

**By Brett Lennon**

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***Introduction – The Australian Health System***

Australia has a blended system of public and private health care service providers. The centrepiece of Australian health care is the Medicare system. This provides the community with access to:

- subsidised out-of-hospital medical care with choice of doctor through the Medicare Benefits Scheme (MBS);
- free public hospital care; and
- subsidised pharmaceuticals through the Pharmaceutical Benefits Scheme (PBS).

A fundamental feature of the Australian health care system is the division in responsibility for health care funding and delivery between the Australian (central) Government and the State and Territory governments. The Australian Government is responsible for the funding and operation of the MBS and PBS. However, the Australian Government and the States and Territories share responsibility for funding the public hospital systems, which are operated by the States and Territories. The State and Territory governments are also responsible for registration and regulation of health care clinicians.

The Australian health care system is also shaped by the geographical spread of the population. Currently, 64% of Australia's population live in major urban centres, with most of the rest of the continent uninhabited or sparsely populated. A continuing major policy concern is providing improved health services to rural and regional areas.

Overall spending on medical services is substantial, accounting for nearly 20% of total recurrent health expenditure in Australia.

The majority of doctors in the Australian health care system are self-employed and operate as small businesses providing medical services with fees payable by their patients. These fees are offset in full or part by rebates provided by the Australian Government through the MBS. The rebates are either paid to the patient or assigned by the patient directly to the doctor.

Other doctors work under contractual arrangements within larger practices and/or larger companies in the health sector, which provide a number of different types of health services. A minority of doctors are salaried employees of Australian, State or Territory governments.

Salaried specialist doctors in public hospitals often have rights to treat some patients in the hospital as private patients, charging fees, which attract a Medicare rebate, to those patients and usually contributing some of their fee income to the hospital. Private specialists may contract with public hospitals to provide private services within the public hospital.

In 2000 there were 46,691 medical practitioners employed in the following fields:

- 45% primary care physicians, known in Australia as general practitioners<sup>1\*</sup>;
- 34% specialists;
- 11% hospital non-specialists; and
- 10% general practitioners and specialists in training.

### ***Boundaries between General Practitioners, Specialists and Sub-specialists***

General practice has a central role in the health care of Australians. General practitioners (GPs) are at the front line of the delivery of primary health care. They diagnose and treat chronic and acute illness, deliver preventive through to palliative care, and act as key referral and coordination points, directing and managing patients through the health sector. Most access to specialist medical services is on referral from GPs who act as the ‘gatekeepers’ of secondary care in the Australian system. General practice is recognised as a discrete discipline with a formal postgraduate training program.

Progressive governments have moved to reinforce general practice as a discrete discipline by:

- requiring all medical graduates, since 1996, to complete vocational training, as either a GP or specialist, before being able to provide services that attract Medicare benefits;
- enabling fully qualified GPs to provide services which attract a higher Medicare rebate; and
- providing support to general practice organisations (Divisions of General Practice).

Consultations conducted by a specialist or sub-specialist attract a higher MBS rebate than those conducted by a GP if these services are provided by a doctor who has completed postgraduate training in a recognised specialty or sub-specialty discipline, and the patient has been referred by another doctor (usually a GP).

The referral requirements reinforce the existing distinction between primary care and specialist services. In Australia, the evolution of specialties is an ongoing process determined largely by the medical profession itself, although endorsed by the Australian Government. Specialist areas of practice emerge over time, reflecting clinical, technological and scientific advances. As a body of medical knowledge and specific skills in that area emerges, medical practitioners who have acquired that expertise through training and experience begin to practise primarily in that area. Formal training and professional development arrangements develop gradually leading to the development of new professional bodies.

Sub-specialities also evolve, building upon the training and experience of a particular specialty, such as cardiology (a sub-specialty of internal medicine) and paediatric surgery (a sub-specialty of surgery). Usually these develop within the teaching hospital setting, then progressively move into the private practice setting. Specialists may therefore be 'generalists' within a specialty group, or sub-specialists within that specialty group. The sub-specialty usually develops its own training program, which may have links or overlaps with the training provided in the specialty from which it develops or other sub-specialities.

General surgery, general medicine and general pathology are still recognised as sub-specialities in their own right, though the number of sub-specialities in surgery, internal medicine and pathology is now large.

