Queensland Government Submission to the Productivity Commission Study of the Health Workforce

July 2005

Foreword

The Queensland Government welcomes the COAG decision to study the health workforce, and the appointment of the Productivity Commission to undertake this study. This body of work coincides with two highly relevant reviews within this State: the Health Systems Review (Forster Review); and the Bundaberg Hospital Commission of Inquiry (Morris Inquiry). Both reviews will impact on Queensland Government health policy and may influence the Queensland Government's position regarding its health workforce.

Health workforce issues are the major driver for change in the Queensland health system, yet it is apparent that many of the problems we face in Queensland are endemic across the nation. Attracting and retaining appropriately skilled clinicians and support personnel for our services, is an enormous challenge. The Queensland Government recognises that delivery of services as has occurred in the past is unsustainable, in particular in rural and remote areas.

To address these issues, the Queensland Government is already taking action. On 1 July 2005, the Premier announced the funding of 235 medical training places at the new Griffith University medical school. These additional places will be employer sponsored places at a cost of approximately \$61M over 8 years. This approach has been necessary to meet the shortfall in university training places made available by the Commonwealth. students will be bonded to Queensland Health for 10 years and will serve in the areas of greatest need including rural and remote areas, Indigenous health services and community run health services. The Premier also announced on 14 July 2005 the provision of 20 scholarships for nurse practitioners. These scholarships will cover the fees of Masters of Nurse Practitioner students at a cost of approximately \$160,000 per year initiative is also aimed at easing the burden of chronic workforce shortages, especially in rural and remote communities. Collaboration between Queensland Government agencies is also occurring around an enhanced clinical role for paramedics as Paramedic Practitioners in regional and rural area. Further details can be found in Section 2 of this paper.

This paper addresses the issues raised in the Productivity Commission's Issues Paper of May 2005 and highlights initiatives the Queensland Government is already taking in relation to health workforce issues. The paper also includes a copy of previous submissions to the Morris Inquiry and Forster

Review. It incorporates the views of a range of Queensland Government agencies. These include:

- Queensland Health
- Department of Employment and Training
- Department of Education and the Arts (including the Office of Higher Education)
- Disability Services Queensland
- Department of Emergency Services (including the Queensland Ambulance Service)

1. Issues

1.1 Workforce shortages

Queensland is Australia's most decentralised state. The provision of health care across the state poses significant logistical problems, in particular due to difficulties regarding workforce supply.

In 2002, Queensland had the lowest number of registered medical practitioners per head of population in Australia, decreasing from 236 per 100,000 in 1997, to 220 in 2002. The national average rose from 260 to 275 in the same years. The demand for medical practitioners is forecasted to keep increasing during the foreseeable future, a demand which will not be met by the significant increase in medical student intakes. With current models of care, the Queensland Health (public sector) forecasted gap between supply and requirements will increase from 478 in 2006 to 993 by 2010. Clearly this is a significant gap, despite the current reliance on international medical graduates. In addition, the medical workforce trend towards reduced working hours may further reduce the productivity of the medical workforce per capita. Further detail on the medical workforce in Queensland is provided in the Queensland Government Submission to the Bundaberg Hospital Commission of Inquiry at Attachment 1.

http://www.health.gld.gov.au/inquiry/submissions/healthworkforce.pdf

Other professions are also in short supply in Queensland. Experienced nurses are increasingly difficult to recruit. The private sector is able to offer higher remuneration, thereby exacerbating shortages in areas such as dentistry and pharmacy. Allied health professionals are difficult to recruit, particularly in non-metropolitan areas. Health service administrators are also in short supply in rural and remote areas. Even within government, a range of sectors (eg health, disability services and education) compete for the same diminishing workforce.

There is considerable risk in engaging workers in roles for which they are inadequately skilled, be they clinicians, administrators or support staff, due to skill-shortage driven necessity. Concurrently, access to professional development and up-skilling is compromised through inability to backfill.

Some professions, eg radiation oncologists and radiation oncology medical physicists, are so highly specialised and so few in numbers nationally, that small fluctuations in numbers can have serious impact on capacity to deliver services. National workforce planning is therefore as critical for these specialties as overall profession numbers.

There is an identified lack of skilled professionals and research to meet emerging public health 1. needs, particularly in the areas of environmental health, food and nutrition, child health, physical activity for health, injury prevention and epidemiology. Skills are also required in areas of health impact assessment, community capacity development, community public health planning, regional planning and health informatics to enable analysis of linked data and geocoding.

Whilst workforce availability is currently compromised, retention of the health workforce is a contributing factor in a climate of low unemployment and lucrative opportunities in other industries. The greater part of the health workforce is highly intelligent and educated. Yet health care offers limited career paths and for many, unattractive shift work and heavy physical and psychological demands.

