HealthWorkforce AUSTRALIA

Australia's Health Workforce Series
Podiatrists in Focus

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An Australian Government Initiative

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Introduction

About HWA

Health Workforce Australia (HWA) is a Commonwealth statutory authority established to build a sustainable health workforce that meets Australia's healthcare needs. HWA leads the implementation of national and large scale reform, working in collaboration with health and higher education sectors to address the critical priorities of planning, training and reforming Australia's health workforce.

Australia's health system is facing significant challenges, including an ageing population and an ageing health workforce; changing burden of disease, in particular a growing level of chronic disease; and increased demand for health services with higher numbers of people requiring complex and long-term care. To achieve HWA's goal of building a sustainable health workforce that meets Australia's healthcare needs, health workforce planning is essential – and in health workforce planning, understanding the number and characteristics of the existing health workforce is the essential first step.

Australia's Health Workforce Series describes particular professions, settings and issues of interest to aid workforce planning. This issue of Australia's Health Workforce Series examines podiatrists, bringing together available information to describe the podiatrist workforce, including number and characteristics, potential data sources to measure workforce activity, and an analysis based on information presented.

This publication is divided into four main parts:

1. **What is a podiatrist?** – a brief overview of the podiatrist role and training pathway, and descriptions of the key regulatory bodies and peak associations
2. **What is known about the podiatrist workforce** – presentation of data from different sources, describing the number and characteristics of the workforce, student and migration inflows into the workforce, and potential data sources that could be used to measure workforce activity
3. **What issues are expected to impact supply and/or demand for podiatrists** – a summary of issues obtained through stakeholder consultation
4. **HWA's assessment of the workforce** – including an assessment of existing workforce position (whether workforce supply matches demand for services or not); presentation of a set of workforce dynamics indicators, used to highlight aspects of the current workforce that may be of concern into the future; and a comparison of the podiatrist workforce's key characteristics with other registered health occupations.

What is a podiatrist?

A podiatrist is a primary healthcare practitioner for the feet and related lower limbs. Podiatrists regularly perform assessments, give advice and treatment for skin and nail conditions of the feet, provide footwear advice and modification, treat diabetic feet complications and perform surgical treatment of ingrown toenails. Through their understanding of gait and biomechanics, podiatrists apply physical and soft-tissue therapies to the feet and related lower limb, as well as prescribe shoe inserts such as heel lifts, and a variety of orthoses[1].

Podiatrists work in a variety of settings including private practice, community health centres, hospitals, sports medicine clinics and nursing homes. Podiatrists also work as part of health-care teams, often consulting with other healthcare practitioners, requesting x-rays, ultrasounds and providing referrals to relevant specialists within the healthcare system, when managing feet or feet-related problems[2].

Podiatrists can undergo postgraduate training to become a podiatric surgeon, which enables them to perform reconstructive surgery of the feet and ankle. Podiatrists can also hold a scheduled medicine endorsement. Podiatrists with an endorsement are able to prescribe or supply scheduled medicines to the extent of the authority conferred under the drugs and poisons legislation in the jurisdiction in which they practice.

Podiatry is a registrable health profession under the National Registration and Accreditation Scheme (NRAS). Therefore a practitioner must be registered with the Podiatry Board of Australia to practise as a podiatrist.

How are podiatrists trained?

To become a podiatrist, a person generally needs to complete an accredited program of study in the tertiary sector. Exceptions to this are overseas-trained podiatrists who have been assessed as having equivalent skills and qualifications to an Australian-trained podiatrist, and have obtained registration with the Podiatry Board of Australia; and podiatrists who completed their training prior to the implementation of the NRAS, and joined the register under transitional arrangements.

Accredited programs of study include a Bachelor of Health Science majoring in podiatry, a Bachelor of Podiatry (three or four year programs available), or postgraduate (Masters) podiatry programs. Masters programs are accelerated two-year programs that provide an alternative pathway into the profession for individuals who have a suitable health-related bachelor degree (or equivalent).

Two qualifications are currently accepted for consideration towards eligibility for specialist recognition in podiatric surgery – Fellowship or eligibility for Fellowship of the Australasian College of Podiatric Surgeons, and a Doctor of Clinical Podiatry though the University of Western Australia.

Associations

Australasian Podiatry Council (APodC)

The APodC is responsible for preparation of national policies and clinical practice, representation and advocacy of the profession to national government and industry bodies and research within the discipline. APodC also represents the podiatry profession on a range of national peak groups including the National Diabetes Network, the National Allied Health Classification Committee and at Allied Health Professions Australia[3]. Representatives of each state member association or organisation (see below) sit on the Board of the APodC.

1 Unpublished report. Current Scope of Podiatry Practice in Australia.
2 Australian Podiatry Association (Vic) website: http://www.podiatryvic.com.au/Podiatrists/Podiatry.htm. Accessed 6 November 2012.
3 The Australasian Podiatry Council website. http://www.apodc.com.au/the-council. Accessed 6 November 2012.

Australian Podiatry Associations (APodAs)

The APodAs are the professional associations, with membership open to all registered podiatrists. APodAs are comprised of associations/companies in each state, with each state association holding membership with the APodC. On behalf of its members, the APodAs represent the profession to their local government, community and other professional bodies, as well as acting as a contact point for the public.

Australasian College of Podiatric Surgeons (ACPS)

The ACPS is a national organisation whose roles include the development, implementation and monitoring of guidelines for the practice and training of podiatric surgery within Australia[4] .

Regulatory and Accreditation bodies

Podiatry Board of Australia (the Board)

Functions of the Board include registering podiatrists and students, developing standards, codes and guidelines for the podiatry profession, handling notifications, complaints, investigations and disciplinary hearings, assessing overseas-trained practitioners who wish to practice in Australia and approving accreditation standards and accredited courses of study[5].

Australia and New Zealand Podiatry Accreditation Council (ANZPAC)

ANZPAC is an independent organisation that assesses and accredits podiatry education programs. ANZPAC also assess the qualification and skills of overseas-trained podiatrists for skilled migration to Australia or suitability to practice in Australia and New Zealand[6].

What is known about this workforce?

In workforce planning, the first key step is to understand the existing workforce. In this section information is presented from a range of sources to describe the existing size and characteristics of the podiatry profession.

Data sources and limitations

National Health Workforce Dataset (NHWDS)

The NHWDS combines data from the NRAS with podiatry workforce survey data collected at the time of annual registration renewal. The podiatry workforce survey is administered through the national registration body, the Australian Health Practitioner Regulation Agency, on behalf of Health Workforce Australia. The podiatry NHWDS was collected for the first time in 2011, with data for 2011 and 2012 presented in this report. The overall response rate to the podiatry workforce survey was 88.5 per cent in 2011 and 91.9 per cent in 2012. As it is a new collection, the NHWDS shows the current characteristics of the podiatry workforce.

4 The Australasian College of Podiatric Surgeons website. http://www.acps.edu.au/about.php. Accessed 25 November 2013.
5 The Podiatry Board of Australia website. http://www.podiatryboard.gov.au. Accessed 19 March 2013.
6 The Australian and New Zealand Podiatry Accreditation Council. http://www.anzpac.org.au/about_us.html. Accessed 25 November 2013.

Australian Bureau of Statistics (ABS) Census of Population and Housing

The census is a descriptive count of everyone who is in Australia on one night, and of their dwellings. Its objective is to accurately measure the number and key characteristics of people who are in Australia on census night, and of the dwellings in which they live. Information in the census is self-reported, meaning information is dependent on individuals' understanding and interpretation of the questions asked. In particular for information on occupation, a person may self-report as working in a particular occupation, but not necessarily be appropriately qualified/meet registration standards (where a registrable profession). However, the census is able to provide a picture of the changing size and characteristics of the reported podiatry workforce, which is not currently available through the NHWDS.

The Department of Education (DE)

The DE conducts the Higher Education Statistics Collection, which provides a range of information on the provision of higher education in all Australian universities. Information on higher education commencements and completions by field of education is presented in this publication. Cautions to note with the DE data:

- Information may include courses allocated to the podiatry field of education that do not lead to registration as a podiatrist. That is, it may include students in non-accredited courses.
- The accuracy of coding courses to field of education is the responsibility of each university, and is subject to the knowledge of those allocating the codes.
- Information includes combined courses where the course has been allocated to two fields of education. Combined courses are courses designed to lead to a single combined award or to meet the requirements of more than one award.

Department of Immigration and Border Protection (DIBP)

DIBP information is administrative by-product data, reporting the number of temporary and permanent visa applications granted to podiatrists.

National Health Workforce Dataset: Podiatrists

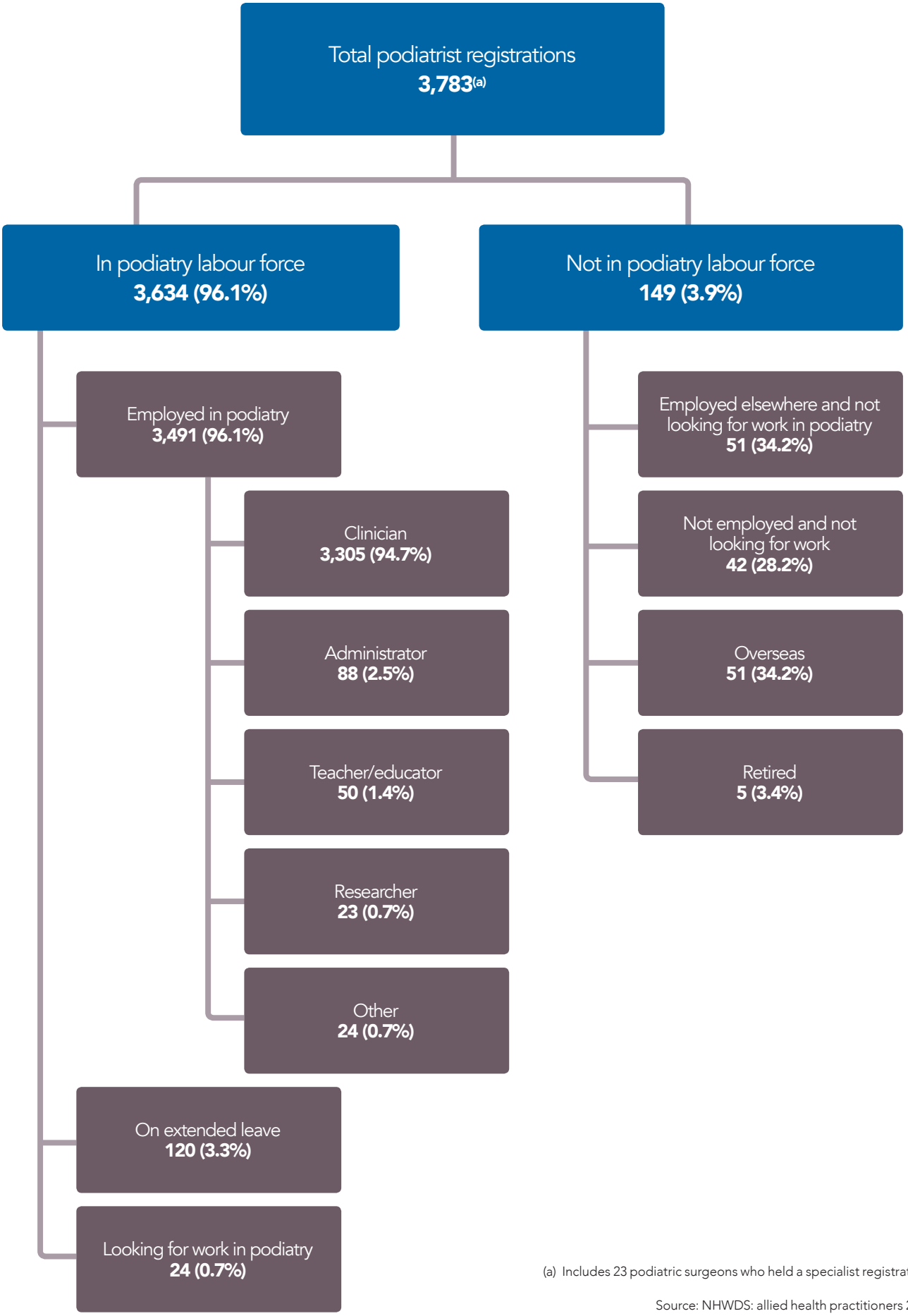
As noted, the NHWDS for podiatrists was first collected in 2011. Information is collected from podiatrists at the time of their annual registration renewal (for most practitioners, registration renewal is due in October and November). In this section, information focuses on describing the number and characteristics of employed podiatrists.

