

# Issues Paper

## **State of the Specialist Workforce Crisis in New Zealand's Public Hospitals**

A paper for promoting discussion and awareness prepared by the Association of Salaried Medical Specialists on the status of the senior medical workforce crisis in district health boards

**ASMS**

Association of Salaried Medical Specialists

L11 The Bayleys Building  
Cnr Brandon St & Lambton Quay  
PO Box 10763  
Wellington 6143  
New Zealand

T+64 4 499 1271  
F+64 4 499 4500  
[www.asms.org.nz](http://www.asms.org.nz)

Ian Powell  
Executive Director

# Medical Specialist Workforce Crisis in DHBs: A Status Report

## Preamble

This issues paper discusses what we assess as a specialist workforce crisis in public hospitals. It deliberately excludes consideration of government objectives for DHBs which will require additional senior medical workforce capacity. These objectives include implementation of the recommendations of the Resident Medical Officers Commission adopted by government; comprehensive clinical leadership envisaged by the *Time for Quality* agreement between the ASMS and the 21 DHBs and the government's *In Good Hands* policy statement; enhancement of integration within the spectrum of care including primary and secondary; achievement of clinical networks and regional service collaboration and delivery between DHBs; the whole of hospital changes to achieve the government's six hour target for emergency departments; and the 20 additional theatres to increase elective volumes.

It also excludes consideration of the workforce capacity for shared but not fully achieved objectives between the ASMS and the DHBs on, for example, sufficient time for the fulfilment of non-clinical duties (especially those that support the quality of care) and provision of sabbatical consistent with the tenor of the MECA.

Instead it is largely limited to the thin white line between an "acceptable" service and a dysfunctional one. This paper describes how that line is becoming more and more fragile in the face of growing demand for services and increased global competition for medical specialist staff.

The Senior Medical Officer Commission<sup>1</sup> described the state of our medical specialist workforce as putting the health system in a "vulnerable situation". The Minister of Health has on more than one occasion described it as a "crisis".<sup>2</sup>

## Current position

In 2000 the Clinical Training Agency's analysis<sup>3</sup> of the medical workforce indicated a shortfall of up to 300 specialists, excluding several specialties that required further analysis. Despite the growth in New Zealand's specialist workforce between 2000 and 2008, the rate of growth has not kept pace with New Zealand's increasing needs.

Table 1 shows that by 2008 the workforce shortfall had grown to well over 600 specialists, based on international workforce benchmarks where they are available. The shortfall across all specialties is likely to be much greater.<sup>4</sup>

---

<sup>1</sup> The Director-General of Health's Commission on Competitive and Sustainable Terms and Conditions of Employment for Senior Medical and Dental Officers Employed by District Health Boards.

<sup>2</sup> Most recently on *Morning Report*, Radio New Zealand National, 22 February 2010.

<sup>3</sup> Clinical Training Agency (2001). *The Health Workforce: A Training Programme Analysis*. Ministry of Health 2001.

<sup>4</sup> Ideally, indicators to assess medical workforce adequacy should include regular analysis of a range of factors, including: unfilled positions, unmet need and waiting times in elective surgery, patient access, hours of work, quality and safety measures, referring practitioner assessment of access, consumer assessments of access, and views of practitioners in the workforce under review, as well as specialist-to-population benchmarks (which should be updated regularly to take account of the dynamic nature of health service delivery).

Table 1 provides recommended specialist-to-population ratios from a variety of local and international sources and should be seen as indicative. Recent qualitative information on some specialties, such as obstetrics and gynaecology, and anaesthesia, suggest some of the ratio benchmarks are conservative for current New Zealand conditions.

**Table 1: New Zealand specialist workforce requirements compared with Australia \***

\*See notes to table in Appendix 1

Specialty	New Zealand 2008 <sup>a</sup>				Australia 2007 <sup>b</sup>		No. required to equal Australia <sup>c</sup>
	No. (active)	No/pop.	Recommended benchmark	Deficit/surplus	No. (active)	No/pop.	
Not recorded	8		-	-	-	-	
Other	41	1:104,112	-		275	1:76,149	15
Anaesthesia	488	1:8,747	1:8,500 <sup>d</sup>	- 14	2,924	1:7,188	106
Basic med science	10	1:426,860	-		n/a		n/a
Breast medicine	2	1:2,134,300	-		n/a		n/a
Dermatology	50	1:85,372	< 1:66,500 <sup>e</sup>	-14	401	1:52,412	31
Emergency med	103	1:41,443	(f)	-77	895	1:23,483	79
Musculo-skeletal	17	1:251,094	-		n/a		n/a
Obste & gynae	196	1:8,893	1:10/15,000 <sup>g</sup>	shortage	1,332	1:6463	74
Occupational med	47	1:90,821	-		191	1:110,038	-8
Ophthalmology	109	1:39,161	1:22,700 to 1:26,000 <sup>h</sup>	-66	843	1:24,931	62
Pathology	167	1:25,560	(i)	shortage	1,115	1:18,850	59
Intensive care	42	1:101,633	(j)	shortage	385	1:54,590	36
Internal medicine	644	1:6,628	(k)	-230(+)	5,196	1:4,046	411
Paediatrics	218	1:5,566	1:5,400 <sup>l</sup>	-7	1,105	1:4,990	25
Palliative medicine	25	1:170,744	1:100,000 <sup>m</sup>	-18	178	1:118,074	11
Psychiatry	420	1:10,163	1:10,000 <sup>n</sup>	-7	2,745	1:7657	137
Public health medicine	130	1:32,835	(o)		140	1:150,123	-102
Radiology	272	1:15,693	1:10,000 <sup>p</sup>	shortage	1,462	1:14,376	25
Radiation oncology	34	1:125,547	1:100,000 <sup>q</sup>	-9	234	1:89,817	14
Rehabilitation medicine	8	1:533,575	1:100,000 <sup>r</sup>	-35	268	1:78,422	46
Sports medicine	17	1:251,094	-		n/a	-	n/a
Sexual health	12	1:355,716	1:100,000 <sup>s</sup>	-31	n/a	-	n/a
Surgery: cardio	21	1:203,266	1:150,000 <sup>t</sup>	-7	177	1:118,741	15
Surgery: general	168	1:25,408	1:18,600 <sup>u</sup>	-61	1,168	1:17,994	69
Surgery: neuro	17	1:251,094	1:180,000 <sup>t</sup>	-7	165	1:127,377	17
Surgery: orthop	196	1:21,778	1:22,200 <sup>v</sup>	+4	953	1:22,054	-2
Surgery: other	40	1:106,715	-		179	1:117,415	-4
Surgery: ORL	83	1:51,429	1:50,000 <sup>t</sup>	-2	393	1:53,479	-3
Surgery: paed	14	1:304,900	1:250,000 <sup>t</sup>	-3	82	1:256,307	3
Surgery: plastic	48	1:88,929	1:100,000 <sup>t</sup>	+5	345	1:60,919	22
Surgery: urology	49	1:87,114	1:50,000 <sup>t</sup>	-36	296	1:71,004	11
Surgery: vasc.	17	1:251,094	1:108,000 <sup>w</sup>	-23	195	1:107,780	23
<i>Surgery: subtotal</i>	<i>[653]</i>	<i>1:6,537</i>	<i>-</i>	<i>[-130]</i>	<i>[3,953]</i>	<i>1:5,317</i>	<i>[151]</i>
<b>TOTAL</b>	<b>3,713</b>	<b>1:1,150</b>	<b>-</b>	<b>-638(+)</b>	<b>23,642</b>	<b>1:889</b>	<b>1,100<sup>x</sup></b>
<b>Estimated Comparison for 2008<sup>y</sup></b>	<b>3,713</b>	<b>1:1,150</b>	<b>-</b>	<b>-</b>	<b>24,600</b>	<b>1:854</b>	<b>1,300</b>

Nineteen of 26 specialties and sub-specialties for which specific data are available require workforce increases of more than 20% to meet the recommended specialist-to-population ratios. Eight require increases of more than 50%, and four require increases of 100%+.

