phn NORTHERN TERRITORY

An Australian Government Initiative

Northern Territory Primary Health Care Workforce Needs Assessment

AUGUST 2018

YEAR 1: REMOTE PRIMARY HEALTH CARE AND GENERAL PRACTITIONERS

Table of Contents

Table of Contents

Please note: In this document the word 'Aboriginal' refers to both Aboriginal and Torres Strait Islander people. Direct reference to Torres Strait Islander people and the word 'Indigenous' have been used where these are part of a title or direct quote.

1 Glossary

Aborignial Medical Service	An Aboriginal Medical Service is a primary health care service delivering **holistic, comprehensive, and culturally appropriate health care** to **a community** of Aboriginal people which may be initiated, operated or controlled by the Aboriginal community, another government or non-government entity or a combination thereof.
Aborignial Community Controlled Health Service	An Aboriginal Community Controlled Health Service is a primary health care service initiated and operated by the local Aboriginal community to deliver holistic, comprehensive, and culturally appropriate health care to the community which controls it, through a locally elected Board of Management. (NACCHO.org.au, 25/6/18)

2 Acronyms

ACIKE	Australian Centre for Indigenous Knowledges and Education
ACRRM	Australian College of Rural and Remote Medicine
AHP	Aboriginal and Torres Strait Islander Health Practitioner
AHPRA	Australian Health Practitioner Regulation Agency
AGPT	Australian General Practice Training
AMSANT	Aboriginal Medical Services Alliance Northern Territory
BIITE	Batchelor Institute of Indigenous Tertiary Education
CAHS	Central Australian Health Service
CDU	Charles Darwin University
FGAMS	Foreign graduate of an accredited medical school
GIRS	Geographically-adjusted Index of Relative Supply
GPRIP	General Practice Rural Incentives Program
HWNA	Health Workforce Needs Assessment
HWSG	Health Workforce Stakeholder Group
IAHA	Indigenous Allied Health Australia
ISSP	Indigenous Student Success Programme
ITAS	Indigenous Tuition Assistance Scheme
MMM	Modified Monash Model
NDIS	National Disability Insurance Scheme
NT	Northern Territory
NTG	Northern Territory Government
NTGPE	Northern Territory General Practice Education
NT PHN	Northern Territory Primary Health Network
NTMP	Northern Territory Medical Program
OTD	Overseas Trained Doctor
RACGP	Royal Australian College of General Practitioners
RAN	Remote area nurse
ROMP	Rural Other Medical Practitioners
ROSO	Return of service obligations
RWA	Rural Workforce Agency
TEHS	Top End Health Services
VRGP	Vocationally Registered General Practitioner

3 Executive Summary

The Health Workforce Needs Assessment (HWNA) is an activity under the Rural Health Workforce Support Activity (RHWSA) funded by the Australian Government Department of Health and managed by Northern Territory PHN (NT PHN).

This ongoing activity takes place in consultation with the Health Workforce Stakeholder Group (HWSG). The HWSG is made up of industry representatives and experts that guide the development of the HWNA and subsequent planning and implementation of activities to address identified needs.

In undertaking the Needs Assessment, NT PHN have, to date:

- Convened the Health Workforce Stakeholder Group to provide governance over the activity
- Collated a range of existing data, policies, reviews and literature
- Begun to develop an understanding of the scope of current national and local primary health care workforce initiatives.
- Undertaken a base level consultation with stakeholders.
- Workshopped interim results with the HWSG to summarise and prioritise broad needs as identified in the needs assessment.
- Agreed and endorsed priorities for primary healthcare workforce in the Northern Territory
- Undertaken a broad consultation with the sector, incorporating feedback into this document
- Conducted workshops to obtain industry and stakeholder input into solutions
- Developed activities to address identified needs

This document forms the basis for ongoing consultation with the sector and enhancement of our understanding of the health workforce, workforce challenges and the range of existing and potential solutions available. This consultation is an ongoing process, and the resulting Assessment will be a living document that will improve and develop with input from stakeholders.

Scope:

Nationally, Rural Workforce Agencies decided to focus the 2017/18 HWNA, on GPs and Remote Primary Health Care Workforce (primarily Remote Area Nurses and Aboriginal Health Practitioners). This scope will be extended, over time, to include the broader primary health workforce.

Methodology:

The NT PHN needs assessment process involves a collaborative, co-design approach underpinned by principles guiding governance, engagement and data. At the first meeting of the HWSG in November 2017 decisions were made to include the following steps in the Health Workforce Needs Assessment:

- Literature review and collation of existing data
- Broad consultation
- Survey, interview (Appendix 5) & other activity to consult and fill information gaps
- Prioritisation
- Draft Health Workforce Needs Assessment (HWNA)
- Validation with subject experts
- HWSG endorsement

3.1 Priority Areas for the Rural Health Workforce Support Activity

Priority areas for activity under the RHWSA were developed in two ways:

1. Geographical prioritisation of workforce need

2. Strategic priority areas which were developed by the NT PHN Health Workforce Stakeholder Group in February 2018 based on the draft Health Workforce Needs Assessment.

Geographic Priorities

At the first meeting of the Health Workforce Stakeholder Group (HWSG) in November 2017, key decisions were made regarding the Geographical priorities. The application of the nationally consistent approach to HWNA to the Northern Territory's demographics, characterised by Darwin and Alice Springs as regional centres and a large number of small remote townships and communities, clearly defines all remote primary health services as a high or extreme risk. The HWSG agreed to geographical prioritisation of all remote primary health care services. Due to the similar demographics and small size of the 80+ remote primary health care services in the Northern Territory, it is acknowledged that the need for health professionals is not significantly greater in any one location and changes quickly. Thus priorities within this group should be determined at an operational level. It was agreed that General practice, however, would be subject to geographical prioritisation and the Health Workforce Needs Assessment identified these priorities.

Geographic Priorities
All remote Aboriginal community controlled health care services
All Aboriginal community controlled health services serving the Aboriginal populations in Darwin and Alice Springs
General Practices in remote locations MMM 6 and 7 – (Katherine, Nhulunbuy), growing outer regional areas (Dundee, Wagait Beach, Adelaide River and Batchelor) and Darwin urban fringe communities – Howard Springs, Humpty Doo, Weddell, Alligator

Strategic Priorities

Strategic priority areas were identified by the NT PHN Health Workforce Stakeholder Group in February 2018 based on draft Health Workforce Needs Assessment. There were four priority areas identified that are underpinned by high-level strategies. It is important to note that the Aboriginal health workforce has a standalone strategy. However needs of the Aboriginal health workforce are considered through all the strategic priority areas.

These priorities and strategies synthesise the information collected throughout the needs assessment and, as such, the following report is organised under these areas.

Priority Area 1: Develop the Aboriginal and Torres Strait Islander Workforce – Clinical and Non-clinical
Develop dedicated and achievable/flexible pathways to health careers
Build and support the Aboriginal Health Practitioner workforce
Develop and support all Aboriginal people working in and supporting health

Priority Area 2: Develop pathways from selection and employment to retention
Develop mechanism for coordination of pathways across/with key stakeholders
Identify enablers to retention and apply across all professions
Target local students from high school/VET/undergraduate cohorts
Support and develop existing pathways and extend to all disciplines/professions

Priority Area 3: Attract, maintain and retain existing workforce within the Northern Territory with consideration of gaps and emerging needs.
Develop appropriate marketing and recruitment activities
Develop career opportunities through continuing professional development and skill building
Support structured career progression and emerging needs of the workforce
Develop strategies to reduce workforce turnover including flexible attraction and retention packages and incentives

Priority Area 4: Develop locally responsive, sustainable models of care
Supporting activities that develop the quality of leadership and management
Support activities that build capacity in organisations to become 'employers of choice'
Facilitate organisations to explore successful and sustainable service models

4 Background

4.1 Rural Health Workforce Support Activity

The Rural Health Workforce Support Activity (the Program) will run over three years from 1 July 2017 to 30 June 2020. Northern Territory Funding is $13,222,019 over three years.

The objective of the Rural Health Workforce Support Activity is to contribute to addressing health workforce shortages and maldistribution in regional, rural and remote Australia.

The expected outcomes of the Program are contingent on meeting current and future community health workforce needs through workforce planning. Meeting these outcomes can be achieved by:

- Identification of needs and undertaking activities in three key priority areas (next slide)
- Collaboration with relevant stakeholders such as Primary Health Networks and Aboriginal and Torres Strait Islander state peak bodies, through establishing formal networks of consultation (for example, Health Workforce Stakeholder Groups).
- Delivery of programs, including the Rural Locum Relief Program (RLRP) and Five Year Overseas Trained Doctors (5Yr OTD) Scheme.
- National representation of rural workforce agencies and their interests, administered through sub-contracting arrangements to Rural Health Workforce Australia) [1].

Elements

There are three elements to the grant activity:

Element 1: Health Workforce Access Program: the objective of this element is to improve access and continuity of access to essential primary healthcare, particularly in priority areas identified by the department and through the Health Workforce Needs Assessment process, involving a jurisdictional Health Workforce Planning Stakeholder Group.

Element 2 - Improving Workforce Quality Program: the objective of this element is to build local health workforce capability with a view to ensuring communities can access the right health professional at the right time, and ensuring health practitioners have the right skills and qualifications for their positions.

Element 3 - Building a Sustainable Workforce Program: the objective of this element is to grow the sustainability and supply of the health workforce with a view to strengthening the long-term access to appropriately qualified health professionals, with consideration of continuity and growing the sustainability of the health workforce.

All elements will involve:

- Development of a Health Workforce Needs Assessment (HWNA) relating to the element
- Development of an Activity Work Plan (AWP) to meet the requirements under that element as identified within the HWNA
- Development of guidelines and policies relating to the administration of services under that element
- Sub-contracting Rural Health Workforce Australia for national representation and coordination [1]

4.2 Health Workforce Stakeholder Group

Administrators are required to use grant funding to establish a Health Workforce Stakeholder Group (HWSG).

The Health Workforce Stakeholder Group will:

- Have a current terms of reference (Appendix 1)
- Participate in the development of a Health Workforce Needs Assessment (HWNA)
- Endorse the Health Workforce Needs Assessment
- Endorse the annual Activity Work Plan (AWP)
- Provide an annual report to the Australian Government Department of Health [1]

Membership

Membership of the Northern Territory Health Workforce Stakeholder Group includes:

Stakeholder type	**Organisation**
Rural Clinical Schools;	Flinders University
Regional training organisations;	Flinders University
	Batchelor Institute of Indigenous Tertiary Education (BIITE)
	Charles Darwin University
Primary Health Networks;	Northern Territory Primary Health Network (NT PHN)
State Health Departments;	NT Department of Health
	Top End Health Service (TEHS)
	Central Australian Health Service (CAHS)
Rural Health Outreach Fund Fund-holders;	NT Department of Health (Specialist Outreach NT)
Aboriginal and Torres Strait Islander Health State Peak Bodies	Aboriginal Medical Services Alliance NT (AMSANT)
Specialist Training Pathway Providers	Northern Territory General Practice Education (NTGPE)
Other	Royal Australian College of General Practice SA & NT Faculty (RACGP)
Other	Australian College of Rural and Remote Medicine (ACRRM)
Other	Health Providers Alliance NT

4.3 Health Workforce Needs Assessment

The Health Workforce Needs Assessment (Needs Assessment) is an iterative process that is used to identify workforce needs and inform the development of Activity Work Plans. While undertaking the needs assessment process, NT PHN engages with stakeholders to ensure efforts and investment are aligned. This involves the identification of key data and other forms of information.

- Needs assessments uses existing data and evidence where possible, particularly from members of the HWSG, and not duplicate efforts of others. Needs assessments should:
    - Analyse relevant and current local and national health data;
    - Review health service needs and available service provision in the region;
    - Identify health services priorities based on an in-depth understanding of the areas in the jurisdiction; and
    - Be informed by clinical and community consultation and market analysis [1].

The needs assessment contributes to the ongoing development and implementation of evidence-based Activities to address national and specific priorities, relating to workforce needs and gaps in jurisdictions.

Information used to build the needs assessment is sourced from local and national data sets, and also from consultations with communities, health professionals and stakeholders, including the Health Workforce Stakeholder Group.

5 Methodology

5.1 Nationally consistent scope

Nationally, Rural Workforce Agencies decided to focus the 2017/18 HWNA that will inform the 2018/19 AWP on GPs and Remote Primary Health Care Workforce.

5.2 Nationally consistent approach

Rural Workforce Agencies have also taken a consistent approach to determining priority areas in the 2018/19 HWNA. This includes the following steps:

Step 1: Categorising towns according to need using Socio-Economic Indexes For Areas (SEIFA) and Remoteness as indicators.

Step 2: Determining the General Practitioner (GP)/remote area nurse workforce (RAN) using estimated resident population and headcount of GPs and RANs.

Step 3: Identifying priority communities utilising vulnerable population characteristics including:

- Aboriginal and Torres Strait Islander Status
- Population aged under 5 or over 65 (55 for Aboriginal and Torres Strait Islander people)

Step 4: Profile hotspot regions

Step 5: Apply other locally determined weightings or measures

5.3 Northern Territory HWNA Scope

At the first meeting of the HWSG in November 2017, key decisions were made regarding the scope of the NT HWNA, these are:

1. General Practice and Remote Primary Health Care operate distinctly different models of service delivery which impact on aspects of workforce needs assessment. Aspects of

workforce needs assessment will be treated and addressed separately for General Practice and Remote Primary Health Care.

2. The application of the nationally consistent approach to HWNA to the Northern Territory's demographics, characterised by Darwin and Alice Springs as regional centres and a large number of small remote townships and communities, clearly defines all remote primary health services as a high or extreme risk. The HWSG agreed to geographical prioritisation of all remote primary health care services.
3. Due to the similar demographics and small size of the 80+ remote primary health care services in the Northern Territory, it is acknowledged that need for health professionals is not significantly greater in any one location and changes quickly. Thus, priorities within this group should be determined at an operational level.
4. General practice, however, will be subject to geographical prioritisation.

5.4 Method

The NT PHN needs assessment process involves a collaborative, co-design approach underpinned by principles guiding governance, engagement and data. The steps involved are outlined in appendix 2. The scope of a needs assessment is defined through collaboration with stakeholders and people with local knowledge. To promote robust and successful partnerships, NT PHN is guided by co-design principles and collective impact when engaging internal and external stakeholders.

At the first meeting of the HWSG in November 2017 decisions were made to include the following steps in the Health Workforce Needs Assessment:

a. Literature review and collation of existing data
b. Broad consultation
c. Survey, Interview (Appendix 5) & other activity to consult and fill information gaps
d. Prioritisation
e. Draft Health Workforce Needs Assessment (HWNA)
f. Validation with subject experts
g. HWSG endorsement

A road map was developed to outline this process for stakeholders and used to inform the stakeholder group (Appendix 3).

5.5 Limitations

Scope

This document should be read with an understanding of the limited scope of the 2017/18 needs assessment activity. Nationally, Rural Workforce Agencies made the decision to focus the HWNA that will inform the 2018/19 AWP on GPs and Remote Primary Health Care Workforce (primarily Remote Area Nurses and Aboriginal Health Practitioners). It is intended that future iterations will represent the workforce needs of the broader primary health care sector including Allied Health and Practice Nurses.

Data

The authors have endeavoured to provide data to support information contained in this Needs Assessment. Data is obtained from various sources and therefore can demonstrate inconsistencies. Furthermore, data can be filtered in many different ways, each representing different perspectives. For example, workforce numbers can be represented as 'resident workforce', 'principal place of practice' or 'main place of practice in a given week'.

5.6 Consultation list

The following stakeholders were interviewed in developing the current DRAFT Health Workforce Needs Assessment:

Batchelor Institute of Indigenous Tertiary Education: Senior Lecturers
Flinders NT: Academic Leader - Engagement and Social Accountability
Flinders NT : Course Director NT Medical Program
Top End Health Services: Exec Director Nursing/Midwifery TEHS
NT Department of Health: Director Aboriginal Workforce
NT Department of Health: Chief Nurse
NT Department of Health: Principal Policy Officer, System Strategic Policy & Planning
Top End Health Services: Executive Director Allied Health
NT Department of Health: Principal Allied Health Advisor
NT Department of Health: A/Principal Aboriginal Health Practitioner Advisor
RACGP: Board Member
Indigenous Allied Health Australia (IAHA): Workforce Development Officer
Centre for Remote Health
Menzies School of Health Research: Director
NTGPE: Chief Executive Officer
Health Professionals Alliance NT: Board Member
AMSANT: Programs Manager
NT PHN: Health Stream Leader - Mental Health
NT PHN: Health Reform Manager
NT PHN: Workforce and Practice Support Managers and Team Leads

6 Demographic Profile

The Northern Territory represents a unique environment for the delivery of primary health services, concerning both its geography and population. This presents both opportunities and challenges for workforce planning.

