Medical Retention and Retirement in Australia, 2000 to 2025

Associate Professor Deborah Schofield* and Ms Susan Fletcher#

International Medical Workforce Conference
Vancouver, Canada, March 2007

*DJ Schofield, Associate Professor, and Research Leader, Northern Rivers University Department of Rural Health, School of Public Health, Faculty of Medicine, University of Sydney.

#SL Fletcher, Research Officer, Northern Rivers University Department of Rural Health, School of Public Health, Faculty of Medicine, University of Sydney.

The Northern Rivers University Department of Rural Health is a collaboration between The University of Sydney and Southern Cross University

PO Box 3074, Lismore NSW 2480, Phone: +61 2 6620 7570 Fax: +61 2 6620 7270

Medical Retention and Retirement in Australia, 2000 to 2025

Abstract

Purpose: To examine patterns of ageing of and retirement of the general and specialist physician workforce in Australia and to project retirement to 2025. The work patterns of younger and older cohorts will be compared to determine the likely impacts of the transition from the older to younger cohorts. Where available, retirement patterns of other health professions are presented for comparison. The projections of retirement are used to assess the future prospects of the general and specialist medical workforce and to discuss possible ways forward.

Methods: The paper used extracts from the Department of Health and Ageing Medicare database and the Australian Institute of Health and Welfare's annual Medical Labour Force Surveys to examine trends in attrition of general and specialist physicians over the age of 45 years from the workforce and to predict their rate of retirement to 2025.

Results: Both the general and specialist physician workforce have aged in Australia. Between the years 2000 and 2025, it was projected that 43% of the general physician workforce and 56% of the specialist physician workforce would have retired, although the retirement rates of some health professions, such as nursing, were projected to be higher. Shorter working hours of younger physicians (both men and women) will have a compounding effect on physician retirement.

Conclusions: Ageing and retirement of the baby boomer and older cohorts of the general and specialist physician workforce combined with an ageing population demanding more services are likely to add to shortages over the next 20 years. While increasing numbers of students and new medical schools should alleviate shortages from about 2015 onwards, international competition for the medical

workforce and shortages in other related health professions will mean that ensuring an adequate medical labour force in Australia will be a significant challenge over the next 20 years.

Abstract word count: 299 (limit 500 words)

Medical Retention and Retirement in Australia, 2000 to 2025

Background

Two major government reports have examined the impact of ageing in Australia – the Intergenerational Report (IGR) released by the Treasurer in 2002[1] and the report on the Economic Implications of an Ageing Australia by the Productivity Commission[2] . These two reports highlighted future pressures which threaten the sustainability of the Australian Government budget balance due to the growing needs of an ageing population and labour shortages which will limit economic growth and taxation revenue. In addition, ageing of the "baby boomer" generation was found to increase demand for health care, and consequently the ageing population will require more health professionals to deliver the services required in an environment where the existing workforce is rapidly towards retirement.

It is widely anticipated that the ageing medical workforce will result in shortages within the next 5 years based on numerous studies which have noted the ageing of the Australian medial workforce[3,4,5,6]. However, there has been very little research specifically on physician retirement or retirement intentions in Australia. There has been one recent study which examined ageing and rates of retirement amongst the general practitioner and registered nursing workforce[7] which concluded that there will be a period of rapid retirement from the medical workforce over the next 15 years. There has been a recent paper projecting Australian medical workforce supply from 2001–2012[8]. This paper included the impact of ageing and concluded that there will not be enough doctors in 2012. There has also been a study of intentions to leave or stay in rural practice (not limited to retirement) comparing 1986 intentions with 1996 outcomes[9]. It was found that 49% of doctors who said they would leave in fact stayed and that of those who said they would stay 24% left rural practice.

Scope

This paper will examine ageing of the general and specialist medical practitioner workforce in Australia and will project their retirement to 2025. These projections will be compared with available results for other health professions. Factors which impact on retention and retirement of older workers including the impact of superannuation in Australia and future prospects and possible ways forward will be discussed.

The paper used a special extract from the Department of Health and Ageing Medicare data and the Australian Institute of Health and Welfare's annual Medical Labour Force Surveys to examine trends in attrition of physicians over the age of 45 years from the workforce and to predict their retirement from 2000 to 2025.

Methods - data and research

The methods used in this paper are similar to those used recently in Australia to examine past general practitioner and nursing retirement[10] but using different data sources and projecting the patterns of retirement into the future.

Grouped data on demographic characteristics (age and sex) were obtained for general practitioners from the Australian Government Department of Health and Ageing's Medicare data and for specialists (age, sex and hours worked), from the Australian Institute of Health and Welfare's (AIHW) annual Medical Labour Force Surveys. The Medicare data was provided from 1984-85 to 2004-05 and the Medical Labour Force Survey data from 1995 to 2003.

