



Fact File

The Royal College of Pathologists of Australasia

Australian Pathologist Workforce 2018 Haematology

AUSTRALIAN PATHOLOGIST WORKFORCE – HAEMATOLOGY

Overview

Haematology is another rapidly developing discipline which deals with many aspects of those diseases which affect the blood and bone marrow such as anaemia, leukaemia, lymphoma, and clotting or bleeding disorders.

Another important activity is the management of transfusion services. Many haematologists are involved, not only in the laboratory diagnosis and management of patients with blood diseases, but as clinical consultants. They also provide advice on the diagnosis and management of patients referred to them by medical colleagues, where the disease impacts on some aspect of the patient's haematopoietic/haemostatic systems.

In general terms, the variety and diversity of activities undertaken by haematologists at both a laboratory and clinical level provides the major attraction training and practising in this discipline.

Workforce profile and trends

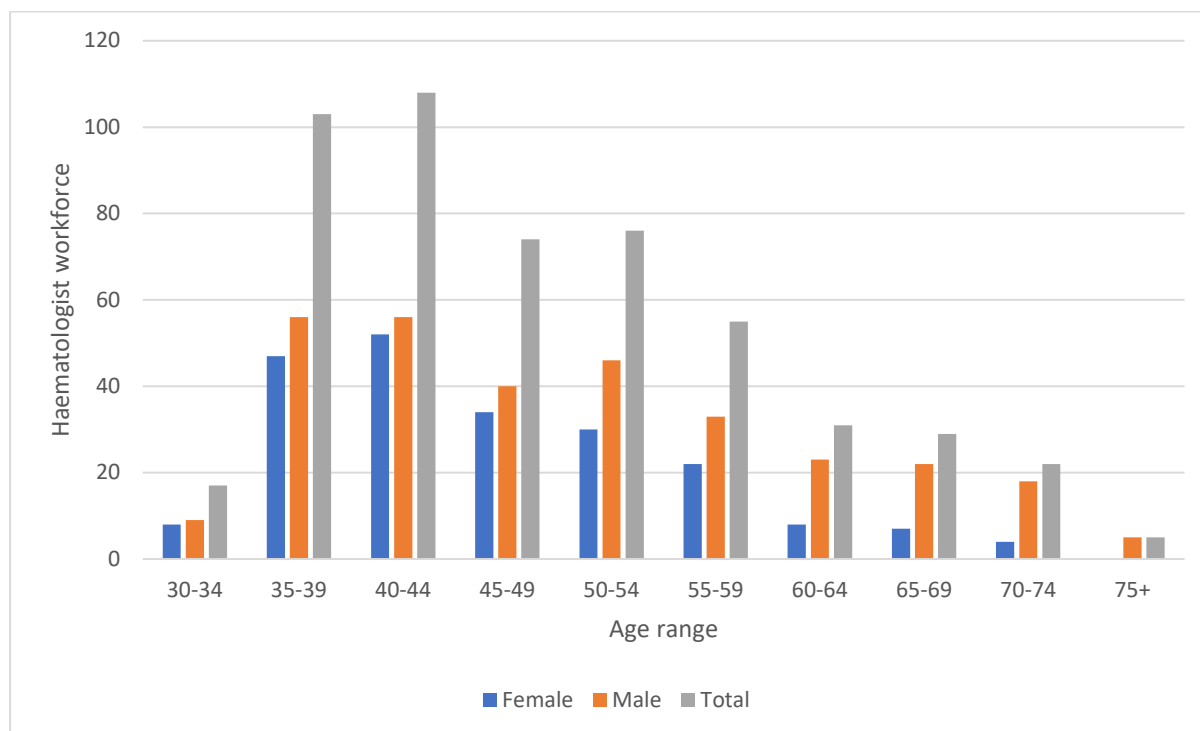
In 2016, the Haematologist workforce was 27.1% of the total Australian Pathologist workforce, a growth from 25.3% in 2011. Haematology experienced the second highest growth per annum of 5.5% between 2011 and 2016

Table 1: Haematologist Workforce, 2016, Age and Sex Profile

Age Group	Headcount			Percentage	Percentage
	Female	Male	Total	by Age	Female by Age
30-34	8	9	17	3.3%	47.1%
35-39	47	56	103	19.8%	45.6%
40-44	52	56	108	20.8%	48.1%
45-49	34	40	74	14.2%	45.9%
50-54	30	46	76	14.6%	39.5%
55-59	22	33	55	10.6%	40.0%
60-64	8	23	31	6.0%	25.8%
65-69	7	22	29	5.6%	24.1%
70-74	4	18	22	4.2%	18.2%
75+	0	5	5	1.0%	0.0%
Total	212	308	520	100.0%	40.8%
55 years and older	41	101	142		
% 55 years and older	19.3%	32.8%	27.3%		