Please note, in the NHWDS, the term 'employed' means a practitioner who worked for a total of one hour or more in the week before the survey in a job or business (including own business) for pay, commission, payment in kind or profit; or usually worked but was on leave for less than three months, or on strike or locked out, or rostered off. Also, for podiatrists, data on gender was unavailable for a significant percentage of the Victorian podiatry workforce, with national data consequently affected. Where the percentage of females appears in tables, it was calculated excluding those with gender unknown or not stated.

Labour force status

In 2012 there were 3,783 podiatrists registered in Australia, with the majority (96 per cent or 3,634) in the podiatry labour force (either working, looking for work, or on extended leave). Of those in the podiatry labour force, most (96.1 per cent or 3,491 podiatrists) were working at the time of the survey. Within this, the overwhelming majority were working as clinicians, that is, practitioners who spend the majority of their time undertaking activities related to the diagnosis, care, and treatment, including recommending preventative action, of patients or clients (figure 1).

Figure 1: registered podiatrists by labour force status, 2012



(a) Includes 23 podiatric surgeons who held a specialist registration.

Source: NHWDS: allied health practitioners 2012

Age and gender

Table 1 shows that of those employed podiatrists where gender is recorded, over half were female. However there were a significant number of employed podiatrists without gender recorded on their registration, making comparisons difficult.

Table 1: number of employed podiatrists by gender, 2011 and 2012

	2011	2012	% increase
Male	1,066	1,165	9.3
Female	1,455	1,606	10.4
Not stated/ inadequately described	795	719	-9.6
Persons	**3,316**	**3,491**	**5.3**
% Female[(a)]	57.7	57.9	. .

(a) calculated excluding those where gender not stated/inadequately described

Source: NHWDS: allied health practitioners 2011 and 2012

Table 2 shows employed podiatrists had an average age of approximately 38 years, with less than 10 per cent aged 55 years or over. There was little difference in the age profile of male and female podiatrists, both in terms of their average age and the percentage aged 55 or more.

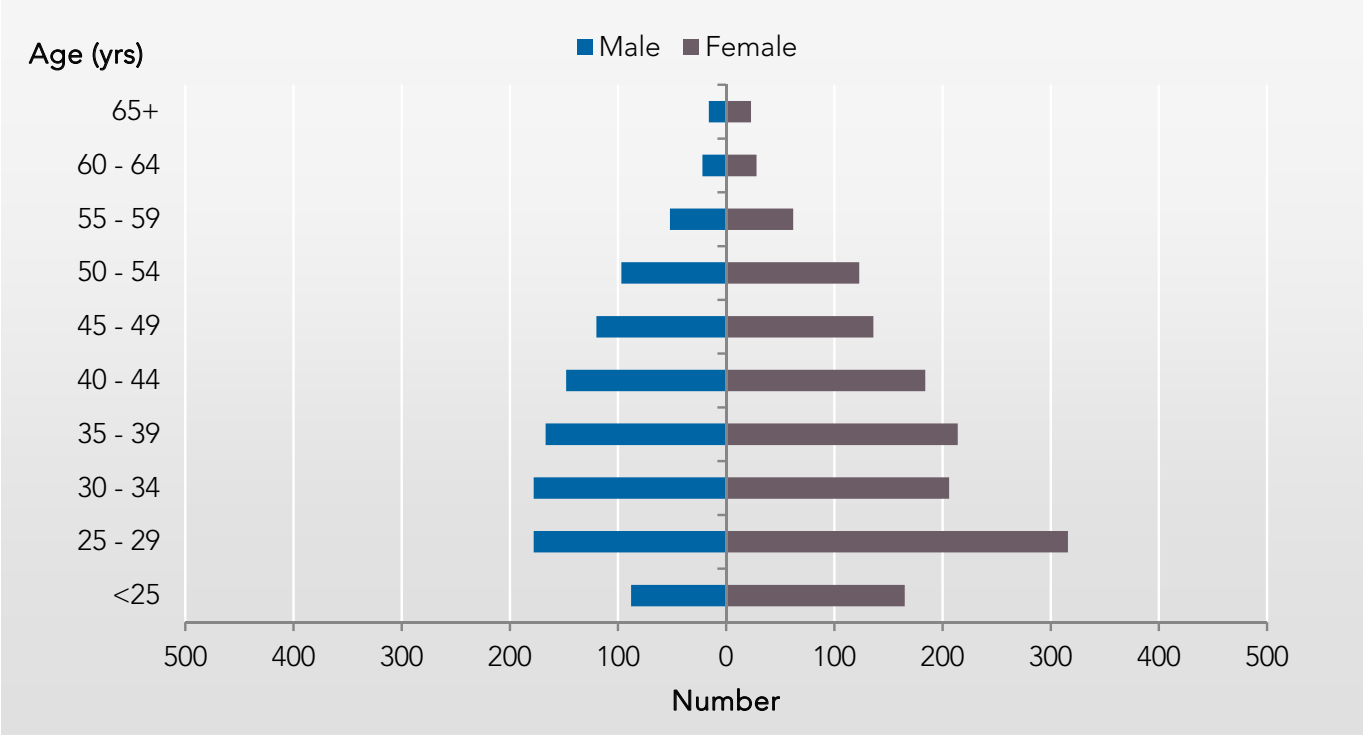
Table 2: employed podiatrists, age profile by gender, 2011 and 2012

	Average age (years)		Percentage aged 55 and over	
	2011	2012	2011	2012
Male	38.4	38.2	8.4	9.6
Female	37.2	37.0	7.7	7.8
Persons	**37.5**	**37.6**	**7.6**	**8.2**

Source: NHWDS: allied health practitioners 2011 to 2012

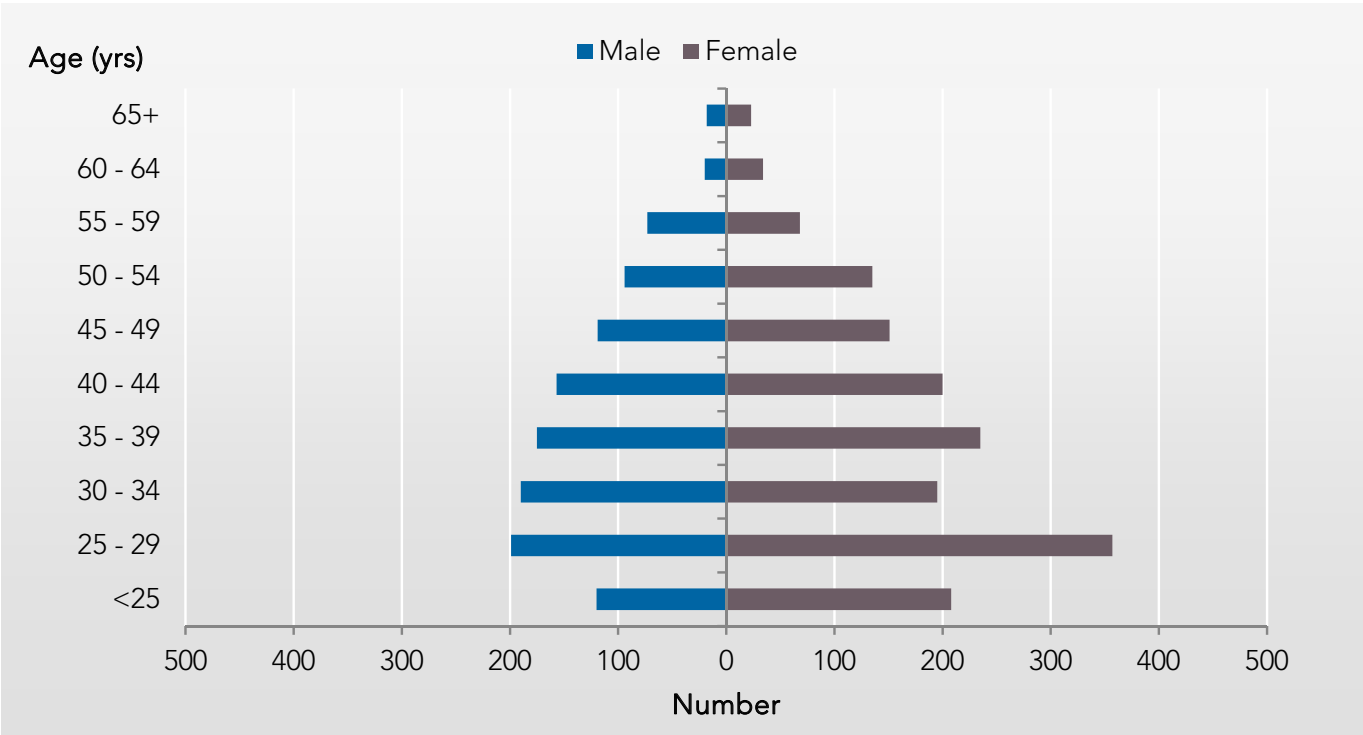
Figures 2 and 3 show the number of (known) employed male and female podiatrists by five-year age cohorts. Of those with their gender recorded, the highest numbers of employed male and female podiatrists were in the 25-29 age cohort in 2011 (178 males and 316 females) and 2012 (199 males and 357 females). There were more females in this age group than any other male or female cohort.

Figure 2: number of employed podiatrists by age cohort and gender, 2011



Source: NHWDS: allied health practitioners 2011

Figure 3: number of employed podiatrists by age cohort and gender, 2012



Source: NHWDS: allied health practitioners 2012

Hours worked

Male podiatrists worked longer average weekly hours than female podiatrists, by approximately six and a half hours per week in both 2011 and 2012. There was almost no change in the total average weekly hours worked between 2011 and 2012 (table 3).