There are two main options for projecting specialist medical practitioner retirement in Australia – the AIHW Medical Labour Force Surveys and the Australian Bureau of Statistics census data – both of which are national data collections. However both cover limited time periods with the census, which is

carried out every five years, being for the years 1996 and 2001 and the annual Medical Labour Force Surveys covering the years 1995 to 2003. Both of these time periods are relatively short for estimating and projecting retirement, however the Medical Labour Force Surveys at least has nine data points compared with only two for the census. The census was conducted before 1996, but the definitions for specialists have changed substantially so that comparisons with earlier years are not reliable.

The annual Medical Labour Force Surveys used in this paper have had a response rate of between 75% and 83%. The data collected are weighted to all medical registrations in each state and territory and includes employed specialists and specialists in training. It is quite difficult to find consistent data on specialist physicians in Australia and while the Medical Labour Force Survey is the best data source available there have been some changes to the surveys between years.

Using Medicare and Medical labour force survey data, 5-yearly cohorts of general and specialist medical practitioners aged 45 years and over were followed from one 5 year period to the next to calculate attrition rates as physicians left the workforce. Leaving the workforce may be due to factors including retirement, ill health, change of profession, and death. Attrition in this paper was broadly grouped as retirement.

Net attrition rates were calculated for general practitioners and specialists every 5 years as the percentage reduction in total physicians over the previous 5 years. Cumulative net attrition was the sum of the attrition for all previous years. The calculation of cumulative attrition rates was as follows:

$$CAR=1-Nti/Nt1$$

where CAR=Cumulative attrition rate,

N=number of people,

ti =time period i and

t1=first year of data in series

Because there were only 9 years of data for specialists, meaning that attrition could be calculated for the first 5 years and then the next 3 years, the final 2 years of attrition for the second 5 year period was estimated on a pro rata basis from the attrition of the previous 3 years.

The general and specialist medical practitioner data was then "aged" from a base year of 2000, so that it represented the general and specialist medical practitioner workforce aged 45 and over in 5, 10, 15, 20 and 25 years time. These attrition rates were then applied to younger general practitioners and specialists to project future attrition from the workforce.

Results - current and future retention and retirement of older physicians

The medical workforce in Australia

General physicians

Between 1985 and 2005 the general medical practitioner workforce in Australia grew from 13,831 to 22,262 physicians. General medical practitioners were predominantly male in all years included in the study, although their majority decreased steadily from 80 per cent in 1985 to 63 per cent in 2005. Women were better represented in the younger age groups, accounting for 26 per cent of general medical practitioners aged less than 45 in 1985 compared to 12 per cent of practitioners aged over 45. By 2005, the proportion of women had grown to 49 and 26 per cent in the younger and older age groups respectively.

Table 1: General physicians by age and sex, 1995 to 2003, Australia

		Age												
Sex	**Year**	**< 25**	**25-29**	**30-34**	**35-39**	**40-44**	**45-49**	**50-54**	**55-59**	**60-64**	**65-69**	**70-74**	**75-79**	**80+**	**Total**
Male	**1985**	29	844	1949	1970	1493	1081	887	1075	874	480	240	76	46	11044
	1990	7	1183	1962	2207	2054	1507	1083	871	1038	785	368	150	59	13274
	1995	5	867	1747	2055	2349	2105	1485	1077	823	905	593	245	88	14344
	2000	1	332	1171	1727	2102	2299	2092	1488	1026	712	650	363	137	14100
	2005	1	170	732	1275	1974	2246	2329	2057	1406	848	480	358	191	14067
Female	**1985**	20	519	731	512	375	165	139	152	89	51	21	7	6	2787
	1990	4	804	1252	1031	634	420	189	149	162	80	42	10	7	4784
	1995	2	712	1375	1424	1145	726	442	200	142	140	60	27	8	6403
	2000	2	408	1112	1436	1490	1192	732	454	189	103	90	33	14	7255
	2005	0	257	953	1206	1552	1611	1220	716	415	146	57	45	17	8195
Total	**1985**	49	1363	2680	2482	1868	1246	1026	1227	963	531	261	83	52	13831
	1990	11	1987	3214	3238	2688	1927	1272	1020	1200	865	410	160	66	18058
	1995	7	1579	3122	3479	3494	2831	1927	1277	965	1045	653	272	96	20747
	2000	3	740	2283	3163	3592	3491	2824	1942	1215	815	740	396	151	21355
	2005	1	427	1685	2481	3526	3857	3549	2773	1821	994	537	403	208	22262

Specialist physicians

There were about 20,200 specialist physicians in Australia in 1995 increasing to 26,500 by 2003. The majority of specialist physicians were men in 1995 and this was still the case in 2005. However, the proportion of women specialists had increased from 18% to 25%. In the older cohorts, aged 45 years or more, women represented 11% of the specialist workforce in 1995, but increased to 15% in 2003. However, they represented a considerably larger proportion of the younger cohorts, aged less than 45 years, where women represented 26% of the specialist workforce in 1995, but increased to 34% in 2003.

