Health Workforce Development

An Overview

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Demographic change is a major driver of demand for health services. Between 2001 and 2021 it is predicted that the New Zealand population over 65 will increase from 461,000 to 729,000. Most significantly, in this period the population aged over 85 is predicted to grow from 48,639 to 105,400. The proportion of Māori and Pacific older people will also grow substantially.

Government strategies such as the Primary Health Care Strategy (Minister of Health 2001) require the workforce to work in new ways. They require a population-based approach to health care provision which emphasises prevention, education, health maintenance and wellbeing, and strengthening of connections with other health agencies, social and community services, and iwi. These strategies also emphasise improving the cultural appropriateness of services, the promotion of inclusive and consumer-centred approaches to service provision, and the development of new health care services and roles in the community.

Finally, health consumers in developed countries now have much greater access to information about health, and consequently greater expectations about what the health care system can potentially deliver for them. Those expectations are further amplified by the 'medicalisation of wellbeing' (Gorman and Scott 2003) and the publicity about technological developments that can improve treatment outcomes. All of these factors influence the kind of workforce that New Zealand will need in the future.

Health sector workforce regulation affects the shape of the workforce by setting and reinforcing the parameters for accountability. The Health Practitioners Competence Assurance Act 2002 (HPCAA) requires registration authorities to ensure that practitioners are competent and fit to practise their professions. It is also possible to develop and register new, different and/or overlapping professional scopes of practice under the HPCAA to support developments in services and in practitioner roles. Contractual requirements and collective employment agreements also define the roles and activities of occupational groups.

The Health Workforce Advisory Committee (HWAC) was set up under the New Zealand Public Health and Disability Act 2000 to advise the Minister on workforce issues. The HWAC also has a Māori Health and Disability Workforce Subcommittee and a Medical Reference Group.

District Health Boards New Zealand (DHBNZ), on behalf of DHBs, has developed a collaborative workforce development framework, based on a workforce action plan that focuses on information, relationships and strategic capability. The DHB/DHBNZ Future Workforce framework, developed in 2005, has identified future workforce needs and priorities for action. This framework is driven by collaborative mechanisms set up by DHBs, including the DHB/DHBNZ Workforce Development Group (WDG) and six workforce strategy groups, which provide capacity and leadership for the development of key workforces and report to the WDG.

The Ministry of Health's role in this is to ensure that the policy and regulatory environments support the Government's strategic objectives, and to provide leadership and support to the sector on workforce development. Work includes the development of workforce action plans targeting various sectors.

The education sector is responsible for funding health workforce education through the Tertiary Education Commission, and clinical training is generally funded through the Ministry's Clinical Training Agency. DHBs also play a significant role in the clinical training of registered health practitioners. A stocktake of the provision of education in the 2002 year identified that the Commission's funding was $191.2 million, Clinical Training Agency funding was $86.6 million, and DHB funding was $15 million (Ministry of Health and Tertiary Education Commission 2004).

Approaches to workforce development

The most significant change facing the New Zealand labour market over the next 25 years is that many more workers will retire than will be recruited. In addition, current projections suggest that Māori and Pacific people will make up a greater proportion of the workforce, and there is an increasing mobility of professionals in the global labour market.

Overall, there is a lack of good data to profile the health workforce itself. The HWAC stocktake report (HWAC 2002) estimated that there were 43,510 nurses and medical practitioners, making up 65% of the 67,000 registered practitioners. The rest of the workforce comprised 30,000 support workers and 10,000 alternative and complementary health workers. Subsequent research has raised the estimate of disability workers in the community and residential care to approximately 45,000 (Ministry of Health 2004c, 2004d). In 2004 the New Zealand Institute of Economic Research estimated the total size of the health and disability workforce (registered and unregistered) as around 130,000 (NZIER 2004).

The health workforce is part of the overall New Zealand workforce and shares many of the same features, including the effects of changes in demand and supply. However, it is may be difficult to utilise the strategies that private firms can use in response to skill shortages. Occupational regulation may limit flexibility, service coverage obligations may limit changes being made to services, budget constraints may limit the ability to respond to changes in demand or labour market conditions, and capital constraints may limit options to substitute capital and technology for labour.

There have been reported shortages in both the regulated and unregulated workforce, in particular of medical practitioners, nurses in primary care, mental health professionals, allied and primary health professionals, Māori and Pacific practitioners, and support workers. There is also an ongoing issue of a maldistribution of workers between rural and urban locations. There are few short-term strategies available when the labour market is tight. These are primarily immigration, attracting ex-practitioners back into the health sector, reducing turnover and improving productivity.

In terms of future demand, a report produced for the Ministry, *Ageing New Zealand and Health and Disability Services: Demand projections and workforce implications, 2001−2021* (NZIER 2004) predicts that if health and disability services were to retain their current share of the working-age population, demand for labour will outstrip supply by 2011. The excess of labour demand over supply would be between 28% and 42% of the 2001 workforce by 2021. These predictions paint a worst case scenario. They point to the importance of workforce development in ensuring that health and disability services will continue to be available in line with public expectations.

Professional organisations, representative bodies and unions have a significant affect on the demand for and supply of registered health workers. They tend to view health sector development through a discipline-based lens and to advocate for particular professional practice standards, service models and work design. This contributes to a push for increasing specialisation and increasing levels and length of education.

The methods for determining workforce shortages tend to assume that the structure of the workforce is set, and ignore the potential for substitution between roles, opportunities for new roles and the impact of developing technologies and practices. In New Zealand, workforce planning since the 1980s has been largely focused on various ways to predict discipline-specific demands.

A review of workforce planning approaches in Australia, France, Germany, Sweden and the UK in 2003 identified similar limitations. Since then England, Scotland and Australia have developed national workforce development frameworks which focus on improving knowledge about the workforce, promoting entry to the workforce, developing the unregulated workforce, developing career pathways, promoting innovation, and aligning health education and training with sector needs.

In the future, the constraints on labour supply in New Zealand will necessitate a much greater focus on growing the health workforce and improving the performance and productivity of the available workforce.

The area in which there has been the most consistent investment in workforce development since the 1990s is mental health. *Tauawhitia te Wero, Embracing the challenge: National Mental Health and Addiction Workforce Development Plan 2006−2009*, launched in December 2005, emphasises organisational development, and recruitment and retention, includes significant national training and development initiatives, and lays the research and evaluation groundwork to support the next 10-year plan.

A systems perspective on health workforce development

The growing gap between workforce demand and supply will need to be addressed over the next five to 15 years to ensure future population demands associated with our changing demographics and ageing population can be met. The extent to which this will be possible is influenced by policy, regulation, funding, health workforce culture, change weariness and the ability to grow and develop the workforce in the timeframes required.

A significant amount of work has been done, or is underway, to understand changing population demands and service delivery and workforce development needs, and to develop workforce development responses. Considerable workforce development activity is going on across the sector to implement concrete steps towards achieving these high-level outcomes, with current and future activities outlined in Ministry of Health workforce development and DHB/DHBNZ *Future Workforce* framework.

All of this diverse national workforce development activity can be best understood if it is mapped into a single framework. The rationale for this is that as stakeholders continue to put time and effort into workforce development, there is a risk that actions may become fragmented and duplicated. Efficiencies possible through utilising, for example, nationally consistent information collection and reporting systems, clear networks of relationships and communication processes, and shared terminology can be achieved through understanding how each stakeholder's valuable efforts fit together into the big picture.

The mental health workforce development framework has been used to provide a comprehensive overview of workforce development activity. The activity is summarised as follows.

Summary of workforce development activity in Ministry of Health workforce development plans and DHB/DHBNZ *Future Workforce* framework

1. Workforce development infrastructure **Goal:** A national and regional workforce development infrastructure which supports stakeholders to progress workforce development
Actions: • Improve national co-ordination of actions. • Develop collaborative and cross-sectoral relationships. • Develop funding mechanisms which facilitate new models of care and training. • Monitor progress on workforce development plans. • Develop regulatory or other infrastructures to facilitate increased workforce flexibility under the Health Practitioners Competency Assurance Act 2003.
2. Organisational development **Goal:** Health services develop the organisational culture and systems which will attract and grow their workforce and meet service needs
Actions: • Improve leadership capacity and practice (particularly by under-represented workforce groups). • Increase the range of health workforce groups involved in governance. • Develop innovative models of care and support (eg, continuum of care approach, primary health teams). • Improve healthy workplace environments and practices (eg, magnet hospitals). • Align workforce with service needs (ie, identify and plan to address service gaps).

3.	**Recruitment and retention**
	Goal: Health services have a nationally and regionally co-ordinated approach to recruiting and retaining staff, which results in increased capacity and capability of the health workforce
	Actions: • Establish national advertising and branding campaigns (including websites). • Implement career pathways and co-ordinated professional development programmes. • Develop strategies to train and recruit under-represented groups within the health workforce (Māori, Pacific, Asian workforces). • Deliver health career promotion in schools. • Support new staff through the transition from training to practice. • Support the development of career pathways for the development the unregulated workforce.
4.	**Training and development**
	Goal: All stages of health workforce training are aligned to service needs and promote retention
	Actions: • Establish an agreed set of core competencies which are portable across disciplines. • Develop and deliver training to support new models of care. • Establish a set of cultural competencies within training programmes to improve service delivery to cultural groups and recruitment of staff from them.
5.	**Information, research and evaluation**
	Goal: Information and research are available to support workforce development planning
	Actions: • Ensure the collection of workforce information is robust, uniform and nationally co-ordinated. • Improve information-sharing mechanisms. • Develop the ability to monitor and evaluate the structure of the health workforce and its activities (HPCAA processes). • Undertake surveys of existing workforce groups

When the Ministry of Health's workforce development plans and DHB/DHBNZ's *Future Workforce* framework are summarised in this way, a high level of continuity and activity is clearly apparent.

Achieving these changes needs a combined approach which provides incentives for local innovation, at the same time as addressing structural issues at the national level. This will need to be supported by a change management process which engages all agencies and groups within the sector.

Introduction

Background

Demographic change is a major driver of demand for health services. A recent discussion paper produced for the Ministry of Health (NZIER 2004) predicted that if health and disability services were to retain their current share of the working-age population, demand for labour will outstrip supply by 2011. The excess of labour demand over supply was predicted to be between 28% and 42% of the 2001 workforce by 2021. This equates to a projected deficit in New Zealand of between 7000 and 10,000 regulated workers by 2011, and between 18,000 and 28,000 by 2021. The deficit for the unregulated workforce is predicted to be even higher.

These predictions, driven by consideration of the impact of population ageing and analysis of the demand for services based on the burden of disease, paint a worst-case scenario. Nevertheless, they point to the huge importance of workforce development in ensuring that health and disability support services will continue to be available in line with public expectations.

This report draws together an overview of health workforce development[1] in New Zealand since 2000. It is intended to be a resource to assist those with an interest in health workforce development to understand current issues and approaches to dealing with health workforce development. It also indicates the directions needed to respond to the new demands for health and disability support workers in the future.

Structure

Part 1 of the report describes the workforce development environment, including influences on the demand for services, workforce regulation, and the role of government agencies involved with health workforce development. Part 2 discusses approaches to health workforce development in New Zealand and overseas directed at ensuring the workforce will be able to meet future needs. Finally, Part 3 maps current and proposed national workforce development activity into a single framework and describes the key developments in each area.

The report also includes appendices which provide greater detail on the priorities identified by DHBs for 2005−2010 in the *Future Workforce* strategy, recent workforce innovations and international perspectives on workforce development, and each Ministry of Health workforce development plan mapped into one framework.

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[1]   The term 'workforce development' is used in this report to mean 'development of workforce capability and capacity to satisfy future service demands'.

Part 1: The Environment for Workforce Development

1.1 Factors influencing demand for health and disability support services

Demographic change and consumer demand

Health is influenced by factors beyond the control of the health care sector. It is well established that policy and the social, cultural, economic and physical environments in which people live their lives affect health outcomes (Public Health Advisory Committee 2004). This is depicted graphically in Figure 1.1.

Figure 1.1: Environmental factors that influence health outcomes

Source: Ministry of Health. 2002. *Reducing Inequalities in Health*. Wellington: Ministry of Health.

In most OECD countries, education and health policy, legislative and economic developments and growth, coupled with technological and medical advances, have led to an overall improvement in health treatment, longer life expectancy and greater expectations about health care. However, the ageing population is expected to have a significant impact on the need for health care services, because the use of health and disability support services rises with increasing age. In 2001 our total population was 3.784 million, of which the over-65s numbered 461,000. The most conservative of Statistics New Zealand's population projections predict that by:

- 2011 our total population will have increased to 4.25 million, of which 577,000 will be over the age of 65

- 2021 the population will have increased to 4.5 million, of which 729,000 will be over the age of 65 (NZIER 2004).

In addition, by 2021 the proportion of those over the age of 65 years who are non-European will have increased by 242%. In particular, the proportion of older people who are of Māori and Pacific ethnicity is growing. These groups are disproportionately affected by chronic health conditions.

The increasing urbanisation of the New Zealand population and the consequent impact on rural economies affects the availability of services and skilled health workers in these areas. One in four New Zealanders still live in rural areas or small towns, and there is a higher proportion of children and older people. Notably, the health status of rural Māori is significantly poorer than that of rural non- Māori and urban Māori (HWAC 2002).

Health consumers in developed countries now have much greater access to information about health, and consequently greater expectations about what the health care system can potentially deliver for them. The publicity about technological developments that can improve treatment outcomes also generates demand.

Another contributor to consumer demand has been described as 'a tendency toward medicalisation of health and well-being', by defining and naming health status in terms of illnesses, leading to the development of a health-disease industry by creating expectations for treatment (Gorman and Scott 2003). At the same time there has been an increase in the level of general knowledge of health issues, care standards, rights, responsibilities and expectations, as well as a growing desire for and focus on consumer participation in health care delivery.

Government strategies for the health and disability sector

Government responses to these trends influence the requirements placed on health and disability support services. Two overarching strategies have been developed:

- the New Zealand Health Strategy, aimed at improving population health outcomes and reducing disparities (Minister of Health 2000)
- the New Zealand Disability Strategy, aimed at enhancing participation and independence of people with disabilities, providing a long-term intersectoral plan for changing New Zealand from a 'disabling' to an inclusive society (Minister for Disability Issues 2001).

These strategies provide a framework for a range of specific population services and diseased-based strategies, including primary health care, Māori and Pacific health, mental health, the health of older people, improving quality, cancer control, and the Healthy Eating – Healthy Action strategy.

The general themes that run through the strategies are requirements to:

- take a preventive, population-based approach to improving health outcomes
- shift the emphasis of service delivery and resourcing from secondary and tertiary services to primary care, and link with services across the sector
- increase the accessibility and acceptability of service provision in the community
- develop culturally appropriate services, including Māori and Pacific health care service providers.

The service models they imply are consumer-centred, focused on primary care public health (population health) rather than secondary and tertiary health care, based on higher cognitive and higher generalist skills rather than specialist skills, and emphasise collaboration and teamwork over individual work, as well as integration across health, disability and social services.

These service models require changes in service practice. For example, there is a need to expand the roles of primary care nurses, practice nurses, general practitioners (GPs) and community providers (urban and rural) to increase the range of services they can provide and to encourage early intervention. A small number of these service delivery models are being piloted (see Appendix 2).

Specific workforce strategies focused on service changes have been developed in some priority areas, including Māori health, Pacific health and mental health, and others are under development. These are discussed later in this report.

Regulation and contractual constraints

Regulation affects the shape of the workforce and health practitioner practice by setting the parameters for accountability.

Health Practitioners Competence Assurance Act 2003 (HPCAA)

The HPCAA came into force on 18 September 2004, replacing 11 occupational statutes governing 13 specific professions. The Act provides the basis for regulating health practitioners in order to protect the public where there is a risk of harm from the practice of the profession. It includes mechanisms to ensure that practitioners are competent and fit to practise their professions for the duration of their professional lives. It reflects the principles set out in The Policy Framework for Occupational Regulation: A guide for government agencies in regulating occupations (Ministry of Economic Development 1999), to maximise the effectiveness of government regulation of occupations while taking into account the impact on competition and consumer choice.

Under the HPCAA, regulatory authorities are responsible for ensuring that practitioners meet registration and competency requirements. Each authority appointed in respect of a profession under the HPCAA must, by notice in The Gazette, describe the contents of the profession in terms of one or more scopes of practice (part 2, section 11). A set of competencies is developed for each scope of practice. Regulatory authorities also shape the content of education and training programmes by determining whether or not the content meets professional registration requirements. These requirements are derived from the professional practice models and standards developed by each profession.

It is also possible to develop and register new, different and/or overlapping professional scopes of practice under the HPCAA to support new developments in service and practitioner roles.

Health practitioners currently registered under the HPCAA are:

- chiropractors
- dentists, dental technicians, clinical dental technicians, dental therapists and dental hygienists
- dieticians
- dispensing opticians
- medical laboratory scientists and technicians
- medical practitioners (such as GPs, psychiatrists, surgeons and other specialists)
- medical radiation technologists
- midwives
- nurses
- occupational therapists
- optometrists
- osteopaths
- pharmacists
- physiotherapists
- podiatrists
- psychologists.

