

# NORTHERN TERRITORY SUBMISSION

# TO THE PRODUCTIVITY COMMISSION HEALTH WORKFORCE STUDY

SEPTEMBER 2005

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# **EXECUTIVE SUMMARY**

This Submission to the Productivity Commission on Health Workforce has attempted to identify the key issues regarding health service demand and the supply of health services and workforce to the population of the Northern Territory (NT). Clearly the NT is influenced by national health workforce issues and as such the issues identified in the Submission must be viewed in the national context.

In the NT workforce demand issues are well identified and documented. These particularly relate to the NT's population profile, geography and burden of disease, particularly borne by Aboriginal Territorians.

Processes both to analyse and predict the supply of services and particularly the health workforce needed to provide those services are not well defined. The Department of Health & Community Services (the Department) recognises the need and as such has prioritised the development of strategic service and workforce planning methodologies and processes across all pertinent sectors. This fact, and its implications of potentially limiting an accurate analysis and prediction of workforce issues are identified in the Submission.

The Department, in collaboration with private and non-government organisations and education providers has developed a range of innovative solutions to address the workforce issues. These have met with some success, for example those to attract, recruit and retain health staff in the NT. These will be further discussed in the Submission. As is the case in other jurisdictions, this has occurred within an environment of increasing complexity of health services, heightened consumer expectations for health services and increasing shortages of health industry workers.

The key issues addressed in this Submission include improving:

- workforce planning, within the national and international context;
- workforce supply with broad-based generalist skills;
- workforce distribution to address access issues, especially to remote communities and the Aboriginal population;
- the alignment of education and training to the forecasted service needs; and
- and promoting workforce flexibility within and across all professional groups again to address need and access issues.

The NT recognises that in many instances its issues are those on the national agenda for health workforce reform. We have tried to demonstrate in our Submission some of the initiatives that we have implemented to try and improve our health workforce recruitment and retention as well as flexible and innovate ways to deliver health services in the Northern Territory. However, due to our small health workforce resources, we lack the capacity to develop and/or implement the reforms required by ourselves. Although we have developed partnerships with other service and training providers we need a broader engagement with the Australian Government, other jurisdictions and the eduction and training sector.

# 1. The impact of the Northern Territory context on its health workforce

# **Demography and Geography**

The NT has a very low population density – it has a population of approximately 198 500 (around 1% of Australia's population) scattered across 1, 352, 200/km2. This population has grown significantly over the past two decades (from 114,000 in 1979), significantly increasing the requirement for health services and its requisite workforce, and contributing to 29% of the increase in health expenditure in the NT in that time. While the NT health workforce has grown considerably in this time, it still does not have the critical mass in terms of either total population or its distribution, to be able to provide a stable well structured workforce to meet all its health service needs.

Approximately 59% of Territorians live in the major urban areas of Darwin (including Palmerston) and Alice Springs. The remainder are spread across the Territory - for example in regional towns, Aboriginal communities and outstations and cattle stations. There are significant differentials in the availability of services in general, and health services in particular, informed particularly by the size of the population grouping and its remoteness from a more major centre.

29% of the NT population are Aboriginal people, a many times higher percentage than in other jurisdictions. A greater proportion of Aboriginal (70%) than non-Aboriginal people (35%) live outside the major urban centres, and thus have less access to health services. Indeed, 89% of Aboriginal people live in discrete communities outside the five major regional centres in the NT. This proportion is significantly greater than that of other jurisdictions (e.g. Queensland, South and Western Australia approximately 25%, NSW 8% and Victoria 1%). While some of these communities are now increasing in size to that comparable of towns, in the main, their remoteness still dictates the range of health services, and the workforce available. Thus, for example, 516 communities are 100km or more to the nearest hospital, 124 communities are 100km from the nearest health centre; and 2,403 (4.4%) people live 100km or more from the nearest health centre.

The median age of Aboriginal Territorians is lower than non-Aboriginal Territorians - influenced by a higher birth rate, having children at an earlier age and a shorter life expectancy. However, overall, Territorians per se are the youngest Australians, with a median age of 30 years compared with the national average of 35 years. This population profile requires a different health service profile and therefore workforce profile to that of an "older" population, with a greater quantum of demand for example on maternal and child health services, than on aged care services. This has implications for national resourcing processes that assume similar demographic spreads across jurisdictional populations. It does however need to be noted that increasingly people are choosing to reside in the NT and consequently the aging population is growing at a rate disproportionate to the national figures, primarily due to starting from a lower base.

A major component of the NT population is transient, coming to the Territory for short-term work, for example that associated with major infrastructure developments or with the defence forces. This population may not have well established support networks or relationships with health service providers, potentially influencing their usage rates of these services. As a subset of the total population, there are also significant influxes and effluxes in the heath workforce itself.

Furthermore, there is a significant influx of short- term tourists (particularly in the dry season) across the Territory, many of whom access health services. These visitors mainly arrive during the months of April through to September each year. The Northern Territory Tourist Commission has identified that approximately 1.7 million visitors come to the Territory on an annual basis (eight times the NT's population). Given that resourcing of services is usually on a residential population basis, this causes a significant impost on health services, as well as the need to provide a workforce ready to deal with this services demand.

# **Burden of Disease**

The Northern Territory is the Australian jurisdiction with the highest burden of fatal disease and injury. The main conditions contributing to this high burden of disease are cardiovascular disease, mental disorders, cancers, unintentional injury and chronic respiratory disease. The proportion of Territorians with intentional and unintentional injuries, acute respiratory infections and neonatal disorders is greater than the Australian average. This degree of disease and injury has a significant effect on the resources, and in particular the workforce, required for an efficient and effective health service.

Furthermore, Aboriginal Territorians bear the brunt of this burden of disease and injury. As noted above, Aboriginal Territorians die earlier than non-Aboriginal Territorians. The burden of disease and injury rates for Aboriginal people in the NT are 2.5 times higher than non-Aboriginal people, and the Disability-adjusted life-years (DALY) rates are 4.1 times higher for Aboriginal people aged 35-54 years. The burden of disease specifically attributable to cardiovascular disease, acute respiratory infections, diabetes and neonatal disorders is greater in Aboriginal Territorians than non-Aboriginal Territorians, and it appears that the gap between the health and wellbeing of Aboriginal and non-Aboriginal Territorians is increasing - Aboriginal Territorians' health status now equates to that of non-Aboriginal Territorians who are twenty years older than they are – both in terms of the extent of disease and outcomes. Indeed, the ageing of the Aboriginal population has been identified as one of the key drivers of health expenditure in the NT, with costs increasing in line with the epidemic of chronic diseases.

The causes for this burden of disease are well documented but include both physical and social determinants, such as poor physical environment; sanitation and hygiene; food supply, nutrition and activity; education, parenting and social and emotional wellbeing. Many of the interventions needed to address these issues require at the least cross-sectoral partnerships, and in many cases whole of Government (including the three tiers of Government) involvement. It also requires a workforce that has a strong focus on chronic disease management, lifestyle changes and primary health care. In a catch 22 situation, shortages of skilled staff and difficulties in placing the workforce in isolated communities (including providing adequate infrastructure and support) impacts directly on the NT's ability to affect meaningful interventions, and reduce this burden.

In addition, the Top End of the Northern Territory, along with North Queensland and Northern Western Australia, has both endemic tropical infectious diseases (e.g. melioidosis) not seen in temperate Australia, and is susceptible to others should they be brought to it (e.g. dengue fever). As such, it requires a component of its health workforce to have specialist knowledge and skills not readily used in the rest of Australia.

# **Current Health Service Profile**

# Acute Care

Health services in the NT are predominantly provided by the Northern Territory Government (NTG), although there is a slow shift to service delivery by others (such as the Aboriginal Community Controlled Health Services), particularly in the more remote areas of the Territory. In the acute care sector, there is one public hospital located in each of the urban centres, all of which are linked as the NTG Hospital Network. Only having one hospital in each centre means that unlike in other jurisdictions, no NT hospital can go on "ambulance bypass", allowing system stress relief. This has implications for the pressures initially placed on the emergency care workforce, as well as other acute care workers. Furthermore, there has been an increase in hospital separations over the past two years, representing increased acute care service activity.

While the range of services provided by the hospitals has expanded in recent years, there is current work underway to examine the efficiency and effectiveness of role delineation between hospitals i.e. the larger the centre, the greater range and complexity of health services available, and greater specialization of health workforce.

Thus, Royal Darwin Hospital (RDH), the largest of the hospitals, has the broadest scope of practice, and includes the most highly technical. However, not all specialist services are available within the NTG Hospital Network, requiring some Territorians to travel interstate to receive the appropriate healthcare. This may either be due to the service being outside the agreed scope of services, or because of workforce shortages. Patients therefore may need to travel either within the Territory or to other jurisdictions to access appropriate specialty services. The magnitude of this movement is borne out by the NT's Patient Travel and Assistance Scheme which in 2004-05, spent approximately \$5M on intra-Territory travel, \$2.7M on interstate travel, and \$19.1M on cross border charges (a total expenditure of \$26.7M).

There is only one private hospital in the NT Darwin Private Hospital (DPH). The potential to expand private hospital services has been previously explored on a number of occasions and to date has been deemed not viable. The subsequently limited range of options for private health care undoubtedly has an impact on the uptake of private health insurance in the NT. Furthermore, as in other jurisdictions, many specialists employed in the public health system in the Northern Territory have the right to practice privately. However, because of the limited care/provider options, often the same specialist can be accessed by a patient irrespective of whether they are classified a public or private patient. As a result patients see little value in accessing the private health system or indeed in having private health insurance cover. This trend appears to be increasing - over the past year there has been a significant decline in DPH bed numbers. This is placing an additional burden on the public health system, and its workforce. It also inhibits the development of a robust private health sector.

