Health Workforce Advisory Committee

Fit for purpose and for practice:
a review of the medical workforce in New Zealand Consultation document
# CONTENTS

## ABOUT THIS DOCUMENT
- Health workforce review objectives
- Key audiences for the consultation document and submissions
- Submission closing date and details

## ACKNOWLEDGEMENT
- Medical Reference Group (MRG)
- MRG members

## EXECUTIVE SUMMARY
- Health workforce development
- Immediate priorities for action

## INTRODUCTION AND BACKGROUND
- Consultation document scope and objective
- Background to the HWAC and the MRG
- How this consultation document was prepared
- Key findings
- The Scottish experience
- An outline of ‘Fit for purpose and for practice – A review of the medical workforce in New Zealand’

## CHAPTER 1: KEY ISSUES AFFECTING HEALTH WORKFORCE DEVELOPMENT
- About this chapter
- Workforce development defined
- Workforce development context
- Implications for the health workforce

## CHAPTER 2: THE MEDICAL WORKFORCE IN NEW ZEALAND – A STOCKTAKE
- About this chapter
- Data and its limitations
- Characteristics of the registered medical workforce
- New Zealand medical students – The future workforce

## CHAPTER 3: THE HEALTH PROFESSIONS IN A CHANGING LANDSCAPE
- About this chapter
- Professionalism in a changing society
- The ‘new professionalism’
- Roles and competencies
- Behaviour in complex human systems
- Leadership and governance
- The health of doctors
APPENDICES
Appendix 1: Health/Medical Workforce Planning and Development and the Health Education Interface: An historical perspective 102
Appendix 2: Figures and Tables 109
Appendix 3: HWAC: Future directions – A model for workforce development 124
Appendix 4: New Zealand Institute for Economic Research (NZIER) Report – Ageing New Zealand and health and disability services 125
Appendix 5: Māori in Medicine 127
Appendix 6: Pacific Peoples in Health Service Delivery 132
Appendix 7: Financial Support of the Medical Student 139
Appendix 8: CanMEDS 2000 Roles and Competencies 145
Appendix 9: HWAC Terms of Reference 147
Appendix 10: Medical Reference Group (MRG) Terms of Reference 151
Appendix 11: Doctors in Training Workforce Roundtable (DTWR) – terms of reference 153
Appendix 12: Tertiary Education Commission/Ministry of Health Qualifications Supply Analysis – The New Zealand health sector 156

FIGURES
Figure 3.1: The CanMEDS roles framework 38
Figure A2.1: Active medical workforce, 1980–2003 109
Figure A2.2: Trends in the ratio of active medical practitioners to population, 1980–2003 110
Figure A2.3: Employment capacities of active medical practitioners, 2003 111
Figure A2.4: Ethnicity of active medical practitioners, 2003 112
Figure A2.5: Females as a percentage of all New Zealand medical graduates, 1975–2002 113
Figure A2.6: Increase in proportion of female active medical practitioners, 1980–2003 113
Figure A2.7: Age structure of active medical workforce 115
Figure A2.8: Age structure of GPs, 1994–2003 116
Figure A2.9: Hours worked per week by workforce role, 2003 116
Figure A2.10: Workforce roles by OTD/New Zealand medical graduate, 2003 118
Figure A2.11: GP to population ratios: New Zealand and comparable countries, 1996–2002 120
Figure A2.12: Citizenship status of MBChB students, 1996–2002 121
Figure A2.13: Ethnicity of final-year MBChB students, 1994–2002 121
Figure A2.14: Domestic and international MBChB graduates, 1956–2003 122
Figure A2.15: Practitioners active in 2003 123
Figure A5.1: Average admissions per year to the University of Auckland’s Māori and Pacific Admission Scheme (MAPAS), 1972–2004 127
TABLES

Table 1.1: New Zealand population by ethnicity = ethnic group as a percentage of total population 15
Table 1.2: Percentage of New Zealand population over 65 years of age 15
Table 2.1: Percentage of different groups reporting more than 50 hours worked per week in 2003 26
Table 2.2: Percentage of different groups reporting part-time employment in 2003 (part-time is less than 40 hours per week) 26
Table 2.3: Numbers of house officers, MOSS and registrars, 1999–2003 28
Table 2.4: Specialists per 100,000 population, selected years 29
Table 2.5: International comparisons of GP provision per 100,000 of population; selected years 30
Table 2.6: Ratio of first-year enrolments/graduates per 100,000 population 31
Table 2.7: Historical limits on admission to medical schools 31
Table 2.8: Ethnicity of medical students 32
Table 3.1: Differences between old and new professionalism 37
Table 7.1: Summary of main differences between hierarchies and networks 78
Table A2.1: New Zealand statistics – population projections, 2001 to 2021 109
Table A2.2: Active medical practitioners by year, 1980–2002 110
Table A2.3: Doctor to population ratios as reported by New Zealand and comparable countries 111
Table A2.4: Changes in employment capacities, 1998–2003 112
Table A2.5: Gender balance of the active medical workforce, 1985–2003 114
Table A2.6: Female vocational trainees, 2002 114
Table A2.7: Workforce role by gender, 2003 115
Table A2.8: Overseas trained doctors (OTDs) as a percent of total active medical workforce, 1980–2003 117
Table A2.9: Specialist to population ratios 117
Table A2.10: Distribution of specialist by vocational role, 2002 119
Table A4.1: Projected numbers of workers in 2011 and 2021 under Scenarios 1, 2 and 3 125
Table A12.1: Total Crown funding for health and medical training, 2002 157
Table A12.2: Total funding for undergraduate medical education, 2002 157
Table A12.3: Undergraduate and postgraduate medical training costs, 2002 158
Table A12.4: Total Crown funding for other health professions, 2002 158
Table A12.5: Division of funding for other health professions, 2002 159
Table A12.6: Undergraduate and postgraduate training costs – other health professions 159
Health workforce review objectives

This consultation document is a review of New Zealand’s medical workforce by the Medical Reference Group (MRG).

The MRG was set up in September 2003 to provide independent advice to the Health Workforce Advisory Committee (HWAC). HWAC advises the Minister of Health on health workforce issues.

The consultation document sets out issues facing workforce development, and is designed to:

- present existing information and identify gaps in research
- identify key international and New Zealand medical workforce issues
- encourage a greater understanding of the key issues
- promote discussion
- develop commitment to an agreed national health workforce planning strategy

Background to the consultation document and an overview of its contents are found in the Introduction and Background section to follow.

Submissions received on the consultation document will be used to develop recommendations. The consultation document and recommendations will be sent to the Minister of Health.

Key audiences for the consultation document and submissions

Submissions are sought from:

- medical practitioners
- teachers and educators
- professional colleges and associations
- District Health Boards (DHBs) and District Health Boards of New Zealand (DHBNZ)
- health professional registration bodies
- primary health organisations (PHOs)
- private and non-government organisations
- health professionals
- Māori and Pacific people
- disability groups and representatives
- workforce champions
- other interested parties.
Submission closing date and details

Submissions must reach HWAC by **29 July 2005**. They can be posted to:

- Delphina Gray
- C/- Medical Reference Group
- Health Workforce Advisory Committee
- PO Box 5013
- Wellington

Or emailed to: hwac@moh.govt.nz
ACKNOWLEDGEMENT

The Group thanks all those who have already contributed to this work. Particular thanks go to Professor Andrew Hornblow, the previous chair of HWAC, for his advice, support and contributions.

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Dr George Salmond
Chair: MRG
Member: HWAC

Hon Stan Rodger
Chair: HWAC

MRG members

Professor John Campbell, Dr Dwayne Crombie, Dr David Galler, Mrs Anne Kolbe, Ms Jane Lawless (HWAC), Dr Peter Leslie, Dr Don Simmers, Ms Cindy Towns, Dr Ralph Wiles (HWAC).
EXECUTIVE SUMMARY

This executive summary highlights the key issues in each chapter of the consultation document. It concludes with a list of eight priorities for immediate action.

Health workforce development

Health workforce development is a broader concept than just workforce planning. Workforce development is a dynamic approach to producing doctors and other health professionals who are fit for purpose, in the right numbers and in the right place at the right times.

It treats the workforce as a whole, rather than dividing it into separate employer or professional groups, and is based on the principles of partnership.

Workforce development aims to respond to changing service demands in creative and innovative ways. It links workforce needs to service redesign and new working styles to provide flexible strategies suited to an ever-changing environment.

Chapter 1: Key issues affecting health workforce development

- Medical workforce development must be placed in the wider context of health service and health workforce development.
- Changing social expectations and cultures will affect health service demand – these are difficult to include in workforce modelling.
- External factors such as changing demographics and disease trends must be taken into account.
- Recent studies indicate that, even with conservative analysis, future demands for medical service will exceed supply.
- Expectations will increase for greater equity in allocation of health resources.
- Health services will become more community-focused, context-specific, flexible and responsive to patient and community needs.
- The health sector must become more efficient in order to meet the growing demand for services. Increasing numbers alone will not meet demand.
Chapter 2: The medical workforce in New Zealand – A stocktake

- Data on the size and shape of the New Zealand medical workforce is generally reliable. There are some limitations, however, including a lack of information on temporary registrants (TRs), a failure to separate ‘hours on call’ and ‘hours worked’ and a lack of distinction between full- and part-time work within roles.

- Māori and Pacific medical practitioners and students are significantly under-represented compared with the current and projected size of their respective populations.

- Women now comprise over 50 percent of medical students. There will be significant implications for work organisation, training and workforce development if women medical practitioners demand greater work/life balance.

- The medical workforce has aged progressively over the last decade. This trend is most striking for general practitioners (GPs).

- Hours of work increased across all roles during the late 1990s. This has major implications for balancing teaching, training and workloads.

- Overseas trained doctors (OTDs) account for around 40 percent of New Zealand doctors. There are concerns for OTDs who have difficulties with the English language and those who work in rural or other practice settings where support is limited.

- There are major concerns about the general practice workforce situation and the significant decline in the GP to population ratio in recent years.

Chapter 3: The health professions in a changing landscape

- Public confidence in the medical profession has been undermined in New Zealand and overseas by a perception that the profession has put its self-interest ahead of that of patients and the public.

- There is now increasing support for a ‘new professionalism’. Features are reflective practice, interdependent decision processes, teamwork, collective learning, responsibility, accountability and engagement.

- The ‘new professionalism’ will require a wider range of competencies as well as specialist technical skills.

- The health sector must build and strengthen existing links within and between health professionals to benefit the patient.

- The health sector is again looking to doctors for leadership as well as technical skills.

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1 This figure includes temporary registrants (TRs) and assumes that TRs are overseas graduates.
Chapter 4: Medical work in a changing workplace environment

- Traditional models of care and patterns of medical work must change through effective service and workforce redesign.
- Workforce redesign has the potential to significantly improve medical productivity and the effectiveness and efficiency of service delivery.
- Health service development and workforce development must be planned and managed together.
- Workforce development requires a systemic, sector-wide approach and good information support.
- Greater investment is required to support research and evaluation into innovative ways of delivering health services and organisational learning.
- Technology transfer can occur once procedures have become standardised, safe and routine.

Chapter 5: Training and development of the medical practitioner

- Medical roles and practices are evolving and becoming more diverse and specialised.
- Changing expectations, patterns of work and terms and conditions of employment have put existing arrangements for doctors in training under strain.
- The MRG supports the establishment and the terms of references of the Doctors in Training Workforce Roundtable (DTWR).
- Challenges that have inhibited the development of interprofessional learning and practice need to be faced.
- Major changes are needed to the way in which medical education is organised and delivered in New Zealand.

Chapter 6: Recruiting and retaining doctors in a global market

- New Zealand competes for doctors in a highly competitive international medical labour market.
- Recruitment and retention issues arise at each stage in the medical life cycle, both clinically and academically.
- New Zealand should develop and promote a positive labour market identity.
- Student debt is a major recruitment and retention issue against the background of the global marketplace.
- Career guidance and mentoring should be available throughout undergraduate training and early in postgraduate years.
- Primary health organisation development is challenging traditional thinking about the organisation of medical work and training, recruitment and retention in primary practice.
Chapter 7: Working together – A systemic, sector-wide approach to health workforce development

- Effective health workforce development requires all stakeholders to have a clear understanding of the roles and functions of sector hierarchies and networks.
- Health workforce development and health system improvement are interdependent.
- Health workforce development requires skilled and capable leadership at all levels, from the clinical frontline and from all stakeholders.
- The Scottish National Health Service has, over the last five years, developed a framework for workforce development and planning. This framework has lessons for New Zealand.

Immediate priorities for action

The primary health care/general practice workforce

The national primary health care strategy provides many opportunities to build an even more robust and effective primary health care service. High priority should be given to strengthening and increasing the primary health care workforce, particularly in general practice. Training and ongoing education are both important. A broader training scope would respond to the need for increasing role diversity and skill acquisition, interdisciplinary care and integration, and the needs of rural practice.

Medical education

Medical education has been slow to respond to the changing needs and expectations of New Zealand society, to changing medical and other technologies, and to changing requirements of medical professionalism. Major changes and innovations in the structure and process of both undergraduate and postgraduate medical education are required.

Service and training arrangements

The health care sector, especially hospitals, is under considerable pressure in trying to balance service commitments and training requirements. The organisation of medical work, medical staffing, recruitment, deployment, training and continuing education in hospitals and other settings needs to change to better reflect the needs of patients, doctors and the health system in general. In particular, more innovative approaches are needed for medical continuity and cover after hours, improved Senior Medical Officer–Resident Medical Officer relationships, alternative options to enhance training and adult learning, and strategies to improve interdisciplinary care.
**Vocational guidance and support**

Undergraduate and early vocational trainees require well-structured, ongoing vocational guidance and mentoring. They also need better informed and organised support for vocational choice and for early career decision-making.

**Recruitment and retention**

Recruitment and retention of the medical workforce is a significant issue both nationally and internationally. The New Zealand health system requires clear strategies, policies and well-designed and publicised incentive schemes. These are required for the recruitment and retention of doctors, regardless of whether they are trained locally or overseas. In particular, issues such as work/life balance, commitment to family and changing professional aspirations will drive demand for more flexible employment and training options.

**Information, innovation and research**

Better gathering, analysis and reporting of workforce information is needed at national, regional and local levels. This requires better planning and co-ordination. Resources should be specifically provided to initiate and promote strategically directed innovation and research in support of workforce development.

**A systemic, sector-wide approach**

Health systems and health workforce improvement require a clear agenda for change. Clarity is needed about roles, responsibilities and accountabilities, particularly those of the statutory agencies. Structures, processes and networking arrangements should enable informed and sustained dialogue on the key issues, concerted decision-making and co-ordinated workforce development action.

**Leadership**

Leadership is required at all levels across the health system to drive workforce development. Organisations with statutory roles and responsibilities must work together to create and sustain effective health workforce development networks. They should also identify and support innovators, workforce champions and change managers.

**Sense of urgency**

History shows that New Zealand has been slow to respond to the workforce demands of a rapidly changing health system. New Zealand's health, primary health care, and other health strategies are at the cutting edge internationally. There is much to be proud of in our health system.
Unfortunately, as this consultation document shows, health workforce development in New Zealand has not kept pace with development overseas, in the United Kingdom particularly in Scotland.

Evidence available to the MRG suggests that at least the leaders of the medical profession in New Zealand are aware of the need for change. The problems are all too obvious. Also, there appears to be a general willingness to change. What seems to be lacking is the ability to confront and to manage major change.

The MRG has identified priorities for immediate action – a wide-ranging agenda for change. A piecemeal approach to this agenda will not produce a medical workforce that is fit for purpose and for practice in the years ahead. What is required is a systemic, sector-wide approach whereby health system improvement and health workforce development march in lockstep. Tinkering, ad hoc approaches will not suffice. It is time for concerted action.
INTRODUCTION AND BACKGROUND

Consultation document scope and objective

This document was prepared by the Medical Reference Group (MRG) for the Health Workforce Advisory Committee (HWAC).

It discusses health and medical workforce development and planning issues. It looks at the current workforce and considers the likely impacts of a wide range of issues on the workforce of the future. These issues include demographic change, medical workforce characteristics, new concepts about professionalism and the global medical workforce, and issues in training, development, recruitment and retention.

While the MRG has focused primarily on the medical workforce, we recognise that other groups face similar issues.

The consultation document concludes with a call for strong leadership to develop and promote a systemic, sector-wide approach to workforce planning and development.

Submissions are sought on the document from a wide range of interested organisations. The report and recommendations based on the submissions will be sent to the Minister of Health.

Background to the HWAC and the MRG

HWAC was established in 2001 to provide strategic advice to the Minister of Health on the health and disability workforce. In 2003, HWAC set up the MRG to formulate specific policy advice on medical practitioner supply and demand, and on the education and deployment of doctors.

How this consultation document was prepared

The MRG began by reviewing the history of New Zealand health and medical workforce planning and development over the last 40 years. An historical summary is provided in Appendix 1. Further detail can be found in the ‘Future Directions’ documents (HWAC 2002, 2003).

Data was then gathered about the medical workforce. Summary data is presented in Appendix 2.

Key issues and the most urgent problems were then identified. These are presented in the body of this document and are summarised at the end of each chapter.

Supporting information is provided in the appendices.
Key findings

The medical workforce in New Zealand faces a large number of issues and challenges. Some issues are shared by all western countries, even though each country has specific issues and problems. Some countries are further ahead in designing and implementing effective strategies.

Shared issues include:
- ageing populations
- workforce shortages
- scarce resources
- changing service and employment arrangements
- changing work/life balance expectations amongst the health workforce, particularly with more women in the workforce.

The Scottish experience

Workforce development work in Scotland over the past five years is of particular relevance to New Zealand. Similarities between the two countries include:
- population size
- geography
- social and economic background
- proximity to a larger and more affluent country.

The two health systems share a common British tradition and organise and deliver services in much the same way. However, the Scottish Executive Health Department (NHS Scotland) has invested a proportionately far greater amount of research, planning and resources in the issues than has occurred in New Zealand. It commissioned a number of substantial reviews and reports on key workforce topics.

The MRG believes the Scottish experience is directly relevant to the New Zealand situation. We have drawn heavily on their material and recognise and acknowledge this contribution to our deliberations.
An outline of ‘Fit for purpose and for practice – A review of the medical workforce in New Zealand’

This consultation document is divided into seven chapters:

- **Chapter 1** defines workforce development and places this development in a wider social context. It also outlines the main influences identified and assumptions we have made in key areas. These influences will affect health workforce development over the next 20 or more years.

- **Chapter 2** provides an overview of the current New Zealand medical workforce. Data about all levels of the medical workforce, from student to specialist, is outlined. Supporting information is provided in Appendix 2.

- **Chapter 3** looks at the evolving nature of professionalism in society. It considers how public expectations of doctors are changing and looks at the new skills and competencies now required by the medical profession.

- **Chapter 4** considers the many ways in which change is occurring in the health workforce and in the organisation of medical work. It outlines the need for service and workforce redesign and recommends a systemic, sector-wide approach for this redesign.

- **Chapter 5** focuses on the training and development of medical practitioners. It considers the impact of increasing role diversity and the issues involved in balancing medical training and service delivery in early postgraduate years. It also considers the opportunities presented by the growth of interprofessional learning.

- **Chapter 6** considers the issues surrounding recruitment and retention of doctors in New Zealand in what is an increasingly competitive international market. It looks at specific issues facing doctors throughout their careers, from prospective medical student to older doctor. General practice, specialist roles and overseas doctors are included in the discussion.

- **Chapter 7** looks at the current arrangements for health workforce development in New Zealand and at relationships between various stakeholders. The place for hierarchy and networks is explained and explored. Leadership is identified as a key issue for effective integrated health sector workforce planning. This chapter also looks at the approach taken in Scotland to tackle similar problems.
CHAPTER 1: KEY ISSUES AFFECTING HEALTH WORKFORCE DEVELOPMENT

About this chapter

This chapter defines health workforce development and planning. It puts this development and planning work into context in New Zealand’s social and medical environment. This sets the scene for the following chapter, which profiles the medical workforce.

The key topics covered in this chapter are as follows:

- Workforce development defined
- Workforce development context
- Implications for the health workforce.

Workforce development defined

‘New Zealand needs to develop and sustain an appropriately skilled, supported, responsive health workforce in order to achieve optimum health care and improved health outcomes for all New Zealanders’ (HWAC 2003).

As outlined in HWAC’s goal above, workforce development is a broader concept than just workforce planning.

Workforce planning:

- requires a minimum 10-year planning horizon
- is an active and holistic approach to producing health workers who are fit for purpose, in the right numbers and in the right places at the right times.

Like workforce planning, workforce development also requires a 10-year horizon but differs in that it:

- aims to respond to changing service demands in creative and innovative ways
- treats the workforce as a whole, rather than dividing it into separate employer or professional groups
- builds on the principles of partnership, both internally and externally
- is more than just increasing workforce numbers.
Workforce development decisions are shaped by many factors. These change over time and include:

- demographic and social change
- technology – changes, improvement, new developments
- public expectations
- government strategies and public policies
- design and configuration of services
- employment and statutory legislation
- employee expectations and lifestyles
- educational policies and delivery
- professional boundaries and scopes of practice
- terms and conditions of employment
- international, national and local labour markets
- expectations of national, regional and local governance.

These complex and interconnected factors make it essential that workforce development is tackled systematically at all levels of the New Zealand health sector. Difficult decisions need to be made now rather than deferred and these issues are explored in the rest of this chapter.

**Workforce development context**

It is difficult to accurately predict the future health care requirements of New Zealanders.

However, the existence of a clearly articulated national strategy for the health system provides a useful framework. The health system will continue to be affected by government strategy and by social and demographic factors such as:

- strategic direction
- demographics
- medical and technical advances
- public expectations
- equity and social justice
- health service development
- health practitioner expectations
- global demand for qualified health workers.

This chapter outlines the main assumptions the MRG has made about each of these factors. We believe this approach provides a firm foundation for later recommendations. The implications for the health workforce as a whole are discussed later in this chapter. Later chapters discuss the likely consequences for the medical profession.
**Health sector strategic direction**

We assume that:

- the principles of the Treaty of Waitangi will continue to be accepted and applied
- the direction set by key strategies will continue for the foreseeable future along broadly similar lines (i.e., the New Zealand Health Strategy, the Primary Health Care Strategy and other associated health and disability strategies)
- the availability of public funds will require priority setting and service prioritisation
- publicly funded and managed services providing comprehensive health care to all New Zealanders will continue
- a significant private health sector will continue.

**Demographics**

Demographic factors have a major impact on the shape of health factors. These factors are largely outside government and medical service influence. Demographic projections (Appendix 2, Table A2.1) point to changes in:

- population size
- population growth
  - a population growth of 1 percent a year is expected over the next 10 years
- ethnic diversity: non-European people will be a higher proportion of the population (Statistics New Zealand 2004).

**Table 1.1: New Zealand population by ethnicity = ethnic group as a percentage of total population**

<table>
<thead>
<tr>
<th>Ethnic group</th>
<th>Year 2001</th>
<th>Year 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Māori</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Pacific</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Asian</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>European</td>
<td>71</td>
<td>61</td>
</tr>
</tbody>
</table>

There will be a substantial increase in the proportion and numbers of the population in older age groups (Statistics New Zealand 2004).

**Table 1.2: Percentage of New Zealand population over 65 years of age**

<table>
<thead>
<tr>
<th>Ethnic group</th>
<th>Year 2001</th>
<th>Year 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Māori</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Pacific</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Asian</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>European</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td>Overall (all ethnic groups)</td>
<td>11.9</td>
<td>17.6</td>
</tr>
</tbody>
</table>
**Disease demographics**

Trends in New Zealand disease demographics suggest that:
- the level of chronic disease and consequent requirements for health care will rise substantially as the number of older New Zealanders increases
- population ageing has far-reaching implications for the health system.

Currently, those over 65 years account for 39 percent of public health service spending. Those over 75 years account for just over a quarter of the 39 percent.

**Implications for the health workforce**

The implications for the health workforce are that:
- the labour force is ageing
- the New Zealand labour force is expected to grow slowly over the next 20 years (ie, there will be fewer workers aged 18–44 years and many more workers aged 45–64 years)
- the health system will have a smaller working population from which to recruit, and the workforce will be increasingly Māori, Pacific or Asian
- the labour market competition for younger workers will be vigorous.

The health sector needs to seriously consider how it recruits, retains and if necessary re-trains non-European and older workers.


The report focused on regulated health professionals. However, the MRG believes that the implications also apply to the medical workforce.

Three key messages are identified in the report.
- The ageing New Zealand population will drive the rate of demand for health and disability services. This demand will increase more rapidly than the size of the population itself.
- There is a strong risk of labour shortages in health and disability services, especially after 2011, unless preventive action is taken.
- Attention should focus on how the health and disability services workforce should be educated, trained, developed and deployed.
Medical and technical advances

Medical and technical advances will continue to accelerate and may be quickly introduced into the health system. In the next 10 years, we can expect that:

- new specialist knowledge and skills will be introduced
- some medical knowledge and skills will become outmoded
- electronic means of communication and data transmission capability and capacity will increase enormously
- new technologies will enable daily remote access to diagnostic and treatment services by doctors, other health professionals and patients
- new education technologies will be both widely available and extensively used.

Public expectations

Public expectations of health services are likely to change. In future, the public is likely to expect:

- continued access to primary health care in their community, and for their needs to be the main driver of services delivered
- a more informed and informative service from all members of health care teams
- convenient and affordable access to services including 24-hour, seven-day access to acute care services
- more care tailored to meet diverse individual and community needs, and for services to be delivered in community settings
- advice and assistance in healthy living, and in the management of chronic disease and disability
- greater specialisation in the delivery of more sophisticated health services.

Equity and social justice

Continuing attention will be required to address disparities in health status and the availability and use of health resources by different sections of the population. In an increasingly ethnically diverse population, New Zealanders are likely to expect:

- greater equity and social justice in the allocation and use of all health resources
- care and service provision in keeping with the Treaty of Waitangi principles of partnership, participation and protection
- access to care and services provided by and for Māori and by and for Pacific peoples
- culturally sensitive care that takes due account of each culture’s social concepts and models of health and care
• similar care and concern for other minority populations, including those with continuing mental disability and/or physical disability and/or social or economic disadvantage

• access to care and services which respond to the expected increase in New Zealand's Asian population.

**Health service development**

Our health services in 10 years' time are likely to offer greater direct community involvement in all aspects of health care, including:

• shared understanding about how health services can help people to maintain healthy lives and cope with illness and disability

• involvement in the planning and service delivery of community health services and community-based health care teams

• services provided by and identified with a health care team, rather than services provided by and identified with an individual or an institution

• ready access to 24-hour, seven-day acute services

• managed access to timely elective secondary care

• services reorganised and redesigned to ensure that medical care is delivered by doctors who are vocationally trained specialists. These specialists will be consultants or general practitioners (GPs). There will be less dependence on doctors in training.

The health sector is also likely to offer:

• services tailored to the needs and wishes of particular groups. These will include ethnic groups and other minority groups and particular cultural, social and economic settings, including rural locations

• advice and care for all cases given by the most appropriately qualified and skilled health care professional for that specific function (advice and care processes will also recognise when another team member should be involved, and when patient access to that team member should be facilitated)

• more context-specific care with a conscious move away from 'one size fits all' approaches.

**Health practitioner expectations**

Social trends, changing lifestyle expectations, legal requirements and industrial agreements will increasingly shape health practitioner expectations. These will include:

• reasonable working hours and patterns of work that fit with family commitments and changing personal lifestyles

• a clear, secure and flexible framework for work and career progression

• greater clarity about roles and responsibilities and the other requirements for successful teamwork.
Global demand for qualified health workers

The need for a more resourceful health sector has recently been publicly recognised by most western countries with ageing populations and demographic and disease trends similar to those in New Zealand.

Most countries, including New Zealand, have made major and sustained investments in new health funds. The resulting international demand for qualified and experienced health workers has outstripped the available supply. The flow of migrant workers from relatively poor to relatively rich countries has increased.

The British National Health Service (NHS) launched an aggressive campaign in July 2000 to recruit overseas trained doctors (OTDs). The campaign also introduced incentives to recruit and retain medical practitioners in areas of recognised shortage.

The NHS claimed some success in 2004 for this campaign. An increase of 19,400 doctors between September 1997 and September 2003 was quoted in the July 2004 report (NHS Improvement Plan, July 2004, see the NHS website for details).

Australia, Canada and the United States have embarked on similar schemes.

Many countries have adopted a medium- to long-term strategy of increasing medical school intake and output. However, it is not expected that the perceived global shortage of health professionals, including medical practitioners, will be alleviated in the short term.

Implications for the health workforce

New Zealand must respond to rising local workforce demand and to increasing competition in the international labour market. The numbers of health workers, including doctors, in training must increase.

New Zealand, however, can expect continued problems unless significant changes are made to the way that health workers are recruited, trained, deployed and managed. These problems include difficulties in retaining local graduates and in attracting suitable numbers of qualified workers from overseas.

Simply increasing workforce numbers is not a sustainable answer to New Zealand’s health and medical workforce problems.

The efficiency and effectiveness of the whole health workforce must improve. Skill transfer and enhancement, and collaboration between all disciplines is required if high quality, flexible and continuous services are to be delivered equitably to all New Zealanders.
Improved effectiveness must occur simultaneously at all levels, including:

- at the national level between the government and non-government organisations concerned with policy making and the planning, purchasing and oversight of health and associated education services
- regionally between District Health Boards (DHBs) and the providers of health and associated education services
- most importantly, at a local level between all health professionals, provider and community organisations and carers.

