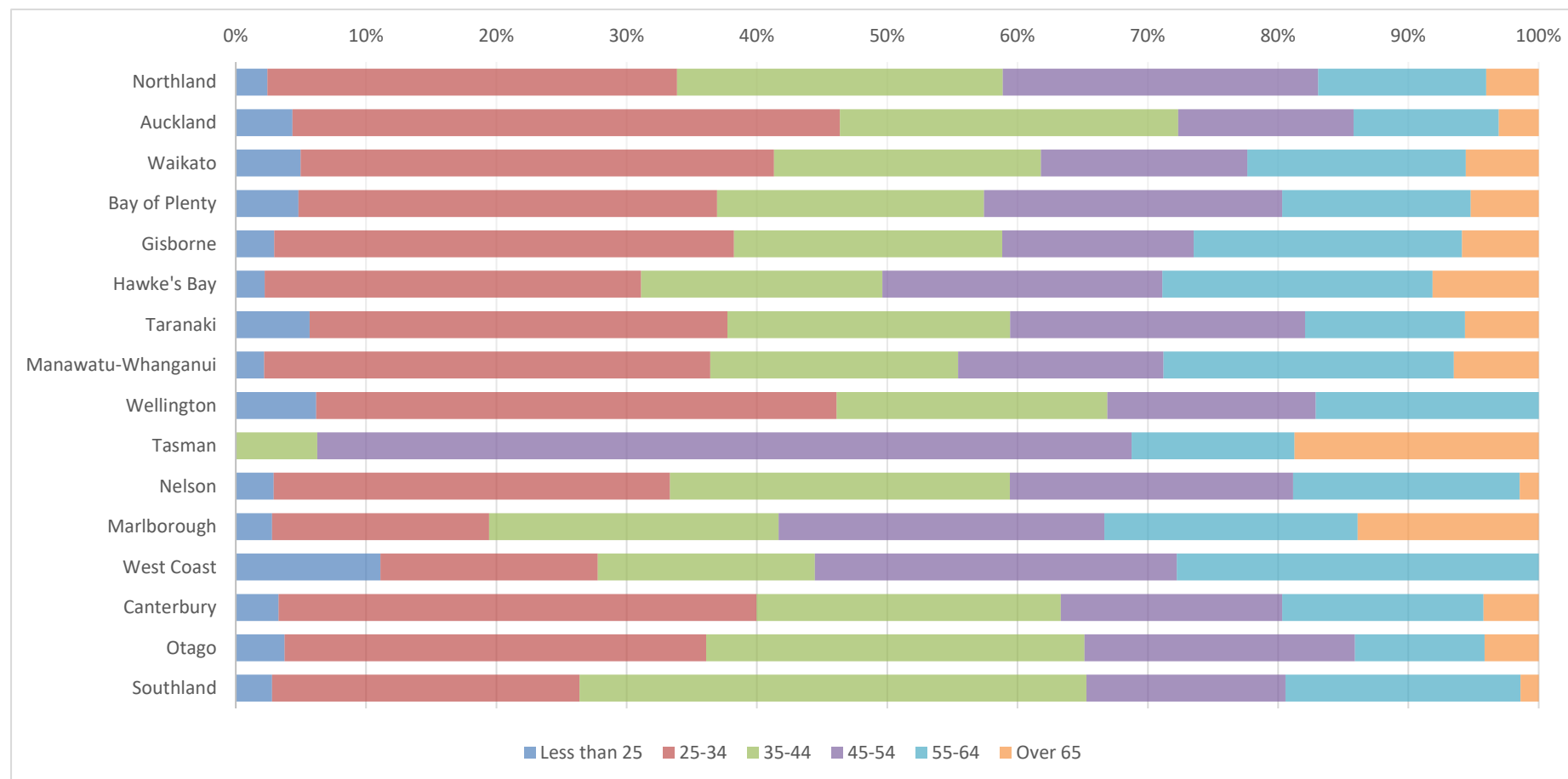
Figure 4 Demographic Profile of the pharmacy workforce



² Estimated population of New Zealand as at March 2021. Retrieved July 8, 2021, from <https://www.stats.govt.nz/indicators/population-of-nz>

The age distribution of pharmacists around the country seems relatively uniform with a mix of early career and experienced pharmacists found in all regions. However, data in Figure 5 does show slightly higher proportions of younger pharmacists in urban areas.