Increasing the total quantum of specialists may alleviate this situation; however this should come through increases in the private sector; it may be facilitated by changes to the Australian Government Medicare funding.

There are only a limited number of private providers of allied health and other ancillary health services such as physiotherapy and optometry. This places significant stress on the public system both in terms of service delivery, health workforce training and career development. Furthermore, these private allied health professionals are predominantly based in urban areas, limiting the option for access to these services for those who live outside these areas.

# Primary Health Care and Public Health

Primary health care services in both urban and remote areas are provided by private General Practitioners (GPs), NTG operated health centres, Aboriginal community controlled health services (part funded by both the NTG and the Australian Government through the Primary Health Care Access Program (PHCAP)) and non-government organizations. In both instances, managing demand and community expectations can be challenging, particularly with resource constraints – be they financial, or infrastructure or workforce related. The specific challenges of remote area health services are expanded on below.

Urban NTG community health centres provide a range of primary health care services, often with a particular focus on child health, but may include services such as home visiting and wound care that in other jurisdictions would be undertaken by other providers. The scope and nature of urban community health services is currently being reviewed. Urban community health services are also provided by the Aboriginal community controlled health sector e.g. Danila Dilba in Darwin, Wurli Wurlijang in Katherine and Congress in Alice Springs, and include a range of men's, women's and child health primary health care services.

Private General practices are located in each of the regional centres (although Tennant Creek currently has no GP). The population distribution of GPs matches that of the general population with greater numbers in the larger urban centres. There are a few GPs based in remote Aboriginal communities, however, most GP type work has been undertaken by the Department's District Medical Officers (DMOs). Located throughout the Territory, DMOs provide a range of primary and secondary care services through locally based or "out reach" clinics. A Section 19(2) agreement with the Commonwealth Department of Health and Ageing enables some bulk billing to be undertaken by DMOs. The critical issue of Medicare resourcing in the NT is elaborated below.

The Department is increasingly using an evidence basis for its service delivery choices, including the need often for significant long- term investment to yield appropriate health outcomes. The long-term nature of health outcomes often disguises the need for an "upstream" primary health care and public health workforce. This is particularly the case for health professionals providing chronic disease prevention and management programs, which may have profound effects on other health service requirements. For example, it is postulated that the current slowing of the rate of renal dialysis commencements in the NT is due to a more effective chronic disease management program. Public health services such as environmental health, health promotion and disease control are also predominantly provided by the NTG with some services provided by Aboriginal community controlled health services and some non-government organisations.

# The specific challenge of remote area health services

The burden of disease and injury and its predominantly remote context creates unique challenges and difficulties for health service delivery in the Northern Territory. Remote communities and Aboriginal communities in the NT are particularly geographically isolated and accessibility can be very problematical, particularly during the wet season, when many remote Top End communities are only accessible by air as the unsealed roads are covered in water. This hinders both emergency and planned evacuations, and the ability for non-resident health service providers to deliver care to community members. The very process of accessing many remote communities and the complexity of health demand and service provision that is culturally appropriate, detracts significantly from the productivity of the remote health workforce.

The provision of health services to the remote and Aboriginal communities therefore comes at a high cost and is fraught with logistical difficulties. Workforce shortages have a direct impact on service delivery, with limited options for "back up" services should there be shortages. It requires a focus on primary health care and a skilled workforce able to work in isolated areas; although the practicalities of these logistics mean that predominantly it is only direct primary health care providers (Aboriginal Health Workers (AHWs), nurses, and in some instances GPs) who live in the remote community where they provide the service. Even so, there are still significant challenges for service provided "in community", many of them due to workforce issues (e.g. high turnover, workload, lifestyle, accessibility, workplace demands, poor infrastructure, stress and community issues). There is therefore consequentially a reliance on providing care in regional centres with correspondingly high costs, or on a visiting service (which may be relatively infrequent).

These issues are well illustrated in the following table, reproduced from the work of Carson and Baillie (2004), which illustrates the number of NT communities and related population that lack access to a range of primary health care professionals, and the number of communities that have no access to a range of specialist medical and allied health practitioners<sup>1</sup>.

Table 1: Remoteness and Access to Health Services in the NT

Less than 3 monthly or	No. of communities	Population
no access to community		
by health worker		
AHW – Male	50	12,483
AHW – Female	25	4,863
Registered Nurse	9	1,245
Medical Officer	12	1,473
No access in the community by specialist		
health worker		
Dentist	35	5,155
Obstetrician &	75	17,231
Gynaecologist		
ENT/Respiratory Specialist	67	16,316
Ophthalmologist	37	6,580
Dietician	54	12,420
Physiotherapist	63	14,890
Mental Health Worker	54	9,364
Drug and Alcohol Worker	54	10,673

Remote Aboriginal communities are often culturally different to "mainstream" Australian towns, requiring culturally appropriate health services. While there is a significant body of knowledge around Aboriginal cultural awareness, security and respect and the impact that this has on the effective delivery of services to Aboriginal people living in remote communities, it is recognised that delivering cross-cultural health services in remote communities is one of the particularly challenging issues for the non-Aboriginal health workforce in the NT, and that there is a "two-way" cultural awareness required to facilitate optimal health outcomes. It is also recognised that cultural obligations and expectations may intersect with the practice of remote area Aboriginal health workforce, particularly AHWs.

<sup>1</sup> Analysis is based on the availability of Health Workers to communities with population  $\geq$  50 and located 10km or more to the nearest hospital

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The NT welcomes the work that is being undertaken nationally on guidelines for educational institutions to better prepare health professionals for working in such an environment, and remains a keen advocate for appropriate health professional training on the clinical, social, emotional and spiritual aspects of Aboriginal health.

The Department's Remote Health Branch and Aboriginal Community Controlled Health Services such as Katherine West Health Board provide a range of primary health care services to remote communities. Remote area health services workforce planning and support needs to take into consideration both sectors, given the relatively small pool of staff, their mobility (including between the sectors) and economies of scale for workforce development initiatives.

The importance of Australian Government practical support for these cross sectoral workforce activities is critical, and may need to be made more explicit than articulated in existing funding models and agreements (e.g. PHCAP).

# NT Government health policy directions

The two current Government policy documents that drive the Department's planning and service delivery are:

Building Healthier Communities: A Framework for Health and Community Services 2004–2009 (2004); and

Aboriginal Health and Families, a Five Year Framework for Action (2005).

The Building Healthier Communities framework provides the NT Government's vision for health and community services and a description of its priorities for ensuring that all Territorians enjoy long and healthy lives, and have a health and community services system that is responsive, accountable and effective. It focuses on six key areas and four enablers to build a better system; one of these being "valuing and supporting our workforce". Four key areas for action are identified under this theme:

- A skilled workforce
- Recruitment and retention
- Supporting the workforce, and
- Aboriginal staff.

In essence, Government has articulated its recognition that the health workforce is a critical ingredient in the capacity to deliver good health outcomes for Territorians, and that it supports the development and effective management of a health and community services workforce that can do this. Additional workforce relevant actions are described in a number of the service specific key areas of focus (e.g. employing more child protection and family support workers)

The NT Government's Aboriginal Health and Families-Framework for Action is based on a model of care involving a multidisciplinary team approach to delivering a balanced set of core and targeted primary health care services which are designed to be available in all Territory health clinics. It is based on a "life course" approach to the planning and delivery of health and family well-being services and necessarily envisages making health and community services more closely available to the Aboriginal communities. For this Framework of Action to be successful, it must link to a workforce plan that is able to deliver the core targeted primary health care and community services.

It is recognised that the effective implementation of government policies such as those detailed above, is dependent on being able to put in place an appropriately trained and skilled workforce that is able to deliver the health services planned, in the locations that

those services are required. There will be a need to develop new models of care supported by a health workforce that is innovative (e.g. the implementation of new career paths in allied health and the nurse practitioner, the use of tele-medicine are urgent priorities) and trained to deliver culturally appropriate services. A more detailed description and analysis of this issue is provided for later in the Submission.

# **Health Services Funding**

As indicated above, funding and resourcing of health services in the NT is predominantly in the government domain, with a significant proportion of this from the NTG. Public hospital services are funded, as elsewhere in Australia, through the Australian Health Care Agreements, with both Australian and NT Government contributions. Similarly, the Public Health Funding Agreement guides the joint funding of some Public Health services such as cancer screening and some HIV/STD prevention activities.

However, it is the funding of primary health care, particularly through Medicare and the Pharmaceutical Benefits Scheme (PBS), and its sequelae in terms of service provision and access to health care, where there are significant differences between the NT and the rest of Australia. Only 50% of the total expected Medicare payments (on the basis of population numbers) were accessed in the years 1993/94-2003/4, and only 30% of the total expected PBS payments. It is not surprising then, that there were just over half the number of Medicare services used by Territorians, compared with the Australian average (six, compared to eleven), and that in 2003/04 the per capita average for Medicare payments in the NT was \$222, compared to the Australian average of \$427.

If the NT had the same age-adjusted usage patterns as the rest of Australia 2003/4, this Medicare shortfall equates to \$23.1 million. This gap has increased over the last ten years, and there are significant resource implications if this trend continues. Furthermore, given the degree of morbidity in the NT, it is likely that the true Medicare usage rate should be higher than the Australian average, and therefore this shortfall of \$23.1 million is an underestimation. These shortfalls are clearly the result of the dispersed population in the NT (including the distribution of the health workforce) but they are also a direct result of a lack of a health workforce that is able to access both MBS and PBS payments. Currently this specifically relates to medical practitioners, and as discussed elsewhere, particularly GPs; however, it also begs the question of non-medical practitioners being eligible to deliver Medicare funded services.