It is expected that further groups will seek registration in the future.

Prescribing

In New Zealand, registered medical practitioners, midwives, dentists and nurse practitioners can legally prescribe 'prescription only' medicines. These health practitioners are regarded as having 'independent prescribing rights'; that is, they can prescribe prescription medicines to consumer groups who have conditions that fall within particular parameters. These parameters include:

- scope of practice
- client/age group
- disease conditions
- setting.

Recently the Government agreed that extending 'limited independent prescribing authority' to other health practitioners was one way to improve access to health care in the community and provide people with better health care services. So far, limited independent prescribing authority has been extended to optometrists and nurse practitioners. A proposal has been received from podiatrists. Registration bodies are responsible for monitoring prescribing practice.

The Health and Disability Commissioner Act 1994

The Health and Disability Commissioner Act 1994 promotes accountability for the delivery of services to consumers. The Act is designed to promote and protect the rights of health consumers and disability services consumers, and, in particular, to secure the fair, simple, speedy and efficient resolution of complaints relating to

infringements of those rights (section 6). This objective is achieved through the implementation of a code of rights, the establishment of a complaints process to ensure enforcement of those rights, and the ongoing education of providers and consumers.

The Health and Disability Services (Safety) Act 2001

This Act, which came into force in October 2004, establishes a framework for improved safety standards for health and disability services. Standards developed under this framework apply to rest homes, residential disability care and hospital care. Although the standards are outcome focused, they include specific requirements which impact on practice, such as a requirement to train support workers who provide services for people with dementia. The penalties under the Health and Disability Services (Safety) Act affect providers (unlike the HPCAA, which focuses on the accountabilities of individual registered health practitioners).

Employment-related legislation

The health sector is subject to the employment-related provisions of legislation such as the Health and Safety in Employment Act 1992, which affects employment, workplace and workforce development practices. In many cases, collective employment agreements also define the roles and activities of occupational groups in the workplace.

There is a trend towards negotiating national multi-employer collective agreements for professional groups (eg, nurses, doctors and allied health staff). This type of workplace agreement can determine the shape of those professional groups in aspects such as terms and conditions, and career development. This trend has the potential to reduce local flexibility but provide nationally consistent workforce conditions, which in turn has an impact on recruitment and retention.

Professional scopes of practice and professional standards (including professional development) are also referred to in collective employment agreements and workplace policies.

New Zealand Public Health and Disability Act 2000

At a sector level, health is largely governed by the provisions of the New Zealand Public Health and Disability Act 2000. Although each DHB is responsible for its own contracts with providers, the nationwide service framework provides a structure for DHB funding and performance agreements. It specifies the categories, quantity and quality of the services to be provided in the services they fund. The Act also requires that DHBs be a good employer, as set out in section 118 of the Crown Entities Act 2004. A good employer is an employer who operates a personnel policy containing provisions generally accepted as necessary for the fair and proper treatment of employees in all aspects of their employment (section 118(2) Crown Entities Act 2004).
National practice guidelines define standards, including workforce participation, and are part of purchase agreements. Contracts with the Ministry and DHB-funded providers may also impose workforce requirements on providers.

1.2 Government agencies involved with health workforce development

A wide range of organisations and agencies are involved with the health and disability workforce, including registration bodies, health practitioner organisations and service providers. This section focuses on the roles of the Health Workforce Advisory Committee (HWAC), DHBNZ and the Ministry of Health in advising on and implementing government policy.

Health Workforce Advisory Committee (HWAC)

HWAC was set up under the New Zealand Public Health and Disability Act 2000 to advise the Minister on any workforce issues the Minister specifies by notice to the committee. The committee's key tasks, in line with the requirements of section 12 of the Act, are to:

- 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

- advise the Minister on national goals for the health workforce, and recommend strategies to develop an appropriate workforce capacity

- facilitate co-operation between organisations involved in health workforce education and training to ensure a strategic approach to health workforce supply, demand and development

- report progress on the effectiveness of recommended strategies, and identify any required changes.

Other tasks may be undertaken as agreed between the Minister and the committee.

HWAC has produced a series of reports, referred to throughout this report. Its most recent consultation document is *Fit for Purpose and for Practice: A review of the medical workforce in New Zealand* (HWAC 2005). This emphasises the need to understand workforce development as a broader concept than just workforce planning, instead involving 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 time (HWAC 2005). HWAC expects to make recommendations to the Minister based on submissions on the document by March 2006.

DHBs/District Health Boards New Zealand

DHBNZ was set up by DHBs to co-ordinate their common strategic interests at a national level. In this role DHBNZ co-ordinates national DHB industrial and workforce development activity. In 2003 DHBNZ developed an overarching Workforce Action Plan, which focuses on information, relationships and strategic capability. These three streams provide a collaborative workforce development framework, and the plan is intended to build the necessary platform for ongoing workforce development.

In 2004/05, as part of building strategic capability, DHBs/DHBNZ has carried out the *Future Workforce* project, which focuses on DHB collective priorities and actions for

health workforce development over the next five years. The project has identified two focuses, which include eight priorities:

- nurturing and sustaining the workforce − priorities are fostering supportive environments and positive cultures, education and training

- developing workforce/sector capability − priorities are models of care, primary health workforce, Māori health workforce, Pacific health workforce, and the unregulated support workforce.

The eight priorities identified under these headings provide a clear direction for development of the health workforce, building on sector progress to date (see Appendix 1). These priorities will feed into DHB workforce planning at the national, regional and individual DHB levels.

DHBs have set up collaborative mechanisms to achieve sector workforce goals. Overseeing the *Future Workforce* framework is the Workforce Development Group (WDG), which provides overall strategic direction, alignment and co-ordination of DHB workforce activity and will attempt to reduce the tendency for inefficient and ineffective development.

A key action in the *Future Workforce* framework has been to establish workforce strategy groups to provide capacity for the development of the key health workforces. These groups are the:
- Medical Workforce Strategy Group
- Nursing Workforce Strategy Group
- Allied Technical Workforce Strategy Group
- Allied Therapy Workforce Strategy Group
- Corporate Management Workforce Strategy Group
- Non-regulated Workforce Strategy Group.

DHB/DHBNZ have also developed a Health Workforce Information Programme (HWIP), which will be rolled out over successive years (see section 3.5), to improve the data required for effective workforce planning.

Ministry of Health

The role of the Ministry in workforce development is to ensure that the policy and regulatory environments are able to support the Government's strategic objectives, and to provide leadership and support to the sector on workforce development. The Ministry's workforce activity generally focuses on workforce strategy development in key priority areas.

Workforce strategies and/or action plans have been developed, or are under development, for many of the Ministry's priority areas, as follows:

- *Raranga Tupuake: Māori Health Workforce Development Plan: Discussion Document* (Ministry of Health 2005a)

- *Public Health Workforce Development Plan* (draft)

- *Pacific Health and Disability Workforce Development Plan* (Ministry of Health 2004a)
- *Cervical and Breast Cancer Screening Programmes Workforce Development Strategy and Action Plan 2002–07* (National Screening Unit 2004)
- *The New Zealand Cancer Control Strategy: Action Plan 2005-2010* (Cancer Control Taskforce 2005)
- *Investing in Health, Whakatohutia te Oranga Tangata: A framework for activating primary health care nursing in New Zealand* (Ministry of Health 2003)
- *Tauawhitia te Wero, Embracing the challenge: National Mental Health and Addiction Workforce Development Plan 2006–09* (Ministry of Health 2005b).

Further information about these strategies is provided in Part 3.

The Ministry takes the lead role in implementing workforce development in a number of areas, including mental health, national screening programmes and public health workforce development. It also works with other sector agencies on a range of issues that impact on the workforce, such as the future of school dental therapy services and the purchase framework for home support services.

The Ministry has also commissioned work on the impact of population ageing on the future demand for health services (NZIER 2004), and on understanding existing health education programme supply arrangements (Ministry of Health and Tertiary Education Commission 2004). The Ministry has provided support for the Doctors in Training Workforce Round Table, set up by the Minister to look at the education and training of doctors in relation to service needs. This Roundtable completed their report to the Minister of Health in December 2005.

1.3   Health workforce education and training

The education sector is responsible for the education of the health workforce as part of its general responsibility for educating New Zealanders. The Ministry of Education is responsible for facilitating the achievement of the government's priorities in the education sector. This includes increasing the number of graduates in skill areas identified as aligned to national priorities and labour markets needs. Health has been identified as a strategic priority for the education sector.

Universities, polytechnics and other organisations providing tertiary education for health and disability workers are funded under Vote: Education through the Tertiary Education Commission (TEC). Some support worker training is also funded by the TEC, through the Community Support Services Industry Training Organisation.

The TEC was established under the provisions of the Education (Tertiary Reform) Amendment Act 2002 to oversee the implementation of the Tertiary Education Strategy. It is required to actively facilitate collaboration and co-operation in the tertiary education system, and a greater connectedness to New Zealand businesses, communities, iwi and enterprises.

Clinical training is funded under Vote Health via the Ministry's Clinical Training Agency (CTA), whose vision is to facilitate the development of a health and disability workforce which can meet our future requirements (Ministry of Health 2004b). The CTA identifies alignment of the following factors as being critical to ensuring a workforce that will support high-quality health service provision:

- pre-entry training through Ministry of Education-funded programmes
- post-entry clinical training (PECT)
- in-service training and ongoing professional development
- service infrastructures that encourage retention (Ministry of Health 2004b).

The CTA is involved in a range of projects aimed at gathering information and improving the participation of Māori, Pacific people and GPs in training and developing clinical skills across disciplines, so as to expand scopes and retain health care workers, especially in rural areas (see Appendix 2). The CTA budgeted $91.274 million for the financial year ending 2004/05 for post-entry clinical training, and around 3200 health professionals are receiving training funded through CTA contracts. Further information on CTA-funded programmes is provided in Part 3 of this document.

In 2004 the Ministry of Health and TEC carried out a stocktake of the current provision of undergraduate and postgraduate qualifications and clinical training. The resulting report, *Qualifications Supply Analysis*, focused on the 2002 year and included consideration of human health qualifications, including mental health, sports and fitness, and complementary health disciplines. Although the analysis did not include all courses and is not regarded as definitive, the results provide a snapshot of funding for the 2002 year, as follows:

- There were 350 different qualifications, delivered in 490 instances.
- The 350 different qualifications offered were provided by 60 tertiary education organisations, comprising eight universities, 20 polytechnics, three wānanga, 28 private training establishments, and one College of Education.
- Explicit funding for clinical training was provided by the Ministry of Health via the CTA, mostly in the area of medicine, but with some funding for dentistry, postgraduate nursing, pharmacy, mental health workers and other health professionals.
- DHBs indirectly fund clinical training through clinical supervision.
- The Crown met 78% of the cost of tertiary health qualifications through the TEC, CTA and DHBs, and learners contributed 22%,
- The TEC provided two-thirds of the investment ($191.2 million), the CTA one-third ($86.6 million) and DHBs about 5% ($15 million).

The health workforce represents 10% of the funding pool the TEC administers (Ministry of Health and Tertiary Education Commission 2004).

It is intended that the Qualifications Supply project and current Ministry and DHBNZ work on workforce priorities for the health sector will feed into a joint working group with the TEC and other stakeholders to facilitate alignment between educational programmes and health workforce needs.

1.4   The New Zealand labour market

Like other OECD countries, New Zealand has experienced a shift in employment market share towards the service industries. As incomes have risen and the ageing population has increased, so have service industry demands, the amount spent on services, and employment levels in this sector. The Department of Labour reports a strong growth in knowledge-intensive services, including education, health and community services, and property and business services (New Zealand Department of Labour 2004a). Services – including a wide range of activities, from low-skilled labour-intensive production to high-technology knowledge-intensive sectors – are reported as now accounting for about two-thirds of employment in developed economies (New Zealand Department of Labour 2004b).

Technology also has a big impact. New technologies affect the products and services that are produced and who produces them. Technology developments are impacting on employment by creating new jobs, increasing skill/competency requirements and altering work design.

The Department of Labour projects that over the next 25 years, across the OECD countries 70 million people will retire but only 5 million workers will take their place. Although this effect is projected to occur in New Zealand, the impact is expected to be slightly less because our fertility levels are higher (New Zealand Department of Labour 2004b).

According to the *Labour Market Outlook* report (New Zealand Department of Labour 2005a), as at 28 October 2005 New Zealand's unemployment rate had hovered at 3.7% for about a year, the lowest among all 30 member countries of the OECD. Our incomes have become more dispersed in common with other OECD countries. Lower-skilled workers earnings have stagnated and atypical work arrangements and hours of work have increased for most workers. There is demand for and shortages of skilled workers in health and other service industries.

As of September 2005 the New Zealand workforce breakdown was 9.6% Māori, 4.6% Pacific, 75.5% European/Pākehā and 10.2% other. Projections suggest that European/ Pākehā will make up only 67% of the workforce by 2021. The number and proportion of Māori and Pacific people in our workforce is forecast to increase because these groups are currently more youthful than the rest of the population. As New Zealand's Asian population is heavily influenced by immigration, their share of the working-age population is more difficult to predict, but is expected to grow.

The patterns of employment for women are also changing to more closely match those of men, but child bearing and parenting, with a consequent reduction to part-time or flexible-hours arrangements, still commonly interrupts their employment. Women are delaying child bearing, having fewer children and returning more quickly to paid employment, more often part-time. As a result of these factors, 30–40% of women aged 30–50 are part-time employees.

In New Zealand, professionals made up almost 35% of both long-term arrivals and departures in 2001, but only 14% of the resident workforce for that year. This reflects the increasing mobility of professionals in the global labour market (New Zealand Department of Labour 2005a).

1.5   Characteristics of the health and disability workforce

The health workforce profile is sketchy in parts because of a lack of good data, especially on disability support workers in the sector (NZIER 2004). The major national source is information on registered health practitioners collected by registration bodies annually. Information about the unregistered workforce is not routinely collected. This section draws heavily on *The New Zealand Health Workforce: A stocktake of issues and capacity 2001* (HWAC 2002), which provides the most complete picture of the health and disability workforce.

Using 2001 data, the HWAC stocktake estimated that the health and disability sector workforce numbered over 100,000. It estimated that:

- 67,000 of these were registered health practitioners
- 30,000 were support workers
- 10,000 were alternative and complementary health workers.

The NZIER (2004) has subsequently estimated the total size of the health and disability workforce as substantially higher at 130,000.

The HWAC stocktake estimated that in 2001 nurses and medical practitioners (43,510 in total) comprised about 65% of the 67,000 registered practitioners or 40% of the total health workforce. Nurses were estimated as comprising 40% of registered practitioners. The Nursing Council of New Zealand reports that it issued annual practising certificates to 51,583 nurses and midwives for the 2003/04 year. The Medical Council indicates that for the same period, there were 13,379 doctors on the medical register, of whom 10,732 held a current practising certificate.

Ninety percent of nurses are women (Ministry of Health 2005b), and the HWAC forecasts that by 2015, 40% of doctors will also be women. Women GPs are reported as working fewer hours than their male counterparts. These patterns are consistent with wider labour market trends for professional groups.

The number of nurses working in primary care was reported by the HWAC as having increased from 16% to 23% between 1990 and 2000. However, medical practitioners' participation in primary care remained largely unchanged at 39%. The proportion of our doctors and nurses who were born overseas is estimated at 35% for doctors and 16% for nurses.

Māori practitioners were estimated as comprising 5.4% of the professional workforce and Pacific practitioners 1.8%. The average age for qualified health professionals is approximately 45, which again is consistent with the wider professional services labour market (HWAC 2002).

Medical, nursing, allied health, support and management/administration staff engaged by DHBs for the 2002 year totalled 43,778. This is around 40% of the total estimated workforce of 107,000 identified in the HWAC stocktake. The DHB workforce figure has gradually increased to 48,710 for the year ending June 2005. This represents an increase in overall DHB staffing of 4932 full-time equivalents (FTEs), which equates to an approximate increase of 11% over a period of five years.

Surveys carried out for the Ministry of Health by Auckland University in 2004 estimated that there were between 40,000 and 50,000 support workers engaged in providing a range of disability support services, including home support and residential care (Ministry of Health 2004c). These surveys did not include support workers in mental health, primary or secondary care services, or employed privately.

Disability support workers, whether working in private homes or in health care institutions, are mostly women averaging over 40 years of age, who are relatively lowly paid, who work part time or flexible hours, and whose hours are often not guaranteed (Ministry of Health 2004c). This can be contrasted to most other paid community and public health workers and health care professionals employed by DHBs, who generally enjoy better terms, conditions and rewards under collective employment agreements.

Older workers are becoming an increasing proportion of the total working population. There is an average age of 45 years in the New Zealand health sector, with average ages of 43 for nurses, 44 for doctors (HWAC 2002) and over 40 for support workers (Ministry of Health 2004d).