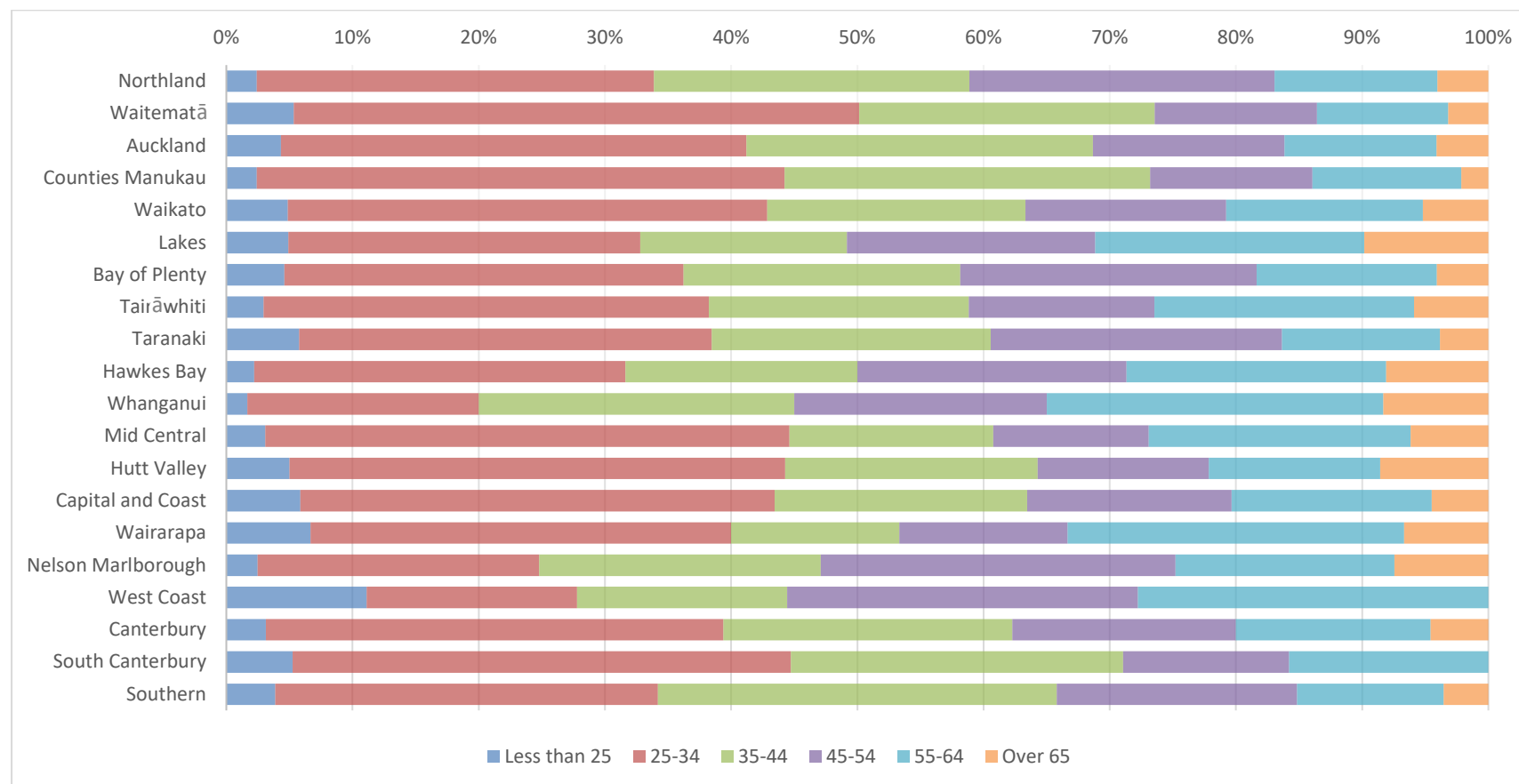
Figure 5 Practising Pharmacists by Regional Council and Age



District Health Board

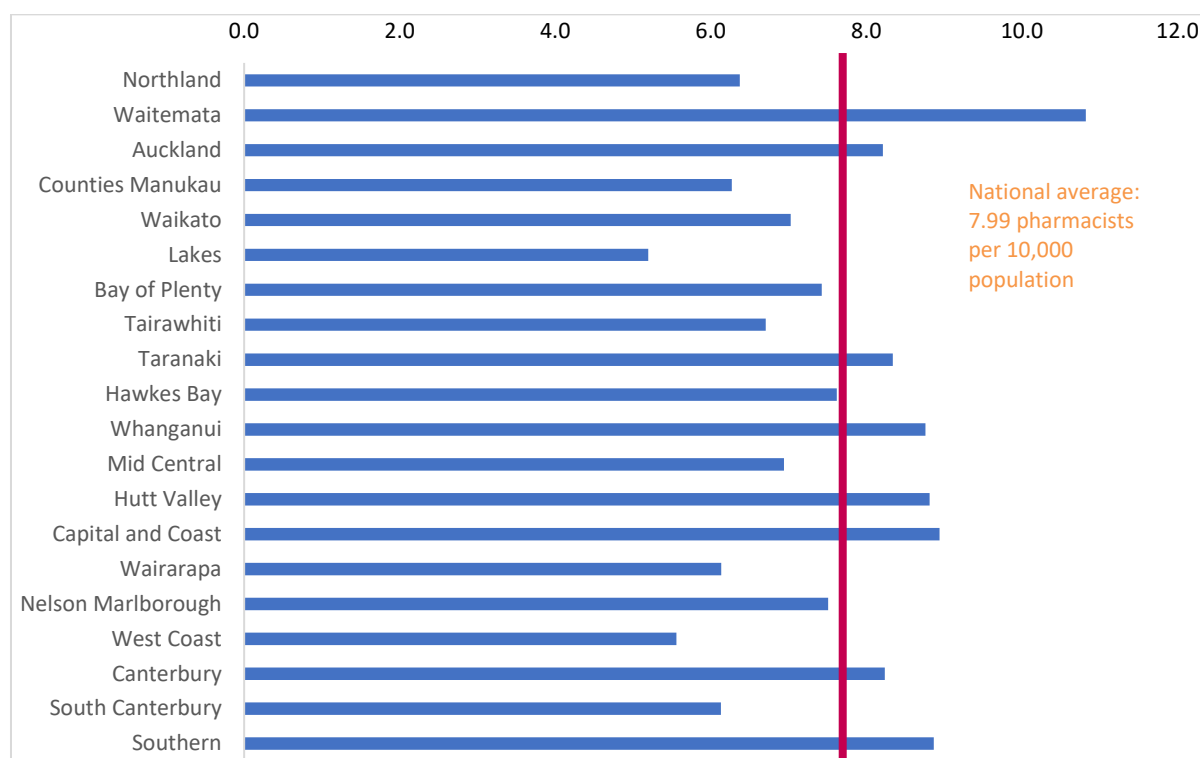
Analysis at a district health board level allows a slightly more granular analysis (16 regional councils versus 20 district health boards). Figure 6 demonstrates even more clearly that urban areas tend to be served by a slightly younger pharmacist workforce, while more rural areas generally have a slightly more experienced workforce.