As identified repeatedly, Australia's population is ageing, with anticipated increasing demand on the health system. Queensland is also experiencing population growth, across all age groups and predominantly but not exclusively in the south-east corner of the State, through interstate migration. Projected demand for services cannot continue to be met through the current system.

1.2 Workforce distribution

Medical workforce shortages are not homogenous across the state, nor across specialties or levels of seniority. The Queensland public health system experiences chronic shortages in rural and remote areas, and in the specialties of anaesthetics, cardiology, orthopaedics, obstetrics / gynaecology, psychiatry and surgery. This impacts not only on provision of care, but also leads to wastage of specialist training positions outside of the Brisbane metropolitan area due to lack of Australian-trained specialist supervisors. Funding in these instances is allocated, but training positions are filled with non-training medical staff resulting in wastage of specialist training opportunities.

Details of the Queensland medical workforce can be found in the attached Issues Papers for the Bundaberg Hospital Commission of Inquiry, Health Workforce Paper 1 and Paper 2 – Medical Workforce.

^{1.} Public health is defined as the organised response by society to protect and promote health, and prevent illness, injury and disability (National Public Health Partnership 2003)

Other professions follow a similar pattern geographically, with greatest difficulty to recruit and retain the workforce in rural and remote areas. Nursing experiences shortages in rural and remote areas with limited ability to backfill. This is also becoming an increasing problem in metropolitan areas, with increasing part-time and 'casualisation' of the workforce and reluctance to work, eg during school holidays.

Specialty areas of midwifery, mental health, renal, aged care and some critical care areas have greater difficulty filling nursing positions.

Allied health professionals face similar recruitment and retention difficulties and this applies even to large coastal centres. It is also becoming increasingly difficult to recruit and retain ambulance paramedics to some rural and remote locations.

1.3 Clarity of Objectives

The Queensland Health Strategic Plan 2004 – 10 states that Queensland Health has three major roles:

- a leadership role to protect health and promote a healthier Queensland
- a stewardship role to deliver health services that prevent, alleviate and manage illness and disease, such as programs to protect and promote public health; hospital services; mental health services; communitybased support programs; services specific to population groups including older women, children and young people, and Aboriginal and Torres Strait Islander peoples; and alcohol, tobacco and other drug, sexual health and oral health services
- a partnership role with consumers, other health providers and other sectors to achieve healthier lifestyles and healthier communities.

The most significant worldwide contribution to health and longevity has been through disease prevention. The importance of 'health' through healthy lifestyles and environments, disease prevention and early intervention is widely known and espoused. Whilst attempts are made to appropriately focus on prevention and early intervention, health care systems in the public sector will inevitably continue to be responsible for the provision of high cost interventions and disease management. 'Hospitals' continue to be considered by many to be synonymous with 'health care', and 'doctors' the prime decision-makers in its delivery. Health care policy and planning reform must focus on the optimum means of protecting population health.

There is now agreement nationally as to the essential functions to be carried out by the publicly-funded health sector in the interests of the health and wellbeing of society. However, there has been no standardisation of the minimum and optimal levels of the infrastructure necessary to design and deliver services or programs to a given population. Nor has there been standardisation of the minimum or core services/programs that form the minimum set of core functions carried out by a given public health organisation.

There is significant potential for improved patient outcomes through increased flexibility of the workforce (eg through advanced roles and shared clinical competencies across professions). Flexibility is however currently impeded by regulatory and industrial issues which will be further discussed in section 1.4.

1.4 Effective Coordination

The Queensland Government recognises the critical relationships in both ensuring its health workforce, and in meeting demand. Yet, as outlined in a number of submissions to this study, these relationships are difficult due to differences in objectives, funding, and interests of various stakeholders. In many respects, the levers for change are not in the hands of State governments. Where it could be argued that State governments do have the capacity for reform, such arguments must be made within the context of competing health system interests that make it difficult for a State government to implement change. An environment of collaboration towards health care reform to best meet population needs is difficult to achieve. Reform is hampered by regulation, industrial issues, limited collaboration between various health providers and education and training sectors, disparate funding sources and wage structures.

Education and Training

Ensuring sufficient numbers of appropriately skilled and flexible workers are produced from the education system is a whole of government challenge, complicated by competition both within government and in the non-government sector.

