

Australian Medical Workforce Advisory Committee

**THE GENERAL PRACTICE WORKFORCE IN
AUSTRALIA**

Supply and Requirements to 2013

SUMMARY OF FINDINGS AND RECOMMENDATIONS

AMWAC Report 2005.2

August 2005

© Australian Medical Workforce Advisory Committee 2005

ISBN 0 7347 3866 8

This work is copyright. It may be reproduced in whole or part for study or training purposes subject to the inclusion of an acknowledgement of the source. Reproduction for purposes other than those indicated above requires the written permission of the Australian Medical Workforce Advisory Committee.

Enquiries concerning this report and its reproduction should be directed to:

Australian Medical Workforce Advisory Committee
New South Wales Health Department
Level 6
73 Miller Street
NORTH SYDNEY NSW 2060

Telephone: (02) 9391 9933
E-mail: healthworkforce@doh.health.nsw.gov.au
Internet: www.healthworkforce.health.nsw.gov.au

Suggested citation:

Australian Medical Workforce Advisory Committee (2005), The General Practice Workforce in Australia: Supply and Requirements to 2013, AMWAC Report 2005.2, Sydney

A copy of the full report is available at the Health Workforce Australia website:
www.healthworkforce.health.nsw.gov.au

Publication and design by Australian Medical Workforce Advisory Committee.

Printing by Ligare.

Contents

List of Tables	vi
Outline of the report	vii
Part A Setting the scene	
1. What were we asked to do?	1
2. What has happened in the past?	1
3. How did we do this review?	2
Part B The general practice workforce in Australia	
What did we find out about the GP workforce?	
4. The role of general practitioners	5
5. General practitioner caseloads	5
6. Practice arrangements	6
7. Financing general practice services	6
8. Overseas trained doctors	6
9. Other primary care providers	7
10. General practice training arrangements	8
What did we find out from the stakeholder consultations?	
11. SWOT analysis	9
12. Changes in patient profiles, expectations and needs	11
13. Changes in GP profiles, career expectations, practice structures and arrangements	17
14. Local issues	22
15. Data issues	23
16. Consumer issues	24
17. GP registrar issues	25
Part C Key perspectives on the general practice workforce	
18. Outer metropolitan general practice	27
19. Rural general practice	27
20. Aboriginal and Torres Strait Islander Australians	28
21. Consumer perspectives	29
22. State and territory overview	29
Part D The general practice workforce to 2013	
23. General practice service requirements	31
24. The supply of general practice services	31
25. Modelling the general practice workforce and workforce projections	32

Recommendations	43
Terms of reference of the Australian Medical Workforce Advisory Committee	44
Membership of the Australian Medical Workforce Advisory Committee	46
Terms of reference of the AMWAC general practice working party	48
Membership of the AMWAC general practice working party	50
Acknowledgements	53
Abbreviations and acronyms	55
Appendix: List of Consultations	56

List of Tables

Table 1: GP workforce entrants required from 2007 onwards	39
Table 2: GP workforce projection results by state and territory (Scenarios 1A and 2A)	41

Review Outline

Three separate reports have been prepared as part of this review.

- The report – The general practice workforce in Australia to 2013. This report summarises the key findings of the AMWAC general practice workforce review. It sets the scene, outlines the characteristics of the current general practice workforce, reports on the stakeholder consultations, explains the results of the workforce modelling, and presents general practice workforce projections to 2013.
- The technical report – The general practice workforce in Australia: general practice workforce modelling – process, methods and data sources.
- The summary report – this document which contains the report's executive summary plus some additional information about stakeholder consultations, workforce modelling and projections and AMWAC's recommendations.

The report – 'The general practice workforce in Australia to 2013' – is divided into five parts. It also has a prologue and an executive summary. This summary report follows the five part format provided below.

Part A sets the scene. It provides background information on the review, details of the data and information sources used, and the results of the stakeholder consultations that were conducted around Australia.

Part B is about the general practice workforce in Australia. It includes information on the numbers, characteristics and roles of current GPs, their caseloads and practice arrangements, and how general practice services are financed. It also contains sections on overseas-trained doctors and other primary care providers and a chapter on training arrangements for general practice.

Part C describes some key perspectives on general practice workforce supply and requirements. It includes information about outer metropolitan and rural general practice, Aboriginal and Torres Strait Islander Australians and consumer perspectives. It also contains an overview of general practice in each state and territory.

Part D covers the general practice workforce to 2013. It includes expectations for future supply and requirements, a summary of the results of the modelling used by PwC to assess the adequacy of the workforce, and how workforce supply and requirements projections can be balanced.

Part E includes various appendices which provide additional information on key aspects of the review.

For full details of the AMWAC review, please see The General Practice Workforce in Australia: Supply and Requirements to 2013 (the 'report').

For the detailed technical results, please see the PricewaterhouseCoopers (PwC) paper (the 'technical report').

This publication has been issued with a companion CD containing the full general practice workforce report and the technical report. To download either the full report or the technical report please visit the National Health Workforce Secretariat website at www.healthworkforce.health.nsw.gov.au.

The report was prepared by Justine Curnow and Susan Widderick, with assistance from Brody Atterby, Robert Bain, Margaret Banks, Larissa Briedis, Brett Dee, Cathy Ellis, Kathy Gronthos, Annette King, Janice McLeod, Margaret Norington and Terry Roberts.

Part A Setting the scene

1. What were we asked to do?

The general practice working party was established in April 2003 as a subcommittee of the Australian medical workforce advisory committee or AMWAC. It includes representatives from a wide range of professional and government organisations involved with general practice in Australia.

The working party was asked to provide a report to AMWAC on the optimal supply and appropriate distribution of general practitioners across Australia for the period 2003 to 2013.

The aim of the review was to provide advice on:

- general practice workforce supply and requirements
- the structure, balance and geographic distribution of the general practice workforce
- the number and distribution of vocational training places needed to meet future requirements.

The definition of a general practitioner or GP in this review includes all medical practitioners who self-report as mainly practising as primary care practitioners. This includes all vocationally registered GPs, non-vocationally registered GPs working mainly in primary care, and GPs in training. Also included are GPs, largely located in rural areas, who mainly provide general practice services in a hospital setting rather than a private practice setting.

2. What has happened in the past?

There have been three major national general practice workforce studies over the past ten years - two by AMWAC (1996 and 2000) and one by the AMA and Access Economics in 2002.

AMWAC 1996 provided advice on national benchmarks and recommendations on supply targets at five year intervals to 2025. It considered that the most serious problem was the maldistribution of medical practitioners.

AMWAC 2000 described and assessed the adequacy of the then current GP workforce and projected GP workforce supply and requirements to 2010. Their expectation was that general practice requirements would increase at 1.13% per annum over the next 10 years. The report concluded that there was a shortage of GPs in rural and remote areas, an excess of GPs in capital cities, and GP trainee intake would have to be increased if there was a reduction in the recruitment of permanent GPs from overseas.

AMA 2002 focused on the supply and demand for the primary care services that GPs provide and a range of policy options that could be implemented to deal with GP shortages. The report stressed that it was not the number of doctors that was important, but the number of

hours they are willing to work. They also suggested remuneration initiatives to attract GPs to work longer hours and the use of complementary practitioners such as practice nurses.

This current AMWAC review includes broader stakeholder consultations than the 2000 AMWAC review and a more detailed and refined approach to modelling the general practice workforce.

3. How did we do this review?

Data sources

A variety of data sources are available for studying the general practice workforce. The scope of these sources ranges considerably – in terms of time period covered, units of measurement and aspects of the workforce considered.

The main quantitative data sources used in this review were Medicare data held by the Australian Department of Health and Ageing and the annual medical labour force survey and other data collections held by the Australian Institute of Health and Welfare. Each data source has its strengths and limitations.

These two key data sources were supplemented by information from the Bettering the Evaluation and Care of Health or BEACH program, the rural workforce agencies, the Australian Bureau of Statistics, divisions of general practice, state and territory health departments, the Department of Veterans' Affairs, the medical training review panel, the Royal Flying Doctor Service, General Practice Education and Training Ltd, and the Office for Aboriginal and Torres Strait Islander Health.

The review also considered a range of indicators for assessing the adequacy of the general practice workforce in Australia. These indicators included vacancies, hours worked, closed books, consultation waiting times, co-payments, and locum and deputising services.

Extensive input was also obtained through a comprehensive stakeholder consultation process and from written submissions.

Stakeholder consultations

The National Health Workforce Secretariat (NHWS) held thirty-eight consultation meetings with a range of stakeholders including GPs, GP registrars and consumers. The consultations took place during 2003 and 2004 in urban, rural, regional and remote areas in every Australian state and territory.

Participants at the consultation sessions were asked for their views on changes in patient profiles, expectations and needs, changes in GP profiles and career expectations, changes in practice structures and arrangements, specific local issues, concerns about data sources, and issues affecting consumers. A SWOT analysis of general practice was also conducted at twenty-four of the consultations.

Some of the key findings from the stakeholder consultations were that:

- patients are ageing and have more chronic illnesses and complex needs
- many patients are better informed 'consumers' than they were and are more likely to shop around or see alternative practitioners
- there is often a lack of available GPs and insufficient support services, especially in rural and remote areas
- overseas trained doctors are often being used to fill these 'gaps'
- newer and incoming GPs are more likely to be female and want to work part-time
- many GPs want to work less demanding hours and have a better work / life balance
- practice ownership has become much less attractive than it was in the past
- many GPs have concerns about finding locums, indemnity issues and an increase in paperwork.

Modelling supply and demand

Modelling of the supply and demand for GP services was done by PricewaterhouseCoopers (PwC). Workforce projections were also done to provide estimates of the number of new GP workforce entrants that will be required each year from 2007 to 2013 to overcome the estimated shortfall in 2002 and to respond to likely upward trends in demand for GP services as the Australian population grows and ages.

The modelling project provided statistical estimates of the effects of the various factors that influence the demand for and supply of GP services. It identified divisions of general practice that appear to have relatively high or low demand and supply situations, and indicated the number of additional GPs that would be required to address shortage situations under a range of scenarios.

The modelling project working group concluded that the shortage of GPs in the divisions that showed a below-average availability of GPs relative to demand was likely to fall in the range of 800 to 1300 GPs. The group also noted the very wide variation in the level of services and GP throughput between divisions and that a relatively small number of divisions – mostly in fairly high socioeconomic urban areas – had a substantial above-average supply of GPs relative to demand.

The standard AMWAC workforce projection model was used to project general practice workforce supply and requirements from 2002 to 2013. This model projects on the basis of five year age and sex cohorts.

Scenarios were developed for estimated lower and upper limits of the initial shortages—800 GPs and 1300 GPs. A third scenario, assuming supply and requirements in balance – ie 0 shortage, was included for comparison. For each of the three initial shortage scenarios – 1, 2 and 3 – three different variations of average hours worked trends were considered. These were scenarios A, B and C.

Some key assumptions and inputs of the projection modelling included current workforce supply based on AIHW medical labour force survey data, estimated entries to and exits from the workforce based on Medicare and GPET data, initial under/oversupply estimated by the workforce adequacy assessment done as part of the modelling process, and estimated future growth in requirements estimated through the modelling process.

Part B The general practice workforce in Australia

What did we find out about the GP workforce?

In 2002, there were approximately 22,000 GPs in Australia and more than 80% of the workforce was vocationally registered. The distribution of the GP workforce by state and territory closely followed the population distribution, with 70.4% of the workforce in major cities.

The average age of GPs was 48.6 years and the majority (60.9%) were aged between 35 and 54 years. More than one third of the workforce (37.0%) was female and female GPs were, on average, seven years younger than their male counterparts.

GPs work an average of 41.1 hours per week. Female GPs worked, on average, 13.6 fewer hours per week than male GPs did. GPs in major cities worked the fewest number of hours per week – 40.0 hours per week on average. Average hours worked increased progressively with rurality and remoteness, with GPs in very remote areas averaging the highest work hours – 49.2 hours.

A large proportion of GPs (40.3%) worked in practices of five or more GPs and 15.9% worked in solo practices. Most GPs worked in private rooms (78.1%), followed by 5.5% who worked in acute care hospitals, 3.1% in 24 hour clinics and 3.0% in non-residential health facilities. The remaining 10.3% worked in a variety of other settings.