Figure 6 Practising Pharmacists by District Health Board and Age



District health boards that include large urban areas seem to have greater access to pharmacists (higher per capita result) compared to more rural health boards. Though there is the possibility that some practising pharmacists may work in a non-patient facing role or may work as a pharmacist part time.

Figure 7 Practising Pharmacists per 10,000 population by District Health Board



Age Profiling

The median age of a practising pharmacist in New Zealand is 37.5 years old. Figure 8 shows a relatively young workforce with a concentration of pharmacists aged between early twenties and early thirties.

Figure 8 Age Profile of Practising Pharmacists

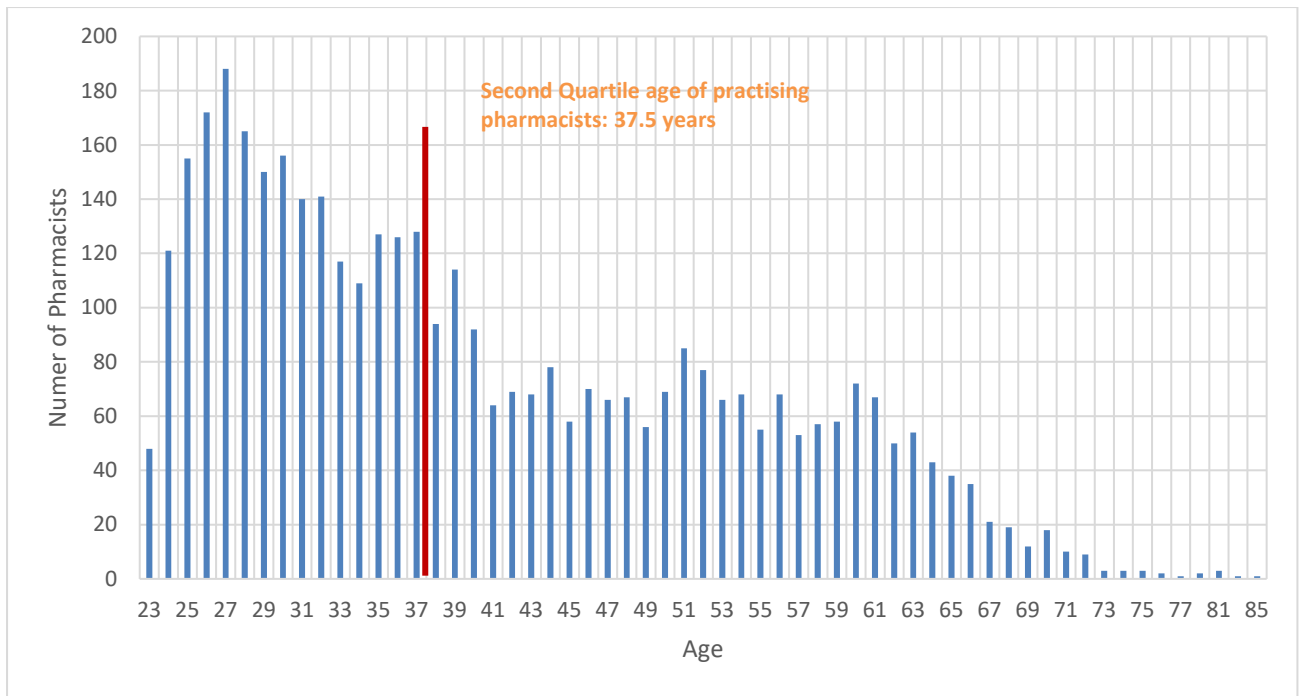


Figure 9 Comparison of Age Profiles (smoothed) of Practising Pharmacists by Gender