Table 2: Specialist physicians by age and sex, 1995 to 2003, Australia

		Age												
Sex	Year	< 25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	Total
Male	**1995**	30	1,016	2,006	2,294	2,293	2,443	2,106	1,568	1,134	874	455	214	79	16,511
	2000	18	727	2,383	2,451	2,589	2,249	2,330	2,054	1,429	806	535	266	85	17,921
	2003	6	923	2,362	2,642	2,907	2,650	2,317	2,384	1,746	1,015	530	346	102	19,930
Female	**1995**	16	589	787	698	555	372	269	171	110	92	24	12	7	3,702
	2000	–	567	1,362	993	887	618	416	281	124	88	36	26	5	5,403
	2003	–	755	1,571	1,225	1,072	793	525	326	171	90	41	19	15	6,602
Total	**1995**	46	1,605	2,794	2,992	2,848	2,815	2,375	1,738	1,243	966	478	226	87	20,213
	2000	18	1,294	3,745	3,444	3,476	2,867	2,746	2,335	1,553	894	571	292	90	23,324
	2003	6	1,678	3,933	3,867	3,979	3,443	2,841	2,709	1,918	1,105	571	365	117	26,532

Ageing of the medical workforce

General physicians

The Australian general medical practitioner workforce has aged significantly since 1985, with the proportion of practitioners aged 45 years and over increasing from 39% to 64%. Male general medical practitioners were older than their female counterparts in both 1985 and 2005, with 70% of men and 52% of women aged over 45 in 2005 (43% and 23% in 1985).

Table 3: Ageing of the generalist physician workforce 1995-2003, Australia

	24 or less	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50-54	55-59	60-64	65-69	70-74	75-79	80+
1985	0%	10%	19%	18%	14%	9%	7%	9%	7%	4%	2%	1%	0%
2005	0%	2%	8%	11%	16%	17%	16%	12%	8%	4%	2%	2%	1%
% change	0%	-8%	-12%	-7%	2%	8%	9%	4%	1%	1%	1%	1%	1%

Specialist physicians

There has not been marked ageing of the specialist medical workforce in Australia between 1995 and 2003. However, with only nine years of data, gradual ageing over a longer time period may not be identified. About half of specialist physicians were aged 45 and over in both 1995 and 2003.

Table 4: Ageing of the specialist physician workforce 1995-2003, Australia

Age	<25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+
1995	0%	8%	14%	15%	14%	14%	12%	9%	6%	5%	2%	1%	0%
2003	0%	6%	15%	15%	15%	13%	11%	10%	7%	4%	2%	1%	0%
change (% point) 2003:1995	0%	-2%	1%	0%	1%	-1%	-1%	2%	1%	-1%	0%	0%	0%

Retirement and attrition rates

General physicians

By following the same shaded cells in Table 5 we can follow each cohort in table 5 through each 5-year period from 1995 to 2000, and then from 2000 to 2005.

There is a relatively low rate of attrition from the general medical practitioner workforce until physicians reach the age of 65, with only 2 per cent of GPs aged 45-49 in 1985 leaving the workforce before this age. While attrition rates grow steadily after age 65, a large proportion of GPs keep working well into older ages. Over half of physicians aged 50-54 in 1985 were still in the workforce at age 70 and almost one quarter of those aged 65-69 in 1985 were still working at 80.

Table 5: Cumulative attrition from the generalist physician workforce 1985-2005, Australia

	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+
1985								
1990		0%	-1%	-2%	-10%	-23%	-39%	-20%
1995			0%	-6%	-15%	-32%	-49%	-63%
2000				-2%	-21%	-40%	-59%	-72%
2005					-20%	-48%	-67%	-78%

Specialist physicians

A large proportion of specialist physicians tend to work beyond the traditional Australian retirement age of 65 years (although in practice many Australians retire before age 65). For example, of

practitioners aged 50-54 in the year 1995, only a net 2% had left the workforce by 2000 when they were 55-59 years of age, and 31% by the time they were 60-64 years of age in 2005. Even of those aged 75-79 years of age in 1995, only a net 60% had retired five years later.

Table 6: Cumulative attrition from the specialist physician workforce 1995-2005, Australia

	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+
1995								
2000		-2%	-2%	-11%	-28%	-41%	-39%	-60%
2005[(a)]			-5%	-31%	-54%	-71%	-76%	-100%

Note: (a) Data for 2004 and 2005 were based on projections assuming the same rate of attrition for the previous 3 years 2001-2003

Projected retirement of older physicians

General physicians

The attrition rates calculated for general physicians aged 45 and over were used to project future general medical practitioner retirements from 2005 to 2025. As in the past, attrition was predicted to be slow among younger physicians and then increase steadily after age 65. While some GPs remain in the workforce past age 80, small numbers made projections past that age unreliable and so attrition was set at 100 per cent.