Table 3: employed podiatrists, average weekly hours worked by gender, 2011 and 2012

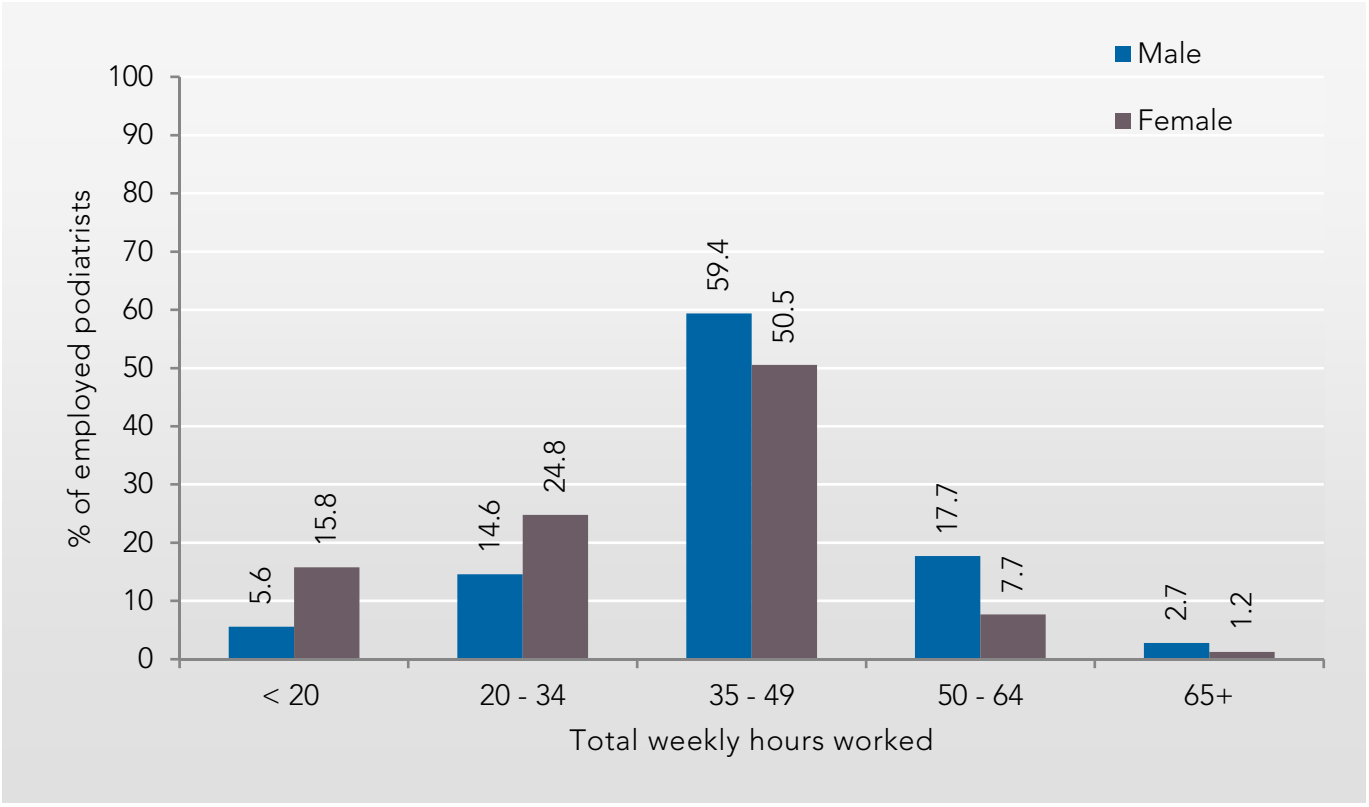
	2011		2012	
	Average weekly hours	Full-time equivalent[a]	Average weekly hours	Full-time equivalent[a]
Males	40.5	1,135	40.4	1,240
Females	34.1	1,304	33.9	1,431
Persons[b]	**36.6**	**3,190**	**36.4**	**3,348**

(a) FTE calculated on a 38 hour week
(b) Includes gender not stated/inadequately described

Source: NHWDS: allied health practitioners 2011 and 2012

Figure 4 shows the largest number of podiatrists worked between 35-49 hours per week in 2012, accounting for approximately 50 per cent of females (811) and 60 per cent of males (692). Males were more likely to work between 50-64 hours than females, while females were more likely to work below 35 hours per week.

Figure 4: employed podiatrists by total weekly hours worked, 2012



Source: NHWDS: allied health practitioners 2012

Years worked

On average, podiatrists had been employed in podiatry for approximately 12 years in 2011 and 2012 (table 4). Despite there being little change in total average years worked between 2011 and 2012, there were more substantial changes in the average years worked by teachers or educators, and podiatrists with other principal roles over the period – increasing approximately three and four years respectively. Few podiatrists reported working in these roles (refer figure 1), so this had little impact on overall average years worked. It should be noted with the small numbers in these roles, small changes in survey responses can have substantial impacts on survey results.

Table 4: Employed podiatrists, average years worked by principal role, 2011 and 2012

Principal role	2011	2012
Clinician	12.0	11.7
Administrator	14.4	14.6
Teacher or educator	12.2	15.5
Researcher	12.3	10.7
Other	13.4	17.3
Total	**12.1**	**11.6**

Source: NHWDS: allied health practitioners 2011 and 2012

Aboriginal and Torres Strait Islander status

The number of podiatrists of Aboriginal and Torres Strait Islander status accounted for less than one per cent of all employed podiatrists in 2011 and 2012 (table 5).

Table 5: number of employed podiatrists reporting Aboriginal and Torres Strait Islander status, 2011 and 2012

	2011	2012
Male	8	3
Female	3	4
Not stated/Inadequately described	3	3
Persons	**13**	**10**
% of all employed podiatrists	**0.4**	**0.3**

Source: NHWDS: allied health practitioners 2011 and 2012

Table 6 shows selected characteristics of those podiatrists of Aboriginal and Torres Strait Islander status. Care should be taken when interpreting these figures due to the small number of Aboriginal and Torres Strait Islander practitioners.

Table 6: employed podiatrists reporting Aboriginal and Torres Strait Islander status, average age and average hours worked, 2011 and 2012

	Average age (years)		Average hours worked	
	2011	2012	2011	2012
Male	37.0	41.1	33.1	43.3
Female	34.8	35.9	37.7	29.9
Persons	**35.4**	**36.3**	**35.9**	**34.8**

Source: NHWDS: allied health practitioners 2011 and 2012

Country of first qualification

Most employed podiatrists (88 per cent or 3,057) gained their initial qualification in Australia. The characteristics of overseas-trained podiatrists differed to those of Australian-trained:

- New Zealand trained podiatrists had a lower average age.
- Other overseas-trained podiatrists were substantially older, with a higher average age and percentage aged 55 years or more.
- Both New Zealand and other overseas-trained podiatrists had higher percentages of females, and worked slightly longer average weekly hours than Australian-trained podiatrists (table 7).

Table 7: selected characteristics of employed podiatrists by country of first qualification, 2012

Country of initial qualification	Number	Average age	% aged 55+	% female[(a)]	Average weekly hours worked	FTE[(b)]
Australia	3057	37.1	7.3	57.8	36.2	2913
New Zealand	106	35.7	7.0	60.6	38.8	108
Other country	303	43.4	18.1	58.2	38.1	304
Not stated/ inadequately described	24	35.1	0	60.8	35.4	22
Total	**3491**	**37.6**	**8.2**	**57.9**	**36.4**	**3348**

(a) calculated excluding those where gender not stated/inadequately described.
(b) FTE calculated on a 38 hour week

Source: NHWDS: allied health practitioners 2012

Sector and setting

Table 8 shows the number of podiatrists conducting clinical work in the public and private sectors in 2012. A higher number of podiatrists worked in the private sector, which reflects the high prevalence of podiatrists in private practice (shown in table 9).

Podiatrists may undertake clinical work in both the private and public sector. Full-time equivalent calculations account for hours worked in each sector, and show that most podiatrists' clinical work is in the private sector.

Table 8: employed podiatrists undertaking clinical work by sector, 2012

	Public	Private
Number	888	2,960
Clinical FTE[(a)]	536	2,308

(a) FTE calculated on a 38 hour week

Source: NHWDS: allied health practitioners 2012

Approximately two-thirds of podiatrists were employed in private practice. Small numbers of podiatrists worked in other areas – the only other two work settings accounting for more than five per cent of employed podiatrists were community healthcare services (ten per cent) and hospitals (nine per cent).

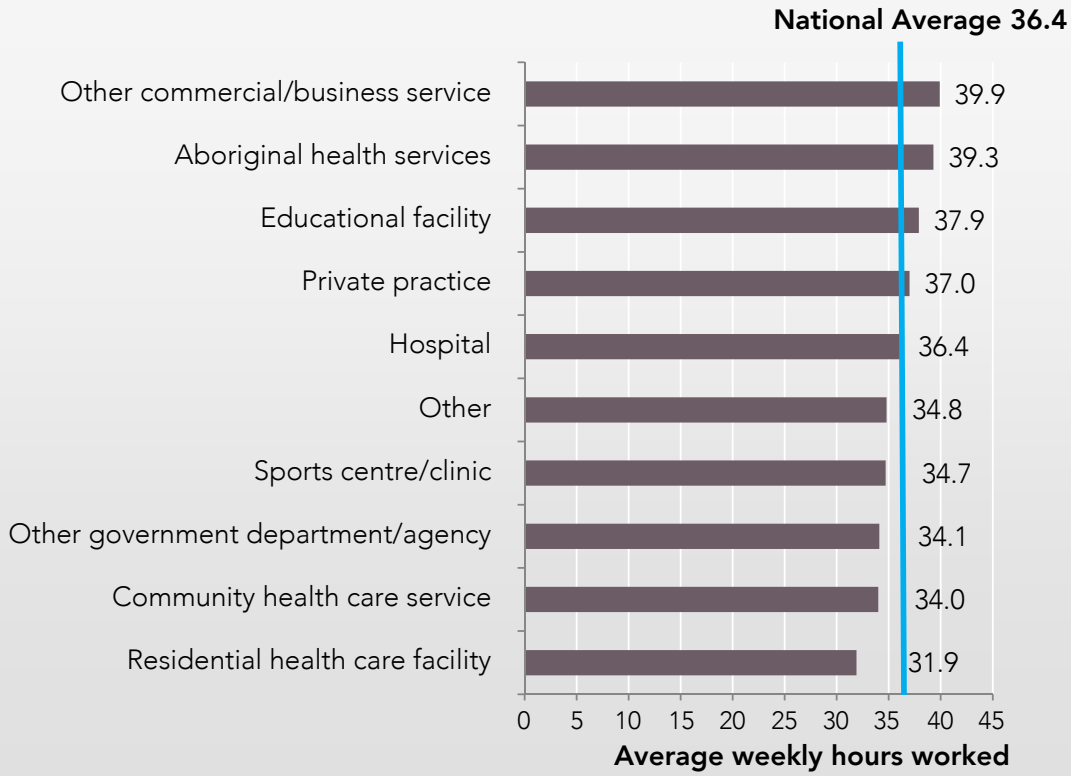
Table 9: Number of employed podiatrists by work setting of main job, 2011 and 2012

Setting	2011	2012		% change 2011 to 2012
	Number	Number	% of total	
Private practice	2,222	2,402	68.7	8.1
Aboriginal health service	27	26	0.7	-3.7
Community healthcare service	362	345	9.9	-4.7
Hospital	295	312	8.9	5.8
Residential healthcare facility	126	147	4.2	16.7
Sports centre/clinic	41	49	1.4	19.5
Other commercial/business services	8	11	0.3	37.5
Educational facility	56	56	1.6	0.0
Other government department or agency	6	18	0.5	200.0
Other	37	33	0.9	-10.8
Inadequately described/not stated	132	90	2.6	-31.8
Total	**3,313**	**3,494**	**100.0**	**5.5**

Source: NHWDS: allied health practitioners 2011 and 2012

Average weekly hours worked by podiatrists in different settings ranged from a low of 32 in residential healthcare facilities to a high of 40 in other commercial/business services (figure 5). As highlighted in table 9, most podiatrists work in private practice, consequently the average weekly hours worked in private practice (37) closely reflected the national average (36).

Figure 5: employed podiatrists, average weekly hours worked by work setting, 2012



Source: NHWDS: allied health practitioners 2012

Distribution

Information from the NHWDS on the distribution of the podiatrist workforce is based on survey respondents' reported location of main job.