Work–life balance and the preferences of older workers will therefore need to be considered in order to maximise retention. Similarly, women make up the great majority of the health care workforce and often need the flexibility to work variable or part-time hours due to caregiving or family commitments. It is also important to note that many people now expect to have several careers during their working life. The challenge for health employers is to offer those different careers opportunities to the employee while retaining them in the health industry.

1.6   Workforce shortages

Current situation

Methods used to determine whether or not a workforce shortage exists range from calculating ratios of practitioners to populations, to comparison between historical and existing practitioner numbers and extrapolations of the numbers of disciplines required on the basis of changing demographics.

These methods assume that the fundamental structure of the workforce is set, and ignore the potential for substitution between roles, the potential for new roles, and the impact of developing technologies and practices. However, whatever the method of shortage assessment, the relative wages of health workers, the workplace environment offered and the time required to train them all affect the workforce supply.

The HWAC stocktake (HWAC 2002) identified a range of shortages in both the regulated and unregulated workforce based on advice from providers, professional organisations and a literature review. The key themes relating to recruitment and retention include difficulties recruiting and retaining the following groups:

- *medical practitioners*, in specialist areas without opportunities for private income, in general practice, and in rural areas where there are few opportunities for specialist practice and where there is little back-up or support

- *nurses*, in primary care, because of workloads and a lack of career opportunities; in older people's health, because of limited career opportunities, heavy work and poorer terms and conditions than those offered in DHBs; in hospital-based midwifery, where better conditions are offered in private practice; and in rural areas, where they may be the midwife and sole health professional

- *mental health professionals*, including psychiatrists, mental health workers, nurses, child youth and family workers and psychologists, who are offered better opportunities and conditions in the private sector

- *allied health and primary health care professionals*, including pharmacists, occupational therapists, speech–language therapists, physiotherapists, dental therapists, dentists in rural areas, public health workers of all types, social workers and dieticians

- *Māori and Pacific health practitioners and support workers,* iwi and community support workers.

Rural workforce shortages

The HWAC stocktake identified the ongoing issue of maldistribution of workers between rural and urban locations as a historical and international issue of increasing concern in the face of decreasing rural populations, increasing skill demands, and a lack of readily available training, back-up cover and relief. Problems included:

- the inaccessibility of GPs, nurses and other primary care providers, community health providers and public health providers in rural areas

- ongoing difficulties in recruiting and retaining health care providers in rural areas

- the need for improvements in the range and consistency of services provided to rural New Zealanders.

Older people's care

Work carried out as part of the Quality and Safety Project in 2004 looked at the quality and quantity of community and residential care for older people and people with disabilities, with a particular focus on workforce issues. The report from the project, based on surveys of providers and workers in a range of disability support services carried out by Auckland University, identified a range of concerns, including staff shortages affecting safety, recruitment and retention issues, and the condition of employment for support workers.

Department of Labour Job Vacancy Monitoring Programme

As part of the Job Vacancy Monitoring Programme, the Department of Labour is preparing a series of reports examining skill shortages in 10 professional occupations. Four of these are in the health sector: dentists, hospital and retail pharmacists, occupational therapists, and registered nurses. The analysis concluded that there is no shortage of dentists, but there is a genuine shortage of pharmacists. Training levels have already been lifted for pharmacists, with the opening of a new pharmacy programme at Auckland University. However, it is likely to take a few years for these higher training levels to have an impact on shortages.

It was found that although employers have considerable difficulty filling vacancies for occupational therapists and registered nurses, there is no actual shortage of individuals with the required skills for these professional organisations. These two occupations are instead identified as having recruitment and retention difficulties rather than a skills shortage (New Zealand Department of Labour 2005c).

In response to concerns about health practitioner shortages in primary health care, in some highly technical specialities and in rural areas, a number of innovation projects have been initiated. These include new services, new ways of working and new roles. Some examples of these are detailed in Appendix 4. The CTA has been involved in a number of these, such as the development of a career pathway for hospital generalists to develop the capacity and careers of hospital medical officers and the proposal to develop a 'cut up technician' role that would free up pathologists, among other initiatives. Approaches to workforce shortages are discussed in Part 3, and further details are given in Appendix 2.

Future demand

A report produced for the Ministry of Health in 2004, *Ageing New Zealand and Health and Disability Services: Demand projections and workforce implications, 2001–2021* (NZIER 2004) developed three scenarios of potential future demand for health and disability support services as the population ages. These scenarios are based on various assumptions about the health status and service use of future cohorts of older people. If health and disability services were to retain their current share of the working-age population, demand for labour would outstrip supply by 2011. It is estimated that the excess of labour demand over supply would be equivalent to between 28% and 42% of the 2001 workforce by 2021 depending on which of the three scenarios is used (NZIER 2004). The most conservative scenario of the workforce demand and supply projections from the NZIER report is illustrated in Figure 1.2.

Figure 1.2: Estimated demand for health care workers versus supply, 2001–2021
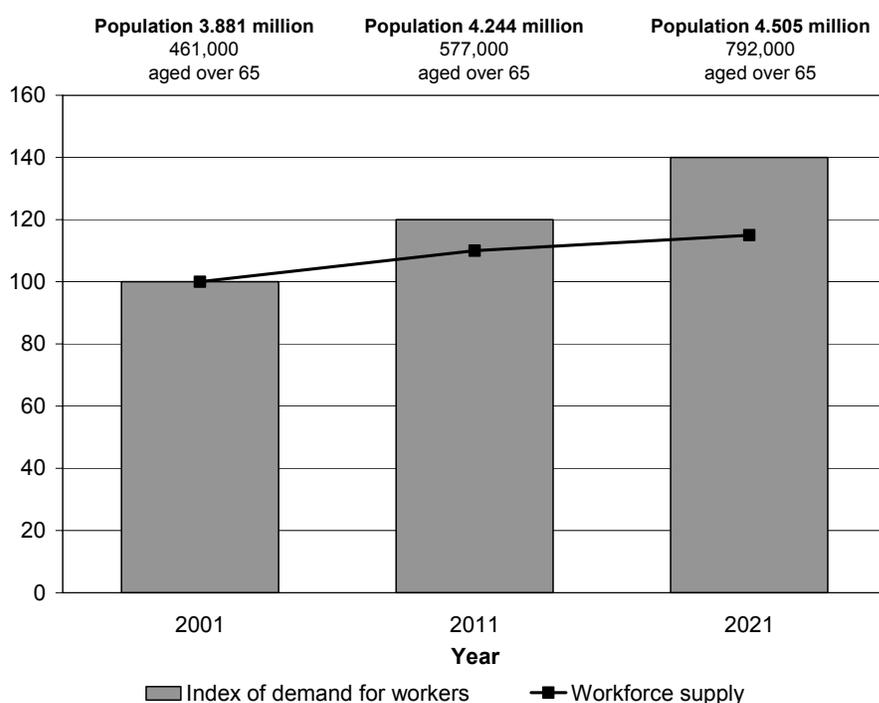
The Statistics New Zealand medium population projections for each period have been added to the figure to highlight the impacts of an ageing population on workforce demand. The vertical axis shows increasing workforce demand via an index (2001 = 100) and the horizontal axis shows the expected change in workforce demand over the period 2001 to 2021. The line running across the bars shows the expected changes in workforce supply for the same period. No excess demand is shown for the year 2001 because it was assumed (possibly optimistically) that the provision of services met demand in that year and that, consequently, demand for labour was matched by the supply of labour.

The NZIER report comments that it is unsafe to assume that our health and disability services will be able to increase their share of the total workforce in New Zealand to avoid labour shortages. Nor can productivity increases be counted on, or better health education and monitoring, to reduce service needs. Attention needs to focus on how the health and disability services workforce should be educated, trained, developed and deployed (NZIER 2004).

As previously mentioned, this increased demand will occur in the context of greatly increased competition for labour within the New Zealand and world economy as the ageing population is matched with a proportionally smaller replacement working-age population, and a correspondingly smaller base of taxation from which to fund health and other social services for the ageing population.

New Zealand will not be alone in facing workforce shortages. In Australia, the national workforce is increasing at an annual rate of 170,000 per year. By 2020 it is predicted this will be just 12,500 per year; put another way, for the whole decade 2020–2030 the

workforce will grow less than it currently does each year (Australian Health Ministers Conference 2004).

International competition for skilled workers is projected to increase due to the changing demographics and labour market conditions across OECD countries. Relying on immigration from less developed economies raises issues of ethics and cultural appropriateness, and is unlikely to be a sustainable solution to addressing workforce shortages. Also, other OECD countries will continue to lure New Zealand's skilled workers overseas (irrespective of non-poaching agreements).

The predominant focus for workforce development has been on increasing participation by attracting more people into existing disciplines with their corresponding skill mix. In future the constraints on labour supply will necessitate a much greater focus on improving the performance and productivity of the available workforce. Competitive remuneration and attractive working conditions, satisfying careers and a positive work environment will be vital to maximise retention.

Part 2: Approaches to Workforce Development

In Part 1 we concentrated on setting the scene, in terms of describing the changing requirements for health services and what this means for the New Zealand health workforce. In this part we look at the kinds of approaches that are being taken to ensure that we have a workforce that can meet the needs of New Zealanders in the future.

2.1 Can the health labour market be changed?

The health labour market workforce shares many of the same features as the overall New Zealand labour market, except with respect to labour adaptability and flexibility. In response to changes in demand and skill shortages, private firms can:

- seek ways to use labour and capital resources in a smarter way
- hire more labour, which might involve raising wages to entice labour away from other activities in the short or long term
- invest in on-the-job, or off-the-job, education and training for existing or new staff
- change the production process to involve people with other skills, or by substituting capital for labour
- raise the prices of goods and services to dampen demand.

As competing firms also select one or more of these strategies, the effects ripple through the wider setting, causing other participants to respond to the new signals, creating a domino effect. Eventually an equilibrium is found, with some systems adjusting more smoothly and quickly than others (NZIER 2002).

The strategies private firms can use in response to skill shortages are often not feasible in the health system for reasons of social equity, health outcome and consumer safety. Barriers include:

- occupational regulation, licensing and credentialing, which limit the flexible deployment and substitution of labour, particularly in the short to medium term
- service coverage obligations, which limit the ability to change the level or mix of offered services, and limit the use of price as a demand rationing device
- budget constraints, which limit the ability to respond to changes in demand or changes in labour market conditions, particularly in the short term
- capital constraints, which limit the options to substitute capital and technology for labour and create inflexibilities in service location and size in the short to medium term.

Where some of these constraints are relaxed or removed, others may still restrict adjustment. For example, one might raise or remove the cap on medical student places or allocate more money to train mental health workers, and then find there are a limited number of available clinical training places, or a lack of appropriate education and training courses.

There are only a few strategies available to make a difference in the short term when the labour market is tight, primarily immigration, attracting ex-practitioners back into the health sector, reducing turnover, and improving productivity (making better use of support staff and resources to focus skilled labour). In the long term it is possible to train more staff, change some of the rules and regulations, increase resources, and undertake a more fundamental redesign of job descriptions.

Until recently New Zealand and other OECD countries have relied on immigration of registered health professionals to address identified shortages. However, demographic changes, related changing population health demands and workforce and health education profiles across OECD countries competing in the same labour markets mean this is no longer a sustainable or realistic approach (HWAC 2002).

Also, reliance on immigration to address either regulated or unregulated workforce shortages gives rise to issues relating to the cultural appropriateness of the care provided by immigrants. And it does not address the need to develop the unregulated workforce, where shortages are currently being experienced and where pressure is expected to increase in the future.

In 2001 the Health Workforce Advisory Committee predicted the need for new approaches that would require workforce planners 'to take more account of consumer perspectives, quality issues and the cost of producing services'. It went on to state that 'these considerations may lead to the existing division of labour, role demarcation and regulatory structures being challenged' (HWAC 2001). These new approaches suggest a shift from planning for individual professional workforce groups, to developing the whole of the health workforce to meet population health demands.

The feedback received by the Ministry on the NZIER (2004) report on the rising gap between workforce demand and supply (see Part 2) identified the following key needs for workforce development:

- a collaborative team approach in communities, especially rural areas
- a widening of scopes of practice, particularly for practice nurses
- a competency building approach, like the NHS model
- addressing training and legislative barriers to facilitate change
- a collaborative approach to education across professional groups and education and service providers
- generic practitioners who can specialise
- increased participation of Māori and Pacific Island people
- information sharing across primary, secondary and tertiary services
- a population-based preventive approach
- provision of targeted training and recruitment for rural, GP, mental health, aged care, disability and volunteer workforces.

Addressing rural health shortages

In Part 1, we saw that the HWAC stocktake identified the ongoing issue of an insufficient health workforce to serve rural populations. This is one defined area in which the health workforce could be improved, and a number of different approaches have been taken to reducing this deficit. For a start, additional funding has been allocated under the Primary Health Care Strategy to rural health, acknowledging the need to ensure access to services by rural people. In 2004/05 $80 million additional funding was allocated as part of the population-based funding formula to the 18 DHBs with rural populations. This funding was provided in recognition of the additional costs associated with maintaining small hospitals and community services.

In 2004/05 $12.9 million in funding was made available from the primary health care funding path for rural primary health care. This is specifically to assist DHBs and primary health organisations (PHOs) to retain and recruit suitably qualified primary health care professionals. Part of the funding goes to support 'reasonable roster' arrangements, part supports scholarships for rural nurses, but a significant proportion is available to be used flexibly by DHBs or PHOs to attract and retain their rural workforce.

Rural GPs also qualify for a rural bonus payment if they score sufficiently highly on the Rural Ranking Scale. In 2004/05 417 GPs received annual rural bonuses, ranging from $3,000 to $25,000. As rural demographics change, and the Primary Health Care Strategy brings about a shift in the way primary health care is delivered, some anomalies in the rural ranking are beginning to appear. In response to this, a review of the criteria that underpin the Rural Ranking Scale is being undertaken (Ministry of Health 2005d).

However, providing incentives can only go so far if there are aspects within the health workforce culture that create barriers to change.

2.2 Health workforce culture and innovative models of care

Culture is a central feature of any workforce and needs to be understood and taken account of as part of any workforce development strategies or initiatives. Professional groups dominate the registered health workforce. Research undertaken by Raelin on professionalism in 1985, while somewhat dated, provides useful comment on professionalism. It identifies that professional groups demonstrate certain traits in common, including:

- promoting professional status and defining work through subject expertise
- claiming entitlement to autonomy in practice
- commitment to a chosen specialty
- identification with one's own profession
- setting ethical criteria for rendering services
- setting and monitoring one's own professional standards (Raelin 1985).

The strength of these attributes varies across different professional groups, but Raelin considers that these attributes have contributed to increasing specialisation of skilled workforces such as health. This, in turn, is related to the requirement for increasing levels and length of education aimed at developing specific knowledge and skills, which are applied at first under supervision for a period of time, but at the end of which the practitioner is entitled to a label that carries credentials for independent activity.

In health, professional organisations, representative bodies and unions have a significant effect on the demand for and supply of health workers. They view health sector workforce development through a discipline-based lens and advocate for particular professional practice standards, service models and work design. It is their natural role to advocate for arrangements that match the cultural attributes and aspirations of the groups they represent.

Although many professional attributes contribute to a sense of purpose and value for the practitioner, as well as encouraging developments in practice treatment, quality and safety, they can also lead to an internal discipline-specific focus, inflexibility and unintended impacts on the overall quality of care provided. The *Report on the Public Inquiry into the Children's Heart Surgery at the Bristol Royal Infirmary 1984−1995: Learning from Bristol*, an inquiry established in response to service failures in the British National Health Service, described cultural issues within that organisation and some of the changes needed to improve the quality of patient care. One issue in particular was how professionals behave toward each other, and the way individual professionals treat their patients. A briefing on the report identified four themes:

- the need to take a systems or integrated view of health care

- professions create arbitrary and harmful divisions between different parts of the services provided

- tribalism or separatism of the professions is a part of the problem to be addressed

- services should be consumer centred, designed and delivered around the needs of the patient, with the relationship between the healthcare professional and the patient being one of partnership (Royal Pharmaceutical Society of Britain 2001).

The HWAC (2005) consultation document on the medical workforce, *Fit for Purpose and for Practice*, raises the need to address cultural issues within the New Zealand workforce. It identifies:

- perceptions that the profession has put its self-interest ahead of that of patients and the public

- the need for a new professionalism characterised by reflective practice, interdependent decision processes, teamwork, collective learning, responsibility, accountability and engagement

- the need for services to be community focused, context specific, flexible and responsive to patient and community needs (HWAC 2005).

It is important to value and develop insight and understanding into the aspects of professional cultures that support the kinds of development and practices that lead to significant improvements in treatment and in provision of care. It is equally important to understand the aspects that are counter-productive to the goal of improving health outcomes, and to develop more collaborative, reflective, effective, adaptive, productive, team-oriented and patient-centred professional practices.

Culture ultimately determines whether structural changes achieve their strategic objectives. Indeed, research suggests that the failure to address workplace culture accounts for 33−66% of failures in organisational change (Davy et al 1988).