Table 7: Projected cumulative 5-yearly generalist physician attrition, 2000 -2025, Australia

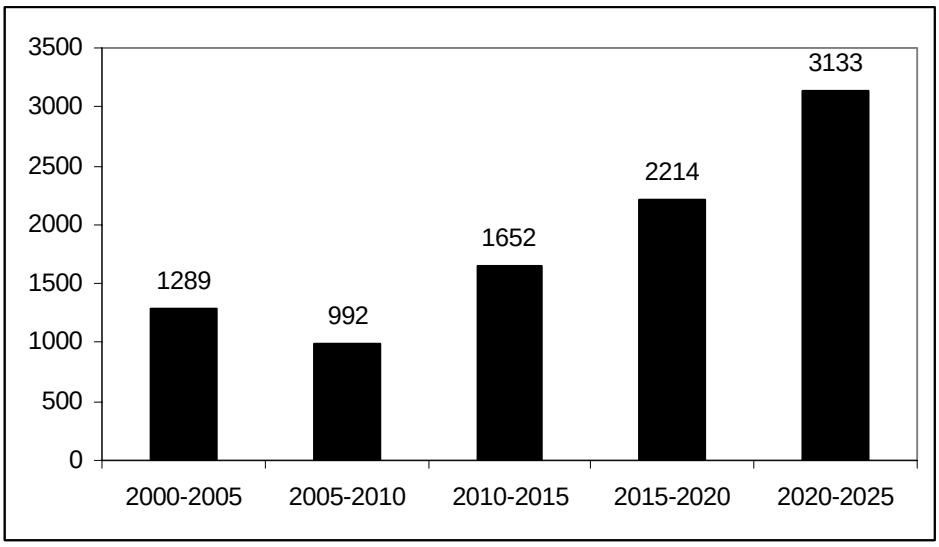
Year	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+
2000[(a)]	-	-	-	-	-	-	-	-
2005	0%	1%	2%	10%	23%	39%	20%	100%
2010	0%	6%	15%	32%	49%	63%	100%	100%
2015	2%	21%	40%	59%	72%	100%	100%	100%
2020	20%	48%	67%	78%	100%	100%	100%	100%
2025	20%	48%	67%	78%	100%	100%	100%	100%

(a) base year

In the year 2000, there were 21,355 general physicians in Australia. Of these, 1289 or 6% were projected to retire by 2005. A further 5% were expected to retire in the five years to 2010. A greater

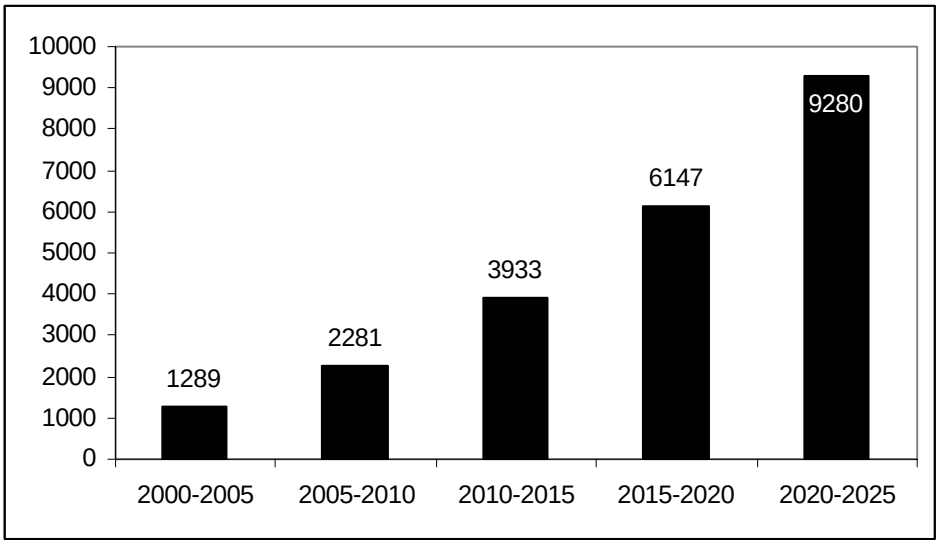
number of general medical practitioners were expected to leave the workforce in each subsequent five year period so that by 2025, a total of 9280 or 43% of the 2000 workforce would no longer be practicing.

Chart 1: Projected retirement every five years, generalist physician 45 years or more, 2000- 2025, Australia



Note: Attrition from 2000-2005 has been calculated using Medicare data while attrition from 2005 onwards has been projected as described in the text.

Chart 2: Projected *cumulative* retirement every five years, generalist physician 45 years or more, 2000- 2025, Australia



Note: Attrition from 2000-2005 has been calculated using Medicare data while attrition from 2005 onwards has been projected as described in the text

Specialist physicians

Of the specialist medical practitioners who were aged 45 to 49 years in 2005, 39% were projected to cease practice by 2020 when they were aged 65 to 69 years, with this figure increasing to 64% when they would be 70 to 74 years of age. As expected, for those cohorts that were older in 2005, their attrition was more rapid than for the younger cohorts. For example, of those aged 60-64 in 2005, 28% were projected to retire within 5 years and a total of 71% 5 years later when the cohort would then be aged 70 to 74 years of age. There were some specialist medical practitioners practicing at 80 years of age or more, however as the numbers were too small for reliable projections it was assumed that all specialist physicians retired after 80 years of age.

For those cohorts aged less than 45 years in 2000, they were projected to commence retirement at the same rate as the 45 to 49 year cohort but their retirement did not commence until the year they turned 45. For example, for the 40-44 year cohort, none would have been projected to retire in the first five years to 2005, but from 2005 when they would have been aged 45 to 49, 2% would have been projected to retire in the five years to 2010.