More efficient and effective use of health resources will only occur when the collective potential of all health sector personnel is realised. Competition between services may be inefficient and result from short-sighted, professional self-interest and non-collaborative practices. These do not help provide timely, effective and efficient patient care.

The following chapters of this consultation document consider the implications of these projections on medical practice and medical workforce development.

### Key issues in this chapter

- A minimum 10-year horizon is needed for health service planning and associated workforce development.
- Medical workforce development must be placed in the wider context of health service and health workforce development.
- External factors such as changing demographics and disease trends must be taken into account.
- Recent studies indicate that, even with conservative analysis, future demands for medical service will exceed supply.
- Medical and technical advances can rapidly and dramatically affect service delivery.
- Changing social expectations and cultures will affect health service demand – these are difficult to include in workforce modelling.
- Expectations will increase for greater equity in allocation of health resources.
- Health services will become more community-focused, context-specific, flexible and responsive to patient and community needs.
- Human resource planning and management, and work terms and conditions must improve to meet the changing expectations of health workers.
- The health sector must become more efficient in order to meet the growing demand for services. Increasing numbers alone will not meet demand.
CHAPTER 2: THE MEDICAL WORKFORCE IN NEW ZEALAND – A STOCKTAKE

About this chapter

This chapter outlines the current size and shape of the New Zealand medical workforce.

It considers recent changes in the composition of the workforce and notes key issues that arise from these changes.

The key topics covered in this chapter are as follows.

- Data and its limitations
- Characteristics of the registered medical workforce.

Data and its limitations

Reliable data on the size and shape of the medical workforce in New Zealand has been available since the early 1970s when the Medical Council of New Zealand (MCNZ) first partnered with the Department of Health to introduce the Annual Workforce Survey (AWS). This partnership is now managed by New Zealand Health Information Service (NZHIS) – a business group within the Ministry of Health.

The AWS is completed by medical practitioners when they apply for their Annual Practising Certificate (APC) and provides the MCNZ with supplementary information to that gathered for registration purposes. Analysis of some of this information is made available publicly by the MCNZ on its website. Pre-defined tables are provided in a non-identifiable form to NZHIS. NZHIS publishes time series and analysis of the data in hard copy, and it also publishes summary data on its website. In addition, relevant portions of the detailed data are made available to approved individuals or organisations who apply to have access to it for workforce planning and research purposes.

The AWS is the most reliable and comprehensive data source currently available. Its response rate is consistently high, particularly by comparison with voluntary studies in other countries. Around 95 percent of medical practitioners seeking an APC complete the survey.
The AWS, however, does have the following limitations.

- It fails to capture information on temporary registrants (TRs).
- It requires self-reporting of working hours per week. Respondents are asked to report separately on ‘hours on call’ and ‘hours worked’. Some respondents do not make this distinction.
- The hours of work are aggregated in the survey, and thus the survey does not distinguish between full- and part-time work within roles.

Data on temporary registrants has been sourced for this document directly from the MCNZ.

Reference in this chapter to ‘overall medical workforce’ is a combination of MCNZ information on temporary registrants and AWS respondents. The ‘medical workforce (AWS)’ refers only to those who responded to the MCNZ survey.

**Characteristics of the registered medical workforce**

**Medical workforce numbers**

Medical workforce numbers grew at a rate slightly in excess of population growth over the 1980s and early 1990s (Appendix 2, Figures A2.1 and A2.2). From around 1998 onwards, this trend changed. Medical practitioner numbers as measured by the AWS fell in 2000 and in the following two years. The 2003 AWS shows numbers again rising.

The medical practitioner to population ratio had been increasing until 2000. It has been maintained at a near constant level since then only with the assistance of temporary registrants. Over 90 percent of these have gained their temporary registration under the category that specifies that an equally suitably qualified New Zealand resident doctor could not be found to fill the position (MCNZ 2003, 2004a), (Appendix 2, Figure A2.1 and Table A2.2).

In 2002, New Zealand compared favourably with England, but less favourably with Australia and Scotland in doctor to population ratios (Appendix 2, Table A2.3). The NHS plan includes measures to substantially increase the medical workforce throughout England, Scotland and the remainder of the United Kingdom.

**The medical workforce: An overview**

The medical workforce (AWS) of 2003 could be divided into thirds.

- Specialists comprised nearly one-third.
- GPs accounted for just over one-third.
- The remaining third was made up of registrars, house officers, Medical Officers of Special Scale (MOSS) and others (Appendix 2, Figure A2.3).
The relative size of these groups has changed over the past six years (Appendix 2, Table A2.4).

- Specialists and registrars now make up a larger proportion of the overall medical workforce.
- The GP proportion has declined.

Throughout the late 1990s, house officers decreased in both number and proportion of the medical workforce. This trend reversed in 2002 and is again rising, although both number and proportion remain below 1998 levels.

**Ethnic balance**

Illustrated in Appendix 2, Figure A2.4.

**Māori medical practitioners**

In 2003, Māori doctors made up 2.7 percent of the medical workforce (AWS). This is well below the 15 percent of the population who identified themselves as Māori in the 2001 census.

By 2021, the Māori population is predicted to constitute 17 percent of the New Zealand population (Statistics New Zealand).

Māori are disadvantaged when compared with other New Zealanders in terms of reduced life expectancy, disparities in health status and access to and use of health services. These inequalities make the disproportionately low representation of Māori medical practitioners relative to population a major cause for concern.

Moves towards the development of ‘by Māori for Māori’ health service delivery has increased the demand for Māori doctors. There has been slow growth of Māori in the medical workforce, despite both medical schools (Auckland and Otago) having set targeted and specific criteria for the entry of Māori into their schools.

Access to a Māori doctor is currently only possible for a few Māori. The majority consult non-Māori practitioners. Māori practitioners ‘may better meet health needs of some Māori patients due to improved communication and trust between people of the same culture interacting’ (Burrell et al 2005). As well as benefits to be gained from more Māori in front-line delivery roles, more Māori senior clinicians, managers and policy makers are also needed. Māori in these important roles help whole institutions provide more culturally effective and equitable health care and serve important roles as opinion leaders and advocates to improve Māori health.

Action is required now to address the disproportionately small Māori medical workforce to ensure adequate numbers for these front-line and senior roles.

Appendix 5 explores some of the history of Māori involvement with the health system. It also discusses efforts medical schools have made to increase the number of Māori medical students.
**Pacific medical practitioners**

In 2001, Pacific doctors made up 1.1 percent of the medical workforce (AWS), while Pacific people accounted for 6.5 percent of the population.

By 2021, Pacific people are predicted to account for between 8.3 and 9.4 percent of the New Zealand population (Statistics New Zealand).

The health status of Pacific people in New Zealand, although improving, remains well below that of the non-Pacific population. As a younger and lower socioeconomic population, Pacific people’s health needs and expectations differ significantly from those of other New Zealanders.

The current slow rate of growth of the Pacific medical workforce is a cause for major concern. Appendix 6 provides further information about current efforts to compare the capability and capacity of Pacific doctors and other health workers.

**Asian medical practitioners**

Key statistics are as follows.

- Chinese doctors make up 5.4 percent of the AWS medical workforce.
- Indian doctors make up 4.9 percent of the AWS medical workforce.
- Asian peoples currently make up approximately 6 percent of the New Zealand population. This percentage is expected to double by 2021 (Statistics New Zealand).
- 29.7 percent of all domestic New Zealand medical students defined themselves as Asian in 2002 (Ministry of Education 2004). It is unlikely that Asians will be under-represented in the medical workforce in the medium to long term.

**Gender balance**

The gender balance of the medical workforce (AWS) is changing. Women now comprise more than 50 percent of medical students and 34.5 percent of the active medical workforce (Appendix 2, Figures A2.5 and A2.6, Table A2.5).

The female medical workforce is thought to have a greater preference than males for both well-organised salaried employment and flexible part-time work. Female doctors are also believed to have a greater interest in family and work/life balance.

However, lifestyle and work/life balance aspirations are changing throughout all working populations. These new aspirations may be more characteristic of generation than gender.

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4 We note the mismatch between AWS ethnicity and Statistics New Zealand ethnicity.
The working life contribution for female medical practitioners, when measured in total time worked, is possibly about 80 percent of that of a male medical practitioner (Bewley and Bewley 1975). This tendency of female medical practitioners to work fewer hours, combined with the increase in women in the medical workforce, results in an need to increase the overall numbers of medical practitioners to obtain the same number of full-time equivalents (FTEs).

Key statistics on the gender balance in vocational training (2002) are as follows.
- 661 women were in vocational training (42.4 percent of all vocational trainees).
- The largest group of vocational trainees was in general practice. Women comprised 50.9 percent of this group (Appendix 2, Table A2.6).

Women made up 60 percent or more of the trainees in the areas of breast medicine, family planning and reproductive health, intensive care medicine, obstetrics and gynaecology, paediatrics, public health medicine, sexual health medicine and vascular surgery.

Key statistics on gender balance and workforce roles (2003) are as follows.
- Women accounted for 51.2 percent of house officers, 39.9 percent of registrars and 39.1 percent of GPs.
- Women accounted for only 21.0 percent of specialists (Appendix 2, Table A2.7).

Despite proven academic and clinical ability, women have not taken up vocational training and specialist practice at the same rates as their male counterparts. This is starting to change, with more women now coming to occupy positions of clinical, public health and administrative responsibility and leadership in many areas of practice.

However, barriers and constraints still exist that limit vocational choices and the work opportunities open to women. Innovative and flexible training and working arrangements are needed to overcome these obstacles.

**Age structure**

The medical workforce (AWS) has aged progressively over the last decade. There are now proportionately fewer doctors in the younger age groups.

Key statistics and issues are as follows.
- In 1990, 35 percent of the workforce were under 35 years of age.
- By 2003, this had fallen to 23.3 percent (Appendix 2, Figure A2.7).
- Ageing of the workforce is most striking for GPs. In 1997, 43.1 percent of GPs were under 40 years of age. By 2003, this had fallen to 25.0 percent (Appendix 2, Figure A2.8).
- The age structure of the medical workforce (AWS) shows a striking bulge of doctors currently in their early to mid 40s. (For overseas trained doctors (OTDs), this is consistent with overall demographic trends associated with the baby boom.)
The bulge of New Zealand graduates currently in their early to mid 40s is probably the combined result of the international post-war ‘baby boom’ and the temporary increase in admissions to New Zealand medical schools between 1975 and 1980.

As those within the resulting bulge years grow older, this will have a significant effect on the ageing of the workforce. There are some indications that a larger proportion of GPs than specialists may fall within this bulge.

**Hours of work**

The reliability of data on hours of work is hampered by the inaccuracies inherent in self-reporting, by instances where on-call hours not worked are mistakenly included and by the inclusion of part-time practitioners in the statistics.

Despite these limitations, there is still evidence to suggest that the hours worked by many practitioners are higher than what could be considered consistent with a healthy work-life balance.

**Table 2.1:** Percentage of different groups reporting more than 50 hours worked per week in 2003

<table>
<thead>
<tr>
<th>Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPs</td>
<td>30.6</td>
</tr>
<tr>
<td>House officers</td>
<td>83.7</td>
</tr>
<tr>
<td>Registrars</td>
<td>75.5</td>
</tr>
<tr>
<td>Specialists</td>
<td>50.6</td>
</tr>
<tr>
<td>Medical officer of special scale (MOSS)</td>
<td>19.8</td>
</tr>
</tbody>
</table>

Note: Hours of work are self-reported and include any practitioner working more than four hours per week. Temporary registrants are excluded. See also Appendix 2, Figure A2.9.

Source: Data from AWS 2003, NZHIS.

**Table 2.2:** Percentage of different groups reporting part-time employment in 2003 (part-time is less than 40 hours per week)

<table>
<thead>
<tr>
<th>Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPs</td>
<td>35.1</td>
</tr>
<tr>
<td>House officers</td>
<td>Less than 5 percent</td>
</tr>
<tr>
<td>Registrars</td>
<td>Less than 5 percent</td>
</tr>
<tr>
<td>Specialists</td>
<td>17.5</td>
</tr>
<tr>
<td>Medical officer of special scale</td>
<td>37.6</td>
</tr>
</tbody>
</table>

Source: Data from AWS 2003, NZHIS.
Key issues in hours of work are as follows.

- Considerable effort has been made to reduce the hours of work and rostering schedules of doctors in training.
- Industrial action by resident medical officers (RMOs) has substantially improved terms and conditions of work, including hours of work.
- Older doctors, who have traditionally provided out-of-hours cover, are becoming increasingly reluctant to do so.
- Tension over hours of work has the potential to blight training and working relationships between some trainee doctors and their senior colleagues. There are profound implications for work organisation and meeting teaching and service obligations (Morton and Lynn 2004).

**Overseas trained doctors (OTDs)**

In 2003, 34.1 percent of doctors in New Zealand obtained their basic medical qualification outside New Zealand (AWS) (Appendix 2, Table A2.8). The inclusion of temporary registrants, almost all of whom are overseas graduates, would bring this figure up to approximately 40 percent. This figure is high in comparison with other countries.

- In the United Kingdom, 24 percent of doctors were overseas trained in 1996 (IMWFC and Curson 2003). By 2004, this had risen to 33 percent (Buchanan and Dovlo 2004).
- In Australia, one in three doctors had gained their medical qualification overseas in 2003 (IMWFC and Gavel 2003).
- In 2002, Scotland reported one in eight doctors had gained their medical degree overseas (Scottish Executive Department of Health 2002a).

DHBs find it difficult to fill RMO positions. The problem is especially acute for smaller health boards. These difficulties mainly account for the large proportion of OTDs in medical officer or specialist scale positions (Appendix 2, Figure A2.10). This situation has arisen from the need to reduce the working hours of RMOs in order to meet rostering arrangements required by nationally negotiated industrial contracts.

Future recruitment of OTDs must be targeted and effective, and recruits must be supported and integrated, if the supply of OTDs, on which New Zealand is dependent, is to be maintained.

The Medical Reference Group (MRG) is particularly concerned for those OTDs who experience difficulty with English as a second language. The MRG is also concerned for those who work in rural or other practice settings where professional oversight and support is limited.
Doctors in training – The RMO workforce

The term RMO is used in this document to refer to house officers and registrars. Data has been obtained from NZHIS.

Doctors in training in New Zealand make a significant service contribution in hospitals, particularly outside normal working hours.

Negotiated changes to employment contracts have led to more RMO positions and reduced RMO hours of work in many New Zealand hospitals. These changes affect both doctors’ working methods and services provided. They also affect the way in which doctors in training are deployed and supported in hospitals.

Serious questions are now being raised as to whether or not the current working conditions for medical staff in New Zealand hospitals are in the best interests of a wide range of groups. These groups include doctors in training, vocationally trained doctors, other grades of staff and patients (Canterbury District Health Board RMO Advisory Committee and Child 2002).

Gender, ethnicity, workplace culture, working environment, terms and conditions of employment, training requirements and work/life balance all impact on doctors in training. Added to this, many doctors in training are burdened with student debt, which weighs heavily on their career and work/life prospects and decisions (Appendix 7).

Table 2.3: Numbers of house officers, MOSS and registrars, 1999–2003

<table>
<thead>
<tr>
<th>Workforce role</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>House officer</td>
<td>936</td>
<td>894</td>
<td>760</td>
<td>774</td>
<td>842</td>
</tr>
<tr>
<td>MOSS</td>
<td>290</td>
<td>277</td>
<td>289</td>
<td>277</td>
<td>303</td>
</tr>
<tr>
<td>Registrar</td>
<td>1167</td>
<td>1227</td>
<td>1242</td>
<td>1238</td>
<td>1319</td>
</tr>
</tbody>
</table>

Source: MCNZ 2005 (in production)

The Medical Officers of Special Scale (MOSS) workforce

Doctors working in a MOSS role fulfil a service need. While in many cases, they may have many years of experience, they are not on a training scheme leading to vocational registration. Two important groups are those MOSS working in rural hospitals and those working in psychiatry. Issues remain on how to best recognise, advance and use the skills of the MOSS, many of whom work part time or are OTDs.
The specialist workforce

Specialist to population ratios in New Zealand have risen over recent years (Appendix 2, Tables A2.9 and A2.10). Only general comparisons between specialist to population ratios in New Zealand and other countries can be made. In the United States, Australia, Canada and the United Kingdom, specialist numbers are expected to rise in the future.

Table 2.4: Specialists per 100,000 population, selected years

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>108</td>
<td>136</td>
<td>132</td>
<td>135</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>82</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td></td>
<td>90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>93</td>
<td></td>
</tr>
<tr>
<td>England</td>
<td>42</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>57</td>
</tr>
<tr>
<td>New Zealand</td>
<td>64</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>70</td>
<td></td>
<td>72</td>
</tr>
</tbody>
</table>

Sources: Figures have been adjusted for rounding: United States (IMWFC et al 2003); Australia (AIHW); Canada (IMWFC 2003, Canada Update); England (Department of Health – publications and statistics).

The general practice and primary health care workforce

The MRG is deeply concerned about the general practice workforce situation.

Key statistics are as follows.

- The number of active GPs in New Zealand dropped by 6.5 percent between 1997 and 2002 (New Zealand Medical Association 2004).
- In 2002, there were 2917 active GPs in New Zealand, giving a GP to population ratio of 74.0 per 100,000 (Appendix 2, Figure A2.11).
- The ratio varies greatly across the country, from well over 100 per 100,000 in some metropolitan areas to 40 to 60 per 100,000 in some provincial centres and rural areas.
- The number of GPs aged under 40 years has fallen dramatically over recent years (Appendix 2, Figure A2.8).
- The recent small increase in GP numbers (up from 2917 in 2002 to 3006 GPs in 2003) is almost entirely due to OTDs; 95.5 percent of the increased numbers are OTDs (NZHIS). It is difficult to draw conclusions from these statistics, other than to observe the relatively low level of publicly funded health care available in some rural, provincial and poorer urban areas (Malcolm 2002). International data on GP provision is not directly comparable.

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Using the work type at site 1 category, which is a more restrictive definition of a GP, there were 2538 GPs and a GP/population ratio of 64.4 per 100,000.
Table 2.5: International comparisons of GP provision per 100,000 of population; selected years

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>109</td>
<td></td>
<td>111</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>60</td>
<td></td>
<td></td>
<td>65.4</td>
<td></td>
</tr>
<tr>
<td>New Zealand</td>
<td>82.6</td>
<td>74</td>
<td>74.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- The Australian rate of GP provision varies markedly between urban and rural areas as in New Zealand (AIHW).
- United Kingdom GP provision is historically low (United Kingdom Department of Health, United Kingdom Department of Statistics). However, the ratio is expected to rise in the next few years as new resources flow into the British National Health Service.
- New Zealand is the only one of the comparable countries to see a significant decline in its GP to population ratio in recent years.

*Rural general practitioners*

Key statistics are as follows.

- In 2003, there were 477 rural GPs (Farry and Tucker 2004).
- These equated to 396 full-time equivalents and approximately 15 percent of the overall GP workforce.
- Females accounted for one-third of rural GPs. Most indicated they worked part time.

Chapter 6 of this document includes discussion on rural GP recruitment and retention.

Based on the available evidence, there is little doubt that New Zealand requires more primary health care doctors. However, there is real difficulty in quantifying need in terms of the type of doctor required, and in establishing national target practitioner to population ratios. Significant differences in GP to population ratios already exist across the country. Added to this, changes to the organisation and design of services and associated workforce changes that can be expected as part of primary health organisation development mean that forecasting workforce requirements is fraught with problems.

Workforce numbers, models and target practitioner to population ratios have their place but must be interpreted and used with real care. Other contextual factors that are often difficult to quantify must be taken into consideration in workforce planning.
New Zealand medical students – The future workforce

Graduate production

Key statistics and issues are as follows.

- New Zealand had 325 domestic first-year medical students in 2004 (Ministry of Education 2004) – this gives a first-year student to population ratio of 8.1/100,000.
- Currently around 285 domestic students graduate each year, giving a ratio of 7.1/100,000.
- It may be possible to calculate annual graduate rates from first-year intake rates. However, recent increased intakes will cause overestimates of current graduate production.

International comparisons of first-year enrolments per 100,000 population are shown in Table 2.6.

Table 2.6: Ratio of first-year enrolments/graduates per 100,000 population

<table>
<thead>
<tr>
<th>Country</th>
<th>Late 1990s</th>
<th>2001</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States (approximate enrolments)</td>
<td>5.96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia (graduates)</td>
<td>6.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada (enrolments)</td>
<td>5.1</td>
<td>6.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>England (enrolments)</td>
<td>7.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scotland (enrolments)</td>
<td></td>
<td></td>
<td>16.0</td>
<td></td>
</tr>
<tr>
<td>New Zealand (enrolments)</td>
<td></td>
<td></td>
<td></td>
<td>8.1</td>
</tr>
</tbody>
</table>


Controls on student numbers

Restrictions on the numbers of students entering New Zealand medical schools began in 1940, with an annual cap of 100 places per year.

Table 2.7: Historical limits on admission to medical schools

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Otago</td>
<td>100</td>
<td>120</td>
<td>120</td>
<td>150</td>
<td>150</td>
<td>200</td>
<td>150</td>
<td>170</td>
<td>170</td>
<td>170</td>
<td>190</td>
</tr>
<tr>
<td>Auckland</td>
<td>60</td>
<td>60</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>115</td>
<td>115</td>
<td>135</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>120</td>
<td>180</td>
<td>210</td>
<td>260</td>
<td>310</td>
<td>260</td>
<td>280</td>
<td>280</td>
<td>285</td>
<td>325</td>
</tr>
</tbody>
</table>

Source: Otago, http://healthsci.otago.ac.nz/division/medicine; Auckland, Dr Philippa Poole, Associate Dean, Auckland Medical School.
The cap is used as a tool to manage the perceived over- or undersupply of doctors. Changes to the cap level can only be made by New Zealand government cabinet agreement. The last change took effect in 2004, when an additional 40 places were created for students from a rural background.

**Changing student profiles**

Student profiles have changed significantly in recent years (Ministry of Education 2004). In particular, there has been an increasing proportion of female students and graduates since the mid 1970s.

The 1990s have seen:

- an increasing number of students with permanent residency rather than New Zealand citizenship (Appendix 2, Figure A2.12)
- a change in the ethnic mix of New Zealand residents and citizens – a rapid growth in those of Asian ethnicity and a fall in the number of European ethnicity (Appendix 2, Figure A2.13)
- a steady increase, although far too slow, in the number of Māori and Pacific Island students
- an increasing number of international students (Appendix 2, Figure A2.14).

**Gender balance**

In recent years, females have comprised about 50 percent of all medical graduates (Ministry of Education 2004) (Appendix 2, Figure A2.5). As the female proportion in the medical workforce rises, there will be far-reaching implications for work practice, medical staffing and service provision.

**Ethnic balance**

For many years, it has been argued that the social diversity of medical students should better reflect the social mix in society. The ethnicity of graduating medical students in 2002 remains substantially different from New Zealand society (Appendix 2, Figure A2.13).

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Percentage of students</th>
<th>Percentage of population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Māori</td>
<td>7.5</td>
<td>15</td>
</tr>
<tr>
<td>Pacific</td>
<td>2.9</td>
<td>7</td>
</tr>
<tr>
<td>Asian</td>
<td>29.7</td>
<td>7</td>
</tr>
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Domestic medical students

Domestic students are eligible for government assistance while studying medicine at undergraduate level. Assistance takes the form of student allowances, student loans and fee subsidies (for details see Appendix 7). Domestic students are defined as New Zealand citizens, New Zealand permanent residents and Australian citizens. Full-fee-paying places are reserved for international students.

The number of New Zealand permanent residents graduating from the medical schools has increased steadily over the last decade (Ministry of Education SL2). In 2002, permanent residents accounted for 44 out of the 272 domestic MB ChB graduates.⁶

Preliminary data analysis on a small number of students suggests that permanent residents may be more likely than New Zealand citizens to leave New Zealand in the first four years after graduation (Ministry of Education SL1).

International students

The number of full-fee-paying international students at New Zealand medical schools has increased sharply since 1996 (Ministry of Education SL1). In 2002 they numbered 163 out of 1370 students. In the same year 38 international students graduated (Appendix 2, Figure A2.14).

Some of these international students are from the International Medical University in Malaysia and are only taking clinical years. Others complete the whole medical course in New Zealand.

Student recruitment and selection

Studies show that medical students are much more likely to come from upper socioeconomic families and from populous urban areas, when compared with the wider population (Campbell 2002).

The Auckland and Otago medical schools have been working for some years to improve student selection methods. Māori and Pacific applicants, and students from rural backgrounds, can be admitted using special criteria. The recently piloted Step-up Scholarships are targeted at potential health sciences students from low income backgrounds. The scholarships may help to produce a student population whose socioeconomic profile is closer to that of the general population (see Appendix 7 for more details).

The medical schools are also looking at the possibility of making more graduate and mature-entry provisions. These would enable older students with broader educational and life experience to gain entry to the course. These students are generally high achievers in their courses.

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⁶ Including international students, there were 310 MB ChB graduates in 2002.
Continuing efforts are needed to ensure that medical school recruitment and student selection better reflects the changing demographics and diverse medical workforce needs of the New Zealand population.

### Key issues in this chapter

- Data on the size and shape of the New Zealand medical workforce is generally reliable. There are some limitations, however, including a lack of information on temporary registrants (TRs), a failure to separate ‘hours on call’ and ‘hours worked’ and a lack of distinction between full- and part-time work within roles.

- Māori and Pacific medical practitioners and students are significantly under-represented compared with the current and projected size of their respective populations.

- Women now comprise over 50 percent of medical students. Changing gender balance has significant implications for the organisation of medical work, in training and career development and for the work/life balance of doctors.

- The medical workforce has aged progressively over the last decade. This trend is most striking for GPs.

- Overseas trained doctors (OTDs) account for around 40 percent of New Zealand doctors. There are concerns for OTDs who have difficulties with the English language, and those who work in rural or other practice settings where support is limited.

- There are major concerns about the general practice workforce situation and the significant decline in the GP to population ratio in recent years.

- The recruitment and selection of medical students should better represent the social and economic diversity of the New Zealand population.

### Questions for submission

2.1 Is the workforce data and other information presented in Chapter 2 complete and accurate from your point of view?

2.2 Are there any items you wish to question, add or comment on?

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7 This figure includes temporary registrants (TRs) and assumes that TRs are overseas graduates.
CHAPTER 3: THE HEALTH PROFESSIONS IN A CHANGING LANDSCAPE

About this chapter

This chapter reviews the changing role of professionalism in society, with particular reference to the health sector. It outlines an evolving model of ‘new professionalism’ based upon a widely accepted Canadian model and discusses the roles, competencies and behaviours that will be required of doctors in a new era of medical practice.

The key topics covered in this chapter are as follows.

- Professionalism in a changing society
- The ‘new professionalism’
- Roles and competencies
- Behaviour in complex human systems
- Leadership and governance
- The health of doctors.

A central theme of the Government’s health reform strategy is putting patients, carers and community first. The goal is the equitable delivery of safe, high-quality and cost-efficient health care.

This approach demands a collaborative work model that continuously improves structure and processes. Under this model, the organic nature of the health system is recognised, values and goals are shared, and teamwork is of a high order.

The MRG seeks an environment that enables all health professionals to realise their full potential. This can only occur if career structures support lifelong professional development, build competency and align work with New Zealanders’ health service requirements.

Professionalism in a changing society

The public have traditionally been supportive of the stated values and ethics of medicine and other health professions. During the 1960s, it began to question whether doctors were putting their own business, financial and other interests ahead of those of society and patients. Unquestioning support for professions began to wane.

Different values and models of care were imposed in the 1980s and 1990s, as New Zealand and other countries moved sharply towards state and corporate sector models based upon managed competition. Experience now shows that this move had some unforeseen and unfortunate consequences for patients, services and the health workforce.
The medical profession’s public reputation was seriously damaged in New Zealand by the Cartwright inquiry, and in Britain by the Bristol inquiry. Public trust was undermined by the perception that the medical profession failed to guarantee competency through self-regulation. People gained the impression that the profession put its own self-interest above that of patients and the public.

Changing public expectations have not been matched by parallel changes in medical practice. As a result, the implicit social mandate between doctors, patients and society was seriously undermined (Walshe and Shortell 2004).

The MRG believes that most New Zealanders want their own doctor and to maintain an ongoing relationships with their doctor. However, this view is open to debate, particularly for younger people.

Nevertheless, we believe that:

- most people do not wish the state or the corporate sector to make decisions about their care and wellbeing
- the public and health professionals generally share a common view about necessary health system changes
- the profession must clearly and honestly articulate its vision, and then put it into consistent practice publicly and privately (something that is essential for public confidence)
- public good must be the foundation for ‘professional models of care’, which are increasingly adopted in today’s complex, rapidly changing global community.

**The ‘new professionalism’**

The changing relationship between medicine and society, and the role of medical professionalism, has attracted much debate in recent years. There is general agreement that a new social contract is needed. This would spell out the rights and responsibilities between doctors, patients and society.

The formulation of such a contract would require considerable debate with the public, and within and between the health professions. Agreement may be difficult to achieve. However, it is an essential prerequisite for the effective partnerships that are required for ongoing development of the health sector and its workforce (Friedson 1994; Ham and Alberti 2002; Calman 1994; Salmond 1988; Cruess et al 2002).