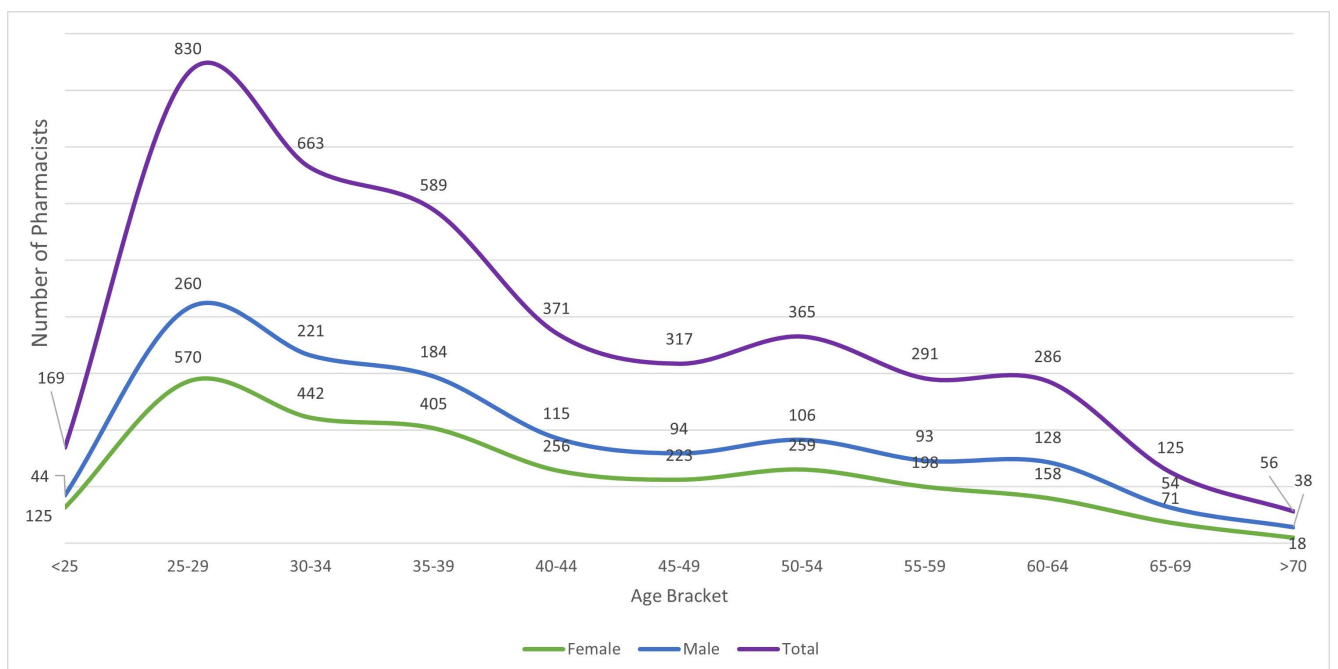
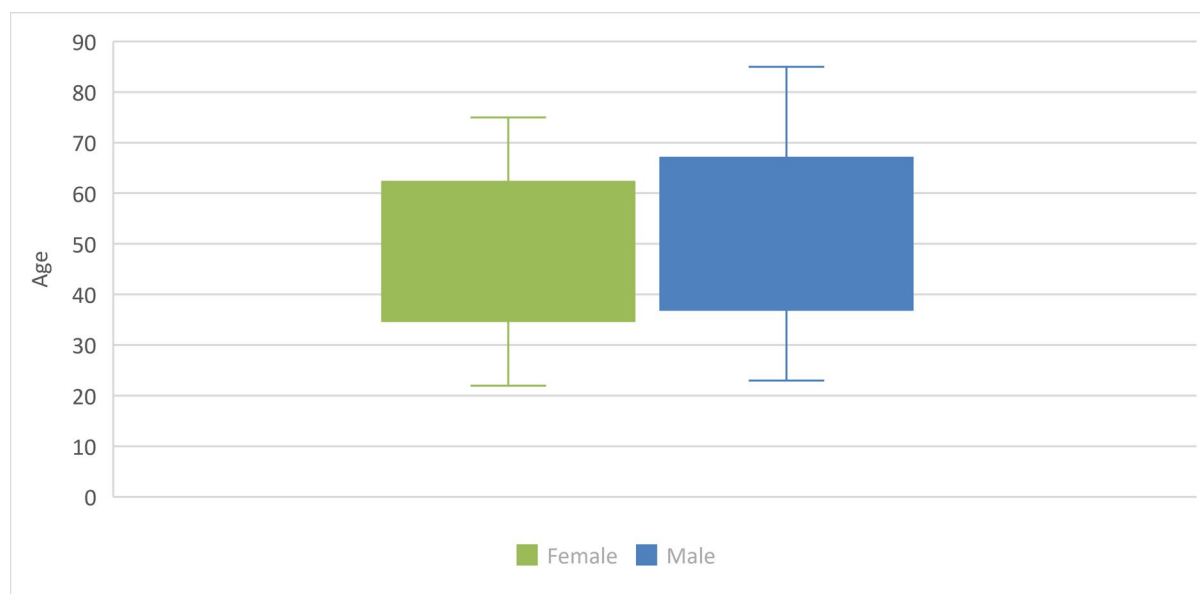


Figure 10 Comparison of Age of Practising Pharmacists by Gender



In addition to being a smaller workforce, the male portion of practising register is also, on average, a slightly older workforce (see Table 9).