Traditionally, the focus has been on developing the workforce as a series of discrete occupational groups. Within the workplace, work has tended to be defined by the practice paradigm of the occupational group which carries it out. Increasing specialisation within professions attracts higher rewards and status. Incentive structures support increasing specialisation as illustrated in Figure 2.1.

Figure 2.1: Competency structures, rewards and incentives
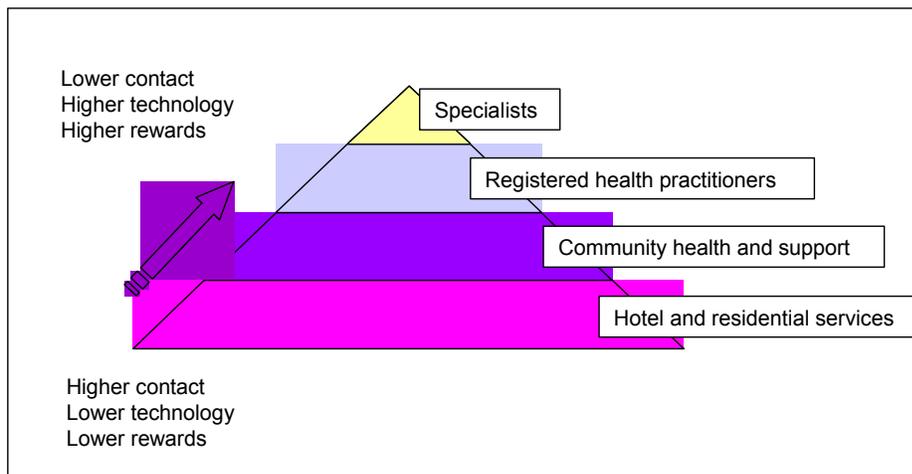
The focus on single occupational groups and the push towards greater specialisation may contribute to a less flexible deployment of the workforce at a time when the wider health context requires a greater team approach and faces potential shortages. Primary health care and rural service provision, in particular, require more high-contact, cognitive and generalist skills delivered within a team environment. There is also great potential for productivity to be maximised when each team member is working at their optimum skill level.

To achieve this change, incentives will need to change so that high-contact and cognitive competencies are valued and developed, and higher-skilled generalists can be used instead of specialists for routine procedures. This will free specialist health practitioners up for areas that require their level of expertise. Status and recognition would need to be linked to effective team contributions and health outcomes, rather than individual disciplines or practices. The key will be establishing teams with the optimum skill mix designed to meet patient needs.

Changing the way health practitioners work is a complex process, and lead-in-times will need to be long. Table 2.1 illustrates the kinds of changes required if practitioners are to be effective within new or broadened scopes of practice:

Table 2.1:   The steps needed to achieve role redesign changes

Required changes	Necessary steps to implement the changes
New models of practice need to be developed and their efficacy accepted	Consultation, advocacy, championship of change
New scopes of practice may need to be approved	Consultation, negotiation, persuasion of interest groups
New roles must be acceptable to consumers	Social marketing, cultural appropriateness, effective implementation, high-quality service
New practitioners must: - get referrals and information from colleagues and consumers - be enabled to function as part of a team - be enabled to carry out all the routine tasks, such as prescribing and test requisitions - offer services at an acceptable and competitive level of cost	- Consultation, shared base training and recognition of common and complementary competencies - Systems developed, shared base training, recognition of common and complementary competencies. - Mechanisms in place to facilitate practices - Ensure rewards are commensurate with the range of services offered
Those who traditionally perform these functions as individual practitioners will need to let go of some of their role and work alongside other practitioners as part of a team	Systems developed, shared base training, recognition of common and complementary competencies, acceptance of changes to market niches

The problems associated with introducing new roles are illustrated by the experience with nurse practitioners. In recognition of shortages of doctors in rural areas and the need to develop better resourcing in primary care, the Ministry has promoted the concept of the nurse practitioner. Nurse practitioners with appropriate training could perform many routine medical procedures and have a significant role in advocating health promotion and disease prevention.

It was proposed that nurse practitioners could also lead specialty community clinics, or independent primary health care nursing practices that offer a range of assessment, diagnostic, treatment and support services, and manage clinical caseloads in acute settings. Specifications for nurse practitioners based on professional practice models and experience were approved by the New Zealand Nursing Council.

Nurse practitioners have been trained but are not being utilised to the extent envisaged. Various reasons for this have been suggested by sector observers, including the following.

- Other health professionals and regulatory systems have not actively supported the role of nurse practitioner. As a result, nurse practitioners have found it hard to find employment in community settings as independent health practitioners, and other professionals have not readily accepted their referrals.

- There have been constraints to practice, including contractual barriers for referral to community laboratories and radiology services, as well as legislative barriers.

- Health providers need to retro-fit the role into existing service arrangements, because the concept of nurse practitioner scopes of practice and nurse practitioner education came from professional bodies and advisors, rather than providers.

- Because nurse practitioners are self-selecting, there is potential for a mismatch between required scopes of practice and the scopes of practice of available nurse practitioners (no work has been completed on the prioritisation for different specialties and the volumes required).

- There has been concern that the nurse practitioner role will reduce the work and status of medical practitioners, despite the fact that the development of the nurse practitioner role is intended to create greater flexibility and provide community health care services that are complementary to those provided by GPs, as well as being affordable and designed to address inequalities in access to health care.

The Minister has now set up a working group to oversee the development and implementation of nurse practitioners with a view to ensuring the roles developed align with service delivery needs. Appendix 2 provides further examples of the promotion of innovative practice.

Existing funding arrangements in primary care may influence the flexibility of service delivery and create barriers to workforce change. For example, the Crown funding for PHOs is primarily on a capitation basis. Although this funding is focused on improving access and can be used for a range of primary care services, it is essentially the same subsidy funding that pays for GPs to see patients. Under this arrangement there is debate as to whether the potential for innovative practice can be fully developed. This is because the incentives are built around subsidies to GPs for their services, which include any other health care services they supply, such as the services of practice nurses. These kinds of concerns are identified in a Health Services Research Centre report, *Primary Health Organisations: The first year (July 2002–June 2003) from the PHO perspective* (Perera et al 2003).

A further identified barrier to innovative practices is the traditional professional and employment relationship that exists between the GP (as the doctor and employer) and the practice nurse (the employee), which may make it difficult for an effective and equitable professional partnership to exist between them. In addition, where there is targeted funding for nurses, the rates offered are lower than for GPs for the same services (eg, ACC payments). This has been reported as a disincentive to independent nurse-led clinics, given the financial investment and risks.

When the HPCAA was under development it was acknowledged that there was a tension between the desirable objective of defining scopes of practice for quality assurance purposes and the potential to restrict flexible and competitive practices between professional groups. In this respect it is important that the implementation of the HPCAA is actively managed and monitored to ensure there are no unnecessary demarcations, and that scopes of practice can be broadened and overlap between health practitioner groups where this will assist participation, performance and productivity.

Well-designed and integrated education and training, together with ongoing competency assurance, will be vital to support change. It will also be important to ensure that service specifications, purchase agreements, funding arrangements, and industrial arrangements do not unnecessarily impede this kind of development and work redesign.

The powerful influence of professionalism has been highlighted earlier in this section: there is a need to address unnecessary demarcations between professional groups as well as to develop practices that are reflective, interdependent and team-oriented.

Front-line information and communication technologies also have the potential to enable significant productivity gains, to speed up activities, and to enable information and knowledge sharing, thus reducing the dependence on individual experts or professional groups. Such technologies can also make it possible for skilled professionals to work globally and to oversee the work of less formally skilled workers at a distance.

Currently available technology and health information programmes are not being quickly adopted to facilitate widening scopes of practice, streamline processes, reduce unnecessary contacts, and provide a record of care. Improved uptake of frontline information and communication technologies could provide:

- real-time patient status information to be shared between teams providing care
- fingertip access to health status assessment tools and knowledge
- streamlined approval/requisition processes
- a reduction in the number of contacts or visits required for service delivery.

Examples include such things as hand-held computer technologies that interface clinical equipment (eg, for measuring blood pressure, pulse, glucose, urine testing), enabling a visiting community worker or nurse to enter electronically generated observation data into a health database directly. Such data could be viewed in real time by a supervising health practitioner.

2.3 International approaches to workforce development

Bloor and Maynard (2003) reviewed health workforce planning approaches in Australia, France, Germany, Sweden and the UK. Their findings were as follows.

- Workforce needs are determined by relatively mechanistic estimates of the demand for medical care, such as demographic forecasting, resource constraints and estimates of the likely retirement and loss of existing medical staff.

- Medical school intake and nursing training places are controlled in all countries except Germany.

- There is no formal planning for ancillary health care workers, allied health professionals or health management and administrative staff.

- There is a lack of performance management of health professional staff, which obstructs measuring, before and after improving their productivity (eg, by addressing unwarranted variations in practice).

- There is only a partial approach to planning, which ignores complementary roles in the health workforce and the potential for substitution.

- There is a lack of consideration of the implications of basic economics, such as relative wages, comparative advantage, and the role of incentives in promoting or resisting changes in the health workforce.

- There is a lack of systematic analysis of the nature and causes of changes in the health workforce.

In most health care systems, workforce planning is driven by health care expenditure, with resources dictating the volume of provision. Typical workforce planning systems ignore variations in practice and the possibility of changing productivity, skill mix and substitution. Health care policy makers increasingly recognise the need for more integrated planning of human resources in health care, in particular making the management of human resources responsive to system needs and design, instead of vice versa (Bloor and Maynard 2003).

In the UK, the Wanless Report, *Securing Our Future Health: Taking a long term view*, commissioned by the Office of the Exchequer (Wanless 2002), recommended key changes to ensure the National Health Service can meet demand and improve care over the next 20 years. In particular, the Wanless Report focused on increasing productivity through adopting integrated information and communication technologies across the health and social services, the use of the unregulated workforce, integrated social and health services, complementary use of public and private health care resources, working differently, health promotion, and a community-based consumer-centred approach to care.

The National Health Service in the UK has developed a competency framework along these lines, commonly referred to as a 'flexible careers and skills escalator' (NHS Modernisation Agency 2004). This provides a framework for a more flexible reconfiguration of a health workforce into a 'continuum of care', or team-focused service model, which aims for the maximisation and most efficient use of each practitioner's skills. This needs to be supported by the appropriate education and training of the workforce, which allow past experience and skills to be built on to enable people to move up the 'escalator'. The need for such a stepped approach to learning for disability support workers, who often face barriers to formal education, was identified as part of the quality and safety project in New Zealand.

A potential career development framework for New Zealand, based on the National Health Service career framework, is set out in Figure 2.2 (Ministry of Health 2004e).

Figure 2.2: Potential career development framework for New Zealand
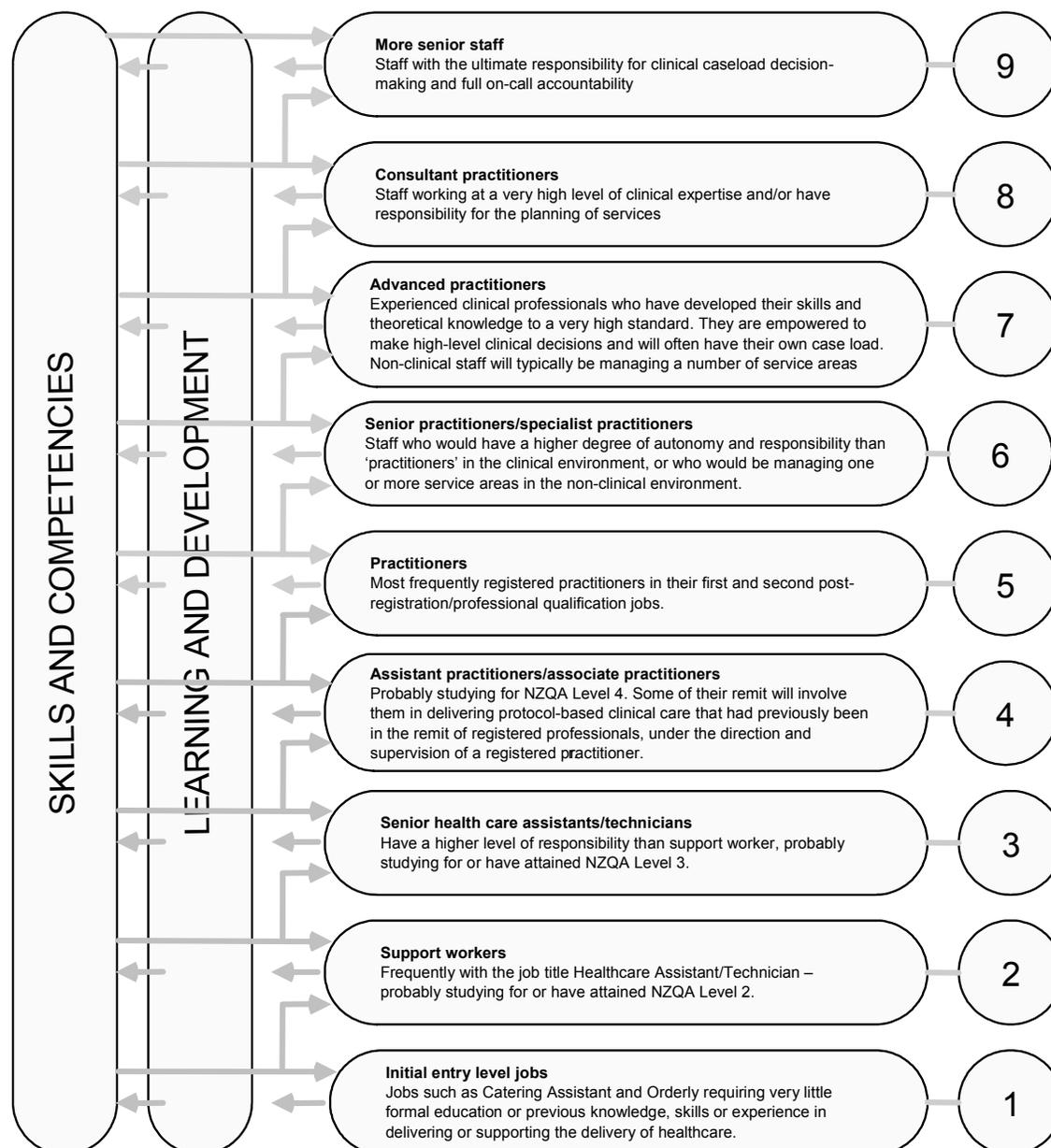
Source: Based on A Career Framework for the NHS: A discussion document. Version 2, June 2004.

In a primary care setting, for example, an organisation may be structured to include staff at all levels of the career framework, but with a greater concentration of those with more generalist skills to meet service demands for predominantly routine procedures.

The World Health Organization review of the international literature on educational reform for health care providers and health care for chronic conditions, and various related professional organisation standards, resulted in the identification of five common competencies that are required across a variety of professional groups (see Table 2.2).

Table 2.2: Five common professional competencies

Patient-centred care	Partnering	Quality improvement	Information and communication technology	Public health perspective
Interviewing and communicating effectively	Partnering with patients	Measuring care delivery and outcomes	Designing and using patient registries	Providing population-based care
Assisting changes in health-related behaviours	Partnering with other providers	Learning and adapting to change	Using computer technologies	Systems thinking
Supporting self-management	Partnering with communities	Translating evidence into practice	Communicating with partners	Working across the care continuum
Using a proactive approach				Working in primary health care-led systems

Source: World Health Organization 2005

Similar approaches are being taken in England, Scotland and more recently Australia to address concerns about the ageing population, changing labour market demographics and related health sector impacts. Each of these countries has elected to take a more integrated approach to workforce development, which involves establishing a workforce development framework together with a set of underlying principles. Each of these workforce development frameworks targets increasing participation, performance and productivity of the workforce in some way, through:

- improved knowledge about the workforce
- health workforce promotion and the removal of barriers to entry
- development of the unrecognised and unregulated workforce
- promotion and provision of incentives for service and skills development, and role innovation
- removal of regulatory, contractual and funding barriers to innovation
- alignment of health education and training with sector needs, including accreditation structures and registration requirements
- focusing on measurement to evaluate impacts
- focusing on sector and culture change to remove the barriers to achieving sustainable change.

Following are the common underlying principles.
- Workforce reform is urgent and should be guided by key principles.
- Workforce policy development and planning are most effective if undertaken collaboratively.
- Improved information and health service planning at all levels is a better way of going about workforce planning than demand and supply projections for individual professions.

- National workforce self-sufficiency is desirable.

- Distribution of the workforce should optimise equitable access to health care.

- The best use should be made of scarce resources. Wherever possible, services should be delivered by the minimum qualified person able to provide safe, quality care, and this should be evidence based.

- Education and training should align with changing service needs.

- Opportunities exist for meeting health demands through recognising complementary roles, new workforce entrants, upskilling, changes to the skill mix, new roles and increased productivity.

- Health care environments should be good places in which to work.

- A robust, collaborative, national approach is required to bring about improvements in health workforce shortages in the short and long term.

