



Fact File

The Royal College of Pathologists of Australasia

**New Zealand Pathologist
Workforce Study 2018
Anatomical Pathology**

NEW ZEALAND PATHOLOGIST WORKFORCE – ANATOMICAL PATHOLOGY

Overview

Anatomical Pathology is 52.8% of the total workforce in 2016. This is a higher percentage compared to the Australian Pathologist workforce where Anatomical Pathologists are 44.5% of the workforce. There has been high growth in the discipline of Anatomical Pathology within New Zealand at 9.8% per annum on average between 2011 and 2016. The Anatomical Pathologist workforce in New Zealand has grown from 102 to 152 headcount in that period.

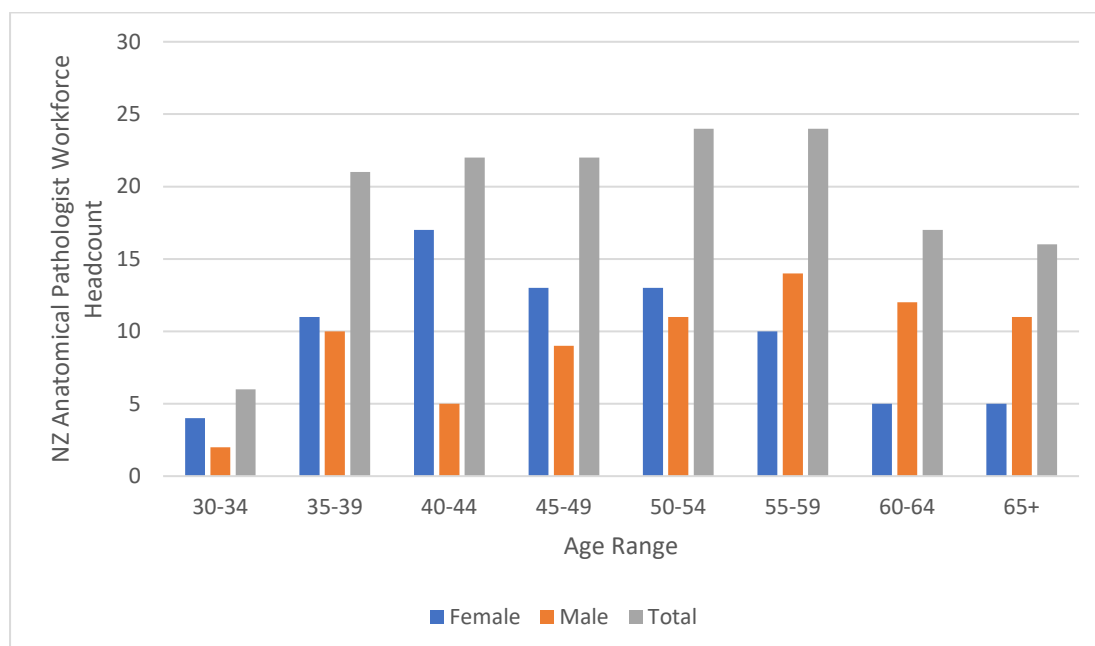
Workforce profile and trends

Table 1: NZ Anatomical Pathologist Workforce, 2016, Age and Sex Profile

Age Group	Headcount			Percentage	Percentage
	Female	Male	Total	by Age	Female by Age
30-34	4	2	6	3.9%	66.7%
35-39	11	10	21	13.8%	52.4%
40-44	17	5	22	14.5%	77.3%
45-49	13	9	22	14.5%	59.1%
50-54	13	11	24	15.8%	54.2%
55-59	10	14	24	15.8%	41.7%
60-64	5	12	17	11.2%	29.4%
65+	5	11	16	10.5%	31.3%
Total	78	74	152	100.0%	51.3%
55 years and older	20	37	57		
% 55 years and older	25.6%	50.0%	37.5%		

Source: RCPA data base, 2016

Figure 01: NZ Anatomical Pathologist Workforce, 2016, Age and Sex Profile



Source: RCPA data base, 2016

Table 1 and Figure 1 show that the modal age range for the total workforce is 50 to 54 years and 55 to 59 years, for the female workforce it is 40 to 44 years, and for the male workforce it is 55 to 59 years. Females are in the majority in each age cohort up to 54 years. Males are in the majority for all age cohorts 55 years and over.

Over one third of the workforce is older than 55 years (37.5%), with one quarter of females in this age range (25.6%), and fifty percent of males (50.0%). This profile has significant implications for the retirement of a large proportion of the workforce in the next ten years. However, there are 21.7% of the workforce aged 65 years and older, so that 33 Anatomical Pathologists nationally in the New Zealand workforce will retire in a much shorter time frame.

Trends in trainee numbers

NZ Anatomical Pathologist trainees increased from 40 to 46 trainees over the period 2011 to 2016. This was a low growth of 15.0% over the period.

Workforce demand and supply

Demand drivers

Demand drivers were discussed and ranked by the RCPA Expert Group (Workshop 1). Demand drivers ranked as high in terms of impact on **service growth** were:

- Population change
- Cancer incidence and prevalence
- Precision medicine
- Genetic testing
- Complexity of tests – more workload intensity per test

There was agreement at both the first and second workshops with RCPA members that the increasing complexity of testing was the main driver of **workforce** demand.

Furthermore, structured reporting protocols are also contributing to increasing workload associated with complexity of testing.

The second key driver was the value adding role of pathologists who are increasingly responding to referrers for advice on the outcomes of pathology tests, increasing requirements for Anatomical Pathologists to be on-site at local laboratories.