The Australian Medical Council Incorporated (AMC) administers the process for recognising new specialties and sub-specialties through a process, which reinforces the clear boundaries between general practitioners, specialists and sub-specialists. The AMC is an independent, national standards advisory body for basic medical education. It:

- Accredits Australian and New Zealand medical schools and medical courses;
- Accredits Australian/Australasian programs of specialist medical training;
- Assesses overseas trained medical doctors who wish to practise medicine in Australia; and
- Advises the Australian Health Ministers' Advisory Council (made up of Heads of the Health Departments of the Australian, State and Territory governments) on the registration of doctors.

The AMC's recognition system is a two-step process, entailing an assessment of the need for a new specialty followed by an assessment of the relevant education and training program(s). The AMC's Recognition of New Medical Specialties Advisory Committee (RMSAC) oversees the process and provides advice to the Australian Minister for Health and Ageing as to whether new specialties should be recognised.

Those specialists which are recognised are then able to provide consultations that attract higher MBS rebates. In this way, the financing arrangements reinforce the boundaries between primary care practitioners and specialists established by the AMC.

### ***Medical Workforce Planning***

The Australian Medical Workforce Advisory Committee (AMWAC) is a national body established in 1995 to assist with the development of a more strategic focus on medical workforce planning in Australia and advise on national medical workforce matters, including workforce supply, distribution and future requirements.

AMWAC oversees a medical workforce research program approved by the Australian, State and Territory governments. The reports of AMWAC are used to inform planning decisions on the number of vocational training places to be provided. Vocational training occurs following completion of an undergraduate medical degree and a period of training in the public hospital system. Vocational training in specialities and sub-specialities is

conducted by the specialist medical college. In general practice different arrangements apply, as discussed in Part E of this paper.

The States and Territories are responsible for the funding of specialist and sub-specialist training places and the Australian Government is responsible for the funding of general practice training places.

AMWAC recommendations on vocational training places aim to ensure that there is an adequate number and mix of general practitioners, specialists and sub-specialists to meet the future medical workforce needs of the community.

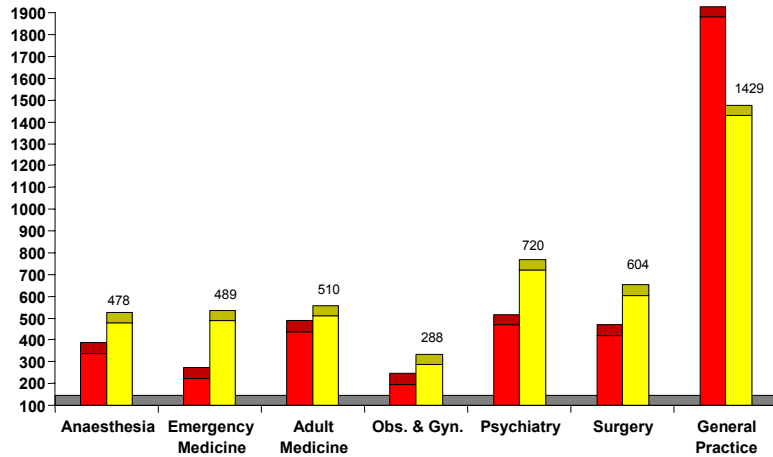
### ***Growth Trends in the General Practice and Specialist Workforce***

The Australian medical workforce has become more specialised in recent years. Over the period 1995 to 1999, for example, the specialist medical workforce grew by 9.5% compared with 5.2% for the general practitioner workforce.

Figures 1 and 2, below illustrate the growth in the numbers of vocational trainees between 1994 and 2002. The decline in the number of GP trainees from 1994 to 2002, shown in Figure 1, can be explained by the Australian Government's policy decision in 1996 to cap the number of new training places for this discipline to 400 per annum (see Part A below). From the year 2000 this was increased to 450.