4. The role of general practitioners

GPs are often the first point of contact that people have with the health system. In addition to providing direct treatment – prescribing, advising on and supplying medications or providing non-pharmacological treatments – GPs act as ‘gatekeepers’, linking primary care patients with the wider health system. This may include ordering investigative tests and making referrals to other health care workers or support services.

The role of rural or remote GPs is often broader than that of their urban counterparts. This may be because of geographic and professional isolation and a lack of nearby supporting or complementary services such as medical specialists.

GPs also practise a range of special skills including procedural work (anaesthetics, obstetrics and surgery), emergency care and Aboriginal health care. In 2003, 22.1% of the rural and remote general practice workforce practised in at least one procedural field.

5. General practitioner caseloads

It is hard to gain an accurate picture of GP caseloads because each potential data source – Medicare, BEACH and divisional data sets – has its limitations and is not necessarily comparable. There are also a range of variables operating at individual GP and practice level.

The majority of services provided by GPs are practice room-based consultations. These services include general consultations, enhanced primary care (EPC) services and services funded under the practice incentives or PIP program. In February 2004, there were 4,628 practices participating in the PIP program.

BEACH data from 2003-2004 shows that standard consultations made up 82% of the work of GPs and 9.8% of Medicare consultations were long consultations. The most common problems managed were hypertension, upper respiratory tract infections, immunisation and vaccination, depression and diabetes. GPs are also involved in non-clinical work such as teaching, divisional activities, research, administration and practice management.

6. Practice arrangements

The definition of a general practice is complex and changing. It includes characteristics such as practice structures and organisation, employment and ownership arrangements, and management systems.

The number of practitioners working in practices of four or more GPs is increasing, particularly for female and younger GPs. The average hours worked per week by GPs in 2002 was greatest for those working in solo practice and lowest for those in practices of five or more GPs.

About 8% of the GP workforce work as locums or in deputising services. The availability of locums is a key consideration for GPs, especially those in rural and remote areas.

7. Financing general practice services

The financing of general practice services includes payments made to individual GPs and practices via Medicare and funding for a range of government programs and initiatives.

The fee income for a GP is determined by the number of services provided, the MBS payment or rebate, and the average co-payment. In 2001-2002 around 77% of the income of GPs was derived from the MBS. In 2003-2004 the bulk billing rate was 68%. This rate increased in the last six months of 2004 probably due to strengthening Medicare initiatives.

About 23% of general practice funding is attached to a variety of government programs. This includes funding for infrastructure support and development, the practice incentives program or PIP, programs to prevent and manage specific diseases, and funding for workforce initiatives in rural and remote areas. Some of these programs have high compliance and 'red tape' costs.

8. Overseas trained doctors

Overseas trained doctors (OTDs) – sometimes referred to as International Medical Graduates (IMGs) - are able to enter Australia on a temporary or permanent basis, with a

series of restrictions applying to their medical registration. It is estimated that OTDs account for about 25% of the medical workforce in Australia.

A variety of government programs have been introduced to attract doctors from overseas to fill gaps in the GP workforce, particularly in rural, remote and outer metropolitan areas. Medicare provider number restrictions introduced from 1997 confine OTDs to work in districts of workforce shortage, which for GPs is largely rural and remote areas. There are now more than 1500 restricted OTDs with approvals to work in general practice.

The 5-year overseas trained doctor recruitment scheme allows OTDs with GP qualifications – who have or are seeking permanent residency – to be assessed by the RACGP instead of the AMC. There is a five category classification system for doctors wishing to join the scheme and they have to register to work in an approved ‘district of workforce shortage’ for 5 years.

Concerns about using OTDs to meet workforce shortages include ethical issues about recruiting doctors from other countries also experiencing a shortage, the need for nationally consistent approaches for assessing OTDs and areas of workforce shortage, and the lack of quality supervision and support for OTDs to achieve fellowship status.

9. Other primary care providers

Other primary care providers include nurses, allied health professionals, pharmacists and Indigenous health workers. A series of changes have been influencing their roles and the nature of their relationships with GPs. Collaborative links between GPs and other primary care providers are particularly important in rural and remote areas.

Practice nurses are increasingly being employed, particularly in areas of workforce pressure. They are typically registered nurses who work part-time in a medium to large practice. Their role varies depending on the health needs of the practice’s population and the operation of the individual practice.

Advanced practice nurses are generally registered nurses with either speciality credentials or postgraduate nursing qualifications. The nurse practitioner role is an expanded form of advanced practice nursing that is specifically regulated by legislation and professional regulations. There are nurse practitioner projects in all states and territories but no nurse practitioners work yet in general practice. There is opposition to the idea of nurse practitioners being able to prescribe, refer or order tests for patients in their own right.

There is increasing interest in Australia in expanding the role of pharmacists in primary health care, but this is not supported by the AMA. Other possible new roles include medical assistants (developed in Brisbane) and physician assistants (part of the medical workforce in the USA).

10. General practice training arrangements

Since 2001 vocational training for general practice has been conducted by an independent, but government owned, organisation called General Practice Education and Training Ltd. They purchase training from 22 regional training providers or RTPs across Australia.

The Australian General Practice Training or AGPT program involves three years full-time training or part-time equivalent. The RACGP sets the curriculum and standards and conducts the final fellowship examinations. The current annual intake of GP registrar training positions is limited to 600. There are also an additional 24 defence force places.

GP registrars may elect to train in either the rural or general pathway. Although there are financial incentives for the rural pathway, GP registrars tend to opt for training in urban-based RTPs – particularly in NSW and Victoria—and rural pathway places tend not to be fully taken up. There are also several options for existing GPs and OTDs without formal qualifications in general practice to prepare for professional recognition.

The focus of continuing professional development for GPs is broadening to include areas such as population health, practice management, strategic planning skills, IM and IT. Training is also being provided in more flexible and non-traditional ways.

In consultation sessions with GP registrars, training pathways were seen as being too rigid and the compulsory rural term was not universally liked. Factors influencing the decision to choose rural and remote practice largely centred on employment opportunities for partners, children's education and community support services. Locum work was considered to be attractive to some registrars because of its monetary value.

What did we find out from the stakeholder consultations?

During 2003 and 2004, the National Health Workforce Secretariat (NHWS) carried out 38 consultation meetings around Australia with general practitioners, general practice registrars, consumers and other interested parties, including divisions of general practice staff. The purpose of these meetings was to discuss the future of general practice in Australia and to obtain a range of perspectives on the changes that have occurred and are occurring in patients and GPs, as well as any local concerns that group members had. The consultations took place in every state and territory of Australia and covered a wide range of areas from urban to rural to remote.

The NHWS coordinated the process and worked closely with rural workforce agencies, divisions of general practice, and other bodies such as state and territory health departments to identify a representative range of locations, ensure an efficient process, and maximise participation and representation at the consultation sessions. Six of the 38 sessions were conducted by teleconference and the rest were done face to face by AMWAC staff and a private consultant.

The data from the consultations was written up into MS Word from notes taken in each session. Each of these documents was then loaded into the QSR NUD*IST program for coding by theme. The themes were then analysed and the results documented. The two consumer consultations were not included in the general analysis but examined separately. The GP registrars' session was included both in the general analysis and examined separately.

The section below documents the findings of a SWOT analysis (strengths, weaknesses, opportunities and threats) that was conducted with 24 of the 38 groups. Groups that had only a small number in attendance or were conducted by teleconference did not do a SWOT analysis.

The next sections describe the consultation findings under the following headings:

- Changes in patient profiles, expectations and needs
- Changes in GP profiles, career expectations, practice structures and arrangements
- Local issues
- Data issues
- Consumer issues
- GP registrar issues

11. SWOT analysis – strengths, weaknesses, opportunities and threats

A SWOT analysis was conducted at 24 of the 38 consultations as an introduction to the session. Participants were asked to spend some time noting the strengths, weaknesses, opportunities and threats to general practice as they saw it. The issues raised were noted and combined across the groups for analysis.

Strengths of general practice

The following issues were identified by many or all of the groups as key strengths of general practice.

- Variety of work
- Relationships with patients
- Breadth of work especially in rural settings
- Relationships with colleagues – GPs and others eg specialists, allied health workers
- Role in the community – as a gatekeeper, respected and valued by community especially in rural communities
- GPs have a high level of commitment to the community, many have been involved in the community for a long time
- Variety of GP workforce – multicultural, a diverse group
- Lifestyle benefits of general practice including flexibility of hours, portability of qualifications
- Autonomy of the GP
- Continuity of care able to be provided to patients

Weaknesses of general practice

The following issues were identified as being weaknesses of general practice.

- A high workload
- Problems of stress and burnout among GPs
- Insufficient numbers of GPs to meet demand and an ageing workforce
- Changes in workforce patterns ie more female GPs, more working part-time
- Training issues – lack of resources, time, payment etc
- Professional isolation especially in rural areas
- Patient expectations of GPs and restricted access to GPs in some cases
- Large amounts of paperwork and government red tape
- Remuneration for GPs is poor compared with other medical practitioners
- After hours and locum issues for rural GPs

Opportunities for general practice

The following issues were identified as opportunities for general practice.

- Current move toward primary care, health system changes and new models of care
- Links with other primary health workers
- Teaching and training links with clinical schools and universities
- Rural and outer urban issues are now on the political agenda, leading to things such as practice incentives
- Divisions of general practice are a forum to reduce isolation and can promote GP issues

Threats to general practice

The following issues were identified as threats to general practice.

- Medical indemnity issues including reluctance to enter/continue in general practice or to perform procedural work
- Drift away from general practice, due to various reasons including poor remuneration, indemnity issues, poor image among students
- Bureaucracy and government red-tape and interference in general practice
- Practice costs are prohibitive and few people want to own practices
- Working issues – fewer hours, more females
- Children's education and spousal employment as a disincentive for rural practice
- More demand and fewer doctors
- Lack of support systems eg specialists and allied health especially in rural areas, with increased pressure on GPs
- Reliance on overseas trained doctors for some areas
- Deskillling of GPs in some cases – possibly related to indemnity

There were a number of key issues identified under each heading for the SWOT analysis that were common to many or most of the consultations. In some cases, some of the strengths identified were later also identified as weaknesses. For example, relationships with colleagues were identified as a strength but professional isolation was a weakness. This apparent contradiction may be attributable to disagreements about these issues within the same group or across the groups.

Participants in the consultations largely agreed on the key issues facing general practice. This is interesting given the diversity of the people involved and the areas in which the consultations were conducted. For rural GPs in particular, there was a high level of agreement about the issues confronting them in their practices.

12. Changes in patient profiles, expectations and needs

Participants in the consultations discussed the changes that had occurred in their patients' profiles, expectations and needs in the past five years and anticipated future changes. All 35 groups of GPs and others were included in this analysis. The data is reported under the following headings:

- changes in patient profiles, including specific groups of patients
- changes in patient expectations of GPs
- changes in patient needs and resources to meet those needs.

Changes in patient profiles

Participants in the consultations identified a number of specific groups of patients that they felt had particular issues with which GPs were increasingly expected to deal.

Patients who are ageing

Of the 38 consultation sessions, 25 identified that GPs are increasingly involved with patients who are ageing and that this profile has a number of implications. One is the need and expectation that GPs will service patients in nursing homes and other aged care services when this is time-consuming and poorly remunerated. Some groups mentioned that new nursing homes are frequently built in outer urban areas without consideration of whether there are sufficient GPs who are able and willing to service them. A shortage of nursing home and acute care beds for elderly patients was also an issue for some GPs. In rural areas an increasingly ageing population put many demands on general practice, often without sufficient community care services available to assist them. The effect of many ageing people retiring to rural coastal areas or joining their children in outer urban areas was also perceived as putting a strain on GP resources.

Patients with chronic or complex illnesses

Of the 38 sessions, 24 noted a marked increase in the number of patients presenting with chronic or complex illnesses including things such as diabetes, cardiac and respiratory

disease. The increased longevity of patients was accompanied by increasing rates of co-morbidity and chronic disease and higher demands on GP time and other services. Those in remote areas, such as Aboriginal people, and in outer urban and rural areas with low socio-economic status were seen as being particularly prone to chronic illness. A few consultations also mentioned people with disabilities having much longer life expectancy and living in the community, and needing ongoing support including GP services. Higher rates of chronic illness also meant that these patients were requiring longer and more frequent consultations with GPs.