Although there are a range of Australian Government programs providing funds for primary health care services, such as PHCAP, these do not necessarily fund the same range of services as provided by GPs through Medicare, thus leaving a gap in both the quantum and type of service availability for Territorians, and most particularly those living in remote areas. The NT will continue to be challenged by its size and complex health needs for the next 10-20 years and cannot be fairly or properly assessed on the basis of normal efficiency measures, such as per capita measures.

Clearly, the current funding models are not facilitating Territorians' access to health care providers. A national review of the current health funding models, particularly the Medicare and Pharmaceutical Benefits Schemes would be useful to identify opportunities and options to better promote engagement of the health workforce in regional and remote areas. The Territory is encouraged by recent preliminary bilateral discussions with the Australian Government regarding this issue.

# 2. Current Northern Territory Health Workforce Issues

A key factor in the delivery of effective and efficient health services in the NT is a robust health workforce. The challenges faced by the workforce are in many aspects unique to the Northern Territory, given its size, burden of disease, population dynamics and economic capacity (e.g. working in Aboriginal communities with limited support or structures). The NT health workforce is comparatively small and concentrated in the major urban centres; although even in these centres, the health workforce is not comprehensive in terms of the range of practitioners available nationally. Conversely, there are opportunities for generalist (as opposed to specialist) health professionals to have a diversity of practice that is the envy of many of their colleagues in other jurisdictions.

The "homegrown" component of the health workforce is comparatively small, and as such, a significant proportion must be recruited from elsewhere. While "missionaries, mercenaries, messiahs and mad" is a phrase sometimes flippantly used to describe the people who come to work in the health sector in the NT, in reality the NT recruits both newly qualified and highly experienced individuals to its health workforce, many of whom are very eager to make a significant contribution to improving health, and in particular Aboriginal health, in the NT.

Furthermore, the NT is recognized both nationally and internationally, as having skilled personnel who work in challenging field conditions to establish and provide comprehensive primary health care and public health services, often within a cross-cultural context. The NT workforce has particular expertise in several areas especially relevant to Asia including:

- mosquito borne vector control (dengue, malaria)
- maternal and child health services;
- infectious and communicable diseases;
- nutrition; and
- environmental health

Many NT health professionals also have public health or community development/ capacity building experience, and Asian language skills. This skilled public health and primary health care workforce has the capacity to provide highly relevant leadership and technical advice in Asia. This expertise is highly sought after by aid agencies, resulting in competition for talented health professionals, both for ongoing programs, and as evidenced over recent years, for the provision of post disaster emergency and public health services.

Opportunities for the Northern Territory to capitalize on both the recognition of its capacity to provide opportunities for the health workforce to develop these skills (e.g. as a recruitment tool), and on the use of these personnel by both the Australian Government and non-government aid agencies are being explored. The NT Government welcomes further dialogue on this issue.

As noted above, the need for an effective health workforce in the Northern Territory is recognised by the NTG. Previous reviews of the Department, most recently that undertaken by Banscott Health Consulting in 2002-03 have identified the fragility of the Department's workforce, both in terms of strategic workforce planning direction and capability, and effective human resource management and development. In response to these findings, the Department has implemented a number of initiatives, many of which are described in *Building Healthier Communities*, to build the capacity of its health workforce. These are expanded upon below.

# **Documenting, Analysing and Planning the Health Workforce**

The Department currently has only limited workforce analysis and planning capacity, but recognises for the improvement of its health outcomes, service delivery and workforce, it needs to enhance this. The NT is currently developing and will subsequently implement a workforce planning strategy linked to health service delivery models and needs, in particular to address:

- workforce re-design and reform;
- demand and supply;
- · workforce shortages and skills gaps;
- distribution of the workforce;
- deficient data collection and analysis.

While there has been work undertaken to try to quantify service requirements and subsequent workforce requirements for specific regions in the NT, these have not been based on an agreed nationally benchmarked methodology. The Department has not undertaken jurisdiction wide workforce/service modelling, in terms of required numbers and profile of the health workforce needed to meet the demand for services. The numbers and type of health workers currently are pre-dominantly based on historical staffing and models of care.

The NT is not alone in acknowledging that has lacked capacity in this area, and anticipates that the work of the Australian Health Workforce Officials Committee (AHWOC) and the outcomes of this inquiry will provide direction for national workforce planning. One of the challenges for the NT will be to develop a strong understanding of the non-government health sector in terms of workforce planning and to create partnerships to ensure that such planning is co-ordinated and compliments rather than duplicated. Current health workforce planning activity in Australia is fragmented across the States and Territories, across professional disciplines, and between the public and private sectors in health. Much of the workforce planning to date has been focused on the medical and nursing workforce.

Other submissions to this inquiry have identified the benefits of a more co-ordinated national, and broad based approach to both workforce planning and workforce management. This is strongly supported by the NT. Furthermore, the need for innovation in terms or role redesign, and new roles should be able to be incorporated into this planning and management.

# Workforce profile

A picture of the Northern Territory health workforce can be compiled from a number of sources – as with other jurisdictions, there is no one data set which provides comprehensive information on the status of the health workforce. Information sources for the NT health workforce includes the Australian Bureau of Statistics, the Australian Institute of Health and Welfare, the NT Health Professions Licensing Authority and the Department. Recent data from the two latter sources are reproduced in the tables below. It is important to note that the number of registered health professionals may vary significantly with the number of those actually practicing - this is particularly the case for medical practitioners.

The Department employs a significant proportion of the health workforce in the NT, currently including just over 4,400 health professionals, executive, administrative and support staff. From the tables below, it can be seen that the Department employs 40% of the registered AHWs in the NT, 33% of the nurses (enrolled and registered), and 23% of medical practitioners.

Aboriginal Community Controlled Health Services, private and private not-for-profit including non-government organisations (NGOs) also employ both health professionals and relevant administrative and support personnel. At present there is no method of collating the number of health staff employed by the private and NGO sectors.

Table 2: Northern Territory Registered health practitioners (as at June 2005):

Profession	Number
Aboriginal Health Workers	295
Chiropractors	39
Dental Hygienists	11
Dental Prosthetist	1
Dentists	96
Dental Specialists	18
Dental Therapists	20
Enrolled Nurses	518
Medical Practitioners	1544
Registered Nurses	4262
Occupational Therapists	90
Optometrists	148
Osteopaths	7
Pharmacists	606
Physiotherapists	141
Psychologists	176
Radiographers	86

Table 3: Department of Health and Community Services Employees (June 2005)

Profession Grouping	Number
Aboriginal Health Workers	117
Nursing and Midwifery (including Enrolled Nurses)	1578
Medical Officers	353
Allied Health Professionals <sup>2</sup>	261
Other Health Professionals <sup>3</sup>	195
Executive	77
Administration <sup>4</sup>	1106
Physical	534
Technical	204
Other	17
Total	
	4442

The NT health workforce has grown in line with service expansion. The AIHW has also reported significant growth in the number of both the employed nursing and medical workforces in the NT between 1997 and 2003 (e.g. an increase of 33% for clinical nurses, and an increase of 58% for medical practitioners). Although this is definitely a real growth effect, these figures need to be viewed cautiously as they do not necessarily reflect the more valid full time equivalents (FTE) measure (particularly an issue for medical

<sup>&</sup>lt;sup>2</sup> Allied Health Professionals includes: Audiology, Dental Therapists, Dietetics, Environmental Health Officer, Nutritionist, Occupational Therapy, Pathology, Pharmacist, Physiotherapist, Prosthetics /Orthotics, Psychologist, Radiographer, Social Worker and Speech Pathologist.

<sup>&</sup>lt;sup>3</sup> Other Health Professionals includes: Epidemiologists, FACS Advanced Practitioner, FACS Community Welfare Worker, Mental Health Worker, Poisons Inspector, Policy/Project Officer and Sexual Assault Worker.

<sup>&</sup>lt;sup>4</sup> Administration includes a number of employees who deliver services and includes: FACS Child Protection Officers and Hospital Ward Clerks

practitioners). The Department has also increased its workforce by approximately 15% (550 FTE) between June 2003 and June 2005. Almost half (48%) of this growth was attributable to its Acute Care Division and 25% to Health Services (responsible for primary health care and public health). Similarly, when examined by classification, nursing accounted for almost half of this growth (48%).

# Skills shortages, turnover and mobility

The NT health workforce, with the Department as an exemplar, has a number of recognised skills shortages. There are a number of professions within the NT health workforce classified by DEWR as occupations in skills shortage/recruitment difficulty: enrolled and registered nurses, registered midwives, medical specialists, physiotherapists and dental assistants. These are symptomatic of broader national shortages, but considered to be exacerbated in the NT due to the health service demands of the client population as described above, limited availability of training and education opportunities, perceived professional isolation and the increasing mobility of the health workforce as a whole. The NT is particularly vulnerable to national and international shortages of health services staff due to its small size and its relatively limited capacity to "grow our own". This means that there is a heavy reliance on other States to recruit staff in the short and long-term.

The increasing pressure in interstate health services to meet the health workforce demands of their own State is reducing the access of the NT to these labour markets. Competition from interstate may further exacerbate the Territory's ability to access an adequate workforce and services and consequently provide and maintain health services. It will be vital for the NT to build on existing relationships and arrangements to ensure Territorians continue to attract skilled staff, which is not readily available in the NT. A strategic focus on building and maintaining effective workforce and training provider relationships will be a critical factor.