State governments have little input into the allocation of new Federally-funded university places to meet either population needs or course requirements. The way in which DEST regulates numbers and allocates funding is not based on the demand for places to address workforce requirements for profession numbers or for geographic areas of need. Rather, it is based on rationing of places across all disciplines to achieve a pre-determined budget allocation based on an average cost. The Commonwealth course contributions for 'other health' courses do not equitably reflect the costs of capital infrastructure or supervisory requirements. Costs of clinical placements are not even adequately provided to universities, let alone the public health sector. For example, physiotherapy (as 'other health', \$7,212 per student load) has lower basic Commonwealth Course funding than science (\$12,003) or foreign languages (\$8,869) despite the requirements for clinical education 2. (1,000 hours of supervised clinical practice). This has led to considerable and ongoing pressure on universities, health services and staff to deliver a crucial but unfunded component of clinical education.

2. These figures do not include the additional, variable HECS charge levied on students by universities.

Queensland has the most regionalised university system in Australia, recognising the need to educate the workforce for regional areas (as far as possible) in those areas. This is critical in Queensland, where more than half of the population is distributed outside of Brisbane. Nursing schools in regional universities are contributing substantially to workforce numbers, but this has not been as well achieved for medical, dental or allied health professions. James Cook University (JCU) in Townsville now has established courses in pharmacy, occupational therapy, psychology and social work and will be graduating its first medical cohort this year. The JCU Faculty of Medicine, Health and Molecular Sciences has commenced courses in speech pathology and physiotherapy in 2005 and is proposing a physician assistants program. In addition, JCU and Queensland Ambulance Service have entered into a partnership investigating the extended role of paramedics in rural and remote areas. This will include the ability of rural and remote paramedics to assist rural doctors and nurses to deliver primary health care. Health professional graduates from JCU will greatly contribute to addressing health workforce needs in northern Queensland.

DEST (Department of Education, Science and Training) funding allocations for University capital development are inadequate and bear little relationship to the allocation of places, regional priorities, institutional capacity or population need. The scale of the program and its method of allocation require significant reform. While some major centres receive capital grants of up to \$17M for new medical schools, these allocations are selectively applied and iniquitous. By contrast, Griffith University has received two grants of \$2m for its new medical school. Smaller and regional universities struggle as they try to expand and increase the profile of appropriate courses for their regions, with insufficient funds to establish new courses with appropriate capital infrastructure to meet population needs. Some Queensland universities have borrowed substantially to fill this funding shortfall, without DEST contribution. Griffith University is establishing Australia's first new Dental School in more than 50 years. No DEST funding has been allocated despite the significant need.

The Queensland Government has also significantly funded universities, with \$300M in funding to higher education sector places, new campus developments and capital over the past fifteen years, and a further \$300M in research infrastructure investment through Smart State programs over the past seven years. The Queensland Government has recently announced a further, fully state-funded increase in medical school placements at Griffith University of 35 in 2006, rising to 50 per year from 2007-2010 to help address the chronic shortage of doctors in regional areas. The Queensland contribution to this initiative over the next five years amounts to a further \$41.6m.

In the United Kingdom's National Health Service, (with the exception of medicine and pharmacy), health authorities commission and fund education places in tertiary facilities in alignment with local needs. This contrasts with the Australian system whereby health authorities have little input into required student numbers, or the curriculum required to deliver skilled graduates. The

public health system and staff do, however, bear the onus of responsibility for the clinical supervision of students on placement and in intern years. This occurs without funding and is usually expected of clinicians in addition to their clinical load. It is accepted that the public system assumes an element of responsibility towards the education and training of students and interns. However, the current lack of funding of clinical placements threatens both the quality of clinical care provided within the system, and the quality of clinical education experienced. The system for structured funding arrangements for clinical places has failed.

Queensland Health has seen a recent shift towards improved communication and consultation with the tertiary and vocational education sectors. This is critical if, as a nation, we are to achieve a health workforce that is responsive to population health needs, through sufficient numbers of appropriately skilled, flexible workers. Consultation about training packages and education remains at this stage largely ad hoc and would benefit from more formal mechanisms. In the VET sector, timeframes for consultation are often limited, with insufficient time between release of training packages and reviews to implement associated training effectively. The capacity to act on feedback from industry is sometimes compromised given the broad number and diversity of views of stakeholders. The official mechanisms for engagement with industry (the ITABs) have just been dismantled.

In relation to the public health workforce, issues to be addressed include:

- gaps in public health knowledge and workforce;
- undergraduate education and ongoing training needs of the public health professional; and
- public health literacy in the broader health care workforce. Greater industry involvement is required in curriculum development and review of specific subjects/discipline streams as well as overall courses for both generalist and specialist public health training to ensure current and emerging needs are met.

Queensland Health is currently trialling Nurse Practitioner roles in a variety of settings. Registration for these valuable professionals will require completion of a relevant Masters Degree. It is critical that the skills and competencies that health services require of Nurse Practitioners are incorporated into these courses. There is considerable risk that, without a collaborative approach to course development, the qualification could be academic without truly addressing the requirements of the role.