Source: RCPA data base, 2016

Figure 1: Haematologist Workforce, 2016, Age and Sex Profile

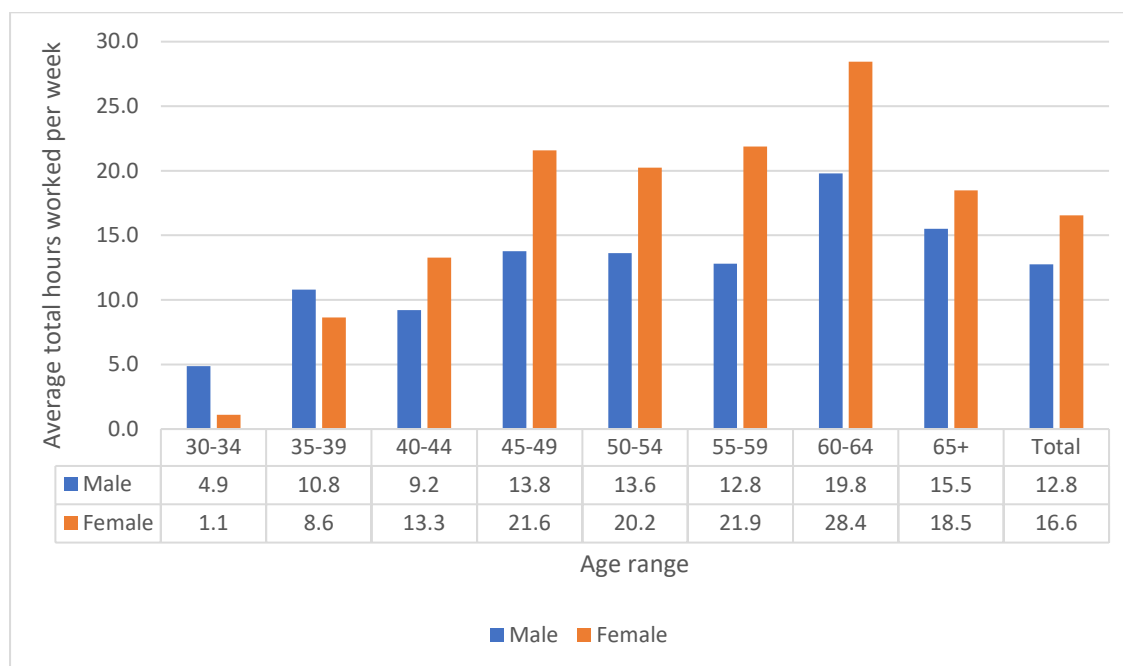


Source: RCPA data base, 2016

Table 1 and Figure 1 show that the modal age range for the total workforce is 40 to 44 years, for the female workforce it is 40 to 44 years, and for the male workforce it is 35 to 39 years and 40 to 44 years. Males are in the majority with 59.2% of the total workforce. Females are in the minority in each age cohort, although they are just under half of those 30 to 34 years and 40 to 44 years.

Over one quarter of the workforce is older than 55 years (27.3%), with just under one fifth of females in this age range (19.3%), and nearly one third of males (32.8%). However, there are 10.8% of the workforce aged 65 years and older, so that 56 Haematologists nationally will retire in a much shorter time frame.