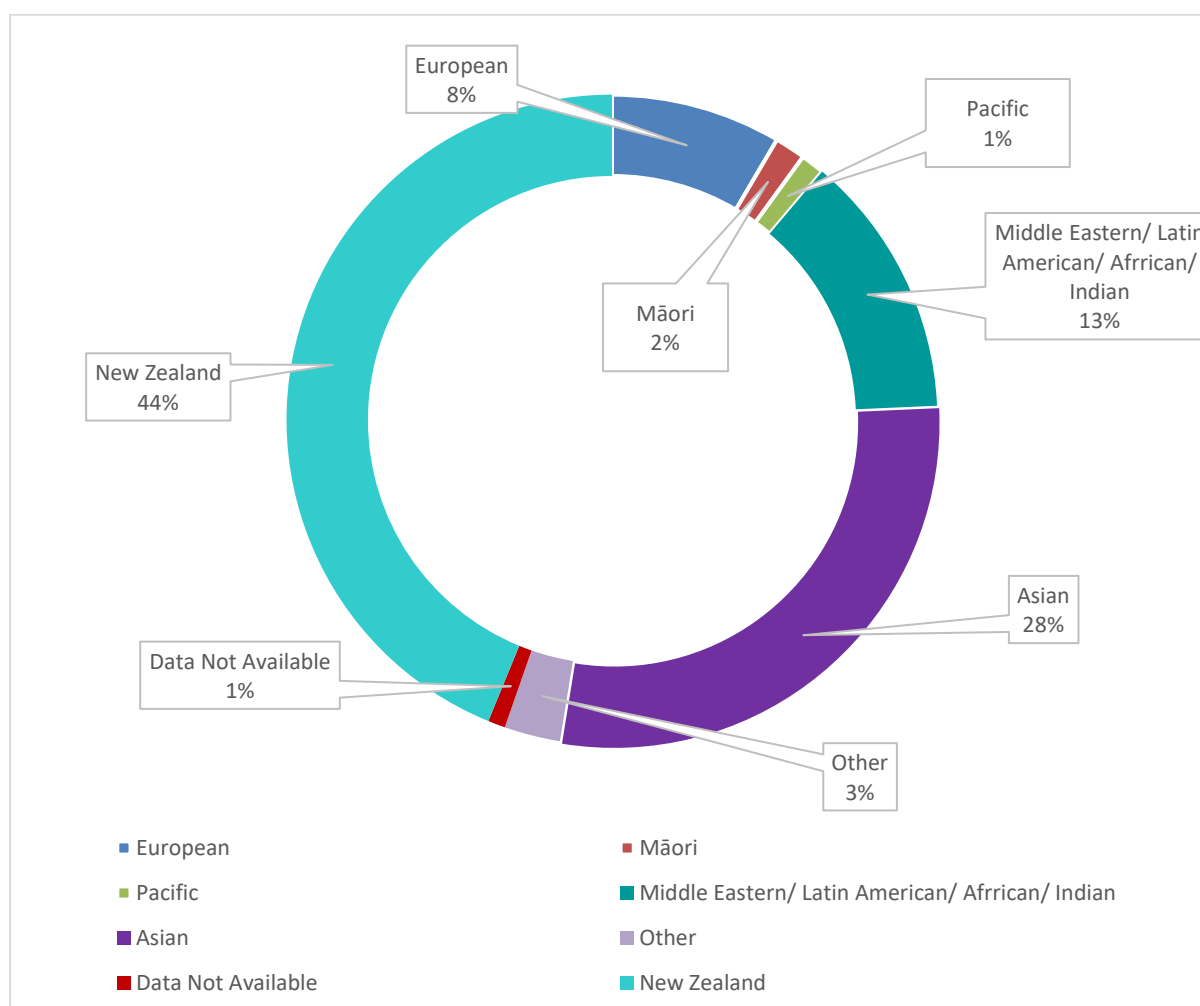
Table 9 Distribution of the Ages of Practising Pharmacists

	Female (years)	Male (years)	Total Practising Register (years)
Maximum	75.00	85.00	85.00
Third Quartile	62.00	66.50	66.50
Median	49.00	52.00	52.00
First Quartile	36.00	37.50	37.50
Minimum	23.00	23.00	23.00

Ethnicity

The ethnicity categories reported align with the level 1 classifications used by the Ministry of Health³.