Table 8: Projected cumulative 5-yearly medical specialist attrition, 2000 -2025, Australia

Year	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+
2000(a)	-	-	-	-	-	-	-	-
2005	2%	2%	11%	28%	41%	39%	60%	100%
2010	5%	31%	54%	71%	76%	100%	100%	100%
2015	15%	50%	73%	83%	91%	100%	100%	100%
2020	39%	71%	83%	93%	100%	100%	100%	100%
2025	64%	82%	93%	100%	100%	100%	100%	100%

(a) base year

Of the approximately 23,300 specialist medical practitioners in the year 2000, about 1655 were projected to retire over the five years to 2005. A further 3410 were projected to retire in the following

five years to 2010 and between 1700 and 2600 every five years after that to 2025. This amounted to a total of 11,722 retirees or 56% of the specialist physician workforce in the year 2000.

Chart 3: Projected retirement every five years, specialists physicians 45 years or more, 2000-2025, Australia

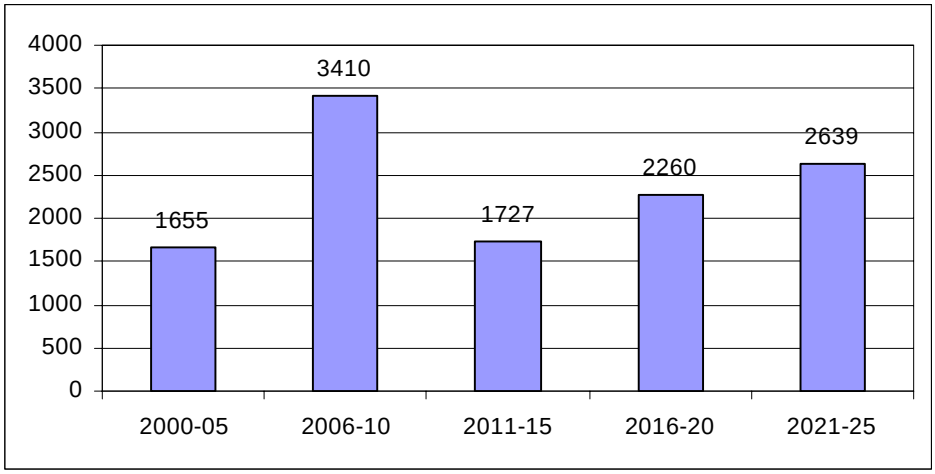
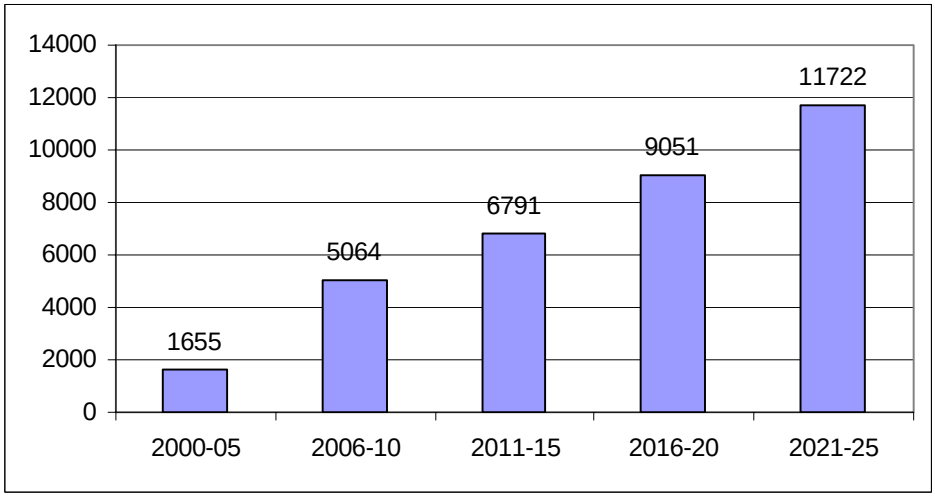


Chart 4: Projected *cumulative* retirement every five years, specialists physicians 45 years or more, 2000- 2025, Australia



Comparison with other professions

Generally, in Australia, predominantly male occupations such as general and specialist medical practitioners and pharmacists were predicted to have fewer clinicians retire, particularly in the years to 2015-16. Predominantly female occupations such as nursing were predicted to have higher rates of retirement over the same period, partly due to 60% of nurses being over 40 years of age in 2001, and partly because on average women retire earlier[7, 11]. Physiotherapists, although highly female were not projected to have as high a retirement rate as nurses largely because of the high proportion of physiotherapists under the age of 40 years[12]. Physiotherapists also differ from nursing in that private practice provides opportunities for higher remuneration and physiotherapy is also one of the few health professions where there is an increasing proportion of men.

Between the years 2000 and 2025 approximately 40-70% of all of the disciplines projected were expected to retire. By this time those aged 50 years in 2005-6 would be in their 70s and retirement rates are high for all groups by this age.