The number of medical specialties on Immigration New Zealand's Long-Term Skills Shortage List has also grown in recent years, from eight in 2004 to 11 in 2009, and there are strong grounds for adding more (Table 2).

This is further underpinned by OECD statistics showing New Zealand is bottom of the OECD table in terms of the number of specialists per 1,000 population (Figure 1).

**Table 2: New Zealand and Australian skills shortage lists, November 2009**

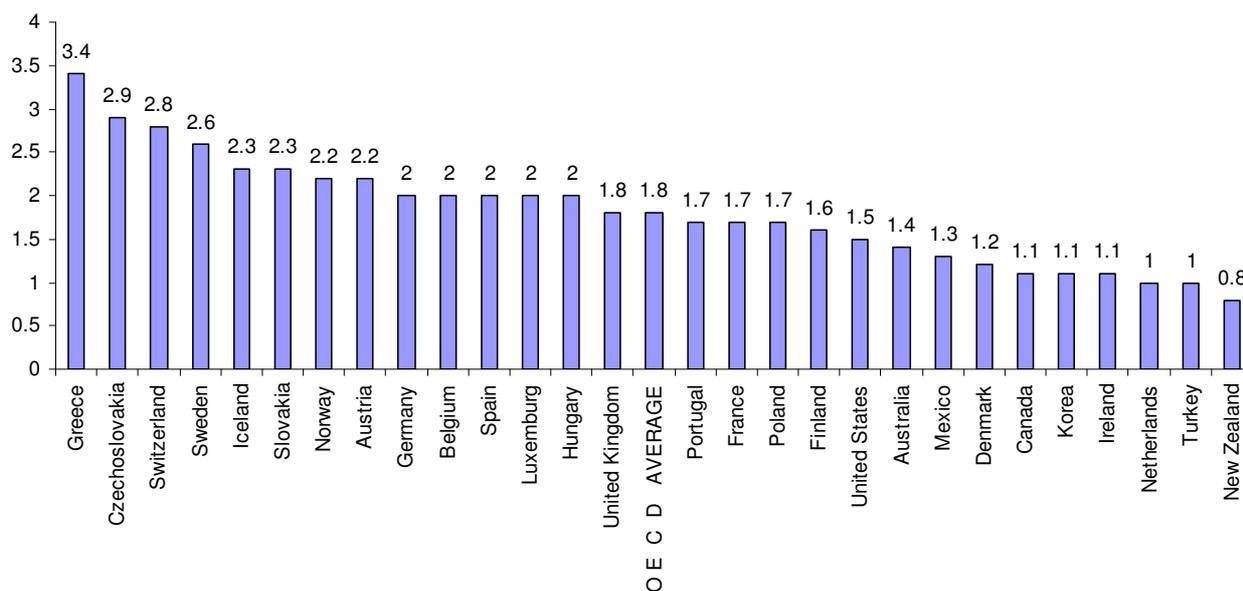
<u>NZ Long-Term Skills Shortage List (Medical Specialists)</u>	<u>Australian Critical Skills List (Medical Specialists)</u>
Anaesthetists .....	Anaesthetists
Intensive Care Specialists .....	Emergency Medicine Specialists
General Surgeons .....	Obstetricians & Gynaecologists
Obstetricians & Gynaecologists* .....	Ophthalmologists
Oncologists (Radiation) .....	Paediatricians
Oncologists (medical)* .....	Pathologists
Pathologists .....	Psychiatrists
Physician (Palliative Care)* .....	Radiologists
Psychiatrists .....	Specialist Physicians
Radiologists .....	Specialists (not elsewhere categorised)
Renal Medicine Specialists.....	Surgeons

\* Added to the list since 2004

*The Long-Term Skills Shortage List identifies those occupations where there is an absolute (sustained and ongoing) shortage of skilled workers both globally and throughout New Zealand.* – Immigration New Zealand

*A list of occupations in high demand in Australia*  
– Australian Immigration Department

Figure 1: Practising Specialists per 1,000 population in OECD Countries 2007 (or latest year available)



**Note:** The numbers are based on head counts. Ireland, the Netherlands, New Zealand and Portugal report the numbers of specialists entitled to practise (resulting in an over-estimation). Australia, Spain, Denmark, Finland, Sweden and Greece report 2006 numbers; Slovak Republic reports 2004 numbers.  
Source: *Health At A Glance*, OECD 2009.

More recent and detailed figures from the Medical Council's 2008 Workforce Survey indicate New Zealand had 0.87 specialists per 1,000 population in that year, which still leaves New Zealand last, even when compared with all other countries' results of the previous year. Table 1 indicates that in 2008 New Zealand had approximately 1,100 fewer specialists than Australia's 2007 workforce total, on a specialist-per-population basis.

Given Australia's specialist workforce has been growing at an average 4% per year over recent years, New Zealand's would have needed approximately 1,300 additional specialists (an extra 35% on our current workforce) to match Australia on a per population basis in 2008.<sup>5</sup> It should also be noted that the size of Australia's specialist workforce is below the OECD average, with acknowledged shortages across a range of specialties (Table 2).

The global competition for specialists is well documented. New Zealand's position in this contest of recruitment and retention presents some daunting challenges. This is especially so when we look at our nearest neighbour, Australia, which each year attracts an estimated 280 New Zealand doctors, including many specialists. According to the OECD, we have the second highest emigration rate of doctors in the OECD, the highest dependency on overseas-trained specialists (40% of the workforce, who tend to have a higher turnover rate than New Zealand trained specialists), and the lowest number of specialists per head of population (0.8 per 1,000).

Despite shortages in many specialties, many DHBs are not advertising on their web-sites (ie to international as well as domestic audiences) to attempt to fill the gaps.

For example, general surgeons are on the Long-Term Skills Shortage List, and there are reports of a "critical" shortage in many parts of Australia.<sup>6</sup> Currently there is an estimated shortage of more than 60 general surgeons in New Zealand, measured against recommended benchmarks, yet only one DHB was advertising for these specialists in February 2010. Pathologists are included on the Long-Term Skills Shortage List and the Australian Critical Skills List, yet, again, only one DHB was advertising for these specialists in February 2010.

A similar situation exists for other specialties. (Details of a spot-check of DHBs' advertised vacancies, in mid-February 2010, are included in "A summary of specialties" in Appendix 3.)

The pattern of advertised vacancies suggests some are being suppressed, either because management has no expectation of successful recruitment or in order to cut costs, or both.