In addition, in England, Scotland and Australia, innovation funds have been established to provide incentives for the change required in terms of new service models and roles as a key part of their workforce development strategies. In Australia, consideration is also being given to the impacts of the public–private service mix and the potential for more complementary public and private sector arrangements, as well as the potential for cross-crediting health qualifications.

Further information on international approaches is set out in Appendix 3.

2.4   The New Zealand approach to workforce development

In New Zealand, limited attention was paid to workforce planning during the 1990s. Since then, efforts have largely focused on various methods for predicting discipline-specific workforce demands. The HWAC summarised the main health workforce planning methods as:

- workforce population ratios, where forecasts are based on current norms about the optimal use of health professionals per 100,000 people

- control of (medical) student intakes

- needs-based or demand-based planning, where workforce forecasts are based on forecast epidemiology, given expert judgements about the workforce involved in treating different diseases, and the impact of technology, etc

- benchmarking, where various performance indicators of the health workforce (such as hours, vacancy rates and clinical errors) are compared against some ideal

- models of care, where some ideal team needed to deliver a particular service is used as the basis for forecasting labour market demand (HWAC 2002).

The New Zealand Health Workforce: Framing future directions (HWAC 2003) identified a number of health sector legacy issues, including 'a degraded infrastructure, inadequate information base, poor communication and co-operation, narrow siloed thinking ... and unhealthy/dysfunctional work environments'. The report also identified seven priority areas for workforce development, covering the need to:

- address the health workforce implications of the Primary Health Care Strategy
- progress the development of healthy workplace environments
- facilitate the evolution and further development of health workforce education
- progress Māori health workforce development
- progress Pacific health workforce development
- facilitate the evolution and development of the health and support workforce to better meet the needs of disabled people
- facilitate the enhancement of health workforce research and evaluation capability (HWAC 2003).

An NZIER (2005) report, *Approach to Health Workforce Forecasting,* identified three main components that determine the size and mix of the health workforce over time, and which should be considered in any workforce modelling:

- the demand for labour – derived from health services (expected) to be provided given relative wages, labour productivity, technological change, the model of care, and regulatory constraints

- the supply of labour – linked to both macro conditions, such as population make-up, labour force participation and social norms; and individual decisions about what skills to obtain, and how much, how hard and where to work

- labour market matching process – the 'filters' that shape the information flows between employers, employees and other stakeholders in the system, the incentives for different stakeholders, and the ability of the system to adapt to change.

NZIER comments that these aspects are also implicit in the approaches described by the Australian Health Workforce Officials Committee and the National Health Service (NZIER 2005).

2.5 Mental health and addiction workforce development

The area in which there has been the most consistent investment in workforce development since the 1990s is mental health. This section outlines the workforce development activity that has supported the expansion of mental health service coverage to reach 2.5% (relative to the benchmark of access for 3% of the population) in most areas for the general population (Ministry of Health 2004f).

This work has been undertaken in the context of the New Zealand Mental Health and Addiction Strategy. The following three documents form the Strategy:

- *Looking Forward: Strategic directions for mental health services* (Ministry of Health 1994)

- *Moving Forward: The National Mental Health Plan for More and Better Services* (Ministry of Health 1997)

- *Te Tāhuhu – Improving mental health 2005–2015: The Second New Zealand Mental Health and Addiction Plan* (Minister of Health 2005).

It is government policy to fund and implement the strategy through the *Blueprint for Mental Health Services in New Zealand: How things need to be* (Mental Health Commission 1998). The *Blueprint* is a national mental health and addiction service development plan, which includes detailed resourcing guidelines for the level of mental health and addiction service delivery. Mental health and addiction services for the whole country are now funded at 75% of the recommended *Blueprint* levels.

When the Ministry of Health published *Looking Forward* more than 10 years ago, it was quickly recognised that the goal of more and better mental health and addiction services required a parallel focus on the people to deliver those services. A National Working Party on Mental Health Workforce Development was convened and published its report in 1996: *Towards Better Mental Health Services* (Ministry of Health 1996). This presented a number of overarching strategies for workforce development, many of which continue to be relevant today.

A follow-up report by the National Mental Health Workforce Development Co-ordinating Committee in 1999, *Developing the Mental Health Workforce* (Mental Health Commission and Ministry of Health 1999), was presented as a work in progress. It identified a further set of strategies as part of a framework for addressing issues in an ongoing way. It also formally recognised the needs of the Māori and Pacific workforces, as well as the child and youth workforce.

Those needs were progressed by *Tuutahitia te Wero: Meeting the challenges* (Health Funding Authority 2000), a mental health workforce development plan for 2000 to 2005. The plan covered the national allocation of funding for mental health workforce development administered by the Ministry's Mental Health Directorate, as well as CTA spending on mental health and addiction post-entry clinical training programmes.

Tuutahitia te Wero was followed closely by the *Mental Health (Alcohol and Other Drug) Workforce Development Framework* (Ministry of Health 2002c), which signalled a shift to a whole-system approach to mental health workforce development. A key part of this shift was the introduction of five strategic imperatives:
- workforce development infrastructure;
- organisational development;
- recruitment and retention;
- training and development;
- research and evaluation.

Since the publication of *Tuutahitia te Wero* and the *Mental Health (Alcohol and Other Drug) Workforce Development Framework*, four national centres and programmes have been established to focus on priority areas.
- Werry Centre for Child and Adolescent Mental Health.
- Te Rau Matatini (focusing on the Māori workforce).
- Mental Health Workforce Development Programme (focusing on adults, older people, service users, families/whānau and NGO issues).
- Matua Raki (focusing on the addiction treatment sector workforce).

A significant proportion of the national allocation of funding is now managed by these organisations, which undertake a range of activities across all five strategic imperatives. The foundational work of the centres and programmes is informing the development of their long-term strategic plans. Thus Te Rau Matatini has finalised its strategic plan for 2005 to 2010, *Kia Puāwai te Ararau*; Matua Raki is consulting on its plan for to addictions sector for 2005 to 2015; and the Werry Centre is in the process of developing a long-term strategic plan for the child and adolescent mental health and addiction workforce.

Some of the other significant mental health workforce development initiatives funded by the Ministry include:

- Pacific mental health and addiction workforce training, research and feasibility studies conducted by Pava (an NGO health strategy organisation concerned with the impact of health-related problems in New Zealand for Pacific peoples)
- four regional mental health and addiction workforce co-ordinators (Northern, Midland, Central and South Island)
- Te Rau Puawai Workforce 100 (providing scholarships and mentoring)
- Knowing the People Planning (an approach to planning mental health services)
- the Self Harm and Suicide Prevention Collaborative Project.

In addition, some projects are funded in partnership with other organisations, such as universities and DHBs. For example, the University of Auckland Chair of Mental Health Nursing will be fully funded by the University in the fourth and fifth years.

Mental health and addiction workforce development has moved into a new strategic phase with the release of the Minister of Health's second New Zealand Mental Health Plan, *Te Tāhuhu – Improving mental health 2005–2015: The Second New Zealand National Mental Health and Addiction Plan* 2005. It includes the leading challenge for workforce and culture for recovery:

> Build a mental health and addiction workforce – and foster a culture among providers – that supports recovery, is person centred, culturally capable, and delivers an ongoing commitment to assure and improve the quality of services for people (Minister of Health 2005).

The next workforce development plan, *Tauawhitia te Wero: Embracing the challenge: National Mental Health and Addiction Workforce Development Plan 2006 to 2009*, launched in December 2005, supports the workforce and culture for recovery leading challenge in *Te Tāhuhu*. It gives more emphasis to organisational development and recruitment and retention, includes significant national training and development initiatives, and lays the research and evaluation groundwork to support the next 10-year plan. It reports that $72.99 million has been invested in mental health workforce development over the 2002 to 2005 period.

The experience with mental health workforce development gives an indication of the scale of effort and investment required to produce a substantial increase in workforce capability.

Part 3: Key Themes for the Shape of Future Workforce Development in New Zealand

The earlier parts of this report highlight the growing gap between workforce demand and supply. This gap will need to be addressed over the next five to fifteen years to ensure future health demands associated with our changing demographics and ageing population can be met. The extent to which this is possible is influenced by policy, regulation, funding, culture, change weariness and the ability to grow and develop the workforce in the timeframes required.

The report also shows that a significant amount of work has been done, or is under way, to understand changing population demands, service delivery and workforce development needs, and to develop workforce development responses. Considerable workforce development activity is already established across the sector to implement concrete steps towards achieving these high-level outcomes, with current and future activities outlined in Ministry of Health workforce development and DHB/DHBNZ *Future Workforce 2005–2010* framework.

Part 3 sets out to summarise current and proposed national workforce development activity into a single framework using the mental health workforce development model. The rationale for this is that as stakeholders continue to put time and effort into workforce development activity, there is a risk that their actions may become fragmented and duplicated. Efficiencies possible through utilising, for example, nationally consistent information collection and reporting systems, clear (well-understood) networks of relationships and communication processes, and shared terminology can be achieved through understanding how each stakeholder's valuable efforts fit into the big picture. The framework is summarised in Table 3.1.

Table 3.1: The workforce development framework

1	**Workforce development infrastructure** A national and regional workforce development infrastructure which supports stakeholders to progress workforce development
2	**Organisational development** Health services develop the organisational culture and systems which will attract and grow their workforce and meet service needs
3	**Recruitment and retention** Health services have a nationally and regionally co-ordinated approach to recruiting and retaining staff which results in increased capacity and capability of the health workforce
4	**Training and development** All stages of health workforce training are aligned to service needs and promote retention
5	**Information, research and evaluation** Information and research are available to support workforce development planning

Source: Based on the mental Health Workforce Framework (Ministry of Health 2002c, 2005a).

The key national workforce development actions are summarised using this framework, including DHB actions and actions from the following Ministry of Health workforce development plans:

- *Raranga Tupuake: Māori Health Workforce Development Plan: Discussion Document* (Ministry of Health 2005a)

- *Public Health Workforce Development Plan* (draft)

- *Pacific Health and Disability Workforce Development Plan* (Ministry of Health 2004a)

- *Cervical and Breast Cancer Screening Programmes Workforce Development Strategy and Action Plan 2002−07* (National Screening Unit 2004)

- *The New Zealand Cancer Control Strategy: Action Plan 2005-2010* (Cancer Control Taskforce 2005)

- *Investing in Health, Whakatohutia te Oranga Tangata: A framework for activating primary health care nursing in New Zealand* (Ministry of Health 2003b)

- *Tauawhitia te Wero, Embracing the challenge: National Mental Health and Addiction Workforce Development Plan 2006−09* (Ministry of Health 2005b).

3.1　Workforce development infrastructure

Workforce development infrastructure
Goal: A national and regional workforce development infrastructure which supports stakeholders to progress workforce development
Actions: • Improve national co-ordination of actions. • Develop collaborative and cross-sectoral relationships. • Develop funding mechanisms which facilitate new models of care and training. • Monitor progress on workforce development plans. • Develop regulatory or other infrastructures to facilitate increased workforce flexibility under the Health Practitioners Competency Assurance Act 2003.

A comprehensive national and regional workforce development infrastructure provides the foundation on which all workforce development activities can be successfully and efficiently progressed. Without this, workforce development activities risk becoming inefficient, fragmented and replicated as various stakeholders attempt to tackle the same issue in different ways.

Activities designed to build workforce development infrastructure aim to improve national co-ordination of actions through developing strong networks of collaborative and cross-sectoral relationships. The importance of strong relationships between key workforce development stakeholders in the health, education and employment sectors cannot be underestimated, and the cultivation of these relationships needs to be approached in an intentioned and co-ordinated manner.

Crucial to well-functioning workforce development relationships are established and well-maintained communication processes. Workforce development infrastructure also involves developing improved funding mechanisms to support new models of care and training, and programmes to monitor the progress and success of workforce development activities and the implementation of workforce policy and regulation, such as the HPCAA frameworks.

3.2 Organisational development

Organisational development
Goal: Health services develop the organisational culture and systems that will attract and grow their workforce and meet service needs

Actions:
- Improve leadership capacity and practice (particularly by under-represented workforce groups).
- Increase the range of health workforce groups involved in governance.
- Develop innovative models of care and support (eg, continuum of care approach, primary health teams).
- Improve healthy workplace environments and practices (eg, magnet hospitals).
- Align the workforce with service needs (ie, identify and plan to address service gaps).

Organisations with positive cultures and responsive systems attract, support and retain their staff. Such organisations also perform with high levels of productivity, efficiency and consumer satisfaction. Workforce development activities to improve organisational development focus on strategies to build health workplaces with strong internal infrastructures. *Tauawhitia te Wero, Embracing the challenges: National Mental Health and Addiction Workforce Development Plan 2006−2009* (Ministry of Health 2005b) suggests that some of the important facets of organisational development are improving organisational culture, leadership, management and design.

Actions in Ministry of Health workforce development plans and DHB/DHBNZ *Future Workforce* framework to improve organisational development centre around fostering strong leadership capacity and practice, particularly by under-represented workforce groups, such as Māori and Pacific leaders. These cover the range of workforce groups involved in governance, developing innovative models of care, and building healthy workplace environments. In the face of a tight labour market many employers who cannot afford higher wages are promoting healthy workplace practices, positive and flexible workplace environments, and other health, career and personal benefits to employees to attract and retain them. Improving the health workforce environment and developing career pathways in health are likely to be important aspects of retaining the health share of the New Zealand workforce.

Leadership and governance

A theme running through Ministry and DHB/DHBNZ framework activity is the need to provide leadership development for all health workforce groups, particularly groups that are currently under-represented in New Zealand's health workforce, such as Māori and Pacific peoples. Plans also stress the need for health practitioners to be involved in leadership and governance roles so that they can progress new models of care; for example, for nurses to be given key roles in leading and making decisions in primary health care (Minister of Health 2001).

A DHB Leadership Framework project aimed at producing generic leadership competencies for DHBs has been completed, and further work implementing leadership models which use the framework is underway. LAMP (the DHB/DHBNZ Leadership and Management Programme) and health sector conferences are well established as key forums to progress leadership development activity.

Developing innovative models of care

The implementation of the Primary Health Care Strategy and growing pressures on rural health services – and services generally – as a result of an ageing population are the key contemporary elements of the New Zealand health context. There is widespread agreement among Ministry of Health and DHBNZ workforce development plans that new models of care to support these new health environments are required. As discussed earlier, it is envisaged that the traditional structure of workforce roles and team configurations needs to be reshaped if we are to better utilise the capacity and strengths of the health workforce. Each of the plans contemplates such changes, and actions relating to organisational development are focused on moving towards new organisational structures and skill mixes. In practical terms, this means investigating new models and then piloting new team structures and re-designed roles.

One area where this is already underway is in primary health care nursing initiatives, such as at:

- Fox Glacier, where a rural nurse specialist provides the range of care necessary in such a remote location
- Evolve Wellington Youth Service, a nurse-led clinic, supported by a GP and peer support workers
- St Luke's Community Mental Health Centre (Auckland DHB), a nurse-led primary care liaison service
- Pegasus Health (Christchurch), which employs a number of higher-skilled-generalist nurses who work across a range of health care areas and environments.

In this way more specialist health care workers, such as GPs, can have some of their time freed up to provide care requiring their specialist level of skill.

Other initiatives to establish new models of care at varying stages of development include:

- Healthline, incorporating Plunketline, a 24-hour-a-day telephone advice service staffed by nurses, which became nationally available to callers throughout New Zealand in June 2005, and provides a consumer-centred approach that improves access to health information

- consideration by Otago DHB of whether the 'Cut-up Technician' model operating in the UK could be adopted in New Zealand (employment of technicians to undertake routine pathology work where there are shortages of pathologists)

- development of a career path for hospital generalists, particularly for rural hospitals

- nurse practitioners

- expansion of prescribing rights

- the Christchurch 'Hospital at Night' project, involving considering the development of hospital night teams to economise on skills required during night shifts.

For more information on these projects, see Appendix 2.

Improving healthy workplace environments

Given the various influences on the demand for and supply of our workforce, it is vital that the participation of the potential workforce is maximised by ensuring that employment practices and the workplace environment are responsive to their needs. HWAC has identified progressing the development of healthy workplace environments as a priority (HWAC 2003), and expects to publish guidelines in 2006.

The New Zealand Nurses Organisation and DHBs have a joint inquiry under way (Safe Staffing/Health Workplace) which focuses on improving patient and nursing outcomes. The inquiry takes into account service provision, models of care, patient classification, patient flow, skill mix, infrastructure, workloads, nursing/midwifery care intensity levels, a healthy work environment, work–life balance, and professional development opportunities. Subject to the quality of the review, this inquiry has the potential to identify opportunities for improvements in participation as well as performance and productivity. DHB/DHBNZ projects under way include implementation of actions from a Healthy Work Environment Stocktake and Building Healthy Workplaces, which involves the development of toolkits to support successful staff retention strategies.