An example of successful collaboration between the Queensland Department of Education and Training, and Queensland Health, was the establishment of a Certificate IV Pathology Specimen Collection training package for phlebotomists. Queensland Health identified the need for this training, but there was no suitable package available. Discussions between departments led to the development of a two-phase process by a private registered training provider. The first phase involved recognition of prior learning / competencies of existing staff, funded by the Department of Education and Training through its SmartVet program. Phase two will be the delivery of training based on a

training gap analysis. Training will be provided to staff across the entire state, with 90 – 95% of all phlebotomists enrolled. Benefits to the organisation include: assured competencies in service delivery; improved workforce pride; improved recruitment and retention; and compliance with the enterprise bargaining agreement. Benefits to the phlebotomists include: recognition of skills; assistance in achieving their qualification; and (with employment experience) progression to a higher level of remuneration.

Disability Services Queensland has embarked on a similar plan of engaging with the VET and University sectors with a view to both influencing curriculum and accessing future workforce opportunities. This has been identified as crucial, particularly in the areas of psychology, social work, physiotherapy, occupational therapy and speech pathology.

The Directors-General of Queensland Health and Emergency Services have held preliminary discussions about an enhanced role for paramedics as a response to the shortage of specialist health care providers particularly in regional and rural areas of the State. Qualified, experienced paramedics would complete a two year post graduate degree as Paramedic Practitioners and would assist doctors in a variety of medical procedures such as minor surgery, investigative procedures such as endoscopies, anaesthetics and be able to request diagnostic tests such as x-rays and routine pathology. This enhanced role is a reflection of the high skill level of paramedics and provides an innovative response to the periodic shortage of doctors outside the larger regional locations. Earlier this year Queensland Ambulance Service (QAS) paramedics formed part of a multi-disciplinary team of health care practitioners. emergency services personnel and logistics and communications personnel who travelled to Banda Aceh as part of Operation Foxtrot. The paramedics assisted in the operating theatres at Banda Aceh hospital and with wound management and infection control.

National policy development

Priority areas for workforce development need to continue to be incorporated into national policies. Development of the future workforce and continuing development for the existing workforce must target priority areas in alignment with national policies.

1.5 Good Regulatory Practice

Regulation is a further example where limited collaboration and competing interests hamper reform. Whilst it is essential that each profession takes responsibility towards regulation of its members, the jurisdictional and siloed approach to regulation undermines the capacity for the development or expansion of roles that might best, flexibly provide the health care of the future. Role expansion will certainly include some work practices moving from one occupational group to another. If these work practices require regulation to protect public interest, the current system will not provide for this change. As an example, if 'the delivery of anaesthetic' or 'medical imaging reporting' has the potential to be the responsibility of a number of professions acting in

an advanced role, how and by whom would relevant competencies in these areas be regulated?

1.6 Fiscal Gatekeeping

Funding through Medicare

The restricted access to Medicare currently limits the capacity for workforce reform. Select registered nurses could, for example, expand their scope in the primary care setting to provide a significant role in the management of chronic disease. Restricted access to the Pharmaceutical Benefits Scheme may also limit the effectiveness of Nurse Practitioner roles, particularly in the private sector.

A number of decisions were made by the Australian Government in the mid to late 1990's to constrain the growth in medical and health expenditure. These decisions included:

- reductions in medical` school intakes
- reductions in net additions to the workforce from immigration
- reductions in annual intakes for general practiced training programs access to Medicare provider numbers for new graduates denied until after they enter a recognised general or specialist training program.

The impact of many of these decisions are now been felt through a severe impact on the Queensland medical workforce.

Remuneration

The health workforce in Australia is remunerated through a wide range of Awards and Agreements. Enterprise bargaining negotiations in each jurisdiction impact on others as settlements in one jurisdiction are used as the basis for claims in other states. The United Kingdom has a national common pay spine across professions, recognising progression through skill levels and encouraging learning.

The public sector cannot compete with the private sector for many professionals. Salary packaging provides some assistance through PBI status, but factors other than remuneration, such as job satisfaction and working conditions, are critical for much of the public health workforce. Conditions become increasingly strained as workforce shortages result in increasing workloads and staff have difficulties accessing leave.

2. Opportunities to meet core health workforce objectives in new ways

2.1 Ensuring adequacy of workforce

Adequacy of the health workforce is a national issue. Significant data are required to adequately determine education and training places to meet workforce needs. Whilst there are official mechanisms for jurisdictional collaboration on workforce planning, available data are of variable reliability at this stage. AHWOC is addressing this issue.