There is a need at a national level for initiatives to be implemented and funding to be made available, so that the Northern Territory will continue to have the capacity to access or and attract an appropriately trained and qualified workforce. It is particularly important that this workforce will be adequately trained and skilled so as to be able to provide planned health services in the Northern Territory, particularly to remote Aboriginal communities.

However, in the NT, it appears that retention of staff (or non-retention) is a significant driver for high recruitment needs, providing an additional overlay to shortages of the supply of specific professions. Similar to other jurisdictions, the key issues identified in the NT to facilitate the retention of health professionals within their chosen profession and their workplace include:

- an adequate career pathway. This issue is most obvious in non medical and non nursing health professions;
- access to training, professional development and support both in the workplace and externally;
- management of health professions;
- ready access to discipline specific support and expertise;
- flexibility of work arrangements;
- (in)ability to achieve health related outcomes for consumers.

The stability and turnover data provided in the tables below indicate that there appears to be two pools of staff in the workforce – one that is relatively stable, the other that turns over frequently. The nursing and medical workforce data below are good examples of this.

Table 4: DHCS Staff Stability<sup>5</sup> (%) June 2004-June 2005

NURSING	ADMIN	PHYSICAL	PROFESSIONAL	MEDICAL	TECHNICAL	AHW	DENTIST	DHCS Stability Total
71	79	76	76	52	80	76	67	73

Table 5: DHCS Staff Turnover<sup>6</sup> (%) June 2004-June 2005

NURSING	ADMIN	PHYSICAL	PROFESSIONAL	MEDICAL	TECHNICAL	AHW	DENTIST	DHCS Total
45	25	34	32	71	23	20	34	38

Indeed, while approximately 70% of the Department's nursing workforce is reasonably stable, the remaining 30% is extremely mobile with significant numbers on short-term contracts of 1 to

3 months. This particularly the case with junior (e.g. N2) nurses with 68% turnover, and nurses based in remote communities (58%). Similarly, short term contract employment for a subset of the medical workforce have driven up the turnover rate for this group.

It is important to note that some degree of turnover enables "fresh blood" into the organisation, bringing new ideas, different experiences and challenges to the traditional modus operandi. However this level of "churn" places significant stress and demands on long-term staff (to support and train new staff, who are often not work ready), along with high costs related to recruitment and the employment of staff through Agencies (third parties). Furthermore, productivity, quality and job satisfaction are all compromised with these high levels of turnover.

The NT Office of the Commissioner for Public Employment (OCPE) has recently undertaken an analysis of the costs related to employee separation and the cost of recruitment to the NT, and has estimated the cost between 50-100% of the annual salary for each employee. Similarly, research undertaken by the Council for Equal Opportunity in Employment (CEOE), revealed that labour turnover costs can range from between 50 -130 % of an incumbent's salary. These costs are affected by the level of skill and experience required to perform a job, and rise exponentially the greater the employee's influence on an organisation's decisions.

The reasons for this rapid turnover are varied. The Department recognises that a more systemic approach to analysing its underpinning causes is required and is currently exploring a number of options to better do so, as well as better manage the turnover. The Department is keen to hear of successful models of doing so. There are clearly some common national reasons for this turnover – for example, the mismatch between expectations and reality of a career in health; however in the NT, these are often exacerbated by the environmental conditions (in the broadest sense) as described above, in which health personnel work.

# **Workforce Distribution**

There is a direct correlation between population distribution and undersupply of health workers – it increase as one moves out from city centres through the outer metropolitan areas, major regional centres, remote rural communities and Aboriginal communities. Furthermore, the current classifications of remoteness do not necessarily classify the population centres, and particularly Darwin appropriately. Darwin, whilst a capital city is

<sup>5</sup> **stability reflects** the proportion of staff employed within the department at year beginning and who were still employed at year end. The calculation does not measure any people who started or left in the intervening period, which are captured in the actual turnover concept described below.

<sup>&</sup>lt;sup>6</sup> calculated by dividing the total separations for the year by the average of the total number of staff at the beginning and the end of year (based on WA Health and Tasmanian DHHS methodology)

more appropriately classified as a regional centre and does not have the population base or resources to attract and sustain many areas of specialty.

The mal-distribution of the workforce raises significant equity issues and impacts on productivity, quality and job satisfaction:

- community health status is typically poor in remote areas;
- specialist health professions are more likely to work in major cities;
- accessing specialised services outside major population centres involves travel (intra and inter state) or reliance on visiting clinicians;
- specific programs to promote access to specialised services in remote areas may be warranted on equity grounds; and
- there is a significant shortage, in regional areas, of clinicians with broader competencies, for example general surgeons and physicians, general practitioners who have advanced competencies in areas such as obstetrics, anaesthesia and general surgery

# **Occupation Specific Issues**

This section will highlight some of the particular issues associated with individual occupations/professions in the NT.

# Aboriginal Health Workers

The Northern Territory Aboriginal Health Worker (AHW) is unique in Australia. NT AHWs have been registrable since 1985. The role is very specific and covers the delivery of primary health care and includes treatment, health promotion and disease prevention activities. While currently the role is predominantly in remote areas, some AHWs are employed in urban community and hospital settings. Development of the role in urban community and hospital setting is an area of need and future potential growth The AHW is not just a cultural broker but a key health service provider and vital member of the primary health care team, ensuring service effectiveness and appropriateness. The role is an excellent example of innovation in response to a gap in health care provision, with this health professional developed in response to the need for clinical practitioners in remote areas in the 1960s.

As can be seen from the tables above, the Department's AHW workforce is stable and compares favourably with other health service delivery personnel such as doctors and nurses. However, there are few young AHWs in the Department, with only 9% aged 20-29 years, 70% aged 30-49 years and 21% aged 50 years and over. While the ageing of the health workforce is an NT as well as national concern, specific factors such as changes to the NT AHW career structure, training provider capacity, the process of selection of AHWs and alternative career choices for Aboriginal people may have reduced the number of younger people entering the AHW workforce.

For example, previously communities identified individuals they wanted to be AHWs. This enabled both succession planning from a community perspective, culturally appropriate people identified to work as AHWs, and AHW presence in communities. However in recent years, training providers have not necessarily proactively engaged with remote communities to maximise the breadth of their intake of students. The Department is working to better engage the relevant training providers to ensure that students are both selected and trained to meet the needs of health services.

While AHWs in many instances are best able to understand the complex dynamics determining the health of an individual in a community, AHWs in remote communities are

exposed to issues not generally faced by other health practitioners such as family demands, community and societal pressures and the impact of overcrowded housing (e.g. average 17 people per home in remote communities). The NT Government is currently exploring the provision of housing for local recruits in remote areas -housing has been provided for some non-local remote staff such as nurses and doctors for many years.

The current re-consideration of the management and operation of the Australian Government's Indigenous Affairs responsibilities may provide an opportunity for housing of local health professionals to be considered bilaterally.

Currently AHWs in the NT require the Certificate III in Aboriginal Health Work (Clinical) for Registration. In the current review of AHW competencies, national benchmarking has indicated that its complexity is equivalent to the Certificate IV, and in the next iteration of these competencies is likely to be recalibrated as such. Many AHWS undertake both formal and informal continuing education, either to enhance their current role or for career development. In the NT there are a number of options for career development within the NT AHW career structure (which is also used by the NT Aboriginal Community Controlled Health sector) such as clinical work, a specialist stream, education and training and management. More Aboriginal Enrolled Nurses (ENs) become AHWs than vice versa as AHWs have better conditions than the EN Award in the NT. Few AHWs undertake RN training. AHWs do not in the main view this as a career pathway.

In other jurisdictions, a broader range of roles is covered by the term Aboriginal health worker. However in the NT, there are specific career pathways for community and urban based Aboriginal people in other areas of health such as mental health, nutrition and maternal and child health. These are linked to relevant competencies and qualifications from the Vocational Education and Training (VET) sector, predominantly the Health Training Package. The NT has a relatively high uptake of VET, often facilitated by the work based nature of its delivery, and the ability to recognise current competence/pre-existing skills and knowledge.

# Medical Workforce

#### **Nurses and Midwives**

The national trend of shortages in nursing and midwifery, particularly in acute care are reflected in the NT. The current policy to address the recruitment and retention of nurses and midwives is focussed on "growing our own" through a closer relationship with education providers, especially Charles Darwin University (CDU), ensuring their graduates are equipped with the appropriate knowledge and skills for working in NT as well as the development and implementation of the Department's Graduate Nurse program (in 2004-05 90 new graduates participated in this program). There is anecdotal evidence that in recent years there appears to have been increasing success in supporting local nurse training. A more rigorous assessment of the impact needs to be undertaken. Locally trained junior nurses appear to have a lower turnover rate than their interstate trained counterparts, and as long term residents have a greater awareness of the NT context of their nursing practice.

Indeed, for many nurses coming to the NT, much learning and support is required in relation to the client/patient population, the nature of the work, work settings and how services are provided in multidisciplinary teams. The range of skills acquired, expanded scope of practice, the complexity and diversity of care provided are major reasons why nurses and midwives are drawn to and stay in the Territory. The converse to this and a contributing factor to the high turnover or 'churn' of nursing staff, particularly in remote areas, is the lack of life experience such as being able to function effectively in very remote, often dysfunctional communities.

Like AHWs, the NT nursing workforce is aging with average age of employed nurses 43.6 years (up from 39.3 years in 1997). 73% of current the Department's nurses (FTE) work in acute care (hospitals), and 26% in primary health care (urban and remote areas). Nurses are also employed throughout the Aboriginal Community Controlled health sector and some NGOs. Although the AIHW reports that in 2003 there were more nurses in non-metropolitan areas of the NT than in metropolitan areas, this reflects the population structure of the NT (only Darwin has a population base of greater than 100,000).