The medical profession is increasingly accepting of more partner-focused relationships involving doctors, their patients and carers and other health workers. This acceptance of change is required by the profession collectively as it works with government and the general public. It is also required of individual practitioners working within the sector and with patients. Table 3.1 summarises the differences between the old and the new professionalism (Davis 1996).
Table 3.1: Differences between old and new professionalism

<table>
<thead>
<tr>
<th>The old professionalism was characterised by:</th>
<th>The new professionalism is characterised by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• mastery of knowledge</td>
<td>• reflective practice</td>
</tr>
<tr>
<td>• unilateral decision processes:</td>
<td>• interdependent decision processes:</td>
</tr>
<tr>
<td>- patient as dependent</td>
<td>- patient empowered</td>
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<tr>
<td>- colleagues as deferential</td>
<td>- colleagues engaged as equals</td>
</tr>
<tr>
<td>• autonomy and self-management</td>
<td>• supported practice – teamwork</td>
</tr>
<tr>
<td>• individual accountability</td>
<td>• collective learning, responsibility and accountability</td>
</tr>
<tr>
<td>• detachment</td>
<td>• engagement</td>
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</tbody>
</table>

Roles and competencies

The new era of medical practice will require specific competencies in addition to technical knowledge.

The CanMEDS 2000 project presents a model of what the 'new professionalism' could mean for medicine (CanMEDS 2000 Project 1996). The Royal College of Physicians and Surgeons in Canada developed the project. This internationally significant project developed a roles and competency framework entitled ‘Skills for the New Millennium’. The framework is designed to help doctors respond to today’s challenges as professional providers of health care.

These challenges require doctors to function in complex health care systems that are in constant flux and that face increasing fiscal constraints and uncertainty. At the same time, doctors are required to provide effective, efficient and equitable patient care (ibid).

The CanMEDS 2000 competencies framework was initially designed for use in Canada. Today the framework is widely used internationally in medical vocational training programmes. In future, the framework could become the model of 'new professionalism' used by all health professionals.

Modified CanMEDS competencies are already being used to guide the vocational training of doctors in both New Zealand and Australia (Australian Medical Council 2003).
Figure 3.1 shows the CanMEDS 2000 essential roles and key competencies framework. It is described in more detail in Appendix 8. Processes need to be found to enable doctors to establish and strengthen those skills and competencies that will complement the more technically-oriented knowledge and skills (Mant 1997).

The MCNZ similarly recognises that the competencies of medical practitioners go beyond the purely clinical. The MCNZ has published practising guidelines that outline the domains of competence, which include:

- communication
- collaboration
- management
- scholarship
- professionalism.

These fit well with the CanMEDS 2000 competencies framework.

**Behaviour in complex human systems**

New ideas about behaviour in complex human systems, such as the health system, are helping build understanding and acceptance for the new professionalism. The complexity theory offers a number of ideas and insights. The theory concerns the behaviour of complex systems and processes. It contends that:

- there is no sense of a preordained control centre issuing orders. Instead, processes in themselves generate the direction of the system in response to internal and external events (Burton 2004)
- complex systems evolve and develop according to their internal interactions
internal interactions are largely between elements that share close contact, and are flexible and non-hierarchical

interactions are neither simple nor predictable. Sometimes even major stimuli produce little change, being absorbed by the self-regulation of the system. But at other times, even a minor stimulus will produce a cascade of events through which the system changes dramatically. This has been described as ‘moving beyond the tipping point’ (Plesk and Wilson 2001).

Under this model, the health system is better understood as an organic system rather than a mechanical system. The command and control tools used in the ‘old professionalism’ are poorly suited to the new environment. They do not fit with the concepts of partnership and networking that underpin the ‘new professionalism’. Neither do they fit with more recent ideas and practices in health systems human resource management (see Chapter 4).

Leadership and governance

Until the 1990s, public health system professionals often undertook leadership and governance roles in clinical service delivery in addition to their clinical roles. Greater emphasis was given in the 1990s to state and corporate models of care. This resulted in health professionals playing lesser roles in the leadership and governance of systems and services.

Renewed interest in professional models of care and the ‘new professionalism’ means that health professionals are again being asked for leadership.

Leadership is an implicit requirement for many of the CanMEDS 2000 competencies. It is a set of behaviours and skills that many doctors are called upon to display in their clinical and governance roles within organisations and the wider health system. This skilled leadership generally requires:

- insight and vision
- an ability to provide focus and establish priorities for action
- an ability to align people
- an ability to motivate and inspire people to do better
- well-developed emotional intelligence.

Processes are needed that enable and encourage doctors to develop and strengthen these skills and competencies.

The complexity theory suggests that future leadership style is likely to be substantially different than earlier styles. The ‘heroic leader’, notable for being highly visible, assertive and dominant, is less likely to be successful in today’s environment.

Instead more democratic or ‘servant’ styles of leadership are more likely to be successful (Mant 1997; Wheatley 2002). Servant leaders seek to serve first and to exercise responsible stewardship in meeting their leadership responsibilities.
Health sector politicians, managers and other health professionals look to doctors for leadership. Doctors need to meet, and be seen to meet, the expectations of leadership. If they do not achieve this, or are thought to be obstructing others from achieving leadership, then they cannot fit the ‘new professionalism’ model or achieve the CanMEDS 2000 charter.

Medical establishments need to find, encourage, educate and support their own servant leaders. They also need to work collaboratively with other health professions to recruit, encourage and support such leaders across the entire health sector (Greenleaf 2002) (see Chapter 7).

**The health of doctors**

Doctors’ responsibilities in leadership, professional education and self-regulation are widely recognised. Their individual and collective responsibility to look after their own health, the health of colleagues and the health of the profession as a whole is less widely recognised and accepted.

As an occupational group, the comparative health of doctors is not good (RACGP – Doctors’ Health Project; Clarke and Singh 2004). Traditional medical culture and training reinforces doctors’ view of themselves. This view says they are capable people who ‘should’ be able to manage long hours, hard work and emotional difficulties independently. They see themselves as the providers of assistance, not the recipients.

Medical culture tends to view ill health, psychological ill health and addictive behaviour as personal weakness. This view encourages doctors to deny their own illness. It also fosters inappropriate behaviour, such as self-investigation, self-diagnosis, self-treatment and self-referral. This sometimes has unfortunate results.

The last three decades have seen enormous changes in the working environments of doctors, especially GPs. Doctors can suffer physical and psychological problems as a result of the stress caused by this change. These problems can affect colleagues and co-workers and reduce patient care quality and safety.

These and other changes have direct workforce development implications.
Key issues in this chapter

- Public confidence in the medical profession has been undermined in New Zealand and overseas by a perception that the profession has put its self-interest ahead of that of patients and the public.
- There is now increasing support for a ‘new professionalism’. Features are reflective practice, interdependent decision processes, teamwork, collective learning, responsibility, accountability and engagement.
- The ‘new professionalism’ will require a wider range of competencies as well as specialist technical skills.
- The health sector must build and strengthen existing links within and between health professions to the benefit of patients.
- The health system is better understood as an organic system rather than a mechanical system.
- Old management styles will not fit with concepts of partnership and networking, which underlie the ‘new professionalism’.
- The health sector is again looking to doctors for leadership as well as technical skills.
- Individually and collectively, the health of doctors is a professional responsibility.

Questions for submissions

3.1 Have we accurately portrayed the changing environment in which the medical profession operates?
3.2 Have we missed any significant environmental issues?
3.3 Is there anything else you would like to add or comment on?
CHAPTER 4: MEDICAL WORK IN A CHANGING WORKPLACE ENVIRONMENT

About this chapter

This chapter looks at the many ways in which change is occurring in the health workforce and in the organisation of medical work. It then considers structures and processes for a systemic, sector-wide approach to workforce design and development.

The key topics covered in this chapter are as follows.

- The need for service and workforce redesign
  - The redesign process
  - Division of labour (skill-mix)
  - Technology transfer
- Structures and processes
  - Primary health organisation (PHO) development
  - Primary/secondary interface
  - Non-government organisation (NGO) and private sector development
  - Health care networks
- A systemic, sector-wide approach to workforce design and development
- Information support
- Communication and teamwork
- Innovation and research
- Organisational learning
- Accountability and administration
- Human resource management.

The MRG believes that traditional care models and service delivery patterns must change if public sector expectations and the government’s health strategies are to be met. A focus on workforce capacity and environment is essential for successful change management.

Demographic projections suggest the total health workforce needs to increase by 25–35 percent over the next 20 years (NZIER 2004). It is assumed the medical workforce size will also need to increase substantially.

A significant factor in this change will be terms and conditions of employment. Current indications suggest that the future health workforce will not be willing to meet the out-of-hours commitments accepted by doctors and other health practitioners in the past.
Solutions that rely on substantial increases in the number of doctors are probably not feasible, affordable or sustainable. Instead, significant service and workforce redesign will be required.

**The need for service and workforce redesign**

Doctors and other health workers are already working under new scopes of practice, organisational arrangements and work patterns in order to deliver services. These changes will continue. Not all services currently provided by doctors will continue to be so provided in future.

This raises key questions for medical workforce development.

- What services is it most appropriate for doctors to provide in future?
- What types of doctors will best provide those services?
- What needs to be done to ensure doctor role and capability changes keep pace with shifting public and professional expectations and service needs?

The MRG believes that services will be further redesigned in the future, with more responsibility for care being taken on by other trained health professionals. In the context of general practice, for example, this might enable doctors to have more time available to:

- manage emergencies and diagnose acute conditions
- lead or participate in chronic care management teams
- consult with clinically demanding patients
- co-ordinate the care of patients with medically complex conditions
- work within fields in which they have particular interest and expertise
- extend their interaction with colleagues at the primary/secondary care interface
- enhance the organisational and procedural aspects of practice
- teach and mentor other medical/health professionals and students.

Such redesign could also reduce the bureaucratic burden on doctors and improve job satisfaction and work/life balance. This could also enable other health professionals in the care-based team to expand their own scopes of practice, professional learning and job satisfaction.

These new approaches to service delivery and workforce arrangements will vary across New Zealand. They will alter both the qualitative and quantitative demand for doctors. A national blueprint for medical workforce development is unlikely. However, there are general principles that should apply within institutional, primary care and community settings, and in any defined geographical location.
The redesign process

Success will only be achieved if service and workforce redesign is well planned, integrated and managed. This will ensure that time, effort and resources are used effectively.

Key aspects of effective service and workforce redesign are:

- public and professional involvement in any service or workforce redesign. This is vital to ensure that both the public and health professionals have confidence that access, safety and quality of care improvements will flow from the service redesign
- clarity about what services are to be provided and how they are best delivered in primary and secondary care, in metropolitan, provincial and rural settings
- a clear understanding that the focus should move to enhance care within the community, rather than building up larger and ever more complex institutions
- clarity about the co-ordination of services across the full range of settings
- inclusion of workforce considerations in business planning from the beginning of service redesign. Service planning and workforce development objectives must fit together and include issues such as:
  - quality of care
  - adequacy of skill levels
  - appropriate accountability.

An important outcome of redesigned services is continuity of care. Practitioners and the public should have confidence that this is being achieved. Special effort will be required to ensure continuity of care as part-time and shift-work increase. This increase will result from the desire of health professionals to balance their work and personal lives, while meeting public expectations of convenient and prompt access to services.

Teamwork and communication skills will become paramount as patients move between different environments, such as primary health organisations (PHOs), primary care teams and secondary and tertiary care.

Division of labour (skill-mix)

The health workforce needs to continually adapt in light of evolving roles and practices. The medical workforce can support and accelerate change, evolution and devolution in its roles in a way that enhances standards, interprofessional relationships and continuity of care.

Change presents an opportunity, not a threat. However, all parties need to work together, including health professionals, administrators, professional bodies, consumers and legislators. An innovative project that engages front-line practitioners is an ideal way to initiate change. Such projects need to be properly evaluated and form part of ongoing service development. Increased team-based care will provide opportunities to find the best way to configure skills and tasks. There is growing evidence that many tasks and services currently provided by medical practitioners can be safety and effectively carried out by
others who are appropriately trained, such as nurses, technicians or allied health professionals (Sibbald 2004; Stolarek 2004).

Factors determining the success or failure of changes in skill-mix and roles include:

- quality of the practice organisation
- quality of teamwork
- attitudes of team members
- general infrastructure support
- support for the process of transferring task, skill and responsibility.

Skill-mix changes do not automatically or in all cases lead to lower costs. However, there are many examples where service delivery effectiveness and efficiency is enhanced (Buchanan and Calman 2004).

**Technology transfer**

Technology transfer can occur when procedures that were once risky and experimental become well specified, standardised, safe, routinely performed and subject to quality measures. When this occurs, procedures can be performed by less highly trained doctors, nurses, technicians and other health workers.

In some fields of specialist practice, there is considerable scope for technology transfer in association with service redevelopment and workforce redesign.

Reports of ‘surgical practitioner’ trials in the United Kingdom include:

- a 30-minute reduction in the average time for bilateral varicose vein surgery
- an average reduction of 20 minutes of consultant time per gynaecology operation
- a reduction in junior doctors' hours by almost 10 hours a week (NHS website).

The MRG believes that, in general, expensively trained and highly skilled and remunerated health workers should not be providing services that can be delivered safely and effectively by less highly qualified and remunerated workers (Richardson et al 1998).

Attention should be focused on achieving better service delivery and cost-benefit outcomes instead of focusing entirely on workforce shortages. As health care teams develop, they should be mandated to begin demonstration projects in areas identified with technology change potential. The results of these projects should be shared.
Structures and processes

Structural change and workforce development should be planned and managed together. This has not always occurred in New Zealand, where structural reform has lead the way, and workforce development has been expected to follow. An example is the current implementation of the government’s Primary Health Care Strategy and the development of primary health organisations (PHOs).

Primary health organisation (PHO) development

PHO development has advanced at an even greater rate than originally anticipated. By January 2005, there were 78 PHOs covering 3.8 million New Zealanders (Ministry of Health 2003; King 2004; Austin 2003).

PHO development creates opportunities to further evolve the way:
- primary practice is organised
- services are designed and delivered
- doctors and other health practitioners are trained, deployed and work together in teams.

As well as improving the scope and quality of care offered to patients, successful PHO development should lead to:
- better and more diverse employment prospects
- improved terms and conditions of employment
- higher morale and greater job satisfaction for all primary health care professionals, including doctors.

For general medical practitioners, PHO development opens up the possibility of new roles. Some examples are:
- enhanced clinical roles in primary health care teams at the interface between primary and secondary health care
- population-based and community-implemented public health functions
- organisation and delivery of a comprehensive set of health and disability support services to enrolled populations
- specialised roles within a professional ‘portfolio’ that could extend across government, private and non-government organisations (NGOs) such as Plunket and the Family Planning Association, as well as areas such as cancer treatment, diabetes or sports medicine.

The numbers of practitioners required will depend upon the nature, size and scope of the PHO, the way the work is organised and managed, and the requirements of the position. Different PHOs serving diverse communities will approach workforce development in different ways (Pullen and McKinlay 2004; Robinson and Blaiklock 2003).
Primary/secondary interface

PHO development brings into sharp focus workforce and other developments at the primary and secondary care interface. These are currently in a state of flux characterised by:

- new relationships between primary and secondary health care providers. These ensure that the knowledge and skills of both are applied to each patient’s care in the most effective way.
- closer working relationships between primary health care and social services to support timely discharge, aid rehabilitation and reduce the risk of re-admission.
- extended roles for GPs and other primary health care doctors. These increase the capability and capacity of the system to deliver safe, high-quality care in community settings.
- specific roles for smaller hospitals, health centres and PHOs providing local care and relieving pressure on secondary services.
- more appropriate, effective and efficient use of expensive facilities, technologies and personnel.

Good organisation, effective communication and teamwork will enable a seamless transition between primary and secondary health care.

Non-government organisation (NGO) and private sector development

Non-government organisation (NGO) and private sector workforce needs and possible development contributions have in the past been largely ignored by those responsible for health workforce planning and development. It is no longer possible to continue in this manner. For example, some surgical training now requires the direct involvement of the private sector, a trend that is expected to continue.

NGOs now play greater and more sophisticated roles in community settings, particularly in the care of people with chronic illness and continuing disability. The NGO workforce is becoming more diverse, is growing rapidly and is in urgent need of workforce development support.

The MRG acknowledges that the planning and development of the medical workforce must include those who practise, partially or completely, outside the public health system.

However, examining the interaction between the public, NGO and private sectors is very complex, and currently beyond the capacity of the MRG.
Health care networks

New Zealand’s 21 District Health Boards (DHBs) differ widely in size, geography and demographic profile. The total national population of four million people means that few boards are able to individually deliver low-demand specialty and sub-specialty services to their local population. The informal regional health care networks, which already exist across New Zealand, should be supported so they can grow into effective, innovative service delivery groups.

Support should enable flexible regional teamwork and networking arrangements, while providing the benefits of planning, workforce development and service provision arrangements within and between DHBs. Where applicable, NGO and private sector organisations should be included.

Regional networks could be developed in at least two situations. These are in tertiary/quaternary care where several boards work together to provide highly specialised services from a single site and where specialised services are delivered to geographically dispersed communities in the region.

Effective networks should be allowed to evolve and may take different forms in different settings. Generally they should:

- be well designed and supported
- be practical and fit for purpose
- include the relevant health professionals
- mesh primary and secondary health care
- be adequately resourced.

Regional networks will usually centre on one or more tertiary facilities. Each region should support its own set of satellite facilities, hospitals, PHOs and rural practices. Regional service and workforce planning and human resource management should facilitate workforce development.

Services that are best delivered through networked arrangements should be identified and helped to achieve their full potential. Specific development programmes should be led and co-ordinated nationally and regionally but implemented locally. These include workforce development programmes.

Linking employment contracts to regional arrangements can offer several advantages, including providing:

- more equitable access to services
- more effective and efficient service provision
- greater professional satisfaction
- improved recruitment and retention of professional staff, particularly in provincial and rural settings.
A systemic, sector-wide approach to workforce design and development

A systemic, sector-wide approach to workforce development is required for successful service and workforce redesign, PHO development and network evolution. It:

- needs to be clearly defined and understood. This will enable planners to ask the right questions and make sound decisions
- should be clearly accountable and taken seriously by senior decision-makers
- must be supported by well-planned, co-ordinated and managed information systems
- must accommodate longer-term planning horizons (eg, a five-year horizon is not sufficient for doctors, whose training takes much longer than that period)
- must take account of ‘horizon scanning’ for global trends in technology development and health service delivery, developments in the international health labour market and New Zealand societal and health sector changes
- must ensure that local decisions on individual appointments take due account of local and regional service and workforce development requirements.

Information support

Information support is a key prerequisite for a systemic approach to health sector workforce design and development. It must enable the transfer of relevant, accurate and timely shared data on service and workforce capacity and performance. Electronic data linkage of hospital and primary health care patient records and workforce records is essential if developments at PHOs and at the primary/secondary health care interface are to achieve their full potential.

Interlocking information systems should be designed to provide the information needed for workforce development. Data is often generated as a by-product of clinical or administrative systems and is not aggregated, analysed and presented in formats that facilitate workforce planning and development.

Communication and teamwork

Good communication and teamwork amongst patients, carers and other members of health care teams is another key ingredient for successful service and workforce development.

The benefits of team-based care can be maximised by:

- specific training on teamwork at national, regional and local levels
- recognising training and experience in teamwork as an integral part of the development of all health practitioners across the care continuum
- giving priority to developing teams and effective teamwork in all sectors of health and across all health professions

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Fit for Purpose and for Practice 49
recognising the important opportunity for PHO development presented by teams crossing the boundaries of primary and secondary health care and extending into community-based social care

- helping the public understand:
  - why teams are created and developed
  - what safety and care quality standards have been set
  - the role of different team members and when different members should be contacted

- making teams flexible and responsive to varied and changing work patterns
- having health practitioners work in more than one team
- recognising that team leadership is not inevitably the role of the doctor.

Current teamwork practices, while often harmonious, do not usually exhibit the full range of effective communication and skilful teamwork required for the new workplace environment. The skills implicit in democratic practices must be learned, old habits of demarcation and hierarchy replaced and differences in disciplinary perspective respected (Salvage and Smith 2000).

**Innovation and research**

Research has been described as ‘organised curiosity’. It is characterised by a systematic approach to asking and answering questions. Organised curiosity, initiative and innovation have not traditionally been encouraged in health worker practice. The focus has instead been on learned application of established knowledge and skills.

Health care organisations and teams should learn to recognise, encourage and support innovators and others with vital innovation skills. Organisations also need to critically evaluate and learn from the results of organised innovation.

New Zealand has traditionally been slow to recognise and encourage innovation and health services research. This includes understanding how new technologies and insights from biomedical and social research can best be used to improve the performance of the health workforce. Recent developments in the United Kingdom have seen major investment in innovation and research into ways to improve health workforce effectiveness and efficiency (Hampshire and Isle of Wight Workforce Development Confederation 2003).

New Zealand urgently needs to commit more resources to support health workforce research and innovation at national, regional and local levels. Relevant international innovation and research should be utilised, while providing more recognition and support for the work of local innovators, evaluators and researchers.
Organisational learning

Learning organisations encourage ‘research-mindedness’ and innovative ideas in their workers. They design their information systems to provide data for administrative and clinical purposes, and also for research, development and organisational learning. These organisations can plan and implement their own systems evaluations and perform well under external review.

To encourage organisational learning in New Zealand:

- education needs to become even more flexible and dynamic
- retraining, recertification, lifelong learning, interprofessional learning and learning organisations should be more widely recognised and developed
- health practitioners should become more research-minded in their training and work roles, and organisations should encourage this development
- core learning organisation functions and cultures need to be recognised and included in training and development programmes. These include information, innovation, research and development, evaluation, and provision for individual and organisational learning.

Organisations that perform these functions well usually find it easier to recruit and retain good staff. They are also more likely to deliver safe, high quality and cost-effective health care.

Accountability and administration

The health care reforms of the 1990s shifted control away from health professionals at all levels of the system. Control moved to markets and managed-care arrangements, and depended heavily on top-down policy directives, command and control mechanisms, and micro-management. These were aimed at driving safety, quality and efficiency into health care systems.

The application of market forces resulted in some efficiency gains, but these should be offset against widespread alienation of the health workforce. Doctors and other health workers across the system complained that command and control mechanisms did little to achieve safety, quality and efficiency objectives. Instead these mechanisms were seen as largely counter-productive.

Many health practitioners argue that they are increasingly burdened with administrative tasks, some of which do not require a medical qualification. Some see such requirements as contributing to a ‘shame and blame’ micro-management culture that can be counter-productive.
Performance monitoring and accountability measures and procedures are essential elements in health care delivery. That said, better understanding and co-operation between clinicians and managers can create trusting environments in which work restructuring and workforce redesign have the potential to reduce bureaucratic burdens, raise productivity, enhance job satisfaction and improve prospects for recruitment and retention.

**Human resource management**

Workforce planning and development are core elements in modern human resource management. In the past, health service providers have taken little direct interest in the education, training and career development of health professionals. This has largely been left to education providers, to registration bodies and to the health professions themselves.

This view is changing as employers realise the importance of shared values, teamwork and the right structures and processes to retain the best mix of well-trained health professionals. Employers are therefore taking increasing interest in:

- the way work is structured and allocated
- knowledge, skills and competencies required to do the work
- training and deployment of staff, in interdisciplinary teamwork
- general welfare of staff
- human resource management (the effective and efficient use of human resources across the health sector).

Most DHBs now have human resource management systems, and a national human resource network is co-ordinated by District Health Boards of New Zealand (DHBNZ).

In addition, nurses have initiated a number of pilot or demonstration projects where ‘Magnet principles’ of human resource management are being applied and evaluated (Magnet New Zealand).
Key issues in this chapter

- Traditional models of care and patterns of medical work must change.
- Successful change will involve service and workforce redesign.
- Workforce redesign has the potential to significantly improve medical productivity and the effectiveness and efficiency of service delivery.
- Technology transfer can occur once procedures have become standardised, safe and routine.
- Health service development and workforce development must be planned and managed together.
- Workforce development requires a systemic, sector-wide approach and good information support.
- Effective communication and skilled teamwork are essential.
- Greater investment is required to support research and evaluation into innovative ways of delivering health services and organisational learning.
- Service and workforce redesign should aim to reduce the administrative burden without undermining necessary accountability.
- Health sector employers should apply the principles and practices of modern human resource management.

Questions for submissions

4.1 Does this chapter give an accurate picture of the changing work environment?
4.2 Have we missed any issues?
4.3 Is there anything else you would like to add or comment on?
CHAPTER 5: EDUCATION, TRAINING AND CAREER DEVELOPMENT

About this chapter

This chapter focuses on the education, training and career development of medical practitioners. It considers the impact of increasing role diversity, the issues involved in balancing medical training and work, and opportunities presented by the growth of interprofessional learning. The chapter also looks at a range of issues involved in undergraduate selection, numbers and teaching.

The key topics covered in this chapter are as follows.

- Medical education
- Undergraduate medical education
- Role diversity
  - Medical work and doctors in training
  - Review of medical work, staffing and training
- Professional and career development
  - Interprofessional learning and practice.

Medical education

Medical education has three distinct phases.

- Undergraduate
- Postgraduate
- Continuing professional development.

The goal of medical education is to develop junior doctors who are competent to practise safely and effectively as interns in New Zealand or Australia. It is also expected that they will have an appropriate foundation for lifelong learning and for further training in any branch of medicine. Attributes should be developed to an appropriate level for the graduate’s stage of training (AMC).

Specific attributes, incorporating knowledge, skills and professional attitudes are generally in keeping with the CanMEDs 2000 roles and competencies (Appendix 8).

Several recent reports in the international literature have outlined the need for radical change and innovation in the structure and process of medical education at all three levels. Such reconstruction is necessary to:

- prepare doctors for the needs and expectations of society
- cope with the explosion in medical scientific knowledge and technology
- foster physicians’ ability for lifelong learning
• ensure training in the new information technologies
• adjust medical education to changing conditions in the health care delivery system (WFME 2003).

Undergraduate medical education also needs to adjust to changes in medical training in the early postgraduate years.

A global set of standards for medical education has been prepared by the World Health Organization (WHO) and the World Federation for Medical Education (WFME). These standards focus on the fundamental theory and practice of medicine, specifically:

• basic biomedical, behavioural and social sciences
• general clinical skills
• clinical decision skills
• communication abilities
• medical ethics.

The organisations recommend all medical schools should address these standards.

The process of medical education is just as relevant as the standards themselves. Standards should be used as guidelines and modified or supplemented to meet national, regional and local needs and priorities. Standards are useful for educational institutions as the basis for internal evaluation and quality improvement. They are also an essential tool for external evaluation, recognition and accreditation of medical schools.

The Australian Medical Council, working with MCNZ, is responsible for the accreditation of medical education activities in New Zealand.

It defines the goals and objectives of basic medical education as follows.

‘Doctors must be able to care for individual patients by both preventing and treating illness, to assist with the health education of the community, to be judicious in the use of health resources, and to work with a wide range of health professionals and other agents. They must possess a sufficient educational base to respond to evolving changing health needs throughout their careers.’

Medical courses should produce graduates who are prepared for and motivated to seek ongoing professional development from their intern year onwards. This can occur through in-service training, continuing medical education and through the use of modern information technology.

The quality of each medical school will ultimately be judged by the ability of its graduates to perform at a high level in roles demanded by the community.
**Undergraduate medical education**

Medical schools organise and deliver undergraduate education, covering the period up to the first medical qualification.

There has been little open questioning until recently about the responsibility of medical schools in the design and delivery of medical education. This role has traditionally spanned:

- student selection
- curriculum content and structure
- the nature and location of clinical training, assessments and examination.

Medical schools are accountable to the medical profession for the quality of graduates. This occurs through accreditation by the AMC and the MCNZ. Funding accountability has been through education sector funding mechanisms and is now handled by the Tertiary Education Commission.

In New Zealand, as in many other countries, there is little direct accountability from the universities and the medical schools to the health sector, or to the wider public as consumers of medical services. However, there is now increasing pressure for medical education to be more responsive to changing health needs and expectations, and accountable to more than just the traditional academic and professional peers (Gorman and Scott 2005).

The MRG therefore believes that prompt action is needed to address long-standing and unresolved issues between the health and education sectors (for historical details see Appendix 1).

We further believe that continued reliance on informal collaboration and ad hoc arrangements will not meet the future needs of basic medical education in New Zealand. A more structured approach is required. This will demand commitment from all the sectors of the health/medical workforce development network. Chapter 7 explains this requirement in more detail.

The form of this agreement, how it should operate and how it should be integrated with other aspects of workforce development is beyond the scope of this document. It should be the subject of a separate review.

The MRG makes the following observations and suggestions now, in advance of such a review.

**Diversity through student selection**

Medical school entry should better reflect the social and economic characteristics of the population. Current efforts to research and develop new initiatives to enable greater diversity in recruitment should be intensified.
Diversity through graduate entry

Diversity is not just about widening participation and entry for those from disadvantaged backgrounds. It should include mature students, who bring different experiences, and also students from other disciplines. This sort of diversity has an important effect on the profession and on the learning process (Scottish Executive Department of Health 2004b).

Both New Zealand medical schools admit graduates but require these students to complete a five-year course. This is the same length of course as undergraduates entering after their first year at university. Graduate programmes in Australia, the United Kingdom and Canada are now four-year courses and, in some instances, three years.

The medical curriculum

The WHO and the WFME have noted the need for significant change in medical curricula. Emphasis should move from gaining knowledge to a learning process that includes the ability to evaluate data as well as develop skills to interact with patients, colleagues and communities. Curricular innovation is already underway in New Zealand and should receive active encouragement and supporting resources.

