

Australian Medical Workforce Advisory Committee

THE GERIATRIC MEDICINE WORKFORCE IN AUSTRALIA

SUPPLY AND REQUIREMENTS

1996 - 2007

AMWAC Report 1997.5

October 1997

AMWAC 1997.5

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ISBN 0 7313 4006 X

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Suggested citation:

Australian Medical Workforce Advisory Committee (1997), *The Geriatric Medicine Workforce In Australia*, AMWAC Report 1997.5, Sydney

Publication and design by Australian Medical Workforce Advisory Committee.

Cover design and printing by Copybook, Sydney.

CONTENTS

Abbreviations	v
List of Tables and List of Figures	vi
Terms of Reference of AMWAC and the AMWAC Geriatric Medicine Workforce Working Party	ix
Membership of AMWAC	x
Membership of the AMWAC Geriatric Medicine Workforce Working Party	xi
Introduction, Guiding Principles and Methodology	1
Summary of Findings and Recommendations	5
Description of the Current Geriatric Medicine Workforce	13
The Number of Practising Geriatric Medicine Specialists in Australia	13
Distribution of the Geriatric Medicine Workforce	14
Age Profile	16
Gender Profile	18
Employment Status and Hours Worked	18
Public Hospital Involvement	23
Practice Profiles	24
Services Provided and Performed	26
Training Arrangements	33
Adequacy of the Current Geriatric Medicine Workforce	35
Geriatric Medicine Specialist:Population Ratio	35
Public Hospital Vacancies	36
Waiting Times for Geriatric Consultations	36
Limitations on Public Hospital Geriatric Work	37
Conclusions on Adequacy of the Current Geriatric Medicine Workforce	39

Projections of Requirements	41
Population	41
Changes in Utilisation	43
Changes in Technology and Options for Service Provision	46
Projections of Supply	48
Additions to the Geriatric Medicine Workforce	48
Losses from the Geriatric Medicine Workforce	48
Female Participation in the Workforce	48
Balancing Supply Against Requirements	49
Requirement Trends	49
Supply Trends	49
Projected Balance	50
Conclusions	55
Recommendations	57
References	59

ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACAT	Aged Care Assessment Teams
ACT	Australian Capital Territory
AHMAC	Australian Health Ministers' Advisory Council
AIHW	Australian Institute of Health and Welfare
AMWAC	Australian Medical Workforce Advisory Committee
ASGM	Australian Society for Geriatric Medicine
Aust	Australia
DHFS	Department of Health and Family Services (Commonwealth)
DVA	Department of Veterans Affairs (Commonwealth)
FRACP	Fellow of the Royal Australasian College of Physicians
FTE	Full time equivalent
GM	Geriatric medicine
GP	General Practitioner
HIC	Health Insurance Commission
MBS	Medicare Benefits Schedule
NSQAC	National Specialist Qualification Advisory Committee
NSW	New South Wales
NT	Northern Territory
Pop	Population
Qld	Queensland
RACP	Royal Australasian College of Physicians
RRMA	Rural, Remote and Metropolitan Areas
SA	South Australia
SPR	Specialist:Population Ratio
Tas	Tasmania
Terr	Territory
Vic	Victoria
WA	Western Australia

LIST OF TABLES

1. ASGM members, recognised as a consultant or specialist spending 50% or more of their time in geriatric medicine; by State/Territory and sex, 1996
2. Geriatricians; by State/Territory and sex, (AIHW data), 1995
3. Geriatric medicine specialist:population ratio (ASGM data); by State/Territory, 1996
4. Distribution of geriatric medicine specialists (ASGM data); by State/Territory and geographic location, 1996
5. Age profile of geriatric medicine specialists (ASGM data); by State/Territory and gender, 1996
6. Geriatric medicine specialists (ASGM data); by State/Territory and major age group, 1996
7. Age profile of geriatric medicine specialists (AIHW data); by State/Territory and gender, 1995
8. Employment status of geriatric medicine specialists (ASGM data); by sex, 1996
9. Hours worked per week (ASGM data); by employment status and sex, 1996
10. Hours worked per week by full time geriatric medicine specialists (ASGM data), by sex and State/Territory, 1996
11. Geriatric medicine specialist part time hours per week worked (ASGM data); by State/Territory and sex, 1996
12. Geriatric medicine specialists, average working hours per week (AIHW data); by sex and age, 1995
13. Geriatric medicine specialists, average working hours per week (AIHW); by State/Territory, 1995
14. Geriatric medicine specialists, average working hours and average age (AIHW data); by region of main job, 1995
15. Principal employer of geriatric medicine specialist (ASGM data); by sex, 1996
16. Principal practice type of ASGM members by public hospital/regional geriatric service attachment, that spend greater than 50% of their time in geriatric medicine, 1996
17. Primary work area of geriatric medicine specialists; by sex, 1996

18. Average number of Medicare services processed per Australian resident; by age and sex of patient, 1992-93 to 1994-95
19. Percentage separations and percentage bed days; public and private acute hospitals; by age and sex, Australia, 1994-95
20. Annual number of ACAT assessments as a proportion of the total population of people aged 70 years or more, 1991 to 1994
21. ACAT assessment numbers and rates; by State/Territory, July 1994 to June 1995
22. ACAT clients (%); by State/Territory and by age group, 1994 /95
23. ACAT clients; by mean and median age, gender and State/Territory, 1994-1995
24. Advanced geriatric medicine trainees; by State and gender, 1997
25. Geriatric medicine accredited training programs for advanced trainees; by hospital and by State/Territory, 1997
26. Geriatric medicine hours of service provided to population ratio; by State/Territory, 1996
27. Population estimates and projections at 30 June, 1996 to 2006
28. Persons aged 65 years or more; projections of hospital separations, 1995-96 to 2005-06
29. Persons aged 65 years or more; projections of ACAT assessments, 1995-96 to 2005-06
30. Projected requirements for geriatric medicine services; assuming current 50 hours worked per week, 1997, 2000, 2005 and 2007
31. Projected supply of geriatric medicine services based on low retirement rates and a working week of 50 hours for the years 1997, 2000, 2005 and 2007 compared to the projected requirements
32. Geriatric medicine graduate output needed to move projected supply into balance with projected requirements (3% growth per year); by 50 hours worked per week, 1996 to 2007 compared to no change in trainee intake.
33. Recommended State/Territory distribution of first year advanced geriatric medicine trainee placements, 1998 to 2004

LIST OF FIGURES

- 1 Average hours per week by geriatric medicine specialists; by age group, 1996
- 2 Medicare services per capita by age group and sex, 1994-95.
- 3 Proportion of the population aged 75 years and over, 1995 (preliminary) and 2001 to 2026 (projected).
- 4 Persons 65 years of age and over, projected increase in population, hospital separations, hospital bed days, severe and profound handicap and ACAT assessments, 1992-93 to 2015-2016.
- 5 Geriatric medicine specialists supply (average attrition rates) versus demand projections, using a 50 hour week, incorporating the current intake (16 per year intake and graduation) with no further increase in the number of trainees into the specialty of geriatric medicine.
- 6 Geriatric medicine specialists supply (average attrition rates) versus demand projections, using a 50 hour week, incorporating a constant increase in the number of trainees into the specialty of geriatric medicine beginning in 1999 and graduating in 2002 and thereafter.

TERMS OF REFERENCE OF AMWAC AND THE AMWAC GERIATRIC MEDICINE WORKFORCE WORKING PARTY

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 held its first meeting in April 1995.

AMWAC Terms of Reference

1. To provide advice to AHMAC on a range of medical workforce matters, including:
 - the structure, balance and geographic distribution of the medical workforce in Australia;
 - the present and required education and training needs as suggested by population health status and practice developments;
 - medical workforce supply and demand;
 - medical workforce financing; and
 - models for describing and predicting future medical workforce requirements.
2. To develop tools for describing and managing medical workforce supply and demand which can be used by employing and workforce controlling bodies including Governments, Learned Colleges and Tertiary Institutions.
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.

AMWAC Geriatric Medicine Workforce Working Party Terms of Reference

The AMWAC Geriatric Medicine Workforce Working Party was established as a sub-committee of AMWAC and was asked to provide a report to AMWAC on the optimal supply and appropriate distribution of geriatric medicine specialists across Australia, including projections for future requirements.

The Working Party held its first meeting on 7 June 1996 and presented its report to the AMWAC meeting of 8 October 1997. The report was accepted by AHMAC at its October 1997 meeting.

MEMBERSHIP OF AMWAC

Independent Chairman

Professor John Horvath Physician, Sydney

Members

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Dr Robert Stable Director General, Queensland Department of Health

Dr David Theile Surgeon, Brisbane (former President, Royal Australasian
College of Surgeons)

MEMBERSHIP OF THE AMWAC GERIATRIC MEDICINE WORKFORCE WORKING PARTY

Chairman

Dr Peter Brennan AHMAC Medical Advisor

Members

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President, Australian Society of Geriatric Medicine

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The Working Party would also like to acknowledge the helpful comments provided by Professor John Horvath and Mr Paul Gavel (AMWAC); and Mr John Harding, Mr Graham Angus and Mr Warwick Conn (AIHW), and the Australian Society of Geriatric Medicine (ASGM) for assistance with data collection.

INTRODUCTION, GUIDING PRINCIPLES AND METHODOLOGY

Introduction

In preparing this report, the Working Party's aim has been to promote appropriate aged care services across Australia.

The main objective of the Working Party has been to promote an optimal supply and appropriate distribution of geriatric medicine specialists, including projections for future requirements to the year 2007.

Geriatric Medicine

Geriatric medicine is a recognised sub-specialty within internal medicine. Consultant geriatricians are Fellows of the Royal Australasian College of Physicians (RACP) or have equivalent qualifications.

The Working Party has identified a geriatric medicine specialist as a member of ASGM who is either a Fellow of the Royal Australasian College of Physicians (FRACP) or registered under the National Specialist Qualification Advisory Committee of Australia (NSQAC) as a consultant or specialist and who spends 50% or more of their time in geriatric medicine.

This definition of a geriatric medicine specialist does not include other specialist physicians who see elderly patients as a part of their practice; nor does it include the training registrars or hospital medical officers in hospitals who work in geriatric medicine departments.

Geriatricians see patients on referral from other practitioners. These patients typically have multiple diseases including the age related illnesses of neuro-degenerative disease, cardio-respiratory disease and stroke. The geriatrician provides acute care in the hospital and community, and a consultative service to the community. Aged Care Assessment Teams (ACAT) commonly have a geriatrician as a member.

Geriatricians work within a multi-disciplinary team providing effective geriatric care which is dependent on the availability of support services in the hospital system, home, community and welfare based services. The type of aged care that may be provided by health and welfare authorities include: acute and ongoing geriatric evaluation and management, palliative care, rehabilitation, nursing home care, planned respite, and psychogeriatric care.

The range of services provided will depend on the proportion of elderly people in the communities that the services serve, the availability of acute and non acute sector beds and the size of the geographical catchment area. To be effective these services require adequate staffing.

In recognition that psychogeriatric services and geriatric services have patients in common, the ASGM and the Royal Australian and New Zealand College of Psychiatrists have prepared a joint position statement. This statement states that wherever possible, it is desirable that conjoint geriatric and psychogeriatric services be operated. The position paper also provides guidelines on how to accomplish a collaborative provision of services based on the patients' assessed needs.

Guiding Principles

In compiling this report, the Working Party adopted the following guiding principles:

- the Australian community should have available an adequate number of trained geriatric medicine specialists, appropriately distributed to provide the geriatric services it requires;
- the community is best served when geriatric medicine specialists have high standards of qualification and work with a high level of ongoing experience;
- the best assurance of standards is a high quality requirement for entry to practice;
- all Australian residents must have access to a good standard of geriatric services 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;
- the desire to maximise opportunities for the elderly to live in the community; and
- both public and private sectors must provide an adequate amount and quality of service.

Methodology

The approach of the Working Party has been to analyse existing data sources and to undertake consultation with relevant persons and organisations in order to make informed comments on the factors affecting the current and future market for geriatric services. In estimating workforce numbers, establishing a profile of the workforce and assessing its adequacy, the main sources of data were:

1. Australian Society for Geriatric Medicine

The ASGM keeps a variety of data, principally on the number, age, gender and location of Fellows, and trainees and training arrangements. A survey of members was conducted in early 1996 with a response rate of 92.6% (355 out of 383 members).

2. Australian Institute of Health and Welfare (AIHW)

The principal AIHW data source is the annual Medical Labour Force Survey and the Australian Hospital Statistics 1995-96. The Medical Labour Force Survey presents

national labour force statistics for registered medical practitioners, principally through a survey collected as part of the annual renewal of registration. The survey data used in this report is for 1995. This survey had an overall response rate of 79.6%.

3. Aged Care Assessment Teams (ACATs)

ACAT collect data on a State and Territory basis on elderly people who receive a comprehensive geriatric assessment, which includes consideration of medical, functional, psychological, and social factors. Elderly people are required to be assessed by an ACAT to be eligible for care in a nursing home or hostel and to access community and aged care services.

4. Department of Health and Family Services (DHFS) Medicare provider database and report on hospital activity

Medicare provider statistics define medical practitioners according to the predominant services billed to Medicare. The Medicare statistics include all practitioners who have billed Medicare for at least one service during a financial year.

The major deficiency with the use of Medicare data for workforce planning purposes is that it does not provide any information on practitioners who are full time salaried geriatric medicine specialists in the hospital system and who do not render services on a fee for service basis. So Medicare data excludes services rendered to public hospital patients and to Veterans' Affairs patients and compensation cases. For these reasons the Working Party considered Medicare data to be of little use when reviewing this specialty.

5. Hospital Casemix data

Since August 1994, a national overview of acute care hospital activity as measured by Australian National Diagnosis Related Groups (AN-DRGs) has been published. To date, reports covering the years 1991-92, 1992-93, 1993-94 and 1994-95 have been issued. The first three reports only included information on activity in public hospitals. The 1994-95 report provides details on activity in both public and private hospitals.

AN-DRGs are a classification system of acute episodes in hospitals. Each DRG represents episodes of care for inpatients with similar clinical characteristics (for example diagnosis, procedure, age).

5. Australian Bureau of Statistics

The Australian Bureau of Statistics (ABS) population data and projections are used as the sole source of population data. In making its population projections ABS uses four

different series. The population projections in this report are based on Series A/B, where constant fertility and low overseas migration are assumed (ABS 1994, ABS 1997).

6. Other sources of data

Wherever possible, distributional data has been interpreted using the rural, remote and metropolitan area (RRMA) classification developed by the Commonwealth Department of Primary Industries and Energy and the Commonwealth Department of Health and Family Services (DHS & DPIE 1994).

Key Assumption

The Working Party would like to emphasise that the projections on supply and requirements are based on the existing national health structure. The report has not canvassed the potential medical workforce impact of any changes to aged care policy.

Overseas experience also has indicates that significant structural changes to the Australian health system, for example the introduction of formalised co-ordinated care arrangements (managed care) and greater substitution of care by other health professionals, could substantially change medical workforce requirements in Australia (AMWAC & AIHW 1996a).

SUMMARY OF FINDINGS AND RECOMMENDATIONS

This report describes the current geriatric medicine workforce, assesses the adequacy of that workforce, and projects workforce supply and requirements to 2007.