In 2008, District Health Board New Zealand's official vacancy rate nationally was nearly 10%. The SMO Commission not only made the observation that this put the system in a "vulnerable situation", it was also "more likely to be an underestimate". A 10% vacancy rate far exceeds the rates reported in the United Kingdom and Australia, and most official DHB rates surpassed the levels that are regarded as "severe" or indicating "considerable shortage" overseas.<sup>7</sup>

An ASMS vacancy survey of senior doctors – mainly clinical directors – in six DHBs in 2008 indicated the number of vacancies, measured against the number of established positions was actually more than 22% and, when assessed against estimated professional need, totalled more than 34%.<sup>8</sup>

---

<sup>5</sup> *Medical Labour Force 2007*. Australian Institute of health and Welfare, October 2009

<sup>6</sup> Bronwyn Herbert "Surgeon shortage threatens regional health", ABC News, 25 November 2009

<sup>7</sup> Detailed in *Repairing the Leaking Bucket*, ASMS, January 2009

<sup>8</sup> Detailed in *Repairing the Leaking Bucket*, ASMS, January 2009

## DHB Specialist Inflows and Outflows

MCNZ workforce registration data shows that, on average, over the three years to March 2009, approximately 296 new specialists entered the workforce each year.<sup>9</sup>

DHBNZ's quarterly workforce reports shows the number of specialists working in the public sector for the period June 2006 to September 2009 grew from 3,179 to 3,401.<sup>10</sup> That is an increase of 68 specialists per year on average.

This suggests, over recent years at least, that (a) the large majority of new entrants into the specialist workforce have been employed exclusively in the private sector, which is unlikely since in 2008 only 8% of specialists reported working exclusively in the private sector,<sup>11</sup> or (b) the turnover rate of DHB specialists is high with the large majority of the 296 new specialist registrations per year being employed, at least in part, by DHBs but resulting in a net annual increase of around 68 DHB specialists.

Assuming 92% of new specialists each year were employed, at least in part, by DHBs, the above figures indicate around 270 specialists join the DHB workforce each year, while around 200 leave it.

## International Inflows and Outflows

### Inflows

Forty percent of the New Zealand specialist workforce are international medical graduates (IMGs). In some specialties on the Long-Term Skills Shortage List the IMG proportion is close to 50% and for psychiatry it is approaching 60%. Over the last three years, IMGs have comprised approximately half of the new specialist registrations.

Retention rates of IMG specialists are poorer than those of New Zealand trained specialists. While MCNZ data show that around 92% of a cohort of New Zealand doctors with vocational registration are retained eight years-post registration (though the rate is declining), around only 70% of vocationally registered IMGs are retained over the same period and, again, the retention rate appears to be declining. In the most recent figures (2008), 20% of the IMG cohort were lost in the year following vocational registration.

The practical reality of New Zealand's situation is that we have no option but to continue to depend on a large proportion of overseas-trained specialists, at least in the short- to medium term. According to a recent OECD study:

*...the sustainability of New Zealand health workforce policy is probably not so much jeopardised by the large reliance on immigration but rather by the failure to retain international health workers migrants in New Zealand on the medium and long term.<sup>12</sup>*

### Outflows

There are no official statistics kept on the number of specialists emigrating each year. However, an OECD paper conservatively estimates 29% of New Zealand doctors are working overseas, giving New Zealand the second-highest expatriation rate in OECD countries (behind Luxembourg).<sup>13</sup> A survey by the ASMS found that in the 18 months to July 2007 New Zealand lost at least 80 specialists to Australia alone – the equivalent of a senior medical specialist workforce at a regional hospital.<sup>14</sup>

---

<sup>9</sup> This is the total number of new vocational registrations excluding GPs and Accident and Medical Practitioners.

<sup>10</sup> The September 2009 data is yet to be published.

<sup>11</sup> Report of the Director-General of Health's Commission on Competitive and Sustainable Terms and Conditions of Employment for Senior Medical and Dental Officers Employed by District Health Boards. June 2009

<sup>12</sup> P Zurn, J-C Dumont. *Health Workforce and International Migration: Can New Zealand Compete?* OECD Health Working Paper No 33, 2008

<sup>13</sup> P Zurn, J-C Dumont. *Health Workforce and International Migration: Can New Zealand Compete?* OECD Health Working Paper No 33, 2008

<sup>14</sup> Association of Salaried Medical Specialists (ASMS), Survey Summary, 29 July 2007. Available at: [www.asms.org.nz](http://www.asms.org.nz)

There is a range of “push” and “pull” factors that motivates specialists to leave. Key factors identified by delegates at the ASMS Annual Conference 2008 included “onerous” on-call hours, shortages of junior doctors as well as senior staff (resulting in more work for senior doctors), lack of administrative support, lack of real non-clinical time, adversarial attitudes from management, unstable staffing with high dependence on locums, time for mentoring young doctors, increasing numbers of staff working part-time putting more pressure on full-timers, as well as remuneration.

There is mounting evidence that the latter is becoming an increasingly important “push” and “pull” factor.

An ASMS national survey and telephone interviews with 112 training directors across four major specialties (psychiatry, anaesthesia, surgery, general medicine and intensive care), undertaken at the end of 2009, found that half of New Zealand’s registrars in their final year leave to take up their first specialist positions with overseas employers and that the most common reason for leaving, according to the training directors, was for better salaries and conditions.

Better salaries and conditions were cited by respondents twice as many times as “training and experience” as reasons why registrars leave for Australia. Lack of available positions in New Zealand once registrars complete their training was also identified as a major reason for heading across the Tasman.

Similar results were found in an unpublished survey<sup>15</sup> carried out in 2009, following up a 2002 survey of trainees’ career intentions in anaesthesia. The 2009 survey showed that while 80% of the 2002 cohort had intended to eventually work as a specialist in New Zealand, only 64.5% were working in New Zealand seven years later. In 2002, 13% stated Australia as their preferred destination while twice that amount (26%) were working there in 2009.

Significantly, the 2009 survey found that 75% of respondents currently working overseas agreed or strongly agreed that salary was an important influence on choosing their country of residence, whereas respondents working in New Zealand indicated lifestyle and family ties as the main reasons for staying.

The international literature also often points to personal and family factors, as well as the importance of pay and conditions, as common reasons for migration or staying put. Generally, the more independent and career-minded the person, the more open they are to moving. But as one Canadian study found:

*Despite expressions of discontent with involuntary long hours of work, or inadequate social infrastructure, research capacity or social amenities, discussion invariably settles on relative incomes as the chief determinant of migration...<sup>16</sup>*

The unprecedented support for industrial action by ASMS members during the last MECA negotiations indicates pay and conditions in New Zealand are also key factors in many specialists’ career decisions. Feedback from ASMS members suggests the issue of remuneration is not merely a matter of how much they are paid but also how it impacts on other factors that determine the ability of their DHB to recruit and retain staff, which in turn impacts on the conditions in which they work.

---

<sup>15</sup> Moran EML, French RA. A comparison of anaesthetic trainees’ career outcomes with previously expressed intentions.