In most overseas medical schools, there is now a greater emphasis on early clinical experience than in New Zealand schools.

Most overseas undergraduate medical school programmes are now five years in length. In New Zealand, they take six years. New Zealand medical schools would be at a significant financial disadvantage if they were to shorten their courses. Shorter courses would, however, enable graduates to enter paid employment earlier.

A primary health care focus

The MRG believes a top priority should be placed by policy makers, funders and educators on starting and encouraging significant moves towards community-based medical education. These are needed under the Government’s health and primary care strategies and PHO development (Farry and Williamson, 2004).

Effective use of learning resources

Clinical skills training is fundamentally important to medical students. Further development is needed for the widening range of learning resources, including mechanical and computerised models, and learning opportunities in different settings.

Teamwork and interprofessional education

The delivery of health care is increasingly a team activity. Well-designed and delivered interprofessional development activities are now required for medical students to work and learn with students from other related disciplines.
Medical education networks

Shared teaching resources could be developed, such as local, regional and national medical education networks. They could be used in teaching, in provincial and rural hospitals, and in PHO and other community settings.

Medical socialisation

Students and graduates interested in community-based medical practice have been discouraged by previous medical school and early graduate socialisation settings. These have traditionally focused on medical practice predominantly in hospital settings.

Vocational guidance and support

Undergraduate students should have greater access to information, advice and guidance about vocational possibilities and pathways in medicine. From an early stage, students should have opportunities to develop vocational aptitudes and interests and to advance particular career aspirations. Greater use of elective study would be one way to do this.

Teaching and infrastructure support

Clinical teachers often have many roles to play simultaneously. These include work as researchers, teachers, learners, clinical service providers, managers, administrators and leaders. The range of sometimes conflicting roles, when coupled with inadequate infrastructure, raises recruitment and retention issues. It also raises larger questions about how continuing teaching and training costs should be met.

Information, innovation and research

Reform of undergraduate medical education requires relevant information, support for targeted innovation and evaluation, and a well-resourced and nationally co-ordinated medical education research and development programme.

Medical student numbers

There is no clear-cut relationship between medical student numbers and the supply of fully trained doctors. However, decisions about the number of medical school places are needed. TEC funding for medical school places is limited by Cabinet decision – medical schools cannot just increase places on their own. A review of undergraduate medical education should address key issues such as:

- how those places are filled
- what students are taught and how they learn
- how undergraduate medical education should be advanced through vocational training and career and medical workforce development.

Well co-ordinated processes to gather and utilise relevant data, make key decisions and audit performance will be needed.
Statistical data and models for forecasting demand and supply requirements, such as the use of target practitioner to population ratios, are of limited use in complex and rapidly changing environments. What is required is a well-informed, co-ordinated and ongoing deliberative process that brings together interested stakeholders to make and monitor decisions and to review implementation.

Appropriate education and training in New Zealand medical schools has the potential to improve both the quality of patient care and service delivery, and the recruitment and retention of recent graduates and vocationally trained doctors.

**Role diversity**

A role change for doctors within the health system is being driven by:

- different public expectations
- different role and competency requirements
- changing work patterns
- increasing work/life balance expectations held by doctors in training
- wider career options.

The MRG believes that:

- the central role of doctors will continue to be the diagnosis of clinical problems and providing and co-ordinating patient-centred care
- retaining motivation and professionalism is essential if medicine is to be more than just a job
- doctors and their health practitioner colleagues will continue to lead health service workforce development and service organisation and delivery
- workforce redesign and general improvement to the work environment should be driven by health professionals to benefit all patients and all health professionals
- service redesign and skill-mix change requires new ways of working and new competencies
- doctors can develop new professional roles through population-based health programmes.

**Medical work and doctors in training**

Increasing role diversity and changes in employment conditions have put doctors’ existing vocational training and career development under serious strain. For example, reduced work hours and rostering arrangements for resident medical officers (RMOs) have placed pressure on training and the organisation of medical work while providing the required level of service (Morton and Lynn 2004, Childs and Old 2004).
The MRG believes that reducing the hours of rostered work by RMOs may make it difficult to:

- provide care continuity for patients and achieve learning continuity for doctors in training
- gain necessary knowledge, practical experience and proficiency in technical skills
- build trusting relationships with medical and other colleagues
- meet registration and vocational training requirements
- find role models and develop career aspirations and plans.

Consultants and teachers face similar issues, with some added complexities. Difficulties may include:

- reduced continuity and possibly reduced standards of patient care
- less opportunity and commitment to establishing teaching and mentoring relationships
- less confidence and trust by consultants in the clinical judgment and technical ability of RMOs
- additional work, much of it out-of-hours
- greater dependence on MOSS and on other staff such as nurses.

**Review of medical work, staffing and training**

The MRG believes the Doctors in Training Workforce Roundtable (DTWR) will play an active part in addressing the organisation of medical work, staffing and training in the New Zealand hospital system.

The formation of the DTWR (Appendix 11) in December 2004 was an acknowledgment of significant problems with postgraduate medical training arrangements. These issues affect both patient outcomes and the future medical workforce.

The MRG supports the role and terms of reference of DTWR. It believes that any review should start with what are clearly urgent problems in hospital settings. However, at an appropriate time, the review process should be expanded to include doctors in training in primary health care settings. The MRG is keen for the following issues to be reviewed.

- Work optimally done by vocationally trained specialists
- Work optimally done by sub-specialists (eg, MOSS)
- How to make the MOSS role more attractive and effective
- Service work most suitable to doctors in training
- The vocational focus of RMO work, and the length of RMO work rotations
- Work currently carried out by doctors that would be more efficiently done by appropriately trained technicians, nurses or other staff
- Teaching and training obligations of all grades of medical staff
• How to address the individual needs and different service delivery requirements of hospitals in different localities
• The cost of teaching and training and how and by whom costs are met.

In the United Kingdom, these issues are the subject of research and reform. The NHS has produced several major reports, reference to which could provide a good starting point for a New Zealand review (Department of Health 2002; National Taskforce on Medical Staffing 2003).

**Professional and career development**

Professional development has traditionally focused on achieving training milestones. It has largely been the domain of education providers, registration bodies, vocational colleges and the organised health professions.

This is now changing, with increasing acceptance of lifelong learning, professional development and recertification. The career outlook of doctors and other health professionals is also changing with growing demand for:

• more flexible working patterns
• career breaks
• opportunities to change career directions
• greater recognition of prior learning.

Increasing medical specialisation and sub-specialisation within and between traditional medical disciplines is another trend. For example, many GPs now have specialty interests that they pursue in part-time employment.

While increasing specialisation is a clear trend, widely competent and experienced generalists will remain important. Core general skills are likely to remain highly valued, particularly in smaller centres and in rural and other community settings. PHO development and changes at the primary/secondary health care interface could also see an increased demand for capable generalists.

These trends all drive the need for health sector employers to provide additional, individually-tailored professional support. Future professional development will have a career-based focus, rather than a skills-based focus. Professional development needs to:

• consider the full spectrum of clinical practice – from pre-registration training through to retirement, and even beyond retirement
• take into account the work/life balance sought by health professionals
• recognise individual interest in career development.

Some health sector employers have already begun to recognise this need for change and have responded by investing in development. We have already noted the opportunities presented in this area by DHB human resource management systems and health care networks.
Professional development in the health sector could be further encouraged by:

- recognising the need to invest in the development of all health professionals
- demonstrating a greater level of interest in staff general welfare, training and deployment, work structure and allocation
- utilising the development opportunities created by new regional networks, the primary/secondary health care interface and interdisciplinary teams
- developing policies on professional development and related support
- providing flexibility in employment service, continuing education and career development
- providing career advice and guidance, and where appropriate, mentoring at all stages of employment
- facilitating training in more diverse settings, such as in communities, NGOs and private practice.

Health professionals must also take personal responsibility for understanding their service delivery role, maintaining their knowledge and competencies, and communicating their career and life aspirations to their employers.

The measures outlined above should support and enhance recruitment and retention in both primary and secondary health care.

**Interprofessional learning and practice**

The full potential of the health workforce will only be realised by commitment to collaborative lifelong education. Interprofessional learning must feature more prominently in health workforce development.

In the current environment, which focuses on teamwork, the concept of independent practice by any individual health practitioner is outmoded and needs to be re-evaluated. In the United Kingdom, a rapidly growing literature focuses on interprofessional teaching and learning technologies, learning networks, innovative educational practice and employment arrangements. This research considers implications for teamwork and for realignment of roles (Davies 2000, Humphris et al 2002). New Zealand could learn much from this experience.

Regional workforce development confederations now bring a sense of consistency and cohesion to workforce innovation and development (Hampshire and Isle of Wight Workforce Development Confederation 2003).

‘Stable, well-trained, professionally motivated workers are needed to deliver safe, high quality, cost effective health care. For this to happen, clinicians – doctors, nurses and other health care practitioners – must learn to work in interdisciplinary teams and open partnerships to govern, manage and deliver services. This is a core issue for health/medical workforce development’ (Bates 2004; Humphris and Masterson 2000).
Formal interprofessional learning and practice have been slow to develop in New Zealand. This may be due to:

- conservative attitudes and behaviour by the health professions
- similar attitudes in health and education sector policy makers and managers
- traditional teaching practices and learning requirements that slow the introduction of interprofessional teaching.

However, the health sector needs to grapple with these challenges and push forward with interprofessional teaching and teamwork issues.

### Key issues in this chapter

- Major changes are needed to the way in which medical education is organised and delivered in New Zealand.
- The MRG proposes and outlines a case for a major review of undergraduate medical education in New Zealand.
- Medical roles and practices are evolving and becoming more diverse and specialised.
- Changing expectations, patterns of work and terms and conditions of employment have put existing arrangements for doctors in training under strain.
- The MRG supports the establishment and the terms of references of the Doctors in Training Workforce Roundtable (DTWR).
- The MRG supports a wide-ranging review of the organisation of medical work, staffing and training in New Zealand hospitals.
- When appropriate, such a review should be expanded to include doctors in training in primary health care settings.
- Challenges that have inhibited the development of interprofessional learning and practice need to be faced.
Questions for submissions

5.1 Does this chapter give an accurate picture of the issues involved in the organisation of medical work, medical staffing, vocational training and professional and career development?

5.2 The MRG has outlined a case for a review of undergraduate medical education – do you agree with this case?

5.3 The MRG has outlined a case for a wide-ranging review of the organisation of medical work, staffing and training in New Zealand hospitals – do you agree with this case?

5.4 Is there a case for a similar review of the training of doctors to work in primary health care settings?

5.5 Why has interprofessional learning and practice been slow to develop in New Zealand – what should be done?

5.6 Is there anything else you would like to add or comment on?
CHAPTER 6: RECRUITING AND RETAINING DOCTORS IN A GLOBAL MARKET

About this chapter

This chapter considers the issues surrounding recruitment and retention of doctors in New Zealand in what is an increasingly competitive international market. It looks at specific issues facing doctors throughout their careers, from prospective medical student to older doctor. General practice, specialist roles and overseas doctors are included in the discussion.

The key topics covered in this chapter are as follows.

- The international medical labour market
- Student recruitment and graduate retention
- Early postgraduate years
- Specialist practice
- Primary health care and general practice
- Overseas trained doctors (OTDs)
- Academia and research
- Mid-career and older doctors.

New Zealand must locate and retain its medical workforce in increasingly competitive international and local markets. A range of social and economic factors shape those markets. Fortunately New Zealand has a reputation as a safe and pleasant place to live and practise medicine. Recruitment and retention of doctors will be assisted by this continued reputation, coupled with sustained, reasonably high economic growth.

Those responsible for medical workforce development can assist by promoting this positive image, and ensuring the image is also a reality.

Recruitment and retention issues arise in many ways. These will be explored more fully in the rest of this chapter but can be summarised as issues surrounding:

- recruitment of students to medical school
- retention of students during undergraduate study
- recruiting new doctors to training posts after graduation
- retaining new doctors in New Zealand
- recruiting and retaining vocationally trained New Zealand doctors and OTDs in response to service gaps
- retaining doctors nearing retirement age.
The international medical labour market

Demand for doctors is rising in all relatively affluent Western countries due to:

- increasing demand for medical services
- rising service demand in ageing populations
- advances in medical technology
- rising public expectations about medical outcomes
- increasing expectations of health professionals about how care should be provided and paid for, including lifestyle, employment and remuneration issues.

Most countries have responded to rising demand by significantly increasing investment in medical education and increasing medical student numbers. They also seek to improve employment terms and conditions in order to improve retention of qualified doctors. This may include reducing hours of work and increasing remuneration.

Aggressive recruitment of suitably trained and experienced OTDs is occurring in many countries. The MRG expects the international medical labour market for well-trained, English speaking graduates will be fiercely competitive for the foreseeable future. New Zealand medical graduates will continue to be an attractive international commodity.

Several significant issues should be noted.

- As discussed in Chapter 2, New Zealand medical graduate production has historically been high in relation to comparable countries. However, many of these other countries have increased, or have plans to increase, graduate production.
- New Zealand also has a high dependence on OTDs – up to 40 percent of the medical workforce in 2003.
- Most New Zealand-trained doctors spend time overseas at some point in their careers. This is generally accepted as a positive thing. However, permanent loss of the doctor to New Zealand is undesirable.

Student recruitment and graduate retention

The number of eligible and able students seeking entry into medical schools in New Zealand continues to exceed the number of available places.\(^8\) Overseas indication is that entry into medical training has become less popular (AAMC 2004).

Medicine needs to attract students with the right motivation and talents. At the same time, medical students should broadly reflect New Zealand’s ethnic and socioeconomic profiles.

This is not currently the case (see Chapter 2). Efforts in both New Zealand medical schools to selectively recruit Māori and Pacific Island students have had only modest success (see Appendices 5 and 6). The effect of the Step-up Scholarship scheme on the socioeconomic profile of medical school students is yet to be seen.

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\(^8\) The number of domestic places available is determined by government Cabinet decision and currently is capped at 315 per year.
The New Zealand student support scheme, generally known as ‘student loans’, aims to provide financial support for medical and other students. It has been controversial from the start, is complex, and constantly under review and modification by the government, and the detail is not widely understood (Appendix 7).

The debt burden accrued by most students during their undergraduate medical education could be expected to be a disincentive to entering medical training.

Information on student debt repayment is not collected by socioeconomic status. However there is evidence that medical students are much more likely to have parents from higher socioeconomic groups and that Māori and Pacific students are more likely to accumulate debt and have difficulties in debt repayment (Ministry of Education 2005).

The full impact of rising debt is not usually felt until the later undergraduate and early postgraduate years. At this time, lifestyle, vocational and early career decisions are made. For example, concern over debt may:

- encourage new doctors to leave New Zealand soon after graduation in search of better-paid, overseas job opportunities
- make areas of medical practice with the highest earning potential more attractive and other disciplines (eg, general practice) less attractive.

While most students accept that they should pay something towards the cost of a medical education, the question is how the costs should be split between the student and the public purse.

One New Zealand medical graduate costs approximately $200,000 to train. The cost of vocational training for doctors varies greatly, but can add another $400,000 to the basic training cost (TEC 2004a, and Appendix 12).

At any one time, only two-thirds of recent domestic medical graduates appear to have a practising certificate (Appendix 2, Figure A2.15). This rate of loss appears constant. The very significant investment in these students is lost to New Zealand.

Of the MBChB students who completed study in 1998, 71% had at some stage used the student loan scheme. Sixteen percent of this group advised Inland Revenue that they were resident overseas at 31 March 2003 (Ministry of Education 2005).

There is evidence that many of those who travel overseas return to New Zealand. Of the 60% of 1997 completing medical students who used the loan scheme, the percentage who advised Inland Revenue that they were resident overseas fell from 26% in 2001 to 12% in 2003.

Although they incur relatively high levels of debt, medical graduates retire debt faster than graduates in most other disciplines (Ministry of Education SL1). This is in marked contrast to other health disciplines, such as nursing. The variation is due to the relatively high levels of medical remuneration in the early postgraduate years.
With current emigration information, it is not possible to establish the precise motivation of those leaving the country, nor at this stage to prove or disprove a cause and effect between higher student loans and higher long-term emigration rates.

Nevertheless, the MRG strongly believes that the current debt burden carried by medical students is too high. A high level of debt has the potential to impact on the career decisions of graduates, encouraging moves into high-paying vocational groupings (eg, private surgical practice) and employment locations that are not in the best interests of the New Zealand public health system. The MRG supports general measures to reduce debt for all students, including medical students, while recognising the complexity of the issues. The MRG suggests that the health sector could itself develop employment arrangements and incentives to assist in financing medical education. These would:

- assist young doctors with debt relief
- help doctors in their early postgraduate years to identify and take advantage of employment, training and career development opportunities in New Zealand
- encourage a higher proportion of graduates to start postgraduate and vocational training in New Zealand.

The health sector may also enable those who decide to go overseas to do so with training and career objectives firmly in mind. On their return to New Zealand, the graduates could return into pre-organised employment that could make immediate use of their new skills. Arrangements of this type could also guide vocational trainees into areas of established medical workforce need, thereby assisting New Zealand’s short- and long-term medical workforce planning. This general theme is developed further in the next sections.

Early postgraduate years

The health sector should explore opportunities for career and vocational guidance throughout under- and postgraduate medical education. This could include more structured programmes to assist new graduates through:

- the provision of information
- individual mentoring
- guidance and career advice before and after graduation
- formal arranged talks
- career fairs and the like.

After six years of university education, the new medical graduate emerges as a generalist able, with additional training, to turn their hand to any branch of medical practice.

Questions now need to be asked about whether changes in medicine make the production of generalist graduates desirable in the longer term. These changes include:

- a growing body of medical knowledge
- more demanding and specialised practice
- more diverse medical roles
- the introduction of new education technologies and more elective study.
The MRG believes that there could be advantage in enabling at least some students to actively pursue vocational interests and aptitudes during the medical course. This would help them develop and advance career aspirations and plans earlier.

Many doctors seeking their first house officer appointment have only vague ideas about their long-term career plans. The establishment of the ‘Advanced Choice of Employment’ (ACE) scheme that brings intending house officers together with DHB employers is a significant step towards creating smoother pathways to initial employment (Pole et al 2004). It should be noted that the ACE scheme for making house officer appointments takes little account of longer-term vocational or career interests and aspirations.

The main focus of the initial house officer years is on learning the culture and practice of hospital medicine. During these busy and challenging years, most graduates are distanced from any previous interest in primary health care or community-based medical practice.

By the end of postgraduate year two, most house officers are socialised in the hospital culture. This is also the time that many start to make decisions about their future career and related vocational training. Those who opt for further training in hospital-based specialist practice usually find assistance easily, especially if they are seen as able trainees with good potential by clinical teachers and mentors.

However, for those with less career direction, and for those interested in careers outside the hospital, there is less reassurance and security. These doctors are most at risk of drifting in their early postgraduate years. Overseas travel and well-paid employment overseas can appear attractive, leading to a costly permanent loss of the doctor from New Zealand.

Many different factors shape graduate decision-making. These include financial considerations, lifestyle aspirations, job opportunities, career options and family interests.

The right assistance at the right time can assist graduates to confidently establish themselves professionally. This may include targeted overseas study and experience, but with the option of returning to work in New Zealand made as attractive as possible.

This assistance should include:

- effective strategic medical workforce planning at national, regional and local levels
- well-organised and active vocational guidance programmes, including rotations into general practice in postgraduate years one and two
- mentoring and career support
- well-designed, packaged, publicised and managed incentive schemes.

Most DHBs already operate a variety of informal schemes to attract and retain doctors. These involve a variety of vocational training packages and incentives to attract doctors to provincial and rural locations and practice vacancies that have proved difficult to staff.

These DHB initiatives should be fostered and extended into a national programme. Such a programme would be a major undertaking and would require effective partnerships between all government-funded health and education agencies, health sector employers
and professional organisations. It would also demand innovative thinking, infrastructure development, investment of significant resources and sound evaluation including a broadly-based cost-benefit evaluation.

Current challenges in the local and international medical labour markets make a formal national programme very desirable, if not essential. Any national scheme should recognise and provide for careers:

- outside hospitals
- in general practice/primary health care
- in public health/population-based medicine
- in research and academia
- that take account of the special needs of OTDs.

Local marketing to recent New Zealand graduates about the value of remaining in New Zealand could also be beneficial, especially when combined with vocational training, incentives and career development programmes. To date there has been relatively little domestic promotion of working in New Zealand, in contrast to the high profile given in the media to the ‘brain drain’ and student debt levels.

**Specialist practice**

It is clear to the MRG, even though this is hard to quantify with data, that in the short to medium term, New Zealand is likely to be short of specialists. We believe that a major review of medical work, staffing and training arrangements in New Zealand hospitals, as described in Chapter 4, will assist with recruitment and retention. We noted in that chapter the value of regional networks, redesign and technology transfer in addressing specialist vacancies.

However, rather than focusing entirely on workforce shortages, more attention should be given to service and workforce innovation and development aimed at achieving better patient outcomes within funding and staffing constraints. Particular problems should be handled in a broad and long-term context, which may involve national, regional and local arrangements.

The MRG believes that demonstration projects should be established and formally evaluated. These projects can explore the risks and benefits of innovative recruitment and retention practices, service and workforce redesign and technology transfer as ways of addressing service gaps in specialist areas and in general practice.

The following factors affect demand for specialist services and the recruitment and retention of specialists.

- The specialist workforce is growing but is only just keeping up with population growth.
- New technologies and rising public expectations are increasing demand for many specialist services.
- The scope and cost of services is increasing rapidly putting pressure on both public and private funders.
• Equity of access and how services are rationed will remain major issues.
• Service and workforce redesign and technology transfer are major workforce issues.
• Modelling specialist workforce requirements in terms of target specialist to population ratios is difficult and has serious limitations.
• Discussion is required about the merging of roles of specialists and general practitioners at the primary/secondary health care interface.
• Recruitment and retention is difficult and significant shortages exist in some areas.

Additional important factors include:
• training programmes are under pressure, in part due to changes in the expectations and working conditions of doctors in training
• training programmes and the allocation and funding of training posts need to be better organised and co-ordinated nationally, regionally, locally and internationally, particularly with Australia
• vocational guidance and career development arrangements need to be better organised and co-ordinated. This includes the use of incentives to meet planned medical workforce needs and the career aspirations of individual doctors in training
• postgraduate medical education needs to be better organised, co-ordinated and funded in national, regional and local networks.

Primary health care and general practice

The MRG is deeply concerned about recruitment and retention in general practice.

Until 1992, the government funded an average of 95 GP training places per year in the Royal New Zealand College of General Practitioners (RNZCGP) General Practice Vocational Training Programme (GPVTP). There were regularly more applicants than places available.

In the late 1990s, the GPVTP had difficulty attracting trainees. There are now 55 funded places available per year on the GPVTP, and applicants exceed the number of funded positions (RNZCGP 2003).

Registrars undertake supervised attachments to accredited GP teaching practices and participate in day-release seminars and workshops. Because the number of funded training posts is limited the College offers a ‘seminar attendee’ option whereby self-funded trainees are able to attend the seminars offered to registrars. About 50 self-funding doctors currently attend these seminars (RNZCGP 2003).

Some key issues and trends in GP training are as follows.
• 50 percent of GP trainees are women, and the proportion is rising (NZHIS).
• Approximately 50 percent of trainees are OTDs who, on average, are 5–10 years older than local trainees (RNZCGP 2003).
• Most trainees see themselves as practising in New Zealand.
The majority are interested in flexible working arrangements (locum, salaried and session work), preferably in urban settings.

Few are interested in buying into a practice, with substantially more males than females expressing an interest in buying a practice.

Key issues in remuneration are as follows.

- GP trainee remuneration is significantly less than for doctors in other forms of vocational training in institutional settings.
- Funding through the Ministry of Health’s Clinical Training Agency (CTA) has led to recent improvements.
- Anecdotal evidence suggests that the relatively poor remuneration of trainees has discouraged general practice recruitment.

The College has previously accommodated almost twice as many registrars it does now. The College is confident that it could provide for at least 100 registrars per year (RNZCGP 2003). Many GP trainers regard providing training as a valuable and rewarding role.

It is important to ensure that existing training programmes meet the changing needs of practitioners working in PHO environments in urban, provincial and rural settings.

The MRG believes that there should be a review of the RNZCGP General Practice Vocational Training Programme. This should include activities and resources in both the College and in the universities. It is important to ensure that existing training programmes are meeting the changing needs of practitioners working in PHO environments in urban, provincial and rural settings. The programme should provide for trainees with special clinical interests, with public health or organisational development interests, and those wishing to practise in Māori or Pacific Island communities, or in areas with relatively deprived populations.

Resourcing for the programme should be increased, the training infrastructure strengthened and the numbers in training increased. New training posts should also be established, mainly in community settings.

**PHO and primary health care practice**

PHO development has generally proved flexible and adaptable to local settings. However, the speed of its development has put a strain on those providing the necessary infrastructure. Variation exists in the early performance of PHOs. This should be recognised and appropriate support mechanisms and safety nets provided.

PHOs are only now beginning to give serious thought to workforce development rather than immediate and urgent staffing issues. As evidenced at the Primary Focus 2 Conference in March 2005, many innovative service redesign and development projects are under way in different practice settings across the country. Many of these have potentially important workforce development implications. This outpouring of local energy and enthusiasm is encouraging even if some projects are under-resourced and poorly co-ordinated.
What is needed at national, regional and local levels are over-arching and facilitating strategic frameworks, policies and other tools to guide and enable integrated workforce development within and between PHOs and in other settings.

**Rural practice**

The demographics of the rural GP workforce have been briefly outlined in Chapter 2. Annual rural workforce surveys have been carried out and reported since 2000. Farry and Tucker provided a valuable resource in their 2004 major review of vocational training for rural general practice in New Zealand (Farry and Tucker 2004; London 2002, 2004). This was commissioned by the CTA.

There are many well-documented reasons for medical graduates not choosing rural general practice as a career option. These include on-call workload, the requirement of an extensive skill-base, career aspirations of the partner, family concerns, lifestyle choices, financial considerations, urban origin of students and a lack of a robust locum service.

Rural GP work does have advantages, including more clinical work, good teamwork, more community support and involvement, and an attractive environment.

For more than a decade, rural practice has had a prominent place on the political agenda. Targeted funding and other assistance have improved the workforce situation and working conditions. Rural nurses have been trained and deployed. This has strengthened practice teams, created more supportive environments and improved the retention of staff.

Recent increases in medical student numbers are conditional on increased teaching focus on rural health.

Some of the innovations, particularly in nursing and teamwork, could be applied elsewhere in general practice and in the wider health sector.

**Summary of general practice recruitment and retention factors**

The following is a summary of the factors the MRG has identified that affect GP demand, recruitment and retention.

- GP to population ratios are falling – especially in rural and deprived areas.
- The workforce is ageing.
- There is a heavy dependency on OTDs, especially in rural and deprived areas.
- Workloads and hours of work are increasing.
- More doctors are working part time, often outside general practice.
- More women are entering general practice.
- Fewer doctors are self-employed.
Other factors include the following points.

- Salaried and locum employment is increasingly popular.
- 70 percent of doctors either belong to, or intend to join, a PHO.
- The ‘bureaucratic burden’ in general practice is increasing.
- General practice remuneration is low, compared to other areas.
- Workforce morale has generally been low.
- Few students and recent graduates are interested in careers in general practice.
- The numbers receiving general practice training are inadequate.

**Overseas trained doctors (OTDs)**

OTDs will always be needed for positions that are not filled by suitably trained and experienced New Zealanders. Arrangements for OTD recruitment and training are not nationally co-ordinated in New Zealand, unlike in the United Kingdom.

The MRG believes that OTD recruitment and retention should be consistent with regional planning and medical workforce development. Once recruited, OTDs should have the same access as other medical workers to training and career development resources. Previous inadequate orientation, support and additional learning for some OTDs has reduced their ability to work safely and successfully in New Zealand. Some have found their way into non-consultant grade positions (MOSS) where, without access to formal training and supervision, their career aspirations have been frustrated.

**Academia and research**

Specialists in full-time public sector employment in academic and research positions are now remunerated at levels well below those in other forms of public and private sector employment. As a result, it is now difficult to recruit and retain skilled teachers and researchers.

The MCNZ found in their 2002 Medical Workforce survey that there was a 33 percent fall in doctors involved in basic medical science – predominantly non-clinical work – between 2001 and 2002. The MCNZ felt that ‘the fall in numbers of medically qualified basic medical scientists is a potential threat to medical education in New Zealand’ (MCNZ 2004b). New Zealand is not alone in experiencing this problem (Scottish Executive Department of Health 2002a).

The MRG supports the development of initiatives and local partnerships between health and education sector employers and the government. These initiatives and partnerships should ensure that fair and equitable remuneration and terms and conditions of employment are available to these key members of the medical workforce.

Failure to retain and develop academic and research positions will have a negative effect on the quality and quantity of future medical research and teaching in New Zealand. This will result in a lack of potential mentors for those interested in research and academia.
Academics and researchers will play an integral role in developing and implementing new curricula that will be essential for the changes in undergraduate and postgraduate medical education suggested in previous chapters.

**Mid-career and older doctors**

Many doctors in their mid and late career seek flexible employment and career progression to enable them to balance changing work abilities and interests with personal and family life aspirations and commitments. Opportunities for career breaks and sabbaticals can improve recruitment and retention, as can career and succession planning.

Early retirement is less likely if work can be tailored to meet changing physical abilities and intellectual interests. Older doctors can often provide not only scarce clinical knowledge and skills but also much needed experience in teaching, management and mentoring. Such arrangements can benefit older doctors, their younger colleagues and employers alike.