Patients with mental health and/or drug and alcohol issues

This was an area of concern for 27 out of the 38 consultations and was equally an issue in urban and rural areas. Participants identified that GPs are seeing more people with mental illnesses, stress-related conditions and drug and alcohol problems but often lack the support services to treat and refer these patients eg psychiatric services, community care and treatment programs. Some identified that increased knowledge and acceptance of mental illness, while a positive trend, had resulted in increased work for GPs. Other conditions such as ADHD, eating disorders and personality disorders were seen as becoming more prevalent. Many of these problems, particularly drug abuse, were seen as being related to isolation and boredom especially among young people in outer urban areas. Some GPs also mentioned that they were seeing a larger number of patients who were seeking drugs or 'doctor shopping'. Increasing incidences of suicide was also an issue identified by some consultations.

'the tv is talking to me'

The plight of patients with mental illnesses living in regional and rural areas was frequently cited in consultation sessions as being of major concern to GPs, as was the GPs' difficulties in providing adequate support to the patient and their family and access to specialist services.

The inadequacy of service provision faced by these patients was highlighted at one of the consumer consultation sessions by a health professional working with patients with a mental illness living in rural areas. She spoke of an attempt to provide specialist support to some patients by telemedicine, involving a patient receiving advice from a psychiatrist via a TV monitor. This, she noted, merely reinforced the patient's prior concerns that 'the TV is talking to me'.

Aboriginal and Torres Strait Islander patients

Issues surrounding the needs of Aboriginal and Torres Strait Islander patients were identified by 14 consultations. These were largely in rural and remote areas but included some metropolitan areas such as Canberra and Darwin. For central Australian GPs, these issues were of particular concern. Many identified the relative poor health of indigenous patients in comparison with non-indigenous Australians, including higher rates of chronic disease and

lower life expectancy. GP relationships with Aboriginal people were seen as being more difficult with lower levels of acceptance of non-Aboriginal health professionals and a lack of culturally appropriate medical services. Where Aboriginal-specific health services did exist, they experienced high turnover of medical staff and many relied on overseas trained doctors who were often poorly prepared to deal with Aboriginal people. Cost, language and cultural differences were all identified as barriers to indigenous people accessing services.

Young people

The needs of young people, particularly those living in outer urban or rural and regional areas, were also identified by ten consultations. Issues confronting this group included teenage pregnancy, drug and alcohol abuse, suicide and high rates of depression. Some GPs stated that services to treat these problems were in short supply and had long waiting lists. One group identified that young people diagnosed with a mental illness had to be transferred to the nearest capital city due to a lack of services in the country.

Transient populations and seasonal shifts

This was an issue identified by twenty-two groups, both rural and urban. Areas that are particularly prone to seasonal changes in population include coastal holiday areas, rural university centres and defence force facilities. Also some areas were seeing higher rates of migration particularly by ageing people retiring, urban people moving to rural areas and commuting to the city, and people seeking cheaper housing. Tourism to popular areas during the summer and other holiday periods also put an added strain on GP resources. Some regional centres attracted many patients from remote and outlying areas. Planning services for some patients was seen as difficult due to their high mobility. This was particularly the case for some Aboriginal communities.

Changes in patient expectations of GPs

The consultations identified a number of areas in which there have been changes in the expectations that patients have of their GP.

Patient knowledge

Most consultations (28 out of 38) identified that patients had greater access to information than previously and that this had a number of effects on their interactions with GPs. Many participants mentioned the internet and the media as having led to an increase in patient information and requiring GPs to answer more questions and provide more contextual information. Some participants felt that this increased information was a positive thing because it meant that patients were more aware of illness and presenting appropriately. Others felt that it was frequently a case of mis-information and that increased consultation time was needed to sort this out, resulting in an increased workload for the GP. Some also identified that patients used these information sources to visit the GP to ask for new drugs, diagnostic tests or treatments. A greater demand for explanation about the treatment decisions made by the doctor was also a result of higher levels of patient knowledge.

Patients were perceived as expecting GPs to be up to date on everything. A few groups also identified that an increased emphasis on illness prevention and health promotion had led to more patients taking an active interest in their health, although this tended to be more in urban rather than rural communities.

Use of complementary/alternative medicine

Many participants, particularly in urban areas, identified that more of their patients are seeing complementary or alternative medicine practitioners. Most did not believe this was a positive trend as patients then expected GPs to explain these treatments against those of conventional medicine or 'if this does not work, a GP will be able to deal with the consequences'. Some also perceived that they were ordering extra tests to counter the claims of alternative practitioners.

Patients as consumers

Many GPs, particularly in urban areas, felt that patients were now more empowered by the consumer movement and that this had affected their expectations of GPs. Some identified that patients expect to be able to access the doctor of their choice at any time and will go elsewhere if this is not possible. Also if it is a serious illness, many patients will wait to see their family GP but if it is not, they will see anyone from the practice. This is more likely to occur with younger rather than older people. Many patients were seen as visiting their GPs with a 'shopping list' of problems. Also, some GPs felt that some patients expected medical services to solve all problems quickly with minimal responsibility on their part to care for their own health. Others were seen as demanding a more central role in the decision making for their treatment.

Another related point was that patients were now seen as being more litigious and likely to sue their doctor if things went wrong. People were seen as expecting 'perfect results, every time' and therefore required the GP to practise defensive medicine, such as ordering extra tests and completing more paperwork, to pre-empt this.

Views of GPs

Of the 38 groups, 18 made some comment about how GPs and their role are viewed by patients and others. This was quite variable. In some cases, they believed that GPs were no longer 'on a pedestal' and that patient demands had increased while respect had declined. Others, particularly in rural areas, felt that GPs were still highly regarded but many patients lacked an understanding of the demands of the role, expected them to be available around the clock and regarded any CME training as 'a holiday'. Some groups linked changing views of the GP to changing views in society as a whole. Patients were perceived as expecting everything to be able to be fixed cheaply and quickly and the GP was supposed to deliver this service on demand. Others felt that patients had become aware of the strain on GPs and, as a result, are presenting to emergency departments or not presenting all their problems so as 'not to bother them'. There were also varying views on patient loyalty to particular GPs. Some felt that some patients will wait to see their choice of GP while others

will see anyone or go elsewhere to get their needs met. Some GPs also felt that governments, specialists and other colleagues did not adequately value GPs.

‘they don’t bring us tomatoes anymore’

This comment was heard at a regional consultation session, and was made with reference to a change in the relationship many GPs had with their patients. The sentiment was echoed in many consultation sessions, particularly by older GPs, and more frequently in regional or rural areas. It reflected both what GPs perceived as a loss of their standing in the community, as well as the lack of continuity in the relationship between GPs and patients.

A number of factors were suggested as contributing to this change:

- the increased levels of mobility, such that patients no longer saw the same GP from ‘the cradle to the grave’
- increased options of health care, such as alternative health care professionals
- the shortage of GPs, meaning that it was not always possible to see a patient’s GP of choice
- consumers’ increased access to information, such that the GP was no longer considered to be omnipotent and therefore questioned more frequently
- bulk-billing – the fact that patients did not have any out-of-pocket expenses meant that they did not value the level of care provided by their GP.

This lack of valuing was identified as contributing to poor morale in the GP workforce – and a factor in rising levels of stress and burnout among GPs.

Changes in patient needs

Complexity of needs

Of the 38 groups, 25 identified that many of the patients they were seeing had increasingly complex needs. These included things such as the problems identified earlier – chronic illness, mental health and drug and alcohol problems. However other patient needs that arose for GPs included the requirement to advocate on behalf of patients to obtain other services and to complete examinations and forms for Centrelink and workers’ compensation. These requirements were increasingly onerous. Some groups also identified the need to service diverse groups from non-English speaking backgrounds, as well as newly arrived migrants. One group described the GP as acting as an ‘unpaid social worker’ for some groups of patients who needed help with financial advice or domestic issues. Family breakdown was another area where some GPs are seeing more patients coming to them as ‘their only stable form of relationship’.

Bulk-billing

The issue of bulk-billing of patients was raised by seventeen consultations and was equally an issue for rural and urban groups. Some GPs believed that a lack of bulk-billing meant that patients did not attend GPs or went instead to hospital emergency departments. Patients were often not seen until the problem was serious and hospitals were critical of patients for not attending a GP without acknowledging the lack of low or no-cost GPs available. Some groups identified that GP clinics within hospitals had been set up to address this problem. Others believed that bulk-billing was no longer financially viable for GPs given rising practice costs and that patients tended to be more appreciative of services and respectful of the GP's time when there was some cost involved. Others thought that paying for services meant patients had higher expectations of quality.

Patient resources

Of the 38 groups, 23 noted that many patients they saw had fewer resources than previously. This included a wide range of things such as income, employment, access to transport to visit a GP and family support including parenting skills, help with children and social and emotional support. This lack of resources was seen as having an impact on GPs as many of these patients' medical problems were affected by or overlaid with social issues. Many rural GPs noted that the drought had affected many of their patients and some had stopped coming until it was over. Ageing patients were often the ones who remained in rural areas because they could not afford to move while young people left to find work in larger centres. Many outer urban and rural groups noted that larger numbers of their patients were poorer overall.

'tears and smears'

This comment was heard at a cross section of consultation sessions. Female GPs spoke of a different caseload from their male counterparts. They cited their increased likelihood of dealing with women's health problems such as breast examinations, pap smears, and sexual and reproductive health matters.

While acknowledging that there had been a general increase in the pastoral/counselling role played by GPs, it was noted that there had been a disproportionate increase in this kind of work for female GPs. Many GPs noted that this could create an imbalance within a practice – female GPs working fewer hours, but seeing patients who required longer consultations.

Access patterns

Many groups commented on changing ways in which patients access GP services. This included things such as people travelling across areas to see the GP of their choice or to maintain ties with a GP even when they have moved to another area. Many groups described how a lack of access to after-hours services had led to an increased demand on hospital emergency departments. Some people were unable to access GP services due to

poor or non-existent transport links. Particular groups such as the aged, disabled, socially isolated and those from non-English speaking backgrounds were also seen as having greater potential problems accessing GPs.

Service shortages

The lack of services to address some patients' needs was identified as an issue by twenty-seven groups. This was particularly the case for rural, regional and remote area GPs. Services such as drug dispensing, allied health and mental health services were in short supply in many of these areas. A lack of hospital and aged care beds was also an issue for some groups. They also identified that their own services were in short supply in many areas, with many having closed books or being unable to service new arrivals to the area or seasonal visitors. Some patients who moved to rural areas often expected to be able to access specialist services that were unavailable. Anything beyond basic medical services would require them to travel to a capital city. The trend toward early discharge from hospitals has also affected patients and GPs with more time needing to be spent with patients and more services required to support them outside hospital.

13. Changes in GP profiles, career expectations, practice structures and arrangements

The second question the participants at the consultations were asked to consider was how GP profiles, career expectations, practice structures and arrangements had changed and were changing.

Changes in GP profiles and career expectations

All groups were able to identify that the profile of GPs is changing in a number of significant ways and that these changes will have a bearing on the future of general practice. This changing profile appears to have a direct relationship to the career expectations of GPs and, as a result, these two areas are reported together.

Demography and working style

Changes that were affecting the profile of current and incoming GPs were mentioned in all but one of the 38 consultations. They included things such as the fact that more GPs are female and many of these wish to work part-time. However the point was made by a number of groups that 'part-time' for GPs is often almost equivalent to full-time hours for the general workforce. The increased number of female GPs means that childcare services are needed. These are hard to access in many areas and GPs may be reluctant to move away from urban areas where family supports are available. Also many GPs are seeking more of a work/life balance and see general practice as a job, not a vocation. Fewer GPs are willing to work the long hours and outside business hours that were previously taken for granted by the community. Most groups agreed that many GPs are retiring earlier either because of excessive workloads or indemnity costs.

There has also been an increase in other roles for GPs, such as working with divisions of general practice and teaching, that take them away from full-time clinical work. Graduate entry courses mean that many GPs are entering the workforce with well established families and may be less likely to want to work full-time or to move to rural areas due to a partner's career needs. GPs also have the option to travel, study or spend time away from the workforce and are more likely to take up these options than previously.

Some groups identified that many of these changes were positive, making GPs more representative of the community they were serving.