Figure 11 Practising Pharmacists by Primary Ethnicity



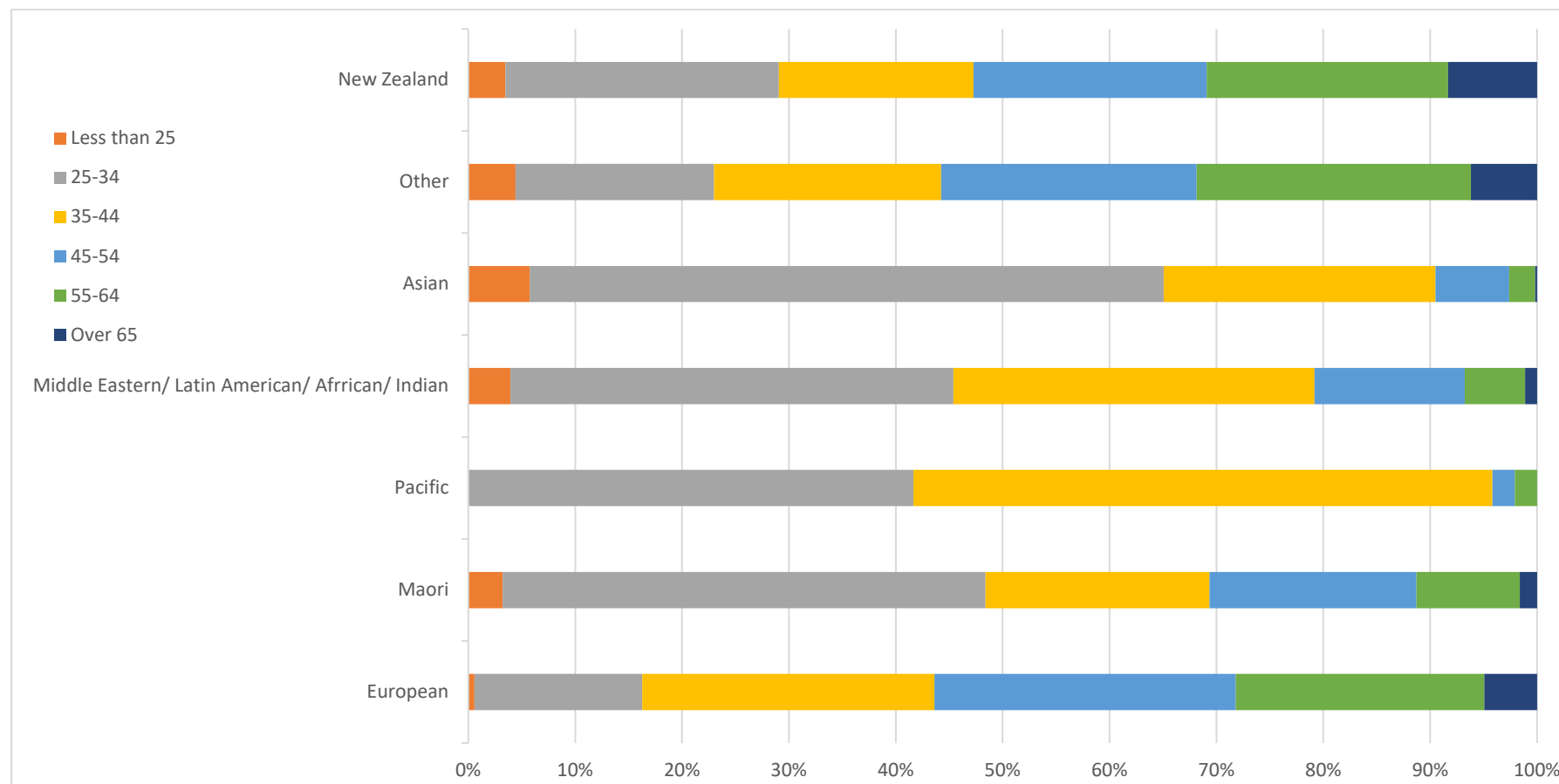
The proportion of practising pharmacists of Māori ethnicity remains at about 2%. Similarly, the proportion of practising pharmacists of Pacific Island ethnicity has also remained static at 1%. Both groups remain underrepresented within the population of practising pharmacists compared to the wider population. This year we separated New Zealand ethnicity (44%) from the broader European group (8%). Combined (52%), this grouping is similar to last year's result of 54%.

We also note a decrease in pharmacists identifying as Asian. This 8% drop is offset by a similar increase in the Middle Eastern/Latin American/African/Indian category. No change has been made to Council's process and so this result is either due to change in identified ethnicity. A change of 8% equates to approximately 325 pharmacist

³ Ministry of Health. 2017. HISO 10001:2017 Ethnicity Data Protocols. Wellington: Ministry of Health.

Figure 12 Practising Pharmacists by Primary Ethnicity and Age

This figure shows relatively young cohorts of Pacific, Middle Eastern/Latin American/African, and Asian pharmacists in current practice. The figures for Asian pharmacists is the more pertinent given the larger size of this sub-group.



Request for certificates of current professional status

Certificates of Current Professional Status or Letters of Good Standing are issued by the Pharmacy Council on behalf of pharmacists seeking registration with a responsible authority in an overseas jurisdiction. The certificate details registration information (pharmacy degree, scope(s) of practice, date of registration etc), current registration status, and a statement about the pharmacist's fitness to practise pharmacy.

Table 10 Certificates of Current Professional Status Issued

Country	Number of certificates issued
Australia	9
New Zealand	1
United Kingdom	1
Total	11

Only 11 certificates of current professional status were issued compared to 64 in the previous year. This is presumably due to travel restrictions due to the COVID-19 pandemic.