Figure 1

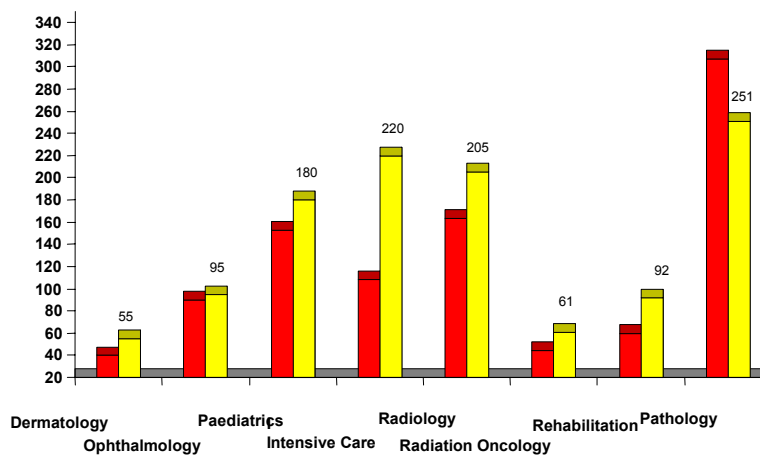
### Total vocational trainees, 1994 and 2002



Source: 2002 Medical Training Review Panel

Figure 2

### Total vocational trainees, 1994 and 2002 (contd.)



Source: 2002 Medical Training Review Panel

In 2002 the major areas of vocational training were:

- general practice (1,429 trainees, 24.3%);
- psychiatry (720 training positions, 12.3%);
- surgery (604 training positions 10.3%);
- adult medicine (510 trainees, 8.7%);
- emergency medicine (489 trainees, 8.3%); and
- anaesthesia (478 training positions, 8.1%).

Over the period 1997 to 2002 the total number of advanced vocational training places has increased by 3.7%. The major areas of increase have been:

- surgery;
- adult medicine;
- psychiatry;
- rehabilitation medicine; and
- ophthalmology.

#### ***A Public access to both primary care and specialist/consultant services***

There are two requirements to ensure that the community can get adequate access to an appropriate mix of general practice, specialist and sub-specialist services – the financial capacity to afford the services and the availability of a suitable number of doctors in the right areas.

In Australia, consumers have extensive access to a wide range of general practice and specialist services which are either free at the point of service or attract substantial government rebates. All medical services provided to public patients in the State and Territory public hospital systems are available free of charge. Around 69% of medical services provided through the MBS are also currently provided free of charge. These arrangements ensure that financial issues are not a significant barrier to accessing a full range of general practice and specialist medical services.

On the question of the availability of medical practitioners, in the mid 1990s concerns were raised in Australia about a significant oversupply of general practitioners in the medical workforce, coupled with a maldistribution of medical services between rural and urban areas. This manifested itself in growth in MBS outlays which outstripped population growth in

many urban areas, while at the same time some rural areas suffered chronic shortages of both general practitioners and specialist positions. Two major policy prescriptions were developed in response.

Firstly, in 1996 the Australian Government moved to control medical workforce supply by capping the number of university medical school places. Secondly, legislation was enacted which aimed to ensure that all doctors working in general practice are suitably trained to provide quality care, and to address the maldistribution of the general practice workforce. The quality issue was addressed by ensuring that Australian medical graduates can only gain unrestricted access to Medicare billing arrangements once they have achieved formal post-graduate qualifications by undergoing vocational training as either a general practitioner, specialist or sub-specialist. To address the maldistribution of the general practice workforce, overseas-trained doctors entering Australia were restricted to working in districts of workforce shortage in rural and regional areas.

These measures have had the effect of channelling more medical practitioners into general practice or specialist training programs or to work in areas of workforce shortage. Through this mechanism improvements in the quality of GP services have been encouraged and there is greater capacity to adjust supply between general practice and the different specialities to meet changes in demand for medical services in particular services.

Since these measures were introduced, the number of doctors practicing in rural areas has increased by 11%. However, rural and remote areas are still relatively poorly served compared with metropolitan areas, particularly for specialist services. Sub-specialist services are not available at all in many rural areas because of the large population required for sub-specialists to operate effectively.

In addition the overall medical workforce supply situation has now moved into shortage, which is particularly apparent in the outer metropolitan areas of major Australian cities. This overall shortage is mainly due to significant changes in the supply characteristics of the medical workforce. For example, new doctors of both genders are seeking to work shorter hours than they have in the past.



The Australian Institute of Health and Welfare (AIHW) in its report on the medical labour force in 2000 found that the overall numbers of practitioners had risen by 8% in total, and the number of practitioners per head of population had increased from 260 in 1995 to 267 between 1995 and 2000. However, this was offset by a decline in the average hours worked per week by practitioners from 48.2 to 45.5 hours resulting in a decline in the national full time equivalent measure of medical workforce from 279 per 100,000 population in 1995 to 270 per 100,000 population in 2000.