State and territory

Victoria recorded the highest number of employed podiatrists nationally, despite having a smaller population than New South Wales and a population similar in size to Queensland. This may reflect students choosing to study podiatry at LaTrobe University, which has a number of accredited podiatry programs.

On a per 100,000 population basis, South Australia had the highest number of podiatrists (21.1 per 100,000 population), followed by Victoria (19.9). Victorian podiatrists were typically younger than podiatrists in other states and territories, while the Australian Capital Territory was the only state or territory to record an average age over 40, also having almost one in five podiatrists aged 55 or more. Podiatrists in the Northern Territory recorded the highest average hours figure per week, while Western Australian podiatrists recorded the lowest (table 10).

Due to the significant percentage of podiatrists in Victoria with gender not available (and the consequent national impact on this data item), comparisons of the percentage of female podiatrists across states and territories should be conducted with caution.

Table 10: selected characteristics of employed podiatrists by state and territory, 2011 and 2012

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
2012									
Number	919	1,123	584	349	366	89	13	46	**3,491**
No. per 100,000 population	12.6	19.9	12.8	21.1	15.0	17.4	5.5	12.3	**15.4**
Average age	39.6	35.8	36.5	38.7	38.0	39.5	38.2	41.9	**37.6**
% aged 55 and over	11.5	5.5	5.3	10.2	7.9	12.0	15.3	19.6	**8.2**
Average hours worked	37.6	35.6	38.2	35.9	33.7	36.5	39.2	36.2	**36.4**
% female[(a)]	57.0	59.8	57.1	59.2	59.7	56.0	45.8	54.6	**57.9**
2011									
Number	857	1,065	569	343	337	85	16	43	**3,316**
No. per 100,000 population	11.9	19.2	12.7	20.9	14.3	16.6	6.9	11.7	**14.8**
% change in number 2011 to 2012	7.2	5.4	2.6	1.7	8.6	4.7	-18.8	7.0	**5.3**

(a) Calculated excluding those where gender not stated or inadequately described.

Source: NHWDS: allied health practitioners 2011 to 2012, ABS, Australian Demographic Statistics, Dec 2012, cat. no. 3101.0

Remoteness area

The remoteness area (RA) structure is a geographic classification system produced by the ABS and is used to present regional data. The RA categories are defined in terms of the physical distance of a location from the nearest urban centre (access to goods and services) based on population size.

In 2012, the number of employed podiatrists per 100,000 population reduced with increasing remoteness, from 16.5 employed podiatrists per 100,000 population in major cities to 3.4 in very remote areas (table 11).

Table 11: selected characteristics of employed podiatrists by remoteness area, 2011 and 2012

	Major cities	Inner regional	Outer regional	Remote[a]	Very remote[a]	Australia
2012						
Number	2,638	610	207	23	7	**3,491**
No. per 100,000 population	16.5	14.7	10.1	7.2	3.4	**15.4**
Average age	37.6	37.7	37.7	37.0	40.7	**37.6**
% aged 55 and over	8.1	8.8	7.0	8.8	13.7	**8.2**
Average hours worked	36.3	36.8	37.4	34.5	39.0	**36.4**
% female[b]	55.9	63.6	63.7	82.1	29.3	**57.9**
2011						
Number	2,509	563	210	20	8	**3,316**
No. per 100,000 population	16.0	13.7	10.4	6.4	3.9	**14.8**
% change 2011 to 2012	5.1	8.3	-1.4	15.0	-12.5	**5.3**

(a) Care should be taken when interpreting the figures for Remote and Very remote areas due to the relatively small number of employed podiatrists who reported their main job location was in these regions.
(b) calculated excluding those where gender not stated or inadequately described.

Source: NHWDS: allied health practitioners 2011 to 2012, ABS, Regional Population Growth, Australia, 2012, cat. no. 3218.0.

Medicare Local regions

In 2011 the Australian government established 61 Medicare Locals across Australia. The Commonwealth government funds these organisations to plan, fund and deliver healthcare services at a local level, with each Medicare Local covering a defined geographic area.

Table 12 shows the Medicare Local regions with the highest and lowest rate of employed podiatrists per 100,000 population, by primary place of work (a full list of Medicare Locals is included as appendix 1). Please note, data in this table shows the number of podiatrists per 100,000 population working in the relevant Medicare Local region, and provides a useful refection of the geographical distribution of podiatrists – it does not reflect podiatrists employed by Medicare Local organisations.

As can be expected, Medicare Locals with the highest rates of employed podiatrists per 100,000 population were in metropolitan areas, while Medicare Locals with the lowest rates of employed podiatrists were located in regional and remote areas.

Table 12: number of employed podiatrists per 100,000 population by selected Medicare Local regions, 2012

Highest			Lowest		
State/ Territory	Medicare Local	Rate	State/ Territory	Medicare Local	Rate
SA	Central Adelaide and Hills	30.2	NSW	Far West NSW	5.2
VIC	Inner North West Melbourne	28.7	NT	Northern Territory	5.5
VIC	Loddon – Mallee - Murray	27.9	WA	Kimberley - Pilbara	5.9
VIC	Bayside	25.5	QLD	Far North Queensland	6.8
WA	Perth Central and Metro	24.7	NSW	Western Sydney	7.2

Source: NHWDS: allied health practitioners 2012

ABS Census of Population and Housing

While the NHWDS provides a picture of the number and characteristics of the current podiatrist workforce, historical information showing trends in the podiatrist workforce is not currently available from this source (although as it is an annual collection, this is a short-term issue only). Census information is self-reported, so people may report as a podiatrist without being a registered practitioner. However, the census provides a picture of the changing number and characteristics of the reported podiatrist workforce, which is not currently available through the NHWDS.

In the Census, the Australian and New Zealand Standard Classification of Occupations (ANZSCO) is used to publish occupation statistics. In ANZSCO, a podiatrist is defined as 'someone who prevents, diagnoses and treats disorders of the feet'.

Please note, information is presented for people who self-reported as an employed podiatrist in the Census (regardless of level of education). This includes those people working for an employer or conducting their own business, including those with their own incorporated company as well as sole traders, partnerships and contractors. Also, the ABS randomly adjusts cells to avoid the release of confidential data, so there can be slight discrepancies in totals when comparing census tables.

Age and gender

Between 1996 and 2011 the number of employed podiatrists in Australia almost doubled, from 1,459 to 2,803 (up 92 per cent). The majority of those employed in 2011 were female (61 per cent). This was a slight fall from 1996 (64 per cent), indicating that male podiatrists increased at a greater rate than females over this time (table 13).

Table 13: number of employed podiatrists by gender, 1996 to 2011

	1996	2001	2006	2011	% increase 1996 to 2011
Males	527	673	806	1,091	106.5
Females	932	1,083	1,290	1,712	83.9
Persons	**1,459**	**1,756**	**2,096**	**2,803**	**92.0**
% female	63.9	61.7	61.5	61.1	. .

Source: ABS Census of Population and Housing, 1996 to 2011

Table 14 shows the percentage of podiatrists aged 55 or more reduced by approximately four percentage points from 1996 to 2011 – a result of younger female workforce entrants. Consequently, it can be expected average age would also have reduced between the two selected census years.

Table 14: employed podiatrists, age profile by gender, 1996 and 2011

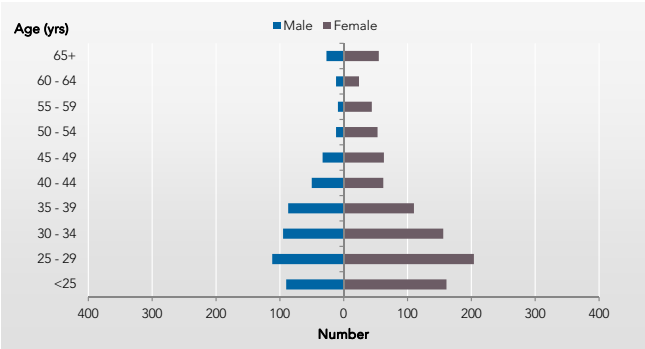
	Average age		Percent aged 55 and over	
	1996	2011	1996	2011
Males	n.a	38.6	9.1	8.5
Females	n.a	37.3	13.2	7.3
Persons	**n.a**	**37.8**	**11.7**	**7.8**

Source: ABS Census of Population and Housing, 1996 and 2011

Figures 6 to 9 show a detailed age and gender breakdown of employed podiatrists for each selected census year. The increasing number of younger people entering and moving through each age group can clearly be seen.

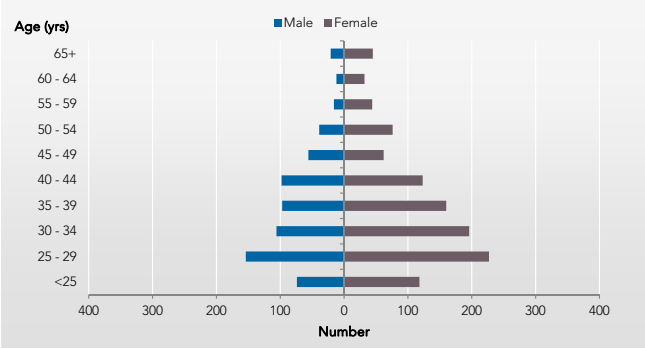
Results from 2011 show a clear peak in new entrants to the podiatry workforce, with over 500 females and over 300 males aged less than 30 in the workforce. These are the highest numbers in this age bracket across the selected census years.

Figure 6: number of employed podiatrists by age and gender, 1996



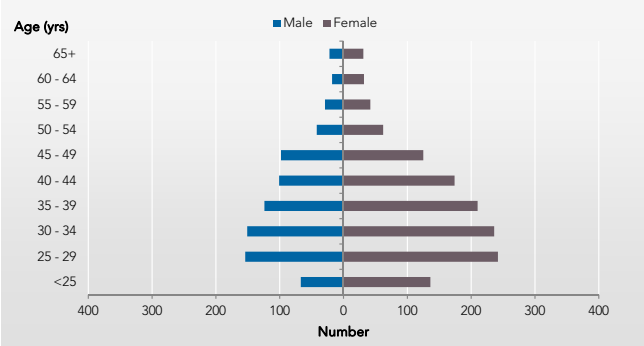
Source: ABS Census of Population and Housing, 1996

Figure 7: number of employed podiatrists by age and gender, 2001



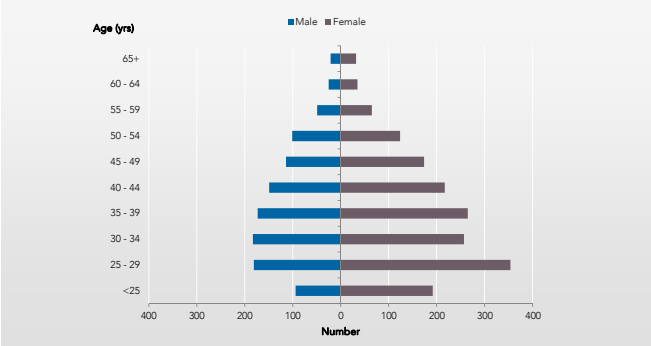
Source: ABS Census of Population and Housing, 2001