The report concluded that there is a shortage of geriatric medicine specialists and a maldistribution of the workforce (both between States/Territories and between urban and rural areas). The report also concludes that the current projected level of graduate output will not be sufficient to meet expected future requirements.

It is estimated that requirements will grow by 2.6% per annum. Future supply will be affected by the cohort of geriatricians aged 60 years and over (16% of the workforce). There also seems to be some difficulty in attracting potential trainees to a career in geriatric medicine.

As a result significant increases in trainee input are recommended to move future supply into balance with expected requirements. Current trainee numbers indicate that shortages are expected to remain until at least 2001, but if the Working Party's recommendations are adopted, for requirements and supply to move back towards balance thereafter. The Working Party recommends an increase in advanced trainee intake from the current 16 per year to 25 each year for 1999 and 2000, 22 trainees per year in 2001 and 2002. As a priority the ASGM will need to increase the awareness of the specialty, and the career opportunities in geriatric medicine, to help achieve these trainee intake levels.

The Working Party also recommends that geriatric medicine supply and requirements be monitored regularly so that they can be amended if new trends emerge and that a review of the specialist geriatric medicine workforce be undertaken before the level of trainee intake for 2003 is decided.

Description of the Current Geriatric Medicine Workforce

Number of Practising Geriatric Medicine Specialists

- The current size of the practising geriatric medicine specialists workforce is estimated to be 180 (ASGM Survey) which is similar to the AIHW Medical Labour Force Survey 1995, figure of 188.

Geographic Location

- The ASGM Survey indicated that overall, 67.2% of geriatric medicine specialists had their primary practice in a capital city (63.5% of the total population), 5.0% in other major urban areas (8.2% of the total population) and the remaining 12.7% in rural major and other areas (28.3% of the total population), 15.1% of respondents made no response.

- The majority of the workforce is located in New South Wales (37.8%) and Victoria (28.9%) with Northern Territory having only 1% of the workforce.

Age Profile

- From the ASGM Survey the age range was 31 to 76 years, with a mean age of 47.7 years.
- The age profile of this specialty is relatively young with the majority (64%) of geriatric medicine specialists aged under 50 years of age, 20% aged between 50 to 59 years of age and 16% who are aged over 60 years of age.

Gender Profile

- The ASGM gender profile of geriatric medicine specialists shows that women make up 24.4% of the workforce. This is one of the highest levels of female representation in a specialty. The female profile of this specialty is younger than the males with 34 (77.2%) females aged less than 49 years of age and the largest proportion of female specialists is in the 35-39 years age group. The male profile of the specialty is much older with 65 specialists (40%) aged over 50 years
- 1995 AIHW data indicated that females made up 22.6% (41) of geriatric medicine specialists.

Training Positions

- Currently in 1997, there are 27 trainees of which 13 (48.2%) are female. The States with the majority of trainees are New South Wales (48%) followed by Victoria (26%).

Principal Employer

- The ASGM Survey found that the principal employer of geriatric medicine specialists is public hospitals (73.3%), followed by those who were self employed in private practice (9.4%); 10% of specialists indicated they held an academic or university position.

Hours Worked

- Of the 180 geriatric medicine specialists identified in the ASGM Survey, the average full time hours per week worked was 50.9 hours and for part time geriatricians 30.3 hours per week. Hours per week worked by each age group averaged around 47 to 51 hours up to the age of 60 years when hours worked decreased.
- On average, full time male specialists in geriatrics worked a total of 51.8 hours per week, while their female counterparts worked 47.0 hours per week.
- AIHW data gave the average hours per week for male geriatricians as 51.0 hours

and for females as 38.4 hours. Geriatric specialists worked an average of 44.0 hours per week in the direct care of patients. This varied from 46.1 hours in other major urban areas to 41.0 hours in major rural areas. Geriatricians spent less time on call (not worked) in rural areas than in urban areas.

Services Provided and Performed

- There is no definitive source of data on services provided by geriatric medicine specialists. As a result the Working Party has collected a range of information that can be used as an indicator of services provided and performed.
- All available information on geriatric services using morbidity, Medicare data and Australian hospital casemix data have shortcomings and this has made it extremely difficult to gain an accurate assessment of the extent of geriatric services being provided.
- The development of models of geriatric service delivery and performance should be pursued jointly by State/Territory health departments and ASGM to overcome this problem. Until this is done, the information available on geriatric services will remain general rather than specific.
- In the mean time, the Working Party, whilst recognising that the number of people over 65 years of age and over 75 years of age and their utilisation of services at a gross level is a poor indicator of the need for geriatric specialists (as the services provided to older people are varied, and provided by a variety of medical practitioners), the available data on service provision and utilisation by these age groups was used to build up a basic picture of likely geriatric service provision.
- People aged 75 years and over are the highest users of MBS services of any age group. In 1994-95, males in this age group used on average 20.4 services per person (the average for all age groups is 8.4 services per person) while females used on average 23.4 services per person (the average for all age groups is 12.5 services per person).
- Similarly, hospital separations and bed days are highest for those aged over 65 years. In 1994-95, people aged 65 years and over comprised 11.9% of Australia's estimated resident population but accounted for 27.6% of separations, and 42.7% of bed days in public acute hospitals; and 28.9% of separations, and 44.3% of bed days, in private acute hospitals.
- The Working Party considers ACAT data to be a good indicator of geriatric service requirements. Approval of applications for nursing home or hostel entry are carried out by ACAT. Such teams are currently linked with 70% of general hospitals.

- Between 1991 and 1994, there was a 41.4% increase in ACAT assessments, and an 11% increase in the population of people 70 years of age or more over this period.
- A 1994 survey of ACATs found that of the 116 ACATs that responded to the survey, 59% had specialists as team members. Of those that had specialists, over half had at least one equivalent full time specialist.
- It would be ideal if all ACAT assessments could involve a geriatrician. The fact that this is not possible is probably indicative of a shortage of geriatric medicine specialists on the whole.

Adequacy of the Current Geriatric Medicine Workforce

All indicators suggest there is a shortage of geriatric medicine specialists; although data difficulties make quantification of the shortage difficult.

There is no recommended SPR benchmark. Comparison between States/Territories indicates some maldistribution of the workforce and this is confirmed both when SPR and specialist hours worked to population is considered. It would seem that New South Wales, Victoria and the Northern Territory are comparatively better endowed than the national average; and that Queensland, Western Australia and South Australia are comparatively less well endowed with specialists in geriatric medicine. In addition, rural areas have a lack of specialists and there appear to be difficulties with Indigenous Australians accessing geriatric medicine services.

In addition, consultation waiting times are comparatively long and the public hospital vacancy rate is considered significant.

Due to the difficulty in attracting potential trainees in geriatric medicine, there may be a shortage of specialists in the workforce into the future. The current vacancies in the established geriatrician positions were considered to add substantially to the workloads of the remaining geriatricians which resulted in ongoing risk of >burn out= and further vacancies being created.

Even though the age profile of the profession is relatively young, it is estimated that approximately 35% of current geriatric medicine specialists will be leaving the workforce due to retirement in the period 2000 to 2015. In the next five years at least 50% of the of the geriatric medicine specialists aged 60 years and over will retire from the workforce, approximately three people per year; and in the next ten years at least 65-70% of the geriatric medicine specialists aged 50 years and over are expected to retire from the workforce, approximately five people per year.

Specialist to Population Ratio

- The distribution of geriatric medicine specialists is not entirely consistent with population distribution. Based on the population 65 years and over the SPR for Australia is estimated at 1:12,253 and ranges from 1:2,992 in the Northern Territory to 1:18,195 in Queensland.
- For population aged 75 years and over the SPR for Australia is estimated at 1:5,064 ranging from 1:908 in the Northern Territory to 1:7,506 in Queensland.
- Both approaches indicate that in most States/Territories there is an undersupply of geriatric medicine specialists. Using either population figure, Queensland, South Australia and Western Australia all have SPRs below the national average.
- There is no recommended Australian SPR benchmark for geriatric medicine.

Public Hospital Vacancies

- The AMWAC survey of public hospital specialist vacancies conducted in October 1996 found there were eight geriatric medicine vacancies. Three of the vacancies were in New South Wales and two in Western Australia. Three of the vacancies were in rural areas throughout Australia. There were no temporary resident doctors filling a vacancy. For a small workforce, the Working Party considered the number of vacancies to be significant.

Consultation Waiting Times

- A 1993 survey of consultation waiting times found that the mean waiting time to admission for patients, other than those admitted directly from an emergency department, ranged from zero to 50 days and the average was 5.8 days. More than half of the respondent hospitals estimated the wait to be less than six days. Twelve (17%) estimated the mean wait to be zero, 34 (48%) to be between one to five days, 12 (17%) between six and ten days and 13 (18%) greater than ten days.

Projections of Requirements

- It is estimated that the demand for geriatric services will increase by approximately 30% over the next ten years, mainly due to the ageing of the population.

Population

- ABS estimates that the median age of the total population will rise from 33.1 years in 1993 to between 39.4 and 41.8 years in 2041.
- Between 1996 and 2006, it is estimated that the population aged 65 and over will increase by 18.9%; the male population in this age group will increase by 22.1% and the female population will increase by 16.6%.
- The population aged 75 years and over will increase by 36.7% by the year 2006;

the male population in this age group will increase by 44.7% and the female population will increase by 31.9%. The ABS projects that the population aged 75 and over will have increased by 52.3% by the year 2016, compared to an increase of only 19.5% for the population as a whole.

- The population aged 85 years and over will increase by 56.8% by the year 2006. The ABS projects that the population aged 85 and over will have increased by approximately 100.1% by the year 2016.

Changes in Utilisation

- The hospital separations for the population aged 65 years and over are projected to increase by 21.9% from 1995-96 to 2005-06. The separations are estimated to increase by 24.6% for males and increase by 19.1% for females.
- Similarly, hospital bed days for those aged 65 and over are expected to increase by 27.2% from 1995-96 to 2005-06.
- ACAT assessments are expected to increase by 34.9% from 1995-96 to 2005-06.
- The number of people aged 65 years and over with severe and profound handicap is estimated to increase by 30.3% from 1995-96 to 2005-06.

Projections of Supply

- The FTE supply projections of the current workforce fall well below the requirement levels indicated.
- Using current known age cohorts on graduates, retirement trends, losses, re-entry and migration data, the supply trends for this specialty indicate that over the next ten years, it will be dominated by the cohort of geriatric medicine specialists aged 60 years and over (16% of the workforce) progressing through to retirement.
- The current figures indicate there will be a significant undersupply of geriatric medicine specialists. Prompt action must be taken to attract graduates to the profession in 1998 and beyond so that during the period 2001-2007 expected service requirements can be sufficiently met.

Balancing Supply Against Requirements

- Current trainee numbers indicate that shortages are expected to remain until 2001, but if the Working Party's recommendations to increase trainee numbers are adopted, requirements and supply should move back towards balance thereafter. The Working Party recommends first year trainee placements be increased to 25 trainees per year in 1999 and 2000, 22 trainees per year in 2001 and 2002. The assumption made by the projections model is that all trainees will graduate at the

end of the three year advanced training program, with the 2002 intake trainees graduating in 2005.

- The staged increase will mean that by the year 2005 , the projected shortfall in hours worked will be 7.9% for a 50 hour week compared to a 14.0% shortfall if the current number of graduating trainees (16) remained constant each year from 1998 to 2002.
- Training placements should be increased proportionately less in the comparatively well endowed States of New South Wales and Victoria and kept roughly in line with projected 2006 State/Territory population. In particular, emphasis needs to be given to increasing training placements in Queensland, Western Australia and South Australia as a priority. The geriatric needs for rural and remote areas and the Indigenous population also need to be considered when deciding on new training placements.

RECOMMENDATIONS

The Working Party recommends:

1. That there be an increase in the number of funded geriatric medicine specialist trainees to match an expected future growth in geriatric specialist requirements of 2.6% per year.
2. That State and Territory health departments undertake negotiations with the ASGM to achieve the following intake numbers of first year advanced trainee placements: beginning with 25 in the year 1999, 25 in 2000, 22 each year in the period 2001 and 2002. This assumes that all first year intake trainees will graduate at the end of the three year advanced training program.

Training placements should be increased proportionately less in the comparatively well endowed States of New South Wales and Victoria and kept roughly in line with projected State/Territory population. In particular, emphasis needs to be given to increasing placements in Queensland, Western Australia and South Australia as a priority. The Working Party recommends that the training placements up to the year 2002 should be distributed as shown below.

Recommended State/Territory distribution of first year advanced geriatric medicine trainee placements, 1998 to 2002

State/Territory	1998	1999	2000	2001	2002
NSW/ACT	4	5	5	4	4
Victoria	3	4	4	3	3
Queensland	2	4	4	4	4
South Aust.	3	4	4	4	4
West. Aust.	2	4	4	4	4
Tasmania	2	1	3	3	2
North. Terr.	1	1	1	1	1
Australia	16	25	25	22	22

Source: AMWAC

The geriatric specialist needs for rural and remote areas and the Indigenous population should also be taken into consideration with trainee position placements.

3. State/Territory based geriatric medicine services working groups, comprising ASGM and State/Territory department of health representatives, be organised to oversee the funding and establishment of the new training placements; a co-ordinated planning approach to the expansion in the workforce that includes the development of the necessary support services (eg. allied health and nursing); and the introduction of any short term measures they may feel are necessary to meet localised service shortfalls (recognising that the increased number of graduates will not make an effective contribution to the geriatric medicine workforce until 2002).
4. The ASGM and State/Territory department of health representatives seek support from State/Territory postgraduate medical councils to ensure early training in, and exposure to, geriatric medicine for all medical students.
5. That the ASGM clearly identifies strategies to attract trainees to the specialty emphasising the demand for geriatric medicine specialists.
6. That geriatric medicine requirements and supply projections be monitored regularly so that they can be amended if new trends emerge, and that a review of the specialist geriatric medicine workforce be undertaken before the level of trainee intake for 2003 is decided.
7. That this monitoring be coordinated by the ASGM and AMWAC and the results incorporated into the AMWAC annual report to AHMAC.

DESCRIPTION OF THE CURRENT GERIATRIC MEDICINE WORKFORCE

As discussed in the introduction, there are a variety of data sources on the numbers, attributes and distribution of geriatric medicine specialists in Australia. While each of these data collections has some deficiencies, it is possible to piece together a reasonably accurate and up-to-date profile of the workforce.

In establishing the profile of the current geriatric medicine workforce the Working Party defined:

- the number of practising geriatric medicine specialists;
- the distribution of geriatric medicine specialists;
- the age and gender profiles of the workforce;
- the hours worked; and
- the services provided and performed by geriatric medicine specialists.

The information sources used in this section are:

- AIHW Medical Labour Force Survey, 1995;
- ASGM and RACP data on its Fellows and training arrangements;
- ACAT data; and
- hospital activity as measured by AN-DRGs

The Number of Practising Geriatric Medicine Specialists in Australia

There is no definitive source of data on the number of practising geriatric medicine specialists in Australia. The Working Party estimates that in 1996 the number of geriatric medicine specialists was 180.

This estimate was arrived at by reconciling several pieces of data from the 1996 survey the ASGM conducted of its members and includes members who identified themselves as being either a FRACP and/or registered under NSQAC as a consultant or specialist who spend 50% or more of their time in geriatric medicine.