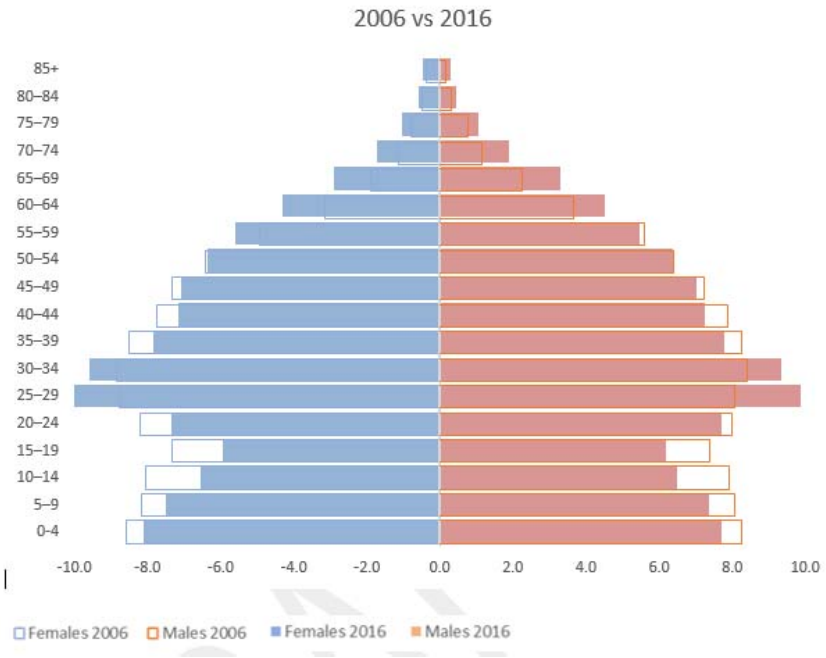
6.1 Population

The estimated resident population of the Northern Territory at 30th June 2016 was 245,191 persons. This figure represents a very slight increase (0.2%) on the 2015 figure, and is mainly driven by urban/peri-urban growth in Palmerston, Litchfield and to a lesser extent, Darwin city. All of the remote areas have recorded a negative population change (ABS ERP 2017). However, preliminary projections suggest that the total population of the NT will continue to increase to over 375,000 by the year 2046, with the Aboriginal population projected to rise from the current 74,000 to over 97,000 (Northern Territory Government Department of Treasury and Finance, NT Population Projections, 2017).

Aboriginal and Torres Strait Islander people make up over 30% of the total population - approximately 70,000 people. While there are significant urban populations of Aboriginal people in Darwin and the major regional centres, a significant proportion live in remote communities and homelands scattered throughout the remote regions of the NT.

The structure of the population has also altered slightly over the past ten years (Figure 1). By 2016, the proportion of the population aged 25-35 had increased noticeably along with the population aged over 55, while there have been notable decreases in the proportion of children and young people aged <25, and adults aged 35-50. The gender proportions are similar at both time points.

Figure 1: Northern Territory Population Pyramid comparing 2006 and 2016



Source: 2016 ABS Estimated Resident Population, reported by PHIDU

6.2 Remoteness

According to the Modified Monash Model (MMM) classification, the majority of the Northern Territory sits within categories 6 and 7; however, the majority of the population (57%) live within the category 2 region, which covers Darwin and surrounds. Alice Springs, Katherine and surrounding areas fall within MMM category 6 (19%), and there is a small area of Category 5 surrounding the greater Darwin region which covers 3% of the population. The most remote category 7 comprises the bulk of the geographical area of the NT and includes 21% of the population.

6.3 Ageing

While the NT currently has the youngest age profile of all states and territories with a median age of only 33, it also has the most rapidly ageing population. Both the Aboriginal and non-Aboriginal populations are projected to age so that the proportion of the population aged over 65 will increase significantly. This is particularly pertinent among Aboriginal populations where the proportion is expected to more than double. Increased life expectancy, particularly among Aboriginal populations, combined with low fertility rates are the major drivers of this trend.

6.4 Culturally and Linguistically Diverse Populations

Approximately 20% of the current NT population was born overseas, and twice as many came from predominantly non-English speaking countries compared to predominantly English speaking countries. Over 23% of Darwin residents were born in non-English speaking countries, and the overall rates are higher in the Darwin peri-urban area and the regional centres. The overall percentage has increased slightly since 2016, but the most significant change has been the shift in the proportion of migrants from English speaking countries vs non-English speaking countries – the proportions were very similar in 2006.

6.5 Transience

The Northern Territory has a highly transient population, with 17% of NT residents in 2016 reporting that they lived at a different address one year ago (national average 15%). NT mobility reflects two discrete types of migration:

1. Transient movement, largely of Aboriginal people, to and from and between homelands, remote communities and regional towns (including Darwin). This movement is often seasonal and may involve cultural obligations, visiting kin, accessing services, climate-driven relocation, or a combination of any of these.
2. Economic relocation of a short-term workforce who come to the NT for a specific contract or position and leave again after several months or years. These workers are often employed in the construction and mining industry, but many are health and other professionals, or in the armed forces, and there are also a number of international backpackers who take short-term employment predominantly in the hospitality industry. These short-term workers create the 'bulge' in the population pyramid (Figure 1) of people aged 25 – 34.

This transient population poses unique challenges to the implementation and maintenance of an integrated and coordinated primary health system, as continuity of care is difficult to maintain and records are not always easily transferred.

6.6 Summary

The overall picture of population change in the Northern Territory is of a slowly increasing total population. This increasing population comprises of a high proportion of young adults, a high rate of both intra-territory and interstate migration and a growing proportion of older people – particularly Aboriginal people.

7 Health environment overview

7.1 National Primary Health Network Priorities

The Government has agreed to six key priorities for targeted work by PHNs. These are:

- Mental health
- Aboriginal and Torres Strait Islander health
- Population health
- Health workforce
- Digital health
- Aged Care

There are obvious synergies between the PHN priority area of Health Workforce and the work of NT PHN as a Rural Workforce Agency (RWA) with significant opportunities to align the strategy and planning of both entities. Additionally, the health workforce is an essential component of any primary health care strategy so that the work of NT PHN as an RWA impacts on all of the PHN priority areas.

7.2 NT PHN baseline needs assessment

The NT PHN baseline needs assessment (pending Commonwealth approval) provides an overview of the health status of Northern Territorians, characterised by:

- Mental Health & Trauma:
    - Poor access to, and coordination of, mental health services, particularly for Aboriginal people
    - High suicide rates
    - Inter-generational trauma affecting Aboriginal and Torres Strait Islander people
- Alcohol and other drugs
    - High levels of alcohol related harm
    - Highest proportion of smokers in Australia
    - Increased amphetamine use, highest use of ecstasy and volatile substances use in Australia
    - Higher rates of smoking in pregnancy in Aboriginal mothers
- Health System & Public Health Issues
    - Complex, challenging and costly access to services for Aboriginal and Torres Strait Islander people
    - Poor communication across the primary health care sector and hospitals
    - Difficulties providing population health initiatives due to remoteness and cultural diversity
    - Lack of access to dental services and water fluoridation
- Social Determinants
    - Poor social determinants of health including housing, nutrition, education, employment, exercise and safe environment
- Chronic Disease prevalence
    - Lower than national average Cancer screening participation for breast cancer, colorectal cancer and cervical cancer
    - Diabetes-related deaths over three times the national average
    - Kidney disease affecting a greater proportion of the population with particularly high incidence in Alice Springs, Barkly and Daly-Tiwi-West Arnhem

    - Potentially preventable hospitalisations from congestive heart failure in the NT is 50% higher than the national average.
    - Highest rates of rheumatic heart disease within Australia
    - Potentially preventable hospitalisations from chronic obstructive pulmonary disease (COPD) two and a half times the national rate
- Other health
    - Subgroups that have high rates of infectious diseases, accidental and non-accidental injuries and falls, non-communicable diseases, and ageing syndromes (including dementia)
    - Significant low birth weight rates in Aboriginal children, high incidence of scabies and skin sores, and infant mortality are markedly higher than the national average.
    - A number of subpopulations at greater risk of poor sexual health
- Demographic pressures
    - The number of ageing Territorians is anticipated to triple by 2036, and the lifestyles of older Territorians are less healthy than the rest of Australia.
    - High proportion of Aboriginal children in the population
    - Significant proportion of the population born overseas more likely to experience poorer mental and physical health

These statistics highlight significant challenges in the delivery of appropriate health services to a culturally diverse and geographically dispersed population with high levels of social disadvantage. However, there also exist opportunities to collaborate closely with local communities to define and deliver innovative models of care, and to forge strong partnerships between the various organisations committed to providing equitable care and a strong workforce to all Territorians.

8 Health Service Profile NT

8.1 Characteristics of health service delivery in NT

There are essentially two modalities of primary health care provision in the NT:

- Mainstream general and allied health practices (Darwin and the regional centres)
- Aboriginal Medical Services (AMS) including Aboriginal Community Controlled Health Services (ACCHS) and Northern Territory Government remote health services serving Aboriginal populations

There are approximately 50 mainstream General Practices in the Northern Territory, the vast majority in Darwin and surrounds. There are six practices in Alice Springs, one in Katherine, one in Tennant Creek and two in Nhulunbuy.

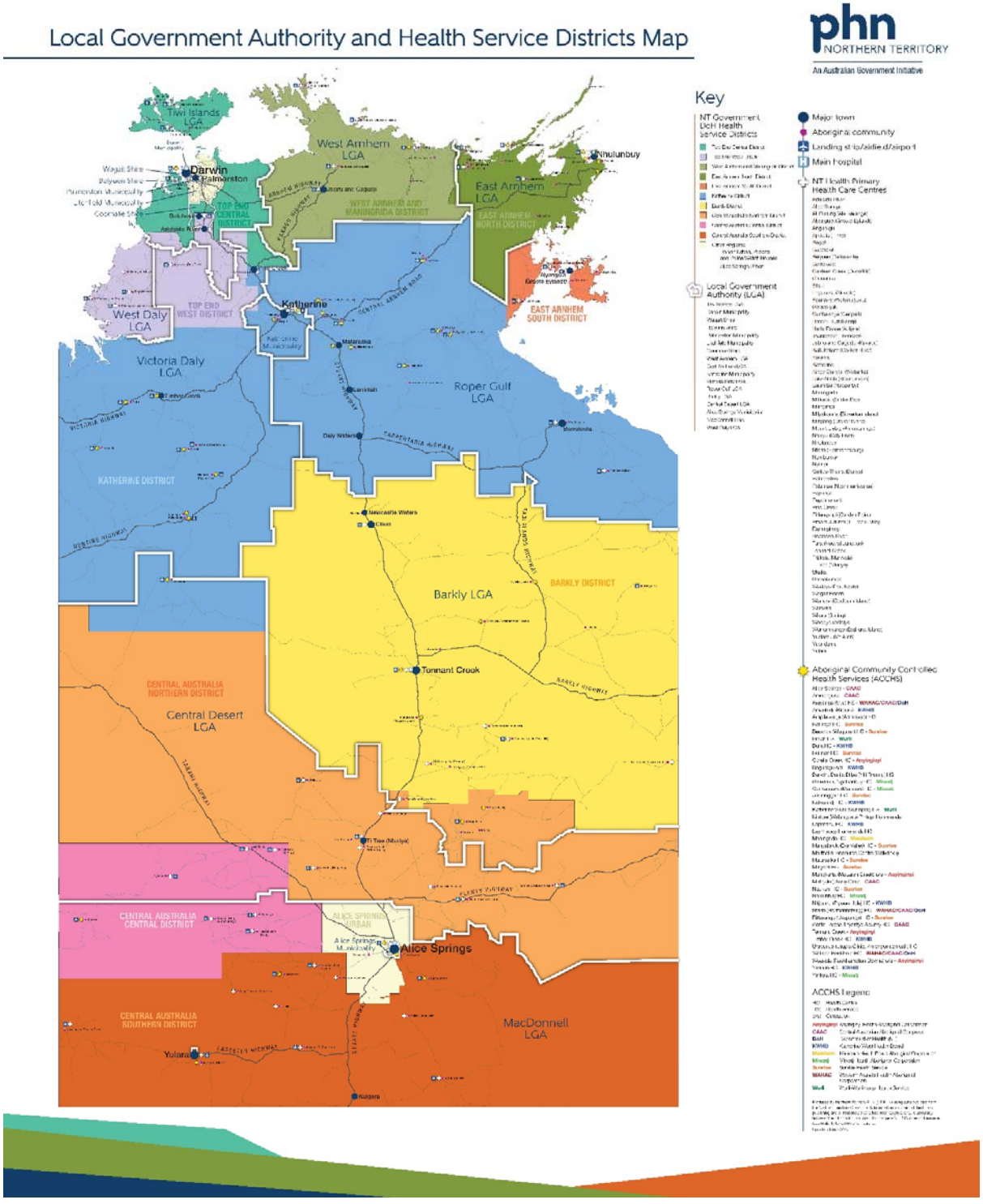
In more than 80 remote Northern Territory communities (with a steady population of over 100 people) there are resident health staff offering primary health care services, whether provided by an ACCHS or NT Health. These can consist of a mixture of Aboriginal Health Practitioners (AHPs), Remote Area Nurses (RANs) and Medical Officers. Some communities have resident AHPs and/or RANs with regular service from a non-resident doctor, while others will also have a doctor in residence.

Whatever the core staff distribution, all centres are supplemented by visiting specialists and allied health professionals. Funding of the AMSs is different to the majority of mainstream general practice in Australia. The majority of health care is provided by Remote Area Nurses (RAN) or Aboriginal Health Practitioners (AHP), not by GPs. Only a small portion of costs are covered by Medicare, and the majority of funding comes from State and Commonwealth Government grants. Therefore, unlike mainstream General Practice, health workforce needs are not driven by demand but by available funding.

The AMS sector includes 17 Aboriginal Controlled Community Health Services serving 32 remote communities [2]. Some ACCHS have as many as seven primary healthcare sites while others are single locations serving populations as small as 500. The remaining 53 remote locations throughout the NT have primary health care services delivered by NT Health [3]. A small number of remote locations have two primary health care services comprising of one ACCHS and one NT Health service. Many remote primary health care services provide outreach to homelands from a larger, central community. Significant differences in the size of these organisations mean that the available resources, and presence of administrative supports (including Human Resources support) characteristic of larger organisations, varies significantly. All AMSs are unique organisations, and they use different models of service delivery (i.e. Nurse led or AHP led).

The different service models and their associated variable funding streams provide a unique challenge in the establishment of effective and responsive health workforce models. The different mix of roles – often determined locally – and the available funding means that remote primary health centre workforce priorities need to be assessed on a case by case basis.