Figure 8: number of employed podiatrists by age and gender, 2006



Source: ABS Census of Population and Housing, 2006

Figure 9: number of employed podiatrists by age and gender, 2011

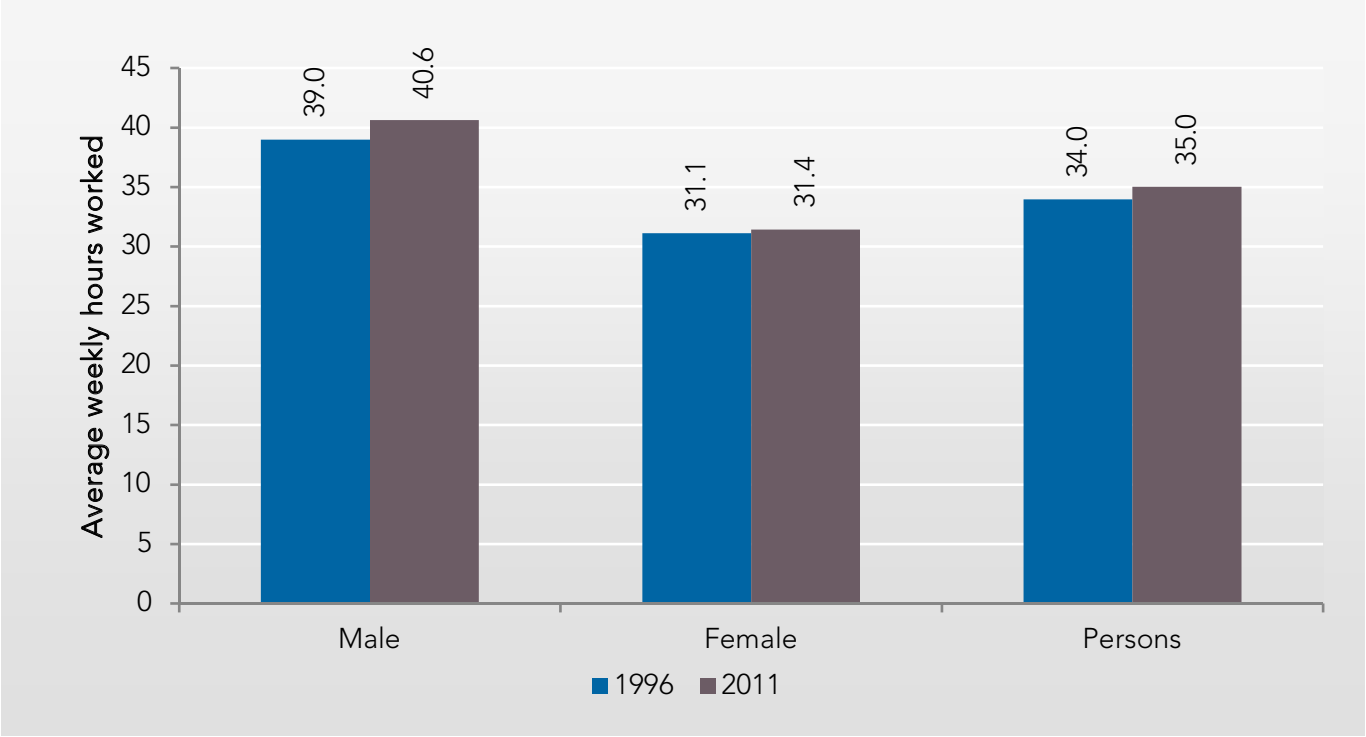


Source: ABS Census of Population and Housing, 2011

Hours worked

Podiatrists' average weekly hours worked experienced little change from 1996 (with an average of 34 hours per week) to 2011 (35 hours per week). Males recorded a slight increase in average weekly hours worked (of 1.6 hours), while females remained virtually unchanged (0.3 hours per week increase). As was the case with data from the NHWDS, males worked longer hours than females, however the overall hours worked figure more closely reflected that of females due to the higher numbers of females in the workforce.

Figure 10: employed podiatrists, average weekly hours worked, 1996 and 2011



Source: ABS Census of Population and Housing, 1996 and 2011

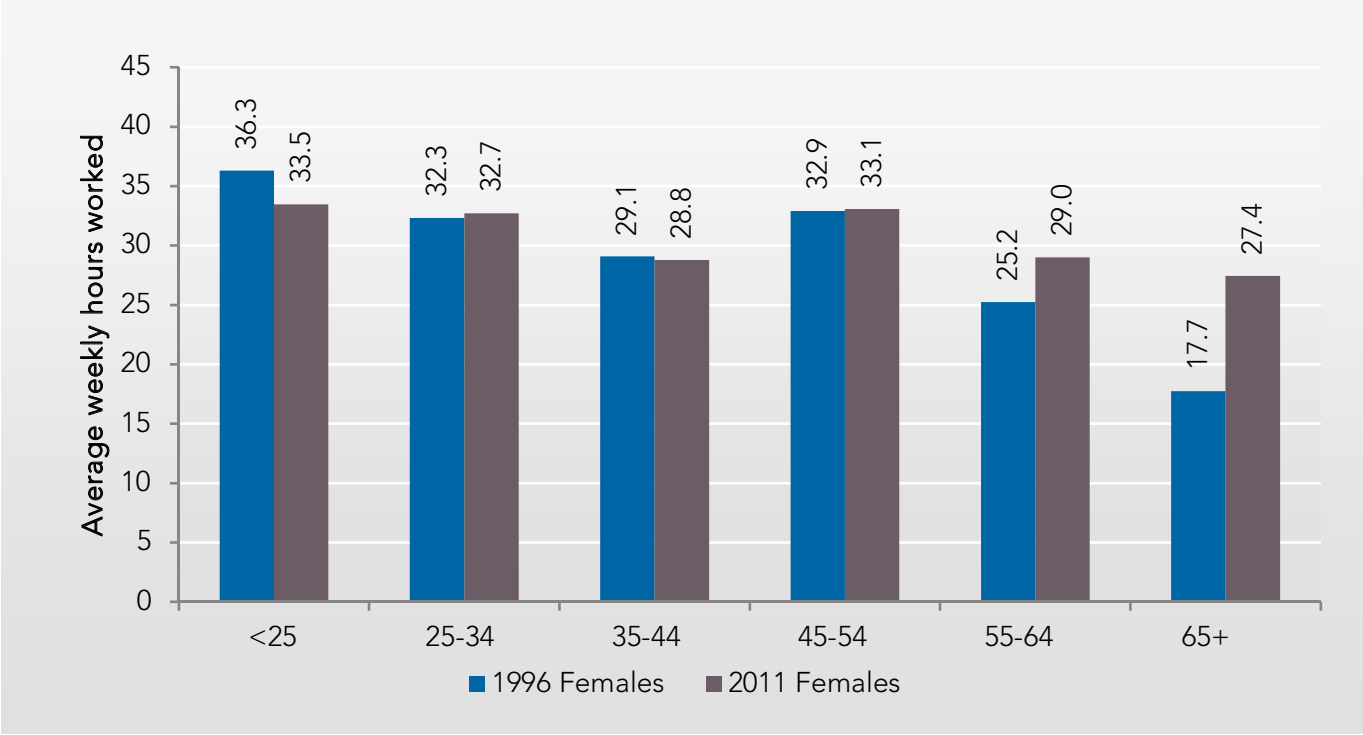
Fluctuations in average hours worked occurred across all groups from 1996 to 2011 (figures 11 and 12). The largest fluctuations occurred in the older age groups for both males and females. Average weekly hours worked for males aged 55 to 64 increased by approximately four hours, and for those aged 65 and over by approximately three hours. For females, the increases were approximately four hours and 10 hours for those aged 55 to 64 and 65 and over respectively.

Despite the large increases, there was little impact on overall average hours worked as only low numbers of employed podiatrists were in these age cohorts.

Figure 11: employed male podiatrists by age and average hours worked, 1996 and 2011

Source: ABS Population of Census and Housing, 1996 and 2011

Figure 12: employed female podiatrists by age and average hours worked, 1996 and 2011



Source: ABS Population of Census and Housing, 1996 and 2011

Aboriginal and Torres Strait Islander status

Over the four selected census years, there were very few employed podiatrists of Aboriginal and Torres Strait Islander status (table 15).

Table 15: number of employed podiatrists by Aboriginal and Torres Strait Islander status, 1996 to 2011

	1996	2001	2006	2011
Aboriginal and Torres Strait Islander	3	6	12	3
Non-Aboriginal and Torres Strait Islander	1,451	1,755	2,079	2,789
Total[(a)]	**1,463**	**1,761**	**2,100**	**2,807**

(a) Includes Aboriginal and Torres Strait Islander status not stated.

Source: ABS Census of Population and Housing, 1996 to 2011.

Country/region of birth

There was little change in the country/ region of birth profile of employed podiatrists between 1996 and 2011 – with approximately three-quarters of podiatrists Australian-born in both years, followed by those born in the United Kingdom and New Zealand.

Table 16: employed podiatrists – top five countries/regions of birth, 1996 and 2011

1996			2011		
Country/region of birth	**Number**	**%**	**Country/region of birth**	**Number**	**%**
Australia	1,154	79.8	Australia	2,144	76.5
United Kingdom	134	9.3	United Kingdom	253	9.0
New Zealand	34	2.3	New Zealand	85	3.0
Western Europe	19	1.3	Southern and East Africa	45	1.6
Northern America	13	0.9	Maritime South East Asia	35	1.2
Other countries[(a)]	93	6.4	Other countries[(a)]	240	8.6
Total	**1,447**	**100.0**	**Total**	**2,802**	**100.0**

(a) Includes country of birth not stated and inadequately described.

Source: ABS Census of Population and Housing, 1996 and 2011

Education

While the NHWDS provides insight into the roles and work settings that registered podiatrists are employed in, it does not provide information on the levels of qualification held by podiatrists. Census data provides an indicator of the types of qualifications held by those who self-reported as a podiatrist, and also provides information about the occupation of those who have qualifications in podiatry but are not working as podiatrists.

Table 17 shows the number of people who reported their highest level of qualification in podiatry, by the type of qualification and the occupation they reported as working in at the time of the 2011 census.

Most people with their highest level of qualification in podiatry reported a bachelor degree as their highest level of qualification (1,952).

Those with their highest level of qualification in podiatry most commonly reported an occupation of 'professional' (2,482), and within this, almost all reported an occupation of podiatrist (2,400).

It should be noted current registration standards generally require a podiatrist to have completed an accredited bachelor qualification in podiatry (refer to 'how are podiatrists trained?'). Those people who self-reported as a podiatrist with an advanced diploma or diploma (439) as their highest level of qualification may have gained registration under transitional arrangements during the implementation of the NRAS, or they may not actually meet current registration standards to be recognised as a podiatrist.

Table 17: Employed persons, highest level of qualification in podiatry, by type of qualification and occupation, 2011

	Highest level of qualification					
Occupation	Postgraduate degree	Graduate diploma and graduate certificate	Bachelor degree	Advanced diploma and diploma	Certificate	Total[(a)]
Professionals	100	66	1,824	444	26	2,482
Podiatrists	*84*	*60*	*1,776*	*439*	*19*	*2,400*
Other occupations	3	5	128	101	13	250
Total	**103**	**71**	**1,952**	**545**	**39**	**2,748**

(a) Includes level of education inadequately described and level of education not stated.

Source: ABS Census of Population and Housing, 2011.

Sector of employment

In all selected census years, most podiatrists were employed in the private sector. In 1996 approximately 85 per cent of the profession worked in the private sector, increasing slightly to 87 per cent in 2011.

Of those employed in the government sector, almost all were employed at the state/territory level, with very low numbers reporting as being employed by the Commonwealth Government (table 18).

Table 18: Number of employed podiatrists by sector of employment, 1996 to 2011

Sector	1996	2001	2006	2011
Commonwealth government	9	9	3	7
State and territory government	185	275	259	336
Private	1,241	1,460	1,816	2,451
Total[(a)]	**1,460**	**1,765**	**2,099**	**2,803**

(a) Includes local government and sector not stated.