By way of comparison, the 1995 AIHW Medical Labour Force Survey, reported that there were 188 specialists in geriatric medicine working in Australia. The AIHW defined a specialist in geriatric medicine as a clinician in active practice who reported being a specialist with a qualification in geriatric medicine.

In 1996, the ASGM had 383 members. Of the 383 members, there were 355 who responded to the ASGM Survey, indicating a response rate of 92.6%. Of the 355 respondents 157 (44.2%) were FRACP. From the 355 respondents there were 212 (59.2%) members who identified themselves as either NSQAC qualified as a consultant or a specialist in a specialty.

Using the ASGM survey, the Working Party definition of a geriatric medicine specialists identified 180 practising geriatric medicine specialists. Of this group of 180, there were: 131 FRACP members; 147 were NSQAC qualified as either a physician or consultant in geriatric medicine, and 115 who indicated they were both FRACP and NSQAC qualified as either a consultant or a specialist in geriatric medicine.

There were 19 respondents who did not respond to the question of NSQAC qualifications. A further 14 indicated that they were not NSQAC recognised members but were FRACP members; all 14 indicated they were not general practitioners (GPs). The reconciliation process undertaken by the Working Party involved combining these responses and then checking for double counting.

Distribution of the Geriatric Medicine Workforce

The majority of the geriatric medicine workforce is located in New South Wales (37.7%) and Victoria (28.9%) as is shown in Table 1.

Table 1: ASGM members, recognised as a consultant or specialist spending 50% or more of their time in geriatric medicine; by State/Territory and sex, 1996

State/Terr.	NSW/ACT	Vic	Qld	SA	WA	Tas	NT	Un.	Aust
Males	55	39	13	10	9	*	*	6	136
Females	13	13	8	4	3	*	*	0	44
Total	68	52	21	14	12	5	*	6	180
% total	37.7	28.9	11.7	7.8	6.7	*	1.1	3.3	100.0
% female	28.1	25.0	38.1	28.6	25.0	*	*	0.0	24.4

* number less than 3; Un - unidentified

Source: ASGM Survey 1996

The 1995 AIHW survey indicated a fairly similar distribution of the geriatric medicine workforce as the ASGM (Table 2).

Table 2: Geriatricians; by State/Territory and sex, (AIHW data), 1995

State/Terr.	NSW/ACT	Vic	Qld	SA	WA	Tas	NT	Aust
Males	61	43	13	10	14	3	0	144
Females	13	11	9	5	4	0	*	44
Total	75	54	22	15	18	3	*	188
% total	39.8	28.7	11.7	7.9	9.6	1.6	0.0	100.0
% female	17.3	20.4	40.9	33.3	22.2	0.0	*	23.4

* number less than 3

Source: AIHW

Table 3 shows that the distribution of specialists is not entirely consistent with population

distribution. For geriatric medicine two population figures are used: population aged 65 years and over, and population aged 75 years and over. Both approaches indicate that the Northern Territory has a high specialist to population ratio (SPR) and that Queensland has a low SPR when compared to other States/Territories and the national average. New South Wales/Australian Capital Territory, Victoria and Tasmania are comparatively better endowed than the other States/Territories.

Based on the population 65 years and over (2,205,468) the SPR for Australia is estimated at 1:12,253 and ranges from 1:2,992 in the Northern Territory to 1:18,195 in Queensland. For population aged 75 years and over (911,663) the SPR for Australia is estimated at 1:5,064 ranging from 1:908 in the Northern Territory to 1:7,506 in Queensland.

The Working Party determined that, on balance, the geriatric population is probably best reflected in the 75 years and over population and wherever possible reference has been made to this age group throughout the report.

Table 3: Geriatric medicine specialist:population ratio (ASGM data); by State/Territory, 1996

Pop./SPR	NSW/ACT	Vic	Qld	SA	WA	Tas	NT	Aust
% GM spec.	37.7	28.9	11.7	7.8	6.7	2.8	1.1	100.0
<i>65 years and over</i>								
Pop. (>000)	801.6	564.1	382.1	206.2	185.0	60.4	5.9	2,205.5
% total pop.	12.3	12.4	11.4	13.9	10.5	12.8	3.3	12.1
SPR, 1:	11,788	10,848	18,195	14,729	15,417	12,084	2,992	12,253
<i>75 years and over</i>								
Pop. (>000)	330.4	233.5	157.6	87.4	75.6	25.2	1.8	911.6
% total pop.	5.1	5.1	4.7	5.9	4.3	5.3	1.0	5.0
SPR, 1:	4,859	4,491	7,506	6,242	6,303	5,048	908	5,064

Source: ASGM and ABS

Table 4 summarises the ASGM data. Overall, 67.2% of geriatric medicine specialists had their primary practice in a capital city or other metropolitan area (63.5% of the total population), 5.0% in other major urban areas (8.2% of population) and the remaining 12.7% in rural major and other areas (28.3% of the total population). The AIHW indicated similar distributions for location of primary practice: with 88.7% of geriatric medicine specialists having their primary practice in a capital city or other metropolitan area; 11.3 in rural major and other areas; and no geriatricians in remote areas. The majority of those in rural and remote worked in major rural. No response was indicated

by 15% of respondents.

Table 4: Distribution of geriatric medicine specialists (ASGM data); by State/Territory and geographic location, 1996

State/Terr.	Total	% of Aust	% capital city	% other major urban	% rural
NSW/ACT	58	32.2	69.0	8.6	22.4
Victoria	45	25.0	84.4	2.2	13.3
Queensland	18	10.0	66.7	11.1	22.2
SA	13	7.2	100.0	..	0.0
WA	12	6.6	100.0	..	0.0
Tasmania	5	4.4	80.0	20.0	0.0
NT	2	1.1	100.0	..	0.0
No response	27	15	0.0	0.0	0.0
Australia	180	100.0	67.2	5.0	12.8

.. - not applicable

Source: ASGM survey 1996

Rural areas appear to be undersupplied with specialists. The proportion of geriatric medicine specialists with their primary location in a rural/remote area varies considerably between States and Territories; ranging from 22.4% in New South Wales and 22.2% Queensland to 0% in Tasmania, Western Australia and South Australia/Northern Territory.

Age Profile

From the ASGM survey the youngest geriatric medicine specialist was 31 years and the oldest was aged 76 years with an average age of 47.7 years. There were 14 (7.8%) respondents aged over 65 years of age, and 29 (16.1%) respondents aged 60 years and over. The largest five year age group was the 45 to 49 year age group (19.4%), followed by the 35 to 39 and 40-44 year age group (18.9%).

In the AIHW data, males made up 77.3% (140) of the specialty, with 46 (32.8%) aged between 35-44 years of age; 26 (18.6%) aged between 55-64 years of age and 18 (12.8%) over 65 years of age. Females had a relatively younger profile with 16 (39%) aged in the 35-44 year age group; 8 (4.4%) aged between 55-64 years of age and no females ages over 65 years of age.

Table 5: Age profile of geriatric medicine specialists (ASGM data); by State/Territory and gender, 1996

State/Terr.	Sex	30-34 yrs	35-39 yrs	40-44 yrs	45-49 yrs	50-54 yrs	55-59 yrs	60-64 yrs	65-69 yrs	>70 yrs	Total
NSW/ACT	M	3	10	9	8	3	6	7	9	*	55
	F	3	*	3	3	*	*	*	*	*	13
Victoria	M	*	5	8	10	7	5	*	*	*	39
	F	*	5	*	4	*	*	*	*	*	13
Queensland	M	*	*	5	*	*	*	*	*	*	13
	F	*	*	*	*	*	*	*	*	*	8
SA/NT	M	*	3	*	*	*	*	*	*	*	11
	F	*	*	*	*	*	*	*	*	*	5
Western Australia	M	*	*	*	5	*	*	*	*	*	9
	F	*	*	*	*	*	*	*	*	*	3
Tasmania	M	*	*	*	*	*	*	*	*	*	3
	F	*	*	*	*	*	*	*	*	*	2
Australia	M	5	24	26	26	15	16	11	11	*	136
	F	7	10	8	9	*	5	4	*	*	44
Unidentified	M	*	*	*	*	*	*	*	*	*	6
Total		12	34	34	35	15	21	15	12	*	180
%	F	58.3	29.4	23.5	25.7	0.0	23.8	26.7	*	*	24.4

* number less than 3 or 0

Source: ASGM Survey 1996

The age profile of this specialty is relatively young with the majority (63.9%) of geriatric medicine specialists aged under 50 years of age, 20% aged between 50 to 59 years of age and 16.1% who are aged over 60 years of age.

Table 6: Geriatric medicine specialists (ASGM data); by State/Territory and major age group, 1996

Age (years)	NSW/ACT	Vic	Qld	SA/NT	WA	Tas	Un.	Aust
% under 50	60.3	73.1	61.9	56.2	66.7	40.0	66.8	63.9
% 50-59	14.7	23.1	14.3	37.5	25.0	20.0	16.6	20.0
% 60 and over	25.0	3.8	23.8	6.3	8.3	40.0	16.6	16.1

Source: ASGM Survey 1996

Table 7 summarises the 1995 AIHW medical labour force sex and age distribution for geriatric medicine specialists and shows that it is similar to the ASGM Survey 1996 Table 5.

Table 7: Age profile of geriatric medicine specialists, AIHW data; by State/Territory and gender, 1995

	<35 yrs	35-44 yrs	45-54 yrs	55-64 yrs	65-74 yrs	75+ yrs	Total
Male	9	45	45	30	13	2	144
Female	8	18	9	8	2	0	45
Persons	17	62	54	38	15	2	188
	(per cent)						
Male	51.7	71.7	83.4	78.2	87.4	100.0	76.2
Female	48.3	28.3	16.6	21.8	12.6	0.0	23.8
Persons	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: AIHW, Medical Labour Force Survey, 1995

Gender Profile

Table 5 also provides information on the gender profile of geriatric medicine specialists and shows that women make up 24.4% of the workforce. The largest proportion of female specialists was in the 35-39 years age group (10 or 5.6%). The AIHW Medical Labour Force survey estimated that in 1995, 22.7% of specialists were female.

Currently there are 13 (48%) females undertaking advanced geriatric medicine training. It is expected that the proportion of women in the workforce will increase slightly; as is demonstrated by the high proportion of female trainees and the relatively younger age profile of the female workforce.

The Working Party felt that the attractiveness of the specialty to women could be due to a number of reasons including: the specialties holistic approach to the well being of the patient; the team based nature of the specialty that requires close working relationships to be developed with other health care providers in providing appropriate services; the fact that the speciality is non procedural; and, the opportunity to schedule the workload to be able to participate in personal family commitments.

The impact of increasing female participation into the specialty will need to be monitored. Issues such as retirement patterns where females tend to retire at an earlier age than males, on average at least five years earlier than males, must be taken into account in projecting workforce requirements. Working hours by females in the specialty is another issue that needs to be considered due to the fact that females, generally, work lower average hours per week in total and in direct patient care than males.

Employment Status and Hours Worked

From the ASGM Survey there were 145 (80.6%) full time employees; 24(13.3%) part time employees; 5 (2.8%) who were employed under other arrangements and 9 (5%) who did not respond.

Females made up 62.5% of the part time workforce which is defined in this document as less than 40 hours per week.

Table 8: Employment status of geriatric medicine specialists (ASGM data); by sex, 1996

Employment status	Female	% female	Male	% male	Total
Full time	27	61.4	118	86.8	145
Part time	15	34.1	9	6.6	24
Other	1	2.2	4	2.9	5
No response	1	2.2	5	3.7	6
Total	44	100.0	136	100.0	180

Source: ASGM Survey 1996

Table 9 is a summary of the total hours provided by full time and part time geriatric medicine specialists by State/Territory and sex. The ASGM survey shows that, in 1996, the national average hours worked by full time specialists in geriatric medicine per week is 50.9 hours and for part time is 30.3 hours.

Table 9: Hours worked per week (ASGM data); by employment status and sex, 1996

	Males	Females	Total
<i>Full time employment</i>			
Total (labour force supply)	5,907	1,269	7,176
Maximum hours worked per week	90	90	90
Average hours worked per week	51.8	47.0	50.9
<i>Part time employment</i>			
Total (labour force supply)	293	373	666
Maximum hours worked per week	60	50	60
Average hours worked per week	32.6	28.7	30.3

Source: ASGM Survey 1996

Tables 10 to 12 summarise the ASGM survey and provide details on full time, part time and overtime hours worked by geriatric medicine specialists by State/Territory and sex. Table 10 details the total hours provided by full time geriatric medicine specialists by State/Territory and sex. The average hours worked per week spent in geriatric medicine ranged from 49.8 in Queensland to 54.7 in Western Australia.

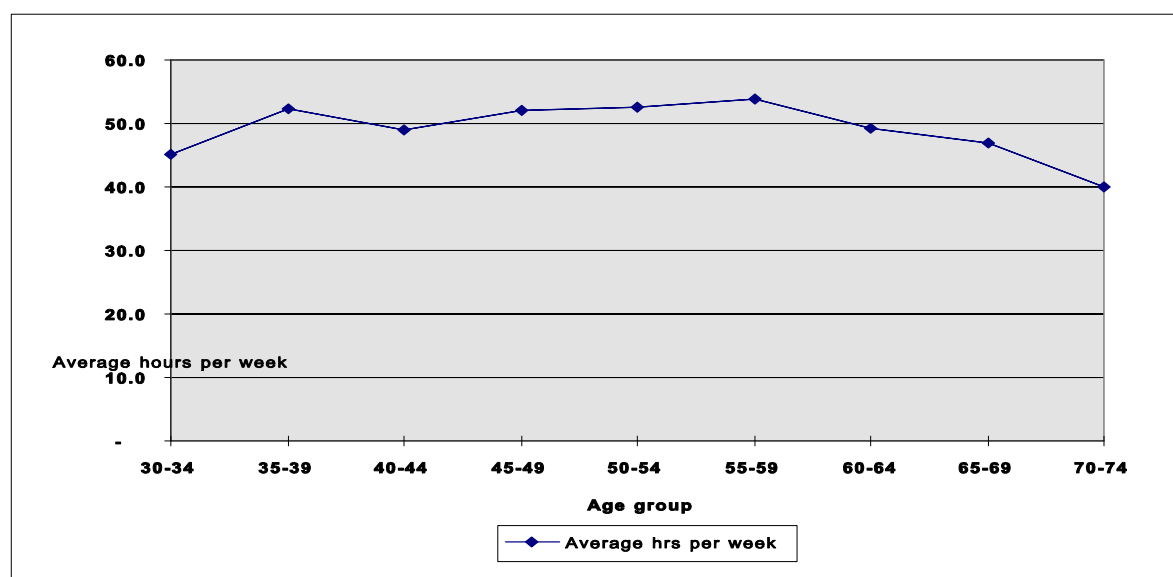
Table 10: Hours worked per week by full time geriatric medicine specialists (ASGM data), by sex and State/Territory, 1996

Hours per week	NSW/ACT	Vic	Qld	SA	WA	Tas	NT	Un.	Total
<i>Female</i>									
total	460	248	266	85	130	40	40	-	1,269
maximum	70	60	60	45	90	40	40	-	90
average	46.6	41.3	53.2	42.5	65.0	40.0	40.0	-	47.0
<i>Male</i>									
total	2,423	1,561	580	460	472	115	55	241	5,907
maximum	80	80	60	90	70	70	55	65	90
average	53.8	52.0	48.3	57.5	52.4	38.3	55.0	40.2	51.8
<i>Australia</i>									
total	2,883	1,809	846	545	602	155	95	241	7,176
maximum	80	80	60	90	90	70	55	65	90
average	52.4	50.3	49.8	54.5	54.7	38.8	47.5	40.2	50.9

Un - unidentified

Source: ASGM Survey 1996

On average, full time male specialists in geriatrics worked a total of 51.8 hours per week nationally, while their female counterparts worked 47.0 hours per week. Hours worked per week by each age group averaged around 47 to 51 hours up to the age of 60 years when hours worked decreased (Figure 1).