Local Government Authority and Health Service Districts Map



9 Geographic Priorities

9.1 National Health Workforce Needs Assessment Framework

Nationally, Rural Workforce Agencies have taken a consistent approach to determining 'hot spots' or priority geographical areas in the 2018/19 Health Workforce Needs Assessment. This includes the following steps:

Step 1: Categorising towns according to need using SEIFA and Remoteness as indicators.
Step 2: Determining the General Practitioner (GP) / remote area nurse workforce (RAN) using estimated resident population and headcount of GPs and RANs.
Step 3: Identifying priority communities utilising vulnerable population characteristics including:

- Aboriginal and Torres Strait Islander Status
- Population aged under 5 or over 65 (55 for Aboriginal and Torres Strait Islander peoples)

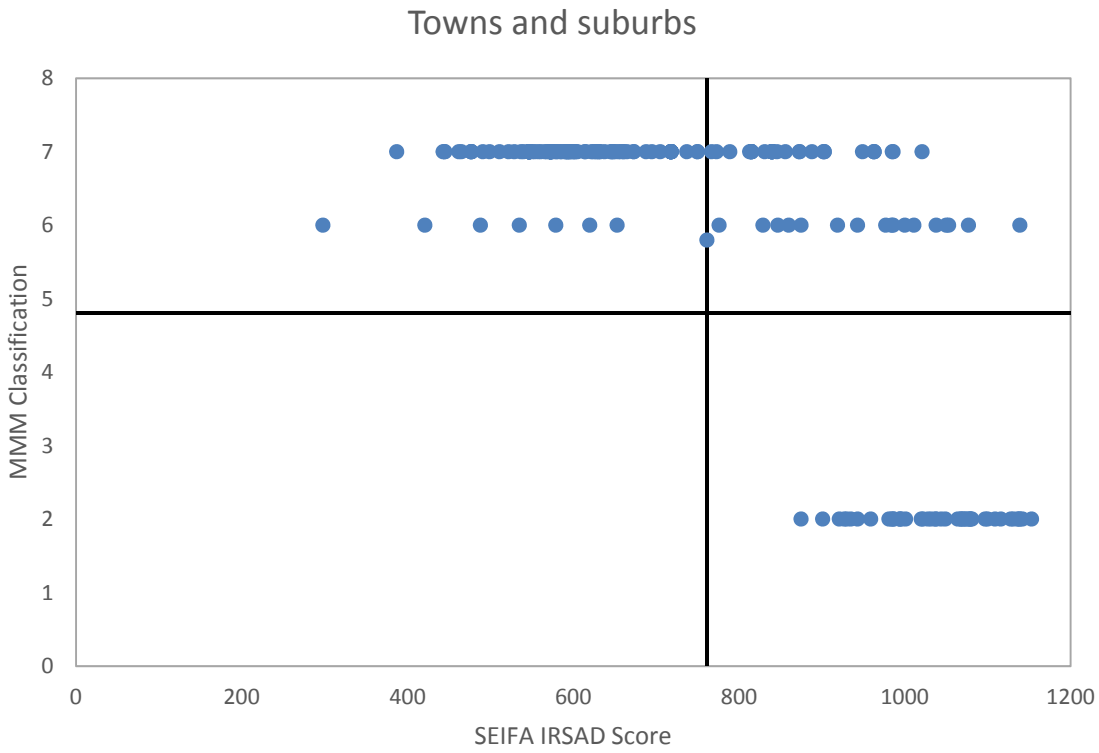
Step 4: Profile hotspot regions
Step 5: Apply other locally determined weightings or measures

Step 1: Categorising towns according to health need

The majority of locations in the NT fall within MMM Classification 2 (Darwin and surrounds), or MMM Classifications 6 and 7. The scatter plot (Figure 13) determines that apart from Darwin and surrounds, all localities within the NT are considered areas of high to extreme risk, based on the combination of remoteness and disadvantage.

Those communities with the most extreme risk are in the vicinity of Katherine, and in the northern part of East Arnhem.

Figure 13: Scatterplot of communities by risk



Step 2: Determining the required GP/remote area nurse workforce

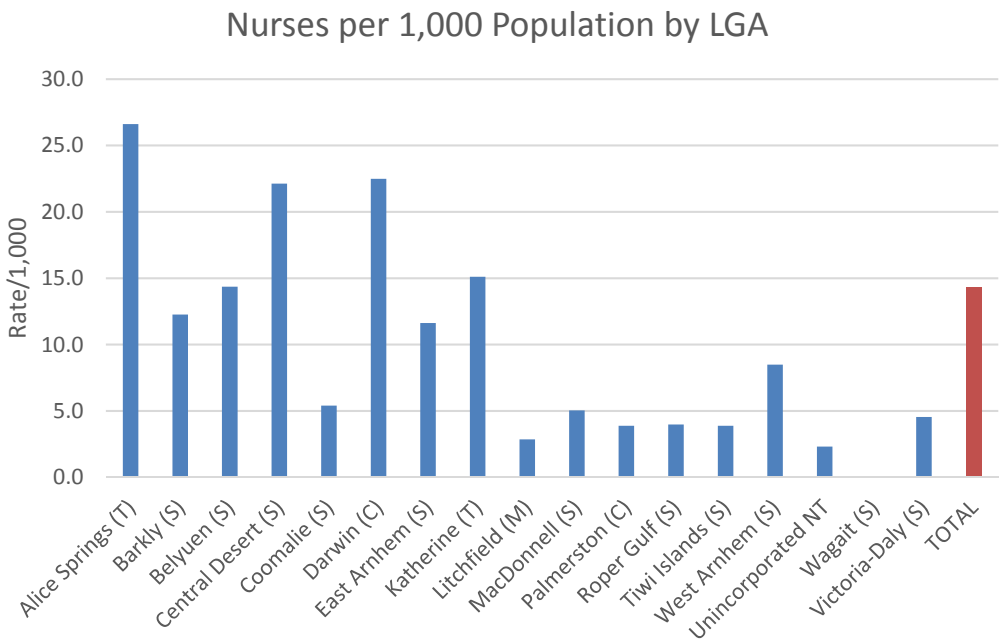
The total number of nurses per 1,000 population for the Northern Territory in 2016 was 14.3. This data represents a snapshot of practitioners working as clinicians in the NT in the week before they filled out their registration survey, and the figures include both registered and enrolled nurses. Alice Springs, Darwin and Central Desert LGAs have a much higher rate, while a number of the smaller and more remote LGAs have a rate of five or below (Figure 14).

The unexpectedly high number of nurses per 1000 population in the Central Desert is likely a result of the small size of communities in this area – the average community size in the Central Desert LGA is around 280 Aboriginal people, whereas in the McDonnell and Barkly LGAs the average size is over 400 people. Health services carry a minimum staffing level to support safety and equity. As such smaller communities will have a higher per capita staffing ratio. Given this, the staffing is generally two nurses and therefore is not resilient to resignations. As such, the high ratio of staff should not be seen as an indicator of a decreased need for workforce support.

When viewed by Modified Monash classification (Figure 15); although it appears that there is a high rate in MMM 6, it should be remembered that these areas include the towns of Alice Springs and Katherine.

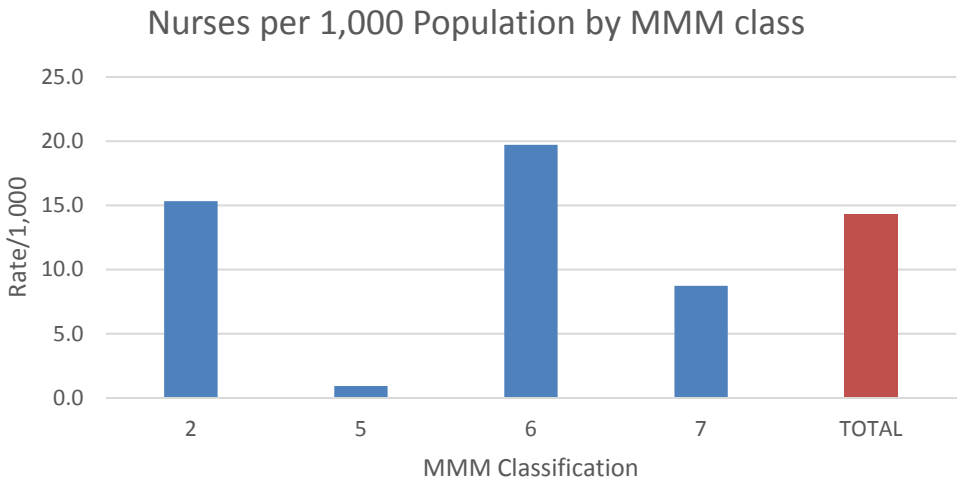
It is likely that the majority of nurses practising in MMM 7 areas are Remote Area Nurses.

Figure 14: Nurses by population – Local Government Area



Source: National Health Workforce Data Set, derived from APHRA registration data, 2016, and ABS Estimated Resident Population, 2016

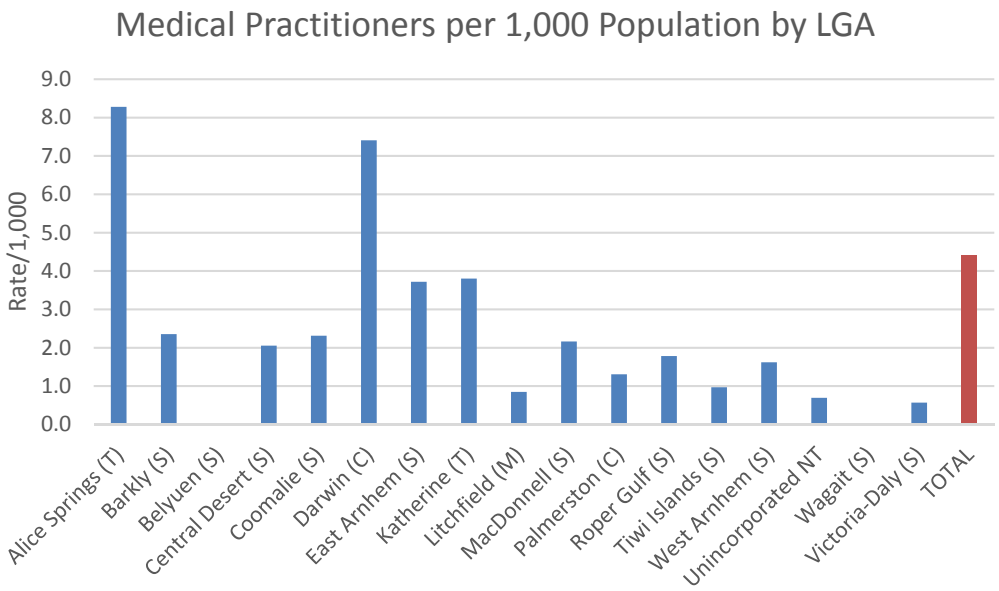
Figure 15: Nurses by population – Modified Monash Model



Source: National Health Workforce Data Set, derived from APHRA registration data, 2016, and ABS Estimated Resident Population, 2016

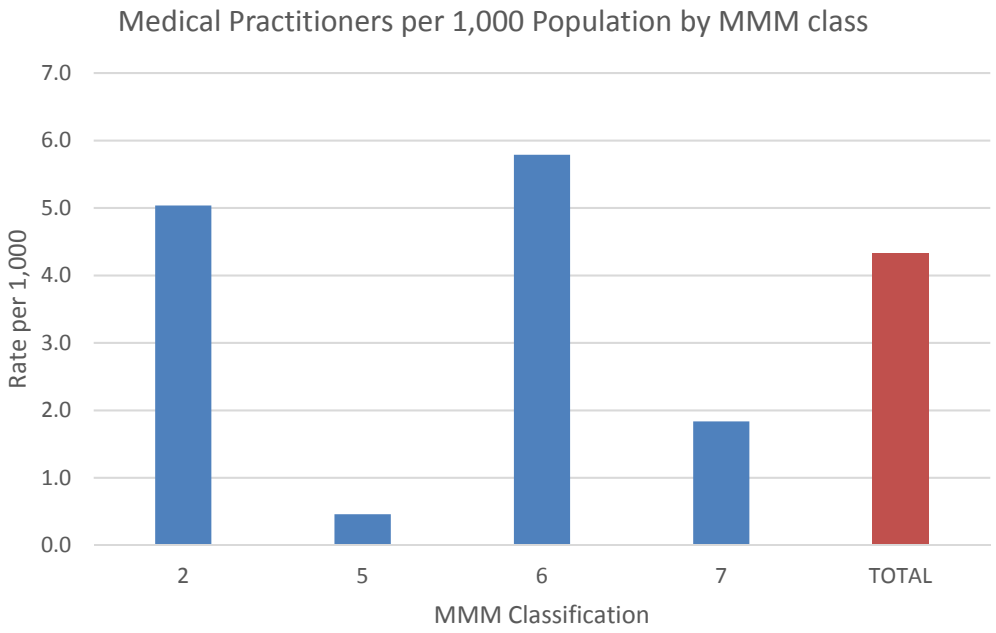
The distribution of Medical Practitioners by LGA in 2016 (Figure 16) is similar to that of nurses although without the spike in the Central Desert. These figures include all medical practitioners, not just GPs and also represent a snapshot of practitioners working as clinicians in the NT in the week before they completed their registration survey. The distribution by MMM classification (Figure 17) is almost identical to that of nurses. It is clear that population rates in the most remote areas - MMM 7 – are well below state and national averages.

Figure 16: Medical Practitioners by Population – Local Government Area



Source: National Health Workforce Data Set, derived from APHRA registration data, 2016, and ABS Estimated Resident Population, 2016

Figure 17: Medical Practitioners by Population – Local Government Area



Source: National Health Workforce Data Set, derived from APHRA registration data, 2016, and ABS Estimated Resident Population, 2016

It should also be noted that these figures do not take into account the high rates of staff turnover and temporary workforce models that are known to impact the stability of service in many locations throughout the NT. While the workforce figures provide a useful baseline to discuss workforce distribution, the actual situation in many communities is far more complex than can be represented by standard data collections.

Step 3: Identifying priority communities

There is a clear increase in the proportion of Aboriginal people within the highest risk SA2s, with many communities identifying over 80% of their population as Aboriginal and/or Torres Strait Islander and dependent upon Aboriginal Medical Services. While some of the Extreme risk SA2s have comparatively lower proportions of Indigenous people, these regions invariably contain a significant non-Indigenous population centre, e.g. Yulara in Petermann-Simpson and Jabiru, Wagait Beach and Dundee Beach (among others) in the Alligator SA2; and may also have additional general practice options.

It should be noted that the proportion of people aged 65 and over is not necessarily a good indicator of need in Aboriginal populations, where the early onset of chronic disease and lower life expectancies mean that additional primary health care support is targeted from the age of 50.

Ultimately, it is clear that the communities at highest risk (i.e. those falling within the 'Extreme' quadrant) are also those with the lowest availability of GPs and nurses. These are also predominantly Aboriginal communities or contain significant Aboriginal populations that are explicitly served by Aboriginal primary health care organisations as opposed to mainstream general practice.

At the December 2017 meeting of the Health Workforce Stakeholder Group, this information was reviewed, and a decision made that all remote Aboriginal primary health care services be given the

highest priority and that further prioritisation within this category will be allocated in an operational context (on a needs basis). Additionally, there was an agreement that general practice (outside of remote Aboriginal health services) will be subject to geographical prioritisation. The areas under consideration for geographical prioritisation include:

Katherine

Katherine local government area has a population of 9717 and is a regional centre serving a population of 18710. The Aboriginal population makes up 22% of the local government area while 49% of the wider regional population is Aboriginal.

There is one private GP clinic in Katherine (Gorge Health), with a patient list of 8000 and employing two full-time GPs, two full-time GP Trainees (GPTs) and a generally registered doctor. While there are reports of two weeks waiting times to see the fellowed GPs, an availability of registrars ensures patients can access same day services if required[4]. While the health service sees Aboriginal patients, a conservative measure of demand (given the presence of an ACCHS in the community) using the non-Aboriginal population of 7547 and the national average ratio of 1.2 GPs per 1000 people [5] equates to an ideal staffing level of 9.1 FTE GPs.

Wurli Wurlinjang Health Service (Wurli) is an ACCHS providing GP services to the Aboriginal residents of Katherine employing four full-time GPs, and two part-time GPs. Wurli Wurlinjang, Katherine West and Sunrise ACCHSs also employ GPs who are based in the community while providing services to the broader region[4].

Tennant Creek

Tennant Creek has a population of 2991. The Aboriginal population of Tennant Creek is approximately 1536 or 51%. GP services in Tennant Creek are provided by Tennant Creek Hospital utilising a 19(2) exemption and by Anyinginyi Aboriginal Medical Service for Aboriginal residents. This is a recent change in service model with GP services previously delivered by a visiting service provided by Royal Flying Doctor Service (RFDS). This new service delivery model has influenced attraction and retention of a medical workforce with other benefits being the support of a GP Registrar, improvements to the continuity of care and patient outcomes, improved efficiency and opportunity to create a generalist workforce created by utilising doctors across the acute and primary care aspects of health.[4]

Nhulunbuy

Nhulunbuy (SA2 Geographical area) has a population of approximately 3088 people of which 328 are Aboriginal. Nhulunbuy also serves as a regional centre for the East Arnhem Region with a population of over 13000, of which 68% or 8868 are Aboriginal. GP services in Nhulunbuy are provided by Endeavour Medical Centre, a private GP practice, and Miwatj Health ACCHS. Miwatj Health currently employs four GPs and five GP Registrars, and Endeavour Medical Centre employ one GP and one GP Registrar.