Remote area nurses are an integral component of the NT's remote health workforce. These nurses work as advanced practitioners, within, and frequently leading, the broader health team including AHWs, medical officers and other visiting allied health professionals. In the NT context the Remote Area Nurses are responsible for delivery and coordination of health care for a remote Indigenous population. The breadth of clinical, population health and preventive care, cross cultural work environment, geographic and professional isolation add to the complexity of the role, which can be viewed as a pre-curser to that of a remote area nurse practitioner.

## **Medical Practitioners**

The medical workforce is broadly segmented as in other jurisdictions between the acute and primary health care/public health sectors. In recent years, the capacity to have locally trained medical practitioners has increased with the development of the NT clinical School and expansion of the breadth of post-graduate clinical training opportunities in the NT. The NT Clinical School, which is supported by the NT Government in partnership with Flinders University, provides 10 NT medical training places in the third and fourth years of this Graduate Entry Medical Program. The Clinical school, in conjunction with RDH and Alice Springs Hospital's teaching hospital status, facilitates both the employment and retention of clinicians, particularly medical specialists. The establishment of the NT Clinical School has further bolstered the specialist medical workforce capacity, both in terms of fully trained specialists, and increasing the number of junior doctors who already have NT experience and expertise.

# General Practitioners

The number and distribution of General Practitioners in the NT influences both service availability and the flow of Medicare funding into the NT. Recent data suggest that while there has been significant growth in GP numbers over the last few years, and that "on paper "it may appear that there are "adequate" numbers of GPs when each practitioner is counted as an individual. However this is not the case when service delivery is actually assessed (in terms of FTE), as many NT GPs work part-time. The feminisation of the GP workforce is well documented and the NT experiences the same impact, as is the national experience. When this correction is included in the analysis of GP availability, the NT as a whole is under-resourced in terms of GPs, particularly in remote communities.

Similarly to other parts of the health workforce, GPs have a mix of stable and rapidly turning over workforce, with some GPs staying for on very short- term short periods (3-6 months).

DHCS is keen to encourage Australian Government initiatives such as the Remote and Rural General Practice Program (RRGPP) that facilitate both the recruitment and retention of GPs to remote areas, in the NT.

# Medical Specialists

Medial Specialists in the Territory are generally hospital based, but also provide a range of specialist out reach services. Although Alice Springs and the RDH are teaching hospitals, the NT does not have a full range of medical specialist services, although there is ongoing public demand. However, having the full range of medical specialist services in the NT would not be viable and in many cases inappropriate (in safety, quality and cost outcomes). The current situation is that there is frequently only one or two doctors trained in a particular specialty based in the NT.

The Territory relies significantly on "general" physicians and paediatricians for the provision of specialist medical services. This needs to be emphasised with medical Colleges, in relation to individual practitioners meeting standards and hospitals meeting College accreditation for training posts. Innovative training opportunities need to be developed in collaboration with Colleges that enable the specialists to train and work with the NT population.

There are well established linkages with particular specialty areas not available in the NT, for example Royal Adelaide Hospital with either patient transfers to these areas or visiting services to various centres in the NT. These workforce relationships will be critical for the NT and will need to be a strategic priority and focus for the next 10 years. Ongoing relationships will need to be maintained whilst new options will need to be explored and developed.

The NT is supportive of recent national work exploring models of specialist care for remote and regional populations e.g. a hub and spoke or network model of health care, where regional specialists provide clinical services and support to primary health care providers in a catchment area, who, in turn receive clinical support and training from a teaching hospital or individual subspecialists.

The NT's Medical Specialist Outreach service operates in this manner; with the RDH specialist having dual roles in terms of both being the regional and the teaching hospital specialists, as well as some undertaking remote area visits. The NT is keen for the Australian Government to continue to fund this program, and indeed an increase is justified by morbidity and service requirements. Furthermore, the NT is keen for the potential for the Australian Government to fund a similar scheme for non-medical specialists e.g. allied health.

## Overseas trained doctors

The Northern Territory employs a significant number of overseas trained doctors – 134 of the 362 medical officers employed by the Department as at 1 July 2005 (37%) were overseas trained doctors on conditional registration. Currently it is not possible to benchmark these figures with those of other jurisdictions. Such a high proportion of the health workforce, requiring supervision and ongoing training and development places a significant burden on an already overworked health workforce. Whilst the Northern Territory has adopted a robust process for assessment, registration and supervision of overseas trained doctors, this does not come without cost. Recent experience in Queensland demonstrates the risks that can arise if the process of recruiting overseas trained doctors is not carefully and properly regulated and supervised.

The Northern Territory's dependence on recruiting from interstate and overseas, its lack of educational facilities and limited capacity to 'grow its own' health workforce means it is particularly vulnerable if its capacity to recruit overseas trained doctors diminishes either through competition or other factors.

## Allied Health Professionals

The Allied Health workforce in the Northern Territory across nearly all disciplines is stretched to capacity across all settings. There is a critical undersupply of many disciplines impacting on the capacity of both therapeutic and preventive health services, and particularly affecting the access to services by all communities. There is generally a lack of benchmarks to provide an objective measure for appropriate allied health workforce numbers, although some preliminary work has been undertaken in the NT to calculate remote area allied health requirements. The implementation of any such benchmarks is dependent on service models, and both available funding and personnel.

The significant allied health vacancies<sup>7</sup> in the Department are documented in the table below.

Table 6: Significant DHCS Allied Health vacancies

Discipline	Vacancy rate (%)
Pharmacy	52
Psychology	43
Physiotherapy	37
Social work	33
Environmental health	28.5
Nutrition	27
Occupational therapy	26
Speech pathology	20
Dental therapy	20
Pathology	17
Audiology	16.6
Dietetics	12.5

To meet this challenge, there is already a degree of cross-skilling in some of the remote area therapy services, such as between occupational therapists and physiotherapists, who alternate visits to remote communities. This strongly suggests there is a role for more generalist allied health practitioners, who have a broader scope of practice than the existing individual Allied Health disciplines. While this would not preclude the ongoing need for the specialist Allied Health disciplines, the latter would be better able to focus on the more complex discipline-specific client needs (for example in the tertiary health sector), while the generalist Allied Health practitioner could provide a more holistic, primary level of care. The NT is keen to explore opportunities to progress the development of such a role, and its training requirements.

CDU is also being responsive to a range of requests in relation to the provision of allied health undergraduate and postgraduate programs. In 2006, a new four year degree will commence in Pharmacy, and Social Work studies will recommence in 2007. There are already opportunities for students to commence their allied health tertiary education in the NT, and complete it in universities with specialist programs. This has increased opportunities for local students to enter these professions. This is further discussed later in this paper.

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<sup>&</sup>lt;sup>7</sup> Eastaway, J. and Campbell, N. (2004) Position Paper on Allied Health Clinical Education and Training in the Northern Territory.

The allied health sector is also eager to increase the participation of VET sector trained people in its workforce – e.g. allied health assistants. Recently developed qualifications, the potential for apprenticeships, and re-consideration of traditional roles to be offered in these areas have the potential to expand the non-university trained allied health workforce. For example, there is excellent opportunity to introduce Certificate III and IV for Allied Health Assistant courses in the NT to assist allied health professionals to provide a continuum of care, especially in remote communities. Aboriginal co-workers (allied health therapy assistants) are essential in the implementation of community based rehabilitation. These can provide opportunities for new career pathways for Aboriginal people and articulation into graduate allied health courses.

#### Oral Health Workforce

The oral health workforce in the NT is insufficient to meet both the preventive and therapeutic oral health needs of the population. This includes dentists, dental therapists and dental hygienists. There is an undersupply of dentists across the NT, particularly in the public sector. On a population basis, the number of NT dentists is less than the national average (28.6 versus 49.2) although the morbidity profile creates greater demand for these services relative to population size. The Department currently employs 17 dental therapists (14.9 FTEs) and 1 dental hygienist (historically dental hygienist work predominantly in the private sector). Furthermore, the population segment with the highest needs, is that which logistically provides the greatest challenge- i.e. those living in remote areas.

The supply of oral health services especially to remote communities is extremely expensive related to the technical nature of the work and associated overheads, the establishment of mobile dental services (2 trucks and one caravan), accommodation and travel. Almost 100 remote communities and outstations are visited each year. The number of visits changes from community to community – it can be 1 or 2 days a month or six weeks, to a week every six months or a year. Because of the nature of the work, and the resources available, it is predominantly dentists who undertake this remote work. The NT believes that there is scope in the future for more broadly trained dental therapists/ hygienists to undertake a primary oral health role, particularly in the remote areas of the NT.

Up until recently the potential for greater non-dentist, oral health workforce utilisation has been constrained by registered dentist work scope. Dental therapists in the NT are now undertaking more advanced work on adult patients. The *Health Practitioners Act* (2004) extended the scope of practice of dental therapists from primary school children and younger children to all children younger than 18 years. However, the majority of NT dental therapists do not have the qualifications or recency of practice credentials that would allow them to achieve registration to practice on the older aged children. This issue poses a huge challenge in terms of upskilling the existing workforce to meet the national standards, and subsequently the capability to better meet the oral health demands. Furthermore, this amplifies the need for adequate numbers of training places for oral health practitioners, as the expected increase in workload demands cannot be met with a static workforce (in terms of numbers) that has an ageing profile.

Although the number of dentists in Darwin had increased by 15% from 1994 to 2000, the number in the rest of the Territory decreased by 27%. Indeed there are very few private sector dentists outside major urban centres. The gender and age mix of dentists is changing with more female dentists, and an ageing profile. This is leading to a pressure for more part-time employment. However, the dentist workforce appears to be very mobile.