Source: ABS Population of Census and Housing, 1996 to 2011

Podiatrists almost exclusively worked in the healthcare and social assistance industry between 1996 and 2011, with very low numbers working in other industries. Among those working in healthcare and social assistance, the large majority worked in 'other allied health services' (which includes podiatry services), with hospitals being the only other common setting for podiatrists (table 19).

Table 19: number of employed podiatrists by industry, 1996 to 2011

Industry	1996	2001	2006	2011
Healthcare and social assistance	1,389	1,750	2,049	2,743
Other allied health services	*1,038*	*1,443*	*1,657*	*2,194*
Hospitals	115	87	222	298
Other industries	13	15	47	59
Total	**1,402**	**1,765**	**2,096**	**2,802**

Source: ABS Census of Population and Housing, 1996 to 2011.

Distribution

Information from the census on the distribution of the podiatrist workforce is based on place of usual residence (not place of work).

State and territory

The number of employed podiatrists increased across all states and territories from 2006 to 2011, with the largest increases occurring in Victoria (256), followed by New South Wales (197). The Victorian increase accounted for over one-third (36 per cent) of the national increase in employed podiatrists between 2006 and 2011 (table 20).

In line with experiencing the largest absolute increase in employed podiatrists, Victoria also experienced the greatest increase in employed podiatrists per 100,000 population (up 3.6, from 12.0 to 15.6 employed podiatrists per 100,000 population). As was the case with NHWDS data, South Australia had the highest number of podiatrists per 100,000 in both Census years (17.5 in 2011). The Australian Capital Territory was the only state or territory where the number of employed podiatrists per 100,000 population fell from 2006 (10.1 per 100,000 population) to 2011 (9.8 per 100,000 population).

Table 20: selected characteristics of employed podiatrists by state and territory, 2006 and 2011

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
2011									
Number	759	864	485	287	287	73	11	36	2802
No. per 100,000 population	10.5	15.6	10.8	17.5	12.2	14.3	4.8	9.8	12.5
Average age	39.4	36.7	35.8	38.4	38.2	34.4	54.7	38.1	37.6
% aged 55 and over	10.5	8.8	3.9	6.9	4.9	6.9	33.3	14.3	7.9
Average hours worked	34.4	33.4	37.0	34.3	30.8	38.4	43.1	39.5	34.4
% female	60.3	64.1	56.9	60.8	61.8	65.6	27.3	61.8	61.1

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUS
2006									
Number	562	608	351	230	247	62	3	34	2,097
No. per 100,000 population	8.3	12.0	8.8	14.8	12.0	12.7	1.4	10.1	10.3
% change in number 2006 to 2011	35.1	42.1	38.2	24.8	16.2	17.7	266.7	5.9	33.6

Source: ABS Census of Population and Housing, 2006 and 2011, ABS, Australian Demographic Statistics, Dec 2012, cat. no. 3101.0

Remoteness area

In both 2006 and 2011, almost all podiatrists were located in either major cities or inner regional areas (table 21). These two categories also recorded the largest increase in the number of employed podiatrists per 100,000 population (both with an increase of 2.3 podiatrists per 100,000 population) from 2006 to 2011.

Table 21: selected characteristics of employed podiatrists by remoteness area, 2006 and 2011

	Major cities	Inner regional	Outer regional	Remote[(a)]	Very remote[(a)]	Australia[(b)]
2011						
Number	2,131	478	174	19	3	2,805
No. per 100,000 population	13.6	11.6	8.6	6.0	1.5	12.6
Average age	37.6	37.9	36.6	29.8	66.0	37.6
% aged 55 and over	7.8	8.8	4.7	0	100	7.8
Average hours worked	33.9	36.1	35.0	40.1	80.0	34.4
% female	59.8	65.6	61.4	81.8	n.a.	61.1
2006						
Number	1,605	356	125	13	0	2,099
No. per 100,000 population	11.3	9.3	6.5	4.3	0.0	10.3
% change in number 2006 to 2011	32.8	34.3	39.2	46.2	. .	33.6

n.a. data not available
(a) Care should be taken when interpreting the figures for Remote and Very remote areas due to the relatively small number of employed podiatrists who reported their usual residence was in these regions.
(b) Includes migratory and no usual residence.

Source: ABS Census of Population and Housing, 2006 and 2011, ABS, Regional Population Growth, Australia, 2012, cat. no. 3218.0.

Workforce inflows

Information on workforce inflows is an important component of workforce planning, to understand how many people are entering the workforce. There are two primary streams to become a podiatrist in Australia – through the education system and through immigration. Information available on both streams is presented in this section.

Students

There are currently two sources of information on podiatry students in Australia – AHPRA and the DE. Information from both sources is presented below.

Registered podiatry students

As outlined earlier, a person needs to complete an accredited program of study to become a podiatrist in Australia. Students gaining a qualification that enables them to practise as a registered health professional usually undertake periods of clinical practice (involving direct patient contact) as a part of their course of study. In the interests of public safety, Health Ministers agreed that monitoring of students undertaking clinical practice is reasonable, and in line with the monitoring of fully qualified health professionals.

Therefore, under the National Law, education providers provide AHPRA the details of people undertaking a Board approved program of study or clinical training. For students enrolled in approved programs of study, student registration commences from the first year of the program (except for psychology, which does not register students).

For students not enrolled in an approved program of study, registration occurs upon commencement of clinical training. Examples of this include:

- When an overseas student arranges a clinical placement as part of the course requirements set out by the education provider in their home country.
- When an education provider is running a course that is accredited by an accreditation authority but is not yet approved by a National Board.
- When an education provider is running a course that has not yet been accredited by an accreditation authority or approved by a National Board[7].

Student registration numbers are cumulative and reflect the number of students who have an active registration on 30 June, based on the expected completion date supplied by the education provider [8].

At 30 June 2013 there were 1,612 registered podiatry students (table 22). A further 128 students were undertaking clinical training that does not currently from part of an approved program of study.

7 AHPRA Fact sheet for education providers: http://www.ahpra.gov.au/Registration/Student-Registrations/fact-sheet-for-education-providers.aspx. Accessed on 6 June 2013

8 Australian Health Practitioner Regulation Agency Annual Report 2012-13

Table 22: number of registered podiatry students, 2011 to 2013

	30 June 2011	30 June 2012	30 June 2013	% increase 2011 to 2013
Approved program of study[a]	1,173	1,552	1,612	37.4
Clinical training[b]	0	120	128	. .

(a) Students enrolled in a course approved by a National Board and leads to general registration.
(b) Students undertaking any form of clinical experience that does not form part of an approved program of study and the person does not hold registration in the health profession in which the clinical training is being undertaken.

Source: AHPRA Annual reports 2010-11, 2011-12 and 2012-13

The Department of Education student numbers

While the AHPRA student registration numbers show the number of students in accredited podiatry courses, it is cumulative only and student characteristics are not published. The DE conducts the Higher Education Statistics Collection, which provides a range of information on the provision of higher education in all Australian universities. From this collection, information is available on the number of student commencements and completions in higher education courses allocated to the podiatry field of education, as well as the characteristics of those students. While this does not specifically include only those students in accredited podiatry courses, it does provide an indication of student trends over time, which can assist with workforce planning.

In this section, information on student commencements and completions in higher education courses allocated to the podiatry field of education is presented.

Cautions to note with the DE data:

- Information may include courses allocated to the podiatry field of education that do not lead to registration as a podiatrist. That is, it may include students in non-accredited courses.
- The accuracy of coding courses to field of education is the responsibility of each university, and is subject to the knowledge of those allocating the codes.
- Information includes combined courses where the course has been allocated to two fields of education. Combined courses are courses designed to lead to a single combined award or to meet the requirements of more than one award.

Student commencements

Table 23 shows the number of commencing podiatry students was relatively consistent across each of the selected years, with a low of 319 in 2009 and a high of 384 in 2012.

Females fell as a percentage of all podiatry student commencements, accounting for approximately two-thirds of commencements in 2008 and falling to 55 per cent in 2012. This suggests an increasing number of male workforce entrants in future years. International students represented only minor numbers of student commencements in each of the years, peaking at 6.8 per cent (26 students) in 2011.

Table 23: number of student commencements within the podiatry field of education, by course type and characteristics, 2008 to 2012

	2008	2009	2010	2011	2012
Bachelor	325	294	342	356	366
Postgraduate	16	25	24	24	18
Total	**341**	**319**	**366**	**380**	**384**
% Female	65.4	62.4	59.3	61.8	54.9
% Overseas	5.9	5.6	6.0	6.8	3.9

Source: Department of Education

Student completions

The characteristics of student completions reflected those of the student commencements, with over half of all podiatry student completions female, and less than ten per cent overseas students across each selected year (table 24).

Table 24: number of student completions within the podiatry field of education by course type and characteristics, 2008 to 2012

	2008	2009	2010	2011	2012
Bachelor	148	178	196	208	190
Postgraduate	12	13	17	22	16
Total	**160**	**191**	**213**	**230**	**206**
% Female	66.9	59.7	60.6	61.7	62.1
% Overseas	4.4	4.2	2.8	7.4	7.3

Source: Department of Education

Immigration

Podiatry appears on the Skilled Occupation List and the Consolidated Sponsored Occupation List. This means that podiatrists can migrate to Australia independently or through sponsored programs including employer, state and territory or regional sponsored schemes.

The ANZPAC is responsible for assessing the skills and qualifications of podiatrists for migration purposes.

For skilled migration purposes, two assessment streams currently exist:

1. Modified assessment – for people who hold registration as a podiatrist with the Podiatry Board of Australia, or have completed a recognised, registrable, entry-level qualification in podiatry at a university in Australia or New Zealand within the two years immediately prior to the date of applying for a migration skills assessment, and
2. Full assessment – for people who could not apply for modified assessment.

In addition to obtaining a visa, overseas-qualified podiatrists wishing to practise in Australia are required to register with the Podiatry Board of Australia, and undergo a separate assessment process for this (also conducted by the ANZPAC)[9].

Temporary visa grants

The number of temporary visas granted varied, ranging from a low of nine in 2006-07 to a high of 33 in 2008-09 (table 25).

Table 25: number of temporary visas granted to podiatrists, 2005-06 to 2012-13

Visa category	2005 -06	2006 -07	2007 -08	2008 -09	2009 -10	2010 -11	2011 -12	2012-13
457 temporary work (skilled)	14	9	21	33	17	19	27	26

Source: Department of Immigration and Border Protection administrative data

Permanent visa grants

Similarly, permanent visas granted to podiatrists varied, ranging from a low of 17 in 2007-08 to a high of 31 in 2009-10 (table 26).

Table 26: number of permanent visas[(a)] granted to podiatrists, 2005-06 to 2012-13

Visa category	2005 -06	2006 -07	2007 -08	2008 -09	2009 -10	2010 -11	2011 -12	2012-13
Permanent visas	18	20	19	17	31	27	21	23

(a) Includes employer sponsored, skilled independent, skilled regional, state/territory nominated, business innovation and investment, distinguished talent and provisional visas.

Source: Department of Immigration and Border Protection administrative data

9 Australia and New Zealand Accreditation Council: http://www.anzpac.org.au/files/ANZPAC%20Assessment%20of%20 Quals%20and%20Skills%20in%20Podiatry.pdf Accessed on 6 June 2013

On 1 July 2012, Skillselect was implemented – a process where a person wanting to migrate to Australia first completes an expression of interest (EOI); and an invitation to apply for a visa is then extended to people with an EOI, in order of those who scored the most points. Caps on the number of visa grants allowed for each occupation have been implemented from 1 July 2012. This is in contrast to the previous process where there were no caps, and anyone could submit an application without being invited to apply. The impact of these changes on skilled independent immigration numbers is yet to be seen.