In light of these changes the Australian Government recently announced several measures to boost medical workforce supply and further improve workforce distribution:

- An additional 234 Government funded undergraduate medical school places are to be made available. These new places are bonded to areas of workforce shortage for six years on completion of the student's training and will increase undergraduate medical school intakes by 16 per cent on current levels.
- An additional 150 general practice vocational training places are being made available each year, which represents a 30% increase on the current annual intake of 450. These GP trainees (registrars) will work primarily in general practices in areas of workforce shortage while they are training.
- Funding is also being made available to GPs working in urban areas of workforce shortage to employ nurses and allied health professionals, like physiotherapists and podiatrists, in their practice to assist in the delivery of primary care medical services (previously funding of this kind was only available to GPs working in rural areas).

### ***B Trends toward sub-specialisation among residents in various “general” specialty postgraduate-training programs***

In Australia postgraduate vocational training leads to a career path in general practice or a specific medical specialty. For general practitioners training is focussed in community settings in practices accredited for this role. For specialists, training is undertaken in college accredited training positions or accredited hospitals, in work-based placements that provide supervised vocational training. These positions are focussed in major public teaching hospitals operated by State and Territory governments. Some colleges (for emergency medicine, adult medicine, paediatrics and surgery) require that periods of basic training be completed before trainees can access advanced vocational training.

There have been some concerns in Australia about the increasing sub-specialisation occurring in some medical specialties. For example, there has been a substantial reduction in the number of general internal medicine specialists (generalist physicians) as opposed to a significant increase in internal medicine sub-specialists (specialist physicians). Results from a survey conducted by the Royal Australasian College of Physicians in 2001 indicate that 14% of the physicians surveyed practised as generalist physicians, compared with 86% who practised as specialists or sub-specialists. The proportion of generalists had fallen from around 40% in 1981. Increasing sub-specialisation is also a major issue within surgery, which particularly impacts on in rural areas where general surgeons are a key element of the medical workforce.

Issues have also been raised as to the potential impact of this trend on patient care where there is increased compartmentalisation of care, rather than a more holistic approach with greater attention to co-morbidities and patient problems not related to the particular specialty or sub-specialty being practised. There are also potential health system cost implications, through increased training expenditure, increased use of advanced technology, higher remuneration expectations, and the possibility of more cross-referrals between specialists. However, cost implications vary between sub-specialties, depending upon the extent of additional training and technology investment and whether services are provided at higher cost than before.

***C The extent to which access to consultant services influences the scope of practice of primary care physicians***

In Australia general practice is strongly utilised. Each year it is expected that around 85 percent of the population will visit a GP, with around 100 million GP services provided, which is equivalent to an average of 5.1 services per head of population. Access to specialist services does influence the scope of general practice in Australia. The small size of many rural communities limits access to specialist services, including diagnostic services, as illustrated in Table 1 below.

**Table 1**

<b>Population size</b>	<b>Sustainable resident services</b>
Up to 10,000	Primary care
10,000 – 20,000	General Surgery Anaesthesia
Rural areas with catchments of 20,000 to 60,000	General Physician Obstetrics & Gynaecology Paediatric Medicine Psychiatry Orthopaedic Surgery Geriatric Medicine Pathology
Urban and rural areas with catchments of 50,000 – 80,000	Ear Nose Throat Surgery Dermatology Rehabilitation Medicine Neurology Thoracic medicine
Urban and rural catchments above 80,000	Urology Diagnostic. Radilogy Cardiology Intensive Care Nephrology Medical Oncology Radiation Oncology

Source: AMWAC 1998

Rural GPs are usually required to deal with a wider range, and a greater complexity of cases, than their urban counterparts. As a consequence rural GPs generally work longer hours and require a greater range of procedural skills, such as minor surgery anaesthesia and obstetrics, than urban GPs.

Anecdotal evidence also suggests that the scope of practice of general practice has narrowed over the last decade especially in metropolitan Australia. That is, GPs do less minor surgery and obstetrics today than previously.

#### ***D Trends toward family medicine training among graduating medical students***

The number of general practice training places is governed by policy decisions of the Australian Government. There has always been a larger number of applications received from medical graduates for GP training than actual training places available on the program. As part of the efforts to ameliorate the effects of an oversupply of GPs in the mid 1990s, the number of new places was capped at 400 per annum in 1996. It was increased to 450 in 2001, with the increase in training places being allocated to training for rural practice. In light of

recent emerging shortages of GPs the number of new training places has been increased to 600 from 2004.