Additions to the Practising Register

Return to Practice

Pharmacists can apply to return to practice at any time. They may wish to re-join the practising register after a period of a non-practising status or they may not be registered and wish to also be reinstated the register. The return to practice requirements for each pharmacist will differ, as they depend on the period away from New Zealand practice and type of overseas pharmacy practice (if any) in the intervening period.

Table 11 Return to Practice Applicants by number of years since last practice

Number of years since last practice in New Zealand	2018/2019	2019/2020	2020/2021
Less than three years	88	86	75
Three to eight years	12	12	12
More than eight years	2	0	1
Total	102	98	88

*All years ending 30 June

New Registrations to the Pharmacist Scope of Practice

In the 2020/21 year, 264 pharmacists registered with the Pharmacy Council for the first time. As previously mentioned, with the deferral of the mid-year assessment centre due to COVID-19 pandemic, there was no opportunity for eligible intern pharmacists to apply for transfer to the Pharmacist scope of practice. This accounts for the reduced number of additions to the register for the 2020/21 year. Many of these intern pharmacists went on to register as a pharmacist in December 2021. This largely accounts for the increase in first time registrants. We would expect reversion to previously seen levels from next year. The 264 pharmacists reported include 22 overseas pharmacists.

Table 12 Number of Initial Registrations in the Pharmacist Scope of Practice 2017-2021

Year	Pharmacists registering for the first time	Percent change
2021	264	32.00%
2020	200	-11.11%
2019	225	-13.13%
2018	259	13.10%
2017	229	

Table 13 Initial Registrations by Route of Registration

Registrations Route	2018	2019	2020	2021
Graduates (New Zealand and Australia)	234	200	161	242
Trans-Tasman Mutual Recognition Act 1997	15	8	10	2
REQR	8	11	20	10
NON-REQR	2	6	9	10
Total	259	225	200	264

For the year ended 30 June 2021, 252 intern pharmacists transferred from the Intern Pharmacist scope of practice to the Pharmacist scope. Of these, 242 were Bachelor of Pharmacy or Bachelor of Pharmacy with Honours graduates from a New Zealand university, while 10 completed the intern training programme as part of the non-recognised equivalent qualification route (non-REQR).

Table 14 Transfers from Intern to Pharmacist Scope of Practice

Country of Qualification	Number of Transfers
New Zealand (Total)	239
• University of Auckland	92
• University of Otago	147
Other	13

Table 15 Registrations Granted by Country of First Registration

Country of first registration	2018	2019	2020	2021
Australia	15	7	10	2
Ireland and the United Kingdom	8	8	14	6
Canada and the United States of America	0	3	6	2
Total	23	18	30	10

Type of Pharmacy Practice

Data on pharmacist type of work is collected at the time of annual practising certificate application in March each year. This data asks pharmacists to retrospectively describe their practice over the previous 12 months, and therefore reflects practice within the period 1 April 2020 to 31 March 2021. During the 2021 annual practising certificate application period 3,975 valid applications for annual practising certificates were received. This total differs from the total number of pharmacists at 30 June 2021 (4,062) as further applications were received after the close of the period.

Table 16 Primary Type of Pharmacy Practice Undertaken by Practising Pharmacists

Primary type of pharmacist work	Number of pharmacists	Percentage
Community Pharmacy¹⁰	3,108	78%
DHB (excluding hospital pharmacy work)	34	1%
General Practice	45	1%
Hospital Pharmacy	545	14%
Other	79	2%
Pharmaceutical Industry	28	1%
Pharmacy related organisations (e.g., professional bodies)	39	1%
Primary Health Organisation	35	1%
Teaching/Research	62	2%
Total	3,975	100%

Table 17 Average Hours per Week Worked in Scope by Practising Pharmacists

Hours worked per week	10 or less	11-19 hours	20-29 hours	30-39 hours	40-49 hours	50+ hours	Total
Community Pharmacy	135	181	393	644	1524	231	3,108
DHB (excluding hospital pharmacy work)	1	1	6	6	18	2	34
General Practice	2	2	7	16	16	2	45
Hospital Pharmacy	11	25	76	64	358	11	545
Other	10	4	15	23	23	4	79
Pharmaceutical Industry	1	1	3	5	16	2	28
Pharmacy related organisations (e.g., professional bodies)	2	4	6	3	20	4	39
Primary Health Organisation	1	1	5	14	14	0	35
Teaching/Research	2	3	12	12	24	9	62
Total	165	222	523	787	2,013	265	3,975

Table 18 Number of weeks worked in scope by Practising Pharmacists

Weeks worked per year	10 or less	11-19 weeks	20-29 weeks	30-39 weeks	40-49 weeks	50+ weeks	Total
Community Pharmacy	82	167	117	134	969	1,639	3,108
DHB (excluding hospital pharmacy work)	1	0	1	0	9	23	34
General Practice	0	0	3	0	18	24	45
Hospital Pharmacy	12	21	14	18	143	337	545
Other	5	0	0	6	31	37	79
Pharmaceutical Industry	0	0	2	0	11	15	28
Pharmacy related organisations (e.g., PSNZ)	2	0	1	1	16	19	39
Primary Health Organisation	1	3	2	0	15	14	35
Teaching/Research	0	2	2	2	28	28	62
Total	103	193	142	161	1,240	2,136	3,975