How can workforce activity be measured?

As well as understanding the existing workforce stock and having an indication of how many people are entering the workforce, understanding workforce demand also forms an integral component of workforce planning. Potential data sources that could be used to measure demand for the podiatrist workforce are outlined in this section.

Podiatry services can be covered by private health insurance. Therefore Private Health Insurance Administrative Council data is one source of information that may be used to measure workforce activity.

Medicare information is also available for consumers who access podiatry services through the Chronic Disease Management items.

Some podiatrists are also employed in the hospital sector, so national hospital morbidity database information may also provide some information on podiatrists' activity.

A final possible source of information that could be used to assist in measuring workforce activity is the ABS National Health Survey, which has previously provided information on how many people accessed podiatry services.

What issues have stakeholders identified for the podiatry workforce?

Considerations that may impact future workforce supply or demand are important in providing a real world context for interpreting the historical trends presented in this report, and developing an understanding of future workforce requirements. Consultation was conducted with employers and the profession to obtain their views on such considerations, which are summarised in this section.

What were the jurisdiction views?

A consistent theme noted across many of the jurisdictions was the maldistribution of the workforce, with shortages of podiatrists across rural and remote areas and in some metropolitan areas too (reflected by public sector vacancies and extended waiting times).

In relation to future workforce supply, the registration of podiatric surgeons was noted as a potential attraction mechanism. Difficulties in obtaining clinical placements in a predominantly private workforce were highlighted as affecting the training pathway. One jurisdiction also noted the increasingly narrowing scope of practice, with a substantial amount of podiatry work now focused on those presenting as high risk for limb loss.

Multiple jurisdictions reported demand for podiatrists will continue to grow as a result of the increasing incidence of type 2 diabetes, renal disease, growth in obesity rates and an ageing population.

Several jurisdictions also highlighted a key issue was the need for sustainable podiatry services for the Aboriginal and Torres Strait Islander population, who have one of the highest levels of need for this workforce.

What were the APocC's views?

The APodC views were consistent with those of the jurisdictions, particularly highlighting:

- Growth in diabetes and prevention of amputations is expected to be a huge driver of future demand.
- Clinical placement issues – in terms of difficulties in obtaining sufficient placements in a predominantly private sector workforce; and also difficulties in achieving the required hours of supervised practice for the scheduled medicines endorsement (where podiatrists often may only prescribe once a week).
- The need to provide appropriate services to rural and remote and Aboriginal and Torres Strait Islander communities (with both often currently relying on other practitioners like GPs and nurses, rather than receiving podiatry services).

APodC also highlighted increasing career pathway options through podiatric surgery and prescribing rights for practitioners may assist in attracting and retaining podiatrists in the profession.

HWA's assessment of this workforce

HWA's assessment of the podiatry workforce comprises three components:

1. An assessment of existing workforce position – used to assess whether workforce supply matches demand for services (whether the workforce is in balance or not) at this point in time.
2. A set of indicators – collectively called the workforce dynamics indicator – used to highlight aspects of the current workforce that may be of concern into the future.
3. Comparison with other occupations – NHWDS data is used to compare key characteristics of the podiatry workforce with other registered health occupations.

Existing workforce position assessment

Ideally, quantitative evidence should be used to determine whether a workforce is in balance or not at a point in time. However, there is a lack of such evidence. Therefore, to provide an understanding of the existing workforce position for the health workforces, HWA conducted an assessment using a range of partial measures. These measures were:

- Assessment by key stakeholders.
- Waiting times.
- Vacancy rates.

Each of these measures is discussed below.

Assessment by key stakeholders

HWA consulted with jurisdictions, the peak association, and employers to obtain their assessment of the existing workforce position of the podiatry workforce. Where provided, these views are incorporated within the existing workforce position assessment.

Waiting times

Waiting times are a measure of access to a health professional – not specifically a measure of workforce imbalance. It is for this primary reason that waiting times can only be used as a partial measure to demonstrate existing workforce position. Factors aside from workforce availability influence waiting times and affect its use as an indicator, including the length of time someone has to wait, as this influences their likelihood to wait, and demand for a particular health profession.

Budget can also strongly influence waiting times for health professions primarily based in the public sector. Budget constraints influence supply by limiting the availability of staff, which impacts waiting times.

Vacancy rates

Vacancy rates and duration of vacancies are often used to assess potential workforce imbalances. Vacancies can imply there is an insufficient workforce as there are not enough people to fill positions available. However there are a range of cautions to note with using vacancy rates as a measure of workforce shortage:

- Vacancies occur as part of normal operations due to turnover and lags in filling positions.
- There is no single level of vacancy rate considered to reflect a workforce shortage.
- Vacancies can occur for reasons other than shortage, for example: the vacancy could be in an unattractive location; an employer may choose not to fill a vacancy for reasons such as budget constraints; or, applicants for a position may not have sufficient experience the employer is looking for.
- Vacancy rates may also understate workforce shortage, for example positions may not be advertised if they are not expected to be filled.

The sector in which this measure is being applied also determines its usefulness. In the public health sector, positions are salaried so vacancy rates can be an appropriate indicator. However in the private sector, private practitioners often deliver services so there may be minimal identified vacancies. Other indicators such as waiting times for a first appointment may be more appropriate for the private sector. For the reasons above, vacancy rates can also only be used as a partial indicator – they should not solely be considered as a measure of workforce shortage.

A number of other partial indicators can also be used to provide a picture of the existing workforce position, including overtime rates, salaries and predicted employment growth. However for this publication, the measures described above were the focus.

Existing workforce position assessment scale

Using available information from the three measures outlined above, the following scale was used to assess the existing workforce position of podiatrists.

White	Current perceived excess supply – current aggregate workforce exceeds existing expressed service demand, including across geographic areas
Green	No current perceived shortage – sufficient workforce for existing expressed service demand, minimal number of vacancies, no difficulty filling positions, and short waiting times
Yellow	Perceived maldistribution – localised excess supply and localised shortages – existing workforce supply exceeds existing expressed service demand in some locations, while in other locations expressed service demand exceeds existing workforce.
Orange	Perceived maldistribution – localised adequate supply and localised shortages – existing sufficient workforce for existing expressed service demand is some locations, however expressed service demand exceeds existing workforce in other locations
Red	Perceived current shortage – expressed service demand in excess of existing workforce, ongoing vacancies exist, difficult/unable to fill positions, and extended waiting times across geographic areas

Existing workforce position assessment

Reflecting the fact allied health professionals are employed and deployed differently across jurisdictions, not all stakeholders made assessments for the podiatry workforce. Additionally, for those providing information, a wide range of views were received, and with the difficulty of assigning weightings to stakeholders to generate a national assessment; a single existing workforce position assessment has not been assigned for podiatrists.

However from information obtained, the podiatry existing workforce position assessment is predominantly 'orange' (perceived maldistribution: localised adequate supply and localised shortages), with some yellow (perceived maldistribution: localised excess supply and localised shortages) and red (perceived current shortage) assessments as well.

The predominant reason for the assessments provided was shortages of podiatrists in rural and remote areas. Some stakeholders noted shortages across all geographic areas, along with extended waiting times, which resulted in the 'red' assessment.

The Department of Employment conduct research to identify skill shortages in the Australian labour market, and publish the results of their research in individual occupation reports. The skill shortage research methodology is based on a sample survey of employers who had recently advertised vacancies, examining whether they were able to find suitable workers for the advertised position. Employers are identified through sources including national and regional newspapers, online job boards, association websites, professional journals and specialist publications.

The Department of Employment's labour market rating for podiatrists (at March 2013) was 'no shortage', with the comment that surveyed vacancies were generally filled without difficulty, and unfilled vacancies generally attracted suitable applicants but were unfilled due to their location (some applicants were unwilling to move to regional areas) or because the offered conditions of employment were unacceptable to preferred candidates (such as requirements for travel, or management and training responsibilities[10]).

Workforce dynamics indicator

The workforce dynamics indicator (WDI) is used to highlight aspects of the current workforce that may be of concern into the future. The WDI was adapted from Health Workforce New Zealand's (HWNZ) medical discipline vulnerability ranking method[11], where a traffic light approach is used to score workforces against the selected indicators.

HWA selected the following indicators for scoring:

- **Average age** – workforces with a higher average age are more susceptible to higher exit rates (through retirement) with lower entry rates.
- **Percentage aged 55 and over** – this can be a useful indicator of those potentially retiring or reducing working hours within the next 10 years.
- **Change in average hours worked** – workforces with falling average weekly hours worked can be an indicator of sufficient workforce supply, or supply exceeding demand; while workforces with increasing hours of work can indicate supply pressures.
- **Replacement rate** – this item is designed to calculate the ratio of newly registered professionals to workforce exits in a given year. This indicates whether the number currently completing training is sufficient to replace those presently leaving the workforce.

10 DEEWR national, state and territory skills shortage information. DEEWR website: http://foi.deewr.gov.au/node/31533. Accessed 13 September 2013.
11 Prioritisation of Medical Disciplines for Funding by Health Workforce New Zealand. www.rnzcgp.org.nz Accessed 3 May 2012

- **Dependence on internationally trained professionals** – workforces with high percentages of internationally trained professionals are of greater concern due to their dependence on a less reliable supply stream (for example, changes in immigration policy may impact on supply).
- **Duration of training program** – the greater the duration of training, the longer it takes to train a replacement workforce.

The WDI provides a visual summary of the key dynamics of workforce recruitment, retention and retirement. They provide an easily understood presentation of health workforce planning information.

Workforce dynamic indicator assessment

NHWDS data was used to calculate the WDI, except for duration of training. For duration of training, the assessment is based on the shortest accredited training pathway to general registration. Given the maldistribution of the health workforce is one of the key findings across a number of HWA consultations, the WDI has also been calculated by remoteness area. This visually shows any differences in the characteristics of the employed podiatry workforce by remoteness area.

Table 27 shows the WDI assessment for employed podiatrists by remoteness area. The value used to determine the WDI assessment is shown in the table, and shaded according to the assessment scale (table 28).

Table 27: Podiatry – workforce dynamics indicators

	Major cities	Inner regional	Outer regional	Remote[a]	Very remote[a]	Australia
Average age	37.6	37.4	37.8	39.7	38.0	37.6
Percentage aged 55+	8.0	7.8	7.5	28.3	0.0	8.2
Change in average hours	0.0	0.0	-0.8	-0.4	-6.9	-0.2
Replacement rate[b]	not assessed					
Dependence on ITPs	11.0	15.6	20.8	8.9	13.6	12.4
Duration of training	3	3	3	3	3	3

(a) Care should be taken when interpreting the figures for Remote and Very remote areas due to the relatively small number of employed practitioners who reported their main job location in these regions.
(b) As the NHWDS is a longitudinal dataset, replacement rate will be able to be calculated in the future, using provisional registration as a proxy for workforce entries.

Source: NHWDS: allied health practitioners 2011 and 2012

Indicator range boundaries

The range boundaries for most indicators were selected as an extension of the HWNZ ranking method. In this development of the WDI, the ranges for each indicator were set to be relatively equal, rather than being established using a statistical base.

To be able to score against the WDIs, an extensive range of data is required. Where a score cannot be allocated due to insufficient data, the indicator is not assessed.