Ageing workforce

Of the 38 groups, 22 identified that much of the current GP workforce, like their patients, is ageing. This is particularly the case in urban centres and some rural areas where GPs have been in practice for a long time. There are concerns about this trend on several fronts. Many believe that there are insufficient numbers of new doctors being trained to adequately replace those who are due to retire. The larger demands on GPs suggests that more GPs need to be in training to meet future needs of patients and the changing health system. Also the increase in doctors working part-time means more GPs overall are needed to replace those retiring. This ageing group of doctors was seen as the most likely to be working excessive hours. Some however were seen as less willing to work long hours or after hours than they had been previously.

Overseas trained doctors

Of the 38 groups, 22 mentioned the issue of overseas trained doctors. This was an issue for both urban and rural centres, but particularly for the remote centres who said they were heavily reliant on these doctors to service their communities. Many were seen as having difficulty gaining adequate support to cope in isolated rural areas in an unfamiliar health system. Some areas may not be accepting of doctors from a different cultural background to that of the community. A couple of groups suggested that some overseas trained doctors are regarded as 'time servers' – they will move back to urban centres as soon as their time in rural practice is over and this is a negative thing for the community. These concerns were also seen as being related to the issue of not training sufficient GPs in Australia.

Skills and training

Skills required for general practice were mentioned by twenty-nine of the thirty-five groups. There was concern from many rural groups that some GPs were not maintaining their procedural skills for reasons including concern about indemnity issues and inability to find time to keep up to date. However a shortage of specialists in these areas meant that many people relied on GPs for things such as obstetrics, anaesthesia, minor surgery and mental health care. Some identified that GPs were also involving themselves in very specialised areas such as women's health or sports medicine and that this reduced the overall pool of available GPs. In an increasingly demanding and complex practice environment, GPs needed to constantly update and learn new skills but many found it difficult to find the time,

the supervision or the facilities to do this. Some felt that a broader range of skills were needed in rural practice compared with urban practice. GPs were also seen as needing to acquire skills outside medicine such as computer knowledge and how to run a business.

Remuneration and funding arrangements

A number of concerns were expressed about the nature and amount of remuneration that GPs receive. Many GPs undertake work for which they are not paid enough, such as nursing home visits, or not paid at all – such as paperwork and chasing up test results. There was a general perception that GPs did not earn as much relatively as they used to and that MBS rates did not adequately cover costs, leading to a decline in bulk-billing. There were also concerns about the various government rating schemes that determined whether or not a rural area qualified for practice incentives. In some areas the costs of practice were much higher than in others eg in remote areas and in high rent, inner urban areas. Some GPs were in favour of a move away from fee-for-service toward more blended payments but others felt the paperwork associated with this cancelled out any financial benefit.

Changes in practice structures and arrangements

Changes in the way GP practices are structured and arranged were discussed and brought up issues in the following areas.

Practice ownership

Of the 35 groups, 33 identified changes in practice ownership arrangements as having an impact on general practice now and in the future. All agreed that practice ownership has become much less attractive than previously. This is for a number of reasons including financial viability, level of responsibility and inability to sell the practice later. A preference for more flexible employment arrangements was also seen as a reason for this trend. Solo practices, particularly in some urban areas, were in decline and amalgamations were taking place in many but not all cases. Many were concerned that practice goodwill was no longer worth much when it came to selling a practice. Urban and larger rural centres were also experiencing corporatisation of practices. Many GPs were attracted to this model or to becoming salaried GPs because it meant they worked standard hours and did not have to run a business as well as practise medicine. Some rural communities have purchased practices to encourage GPs to work there without expecting them to buy in. Partnerships were also seen as becoming less common than associateships because of cost factors.

‘why borrow money to buy what I can’t sell ?’

This comment was heard at a majority of the consultation sessions and referred to the increasing reluctance of younger GPs to invest in practices.

Older GPs frequently spoke of the difficulties in selling their practices, noting that goodwill was – literally – worth nothing. In keeping with their preference for flexibility, younger GPs were demonstrating an interest in salaried employment or ‘walk-in walk-out’ models as it was frequently called. The growth in female participation in the GP workforce was compounding this move away from practice ownership, as it was incompatible with their demonstrated preference for flexible working hours.

GPs also noted the increased complexity in owning a practice – mounting red tape, OH&S requirements and other small business management skills. GPs felt that they had not ‘trained in medicine to become an accountant’ and that time spent in practice management took time away from their patients.

GP staffing

Half of the groups identified that it was difficult or impossible for them to fill all the positions available for GPs in their area. This situation was particularly acute in smaller rural and remote communities. This problem is also seen as a reflection of insufficient numbers of GPs in training. It was also difficult to recruit people with the right skills to rural areas in times of high demand. Retention and turnover of existing staff was mentioned as an issue for twenty-five groups, especially in light of high workloads and the ageing workforce. Many suggested that the new requirements of incoming GPs – shorter working hours, support services, education facilities for children – required creative planning by divisions and practices if GPs in rural areas in particular are to be attracted and retained. Continuous turnover of GPs in remote areas was seen as having a negative effect on both practices and patients. Many patients were not returning to see the GP if he or she indicates that they are not staying beyond a year in the area. Some suggested that the advent of rural clinical schools and the recruitment of rural students to medical school may help to alleviate the problem of recruitment and retention in non-urban areas. There was also concern that many of the trainees for general practice do not go on to work as GPs. Also, the difficulty in attracting and retaining specialist and allied health staff to some areas has a negative impact on GPs and their workload. Some groups mentioned programs such as after hours support and workforce support provided by divisions as helping with the retention of existing GPs.

Other team members

Of the 38 groups, 26 mentioned the issue of working with other team members as part of general practice. Many, particularly in rural areas, stated that it was important to develop collaborative links with nurses and allied health workers. Urban GPs were more likely to mention practice nursing as an issue. Most felt that these links could be beneficial but

should be funded, as it was difficult to cover costs otherwise. Outer urban areas and rural areas were more likely to have a shortage of allied health workers, making collaboration and the provision of team services difficult. Groups in remote areas identified that lack of resources made cooperation between health workers essential if patient needs were to be met—this was a strength of practice in these areas. Many groups were also appreciative of programs that allowed divisions to employ allied health staff to assist GPs in areas such as diabetes care and mental health. There were divided opinions about the acceptability of nurse practitioners and whether these were a solution to the lack of GPs or a threat to GP roles. There was general agreement that most GPs were more team-focused than previously and that this would continue into the future.

Locums

There was general agreement that for many areas locum GPs were difficult to obtain. This was seen as having a negative impact on the ability to retain GPs and to manage the workloads of the existing doctors. Where locum cover was available, it was seen as expensive and did not make any money for the practice. Some divisions employ locums for their areas and this was an effective model when available. The presence of locums was often a deciding factor in whether people stayed in rural areas. One group described their successful program that had been running for a number of years and operated across the division. Availability of locums was thought to have been negatively affected by indemnity concerns and the restriction of provider numbers.

Trainees

Issues regarding GP trainees were mentioned by twenty-five groups. Some of these concerns related to the shortage of people being trained in general practice and the long term effect this would have on the numbers of GPs available. Others stated that time constraints and lack of physical facilities made it difficult for practices to take on trainees. GPs also stated that they were not given any funding to take on trainees. Some rural areas that were closer to capital cities did not receive access to rural stream trainees for this reason and saw this as inequitable. Likewise some areas were not considered outer urban by the classification system but were perceived as such by the group members and did not get trainees easily. Trainees from different cultural backgrounds were often not well accepted in rural communities.

Computerisation

Computerisation of general practice was mentioned by one third of the groups as having an impact on structure. Most of these were from urban or larger rural centres where possibly computerisation is more likely. Many found technology had helped with the efficient running of the practice while others felt it had added to the stress. There was agreement that increasing computerisation of records was likely in the future and that this was another area in which many GPs would need to have skills.

Paperwork and red tape

Twenty-nine of the consultation sessions spoke about the onerous amount of paperwork and government regulation being experienced by general practice. Often paperwork is required to receive remuneration for services carried out – but the amount of time required to complete it makes the task not financially viable. Patient paperwork was seen as having increased in amount and complexity. Accreditation requirements were also seen as being an imposition on GPs and acted as a disincentive to apply for this. Uptake of programs such as enhanced primary care were inhibited by the amount of red tape involved. Many felt that more staff such as receptionists and practice managers had to be employed to cope with the requirements and this was an added cost to the practice. All of these issues had a negative effect on the time GPs had available to spend with patients.

14. Local issues

All consultation groups were given the opportunity to raise any concerns that applied particularly to their area or region. These areas were divided up into four categories – inner urban, outer urban, rural and regional, and remote.

Some groups covered more than one type of category. For example, the Hobart group raised issues about the whole of Tasmania and the registrars group spoke about urban and rural issues.

Inner urban

The five inner urban areas identified local factors ranging from the variable socioeconomic profile within a given area to the number of GPs to service the population. Some areas were seen as over-serviced and others under-serviced. Often this was related to socioeconomic status ie poorer areas had less GPs than wealthy areas. One group also raised the fact that inner urban GPs can be isolated by the fact that other GPs are their 'economic rivals'.

Outer urban

According to these groups the growing population in outer urban areas, attracted by lower land and house prices, means that regular increases in the number of GPs are needed to keep pace with demand. There was also variation within these areas between poorer and richer patients and their level of need. Many GPs practising in these areas do not live there and therefore spend a long time commuting to work – this adds to their workload and time away from their families. Another concern was that new developments are being planned without adequate services, including GPs, for the people moving there.

Rural and regional

The issues for rural and regional GPs include low doctor: patient ratios in some areas and the inability to attract and retain GPs, particularly those willing to do procedural work. Other concerns include the problem of cross-border issues in places such as Albury-Wodonga and

Mildura and the perception by some doctors that rural practice is seen as 'second best'. The impending retirement of long-serving rural GPs and the reliance of rural communities on one or two vulnerable industries were other concerns raised. Some larger regional centres felt they were not classified appropriately under the RRMA scheme, despite having similar problems attracting and retaining GPs as smaller centres. Some groups suggested that creative planning, the work of divisions of general practice and rural workforce agencies, and increasing use of technology such as teleconferencing would assist rural practitioners in the future.

'grandmas and lattes'

This comment was heard at a number of regional and rural consultation sessions, and refers to the difficulties these areas have in providing child care and lifestyle options for would-be rural GPs. Both of these issues are difficulties in trying to entice GPs to rural practice. The lack of quality and affordable child care options in rural areas makes practice particularly problematic for female GPs.

While offering many lifestyle benefits in their own right, rural and regional areas believe they suffer from preconceptions by urban GPs that they are unable to provide a variety of cultural and entertainment options.

Remote

Many of the issues for rural and regional centres were also the same for remote centres – but, in some cases, more acute. For example, many stated that most GPs did not stay more than two years and finding a replacement was a continuous struggle. This was against a background of long distances and often high rates of morbidity and/or a high proportion of Aboriginal patients. The nearest tertiary medical centre was often in another state but patients were generally sent to the local capital city at a much higher cost and longer travel time. For example, Kimberly patients are sent to Perth although Darwin is much closer. The cost of living in remote centres is also much higher and needs to be taken into account when recruiting staff. The isolation experienced by providers of health care and the reliance on overseas trained doctors were also mentioned as issues.

15. Data issues

All groups were asked to comment on any limitations and interpretations required of the data that is currently collected and to make AMWAC aware of any research or data that may be of use in the GP project. The groups identified the following data issues.

HIC data

Many groups identified that the HIC data on GP activity levels was inadequate for a number of reasons. These included the fact that it did not capture much of the work that rural GPs perform outside the Medicare system, such as work in country hospitals. This means that

the amount of work carried out by such GPs and the number of GPs needed in an area are underestimated if these figures are used. Also, the figures on GP numbers and doctor: patient ratios held by the HIC often did not reflect the experiences of the GPs in that area. They suggested that this needed to be supplemented by local input and some case examples. Provider number figures also needed to be interpreted with caution as one provider number does not equal one full-time GP.

ABS data

A number of groups identified that ABS data being used to plan services for populations was frequently out of date with current needs. One gave an example of 1996 census data being used to derive population figures for 2003. Also, the population figures for given SLAs (statistical local areas) may be at odds with the population actually seen by GPs – people may be travelling to other towns or areas to see a GP. No account is taken in ABS data of seasonal fluctuations in population in many areas.