Source: AGSM Survey 1996

Table 11 indicates the average hours worked per week by part time specialists in geriatric medicine by sex and State/Territory. Part time hours range from 0 hours in the Northern Territory to 37.3 hours in New South Wales/Australian Capital Territory.

Table 11: Geriatric medicine specialist part time hours per week worked (ASGM data); by State/Territory and sex, 1996

Hours on call	NSW/ACT	Vic	Qld	SA	WA	Tas	NT	Total
<i>Female</i>								
total	115	139	20	71	20	8	0	373
maximum	50	45	20	36	20	8	0	50
average	38.3	27.8	20	35.5	20.0	8.0	0	28.7
<i>Male</i>								
total	146	132	15	-	-	-	0	-
maximum	60	50	15	-	-	-	0	-
average	36.5	33.0	15.0	-	-	-	0	-
<i>Australia</i>								
total	261	271	35	71	20	8	0	666
maximum	60	50	20	36	20	8	0	60
average	37.3	30.1	17.5	35.5	20.0	8.0	0	30.3

Source: ASGM Survey 1996

Females worked part time in all State/Territories whilst males indicated only New South Wales/Australian Capital Territory, Victoria and Queensland. Part time hours per week varied enormously in rural and remote areas.

The AIHW Medical Labour Force Survey found that, in 1995, the average hours worked per week for males was 48.7, whereas that for females was 37.2. The average hours per week in direct patient care was 35.6 for males, 30.3 for females. The average hours on call not worked per week was 50.3 for both females and males (Table 12).

Table 12: Geriatric medicine specialists, average working hours per week (AIHW data); by sex and age, 1995

Sex	<35 yrs	35-44 yrs	45-54 yrs	55-64 yrs	65-74 yrs	75+ yrs	Total
<i>Total hours worked</i>							
Male	45.6	51.8	50.1	47.0	44.6	4.0	48.7
Female	38.8	36.0	38.7	40.6	8.0	0.0	37.2
Total	42.2	47.5	48.2	45.7	40.6	4.0	46.0
<i>Direct patient care hours worked</i>							
Male	33.2	38.6	32.5	33.6	39.6	4.0	35.6
Female	28.2	29.4	32.7	35.8	8.0	0.0	30.3
Total	30.7	36.2	32.6	34.0	35.6	4.0	34.4
<i>Hours on call not worked</i>							
Male	30.0	50.8	45.4	62.0	50.4	0.0	50.3
Female	38.5	49.0	27.0	65.0	0.0	0.0	50.3
Total	34.3	50.3	41.9	62.6	50.4	0.0	50.3

Source: Medical Labour Force Survey, 1995, AIHW

Table 13 shows the total hours worked, direct patient care hours worked and hours on call not worked by geriatric medicine specialists by State and Territories and the national averages.

Table 13: Geriatric medicine specialists, average working hours per week (AIHW); by State/Territory, 1995

Hours	NSW/ACT	Vic	Qld	SA	WA	Tas	ACT	NT	Total
Total worked	47.7	46.8	43.8	38.8	39.6	57.0	51.0	45.0	46.0
Direct patient care	41.3	29.0	30.0	20.6	28.9	32.5	43.0	40.0	34.4
Hours on call not worked	50.7	31.1	44.1	36.2	76.8	38.0	99.0	0.0	50.3
% reporting hours on call not worked	75.0	19.4	46.7	50.0	66.7	100.0	100.0	0.0	54.8

Source: Medical Labour Force Survey, 1995, AIHW

The average hours worked per week in regions varied as did the average age of the geriatric medicine specialists within those regions, as is shown in Table 14. The average age of geriatricians in small rural centres and other rural areas was 60 and over.

Table 14: Geriatric medicine specialists, average working hours and average age (AIHW data); by region of main job, 1995

	Major urban centre	Large rural centre	Small rural centre	Other rural area	Total
Total hours worked	47.6	48.0	35.8	40.0	47.0
Direct patient care hrs worked	34.8	49.0	25.7	40.0	34.8
Hours on call not worked	49.5	62.7	72.0	0.0	50.5
Per cent practitioners on call	57.9	42.9	14.3	0.0	54.1
Average age	47.1	47.5	60.0	64.0	48.0

Source: Medical Labour Force Survey, 1995, AIHW

Public Hospital Involvement

Of the 180 geriatric medicine specialists from the ASGM Survey, 132 (73.3%) gave their principal employer as a public hospital; 18 (10%) were employed mainly in academe or university; 17 (9.4%) were employed in private practice; 4 (2.2%) were employed in private practice, otherwise employed; and 8(4.4%) were employed in other areas.

Table 15: Principal employer of geriatric medicine specialist (ASGM); by sex, 1996

Principal Employer	Females	Males	Total
State Government Health Services/Hospital	33	99	132
Academic University	4	14	18
Private Practice/Self Employed	4	13	17
Private Practice/Otherwise Employed	1	3	4
Other	2	6	8
Total	44	136	180

Source: ASGM 1996

There are in excess of 1,000 hospitals in Australia, of which approximately 800 are general hospitals. The number of dedicated geriatric acute medical and assessment units, and rehabilitation units in Australia doubled between 1985 and 1992 as was indicated in the survey conducted by Dorevitch and Gray 1993. In 1992, 31% of general hospitals operated a geriatric service. A further 40% had access to a visiting geriatric service. Geriatric services were operated almost exclusively in the public sector and were more likely to be located in larger hospitals whereas smaller hospitals had visiting services (inpatient consultancy or ACATs).

Approximately 550 general hospitals had some form of inpatient consultancy service, however, only 65 of those included a geriatrician on the service and contributed financially to its operation. Of the 550 general hospitals, 6% had a dedicated geriatric

unit and approximately 20% offered a respite care service.

There were 114 (12%) hospitals that operated acute medical or assessment services, of which 71 included dedicated geriatric units. There were 1,894 beds in dedicated units, which represented 1.52 beds per 1000 population aged 70 years and over.

The survey showed that the supply of dedicated geriatric acute medical or assessment beds represented 2.1 beds per 1000 people aged 70 years and over. The supply of dedicated rehabilitation beds represented 1.1 beds per 1000 people aged 70 years and over. Thus, the total supply of hospital assessment and rehabilitation beds under the control of a geriatric service was 3.2 beds per 1,000 people 70 years and over, and 2.2 of these beds were in dedicated geriatric or rehabilitation wards. There was considerable variation in the bed ratios between States. The overall ratio varied from 1.2 beds in Tasmania to 4.3 in Western Australia.

In New Zealand, where the evolution of geriatric medicine has paralleled that in Australia in terms of physician training and demography, the supply of designated geriatric assessment and rehabilitation beds approximates four beds per 1,000 people aged 65 years and over and for those aged 70 years and over, six beds per 1,000.

Comparison with the United Kingdom is made difficult by the fact that most general medicine (including rehabilitation and long stay care) for those over 75 years has been carried out by geriatricians in beds directly under their control. National Health Service geriatric bed norms for England and Wales, when reduced to account for the 50% long stay (nursing home type) beds for the elderly, produce a recommended ratio of 11 geriatric acute, assessment and rehabilitation beds per 1,000 aged 75 years (Henschke, 1994).

In the United States and Canada, there has been rapid proliferation of geriatric assessment services, using a variety of both inpatient units and consulting services. However, rates of bed supply in North America cannot be discerned from the available literature.

Practice Profiles

In 1996, the ASGM issued a Position Statement on Geriatric Services in General Hospitals. The document states that all general hospitals should offer the following programs to the elderly:

- diagnosis and treatment of acute illness;
- assessment and management of non-acute disorders, disability and psycho-social problems; and
- thorough discharge planning and, where no suitable alternative is available, follow up in the community.

There are numerous other services that provide care to the elderly which refer to geriatric services for consultations.

Table 16 shows the principal practice type by public/non public hospital/regional geriatric service attachment and indicates that 105 (58.3%) geriatricians worked in a public hospital/regional geriatric service attachment and 5 (2.7%) geriatricians worked without attachment to a public hospital or regional geriatric service. The remaining indicated that they were either a specialist geriatrician with general medicine, other physician with interest in geriatric medicine, psycho geriatrician, rehabilitation or made no response.

Table 16: Principal practice type of ASGM members by public hospital/regional geriatric service attachment, that spend greater than 50% of their time in geriatric medicine, 1996

Principal practice type	With public hospital/ regional geriatric service attachment	%	No public hospital/ regional geriatric service attachment	%
Specialist geriatrician	138	76.8	9	5.0
Other physician with interest in geriatric medicine	11	6.1	1	0.5
Psycho geriatrician	6	3.3	3	1.7
Rehabilitation	6	3.3	-	-
No response	6	3.3	-	-
Total	167	92.8	13	7.2

Source: ASGM Survey 1996

The ASGM Survey indicated 145 respondents who have an attachment to a service with delegated authority to approve nursing home or hostel admission.

Table 17 shows the primary work area of geriatric medicine specialists who responded to the Survey. Of the 180 geriatric medicine specialists, 150 (83.3%) worked mainly in the clinical area; 11 (6.1%) worked in hospital administration; 9 (5.0%) worked in research; 5 (2.8%) worked in education; and 2 (1.1%) indicated that they worked in other areas.

Table 17: Primary work area of geriatric medicine specialists; by sex, 1996

Primary work area	Females	Males	Total	%
Clinical	36	114	150	83.3
Administration Hospital	2	9	11	6.1
Research	3	6	9	5.0
Education	2	3	5	2.8
Other	0	2	2	1.1
No response	1	2	3	1.7
Total	44	136	180	100

Source: ASGM 1996

Services Provided and Performed

There is no definitive source of data on services provided by geriatric medicine specialists. As a result, the Working Party has collected a range of information that can be used as an indicator of services provided and performed.

All available information on geriatric services using morbidity, Medicare data and Australian hospital casemix data have shortcomings and this has made it extremely difficult to gain an accurate assessment of the extent of geriatric services being provided. The development of models of geriatric service delivery and performance should be pursued jointly by State/Territory health departments and ASGM overcome this problem. Until this is done, the information available on geriatric services will remain general rather than specific.

In the mean time, the Working Party, whilst recognising that the number of people over 65 years of age and over 75 years of age and their utilisation of services at a gross level is a poor indicator of the need for geriatric specialists (as the services provided to older people are varied, and provided by a variety of medical practitioners), the available data on service provision and utilisation by these age groups to build up a basic picture of likely geriatric service provision is used.

Australian Hospital Casemix Data

The AN-DRG patient classification has highlighted the distinction between different categories of inpatient care and ambulatory care, and the need for an explicit definition of boundaries of associated categories. A nationally consistent definition of these patient care categories, and of episodes of care according to illness acuity, will facilitate the design of additional casemix classifications to supplement AN-DRGs. Specific features of the AN-DRGs classification will have a major impact on health care of the elderly through incentives created by funding arrangements based on this classification.

The use of age as an AN-DRG classification criterion, as a surrogate for definitive secondary diagnoses, should be regarded as an interim measure pending improvement in medical record documentation, further analysis of the relationship of age partitions to

these secondary diagnoses, and ongoing improvement of AN-DRG design.

The complex process of developing casemix classifications for subacute and ambulatory care has commenced, and will also have a profound impact on health care of the elderly and on all specialties concerned with both acute and chronic illness, again because of financial incentives in the classification design. The classification system will come from the National Sub-Acute and Non-Acute Casemix Classification Study (SNAP), and will build on previous work in sub-acute and non-acute casemix classification by undertaking nationally coordinated research which will test and build on casemix classification variables and systems identified in earlier Australian studies. This project has been developed at the Centre for Health Service Development, University of Wollongong, by Kathy Eagar, David Cromwell and Carmel Kennedy.

The objective of the study is to assist materially in the development of a national casemix classification system that can be used to fund and clinically manage Australian sub-acute and non-acute services. The five case types about which data will be collected are: (1) palliative care, (2) rehabilitation, (3) psychogeriatric, (4) geriatric evaluation and management and (5) maintenance care. The SNAP project was released in September 1997 with version 1 classification being available at the same time.

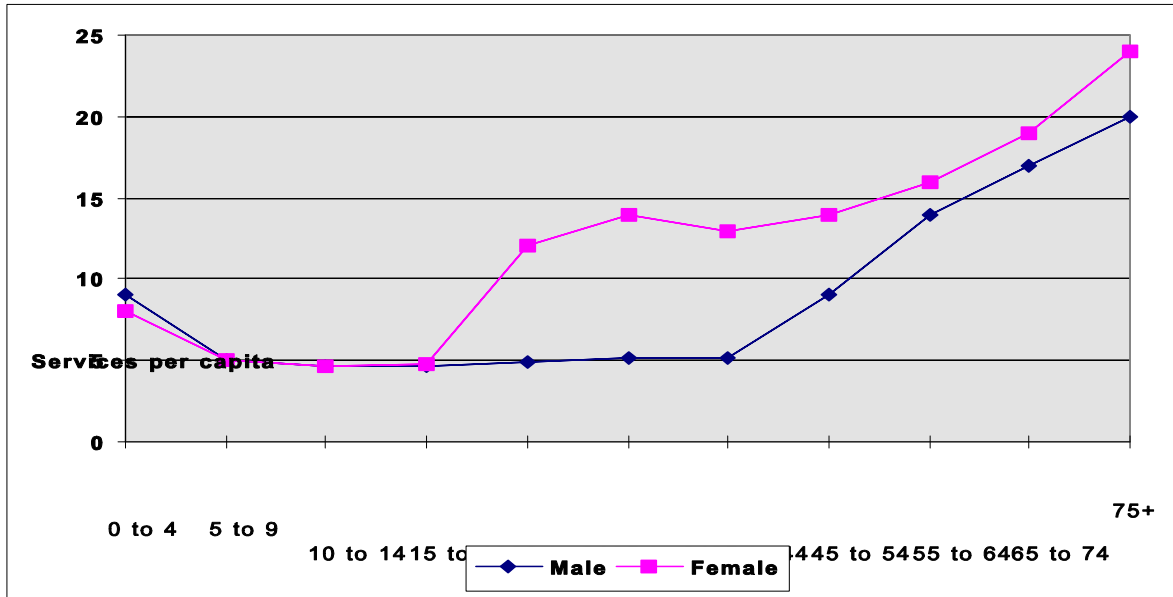
Medicare Benefits Schedule

People aged 75 years and over are the highest users of Medicare Benefits Schedule (MBS) services of any age group. In 1994-95, males in this age group used on average 20.4 services per person (the average for all age groups is 8.4 services per person) while females used on average 23.4 services per person (the average for all age groups is 12.5 services per person). Utilisation of MBS services per person in this age group has grown over recent years, although not to the same extent as for those aged 55 to 74 years (Table 18, figure 2).