There are very few Aboriginal staff in the NT dental workforce at any one time (mainly dental assistants). This reflects the national situation with few Aboriginal dental therapists

or dentists. The NT is keen to explore opportunities to increase the participation rate of Aboriginal people in the oral health workforce.

# Non-Health Skills Workforce

# Non-health practitioners

Workforce capacity is a critical issue for the NT overall, not just from a health perspective. Compounding and exacerbating the supply of health workforce is the relative lack of capacity in the non-health skills workforce required to support professional staff. This includes, in particular information technology (IT), finance and other infrastructure and management skills such as – workforce planning, human resource services and workforce development. The NT will be competing for non health skilled staff in a shrinking general labour market and in the context of an increasingly mobile workforce where retention will be a significant issue.

There is a NT wide shortage of skilled tradespeople, limiting for example infrastructure development, increasing costs of services and decreasing service availability. This is particularly the case for subspecialties such as hospital engineers where there is only one in the NT. While there are engineers and other support personnel who have generalist engineering knowledge and skills, the benefits of this level of expertise is not available to support the maintenance and development of NT hospitals and health centres.

# Non-health skills for health practitioners

There is increasing need for health practitioners to have "non-health core" skills, such as information technology, human and other resource management skills. The Northern Territory recognises that technology is a key component of health service delivery, and as such requires its staff to have appropriate skills to utilise the relevant technology – be it information management systems or tele-health. In many instances these skills have not been part of initial professional training and there is some resistance by some health practitioners to acquire what they perceive as "non-health skills". This needs to be addressed, not just as part of continuing education processes, but also as part of undergraduate education. Furthermore in some remote communities health practitioners may need to manage a range of activities, infrastructure, supply and buildings.

# Aboriginal Health Workforce

The importance of a viable and effective Aboriginal health workforce is well recognised. Other countries such as New Zealand and Canada have been successful in encouraging their Aboriginal population into the health workforce. Australia has not been as successful and the NT's Aboriginal health workforce is not representative of its population profile. Great expectations are also placed on the relatively few successful Aboriginal health practitioners leading to significant professional and personal pressure. This is exacerbated by low absolute numbers of Aboriginal people in the health workforce, and is the case in both urban and remote settings.

Preliminary forays to improve the quantum of the NT's Aboriginal health workforce have been undertaken at an NT and national level with the implementation of the AHMAC Aboriginal and Torres Strait Islander Health Workforce National Strategic Framework and the local Aboriginal workforce development initiatives. However poor secondary education outcomes for Aboriginal students in the NT currently limit the potential for these people to enter the health workforce, and as a consequence there are more Aboriginal people in technical and para-professional areas than in professional areas of health. The nexus

between education, career opportunities and employment is further discussed in the Education section below.

At the end of 2004/05, the Department's Equal Employment Opportunities (EEO) statistics showed that Indigenous employees represent 5% of the Department's workforce. The Department has the largest number of Indigenous cadets within the NT Public Sector, with 14 cadets studying in the areas of Nursing, Pharmacy, Psychology, Social Work, Education and Indigenous Studies. Seven new cadets were recruited for 2004/05. Furthermore, the Department has taken a long- term view with respect to building the NT health workforce, and as such has promoted health career opportunities to students through the Career Expos and Croc Festival and targeted remote community visits.

Initiatives proposed for the future include the continued marketing of Health and Community Services careers to Indigenous people, specifically targeted recruitment programs such as Indigenous Apprenticeships and Cadetships, career development opportunities such as skill development for Aboriginal Health Workers who may be interested in managing a remote health clinic, as well as ongoing contact with education and training providers. Furthermore, models of service delivery that facilitate employment for Aboriginal people in remote communities should be encouraged e.g. community-based rehabilitation.

Australian Government Indigenous education/employment initiatives, such as the cadetships offered through the Department of Employment and Workplace Relations (DEWR), have facilitated both the health career specific education and the link to employment for Indigenous students in the NT. However, it is critical that the all the relevant Australian Government agencies (e.g. Department of Education, Science and Technology, DEWR, Department of Health and Ageing and the Department of Immigration, Multicultural and Indigenous Affairs) remain engaged in the issue of Indigenous education (from school through to Vocational Education and Training and Higher Education) and contribute appropriately to the resourcing of relevant initiatives and programs.

# Regulation

A large range of regulatory issues impact on the health workforce at both a Territory and national level. The health sector is characterised by traditional role delineations, which are reinforced by the professional regulatory frameworks that focus on individual occupations, (for example, through professional boards), and tend not to reflect the team nature of most health care work. Regulatory mechanisms can also either enhance or reduce the capacity to engage in innovative job redesign. Workplace culture underpins this delineation of roles that impedes the development of interdisciplinary education, training and practice and the development of new models of care.

Regulation plays an important role in ensuring health care professionals meet minimum standards to ensure patient safety. However, state and territory based registration is costly (particularly in a small jurisdiction such as the NT), and there is limited consistency nationally. Some registration processes restrict the ease of movement for registered health practitioners between different states and territories, an issue of concern to jurisdictions with a fluid workforce. The NT is participating in the AHMAC processes currently exploring national medical registration

The establishment of a national regulation framework has the advantage of consistent approaches to the regulation and registration of professional groups and would allow for reform and the transferability across States and Territories of the workforce. Furthermore as registration boards influence education and training through course and individual accreditation as well as regulation of clinical supervision requirements, consistency in

registration requirements could facilitate consistency of education requirements. It is important however, that a national regulation framework does not become another form of impediment to the adaptability and flexibility of the health workforce.

# 3. Current Initiatives to Better Align Health Service Needs with Skills Gaps

## **Recruitment and Retention**

The Department has had active recruitment campaigns (local, national and international) for its health workforce, and in particular its nursing and medical workforce. In the main, these are successful in recruiting nurses and doctors to come to the Territory, however, it is the high turnover that effects the stability of the workforce. A long-term recruitment strategy, with both broad, cross discipline elements as well as targeted profession specific elements is under consideration. Recruitment of overseas trained health professionals including skilled migration schemes and utilising conditional registration arrangements need to be thoroughly explored for all professions as part of this strategy. Successful initiatives such as the pathways to professional practice outlined below, and their expansion to other parts of the Departmental workforce, will be included in this strategy.

**Case Study**: The Pathways to Professional Practice Program for Remote Area Nurses (RANs), is an example of an innovative recruitment and retention strategy in the NT. The evaluation undertaken by Spencer Gulf Rural Health School, found that the Program considerably improved RAN recruitment and that there also some evidence of improved retention. Based on the evaluation the Program has now been rolled out across the NT with education units undertaken being accredited through the Centre for Remote Health (Alice Springs) so that RANs who complete the required number of units (usually within a two (2) year period) may be awarded a Graduate Certificate in Remote Practice.

Key strategies in the Pathways to Professional Practice for RANs are:

- support through preceptor programs, clinical supervision and mentoring; and
- continuing education and strategies to address professional isolation.

# Training and Studies Assistance

The Department offers a range of internal programs to facilitate the development of staff knowledge and skills to better meet the specific challenges of delivering health services in the NT. Staff also undertake accredited and non-accredited training provided by other providers such as CDU. There are national concerns that many undergraduate qualifications are not equipping new graduates with sufficient skills to be "work ready"; the NT context adds an additional layer of complexity to the new work environment.

Initiatives undertaken by the Department to train, skill and support the NT health workforce and in particular to improve its capacity to deliver the health services needed include:

- In 2004/05 to a comprehensive Aboriginal Cultural Awareness Program (ACAP) to prepare and support the Department's workforce to deliver health care to the significant Indigenous population in the NT, was delivered across the Territory to 304 participants.
- A range of onsite in-services conducted for Aboriginal Health Workers in clinical practice, linked to National standards
- Increased scope of registration to include accredited course in Diabetes Management and Prevention for Health Workers

The Department in the immediate future will be focusing on:

- Developing and implementing a training program for middle managers designed to enhance management and leadership competencies.
- Implementing an enhanced Performance Management Framework The Work Partnership Plan, a suite of tools designed to promote the achievement of and connection between individual development plans and organisational objectives.
- Developing a Clinical Learning Needs Assessment and Training Framework for implementation across the Territory.

The provision of studies assistance is recognised as an important tool, for not only encouraging entry into health professions or upskilling the NT workforce, but also as a recruitment and retention tool. In 2004/05 159 people were supported under the Department's Study Assistance Program. Approval for study assistance was based on current skill gaps or to support corporate goals under the Building Healthier Communities framework. Thirty one of the Department's remote staff also received OCPE Remote Workforce Development Scholarships. The Australian Government also offers a number of scholarships which are accessed by NT health professionals. The Department is keen to continue to provide staff with professional development programs such as study assistance, or alert them to other funding opportunities to enable skill gaps to be met and to assist with retention of staff.

# **Service Model Changes and Innovative Roles**

# Skill Mix and Models of Care

The development of new roles, models of care and expanded scope of practice within nursing and midwifery are currently being addressed through the NT Nurses Certified Agreement Taskforce. The development of the Nurse Practitioner (NP) is being investigated within the NT and in particular how it may be utilised within remote, urban community and acute hospital settings. It is important to note, that to a certain extent, nurse practitioner role is being undertaken by RANs, particularly in remote communities found with "single nurse" posts.