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**Key issues in this chapter**

- New Zealand competes for doctors in a highly competitive international medical labour market.
- Recruitment and retention issues arise at each stage in the medical life cycle, both clinically and academically.
- New Zealand should develop and promote a positive labour market identity.
- Student debt is a major recruitment and retention issue against the background of the global marketplace.
- Formal support for vocational training and career development should be available from the start of and throughout each doctor’s career.
- Career guidance and mentoring should be available throughout undergraduate training and early in postgraduate years.
- Each area of specialist practice has its own unique training, recruitment and retention requirements.
- PHO development is challenging traditional thinking about the organisation of medical work and training, recruitment and retention in primary practice.
- A review of general practice vocational training is required to meet the needs of a rapidly changing work environment.
- Overseas trained doctors, older doctors and doctors in academic employment have recruitment and retention needs that require specific attention.
Questions for submissions

6.1 This chapter covers a wide range of issues affecting the recruitment and retention of doctors in a global market. Do you have any comments to make on any of the matters highlighted as key issues?

6.2 Have we missed any issues affecting specific groups, such as students, graduates, specialists, GPs, rural doctors, overseas trained doctors and older doctors?

6.3 In this chapter, we make several recommendations. Do you support the following recommendations?
   • That general measures be taken to reduce debt for all students, including medical students.
   • That students should be able to actively pursue vocational interests and aptitudes during their undergraduate medical course
   • That the capacity of the Royal New Zealand College of General Practitioners (RNZCGP) General Practice Vocational Training Programme (GPVTP) be reviewed.

6.4 Is there anything else you would like to add or comment on?
CHAPTER 7: WORKING TOGETHER – A SYSTEMIC, SECTOR-WIDE APPROACH TO HEALTH WORKFORCE DEVELOPMENT

About this chapter

This chapter is about the roles, responsibilities and relationships between the statutory and other organisations involved in health workforce development.

The key topics covered in this chapter are as follows.

- Hierarchies and networks
- Statutory bodies
- Other stakeholders
- Working together
- Guiding principles
- Leadership.

Previous chapters have outlined the need for a systemic, sector-wide approach to health and medical workforce development. In particular, we noted the importance of evidence-based development, and integrated planning and management involving all stakeholders.

Hierarchies and networks

The traditional drivers of health workforce development have been political, administrative and professional hierarchies.

Hierarchical structure and processes alone cannot achieve effective health workforce development. Greater use needs to be made of existing network structures throughout the sector. Mutual self-interest and recognition of the value of working together are the main drivers of formal and informal networks.

These networks are complexes of links between organisations and individuals. They are fundamental to sector work, professional support and workforce development. Workforce development requires considered interaction between both networks and hierarchies.
Table 7.1: Summary of main differences between hierarchies and networks

<table>
<thead>
<tr>
<th>Hierarchies</th>
<th>Networks</th>
</tr>
</thead>
<tbody>
<tr>
<td>People look to their superior for authority</td>
<td>People look to their most competent colleague</td>
</tr>
<tr>
<td>Focus on organisational coherence and viability</td>
<td>Focus on expert achievement</td>
</tr>
<tr>
<td>Depend on formal control, accountability and extrinsic motivation</td>
<td>Depend on collegial values and intrinsic motivation</td>
</tr>
<tr>
<td>Provide structure, control and accountability</td>
<td>Provide knowledge, innovation and capability</td>
</tr>
<tr>
<td>Tend to be favoured by managers, politicians, policy makers and the public</td>
<td>Tend to be preferred by health professionals</td>
</tr>
</tbody>
</table>


Many of the underlying issues in previous chapters relate directly or indirectly to tensions between hierarchies and networks. These tensions are perhaps the defining feature of health workforce development and include tensions between:

- politicians, managers and clinicians
- management and the health profession
- authority, collegiality and accountability
- business-as-usual and flair, innovation and development.

A wide range of government and other organisations with varying views and interests are responsible for, or are involved in health workforce development. Some have hierarchical roles and responsibilities, others are largely dependent upon their relationships and networking. These organisations comprise:

- statutory bodies – those with roles prescribed by law and responsibilities that require or enable them to influence workforce development directly
- stakeholders – their ability to engage in health workforce development largely depends on the support of one or more of the statutory organisations.

A key task of the statutory players is to define, energise, maintain and oversee the work of health workforce development networks. If this is not done well, the other stakeholders may find it difficult to engage and make their contribution.
Statutory bodies

The following statutory bodies are involved in medical workforce development.

Ministry of Health

The Ministry of Health has a small workforce development group within its policy directorate. However, workforce functions and responsibilities are widely distributed across the Ministry’s different operating divisions. There is little co-ordination, and workforce development does not enjoy a clearly defined strategic and operational focus across the ministry.

The Ministry’s Clinical Training Agency (CTA) is responsible for approximately one-third of the total Crown investment in health qualifications. This amounts to about $100 million per year.

Situated in Christchurch, the CTA is part of the Ministry’s DHB Funding and Performance Directorate. The agency’s vision is ‘to facilitate development of a professional health and disability workforce that can meet the future requirements of health and disability services in New Zealand’ (CTA 2004).

The CTA funds what is now known as post entry clinical training (PECT). This is formal training that leads to a nationally recognised qualification in which at least 30 percent of the training is ‘hands-on’. The agency has the potential to be highly influential in health workforce development. At present, its role is tightly constrained due to a lack of infrastructure and a lack of direct engagement with higher levels of policy making, which would enable it to be a more effective change agent.

Ministry of Education

The Tertiary Education Commission (TEC) was founded in 2003. The Commission and tertiary education organisations (TEO) are the main channels for collaboration between the health and education ministries. TEOs comprise universities, polytechnics and private training organisations.

Universities and polytechnics traditionally drove decision-making about what health courses were offered (TEC 2004b). In future, it is likely that responsibility will be more evenly shared with health sector strategists, policy makers, employers and other health sector organisations.

Two-thirds of the total Crown investment in health qualifications is provided through the TEC.

The final shape of this shared decision-making is not yet clear. However, a useful start has been made with the recent New Zealand Health Sector Qualifications Supply Analysis project. This was conducted and reported jointly by the Ministry of Health and the TEC.
The health sector needs to be more proactive than it currently is in advising the TEC on health workforce development and how health qualifications funding should be spent.

**Health Workforce Advisory Committee (HWAC)**

HWAC is a statutory body established under section 12 of the New Zealand Public Health and Disability Act 2000. It provides the high-level strategic advice and policy guidance on health workforce issues that the Minister of Health specifies by notice to the Committee.

The Committee is serviced from within the Ministry of Health and has modest supporting resources and no executive functions. It has a Medical Reference Group (MRG) and a Māori Health and Disability Workforce Sub-Committee (see Appendix 9 for HWAC’s terms of reference).

In its first three years, HWAC has promoted a systemic, sector-wide approach to health workforce development issues. It has identified three requirements for strategically framing workforce development. These are:

- a patient-centred approach that centres on individual needs in the context of family and community, and then considers what workforce is required to meet those needs
- a broad systems approach that takes into account all aspects of the workplace and community culture and values. It acknowledges the work and career needs of workers
- a planned and managed evolutionary approach to workforce development that includes ‘learning by doing’, actively involves all stakeholders and is careful not to over-regulate or stifle local initiatives.

The Committee’s advice and recommendations have generally been well received by the Minister of Health and the sector. It has, however, been difficult in some areas to translate strategic advice into policy action and implementation.

**District Health Boards (DHBs) and District Health Boards of New Zealand (DHBNZ)**

DHBs and their predecessors have traditionally played relatively minor roles in health workforce development. This is now changing as the Boards come to recognise the critical role that the workforce plays in enabling service provision, safety and quality and in continuing health service requirements.

The workforce development spectrum has widened considerably now that the boards are administratively responsible for primary health care and population health objectives and for providing hospital services. Some Boards are meeting the challenge by creating well-founded and broadly based human resource management systems. However, it will take time for all Boards to develop capability and capacity to fulfil this role.
The DHBNZ provides national co-ordination for the human resource management systems of DHBs. The Boards and DHBNZ worked together to produce a wide-ranging, sector-wide workforce action plan. They have also embarked upon an ambitious programme of related projects. These include:

- workforce information
- future workforce development
- building healthy workplaces
- leadership development
- workforce planning, networking and co-ordination.

The DHBs are responding well to challenges to improve their human resource management systems and health workforce development performance. It is not yet certain if DHBs are best placed to take the primary leadership role in national health workforce development. This is in issue for debate.

**Health Research Council (HRC)**

The Health Research Council of New Zealand (HRC), established under the Health Research Council Act 1990, is the Crown entity responsible for the management of the government’s investment in public good health research. The Council’s statutory functions include fostering the recruitment, education, training and retention of those engaged in health research in New Zealand and initiating and supporting health research.

The Council has previously funded little research with direct workforce implications, but there are signs that this could be changing.

**Other stakeholders**

The ‘other stakeholders’ can be described as secondary players. They vary considerably in size and influence. Some are well-established national or international organisations able to exert considerable influence. Others are relatively small, even transient players. Despite this, the secondary players can bring insight, innovation, energy, drive and professional and personal commitment to their chosen cause or area of practice that may be lacking among the statutory players.

The following is an illustrative list – not a complete list – of the other stakeholders in medical workforce development.

**Doctors in Training Workforce Roundtable (DTWR)**

The Doctors in Training Workforce Roundtable (DTWR) was established by the Minister of Health in September 2004. Its role is to provide the Minister ‘with agreed solutions to short-term issues relating to the work and professional development of doctors in training’. The main objective is ‘to facilitate the training of doctors, in the numbers and of the type required, who are highly motivated, well prepared and committed to practise in New Zealand’ (Appendix 11).
DTWR represents a wide spectrum of medical and other health sector interests and is independently chaired. It is serviced by the Ministry of Health and had its first meeting on 15 December 2004 (see Appendix 11).

**Professional registration bodies**

MCNZ and other registration bodies set and monitor standards that manage the safety and quality of the health workforce.

Registration boards are required under the Health Practitioners Competence Assurance Act 2003 to apply the ‘scope of practice’ provisions in the legislation. The impact of these provisions is yet to be determined but could be substantial.

**Professional associations and colleges**

Professional bodies such as the New Zealand Medical Association and vocational colleges have traditionally played leading roles in all aspects of medical affairs, including workforce development. The colleges are responsible for setting and monitoring practice standards and also play key roles in vocational and continuing education.

Health sector reforms of the late 1980s and early 1990s seriously undermined the role and contributions of health professional organisations in professional and sector affairs, including workforce development. As a result, there is considerable uncertainty among the professional associations and colleges about what their role could or should be in the changing workforce environment.

**The medical unions and associations**

Medical unions and associations play an increasingly influential role in medical and health workplaces. These organisations include the Resident Doctors Association, the Association of Salaried Medical Specialists and the New Zealand Medical Students Association. As described in Chapter 5, the medical unions have a substantial part to play in workforce development (Powell 2003, 2004).

**Non-government and private-sector organisations**

Non-government and private-sector organisations should play a greater role in workforce development. These groups are likely to become more directly involved in training doctors and other health professionals as the focus of health care and health sector education moves from acute and continuing care in hospitals and other institutional settings towards continuing care in community settings. Private hospitals are now directly involved in surgical training schemes.
**Māori organisations**

The last decade has seen growth and development of many Māori organisations involved in Māori health research, Māori health service delivery and most recently Māori health and disability workforce development. These organisations include:

- Tui Ora – an umbrella organisation with responsibility for Māori health provider workforce development
- Te Rau Matatini – a national Māori mental health development organisation
- Hauora.com – a Māori-led organisation supported by Māori health professional associations, Māori health providers and Māori health workers
- Te Ohu Rata o Aotearoa – the Māori Medical Practitioners Association, supports Māori before during and after medical school.

**Pacific Island organisations**

The last decade has also seen similar growth in ‘by Pacific, for Pacific’ health services. Such organisations include:

- West Auckland Pasifika Healthcare – a seven-day-a-week general practice and nursing service for over 10,000 people
- Southseas Healthcare – set up for the South Auckland Pacific community and covering more than 7000 people
- Tongan Health Society – Langimalie, New Zealand’s first ethnic specific health care provider, catering for the Tongan community in central Auckland
- the Pasifika Medical Association Inc., formed in 1996, holding annual conferences and providing a forum to discuss issues relating to Pacific health practitioners and the provision of health services to Pacific people.

**Health Care Aotearoa (HCA)**

Health Care Aotearoa (HCA) is a national network of not-for-profit and community-controlled primary health care providers. The Ministry of Health has funded the network since 1998. Many of its current membership of 54 organisations provide care to predominantly Māori, Pacific and relatively deprived communities. The HCA network enables members to share work models and pool practice expertise, including health workforce development (Crampton and Starfield 2004; URL www.hca.org.nz).
**Clinical Leaders Association of New Zealand (CLANZ)**

The Clinical Leaders Association of New Zealand (CLANZ) is a multidisciplinary national organisation with more than 200 members, representing all health professions and sectors of health and disability services. Established in 1999, its mission is to foster clinical leadership for the purposes of improving health and disability services. CLANZ is involved in a wide variety of innovative health workforce development projects (URL www.clanz.org.nz).

**Magnet New Zealand (MagnetNZ)**

MagnetNZ is a national advisory group that offers national support and co-ordination for the introduction of Magnet principles in New Zealand. Established in 2002, it uses innovative management and service delivery approaches to achieve excellence in health care delivery and patient outcomes. Magnet principles are widely applicable to improved human resources management in the health sector and to workforce development. The principles were developed through nursing quality improvement programmes in the United States (Coile 2001; URL www.moh.govt.nz/magnet).

**Working together**

To be successful the stakeholders in medical workforce development must work well together. The statutory players with hierarchical authority must lead the way.

Health systems improvement and health workforce development must march together. What is needed is an integrated, systematic, sector-wide approach. Such an approach requires:

- shared strategic goals and targeted outcomes
- clarity about structure, roles and responsibilities
- effective supporting infrastructure
- co-ordinated information-system support
- direct access to levers for change
- open accountability for action.

The roles and responsibilities, strengths and weaknesses of hierarchies and networks must be clearly understood. To be successful, integration must focus on the interactions and not the individual players. Good health professionals do not make for good health care. Good health professionals interacting with other components of the health system make good health care. If integrated service delivery and workforce development are to achieve their full potential, there is no choice but to invest in improving interaction and interdependence between all the relevant stakeholders.
Guiding principles

The following principles are suggested to guide health service and workforce improvement (Berwick 1997).

- Improvement requires clear aims and a clear agenda for change.
- Leadership from the health profession requires a new mandate from the public. This will involve redefining and renegotiating roles.
- Health professionals must embrace openness and performance measurement as parts of individual and organisational learning.
- A wholehearted commitment to ongoing change in existing methods of work is required. Service and workforce redesign is required as well as service integration.
- Change must be evidence-based. It is important to note that not all change is an improvement.
- Benefit to users, rather than benefit to providers, is the ultimate measure of improvement.
- Improving efficiency and reducing waste are consistent with service and workforce improvement goals.
- Research, innovation and redesign are required as well as service integration, monitoring and auditing.

Leadership

Successful workforce development requires leadership at a number of different levels.

- Government leadership from ministers and other politicians
- Bureaucratic leadership from government managers and policy advisers
- Professional leadership from doctors, nurses and other clinical, managerial and public health leaders
- Community leadership by people who directly represent community interests.

Leadership at these various levels may take different forms, such as:

- broad visionary leadership to look and see ahead
- executive leadership to get and keep stakeholders and network players working together
- hands-on leadership at the front line to carry out basic and other clinical tasks.

Appendix 1 outlines the history over 30 years of efforts to improve health workforce planning and performance in New Zealand. It shows that the central problem is not lack of recognition of the need for change or widespread unwillingness to change. The main constraint appears to be lack of capability and capacity to manage change. What seems to be missing is the leadership and supporting infrastructure necessary to turn innovative ideas, projects, proposals and recommendations into policies, plans, processes and programmes that are effective on the ground.
The need for national leadership and infrastructure to support health workforce planning and development in New Zealand was reported at the first medical workforce planning workshop held in 1976. The theme was raised again at another workshop held in 1982.

Significant progress was made in the late 1970s and early 1980s through the establishment of a Health Workforce Division in the Department of Health. This provided a national programme for:

- gathering and processing health workforce data
- workforce development projects, workshops and conferences
- a national health services leadership and management development unit
- a national fund to support health workforce innovation.

Unfortunately this work was effectively dismantled during health sector reforms of the late 1980s and early 1990s. The view at the time was that market forces would solve workforce supply and demand problems (Fougere 1994; de Raad 1998).

The failure of market forces to deliver was clearly demonstrated in the findings and the recommendations of the independent Committee Advising on Professional Education (CAPE) in its final report in 1997. The Committee’s advice was rejected. At the time, the Minister of Health believed the Ministry of Health would provide strategic advisory functions for the health labour market.

The Ministry of Health has looked to HWAC for strategic leadership and advice, and to the DHBs/DHBNZ for most other workforce development functions.

The MRG believes that the Ministry of Health is the only statutory organisation with the mandate, and with the hierarchical access and authority necessary to design, initiate and maintain an effective health workforce development network.

**The Scottish experience**

This situation is not unique. The National Health Service (NHS) in Scotland faced a very similar set of workforce problems. In August 1999, it established a short-term expert group tasked with proposing improvements to workforce planning.

In 2000, the expert group recognised the need to go beyond workforce planning to embrace the concept of workforce development so that all relevant issues could be considered. They reported a need to improve, support and co-ordinate aspects of workforce planning and development that required central control (SEDH 2000).

In its 2002 report the group highlighted education, training and retention, new work methods, and service/workforce redesign as essential components in workforce development programmes (SEDH 2002b).
Also published in 2002 was *Working for Health: The workforce development action plan for the NHS Scotland*. This plan established a new National Workforce Committee to lead implementation of the action plan. It also established a National Workforce Unit in the Human Resources Directorate of the Scottish Executive Health Department (SEHD) to provide national co-ordination of workforce development (Scottish Executive Department of Health 2002–2004).

The membership and terms of reference of the NHS Scotland National Workforce Committee are worth considering. The Committee is chaired by the Director of the SEHD Human Resources Division. It reports directly to the CEO of the SEHD, who is a member of the Committee. Other members are:

- Director, Centre for Change and Innovation (SEHD)
- Head, Workforce and Policy Division (SEHD)
- Head, National Health Workforce Unit (SEHD)
- Chair, NHS Education for Scotland
- Chair, CEO and HR Director, Scottish Health Boards
- a medical and a nursing leader
- two leading university academics.

Directors responsible for all the key workforce development information and policy functions are members of, or report to, the Committee. External members of the Committee include recognised leaders from health boards, health professions and universities. This broad membership enables increasing integration of service and workforce planning across the entire Scottish NHS.

The NHS Scotland experience is relevant to New Zealand. The two countries are very similar in terms of size, geography, social structure and health service traditions. Scotland has successfully addressed health and medical workforce issues akin to those currently facing New Zealand.

New Zealand is a unique society with its own challenging health workforce needs and opportunities. There is much to learn from relevant overseas experience, but such learning must be applied with sensitivity to the nature and requirements of our own health sector culture and unique workforce environment. We have the people with the knowledge, ideas and enthusiasm necessary to initiate desired change. What we need is leadership and the means and ability to work together to enable that change to happen.
Key issues in this chapter

- The roles and responsibilities of the statutory and other stakeholders must be clearly defined and widely understood.
- Health workforce development and health systems improvement are interdependent and require a systemic, sector-wide approach.
- Networking and integration are about building relationships and trust and encouraging interdependence.
- Improvement in complex systems requires guiding principles, a shared strategy and an agenda for change.
- Health workforce development requires skilled and capable leadership at all levels, particularly from statutory organisations such as the Ministry of Health.
- The Scottish National Health Service has developed over the last five years a framework for workforce development and planning. This framework is relevant to New Zealand.

Questions for submissions

7.1 Do you agree with the way we have conceptualised health/medical workforce development in New Zealand?
7.2 Have the key issues been identified?
7.3 Do you agree with the suggested changes?
7.4 What problems, if any, do you foresee in making the suggested changes?
7.5 What other steps could be taken to enable the various stakeholders to work together more productively?
7.6 Do you have any other comments or suggestions to make?
<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied health</td>
<td>An area of health, such as pharmacy, physiotherapy and occupational therapy, most often based in the community, that does not include doctors and nurses.</td>
</tr>
<tr>
<td>Applied research</td>
<td>Grounded, real-world research, including action research, conducted using a range of sound, qualitative and quantitative methodologies.</td>
</tr>
<tr>
<td>Broad selection criteria</td>
<td>The process of selecting candidates based on what they are able to bring with them and contribute, such as life and communication skills, their values and cultural strengths.</td>
</tr>
<tr>
<td>CanMEDS 2000</td>
<td>A Canadian-developed roles and competencies framework developed to assist doctors to respond to today’s challenges as professional providers of health care.</td>
</tr>
<tr>
<td>Clinical Training Agency (CTA)</td>
<td>A unit within the Ministry of Health that funds post entry clinical training in order to facilitate the development of the health and disability workforce.</td>
</tr>
<tr>
<td>Community</td>
<td>A collective of people identified by their common values and mutual concern for the development and wellbeing of their group or geographical area.</td>
</tr>
<tr>
<td>Community-based health</td>
<td>Health services delivered in the community.</td>
</tr>
<tr>
<td>Competencies</td>
<td>The attitudes, skills, knowledge and behaviour held by health practitioners and support workers to perform particular functions.</td>
</tr>
<tr>
<td>Complexity theory</td>
<td>Concerns the behaviour of complex systems and processes. Complex systems, such as the health system, evolve and develop according to their internal interactions, which in turn are largely between elements that share close contact. There is no sense of a preordained control centre issuing orders; rather the processes in themselves generate the direction of the system in response to internal and external events.</td>
</tr>
<tr>
<td>Continuity of care</td>
<td>People are able to access needed services at the right time, in the right place and from the right people.</td>
</tr>
<tr>
<td>Cultural safety</td>
<td>An approach in which health practitioners are knowledgeable of and sensitive to the specific cultural needs of the people and populations they serve.</td>
</tr>
<tr>
<td>Culturally appropriate services</td>
<td>Services responsive to, and respectful of, the history, traditions and cultural values of the different ethnic groups in our society.</td>
</tr>
<tr>
<td>Disability support</td>
<td>Services primarily community-based and delivered by private and not for profit providers.</td>
</tr>
<tr>
<td>District Health Boards (DHBs)</td>
<td>District health boards are funders and providers of publicly funded services of a specific geographic area. Twenty-one DHBs were established under the New Zealand Public Health and Disability Act 2000.</td>
</tr>
<tr>
<td>District Health Boards of New Zealand (DHBNZ)</td>
<td>An organisation that represents all DHBs.</td>
</tr>
<tr>
<td>Domestic student</td>
<td>Students who are New Zealand or Australian citizens, or permanent residents of New Zealand.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Evolutionary approach</td>
<td>An approach in which systems changes are planned and incremental rather than forced and sudden.</td>
</tr>
<tr>
<td>Globalisation</td>
<td>Process by which the domestic and international labour markets have become interconnected and allow the free movement of health practitioners between countries.</td>
</tr>
<tr>
<td>Governance</td>
<td>The system for strategic leadership. This includes systems for decision-making and the gathering and distribution of information relevant to decision-making.</td>
</tr>
<tr>
<td>Health care networks</td>
<td>Health care networks are complex links between different parties within the health sector, organisational and individual, driven largely by the interests of those parties and their recognition of the value of working together.</td>
</tr>
<tr>
<td>Health Practitioners Competence Assurance Act 2003</td>
<td>Legislation designed to protect the health and safety of the New Zealand public by ensuring that health practitioners are competent and fit to practise within their scope of practice.</td>
</tr>
<tr>
<td>Hours worked</td>
<td>The Medical Council of New Zealand defines hours worked as the combined total hours worked per week across all worksites as self-reported by the respondent and includes only that part of on-call time that is worked.</td>
</tr>
<tr>
<td>House officer</td>
<td>Medical graduates employed in hospital environments in the first or second postgraduate years. Senior house officers are in their third or subsequent postgraduate year.</td>
</tr>
<tr>
<td>Integrated health service delivery</td>
<td>An integrated approach to health and disability support services that is responsive to people's varied and changing needs. Providers coordinate their services, working closely with the person and, where appropriate, with their family, whānau and carers to provide services that appear seamless to recipients. For Māori operating within a framework of whānau ora, this means placing the whānau at the centre of health care and support for Māori.</td>
</tr>
<tr>
<td>Interdisciplinary</td>
<td>An approach in which individuals from two or more professions work collaboratively to improve health outcomes. The approach emphasises the connectivity, alignment and collaboration between primary, secondary and tertiary health care services.</td>
</tr>
<tr>
<td>International student</td>
<td>A student from overseas, studying in New Zealand on a student permit.</td>
</tr>
<tr>
<td>Intersectoral collaboration</td>
<td>Projects involving various sectors of society including central and local government agencies, community organisations and the private sector.</td>
</tr>
<tr>
<td>Magnet hospitals</td>
<td>A set of hospitals that were studied in the 1980s and 1990s because they were effective in attracting and retaining staff. Comprehensive analysis of these hospitals was made initially in the United States, and later in other countries (Aiken et al 1994).</td>
</tr>
<tr>
<td>Māori preferred employer criteria</td>
<td>This concept is similar to work done on 'Magnet hospitals' referenced above.</td>
</tr>
<tr>
<td>Medical Council of New Zealand (MCNZ)</td>
<td>The Medical Council registers doctors to practise medicine within their scopes of practice in New Zealand.</td>
</tr>
<tr>
<td>Medical Officer of Special Scale (MOSS)</td>
<td>Posts targeted at those who have sufficient training to act in a senior role but lack formal completion of training that would allow vocational registration as a specialist (Sotherndoctor.net).</td>
</tr>
<tr>
<td>Models of care</td>
<td>An approach for developing service delivery around particular patient needs (e.g., developing service components required by individuals with diabetes).</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>The ‘new’ professionalism</td>
<td>An approach to professionalism centred on the idea of serving the public good. The ‘new’ professionalism is characterised by reflective practice, interdependent decision-making, teamwork, collective learning, responsibility and accountability, and engagement with the community.</td>
</tr>
<tr>
<td>New Zealand Disability Strategy</td>
<td>A strategy that aims to change New Zealand from a disabling society to one that is inclusive of disabled people, defined as ‘a society that highly values our lives and continually enhances our full participation’ (New Zealand Health and Disability Strategy 2000).</td>
</tr>
<tr>
<td>New Zealand Health Strategy</td>
<td>An overall framework for the health sector, with the aim of directing health services at those areas that will ensure the greatest benefits for our population, and focusing in particular on tackling inequalities in health.</td>
</tr>
<tr>
<td>Non-government organisations (NGOs)</td>
<td>Encompasses community or voluntary organisations; Māori, iwi and hapu organisations; and for-profit organisations where government organisations contract with them for delivery of outputs.</td>
</tr>
<tr>
<td>Nurse practitioners</td>
<td>Experts in their field who use advanced knowledge and skills within their specialist scope of practice. Nurse practitioners are educated through a clinically focused Masters degree programme and must meet the competencies set out by the Nursing Council of New Zealand. These include being able to articulate and advance the scope of their nursing practice, showing expert practice and working collaboratively with other disciplines as well as across settings. Competencies also include demonstration of leadership and consultancy in nursing, active development and influence on policy and nursing practice. Nurse practitioners may or may not choose to be nurse prescribers (Nursing Council of New Zealand 2001).</td>
</tr>
<tr>
<td>Overseas trained doctors (OTDs)</td>
<td>Doctors who obtained their primary medical qualification in a country other than New Zealand. Excludes temporary doctors.</td>
</tr>
<tr>
<td>Pacific peoples</td>
<td>People from Pacific countries or ethnic backgrounds (Samoan, Cook Island Māori, Tongan, Niuean, Fijian and Tokelauan) who are resident in New Zealand.</td>
</tr>
<tr>
<td>Population health</td>
<td>The health of groups, families and communities. Locality, biological criteria such as age or gender, social criteria, such as socioeconomic status, or cultural criteria such as whānau may define population.</td>
</tr>
<tr>
<td>Primary health care</td>
<td>Essential health care based on practical, scientifically sound, culturally appropriate and socially acceptable methods. It is universally accessible to people in their communities, involves community participation, is integral to, and a central function of, the country’s health system, and is the first level of contact with the health system.</td>
</tr>
<tr>
<td>Primary/secondary interface</td>
<td>The connection between primary and secondary health care. Better communication and teamwork between primary and secondary health care ensures that the knowledge and skills of both are applied to each patient’s care in the most effective way.</td>
</tr>
<tr>
<td>Primary health organisations (PHOs)</td>
<td>Local, not-for-profit provider organisations funded by DHBs to provide primary health care services for an enrolled population.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
</tr>
<tr>
<td>Professional colleges</td>
<td>Organisations that are authorised to register vocationally qualified medical practitioners.</td>
</tr>
<tr>
<td>Registrar</td>
<td>The term strictly refers to a pay scale. Most practitioners employed on this scale are undergoing postgraduate specialist training in posts approved by the vocational colleges.</td>
</tr>
<tr>
<td>Resident medical officer (RMO)</td>
<td>A term that covers house officers and registrars. Doctors in training.</td>
</tr>
<tr>
<td>Scopes of practice</td>
<td>Health services that a practitioner is qualified and competent to offer, the parameters within which these services can be offered and a time period for review.</td>
</tr>
<tr>
<td>Secondary health care services</td>
<td>Specialist services that patients access when their needs are unable to be met by primary health care services. Typically provided in a hospital setting.</td>
</tr>
<tr>
<td>Service redesign</td>
<td>Innovative service development through technology transfer aimed at achieving better cost-benefit outcomes (eg, delivering services through the greater use of technicians).</td>
</tr>
<tr>
<td>Silo</td>
<td>A separate or isolated system.</td>
</tr>
<tr>
<td>Skill-mix</td>
<td>The mix of health workers from the same professional cluster, the mix of health workers from a variety of professional or occupational groups, the combination of skills available at a specific time and the combinations of activities that comprise each role (Buchan et al 2004; Sibbald 2004).</td>
</tr>
<tr>
<td>Team</td>
<td>A team of health practitioners from different disciplinary backgrounds who demonstrate generic competency in interpersonal skills, cultural and ethical skills, adaptability, feasibility, outcome thinking, problem-solving and consensus decision-making in relation to best health practice.</td>
</tr>
<tr>
<td>Teamwork</td>
<td>Different disciplines working together to address shared problems. All members of the health care team, as well as the patient and carers being involved in the decision-making processes. Communication is the key to good teamwork.</td>
</tr>
<tr>
<td>Temporary registrant (TR)</td>
<td>Doctors who graduated from an approved medical school and are visiting, but not intending to reside permanently, in New Zealand. Temporary registration is usually granted for two years. Temporary registrants require supervision throughout their employment.</td>
</tr>
<tr>
<td>Vocational registration</td>
<td>A general practitioner or specialist who has met the criteria for vocational registration with the Medical Council of New Zealand, including completion of the requirements of the relevant college or professional association.</td>
</tr>
<tr>
<td>Workforce development</td>
<td>Any initiative that influences entry to and exit from the health and disability sectors, education, training, skills, attitudes, rewards and the associated infrastructure.</td>
</tr>
</tbody>
</table>
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APPENDIX 1: HEALTH/MEDICAL WORKFORCE PLANNING AND DEVELOPMENT AND THE HEALTH EDUCATION INTERFACE: AN HISTORICAL PERSPECTIVE

Health and medical workforce planning – 1970 to 1998

Pre-1970: Ad hoc reviews or enquiries

Before 1970, medical workforce planning in New Zealand took the form of occasional ad hoc reviews or inquiries. The work was narrowly focused on medical profession concerns and based on incomplete and otherwise inadequate information. There were no defined structures or processes for information gathering or analysis, and workforce requirements were poorly defined.