Other data issues

Some groups spoke about the perceived inconsistencies and inequities in the RRMA scheme in terms of availability of incentives and other programs. Also one group felt that there should be work done to define exactly what constituted an outer urban area and how its needs are defined. Classification systems in general were seen as over-generalising and not accounting for local fluctuations in the nature of populations and services. One group recommended that data be kept on allied health numbers as well as that of GPs.

16. Consumer issues

The general practice study team held two meetings with consumer representatives about GP services—one in Adelaide and one in Melbourne. A small steering committee, including members with expertise in consumer health issues, advised the Secretariat and facilitator on the format of these sessions so that consumer participation was maximised. Consumers were asked to identify the key issues for the general practice workforce now and in the next ten years.

GP access

Many consumers were concerned that it was hard for some groups to access a GP for a number of reasons. These included cost, lack of bulk-billing and availability of GPs, particularly in growth and rural areas. Some patients may also be disadvantaged in trying to access a GP by physical, intellectual or psychiatric disabilities. Out of hours access to GP services and the decline in home visiting were also raised as concerns.

GP skills

Consumers stated that they often had high expectations of the level of skills that GPs should have. This included an ability to diagnose and treat, or refer appropriately, people with

mental health problems, chronic and complex disease and carers' issues. There was also a call for GPs to be holistic in their approach to patients' health and willing to refer people to other services that may be appropriate. Some consumers acknowledged that it was not possible for GPs to be up-to-date on all things.

Patient needs and expectations

There was agreement that different patients required different things from their GP and that some of the groups already identified—mental health, chronic illness, people with disabilities – needed longer consultation times, coordinated care and active involvement in their own care. Trust of the GP and respect for patient confidentiality was felt to be very important for these groups. It was also desirable for the GP to have links with appropriate allied health and community services and to refer patients accordingly. The move to alternative practitioners was seen by some consumers as a response to the lack of a holistic focus on the part of some GPs and the short time available in some consultations. Consumers were also aware that a lack of accessible and affordable GP services was leading to late presentation of sicker patients or increased use of hospital emergency departments.

Practice structures

Consumers were aware of the different and changing practice structures in general practice. Many suggested that a move to salaried GPs would be beneficial to both doctors and patients without compromising GP autonomy. It would also allow the longer consultations that some consumers need. Some consumers felt a mix of practice structures to meet the diversity of consumer needs was desirable. Co-location of GP services with other health services was also seen as a solution to the current fragmentation of the health system. While some GPs are perceived as only interested in money, others are not as well off financially as the public believe. Many consumers were in favour of GPs working as part of a team and using practice nurses for some tasks and to improve continuity of care. There was low awareness among consumers about practice accreditation, the various care planning incentives and other quality assurance initiatives. Many felt that general practice structures, training and costs needed to be more transparent and that the public needed more information about these issues.

17. GP registrar issues

One consultation session was held in Canberra with eleven GP registrars representing six states and territories. The session was planned to coincide with a meeting of the GP Registrars' Association to maximise attendance and participation. A small steering committee, made up of GP registrars from a mix of rural and urban training environments, assisted the Secretariat and facilitator in planning a consultation session which identified areas of particular interest to the future general practice workforce.

The registrars were asked to identify the issues that affected their:

- career decisions made during training, placement issues and training pathways
- work and career intentions.

Career decisions, placements and training pathways

Registrars commented that a number of factors influence their career decisions. These include the quality and quantity of supervision they receive, the support and facilities available in the community in which they are training, and the level of cross-cultural understanding by their supervisors. These factors were seen to be extremely variable for registrars and had a huge influence on what they decided to do in their medical careers.

If trainees receive good support and supervision, they are more likely to return to that area to practice. The reverse is also true—a negative experience can lead to extreme reactions such as dropping out of medicine. Trainees who are given support and encouraged to develop competence and confidence are more likely to be willing to practise in a range of settings.

There are some trainees who do not like the compulsory six month rural placement and many local graduates stay away from the rural pathways, leaving them to be taken up by overseas trained doctors. Some registrars felt that trainees were not sufficiently valued but just seen as filling gaps in the workforce. GPs were also seen as reluctant in many cases to take on trainees. Also, trainees felt that the training pathways were too rigid in many cases and demanded a commitment too early from people who were not yet sure what they wanted to do. The problems of attracting trainees to rural and remote areas were also mentioned. Some participants perceived that overseas trained doctors and international medical graduates are exploited by sending them to areas of need without adequate supports. Many of these accepted this as a way to achieve permanent residency rather than a provider number, as is perceived by some GPs.

Work and career intentions

GP registrars want to work fewer hours overall and to achieve a better work / life balance than their predecessors. The needs of partners and children in terms of employment, education and support services are important in determining whether the registrars will consider moving to rural or remote communities. There was also a desire for a flexible career which meant that buying into a practice was undesirable. This purchase was also precluded by the fact that many trainees had heavy HECS debts. Some registrars choose careers as full time locums as this earns as much if not more than working in a practice. Part-time work is important to a large proportion of registrars who would like GPs to view this more favourably.

Part C Key perspectives on the general practice workforce

18. Outer metropolitan general practice

Previous reports on the GP workforce in Australia did not differentiate supply and demand in inner and outer metropolitan areas. The focus was more on the inadequacy of supply in rural and remote areas. Outer metropolitan areas have traditionally been included and reported on in RRMA 1 – capital city – so it is difficult to get a clear picture of GP services and characteristics in outer metropolitan areas. Determinants of health – such as education levels, employment rates and income – are usually at lower levels in outer metropolitan areas than inner metropolitan areas. However many general practice programs target rural communities, rather than looking more broadly at disadvantage and need.

The Australian government's 'More doctors for outer metropolitan areas' program started in January 2003. It has two main strategies – relocation incentives and training placements. The initial target of 150 new doctors in outer metropolitan areas has been achieved and the revised target for June 2006 is between 200 to 250 doctors.

The 'MedicarePlus for other medical practitioners' program started in February 2004 and provides access to the higher A1 Medicare rebate for GPs who are not vocationally registered if they work in areas of workforce shortage, including outer metropolitan areas.

Other policy responses to outer metropolitan health care needs include grants to employ practice nurses, recruiting international medical graduates, and funding bonded medical school places and short term placements for newly graduated doctors in outer metropolitan general practices. Rural workforce groups however are concerned that programs to encourage more GPs to work in outer metropolitan areas will have a negative impact on similar programs for rural and remote areas.

19. Rural general practice

There were 4074 registered GPs practising in rural and remote locations in Australia in November 2003. In March 2003, males accounted for 70.3% and females for 29.7% of the total rural and remote GP population. The largest age groups of rural GPs were between 35-44 years and 45-54 years. GPs who have spent any time living and studying in a rural location are more likely to practise in a rural location.

Rural areas have shown the largest growth in the proportion of female GPs between 1995 and 2001. The percentage of female GPs in outer regional areas increased by 5.3 percentage points compared with a 7.1 percentage point increase in remote areas and a 4.1 percentage point increase in major cities. GPs in very remote areas reported working the longest hours per week – more than 49 hours per week in 2002. The majority of GPs work 35 hours or more (66%), with 75.2% of males working these hours compared with 43.6% of females.

The lack of specialists in rural areas was cited as one reason why rural GPs are more likely to perform procedural work. This was one of the positive aspects of rural practice, although there were concerns about professional indemnity. There are a greater proportion of GPs with surgery, anaesthetics, obstetrics, emergency and Aboriginal health sub-specialities practising in RRMA 5 – which covers other rural areas and urban centres with populations of less than 10,000 – than in any other RRMA category.

Australia's rural and remote populations have poorer health than their metropolitan counterparts. Life expectancy generally declines with increasing remoteness and is lower for males in each area than for females. These figures are affected by Indigenous mortality rates and the potential migration of the frail aged towards less remote areas.

The Australian government has implemented several programs to encourage registrars to take up rural practice. These include additional training places for the rural pathway, incentive payments to encourage registrars to take up the rural pathway, rural Australian medical undergraduate scholarships for students from a rural background, medical rural bonded scholarships, rural clinical schools, university departments of rural health, and a higher education contribution reimbursement scheme for graduates who practise in a designated rural area.

20. Aboriginal and Torres Strait Islander Australians

Aboriginal and Torres Strait Islander Australians are more likely to live in non metropolitan areas – 54% live in rural and remote areas compared with 20% of the total Australian population. Their life expectancy is approximately 20 years less than non-Indigenous Australians and the infant mortality rate is 2.5 times the rate for all Australian infants.

The major contributors to excess deaths have changed from infectious diseases and mortality in infancy and the perinatal period to chronic diseases such as diabetes mellitus and cardiovascular disease – particularly in early and middle adult age groups.

Primary health care services are poorly accessed by Aboriginal and Torres Strait Islander Australians – they have a relatively higher rate of usage of hospital services. The low number of GP consultations in remote areas and some regional areas is a direct result of lack of availability of health services – rather than poor acceptability which is an important factor in urban and some regional areas.

There are more than 100 Aboriginal Community Controlled Health Services across Australia, providing acute and chronic disease care and a range of other programs and services. In 2000-2001, they provided nearly 1.4 million episodes of health care.

There is considerable potential for GPs to play an important role in improving the health status of Aboriginal and Torres Strait Islander Australians. However the high GP turnover in rural and remote areas and the high mobility of patients often makes relationship building and continuity of care difficult.

There is a need to improve the training, recruitment and retention of Indigenous and non-Indigenous health staff working with Aboriginal and Torres Strait Islander Australians. This includes increasing the numbers and support of Aboriginal and Torres Strait Islander medical students and increasing the number of non-Indigenous GPs who are willing and appropriately trained to provide services to Aboriginal and Torres Strait Islander Australians.

21. Consumer perspectives

In consultations about the future of general practice in Australia, consumers identified four broad themes or areas of concern – access to GPs, the skills of GPs, patient needs and expectations, and practice structures.

The factors that influence consumers' decisions to see their GP include the accessibility of services, both geographically and financially, and the capacity of those services to meet consumer needs and expectations.

Consumers expect their GPs to have up-to-date medical knowledge, they want sufficient time allocated to their consultations, and better links with allied health and other community services. Consumers with chronic health conditions value continuity of care with a GP, but will change doctor if they feel their needs are not being met.

By 2002-2003, more than 90% of divisions of general practice had one or more consultation mechanisms to involve consumers and over 85% indicated that these mechanisms had been formalised.

22. State and territory overview

In 2001, one third (33.8%) of the Australian population lived in New South Wales and 34.9% of all GPs were located there. The average age of GPs in New South Wales increased from 46.3 years in 1995 to 50 years in 2002.

One quarter (24.8%) of Australia's population lived in Victoria and 26.0% of Australian GPs were located there. About 36% of GPs in Victoria are female. GPs in Victoria decreased their average hours worked from 44.7 hours per week in 1995 to 40.8 hours per week in 2002.

Queensland's population is projected to grow more quickly than the population in any other state and territory (1.7% per annum). More than one quarter of the population lived in rural or remote areas of the state.

Western Australia's population is projected to grow to 2.3 million by 2015 resulting in a growth rate that is nearly double that of New South Wales and Victoria. Medical workforce shortages in Western Australia mean that there is a heavy reliance on overseas trained doctors.

South Australia had the oldest population of any state or territory with a median age of 37.9 years, compared with 35.9 years for Australia. GPs in rural and remote areas of South Australia spent, on average, about 20 hours a week working at local hospitals and providing after hours or on-call medical services.

The population of Tasmania is projected to grow slowly (0.1% per annum) to 2013 and then it is projected to decline. A high proportion of GPs in Tasmania said they intend to retire in the next few years but there will not be sufficient new graduates to replace them.

The Australian Capital Territory had the second youngest population nationally, after the Northern Territory. The practitioner-to-population ratio increased from 121 GPs per 100,000 population in 1995 to 138 GPs in 2002.

In 2001 the Northern Territory had the highest proportion of female GPs, a young age structure and a highly mobile population. Aboriginal and Torres Strait Islander Australians made up 28.8% of the population.

Part D The general practice workforce to 2013

23. General practice service requirements

Current and future requirements for GP services are affected by population growth and ageing, the incidence of sickness and disability, the number of patient encounters, the number of problems managed at these encounters, the range of procedural activities undertaken by GPs, and changes to hospital practices such as more day surgery and shorter stays in hospitals.