Another initiative is the development of 'magnet' hospitals in New Zealand. Hospitals with magnet organisational characteristics have demonstrated better patient outcomes (lower mortality and morbidity rates, reduced infection rates and medication errors) and higher patient satisfaction because of 'patient-centred care' than equivalent non-magnet hospitals. Costs are reduced because of lower staff turnover and shorter lengths of stay. Research has also demonstrated a positive impact on organisational culture and increased institution stability. In terms of nursing outcomes, magnet hospitals have demonstrated enhanced recruitment and retention of highly qualified nurses, lower rates of needle-stick injuries, higher rates of nurse job satisfaction, higher nursing ratings of quality of care, and significantly lower rates of nurse burnout (Ministry of Health 2005e).

3.3 Recruitment and retention

Recruitment and retention
Goal: Health services have a nationally and regionally co-ordinated approach to recruiting and retaining staff, which results in increased capacity and capability of the health workforce
Actions: • Establish national advertising and branding campaigns (including websites). • Implement career pathways and co-ordinated professional development programmes. • Develop strategies to train and recruit under-represented groups within the health workforce (Māori, Pacific, Asian workforces). • Deliver health career promotion in schools. • Support new staff through the transition from training to practice. • Support development of career pathways aimed at developing the unregulated workforce.

Good recruitment policies will ensure people with the right capabilities, and the right mix of people, are employed within an organisation. In the New Zealand health context, this means that well-trained staff – including Māori, Pacific and Asian health practitioners, and also the necessary range of staff within a team – are attracted to the organisation. Of course recruitment policies can only be effective when there is a pool of appropriately qualified workers to recruit from. In this sense, recruitment policies rest on the foundation of a well-functioning training and education system, and are also closely linked to organisational development activities, in that healthy and well-designed work teams tend to attract staff.

Retention is a concern in all areas of health care. The average staff turnover rate across DHB services is 16%, and turnover rates in the unregulated support workforce were found to be 39% and 29% in home support and residential care, respectively (Ministry of Health 2004d). The reasons for staff turnover in any given organisation will vary, but they usually include such things as incentives, rewards and environment, family commitments, retirement, performance, and alternative careers and opportunities.

Whatever the reasons for the high turnover, it leads to high 'churn costs', including recruitment costs, loss of institutional knowledge, workplace stress, and reductions in the quality of care provided, all of which reduce the attractiveness of the workplace and may affect productivity. Care must be taken to understand the factors influencing turnover and to identify suitable strategies to reduce it.

The recruitment activities contained in Ministry of Health and DHB/DHBNZ workforce development plans are targeted at national advertising and branding campaigns (including the development of suitable recruitment websites), delivering health career promotion in schools, and developing strategies to train and recruit under-represented groups within the health workforce (eg, Māori, Pacific and Asian health workforces).

Retention activities focus on ensuring that staff stay with an organisation for sufficiently long periods of time to make an effective and valued contribution. Such activities include working with employees to set up structured career pathways and professional development programmes, supporting new staff through the transition into the workplace, and exploring ways in which career pathways could be established to develop the unregulated workforce.

Branding and career promotion in schools

The health and disability sector's share of the overall workforce needs to grow so that there are sufficient workers to match demand. This must be achieved in the face of competition in the global and New Zealand labour markets for a reduced working-age population. DHBs have identified the need to 'brand' the health and disability sector as an attractive place to work, and work is already under way in this area.

Career pathways/professional development

It is also important to note that many people now expect to have several careers during their working life. The challenge for health employers is to offer different career opportunities to the employee while retaining them in the health industry. The DHB/DHBNZ (2005) *Future Workforce, 2005−2010* framework highlights the need to ensure that health organisations have adequate human resources capability to implement quality professional development programmes. Work to ensure that post-entry clinical education programmes are set up and relevant to service provision are also essential (see section 3.5 on 'Training and development').

Developing strategies to train and recruit Māori and Pacific and other under-represented health care workers

As already noted, there is also a need to increase the diversity of the workforce. This means the numbers of Māori and Pacific workers in the sector need to increase so that the workforce more closely matches the population profile of these groups. The aim is that they will be more highly represented as a proportion of the younger replacement working-age population over the next 15 years. As well as focusing on recruiting these groups into the workforce, there is a need to develop the capacity of the current Māori and Pacific health and disability support workforce, particularly those in support worker roles.

The Māori Health Workforce Development Plan (Ministry of Health 2005a) identifies the need to explore options for providing training and career pathways for traditional Māori healers and Māori community health workers. The HWAC's Māori Health and Disability Workforce Sub-committee is charged with providing independent advice on Māori health and disability workforce development issues to the Minister of Health, facilitating collaboration between health providers and education providers on where to allocate Māori health and disability workforce development funding, and monitoring the implementation of plans to progress Māori health and disability workforce development.

The Ministry has also funded research through the Health Research Council into barriers and incentives for Māori to participate in the health sector (some targeted programmes are funded through the CTA). Issues include increasing the attractiveness of the sector as a career option, addressing high drop-out rates during education, and ensuring workplaces support the acquisition of cultural competency and the delivery of services to diverse populations.

Older workers are becoming an increasing proportion of the total working population, and the work–life balance and preferences of older workers will need to be considered if we are to maximise retention. Women make up the great majority of the health care workforce and often need the flexibility to work variable or part-time hours due to caregiving or family commitments.

Recruitment practices, employment arrangements, education methods, service models and workplace environment also need to support cultural diversity.

Supporting new staff through the transition from training to practice

Work is under way on a new, nationwide Nursing Entry to Practice Programme, which has the following vision:

> New Zealand nursing graduates enthusiastically commencing their careers in New Zealand: well-supported, safe, skilled and confident in their clinical practice; equipped for further learning and professional development; meeting the needs of health and disability support service users and employers; and building a sustainable base for the New Zealand registered nursing workforce into the future (Ministry of Health 2005f).

The programme will be managed by the DHB's according to a national specification and learning framework. The Nursing Council will approve each DHB's programme, which will offer new graduate nurses rotations, clinical preceptor support, and study and development days, resulting in a recognised certificate of completion. This is expected to benefit new graduate nurses' skills, safety, competence and confidence, thereby improving the services offered to patients and clients. There are also expected to be recruitment and retention benefits to the employers and the sector as a whole, as this will give new graduate nurses an alternative to travelling overseas to participate in this type of structured support for their first year.

Considering career pathways for the development of the unregulated workforce

It will be important to maximise the retention and development of the unregulated health workers, who comprise 40% of the workforce and who largely work in the community and in residential care. They are a significant and mature group, providing important care to some of the most vulnerable health care consumers, and they are also a potential recruitment pool for the regulated workforce.

Attracting, resourcing and developing the competencies of the unregulated workforce will support them to provide high-quality care and increase retention. A number of studies have shown that appropriate education and training improves the quality of care and reduces staff turnover (Ministry of Health 2004g). To maximise the participation of this workforce, consideration should be given to the efficacy of on-the-job adult-learning models linked to the New Zealand Qualifications Authority framework. The Ministry of Health is currently funding a project supporting the development of a training programme for disability support workers, and training for mental health community support workers has been developed as part of the Mental Health Workforce Development Programme.

3.4   Training and development

Training and development
Goal: All stages of health workforce training are aligned to service needs and promote retention
Actions: • Establish an agreed set of core competencies which are portable across disciplines. • Develop and deliver training to support new models of care. • Establish a set of cultural competencies within training programmes to improve service delivery to cultural groups and recruitment of staff from them.

The education of health care professionals has been the responsibility of the tertiary education sector, in conjunction with the medical colleges and registration bodies that approve curricula. The need for alignment between educational programme providers, professional models of practice and changing service delivery needs has been identified as a central issue by the HWAC, the Ministry, DHBNZ, and the Doctors in Training Workforce Round Table. Changes to education and training will provide the key to successfully implementing new models of practice and the new roles that will be needed to increase workforce productivity.

The Ministry of Health and DHBs have agreed to develop a range of common core competencies across professional groups, and for prior learning to be creditable towards other health qualifications. In this way, as demand changes over time, the workforce has core sets of highly transferable competencies.

The health workforce will also need to have the right skills to:

• work across traditional professional boundaries and within new or expanded scopes of practice

• work in wider community health teams

• work in the community with people with chronic conditions and disabilities

• have effective and functional linkages with and between social services, and tertiary and secondary health and disability services

• adopt frontline information and communication technologies.

Plans also recognise the need to establish cultural competencies, including introducing best practice training on providing health services to Māori, Pacific and other cultural groups in New Zealand into undergraduate health education curricula.

Training for rural nurses

The CTA has received positive feedback on the newly set-up training for rural nurses. The aim of the training programme will be to enable registered nurses to prepare to fill advanced nursing practice roles in the field of rural primary health care nursing, including working towards nurse practitioner status. Rural nurses provide a range of diverse services, depending on the needs of the communities they serve and the service environment. Owing to the isolation and broad nature of the role, rural nurses require a wide range of skills in order to respond to needs as they arise. Demand for places on the programme is strong, and FTEs on the programme have been increased.

Rural rotations for PGY2 doctors

There has also been a positive response to rural rotations for postgraduate year 2 (PGY2) doctors. The Postgraduate Rural General Practice Education Programme, run by the Royal New Zealand College of General Practitioners, is open to year 2 and 3 house surgeons and rural hospital doctors. The programme enables them to experience a three-month attachment in a rural general practice. During this attachment it is intended that they will extend their medical knowledge and skills in a rural setting, develop patient-centred consultation methods with a range of patients, and gain an understanding of primary health care in rural communities. Early feedback indicates that the rotations have been a positive experience for trainees and teachers. Demand for places on the programme is strong, and places on the programme have been increased.

Reviewing training for rural GPs

The CTA is also reviewing the training for rural GPs. The rural sector indicated a need to provide specific rural training for GPs, and in response to this need the CTA signalled an intention to review national rural medical training. A report was prepared for the CTA, which provided an analysis of the options available. Aided by a sector reference group, this report will be used to generate recommendations on a preferred training path for rural general practice.

Other work includes consulting on a framework for training medical officers (formerly MOSS) in response to the need for generalists working in hospitals, and piloting training for overseas trained doctors who have passed the New Zealand Registration Examination (NZREX) to prepare them for work in New Zealand.

Primary health care nursing scholarships

On 17 June 2002 the Minister of Health announced that $8.1 million over five years would be available from the primary health care funding package to support primary health care nursing. A total of $850,000 from the $8.1 million was made available to registered nurses for study scholarships over the 2003 and 2004 academic years. In 2002, 183 scholarships were awarded to registered nurses planning to undertake study in the 2003 study year at a total cost of $380,000. Approximately $470,000 was available for a second round of scholarships for those wishing to study in the 2004 study year, and a total of 207 scholarships were awarded.

The Primary Health Care Nursing Scholarships are intended to support nurses currently practising in primary health care settings to undertake postgraduate nursing courses in primary health care. The Ministry of Health offered scholarships to assist nurses to:

- complete a postgraduate paper, or
- undertake a course of postgraduate study relevant to primary health care nursing.

Funding of $300,000 is being provided in semester 2 of 2005 and semester 1 of 2006 to fund primary health care nursing scholarships. This is the third year that scholarships have been provided.

Dental therapy

The Ministry is funding Auckland University of Technology to explore the potential effectiveness and efficiency of a 'dual' trained dental auxiliary with the capacity to provide both dental therapy and dental hygiene services on graduation. This will cost approximately $750,000 (including GST). There is a range of initiatives under way in relation to dental therapists, including working towards increasing utilisation of dental assistants to free dental therapists to do more clinical work.

3.5   Information, research and evaluation

Information, research and evaluation
Goal: Information and research are available to support workforce development planning
Actions: • Ensure the collection of workforce information is robust, uniform and nationally co-ordinated. • Improve information-sharing mechanisms. • Develop the ability to monitor and evaluate the structure of the health workforce and its activities (HPCAA processes). • Undertake surveys of existing workforce groups.

Workforce information was identified as a priority by HWAC in 2003. In the 2003 DHB Workforce Action Plan it was in the top three areas for action.

However, despite the Government's investment in the health workforce, DHBNZ stresses that current systems to profile and understand the health workforce remain vastly inadequate:

... when it comes to managing and planning the workforce the sector is essentially 'flying blind' with no reliable information to draw on. In the absence of a unifying strategic direction, workforce information investments are being made in an ad hoc and unco-ordinated way. The ability for the sector to plan, develop and manage their workforce is, therefore, significantly hindered by the lack of quality workforce information. The lack of credible information is of particular concern given the urgent need to plan for the impact that an ageing population will have on the sector's workforce requirements (DHB/DHBNZ 2005b).

The health sector needs to know about its workforce to properly understand shortage issues and successfully target and evaluate participation strategies. This includes gathering information about health care worker profiles, activities, processes, systems and procedures to identify what skill mixes are available and what are required, the workforce aspirations and workforce culture. Significant investment is required to support workforce information system development and to drive the necessary changes.

In recognition of this problem, DHBs have developed the Health Workforce Information System (HWIS). Slow progress on this initiative led to a review in 2005 and from this a proposal to progress the work into a Health Workforce Information Programme (HWIP).

HWIP will introduce a comprehensive and phased approach, implementing a process for improving the collection of workforce data, generating workforce information, and undertaking analysis, forecasting and modelling. The initial focus will be on the workforce directly employed by DHBs, with an exploratory stream of work concentrating on primary health and non-government workforce. The CTA has contributed funding to support the development of HWIP, with a view to using it to develop the sector's ability to forecast workforce needs. The CTA is also working with some DHBs to help them model future resource requirements.

3.6   Leading change

Highly credible professional advocacy and good communication of successful examples from within New Zealand and elsewhere will be important to lead the thinking about workforce developments. Culture change and management of change will also have to be of a very high standard, both bottom-up and top-down.

There has tended to be a push towards incremental or evolutionary change in line with the high complexity levels in health, the health culture, change weariness and the need for bottom up-innovations. Although this approach is less likely to attract resistance, allows for local innovation and builds on existing skills to expand scopes of practice, it does not:

- facilitate the proliferation of new roles and services nationally
- address the inflexibility of professional education and training frameworks
- challenge the demarcations, structures and resources that are fundamental to the capacity for work redesign at all levels
- facilitate an adequate response within the short timeframe available.

A combined approach is required which will provide incentives for local innovation at the same time as addressing structural issues at a national level. It is important that local service-based initiatives are adequately funded, sponsored, supported, rewarded, evaluated and shared across the sector to ensure that successful initiatives can be learned from and built on.

This approach requires significant changes in health industry practices and culture. The health sector will need to overcome the inertia associated with investment in the status quo, as with any large organisational change. At the same time it will be important not to undermine the status and business viability of established practitioners and services to avoid the unintended consequence of these skills being lost to the sector. This will need to be supported by a change management process that engages all the agencies and groups in the sector.

Appendix 1: Summary of Priorities in DHB/District Health Boards of New Zealand (DHBNZ) *Future Workforce 2005–2010* Document

The project priorities and actions from *Future Workforce 2005−2010* have been grouped under two themes: nurturing and sustaining the workforce and developing workforce/sector capability. The priorities set out below are not ranked in order of importance, and some actions are already under way as DHB or wider sector projects. Every action has some foundation in the progress the sector has already made and some address more than one priority.

1 Nurturing and sustaining the workforce

Priority I	Fostering supportive environments and positive cultures
1	Promote appropriate shared management, clinical and cultural leadership models
2	Share across DHBs best practice tools that foster supportive environments and positive cultures
3	Support new graduates in their transition into clinical practice
4	Establish mentor training and related sector-wide networks for both clinicians and management
5	Ensure human resources capacity and capability to help foster a supportive environment
Priority II	**Enhancing people strategies**
1	Create an affirmative action programme to attract and retain older people in the health/ disability workforce
2	Establish alternative career pathways/opportunities across all health and disability professions, both vertical and lateral
3	Employment relations strategies and negotiations are informed at each stage by the sector's workforce context, direction and required outcomes
4	Implement policies and programmes that enable work−life balance
5	Integrate organisational values into everyday activities
6	Resource workforce planning across the sector, including DHBs and NGOs
Priority III	**Education and training**
1	Create a relationship with the education sector to enable formal engagement on workforce supply issues – access, numbers, workforce categories, mix and competencies
2	DHBs/DHBNZ facilitate a round table discussion with education, health sector, professional organisations, etc to redesign health education in New Zealand
3	Develop a brand that increases the attractiveness of health sector careers
4	Establish national e-learning systems (including hardware and electronic competency support) for individual and group learning
5	DHBs agree that competencies (such as IV certificate, epidural cert, etc) become portable across DHBs and between disciplines

2   Developing workforce/sector capability

These priorities and actions focus on specific aspects of the health workforce identified as being critical to sustainable development of services in the medium term.