The resulting information generally comprised doctor to population ratios that usually reflected the existing state of the economy, expected trends in health expenditure and current workforce supply. These projections were frequently wrong, discrediting the whole process.

1970: Medical Council’s annual data collection

The Department of Health and the Medical Council of New Zealand (MCNZ) worked together to introduce an annual medical workforce survey (the Annual Workforce Survey (AWS)) in association with renewal of the Annual Practising Certificate. The result is that today New Zealand has one of the world’s most complete and comprehensive national collections of medical workforce data.

1976: Medical manpower planning workshop – Wairakei

In April 1976, MCNZ organised the first National Medical Workforce Planning Workshop. Held at Wairakei, the workshop brought together for the first time leaders from all sections of the medical profession, including clinicians, educators, researchers and managers. They met together with government officials from health and education and international experts on health and medical workforce development.

For the first time, it was formally recognised that ongoing information on the demand for as well as the supply of doctors was a prerequisite for workforce planning. It was also recognised that the medical workforce could not be planned in isolation from other elements of the health workforce (MCNZ 1976).

Led by the Department of Health, this was a decade of steady progress in workforce planning and development.

- A national system was created for the collection, analysis and publication of workforce statistics for the registered health professions.
- A Health Workforce Development Division was established in the Department of Health. The Division was charged with leading and co-ordinating a national health workforce planning and development strategy, policies, programmes and projects.
- A Health Workforce Development Fund was created to encourage and support workforce innovation.
- National workforce planning workshops were held for nursing, dentistry, physiotherapy and health sector managers.
- A Health Services Management Development Unit was commissioned to promote leadership and learning in health sector management.

1982: Health manpower planning workshop – Rotorua

The country’s first national workshop on health manpower planning was held in Rotorua in 1982. High-level representatives from all the registered health professions attended, including the Departments of Health and Education and the district health authorities. Position papers were commissioned, and debate ranged widely around perceived problems at the health and education interface.

The workshop report recommended that a high-level advisory committee to the Minister of Health be established to:

- facilitate the alignment of health workforce planning with the government’s strategic direction and policy objectives for health
- monitor the recruitment, education, training and deployment of health practitioners
- assess the workforce implications of changing health technologies
- address short-term and long-term recruitment and retention issues
- develop advisory networks and commission studies and working parties to review and report on specific workforce issues
- promote a national health workforce planning cycle
- monitor and evaluate the implementation of health workforce plans
- report annually on its activities.

Health workforce development momentum was lost following the change of government in 1984. Other issues gained greater prominence (DOHNZ Management Services and Research Unit 1984).
1985: Role of the doctor conference – Palmerston North

In 1985, a national conference was held in Palmerston North on ‘The Role of the Doctor in New Zealand: Implications for medical education’. A diverse multidisciplinary group with strong Māori and community representation produced a practical review of the changing role of the doctor in New Zealand society and the implications for medical education.

The conference report raises and discusses many of the issues that are still being actively debated today in the context of the changing roles of doctors in PHO development (National Conference on the Role of the Doctor in New Zealand 1985).

1986: Workshop on the deployment of medical practitioners – Ashburton

In 1986, the Minister of Health established an Advisory Committee on the Medical Workforce. The Committee brought together 50 people to represent a wide range of medical and health sector interests in a workshop to consider and report on ‘the deployment of the medical workforce’.

The workshop identified the following problems.

- A vast increase in the number of junior doctors
- Rigid and uncritical use of medical practitioners both within the primary and secondary health care sectors
- Failure to effectively utilise new technologies and management techniques.

Immediate problems for hospitals were as follows.

- Junior doctors constituted one in four of the medical workforce – a more appropriate ratio was thought to be one in ten.
- Hospital systems had become structurally dependent on overseas trained doctors (OTDs).
- Continuity of patient care was no longer usually provided by junior medical staff.

The Committee recommended that the Minister of Health establish a Council for Medical Education to co-ordinate all medical education. This would enable a logical development process from undergraduate through postgraduate and on to continuing education. The responsibilities of the Council were to include:

- receiving lay, community and Māori input in keeping with the Treaty of Waitangi
- developing national objectives for medical education
- reviewing and approving training proposals from the vocational colleges
- sponsoring research in higher education
- evaluating teaching methods and programmes.

The Committee recommended that representatives on the Council include experts from the health professions, educationalists and members of the community (Advisory Committee on the Medical Workforce 1987).

In 1989, the Department of Health was restructured and a new Ministry of Health established. As part of that restructuring, most of the previous health workforce planning structures and processes were dismantled. Actions that affected workforce planning included:

- *Unshackling the Hospitals: Report of the Hospital and Related Services Taskforce* known as the ‘Gibbs Report’ (Gibbs 1988)
- *Your Health and the Public Health: A statement of Government policy* by Hon Simon Upton, known as the ‘Green and White Report’ (Minister of Health 1991)
- the unbundling of health sector spending on post-entry clinical training and the establishment of a Clinical Training Agency (CTA) by the Regional Health Authorities in 1994.

1995: Committee Advising on Professional Education (CAPE)

Growing concerns about health workforce issues led in 1995 to the establishment of an advisory committee by the Minister of Health. The committee’s role was to advise on long-term national policy directions for the education of the health and disability workforce.

The Committee Advising on Professional Education (CAPE) was chaired by Sir Frank Holmes. Following rounds of consultations, workshops, submissions and discussion papers, CAPE submitted its report to the Health Minister in September 1997 (Committee Advising on Professional Education 1997).

Key issues identified in the CAPE report were:

- inadequate attention in the Government’s health strategies to workforce education and development
- preoccupation with short-term financial and service issues by providers and the funder to the detriment of investment in human capital
- the lack of an overall perspective in the allocation of public funds for education in the health and disability sector
- a lack of continuity between pre-entry, post-entry and continuing education
- the compartmentalisation of professions, inhibiting innovative service delivery
- the very low percentage of Māori in the health workforce, and deficiencies in other areas, especially mental health
- a lack of consensus on future directions and workforce requirements.
At the core of the CAPE recommendations was a proposal to establish a Health Education Agency (HEA) as a Crown entity ‘to provide a co-ordinating focus for both the development of official policy and the work of health and disability service providers in seeking to achieve the skilled workforce and the network of learners and learning organisations which the sector needs in order to effect desired improvements in health, safety and independence’ (CAPE 1997).

CAPE further proposed that all of the Government’s interests in undergraduate and postgraduate education of all health professionals and other health practitioners, funded from both the education and health votes, be consolidated in the new agency.

The Committee suggested the following about the CTA: ‘the work it has been doing will be more effective if it becomes part of the agency (HEA) and provides a more comprehensive assessment of priorities and policies for the sector’ (CAPE 1997).

CAPE envisioned that the HEA would act ‘as an independent adviser on long-term strategy for education and a catalyst for consultation and discussion on strategic issues among the networks of organisations involved in the sector’ (CAPE 1997).

The government of the day did not accept the CAPE advice or its recommendations. In a letter from the Minister of Health, CAPE was advised that: ‘it is now more appropriate that the Ministry of Health undertake the strategic advisory function on health labour market issues. The Ministry will build on the achievements of CAPE, including the facilitation of employers in taking a more active role in thinking about the kinds of labour they need in the future and articulating this to education and training providers and promoting networks’.

1998: Director-General of Health’s Advisory Group on the Medical Workforce

Growing concern about the state of postgraduate medical education in New Zealand prompted the Director-General of Health to establish an Advisory Committee on the Medical Workforce. Medical school deans Professors Peter Gluckman and John Campbell were invited to prepare a paper on the organisation of postgraduate medical education (PGME) in New Zealand.

Their paper was based on the Calman model of PGME (Calman 1994) widely recognised as successful in the United Kingdom. The PGME model proposed for New Zealand had the following key features.

- Establishment of a Medical Vocational Training Council with overall responsibility on behalf of the state for PGME in New Zealand
- Appointment of two postgraduate deans, with supporting administrative infrastructure, to oversee all aspects of PGME at local level
- Approved and funded training posts, selected trainees and accountability to follow the funding
• The CTA to have strategic planning and funding responsibilities
• The postgraduate deans to oversee general training in the first and second postgraduate years.

The proposal did not find favour and was not advanced (Gluckman and Campbell 1998).

The health and education interface: An historical supplement

The medical schools

The University of Otago’s medical school was established in 1875. It remained the focal point for medical education in New Zealand until the 1970s. Dunedin was New Zealand’s largest and wealthiest city in the late 19th century, and was also the first to address the young colony’s need for tertiary education. Under the centralised control of the University of New Zealand (1870–1961), the Otago College assumed national responsibility for undergraduate medical education.

Other professional programmes were based at other universities, for example, engineering at Canterbury, in order to distribute scarce education resources across the university’s four colleges. Classes were small by today’s standards. Those seeking postgraduate education, including in medicine, generally obtained this overseas.

After World War I, the Otago medical school increased its student intake. Growing student numbers and changing population demographics from the 1920s meant that the medical school needed to find clinical placements further afield. A series of working parties and reviews resulted in the establishment of the Christchurch and Wellington schools of medicine in 1972 and 1976 respectively.

In 1966, approval was given to establish a medical school in Auckland to help meet medical workforce requirements.

Resourcing undergraduate medical education remains a significant issue for Otago and Auckland universities.

The issue is compounded for Otago by the dispersed nature of its undergraduate medical education programme. Medical science expertise remains in Dunedin, while the greater concentration of clinical services is based in the larger northern centres. A competitive environment in the tertiary education sector has until recently discouraged significant collaboration between the Wellington and Christchurch schools and other universities in their respective regions. This is despite the concentration of basic science, social science and allied health expertise in other local institutions.
**The medical colleges**

The development and growth of the medical colleges had many similarities with that of the medical schools.

Until about the 1970s, postgraduate qualifications for medical specialists required a period of some years in an overseas teaching hospital of international standing. This usually occurred in Britain. The emergence of the Australasian colleges enabled doctors to obtain consultant status through training programmes based in the major New Zealand teaching hospitals.

Increasing recognition of general practice as an area of specialist expertise followed the establishment of the Royal New Zealand College of General Practitioners and formalisation of postgraduate general practice training programmes.

The role of the medical colleges has been crucial in establishing New Zealand-based specialist and sub-specialist training programmes of international standing. The growth of medical knowledge and the rapid advances in biomedical technology have resulted in increasing specialisation and sub-specialisation within medicine.

Accountability for the direction and content of educational programmes has largely been the responsibility of the medical profession. The need for ongoing dialogue between the colleges, the DHBs, the Ministry of Health and other health sector agencies is becoming increasingly important to ensure best use of specialist expertise in a complex and changing health sector.
APPENDIX 2: FIGURES AND TABLES

Table A2.1: New Zealand statistics – population projections, 2001 to 2021

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>2001 Expected</th>
<th>2021 Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand population</td>
<td>3.9 million</td>
<td>4.5 million</td>
</tr>
<tr>
<td>Māori</td>
<td>15%</td>
<td>17%</td>
</tr>
<tr>
<td>Pacific</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Asian</td>
<td>7%</td>
<td>13%</td>
</tr>
<tr>
<td>European</td>
<td>71%</td>
<td>61%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of ethnic groups 65 years and over</th>
<th>2001 Expected</th>
<th>2021 Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Māori</td>
<td>3%</td>
<td>8%</td>
</tr>
<tr>
<td>Pacific</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>Asian</td>
<td>4%</td>
<td>9%</td>
</tr>
<tr>
<td>European</td>
<td>14%</td>
<td>22%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of public spending on health services on</th>
<th>2001 Expected</th>
<th>2021 Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>persons 65 years and over</td>
<td>39%</td>
<td>26%</td>
</tr>
<tr>
<td>persons 75 and over</td>
<td>26%</td>
<td>18%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age of general workforce</th>
<th>2001 Expected</th>
<th>2021 Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>18–44 years</td>
<td>Decrease</td>
<td>Increase</td>
</tr>
<tr>
<td>45–64 years</td>
<td>Increase</td>
<td>Increase</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proportion of the working population of Māori, Pacific Island or Asian ethnicity</th>
<th>2001 Expected</th>
<th>2021 Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure A2.1: Active medical workforce, 1980–2003

Source: Medical Council of New Zealand 2004b, Table 1.
Table A2.2: Active medical practitioners by year, 1980–2002

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Active medical practitioners: workforce survey</td>
<td>4881</td>
<td>5556</td>
<td>6339</td>
<td>7530</td>
<td>8615</td>
<td>8403</td>
<td>8790</td>
</tr>
<tr>
<td>Active medical practitioners and temporary registrants</td>
<td>4881</td>
<td>5556</td>
<td>6504</td>
<td>7659</td>
<td>9036</td>
<td>9192</td>
<td>9548</td>
</tr>
<tr>
<td>Population (000)</td>
<td>3113</td>
<td>3247</td>
<td>3330</td>
<td>3673</td>
<td>3858</td>
<td>3939</td>
<td>4009</td>
</tr>
<tr>
<td>Active medical practitioners/1000 population</td>
<td>1.57</td>
<td>1.71</td>
<td>1.90</td>
<td>2.05</td>
<td>2.23</td>
<td>2.13</td>
<td>2.19</td>
</tr>
<tr>
<td>Active medical practitioners and temporary registrants/1000 population</td>
<td>1.57</td>
<td>1.71</td>
<td>1.95</td>
<td>2.08</td>
<td>2.34</td>
<td>2.33</td>
<td>2.38</td>
</tr>
<tr>
<td>Temporary registrants</td>
<td>165</td>
<td>129</td>
<td>421</td>
<td>789</td>
<td>758</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Figure A2.2: Trends in the ratio of active medical practitioners to population, 1980–2003

Source: Statistics New Zealand, Medical Council of New Zealand 2004b.
### Table A2.3: Doctor to population ratios as reported by New Zealand and comparable countries

<table>
<thead>
<tr>
<th>Country</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Doctors</td>
</tr>
<tr>
<td><strong>New Zealand</strong></td>
<td></td>
</tr>
<tr>
<td>Active medical practitioners: workforce survey</td>
<td>8,403</td>
</tr>
<tr>
<td>Active medical practitioners and temporary registrants</td>
<td>9,192</td>
</tr>
<tr>
<td><strong>Australia</strong></td>
<td></td>
</tr>
<tr>
<td>Registered and currently working in medicine in Australia (2001)</td>
<td>53,384</td>
</tr>
<tr>
<td><strong>United Kingdom</strong></td>
<td></td>
</tr>
<tr>
<td>All doctors excluding retainers</td>
<td>103,400</td>
</tr>
<tr>
<td><strong>Scotland</strong></td>
<td></td>
</tr>
<tr>
<td>All medical staff</td>
<td>12,446</td>
</tr>
</tbody>
</table>


### Figure A2.3: Employment capacities of active medical practitioners, 2003

- **Specialists**: 33%
- **GPs**: 33%
- **Registrar**: 15%
- **House officer**: 10%
- **Primary care other than GP**: 2%
- **MOSS (Medical Officer of Special Scale)**: 3%
- **Other**: 3%
- **N/A**: 1%

Note: Temporary registrants not included.
Source: NZHIS.
Table A2.4: Changes in employment capacities, 1998–2003

<table>
<thead>
<tr>
<th>Employment capacity (role codes)</th>
<th>1998</th>
<th>2000</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialists</td>
<td>2536</td>
<td>29.9%</td>
<td>2653</td>
<td>30.8%</td>
</tr>
<tr>
<td>GPs</td>
<td>3159</td>
<td>37.2%</td>
<td>3166</td>
<td>36.7%</td>
</tr>
<tr>
<td>Primary care other than GP</td>
<td>175</td>
<td>2.1%</td>
<td>190</td>
<td>2.2%</td>
</tr>
<tr>
<td>House officer</td>
<td>910</td>
<td>10.7%</td>
<td>894</td>
<td>10.4%</td>
</tr>
<tr>
<td>Registrar</td>
<td>1147</td>
<td>13.5%</td>
<td>1227</td>
<td>14.2%</td>
</tr>
<tr>
<td>MOSS</td>
<td>261</td>
<td>3.1%</td>
<td>277</td>
<td>3.2%</td>
</tr>
<tr>
<td>Other</td>
<td>285</td>
<td>3.4%</td>
<td>206</td>
<td>2.4%</td>
</tr>
<tr>
<td>N/A</td>
<td>18</td>
<td>0.2%</td>
<td>2</td>
<td>0.0%</td>
</tr>
<tr>
<td>Totals</td>
<td>8491</td>
<td>100.0%</td>
<td>8615</td>
<td>100.0%</td>
</tr>
<tr>
<td>Specialists per trainee S/(R+HO)</td>
<td>1.23</td>
<td>1.25</td>
<td>1.35</td>
<td>1.33</td>
</tr>
</tbody>
</table>

Note: Temporary registrants do not complete the workforce survey and hence are not included in the above data. Source: NZHIS.

Figure A2.4: Ethnicity of active medical practitioners, 2003

Note: Temporary registrants not included. Source: NZHIS.
Figure A2.5: Females as a percentage of all New Zealand medical graduates, 1975–2002

Sources: MCNZ 2004b; Ministry of Education.

Figure A2.6: Increase in proportion of female active medical practitioners, 1980–2003

Note: Excludes temporary.
Source: NZHIS data.
Table A2.5: Gender balance of the active medical workforce, 1985–2003

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>% Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>4435</td>
<td>1121</td>
<td>5556</td>
<td>20.2%</td>
</tr>
<tr>
<td>1990</td>
<td>4823</td>
<td>1516</td>
<td>6339</td>
<td>23.9%</td>
</tr>
<tr>
<td>1995</td>
<td>5349</td>
<td>2181</td>
<td>7530</td>
<td>29.0%</td>
</tr>
<tr>
<td>2000</td>
<td>5804</td>
<td>2811</td>
<td>8615</td>
<td>32.6%</td>
</tr>
<tr>
<td>2002</td>
<td>5577</td>
<td>2826</td>
<td>8403</td>
<td>33.6%</td>
</tr>
<tr>
<td>2003</td>
<td>5754</td>
<td>3036</td>
<td>8790</td>
<td>34.5%</td>
</tr>
</tbody>
</table>

Source: URL: www.nzhis.govt.nz/stats/medpracstats.html

Table A2.6: Female vocational trainees, 2002

<table>
<thead>
<tr>
<th>Vocational training area</th>
<th>Women</th>
<th>Men</th>
<th>Women as % of all trainees in vocational area</th>
<th>Women as % of all women vocational trainees</th>
<th>Men in training as % of all men in training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accident and medical practice</td>
<td>10</td>
<td>33</td>
<td>23</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Anaesthesia</td>
<td>44</td>
<td>83</td>
<td>35</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Breast medicine</td>
<td>5</td>
<td>0</td>
<td>100</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Dermatology</td>
<td>2</td>
<td>2</td>
<td>50</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Diagnostic and interventional radiology</td>
<td>18</td>
<td>31</td>
<td>37</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Emergency medicine</td>
<td>32</td>
<td>59</td>
<td>35</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Family planning and reproductive health</td>
<td>3</td>
<td>1</td>
<td>75</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>General practice</td>
<td>254</td>
<td>245</td>
<td>51</td>
<td>38</td>
<td>27</td>
</tr>
<tr>
<td>Intensive care medicine</td>
<td>3</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Internal medicine</td>
<td>61</td>
<td>119</td>
<td>34</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Medical administration</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Obstetrics and gynaecology</td>
<td>31</td>
<td>8</td>
<td>79</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Occupational medicine</td>
<td>1</td>
<td>9</td>
<td>10</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>4</td>
<td>13</td>
<td>24</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>50</td>
<td>33</td>
<td>60</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Palliative medicine</td>
<td>1</td>
<td>2</td>
<td>33</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pathology</td>
<td>18</td>
<td>14</td>
<td>56</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Psychological medicine or psychiatry</td>
<td>56</td>
<td>74</td>
<td>43</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Public health medicine</td>
<td>27</td>
<td>5</td>
<td>84</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Radiation oncology</td>
<td>7</td>
<td>17</td>
<td>29</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Rehabilitation medicine</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sexual health medicine</td>
<td>5</td>
<td>0</td>
<td>100</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Sports medicine</td>
<td>2</td>
<td>4</td>
<td>33</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Surgery: cardiothoracic</td>
<td>2</td>
<td>2</td>
<td>50</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Surgery: general</td>
<td>17</td>
<td>63</td>
<td>21</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Surgery: neurosurgery</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Surgery: orthopaedic</td>
<td>3</td>
<td>42</td>
<td>7</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Surgery: otolaryngology/head and neck</td>
<td>1</td>
<td>13</td>
<td>7</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Surgery: plastic and reconstructive</td>
<td>1</td>
<td>11</td>
<td>8</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Surgery: urology</td>
<td>1</td>
<td>7</td>
<td>13</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Surgery: vascular</td>
<td>1</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>661</td>
<td>897</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Table 9, MCNZ 2004b.
Table A2.7: Workforce role by gender, 2003

<table>
<thead>
<tr>
<th>Gender</th>
<th>No answer</th>
<th>GP</th>
<th>House officer</th>
<th>MOSS</th>
<th>Other</th>
<th>Primary care other than GP</th>
<th>Registrar</th>
<th>Specialist</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>22</td>
<td>1176</td>
<td>431</td>
<td>135</td>
<td>90</td>
<td>52</td>
<td>526</td>
<td>604</td>
<td>3036</td>
</tr>
<tr>
<td>Male</td>
<td>43</td>
<td>1830</td>
<td>411</td>
<td>168</td>
<td>154</td>
<td>86</td>
<td>793</td>
<td>2269</td>
<td>5754</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>3006</td>
<td>842</td>
<td>303</td>
<td>244</td>
<td>138</td>
<td>1319</td>
<td>2873</td>
<td>8790</td>
</tr>
</tbody>
</table>

Source: Table EO3, NZHIS 2003.

Figure A2.7: Age structure of active medical workforce

Source: NZHIS.
Figure A2.8: Age structure of GPs, 1994–2003

Source: NZHIS.

Figure A2.9: Hours worked per week by workforce role, 2003

Table A2.8: Overseas trained doctors (OTDs) as a percent of total active medical workforce, 1980–2003

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand graduate</td>
<td>3266</td>
<td>4095</td>
<td>4480</td>
<td>5024</td>
<td>5645</td>
<td>5608</td>
<td>5796</td>
</tr>
<tr>
<td>Overseas graduate</td>
<td>1615</td>
<td>1461</td>
<td>1859</td>
<td>2506</td>
<td>2970</td>
<td>2795</td>
<td>2994</td>
</tr>
<tr>
<td>Total</td>
<td>4881</td>
<td>5556</td>
<td>6339</td>
<td>7530</td>
<td>8615</td>
<td>8403</td>
<td>8790</td>
</tr>
<tr>
<td>% OTD by workforce survey</td>
<td>33.1%</td>
<td>26.3%</td>
<td>29.3%</td>
<td>33.3%</td>
<td>34.5%</td>
<td>33.3%</td>
<td>34.1%</td>
</tr>
</tbody>
</table>

Note: This data is exclusive of temporary registrants.
Source: MCNZ 2002; A26, NZHIS 2003.

Table A2.9: Specialist to population ratios

<table>
<thead>
<tr>
<th>Year</th>
<th>New Zealand population (000s)</th>
<th>Specialists</th>
<th>Specialist to population ratio (/100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>3379</td>
<td>1952</td>
<td>57.8</td>
</tr>
<tr>
<td>1991</td>
<td>3376</td>
<td>2021</td>
<td>59.9</td>
</tr>
<tr>
<td>1992</td>
<td>3419</td>
<td>2066</td>
<td>60.4</td>
</tr>
<tr>
<td>1993</td>
<td>3459</td>
<td>2104</td>
<td>60.8</td>
</tr>
<tr>
<td>1994</td>
<td>3507</td>
<td>2184</td>
<td>62.3</td>
</tr>
<tr>
<td>1995</td>
<td>3561</td>
<td>2274</td>
<td>63.9</td>
</tr>
<tr>
<td>1996</td>
<td>3618</td>
<td>2319</td>
<td>64.1</td>
</tr>
<tr>
<td>1997</td>
<td>3761</td>
<td>2459</td>
<td>65.4</td>
</tr>
<tr>
<td>1998</td>
<td>3816</td>
<td>2536</td>
<td>66.5</td>
</tr>
<tr>
<td>1999</td>
<td>3837</td>
<td>2647</td>
<td>69.0</td>
</tr>
<tr>
<td>2000</td>
<td>3860</td>
<td>2653</td>
<td>68.7</td>
</tr>
<tr>
<td>2001</td>
<td>3886</td>
<td>2725</td>
<td>70.1</td>
</tr>
<tr>
<td>2002</td>
<td>3942</td>
<td>2723</td>
<td>69.1</td>
</tr>
<tr>
<td>2003</td>
<td>4009</td>
<td>2873</td>
<td>71.7</td>
</tr>
</tbody>
</table>

Figure A2.10: Workforce roles by OTD/New Zealand medical graduate, 2003

Source: NZHIS.
Table A2.10: Distribution of specialist by vocational role, 2002

<table>
<thead>
<tr>
<th>Vocational area</th>
<th>Number of specialists</th>
<th>Vocation to population ratio (/100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal medicine</td>
<td>504</td>
<td>12.8</td>
</tr>
<tr>
<td>Anaesthesia</td>
<td>373</td>
<td>9.5</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>288</td>
<td>7.3</td>
</tr>
<tr>
<td>Diagnostic and interventional radiology</td>
<td>208</td>
<td>5.3</td>
</tr>
<tr>
<td>Obstetrics and gynaecology</td>
<td>170</td>
<td>4.3</td>
</tr>
<tr>
<td>Orthopaedic surgery</td>
<td>157</td>
<td>4.0</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>157</td>
<td>4.0</td>
</tr>
<tr>
<td>Pathology</td>
<td>146</td>
<td>3.7</td>
</tr>
<tr>
<td>General surgery</td>
<td>142</td>
<td>3.6</td>
</tr>
<tr>
<td>Public health medicine</td>
<td>102</td>
<td>2.6</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>85</td>
<td>2.2</td>
</tr>
<tr>
<td>Otolaryngology head and neck surgery</td>
<td>63</td>
<td>1.6</td>
</tr>
<tr>
<td>Dermatology</td>
<td>43</td>
<td>1.1</td>
</tr>
<tr>
<td>Not answered</td>
<td>42</td>
<td>1.1</td>
</tr>
<tr>
<td>Emergency medicine</td>
<td>41</td>
<td>1.0</td>
</tr>
<tr>
<td>Urology</td>
<td>39</td>
<td>1.0</td>
</tr>
<tr>
<td>Plastic and reconstructive surgery</td>
<td>37</td>
<td>0.9</td>
</tr>
<tr>
<td>Occupational medicine</td>
<td>36</td>
<td>0.9</td>
</tr>
<tr>
<td>Surgery: other</td>
<td>34</td>
<td>0.9</td>
</tr>
<tr>
<td>Radiation oncology</td>
<td>25</td>
<td>0.6</td>
</tr>
<tr>
<td>Other</td>
<td>19</td>
<td>0.5</td>
</tr>
<tr>
<td>Palliative medicine</td>
<td>19</td>
<td>0.5</td>
</tr>
<tr>
<td>Cardiothoracic surgery</td>
<td>18</td>
<td>0.5</td>
</tr>
<tr>
<td>Intensive care medicine</td>
<td>18</td>
<td>0.5</td>
</tr>
<tr>
<td>Vascular surgery</td>
<td>13</td>
<td>0.3</td>
</tr>
<tr>
<td>Medical administration</td>
<td>12</td>
<td>0.3</td>
</tr>
<tr>
<td>Primary care</td>
<td>12</td>
<td>0.3</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>11</td>
<td>0.3</td>
</tr>
<tr>
<td>Musculoskeletal medicine</td>
<td>9</td>
<td>0.2</td>
</tr>
<tr>
<td>Paediatric surgery</td>
<td>9</td>
<td>0.2</td>
</tr>
<tr>
<td>Basic medical science</td>
<td>8</td>
<td>0.2</td>
</tr>
<tr>
<td>Sports medicine</td>
<td>8</td>
<td>0.2</td>
</tr>
<tr>
<td>Rehabilitation medicine</td>
<td>7</td>
<td>0.2</td>
</tr>
<tr>
<td>Sexual health medicine</td>
<td>7</td>
<td>0.2</td>
</tr>
<tr>
<td>Breast medicine</td>
<td>6</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Notes: Not a complete list of specialists. New Zealand’s usual resident population at 2002 = 3.942 million (Statistics New Zealand website).