Figure 2: Haematologist Workforce, 2016, Average Hours Worked by Age and Sex

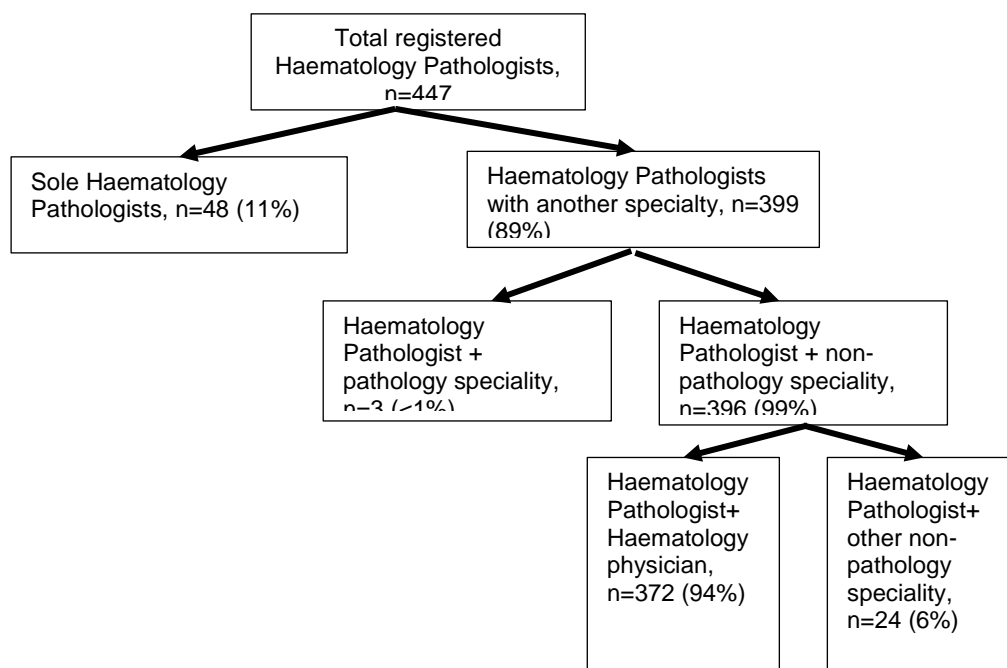


Source: DoH Data Set, 2016

As some Pathologist disciplines have joint training pathways, there is a resulting “part-time” profile in relation to their Pathologist role even if an individual is in fulltime work overall. This is particularly the case for Haematologists, who show very low average hours worked for both males and females in the Pathologist role (Figure 2). Overall, females show higher total hours worked per week in the Pathology discipline (16.6 hours in total on average per week), compared to males (12.8 hours). Males work on average higher hours per week for those 30 to 34 years and 35 to 39 years, while females work higher average hours per week for all other age groups. However, the average hours worked per week for the two youngest age groups is particularly low for both males and females.

It is important to establish whether the finding of lower hours worked by younger workforce members is an emerging trend which makes the “part-time” or fractional role of younger Haematologists even more marginal to the Pathologist workforce and may result in this pattern continuing into older age groups.

Figure 3: Haematologist single and multiple speciality profile, 2016



Source: DoH Data Set, 2016

According to 2016 DoH Workforce data sourced from APHRA, there were 447 registered Haematologists working in Australia (Figure 8.26). This is lower than the 520 Haematologists reported as working in Australia in the RCPA data base. Of these pathologists, only 48 (11%) specialise solely in Haematology and the very large majority of 399 (89%) work in another speciality as well. Of the 399 Haematologists working in two specialities, nearly all (396 or 99%) work in a non-pathology speciality as their second speciality, with only three Haematologists trained in a second Pathology speciality. The most common second speciality, as expected, was Physician – Haematology, indicating the strong clinical role of Haematologists. They accounted for 372 practitioners or 83.2% of the total workforce and 94% of those indicating a non-pathology speciality as their second speciality.

Trends in trainee numbers

Haematologist trainees increased from 126 to 203 trainees over the period 2011 to 2016. This was a very high growth of 61.1% over the period.

Workforce demand and supply

The first workshop scored population change, cancer incidence and prevalence, precision medicine, genetic testing and the value-add role as all contributing to high demand growth. Complexity of testing was identified as a medium-level demand driver. Technological innovation was determined to be low to medium demand driver and efficiency improvements contributed to low demand growth.

Cancer incidence is driving growth in services as there is an increasing range of therapeutic options, better survival rates, with closer and ongoing monitoring being required.

Value-adding is an important and growing role for laboratory Haematologists providing advice on a large range of drugs and transfusions. One participant mentioned the concept of “clinical traction”

where laboratory Haematologists are being increasingly drawn into clinical advisory roles. Complexity is also rising in areas such as bone marrow biopsy reporting.

Genetic testing is now used at diagnosis of most haematological cancers and therefore is becoming more prevalent.

There has been a large increase in options for haematological treatments within clinical trials. However, this is not captured under the MBS items and is also attracting workforce into these roles.

The workforce who have undertaken joint training are predominantly in clinical roles and there is concern regarding adequate supervision roles in laboratories.