Case study: Aboriginal Environmental Health Workers are community based health personnel, undertaking key environmental health duties. The NT developed competencies to map the service requirements to specific skills. The NT competency standards have been incorporated into the national Health Training Package under Population Health (as a separate environmental health stream - Cert II, III, IV and Diploma in Indigenous Environmental Health). This is currently going through the National Training Quality Council and will be ready to be taken up and used next year. This will finally allow for portability across jurisdictions in the VET sector. The Batchelor Institute of Indigenous Tertiary Education (BIITE) offers the Cert. II III and IV in health (Environmental Health), and students can do it as block delivery or undertake it as an apprenticeship, with the flexibility to do their training on the job, off the job, or a mixture of both. BITE now also offers a Degree course, which provides pathways for people to become qualified Environmental Health Officers. These apprenticeships in environmental health work enables people to access the National Training Wage, employer incentives and quality on the job training. The NT is the first and only jurisdiction to offer apprenticeships in this important area of work.

# Team based practice

As discussed earlier in this Submission, the NT Government's Aboriginal Health and Families-Framework for Action is based on a model of care involving a multidisciplinary team approach to provide comprehensive primary health care servicing in remote Northern Territory. The core team comprises an Aboriginal Health worker, Nurse and the Doctor

who work in partnership in the delivery of health services by a broad range of predetermined, evidence-based treatment protocols with active emphasis on individual and population based care planning.

The NT is keen to continue and to further refine the delivery of health services and the development of the health workforce around this model of care. It is considered that this model is the most likely to result in improved health outcomes for Aboriginal Territorians living in remote communities and will see, as a long term goal a reduction in the reliance on acute care health services as a primary source of health service delivery.

# Entry level positions

There are limited base entry-level Professional 1 (P1) positions in the Department e.g. in radiography it is reported that recent graduates may be placed at the Professional 2 (P2) level with supervision. Such an inequitable practice, which does not recognise advanced practitioner skills of experienced practitioners, can often give rise to disenchantment.

Good Practice Example – An entry level position was established in the RDH Speech Pathology Department in 2000. This position is available on a 12 month contract basis. The position has been filled since its creation and over 20 applications were received at the end of 2004 for the position commencing in January 2005.

It is essential that entry level positions have sufficient support at all times. Entry level positions need to be created in larger teams where specialist professional support is available, not in sole practitioner positions or in teams where high staff turnover restricts access to experienced practitioners. It needs to be understood that there is a place for novice practitioners and a number of advantages flow from this:

- · cost effectiveness
- trained for the environment in which they are expected to work and particular service needs
- avoids developing over complex or specialised skills
- energetic, committed and able to be developed and skilled to work in remote communities

The NT would welcome funding education-employment interface initiatives by the Australian Government that would support new graduate entry into base level positions, particularly in those professions and/or locations where shortages have been identified, or where it is particularly important to train and skill the workforce to work in the NT context. Cadetships such as those currently offered by DEWR for Indigenous students, is a useful model.

# 4. Building a Better Health Workforce for the Northern Territory

# **Workforce Analysis and Planning**

The Department is currently developing and testing a model to predict future workforce needs, based on burden of disease and injury data. This needs to take account of the entire NT health workforce, public and private. Their needs to be closer engagement with other NT health service providers to review service model information so this can be meaningful to everyone and there can be a sensible and co-ordinated approach to the delivery of health services.

Better quantification of what service growth is going to occur and better management is required, in terms of workforce capacity. There is a definite need to focus on what skills

are required to deliver the health services needed, rather than relying on the traditional classification and models of the health workforce. The Department recognises that the following will contribute to a more stable workforce, and is exploring processes to best implement relevant initiatives:

- adequate career pathways to encourage specialised skill development by clinical advancement schemes for the recognition of advanced practitioners
- access to training
- mechanisms to improve the standard of management of health workforce
- access to discipline specific support and expertise including; peer support, mentoring and induction programs
- flexible work arrangements that reflect the need for life balance in the workforce
- the ability for the workforce to deliver health related outcomes by monitoring and ensuring staff do not carry excessive workloads due to difficulty in recruiting staff or backfilling when staff are on leave

# **Education and Training**

Developing the health workforce through education and training is underpinned by the quantity and quality of the applicant pool. The traditional source of enrolment into vocational training and tertiary education, school leavers, is few in number, dispersed geographically and have an overall academic performance below their interstate counterparts.

The 1999 "Learning Lessons" review of Indigenous Education in the NT reported that only 68% and 62% of primary students achieved the national literacy and numeracy benchmarks at year 3 and year 5: much lower than any other states or territory. Consequently many young people enter high school without the level of literacy and numeracy to cope with secondary schooling. Disengagement with education is reflected in a year 12 retention rate of 65%, well below the national average of 78%. This challenge is the sharpest for Indigenous young people, where it is estimated, more that 20% of the secondary school aged cohort, are not enrolled in secondary school at all.

Focused on engaging young people in the school to work transition, the "VET in Schools" and New Apprenticeships programs have been introduced into urban areas and some remote areas, but participation rates of remote Aboriginal young people are low.

The poor educational outcomes being experienced by Aboriginal people in the NT is reflective of the difficulties faced in achieving significant and meaningful improvement in the participation of Aboriginal people in the health workforce, particularly in terms of meeting the needs for health delivery in remote communities.

The NT Government is committed to addressing the complexities of building a quality education system that will meet the needs of all children and young people, but the change process will take considerable investment and time.

One of the strategies identified by the NT Government to address anticipated workforce shortages is to target the Aboriginal population to fill the gap. As has been noted, this will be a significant challenge given the geographic complexities and the need to improve educational outcomes for the Aboriginal population.

Complementary strategies focus on Aboriginal employment and remote workforce development. The Aboriginal Employment and Career Development Strategy 2002-2006 together with the Remote Workforce Development Strategy 2003-2006 titled "Willing and Able" aim to deliver improved employment outcomes for Aboriginal people and develop an

effective workforce within remote communities. The strategies are necessarily linked, in order to achieve meaningful outcomes.

Improvements to the educational outcomes for the Aboriginal population is a national issue and Australian Government funding should be reviewed to ensure that it supports locally relevant and flexible Aboriginal employment, education and training outcomes.

# Training of Health Professionals

CDU and Batchelor Institute of Indigenous Tertiary Education (BIITE) offer limited undergraduate courses for health professionals in the NT. Undergraduate training in many health professions requires a shift out of the jurisdiction.

The NT Clinical School as a collaborative effort with Flinders University offers medical training and is an excellent model for training in rural areas and could be a model adopted for other health professions. In this training medical students shift between locations and can do a substantial amount of their training within the NT.

Post-graduate training options are more diverse with on-line courses improving access for NT residents. A critical factor in these remaining relevant are the continuation of Australian Government scholarships that support rural health professionals, for example, the rural Australian Medical Undergraduate Scholarships, Australian Rural and Remote Nurse Scholarships Program: Undergraduate and Re-entry and Up skilling Schemes and the Australian Rural and Remote Health Professional Scholarship Scheme for non medical non nursing health professionals.

However the disconnection between the health and educational sectors, in particular the ability of the health sector to influence the outcomes in the educational sector remains a critical issue for developing the quantity and capacity of the local health workforce.

The role of universities generally throughout Australia, professional Colleges and Registration Boards are all significant aspects of the structural disconnection and are areas where the NT by itself can have little influence.

The NT will continue to need to recruit health staff from interstate and as a consequence will continue to experience the impact of this structural disconnection.

That said, the following Case Study highlights the achievements when industry and the education provider can establish partnerships to address areas of significant mutual interest.

# Case Study:

# Partnership between education and government

The NTG and CDU implemented a Partnership Agreement in July 2003 to ensure collaboration between the primary education provider in the Territory and "all of government". The health schedule, Schedule 1.2 has four key objectives:

- 1. recruit to the Territory through joint appointments skilled and clinically competent academics and researchers to improve service planning and delivery;
- 2. improve the quality of courses provided from VET through to higher education, through education pathways and articulation, with many entry and exit points;
- 3. increase the number of Aboriginal students and graduates through appropriate education pathways; and

4. improve the infrastructure and technology to support students, staff and teachers in all settings, especially remote communities and towns.

Under the Partnership Agreement a Graduate School for Health Practice has been established. This is a joint venture between CDU and the Department and will draw together under the one umbrella a range of education providers including:

- Batchelor Institute of Indigenous Tertiary Education (BIITE);
- Centre for Remote Health (CRH) based in Alice Springs;
- Collaborative Research Centre (CRC) for Aboriginal Health;
- General Practice Education Unit at CDU; and
- Menzies School for Health Research.

Joint appointments will be a strong feature of this Graduate School for Health Practice.

# Re-Entry Issues

Recent changes to practice provisions in the Northern Territory *Health Practitioner's Act* (as well as interstate legislation) mean that some individuals may require refresher courses to gain registration to practice. Sponsorship of individuals would be a useful approach to maximise the pool of health practitioners.

# **Industry as Client**

There has been a history of universities designing curricula and clinical placement with minimal input from industry. As a result, demand for clinical places does not always align with clinical service requirements. Often the demand for supervision of those on clinical placement is in direct conflict with clinical needs. There is a lack of flexibility by education providers in relation to the time of the year that students can undertake student placements with demand reflecting the academic year and term arrangements.

While the health system welcomes any increase in undergraduate places, there is minimal consultation with jurisdictions about the capacity for supervision or management of those additional students. This approach is clearly ad hoc and, with the increasing pressure placed on a workforce in shortage, this system is not sustainable.

The limited support and the assumption that clinicians have the skills required to train and supervise undergraduate students places additional pressure on clinicians and may be a deterrent to accepting students. Some professions offer free student clinical supervision courses, although this is not universal across all disciplines. In some professions the University pays clinical supervision.