Closure of the Rio Tinto refinery in 2014 and subsequent reduction in subsidies supporting the practice along with increased cost of living resulted in the long-term GP (and practice owner) leaving Nhulunbuy in January 2017. FCD Health, a not for profit initiative of Flinders and Charles Darwin Universities has temporarily taken over the operation of the practice. [4]

Dundee Beach

The 2016 Census records a population of 366 for the Dundee Beach, Dundee Forest and Dundee Downs area. This is significantly lower than the 554 residents reported for this region in the 2011

Census. A community plan undertaken by Plan C in 2012, reported high population growth (56.6%) in the previous six years, but the projections that expect the long-term growth rate to 2025 would be slow at 0.75% per annum. The 2012 Dundee community plan identified four priority infrastructure projects, one of which was a health clinic with doctors and nurses to provide health and aged care. In 2016 the DoH agreed that Dundee Progress Association (DPA) could facilitate a private GP service from the first aid post. While some interest has been shown, the DPA have been unable to engage a GP to maintain a service on a permanent basis[4]. The volunteer first aid station has now also been closed due to lack of volunteers. Based on a national average ratio of 1.2 doctors per 1000 people [5] this population equates to 0.4 FTE.

Wagait Beach

The 2016 Census has 461 people residing in Wagait Beach, representing 130 families with the median age being 48. While the 2016-17 Shire Plan notes that there are currently no opportunities to expand the town boundaries [6], the 2017 land claim may result in changes to this position with the local community suggesting that there may be significant growth in the future.

The Wagait Beach Health Outreach Centre operates as a nurse-led outreach from Belyuen clinic and is open Tuesday and Thursday from 5.00pm to 7.30pm. Community demand for health services has been increasing in recent years. In it's 2016/17 Shire Plan [3], Council lists the medical clinic among the 'core' services that will be provided to the local community. NT PHN and NT DOH were involved in a community meeting in February 2017 with attendance at the meeting of approximately 60 community members. Based on the national average ratio of 1.2 doctors per 1000 people[5], this population equates to 0.6 FTE GP.

Darwin Rural Area

Apart from Dundee Beach and Wagait Beach, the rural areas surrounding Darwin also include the townships of Howard Springs, Humpty Doo and Berry Springs. These townships all have a GP clinic or health service but can experience difficulty in recruitment and retention of staff due to their perceived isolation from Darwin, a more desireable destination for practitioners looking to live and work in the NT. These areas also have some of the highest rates of population growth within the NT, with Howard Springs in particular growing by almost 3,000 people since 2011, and nearly 1,000 for Humpty Doo (ABS 3218.0 Regional Population Growth Australia). Recent activity by the NT Planning Commission indicates that the population of Humpty Doo is expected to increase further [7]. The population change of Adelaide River and Batchelor however, is more difficult to ascertain, and the wider region of which they are a part of has maintained a relatively stable population over the past five years. Adelaide River and Batchelor are currently serviced by NT DOH clinics. These clinics are RAN led with visiting GP services three days per fortnight in Adelaide River and four days per week in Batchelor. These services are at least partly grant funded, and private practice might be expected to move into this space if there were demand from a growing population.

9.2 Geographically-adjusted Index of Relative Supply (GIRS)

The GIRS is a tool developed by the Australian Institute of Health and Welfare to measure the geographic supply of the clinical health workforce with particular relevance to Aboriginal and Torres Strait Islander Australians and to identify areas in Australia that face particular supply challenges[8]. GIRS utilises hours worked in clinical roles and main practice location and adjusts for land size, population dispersion, and drive time to services. GIRS scores range from 0 to 8 with lower GIRS scores indicating greater workforce supply challenges. Appendix 6 shows geographically-adjusted Index of Relative Supply (GIRS) for Northern Territory Statistical Areas (2014). [8] This table shows all MMM 7 with the exception of Nhulunbuy and Tennant Creek and some MMM 6 areas as experiencing significant workforce challenges according to this measure.

9.3 Summary

While the challenges of primary health care delivery in remote Aboriginal communities in the NT are well documented and understood, there are some additional areas of geographic need where the current workforce is below the recommended levels, and there are particular challenges around recruitment and retention. With increasing population growth forecast for the Darwin rural areas, these challenges are likely to increase.

10 Strategic Priorities

The Health Workforce Stakeholder Group (HWSG) has identified four Priority Areas for action in developing, recruiting and retaining a primary health workforce to meet the needs of the Northern Territory.

This section summarises, within these four priority areas, the information collected throughout the needs assessment process including:

- National, Territory and industry level reports reflecting health workforce strategies, policy and reviews
- The results of semi-structured interviews undertaken with key stakeholders
- Current workforce development, recruitment and retention initiatives being conducted across the Northern Territory
- Available data to support our understanding of the primary health workforce, relevant to the scope of this needs assessment, in the Northern Territory
- Feedback from the sector obtained through broad circulation of the Draft needs assessment

PRIORITY AREA 1:
DEVELOP THE ABORIGINAL AND TORRES STRAIT ISLANDER WORKFORCE – CLINICAL AND NON-CLINICAL

While the remit of this needs assessment and the activities it will inform, sit within the limited scope of the primary health workforce, there is a need for strong systematic change to improve Aboriginal participation in the health workforce. This change will involve addressing broader determinants such as social disadvantage, language and literacy and racism.

10.1 Develop dedicated and achievable/flexible pathways to health careers

There was a general understanding that more incremental pathways such as VET through to tertiary pathways would support an increase in the Aboriginal workforce. These were evidenced as being present in a range of reasonably small initiatives:

- Menzies School of Health Research run a Certificate III course for Indigenous Research Assistants to support current research projects
- Batchelor Institute of Indigenous Tertiary Education offers a Certificate III Aboriginal and/or Torres Strait Islander Primary Health Care and a Certificate III in Community Services. These may serve as a pathway to the Certificate IV, although this does not often occur. Positions are NT Government funded and only open to NT applicants.
- The Northern Territory Aboriginal Health Academy (NTAHA) is a pilot program coordinated in a partnership between Indigenous Allied Health Australia (IAHA) and Aboriginal Medical Services Alliance Northern Territory (AMSANT). The program aims to support senior school students to complete year 12 and introduce them to a career in health through a VET in Schools pathway. Leadership and culture forms the foundation of the Academy and its model and students complete a Certificate III in Allied Health Assistance.

Some of these opportunities are informal and insecure (limited funding). Some are associated with a small number of specific roles, and others do not have identified roles for natural career progression and employment. There is a need to coordinate this activity for it to fit with a suite of opportunities that can then be put forward as distinct pathways. These pathways should be linked with acknowledged and available roles and promoted to school students and individuals interested in health careers.

It is acknowledged that supporting individual Aboriginal students is critical to the success in both education and in the workplace. These supports can include mentoring, regional based training, cultural and family leave. Strategies are required to address racism within the health system, and improve recognition of medical, cultural and community knowledge [9, 10].

Stakeholders identified that often, the missing piece in Aboriginal health career development, is a formal and coordinated approach to the ongoing support, professional development and career progression planning for both non-professional Aboriginal health staff and Aboriginal health professionals. In particular, a need for leadership skill development, resilience skill development and cultural support were noted, particularly for individuals that are moving into more senior and management positions.

Flexible study options and support in the workplace were seen as vital. While the Indigenous Student Success Programme (ISSP, formerly ITAS) was acknowledged, the need for more support

and direction for students who are not achieving academically (in any field) was raised by interviewees.

CDU's remote services provides support for schools in the effective delivery of VET and Higher Education programs to those Territorians residing outside of Darwin. This is fostered by effective liaison with remote communities though a small team of campus administrators and field officers based in regional centres of Katherine, Nhulunbuy, Alice Springs, Tennant Creek and Jabiru.

- From the Tennant Creek centre, training is delivered to Elliot, Canteen Creek, Ali Curung, Alpurrurulam, Barrow Creek, Epenarra, Robinson River, Borroloola and McClaren Creek. However currently there are no courses being offered with the exception of a certificate three in night patrol offered only through the shires (not publicly available)
- Community services is offered at Jabiru campus
- Katherine campus does not offer any health or human services related VET coursees.
- Yulara currently offers a certificate three in early childhood.
- Alice springs offers a certificate three and four in community services and a certificate three in individual support. A certificate four in mental health is also offered online through Darwin campus.

CDU estimate there are 750 Aboriginal students currently enrolled in in the University and 3500 enrolled in vocational education and training courses. Students have access to kitchen facilities, computer labs and quiet study area (facilities vary at each campus). CDU has Indigenous Support Centres in Katherine, Alice Springs and Darwin; these centres provide a culturally safe student study area specifically for Indigenous Students. Support is available to all prospective, enrolled and ongoing Indigenous students nationally, locally and/or remotely via range of student engagement tools and approaches. Away From Base funding program provides financial support and assistance to eligible Aboriginal and Torres Strait Islander (Indigenous Australian) students enrolled in approved mixed-mode/external courses. AFB funding is available to support student travel, meals and accommodation expenses as assessed and approved by CDU's AFB Team.

10.2 Build and support the Aboriginal Health Practitioner workforce

The vital role of Aboriginal Health Workers in the delivery of health services to Aboriginal people, particularly in remote areas, was noted repeatedly throughout literature and consultations. Stakeholders consistently identified the preference that, in a perfect environment, Aboriginal health services be Aboriginal health practitioner-led. Available data paints a picture of the Aboriginal Health Practitioner Workforce as local, experienced, stable and major contributors to the remote workforce. Some 99% of Aboriginal Health Practitioners working in the Northern Territory identify as residing in the NT while 97% report that their main job in the previous week was located in the NT. Almost 98% of AHP identified their primary place of practice is in the NT and 71% of Aboriginal Health Practitioners work in remote locations (35% in MMM 6 and 36% om MMM 7) [11]. Approximately 71% of Aboriginal Health Practitioners have worked as an AHP for more than ten years, and 70% of respondents intend to work at least another years years[11]

Russell et al. found significantly lower turnover and higher stability rates amongst AHPs than Nurses giving rise to suggestions that greater investment in growing the AHP workforce will better support remote primary health workforce in the long term [12].

Simultaneously it was identified that, in many cases, a lot of workforce development is required to achieve this. There were 226 AHP in the NT as of 2015. This workforce is equivalent to 194 FTE including 151 FTE clinical and 44 FTE non-clinical [11]. Studies have shown that the AHP workforce has declined, with numbers in the remote NT Department of Health services in 2015 being as little as 61% of those in 2010 [13].

A review of the Aboriginal Health Worker Profession, undertaken for the NT Department of Health and Families in 2010 [14], identifies key areas for action in strengthening the AHP workforce. These include:

- achieving clarification of the role(s);
- increasing the AHW workforce;
- cultural awareness training for the non-Indigenous workforce;
- promotion of AHP careers in local schools by local AHPs;
- parity in wages and conditions including housing;
- putting in place major training and support structures;
- developing improved training models;
- implementing professional mentoring support structures;
- accepting job classifications and establishing more enticing career pathways;
- adopting management practices that better demonstrate human resource management best practice; and
- establishing working structures/relationships with other health staff.

A total of 23 recommendations were provided in the report (see Appendix 4). Feedback received through the Health Workforce Needs Assessment indicate that these recommendations are still very much relevant.

Training opportunities

Batchelor Institute offers a Certificate IV in Aboriginal and/or Torres Strait Islander Primary Health Care Practice. This course involves 7-8 x 2 week training blocks over 18-24 months out of the Batchelor campus. All students are subject to fees, however a number of students have their fees paid by their employer through traineeships. Students can also seek exemption from fees. Abstudy covers accommodation, meals and travel and students live on campus in Batchelor. Northern Territory Students have access to the Indigenous Student Success Program (ISSP). Batchelor also offer qualifications designed for individuals who require significant foundation skills support to access a vocational learning pathway.

Without traineeships, the cost of training and completion of 800 hours placement is prohibitive for most prospective Aboriginal Health Practitioners (AHP). Traineeships are vital and are limiting recruitment and workforce development. Organisations are self-funding traineeships which limit capacity to increase numbers. Poor progression further exacerbates cost implications. The NT government funds a certificate II in Aboriginal and/or Torres Strait Islander Primary Health Care and a Certificate IV in population health. The Northern Territory Training Entitlement funds RTOs to deliver a defined list of Certificate III or higher qualifications. However, the Certificate IV in Aboriginal and/or Torres Strait Islander Primary Health Care Practice does not receive any NT Government funding.

The Certificate IV in Aboriginal and/or Torres Strait Islander Primary Health Care Practice is not actively advertised as BIITE receive adequate applications without doing so. Currently, all applicants that meet the criteria are accepted. Approximately 60 students are registered in the Certificate IV at any one time, interstate students account for approximately 50% of the cohort and almost two-thirds of students are from remote communities.

Consultation with stakeholders identified that retention and progression of AHP trainees is supported by:

- Workplace support and workplace understanding of AHP role (including clinical responsibilities)

- Support from employers for study including a place to study, a place to keep study materials and access to the internet
- A designated staff member responsible for the student to mentor, supervise, encourage, provide direction and sign off competencies
- Supervisors understanding of the training package
- Increased access to regionally based Clinical Educators
- Good use of ISSP and additional supports for students that are not progressing

Some Aboriginal community controlled health services have demonstrated successful outcomes for Aboriginal health trainees involving a range of strategies that include, supportive leadership, dedicated financial and other resources to fund student fees, providing a student learning room, dedicated desks and computers for each trainee and a health educator to support their studies off the clinic floor.

Stakeholders also noted that poor retention of students in the AHP training can be attributed to work-life balance, difficulties with being away from children and families and other complications with study blocks in Batchelor. BIITE have received regular feedback from employers that local delivery is required with mixed perceptions of the success, or otherwise, of trials involving more local delivery.

Approximately one-third of students graduate, and graduates can seek registration with AHPRA as an Aboriginal and/or Torres Strait Islander Health Practitioner. The consensus among stakeholders was that support pathways into employment for Certificate IV in Aboriginal and/or Torres Strait Islander Primary Health Care Practice were unnecessary. They cited that almost 100% of graduates already have employment in the sector, through a traineeship or as a result of placement during their course.

BIITE also offers a Certificate IV Aboriginal and Torres Strait Islander Primary Health Care and a Diploma of Aboriginal and Torres Strait Islander Health Practice. Participant numbers are comparatively small.

10.3 Develop and support all Aboriginal people working in and supporting health

While over 25% of the Northern Territory population is Aboriginal and/or Torres Strait Islander:

- 100 (2.21%) nurses who worked in the Northern Territory in the week previous to APHRA registration survey identified as Aboriginal and/or Torres Strait Islander,
    - 34 worked in MMM 6 and 16 in MMM 7.
    - 18 worked in an Aboriginal health service, ten in community health and none in general practice [11].
- 8 GPs (2.35%) who worked in the Northern Territory in the week previous to APHRA registration survey identified as Aboriginal and/or Torres Strait Islander
    - None of the 42 doctors working as a hospital non-specialist who intends to train in general practice identified as Aboriginal [11].
- It is understood that 3 Aborignal and/or Torres Strait Islander graduates of the NT Medical Program commenced as registrars with NTGPE this year.

Stakeholders consistently noted the importance of Aboriginal support staff and the need that these vital members of the health workforce not be missed in workforce planning due to their non-clinical or non-professional roles. Support staff are particularly important given the shortage of Aboriginal Health Practitioners, playing a vital role in connecting health professionals with the community.

Local employment of Aboriginal staff has been linked with remote staff safety. Remote staff also note the contribution of local staff to their access to support, advice and guidance [15]. Lastly, and perhaps most importantly, the presence of Aboriginal people in the health workforce are likely to have a positive effect on the patient experience, improve trust, attendance at appointments and acceptance of treatment [9]

Russell et al [12] suggests that increasing the overall local Aboriginal workforce in a range of positions (in additional to Aboriginal Health Practitioners) within health centres will improve overall workforce stability [12]. Examples of instances where the impact of high turnover of staff was somewhat mitigated by the presence of permanently employed local non-professional or semi-professional staff were also identified. The presence of local Aboriginal dental assistants supporting a dental program in Far North Queensland helped patients to accept different dentists each visit [16].