<sup>16</sup> M Benarroch, H Grant, 2004 “The interprovincial migration of Canadian physicians: does income matter?” *Applied Economics*, 36 (2004), 2335-2345, November

## Future pressures on inflows and outflows

### Demographics

It is widely recognised that a growing and ageing population will require a significantly larger specialist workforce to serve it. In 2006 12% of New Zealanders were aged 65 or over, and this is projected to increase to around 17% by 2021. The proportion of the population aged 65+ has already reached at least 17% in 8 OECD countries.<sup>17</sup> The average size of the specialist workforce in five of those countries<sup>18</sup> is approximately 2.1 specialists per 1,000 population, compared with New Zealand's current 0.8 per 1,000.

For New Zealand to reach a ratio of 2.1 per 1,000 by 2021, an average annual net increase of approximately 490 specialists would be needed. (The current average net growth, based on the MCNZ's workforce surveys for the five years from 2003 to 2008, is approximately 170 specialists per year.)

For New Zealand to reach the current OECD average ratio of 1.8 per 1,000 (also the UK's current ratio) by 2021, there would need to be an average annual net increase of approximately 380 specialists.

Even if New Zealand were able to suddenly find an additional 1,300 specialists to bring our workforce into line with Australia's, as discussed earlier, in order to maintain workforce parity with Australia, New Zealand would still need to increase its current rate of growth of the specialist workforce. From 2003 to 2007 Australia's specialist workforce grew by 19.9% compared with New Zealand's 16.9%.<sup>19</sup>

Projections on specialist workforce requirements are always arguable. It is clear, however, that international comparisons show the current rate of net growth will see New Zealand fall further behind OECD countries. Nor is the current rate of growth sufficient to meet workforce levels required to service the projected older population, based on the levels employed by other countries with older populations.

The report of the SMO Commission acknowledged that the Government's moves to increase medical school intakes over the next five years will not fully benefit the specialist workforce "until 2029, because it takes 12-15 years to qualify as an SMO".<sup>20</sup> However, such benefits will not be fully realised unless, in the meantime, retention rates for both junior doctors and senior doctors are improved, especially considering both groups' high dependency on IMGs.

### International competition

The SMO Commission acknowledged that, while until now we have managed to attract a high proportion of IMGs to fill at least some of the gaps, increasing global competition "could make the New Zealand trained health professionals harder to retain, and attracting the potential pool of foreign recruits more difficult".

To potential recruits in the northern Europe, North America and southern Asia who may consider moving to this part of the world, both New Zealand and Australia can offer attractive life-style options. However, a 30%-35% pay difference between the two countries, as reported by the SMO Commission, puts New Zealand at a considerable disadvantage.

Not least, our geographical proximity, as well as our shared specialist training systems and similar cultures, means New Zealand is a prime recruitment ground for Australia.

---

<sup>17</sup> OECD Health Data 2009. The countries are Austria, Belgium, Germany, Greece, Italy, Japan, Portugal, and Sweden.

<sup>18</sup> Data for Japan and Italy is not available, and Greece has been excluded as an outlier, having 3.4 specialists per 1,000 population.

<sup>19</sup> Statistics published by the Australian Institute of Health and Welfare, 2009, and the Medical Council of New Zealand, 2009

<sup>20</sup> Report of the Director-General of Health's Commission on Competitive and Sustainable Terms and Conditions of Employment for Senior Medical and Dental Officers Employed by District Health Boards. June 2009

Nevertheless, New Zealand's only options to increase its specialist workforce over the next 20 years are to improve retention rates and recruit more IMGs.

The already-high proportion of IMG specialists is therefore likely to grow, assuming we can continue to attract them here (and the high number of approaching retirements will add further pressure for this to happen). As the proportion of IMGs grows, New Zealand's specialist workforce will become more vulnerable than it is already.

The unavoidably heavy reliance on IMGs also means that any policy changes in countries that affect immigration flows (eg policies to attract specialists to return to their country of origin) could have a major impact on services in New Zealand.

#### Competition from the private sector

The private sector is growing along with the public sector. It is clear that incomes in the private sector are considerably better than in the public sector. Opportunities for making high incomes in private practice are greater in some specialties and in some locations. For example, North Shore Hospital anaesthetists and surgeons have indicated to the ASMS that they could make more money working one day in the private sector than they could make from working a week in the public sector and that the balance was tipping further towards the private sector.

#### Gender and generational change

Gender and generational factors will also impact on future specialist workforce requirements. In 2008 women comprised 26% of the specialist workforce, compared with 19% in 2000 and 13% in 1990. Gender statistics for practising registrars indicate the proportion of female specialists will continue to increase in the future. Medical Council data show women tend to work fewer hours than men (41 hours, compared with 47 hours for males, in 2005). Census data show 21% of female doctors work part-time, compared to 6% for males.

The working life contribution for female medical practitioners, when measured in total time worked, is estimated at about 80% of that of a male medical practitioner.<sup>21</sup>

However, the Health Workforce Advisory Committee observed that lifestyle and work-life balance aspirations are changing throughout all working populations. "These new aspirations may be more characteristic of generation than gender."<sup>22</sup>

This is reinforced in a "work-life flexibility" survey of doctors carried out by the Australian Medical Association in 2007, which indicates "attitudes of the medical workforce are changing in line with societal change" and that doctors are placing greater importance to work-life balance. Eighty-one percent of survey respondents said they would like greater access to flexible working arrangements, the top three arrangements for specialists being flexible work hours, part-time work, and home-based work. The survey also found that: "Contrary to popular belief, access to flexible arrangements is not just an issue for female doctors. The demand for flexible working and training arrangements is similar among male and female doctors." Further, older generations of doctors were accessing flexible arrangements in greater numbers than their younger colleagues, indicating they were "just as motivated to find a balance between their personal and professional lives".<sup>23</sup>

---

<sup>21</sup> Bewley BR, Bewley TH 1975. Quoted in *Fit for Purpose and for Practice: Consultation Document*. Health Workforce Advisory Committee, 2005.

<sup>22</sup> HWAC 2005

<sup>23</sup> Australian Medical Association 2008. AMA Work-Life Flexibility Survey. AMA 2008. Available at: [www.ama.com.au/web.nsf/doc/WEEN-7DB7QX/\\$file/WLF\\_Report\\_2008.pdf](http://www.ama.com.au/web.nsf/doc/WEEN-7DB7QX/$file/WLF_Report_2008.pdf)

## Retirements

In 1998, 24% of the specialist workforce was aged 55 or over; by 2008 that had increased to 28%. The affect of the ageing specialist workforce is two-fold.

First, as the SMO Commission noted, there is a sharp drop-off in specialist numbers from age 50 onwards.

Says the Commission:

*To some extent it [the drop in numbers from aged 50] reflects lower numbers of medical students 30 years ago, but it may also reflect a loss of SMOs to the system through early retirement or a career change, or they may be leaving New Zealand to practise medicine overseas – a widely held belief across the health sector... Australia's MABEL survey found that "13% of specialists are very likely to quit medical work entirely within the next five years. Intentions to quit are largely driven by those over 55 years old who expect to retire, and thus reflects the loss to the workforce of the baby boomer generation".<sup>24</sup>*

Within the next five years 21% of the specialist workforce will turn 50, and 17% will turn 55.

Secondly, Medical Council statistics show the estimated average number of hours worked per week begins to fall as specialists get older. Within the next five years 12% of the specialist workforce will turn 60.

## **Conclusion**

The New Zealand medical specialist workforce is in a fragile state. Under current conditions, the capacity to deliver an effective and acceptable level of service cannot be sustained as demand for services grows and international competition for medical specialist staff increases.