Data elements are manyfold, requiring insight into current workforce; retention and loss; gains through new graduates, migration and re-entry; changes in working hours and predicting demand. Harder to predict are the profession-based requirements which are likely to occur though new models of care and skill mix changes. These must be explored. Health workforce planning nationally would benefit from improved collaboration and sharing of reform initiatives.

National workforce planning is being undertaken through a number of bodies, such as AHWOC. National planning is crucial in terms of workforce capacity across government departments and non-government organisations that share the same workforce.

The National Disability Administrators are funding national research into attraction and retention of disability professionals and direct care staff in recognition of the ageing workforce and the consequential expected diminished workforce supply.

The Community Services' Ministers' Advisory Council is also funding research programs into attraction and retention (Structural issues in the Workforce Project) priorities for the community services workforce with a view to expanding the non-government sector and addressing issues of supply.

Queensland Health has had some success with initiatives to recruit and retain in rural and remote areas, including the Rural and Remote Nursing Relief Program, and through the offering of incentive packages for professional development.

http://gheps.health.qld.gov.au/odb/hau/nursing/Html/RRNRP.htm

Opportunities could also be considered for cross-department collaboration and partnering in terms of dual role positions for example paramedic / nurse positions in remote areas which may not justify both a nurse and paramedic position being established. In areas where direct medical supervision is unable to be sustained, expansion of telemedicine and e-options for clinical support and consultation could usefully be considered.

Australia needs to become more competitive on the global market. Further strategies need to be developed to positively and ethically recruit from the international labour market as well as to encourage Australian trained

graduates to remain in, and return to Australia. International recruitment needs to be supported by effective and streamlined migration processes, including combined processes for visa applications and recruitment. Assessment of qualifications of overseas trained health and medical professionals and examination of their competence to practice in Australia could be facilitated by enhanced Government funding. Consideration should be given to the role of case management as a means of facilitating effective immigration from the stage of expression of interest through to entry and practice within Australia.

2.2 New models of care and service delivery

Throughout all stages of prevention and disease management, reform is needed in terms of what workforce skills are required to best deliver that care; who currently and / or potentially possesses those skills; how that care is best delivered and coordinated; and what structure will support it. Work must continue on initiatives which realise the potential of the highly skilled, intelligent health workforce.

Ensuring the primary health care workforce has a public health orientation that will adequately equip them to effectively contribute to the prevention/health promotion agenda is a significant need in terms of ability to deliver on the strategic agenda for Queensland Health. Furthermore, it will lead to increased capacity in this area through enabling the complementary primary health care/public health roles to be maximised. Given the fundamental importance to the public health approach of addressing health inequalities, there could be a greater focus on this issue, particularly as it relates to the health of Indigenous Australians and to the national public health priority areas.

Although in its infancy, Queensland Health is incorporating new models of care into its service and workforce planning. Patient-centric evidence-based care is fundamental. Service planning is therefore based upon the following:-

- What is the best way of providing care to the patient?
- What skills and resources are required to deliver this care?
- What is the best way of constructing a workforce / team with the required skills?

This approach follows a 'disease' or 'service' type, for example cardiac disease or emergency medicine. Queensland Health has provided initial research into Emergency Departments through this process, including a skill mix analysis of the multidisciplinary team. The importance of the multidisciplinary team must be stressed in achieving best patient outcomes.

Optimising the capacity of new models of care may require new ways of working, technological advancements, advanced roles, the introduction of new roles, or a combination thereof.

Physiotherapy Departments, in conjunction with Departments of Orthopaedic Surgery in Royal Brisbane and Women's, Ipswich and Townsville Hospitals

have commenced a 'Fit for Surgery' project, aimed at a new model of care for patients with orthopaedic problems. It aims to reduce cancellations for elective surgery through ensuring fitness preoperatively; treating appropriate patients through first contact physiotherapy management; and providing better outcomes for patients awaiting surgery through strategies to improve nutrition, reduce smoking and obesity, and improve musculo-skeletal fitness. Consultation time with Orthopaedic Surgeons will also be enhanced through appropriate streaming of patients.

Emergency Department waiting times have been reduced, and other performance measures improved, in several Queensland Health hospitals through a variety of new ways of working. These include:

- Streaming of lower acuity patients (not-for-admission triage category 4 and 5) to a see-and-treat service beside the Emergency Department. This is staffed by a Senior Medical Officer and Advanced Practice Nurse (working as first contact practitioner according to clinical protocols)
- Hospital in the home and nursing home a visiting service which prevents unnecessary presentations of elderly at the Emergency Department

Queensland Ambulance Service (QAS), in conjunction with Queensland Health, is investigating extending the scope of practice for rural and remote paramedics. Consideration of new roles for paramedic practice extends to:

- exploration of new service delivery models in remote and isolated communities
- volunteer first responder groups
- the role of Emergency Medical Technicians and Primary Care Paramedics in these locations.