Table 18: Average number of Medicare services processed per Australian resident (HIC); by age and sex of patient, 1992-93 to 1994-95

Age (yrs)	Males				Females			
	1992-93	1993-94	1994-95	% increase	1992-93	1993-94	1994-95	% increase
	(Services per resident)				(Services per resident)			
45-54	8.5	8.8	9.2	8.7	13.2	13.5	14.0	5.9
55-64	12.7	13.4	14.0	10.6	14.9	15.5	16.2	8.5
65-74	14.5	15.8	17.1	18.3	17.9	18.6	19.2	7.1
75+	19.2	19.9	20.4	6.3	22.3	22.9	23.4	5.3
Total	7.7	8.1	8.4	8.2	11.8	12.1	12.5	6.3

Source: HIC



Source: HIC 1994-95

Hospital Separations

Similarly, hospital separations and bed days are highest for those aged over 65 years. In 1994-95, people aged 65 years and over comprised approximately 12% of Australia’s estimated resident population but accounted for 29% of separations, and 48.6% of bed days in public acute hospitals; and 31.3% of separations, and 48.7% of bed days, in private acute hospitals.

Table 19: Percentage separations and percentage bed days, public and private acute hospitals; by age and sex, 1995-96

Age (years)	Public			Private		
	Males	Females	Persons	Males	Females	Persons
<i>Separations (%)</i>						
0-14	16.4	9.9	13.0	7.7	4.5	5.9
15-44	27.3	43.0	35.7	26.1	40.6	34.3
45-64	25.0	20.0	22.3	31.2	26.4	28.5
65+	31.3	27.1	29.0	35.0	28.5	31.3
Proportion of persons	46.5	53.5	100.0	43.8	56.2	100.0
<i>Bed Days (%)</i>						
0-14	11.0	7.0	8.8	5.5	2.9	3.9
15-44	19.4	28.0	24.1	17.5	30.2	25.2
45-64	22.0	15.6	18.5	25.7	19.9	22.2
65+	47.6	49.4	48.6	51.4	46.9	48.7
Proportion of persons	45.1	54.9	100.0	39.4	60.6	100.0

Source: AIHW 1995-96

Aged Care Assessment Teams

The Working Party considers ACAT data to be a good indicator of geriatric service requirements.

Approval of applications for nursing home or hostel entry are carried out by ACAT. Such teams are linked with 70% of general hospitals and tend to be located at the larger hospitals. On-site ACATs work closely with hospital based geriatric services in promoting proper discharge planning to ensure a smooth transition to community care. In addition, the introduction of ACATs has allowed community based assessment of older people and referral, where indicated, to the acute care sector. ACATs have ensured the appropriate use of nursing home beds, thereby minimising delays in the transfer of patients from acute care beds. ACATs also provide information on alternative care options for those who do not need a nursing home.

ACATs collect data on a State and Territory basis on elderly people who receive a comprehensive geriatric assessment, which includes consideration of medical, functional, psychological and social factors.

Table 20 shows the annual number of assessments as a proportion of the total population aged 70 years or more from 1991 to 1994. There was a 41.4% increase in assessments, and an 11% increase in the population of people 70 years of age or more over this period. There was a steady increase in the proportion of the population that was assessed from 8% in 1991 to 11% in 1994. This growth in assessments reflects the proportion of the population requiring the service and highlights the future trend on the demand of such services. A further factor underpinning the growing number of assessments is a greater understanding in the community of the role of ACATs and this will also lead to increased community expectations.

Table 20: Annual number of ACAT assessments as a proportion of the total population of people aged 70 years or more, 1991 to 1994

	1991	1992	1993	1994	% increase 1991-94
Assessments ^a	106,679	121,625	138,787	150,886	41.4
Increase on previous year	-	14.0	14.1	8.7	-
70 years and over population as at 30 June	1,279,325	1,324,832	1,371,958	1,421,037	11.1
Assessments as % of 70 years and over population	8%	9%	10%	11% ^b	-

a - assessments total includes all persons assessed, irrespective of age

b - Northern Territory data for last 6 months of 1994 not yet available

Source: Reports of the State Evaluation Units of the Aged Care Assessment Program and ABS

156,156 assessments were carried out by 122 ACATs in the 12 month period, July 1994 to June 1995. Assessment numbers by State/Territory varied considerably from 876 in the Northern Territory to 53,188 in New South Wales/Australian Capital Territory. This variation in assessments is largely the result of the huge variation in the proportion of Australia's 70 years and over population living in each State/Territory (Table 21).

The role played by ACATs also differs between States/Territories, largely as a result of State/Territory based differences in health and community services systems and policies. Nationally, the ACATs carried out 110.2 assessments for every 1000 people aged 70 years or over. This rate varied from 83.3 assessment per 1000 population aged 70 years or over in Queensland to 303.7 in the Northern Territory. The very high assessment rate for the Northern Territory reflects that fact that nearly half of their assessments were for people aged below 70 years of age and refers mainly to the Indigenous population and the unique role of ACATs in the Northern Territory.

Table 21: ACAT assessment numbers and rates; by State/Territory, July 1994 to June 1995

State/Terr.	Pop. 70 years & over#	% pop. 70 years & over	No. of teams	Assessments		Assessments per 1000 pop. 70 years & over
	no.	%	no.	no.	%	no.
NSW/ACT	517,320	36.5	51	53,188	34.1	102.8
Vic	365,014	25.8	18	48,474	31.0	132.8
Qld	240,120	16.9	14	19,998	12.8	83.3
SA	135,408	9.6	17	11,907	7.6	87.9
WA	116,153	8.2	15	17,040	10.9	146.7
Tas	39,853	2.8	3	4,673	3.0	117.3
NT	2,884	0.2	3	876	0.6	303.7
Total	1,416,752*	100.0	121	156,156	100	110.2

ABS Final Population Estimates, June 1994; * Excludes Jervis Bay, Christmas and Cocos (Keeling) Islands
Source: National Minimum Data Set Report, May 1996

The national assessment rate, excluding assessments of people aged under 70 years, is 94.4 per 1000 population aged 70 years or more. The Northern Territory rate, while still high, compares to that of Western Australia (167.1 and 125.6 per 1000 population 70 and over respectively) (see Table 22).

In 1994-95, only 55.8 per cent of the assessments carried out by ACATs were first assessments, while the remaining 44.2% were re-assessments. More than half of the clients are 80 years of age or more (54.7%), the largest five year cohort of ACAT clients is the 80 to 84 year age category (24.9%).

Table 22: ACAT clients (%); by State/Territory and age group, 1994-95

State/Terr	<60 yrs	60-64 yrs	65-69 yrs	70-74 yrs	75-79 yrs	80-84 yrs	85-89 yrs	>90 yrs	Total
NSW/ACT	4.2	3.3	6.9	13.3	19.8	25.0	17.9	9.6	53,188
Vic	5.9	3.3	6.3	12.4	17.2	24.1	19.0	11.6	48,474
Qld	4.4	2.8	5.7	11.5	18.7	25.5	19.8	11.5	19,998
SA	2.6	2.4	5.8	11.7	18.5	26.7	20.8	11.3	11,907
WA	4.5	3.3	6.6	12.2	17.4	24.8	20.8	10.5	17,040
Tas	3.2	2.5	4.8	12.4	18.3	27.4	21.0	10.4	4,673
NT	23.3	7.9	9.7	13.6	18.6	11.1	8.7	3.1	876
Total	4.7	3.1	6.4	12.5	18.4	24.9	19.1	10.7	156,156

Source: National Minimum Data Set Report, May 1996

The sex ratio of the ACAT clientele is consistent with the age profile, in that nearly two thirds of the clients (63.4%) are female, while only 36.5% are male, except for the Northern Territory where more younger clients are assessed.

The age distribution of ACATs is similar in all States and Territories except the Northern Territory, where 22.9% of clients are aged 80 years or more and 23.3% are aged below 60 years (Table 23). The age profile of the Northern Territory clients is partly related to the very high proportion of the Indigenous population. Indigenous Australians have a much shorter life expectancy than the overall Australian population, and access ACATs at an earlier age than do non-Aboriginal people.

Table 23: ACAT clients; by mean and median age, gender and State/Territory, 1994-1995

State/Terr.	Female %	Male %	Mean age (years)	Median age (years)	Total
NSW/ACT	63.2	36.7	78.5	80.0	53,188
Vic	63.8	36.1	78.3	80.0	48,474
Qld	62.7	37.3	79.3	81.0	19,998
SA	63.9	36.0	80.0	81.0	11,907
WA	63.6	36.4	78.9	81.0	17,040
Tas	64.6	35.4	80.2	81.5	4,673
NT	53.0	46.7	68.5	72.0	876
Total	63.4	36.5	-	-	156,156

Source: National Minimum Data Set Report, May 1996

A survey of ACATs undertaken in 1994 by Sach and Associates showed a wide range of team sizes across Australia: 38% had less than five FTE members and 33% had teams of more than nine FTE members. Of the 116 ACATs that responded to the survey, 59% had specialists as team members. Of those that had specialists, over half had at least one equivalent full time specialist. Of the teams without specialists, 35% have a medical officer and 65% are without medical representation. Only 8% (nine ACATs) have no specialists, no medical officer and no access to a visiting specialist and are dependent on general practitioners for a medical opinion on dementia.

Capital city ACATs have the greatest access to specialists with only six of the 40 teams not having a specialist as an actual team member. Conversely, over half (55%) of the ACATs in provincial centres do not have a specialist on the team. The survey also found considerable geographic differences between States/Territories with regards to specialist representation on ACATs, with the Australian Capital Territory, New South Wales and Victoria having higher representation and South Australia, Queensland,

Tasmania and the Northern Territory having fewer teams with specialists on them (Sach 1994).

It would be ideal if all ACAT assessments could involve a geriatrician. The fact that this is not possible is probably indicative of a shortage of geriatric medicine specialists on the whole, and a particular shortage in rural areas in either a consulting or visiting capacity.

Training Arrangements

The training program for geriatric medicine is overseen by the RACP. Medical graduates who wish to train as specialists and be admitted to Fellowship of the RACP are required to undertake a program of training laid down by the RACP for this purpose and to take the FRACP Part I examination in internal medicine or paediatrics.

The training program is divided into two phases, basic and advanced. Each phase is of at least three years duration. Admission to Fellowship requires satisfactory completion of basic and advanced training and a pass in the FRACP examination in internal medicine or paediatrics. On the satisfactory completion of all the training requirements, the specialist advisory committee supervising the advanced training will recommend that the Board of Censors admit the trainee to Fellowship. Fellowship is undifferentiated, that is, it is not awarded in a sub-specialty.

Advanced training in geriatrics is for a minimum of three years, with two years of core training and one of elective training following completion of basic physician training and the FRACP examination. Advanced trainee numbers by State and gender were provided by the RACP and are detailed in Table 24. There are currently no trainees the Northern Territory. Almost a half of the trainees are in New South Wales (36.8%) and 34.2% of trainees are in Victoria. Compared to their share of the over 75 year old population, the other States/Territories are poorly represented; which in the short term is only likely to perpetuate the maldistribution that already is evident within this workforce.

Table 24: Advanced geriatric medicine trainees; by State and gender, 1997

Trainees	NSW/ACT	Vic	Qld	SA	WA	Tas	Aust
Male	8	3	1	1	3	0	16
Female	5	10	2	1	2	1	21
Total	14	13	3	2	5	1	38
% female	35.7	76.9	66.7	50.0	40.0	100.0	55.3
% of total	36.8	34.2	7.9	5.3	13.2	2.6	100.0
% of pop. 75 yrs +	5.1	5.1	4.7	5.9	4.3	5.3	5.0

Source: RACP

In 1997, there were a total of 42 hospital accredited advanced geriatric medicine training

programs (Table 25).

Table 25: Geriatric medicine accredited training programs for advanced trainees; by hospital and by State/Territory, 1997

State	Area/hospital	Accredited posts
NSW/ACT		15
	Nepean Hospital	1
	John Hunter, Newcastle	1
	Prince Of Wales /Prince Henry	4
	Port Kembla Hospital	1
	Repatriation General, Concord	3
	Royal North Shore	1
	Westmead	3
Canberra	1	
Victoria		16
	Austin and Repatriation Medical Centre	4
	Bundoora Extended Care Centre	1
	Caritas Christi Hospice	1
	Caulfield General Medical Centre	1
	North West	3
	Peter McCallum Cancer Institute	1
	Preston and Northcote Community	1
	Royal Melbourne	2
	St Vincents	1
Southern Health Care Network	1	
Queensland		4
	Princess Alexandra	3
	Cairns Base	1
South Australia		2
	Flinders Medical Centre	1
Royal Adelaide	1	
Western Australia		4
	Osborne Park	1
	Royal Perth	2
Sir Charles Gardiner	1	
Tasmania		1
	Royal Hobart	1
Total		42

Source: ASGM

ADEQUACY OF THE CURRENT GERIATRIC MEDICINE WORKFORCE

There are a number of indicators of the adequacy of a medical workforce. No single measure can provide a definitive assessment; however, by examining each it is possible to gain an indication of whether the workforce is adequately meeting current demand or if there is a significant shortfall or oversupply. The indicators chosen by the Working Party were:

- specialist to population ratio (SPR);
- public hospital vacancies;
- consultation waiting times: and
- perceptions of the adequacy of the current workforce.

Geriatric Medicine Specialist:Population

The Working Party estimated that the current specialist geriatric workforce comprised 180 specialists. Comparing 180 practitioners to the 1996 estimated 75 years and over population of 910,700 gives an SPR of 1:5,059 (18 per 100,000). The 1996 estimated 65 years and over population of 2,201,000 gives an SPR of 1:12,227 (6 per 100,000).

There is no recommended Australian SPR benchmark for geriatric medicine.

The British Geriatric Society, as a minimum requirement, recommends there should be one consultant geriatrician for every 4,000 people over 75 years of age (25 per 100,000) and one consultant geriatrician to 10,000 people over 65 years of age (10 per 100,000).

The fact that the current Australian SPR is below the British benchmark for both the population aged 75 years and over and the population aged over 65 years, could be taken to indicate that the geriatric medicine workforce is in undersupply. However, comparisons across countries are not always valid given the differences that can exist in national health structures and funding arrangements.

Table 3 summarised SPR and showed that New South Wales/Australian Capital Territory, Victoria, Tasmania and the Northern Territory were better endowed than the national average.

The Working Party believed it would be also be useful to look at the hours of service provided by geriatric medicine specialists rather than just the number of providers. Table 26 summarises the considerable variation in the hours to population of 75 years of age and over ratios, by States/Territories and highlights considerable variations. The variations in hours range from 1 hour in geriatric medicine per week provided to 51 people over 75 years of age in the Northern Territory to 1 hour provided in geriatric medicine to 647 people over 75 years of age in Tasmania.