The age and sex structure of the population is a key determinant of GP service utilisation because older people and women have a greater tendency to visit GPs. The decreasing length of stays in hospital is also likely to increase the demand for GP services.

Long term declining fertility and increasing longevity are the two main drivers of population ageing. One in eight Australians is now 65 years old or over and by 2044-2045 this proportion will grow to almost one in four. The number of people consulting a GP is projected to increase by 11.8% from 2000-2010.

Increasing longevity results in an increase in diseases, medical conditions and disabilities associated with age. For example, the prevalence of coronary heart disease, diabetes, arthritis and musculoskeletal conditions all increase with age, and the number of Australians affected by dementia is expected to increase by 50% between 2002 and 2020. The need for GP services will therefore increase with the predicted increase in the ageing population.

24. The supply of general practice services

Additions or increases to the GP workforce include entrants from the GP training program, re-entrants from among GPs who have taken time out from the workforce, and new entrants from migration. Losses from the workforce are mainly due to retirements, deaths and migration.

The average age of the GP workforce increased by 3 years between 1995 and 2001. In 2002 the average age of the GP workforce was 48.6 years. The average age of female GPs was 44.1 years and the average age of male GPs was 51.2 years.

The proportion of male and female GPs in the younger age groups has declined, particularly in the under 35 years group. The proportion of female GPs in the workforce increased from 32.6% in 1994 to 35.0% in 1998. By 2001 female GPs represented more than one-third of the workforce. These trends are also reflected in the gender of GP trainees. In most Australian medical schools, females make up nearly 60% of the total students.

The average hours worked by GPs has declined across all age groups and both sexes. However the reduction in hours worked has been most notable among male GPs in the younger age groups. On average, the GP workforce works 41.1 hours a week. However female GPs work an average of 13.6 hours per week less than male GPs. This lower

average is mainly because more female GPs work part time. There are also an increasing number of part time GP trainees – from 5.2% in 1997 to 11.0% in 2004.

The general practice workforce is ageing and working less hours. The trend to increasing proportions of female GPs, and the fact that they work fewer hours than males, will have a significant impact on hours worked in general practice in the future.

25. Modelling the general practice workforce

Modelling of the supply and demand for general practice services was done by PricewaterhouseCoopers (PwC). The GP modelling group – part of the AMWAC general practice working party – provided advice on this modelling work. The group met with the PwC consulting team on numerous occasions, including frequent teleconferences towards the conclusion of the report, and a number of group members provided direct comment to the NHWS and the PwC team.

The section below provides a brief overview and summary of the PwC modelling report. It highlights their key conclusions about the current availability of GPs to meet the requirements of the population in the 120 divisions of general practice in Australia.

The modelling group was also asked to consider the projections of GP supply and demand and the requirement for new entrants to the GP workforce to the year 2013. These projections were developed by the NHWS, in consultation with the modelling group, and are presented in the latter part of this section.

The PwC modelling project

The modelling work by PwC was designed to:

- provide statistical estimates of the effects of the various factors that influence the demand for and supply of GP services
- identify the divisions of general practice that appear to have a net demand/supply situation above or below the average or standard for all divisions
- indicate the number of additional GPs that would be required to adjust for the lower number of doctors in particular divisions because, for example, they are remote or have a population with relatively low socioeconomic indicators

The PwC models also provided essential input into the forecasts of demand for and supply of GPs and GP services and the policy issues that will need to be addressed to meet the likely need for additional GPs in the future.

It is important to note that the models do not and cannot determine the level of adequacy or benchmark for GP services. This is a policy issue for AMWAC and its advisory committees and, ultimately, for governments. In their previous report on the GP workforce in 2000

(AWMAC 2000), AMWAC selected the average level of GP services provided in major rural towns – about six GP visits per year – as their adequacy benchmark. However this was criticised on the basis that it underestimated the needs of people in outer urban areas, low socioeconomic groups and some rural and remote regions.

Also, with the benefit of hindsight, it is apparent that the earlier report did not anticipate the drop in average working hours among GPs in recent years. In addition, as the current study makes clear, there is a very wide diversity in the manner in which GPs practise in different regions. A single national benchmark of say six visits per year cannot be used to effectively determine the adequacy of the GP supply situation in all geographic areas.

Three basic models were used by PwC.

- The first model estimated demand for GP services per whole patient equivalent
- The second model estimated the supply of GP services measured by hours of work from the medical labour force survey – the work output supply model
- The third model estimated the supply of GP services measured by the number of services from Medicare data – the GP service model.

Each model was estimated in three formats A, B, and C. The A format incorporated all the likely important variables. Some variables were omitted from formats B and C to obtain an indication of the importance of these excluded factors. A descriptive overview of the three models and three formats may be found in section 1.3, page 3 of the technical report.

If model A alone was used to estimate where there is a GP shortage, this would in effect continue the current situation of regions with lower GP numbers as a result of, for example, their low socioeconomic status or their remoteness – because estimates from model A are adjusted for these factors. The models were initially estimated using 2001 data, but were updated when 2002 data became available.

The A formats were highly satisfactory in that they explained a large proportion of the variation in supply and demand for GPs between the 120 divisions. In most cases, the statistical fit of the models diminished significantly when one or two key variables were omitted in formats B and C. This showed how these variables impact on the demand and supply of GP services.

Key results

Demand

The demand for GP services varies across divisions from 3.5 to 8.1 services per whole patient equivalent per year. It is largely influenced by the age, gender and socioeconomic status of the patients, the level of fees in the division, and the relative remoteness of the division. If the socioeconomic and fees factors are excluded (format B), the accuracy or fit of the model drops from 91% to 52%. If all the variables other than age and gender are omitted (format C), the fit falls to 9% – largely as a result of excluding the remoteness factor. For further details about these results see section 5, pages 21 to 30 of the technical report – pages 21 to 25 for format A results; pages 26 to 28 for format B results; and pages 29 and 30 for format C results.

The two key implications, based on 2002 data, are:

- Divisions with lower socioeconomic indicators have significantly lower access to GP services than other divisions, and GP usage outside the capital cities is considerably less than in the major urban areas. Substantially more GPs would be required in low socioeconomic areas and the rural and remote regions for patients to receive services equivalent to the higher income urban areas.
- The level of demand for GP services is quite sensitive to the fee gap charged by the doctor – the amount above the Medicare rebate. Per capita demand for GP services tends to be lower in divisions where the average gap fee is higher.

Supply - work output model

The results of the work output supply model show that GP hours worked in a division are closely linked to the doctor's age-group, gender, the remoteness of the division, and the education and occupation socioeconomic ranking of the region.

Average hours worked by GPs ranged across divisions from 38 to 56 hours per week. The education and occupation ranking of the region was omitted from format B and the measure of fit only declined from 71% in format A to 69% in format B. This shows that the education and occupation index of the area in which GPs work does not have a particularly significant relationship to the average hours worked by the GPs. The remoteness variable was excluded from format C and the measure of fit dropped to 36%, indicating that remoteness is an important factor in explaining average hours of work per week. For further details about these results see section 6, pages 31 to 37 of the technical report – pages 31 to 33 for format A results; pages 34 and 35 for format B results; and pages 36 and 37 for format C results.

Supply – GP service model

The GP service model, based on Medicare data and using mostly the same variables as the work output model, fitted the data very well. It explained 93% of the variation in Medicare

services per GP per annum in A format. The predicted output ranged across divisions from around 3,600 to 8,500 Medicare billable services per GP per year.

When the education and occupation index and the average fee received per service variables were omitted in format B, the measure of fit fell to 60%. This indicates that socioeconomic factors have a significant impact on GP service output. Format C excluded remoteness and the measure of fit fell to 35% suggesting that this factor is also important in determining the number of Medicare services per GP. For further details about these results see section 7, pages 38 to 45 of the technical report – pages 38 to 40 for format A results; pages 41 to 43 for format B results; and pages 44 to 45 for format C results.

Observations from the models

When the hours based work output supply model is used, most – but not all – divisions outside the high socioeconomic and highly accessible areas tended to have a lower availability of GPs relative to modelled demand. This result was much less pronounced with the services based supply model, possibly reflecting a higher throughput of GPs in outer metropolitan areas.

Also, the GP supply situation in a particular division is significantly influenced by the age and sex profile of the GPs in that division. For example, if a division has a high proportion of male GPs in their forties, who, on average, work relatively long hours, the workforce supply situation will appear stronger than in a division that has a similar number of doctors but with a higher proportion of female and older GPs who tend to work significantly shorter hours.

A measure of throughput – the number of services provided per hour of GP work – was estimated for each division. The observed throughput rate was around 2.5 services per GP hour worked. This rate varied by division from around 1 service per GP hour worked to 4 services per GP hour worked. (see page 50 of the technical report)

The high socioeconomic and readily accessible areas tended to have a higher GP throughput and the average number of services provided per hour varied considerably. More remote areas tended to have the lowest GP throughput or number of services per hour – possibly because of greater travelling times – while the highest levels of throughput were recorded in outer metropolitan areas. The range of throughput in highly accessible divisions was quite wide.

Divisions with low socioeconomic indicators had the highest levels of GP throughput while the high socioeconomic areas were associated with lower levels of throughput. Generally, the socioeconomic index of the area in which GPs work is an important predictor of throughput.

For further details regarding throughput, including how it was calculated, and actual and modelled throughput rates, please see section 8.2, pages 50 to 54 of the technical report.

Divisions with low socioeconomic indicators also had a relatively high proportion of male GPs, which may suggest that female GPs are less inclined to practise in these areas.

Estimates of below-average and above-average GP supply

PwC calculated the overall GP supply and demand situation using a number of scenarios. They started with model A and then used the exclusion of key variables to provide an indication of the additional GP services that would be required if the impact of these factors on the GP supply and demand situation were to be removed.

If the model A demand for services is compared with the actual supply of GPs, the total shortage of GPs is 378 (Table 12, page 60 of the technical report) and the divisions with above average supply have a total of 478. However, this scenario only picks up the really outlying divisions because demand model A very effectively adjusts the demand estimates to take account of all the main factors that have been found to determine the demand for GP services.

If socioeconomic factors are excluded (format B) and the demand for GP services is compared with the actual availability of GPs, it is estimated that about 62 (Table 12, page 60 of technical report) divisions have a below-average GP supply amounting to around 846 GPs overall. In other words, it would take about 846 additional GPs to overcome the shortage caused by socioeconomic factors and produce a supply demand balance of GP services in those divisions equivalent to the national average. Conversely, by this measure, the above average GP supply totals about 717.

If the same analysis is carried out – but the availability of GPs is calculated on the basis of the hours model rather than the number of Medicare services – 43 divisions show a clear shortage amounting to 1200 in total.

If remoteness factors are also excluded (format C), the number of divisions in the shortage/balance categories is 70 and the number of additional GPs required to cover both remoteness and socioeconomic factors increases to 2100 (Table 13, page 62 of the technical report). The above-average supply also increases to 2443.

When GP hours data from the annual workforce survey was used for the modelling – rather than the Medicare statistics – the range of shortages and above-average GP supplies tended to be wider. This may be due to the survey recording all hours worked by GPs – not just the time taken in direct patient contact – so it takes into account non Medicare GP work.

For detailed modelling results by division, please refer to Appendix A of the technical report.

Modelling group comments

The PwC modelling does not and could not indicate how many GPs Australia 'should' have. Apparent shortages and above average supplies are measured relative to the modelled national average in 2002, and opinions will differ as to whether the national division average situation is satisfactory or not and whether changes may have taken place between 2002 and 2005.

However the modelling does provide a great deal of information about the range of situations facing divisions and the key factors affecting the supply/demand balance of GP services in these divisions.

To obtain a separate and more current estimate of the GP supply/demand situation, members of the modelling group and the NHWS reviewed the information from the separate qualitative review of the divisions and compared it with the model outcomes. This exercise was limited by the fact that only about 60 out of the 120 divisions provided sufficient information for an assessment of the overall supply/demand situation.

The qualitative data indicated a significantly higher shortage of GPs than the model A results – a shortage of 378 – but, at 840, somewhat less than the model B and C results. It was not possible to make an estimate of the divisions in surplus from the qualitative data because of lack of response from about half the divisions – including many that might have been expected to have an above average availability of GPs. For further details about the Model A results adjusted for qualitative information, see section 10.3.1, page 62 of the technical report.