---

<sup>24</sup> *Medicine in Australia: Balancing Employment and Life*, from MABEL Matters No 1, May 2009, Melbourne Institute, Monash University, Australia

## Appendix 1

**Table 1: Sources & Notes**

- a) Numbers of active specialists: National Health Information Service 2010 (from unpublished Medical Council of New Zealand Workforce Survey data, 2008). Specialists per population: calculated from Statistics NZ population data. Deficit/surplus was estimated from benchmarks listed below.
- b) Number of active specialists: Australian Institute of Health & Welfare, *Australian Medical Labour Force Survey 2007*. These statistics are acknowledged by the AIHW as an “undercount”, due to the way some of the data were collected (see *Medical Labour Force 2007*, National Health Labour Force Series No 44. AIHW 2009). Specialists per population: calculated from the Australian Bureau of Statistics data.
- c) The number of specialists required in New Zealand to equal the number of specialists in Australia on a specialist-per-population basis.
- d) Baker AB 1997. Anaesthesia Workforce in Australia and NZ, *Anaesthesia and Intensive Care* 1997. Feb; 25(1):60-7. University of Sydney, Australia.
- e) Australian Medical Workforce Advisory Committee (AMWAC) considered a ratio of 1:66,500 inadequate (AMWAC Report 1998.1). Note: All AMWAC reports are available at [www.nhwt.gov.au/publications.asp](http://www.nhwt.gov.au/publications.asp).
- f) New Zealand Faculty, Australasian College for Emergency Medicine. *Workforce Document*, April 2003 (unpublished). Recommended a minimum of 180 specialists through to 2007.
- g) AMWAC Report 2004.2. AND RANZCOG (2008). *A Statistical Analysis of the Fellow and Trainee Workforce for the Royal Australian and New Zealand College of Obstetricians and Gynaecologists*. Population based on females 15 years and over.
- h) AMWAC Report 1996.6. *The Ophthalmology Workforce in Australia*.
- i) NZ Committee of Pathologists, *Workforce Analysis: Pathologists in New Zealand 2007*. Royal College of Pathologists of Australia 2007. Note: The RCPA estimated a total of 210 (148.3 FTE) pathologists in 2007, including specialists practising in clinical haematology and clinical immunology.
- j) AMWAC Report 1999.1, *Intensive Care Workforce in Australia*. AMWAC considered a ratio of 1:46,600 inadequate. AND: Drennan K et al, *Intensive Care Resources and Activity: Australia and New Zealand 2006/07*, Australian and New Zealand Intensive Care Society 2009. (The latter reported 59 intensive care specialists in NZ as at 30 June 2007.)
- k) ASMS 2010. See Appendix 2, Internal Medicine Specialists – New Zealand & Australia.
- l) AMWAC Report 1999.6. *The Consultant Paediatric Workforce in Australia*. Population calculations based on 0-18-year-olds.
- m) Australian and New Zealand Society of Palliative Medicine (2009). Position Statement: Benchmark Number of Specialists in Palliative Medicine.
- n) World Health Organisation.
- o) Clinical Training Agency (2001). *The Health Workforce: A Training Programme Analysis*. Ministry of Health 2001. The CTA noted in 2001 that the strengthening focus on preventative measures would most likely require an increase in public health physicians.
- p) Shortage indicated in: Ministry of Health 2007, *Cancer Control Workforce Stocktake and Needs Assessment*, Wellington. Ministry of Health. AND: Royal Australian and New Zealand College of Radiologists (2007). *Results of 2006 Royal Australian and New Zealand College of Radiologists Workforce Surveys*. Available at: [www.ranzcr.ed.au](http://www.ranzcr.ed.au). AND Y Nakajima et al 2008. *Radiologist Supply and Workload: International Comparison, Japanese Journal of Radiology* Vol 26 No 8 2008. Average of 26 OECD countries in 2004 was one radiologist per 10,000 population.
- q) Morgan G et al 2000. Projected requirement for radiation oncologists and trainees in Australia and NZ to 2007. *Australasian Radiology*. 2000 Feb; 44(1): 88-97. Shortage also indicated in Ministry of Health (2007).
- r) AMWAC Report 1997.3.
- s) Auckland District Health Board. 2007. *Career Med: Specialties List*.
- t) For six surgical specialties as indicated: Royal College of Surgeons of England, 2005. *Developing a Modern Surgical Workforce*, January 2005. Available at: [www.rcseng.ac.uk/publications/docs/modern\\_surgical\\_workforce.html](http://www.rcseng.ac.uk/publications/docs/modern_surgical_workforce.html).
- u) In the United States 1:13,300 is considered an adequate benchmark: J. McGuire, *Research News*, Ohio State University 12 January 2008. AMWAC Report 1997.2 suggests 1:18,600 as an adequate ratio. The Royal College of Surgeons (2005) recommends 1:25,000 as a target.
- v) British Orthopaedic Association (2008). Manpower Census December 2008. The BOA has recommended that the 1: 25,000 ratio be revised to 1:15,000 by 2020, with an interim target of 1:20,000 by 2015.
- w) In the United States a ratio of approximately 1:108,000 is suggested as adequate. S Bhagwan et al, *Predicted shortage of vascular surgeons in the United States: Population and workload analysis, Journal of Vascular Surgery* Vol 50 Issue 4, Oct 2004.
- x) For New Zealand to have a total specialist-per-population ratio of 1:889 (Australia’s total in 2007), New Zealand would have needed a little over 4800 specialists in 2008 (ie an additional 1100 specialists approximately).
- y) Australia’s estimated specialist workforce in 2008, assuming a 4% increase on 2007 (based on recent growth trends), would give it one specialist per 854 population. New Zealand would need approximately 5000 specialists (an additional 1300) to reach a similar specialist-to-population ratio.

## Appendix 2

### Internal Medicine Specialists – New Zealand & Australia

Sub-Specialty	New Zealand 2008 <sup>1</sup>				Australia 2007 <sup>2</sup>		No. required to equal Australia <sup>3</sup>
	No. (active)	No. per population	Deficit/surplus	Recommended benchmark	No. (active)	No. per population	
General	173	1:24,674	-83	1:16,700 <sup>4</sup>	595	1:35,323	-52
Cardiology	97	1:44,006	-45	1:30,000 <sup>5</sup>	804	1:26,141	+66
Diabetology	4	1:1,067,150			-	-	-
Endocrinology	26	1:164,177			386	1:54,448	+52
Gastroenterol	53	1:80,540	-12	1:66,000 <sup>6</sup>	591	1:35,562	+67
Geriatric medicine	52	1:10,342 (over 65s)	-82	1:4,000 (over 65) 1:10,000 (over 75) <sup>7</sup>	341	1:8,012	+15
Haematology	25	1:170,744	-0	Est. 25 FTEs <sup>8</sup>	240	1:87,571	+24
Immunology	6	1:711,433			119	1:176,613	+18
Infectious diseases	13	1:328,354			194	1:108,335	+26
Medicine genetics	3	1:1,422,867			85	1:247,259	+14
Medicine oncology	35	1:121,960	-8	1:100,000 <sup>9</sup>	312	1:67,362	+28
Clinical pharmacology	4	1:1,067,150			21	1:1,000,809	+0
Nephrology	35	1:121,960			-	-	-
Neurology	37	1:115,368			408	1:51,512	+46
Nuclear medicine	4	1:1,067,150			166	1:126,608	+30
Thoracic medicine	-				167	1:125,850	-
Respiratory medicine	45	1:94,858			229	1:91,777	+2
Rheumatology	32	1:133,394			252	1:83,401	+19
Renal medicine	-				285	1:73,744	-
<b>Total</b>	<b>644</b>	<b>1:6628</b>	<b>-230</b>		<b>5196</b>	<b>1:4046</b>	<b>+411</b>

Note: Excludes Intensive Care (Internal Medicine) and Paediatric Medicine, which are included in the main list of specialties

<sup>1</sup> Numbers of active specialists: National Health Information Service 2010 (from unpublished Medical Council of New Zealand Workforce Survey data, 2008). Specialists per population: calculated from Statistics NZ population data. Deficit/surplus was estimated from benchmarks listed below.