Table 26: Geriatric medicine hours of service provided to population ratio; by State/Territory, 1996

Pop./hours	NSW	Vic	Qld	SA	WA	Tas	NT
GM hours*	2477	1569	744	519	771	39	36
Pop. 75 years and over	330,363	233,534	157,633	87,398	75,636	25,240	1,815
HPR, 1:	133.4	149	212	168	99	647	51

* hours exclude on call hours

Source: ASGM and ABS

These variations in the geriatric medicine hours of service provided to population ratio (HPR) are further evidence that there is a maldistribution of geriatric medicine specialists in States/Territories. By comparison to the national geriatric medicine HPR which is 1:148, Tasmania, Queensland, South Australia have higher HPRs whereas New South Wales/Australia Capital Territory, Western Australia and the Northern Territory have lower HPRs. Victoria's HPR is very close to the national HPR. The HPR data provides a similar picture to the SPR data.

Public Hospital Vacancies

The AMWAC survey of public hospital specialist vacancies conducted in October 1996 found there were eight geriatric medicine vacancies. Three of the vacancies were in New South Wales and two in Western Australia. Three of the vacancies were in rural areas throughout Australia. There were no temporary resident doctors filling a vacancy. For a small workforce, the Working Party considered the number of vacancies to be significant.

Recurring vacancies in the established geriatric positions was considered to add substantially to the workloads of the remaining geriatricians resulting in ongoing risk of >burn out= and further vacancies. High vacancy rates and increased work loads also lead to little time for research and personal clinical development which further added to the relative unattractiveness to many doctors of geriatric medicine as a career.

Waiting Times for Geriatric Consultations

The most recent data available on consultation comes from a 1993 survey (Dorevitch and Gray). There were 1042 hospitals surveyed, of which 942 (90.4%) responded to the questionnaire. The respondents included 816 general (87%), 34 geriatric (4%), 26 rehabilitation (3%) and 39 psychiatric (4%) hospitals. Two thirds of hospitals were located in rural areas, the majority (71%) were public hospitals.

Within dedicated acute geriatric units, respondents were asked to estimate the mean waiting time to admission for patients, other than those admitted directly from an emergency department which would usually occur on the same day as the patient

presented. Responses varied from zero to 50 days and the average was 5.8 days. More than half of the respondent hospitals estimated the wait to be less than six days. Twelve (17%) estimated the mean wait to be zero, 34 (48%) to be between one to five days, 12 (17%) between six and ten days and 13 (18%) greater than ten days.

The survey also sought to examine those rehabilitation services which operate >under the sole control (of the geriatric service) or shared with another service or unit=. This analysis therefore excluded rehabilitation hospitals and units which are separate from the geriatric service; however, it did include general rehabilitation services where the geriatric service shares a role in patient care. It found in geriatric rehabilitation units the waiting times for admission varied from 0 to 30 days, with the average being seven days. Only two units estimated the wait time to be greater than 12 days.

Limitations on Service Provision

The Working Party felt that the difficulties with the provision of geriatric medicine services to rural and remote areas and indigenous Australians are indicative of a shortage of geriatric medicine specialists.

Provision of Services in Rural and Remote Areas

It is estimated that only 12.8% of geriatric medicine specialists are located in rural/remote areas. New South Wales and Queensland have the highest proportion of their geriatric medicine workforce located in rural areas (22.4% and 22.2% respectively); but South Australia, Western Australia, Tasmania and the Northern Territory have no geriatric medicine specialists in rural/remote areas.

In particular, the Working Party felt that older people in isolated rural areas are significantly disadvantaged in their access to geriatric care services. Small rural hospitals and bush nursing centres have provided primary care to isolated populations. However, many patients requiring geriatric services in rural areas may still need to be transferred to metropolitan tertiary centres.

By the same token, there are obviously some communities where there is insufficient workload to warrant recruitment of consultants in geriatric medicine. In these rural communities, services will need to be provided by visiting consultants in geriatric medicine, general practitioners and by general medicine specialists in some areas; or by patients travelling to the specialists in urban areas. It will continue to be important to encourage general practitioners to obtain, maintain and utilise their skills in geriatric medicine to provide some of these services.

An incentive to attract consultants in geriatric medicine to rural areas could be achieved through funded outreach geriatric teams, consisting of a consultant in geriatric medicine and a trainee consultant. The composition may need to vary between States/Territories. Trainees would be provided support and training and the issue of professional isolation

that currently exists in rural areas would be reduced. This outreach team would be responsible for ensuring that their clients have access to a range of services locally and that referral to such services is managed effectively and appropriately.

Building on the concept of the multi purpose or the rural group practice would also develop more flexible health and geriatric care services in rural and remote areas. This concept will provide an opportunity to work with a number of rural communities by establishing a pool of specialists and other health professionals in health services required in those communities.

It is a challenge for the communities too, to respond positively and creatively to the opportunity to design and manage services which are more appropriate to the needs of their local area or sub-region. Services that could be considered in any multi-purpose complex include acute hospitals, nursing homes and hostels, home and community care services, community health and mental health services, dental and ambulance services.

Indigenous Aged Care Requirements

Closely associated with the problems of geriatric care in rural and remote areas is the provision of geriatric services to Indigenous Australians. The two main limitations on service provision to this population are: data on the use of aged care services by this population and accessibility.

Data on the use of aged care services by Indigenous people are limited by the poor quality of identification in administrative collections. For example, in preparing its report on aged care services, the AIHW found information about Indigenous status was missing for about 26% of nursing home patients and over half (58%) of hostel residents. (Mathur 1996).

The AIHW report found that about 38% of nursing home residents identified as Indigenous were aged 85 years or more, compared to about 47% of those identified as non-Indigenous. Indigenous residents were more likely than their non-Indigenous counterparts to be younger, with 13% of Indigenous residents aged less than 65, compared to only 4% of non-Indigenous residents (Mathur 1996).

A higher proportion of Indigenous people live in rural and remote areas than do their non-Indigenous counterparts, and this may result in reduced accessibility to aged care services. Over half of all Indigenous people living in rural areas had to travel more than 50 kilometres to hospital, while this was true for only a small proportion of people living in capital and other urban areas (ABS 1996d).

Although care of the aged by family members may be preferred in many instances, there may be few acceptable options for people living away from major urban areas who need residential care but do not wish to be taken away from the areas in which they live, especially if they live in their traditional homelands.

The extent of Indigenous involvement may be another factor affecting the access and use of health services and facilities.

Geriatric services provided by acute hospitals and/or community services are not sited in Indigenous communities and this results in the following:

- dislocation from the family;
- having to access inappropriate accommodation for the family;
- early and inappropriate discharge practices;
- lack of appropriate support services for accommodation of disabled people in remote areas;
- admission into unfamiliar environments where there may be no-one who speaks their language;
- the risks associated with inadequate transport and roads prevents patients accessing hospitals for necessary treatment and follow up;
- costs for patients and their families associated with long distance travel are out of reach and this increases the patients' sense of isolation when placed in an urban acute setting alone; and
- the risk of dying far from ones country is a factor preventing many elderly Indigenous patients from accessing distant health services.

In rural areas that have a large Indigenous population, it was considered important to ensure that services are developed in a co-ordinated manner with other Indigenous services and in a culturally sensitive way. The Working Party noted that this could also be successfully achieved by involving Indigenous staff in geriatric service provision to the Indigenous population.

The Working Party is of the view that geriatric medicine services have considerable potential in improving access of health services to Aboriginal people. Geriatric services are currently offered in ways which differ from mainstream medical services and are more acceptable to Indigenous people as a result. Expansion of inpatient geriatric services has important potential for improving access of mainstream medical services by virtue of the improved cultural sensitivity of rehabilitation services to indigenous people.

Conclusions on Adequacy of the Current Geriatric Medicine Workforce

All indicators suggest there is a shortage of geriatric medicine specialists; although data difficulties make quantification of the shortage difficult.

There is no recommended SPR benchmark. Comparison between States/Territories indicates some maldistribution of the workforce and this is confirmed both when SPR and specialist hours worked to population is considered. It would seem that New South Wales, Victoria and the Northern Territory are comparatively better endowed than the

national average; and that Queensland, Western Australia and South Australia are comparatively less well endowed with specialists in geriatric medicine. In addition, rural areas have a lack of specialists and there appear to be difficulties with Indigenous Australians accessing geriatric medicine services.

In addition, consultation waiting times are comparatively long and the public hospital vacancy rate is considered significant.

The Working Party indicated that there were serious limitations on service provision to both rural areas and the Indigenous population. Issues such as access to geriatric services and provision of services in a culturally sensitive way were sighted as areas that needed improvement.

PROJECTIONS OF REQUIREMENTS

Population

Australia has a growing and an ageing population. The 1995-96 Australian population is estimated at 18.29 million (ABS 1997). The ABS estimates the population will reach 19.169 million by 2001 and 20.095 million by 2006 (ABS 1994). Between 1995-96 and 2006-2007 the population is expected to increase by 1.2% per annum.

ABS estimates that the median age of the total population will rise from 33.1 years in 1993 to between 39.4 and 41.8 years in 2041 (ABS 1994).

Between 1996 and 2006 it is estimated that the population aged 65 years and over will increase by 19%; the male population in this age group will increase by 22.1% and the female population will increase by 16.6%. By the year 2026, it is estimated that the population aged 65 years and over will increase by 100.3%; the male population in this age group will increase by 107.6% and the female population will increase by 94.7%.

The population aged 75 years and over will increase by 37.1% between 1996 and 2006; the male population in this age group will increase by 44.7% and the female population will increase by 31.9%. The ABS projects that the population aged 75 years and over will have increased by approximately 52.3% by the year 2016, compared to an increase of only 19.5% for the population as a whole. By the year 2026, the population aged 75 years and over will have increased by 115.7%, males by 136.6% and females by 102.8%

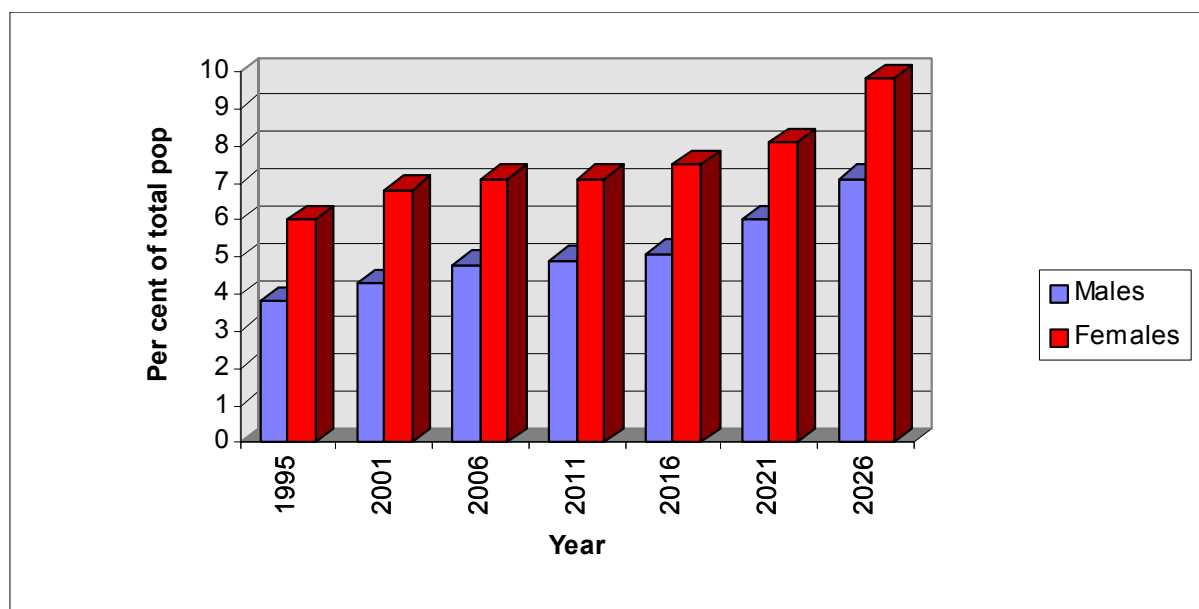
The population aged 85 years and over will increase by 56.5% by the year 2006 (Table 27); the male population in this age group will increase by 68.7% and the female population will increase by 52.9%. The ABS projects that the population aged 85 years and over will have increased by approximately 100.1% by the year 2016, compared to an increase of only 19.5% for the population as a whole. By the year 2026, the population aged 85 years and over will have increased by 136.5%, males by 166.3% and females by 123.5%

Projections are given in Table 27 below and figure 3 which shows projections to 2026 for the population aged 75 years and over.

Table 27: Population estimates and projections at 30 June, 1996 to 2006

Age group	1996	2001	2006	% increase 1996-2006
65 - 69 years	692,250	665,300	769,900	11.2
70 - 74 years	603,164	627,900	608,600	0.9
75 - 79 years	423,406	510,900	537,700	26.9
80 - 84 years	282,461	322,500	391,400	38.6
85 years & over	201,899	258,600	315,900	56.5
Total 65 years & over	2,203,180	2,385,200	2,623,500	19.1
Total 75 years & over	907,766	1,092,000	1,245,000	37.1

Source: ABS, Australian Demographic Statistics, 3101.0, June quarter 1996 and ABS, Projections of the Populations of Australia, States and Territories, 1995 - 2051



Source: AIHW 1996

The steady growth in the aged population, especially the population aged 75 years and over, implies a matching growth in the demand for geriatricians. However, this demographic trend was considered to be only one of the factors that creates a demand for geriatricians. Other factors included the continuing pressure to shorten acute care hospital lengths of stay; and the desire of older people to avoid long term residential care and maintain some kind of independent life at home for as long as possible.

Another factor to consider is the needs of the Indigenous population. The reduced life expectancy of Indigenous people and the higher burden of illness mean that the need for aged care may begin at younger ages for Indigenous people than for their non-Indigenous counterparts. Indeed, the Commonwealth Department of Health and Family Services has explicitly acknowledged this, and planning for the provision of services is made using the number of Indigenous people aged 50 years or older, rather than the usual figures of 65 years and over or 75 years and over. It is difficult however, to obtain data.

Changes in Utilisation

The growth in the older population, combined with the heavy utilisation of medical services by this group, will lead to a large increase in the demand for services by older people as a whole. It is not clear what proportion of this growth in demand will need to be met by a growth in specialists in geriatric medicine, or whether other specialists and general practitioners can provide many of these services. This will largely depend on how specialised the services provided by specialists in geriatrics are, and whether they can be provided as well by other medical practitioners.

The ability to discharge early from hospital may be greater for younger individuals with single illnesses. Older patients are more likely to have more complex illnesses, have pre-existing disability, to live alone and to have fewer social supports. These factors render them more resistant to early discharge strategies. As a result, the older population are occupying a greater proportion of hospital beds than would be predicted by demographic changes alone. Projections prepared for the National Health Strategy suggest that the absolute number of hospital beds required in the future will decline for all age groups except the 75 years and over age group, which will increase in absolute terms (Macklin 1991).

While the population in the older age groups is projected to grow rapidly, hospital separations for those 65 years and over is projected to increase at a slightly faster rate than the population with separations for males increasing by 67.6% and females by 53.2% and bed days increasing by 89.8% for male and 71% for females between 1995-96 and 2015-16. This bed days assumes 1992-93 utilisation per 100,000 population of hospital services by persons aged 65 and over will continue unchanged. Similarly, the projected separations and bed days for those 75 years of age and over will grow only slightly above the growth rates for these population groups.