Table 9: Projected cumulative 5-yearly attrition by profession (2000-2025), Australia

Base year	*Cumulative* retirements	*Cumulative* % of workforce in base year
GPs		
2000-05	1,289	6
2006-10	2,281	11
2011-15	3,933	18
2016-20	6,147	29
2021-25	9,280	43
Specialists		
2000-05	1,655	7
2006-10	5,064	22
2011-15	6,791	29
2016-20	9,051	39
2021-25	11,722	50
Nurses		
2000-05	19,421	12
2006-10	41,950	26
2011-15	61,517	38
2016-20	84,416	53
2021-25	109,639	68
Dentists		
2000-05	695	9
2006-10	1,470	18
2011-15	2,485	30
2016-20	3,601	44
2021-25	5,401	66
Pharmacists		
2000-05	1,413	11
2006-10	2696	20
2011-15	4147	31
2016-20	5459	41
2021-25	6852	51
Physiotherapists		
2000-05	507	5
2006-10	1067	11
2011-15	2036	20
2016-20	3228	32
2021-25	4603	46

Sources: References [7, 10, 11,13,14] Note: Dental, pharmacy and physiotherapy retirement was from age 50 years from 2001. Others were from age 45 years.

Patterns of work of physician cohorts

General physicians

Information on the hours worked by general medical practitioners was not available from Medicare data, however general medical practitioner hours have previously been examined by Schofield and Beard[7] using census data from 1986 to 2001. General medical practitioners were found to have reduced their hours of work, from a median of 49 per week in 1986 to 44 hours in 2001. While the trend towards a shorter working week is partly the result of the feminisation of the profession, it also reflects a reduction in hours worked by male general medical practitioners. Younger males in 2001 worked fewer hours than their older colleagues did at approximately the same age in 1986. Older physicians too tended to reduce their hours as they grew older if they remained in the workforce.

Specialist physicians

Amongst all specialist physicians (men and women), the average hours of work has decreased in almost all groups with the exception of the youngest groups of trainees. The largest decreases were amongst the oldest specialists suggesting that of those physicians who do continue to work beyond the age of 75 years the move to part time work is more rapid. Interestingly specialists in the younger age groups from age to 25 to 49 had the next highest reduction in working hours reflecting not only the increasing feminisation of the specialist workforce but also the decline in average hours of work in almost all age groups for both men and women. Indeed, apart from trainees, the younger age groups were working on average no longer hours than physicians aged 50-60 years of age. This suggests that more than one new young specialist will be needed to replace one older specialist as they retire.

Table 10: Percentage change in average hours worked, Medical Specialists, 1995-2003, Australia

		Age											
		<25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+
Male	1995	55.7	57.5	55.4	54.7	55.7	56.1	54.2	52.1	46.8	36.7	28.5	28.1	26.7
	2003	60.0	51.9	50.2	50.4	52.4	51.9	52.2	50.3	45.5	36.2	27.5	21.5	21.8
% change		8%	-10%	-9%	-8%	-6%	-7%	-4%	-3%	-3%	-1%	-4%	-23%	-18%
Female	1995	35.0	53.3	48.2	42.9	44.4	43.9	42.9	44.0	36.5	29.6	17.3	35.7	26.1
	2003	–	49.5	44.8	38.5	39.1	42.0	42.6	41.7	33.4	35.0	16.4	29.2	26.5
% change		–	-7%	-7%	-10%	-12%	-4%	-1%	-5%	-8%	18%	-5%	-18%	2%
All	1995	48.0	56.0	53.4	51.9	53.5	54.4	52.9	51.3	45.9	36.0	28.0	28.6	26.6
	2003	60.0	50.8	48.1	46.7	48.8	49.6	50.4	49.2	44.5	36.1	26.7	21.9	22.5
% change		25%	-9%	-10%	-10%	-9%	-9%	-5%	-4%	-3%	0%	-5%	-23%	-15%

Discussion

The general and specialist medical workforce in Australia does face potential shortages - due in part to ageing and retirement of the medical workforce[(see for example 15, 16,17)]. Ageing of the population is anticipated to drive up demand for medical care and certain policy constraints such as early discharge from hospital and same day treatment appear to have only limited capacity for delivering further efficiencies[18]. However, the rate of retirement of the medical workforce has not been predicted to be as rapid as for other predominantly female professions. With the rising feminisation of the medical workforce we can anticipate that a greater number of medical practitioners will be required to replace the older workforce and that the workforce may retire earlier in future generations.

The retirement rate of the medical professions is much lower than for the Australian population at large. About a quarter of Australian men and about one half of Australian women retire from full time work before the traditional retirement age of 65 years in Australia although about a one third of retirees from full time work continue some part time work. One of the main reasons for early retirement from full time work before 65 years in Australia is personal illness, with about 40% of men and 20% leaving full time work for this reason[19]. Job loss is another common reason for early

retirement suggesting that much of Australia's early retirement is unplanned. However, with health workforce shortages in Australia, job loss is less likely to be the reason for early retirement than for other workers.