Priority IV	Models of care
1	Incentivise innovative models of care that support job redesign, team building and shared competencies development within the HPCAA framework. New models are community- and outcome-focused.
2	Identify and actively progress the removal of barriers to health practitioners fully exercising their scopes of practice (eg, regulatory and contractual barriers)
3	Support new models of care by developing flexible models of employment/contracting for health practitioners
4	Fund initiatives to encourage the introduction of new models of team working which are health outcome focused
5	Strengthen and value the role of the clinical generalist
Priority V	**Primary health workforce**
1	Develop primary health models that explicitly recognise the range of competencies and skills that provide for the diverse needs of the population
2	Initiatives that develop primary health teams that are integrated with the secondary sector
3	Align funding mechanisms to enable coherent workforce development reflecting service direction
4	Develop IT tools that support the workforce to provide integrated services and a team-based approach
Priority VI	**Māori health workforce**
1	Resource workforce planning and workforce information including ethnic-specific data
2	Engage with Tertiary Education Commission to increase successful Māori participation in health and disability education and training, including developing kaupapa Māori programmes
3	DHBs engage with the school sector locally to improve Māori participation in health and disability education and training
4	Ensure access of Māori and non-Māori clinicians and staff to Māori health / hauora Māori competency development and training opportunities
5	Invest and develop Māori workforce capacity (numbers, professionals and non-professionals) and infrastructure (training opportunities, standards) in primary care, rural health, public health and community health work
Priority VII	**Pacific health workforce**
1	Create organisational environments that recognise and support the ethnically and culturally diverse health and disability workforce (eg, develop toolkits for managers and team leaders managing a diverse ethnic workforce)
2	Recognise community health workers' skills and prior learning to reduce barriers to entering other parts of the health and disability sector
3	Develop an action programme to promote the health and disability sector as a career option and create career pathways for the Pacific health and disability workforce
4	Create incentives for the education sector to ensure a greater proportion of Pacific students complete their courses

5	Develop and support access to leadership and professional development programmes for Pacific health professionals within their local communities and across all sectors
Priority VIII	**Unregulated support workforce**
1	Understand and define this workforce. As appropriate use available research to:
	• match skills to service delivery requirements
	• develop flexible contracts and work environments
	• understand the role of the volunteer sector.
2	Identify an appropriate education framework (NZQA) for paid carers that meet the needs of both carers and provider.

Appendix 2: New Zealand Workforce Innovation Projects

Primary care sector – nursing initiatives

As at July 2005, 11 primary health care nursing innovations were funded by the Ministry of Health. Four of these innovations are outlined below.

Fox Glacier

A rural nurse specialist provides emergency care, personal care, well child, public health, health promotion and immunisation, and also acts as a district nurse and provides antenatal and postnatal care.

Evolve Wellington Youth Service

A nurse-led clinic provides free health and social care services, supported by a GP and peer support workers. Protocols and standing orders have been established to assure the provision of safe care. The clinic nurse uses HEADSSS assessment (home, education, activities, drugs, sexuality, suicide and safety), and provides wound care and sexual health assessment (including smears, oral contraceptives, pregnancy management and counselling), as well as individual health assessment. The nurse also undertakes youth health promotion activities.

St Luke's Community Mental Health Centre, Auckland DHB

This nursing-led primary care liaison service (PLC) enables early intervention, and transition to and ongoing care for mental health consumers in their communities. Supporting GPs provide physical health and mental health care to established informal mental health clients with known diagnosis and treatment who are not on Clozapine.

PHO mental health initiatives

Five primary care liaison nurse positions have been established across four community mental health centres. The liaison nurses work autonomously, responding to the needs of primary and secondary health care providers. At present 42 PHOs are being funded by the Ministry of Health to develop projects that find innovative ways to provide services to people with mild to moderate mental health problems.

Pegasus Health, Christchurch, community care and nurse-led acute care team

This is a collaborative project between primary and secondary care teams to develop the management of unwell patients in community settings at times of acute illness to avoid unnecessary admission to secondary services. The services provided by nurses include such things as care of cellulitis, pneumonia, deep vein thrombosis, acute pyelonephritus, acute chest pain, constipation, exacerbation of chronic obstructive pulmonary disease/asthma and dehydration, and end-stage palliative care.

Other innovations in primary, secondary and tertiary care

HealthLine (www.moh.govt.nz/healthline)

HealthLine incorporating PlunketLine is a free, 24-hour-a-day telephone advice health advice service. HealthLine-registered nurses assess a person's condition and health needs and recommend the best course of action and a timeframe in which to take action. They can also provide general health information and location of services. The HealthLine service incorporates PlunketLine. PlunketLine nurses provide a well child service, including parenting advice, child health promotion and education.

The HealthLine service began operating in four pilot areas (Northland, East Coast/Gisborne, Canterbury and the West Coast) in 2000. In June 2005, HealthLine incorporating PlunketLine became available to callers throughout New Zealand from either a landline or a cell phone. The HealthLine call centre is staffed by registered nurses. The nurses do not diagnose or treat health problems over the phone; they determine the most appropriate level of care for the caller.

HealthLine incorporating PlunketLine:

- guides patients to the right care, at the right time in the right place
- provides people with quick access to free information and advice 24 hours a day, 365 days a year
- refers or guides callers to available health professionals and health services in the most appropriate way
- provides people in rural areas, who often live a long way from a GP or hospital, with access to immediate health advice
- provides support for parents, as well as information on child health issues.

'Cut-up' technicians

These technicians can be trained − in much less time than can pathologists − to undertake routine pathology work, leaving pathologists free to focus on activities that require their level of education and skill. This idea has helped to address pathologist shortages in the UK. Following a proposal by the Otago DHB, the CTA canvassed the proposal with the DHB/DHBNZ Workforce Development Committee to obtain opinion from the DHBs. Because of variable interest in the proposal and competing priorities there was no national mandate to proceed and the project was discontinued.

Proposed medical officer training: a career path for 'hospital generalists'

DHBs expressed interest in the concept of a national training programme to enhance career development for medical officers. Medical officers are key personnel in hospitals (particularly in provincial areas, where fewer consultants are employed), and the proposed training could assist with increasing their contribution and enhancing retention. The concept was discussed with the Medical Council of New Zealand (MCNZ) over a two-year period.

The CTA developed and submitted a training proposal and draft programme specifications to the Education Committee of the MCNZ, and the MCNZ distributed the draft to the Joint Colleges Committee. Little further progress has been made due to requirements for further consultation, requests for extensions and delays in feedback.

Clinical pathway projects

In addition, a number of clinical pathway projects have been initiated. For example, Canterbury DHB conducted a study of night medical activities to audit medical activity at Christchurch Hospital between 2230 and 0800 hours. The aim was to measure the volumes of tasks requiring completion overnight, the competencies required for this, and the level of teamwork that exists with a view to finding the most effective way of managing and resourcing night-time cover. The audit found that most of the medical activities at night were routine rather than specialist or urgent, and recommended that Christchurch Hospital use this data to plan the composition and leadership of after hours services (Canterbury District Health Board 2005).

Appendix 3: Some International Perspectives on Workforce Development

The United Kingdom approach – NHS Modernisation Agency

The NHS Plan: A plan for investment, a plan for reform, published in 2000, provided a blueprint for a radical new approach to developing the health workforce in the UK, and led to the establishment of the Changing Workforce Programme within the NHS Modernisation Agency.

The impetus behind the reforms was the need to upgrade health services in the UK in response to the impact of the European Working Time Directive (which limits the number of hours junior doctors may work) rather than a serious regard for the implications of an ageing population on health services. However, the approach is similar to that required to develop policies to meet the needs of an ageing population: an assessment of the needs of patients, the health services that will be needed, and the workforce needed to deliver the services.

The Changing Workforce Programme set up a flexible career framework (described in Part 2) to help redesign the roles of the health workforce, and supported a series of pilot projects in different provider locations throughout the UK. Much of the new approach is based on a research project that produced three reports in a series entitled *The Future Healthcare Workforce*. The third report in the series specifically covers new roles in services for older people and takes a service-need, patient-focused approach (Cochrane et al 2002).

The report identifies an urgent need for changes to address the problems of a fragmented service and workforce – the lack of continuity of care, the delays and confusion for patients, and the waste of resources. It proposes the development of new professional roles designed specifically for older people's services: a practitioner for older people and an assistant practitioner. It describes how the roles should work in practice across existing professional boundaries and across health and social care (Ministry of Health 2004h).

Workforce development framework

The Health Modernisation Agency established a workforce development framework that focuses on four key components: more staff, working differently, a model career and a model employer. There are also four modernisation strategies aimed at addressing structural and systemic issues: modernising pay, learning and development, regulation, and workforce planning. The strategy recognises the need to improve staff morale and build people management to facilitate and sustain the changes required.

The NHS has developed a core competency framework which provides for nine core competency levels and is designed to facilitate the extension and blurring of professional boundaries and opportunities for the development of new careers within the health sector, rather than outside it. This framework is commonly referred to as a 'flexible careers and skills escalator' (NHS Modernisation Agency 2004).

The Scottish experience

In 1999 the National Health Service in Scotland established a short-term expert group tasked with proposing improvements to workforce planning. In 2000 this group recognised the need to go beyond workforce planning to embrace the concept of workforce development, so that all relevant issues could be considered. 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. A workforce development action plan was also published in 2002, which established a new National Workforce Committee to lead implementation of the action plan.

The action plan also established a National Workforce Unit in the Human Resources Directorate of the Scottish Executive Department of Health (SEDH) to provide national co-ordination of workforce development (Scottish Executive Department of Health 2002).

Australian Productivity Commission

The Australian Productivity Commission, an independent agency which advises the Australian government on microeconomic policy and regulation, has conducted research into a broad range of economic and social issues. The Commission has conducted a study into the pressures facing the health sector. This report *Australia's Health Workforce* was released in January 2006.

The key themes of the Commission's recommendations are:

- reducing inconsistency and fragmentation caused by Australia's federal political structure
- increasing integration of, and consistency between, the regulation, education and training of health professionals
- ensuring that the policy regime surrounding the health workforce is transparent
- ensuring that funding arrangements for both education and training, and the funding of health services, allow for the development of new and innovative roles.

Australian Health Workforce Officials Committee

The Australian Health Workforce Officials Committee (AHWOC) was set up in response to the same issues driving the focus on health workforce development across other OECD countries. The Committee has developed a national health workforce development framework for action, based on seven key principles:

- ensuring and sustaining supply
- workforce distribution optimises access
- health environments are places people want to work
- ensuring the health workforce is skilled and competent
- optimal use of skills and workforce adaptability

- recognising that health workforce policy/planning must be informed by the best available evidence − linked to the broader health system
- recognising that health workforce policy involves all stakeholders working collaboratively with a commitment to the vision and principles of the strategy.

Australia – Department of Human Services, Victoria

At a state level in Victoria, the Department of Human Services has developed a plan to develop health workforce capability and capacity by focusing on:

- better skills, best care strategy, role redesign and pilots
- distribution (where services are delivered), expectations, life-style choices and rewards (public and private)
- productivity, through widening the breadth/scopes of practice, professional practice models (narrow, not team focused) (Australian Health Ministers' Advisory Conference 2004).

Appendix 4: Ministry of Health Workforce Development Actions

In this appendix the numerous actions currently under way, and proposed, by Ministry of Health workforce development plans are mapped onto the framework utilised in the Mental Health Development plan *Tauawhitia te Wero, Embracing the challenge: National Mental Health and Addiction Workforce Development Plan 2006−2009*:

1. workforce development infrastructure
2. organisational development
3. recruitment and retention
4. training and development
5. information, research and evaluation.

These actions are set out below. Note: the abbreviations used in the tables are explained at the end of the appendix.

1.   Current and planned actions in Ministry of Health workforce development plans to improve workforce development infrastructure

National Mental Health and Addiction Workforce Development Plan 2006−09	- Review current mental health workforce development infrastructure and implement recommendations - Improve communication processes - Align planning cycles and contracts - Develop and co-ordinate a set of formal national indicators for mental health and addiction workforce development - Establish a formal consultation group with health, education and employment sectors
Māori Health and Disability Workforce Development Plan	- Maintain current relationships with stakeholders (Industry Training Organisations (ITOs), CTA, tertiary and other institutions) to support Māori in the workforce to gain access to learning opportunities - Build relationships with the Ministries of Education, Women's Affairs and Social Development to enable Māori to gain health qualifications - Work with DHBs in their planning processes to improve opportunities for Māori to develop career pathways

Public Health Workforce Action Plan	• Carry out a stocktake of existing public health workforce development expenditure • Strengthen relationships between professional/working group bodies in the public sector • Strengthen the alignment between health and education sector roles in public health, and between public health and DHBNZ workforce plans • Create a better link between public health and primary health workforce development needs • Establish a network of tertiary training providers • Develop a workforce planning guide to assist the Ministry of Health and DHBs to assess and plan for public health workforce needs • Establish a multidisciplinary mechanism/body which works collectively across professional boundaries to assist multidisciplinary training and professional development
Pacific Health and Disability Workforce Development Plan	• Liaise with the Ministry of Education, Career Services, TEC, CTA and the wider education sector to provide Pacific input into workforce training and development • Provide Pacific input into the Ministry of Health review of clinical training for health practitioners • Provide Pacific input into the range of workforce development plans (mental health, disability, public and primary health and National Screening Unit workforce plans), as well as input into planning for nurses, GPs dental and other workforce reports
The New Zealand Cancer Control Strategy Action Plan 2005–2010	• Develop a cancer control workforce development plan aimed at correcting current deficits and meeting future workforce needs
Investing in Health: A framework for activating primary health care nursing in New Zealand	• Establish a position in the Ministry of Health to lead the implementation of the primary health care nursing framework • Establish processes to allow primary health nurses to access funding for postgraduate education • DHBs and PHOs should work closely and collaboratively with primary health care nursing services in assessing population health needs and developing new service models to address these • DHBs should work towards establishing a clearly identified primary health nursing management/leadership infrastructure at the regional level • The Ministry of Health will monitor and report on the progress of implementing the framework

2. Current and planned actions in Ministry of Health workforce development plans to improve organisational development

National Mental Health and Addiction Workforce Development Plan 2006–09	• Continue to provide leadership development to key personnel (clinical, management, service users) • Investigate whether current leadership initiatives can be linked (eg, Knowing the People Planning tool and National Resource Group Service Improvement Model • Further development of clinical career pathways for nurses, occupational therapists, social workers, and community support workers, particularly in child and adolescent services • Investigate the range of current and emerging organisational improvement models suitable for the diversity of the mental health and addiction sector • Develop guidelines for organisational improvement models • Pilot and then roll-out an action research project on implementing organisational improvement models
Public Health Workforce Action Plan	• Support the development of a public health leadership development programme, linked with or part of LAMPs (Leadership and Management Programmes), and including leadership components or leadership programmes for the Māori and Pacific workforces • Develop a national approach to fostering healthy workplace environments (eg, workplace tools, guidelines, training, contracting processes) • Review the workforce development needs of PHOs • Establish an action plan to support public health practitioners to take on leadership roles • Incorporate health promotion/population health training for primary care settings • Develop national guidelines and tools to build workplace environments supportive of personal, professional and career development of their staff • Assist public health organisations to develop workplace environments and policies that foster learning and development and build rewarding career pathways
Pacific Health and Disability Workforce Development Plan	• Continue to develop the Pacific health leadership programme (PPDF), including existing work as part of the NSU Workforce Development Strategy and increasing targeting for the PPDF to allow funding of more DHBs than those with the highest Pacific populations • Research best practice Pacific models of care and service delivery
NSU Workforce Development Strategy and Action Plan	• Further develop opportunities for Māori in leadership roles in the cervical and breast cancer screening programmes • Further develop opportunities for Pacific people to undertake leadership roles in the cervical and breast cancer screening programmes
The New Zealand Cancer Control Strategy Action Plan 2005–2010	• Identify workforce requirements and workforce development needs to meet the 'guidance' (yet to be developed) on supportive care and rehabilitation services for adults, children and adolescents

Investing in Health: A framework for activating primary health care nursing in New Zealand	• DHBs should engage with developing PHOs and regional and local primary health care nursing leaders to:
	– develop and implement new and innovative models of primary health care nursing services
	– shift the accountability for nursing services to nursing management within the PHOs
	– develop service agreements and funding streams that encourage flexible employment arrangements for primary health care nurses to maximise the contribution of nursing to population and personal health gain
	– recognise and support the role of primary health care nurse practitioners within teams and under independent employment arrangements
	• DHBs should provide opportunities for primary health care nurses to access leadership development training, recognising the priority needs of Māori and Pacific nurses
	• PHOs should establish a nursing infrastructure within the organisation with responsibility for providing leadership, overseeing professional development and practice, and aligning accountability for primary health care nursing practice, employment and service delivery that responds to community health needs
	• PHOs should establish evaluation processes to ensure that the governance, management and leadership recommendations of this framework are being met
	• PHOs should support primary health care nurses to access leadership development training to ensure they are appropriately prepared and supported in governance and leadership roles