The High Scenario Growth in Demand rate used for Haematology was the increase in workforce size of 5%. The Low Scenario Growth in Demand based on MBS growth return was 2.7%.

Workforce Projections

Figure 4: Results of Projection Modelling for Haematologist Workforce, High Scenario (Workforce Demand)

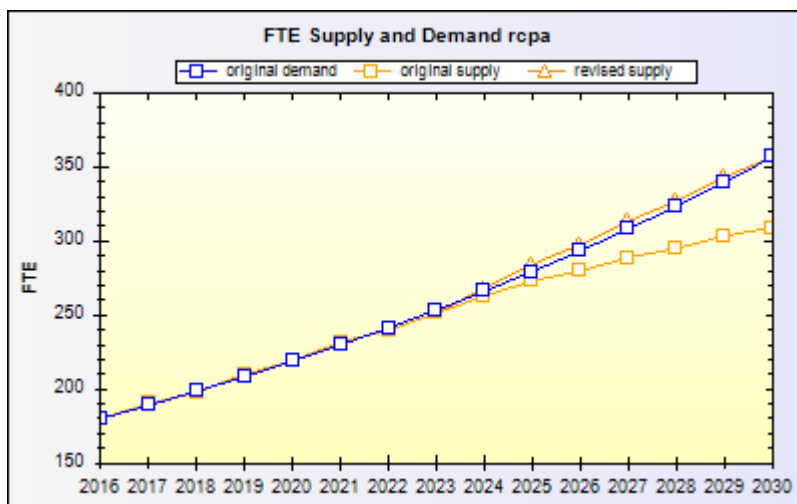


Figure 5: Results of Projection Modelling for Haematologist Workforce, Low Scenario (Service Demand)

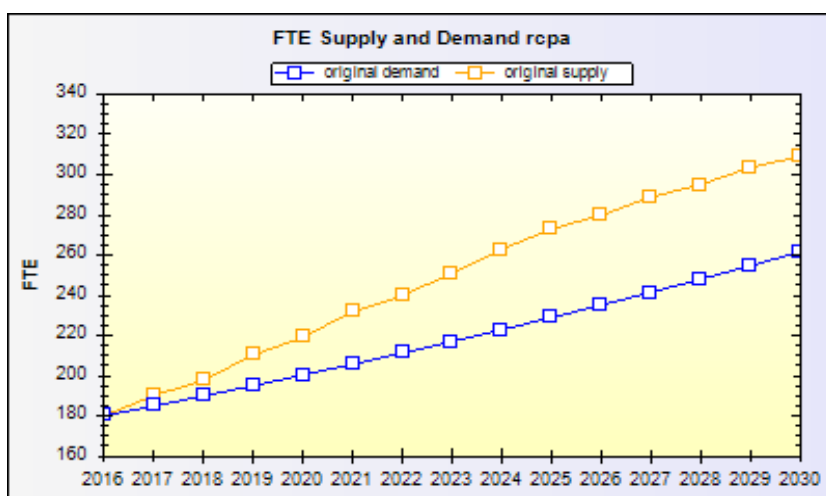


Table 21: Results of Workforce Modelling for Haematologist Workforce

	Trainees				
	Base Year	Low Scenario	High Scenario	Gap Low Scenario	Gap High Scenario
	2016	2030	2030	2030	2030
Haematology	32	32	57	0	25
Total six disciplines	97	151	238	54	141
Total Australian Workforce	100	170	192	70	92
	New Fellows				
Haematology	29	29	51	0	22
Total six disciplines	87	138	213	51	126
Total Australian Workforce	90	153	173	63	83

There was wide variation between the two demand assumptions used in the modelling and therefore there was wide variation between the results. The Low Scenario of service growth with an ACGR of 2.7% resulted in the need for no additional trainees and new fellows. This is partly due to the younger age of the workforce, with an average of 46 for females and 50 for males. While there was only 10.8% of the workforce aged 65 years and over this still results in some 56 Haematologists retiring in the next five years.

The High Scenario of high workforce growth between 2011 and 2016 (ACGR of 5.0%) is most likely to be due to the increasing provision of cancer services throughout Australia. Therefore, the major question relates to whether this level of expansion will continue through to 2030. The number of additional trainees required is 25 to balance supply and demand to this level.

Some additional trainees need to be funded to allow for future service growth and hence workforce growth.

Further work should be undertaken to develop RTUs for Haematology services as a priority, to better reflect services workload for Pathologists within this discipline.