Between 2004 and 2015 the most substantial increases in NT DOH remote primary health care workforce were in administrative and logistics roles (administration officers, drivers, cleaners and gardeners) [13]. It is suggested that these increases provide the opportunity for nurses and AHPs to focus on clinical aspects of their role and local employment to be increased thereby improving retention of organisational knowledge and improving community engagement [13].

The National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework (2016-2023) [17] acknowledges both clinical and non-clinical roles. The National Strategic Framework for Rural and Remote Health[18] also identified that the recruitment and retention of health service support staff is crucial to improved retention of health professionals.

Throughout the needs assessment process, a number of organisations were identified as having in place targets and associated accountability for increasing Aboriginal participation in training and employment. These targets were seen in both education and primary health care and included:

- Targets for Aboriginal participation in higher education programs
- Prioritisation of Aboriginal applicants for higher education, student placement, scholarships and grants.
- Targets for Aboriginal employment within the organisation
- Targets for Aboriginal people in leadership positions within the organisation.

These targets accompanied by strong leadership and accountability were seen as being vital in improving Aboriginal employment in the primary health sector.

Two activities were identified as central to improving the participation of Aboriginal people in the health workforce; the development of support roles and inclusion of these roles in career pathways and the support and development of Aboriginal students studying for qualifications in health. Strategies identified in literature invlolve pathways to training and qualifications, the inclusiveness and cultural safety of the workplace, and the cultural competence of the team [9].

The need to increase the number of Aboriginal and Torres Strait Islander students studying for qualifications in health and improving the completion/graduation and employment rates for Aboriginal and Torres Strait Islander students is a key strategy of the National Aboriginal and Torres Strait Islander Health Workforce Strategic Framework [17]. Stakeholders identified that this involves improving the connection with school students, maintaining this connection through their tertiary experience and providing clearly identified potential employment opportunities.

There has been some work undertaken to understand and build aspiration among remote Aboriginal communities to pursue further education. Understanding and interpreting this work and it's implications for developing this workforce at an active level is important[19].

The Menzies Pathways Program aims to provide an opportunity for Indigenous youth from remote communities of the Northern Territory to be exposed to and provide an insight into the various careers available in health, science and/or research through a range of visits to participating organisations with hands-on activities. The students also gain an insight into Vocational Education and Training and Tertiary Studies. The program aims to encourage Indigenous students to continue on with science based subjects while at school in order to keep science as a career pathway open to them after graduation. It exposes students to the variety of jobs available in the scientific field and encourages them to seek further education in this field.

The Australian Centre for Indigenous Knowledges and Education (ACIKE) offers a free preparation for tertiary studies program that has been especially designed for Indigenous students. Assisting those who have not studied in a while or completed year 12 the PTS program helps to develop the skills, knowledge and confidence to be successful at university. Successful completion offerss a minimum entry requirements for most Diploma and Bachelor programs at the Australian Centre for Indigenous Knowledges and Education (ACIKE), Charles Darwin University (CDU) and universities in South Australia.

The Indigenous Student Services team provides high level support and assistance to Aboriginal and Torres Strait Islander students studying at CDU through:

- Assistance with student admission, enrolment, application and course information, including the development of Individual Learning Plans, educational pathways and progressions from VET to Higher Education;
- Orientation programs for new and continuing students, including intensive advice and support on academic study skills, effective time management, writing better essays and referencing;
- Opportunities to develop leadership, advocacy and representative skills as a CDU Indigenous Student Ambassador;
- Advocacy and support, such as assistance with study issues and liaison with lecturers; and
- Referral to CDU Support services such as counselling, careers, employment and accomodation.
- Support with accessing scholarships

Back on Track is an NT Government initiative to increase the Aboriginal health workforce. Under this program, Scholarships are offered for Aboriginal Health Practitioner trainees of $2500 per semester for up to two years. These are available to both NT Health and non-NT Health trainees.

The Back On Track initiative fund a pilot program offering training in Wadeye. Initially a certificate I level, 12 students commenced the program and 50% are expected to complete. The certificate offers health-focused literacy and numeracy skills. The program is set to continue with Certificate I graduates moving into Certificate II level studies and a new cohort of Certificate I students commencing. The aim is to move students into a Certificate IV Aboriginal and Torres Strait Islander Health Practitioner qualification.

The Northern Territory Aboriginal Health Academy (NTAHA) is a pilot program coordinated in a partnership between Indigenous Allied Health Australia (IAHA) and Aboriginal Medical Services Alliance Northern Territory (AMSANT). The program aims to support senior school students to complete year 12 and introduce them to a career in health through a VET in Schools pathway. Leadership and culture forms the foundation of the Academy and its model and students complete a Certificate III in Allied Health Assistance.

The Northern Territory Government (NTG) Aboriginal Cadetship Support (ACS) Program offers cadetships to Aboriginal and Torres Strait Islander People. The program involves students studying full-time and working in the respective agencies during the major semester breaks. Cadets receive:

- study allowance of $12 000 each year while they are studying full-time
- Higher Education Loan Program (HELP) fees paid on passed units
- 12 weeks work placement each year at the Administrative Officer 2 Level ($50 970)
- $1000 allowance for textbooks each year

This approach has been successful as a method to promote returning to the NT for clinical placements and employment.

PRIORITY AREA 2:
DEVELOP PATHWAYS FROM SELECTION AND EMPLOYMENT TO RETENTION

10.4 Develop mechanism for coordination of pathways across/with key stakeholders

While there is much enthusiasm about the progress of the Northern Territory Medical Program (NTMP), there is a general view that we are not growing enough of our own and therefore turnover is inevitable as health professionals "return home". A 2010 survey of 1006 nurses and midwives in the NT showed just 23 had always lived in the NT [20].

Currently, the opportunities for new nursing and allied health graduates to experience remote practice are limited. Stakeholders identified a need for better (or shared across disciplines) education support for students and new graduates in remote environments and better coordination between educators and health service providers to increase remote experiences for students.

The creation of clear pathways for rural and regional education and training is central to the development of a sustainable rural and remote health workforce, so much so that the Review of Australian Government Health Workforce Programs [21] recommended mandated collaboration between organisations involved in health education programs. Currently there are a range of workforce initiatives to attract students and graduates to health careers in remote locations, however these are sometimes poorly coordinated to maximise the continuity of participants subsequent pathways into health careers. Scholarships, cadetships and other supports for students considering rural and remote health careers are also sometimes poorly promoted, have limiting eligibility criteria and are not easily accessed or understood.

Many more nurse training positions and quality training experiences for N3 nurses and AHPs are required in remote communities to sustain a remote workforce. This will involve addressing the challenge that many remote communities lack the stable, experienced staff to provide mentoring and supervision [13].

Many allied health modalities are not available in the NT tertiary system. With an understanding that "growing our own" is vital to recruitment and retention of the health workforce, strategies are required to support NT residents to complete as much of their training and placement in the NT as possible and ensure they return home once their studies are complete. Achieving this may require the identification of creative pathways and relationships between NT tertiary institutions, NT primary health services and interstate institutions. The objective will be to try to offer some early tertiary components and NT placements for NT students accessing qualifications outside of the NT.

10.5 Identify enablers to retention and apply across all professions

Russel et al. estimated the annual turnover rate for Nurses at 74.4% and Aboriginal Health Practitioners at 37.8%. Generalising and applying this finding to data from the 2016 National Health Workforce Data set, this equates to:

- A turnover of 611 of the 822 nurses identified as working in an Aboriginal Health Service or other Community Health Care Service
- A turnover of 85 of the 226 Aboriginal and Torres Strait Islander Health Practitioners

Costs of staff turnover within the the Department of Health and Families (DHF), and were estimated to average $10,734 per turnover ($5,963 – $22,123). (attracting and keeping nursing professionals) with turnover cost being the highest for Remote Nurses [20]. The need for a renewed and improved focus on retention was a consistent theme across interviews. The industry is celebrating an increase in our homegrown health professionals, particularly medical practitioners, and is confident that this will provide the NT with an increasingly stable workforce. Health services are keen to ensure that our focus for recruitment is ensuring we retain this valuable resource and attract them into areas of need.

Scholarships attached to return of service agreements, such as that currently in place for graduates of the Northern Territory Medical Program offer an opportunity to retain local graduates. Such scholarships are not consistently applied across other health professions in the NT. The World Health Organisation recommendations relating to the improved attraction, recruitment and retention of health workers in remote and rural areas[22] reinforce the need to support the return of service with appropriate support and incentives.

The Australian General Practice Training Program is an essential component of the NT medical pathway. The attraction of a place in an AGPT training program brings many future GPs from interstate. It is now also being accessed by graduates of the NTMP and offers a valuable opportunity to retain our medical workforce in the NT. Similarly, programs such as Districts of Workforce Shortage, Rural Locum Relief Program and the five year overseas trained doctor program attract overseas trained doctors to the Northern Territory (refer 9.14 Overseas Trained Doctors). However, to date, retention of GPs following fellowship and/or completion of their ten-year moratorium is poor.

Ongoing case management and coordinated efforts are required to ensure that retention of NT trained health professionals is maximised and these health professionals see the NT as being able to respond to their personal and professional aspirations.

Both literature and stakeholders sentiment was clear in their understanding of the factors that contribute to retention. These were:

- Health professionals are well briefed and have a clear understanding of the community, available resources and support, their position and their role within the health service.
- Health professionals receive a comprehensive orientation to the Northern Territory, health in the Northern Territory, their community and their role within the health service.
- Awareness of and confidence in the ability of the Northern Territory to meet their career aspirations.
- Health professionals receive individual personal, peer, clinical and career development support or mentoring.
- Access to professional development [22]

In remote health services, the following were also important:

- Remote Health Clinics are fragile workplaces with high, complex workloads. Working in this environment requires a special kind of health professional with a unique skill set. Health professionals personal and career skills, needs and aspirations need to be well matched with their rural or remote placement.
- Understanding of individuals roles within the multidisciplinary team[18]. A lack of role knowledge has regularly been linked to employee dissatisfaction and poor retention and relates to all members of the team, but particularly so with Aboriginal health practitioners and allied health roles.

- Quality housing
- Safety
- Job security, referring in particular to an employment contract of a reasonable duration with timely contract renewal advice.
- Preparation and training. Better prepared health professionals result in better retention. Some stakeholders believe that the Graduate Certificate in Remote Health Practice should be a minimum standard for Remote Area Nurses and will result in better-prepared nurses.

There was also a view that aspirations for retention should include keeping health professionals within the NT as much as within a particular location. It was acknowledged as unavoidable that life circumstances or professional goals could require a health professional move. However, focus should be on the capacity to meet the health professionals changing needs while retaining them within the Northern Territory.

Locum Support

A 2014 study looking at the impact of incentives on retention of rural and remote doctors found that the longest-term impact item was a locum-relief scheme[23]. The NT PHN offer a free locum matching and placement service for all permanent general practitioners working across the Northern Territory. The program provides retention support, enabling general practitioners to take leave. In addition, GP locum placements can also be offered where there is a current GP vacancy. More than 120 locums have been recruited to this program between 2011 and 2017 and provided an average of 1929 days of locum support per year.[24]

Sustainability

Retention of GP's in private practice in remote locations is a distinct area for consideration. Incentives available to some GPs in the public or ACCH sector may not be equally available to GPs in private practice. These include incentives such as free housing and associated costs, fares out of remote locations and CPD allowances. At the same time these services face concerns regarding high rent, ongoing threats to viability due to remoteness and increasing costs, cost of accessing CPD and higher cost of living.

Amenity

Amentity was identified as an important factor in the retention of health professionals in remote communities. This included a range of factors from schools to internet access, quality of housing, gymnasiums and opportunities for social activity. Amenity may also be considered in terms of the work environment including access to quality equipment and resources (Ultrasound, x-ray machine, i-stat for blood tests, slit lamps, defibrillator) needed to perform the role.

Recognition

Community recognition has been reported as one of the positive elements of rural practice contributing to the retention of rural health professionals [25]. Recognition also plays a vital role in improving the profile of primary health care in the Northern Territory and promoting our health professionals as the leaders in Aboriginal health, public health and multidisciplinary care (refer 9.11).

The Administrator's Medals in Primary Health Care have two prestigious awards made by the Northern Territory Administrator; the Individual Medal and the Team Medal, presented annually to recognise and reward the outstanding service provided by the Northern Territory's primary health care professionals. The Northern Territory (NT) Health Professional of the Year Awards celebrates health professionals practising in the NT who have demonstrated an outstanding contribution to the health and wellbeing of their community in seven different categories covering a range of health

professions, practices and community member contributions. The Northern Territory Government administer a range of award programs. The Nursing and Midwifery Excellence Awards cover 11 categories acknowledging exceptional practice, significant contributions and leadership. The Aboriginal and Torres Strait Islander Health Practitioner Excellence Awards recognise the dedication and vital work of this group of health professionls. NT Chronic Disease Network Awards celebrate the contribution of NT individuals and organisations in the prevention and management of chronic diseases.

10.6 Target local students from high school/VET/undergraduate cohorts

Promotion of health careers within the school environment and providing peer examples and practical knowledge of the range of health careers and pathways into those careers is vital[21]. Stakeholders identified that the perception of many Aboriginal school students, that health careers are not an available or achievable option needs to be changed. There are some valuable examples of in-school promotion of health careers in the Northern Territory, however, these are small, poorly coordinated and currently medical dominated. It is suggested that the current activities need to be coordinated to ensure various small programs complement each other, capacity of these programs is maximised and the sector collaboratively offers a more comprehensive approach to promotion of health careers in schools.

Flinders NT work with schools in the Northern Territory to promote health and medical careers and cultivate students with interest and potential. They support a variety of activities such as the IMPACT program, a leadership program for school students that support students to be active community members and role models while assisting them to complete Yr12.

The NT Aboriginal Health Academy is an initiative of AMSANT, IAHA & CDU. Commencing in 2018 senior school students will be able to complete a Certificate III Allied Health Assistant.

The NT PHN High School to Health Careers Program involves interstate students who are undertaking studies in a health discipline at a university or Certificate IV in Aboriginal and Torres Strait Islander Primary Health Care promoting health careers to high school students in rural and remote schools. As part of the experience, students also have the opportunity to visit with various health clinics and meet some health professionals in the NT.

Students participating in the NT PHN Go Rural program visit clinics and health services, to gain an understanding of how different health services meet the diverse needs of the Northern Territory population. Students undertake clinical practice and experience cultural awareness and immersion activities. Students are also given the opportunity to participate in professional development alongside NT health professionals.

The Aspire Program is a partnership initiative between Charles Darwin University (CDU) and Northern Territory secondary schools. It aims to help students from diverse backgrounds achieve their best results in secondary school and to raise the aspirations of young people to pursue tertiary study. The program provides financial support and provides students with an opportunity to participate in a range of activities and programs that encourage them to develop goeals for the future and connect them to university students, staff, alumni and the broader community.

10.7 Support and develop existing pathways and extend to all disciplines/professions

Tertiary Education

The Northern Territory offers a range of tertiary courses that support undergraduate and postgraduate pathways in health careers relevant to the scope of this needs assessment (General Practitioners, Remote Area Nurses and Aboriginal Health Practitioners). These include:

- Flinders University Northern Territory Medical Program
- Charles Darwin University Nursing and Midwifery Program
- Charles Darwin University Nurse Practitioner Program
- Charles Darwin University Clinical Sciences Program
- Centre for Remote Health Remote and Indigenous Health Postgraduate studies
- Batchelor Institute of Indigenous Tertiary Education Aboriginal and Torres Strait Islander Primary Health Care Program
- Menzies School of Health Research postgraduate public health and research programs

Table 1 shows the tertiary courses provided in the NT relevant to the scope of this needs assessment (General Practitioners, Remote Area Nurses and Aboriginal Health Practitioners).

Stakeholders noted the need to promote these courses and work closely to support the quality of placement and pathway of students through to local employment. Where courses are not offered within the NT, or students choose to study interstate, stakeholders believe that pathways should be developed to ensure local placement and potentially provide part of their studies locally, thereby increasing the prospects that students will return home after graduating.

Pathways

Russel et al. (2017) provided a comprehensive report noting the high turnover of staff in remote primary health care services. The report concluded that workforce policies that stabilise the workforce and reduce turnover are crucial to manage the cost and quality of primary health care in rural and remote settings. The report notes that this may require different approaches including preferential access for remote students to tertiary health courses, vocational training based in rural and remote settings, remote scholarships and recruitment and retention incentives for health professionals in remote locations.