# Student placements in rural areas

Research consistently shows across a range of health professionals that a positive experience of exposure to rural practice during student clinical placements has a beneficial effect on subsequent recruitment to rural positions. Artificial barriers are sometimes created to student placements e.g. in Alice Springs it is reported that dental students have to pay rent of \$100 to use flats that medial students access free of charge. Rents are a disincentive in attracting students for placements in the NT. All efforts should be made to maximise the number and quality of student placements undertaken in the NT health system.

A number of broad areas of reform are needed and could include:

- Tertiary education could be supported by developing undergraduate feeder courses in association with local and interstate universities for health professions which do not currently have university undergraduate courses in the NT;
- Create formal arrangements with selected universities across a range of professions to maximise student placements in the Northern Territory;
- Recognition that relocation interstate or from a remote area has substantial associated accommodation costs;
- building clinician teaching and supervision capacity;
- increased use of laboratories and simulation with competency achievement reached prior to the student going out on clinical placement;
- developing agreed modes of clinical placement, such as "Dedicated Education Units" and the possibility of interdisciplinary models; and
- more efficient management of clinical placements.

# Industry and Professional Groups Partnerships

Influence of professional organisations, colleges and registration boards may result in:

- compartmentalisation through professional silos;
- impairing the transferability of skills across professional boundaries;
- preventing the common training modules, shared learning and recognition of prior learning;
- constraining the scope of new professional groups emerging;
- not promoting the concept of generalist skills vis-a-vis specialist skills which is of particular relevance to the Northern Territory.

# Integrated Clinical Streams

Models of care that reflect the needs of the dispersed population are required. The models of care should integrate the professional groups and clinical streams with new roles and changing scopes of practices. A number of innovative examples have been identified in this Submission and will need to be explored in the Territory.

# **Training Sites and Course Content**

The majority of training experience and funding approaches in the NT continue to be focussed on the acute care component of service delivery despite the increasing evidence to suggest that better primary and community care and chronic disease management results in greater health gain.

Postgraduate training and where and how people will need to practise in the future are not matched sufficiently. With respect to paediatrics and child health, nearly all training for paediatricians is hospital-based and runs on the back of junior doctors' service jobs, yet the growth area is in conditions that can usually be managed outside of hospital in locations close to where people live.

# Funding of Education and Training Models

There are several issues related to the funding of education and the provision of training, both VET/undergraduate and postgraduate. Some of the relevant issues for the NT are:

 The complexity of the funding arrangements to educate and train the health workforce make it difficult to identify clearly the different contributions to health education and training and the associated costs and benefits. The public sector contributes most clinical education and training settings, while the private sector

- derives its workforce from the same courses, but only makes a limited contribution to clinical education.
- Many health professionals are now entering the workforce with outstanding HECS debts. These factors may deter students from pursuing careers in health related professions and undertaking postgraduate studies.
- The question arises as to whether the Northern Territory, wishes to press for a more specific option such as the transfer of funding from the education industry to the health industry. There is an argument for this and that the health industry is far
- better placed to understand its requirements and to ensure that workforce planning is an integral part of education and training planning and delivery.
- There is arguably an inherent conflict of interest within the educational industry in terms of delivering relevant training and introducing new career pathways. For
- instance, some Universities have in the past dropped relevant courses despite there being an identified shortage in that field.
- An emphasis on attracting full fee paying students and providing places for overseas students creates considerable tension between providing relevant education and training for the Australian context and needs.

It may well be that collaboration at a national level, and indeed at an individual State and Territory level with the education industry, will be unsuccessful in some areas or to a significant degree. Some consideration therefore might be given to the suggestion that the health industry be given more direct say in how education funding is allocated and utilised.

# **New Paradigms for the Health Workforce**

# Generalist Health Professional

The NT is keen to see the training of more generalist health professionals as opposed to specialists or sub specialists in all occupations:

- allied health is a specific area of concern;
- primary health/integrated clinical streams, care teams in the enabling of the capacity for increased scope of practice as opposed to specific "silos" delivering care is also of particular interest and importance to the NT. There is scope and potential for the development of a primary health care practitioner;
- specialist medical workforce is where the NT would like to see an emphasis on general physicians, surgeons and paediatricians;
- the increasing articulation of how quality and safety in the delivery of health care, whilst they are seen as important health processes, should not be used as a tool by those with a vested interest in super-specialisation. The remote setting in the delivery of health services to remote and Aboriginal communities amplifies the tension between a focus and an increasing focus on quality and safety and the need to provide access to those health services.

# Structural Disconnect

Addressing the structural disconnection that has been identified is an important outcome for the Northern Territory if its Aboriginal Health & Families Framework for Action is going to be successful in the medium and long-term. Establishing nurse practitioners, Aboriginal Health Worker practitioners and defining new career structures and implementing them will be important requirements. In addition, accessing general surgeons, general physicians and other generalist health and community service workforces will an integral component of delivering a balanced set of core and targeted primary health care and community care services through all Territory clinics. If successful, there should be less reliance on an

acute care framework, due to an appropriate focus on prevention and early identification and treatment of health and community issues.

By way of example CDU offering a midwife training program that accepts non-nurses. This is part of a national trend that is welcomed by the NT, as a realistic model for increasing midwife numbers without compromising skills or responsibility of care. This model breaks down the reliance on the traditional nursing model to provide specialised skills that are needed in a specific area or context.

## Team Based Model of Care

The need to develop the ability to provide primary health care services within communities, in multidisciplinary teams and with a view to preventing disease or acute episodes becomes significant and is the direction in which the NT is attempting to go. This again highlights the importance of workforce planning, and the ability of the NT to access an appropriately trained and skilled workforce. There is also a need to breakdown the cycle of a high level of dependence on acute care and intra/interstate transfers to access specialised treatment.

# Flexibility of Workforce

As noted in other submissions a flexible workforce is a key element of our future health system. The environmental demands of the Northern Territory make this a critical issue for health service delivery in the NT. This relates to both service model delineation and role delineation. Workforce flexibility also includes work life balance and hours of work. The latter are well documented as having a direct and significant impact on attracting and retaining staff.

The NT is keen to engage in the national debate on a more flexible health workforce and as is provided in the earlier examples has already begun to explore more flexible approaches to service delivery with a focus on generalist, primary care providers who can access specialist expertise as required.

## Clinical Governance

Encouraging greater clinical governance capacity among leaders of all health professionals and programs in the NT, engendering better clinical outcomes, system outcomes and financial outcomes, is important and will need to be addressed by the Department. This is encapsulated in the concept of "clinical governance", a process used nationally and internationally to engender better clinical outcomes as well as better system and fiscal outcomes.

The Department's Clinical Reference Group is a process already established by the Department to better inform and engage key clinicians about the service-resource interface, and their roles as both leaders and managers in our system. However, it is recognised that this needs to be, and will be, broadened to encompass more of the Department's operational managers, as well as strengthening systematic processes such as financial and human resource delegations to further strengthen local operational accountability.

New service initiatives are by their nature, accompanied by a requirement for additional personnel. In any assessment of new (or existing) service initiatives, the workforce implications will also need to be assessed, and adequately resourced. If sufficient workforce resourcing is unavailable, either the new service initiative as originally described will not be able to proceed or other services will need to be ceased.

There will be a need to focus on developing management skills to facilitate improved collaboration between medical and nursing areas to guide clinical practice and resource allocation.

# **REFERENCES**

AIHW (2005) Medical Labour Force 2003 AIHW

AIHW (2005) Nursing and Midwifery Labour Force 2003. AIHW

Adams, R (2004): Progress in the development of recommended staffing levels for rural physiotherapy services. The National SARRAH Conference.

Australian Medical Workforce Advisory Committee. 2005, (Draft) The General Practice Workforce in Australia.

Banscott Consulting Pty Limited. (2003). A Review of the Northern Territory Department of Health and Community Services

Carson, B. and Ballie, R. 2004, National health workforce in discrete Indigenous communities National health workforce in discrete Indigenous communities. *Australian and New Zealand Journal of Public Health*, 28 (3).

Condon, J. Barnes, B. Cunningham, J. and Smith, L. 2004, Improvements in Indigenous mortality in the Northern Territory over four decades, in *Australian and New Zealand Journal of Public Health*, (28:5) pp 445-451.

Condon, J. Barnes, T, Armstrong, B. SelvaNayagam, S. and Elwood, J. 2005, Stage at diagnosis and cancer survival for Indigenous Australians in the Northern Territory. *Medical Journal of Australia*, 182 (6).

Condon, J. Barnes, T. Cunningham, J and Armstrong, B. 2004, Long-term trends in cancer mortality for Indigenous Australians in the Northern Territory. *Medical Journal of Australia*, 180 (10).

Curry,R (2002) (unpublished). Conference Workshop Summary: Minimum standards for remote allied health workforce. 7<sup>th</sup> International Physiotherapy Congress: Sydney, May27, 2002

DEET (2004). Workforce NT Report. NT Government

DEWR National and State Skills Shortage Lists, 2002-2004

Eastaway, J. and Campbell, N. 2004, (unpublished paper) Position Paper on Allied Health Clinical Education and Training in the Northern Territory.

National Rural Health Alliance (204): Under pressure and under-valued: allied health professionals in rural and remote settings. Position Paper.

Northern Territory Government. (2004) Building healthier Communities: a framework for Health and Community Services. Northern Territory Government.

Tuesner D and Spencer AJ (2003) Projections of the Australian dental labour force, AIHW cat. No. POH 1 Canberra AIHW.

Zhao, Y. 2005, (unpublished paper) An Analysis of Drivers of health Expenditure Increases in the Northern Territory, 1979/80 to 2003/04.

Zhao, Y. Guthridge, S. Magnus, A. and Vos, T. 2004, Burden of Disease and injury in Aboriginal and non-Aboriginal populations in the NT. *Medical Journal of Australia*, 180 (10).