A number of indicators of geriatric medicine service requirements were examined by the AIHW: hospital separations and bed days for the population aged 65 years or more; ACAT assessments for the population aged 65 years or more; and severe and profound handicap for the those aged 65 years or more. The latter two indicators, projections were undertaken based on the year 1992-93, chosen because the data for all indicators was available for that year. The 1992-93 incidence of the particular characteristic in the

population was determined for each five yearly age group by sex, and this incidence rate was applied to the estimated population of that group in each of the projection years.

A consequence of this methodology is that between 1992-93 and 2015-16, the percentage increase for each five yearly age group by sex will be the same as the projected population increase for that group. However, for each indicator, the percentage increase for total persons in each age group and total 65 years and over will differ from the population increase, due to the differing age and sex profiles of the indicators in the base year of 1992-93. The projections detailed below focus on the ten year period of 1995-96 to 2005-06.

For hospital separations and bed days for the population aged 65 years or more 1995-96 actual data was used. Data for 2000-01 and later years are projections based on the age and sex distribution of separations and bed days in 1995-96 and on the ABS population Series A/B.

The hospital separations for the population aged 65 years and over are projected to increase by 21.7% from 1995-96 to 2005-06 (refer to Table 28). The separations are estimated to increase at a higher rate for males at 24.5% and increase by 18.9% for females (AIHW 1996d).

Table 28: Persons aged 65 years or more; Hospital (a) separations and projections of hospital separations, Australia, 1995-96 to 2015-16 (base year 1995-96)

Age group (years)	1995-96	2000-01	2005-06	2010-11	2015-16	% inc 1996-06	% inc 1996-06
65 - 69	395,890	380,641	440,990	535,171	673,897	70.2	11.4
70 - 74	411,926	430,623	418,322	485,934	591,342	43.6	1.5
75 - 79	323,500	391,812	414,322	405,167	473,633	46.4	28.1
80 - 84	232,637	266,456	324,858	346,031	341,668	46.9	39.6
85 +	172,308	221,481	271,289	335,614	382,311	121.9	57.4
Total	1,536,261	1,691,013	1,869,600	2,107,918	2,462,851	60.3	21.7

a - includes public and private hospitals

Notes: (1) Data for 1995-96 are actual; (2) Data for 2000-01 and later years are projections based on the age and sex distribution of separations and bed days in 1995-96; (3) The projections are based on the ABS population Series A/B

Sources: AIHW, Australian hospital morbidity data, 1995-96; ABS, Australian Demographic Statistics, 3101.0; December Quarter 1996, ABS, Projections of the Populations of Australia, States and Territories, 1995 - 2051, Cat No. 322.0, 1995-2051

The hospital separations for the population aged 65 years and over are projected to increase by 60.3% from 1995-96 to 2015-16 (refer to Table 28). Once again the separations are estimated to increase at a higher rate for males at 67.6% and increase by 53.2% for females (AIHW 1996d).

Similarly, hospital bed days for those aged 65 and over are expected to increase by 27.2% from 1995-96 to 2005-06.

The Department of Health and Family Services provided ACAT assessment data compiled from the six monthly reports provided by each State and Territory. It is estimated that ACAT assessments will increase by 34.9% from 1995-96 to 2005-06 (Table 29).

Table 29: Persons aged 65 years or more; projections of ACAT assessments, Australia, 1995-96 to 2005-06

Age group (years)	1995-96	2000-01	2005-06	% increase 1996-2006
65 - 69	9,678	9,309	10,772	11.3
70 - 74	19,075	19,855	19,237	0.8
75 - 79	29,638	35,421	37,185	25.5
80 - 84	39,066	44,345	53,693	37.4
85 +	46,733	60,308	73,673	57.6
Total	144,191	169,239	194,561	34.9

Source: DHFS, ACAT assessments, 1992-93, unpublished data; ABS, Australian Demographic Statistics, 3101.0; ABS, Projections of the Populations of Australia, States and Territories, 1995 - 2051, 3222.0, Series A/B

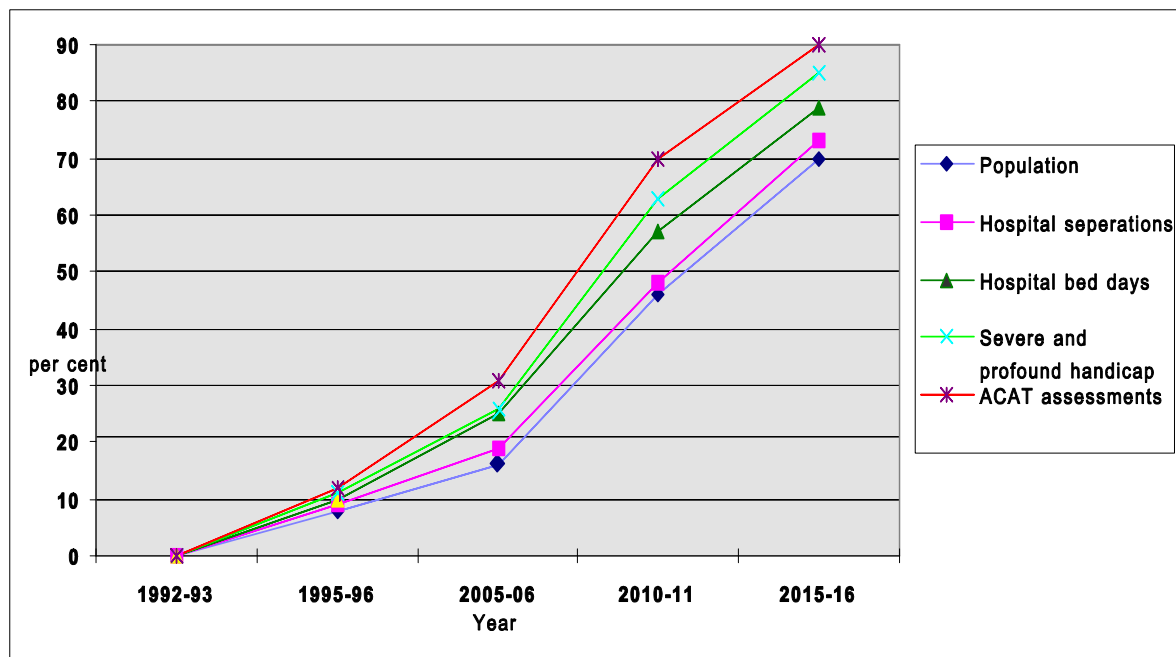
The estimated increases in these indicators from 1995-96 to 2005-06 ranges from 21.7% (approximately 2-3% per annum) for hospitals separations of those aged 65 years or more to 34.9% (approximately 3-4% per annum) in ACAT assessments for those aged 65 years or more.

In summary, projections to the year 2016 indicate that:

- the male population 65 years of age and over is projected to increase by 61% and the female population by 49% between 1996 and 2016;
- the population 75 years of age and over is projected to increase at a faster rate with the male population increasing by 63% and the female population by 45% between 1996 and 2016;

- the population 85 years of age and over is projected to increase by 119% for males and 91% for females between 1996 and 2016;
- while the population in these older age groups is projected to grow rapidly, hospital separations and bed days for those 65 years and over are projected to increase at a slightly faster rate than the population with separations for males increasing by 68% and females by 53% and bed days increasing by 72% for males and 57% for females between 1995-96 and 2015-2016. This assumes 1995-96 utilisation per 100,000 population of hospital services by persons aged 65 and over will continue unchanged;
- similarly, the projected separations and bed days for those 75 years of age and over will grow only slightly above the growth rates for these population groups.

A summary of projections for population, hospital separations, hospital bed days, severe and profound handicap and ACT assessments for the period 1992-93 to 2015-2016 is represented in figure 4.



Source: AIHW, 1996

Changes in Technology and Options for Service Provision

With the advance of new medical technology there will be development of the specialty to provide broader and more sophisticated services. New technology may allow the development of new sub-specialties.

Health technologies provide major potential to improve the quality of life, other health outcomes and the extent to which older people can maintain an independent lifestyle.

However, clearly all technologies have their limitations. Technologies will be able to go only so far in meeting the demands for treatment and support associated with the ageing process. With many technologies, optimum use in the health care of aged persons will require availability and involvement of health and social services and appropriate education of the older patient.

Given the realities of limited health care budgets and population trends, cost considerations in the placement and use of health technologies will, however, remain a major issue. As is the case with the rest of the population, technologies with very high unit costs will have a minor impact on the health of older people, as they will be available only for a few. Expenditure on these technologies should be considered in the context of savings that they may achieve for health care services and the level of benefit they produce for the older person.

One of the challenges for consultant geriatric specialists with the changes in technology will be to use technologies in the care of older people appropriately, in association with other approaches and strategies, and to make wise choices between the different methods that are available. This may imply further education for some who specialise in the application of particular technologies but who have comparatively little knowledge of the physiology of ageing or the ageing population itself.

Such education and training will ultimately lead to an increase in the allied health profession and general medical practitioners that will specialise in the field of geriatric medicine. Some technological activities will bring to the general medical practitioner or other health professional the ability to perform some of the tasks which are currently referred to consultant geriatric specialists. Such developments could provide for more rapid treatment, and increase the productivity of general medical practitioners, nurses and allied health professionals.

PROJECTIONS OF SUPPLY

Additions to the Geriatric Medicine Workforce

Geriatric service provision indicators such as growth trends in ACAT assessments, growth of the population 75 years and over and age specific hospital separations for the population all demonstrate an increase in the demand for geriatric services. For the geriatric workforce supply to match the continued growth rate indicators, the current intake of 16 first year trainee placements will need to increase.

Losses From the Geriatric Medicine Workforce

It is estimated that within the next five years at least 50% (15 of the 29) of the geriatric medicine specialists aged 60 years and over will retire from the workforce, approximately three people per year.

In the next ten years an estimated 65-70% (45 of the 65) of the geriatric medicine specialists aged 50 years and over will retire from the workforce, approximately four to five people per year. There is also approximately one to two losses every year of geriatric medicine specialists migrating overseas; however, this is balanced with approximately one geriatric medicine specialist entering Australia.

Female Participation in the Workforce

It is expected that the proportion of women in the workforce will increase; as is demonstrated by the increase in the number of female trainees; women represent 24.5% of the current workforce but 55.3% of Australian trainees.

Increasing numbers of women specialising in geriatric medicine has implications for the available workforce in the future. Geriatric medicine appears to be one specialty that is attractive to women and the impact of increasing female participation will need to be monitored. Females average shorter hours worked and have a lower labour force participation than males, and newly qualified females tend to be replacing aged males who are retiring from the workforce. The fewer hours worked by female specialists is a result of the fact that a considerably larger number of females work part time which for the purpose of this document is defined as less than 40 hours per week.

The expected lifetime hours worked by a female specialists has been estimated at 74.9% of that of male specialists (AMWAC/AIHW 1996.7). An increase in training numbers is needed to compensate for this lower lifetime hours worked contribution.

In conducting the projection analysis, the expected supply has been adjusted to account for increasing female participation and for lower workforce contribution, based on the AIHW estimates of lifetime participation.

BALANCING SUPPLY AGAINST REQUIREMENTS

Requirement Trends

Over the next ten years, the Australian population is expected to increase at an annual rate of 1.2% per annum. Ageing effects are estimated to be at least 0.4% above population growth. The population aged 75 years and over will increase by 36.7% between 1997 and 2006 and those aged 85 years and over will increase by 56.8% during the same period.

The Working Party used three indicators as the basis for estimating future geriatric requirements. These included: age specific hospital separations for the population aged over 65 years, growth trends in ACAT assessments and growth of the population 75 years and over. Table 30 shows the growth in geriatric requirements using these three indicators.

The Working Party felt that the observed trends in services growth are likely to continue. As a result, it is estimated that geriatric service requirements will continue to grow at approximately 2.6% per annum; which is in fact similar to the projected growth in ACAT assessments.

The indicators are examined over the ten year period 1997 to 2007. It is recognised that this is a long time frame for assumptions to be remain valid, but the time frame was chosen because five years was considered too short for any impact on training numbers to move through, given that most specialist advanced training programs are of three or four years duration.

Table 30: Projected requirements (in hours) for geriatric medicine services assuming current 50 hours worked per week, 1997, 2000, 2005 and 2007

Year	Age specific hospital separations (>65 years)	ACAT growth in assessment services	Population growth of 75 years and over
1997	9,253	9,315	9,359
2000	9,819	10,085	10,276
2005	10,840	11,513	12,008
2007	11,278	12,139	12,781

Source: AMWAC

Supply Trends

The supply of geriatric medicine specialists was projected by ageing the 1996 supply through each year of age, subtracting expected retirements and adding expected new graduates.

The productivity of geriatric medicine specialists as measured in hours worked will vary from time to time and by age group, as not all geriatric medicine specialists work a uniform full time working week, so it is appropriate to measure services provided in hours instead of by head count.

The number of geriatric medicine specialists was converted to hours per week by applying the average number of hours worked of 50 hours per week. The projections show that in 1996 the 180 geriatric medicine specialists provided an estimated 8,686 hours of service per week. It is estimated that supply will increase from this level to 11,727 hours per week in 2007. The assumption is that the average hours worked per week by each of the age cohorts will remain the same over the projection period.

In conducting the projection analysis, the expected supply has also been adjusted to account for increasing female participation and for their expected lower lifetime workforce contribution.

The supply projections of the current workforce and graduate output, fall well below the estimated geriatric service requirements levels growth of 2.6% per annum, representing an estimated 8.4% shortage in 1997 and an estimated 17.2% shortage in the year 2000.

Table 31: Projected supply (in hours) of geriatric medicine services based on low retirement rates and a working week of 50 hours for 1997- 2000 compared to the projected requirements (in hours)

Year	Projected supply (of hours) based on 50 hours/week	Projected requirements (in hours) based on 50 hours/week and 3% per annum compound growth
1997	8,597	9,315
1998	8,547	9,565
1999	8,521	9,822
2000	8,607	10,085

Source: AMWAC

The current figures indicate there will be an undersupply of geriatric medicine specialists in the immediate future. Prompt action must be taken to attract trainees to the specialty in 1998 and beyond so that during the period beyond 2001 service requirements are being sufficiently met and/or any shortfall is minimised.

Projected Balance

A balance in supply to match a continued growth rate in the requirement indicators of 2.6% per annum can be achieved by increasing the proposed number of graduates of the geriatric medicine training program.

Current trainee numbers indicate that shortages are expected to remain until 2001, but for requirements and supply to move back towards balance thereafter. The Working Party recommends that the following numbers of first year advanced trainee placements be achieved: 25 per year in 1999 and 2000, 22 per year in 2001 and 2002, and 15 per year in 2003 and 2004.

As the ASGM is currently admitting first year 1998 trainees into the training program, the Working Party has recommended that projections should be based on the intake of first year trainees beginning with the year 1999. Therefore, in projecting for supply the 1998 first year trainee intake has been based on the 1997 intake of 16. A further assumption is that all trainees will graduate at the end of the three year training program.

The increase in trainee numbers is represented in Table 32. The table shows the geriatric medicine trainee output needed, to move projected supply into balance with projected requirements. The projected requirement used is based on 2.6% compound growth per year, which is the average compound growth rate of all three requirements: age specific hospital separations (>65); ACAT assessments; and, population greater than 75 years of age.