General Practice Pathway

There is a clearly defined pathway for general practitioners within the Northern Territory. This pathway involves comprehensive promotion in schools, priority admission and targets for Indigenous students and NT residents, an Indigenous entry scheme, guaranteed internships, mandatory rural placements for students and registrars, and infrastructure and resources to support these remote placements.

The Northern Territory Medical Program is a four year postgraduate program offered by Flinders University in the NT. Preference is given to students who are NT residents and Aboriginal Territorians. Northern Territory Government bonded medical places may be available and are associated with a four-year Return of Service Obligation (ROSO) in the NT after graduation. Aboriginal and Torres Strait Islander Australians can apply to study medicine in the Northern Territory through the Indigenous Entry Scheme. This scheme is an alternative entry pathway that involves a written application, interview, participation in a Preparation for Medicine Program and the Flinders University Extended Learning in Science program (an online course about chemistry, physics, biology and numeracy). All students of the NT Medical Program are required to complete a remote placement block, six months in third year and an option for a further six months in fourth year. These placements include a mix of hospital, Aboriginal medical services and other primary

health care. These placements are supported by comprehensive infrastructure including education spaces, administration and accommodation support.

Delivered in the NT by NTGPE with the support of NT PHN, the John Flynn Placement Program provides student doctors with the opportunity to experience clinical practice and lifestyle in remote and rural locations across the NT. Successful eligible applicants, spend eight weeks over three to four years in a remote or rural community. In the Northern Territory, 15 places are offered annually. While funding will allow up to 20 places, available placements have limited access to 15 students annually.

Intern positions are available at both the Royal Darwin Hospital and Alice Springs Hospital. Eligibility criteria prioritises bonded graduates of the NT Medical Program, Aboriginal graduates of other medical schools and graduates of other medical schools that are residents of the Northern Territory. RDH interns have the option to be seconded to Katherine Hospital for 2-3 months. The Rural Junior Doctor Training Innovation Fund enables interns to gain experience in general practice, Aboriginal medical services and other primary care settings as an additional elective placement to their mandatory core rotations. The program funds the intern salary, clinical supervision, travel and accommodation. The program is reliant on Royal Darwin and Alice Springs Hospitals allowing the release of interns to work in these areas with interns from other jurisdictions filling the gap. Central Australian Health Service offer over 30 Resident Medical Officers positions (CAHS), incorporating Alice Springs and Tennant Creek hospitals and more than 70 positions are provided by the Top End Health Service (TEHS), incorporating Darwin, Palmerston, Katherine and Gove hospitals.

Northern Territory General Practice Education (NTGPE) is the Northern Territory's only Australian General Practice Training (AGPT) regional training organisation, delivering general practice education and training across the NT. With 56 available positions annually (44 with RACGP and 12 with ACRRM), NTGPE has around 150 registrars in the program. Registrars must do at least one of six rotations in an AMS. At least one six month rotation is also encouraged in a mainstream service. At any one time, one-third of registrars will be placed in mainstream service and two-thirds in AMSs.

NTGPE provides a financial incentive for services supporting a registrar. Practice incentive payments supplement this and ACCHSs can access a salary support scheme. The Aboriginal and Torres Strait Islander Health Training (Registrar Salary Support) Program provides opportunities for registrars who wish to undertake a part of their core vocational training in approved Aboriginal Community Controlled Health Services (ACCHSs) by offering salary support for the registrar.

With maturing of the NT Medical Program, NTGPE is starting to see 'homegrown' doctors enter their program. It is estimated that 10 of the 2018 cohort of around 32 registrars are NT grown doctors.

Other GP fellowship pathways include the ACRRM independent Pathway and the Remote Vocational Training Scheme. The ACRRM Independent Pathway (IP) is an Australian Medical Council accredited training pathway to become a general practitioner. ACRRM delivers the program via distance education. The program is promoted as suiting the experienced practitioner and self-directed learner.The Remote Vocational Training Scheme is a four-year vocational training program that delivers structured distance education and supervision to doctors while they continue to provide general medical services to a remote and/or isolated community. The training provided meets the requirements for Fellowship of both ACRRM and RACGP.

Flinders University has been funded by the Australian Government to implement a regional training hub. Hubs will build on the rural training network to:

- Improve the coordination of the stages of medical training to enable students intending to practise rurally to complete as much of their medical training as possible within regional and rural areas;
- Identify students with an interest in practising rurally and facilitate access to networked rural training opportunities at an early stage in their careers;
- Develop regional training capacity by supporting current supervisors of clinical training, assisting health services in obtaining accreditation for new training positions, and supporting local medical practitioners to become clinical supervisors;
- Strengthen existing, and develop new connections with key stakeholders to improve the continuity of training for medical students/trainees within their region; and
- Identify regional medical workforce needs and use this information to prioritise activity.

While the pathway for medicine is well defined and supported, individual case management is still limited, and loss at some points along the pathway is significant. Case management for all health professionals along pathways including NT students studying in the NT and interstate, registrars and NTMP students (ROSO) was seen as critical in maximising the benefit of significant investment in pathways.

The NT has 56 positions available in the AGPT program offered by NTGPE. However, for 2018, these positions have not been filled due to changes in the way the colleges allocate places. With an estimated NT workforce of 341 GP's, 56 registrar places through the AGPT program each year might be seen as a substantial source of workforce supply. However, there are factors that affect the contribution that this makes to a sustainable GP workforce. These include:

- Changes to the allocation of Australian General Practice Training (AGPT) places has resulted in the 2018 cohort of GP registrars falling some 20 places short of the quota. This will potentially have implications not only on long-term supply of GP's but also on the short term workforce as registrars form a significant part of our total GP workforce. This is concerning and implications may not be insignificant.
- Retention of GPs following fellowship is poor. To some degree this is unavoidable with most registrars being recruited from interstate, with the tendency to return expected. However, opportunities may be in:
    - The maturity of the NTMP. Until this year there was no local medical program to act as a "feeder" into the NTGPE program. 2018 sees the first cohort (6) of graduates from the NTMP entering the AGPT program offered by NTGPE.
    - Improving flexibility to target and promote the NTGPE program to a cohort of individuals particularly suited to Northern Territory practice with the flexibility to offer a program that supports this cohorts needs and interests.
    - Opportunities to work individually with registrars to develop individually tailored employment options within the Northern Territory.

Table 1: Tertiary Courses in the Northern Territory

Course	Institution	Funding	Duration	2017 Intake	Places	NT %	NT % target	Indigenous %	Indigenous % target	Graduates 2017
Medicine	Flinders	State/ Cwth	4 yrs post grad	24			100%	20% (2018)	100%	
Bachelor of Nursing	Charles Darwin University	Cwth Supported	3 years	916	2535	23%	NA	5%	NA	300
Bachelor of Midwifery	Charles Darwin University	Cwth Supported	3 years	76	197	39%	NA	4%	NA	33
Bachelor of Health Schience	Charles Darwin University	Cwth Supported	3 years	40	109	35%	NA	16%	NA	8
Graduate Certificate in Remote Health Practice	Centre for Remote Health	Cwth Supported	1 year (P/T)		69	31%	NA	2.9%	NA	31
Graduate Diploma in Remote Health Practice	Centre for Remote Health	Cwth Supported	2 years (P/T)	35	35	28%	NA	2.9%	NA	8
Master of Remote and Indigenous Health	Centre for Remote Health	Cwth Supported	3 years (P/T)		15	31%	NA	13%	NA	1
Certificate IV Aboriginal and Torres Strait Islander Primary Health Care Practice	Batchelor Institute of Indigenous Tertiary Education	Student/trainee	2 years		60	50%	NA	100%	100%	Circa 33% completion rate
Certificate IV Aboriginal and Torres Strait Islander Primary Health Care	Batchelor Institute of Indigenous Tertiary Education	Student/trainee	2 years	Unknown		Unknown	NA	100%	100%	Unknown
Certificate III Aboriginal and Torres Strait Islander Primary Health Care	Batchelor Institute of Indigenous Tertiary Education	Govt	1 year	Unknown		100%	NA	100%	100%	Unknown
Masters of Public Health	Menzies School of Health Research	Cwth Supported	1.5yrs	23	61	52%	NA	6%	NA	77%*
Graduate Diploma in Public Health	Menzies School of Health Research	Cwth Supported		18	36	69%	NA	38%	NA	69%*
Graduate Diploma in Health Research	Menzies School of Health Research	Cwth Supported		10	13	54%	NA	0%	NA	86%*

* Retention rate: number of students who enrolled in a given year and and completed/continued in the following year/total number of students in the given year

Nursing Pathway

Charles Darwin University offer Bachelor of Nursing at Casuarina and Alice Springs Campus completed over three years full time. A Bachelor of Midwifery is also offered as a three-year course (full time) at Casuarina Campus (or external). Both courses include rural and remote health, cultural competence and Indigenous health topics. The VET Diploma of Nursing course leads to enrollment as an Enrolled Nurse and serves as a pathway to a Bachelor Degree in Nursing. CDU offers a Tertiary Enabling Program (TEP). This free program is designed for mature students who have not met the minimum tertiary entry requirements. It helps students to build their academic skills, knowledge and confidence for studying at university and provides entry into most undergraduate degrees.

A program of the Centre for Remote Health, NT Remote and Rural Interprofessional Placement Learning program provides support and assistance to allied health and nursing students, their universities and clinical supervisors to maximise the outcomes of clinical placements in the Northern Territory. Assistance is provided with access to cultural awareness and health workshops, orientation, accommodation, access to facilities such as computers, video conferencing, Wi-Fi, common rooms and libraries, student networking and education sessions, financial assistance and support for universities and placement supervisors.

Each year the NT Department of Health offers a Graduate Nurse Program to registered nurses, registered midwives or enrolled nurses. 90 positions are offered at Royal Darwin Hospital, 45 at Alice Springs Hospital, around four at Katherine Hospital and two placements at Tennant Creek Hospital. While some rotations may be offered at Gove Hospital, aged care and community care services, this is not well embedded.

The Centre for Remote Health is a joint centre of Flinders University and Charles Darwin University and one of a network of University Departments of Rural Health. Funded by the Commonwealth Department of Health under the Rural Health Multidisciplinary Training Programme the Centre for Remote Health offer a range of undergraduate, postgraduate and professional development courses. These courses are offered to health professionals working in rural and remote regions of Australia including a Masters in Remote and Indigenous Health Practice. The Northern Territory Government recommend and offer this course to its Remote Area Nurses.

A Master of Nursing (Nurse Practitioner) is offered as an external program over two years part-time and may include remote and Aboriginal health subjects through the Centre for Remote Health.

Expansion of the medical pathway to nursing

The sector showed enthusiasm for and confidence in the pathway for remote medical practice developed in the Northern Territory. The Northern Territory Medical Program provides an exemplar of a model of tertiary education that supports principles of growing our own and building our Aboriginal workforce. These principles are less formally embedded in other Northern Territory tertiary health education programs. There was firm belief that expansion of this approach is vital to meet the future needs of the nursing and allied health workforce. Particularly referenced by both literature and stakeholders was the need to implement Northern Territory/rural residency [21] , Aboriginal enrolment targets, entry schemes and rural health topics in the curriculum for nursing. Also noted was the need for support, including administration and infrastructure, in remote areas to support student and graduate placement.

[22]The National Strategic Framework for Rural and Remote Health suggests that rural and remote placements across all health professions, particularly in areas of workforce need are important in achieving an appropriate and skilled rural workforce and recommend the expansion of scholarship, clinical placement, and bonded scholarship programs to all health disciplines [18]. Similarly, the Review of Australian Government Workforce Programs recommends the development of nursing

education plans across the whole training pipeline from enrolled and undergraduate nurse training to advanced scopes of practice and nurse practitioner candidates.

Student placement

ACCHSs are experiencing demands for student placement from a range of disciplines. Services are often short staffed, dependent on an agency or locum workforce and manage a high clinical load. As such, while they understand the value of student placements, they are limited in their capacity to support students due to the limited availability of suitable supervisors and impact on supervisors time for direct care. In response to these pressures, the NT Government prioritises Aboriginal students, NT residents and students enrolled with NT education providers within a clearly defined placement policy.

Stakeholders are particularly mindful of their 'return on investment'. Students that have greater clinical capacity, can add value, and are more independent are seen to be more desirable. Earlier undergraduate placements and first-year registrars are seen to add less value, take up more resources and are less desirable. Further, there are greater financial incentives associated with some placements than others.

The National Strategic Framework for Rural and Remote Health recommends the development of appropriate funding mechanisms and support for distance supervision of remote practitioners and new and emerging health service providers. In the Allied Health space, there are examples where clinical opportunities have been developed and supervisors employed to create student placement opportunities that do not place a burden on existing services.

While access to supervision is a key limitation on remote student placement, other factors affecting student placement include access to clinical spaces, local coordination and support and the safety of remote communities. There is a significant infrastructure that supports the placement of medical students and registrars in the Northern Territory. Lack of access to similar infrastructure, particularly housing, limits capacity to support remote placement for other disciplines. From stakeholder interviews it was identified that a shared housing pool across health, education and police employees in remote communites may increase access to accommodation for Aboriginal health practitioners, allied health professionals and students on remote placements.

PRIORITY AREA 3:
ATTRACT, MAINTAIN AND RETAIN EXISTING WORKFORCE WITHIN THE NORTHERN TERRITORY

10.8 Develop appropriate marketing and recruitment activities

There was an overwhelming sense that health services understand the need to approach recruitment of health professionals from a quality rather than quantity viewpoint, reflecting a need to:

- identify a clearly defined target group, those that are more likely to stay
- use targeted methods to attract this cohort of professionals
- target recruitment more precisely and perhaps personally
- focus on community involvement, professional challenges, public health, multidisciplinary work environment and a realistic view of practice in the Northern Territory
- use our existing workforce to attract the next cohort of likeminded professionals

Evidence indicates that improving the profile of rural and remote health workforce [22] and promoting the rewards of careers in rural and remote areas[18] is imperative to the improved attraction, recruitment and retention of health workers in remote and rural areas. Stakeholders noted that value propositions need to be clearly communicated and include information such as the IT system used and the medical equipment available in the clinics. Opportunities to speak with a clinician in the same or similar discipline in the region would also improve recruitment outcomes.

It was noted that the NT Government recently released a campaign "Our Life Out Here" [26] promoting careers across the various NT Government agencies. There was a perception that similarly, the Northern Territory as a whole should work together to create a profile of primary health in the Northern Territory. Workforce marketing across the health sector should be coordinated to provide a consistent message promoting the Northern Territory as leaders in Aboriginal health, public health & multisiciplinary care. Recent meetings between stakeholders and NT PHN in Katherine and Nhulunbuy have indicated that health services have an appetite for this conversation.

10.9 Develop career opportunities through continuing professional development and skill building

Improved access to education and professional development is clearly linked with both the appropriateness and retention of rural and remote health workers[15, 18, 22] and Remote Area nurses are more likely than other nurses to leave because of a lack of opportunity to undertake professional development [20].

It was acknowledged that professional development opportunities are fewer within the Northern Territory, mostly resulting from the small population and relative remoteness of the Northern Territory from the rest of Australia. However, opportunities were identified to better coordinate and share professional development opportunities to make the best use of limited resources. There were several examples where the skills and expertise of NT Government might be extended to the non-government sector. Additional benefits were noted given that the workforce moves across sectors and providers and shared training would support consistent practice and skills expectations. This concept is expanded in the Review of Australian Government Health Workforce Programs where engagement with the private health sector is recommended to improve utilisation of their capacity for involvement in training.

Career opportunities and professional development needs to be considered in a broader context if we are to provide interesting and challenging opportunities to remote health professionals. Remote health professionals have a unique view of medial issues and need to be given opportunities to take on leadership roles including membership of boards and committees. Flexible approaches to engaging with boards and committees need to be adopted to support this and remote practitioners must be given consideration, if not priority when considering vacancies for such roles.