After detailed consideration of the model results, the modelling group concluded that the total GP shortage in 2002 in the divisions that fall in the shortage category was between 800 and 1300, and that these would be appropriate starting points for the projections analysis. By definition, there is a similar number of GPs above the national average in the divisions with above average supply. Please see section 10.3, pages 62 and 63 of the technical report.

A higher supply relative to demand for GPs in a division does not necessarily imply that there is a surplus or too many GPs in that division. Factors such as easier access for patients, longer consultations, and less stress and pressure on GPs may provide for better health outcomes and less pressure on hospital emergency facilities.

GP workforce projections

Workforce projections were not part of the PwC modelling project – they were carried out by the NHWS after the modelling was largely complete. The modelling group provided advice about the key assumptions that form the basis for the projections.

The aim of the projections was to provide estimates of the number of new GP workforce entrants that will be required from 2007 onward to:

- overcome the estimated shortfall in 2002
- offset expected workforce exits
- respond to likely upward trends in demand for GP services as the Australian population grows and ages.

Projections were done at a regional training provider (RTP) region level and the results are reported at a state/territory and national level.

Two key assumptions were that:

- GPs currently working in areas of above-average supply will not move to GP shortage regions.
- GP exits and retirements from better supplied divisions will be replaced and the balance of the new entrants will go into divisions where there is a GP shortage. It should be noted that the number of required entrants to the GP workforce will need to be further increased above the levels shown in these projections if the new GPs move to the already better supplied divisions at a rate above the necessary replacement rate.

The projection methodology is described in detail in chapter 21 of the main report, but a brief overview of the process is included here.

The initial supply was based on the 2002 medical labour force survey (AIHW 2004) and this was projected forward using average annual GP exit and entry data from Medicare. It was assumed that the estimated entry and exit rate for each five-year age/sex GP group within RTP regions will remain constant throughout the projection period, although the actual number of entries/exits will vary as the workforce ages and the age/sex profile of the workforce changes. From 2003 through 2006, additional entrants are assumed based on the increase in the number of first year entry training places that were accepted. From 2007 onwards, new entrants are modelled based on the requirement to balance the workforce at 2013.

The supply projections are sensitive to future changes in average GP working hours. The average hours calculation was based on the changing age and sex composition of the workforce, but no underlying trend in average hours – a no change scenario. However, given the downward trend in working hours in recent years, the modelling group decided that an initial fall of 0.5% per year – declining to zero by 2013 – was an appropriate basis for projections.

The starting point for projecting future GP requirements was set at the initial supply in 2002, plus any identified shortage from the PwC modelling. It was then projected based on forecasts of population by age and sex, and the assumption that utilisation rates transition from the actual observed rates to the modelled utilisation rates – based on PwC model A – by 2013.

The projections were carried out using two different starting points. Firstly, using the lower end of the estimated shortage from the PwC modelling – 800 GPs – and secondly using the high end of the estimated PwC shortage – 1,300 GPs.

Key results

Assuming an initial shortage of 800 GPs, the number of new entrants to the GP workforce would have to increase from current levels of about 700 a year to 1,105 a year from 2007 to 2013 – to reach a supply/demand balance by 2013. Starting with a shortage of 1,300, and using the same assumption about average hours, would mean that 1,200 new entrants would be needed every year from 2007.

To assess the impact of the assumptions about average hours worked and the level of the initial shortage on the requirement for new entrants to the GP workforce, projections were carried out based on no change in hours worked and a zero initial shortage. Under this scenario, an additional 879 new entrants into the GP workforce would be required every year from 2007 to 2013 to achieve supply/demand balance by 2013.

Table 1 (Table 127 in the report) shows the results for these projection scenarios plus some based on other hours worked assumptions.

Table 1: GP workforce entrants required from 2007 onwards*

Scenarios	A	B	C
1	1,105	1,207	1,010
2	1,200	1,312	1,101
3	970	1,067	879

* To achieve system supply and demand balance by 2013
 Note: Table 1 above corresponds to Table 127 in the report.
 Source: AMWAC

Notes on scenarios shown in Table 1:

- 1 Relieve shortage of 800 in specific geographic areas
- 2 Relieve shortage of 1,300 in specific geographic areas
- 3 system status quo (retain current geographic maldistribution)

- A -0.5% initial decrease, reducing to 0% decrease by 2013
- B -0.5% annual decrease in average hours worked
- C no change to current average hours worked

To achieve a better understanding of the projections, PwC were asked to provide an estimate of the key components that make up the overall change in the demand for GP services for the period up to 2013.

These components have been broken down to show the additional GPs that will be needed in relation to the main factors driving GP workforce requirements – such as GP exits, the growth and ageing of the Australian population, changes in GP average hours worked – and in response to current shortages in specific geographic areas.

Initial estimates are that every year the GP workforce in Australia will need:

- an additional 316 new entrants to cover workforce exits
- an extra 365 GPs to cover changes in the patient population due to growth and ageing
- possibly some additional GPs to cover any decline in average hours worked – this is expected to be between 198 and 386
- additional GPs to cover areas of current shortage – this is expected to be between 131 and 245.

These initial estimates suggest a low of 1010 for workforce entrants and a high of 1312.

Discussion of results

All of the projection scenarios suggest that a major increase in the number of entrants into the GP workforce will be required in the future to meet growth in demand for services. Results are not particularly sensitive to the level of GP shortage in 2002, but they are affected by the projected change in average working hours.

Also if a significant proportion of new entrants decide to practise in areas where GP supply is already above average (in excess of the number needed to replace GP exits from these areas), the number of new GPs required to cover the shortages will be correspondingly higher.

The projection modelling did not try to identify or quantify all possible sources of entrants to the GP workforce. However these sources would be likely to include:

- additional GP trainees
- overseas trained doctors
- maximising the workforce participation of existing GPs
- new models of care

Workforce projections for the states and territories

Table 2: GP workforce projection results by state and territory (Scenarios 1A and 2A)

State/territory	Annual number of workforce entrants required from 2007 onwards ^a		2006 GP training places
	Scenario 1A	Scenario 2A	
New South Wales + ACT	449	461	206
Victoria	270	271	155
Queensland	209	258	124
Western Australia	110	133	58
South Australia	47	54	47
Tasmania*	12 (16)*	12 (16)*	16
Northern Territory*	8 (20)*	11 (20)*	20
Total (Australia)	1,105	1,200	626

Source: AMWAC GP working party and GPET (2006 GP training places)

Note: Table 2 above corresponds to Table 132 in the report.

a To ensure a balanced workforce (supply equal to requirements) by 2013.

* The working party recommends the annual number of workforce entrants for Tasmania and the Northern Territory remain, at a minimum, at the 2006 GP training places level (shown in brackets).

Notes:

Scenario 1A assumes a continued decline in average hours worked by GPs, levelling off to no decline by 2013 and an Australia-wide shortage of 800 GPs.

Scenario 2A assumes a continued decline in average hours worked by GPs, levelling off to no decline by 2013 and an Australia-wide shortage of 1,300 GPs.

Recent policy developments

The GP modelling and projection work for this review was based on the latest available data—largely from 2002 and 2003. Since that time, in recognition of workforce shortages, there have been number of Australian government initiatives that will help to meet the shortfalls estimated and projected in this review.

The number of publicly funded medical places across the tertiary sector has increased by more than 25% since 2000. Five new medical schools have been established since that time and three new medical schools are being established over the next few years. These initiatives will expand the number of publicly funded students completing university medical studies from approximately 1,300 in 2005 to approximately 1,900 in 2010 – an increase of over 45%.

From 2004, the government has also expanded the number of vocational training places available for GPs from 450 to 630 – an increase of one third.

The Australian Government's Strengthening Medicare package, announced in November 2003, includes a range of initiatives to increase the opportunities for appropriately qualified

overseas trained doctors to practise in Australia. These include international recruitment strategies, opportunities for doctors to stay longer or obtain permanent residency through changes to immigration arrangements, improved training arrangements and additional support programs. As a result of these initiatives, an additional 725 appropriately qualified overseas trained doctors are expected to be working in Australia by 2007.

Given the lengthy nature of medical training, the full impact of these new measures will not be felt until around the end of the decade and – even then – not all the new doctors will go into general practice and areas of GP shortage. Nevertheless, the supply of doctors will be much higher than in the early part of the decade. Whether the GP shortage is effectively addressed will depend critically on the distribution of the new doctors and their attitude towards working hours.

Recommendations

That AHMAC note:

1. The key findings of this report are:
 - an increase in demand for GP services:
 - an overall shortage of the GP workforce, coupled with its continued uneven distribution
 - a decrease in hours worked by the GP workforce
 - an ageing GP workforce
 - the estimated shortage of GPs in 2002 was in the range of 800 to 1,300

2. This shortage of between 800 to 1,300 translate into an annual requirement of between approximately 1,100 and 1,200 workforce entrants between 2007 and 2013. The current estimated entrants are in the range of 700 per year based on those entering the workforce in recent years as Australian GP trainees and as overseas-trained doctors.

3. The GP shortages may be alleviated by:
 - additional Australian GP trainees
 - overseas- trained doctors
 - maximising the workforce participation of existing GPs
 - new models of care

Terms of reference of the Australian Medical Workforce Advisory Committee

The Australian Health Ministers' Advisory Council (AHMAC) established the Australian Medical Workforce Advisory Committee (AMWAC) to advise on national medical workforce matters, including workforce supply, distribution, and future requirements.

AMWAC reports to the AHMAC, and through AHMAC to the Australian Health Ministers' Conference. AMWAC is one of three AHMAC workforce committees, the other two being the:

- Australian Health Workforce Officials' Committee
- Australian Health Workforce Advisory Committee.

The Australian Health Workforce Officials' Committee (AHWOC) provides a forum for reaching agreement on key national level health workforce issues requiring government collaborative action and provides advice on health workforce issues to the Australian Health Ministers' Advisory Council (AHMAC). AHWOC also has a central role to play in co-ordinating the implementation of the recommendations arising from the workforce planning analysis undertaken by AHWAC and AMWAC. AHWOC comprises a nominee from the Australian/State/Territory health departments and the Australian Department of Education, Science and Training. The Australian Health Workforce Advisory Committee fulfils a similar role to AMWAC but with a focus on the nursing, midwifery and allied health workforces.

AMWAC oversees a medical workforce research program which is approved by AHMAC. This specific medical program is complementary to, and linked with, the broader health workforce research agenda overseen for AHMAC by AHWOC.

The terms of reference AMWAC operates under are:

1. To provide advice to the Australian Health Ministers' Advisory Council on a range of medical workforce matters, including:
 - the structure, balance and geographic distribution of the medical workforce in Australia
 - medical workforce supply and demand
 - the number and distribution of education and training places needed to meet future demand as suggested by patterns of supply, population health status, practice developments and changing models of health care.
2. To develop models for describing and predicting future medical workforce requirements, and provide advice on its methodology, including indicators and benchmarks, for use by employing and workforce controlling bodies including governments, specialist medical colleges and tertiary institutions at:
 - national level
 - state and territory levels
 - intra-state and territory.

3. To oversee the establishment and development of data collections concerned with the medical workforce, and analyse and report on those data to assist workforce planning.
4. To work in co-ordination and co-operation with the Australian Health Workforce Officials' Committee (AHWOC) in the assessment of the relationship between medical workforce requirements and new or alternative workforce structures, profiles and broader health human resources planning requirements.
5. To provide AHMAC with advice as requested on:
 - best practice models of care
 - future service delivery and workforce developments
 - dynamic scenario planning for the medical workforce.
6. To take into account in its planning, and provide advice in its reports, on information on evidence based practice and outcomes.
7. To advise AHMAC on strengths and weaknesses of possible approaches to achieving desirable workforce supply in accordance with quality health care practices.