Programs being explored include:

Paramedic Practitioner

Paramedic practitioners are experienced paramedics who have undertaken a three year BSc(Hons) Degree as Emergency Practitioners. This course enhances the paramedic's knowledge, skills and experience in pre-hospital care. The diverse nature of the paramedic practitioners' training means that their knowledge, skills and experience could be utilised in other ways. Working closely with primary care practitioners, community nursing providers and within Accident and Emergency Departments are all future considerations.

Physician's Assistant

The American Academy of Physician Assistants (PAs) defines physician assistants as "health care professionals licensed to practice medicine with physician supervision" and says "studies carried out by the [United States (US)] Federal Government have shown that PAs, working with the supervision of physicians, provide care that is comparable to physician care." Many PAs were formerly nurses and paramedics. They practice in the areas of primary

care medicine: family medicine, internal medicine, paediatrics, and obstetrics and gynaecology; as well as in surgery and surgical subspecialties. They conduct physical examinations, diagnose and treat illnesses, order and interpret tests, counsel on preventive health care, assist in surgery and in virtually all US States can write prescriptions.

The Queensland Premier and Minister for Trade released a media statement on 18 June 2005, reporting the difficulties Queensland experiences in attracting doctors to regional and rural areas. He also outlined the US model in which nurse practitioners and physician assistants are generally accepted. The portability of these models to the system in Queensland is being carefully considered.

Primary Care Paramedics

The 2005-06 Queensland State Budget funds the training of 20 rural paramedics to strengthen the delivery of ambulance services in rural and remote areas. These training places will be delivered in conjunction with Queensland Health and it is intended to expand the roles of these paramedics so that they may assist remote area nurses and rural doctors with on-going patient care.

A current collaborative project between the QAS and the James Cook University (JCU) is examining the need for expanded scope services in communities in rural and remote Queensland, with a particular focus on primary health and the integration of ambulance services and allied health and emergency services. As part of this project, a comprehensive national and international literature review is being undertaken, which will examine service delivery models, identifying innovative ways of service delivery which are responsive to the principles of health promotion, prevention and intervention, but also capable of supporting emergency responses.

This project will define the nature of rural, remote, isolated and indigenous communities' needs and possible responses to those identified needs. The project will also develop a draft curriculum for the JCU that will train paramedics in the delivery of an extended scope of practice.

Emergency Medical Technicians (EMT's)

EMT's give immediate care and then transport the sick or injured to medical facilities. They determine the nature and extent of the patient's injuries or illness while also trying to determine whether the patient has other pre-existing medical conditions. EMT's then give appropriate emergency care following strict guidelines for which procedures they may perform. On arrival at a medical facility, EMT's transfer patients to the emergency department, report to the staff their observations and the care they provided and help provide emergency treatment. The EMT model is typically delivered by staff with clinical qualifications less advanced than Queensland trained paramedics. In rural areas, EMT's are trained to treat patients with minor injuries on the scene of an accident or at their home without transporting them to a medical facility.

2.3 Advanced roles

The Queensland Government is supportive of opportunities to improve patient care through enhanced clinical roles. Further information is included in the Enhanced Clinical Roles (June 2005) Issue Paper for the Bundaberg Hospital Commission of Inquiry at Attachment 2.

http://www.health.qld.gov.au/inquiry/submissions/enhancedroles.pdf

Over recent years the Queensland Government has sought to expand nursing roles in order to meet some of the significant challenges facing our health system.

Nurse Practitioners

The success of nurse practitioner trials that began in Queensland in July 2002 prompted the government to extend the use of Nurse Practitioner to a further 10 demonstration sites in a range of clinical areas including aged care, emergency departments, heart failure, mental health, neonatal intensive care, palliative care and women's and child health.

The State Health (Drugs and Poisons) Regulation 1996 was amended in 2004 to allow nurse practitioners to prescribe medications according to a drug therapy protocol. Radiation Safety legislation is currently being reviewed to allow nurse practitioners to request plain film x-rays.

http://gheps.health.qld.gov.au/odb/hau/nursing/Html/NP_home.htm

A review of some federal legislation is required for the nurse practitioner role to be financially viable in the private sector. Legislation related to Medicare funding and pharmaceutical benefits subsidies will need change to allow nurse practitioner visits to be funded through Medicare and to ensure patients seen and treated by a nurse practitioner have access to PBS. Current PBS legislation does not allow for nurse prescribers and hence scripts written by nurse practitioners are not able to attract pharmaceutical benefits subsidies.