Specific CPD needs and comments included:

- More training in business management – particularly given that the rollout of the National Disability Insurance Scheme (NDIS) will potentially move a number of people out of public and not for profit sectors into private practice.
- Mental health, renal health, emergency and primary health care / remote area nursing skills gaps for remote nurses
- Access to services such as dental care in remote areas might be partially addressed through development of some skills within RAN/AHP workforce.
- CPD opportunities that reflect the conditions common in the NT, rather than the profession and that build capacity of the whole workforce and aligns to community need will apply to a range of health professionals.
- Scholarships and bursaries are best suited to allied health as there is not the scale to make professional development available locally.
- Chronic disease management, particularly in relation to the Health Care Homes trials

Northern Territory PHN (NT PHN) coordinates a comprehensive education and training event calendar. The event calendar includes events presented by NT PHN, as well as external providers. NT PHN has delivered an average of 92 CPD events per annum between 2011 and 2017. [13]

The Health Workforce Scholarship Program is an initiative of the Australian Government Department of Health. Managed in the NT by Northern Territory PHN, the program provides scholarships, bursaries to rural, and remote medical, nursing, allied health and Aboriginal and Torres Strait Islander health workers and practitioners. These scholarships and bursaries support further postgraduate study, continuing professional development and upskilling courses including course fees and/or training-related expenses such as accommodation and transport. Other small scholarship programs are also offered including the NT Government Postgraduate mental health study grants available to employees of both NTG and non-government sector.

The Compass Teaching and Learning Conference is a professional development and networking event for NT primary healthcare professionals. This conference is presented in partnership by Northern Territory PHN (NT PHN) and Northern Territory General Practice Education (NTGPE). The biennial NT Chronic Disease Network conference, supported by the NT Government, is a significant event on the calendar of NT health professionals, with a major focus on challenges and innovation in Aboriginal and Torres Strait Islander health.

Health professionals were keen to ensure that the value of CPD as networking and peer support opportunities for Remote practitioners in particular is not underestimated, noting particularly their value in supporting mental wellbeing.

The Remote Primary Health Care Manuals support and promote good clinical practice in primary health care in central, northern and remote Australia and are used by healthcare workers including remote area nurses, Aboriginal health practitioners, doctors, midwives, nurse practitioners, and allied health professionals. They provide the legislated clinical guidelines for remote primary healthcare staff in the Northern Territory.

Cultural Awareness

Stakeholders reflected the need for an organisations focus on cultural safety to address equally the needs of Aboriginal patients and Aboriginal employees. Provision of a culturally safe and responsive workplace is crucial to attracting and retaining an Aboriginal and Torres Strait Islander health workforce[17]. Stakeholders reflected that while it is important to ensure the cultural safety of non-Aboriginal staff providing services to Aboriginal patients, cultural safety lens needs to be broadened to include addressing the systems that exclude the employment of Aboriginal people and the clinical and career progression of Aboriginal employees. The hiring of Aboriginal people in roles throughout the health service contributes to the cultural safety of non-Aboriginal staff and facilitates community access to the clinic.

Across the Northern Territory health sector, cultural safety training is not consistently administered as a requirement for employment and can be seen as tokenistic when delivered poorly. There was an acknowledgement that short, one-off 'cultural awareness training' is ineffective in providing practitioners an introduction to remote health services and the communication skills required to work with Aboriginal people. Stakeholders recognised that remote staff who were lacking cultural competence impacted negatively on remote services, clinical services and workforce retention. Stakeholders recommended regular, in-depth and locally specific, cultural safety training.

Overseas Trained Doctors

There are 116 (34%) doctors working as a GP that do not hold specialist registration in General Practice. Furthermore, 47% of doctors training to be specialist GPs were trained overseas [5]. While the focus on overseas recruitment is lessening, the contribution that overseas recruitment has made to the Northern Territory GP workforce cannot be underestimated. There is a strong commitment to existing overseas trained doctors, in supporting career development, increasing skills relevant to practice in the Northern Territory context and achieving fellowship. The Review of Australian Government Health Workforce Programs recommends improved support for overseas trained doctors, particularly in attaining fellowship [11]

10.10 Support structured career progression and emerging needs of the workforce

Career development and progression opportunities are identified as fundamental to the recruitment and retention of health workers in remote and rural areas[22]. Remote nurses who feel they have limited opportunities for career progression tend to leave the NT sooner and career opportunities elsewhere is one of the most important reasons for leaving [20].

Work is currently being undertaken by the Top End Health Service (TEHS) to strengthen the career path for Aboriginal Helath Practitioners working in NT government run AMSs. This expanded 9 teir career path includes clinical education, work experience and includes leadership and management roles.

The instability of short term funding and the lack of strategic investment in leadership and management roles to allow employee growth in their clinical and non-clinical skills limits career progression in remote AMSs.

10.11 Develop strategies to reduce workforce turnover including flexible attraction and retention packages and incentives

Overseas trained doctors

Of 341 GPs that identified NT as their resident state, 190 received their original qualification in Australia, 9 in New Zealand and 129 in other overseas locations. The dominant countries of initial qualification for those GPs who received their initial qualification in a country other than Australia or New Zealand and identify NT as their resident state were Sri Lanka, England, India, other Asian countries and the Phillippines.

This year the first graduates of the Northern Territory Medical Program are entering general practice. With this, there is a strong belief that priority needs to lay with homegrown health professionals. Stakeholders have largely supported the transition away from overseas recruitment by the Commonwealth Government. However, a number of general practices have a workforce model that has relied significantly on the recruitment of overseas doctors, and these may be under-represented in this view.

The significant number of overseas trained doctors working in the Northern Territory may be attributed to a range of programs and incentives offered by the Australian Government to support the recruitment of overseas trained doctors.

- Currently, the whole of the Northern Territory is considered a district of workforce shortage. A District of Workforce Shortage (DWS) is an area of Australia in which the population's need for medical services has not been met. Unless they choose to work in a DWS, overseas trained doctors are restricted by Section 19AB of the *Health Insurance Act 1973* from accessing Medicare benefits arrangements.
- The Rural Locum Relief Program is managed by NT PHN under the Rural Health Workforce Support Activity. The program allows medical practitioners that are working in rural and remote areas to access Medicare benefits for a temporary period during which they achieve Fellowship. Eligibility is restricted to practices within RRMA 3 – 7, Areas of Consideration and all Aboriginal Medical Services (RRMA 1 – 7). New approvals for the Rural Locum Relief Program reduced from 78 in 2011 to 11 in 2017.
- Section 19AB of the Health Insurance Act 1973 requires overseas trained doctors (OTDs) and foreign graduates of accredited medical schools (FGAMS) to practice in a district of workforce shortage (DWS) for ten years. This 'ten-year moratorium' can be significantly reduced for Doctors working in rural and remote locations who enroll in the five year Overseas Trained Doctor Scheme and achieve fellowship.
- The Area of Need Program enables employers to recruit suitably qualified international medical graduates (IMGs) to vacant positions that have been difficult to fill. The NT Department of Health assess applications for Area of Need status.
- Under the Rural Other Medical Practitioners program (ROMPs) Programme, doctors working in rural and remote general practice have been able to claim the higher (A1) Medicare rebate, regardless of whether they are vocationally recognised. This increases the viability of non-vocationally registered doctors working in rural and remote locations. The Rural Other Medical Practitioners Program (ROMPs) applies to rural and remote areas classified as RRMA 4-7. In 2004, certain general practice workforce programmes, including the ROMPs Programme, were extended to 'areas of consideration' through enhancements to the Strengthening Medicare package.
- Areas of consideration are areas that are not classified RRMA 4-7 locations but exhibit the characteristics of rural areas. Areas of consideration were identified as a 'one-off' exercise and have not been extended since 2004. In 2004, most suburbs of Darwin were identified as

Areas of Consideration however new suburbs, developed since 2004, are not included resulting in seemingly inequitable access to this benefit.

Some stakeholders identified that the application of District of Workforce Shortage (DWS) and other incentive classifications to the whole (or majority) of the NT encourages a concentration of GPs in Darwin. There is a belief that Darwin is now well serviced by GPs and thus should be no longer be classified as a DWS and it's removal will encourage IMGs to work in areas such as Katherine, Tennant Creek and Gove which are currently very short of GPs

The Review of Australian Government Health Workforce Programs [11] recommended a review of the rural classification system used to identify eligibility for incentives, a review of districts of workforce shortage and the Rural Other Medical Practitioners program. These reviews are currently being undertaken and may influence incentives supporting overseas recruitment of doctors, having a significant potential impact on those practices with greater reliance on this workforce.

As part of the Stronger Rural Health Strategy announced in the 2018-19 Budget, the Government is reforming Medicare Benefits Schedule (MBS) item fee arrangements for general practitioners (GPs). Commencing 1 July 2018, this involves discontinuation of the Other Medical Practitioner (OMP) programs and it's replacement with new differential (tiered) rebates on MBS items for non-VR GPs working in Modified Monash 2-7 locations set at 80% of the VR GP rate, providing an incentive for doctors to become fully qualified and work where they are needed most.

This affects all non-vocationally recognised GPs (other than those participating on approved training programs). Grandfathering will apply allowing those receiving ROMPS prior to 1 July 2018 to continue to access this level of MBS payment, however recipients will still need to comply with their current agreement and timeline within which to meet the requirements for fellowship. A Non-VR fellowship support program will help non-VR doctors to meet these obligations.

After five to ten years and meeting certain criteria, overseas trained doctors can practice anywhere in Australia. As these doctors achieve these goals, they may be likely to move out of the Northern Territory which could lead to a heightened demand for doctors. As the focus nationally on overseas trained doctors as a workforce solution reduces, the Northern Territory will need to become increasingly adept at attracting doctors from within Australia.

Incentives

NTPHN recruited an average of 15 GP's per year between 2012 and 2017[13]. In recent years, recruitment support has been extended to nursing, allied health and Aboriginal health practitioners. Health professionals making the transition to living and working in the Northern Territory can apply to NT PHN for a relocation grant of up to $10,000. Funding can assist with reimbursement of costs associated with relocation, upskilling courses, rental assistance and more.

The General Practice Rural Incentive Program (GPRIP) is a financial incentive payment program aimed at retaining medical practitioners in rural and remote locations. The incentive payment is available to medical practitioners who provide primary care services in rural and remote locations and meet the continuous service requirements. Payments are scaled according to practice location, length of service and clinical workload and vary from $4500 to $60000 per annum [13]. GPRIP applications have increased consistently from 37 (20 eligible) in 2011 to 91 in 2017 (51 eligible). Concurrently the total value of GPRIP incentives paid out has increased from $263,000 in 2010/11 to $1,031,000 in 2016/17 [13].

Stakeholder feedback suggested that existing financial incentives for GPs in remote settings are somewhat offsetting increased costs and other disincentives. While wages need to be comparable and account for higher cost of living and difficulty accessing professional development, too great a focus on financial incentives may detract from the other important factors that play a role in the retention of health professionals. Recommendations [18, 21] are that financial and non-financial incentives are sufficient enough to compensate for opportunity costs associated with working in those areas[12] and are bundled to address the broad range of factors that affect recruitment and retention. Furthermore, there is a need to move away from centrally mandated incentive structures to flexible packages in order to meet locally identified needs.

Stakeholders reported that current funding received for some positions lacked adequate compensation for higher costs. The need for financial incentives available to GP's to be extended, in some form, to remote nurses and allied health practitioners, is evident in stakeholder sentiment and literature [21].

Stakeholders noted significant differences in incentives offered between government and non government, public and private primary health care services. This can cause unnecessary disadvantage to some employers over others, particularly where it is not viable to meet the standards set by others. Stakeholders also noted that there is an inadequate financial comparison for GPs in non-remote settings. This inadequacy proves particularly problematic where these practices do not have a point of difference (i.e. the attraction of Aboriginal health) from other metropolitan GP practices but do experience the additional cost associated with living in the Northern Territory. Some GP remuneration packages include a portion of Medicare income. GPs working in settings that cannot claim Medicare do not have access to this incentive. As a result, these positions may not be as competitive in recruiting GPs.

PRIORITY AREA 4:
DEVELOP LOCALLY RESPONSIVE, SUSTAINABLE MODELS OF CARE

10.12 Supporting activities that develop the quality of management and leadership

In a 2010 survey of 1006 nurses and midwives in the NT, two of the four most important reasons given for leaving the NT were stressful work environment (burnout) and a lack of support from management. The highest ranked motivations related to dissatisfaction with management [20]. Providing a safe, well equipped and supportive work environment is key to the recruitment and retention of a stable workforce [22]. There was a perception that, as employers there are opportunities to significantly improve awareness of the value of skills, and capacity around the support and development of employees. Included in this was:

- acknowledgment of the need to have a workforce to build a workforce. Employers need to have the right mix of experience and have access to staff members that are capable of supervision. All too often employers take on staff knowing that they will need support that they cannot provide. This results in reduced retention, low morale and poor reputation. Again this contributes to the overarching theme of quality vs quantity - the need to work for the right employee despite difficulties in recruitment.
- a need for nurse educators in remote areas to support pathways as well as retention
- the need to better understand the cost of turnover (including the use of agency staff), impact on quality of care and cost benefit of investing in staff retention/alternative models.

Evidence obtained both through consultation and literature [13] illustrated highly performing services that have achieved a high level of workforce stability. It was suggested that studying and sharing these examples may provide considerable benefit to the broader industry.

10.13 Support activities that build capacity in organisations to become 'employers of choice'

Some stakeholders challenge the perception that difficulty in recruiting is entirely the result of workforce shortages. Recruitment outcomes may be improved through examination of workforce models, service delivery models, reputation, salary packages and position as a preferred employer. Stakeholders also described a range of HR practices that support the recruitment and retention of staff with particular application to the NT remote and Aboriginal community contexts. These include activities such as involvement of board members in recruitment processes, simplifying application processes, establishment of an Aboriginal Staff Advisory Committee, progressive use of social media to attract suitable candidates, additional leave entitlements to address cultural needs and remoteness and flexible FIFO options.

Research recently undertaken explicitly looked at the long-term trends in supply and sustainability of the health workforce in remote Aboriginal communities in the Northern Territory. This research suggested that while additional funding will enable providers to increase the supply of health practitioners to a region, there is often a “fading of supply” reflecting an inability to recruit and retain employees to newly funded positions. The study concluded that funding therefore, is only part of the solution, noting that the broader solution is likely to involve addressing factors such as ensuring that the workforce is adequately prepared to work in a remote setting, improving governance, or levels of management and clinical support [13].

10.14 Facilitate organisations to explore successful and sustainable service models

Agency Dependency

Employers are experiencing a high level of dependency on agency nurses and locum GPs as a result of recruitment difficulties.

Available data paints a picture of the Nursing workforce as highly transient. Of those Nurses who worked in the NT in the week before the AHPRA survey, 12.65% were not NT residents. However, this percentage grew to 24% when looking only at Aboriginal or Community Health Services and may be more substantial given 34% did not respond to this question. The proportion of the workforce in the previous week that were not residents of the NT increased from 8% in MMM 2 areas to 32% in MMM7. This was more pronounced for Aboriginal Health Services (41% in MMM 7) and less so for Community Health Care (31% in MMM 7). Some 98 nurses who are residents of the NT reported their main work as being in a state other than the NT in the previous week [11].

Russell et al. [12] estimates that for every employed nurse position on an organisation chart there were 0.15 agency nurses. This figure equates to 15% of nursing staff and is significantly less than the estimate of 24% based on the 2016 National Health Workforce Dataset.

The high level of agency use is further "feeding" the perception or culture that the expected pathway for remote practice is through these mechanisms. The high use of short-term, high turnover and agency staffing approaches is financially unsustainable and results in weaker levels of staff safety and patient care outcomes [12].

Stakeholders maintain that a permanent workforce should be the preferred approach and a short term, non-return agency approach should be a last resort. However, a healthy and flexible mix of workforce approaches that respond to the needs of the workforce is required.

Human Resource Models

The Review of Australian Government Health Workforce Programs recommended that alternative rural health service models should continue to be explored, noting that investments in developing new practice models in areas of market failure may assist to ensure more remote communities can access reasonable levels of service [21]. This is supported by recent NT based research which notes the importance of developing and implementing health service models that support the recruitment and retention of long-term clinical staff [13].

Stakeholders noted that Health professionals are attracted to positions that:

- Offer diversity of experience
- Accommodate the need for peer support
- Offer professional development opportunities
- Respond to lifestyle and personal circumstances and responsibilities

Flexible models that accommodate these needs while maintaining a continuity of service provision were recommended in the literature [12] and exemplified in interviews. These involved:

- roles that involve rotation through a range of services i.e. outreach, community service, hospital etc.
- 'job sharing' arrangements
- regular long-term FIFO approaches such as three months on and three months off
- Internal relieving staff arrangements as an alternative to reliance on casual staff has been identified as one way of achieving greater consistency of staff knowledge and skills in relation to both clinical and safety matters, while also contributing to the containment of staff costs [15].