Appendix

Table 19 Distribution of Practising Pharmacists by Regional Council (Raw data associated with Figure 3 and image on page 12)

Regional Council	Number of Pharmacists	Population of Region	Pharmacists per 10,000 population
Northland	124	194,600	6.37
Auckland	1,471	1,717,500	8.56
Waikato	322	496,700	6.48
Bay of Plenty	249	337,300	7.38
Gisborne	34	50,700	6.71
Hawke's Bay	135	178,600	7.56
Taranaki	106	124,600	8.51
Manawatu-Whanganui	184	254,300	7.24
Wellington	465	542,000	8.58
Tasman	16	56,400	2.84
Nelson	69	54,600	12.64
Marlborough	36	50,200	7.17
West Coast	18	32,400	5.56
Canterbury	518	645,900	8.02
Otago	241	245,300	9.82
Southland	72	102,600	7.02
Total	4,062	5,083,700	7.99

Table 20 Distribution of Practising Pharmacists by Regional Council and Age (Raw data associated with Figure 4)

	< 25	25-34	35-44	45-54	55-64	> 65
Northland	3	39	31	30	16	5
Auckland	64	618	382	198	164	45
Waikato	16	117	66	51	54	18
Bay of Plenty	12	80	51	57	36	13
Gisborne	1	12	7	5	7	2
Hawke's Bay	3	39	25	29	28	11
Taranaki	6	34	23	24	13	6
Manawatu-Wanganui	4	63	35	29	41	12
Wellington	27	175	91	70	75	0
Tasman	0	0	1	10	2	3
Nelson	2	21	18	15	12	1
Marlborough	1	6	8	9	7	5
West Coast	2	3	3	5	5	0
Canterbury	17	190	121	88	80	22
Otago	9	78	70	50	24	10
Southland	2	17	28	11	13	1
Total	169	1,492	960	681	577	154

Table 21 Practising Pharmacists by District Health Board and Age (Raw data associated with Figure 5)

District Health Board	< 25	25-34	35-44	45-54	55-64	> 65
Northland	3	39	31	30	16	5
Waitematā	37	310	162	89	72	22
Auckland	18	153	114	63	50	17
Counties Manukau	9	156	108	48	44	8
Waikato	15	117	63	49	48	16
Lakes	3	17	10	12	13	6
Bay of Plenty	9	62	43	46	28	8
Tairāwhiti	1	12	7	5	7	2
Taranaki	6	34	23	24	13	4
Hawkes Bay	3	40	25	29	28	11
Whanganui	1	11	15	12	16	5
Mid Central	4	54	21	16	27	8
Hutt Valley	7	55	28	19	19	12
Capital and Coast	17	109	58	47	46	13
Wairarapa	2	10	4	4	8	2
Nelson Marlborough	3	27	27	34	21	9
West Coast	2	3	3	5	5	0
Canterbury	15	174	110	85	74	22
South Canterbury	2	15	10	5	6	0
Southern	12	94	98	59	36	11
Total	169	1,492	960	681	577	181

Table 22 Practising Pharmacists per 10,000 population by District Health Board (Raw data associated with Figure 6)

District Health Board	Number of Pharmacists	Population of DHB	Pharmacists per 10,000 population
Northland	124	194,600	6.37
Waitematā	692	639,500	10.82
Auckland	415	505,400	8.21
Counties Manukau	373	595,100	6.27
Waikato	308	438,300	7.03
Lakes	61	117,400	5.20
Bay of Plenty	196	263,900	7.43
Tairāwhiti	34	50,700	6.71
Taranaki	104	124,700	8.34
Hawkes Bay	136	178,500	7.62
Whanganui	60	68,500	8.76
Mid Central	130	187,300	6.94
Hutt Valley	140	158,900	8.81
Capital and Coast	290	324,400	8.94
Wairarapa	30	48,900	6.13
Nelson Marlborough	121	161,200	7.51
West Coast	18	32,400	5.56
Canterbury	480	582,700	8.24
South Canterbury	38	62,000	6.13
Southern	310	349,700	8.86

Table 23 Comparison of Age Profiles of Practising Pharmacists by Gender (Raw data associated with Figure 8)

Age Group	Female	Percent	Male	Percent
< 25	125	3%	44	1%
25-29	570	14%	260	6%
30-34	442	11%	221	5%
35-39	405	10%	184	5%
40-44	256	6%	115	3%
45-49	223	5%	94	2%
50-54	259	6%	106	3%
55-59	198	5%	93	2%
60-64	158	4%	128	3%
65-69	71	2%	54	1%
> 70	18	0%	38	1%
Totals	2,725	67%	1,337	33%

Table 24 Practising Pharmacists by Primary Ethnicity (Raw data associated with Figure 10)

Ethnicity	Number of Pharmacists
European	344
Māori	62
Pacific	48
Middle Eastern/ Latin American/ African/ Indian	533
Asian	1,148
Other	113
Data Not Available	35
New Zealand	1,779
Total	4,062