Source: S27, NZHIS 2003.
Figure A2.11: GP to population ratios: New Zealand and comparable countries, 1996–2002

Per 100,000 population

Note: New Zealand data excludes temporary residents.

Figure A2.12: Citizenship status of MBChB students, 1996–2002


Figure A2.13: Ethnicity of final-year MBChB students, 1994–2002

Figure A2.14: Domestic and international MBChB graduates, 1956–2003

Sources: NZHIS, MCNZ, Ministry of Education, Auckland and Otago medical schools.
Inconsistencies exist between data sources for the number of MBChB students graduating by year. International students, where identified as such, are not included in the number of students graduating. Those practitioners not completing the MCNZ annual workforce survey will have been excluded from the active practitioner numbers. The first postgraduate year has not been included, as data for this year is incomplete.

APPENDIX 3: HWAC: FUTURE DIRECTIONS – A MODEL FOR WORKFORCE DEVELOPMENT

A Model for Workforce Development

Prerequisites
- national health goals and strategies
- health sector commitment to workforce development
- health and education sectors working together
- national and regional workforce databases

Goals
- an appropriately skilled workforce
- supported and responsive workforce to achieve optimum health care

Workforce development strategies
- strengthen primary care workforce and skill base
- promote healthy workplace environments
- educate for scopes of practice, teamwork, lifelong learning...
- attract and support a balanced workforce
- recognise and develop support workers

Policy
Communication
Remuneration
Incentives
Training
etc.

Workforce management tools
APPENDIX 4: NEW ZEALAND INSTITUTE FOR ECONOMIC RESEARCH (NZIER) REPORT – AGEING NEW ZEALAND AND HEALTH AND DISABILITY SERVICES

The Ministry of Health commissioned NZIER to assess the impact of changing New Zealand demographics on health and disability services. The aim was to model future demand for health and disability services and to project the workforce supply implications of changing demand. A discussion document released in December 2004 contained initial findings.

NZIER took into account the following factors when building the model for health service demand.

- The size and age structure of the population
- The rates of disease incidence in the population
- The patterns of disease and disability as longevity increases.

Three different scenarios were then created with various combinations of the three variables. The authors then compared changes in the projected burden of disease with the projected supply of registered health professionals in 2011 and 2021.

The first scenario is a simple extrapolation based on medium population growth and historical morbidity patterns.

Scenarios 2 and 3 are also based on medium population growth and project higher morbidity at two levels.

The findings are summarised in Table A4.1 below.

Table A4.1: Projected numbers of workers in 2011 and 2021 under Scenarios 1, 2 and 3

<table>
<thead>
<tr>
<th>Scenario</th>
<th>2011 projections – number of workers</th>
<th>2021 projections – number of workers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Supply</td>
<td>Demand</td>
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<tr>
<td>Scenario 1</td>
<td>72,244</td>
<td>79,258</td>
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<tr>
<td>Scenario 2</td>
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<td>80,432</td>
</tr>
<tr>
<td>Scenario 3</td>
<td>78,105</td>
<td>88,256</td>
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</table>

A key message is that even conservative projection shows an increasing mismatch between the demand for and the supply of regulated health professionals.
The authors suggested some potential ways to alleviate the projected labour shortages. These include:

- increasing the size of the health sector workforce and its share of the working age population
- increasing workforce productivity through service and workforce redesign
- improving health education and preventive care in New Zealand populations with the aim of reducing age-related morbidity.

The authors also suggested the following measures.

- A different division of funding between primary and secondary sectors, with comparatively more funding for primary health care
- Redefining occupational definitions and boundaries through service and workforce redesign
- Placing more attention on education and all aspects of workforce development in training
- Improving human resource management in staff recruitment and retention.

The MRG believes that, while there are some limitations in the report, it is still robust enough to support the general conclusions reported.

While this report focused on registered health professionals as a whole, the MRG believes that there will be similar impacts on the rest of the medical workforce. The size of the service gap for the medical workforce is difficult to project.
Māori medical students

The under-representation of Māori practitioners in the medical workforce was discussed in Chapter 2. Both the Auckland and Otago Medical Schools have recognised this issue and implemented specific policies for entry of Māori and Pacific people into their courses.

These policies are based on the recognition that medical school recruitment should be based on the needs of the New Zealand population. Applicants with Pacific and Māori ethnicity are therefore ranked very highly for admission.

Otago University’s Polynesian Preference scheme has existed for 50 years. The University of Auckland’s Māori and Pacific Admission Scheme (MAPAS) has been in place since 1972.

However, the existence of such schemes has not always ensured an adequate supply of Māori graduates. The following diagram shows that, in the early years of the scheme, the numbers of Māori students graduating from Auckland remained in low single figures. More recently, both schools have improved their recruitment and graduation of Māori doctors.

Figure A5.1: Average admissions per year to the University of Auckland’s Māori and Pacific Admission Scheme (MAPAS), 1972–2004
In 1998, the University of Auckland introduced Vision 2020, which set the goal that Māori would constitute 10 percent of New Zealand’s registered medical practitioners by the year 2020. This goal assumes a registered medical workforce of between 5000 and 6000 practitioners and sets a realistic graduation target of 500 Māori practitioners by 2020. There are currently 200 Māori medical graduates, so the target can be reached if there are an additional 20 Māori graduate per year for the next 15 years from the two medical schools.

There remains, however, a mismatch between the academic standards reached by young Māori at secondary school and the entry requirements to health professional courses. While concessions have been made to the usual entry qualifications into medical schools, all students must pass the same examination and assessments at the end of the course. Any apparent academic discrepancy in entry qualification has disappeared by the end of the fifth year of training and consequent qualifying exams.

An important part of Vision 2020 is the Certificate in Health Sciences, a bridging programme between school and university. This programme has been designed to address the same issue of an apparent gap between academic standards of Māori at secondary school and the standards required to gain entry into health professional courses.

Without these policies, the numbers of Māori doctors practising today would be negligible. Very few of the country’s 500,000–600,000 Māori would have the option to choose to seek health care from a Māori medical practitioner.

The academic barriers to entry into health professional courses are well recognised. However, the burden on poor families of financing a medical education is less widely acknowledged. We believe that a great proportion of Māori 18-year-olds considering the medical profession are embarking on a financial commitment greater than their family’s mortgage.

Expectations of Māori MB ChB graduates

Māori communities want to see their own graduates returning to their own districts. Some Māori graduates do return, but their career options need to be equal to those of their colleagues, given that all benefit from the same considerable state funding contributing to their education.

The specialties of public health and general practice attract most new Māori graduates. Māori graduates are drawn to public health in very significant numbers. This is due to their interest in population medicine, and also to the effectiveness of the training programme to provide a culturally safe, supportive environment.

The Clinical Training Agency funds Māori co-ordinators to support Māori trainees in both the public health and GP programmes.
Māori involvement in the health sector

There is a long history of Māori involvement in the health sector. Dr Maui Pomare was appointed in the early 1900s as the first Māori Medical Officer of Health for the Department of Health.

Dramatic growth in Māori participation in the health sector has occurred more recently.

Prior to 1992, the Area Health Boards were beginning to make concerted efforts to address Māori health issues in specific areas such as cervical screening, mental health and in health promotion. Around 20 Māori health providers had been contracted by the Boards to deliver community health services.

In 1993, the Government legislated a strategic objective to improve Māori health so that Māori could enjoy at least the same level of health as non-Māori. This objective was to form the basis of much of the growth and development of Māori health initiatives throughout the 1990s.

Over the same period, Hekia Parata and Mason Durie undertook a review of the internal structures of the newly-formed Ministry of Health. The review recommended that a Māori Health Group be established, headed by a manager who reported directly to the Deputy Director-General of Health. The Māori Health Branch was established in 1993.

In 1996, Ria Earp was appointed as General Manager of the Māori Health Branch. A number of internal restructures followed as the Ministry of Health assumed its current structure. Throughout these reorganisations, the position of the Māori Health Branch remained in place, and in 2000, the branch became a directorate in preparation for the merger of the Health Funding Authority (HFA) and the Ministry of Health, with the Deputy Director-General position secured.

Since 1996, the Māori health team has grown. The manager of the Māori health team is a Deputy Director-General who is part of the executive team and reports directly to the Director-General. During this time, Māori teams have been built within other directorates. Today, for example, Māori managers also operate in mental health, disabilities, cervical screening, public health and the Clinical Training Agency.

In 2001, the Ministry consulted on He Korowai Oranga: Māori Health Strategy. In November 2002, He Korowai Oranga: Māori Health Strategy was published together with Whakataataaka: Māori Health Action Plan 2002–2005. The overall aim of He Korowai Oranga is whānau ora: Māori families supported to achieve their maximum health and wellbeing. To achieve this, Whakataātaka outlines the actions required to achieve whānau ora along four pathways.

- Development of whānau, hapū, iwi and Māori communities
- Māori participation throughout the health and disability sector
- Effective health and disability services
- Working across sectors.
There are a range of Māori providers outside the Ministry of Health, for example, primary health organisations or District Health Boards. These have not been outlined in this appendix.

**The development of Māori organisations**

Over the last two decades Māori people and specific Māori objectives and health strategies have been formally included within the Ministry of Health. The same period has also seen the development of many non-governmental organisations involved in Māori health services delivery, Māori health research and Māori workforce development. A small number of these are listed below.

**Te Rau Matatini** is a national Māori mental health workforce development organisation. It is funded by the Ministry of Health and was launched in March 2002.

**Hauora.com** is a Māori-led organisation supported by Māori health professional associations, Māori health providers and Māori health workers. Its mission is to build and develop a unified, effective and Māori-led health workforce.

**Health services delivery**

In 1992, Ngai Tuhoe established **Te Runanga Matauranga ō Tuhoe**. The Tuhoe Matauranga Trust has service contracts with the Ministry of Education, Ministry of Health, Te Kohanga Reo National Trust and Pacific Health.

**Tui Ora** is a Māori development organisation and an integrated health service organisation. Its primary objective is to achieve Māori health gains and to ensure clinically viable, accessible and efficient primary and secondary health care services. Tui Ora evolved from a joint venture between Te Whare Punanga Kōrero Trust and the former Midland Regional Health Authority.

Tui Ora Ltd has been established as an integrated care organisation (ICO) with a specific focus on the needs of Māori in Taranaki.

Greater synergy and co-operation has resulted from the emergence of Tui Ora and its role as an umbrella organisation for the majority of Māori providers.

Tui Ora Ltd is expected to develop as an umbrella organisation for:

- Māori health providers to provide support in contract negotiations with the Health Funding Agency (HFA) and other funders
- Māori health provider workforce development
- developing best practice methods
- monitoring Māori health provider services.
**Poutiri Trust** was established in 1998 as a Māori development organisation by whānau, hapū and iwi across the Bay of Plenty. Poutiri is a registered charitable trust. The trust manages the delivery of a variety of primary and public health care services through 23 affiliated healthcare provider organisations across the region.

**He Oranga Pounamu** co-ordinates health and social services for Māori residing in the Ngai Tahu rohe. It acts as a broker for 21 affiliated Māori service providers and community organisations, securing funding contracts and providing business support services. He Oranga Pounamu is a Māori development organisation.

**Health research**

**Tomaiora Māori Health Research Unit** was established in 1998. The unit is located in the Department of Māori and Pacific Health at the School of Medicine and Health Sciences at the University of Auckland. Tomaoria undertakes research projects relevant to the health and wellbeing of tamariki, rangatahi and their whānau.

**Whāriki** is a Māori health research group working in partnership with the Alcohol and Public Health Research Unit at the University of Auckland. The objective is to provide high-quality research, to tautoko Māori communities and to further develop a Māori health research workforce.

**The Māori Psychology Research Unit** was founded in 1997 in order to provide a catalyst and support network for enhancing research that recognises the psychological needs, aspirations and priorities of Māori people.

**Te Ropu Rangahau Hauora A Eru Pomare Research Unit** at Wellington School of Medicine conducts research into Māori health that contributes to improving the health of Māori and the wider population. Included in this research is the health effects of unemployment, disparities between the health status of Māori and non-Māori, and knowledge, attitudes and behaviour of Māori towards tobacco and its use.
Pacific medical students

The under-representation of Pacific doctors in the medical workforce was discussed in Chapter 2.

The University of Auckland and Otago University have both introduced programmes to address this issue.

University of Auckland Māori and Pacific Admissions Scheme (MAPAS)

The University of Auckland established the Māori and Pacific Admissions Scheme (MAPAS) in 1972 to increase the number of Māori and Pacific entrants to health sciences. The objective was to contribute to the development of healthy Māori and Pacific communities in New Zealand.

MAPAS is the responsibility of the Department of Māori and Pacific Health at the University’s School of Medicine and Health Sciences. The admission scheme is available for entry to medicine, Bachelor of Health Science, nursing and pharmacy courses (www.auckland.ac.nz). Successful applicants are admitted either directly from secondary school or as mature entrants. Initially three places were allocated each year. This increased to nine in 1979, to 12 in 1990 and to 25 by 2003.

The programme provides a supportive environment where students, their families and staff are committed to academic achievement and cultural integrity. A commitment to learning to speak Māori or a Pacific language is essential for MAPAS students.

Otago University

Entrance to health science programmes at Otago University until 2003 was judged solely on academic ability. In each of the health science programmes, Pacific Island students could be considered under a ‘special entrance category’. This provided for a slightly lower average mark than that set for the general category. It enabled Pacific students to access second-year programmes.

After the second year of health science programmes, no differentiation is made in academic requirements between Pacific students and mainstream students.

Despite these provisions, there have been years where there have been no Pacific students enrolled in second-year medicine at Otago University.
Changes were made to health science programme admission procedures in 2003 in recognition of the increasing need for communication and people skills. Academic achievement now accounts for two-thirds of the criteria, with the remaining one-third based on the Undergraduate Medical Aptitude Test (UMAT).

The impact of this change on the number of Pacific Island students gaining entrance to medicine has not yet been gauged.

**The Pacific Health and Disability Action Plan**

*www.moh.govt.nz/publications/pacificactionplan*

The Pacific Health and Disability Action Plan sets out the strategic direction and actions for improving health outcomes for Pacific peoples, and reducing inequalities between Pacific and non-Pacific peoples. It is directed at the health and disability service sectors and Pacific communities and aims to provide and promote affordable, effective and responsive health and disability services for all New Zealanders.


The Action Plan highlights six priority areas where improvements can be made to health and disability support services for Pacific peoples. For each of the priority areas, a number of action items have been identified. These include:

- child and youth health
- promoting healthy lifestyles and wellbeing
- primary health care and preventive services
- provider and workforce development
- promoting participation of disabled Pacific peoples
- health and disability information and research.
Pacific Health and Disability Workforce Development Plan

Published by the Ministry of Health in November 2004, the Pacific Health and Disability Workforce Action Plan provides a framework for all organisations to improve recruitment, retention and development of Pacific health and disability practitioners. It outlines four goals that are designed to ‘contribute to a competent and qualified Pacific health and disability workforce that will meet the needs of Pacific peoples’. These goals are to:

- increase the capacity and capability of the Pacific health and disability workforce
- promote Pacific models of care and cultural competence
- advance opportunities in the Pacific health and disability workforce
- improve information about the Pacific health and disability workforce.

The goals have been broken down into 14 objectives, each with an action plan.

By Pacific for Pacific healthcare organisations
(http://www.moh.govt.nz/moh.nsf)

West Auckland – Pasifika Healthcare

West Auckland Pacific Island Health Fono – also known as Pasifika Healthcare – was set up in 1989 by a group of Pacific peoples in West Auckland. It is now an incorporated society that provides a seven-day-a-week general practice and nursing service for more than 10,000 people. It also provides community health promotion programmes, mental health services and a nursing outreach service, as well as population-based programmes such as cervical screening, Hepatitis B, asthma and immunisation services.

Pasifika Healthcare’s mission is to develop and provide an affordable, accessible and culturally appropriate service that improves and contributes to best health outcomes for Pacific people.

Southseas Healthcare

Southseas Healthcare provides health services to more than 7000 people from the South Auckland Pacific community. It was founded in February 1999 with a mission ‘to improve the health status of Pacific families and communities by increasing access to comprehensive primary and preventive health care and effectively integrating these services with secondary and tertiary care’.

The service has 35 employees and offers dental health education, chronic disease management services, treatment for diabetes, well child programmes, intensive home visiting services, child and youth health care services, cervical screening, facilitation with other services and support services for parents.
Southseas Healthcare also focuses on workforce development. This is being done in conjunction with the Manukau Institute of Technology Health Studies Department to develop accredited qualifications for community health workers and a primary health care practitioner programme for registered nurses.

**Health Pacifica doctors**

Dr Siro Fuata’i and Dr Leon Dillon set up Royal Oak Health in 1986. After two years, they opened rooms in Mangere to service the large, local Pacific Island population. ‘This was the start of Health Pacifica Doctors. This practice took off like a balloon’ (Dr Siro Fuata'i, www.moh.govt.nz/moh.nsf accessed January 2005).

The practice has since also become involved in health education with many church groups and in health programmes on Pacific radio.

**Tongan Health Society – Langimalie**

Langimalie is New Zealand’s first ‘ethnic-specific’ health care provider. It was established in 1998 to serve the Tongan community in the central Auckland region.

Ata Sitaleki Finau, Professor of Public Health at the Fiji School of Medicine, helped to create Langimalie. He describes the service as ‘the product of the Tongan community and Tongan health workers talking about the problems Tongan people in New Zealand were facing in terms of health care’ (www.moh.govt.nz/moh.nsf accessed January 2005).

The service has over 10,000 registered clients and provides home visits and house calls in addition to extensive public education programmes.

**Healthstar Pacific**

Healthstar Pacific, established in 1994, offers a range of public awareness and health promotion programmes for the Auckland-region Pacific community. These programmes are aimed mainly at preventive health for children under five years of age.

Three main programmes are based around pregnancy support services, the promotion of immunisation programmes and breast screening. Healthstar Pacific is a charitable trust that acts as a facilitator of services. ‘We don’t aim to replace services that already exist but rather to put our people in touch with the right services, make sure they’re getting what they need and help them find their feet’ (www.moh.govt.nz/moh.nsf accessed January 2005).
K’aute Pasifika

K’aute Pasifika was established in 1999 by representatives from Hamilton’s seven Pacific groups – Tonga, Samoa, Cook Islands, Kiribati, Fiji, Tokelau and Niue. The organisation was established to address issues such as difficulties accessing existing health care services due to costs, lack of knowledge about the diversity of Pacific languages and cultures, and being poorly informed about their own health issues.

Services offered include child and adolescent mental health, well child, asthma, diabetes and smoking cessation. The group also provides community social services such as supporting family members during crises, assisting families to access other social services and assisting new immigrants to settle into life in Hamilton by providing free clothes, blankets, shoes, tinned food, cutlery and dishes donated by the community through their opportunity shop.

Nearly 1000 Pacific peoples are registered with the service, of which 190 are children under the age of five years.

K’aute Pasifika says its long-term sustainability relies heavily on a significant increase in the number of trained Pacific health professionals. As a result, it has started providing staff with appropriate training.

Pacific Health Hutt Valley

Pacific Health Hutt Valley was created in 1999 as a not-for-profit organisation based in Naenae, near Lower Hutt. Over 3000 people are currently enrolled in its service.

A close working relationship is maintained with Hutt Hospital, with a key objective being a reduction in the hospital’s Pacific admission rates.

The centre identified its clients’ major issues as being housing, diabetes and obesity. Pacific Health Hutt Valley has introduced exercise programmes, education programmes and has taken on advocacy roles with Housing New Zealand in an attempt to address some of these problems.

Pacific Trust Canterbury

The Pacific Trust Canterbury, based in Christchurch, is a not-for-profit organisation set up in 1999. A board comprising Pacific health professionals, social workers and other Pacific leaders manages it. The Trust employs 14 people and expects this to expand within the next 12 months when it offers an extended range of services.

The Trust’s employees are currently split into two main teams, one focusing on mental health and the other on child health. The mental health team’s objective is to deliver ‘culturally-safe’ services for Pacific peoples. The child health team provides support for communities and families through education programmes that identify options for child rearing and discipline and that help people understand family violence.
Pacific Trust Canterbury takes a wider approach than just health to ensure the wellbeing of its communities. It offers other services such as exercise and injury prevention programmes, asthma education services, car seat rental and purchase schemes, and learner driver licence courses.

**Pasifika Medical Association Inc**

The ‘marginal health’ of Pacific peoples living in New Zealand was a key factor in the establishment of the Pasifika Medical Association Inc, based in Auckland, in 1996. The Association’s vision is to promote and protect the health of Pacific peoples through advocacy and supporting the development of a strong Pacific medical workforce. Membership is open to all Pacific health workers, and also to non-Pacific health workers who demonstrate a commitment to Pacific health development.

The association runs the annual Pasifika Medical Association conference, which provides an opportunity for Pacific health workers, health administrators and health researchers in the Pacific region to share new initiatives and develop new strategies to improve health outcomes for Pacific people.

**Pacific health research**

**Pacific Health Research Centre**

The Pacific Health Research Centre is based at the University of Auckland. It was established in 1996 to undertake culturally-appropriate and scientific research and training.

The centre offers two postgraduate research fellowships, one focusing on social science methodology and the other on clinical practice.

**Whitireia Community Polytechnic**

Whitireia Community Polytechnic in Porirua, established in 1989, is a research-based centre offering training in a range of Pacific-focused community health care and social work areas.

**Pacific scholarships**

Scholarship programmes have also been developed to help Pacific peoples within the health workforce.
**Pacific Health Leadership Programme**

The Ministry of Health’s Pacific Health Leadership Programme aims to develop Pacific health leadership and to work towards better health status for Pacific peoples.

The Health Research Council has administered the Pacific Health Workforce Awards since 2002. Aimed at establishing a health service infrastructure for Pacific peoples, these awards seek to assist in the development of Pacific health professionals who intend to practise within the Pacific health sector – either mainstream or through Pacific providers.

Over the past three years, approximately 100 students have received funding through this programme. In 2004/05, $350,000 has been allocated to the awards.
APPENDIX 7: FINANCIAL SUPPORT OF THE MEDICAL STUDENT

The New Zealand student support scheme

The New Zealand student support scheme is the subject of widespread and continuing criticism. Many people are philosophically and fundamentally opposed to the scheme.

Designed to ensure equity and fairness to all, the scheme seeks to:

- encourage and facilitate tertiary education
- ensure that tertiary education contributes to national development
- ensure that tertiary education is affordable and sustainable
- ensure consistency with other social assistance programmes.

Components of the scheme are:

- student allowances
- support for students during non-study periods
- student loans
- interest write-offs
- scholarships
- training incentives.

Despite continuing review, the scheme remains generally unpopular. The dimensions and details are quite technical and, with continuing modification, are not well or widely understood.

Student allowances

Allowances are currently available to:

- students under 25. If the student does not have children in their care, their parents’ combined income is taken into account. This is regardless of their relationship status. To be eligible for a student allowance, their parents’ combined income before tax must be less than $57,981.04 (if the student lives away from home) or $63,825.84 (if the student lives at home)
- students 16–24 who are separated and independent from their parents. These students may be able to get the Independent Circumstances Allowance, which is a student allowance for students with special circumstances
- students over 25.

Students in all three categories may earn up to $135.13 (gross) per week from other sources while they are studying. If they earn more than that, a student loses their entire student allowance for that week.
The amount of allowance paid to students under 25 without children in their care depends on how much their parents earn in total. If their parents earn less than $34,606, the student receives a full allowance ($112.38 per week if a student is living at home).

Students who receive an allowance and live away from home, or who have a dependent partner, may also receive an Accommodation Benefit to help meet their costs of living. The amount of Accommodation Benefit paid varies, depending on where the student is living.

Students may receive an allowance for a maximum of 200 weeks (approximately five years) over their lifetime, but some students in particular programmes may receive more (Health Workforce Advisory Committee Secretariat 2001).

**Support for students during non-study periods**

Student allowances, the Accommodation Benefit and student loans are not available to students during non-study periods of more than three weeks’ duration.

Student Job Search is a service provided to help students find vacation jobs. In addition, financial support is available for students who are unable to find work and who are in hardship. Payments available to full-time students during non-study periods are the Unemployment Benefit Student Hardship (UBSH) and the Accommodation Supplement. Other assistance under the Social Security Act may be available during study and vacation periods (for example, the Disability Allowance, Special Benefit and Special Needs Grant).

Rates of payment of student allowances and the UBSH are generally aligned, but differences occur for certain groups.

- Student allowances have an ‘at home’ rate for those aged 18 to 24 ($112.38 maximum rate), whereas UBSH has an ‘at home’ rate for 18- and 19-year-olds only).
- Student allowances have an ‘at home’ rate for recipients 25 years and over ($134.86 maximum rate), whereas UBSH does not ($168.59).
- UBSH and the Accommodation Supplement are tested and abated for personal and partner income only. They are not tested for parental income.

There is a minimum stand-down period of one week for people applying for the UBSH, which is in line with stand-down provisions for all social security benefits. Longer stand-down periods may be imposed, depending on the applicant’s income over the preceding six months. For students with dependants who are experiencing hardship as a result of the delay between their last student allowances payment and commencement of the UBSH, a non-recoverable payment is available. Other students experiencing hardship as a result of the stand-down may be eligible for a recoverable Special Needs Grant (Health Workforce Advisory Committee Secretariat 2001).
Student loans and interest write-offs

Student loans were introduced in New Zealand in 1992, and at present, the student loan scheme assists around 150,000 students in undertaking their tertiary education.

The scheme allows full-time and part-time full-year New Zealand students to borrow:

- the funds necessary to cover tuition fees
- up to $1000 per annum for course-related costs
- up to $150 per week for full-time students’ living costs less any student allowance received.

Student loan debt is written off only in cases of death or bankruptcy.

The student loan scheme is known as an income contingent loan scheme – borrowers are not required to repay any money until they earn sufficient income. Repayments begin once a borrower earns more than the repayment threshold (currently $16,588). Compulsory repayments are set at 10 percent of all income earned above the repayment threshold.

From the 2000/01 financial year, the government capped the rate of student loan interest at 7 percent in an effort to give greater certainty to students. The 7 percent interest rate is made up of a base rate (currently 4.2 percent) and an inflation component (currently 2.8 percent) (Health Workforce Advisory Committee Secretariat 2001).

Various types of interest write-offs are available to certain groups of borrowers.

- All full-time students, and part-time students earning under $29,788, have their interest charges written off at the end of the income year in which the study was completed and so do not pay interest on their loan while they are studying.
- Borrowers who earn less than the repayment threshold have only an interest charge equal to inflation added to their loan, and so no borrower’s loan increases by more than the rate of inflation in any year.
- Only 50 percent of a borrower’s repayment obligation in any one year is used to pay the base interest charge. The other 50 percent is credited first to the inflation component of the interest charge, with any balance being credited to the loan principal. (The amount of the base interest charge in excess of 50 percent of the repayment obligation is written off.)

The effect of these interest write-offs is that $198 million of interest accrued during the 2002/03 financial year was written off. This is just over 50 percent of all interest on student loans for that year. Around 75 percent of borrowers in the 2002/03 financial year had some interest written off. The write-offs are designed to give a greater benefit to those with low earnings. Since the beginning of the scheme, a total of $612.2 million in interest has been written off (Health Workforce Advisory Committee Secretariat 2001).
Student indebtedness

The increasing indebtedness of students and medical graduates is a source of widespread concern, of vocal protest and of advocacy to the government.

Medical school tuition fees in both Auckland and Otago have risen sharply and are now about $10,000 per year. Permission to exceed the fees maxima in 2005 was granted to both Auckland and Otago medical schools. This has seen fees rise to approximately $11,000 per year.

The current costs and means of financing a medical education make it very difficult for students with access to only modest resources to embark upon a medical education.

A study of medical student debt in Christchurch in 2001 showed that:
- the median student debt on graduation is $70,000
- one in four final-year students has debt of more than $80,000
- one in 10 fourth- and fifth-year students receive full financial support from parents
- one in four students do outside work in their fourth and fifth years
- some students have family and private loans as well as their student loans.