<sup>2</sup> No. of specialists: Australian Medical Labour Force Survey 2007. Specialists per population: calculated from the Australian Bureau of Statistics data.

<sup>3</sup> The number of specialists required in New Zealand to equal the number of specialists in Australia on a specialist-per-population basis.

<sup>4</sup> Source: Internal Medicine Society of Australia and New Zealand (2005). *General Physician Numbers* (New Zealand: A discussion paper.) Available: at [www.imsanz.org.au](http://www.imsanz.org.au). The paper recommended between 5FTE and 7FTE per 100,000 population in the medium term. The figure in the table is based on 6FTE per 100,000.

<sup>5</sup> Australian Medical Advisory Committee Report 1999.5. (AMWAC considered 1:30,180 adequate)

<sup>6</sup> AMWAC Report 2000.4, quoting Royal College of Physicians of London, Gastroenterology Committee 1999

<sup>7</sup> AMWAC Report 1997.5, quoting British Geriatric Society

<sup>8</sup> Ministry of Health (2007). *Cancer Control Workforce Stocktake and Needs Assessment*. Benchmark 1.6 medical oncology and haematology specialists per 100,000 population (assuming 1.0-1.1 FTE medical oncology and 0.5-0.6 FTE haematology per 100,000)

<sup>9</sup> *ibid*

## Appendix 3

### SUMMARY OF SPECIALTIES

Following are brief overviews describing the current positions of the main specialties, taking into account the data used in Table 1 and also including, where significant, indicators of age and dependence on IMGs from data provided by the Medical Council.

#### Anaesthesia

**Status:** SHORTAGE

- Included on the Long-Term Skills Shortage List and the Australian Critical Skills List
- 24% of the workforce is aged 55 or over. 5% is aged 65+
- “We have a shortage of Anaesthetists in the North & South Island.” – Enterprise Recruitment advertisement, 17 February 2010.
- 48% of anaesthetists are IMGs.
- Seven DHBs were advertising for one or more anaesthetists in February 2010.<sup>10</sup>

#### Dermatology

**Status:** SHORTAGE

- A 28% increase in the current workforce is needed to match the recommended benchmark.
- Private practice is the main employment setting for over 80% of the workforce.
- 34% of the workforce is aged 60 or over. 4% is aged 65+

#### Emergency Medicine

**Status:** SHORTAGE

- A 75% increase in the current workforce is needed to match the recommended benchmark.
- Despite the shortfall, Emergency Medicine specialists are not on New Zealand's Long-Term Skills Shortage List. They are included on the Australian Critical Skills List.
- 45% of Emergency Medicine specialists are IMGs.
- Eight DHBs were advertising for one or more Emergency Medicine specialists in February 2010.

#### Intensive care

**Status:** SHORTAGE

- Included on the Long-Term Skills Shortage List
- Six DHBs were advertising for intensive care specialists in February 2010.
- From 2000/01 to 2006/07, the number of available intensive care beds in New Zealand fell from 6.02 per 100,000 population to 4.82 per 100,000 – a 20% reduction. During 2006/07, inadequate intensive care resources (beds or staff) led to an estimated 724 elective procedures being cancelled, 99 patients being turned away from intensive care units, and 761 patients being discharged early.<sup>11</sup> In total, about one in 12 intensive care patients were affected.
- While the workforce data provided by NZHIS (sourced from the MCNZ Annual Workforce Survey) shows there were 42 intensive care specialists in 2008, this appears to be understated. ANZICS reported that as at 30 June 2007 there were 54 salaried intensive care specialists and four sessional specialists.
- AMWAC in 1999 noted there were 398 specialists practising in Australia - a ratio of 2.1 specialists per 100,000 population. AMWAC recommended between 464-500 specialists were needed, which equated to a ratio of between 2.5 and 2.7 specialists per 100,000 population. For New Zealand to have achieved that ratio in 2008, approximately 110 specialists would have been needed.

<sup>10</sup> Advertising on the DHB website as at 17 February 2010

<sup>11</sup> *Intensive Care Resources and Activity: Australia and New Zealand 2003-2005, and 2008*, Australian and New Zealand Intensive Care Society

## Internal medicine

**Status:** SHORTAGE

- Specialist-to-population benchmarks in just six of the 19 specialties/sub-specialties within Internal Medicine indicate a shortage of at least 230 specialists. An increase of at least 36% is required in those six sub-specialties.
- Specialists in renal medicine and medical oncology are on the Long-Term Skills Shortage List.
- The Internal Medicine Society of Australia and New Zealand (IMSANZ) estimates New Zealand needs between five and seven FTEs per 100,000 population to provide adequate service, teaching and research capacity in general medicine.<sup>12</sup> Based on that benchmark, there is a shortage of more than 80 general physicians. A 48% increase in the current workforce is needed. 31% of general physicians are aged 55 or over. 11% is 65+.
- Gastroenterology and Medical Oncology both need more than 20% increases to match the recommended workforce benchmarks. Cardiology requires an increase of 46% (45 specialists); 24% of the cardiology specialist workforce is aged 55 or over and 8% is 65+.
- Geriatric Medicine requires a 158% increase to meet the recommended benchmarks, with an estimated shortage of more than 80 specialists. Approximately 38% of the current workforce is aged 55 or over. Despite this, Geriatric Medicine specialists are not on the Long-Term Skills Shortage List.
- 16 DHBs were advertising for internal medicine physicians in February 2010; nine were advertising for Geriatric Medicine specialists.

## Obstetrics and Gynaecology

**Status:** SHORTAGE

- Nationally the ratio of specialists to population falls within the benchmark established in 1997 but a RANZCOG workforce study (see notes to Table 1) shows a maldistribution of O & G specialists, with the bulk of them working in Auckland. The rest of the country does not meet the benchmark (1:10,000/15,000 women).
- MCNZ data show private practice is the main employment setting for nearly 30% of the workforce.
- O& G specialists are included in New Zealand's Long-Term Skills Shortage List and the Australian Critical Skills List.
- 49% of O&G specialists are IMGs.
- Approximately 31% of the workforce is aged 55 or over. 7% is aged 65+

## Ophthalmology

**Status:** SHORTAGE

- A 61% increase in the workforce is needed to reach the recommended specialist-to-population benchmark.
- 28% of the workforce is aged 55 or over. 13% is aged 65+
- More than half of the workforce (56%) list private practice as their main employment setting.
- Despite the shortage, only two DHBs were advertising for ophthalmologists in February 2010 and they are not on New Zealand's Long-Term Skills Shortage List (but are included on the Australian Critical Skills List).