Membership of the Australian Medical Workforce Advisory Committee

Chair

Dr Jeannette Young Executive Director, Medical Services, Princess Alexandra Hospital, Brisbane

Chair of the Australian Health Workforce Officials' Committee

Mr John Ramsay Secretary, Tasmanian Department of Health and Human Services

Nominees of the Australian Health Ministers' Advisory Council

Ms Margaret Lyons First Assistant Secretary, Health Services Improvement Division, Australian Government Department of Health and Ageing

Nominee of the Australian Indigenous Doctors' Association

Mr Alan Eldridge Chief Executive Officer

Nominee of the Australian Institute of Health and Welfare

Dr Richard Madden Director, Australian Institute of Health and Welfare

Nominee of the Australian Medical Association

Dr Robyn Mason Secretary General, Australian Medical Association

Nominee of the Australian Medical Council

Dr Joanna Flynn President, Medical Board of Victoria
(from January 2005)

Dr Lloyd Toft President, Medical Board of Queensland
(until December 2004)

Nominee of the Australian Vice Chancellors' Committee

Professor Paul Gatenby Dean, Faculty of Medicine, Australian National University

Nominee of the Committee of Presidents of Medical Colleges

Dr Robin Mortimer Director, Endocrinology, Royal Brisbane and Women's Hospital

Nominee of the Royal Australian College of General Practitioners

Dr Mary Mahoney Queensland

Nominee of the Australian Government Department of Education, Science and Training

Mr Rod Manns Manager, Funding and Student Support Branch

Member with consumer expertise

Assoc Prof Merrilyn Walton Adjunct Associate Professor of Ethical Practice,
Department of Medical Education, University of Sydney

Member with expertise in rural health care

Dr Sue Page President, Rural Doctors' Association of Australia

Member with expertise in economics, health economics or labour market economics
(awaiting new appointment)**Observers**

Dr Peter Brennan AMWAC Medical Advisor

Ms Justine Curnow Acting Executive Officer,
National Health Workforce Secretariat

Dr David Geddis Chief Medical Advisor
Ministry of Health, New Zealand

Prof John Horvath Chief Medical Officer – Australia
Australian Government Department of Health and Ageing

Ms Glenice Taylor Head, Labour Force and Rural Health Unit,
Australian Institute of Health and Welfare

Ms Helen Townley Executive Officer,
Australian Health Workforce Officials' Committee

AMWAC members have been appointed until 31 December 2005.

Terms of reference of the AMWAC general practice working party

The AMWAC general practice working party was established in April 2003 as a sub-committee of AMWAC. It was asked to provide a report to AMWAC on the optimal supply and appropriate distribution of general practitioners (GPs) across Australia to 2013.

Funding for the project was provided by the Australian Department of Health and Ageing.

The working party included representatives from a wide range of stakeholder organisations with an interest and/or involvement in general practice, including professional, government and consumer groups.

The first AMWAC general practice workforce review was published in August 2000 and was based mainly on 1998 data. One of the recommendations of the 2000 AMWAC GP review was that a full update of the review should be conducted in 2003-2004. This report is the result of that recommendation. It updates and replaces the 2000 AMWAC GP review.

The general practice working party held its first meeting on 15 April 2003 and its final meeting on 13 May 2005. The final report was accepted by AMWAC at its 28 June 2005 meeting.

The aims of the working party were to provide advice on:

- general practice workforce supply and requirements
- the structure, balance and geographic distribution of the general practice workforce
- the number and distribution of vocational training places needed to meet future requirements as suggested by patterns of supply, population health status, practice developments and changing models of care.

In compiling this report, several guiding principles were adopted. These were that:

- the Australian community should have an adequate number of qualified and experienced GPs, appropriately distributed to provide the services it requires
- the community is best served when GPs have high standards of qualification and work with a high level of ongoing experience
- standards of practice will be highest if GPs perform a reasonable volume of relevant work
- the best assurance of standards is a high-quality requirement for entry to practise

- all Australian citizens must have access to a good standard of primary care, irrespective of geography and economic status – in achieving this, convenience to the patient must be balanced against the quality of services that can be distributed to meet that convenience
- both public and private sectors must provide an adequate amount and quality of service.

This review incorporated the recommendations of the review of AMWAC in 2002. These recommendations were that AMWAC should consider evidence in the following areas:

- consumer expectations eg access, choice, consumer trends
- demographic eg changing population, rural issues
- economic eg corporatisation, changes in health insurance coverage and utilisation, changes in medical indemnity
- medical workforce eg full-time vs part-time work, career changes, implications of decisions on safe working hours, long-term decline in hours worked, sex distribution, use of overseas-trained doctors, changes in training
- epidemiological – descriptive and analytical eg changing disease patterns, Aboriginal and Torres Strait Islander health issues
- health system eg impact of shortages in nursing and allied health, changes in health technology, health delivery and practice, public hospital administration
- international eg migration policy, benchmarking, globalisation.

The 2002 review also recommended that AMWAC should provide:

- information at the national, state/territory, regional and local levels
- advice on possible approaches to achieving a desirable workforce supply with reference to adjusting training numbers, addressing maldistribution, importing additional practitioners and possible workforce substitution
- advice on supply and demand according to more than one forecast scenario.

Membership of the AMWAC general practice working party

Key stakeholder organisations, including professional, government and consumer groups, were invited by AMWAC to provide a nominee to the working party. Professor Richard Larkins was invited, and he agreed to, chair the working party.

Chair

Professor Richard Larkins Vice-Chancellor and President
Monash University

Members

Australian College of Rural and Remote Medicine

Professor Ian Wronski President

Australian Divisions of General Practice

Ms Helen Threlfall General Practice Divisions Victoria
(from April 2004)

Dr Patrick O'Sullivan Member
(until March 2004) Board of Directors

Australian Medical Association

Dr Robert Bain Secretary General
(Dr Bain was the AMA representative until June 2004 and continued as a working party member thereafter as a consultant to AMWAC)

Australian Medical Workforce Advisory Committee

Dr Richard Madden Director, Australian Institute of Health and Welfare

Australian Rural and Remote Workforce Agencies Group

Dr Ross Hetherington Chair

Committee of Deans of Australasian Medical Schools

Professor Richard Hays Dean, School of Medicine, James Cook University

Committee of Presidents of Medical Colleges

Professor Philip Boyce Department of Psychiatry, Westmead Hospital

Consumer nominee

Ms Dell Horey Consumer
(from April 2004)

Ms Liza Newby Health Issues Centre
(until November 2003)

Victoria Department of Human Services

Ms Luisa Abiuso
(from July 2003) Senior Project Officer,
Workforce Policy
Service and Workforce Planning

Ms Jennifer Colbert
(until June 2003) Manager
Workforce Policy, Department of Human Services

Western Australia Department of Health

Dr Brian Lloyd Deputy Director General (Health Care)
and Chief Medical Officer

National Health Workforce Secretariat

Ms Justine Curnow A/g Executive Officer

Ms Susan Widderick Workforce Planning Analyst

Acknowledgements

AMWAC and the AMWAC general practice working party would like to acknowledge the assistance of the following people and organisations in providing data, information and helpful comments. In particular, the work of the previous Executive Officer of the National Health Workforce Secretariat, Paul Gavel, is acknowledged and appreciated.

AMWAC and the AMWAC general practice working party would also like to acknowledge the extensive input and advice provided by the members of the working party who participated in the modelling subgroup – Richard Madden, Robert Bain, Ross Hetherington and Brett Lennon.

The people listed below were with the organisation beside which their name appears at the time they provided assistance but they may have moved from that organisation since then.

Alliance of NSW Divisions – Ian Adair

ACT Division of General Practice – Richard Bialkowski

Australian Divisions of General Practice – Wendy Shephard, Mark Elliott and Patrick O’Sullivan

Australian Institute of Health and Welfare – Serge Chrisopoulos, Glenice Taylor, Odette Vogt and Graham Angus

Consumers – Dell Horey, Maggie L’Estrange, Merrilyn Walton and Gordon Gregory

Department of Veterans’ Affairs – Vicki Whitehorn, Shane Ransome and Lyndell Dobbs

Department of Health and Ageing – Angela Mikalauskas, Shelley Crawford, Belinda Parsons, Wendy Mangelsdorf, Juleen Browning, Jennifer Chynoweth and Kelly Taber

General Practice Divisions Victoria – Helen Threlfall

General Practice Division of Western Australia – Deb Costello

General Practice Education and Training – Bill Coote and Rodger Coote

General Practice Registrars’ Association – Sara Twidle, Ed Poliness and Siew Lee Thoo, Vinh Tran, Bennie Ng, George Manoliadis.

Health Insurance Commission – Gordon Calcino

Kimberley Division of General Practice – Andrew Waters

National Nursing and Nursing Education Taskforce Secretariat – Eithne Irving

NSW Rural Doctors Network – Kirsty McEwin, Peter Williams and Ian Cameron

Northern Territory Remote Health Workforce Agency – Kim Goodluck

Outer Metropolitan Workforce Working Group (Perth) – Andrew McGaw

Peel South West Division of General Practice – Nick Francis

Queensland Divisions of General Practice – Ann-Maree Liddy

Queensland Rural Medical Support Agency – Chris Mitchell and Col White

Royal Australian College of General Practitioners – Ian Watts

Royal Flying Doctors Service – Barbara Ryan

Rural Doctors Workforce Agency (South Australia) – Angela Burden

Rural Workforce Agency Victoria – Sharon Kosmina and Mex Cooper

South Australia Divisions of General Practice Inc. – Merelyn Boyce

Tasmanian General Practice Divisions Ltd – Sarah Male and Peter Barnes

Western Australian Centre for Remote and Rural Medicine – Christine Teakle, Greg Down
and Marg Delane

Abbreviations and Acronyms

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ADHD	Attention deficit hyperactive disorder
AHMAC	Australian Health Ministers' Advisory Council
AHWOC	Australian Health Workforce Officials' Committee
AIHW	Australian Institute of Health and Welfare
AGPT	Australian General Practice Training
AMA	Australian Medical Association
AMC	Australian Medical Council
AMWAC	Australian Medical Workforce Advisory Committee
BEACH	Bettering the Evaluation And Care of Health
CME	Continuing Medical Education
EPC	Enhanced Primary Care
GP	General practice or general practitioner
GPET	General Practice Education and Training
HECS	Higher Education Contributions Scheme
HIC	Health Insurance Commission
IMG	International Medical Graduate
MBS	Medicare Benefits Schedule
NHWS	National Health Workforce Secretariat
NSW	New South Wales
OH&S	Occupational Health and Safety
OTD	Overseas Trained Doctor
PIP	Practice Incentives Program
PwC	PricewaterhouseCoopers
RACGP	Royal Australian College of General Practitioners
RRMA	Rural, Remote and Metropolitan Areas classification
RTP	Regional Training Provider
SLA	Statistical Local Area
SWOT	Strengths Weaknesses Opportunities Threats
WACRRM	Western Australian Centre for Remote and Rural Medicine

Appendix: List of Consultations

During 2003 and 2004, the National Health Workforce Secretariat (NHWS) carried out a total of 38 consultation meetings around Australia with general practitioners, general practice registrars, consumers and other interested parties, including divisions of general practice staff. The purpose of these meetings was to discuss the future of general practice in Australia and to obtain a range of perspectives on the changes that have occurred and are occurring in patients and GPs, as well as any local concerns that group members had. The consultations took place in every state and territory of Australia and covered a wide range of areas from urban to rural to remote.

The NHWS coordinated the process and worked closely with the rural workforce agencies, the divisions of general practice and other bodies, such as state and territory health departments, to identify a representative range of locations, ensure an efficient process, and maximise participation and representation at the consultation sessions. Six of the 38 sessions were conducted by teleconference and the rest were done face-to-face by NHWS staff and a private consultant. The full list of consultations is as follows:

New South Wales

- Orange
- Rural medical support forum (not geographic-specific)
- Coffs Harbour
- Tamworth
- Dubbo
- Wagga Wagga
- Broken Hill
- Penrith
- Erina (Central Coast)
- Southern Highlands – meeting with NSW urban divisions

Victoria

- Bendigo
- Mildura
- Milawa
- Wodonga
- Horsham – teleconference
- Morwell – teleconference
- Frankston
- Central Highlands
- Knox - teleconference
- Footscray

Queensland

- Brisbane 1
- Brisbane 2
- Emerald

South Australia

- Adelaide

Western Australia

- Perth
- Outer metropolitan workforce working group
- WACRRM session involving all rural divisions
- Kimberly – teleconference
- Peel South-West – teleconference

Tasmania

- Hobart – pilot session

Northern Territory

- Darwin
- Alice Springs
- Katherine/Gove/Tennant Creek – teleconference

Australian Capital Territory

- Canberra

Special interest sessions

- Consumers – Adelaide
- Consumers – Melbourne
- GP registrars