Screening programs, such as Bowel Screening, are impacting on the work of Anatomical Pathologists, but the quantum of work is not necessarily captured. This is because if cancer screening results are negative it is not counted in the data on the incidence and prevalence of cancers (where cancer incidence and prevalence are a measure of demand).

Cytopathology is increasing in the complexity of testing, with one FTE pathologist now undertaking cytopathology work in some laboratories. While there had been a decrease in the number of pap smears the rate of non-gynaecological tests was seen to be increasing.

There were mixed views regarding the impact of the digitalisation of slides which still requires steps in the process. Some members of the College were of the view that the impact of this changing technology would not be seen for ten years or so, while others felt it could happen more quickly. There was a view that there would need to be a quantum shift in laboratories to digitalise histopathology. It should be noted that digitisation in pathology is not like radiology and will not get the efficiency gains. X-ray can be taken on digital camera, while in pathology the tissue still has to be processed and stained and then finally digitalised. This adds another step.

While undertaking second readings is becoming more common overseas, limited second reading occurs in New Zealand. Currently this activity is driven by the clinician and is not funded. It was felt that there is a need to upskill Anatomical Pathologists in genetic and molecular testing to have a skilled workforce ready to deal with the anticipated changes if/when second readings are adopted more widely.

The impact of demographic change was rated as a medium level for population change and efficiency improvements and technological innovation were seen as low level drivers.

Supply Issues

The 2015 NZ workforce profile reported that Anatomical Pathologists were ageing and that in 2015 there was no additional trainee funding. The proportion of the workforce in this discipline over 55 years at 37.5% is not as high as the total New Zealand Pathologist workforce at 41.3% .

Results of projection modelling

The lack of available data on trends in services in New Zealand due to the lack of an available data source resulted in the decision to use Australian data on Medicare service trends for modelling demand. Therefore, the same assumptions were applied to the New Zealand modelling for services demand as were applied for the Australian national workforce modelling. The high scenario has 3.8% and the low scenario has 3.4%

Figure 2: Results of Projection Modelling for New Zealand Anatomical Pathologist Workforce, High Scenario (Service Demand)

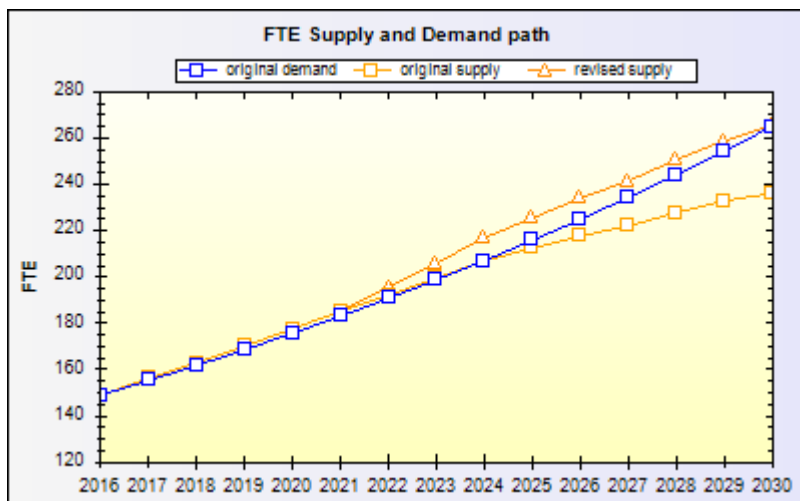


Figure 3: Results of Projection Modelling for New Zealand Anatomical Pathologist Workforce, Low Scenario (Workforce Demand)

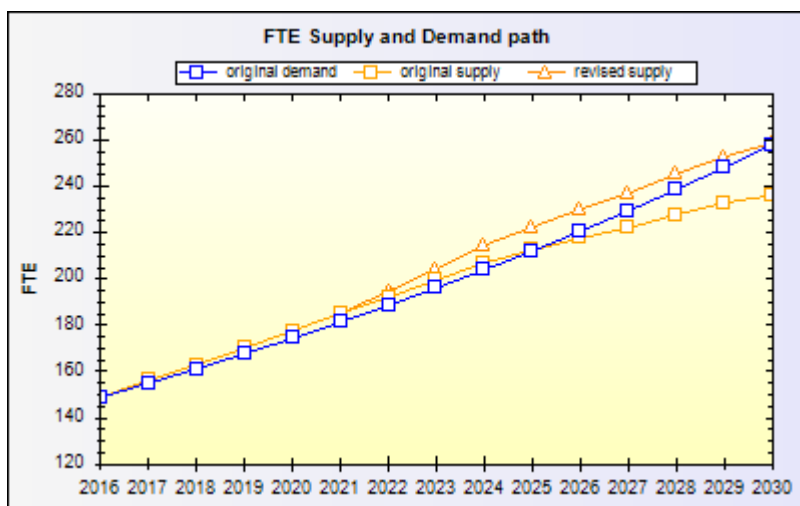


Table 2: Results of Workforce Modelling for New Zealand Anatomical Pathologist Workforce

	Trainees				
	Base Year	Low Scenario	High Scenario	Gap Low Scenario	Gap High Scenario
	2016	2030	2030	2030	2030
Anatomical Pathology	8	11	11	3	3
Total three disciplines	11	26	34	15	23
Total NZ Workforce	11	25	29	14	18
	New Fellows				
Anatomical Pathology	7	10	10	3	3
Total three disciplines	10	23	31	13	21
Total NZ Workforce	10	23	26	13	16

There was 3 additional Anatomical Pathology trainees under both scenarios.