---

<sup>12</sup> Internal Medicine Society of Australia and New Zealand (2005). *General Physician Numbers (New Zealand): A discussion paper*. Available at [www.imsanz.org.au/resources/documents/NZ\\_genmed\\_workforce.pdf](http://www.imsanz.org.au/resources/documents/NZ_genmed_workforce.pdf)

## Paediatrics

**Status:** SHORTAGE

- There were 218 active paediatric specialists in New Zealand in 2008, indicating a specialist-to-population (0-18 years) ratio of more than 1:5,500. However, overseas studies suggest the ideal ratio ranges between one paediatrician per 1,200 to one paediatrician for every 2,000 children.<sup>13</sup>
- Based on the 2008 figures, New Zealand would need around 600 paediatricians (ie nearly 400 additional specialists) to attain a ratio of one specialist per 2000 children (0-18-year-olds).

## Palliative Medicine

**Status:** SHORTAGE

- Included on the Long-Term Skills Shortage List.
- Currently Palliative Medicine needs an increase of 72% to meet the recommended benchmarks, with an estimated shortage of 18 specialists.
- 52% of the workforce is aged 55 or over. 20% are aged 60+.
- 72% of Palliative Medicine specialists are IMGs.
- Despite the shortage, only one DHB was advertising for Palliative Medicine specialists in February 2010.

## Pathology

**Status:** SHORTAGE

- Included on the Long-Term Skills Shortage List and the Australian Critical Skills List.
- Less than half of the pathologists work in DHBs as their main employment setting.
- An estimated 39% of the workforce is aged 55 or over. 14% is aged 65+.
- A workforce analysis by the New Zealand Committee of Pathologists found that between 2003 and 2007 the number of FTE pathologists decreased by 7% – from 159.4 to 148.3, while the population increased by 5%. The population ratio for New Zealand in 2008 stood at one pathologist per 25,000 head of population.
- In Australia, where there is considered to be a severe shortage of pathologists, there is a population ratio of one pathologist per 19,000. This means New Zealand would require 59 more pathologists just to come up to the same level as Australia.
- Based on current training numbers, current rates of international medical graduates (IMGs) entering, retirements, and pathologists leaving, the committee estimates that by 2018 New Zealand will be 106.9 FTE pathologists short of the Clinical Training Agency's projected requirements. Taking the best case scenario to meet this demand there would need to be at least an additional 10 FTE coming into the system each year for 10 years on top of the current 4.1 FTEs.
- Says the committee: "Unless there is a dramatic increase in migration of pathologists to New Zealand, which is unlikely because of the international crisis in the pathology workforce and the lower pay and workload conditions offered in New Zealand for pathologists, an increase in the number of training position [at least 20-30 position per year] will be required."<sup>14</sup>
- 45% of pathologists are IMGs.

---

<sup>13</sup> L Althouse, J Stockman. Paediatric Workforce: A look at paediatrics data from the American Board of Paediatrics. *Journal of Paediatrics* 2006;148:166-9. Available at: <http://journals.elsevierhealth.com/periodicals/ympd/search/quick>

<sup>14</sup> NZ Committee of Pathologists, *Workforce Analysis: Pathologists in New Zealand 2007*.

## Psychiatry

**Status:** SHORTAGE

- Included on the Long-Term Skills Shortage List and the Australian Critical Skills List.
- Approximately 29% of psychiatrists are aged 55 or over; 9% are aged 65+
- Eight DHBs were advertising for psychiatrists in February 2010

*These shortages are slightly offset by the number of foreign-trained psychiatrists practising in New Zealand. However, many of these people are only prepared to work in urban areas and most come to New Zealand on short-term contracts.*

– Government Career service website: [www.careers.govt.nz](http://www.careers.govt.nz) (February 2010)

- 57% of psychiatrists are IMGs.
- In 2009 2.4% of New Zealand medical graduates entered into the field of psychiatry. Predictions of future workforce need show this should be up around 5%.<sup>15</sup>

## Public Health Medicine

**Status:** UNKNOWN

- Unusually, New Zealand compares well with Australia in this specialty. However, because of the nature of public health, its current workforce requirements are difficult to assess.
- The Public Health Advisory Committee commented in 2004:

*There is a general agreement that there is generally a lack of a well-trained public health workforce and the new public health environment requires additional competencies. But there is seen to be a general lack of opportunity for professional development in the public health sector. There are also recruitment and retention problems, especially away from the main centres.*<sup>16</sup>

- A DHBNZ forecast on public health physicians in 2008 said it was “unclear if there was a current unmet need”. But it also noted that features of the Public Health Bill could increase demand for public health physicians. Other DHBNZ papers workforce forecasts recognised that effective public health services could reduce the demand on other areas of the health system.<sup>17</sup>

## Radiology

**Status:** SHORTAGE

- Included on the Long-Term Skills Shortage List and the Australian Critical Skills List.
- 61% of radiologists list DHBs as their main employer.
- 27% of radiologists are aged 55 or over; 7% are 65+.
- A study of radiology services in 26 OECD countries found workforce levels on average to be one radiologist per 10,000 population. (See notes to Table 1.) In 2008 New Zealand had approximately one radiologist per 16,000 population. To match the OECD average of 2004, New Zealand would need 155 additional radiologists (a 57% increase on the current workforce).
- A workforce survey in 2006, following earlier surveys, indicated continuing shortages and continuing maldistribution of the workforce. As with other specialties with a high number in private practice, a high proportion of radiologists (nearly 40%) worked in Auckland. The survey also found the proportion of radiologists working full-time had decreased, from 74.6% in 2004 to 66.9% in 2006.<sup>18</sup>

---

<sup>15</sup> University of Auckland. Media release, Faculty of Medical and health Sciences, 14 October 2009.

<sup>16</sup> *Emerging Issues for Public Health in New Zealand: A Discussion Paper*. Public Health Advisory Committee, October 2004.

<sup>17</sup> DHBNZ (2008). *Workforce Forecast: Public Health Physicians*.

<sup>18</sup> Royal Australian and New Zealand College of Radiologists. *2006 Workforce Survey: Diagnostic Radiologists Report*.

## Radiology (continued)

### Status: SHORTAGE

- In 2008 a survey (with a 64% return rate) shows at least 42 New Zealand medical graduates working as radiologists in Australia (15% of New Zealand's current radiologist workforce).<sup>19</sup>
- A Ministry of Health workforce stocktake of cancer services commented: "The availability of radiologists is ... a limiting factor for the BreastScreen Aotearoa programme... It has not been possible to recruit more radiologists into screening..."<sup>20</sup>

*With imaging becoming an increasingly integral part of the diagnosis and treatment of patient conditions the demand for Radiologists has outstripped supply, particularly in New Zealand. CMDHB is often competing with other DHB's and the Australian market for Radiologists.*

- Counties Manukau DHB Radiology Health Services Plan 2008.

- 10 DHBs were advertising for radiologists in February 2010.