Factors which impact on retention and retirement of older physicians

Medical practitioners may retire somewhat later than some other health professions and the workforce in general in Australia for a number of reasons. Medical practitioners generally have higher full time equivalent earnings and are often self-employed. Higher earnings on the job and number of years of education decrease the probability of job exit[20]. Job satisfaction has also been found to be important in reducing doctor's retirement intentions[21.]

Medical practitioners who are self employed in Australia are not required to contribute to superannuation[1], and may not have developed an awareness of the need for retirement savings until later in life. Persons under 45 years are less likely to save for retirement, and even in the top income quintile (top 20%), one third do not save[22]. At this age, income is more commonly devoted to paying off education debts and/or a home loan, travel, and the costs of raising children. In retirement, medical practitioners are unlikely to qualify for more than a small part-rate aged pension at best and not until age 65 if they are male[23]. Therefore, for medical practitioners without significant income producing assets, the fall in income from their pre-retirement earnings (the substitution effect) can be significant and provides incentive to continue to work[24],[25]. In addition, medical practitioners do not face a mandatory retirement age and those in private practice are able to continue to work flexibly at reduced hours, thus increasing the likelihood of working longer[26].

However, while a relatively large number of older medical practitioners work beyond traditional age there are several drivers that may lead to shorter working life in future generations.

[1] Superannuation is a concessionally taxed retirement savings and investment scheme.

Firstly, there are more female medical practitioners, and they are more likely to retire earlier than men and to reduce their hours of work. Secondly, both younger men and women are working fewer hours compared to men and women of the same age a generation ago and this pattern is likely to continue based on a recent medical survey[27]. Thirdly, if asset accumulation is a driver, then future generations of medical practitioners are more likely to be aware of and proactive about superannuation and retirement savings.

Future prospects and ways forward

Retirement of the baby boomer cohort of general and specialist physicians is likely to place further pressure on workforces which already experience shortages, with shortages occurring most often in rural and outer metropolitan areas. Nonetheless, other professions such as nursing are facing a much higher and faster rate of attrition than the medical workforce. This will limit the prospects for role substitution or streamlining education to allow easier movement between health professions to provide solutions in Australia where nursing shortages may be more acute than those for medical professions. Indeed, Australia already has a shortage of nurses in all Australian States and Territories — as listed on the National Skill Shortage List released annually by the Department of Education, Science and Training[28]. There have been some proposals for physician assistants in Australia but there is not yet a clear career path or acceptance of this role in Australia. However, it seems probable that a physician assistant career that has the advantages of a defined career path and relatively competitive remuneration may be more likely to be successful in reducing shortages than assuming that professions such as nursing — which have faster and earlier retirement rates and are therefore even more likely to experience shortages as their cohort ages than medicine — will be available to fill the gaps.

State governments have become increasingly aware of the potential of ageing to increase workforce shortages. The NSW government has set up a Mature Workforce Retention Project which

aims to devise strategies to retain employees in the public sector[29]. Similar strategies are being developed or implemented in other Australian States[30, 31]. Australian Government departments have also introduced strategies to retain older workers. The range of options available to Australian Government employees include flexible working arrangements, phased retirement, purchased annual leave and contract employment[32]. However, physicians and other health professionals in Australia are most often employed by State government departments (eg public hospitals), have their own private medical practice or are employees of a private practice.

There have been a number of changes to the Australian legislation and its tax and superannuation system which may impact on the retirement and retention of general and specialist physicians in Australia.

Following the release of the Intergenerational Report, the Australian Government has made a considerable effort to ensure that business in Australia is aware of emerging workforce shortages and the need to retain older workers and reduce negative stereotypes. In 2004, an Age Discrimination Bill was passed to make it unlawful to discriminate on the basis of age[33]. The Australian Government has also recently announced the removal of the 15 per cent tax on lump sums and pensions from a superannuation scheme after the age of 60 years effectively making income from a superannuation fund tax free from this age.[34] In addition, reasonable benefit limits (RBLs) which limited the amount that could be concessionally accumulated in a superannuation fund will be abolished. It is possible that this change may encourage some of the less than 10% per cent of general and specialist physicians who retire before age 60 to continue working. However, it is also possible that it will allow some of the more than 90 per cent of general and specialist physicians who have in the past worked beyond 60 years to retire early as their retirement income stream after age 60 years will be increased.

As a result, Australia will need to rely on a combination of new Australian trainees, overseas trained doctors and potentially new professions such as physician assistants to provide an adequate medical workforce for the future.

Length: 3692 words (limit 2500 - 4000 words)

References

1 The Treasurer. The Intergenerational Report. Canberra: Commonwealth of Australia; 2002.

2 Productivity Commission. Economic Implications of an Ageing Australia, Research Report. Canberra: Productivity Commission; 2005.

3 Australian Institute of Health and Welfare. Medical labour force 2002. Canberra: AIHW; 2004.

4 Australian Institute of Health and Welfare. Nursing labour force 2001. Canberra: AIHW; 2003.

5 Australian Medical Workforce Advisory Committee. . Australian Medical Workforce Advisory Committee Annual Report 2003-04. Sydney: AMWAC; 2004.