In 2002 AMWAC conducted a study on career decision making by doctors undertaking vocational training, to gain information about the factors influencing their career choice and workforce participation decisions. Over 4,800 doctors were surveyed, from all States of Australia and all medical disciplines. As noted by AMWAC in the report, no single factor determines career choice and the interrelationships between the range of factors involved are very complex.

In terms of the factors which influenced trainees' choice of discipline, factors of more importance to general practice trainees, compared with trainees in other disciplines were, respectively, 'interest in helping people', 'appraisal of own domestic circumstances', 'opportunity to work flexible hours', 'experience of specialty as a medical student' and 'number of years required to complete training'. On the other hand, 'intellectual content of the specialty', 'influence of consultants/mentors' and 'work experience since graduation' were of more importance to doctors training in other disciplines.

The survey found 80.4% of general practice trainees to be "satisfied" or "very satisfied" with their choice of discipline (with percentages for other disciplines ranging from 78.6 to 97.1).

### ***E Duration and content of family medicine training***

Medical training in Australia can be broken down into a number of definable stages. These can be summarised as:

- undergraduate education in medical schools;
- prevocational training (including intern and other Hospital Medical Officer experience); and
- vocational training and continuing medical education.

Undergraduate education at one of eleven university based medical schools usually leads to a Bachelor of Medicine and Bachelor of Surgery (MBBS). Upon completion of an undergraduate qualification, all Australian medical graduates are required to complete one year of supervised medical experience as an intern (the first postgraduate year or PGY1). Supervised practice primarily occurs within a public teaching hospital. Successful completion of the intern year allows medical graduates to have unrestricted registration

through one of eight State or Territory based Medical Boards. Most medical practitioners then undertake one or more years of additional undifferentiated Hospital Medical Officer work within the public hospital system. This training is primarily within the control of each State and Territory.

Medical school graduates wishing to achieve vocational recognition as a general practitioner must attain Fellowship of the Royal Australian College of General Practitioners (FRACGP). Graduates can acquire Fellowship by completing the general practice vocational training provided through the Australian General Practice Training Program.

Entry to this program is competitive with a merit based selection process being undertaken annually. To be eligible doctors must have full medical registration and be Australian citizens, permanent residents or New Zealand residents.

Doctors accepted onto the training program are required to undertake an educational program, including the completion of a minimum 12 approved training units in accredited teaching practices over three years and complete the Royal Australian College of General Practitioners (RACGP) assessment. The curriculum is recognised as a comprehensive statement of the scope and unique attributes of the discipline of general practice and encompass the following key areas:

- the five domains of general practice;
  - Communication skills and the patient-doctor relationship
  - Applied professional knowledge and skills
  - Professional health and the context of general practice
  - Professional and ethical role
  - Organisational and legal dimensions
- Patient presentations, which primarily involves providing advice to individual patients in the treatment and management of medical conditions and more broadly, health; and

- National Health Priorities which are based on reducing the five areas of highest morbidity and mortality in Australia, namely;
  - cardiovascular health
  - cancer control
  - injury prevention and control
  - mental health
  - diabetes.

General practice vocational training is undertaken in training practices that have been accredited against RACGP standards. From the commencement of 2001 general practice vocational training is also being provided at the regional level. Regionalisation of training allows for innovation and builds a framework that facilitates integration across the GP education spectrum from undergraduate education to vocational training to continuing professional development.

Fellowship of the RACGP can also be obtained by the practice eligible route, which requires seven years postgraduate experience including five years general practice experience (or part time equivalent), and satisfactory completion of the RACGP assessment process. Doctors may be eligible to undertake the College examination after four years full-time approved general practice experience (or part-time equivalent) that is within 12 calendar months of meeting their time requirements for the award of Fellowship. This pathway may be attractive to general practitioners that have been practising for some time.

***F The extent to which the content, culture and location of postgraduate training environments reflect the various working environments for which their residents are being prepared***

In Australia the great bulk of specialist vocational training occurs in teaching hospitals in the major cities, and most general practice training occurs in the community sector in major cities.

This is still a reasonable reflection of the environment in which the bulk of doctors will practice. However, as progressively more specialist services are being provided in

community settings more specialist training can be expected to occur outside the teaching hospital environment.