The Working Party recognises that the recommended increases in first year advanced trainee placements are dramatic, however, they are considered achievable. Even so, it is projected that there could still be a shortfall of an estimated 3.5% in 2007. This does, however, compare to an estimated shortfall of 11.7% if nothing is done and the current number (16) of graduates is simply maintained (Table 32).

Table 32: Geriatric medicine graduate trainee output needed to move projected supply into balance with projected requirements (2.6% growth per year); by 50 hours worked per week, 1996 to 2007 compared to no change in trainee intake.

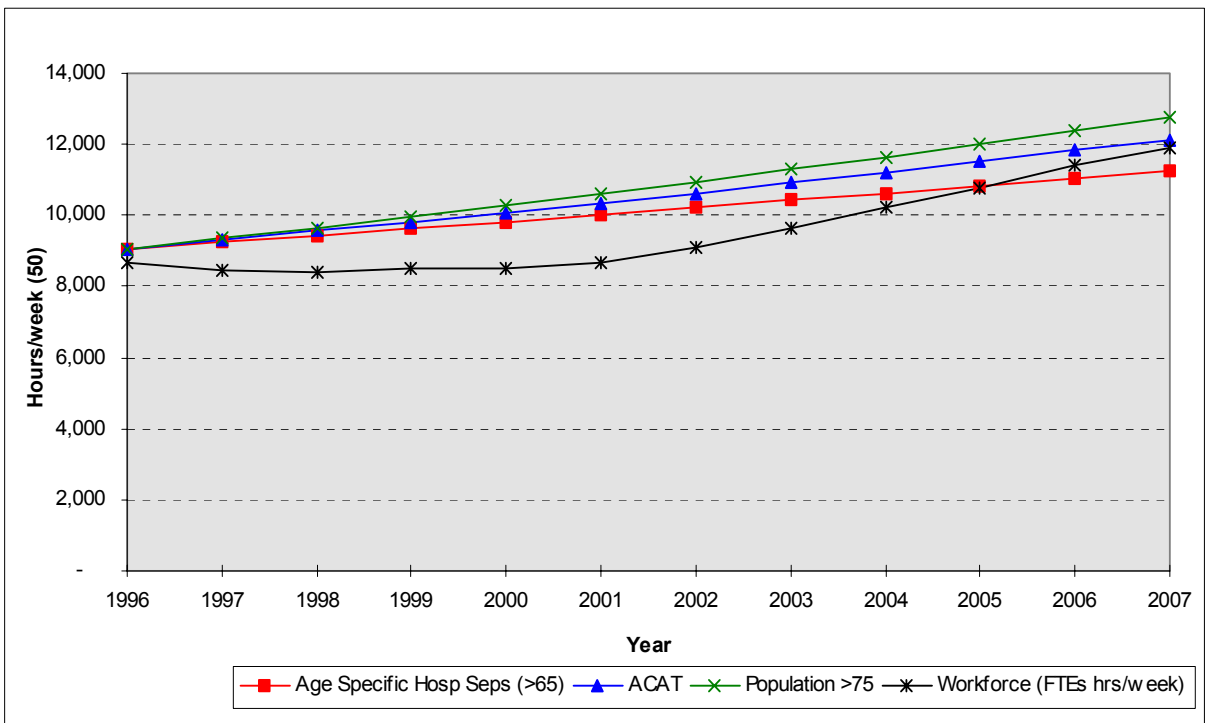
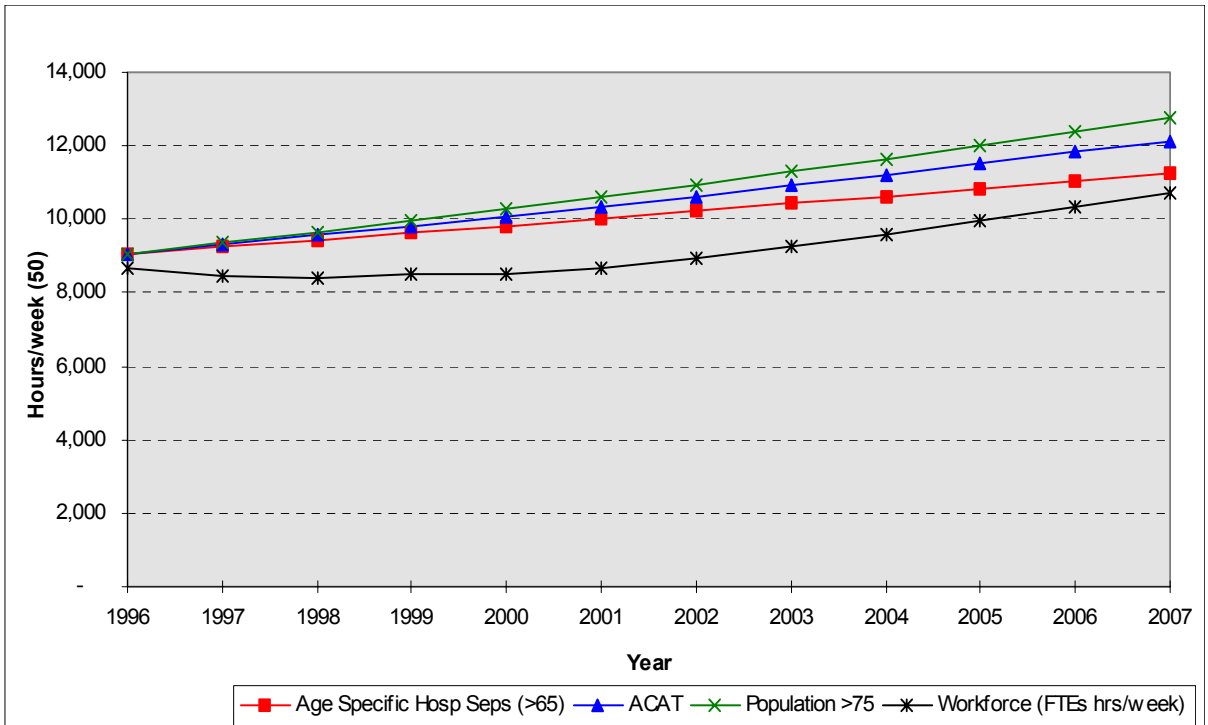
Hours/Week (50) with an increase in the number of graduating trainees												
	1996	1997	1998	1999	2000	2001	2002**	2003	2004	2005	2006	2007
Graduating Trainees*	11	10	8	12	16	16	25	25	22	22	15	15
Projected supply	8,686	8,597	8,547	8,521	8,607	8,817	9,084	9,559	10,111	10,666	11,250	11,727
Projected requirements	9,072	9,315	9,565	9,822	10,085	10,356	10,634	10,919	11,212	11,513	11,822	12,139
Balance (shortage)	386	718	1,018	1,301	1,478	1,539	1,550	1,360	1,101	847	572	412
% shortage	4.4	8.4	11.9	15.3	17.2	17.5	17.1	14.2	10.9	7.9	5.1	3.5
Hours/Week (50) with no change in graduating trainees (intake 16 per year)												
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Graduating Trainees*	11	10	8	12	16	16	16	16	16	16	16	16
Projected supply	8,686	8,597	8,547	8,521	8,607	8,817	9,084	9,393	9,734	10,097	10,475	10,865
Projected requirements	9,072	9,315	9,565	9,822	10,085	10,356	10,634	10,919	11,212	11,513	11,822	12,139
Balance (shortage)	386	718	1,018	1,301	1,478	1,539	1,550	1,526	1,478	1,416	1,346	1,274
% shortage	4.4	8.4	11.9	15.3	17.2	17.5	17.1	16.2	15.2	14.0	12.9	11.7

Source: AMWAC

*Training period is three years

** Increase in trainee intake in the year 1999 and graduating in 2002

Table 32 is shown graphically in figures 5 and 6 below. The graphs include all three demand indicators: age specific hospital separations (>65), ACAT assessments and population greater than 75 years of age, plotted against the workforce supply using graduating trainee figures (Table 32) to the year 2007.



Trainee numbers should be increased proportionately less in the comparatively well endowed States of New South Wales and Victoria and kept roughly in line with projected State/Territory 2006 population shares. In particular, emphasis needs to be given to increasing trainees in Queensland, Western Australia and South Australia as a priority. The Working Party therefore, recommends that the training placements up to the year 2002 should be distributed as shown in Table 33 below. The geriatric needs for rural and remote areas and the Indigenous population need to be considered when examining these placements.

The requirements and supply projections will also need to be monitored regularly so that they can be amended if new trends emerge. The Working Party also recommends that a review of the specialist geriatric medicine workforce be undertaken before the level of trainee intake for 2003 is decided.

Table 33: Recommended State/Territory distribution of first year advanced geriatric medicine trainee placements to 2002

State/Territory	1998	1999	2000	2001	2002	Total	%
NSW/ACT	4	5	5	4	4	22	20.0
Victoria	3	4	4	3	3	17	15.5
Queensland	2	4	4	4	4	18	16.4
South Aust.	3	4	4	4	4	19	17.3
West. Aust.	2	4	4	4	4	18	16.4
Tasmania	2	1	3	3	2	11	10.0
North. Terr.	1	1	1	1	1	5	4.5
Australia	16	25	25	22	22	110	100.0

Source: AMWAC

The Working Party believes the shortage of geriatric medicine specialists is unlikely to improve in the short term, particularly given the shortage of trainees interested in training in geriatric medicine. Accordingly, this issue needs to be addressed by government and ASGM as a priority. Methods of encouraging trainee participation may include part time training; the availability of scholarships with attachment to training in one of the more populous States/Territories; and the workforce required to provide the training. The success of increasing trainee numbers will clearly depend upon close co-operation between State/Territory health departments and the ASGM.

Conclusions

There is a shortage of geriatric medicine specialists and a maldistribution of the workforce (both between States/Territories and better urban and rural areas). There also seems to be some difficulty in attracting potential trainees to a career in geriatric medicine. Both State/Territory health departments and the ASGM need to address these issues and to work closely together in developing appropriate solutions to these problems. In addition, better data on geriatric medicine service provision and utilisation would assist future workforce assessments. The Working Party recognises that the need for better data is largely in hand.

In the long term, the best option for reducing the shortage of geriatric medicine specialists is an expansion in trainee numbers. It is recognised that this will take some time and that health departments may need to consider appropriate short term responses. Short term responses could include geriatric medicine specialists being encouraged to work longer hours, attracting appropriately qualified and skilled overseas trained specialists into the workforce (either permanently or on a short term basis), or encouraging substitution of the service by non specialist practitioners (especially general practitioners in rural and remote areas).

The ASGM needs to consider its role in supporting the development of services in areas of underdevelopment in cooperation with State/Territory health departments, by producing innovative models to address both service and training needs. As a priority, the ASGM needs to increase the awareness of the specialty and its career opportunities amongst medical students and junior doctors.

Strategies to do this could include:

- early exposure of medical students and junior hospital medical staff to the speciality at appropriate stages of their development;
- including an early teaching component focusing specifically on the management of the elderly for undergraduate medical students;
- the development of scholarships with attachment to training in one of the more populous States/Territories;
- the provision of clinical and research fellowships to be made available in existing and/or additional academic units;
- rotation of junior medical staff to extended care centres; and
- rotation of medical registrars to positions not filled by geriatric medicine registrars;

Options to improve service provision to, and specialist numbers in, rural areas could include:

- inclusion of country centre locations in training rotations; this would have to be done in a way as to ensure that the trainees remained dedicated to geriatric work, and were not diverted into general acute care;
- the establishment of funded outreach geriatric teams, consisting of a consultant

in geriatric medicine and trainee consultant. The composition may need to vary between States/Territories. Such a funded team would help in attracting specialists in geriatric medicine and trainees to the rural setting. Trainees would be provided support and training and the issue of professional isolation that currently exists in rural areas would be reduced. For geriatricians, it would allow an opportunity to enhance their skills in health related disadvantages suffered by rural and remote communities and communicate a knowledge base of skills to younger colleagues; and

- where possible and practical, it may be necessary to augment the supply of specialists in geriatric medicine through the use of the services of non-specialist practitioners who have a commitment and demonstrated capacity to work in geriatric care. In particular, while there continues to be a shortage of people with specialist qualifications in geriatric medicine, it will be necessary to use the services of non-specialist practitioners, especially in rural and remote areas.

Options to improve service provision generally include:

- further development of bed-based geriatric departments/geriatric care services in major general and teaching hospitals;
- increasing the component of the work in major general and teaching hospitals;
- geriatric service programs coordinated at a regional level to ensure that the health needs of the elderly are adequately and efficiently met;
- hospital geriatric services should be regarded as key components of regional service networks that deliver health care to the elderly; and
- whilst it may be appropriate for smaller hospitals to provide intermediate or limited services, all hospitals treating elderly patients should have a multi-disciplinary team approach to their management, maintain strong links with regional ACATs, have access to inpatient geriatric services and offer suitable programs and environments for inpatient assessment and rehabilitation.

RECOMMENDATIONS

The Working Party recommends:

1. That there be an increase in the number of funded geriatric medicine specialist trainees to match an expected future growth in geriatric specialist requirements of approximately 2.6% per year.
2. That State and Territory health departments undertake negotiations with the ASGM to achieve the following intake numbers of first year advanced trainee placements: beginning with 25 in the year 1999, 25 in 2000, 22 each year in the period 2001 and 2002. This assumes that all first year intake trainees will graduate at the end of the three year advanced training program.

Training placements should be increased proportionately less in the comparatively well endowed States of New South Wales and Victoria and kept roughly in line with projected State/Territory population. In particular, emphasis needs to be given to increasing placements in Queensland, Western Australia and South Australia as a priority. The Working Party recommends that the training placements up to the year 2002 should be distributed as shown below.

Recommended State/Territory distribution of first year advanced geriatric medicine trainee placements, 1998 to 2002

State/Territory	1998	1999	2000	2001	2002
NSW/ACT	4	5	5	4	4
Victoria	3	4	4	3	3
Queensland	2	4	4	4	4
South Aust.	3	4	4	4	4
West. Aust.	2	4	4	4	4
Tasmania	2	1	3	3	2
North. Terr.	1	1	1	1	1
Australia	16	25	25	22	22

Source: AMWAC

The geriatric specialist needs for rural and remote areas and the Indigenous population should also be taken into consideration with trainee position placements.

3. State/Territory based geriatric medicine services working groups, comprising ASGM and State/Territory department of health representatives, be organised to oversee the funding and establishment of the new training placements; a co-ordinated planning approach to the expansion in the workforce that includes the development of the necessary support services (eg. allied health and nursing); and the introduction of any short term measures they may feel are necessary to meet localised service shortfalls (recognising that the increased number of graduates will not make an effective contribution to the geriatric medicine workforce until 2002).
4. The ASGM and State/Territory department of health representatives seek support from State/Territory postgraduate medical councils to ensure early training in, and exposure to, geriatric medicine for all medical students.
5. That the ASGM clearly identifies strategies to attract trainees to the specialty emphasising the demand for geriatric medicine specialists.
6. That geriatric medicine requirements and supply projections be monitored regularly so that they can be amended if new trends emerge, and that the specialist geriatric medicine workforce be reviewed before the level of trainee intake for 2003 is decided.
7. That this monitoring be coordinated by the ASGM and AMWAC and the results incorporated into the AMWAC annual report to AHMAC. AMWAC will provide all necessary support.

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