Medical workforce issues in Australia: "tomorrow's doctors — too few, too far"

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ABSTRACT

- The Australian medical workforce, like those of most developed countries, is increasingly "feminised" and exposed to the global market for doctors.
- Demand for healthcare services is increasing in the Australian community.
- Concern in relation to doctor shortages is increasing, particularly in rural areas.
- There should be greater flexibility for entry of highly-trained overseas doctors.
- There is an urgent need to increase medical school student intake.
- Issues of workforce practice, including "task" substitution, should be explored.

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THE AUSTRALIAN MEDICAL WORKFORCE Advisory Committee (AMWAC) was formed in 1995 by the Australian Health Minister's Advisory Council (AHMAC) as the principal body to oversee medical workforce planning, and to provide information on how to optimally match the supply and expertise of medical practitioners with community demands in Australia.[1] In short, AMWAC provides AHMAC and other stakeholders with information on the Australian medical workforce. It does this by analysing a variety of workforce databases of federal agencies such as the Australian Institute of Health and Welfare, the Health Insurance Commission and the Australian Bureau of Statistics. These data, together with workforce information from the medical colleges, are used to delineate characteristics of the current workforce, provide estimates of workforce entry from medical schools and immigration, and loss from the workforce because of emigration, retirement, or death. AMWAC also surveys training programs to assess the adequacy of supply of medical subspecialties.

In February 2000, AHMAC initiated the first 5-year review of AMWAC. The terms of reference were to:

- Assess AMWAC's performance to date against its original terms of reference, and to determine to what extent expectations have been achieved.
- Assess and make relevant recommendations on future national medical workforce planning needs, taking account of:
  - The relationship between the medical workforce and other healthcare professionals; and
  - The relationship between the workforce and broader healthcare system issues.
- Assess and make relevant recommendations on the suitability of AMWAC, including its structure and methods, for future medical workforce planning needs, taking account of:
  - Access to and use of evidence-based data;
  - Need for independence and access to broadly supplied advice;
  - International experiences; and
  - Current issues, including the changing medical workforce, implications of applying the *Trade Practices Act 1974* and competition policy, and corporatisation of medical practice; and
- Consider and make recommendations on appropriate financial commitment by AHMAC to medical workforce planning.

The review team (the authors of this article) received written and oral submissions, including meetings with key stakeholders, and conducted a facilitated workshop. The review commenced in 2001, and the report, *Tomorrow's doctors – review of the Australian Medical Workforce Advisory Committee*, was presented in late 2002.[2] The review acknowledged AMWAC's success in significantly advancing workforce planning in Australia, and in ensuring that the planning involves a cooperative approach by key stakeholders, including specialist colleges and government. The key recommendations are shown in the Box.

The review noted that training principally takes place in the public hospital system. Some training in certain surgical disciplines is also occuring in private hospitals, and this needs to be further evaluated and possibly expanded. It further recommended that, as most specialists do a significant amount of work in the private sector, the sector does need to take on a responsibility for training. Other details of the report are available on the Internet.[2]

Medical workforce issues

The members of the AMWAC review team suggested that Australia might be heading towards a significant shortage of doctors. For more than a decade, the number of medical student places in Australian universities has been capped. In fact, the recent opening of the James Cook Medical School in North Queensland and the Medical Rural Bonded Scholarships have only replaced the more than one hundred medical student places that were lost in the early 1990s. The

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Key recommendations of the Australian Medical Workforce Advisory Committee review

- There should be a separate medical workforce planning committee because of the specific characteristics and funding of the medical workforce.
- AMWAC should be commissioned to undertake more dynamic planning of medical workforce requirements, including advising on proposed new models of care and potential changes in service delivery (in this context, AMWAC should draw on advice from the Australian Health Workforce Officials Committee on broader health workforce issues, and on groups such as the Australian Council on Safety and Quality in Healthcare on issues of evidence-based practice and outcome measures).
- AMWAC working parties should include stronger input from economic and statistical experts, and representatives of federal, state and territory jurisdictions and consumers, either as members of those working parties or providing input by other means.
- AMWAC's methods should always take into account evidence in the crucial areas of:
  - Consumer expectations (eg, access, consumer trends);
  - Demography (eg, changing population, rural issues);
  - Economics (eg, corporatisation, changes in health insurance coverage and use, fluctuations in international currencies influencing medical migration, and changes in medical indemnity);
  - Medical workforce (eg, hours worked, career changes, sex distribution, changes in training);
  - Epidemiology (eg, changing disease patterns, Aboriginal and Torres Strait Islander health issues);
  - Changes in the healthcare system (eg, changes in technology, impact of shortage of other healthcare professionals [particularly nurses], healthcare delivery, patient expectations and demands); and
  - International developments (eg, migration policy, globalisation, benchmarking).
- For training, education and quality, AMWAC's programs should take into account quantitative and qualitative education, training and supply issues when conducting specific workforce studies. These should include: changing hospital practices; trends in career choices of doctors; technology change; safety and quality information; outcome information; role of the private sector; impact of schemes promoting participation in rural and remote practice; changes in undergraduate and graduate education; changes in postgraduate education and training; and role of overseas-trained doctors.

recently announced increases of some 230 medical places will go some way towards redressing this shortfall, but future shortages are still likely. Shortages in medical personnel seem to exist in most medical spheres, but particularly in general practice. The number of vocational trainees in general practice declined from around 1900 in 1994 to just over 1400 in 2002,[3] and decreases were also seen in the number of pathology trainees. These shortages, especially of general practitioners, are seen particularly in rural areas[4] and have been a major reason for the establishment of rural clinical schools in Queensland, Victoria and the Australian Capital Territory.[5] The waiting times to see specialists are inordinately long, as they were some years ago, again suggesting a workforce shortage.[6]

There are at least three factors driving these apparent absolute and relative workforce shortages: feminisation of the medical workforce, increasing patient and community demands for healthcare, and globalisation of the healthcare workforce. The full impact of these factors is yet to be felt, but might occur very rapidly.