The nature of hospital work is changing with the concentration of acute care, complex procedures and day surgery. This is effectively narrowing the scope of clinical practice which trainees can be exposed to in teaching hospitals. Particular aspects of care, including pre- and post-operative care, child and mental health, are now conducted in community settings and in Australia many hospitals have closed or privatised their outpatients facilities.

A number of specific arrangements have developed in recent years to enable specialist trainees to do at least part of their training in community based practices, where services are being provided. In keeping with this emerging trend, the Australian Government is funding two pilot projects, in paediatrics and dermatology, to provide opportunities for trainees in those disciplines to do some of their training in non-teaching hospital settings. The pilot projects are being evaluated to assess the feasibility, effectiveness and sustainability of specialist training outside of teaching hospitals.

### ***Specialist and GP Medical Training in Rural and Remote Areas***

There are shortages of specialists in regional and rural Australia. The Australian Government has moved in recent years to support placements for advanced specialist trainees in rural and regional hospitals under the Advanced Specialist Training in Rural Areas (ASTPRA) program. ASTPRA is a joint program with State and Territory governments and the specialist medical colleges.

Under the ASTPRA program the Australian Government makes a significant financial contribution to the training of advanced specialist trainees, by partly subsidising the cost of rotational placements in agreed rural specialist training posts. The State and Territory governments establish and maintain the posts; and the specialist medical colleges accredit the posts for advanced specialist training.

The ASTPRA program provides trainees with opportunities to gain up to a year of accredited training in a rural setting, which can open up opportunities for rural careers for those wishing to pursue rural practice. ASTPRA is building on research and advice from rural specialists that indicates that:

- rural-trained practitioners are more likely to take up rural practice;
- advanced trainees make a valuable contribution to service development and to professional peer support in rural hospitals; and
- a greater breadth of training experience can be gained outside of the metropolitan hospital setting.

In addition to the ASTPRA program, the Australian Government is funding the Royal Australasian College of Surgeons to manage and coordinate a structured, mentored Rural Surgical Training Program for vocational trainees who wish to pursue a career in rural practice. The program provides a mix of regional and metropolitan postings. A similar program for advanced trainee physicians is currently being piloted in State of Victoria.

The working environment for doctors in rural areas is very different to those practising in the major cities. GPs in rural areas provide a broader range of care because there are fewer specialist services and less acute services available. Specialists in rural settings are more frequently required to take a multidisciplinary team-based approach. This involves adopting the role of “consultant”, which includes mentoring, teaching, advising and supporting existing practitioners, plus coordinating care with other health professionals.

Vocational training for both general practitioners and specialists wishing to practice in rural areas is adapted to reflect these differences as much as possible. For general practice there is a separate Rural Training Pathway, which accounts for 263 of the 600 new training places now available each year for this discipline. The Rural Training Pathway provides an opportunity for doctors contemplating a career in rural general practice to experience first hand the lifestyle and needs of rural communities. All GP terms on the Rural Training Pathway must be undertaken in rural and remote areas; however, there is flexibility in advanced rural skills posts and elective terms. Doctors who choose to undertake the Rural Training Pathway are able to access an incentive program, *General Practice Registrars Rural Incentive Payments Scheme (RRIPS)*, which commenced in July 2001 to encourage medical



graduates to take up the Rural Training Pathway whilst reducing the financial burden this move might place on them or their families.

The General Training Pathway for general practice provides an option for those not wishing to commit to rural training. However, as part of their training they are required to undertake a six month placement in a rural community, as well as a six month placement in an outer metropolitan area of a major city, a number of which are experiencing medical workforce shortages. These compulsory terms do not detract from the educational requirements of the training program but do however broaden the experience gained by these doctors.

### ***G The extent to which remuneration and lifestyle influence career choice***

It is not possible to quantify these influences in Australia. However, it can be said that the area in which these factors are most apparent is in the decision of where doctors practice. As stated earlier sustaining general and specialist practices in rural and remote areas is a major challenge for the Australian health system.

Disincentives for rural practice include professional isolation, longer hours of work and on call demands, lack of locum relief, lack of access to continuing medical education activities, poor infrastructure support and back up, spouse and family issues, and the need for generalist specialist training to meet the demands of rural practice.

In recent years, attention has focussed on practitioners' expressed lifestyle needs and preferences, in the context of rapid feminisation of the workforce, the need to improve workforce supply in rural (and more recently outer metropolitan) areas, increasing mobility of the workforce and anecdotal evidence that more doctors (of both genders) desire shorter working hours.