The 2001 Christchurch graduating students questioned about attitudes to their indebtedness indicated that:
- 82 percent planned to leave New Zealand within two years
- 40 percent said that debt was a strong motivation to leave New Zealand
- the higher the debt the greater the motivation to leave
- 40 percent said that financial incentives could influence them to stay in New Zealand
- one in six reported a career interest in general practice (Gill et al 2001; O’Grady and Fitzjohn 2001; Fitzjohn et al 2003).

It seems then that debt looms large for many students and medical graduates. In the short term, it encourages young doctors to leave New Zealand shortly after graduation in search of more highly paid work overseas. This may not be in a young doctor’s best longer-term career interests.

Other data shows that women, Māori and Pacific graduates have higher levels of debt and find it more difficult than other students to retire debt. Graduates with higher levels of debt are more likely to travel overseas soon after graduation but are less likely than those staying in New Zealand to make progress with debt repayment.

It must be acknowledged that young New Zealanders have historically travelled overseas soon after college or university studies. A connection is often articulated between student indebtedness and the ‘brain drain’ – graduates leaving New Zealand. Anecdotal evidence seems to abound with respect to medical graduates leaving New Zealand to earn more money overseas. With current emigration information, it is not possible to establish the precise motivation of those leaving the country, nor at this stage to prove or disprove a cause and effect between higher student loans and higher long-term emigration rates.
Heavy debt encourages career interest in those areas of medical practice with the highest earning potential – private, instrumental specialist practice. This is to the disadvantage of largely publicly funded areas of practice such as general practice, primary care, public health and research/academic positions. Recruitment and retention in these areas is particularly difficult in the present economic climate.

**Step-up scholarships**

These scholarships were initiated in 2004 and are available again in 2005. They are for study towards degrees in the areas of animal and human health and are aimed at students who have the ability to succeed in tertiary education and who come from low-income backgrounds. Recipients of these scholarships need to be in approved health science courses and have a minimum compulsory course fee of $3000. Students must be eligible for a student allowance in order to receive the scholarship. The scholarship is available to the recipient for the duration of their course. As at September 2004, 169 students had received the scholarship.

The scheme has been expanded in 2005 to include students of human and animal health up to the age of 24 (compared to school leavers or those who had left school within the previous 12 months). Originally the animal or human science degree student was expected to contribute $2000 towards their course costs; this has been reduced to $1000 in 2005.

In 2006 Step-up Scholarships will expand further to include school leavers and those who have left school within the last 12 months undertaking degrees in science and technology. These students will be expected to contribute $2000 to their course costs.

It is expected that up to 400 students will receive the scholarship in 2005 and up to 600 in 2006. It has not yet been established what proportion of these scholarship holders might elect to study medicine.

Once the scholarship holder has completed their qualification, they are required to remain in New Zealand for the same length of time as their study period or four years, which ever is the lesser. They are able to leave New Zealand for short periods, such as holidays of up to four weeks. They will also be able to leave for one full year overseas for work experience or similar. If the recipient fails to meet the bonding requirement, they may be required to pay back a proportion of their scholarship.

**Public cost**

It costs about $160,000 of public money to produce one medical graduate. Currently it appears that about one in three medical graduates lost to the workforce through failure to renew their Annual Practising Certificate (Figure A2.15). Quite apart from the intellectual and employment loss, this is a huge financial loss to the New Zealand taxpayer and is only partly compensated for by the immigration of OTDs.
In making changes to the student support scheme, the government is likely to continue to take a broad approach in keeping with the foundation principles it has established. Critics of the scheme contend that the government should treat tertiary education more as a public good, to be paid for by the state out of taxation, and less as a private good to be paid for by individuals.

If more of the cost of tertiary education were financed out of general taxation, those with an education that enabled them to earn more, and thus pay more tax, would contribute more to the cost of tertiary education. This, it is argued, would be generally more equitable and would reduce that debt burden for all students, including medical students.
The CanMEDS 2000 roles and competencies framework has been widely discussed and debated internationally. It is now generally accepted as applying to all doctors.

The Australian Medical Council (AMC) and the Australasian medical colleges have assessed the framework. These bodies have modified CanMEDS for the Australasian vocational education and work environment. The principles espoused by CanMEDS now form the basis for the formal AMC Accreditation of Medical Colleges programme.

The AMC Accreditation of Medical Colleges programme involves the 11 medical colleges that are Australian, and New Zealand-based and the Royal Australian College of General Practitioners. Through the AMC programme, these colleges are accredited to provide vocational medical training and continuing professional development for the Australasian medical workforce.

The following is a consolidated list of CanMEDS competencies (CanMEDS 2000 Project 1996).

**Medical expert**

- Demonstrate diagnostic and therapeutic skills for ethical and effective patient care.
- Access and apply relevant information to clinical practice.
- Demonstrate effective consultation services with respect to patient care, education and legal opinions.

**Communicator**

- Establish therapeutic relationships with patients/families.
- Obtain and synthesise history from patients/families/communities.
- Listen effectively.
- Discuss appropriate information with patients/families and the health care team.

**Collaborator**

- Consult effectively with other doctors and health care professionals.
- Contribute effectively to other interdisciplinary team activities.
Manager

- Utilise resources effectively to balance patient care, learning needs and outside activities.
- Allocate finite health care resources wisely.
- Work effectively and efficiently in a health care organisation.
- Utilise information technology to optimise patient care, lifelong learning.

Health advocate

- Identify the important determinants of health affecting patients.
- Contribute effectively to improved health of patients and communities.
- Recognise and respond to those issues where advocacy is appropriate.

Scholar

- Develop, implement and monitor a personal continuing education strategy.
- Critically appraise sources of medical information.
- Facilitate learning of patients, house staff/students and other health practitioners.
- Contribute to the development of new knowledge.

Professional

- Deliver the highest quality care with integrity, honesty and compassion.
- Exhibit appropriate personal and interpersonal professional behaviours.
- Practise medicine ethically, consistent with the obligations of a doctor.
Objectives

The Health Workforce Advisory Committee (HWAC) is established under section 12 of the New Zealand Public Health and Disability Act 2000. The role of the Committee is to advise the Minister of Health on health workforce issues that the Minister specifies by notice to the Committee.

The advice given by the Committee to the Minister is to be formulated after consultation with people involved in the funding and provision of services and any other people that the Committee considers appropriate.

The Committee will report its advice to the Minister of Health.

Accountability

The Committee is established by and accountable to the Minister of Health.

Key tasks

The committee’s key tasks, in line with the requirements of section 12 of the New Zealand Public Health and Disability Act 2000, are to:

1) provide an independent assessment for the Minister of Health of current workforce capacity and foreseeable workforce needs to meet the objectives of the New Zealand health and disability strategies

2) advise the Minister on national goals for the health workforce and recommend strategies to develop an appropriate workforce capacity

3) facilitate co-operation between organisations involved in health workforce education and training to ensure a strategic approach to health workforce supply, demand and development

4) report progress on the effectiveness of recommended strategies and identify required changes.

Other tasks may be undertaken as agreed between the Minister and the committee.

In developing its advice, the committee may consider:

- what is currently known about the workforce, in particular: a stocktake or analysis of previous reviews and reports, including patterns of shortage, excess or other imbalance in existing workforce capacity, geographically or in specific service areas

- the type of workforce required for the future, including taking account of service, educational, societal and technological trends and public expectations
• the changes necessary to move from the present to a recommended health workforce capacity, including utilising current system strengths that can be built on and identifying barriers and possible resolutions

• co-ordinated strategies or co-operative approaches to achieve necessary changes in education, training, recruitment and retention, and occupational regulation

• any other issues impacting on workforce (eg, interagency or intersectoral issues, funding, training support)

• such other matters as the Minister specifies by notice to the Committee.

**Working arrangements**

After discussion with the Ministry of Health, the Committee will agree an annual work programme with the Minister of Health. A committee secretariat providing professional and advisory support to HWAC will be based in the Ministry of Health.

In developing its advice, the Committee should:

• adopt an evidence-based approach

• where possible, build on existing and previous reports and policy work or models for describing and predicting future workforce requirements, and make use of existing statistics or information collected by other sector organisations

• consult with organisations and individuals as appropriate, including, among other statutory bodies or policy agencies, health and disability support service providers, education or training organisations, registration bodies, professional organisations and unions, and consumer interest groups

• commission, co-ordinate or undertake research projects for the development of advice

• evaluate progress towards achieving the recommended workforce balance, including the effectiveness of current strategies

• publish committee advice at least annually.

**Membership**

The committee shall comprise a maximum of 10 members, including the Chair and Deputy Chair, and all appointments will be made by the Minister of Health.

Members shall have strategic skills, sector experience, understanding and credibility, and knowledge of health workforce issues. Membership shall be drawn from health professional groups, including medical, nursing and disability support interests, employer groups, educational and consumer groups, and people representing Māori and Pacific people’s interests.

Nominations shall be sought from health sector and consumer groups.
The committee may appoint specialist, professional or other sub-committees or establish working parties relevant to its agreed work plan.

**Terms of committee members**

Members of the committee shall be appointed for a term of up to three years. Members shall be eligible to serve a second consecutive term to allow for continuity and full use of increased experience and knowledge. Members shall have staggered retiring dates to ensure a degree of continuity.

**Treaty of Waitangi**

The committee shall undertake its tasks in a manner consistent with the principles of the Treaty of Waitangi.

**Performance measures**

The committee will effectively be meeting its key tasks when it provides relevant and timely advice to the Minister of Health based on research, analysis and consultation with appropriate groups and organisations.

The committee must achieve its agreed work programme.

The committee must stay within its allocated budget.

**Reporting requirements**

Any discussion documents or working papers for consultation shall be provided for the Minister of Health’s consideration prior to dissemination.

The committee is required to:

- report as necessary, but at least once a year to the Minister of Health on the outcome of its key tasks. The report is to include the committee’s rationale for its advice and any relevant evidence and/or documentation
- report on such other matters as the Minister of Health specifies by notice to the committee; these reports to include the committee’s rationale for its advice and any relevant evidence and/or documentation
- keep a record of all committee meetings, which outlines the issues discussed and includes a clear note of any decisions taken or recommendations made
- provide a brief performance report to the Minister of Health within two months of the end of the financial year, detailing the work undertaken by the Committee for the past year and comparing its performance to its agreed work programme.
Frequency of meetings

The timing and frequency of meetings will be determined by the tasks the Committee is obliged to fulfil. All meetings will be convened by the Chair or Deputy Chair as appropriate.

Membership

Hon Stan Rodger, CMG, JP (Chair) (appointed January 2005)
Professor Andrew Hornblow, CNZM (Chair 2001–2004)
Karen Guilliland, MNZM, (Deputy Chair)
Dr Ralph Wiles
Dr Clive Ross, CNZM
Professor Colin Mantell
Mr Mike Gourley
Dr George Salmond
Ms Jane Lawless
Dr Margaret Southwick
Mr Ian Wilson

Publications


March 2003 – The New Zealand Health Workforce – Framing Future Directions.


December 2001 – HWAC First Annual Report to the Minister of Health.
The Minister of Health, Hon Annette King, approved the setting up of and support for a Medical Reference Group (MRG) in September 2003. The MRG reports to the Health Workforce Advisory Committee (HWAC).

**Accountability**

The MRG provides independent advice to HWAC and works within HWAC’s Terms of Reference – see Appendix 9.

**Key tasks**

The MRG is initially tasked with assessing medical workforce information requirements for supply and demand analysis. This analysis will take into account:

- demand for doctors, including how they deliver services and medical workforce capacity requirements
- current supply from the education sector and immigration, also recruitment and retention issues
- planning processes, to improve information systems and use of short- and long-term measures to ensure capacity
- professional issues, including professional development, flexible employment opportunities and career pathways
- reviewing the structure of medical service delivery. This project will explore doctors’ work in terms of specialist, generalist and resident medical officer roles in an environment of patient-centred service delivery. Primary health care, cancer control and diabetes may be used as examples to explore this issue.

**Membership**

Members of the MRG are appointed in an individual capacity rather than as representatives of other groups. The combined membership of the reference group brings strengths and expertise from across the medical workforce.

Appointments to the MRG are for a period of 12 months, with the possibility of extension subject to review of both the Reference Group’s key tasks and the appropriateness of the membership for these tasks.
Members

Dr George Salmond (Chair)
Professor John Campbell
Dr Dwayne Crombie
Dr David Galler
Mrs Anne Kolbe
Ms Jane Lawless
Dr Peter Leslie
Dr Don Simmers
Ms Cindy Towns
Dr Ralph Wiles
APPENDIX 11: DOCTORS IN TRAINING
WORKFORCE ROUNDTABLE (DTWR) – DRAFT
TERMS OF REFERENCE

Objective

The Doctors in Training Workforce Roundtable (DTWR) was established by the Minister of Health to provide agreed solutions to short-term issues relating to the work and professional development of doctors in training.

The prime purpose is to facilitate the training of doctors, in the numbers and of the type required, who are highly motivated, well prepared and committed to practise in New Zealand.

The issues

The DTWR will address the following issues.

- Sustainability of the current preparation of medical practitioners
- Recruitment and retention
- Deployment
- Career guidance and vocational training
- Incentives and career development
- A supportive workplace environment.

In addressing these issues, the DTWR will consider:

- the central focus on patient care
- safety and quality of patient care
- effectiveness and efficiency in the use of human resources
- objectives for training and links to service delivery
- hours of work, work/life balance and vocational guidance
- communication, teamwork, service and workforce design and staffing arrangements
- the designation, accreditation, funding and allocation of training posts
- the use of incentives and other means to facilitate the career development and retention of doctors in training in New Zealand, in both the short and longer term.

The DTWR may also identify issues that are more appropriately progressed through the work of the Health Workforce Advisory Committee (HWAC) or its Medical Reference Group (MRG).
Membership

The DTWR will comprise leaders and decision-makers directly involved in medical education and/or the delivery of medical services and include representatives from:

- District Health Boards (a chief executive, a human resources practitioner, a Chief Medical Advisor)
- Health Workforce Advisory Committee (HWAC) and the Medical Reference Group (MRG)
- Council of Medical Colleges
- medical schools
- Medical Council of New Zealand
- New Zealand Medical Association
- New Zealand Medical Students Association
- Ministry of Health.

Timeframe

The DTWR will provide a full report on its activities and achievements to the Minister of Health within one year of its establishment.

Working arrangements

The DTWR is distinct from the structures and processes whereby employers and employees negotiate employment contracts for Resident Medical Officers and specialist staff.

An independent Chair will be appointed by the Minister of Health.

Secretarial and administrative support will be provided by the Ministry of Health.

The DTWR will draw on:

- evidence gathered by the HWAC and its MRG in its role of developing an independent, expert and strategic view of the medical workforce in the context of the health workforce as a whole
- the knowledge and experience of other interested parties
- any other evidence of relevance provided to the DTWR.

At times, the DTWR may find it convenient to work in subgroups and to co-opt expert outside assistance.
Membership

Chair – Glenys Baldick

District Health Boards:
- Chief Executive – Brian Rousseau, CEO, Otago DHB
- Human Resources Practitioner – Kristine KilKelly, Capital and Coast DHB
- Chief Medical Advisor – Pim Allen, Waikato DHB

Health Workforce Advisory Committee – Taima Campbell

Medical Reference Group – George Salmond

Council of Medical Colleges – Keith Grimwood

Medical schools
- Auckland – Peter Smith
- Otago – Linda Holloway

Medical Council of New Zealand – Deborah Read

New Zealand Medical Association – Ross Boswell

New Zealand Medical Students Association – Jesse Gale

Ministry of Health – Karen Poutasi (alternate Gillian Durham)

Doctors in Training – Richard Pole

Association of Salaried Medical Specialists Nominee – Jeff Brown

Resident Doctors’ Association Nominee – to be confirmed
Material in this appendix has been sourced from the Tertiary Education Commission (TEC) publication *Qualifications Supply Analysis – The New Zealand health sector* published in October 2004.

Established in 2003, TEC is a crown entity responsible for the funding of tertiary education and training in New Zealand. Its responsibilities include:

- allocating $1.9 billion to tertiary education organisations according to an integrated funding framework
- building the capability of tertiary education and training to contribute to national economic and social goals
- advising the government on policies, priorities and sectoral performance
- negotiating a new system of charters and profiles to steer the tertiary education sector.

In 2003, the Ministry of Health and TEC agreed on terms of reference for a project titled *Qualifications Supply Analysis – The New Zealand Health Sector*. TEC undertook sector-specific analysis to inform key stakeholders in the health and education sectors. The Commission assessed ‘the nature, volume and mix of tertiary education sector’s current delivery of health sector qualifications, and related clinical training, and how these qualifications are funded by various government agencies, students and others’ (TEC 2004a).

The full spectrum of health qualifications was analysed for 2002. Medicine was considered one of 12 major occupational groups in the health sector. The main findings of the TEC follow.
Overall medical training costs – 2002

- 10 percent of the overall TEC budget ($1900 million) was spent on health training. Of that, 19.6 percent was spent on undergraduate medical training and 2.9 percent on postgraduate medical training.
- 73 percent of the Clinical Training Agency budget ($86.6 million) was spent on postgraduate medical training – this includes 137 overseas trained doctors at a cost of $4 million. 16.5 percent of CTA’s budget was spent on nursing training and a further 7 percent was spent on mental health workers.
- Medical training costs ($106 million excluding DHB component) accounted for 5.4 percent of the combined budgets of TEC and CTA ($1986.6 million).
- Medical training costs accounted for 38 percent of the health training component of the combined TEC and CTA budgets ($277.8 million).
- DHBs were estimated to contribute $15 million to medical training alone.

Table A12.1: Total Crown funding for health and medical training, 2002

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Total funding ($ million)</th>
<th>Funding for health training ($ million)</th>
<th>Percent total funds for health</th>
<th>Type of medical training</th>
<th>Funding for medical training ($ million)</th>
<th>Percent of health funding for medical training</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEC</td>
<td>1900</td>
<td>191.2</td>
<td>10%</td>
<td>UGM</td>
<td>37.5</td>
<td>19.6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PGM</td>
<td>5.5</td>
<td>2.9%</td>
</tr>
<tr>
<td>CTA</td>
<td>86.6</td>
<td>86.6</td>
<td>100%</td>
<td>Clinical</td>
<td>59.0</td>
<td>69%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>OTD</td>
<td>4.0</td>
<td>4.5%</td>
</tr>
<tr>
<td>DHBs</td>
<td>15.0</td>
<td>100%</td>
<td>Medical</td>
<td>15.0</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>292.8</td>
<td></td>
<td></td>
<td></td>
<td>121.0</td>
<td>41%</td>
</tr>
</tbody>
</table>

The medical undergraduate in 2002

- The TEC invested $37.5 million, and the student invested $15.4 million in tertiary education costs – approximately a 70:30 split.
- On average, the 266 graduates cost $199,000 each, to which the TEC contributed $142,000, and the student contributed $58,000.

Table A12.2: Total funding for undergraduate medical education, 2002

<table>
<thead>
<tr>
<th>Number of graduates in 2002</th>
<th>TEC funding ($ million)</th>
<th>Student funding ($ million)</th>
<th>Total cost ($ million)</th>
<th>Cost per graduate ($000)</th>
<th>% met by the TEC</th>
<th>% met by the student</th>
</tr>
</thead>
<tbody>
<tr>
<td>266</td>
<td>37.5</td>
<td>15.4</td>
<td>52.9</td>
<td>199</td>
<td>71</td>
<td>29</td>
</tr>
</tbody>
</table>

Note: Columns 2 and 3 are calculated from data in columns 6 to 8.

9 Health training is a broad term, encompassing both mainstream and alternative health related professions.
10 Medical training refers to both undergraduate and postgraduate medical training.
Postgraduate medical education in 2002

- GPs were the lowest-cost vocational graduates in 2002, with a calculated cumulative cost of $328,000.
- Pathologists, obstetrics and gynaecology specialists were the most expensive at $627,000 and $603,000 respectively.

Table A12.3: Undergraduate and postgraduate medical training costs, 2002

<table>
<thead>
<tr>
<th>Career path</th>
<th>Undergraduate</th>
<th>Postgraduate</th>
<th>Postgraduate training</th>
<th>Clinical training</th>
<th>Total cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical graduate</td>
<td>199</td>
<td>53</td>
<td></td>
<td></td>
<td>252</td>
</tr>
<tr>
<td>Anaesthetist</td>
<td>199</td>
<td>53</td>
<td></td>
<td>317</td>
<td>569</td>
</tr>
<tr>
<td>Emergency medicine</td>
<td>199</td>
<td>53</td>
<td></td>
<td>317</td>
<td>569</td>
</tr>
<tr>
<td>Physician – general</td>
<td>199</td>
<td>53</td>
<td></td>
<td>263</td>
<td>514</td>
</tr>
<tr>
<td>Obstetrician and gynaecologist</td>
<td>199</td>
<td>31</td>
<td></td>
<td>321</td>
<td>603</td>
</tr>
<tr>
<td>Ophthalmologist</td>
<td>199</td>
<td>21</td>
<td></td>
<td>252</td>
<td>525</td>
</tr>
<tr>
<td>Pathologist</td>
<td>199</td>
<td>53</td>
<td></td>
<td>375</td>
<td>627</td>
</tr>
<tr>
<td>GPs</td>
<td>199</td>
<td>28</td>
<td></td>
<td>49</td>
<td>328</td>
</tr>
</tbody>
</table>

For comparison, the following three tables show costs calculated for other health professionals in the same year, 2002.

Table A12.4: Total Crown funding for other health professions, 2002

<table>
<thead>
<tr>
<th>Occupational group</th>
<th>TEC ($ million)</th>
<th>CTA ($ million)</th>
<th>DHB</th>
<th>Total</th>
<th>Percent of all health training costs (TEC + CTA + DHB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine</td>
<td>43.0</td>
<td>63.0</td>
<td>15</td>
<td>121.0</td>
<td>41</td>
</tr>
<tr>
<td>Dentistry</td>
<td>8.4</td>
<td>0.7</td>
<td></td>
<td>9.2</td>
<td>3</td>
</tr>
<tr>
<td>Nursing</td>
<td>42.6</td>
<td>14.3</td>
<td></td>
<td>56.9</td>
<td>19</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>9.1</td>
<td>0.3</td>
<td></td>
<td>9.4</td>
<td>3</td>
</tr>
<tr>
<td>Allied health profession</td>
<td>32.0</td>
<td></td>
<td></td>
<td>32.0</td>
<td>11</td>
</tr>
<tr>
<td>Mental health work</td>
<td>10.9</td>
<td>5.9</td>
<td></td>
<td>16.8</td>
<td>6</td>
</tr>
</tbody>
</table>
### Table A12.5: Division of funding for other health professions, 2002

<table>
<thead>
<tr>
<th>Occupational group</th>
<th>Number of graduates in 2002</th>
<th>TEC funding ($ million)</th>
<th>Student funding ($ million)</th>
<th>Total cost ($ million)</th>
<th>Cost per graduate ($000)</th>
<th>% met by TEC</th>
<th>% met by student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine</td>
<td>266</td>
<td>37.5</td>
<td>15.4</td>
<td>52.9</td>
<td>199</td>
<td>71</td>
<td>29</td>
</tr>
<tr>
<td>Dentistry</td>
<td>60</td>
<td>7.4</td>
<td>2.4</td>
<td>9.8</td>
<td>163</td>
<td>76</td>
<td>24</td>
</tr>
<tr>
<td>Nursing</td>
<td>1392</td>
<td>37.6</td>
<td>16.9</td>
<td>54.5</td>
<td>39</td>
<td>69</td>
<td>31</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>108</td>
<td>4.3</td>
<td>2.0</td>
<td>6.3</td>
<td>59</td>
<td>68</td>
<td>32</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>181</td>
<td>6.1</td>
<td>3.3</td>
<td>9.4</td>
<td>52</td>
<td>65</td>
<td>35</td>
</tr>
<tr>
<td>Occupational therapy</td>
<td>114</td>
<td>2.6</td>
<td>1.3</td>
<td>3.9</td>
<td>35</td>
<td>67</td>
<td>33</td>
</tr>
<tr>
<td>Optometry</td>
<td>25</td>
<td>1.1</td>
<td>0.7</td>
<td>1.8</td>
<td>70</td>
<td>61</td>
<td>39</td>
</tr>
</tbody>
</table>

Note: Columns 2 and 3 are calculated from data in columns 6 to 8.

### Table A12.6: Undergraduate and postgraduate training costs – other health professions

<table>
<thead>
<tr>
<th>Career path</th>
<th>Undergraduate (including student fee) ($000)</th>
<th>Postgraduate</th>
<th>Postgraduate training (excluding any private contribution) ($000)</th>
<th>CTA subsidy per participant ($000)</th>
<th>Clinical training</th>
<th>Total cost ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medical graduate</strong></td>
<td>199</td>
<td>53</td>
<td>53</td>
<td>375</td>
<td>49</td>
<td>252</td>
</tr>
<tr>
<td><strong>Pathologist</strong></td>
<td>199</td>
<td>53</td>
<td></td>
<td>375</td>
<td></td>
<td>627</td>
</tr>
<tr>
<td><strong>GP</strong></td>
<td>199</td>
<td>53</td>
<td></td>
<td>49</td>
<td></td>
<td>328</td>
</tr>
<tr>
<td><strong>Dentist</strong></td>
<td>163</td>
<td>54</td>
<td></td>
<td>217</td>
<td></td>
<td>48</td>
</tr>
<tr>
<td><strong>Nurse</strong></td>
<td>39</td>
<td>9</td>
<td></td>
<td>48</td>
<td></td>
<td>62</td>
</tr>
<tr>
<td><strong>Pharmacist</strong></td>
<td>59</td>
<td>3</td>
<td></td>
<td>52</td>
<td></td>
<td>52</td>
</tr>
<tr>
<td><strong>Physiotherapist</strong></td>
<td>52</td>
<td></td>
<td></td>
<td>52</td>
<td></td>
<td>52</td>
</tr>
<tr>
<td><strong>Occupational therapist</strong></td>
<td>35</td>
<td></td>
<td></td>
<td>35</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td><strong>Optometrist</strong></td>
<td>70</td>
<td></td>
<td></td>
<td>70</td>
<td></td>
<td>70</td>
</tr>
</tbody>
</table>

*Fit for Purpose and for Practice* 159
SUBMISSION BOOKLET

Fit for Purpose and for Practice:
A review of the medical workforce in New Zealand
Consultation document

Submissions close at 5 pm, Friday 29 July 2005

Making a submission

Please take this opportunity to have your say on the development of the medical workforce in New Zealand. You can provide comment by making a submission on your own behalf or as a member of an organisation.

There are five areas for comment, which refer to the chapters and questions throughout the discussion document. Please comment on areas that interest you and feel free to answer as many or as few questions as suits you.

There are four different ways you can make a submission.

- Complete the online submission form, which sends your comments directly to the Health Workforce Advisory Committee. This is the preferred method and is available at www.hwac.govt.nz
- Complete the submission form as a Word document, which can be found at www.hwac.govt.nz and email it to the Health Workforce Advisory Committee hwac@moh.govt.nz
- Detach this submission booklet, write your comments directly on it and send it by post to the Health Workforce Advisory Committee (see below for postal address).
- Write your comments on a piece of paper or as a letter or as an email and either send them to the Health Workforce Advisory Committee by post or by email hwac@moh.govt.nz

If you send your submission by post, the address is:
Delphina Gray
C/- Medical Reference Group
Health Workforce Advisory Committee
Ministry of Health
PO Box 5013
Wellington

Your submission may be requested by any party under the Official Information Act 1982. If this happens, the Committee will release your submission to the person requesting it. However, if you are an individual, as opposed to an organisation, the Committee will remove your personal details from the submission. If you do not wish for your personal details to be released, please check the following box.

☐ I do not give permission for my personal details to be released under the Official Information Act 1982.
We would appreciate some information about you or your organisation as outlined in the following questions. However, you are not required to provide personal information.

Name _____________________________________________________________

Address __________________________________________________________

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Organisation (if applicable) ____________________________________________

Position (if applicable) ________________________________________________

1 Please tick the box or boxes that best describe you or your organisation.

☐ Health or disability service provider ☐ Service user
☐ Health practitioner ☐ Academic/researcher
☐ Education provider ☐ Family member/carer
☐ Professional association/society ☐ Other (please specify) ________________
☐ Professional regulation body

2 Please tick the box or boxes that best describe you or your organisation’s key interest in the health sector.

☐ Nursing ☐ Māori health
☐ Medical practice ☐ Pacific health
☐ Primary health care ☐ Dental health
☐ Mental health ☐ Technical allied health
☐ Disability sector ☐ Other (please specify) ________________
☐ Public health

3 Please describe what type of organisation you work for.

☐ Non-government agency ☐ Not responding as part of an organisation
☐ Central government agency ☐ Other (please specify) ________________
☐ District or local government agency

4 Please indicate how many additional people contributed to this submission. _____
Chapter 2: The Medical Workforce in New Zealand – A stocktake

Questions 2.1–2.2 (page 34)
Chapter 4: Medical Work in a Changing Workplace Environment

Questions 4.1–4.3 (page 53)

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164  Fit for purpose and for practice
Chapter 6: Recruiting and Retaining Doctors in a Global Market

Questions 6.1–6.4 (page 76)

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166  Fit for purpose and for practice
Chapter 7: Working Together – A systemic, sector-wide approach to health workforce development

Questions 7.1–7.6 (page 88)
Please write any other comments you wish to make.

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Thank you for your submission. Submissions close at 5 pm, Friday 29 July 2005.