Demographic and lifestyle changes

Feminisation of the medical workforce has been a major change over the past 20 years. The sex ratio in Australian medical schools is now 50:50, or with a slight excess of women.[7] The flow-on effects of this change are particularly obvious in specialties like general practice, in which more than 50% of current trainees are female.[8] Female doctors have a working life that approximates 60% that of male doctors. Significant amounts of time are consumed by family demands, and a desire to work sensible (and regular) hours on their return to the workforce.[9] Safe working-hours policies are now established in most junior medical officer awards, and these have had a significant impact on workforce requirements in public hospitals. Further, male doctors are no longer willing to work the hours that were the norm 20 years ago, and are still worked by their senior colleagues. Together, these changes have spawned a current unmet need for medical services.

Increased community demand

Increasing community expectations and the use of technology also drive increased use of medical services. The Australian population now has one of the highest average life spans in the world.[3] Many of our elderly suffer from, or will suffer from, chronic illness, which significantly increases the burden of disease in the community.

Globalisation

The third factor driving the need to increase doctor numbers is globalisation. The Australian healthcare workforce is well trained and highly sought after in the international market. The devaluation of the Australian dollar over the past few years combined with a relative lack of career opportunities within the public hospital system has led to an increasing number of doctors being recruited to overseas jobs. Over the past two years, Britain, Canada and the United States have all realised that they have a shortage of medical personnel. The Blair government in Britain announced a £40 billion revamp of the National Health Service over the next 5 years.[10] This has led to the establishment of 1000 new places for medical students, with the opening of 10 new medical schools and a significant recruitment drive for overseas doctors. Recently, advertisements have appeared in the media and other outlets, offering lucrative short and medium term contracts for general practitioners, specialists and medical researchers in the United Kingdom. Even with the increased cost of living in the UK relative to Australia, it will be difficult for some doctors to resist the offer of a trebling of salary, significant educational benefits and the opportunity to spend some years in Europe — currently one of the most dynamic and interesting areas of the globe.

Canada is also increasing its medical school intakes, and has recently provided A$3billion to increase the health budget over 5 years, including the creation of many new research posts and institutes — many of them associated with schools of medicine.[11,12]

Today's medical graduates emerge into a globalised culture, and may think nothing of spending 5–10 years — possibly a number of times during their lives — working overseas. This globalisation is already affecting New Zealand, where more than 80% of medical graduates indicate they will leave New Zealand within two years of graduation.[13] Lower salaries, the low value of the New Zealand dollar and relative geographic or professional isolation are apparently not in tune with lifestyle expectations. There are clear lessons for Australia in these trends.

Government and the community need to tackle the issue of medical workforce urgently. More medical places need to be offered in Australian medical schools, by increasing student intakes in existing medical schools, opening new schools, or both.

Flexibility in medical immigration

There needs to be much greater flexibility of entry into Australia for qualified overseas specialists whose training can be demonstrated to be equivalent to that in Australia. Solutions need to be negotiated, that are not seen to be discriminatory, to allow all specialist medical colleges to recommend specialists from such countries to medical boards for registration and to the Health Insurance Commission for recognition without the need for local examinations. Another solution may be to have very senior recruits provided with "clinical mentors" for a period of time. Problems with the medical workforce cannot be viewed in isolation from the other healthcare professions, where shortages are also a challenge. Two recent reviews of nursing in Australia have predicted significant shortages in that profession,[14,15] and this also needs to be included on the healthcare workforce agenda. In conjunction with other members of the healthcare workforce, the role and work practices of junior doctors need to be addressed. In particular, many junior doctors spend significant time on "non medical" duties that could be better completed by other staff.

Specialisation

Increasing specialisation and shortages in supply have particular ramifications for regional and rural areas. The review team recommended that AMWAC should plan on the basis of providing the best possible care to the community — not on one standard of care for metropolitan areas and another for rural areas. However, where evidence exists that there is no link between increasing subspecialisation and quality outcomes, training of generalists should be explored.

The review team recommended that AMWAC should advise on options and alternatives for meeting healthcare demand, including:

- Increasing training numbers;
- Addressing maldistribution;
- Importing additional practitioners; and
- Possible workforce substitution.

While it must be in accordance with quality healthcare practices, task substitution could reduce the required supply of medical practitioners, or free up doctors from lower-order tasks for more higher-order tasks. Again, Australia could learn from trends in the US,[16] Canada and the UK, where there has been increasing scope for staff such as nurse practitioners, nurse anaesthetists,[17] physician assistants, clinical nurse specialists, nurse endoscopists[18] and various practitioners within the mental health workforce.

This issue of task delineation and substitution may offer an important opportunity to manage some of the looming medical workforce problems, particularly in relation to chronic diseases and the aged.[19,20]

The Australian community is accustomed to a high standard of healthcare. Action is required to ensure that these high standards can be sustained and improved upon, and that high-quality healthcare services are easily and appropriately accessible.

Competing interests

None identified.

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