## Radiation Oncology

### Status: SHORTAGE

- Included on the Long-Term Skills Shortage List.
- 56% of oncologists are IMGs.
- 21% of the workforce is aged 55 or over.
- To meet demand in the short to medium term, a Ministry of Health paper estimated 39 FTEs were needed by 2004.<sup>21</sup> In 2008 there were just 34 practising radiation oncologists; a 26% increase is needed to meet the recommended benchmark.
- A Ministry of Health workforce stocktake<sup>22</sup> records widespread shortages in cancer treatment services, including radiation oncologists and comments "There is some evidence that radiation treatment volumes are not increasing as rapidly as expected..."
- Despite the shortage, only two DHBs were advertising for radiation oncologists in February 2010.

*The local shortage is made worse by a worldwide shortage of oncologists, as many New Zealand oncologists take up better-paying jobs overseas. New Zealand employers find it hard to attract workers, and many oncologist vacancies remain unfilled.*

- Government Career service website: [www.careers.govt.nz](http://www.careers.govt.nz) (February 2010)

## Rehabilitation Medicine

### Status: SHORTAGE

- In 2000 there were seven rehabilitation specialists practising in New Zealand. The Clinical Training Agency commented: "Given this shortage, along with the high workloads for the specialists, it is likely that people who would benefit from rehabilitation services are not able to access them...The New Zealand public could support up to five times the current number of active rehabilitation medicine specialists."<sup>23</sup> In 2008 there were just eight specialists, five of whom are IMGs.
- A 438% increase is needed to meet the benchmark recommended by the CTA.
- Despite this shortage, only two DHBs were advertising for rehabilitation specialists in February 2010, and Rehabilitation Medicine does not appear on the Long-Term Skills Shortage List.

<sup>19</sup> Royal Australian and New Zealand College of Radiologists. *2008 Workforce Survey: Preliminary Report*.

<sup>20</sup> Ministry of Health 2007, *Cancer Control Workforce Stocktake and Needs Assessment*, Wellington. Ministry of Health. Available at: [www.moh.govt.nz/cancercontrol](http://www.moh.govt.nz/cancercontrol)

<sup>21</sup> Ministry of Health 2001. *Improving Non-Surgical Cancer Treatment Services in New Zealand*. Wellington. Available at [www.moh.govt.nz](http://www.moh.govt.nz)

<sup>22</sup> Ministry of Health 2007, *Cancer Control Workforce Stocktake and Needs Assessment*, Wellington. Ministry of Health. Available at: [www.moh.govt.nz/cancercontrol](http://www.moh.govt.nz/cancercontrol)

<sup>23</sup> Clinical Training Agency (2001). *The Health Workforce: A Training Programme Analysis*. Ministry of Health 2001.

## Sexual Health Medicine

**Status:** SHORTAGE

- A 258% increase (31 specialists) is needed to meet the benchmark recommended in overseas studies.<sup>24</sup>
- Despite the shortage, Sexual Health does not appear on the Long-Term Skills Shortage List, and no DHBs were advertising for sexual health specialists in February 2010.

## Surgery (across all specialties)

**Status:** SHORTAGE

- Overall, New Zealand is short of approximately 130 surgeons, measured against recommended benchmarks.
- Over a third (34%) of surgeons are aged 55 or over; 9% are 65+.
- A paper in the *New Zealand Medical Journal* indicates that to maintain the number of surgeons per population, we will need 820 surgeons by 2026, or 50 new surgeons each year, taking into account those that retire.
- To provide sufficient services to cover estimated unmet need, about 1055 surgeons will be needed by 2026 (77 new surgeons a year). Currently, approximately 37 surgeons graduate from the RACS surgical training programme annually in New Zealand.<sup>25</sup>
- The worst affected surgical specialties are cardiothoracic, general, neurosurgery, urology and vascular.

## Cardiothoracic

- The recommended surgeon-to-population ratio for cardiothoracic surgery is 1:150,000. In New Zealand in 2008 the ratio was approximately 1:200,000. In Canada, the ratio was 1:100,000 in 2005.<sup>26</sup> In Australia it was approximately 1:120,000 in 2007.
- New Zealand currently requires a 33% increase in the workforce to meet the recommended benchmark.
- Ten of our 21 surgeons are IMGs.
- A national review of cardiac surgery services cites a shortage of anaesthetists and registrars as one of the reasons New Zealand has come bottom of a survey of seven comparable countries for heart patients' access to potentially life-saving surgery.<sup>27</sup>
- A review of cardiac surgery services in Wellington found that a series of preventable deaths at the DHB were also due in part to staff shortages, including anaesthetists, cardiologists and registrars, and the resignation of a surgeon.<sup>28</sup>
- Despite the shortage, only one DHB was advertising for cardiothoracic surgeons in February 2010.

---

<sup>24</sup> Auckland District Health Board. 2008. *Career Med: Specialties List*. Available at [www.adhb.govt.nz/CETU/cim/specialties/specialty.information.html](http://www.adhb.govt.nz/CETU/cim/specialties/specialty.information.html)

<sup>25</sup> A Raymont, J Simpson, Projections of surgical need in New Zealand: estimates of the need for surgery and surgeons to 2026. *NZMJ* 2008; 121-1275, 6 June 2008.

<sup>26</sup> C-J Ray. "Training Program for Thoracic and Cardiovascular Surgeons in Canada," *The Japanese Journal of Thoracic and Cardiovascular Surgery*, Volume 53 Number 6, June 2005 (PP 324-327)

<sup>27</sup> Cardiac Surgery Services Working Group 2008. *Cardiac Surgery Services in NZ*, Ministry of Health, Wellington. Available at: [www.moh.govt.nz](http://www.moh.govt.nz)

<sup>28</sup> J Elliott, I Crozier 2008. *Report on Patients Awaiting Cardiac Surgery: Capital and Coast DHB*. Ministry of Health, Wellington. Available at: [www.moh.govt.nz](http://www.moh.govt.nz)

## General

- Included on the Long-Term Skills Shortage List.
- In 2008 there were 168 general surgeons practising in New Zealand. Around 55 to 70 of these are expected to retire over the next five to six years.<sup>29</sup>
- Approximately 40% of general surgeons are aged 55 or over; approximately 10% are aged 65+.
- A 36% increase in the workforce is required to meet the recommended benchmark.
- Despite the shortage, only one DHB was advertising for general surgeons in February 2010.

## Neurosurgery

- In 2008 there were 17 neurosurgeons practising in New Zealand (two less than the previous year). A 41% increase is needed to meet the recommended benchmark.
- Eleven of our New Zealand's 17 neurosurgeons are IMGs.
- Over 40% of neurosurgeons are aged 55 or over; 12% are 65+.
- Despite the shortage only one DHB was advertising for a neurosurgeon in February 2010.

## Urology

- In 2008 there were 49 surgeons practising in New Zealand, 36 short of the recommended benchmark. A 73% increase is needed.
- 31% of the urology surgeons are aged 55 or over.
- Despite the shortage only two DHBs were advertising for urology surgeons in February 2010.

## Vascular

- In 2008 there were 17 vascular surgeons practising in New Zealand. Forty are required (a 135% increase) to match the recommended benchmark.
- Despite the shortage only two DHBs were advertising for vascular surgeons in February 2010.

---

<sup>29</sup> D Meates (CEO, Wairarapa DHB) "Grim outlook for rural surgery". *One News*, 7 May 2007.