The Queensland Government approach has been to develop the Nurse Practitioner role through collaboration with stakeholders. The Queensland State Steering Committee on Nurse Practitioners overseeing the development and implementation of the nurse practitioner model in Queensland includes representation from medical, nursing and allied health professions.

Rural and Isolated Practice Endorsed Registered Nurses

Queensland has seen the successful introduction of the Rural Isolated Practice Endorsed Registered Nurse (RIPERN) in rural and isolated settings. The course prepares Registered Nurses to apply for endorsement by the Queensland Nursing Council to practise under the provisions of the Heath (Drugs and Poisons) Regulation 1996. Training commenced in 1999; to date 479 Registered Nurses have completed the course. Scope of practice includes:

- ability to initiate and supply some medications;
- enhanced assessment and decision making;

- managed care of individuals and groups using Health Management Protocols and clinical guidelines;
- collaborative practice to achieve optimal, culturally relevant client outcomes; and
- provision of culturally appropriate information to clients and carers about drug actions and interactions relevant to drug therapy protocols.

The Primary Clinical Care Manual, which is the main clinical care guideline document for rural and isolated areas, was developed through a collaborative of Queensland Health and the Royal Flying Doctors Service (Queensland Section).

http://www.health.qld.gov.au/clinical/pccm/default.asp

Medication Endorsement for Enrolled Nurses

Medication Endorsement for Enrolled Nurses is also successfully implemented in Queensland. This has resulted from a highly effective partnership between the Department of Employment and Training, and Queensland Health.

Allied Health Professionals

Allied Health Professions have also developed significant specialised roles, including lymphoedema management, incontinence management, aged care, case management, and developmental paediatrics. Some specialities receive mixed levels of recognition from the medical profession, despite significant evidence of excellent patient outcomes.

2.4 New roles

Many roles have been introduced over the past few years; therefore the concept of non-traditional roles is by no means innovative. Indigenous Health Workers and Allied Health Assistants are well integrated as core members of the health team. New roles emerge, often at local level, through need. The health industry needs to consider if the introduction of new health workers, eg Physician Assistants would improve patient outcomes, or if patient needs would better and more effectively be met through existing occupations working in new or extended / advanced ways. Jurisdictional collaboration and shared learning would facilitate national workforce developments and a consistent approach to the introduction of new roles.

Barriers to new and extended roles, such as regulation, industrial issues and culture, must be appropriately addressed.

2.5 Improved care through national / state coordination

Due to the difficulty recruiting and retaining staff in rural and remote areas, and with increasing specialisation of treatment, health departments will need to plan for services and workforce through coordinated state-wide clinical networks, based on facilities with the clinical expertise. Many services

currently offer specialist outreach clinics to provincial areas. Services must be delivered according to where, how and by whom safety and quality are ensured.

Collaborative partnerships between public and private health care sectors and State and Commonwealth departments are of paramount importance. The Queensland Government recognises the critical role that General Practitioners, and the private health workforce as a whole, assume in the provision of healthcare of Queenslanders. Likewise, coordinated functions of non-government and government agencies are essential.

Whilst this study focuses on the health (clinical) workforce, support, building and engineering workforces are also critical to the provision of safe, quality health care. They too are in short supply, particularly in rural and remote areas. Queensland Health has recently implemented a hub and spoke system whereby major metropolitan and provincial centres provide building and engineering expertise to rural and remote centres. In some cases eg Central West, Mt Isa and Torres Strait, it is the first time Districts have had access to this level of expertise, with excellent results. This model holds considerable merit for appropriate clinical services. Coordinated, planned service is the key.

The Queensland Government approach to planning and delivering emergency health care services is through the Queensland Emergency Medical System (QEMS).

QEMS represents an integrated and coordinated system of care for the acutely ill and injured. It focuses on systems, rather than on an organisational approach to the delivery of patient care services. This approach is necessary as emergency health care services are achieved through sub-systems that include private and public health care providers and emergency services agencies. These sub-systems operate within a complex and extensive network of arrangements that together form QEMS.

Collaborative planning is the foundation of this systems approach and has led to the development of new operational guidelines for the provision and management of patient transport between Queensland Health facilities, an important component of the hub and spoke model described above.

2.6 Coordinated, collaborative education and training

National funding models must be addressed to ensure equitable delivery of appropriate resources across sectors. DEST funding must factor in population needs by State and region, and in particular regions of high population growth. Based on sound workforce planning systems, jurisdictions need greatly improved influence over tertiary sector education in terms of numbers, models of education, curriculum and the development of new courses.

A strategic approach to DEST funding is critical. This must include appropriate, equitable allocation of funds for: course requirements; numbers

of places in appropriate courses and locations to meet emerging population needs; aligned with adequate capital investment.