The indicators used are basic measures only – ideally as data availability improves, more sophisticated measures can be developed. Table 28 summarises the indicators and their score ranges.

Table 28: workforce dynamics indicators

Indicator	Minimal concern				Significant concern
Average age	<40	40–44	45–49	50–54	55+
Percentage aged 55+	<20%	20% – <30%	30% – <40%	40% – <50%	50%+
Annual change in average hours	± <0.3 hrs	±(0.3 –<0.6) hrs	±(0.6 –<0.9) hrs	±(0.9 –<1.2) hrs	±1.2 hrs+
Replacement rate	95% – 105%	90% – <95% 105% – <110%	80% – <90% 110% – <120%	70% – <90% 120% – <130%	<70% 130%+
Dependence on internationally trained professionals	<12%	12% – 24%	25% – 37%	37% – 49%	50%+
Duration of training	<4	4	5	6	7+

How do podiatrists compare with other registered health occupations?

Table 29 shows the key characteristics of those employed in registered health occupations using NHWDS data. Podiatrists are one of the smaller registered workforces, and is the only workforce (where all indicators were measured) that scored 'green' ratings on the WDI scale for each of the indicators, that is, there were no particular areas for concern highlighted.

Table 29: registered health occupations, WDI ratings and selected characteristics

	WDI ratings[a]					Other selected characteristics			
Occupation	Ave. Age	% aged 55+	Annual change in ave hrs[b]	Dependence on ITPs	Duration of training	Number employed	Average weekly hours worked	% female[c]	Remoteness distribution[d]
Medical practitioner	46.0	26.6	-0.5	35.1	5	79,653	42.7	37.9	79: 13: 6: 1
Nurse[e]	44.6	23.1	n.a.	n.a.	3	288,236	31.6	89.7	71: 18: 9: 2
Midwife[f]	49.5	34.9	n.a.	n.a.	3	30,792	19.0	98.2	68: 19: 10: 3
Dentist	43.4	23.4	-0.3	28.5	5	13,266	37.0	36.5	80: 14: 6: <1
Dental therapist	46.4	20.4	0.2	7.5	3	1,117	29.4	96.9	63: 21: 13: 3
Dental hygienist	37.4	5.7	0.7	15.2	2	1,425	29.4	94.6	84: 10: 5: <1

	WDI ratings[a]					Other selected characteristics			
Occupation	Ave. Age	% aged 55+	Annual change in ave hrs[b]	Dependence on ITPs	Duration of training	Number employed	Average weekly hours worked	% female[c]	Remoteness distribution[d]
Oral health therapist	31.0	1.9	1.0	1.7	3	675	33.7	84.7	71: 19: 9: 1
Dental prosthetist	49.1	31.3	0.0	5.9	4	1,100	42.7	14.7	73: 21: 6: <1
Aboriginal and Torres Strait Islander health practitioner	44.4	18.8	n.a.	-	2	233	40.5	71.9	3: 4: 31: 61
Chiropractor	41.2	15.2	-0.2	14.4	5	4,029	33.3	34.8	75: 18: 6: <1
Medical radiation practitioner	39.1	14.7	n.a.	14.0	3	7,806	34.4	66.7	83: 13: 3: <1
Occupational therapist	36.8	8.0	n.a.	7.5	4	7,231	33.1	91.5	76: 19: 4: <1
Optometrist[g]	41.2	15.4	0.2	14.3	5	4,066	36.1	48.2	78: 16: 5: <1
Osteopath	38.8	13.2	-0.5	11.1	5	1,543	35.7	46.5	82: 15: n.p.: n.p.
Pharmacist	39.7	16.7	0	12.7	5	21,331	35.9	58.2	76: 15: 7: 1
Physiotherapist	38.6	12.4	-0.3	14.5	4	20,081	34.2	68.8	80: 13: 5: 1
Podiatrist	**37.6**	**8.2**	**-0.2**	**11.7**	**3**	**3,491**	**36.4**	**58.0**	**76: 17: 6: <1**
Psychologist	45.6	26.9	-0.6	7.5	6	22,404	32.6	76.7	82: 12: 5: <1
Traditional Chinese medicine practitioner	47.0	28.5	n.a.	31.8	4	3,580	31.8	52.3	88: 9: 3: <1

n.a. not available. n.p. not publishable.
(a) Replacement rate not included as this has not been assessed for any registered occupations at this point in time.
(b) Aboriginal and Torres Strait Islander health practitioners, medical radiation practitioners, occupational therapists and traditional Chinese medicine practitioners joined the NRAS from 1 July 2012, so NHWDS data not available for 2011 for these occupations. Therefore annual change in average hours worked was not calculated for these occupations.
(c) For osteopaths, optometrists, physiotherapists and podiatrists, calculated excluding those where gender not stated or inadequately described.
(d) Percentage of workforce located in major cities : inner regional : outer regional : remote or very remote areas.
(e) Includes registered and enrolled nurses plus dual registered nurses and midwives. The duration of training WDI indicator for nurses was based on registered nurse training time.
(f) Includes those registered as midwives only plus dual registered nurses and midwives.
(g) For optometrists, the minimum duration of programs with full accreditation at time of publication is 5 years. A 3.5 year fast track program offered by Deakin University holds conditional accreditation at time of publication.

Sources: NHWDS: medical practitioners 2011 and 2012, NHWDS: nurses and midwives 2012, NHWDS: dental practitioners 2011 and 2012, NHWDS: allied health practitioners, 2011 and 2012

What does the analysis show?

The NHWDS shows the podiatry workforce:

- Has a young age profile.
- Is more than 50 per cent female.
- Works at slightly less than full-time hours.
- Is a predominantly private workforce.
- Has a distribution between state and territories that does not reflect the distribution of the overall Australian population.

Findings from the census, while based on a different methodology, are consistent with the NHWDS findings. Additionally, with longer time-series information available, census data also highlights:

- A substantial increase in workforce numbers from 1996 to 2011 (almost doubling in size).
- Male podiatrists increasing at a greater rate than females.
- Little change in average weekly hours worked over time (in contrast with many other selected health occupations, where hours are reducing).
- Little change in work setting, with the workforce remaining predominantly private.

In terms of the WDI, few areas of concern were highlighted for this workforce (for the assessable indicators). The exception is the change in average hours worked WDI rating, which was of substantial concern in very remote areas. However with only seven practitioners located in this region, caution needs to be applied when interpreting this data.

The small numbers of podiatrists in remote and very remote areas demonstrates a consistent theme raised by jurisdictions and the association – the maldistribution of the workforce with shortages across rural and remote areas, and the need to provide appropriate services to rural and remote and Aboriginal and Torres Strait Islander communities. Access to podiatry services is therefore an area for investigation.

Consistent feedback was also received that demand for podiatrists will increase with the presence of health conditions such as obesity and type 2 diabetes. In relation to supply streams, education is the major source in Australia. DE information shows student and graduate numbers have generally increased in recent years. A current drawback of this information though is it shows commencements and completions by the podiatry field of education – not necessarily those in an accredited course that will lead to registration. Despite this drawback, the DE data highlights males comprised an increasing percentage of podiatry students, which is consistent with census trends showing male podiatrists increasing at a greater rate than females. With males working higher average weekly hours than females, this may influence future workforce supply.

Difficulties in obtaining clinical placements in a predominantly private workforce were highlighted as affecting the training pathway though, which influences education capacity and consequently potential future supply.

As well as training new podiatrists, retention of existing podiatrists would result in increased workforce supply. As the NHWDS collection matures, information will exist to examine workforce exits, for example, how many people are leaving the podiatry workforce, and at what point in their career. APodC highlighted increasing career pathway options through podiatric surgery and prescribing rights for practitioners may assist in attracting and retaining podiatrists in the profession.

As Australia's population ages and the increasing incidence of chronic conditions places greater pressure on the public health system; an issue for consideration in future planning for this workforce will be the link between public sector engagement and support for what is primarily a private workforce.

Appendix one – Podiatrists by Medicare Local region

Table 30 shows the number of employed podiatrists per 100,000 population across all Medicare Local regions. Data in this table shows the number of podiatrists per 100,000 population working in the relevant Medicare Local region, and provides a useful refection of the geographical distribution of podiatrists – it does not reflect podiatrists employed by Medicare Local organisations.

Table 30: number of employed podiatrists per 100,000 population by Medicare Local regions, 2012

Medicare Local	State/Territory	Rate	Area (km^2)
Central Adelaide and Hills	SA	30.2	1,657
Inner North West Melbourne	VIC	28.7	149
Loddon - Mallee - Murray	VIC	27.9	49,202
Bayside	VIC	25.5	215
Perth Central and East Metro	WA	24.7	2,149
Great South Coast	VIC	24.6	22,885
Inner East Melbourne	VIC	23.9	319
Grampians	VIC	21.9	47,885
Hume	VIC	21.8	39,200
Barwon	VIC	21.4	7,913
Central Coast NSW	NSW	20.6	1,680
Fremantle	WA	20.4	243
Northern Melbourne	VIC	20.3	1,304
Southern Adelaide - Fleurieu - Kangaroo Island	SA	20.2	8,027
Frankston - Mornington Peninsula	VIC	19.1	854
Metro North Brisbane	QLD	19.1	3,999
Eastern Sydney	NSW	17.5	106
Eastern Melbourne	VIC	17.5	2,641
Tasmania	TAS	17.4	68,018
South Eastern Sydney	NSW	16.8	400
Northern Sydney	NSW	16.8	592
Country South SA	SA	16.4	69,522
Lower Murray	VIC	16.4	75,172

Medicare Local	State/Territory	Rate	Area (km^2)
Sydney North Shore and Beaches	NSW	16.3	307
Illawarra - Shoalhaven	NSW	15.0	5,687
Northern Adelaide	SA	14.8	1,605
Sunshine Coast	QLD	14.8	9,968
Goulburn Valley	VIC	14.6	16,519
Country North SA	SA	14.6	903,379
Gippsland	VIC	14.1	41,557
New England	NSW	13.6	98,905
Greater Metro South Brisbane	QLD	13.2	3,775
Hunter	NSW	13.0	32,747
Macedon Ranges and North Western Melbourne	VIC	12.9	3,275
Perth North Metro	WA	12.8	880
South West WA	WA	12.7	219,939
South Western Melbourne	VIC	12.7	606
Inner West Sydney	NSW	12.4	126
Australian Capital Territory	ACT	12.3	2,352
Bentley - Armadale	WA	12.2	1,734
Gold Coast	QLD	11.5	1,843
North Coast NSW	NSW	11.5	32,767
Murrumbidgee	NSW	11.3	89,471
Central and North West Queensland	QLD	11.1	634,891
South Eastern Melbourne	VIC	10.8	1,821
Perth South Coastal	WA	10.7	3,093
Central Queensland	QLD	10.6	110,959
Goldfields - Midwest	WA	10.0	1,373,296
Townsville - Mackay	QLD	9.8	239,180
Darling Downs - South West Queensland	QLD	9.7	407,815
West Moreton - Oxley	QLD	9.7	9,596
Nepean - Blue Mountains	NSW	9.1	9,122

Medicare Local	State/Territory	Rate	Area (km^2)
Southern NSW	NSW	9.1	4,534
Western NSW	NSW	9.0	117,845
South Western Sydney	NSW	8.9	6,241
Wide Bay	QLD	8.2	36,974
Western Sydney	NSW	7.2	775
Far North Queensland	QLD	6.8	270,956
Kimberley - Pilbara	WA	5.9	925,390
Northern Territory	NT	5.5	1,348,190
Far West NSW	NSW	5.2	275,512

Source: NHWDS, allied health practitioners, 2012

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