3. Current and planned actions in Ministry of Health workforce development plans to improve recruitment and retention

National Mental Health and Addiction Workforce Development Plan 2006–09	• Develop a national advertising campaign promoting mental health and addiction as a career option in a range of occupational roles
	• Establish a national website, with ongoing content provision and maintenance to be shared by DHBs and NGOs and co-ordinated regionally, including an advertising campaign tied in to the career promotion campaign
	• Policies and management practices ensure that all services are organisations that attract and retain Māori, Pacific and Asian staff
	• Regional mental health and addiction workforce development co-ordinators work within annual district planning processes to develop co-ordination strategies
	• National recruitment website to contain regional links
Māori Health and Disability Workforce Development Plan	• Increase media exposure of health and sciences as a career option for Māori students (eg, in *Mana* magazine, Māori television and Māori publications)
	• Promote cadetships with appropriately accredited Māori providers
	• Explore options for providing training and career pathways for traditional Māori healers as well as community health workers
	• Encourage Māori health provider organisations to identify the training needs of their Māori workforce to continue developing and maintaining career pathways

Public Health Workforce Action Plan	• As part of the methodology for assessing public health workforce capacity, ensure consideration is given to the optimum mix and capacity of the occupational groups that make up the public health workforce • Identify areas and strategies that will strengthen the recruitment, retention and optimum distribution of under-represented populations in the workforce • Develop a public health career pathway model and specific occupational group pathways • Conduct a Māori public health workforce needs assessment and develop a Māori -specific approach to public health workforce • Conduct a Pacific public health workforce needs assessment and develop a Pacific-specific approach to public health workforce
Pacific Health and Disability Workforce Development Plan	• Require, support and, where necessary, resource schools and tertiary institutions to encourage Pacific students to choose health-related study and careers • Establish a relationship with Careers Services • Have regular communication with Pacific communities, selling the value of a career in health • Continue to develop newly established Pacific training support initiatives (mentoring programmes) • Explore options for providing further personal development, mentoring support and guidance for Pacific peoples during health education and training
NSU Workforce Development Strategy and Action Plan	• Develop strategic initiatives to increase the number of Māori registered nurses trained as smear-takers (NCSP) • Develop strategic initiatives to increase the number of Māori registered nurses trained as breast care nurses (BSA) • Develop strategic initiatives to increase the number of Pacific registered nurses trained as smear-takers (NCSP) • Develop strategic initiatives to increase the number of Pacific registered nurses trained as breast care nurses (BSA)
The New Zealand Cancer Control Strategy Action Plan 2005–2010	• Expand Ministry of Health support for bridging programmes between school and study for degrees in health • Continue the newly established training scheme and review the intake to ensure the national requirement for new staff is met • Define career pathways for radiation therapists and support their continuing professional development • Agree on appropriate establishments for oncology/haematology nurses for cancer centres and for ambulatory care • Define the scope of a senior oncology nurse • Support and encourage continuous professional education for all groups of palliative care workers

Investing in Health: A framework for activating primary health care nursing in New Zealand	• DHBs should recognise and support the contribution of Māori and Pacific providers and nurses in each of their communities by allocating sufficient resources for future development to meet the health needs of their populations • DHBs should support new graduates to transition directly to primary health care nursing practice, and experienced secondary or tertiary care nurses who wish to move into primary health care practice, through appropriate education and training programmes • DHBs should report to the Ministry on progress with developing a clinical career pathway for nurses working in primary health care and the role of nurse practitioners in primary health care • PHOs should implement practices to support these policies above and provide and resource regular ongoing professional development for primary health care nurses in their employment

4. Current and planned actions in Ministry of Health workforce development plans to improve training and development

National Mental Health and Addiction Workforce Development Plan 2006–09	• Develop the core dual competencies framework, including an implementation plan • Develop the national training plan, including a review of the mental health and addiction component of undergraduate health training, and development of clinical placements • Ensure that all mental health and addiction workers caring for and treating Māori service users are familiar with Māori models of care • Ensure that all mental health and addiction workers caring for and treating Pacific service users are familiar with Pacific models of care
Māori Health and Disability Workforce Development Plan	• Work with training providers, including the CTA and occupational registration boards, to identify the clinical competencies required of these health occupations to provide clinical oversight of trainee placements • Work with DHBs to explore options to assist the appropriate clinical placement in the Māori health sector of health worker trainees • Work with Māori providers to encourage the use of cadetships to increase the Māori workforce's skill base and experience. • Establish a forum for discussing equitable access with key stakeholders • Identify the number of Māori taking up PECT • Explore options to promote uptake of PECT by Māori • Work with training providers to identify and define successful Māori models of learning • Work with occupational registration boards to incorporate cultural frameworks in the training curriculum • Work with the CTA, DHBs, ITOs and Māori providers to incorporate cultural frameworks in training programmes

Public Health Workforce Action Plan	• Develop a national sector-wide training and qualifications framework to strengthen public health career pathways and competency/skills training (build from existing training)
	• Progressively support and influence the implementation of training outlined in the training and qualifications framework
	• Develop inter-disciplinary approaches to strategies and initiatives that will strengthen the capability of the public health workforce (eg, joint training programmes)
	• Develop an agreed set of core public health competencies for New Zealand in order to provide a common framework for the development of a cohesive multidisciplinary workforce
	• Progressively assist professional/work groups to develop, revise and implement professional competencies that are consistent with core public health competencies
	• Identify and develop appropriate mechanisms to support the workforce along training and career pathways (eg, mentoring programmes, scholarships and prizes)
	• Strengthen the Māori workforce by developing and implementing a Māori workforce development model for public health
	• Strengthen the Pacific workforce, in line with the *Pacific Health and Disability Workforce Development Plan* (Ministry of Health 2004f) through supported training actions
Pacific Health and Disability Workforce Development Plan	• Continue to fund health sector scholarships for Pacific students under a range of various schemes
	• Develop educational strategies and programmes to enhance the Pacific health sector's knowledge of, and responsiveness to, disability issues and disability workforce development
	• Define and develop cultural competencies for Pacific health care
NSU Workforce Development Strategy and Action Plan	• Identify generic competencies relevant to the cervical and breast cancer screening programmes, based on the quality standards, to be used as the basis for education and training programmes, and for human resources purposes
	• Examine the possibility of formal training programmes for health promotion, and the development of unit standards for the New Zealand Qualifications Authority (NZQA) framework, linked to generic competencies
	• Identify strategies to train health promoters on how to reach priority group women
	• As part of the overall competencies project, continue to develop Māori and Pacific competencies for the Māori and Pacific health promotion workforces that are culturally and clinically relevant
	• Contribute to the development costs for postgraduate screening teaching modules, with a view to a postgraduate screening paper being offered in future
	• Develop a mechanism to assist NSU service providers to maintain sufficient levels of training for their workforce
	• Develop and promote a training and scholarship directory for courses, papers, conferences and workshops related to screening, and possible sources of funding for those interested

The New Zealand Cancer Control Strategy Action Plan 2005–2010	• Develop and expand postgraduate support for Māori and Pacific staff involved in cancer control
	• DHBs with cancer treatment centres appoint designated oncology pharmacist(s) and make provision for their ongoing professional development
	• Identify cancer treatment centre(s) as a training centre for initial training and on going professional development of oncology pharmacists
	• Work towards the establishment and resourcing of 10 additional training posts in anatomic pathology
	• Establish appropriate numbers of physics registrar posts and regularly review physics staff to ensure Australasian guidelines are met
	• Continue the expanded intake of radiation therapy students
	• Establish and resource training posts for 12 nurses annually to complete post-graduate certificates or diplomas related to cancer nursing
	• Expand of doctoral and postdoctoral research awards to include fields associated with the priorities of the New Zealand Cancer Control Strategy
	• Develop undergraduate and postgraduate programmes for doctors and nurses, additional vocational training posts and the new roles for nurse practitioners in palliative care
Investing in Health: A framework for activating primary health care nursing in New Zealand	• DHBs should support the development of the primary health care nursing workforce by implementing the national framework for post-registration education developed by the Nursing Council of New Zealand, and by supporting primary health care nurses, including Māori, Pacific and rural nurses, to access postgraduate education (eg, scholarships or grants, release time for study and travel expenses).
	• PHOs should support their primary health care nurses, including Māori, Pacific and rural nurses, to access postgraduate nursing education (eg, scholarships or grants, release time for study and travel expenses).

5. Current and planned actions in Ministry of Health workforce development plans to improve information, research and evaluation

National Mental Health and Addiction Workforce Development Plan 2006−09	• Complete a stocktake of the NGO and DHB mental health workforces using a common data template
	• Develop a locally tested best practice workforce planning and development guide appropriate for a diverse workforce
	• Pilot workforce redesign projects, including kaupapa Māori, Pacific, and child and adolescent pilots to attempt to utilise the current workforce in innovative ways to address staff shortages
Māori Health and Disability Workforce Development Plan	• Improve data collection about, and the analysis of, Māori entering training programmes and their completion rates
	• Participate with DHBNZ in the Health Workforce Information Programme
	• Work with DHBs to improve Māori workforce data collection systems and processes in order to track progress in increasing the number and skills of the Māori health workforce, as well as identifying the occupational distribution of the Māori health workforce
	• Progress three Māori health workforce research projects to (i) examine barriers and influences to Māori participation in the health and disability workforce, (ii) examine retention issues for the Māori health and disability workforce; and (iii) evaluate the Māori health scholarship programme

Public Health Workforce Action Plan	• Develop a method to assess the future workforce capacity required to meet population and community need
	• Develop an information management framework for the ongoing monitoring, collection and analysis of public health workforce information, including developing sector capacity benchmarks and mechanisms to review ongoing capacity
	• Work with relevant existing information systems to establish an ongoing public health workforce information collection process – general, Māori and Pacific
	• Set up web-based information and communication mechanisms on public health training
	• Identify ways of supporting the wider public health sector (ie, those not contracted to the Ministry of Health) to establish information collection processes
	• Carry out further Māori workforce development research and needs assessment and begin a Pacific workforce development research and needs assessment
	• Include overall workplace information in a routine information collection system
	• Develop a workplace assessment tool
Pacific Health and Disability Workforce Development Plan	• Implement plans to collect ethnic-specific data as part of implementing the DHB/DHBNZ Workforce Action Plan
	• Collect baseline statistics on Pacific staff and establish consistent Pacific ethnicity data collection standards at national, regional and local levels
	• Undertake Pacific workforce gap analysis
	• Scope the development of a single database to be the repository of all Ministry of Health workforce information, and provide links from the NZHIS, DHBNZ, registration authorities and other relevant sources
	• Develop a screening workforce information framework
	• Complete and analyse a survey of the public heath workforce that includes ethnicity information
	• Develop an information collection system for the public health workforce that includes ethnicity information
	• Establish networks to share information on the Pacific health and disability workforce
	• Align information-gathering systems for public health services with DHB systems
	• Improve access to information by developing the Public Health Workforce Action Plan
	• Establish and fund a Pacific research programme focused on Pacific provider and workforce development
	• Include Pacific research needs in a review of the Pacific public health workforce and develop research initiatives as required to investigate strengthening the capacity of the Pacific public health workforce

NSU Workforce Development Strategy and Action Plan	• Develop an information management framework
	• Collect screening workforce information from a range of sources
	• Analyse screening workforce information to inform workforce development planning and policy
	• Monitor workforce numbers, in particular the number of Bachelor of Medical Imaging students studying mammography (BSA) and the number of Bachelor of Medical Laboratory Science students studying fourth year cytology (NCSP)
The New Zealand Cancer Control Strategy Action Plan 2005–2010	• Undertake a comprehensive stocktake of the present cancer control workforce and define future workforce requirements across the continuum of cancer control
	• Annually monitor the proportions of Māori and Pacific cancer control workers from 2005
Investing in Health: A framework for activating primary health care nursing in New Zealand	• The Ministry of Health should work with DHBs and emerging PHOs to develop information systems and coding mechanisms that assist the collection of data and other information on primary health care nursing for monitoring and evaluation

Abbreviations used: ITO = Industry Training Organisation; CTA = Clinical Training Agency; DHB = District Health Board; DHBNZ = District Health Boards New Zealand; TEC = Tertiary Education Commission; PHO = primary health organisation; HWAC = Health Workforce Advisory Committee; HPCAA = Health Practitioners Competency Assurance Act 2003; NGO = non-governmental organisation; GP = general practitioner; LAMP = Leadership and Management Programme; NSU = National Screening Unit; NCSP = National Cervical Screening Programme; BSA = BreastScreen Aotearoa; HRC = Health Research Council; PECT = post-entry clinical training; NZHIS = New Zealand Health Information Service; HWIS = Health Workforce Information System.

Glossary

Allied health	An area of health, such as pharmacy, physiotherapy and occupational therapy, most often based in the community, that does not include doctors and nurses.
Career pathway / framework	A defined progression of job responsibilities and skills whereby a health practitioner or support worker is able to advance into more complex roles as they gain experience and complete training and professional development programmes.
Clinical Training Agency (CTA)	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.
Community	A collective of people identified by their common values and mutual concern for the development and wellbeing of their group or geographical area.
Community-based health	Health services delivered in the community.
Competencies	The attitudes, skills, knowledge and behaviour held by health practitioners and support workers to perform particular functions.
Continuum of care	People are able to access needed services at the right time, in the right place and from the right people.
Core competencies	The key skills health practitioners and support workers are required to demonstrate proficiency in before they are competent to work within their scope of practice. It is possible that training in these skills can be delivered odular
Cultural competencies	The particular attitudes, skills, knowledge and behaviour required by health practitioners and support workers to meet the specific cultural needs of the people and populations they serve.
Culturally appropriate services	Services responsive to, and respectful of, the history, traditions and cultural values of the different ethnic groups in our society.
Disability support	Services primarily community-based and delivered by private and not for profit providers.
District Health Boards (DHBs)	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.
District Health Boards of New Zealand (DHBNZ)	An organisation that co-ordinates activity on behalf of DHBs.
Generalists	Health practitioners whose training and experience allows them to work across a range of areas, rather than developing specialist expertise in one area.
Governance	The system for strategic leadership. This includes systems for decision-making and the gathering and distribution of information relevant to decision-making.

Health care networks	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.
Health Practitioners Competence Assurance Act 2003 (HPCAA)	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.
Integrated health service delivery	An integrated approach to health and disability support services that is responsive to people's varied and changing needs. Providers co-ordinate 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.
Interdisciplinary	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.
Intersectoral collaboration	Projects involving various sectors of society including central and local government agencies, community organisations and the private sector.
Magnet hospitals	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).
Medical Council of New Zealand (MCNZ)	The Medical Council registers doctors to practise medicine within their scopes of practice in New Zealand.
Medical Officer of Special Scale (MOSS)	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 (Southerndoctor.net).
Models of care	An approach for developing service delivery around particular patient needs (eg, developing service components required by individuals with diabetes).
New Zealand Disability Strategy	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).
New Zealand Health Strategy	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.

Non-government organisations (NGOs)	Encompasses community or voluntary organisations; Māori, iwi and hapū organisations; and for-profit organisations where government organisations contract with them for delivery of outputs.
Non-poaching agreements	Agreement by countries not to actively recruit health practitioners from other countries in areas experiencing shortages of staff. The *Commonwealth Code of Practice for the International Recruitment of Health Workers* provides a policy, although compliance with this is voluntary.
Non-regulated/ unregulated workforce	Health practitioners and support workers who are not registered under the Health Practitioners Competence Assurance Act 2003, or other registration authority.
Nurse practitioners	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).
Overseas trained doctors (OTDs)	Doctors who obtained their primary medical qualification in a country other than New Zealand. Excludes temporary doctors.
Pacific peoples	People from Pacific countries or ethnic backgrounds (Samoan, Cook Island Māori, Tongan, Niuean, Fijian and Tokelauan) who are resident in New Zealand.
Population health	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.
Primary health care	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.
Primary/secondary interface	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.
Primary health organisations (PHOs)	Local, not-for-profit provider organisations funded by DHBs to provide primary health care services for an enrolled population.
Professional colleges	Organisations that are authorised to register vocationally qualified medical practitioners.

Regulated workforce	Health practitioners whose occupations are regulated under the Health Practitioners Competence Assurance Act 2003. These are chiropractors, dentists, dieticians, medical radiation technologists, doctors, medical laboratory scientists, midwives, nurses, occupational therapists, optometrists and dispensing opticians, pharmacists, physiotherapists, podiatrists and psychologists.
Regulatory authorities	Bodies set up under the Health Practitioners Competence Assurance Act 2003 responsible for the registration and oversight of practitioners of each health profession regulated by the Act.
Scopes of practice	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.
Secondary health care services	Specialist services that patients access when their needs are unable to be met by primary health care services. Typically provided in a hospital setting.
Service redesign	Innovative service development through technology transfer aimed at achieving better cost-benefit outcomes (eg, delivering services through the greater use of technicians).
Silo	A separate or isolated system.
Skill-mix	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).
Team	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.
Teamwork	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.
Tertiary Education Commission (TEC)	A stand-alone Crown entity responsible for implementing the government's Tertiary Education Strategy (TES).
Vote: Education / Vote: Health	The proportion of the Government Budget devoted to education spending/health spending.
Work-life balance	Achieving balance between paid work and the other activities that are important to people such as time with family, participation in community activities, voluntary work, personal development, leisure and recreation.
Workforce development	Any initiative that influences entry to and exit from the health and disability sectors, education, training, skills, attitudes, rewards and the associated infrastructure.

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