Health workforce education and training must be reformed by cooperative, coordinated input from all key stakeholders. The interface between sectors needs reform and planning with careful analysis of costs, and articulated funding to address those costs. A collaborative of VET and higher education sectors, health care providers (both clinical and strategic) and consumer representatives would facilitate the development of health workforce education through:

- Patient / consumer focused-care
- Articulated courses through sectors based on industry and population need
- Career paths from base-grade to super-specialist along a 'skills escalator'
- Workforce flexibility
- Teamwork
- (Potentially) improved entry of secondary school leavers into the health workforce.

Workforce flexibility and teamwork have been repeatedly identified in publications as critical to the delivery of safe, quality health care. The delivery of core components of education delivered across professional streams (different professions learning together) would greatly enhance flexibility and the promotion of teamwork through collective learning. This happens to some degree presently, but there is scope for enhancement of this model as has been implemented in the UK.

The development of a 'life long' learning approach focusing on continuing professional development within the workforce is essential to addressing the emerging public and broader health challenges.

The Queensland Department of Employment and Training proposes: a wider range of integrated degree and diploma programs in conjunction with universities. This would enable students to undertake combined bachelor-diploma / advanced diploma / certificate IV programs and gain both university and VET qualifications in much the same time as a degree course the development of a range of new vocational graduate certificates and diplomas aimed at giving existing professionals a range of additional VET skills.

The Queensland Government is promoting the development of Skills Formation Strategies as a process where industry, community and government stakeholders can collaborate to analyse specialist skills formation needs in different regions, sectors and industries. Aged care (including enrolled nursing) is one of the strategy areas under development. (Queensland's proposed responses to the challenges of skills for jobs and growth: A green paper)

http://www.trainandemploy.qld.gov.au/resources/corporate/pdf/det_green_paper.pdf

The relationship between the VET sector and universities must also be addressed, for example, to facilitate articulation of courses from one to the other. Some universities have pursued RTO status to achieve this, eg JCU for nursing (EN through RN), Charles Sturt University to deliver Pharmacy Assistant and Technician training through its Pharmacy School. Articulated courses will benefit health services in the retention of valuable staff through improved career opportunities.

QUT is also exploring generic undergraduate degrees in health sciences that allow opportunity for specialisation in a number of affiliated areas (eg Nursing/Paramedic). The University of Queensland has announced its intention to institute a Bachelor of Health Sciences in the near future. Opportunities for students considering careers in these streams should consequently expand in the near future. The introduction of medical education at Griffith University (2005) also provides expanded places for medical students.

Capacity for medical specialist training also requires review in terms of new training models. As noted in the Productivity Commission Issues Paper, Queensland Health and the Royal Australasian College of Surgeons have signed a Memorandum of Understanding to facilitate the expansion of training exposure and opportunities for surgical registrars employed by Queensland Health through implementation of new training models across the public and private sectors. This is but one example of innovative practice.

2.7 Regulation

Effective regulation of health professionals must focus on protecting public interest through quality and safety. Australia would benefit from a national review including regulation of competency-based qualifications that potentially cross professions and facilitation of the regulation of new roles as required. Effective communication also needs to be established between all stakeholders involved in the assessment and migration of health workforce graduates, including Commonwealth and State health and immigration agencies, private and public sectors, regulatory and professional bodies. The development of mutual recognition schemes for qualifications should be considered.

The special purpose registration for medical practitioners in designated areas of need must not be used as a mechanism to restrict the inflow of overseas trained doctors, but must ensure that the quality and safety of medical practice equals that expected of Australian medical school graduates. The processes of regulation and recognition must be directed at ensuring that overseas trained health professionals meet the health care standards of Australia and health care needs of Australians.

This could be supported through investigation of ethical and safe mutual obligation arrangements with other countries in the area of professional regulation. Changes to the regulatory system must facilitate the 'flow' of the health workforce internationally and allow Australia to ethically and effectively compete in the international labour market. This will require continued emphasis on the development of a nationally consistent approach to health workforce registration across all discipline areas. It is important that local remedies devised to address problems identified in any one jurisdiction are strongly aligned with this imperative. National consistency is also necessary to facilitate the flow of international health professionals on working holidays with temporary short stay visas.

2.8 Shaping consumer expectations

It is a fact that the health system cannot deliver health care in the 'ideal' way of providing all services at a local level. Queensland is Australia's most decentralised state. The current situation in Queensland emphasises the issue that services should not be offered when safety and quality of those services cannot be assured. Shaping consumer expectations regarding what can be delivered locally, and what, in terms of safety and quality must be delivered through other means will become increasingly important. Similarly, reforms that may involve different models of care, and new and advanced roles will necessitate public education.