The recent AMWAC career choice survey, referred to in part D of this paper, suggests that for trainees remuneration is not a significant factor in choice of GP or specialist discipline, but that lifestyle (and other factors) are significant. In response to the question 'How much did the following factors influence, in a positive way, your current choice of discipline?', respondents rated:

- six extrinsic factors as being of relatively high importance, viz:
  - opportunity to work flexible hours;
  - atmosphere/work culture typical of the discipline;

- work experience since graduation;
- opportunity for procedural work;
- hours of work typical of the discipline; and
- influence of consultants/mentors.
- in addition five ‘intrinsic factors’ as were related being of relatively high importance:
  - interest in helping people;
  - intellectual content of the specialty;
  - appraisal of own skills/aptitude;
  - appraisal of own domestic circumstances; and
  - perceived job security prospects.

Trainees identified lifestyle and family issues were among the most important factors identified, including having time to spend with partners and children and the availability of part-time training when choosing a vocation. While this was particularly the case for female trainees, male trainees also identified time with family as an important consideration. Very few trainees wanted to devote their lives solely to medicine as had been done by doctors in the past.

### ***H Amount of primary care done by specialists and sub-specialists***

In Australia, the great bulk of primary care is provided by a general practitioner. Access to specialist medical services is on referral from a general practitioner. However, specialists can provide primary care in the ambulatory setting of a hospital emergency department.

Emergency medicine is one area where a considerable amount of primary care is carried out by specialists. Emergency medicine differs from most other medical specialties as the workforce is almost entirely employed in public hospitals, although the private sector has become increasingly involved in providing emergency care in recent years.

The scope and expertise of emergency service delivery has changed significantly since the early 1980s, when emergency departments were largely staffed by unsupervised junior medical officers whose role was one of reception, clerking and referral to an inpatient unit. Today emergency departments (ED) in Australian public hospitals are often headed by emergency medicine specialists, with additional general physicians and surgeons, supported

by trainees. Other hospital specialists may also provide services on referral by the ED specialists, either as admitted patients or in the ED setting.

In rural areas, specialist ED services are not always sustainable. In smaller hospitals the local GP may provide on call emergency care services or undertake procedural work on a regular basis.

## Reference List

- Australian Institute of Health and Welfare, 2003, Medical Labour Force 1999, National Health Labour Force Series, No. 24.
- Australian Institute of Health and Welfare (2000), *Medical Health Labour Force 1998*, Canberra.
- Australian Medical Council Inc., 2002, *The Recognition of Medical Specialties and Sub-specialities: Policy and Process*, Canberra
- Australian Medical Workforce Advisory Committee (2000), *The Specialist Gastroenterology Workforce in Australia*. AMWAC Report 2000.4, Sydney.
- Australian Medical Workforce Advisory Committee (1997), *The Rehabilitation Medicine Workforce in Australia*. AMWAC Report 1997.3, Sydney.
- Australian Medical Workforce Advisory Committee (AMWAC), 1996, The Medical Workforce in Rural and Remote Australia, AMWAC Report 1996.3.
- Australian Medical Workforce Advisory Committee (AMWAC), 1998, Sustainable Specialist Services – A Compendium of Requirements, AMWAC Report 1998.7.
- Australian Medical Workforce Advisory Committee (AMWAC), 2002, Career Decision Making by Doctors in their Postgraduate Years: A Literature Review, AMWAC Report Number 2002.1.
- Australian Medical Workforce Advisory Committee (AMWAC), 2003, Career Decision Making by Doctors in Vocational Training, AMWAC Report Number 2003.2.
- Australian Medical Workforce Advisory Committee (AMWAC), 2003, Specialist Medical Workforce Planning in Australia, AMMAC Report 2003.1
- Department of Health and Ageing, 2001, The Australian Workforce, Occasional Papers New Series No. 12.
- Medical Training Review Panel, Sixth Report, Commonwealth Australia, October 2002.
- Palmer, G. R. and S. D. Short, 2000, Health Care and Public Policy: An Australian Analysis, 3<sup>rd</sup> Edition, Macmillan, Australia
- Royal Australasian College of Physicians, Workforce in General Medicine in Australia and New Zealand, 2001. Owen Dent (February 2003). (Paper presented at the Forum on General Medicine hosted by the Adult Medicine Division of the Royal Australasian College of Physicians, Sydney, March 2003)