6 Australian Health Workforce Advisory Committee. Australian Health Workforce Advisory Committee 2004 Annual Report. Sydney: AHWAC; 2004.

7 Schofield DJ, Beard JR. 2005 Baby boomer doctors and nurses: demographic change and transitions to retirement. Med J Aust; 183: 80-83.

8 Catherine M Joyce, John J McNeil and Johannes U Stoelwinder 2006 More doctors, but not enough: Australian medical workforce supply 2001–2012. MJA; 184 (9): 441-446.

9 Kamien M. 1998 Staying in or leaving rural practice: 1996 outcomes of rural doctors'1986 intentions; MJA; 169:318-321.

10 Schofield DJ, Beard JR. 2005 Baby boomer doctors and nurses: demographic change and transitions to retirement. Med J Aust; 183: 80-83.

11 Schofield D (2006) Replacing the retiring baby boomer nursing cohort and the role of retirement income policy BMC Health Serv. Res. (accepted 31 Jan 07)

12 Schofield D and Fletcher S (2007) Ageing and retirement of the physiotherapy workforce: The future to 2026. The Aust J Physio (accepted 31 Jan 07)

13 Schofield D Fletcher S (2006) Baby boomer retirement and the future of dentistry Australian Dental Journal (accepted 9/06)

14 Schofield D Fletcher S (2006) Baby boomer pharmacists: ageing and projections of retirement (accepted 4 Dec 2006)

15 AMWAC. The general practice workforce in Australia: Supply and requirements to 2013. Australian Medical Workforce Advisory Committee, Sydney 2005. URL: http://www.health.nsw.gov.au/amwac/pdf/gp_summary.pdf

16 AMWAC. The surgical workforce in Australia (draft). Australian Medical Workforce Advisory Committee, Sydney 2005. URL: http://www.health.nsw.gov.au/amwac/pdf/surgery_draft.pdf

17 AMWAC. The specialist obstetrics and gynaecology workforces in Australia. Australian Medical Workforce Advisory Committee, Sydney 2004. URL: http://www.health.nsw.gov.au/amwac/amwac/pdf/obs_gyn_20042.pdf

18 Schofield D & Earnest A (2006). Demographic change and the future demand for public hospital care in Australia, 2005 to 2050, Australian Health Review 30 (4) pp 507-515.

19 Australian Bureau of Statistics, 1997. Retirement and retirement intentions, Australia. 6238.0. ABS, Canberra.

20 Meghir C, Whitehouse E. Labour market transition and retirement of men in the UK. J Econometrics 1997, 79: 327-354.

21 Sibbald B, Bojke C, Gravelle H. National Survey of job satisfaction and retirement intentions among general practitioners in England. BMJ 2003; 326:22.

22 Kelly S, Toohey M. Who are Australia's best savers? The second report on savings prepared for the Financial Planning Association of Australia. National Centre for Social and Economic Modelling, University of Canberra, Canberra.

23 Centrelink, 2005. Pensions, Payments, Allowances and Tests. www.aboutseniors.com.au/centrelink.html accessed 7 March 2005.

24 Dwyer DS, Mitchell OS. Health Problems as determinants of retirement: Are self-rated measures endogenous? J Health Economics 1999; 18(2): 173-193.

25 Mitchell OS, Fields GS. The Economics of retirement behaviour. J Labour Studies1984; 2 (1): 84-105.

26 Hurd M McGarry K. The relationship between Job Characteristics and retirement. Working paper 4558, National Bureau of Economic Research, Cambridge MA, 1993.

27 AMWAC. Career Decision making by postgraduate doctors. Australian Medical Workforce Advisory Committee, Sydney 2005. URL: http://www.health.nsw.gov.au/amwac/amwac/pdf/career_key20053.pdf

28 National and State Skill Shortage Lists Australia 2005: Canberra: Department of Education, Science and Training; 2005

29 NSW Department of Ageing, Disability and Home Care. Mature Workforce Retention Project. An initiative of the Office for Ageing, Sydney, 2006.

30 Department of Consumer and Employment Protection. Mature Age Employment Strategy. Government of Western Australia, Perth URL; www.worklife.wa.gov.au

31 Victorian Department of Human Services. Attracting and retaining older workers. Challenges and opportunities for the human services sector. Business Work and Ageing, Melbourne, July 2005

32 Commonwealth of Australia. Flexible working arrangements for older workers. Department of Communications, Information Technology and the Arts. Canberra, 2003.

33 The Australian Government. Age Discrimination Bill 2003 to become law. Media Release 094/2004, 17 June 2004 Office of the Attorney General, The Hon. Philip Ruddock, Canberra. URL: http://www.ag.gov.au/agd/WWW/MinisterRuddockHome.nsf/Page/Media_Releases_2004_Second_Quarter_17_June_2004_-_Age_Discrimination_Bill_to_become_law_-_0942004.

34 Australian Government. A Plan to Simplify and Streamline Superannuation. 9 May 2006. URL: http://www.budget.gov.au/. Accessed June 2006.