- Stakeholders also identified an inflexibility within existing budgets and HR systems that made such opportunities an exception rather than a rule. Financial modelling and advice regarding HR solutions are required to support flexible workforce models.

Stakeholders noted that currently these approaches are mostly derived as responses to retain a particular existing staff member rather than options used in pro-active campaigns to attract and retain staff.

Collaboration in recruitment and retention

Stakeholders believe that coordinated recruitment activity across the sector (private practice, government and non-government) would maximise opportunities for shared workforce models to support a range of outcomes: viability, professional development, generalism and retention. This is supported by the Review of Australian Government Health Workforce Programs which recommends addressing market failure through exploring models of collaboration between health services (health and disability sectors) as well as private/public partnerships in smaller communities. Further, recent meetings between stakeholders and NT PHN in Katherine and Nhulunbuy have indicated that stakeholders have an appetite for this conversation.

Emerging service types

There are a number of emerging service types that will necessitate innovation in service and workforce models. These include the National Disability Insurance Scheme (NDIS), Health Care Homes, Aged Care Reform and Social and Emotional Wellbeing programs.

NDIS

Stakeholders identified workforce challenges and opportunities related to the rollout of the NDIS including:

- The NDIS model involves a separation of the role of assessment, care planning and service delivery. The enactment of this separation in small communities where there may traditionally have been a single provider will require innovation and creativity and will potentially provide opportunities for private providers.
- The resources available through NDIS may create more non-professional health roles including personal care workers and allied health assistants.
- An increased need for the multidisciplinary team to be aware of the NDIS program and opportunities it presents for patients.
- A potential move of traditional disability support positions (particularly allied health) out of the public/not for profit sector and into private practice.

Aged Care Reform

Among a raft of aged care reforms implemented by the Australian Government in recent years is the introduction of consumer directed care. Aged care recipients in the community are approved for services and can now choose from a potentially unlimited selection of providers relevant to their needs. Implications for workforce are similar to those in the NDIS where we may see:

- A movement of health professionals out of the traditional government and not for profit sectors and an increase in the number of private businesses offering services to this cohort.
- Market failure where the separation of roles between assessment, service planning and service delivery and the expected choice of provider is not supported by the size of the community or existing range of services.

Health Care Homes

The Australian Government have commenced Stage One of a Health Care Homes (HCH) model to improve care for patients with chronic and complex conditions. Under the model, eligible patients

will voluntarily enrol with a participating primary health care provider known as their HCH. This provider will supply a patient with a 'home base' for the ongoing coordination, management and support of their chronic conditions. Mainstream general practices and Aboriginal community controlled health services can serve as HCHs.

Payment for services provided under the HCH model is based on a yearly sum that is paid to the primary care provider in monthly instalments. This provides flexibility in funding to encourage a team care approach to chronic condition management. It allows clinicians and patients to work with other providers including specialists, allied health and out-of-hospital services through the use of a tailored care plan to manage the condition.

Characteristics of the HCH model that may influence workforce include:

- HCH can enrol 55 patients for each full-time clinical lead. A clinical lead can be either a General Practitioner or a Nurse Practitioner. This may influence the demand for Nurse Practitioners in trial sites.
- While the clinical lead is required to undertake the patients care plan, the multi-disciplinary team rather than a sole GP will be involved in the management or treatment of patients. This too may have implications for the workforce mix that may be adopted under a Health Care Home model, particularly in mainstream General Practice trial sites where the model of service delivery is largely GP led.
- The HCH role is focussed on the coordination and management of support for patients chronic conditions. Closer relationships between allied health providers and the HCH will be vital and potentially drive an increase in co-location, multidisciplinary practices and an overall increase in the use of allied health in primary care.
- The chronic disease focus of HCH may lead to an increase in demand for chronic disease skills and specialties in the current Practice Nurse and Remote Area Nurse workforce, including diabetes and cardiac education roles.

Social and Emotional Wellbeing Programs

NT PHN has provided funding to 13 service providers across the NT to deliver an integrated Social and Emotional Wellbeing (SEWB) program to meet a community need for robust mental health and drug and alcohol services. These service providers are located in Darwin, Alice Springs and remote regions, and are committed to the integrated SEWB model and working together with the community to deliver local solutions to health outcomes. The SEWB workforce consists of a mix of mental health and alcohol and other drugs health practitioners including psychologists, social workers, occupational therapists and social cultural workers.

Funded in 2017, the program has experienced workforce challenges, particularly:

- Recruitment, especially psychologist positions
- Capacity to offer remuneration rates set to attract health professionals to remote locations
- Poor fit of traditional professional service models with remote environment and capacity for health professionals to adjust
- Lack of remote experience, cultural awareness and openness to modifying conventional professional service models
- Impact of stability of existing workforce on capacity to support new service models and health professionals
- Cultural viability of single roles (particularly relating to male/female patients)
- Peer support for professionals working as the sole (and new) provider of their discipline in a multidisciplinary context

Solutions being developed from within the program include:

- Shared service models operating across providers
- Peer support role developed within AMSANT which consists of a SEWB forum to be held in 2018.

Expanded scope of practice and Emerging Roles

Several evidence-based approaches have been recommended that will contribute to improving access to health workforce in remote and rural areas. These approaches include enhanced scope of practice, the introduction of new types of health workers, encouragement of intra- and inter-profession courses that enable health practitioners to provide a broader range of services in rural areas and varying of the skill mix of multi-disciplinary team members to enhance services. [18, 21, 22, 27]. This concept includes the introduction of new professional and semi-professional roles such as vocational and tertiary trained assistants, transport providers and coordinators, and telehealth/e-Health coordinators [18].

The Needs Assessment identified activities in a range of areas commensurate with these recommendations including rural generalism, allied health assistants and nurse practitioners.

Across the needs assessment, participants have strongly reinforced the need to align training opportunities associated with emerging roles, with job opportunities, funding availability (additional cost of positions), funding models (i.e. not accessing Medicare) and workplace readiness (governance) for expanded roles. Past experiences have seen these aspects not well aligned with poor results.

The successful implementation of these emerging roles will be determined by the engagement of the sector to develop workforce models that support clinical skill development and ability to practice. Further investigation is required to describe the barriers and enablers of the expansion of roles in Northern Territory context.

Rural Generalism

Rural generalism in its various forms (GP, allied health and nurse practitioner) is supported as a workforce solution across the sector albeit one in its infancy.

The concept of developing an expanded set of skills that meet the needs of rural and remote communities will be well supported by increasing opportunities for health professionals to move across work experiences and environments. While this might facilitate the development of generalist skills, it has also been identified through the needs assessment as an approach that will support recruitment and retention across the board.

Rural Generalist GP

The Cairns Consensus definition of rural generalist medicine [17] has been broadly adopted as:

"the provision of a broad scope of medical care by a doctor in the rural context that encompasses the following:

- *Comprehensive primary care for individuals, families and communities*
- *Hospital in-patient care and/or related secondary medical care in the institutional, home or ambulatory setting*
- *Emergency care*
- *Extended and evolving service in one or more areas of focused cognitive and/or procedural practice as required to sustain needed health services locally among a network of colleagues*
- *A population health approach that is relevant to the community*

- *Working as part of a multi-professional and multi-disciplinary team of colleagues, both local and distant, to provide services within a 'system of care' that is aligned and responsive to community needs."*
  (World Summit on Rural Generalist Medicine, Cairns, 2014).

The rural generalist is able to deliver quality, personalised and contextual care across the continuum of health services and from cradle to grave. This scope of care is relevant to the rural/remote context and engenders a range of services, through a single or small group of professionals, which are not practically viable in small communities through the mainstream model involving a broad range of specialist providers and services.

According to the Cairns Consensus [17], rural generalist medicine "has doctors applying a full and evolving skill-set, thereby increasing professional satisfaction, productivity and rural retention. Stable models of team-based care are promoted, and there is a reduced reliance on locums. This in turn supports establishment of a quality rural learning environment for students, doctors-in-training and others. Medico-legal risk and associated costs are reduced." (p 3)

The Cairns Consensus identifies a range of actions required to advance rural generalist medicine including appropriate systems of clinical governance (including clinical privileging and credentialing); career structures; relevant and accessible continuing professional development and supporting an enhanced scope of practice.

The Northern Territory is well advanced in many aspects of medical education and training models that produce and retain a generalist rural medical workforce including targeted medical school admission to enrol rural-origin students; locating medical schools, campuses and post-graduate residency/training programs in regional locations; scholarships and bursaries with return of service obligations.

Nurse Practitioner

A total of 25 nurses who worked in the NT in the week previous to the annual AHPRA survey were registered with nurse practitioner endorsement. Eight worked in MMM 6 and five in MMM7. Six worked in Aboriginal medical services, three in community care services and none in general practice [11]. Anecdotal information from interviews conducted suggests that just four nurse practitioners are working in defined nurse practitioner roles in the Northern Territory.

Charles Darwin University has offered a Nurse Practitioner (NP) course since 2009. The course focusses on primary care and remote health. Since 2009, approximately 45 nurses have completed their NP qualification, many supported by NT Health. The restructure of staffing arrangements to accommodate NP positions in NT Health has taken longer than expected, resulting in low numbers of NP positions. Anecdotally stakeholders report that nurse practitioners have left the Northern Territory to take up nurse practitioner roles in other jurisdictions. CDU reports that there are no NT residents currently enrolled in the nurse practitioner course and they consider this to be the result of a lack of local jobs.[28]

Nurse practitioners are still supported as an unrealised opportunity to better meet the workforce needs of remote health services and as an emerging opportunity for practices involved with the Health Care Homes trials. Still, only four Nurse practitioners are reported to be employed by TEHS. Requirements to achieve progression of the Nurse Practitioner roles are seen to be:

- A need to be more creative / flexible about how nurse practitioners may be utilised

- A need to develop cost benefits / financial models to show how it will provide return on investment ($20,000 difference between Nurse Level 4 (N4) wage and nurse practitioner wage)
- Refocus NP roles as generalist not specialist
- Ability to address the significant impediment posed by the national requirement for 300 hours of supernumerary work to ensure clinical competence. This is cost prohibitive for RNs who are generally working while completing studies.

Interest has been shown in collaboration across government/non-government, primary/ tertiary and education sectors to develop a nurse practitioner strategy.

Allied Health Assistants

While Allied Health is not within the scope of this needs assessment, Allied Health Assistant roles have been identified as a strategic opportunity for development of the local Aboriginal workforce. Allied Health Assistants support the delivery of allied health services under the direction of Allied Health Professionals. They too may have a generalist role, working with a number of allied health professionals. Their practice must be supervised by the relevant allied health professional, however, for more experienced staff, this may not always involve daily face to face supervision, but instead, be supported by telephone or teleconference. Allied health assistants have specific potential benefits in remote settings where continuity of service can be maintained through the activities of the assistant in the periods between visiting allied health services. The allied health role can also be a pivotal pathway to health careers, particularly for local Aboriginal people.[15]
Allied health assistant roles have been identified as an emerging role in the new NDIS environment. A new program in 2018, the NT Aboriginal Health Academy offers a Certificate III Allied Health Assistant to Aboriginal senior school students.

10.15 General

Comments made by stakeholders about the Health Workforce Needs Assessment, the development of a Workforce Plan and the range of workforce activities undertaken across the sector included:

- The need to evaluate workforce programs and collect financial and outcome evidence to support the embedding and expansion of activities.
- The central coordination of workforce activities among stakeholders is required to; work with key organisations to enhance their work, maximise the benefit of existing activities and identify and fill gaps.

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12 APPENDIX 1: Terms of Reference – Health Workforce Stakeholder Group

Health Workforce Stakeholder Group

phn NORTHERN TERRITORY
An Australian Government Initiative

Terms of Reference

Under the Rural Health Workforce Support Activity (RHWSA) NT PHN will address health workforce shortages/mal-distribution and workforce capacity/capability in regional, rural and remote areas of the NT.

NT PHN will convene an NT Health Workforce Stakeholder Group to support the identification of health workforce needs through a Health Workforce Needs Assessment (HWNA), the development and application of a priority setting framework and contribution to collaboratively planned activities that:

1. Improve access and continuity of access to essential primary health care through activities, including provision of recruitment and locum support and administration of Rural Locum Relief Program (RLRP) and 5 Year Overseas Trained Doctor (OTD) schemes;
2. Build health workforce capability by working with health professionals to become vocationally qualified or by upskilling to meet community need, supporting the retention of health professionals in rural and remote areas and administering the General Practice Rural Incentives Program (GPRIP) Flexible Payments System;
3. Grow the sustainability of the health workforce by providing policy advice to support a sustainable health workforce, encouraging interest in rural and remote careers, developing strategies to ensure continuity of care and maximising distribution of scarce human resources in rural and remote locations.

1. ROLE AND FUNCTIONS

The role of the HWSG is to:

- Provide assistance with the development of the NT PHN RWA Health Workforce Needs Assessment. This may include contributing to expert knowledge, providing information and /or data, reviewing/editing content, seeking input from their organisation's broader membership etc;
- Support the key activities of:
    - delivery of the annual Health Workforce Needs Assessment by endorsing the Health Workforce Needs Assessment for authorization by the NT PHN Board and submission for approval by the Australian Government Department of Health;
    - identifying needs and priority areas informed by the needs assessment and recommending these for inclusion in the annual Activity Work Plan;
    - delivering the annual Activity Work Plan by endorsing the Activity Work Plan for authorization by the NT PHN Board and submission for approval by the Australian Government Department of Health;
- Where relevant, facilitate the provision of information from their respective organisations to assist in the Rural Workforce Agency key activities.
- Undertake a timely review of documents and provide input/feedback within requested timeframes;
- Regularly attend HWSG meetings.

NOTE: the terms "health professional" and "health workforce" are inclusive of General Practitioners, other doctors working in Primary Health Care, Nurses, Allied Health Professionals and Aboriginal Health Practitioners.

2. AUTHORITY AND REPORTING

The HWSG will endorse the NT PHN's Rural Workforce Agency's annual Needs Assessment and Activity Work Plan for authorization by the NT PHN Board and submission for approval by the Australian Government Department of Health.

Work product will be published and belongs to NT PHN, however will be shared with jurisdictional stakeholders.

3. MEMBERSHIP

The following organisations will be invited to provide a representative and/or proxy:

- Charles Darwin University, and Bachelor Institute of Indigenous Tertiary Education;
- Flinders University;
- NTG Department of Health;
- NT General Practice Education;
- RACGP;
- ACCRM;
- AMSANT (Aboriginal and Torres Strait Islander Health State Peak Body);
- Health Providers Alliance NT
- Representative of the NT Regional Training Network (NTRTN)

See Appendix 1: Health Workforce Stakeholder Group membership nominees

HWSG Members are required to have sufficient delegation or authority to represent the views of their member organisation at meetings.

HWSG Members are required to nominate a proxy to attend meetings in their absence. Proxy members are required to have sufficient delegation or authority to represent the views of their member organisation at meetings. Proxies must agree to abide by these Terms of Reference

The duration of a member's appointment to the HWSG is for 12 months unless agreed to earlier. Membership for any member may be revoked at any time by NT PHN's CEO.

4. PROBITY AND DECLARATION OF INTEREST

HWSG members must declare any actual, potential or perceived conflicts of interest, through completion of a Disclosure of Interest Form.

Completed and / or updated Disclosure of Interest Forms should be provided to the HWSG's Secretariat within 10 business days of the first HWSG meeting. Declared conflicts of interest will form part of the Disclosure of Interests Register, which will be maintained by the HWSG Secretariat and updated at HWSG meetings.

5. PRIVACY AND CONFIDENTIALITY

HWSG members will be expected to maintain confidentiality. In order to maximise the value of the HWSG, robust and open discussion is expected. HWSG members must be mindful that sensitive issues will be discussed and that appropriate professionalism inside and outside meetings is expected.

It is the responsibility of both the Chair and the HWSG member raising/discussing an issue to identify matters of a confidential or sensitive nature.

7. MEETINGS

7.1 Chair

The HWSG will be chaired by NT PHN's CEO, or NT PHN's Executive Manager.

7.2 Meeting Frequency

The HWSG will meet as required to inform Needs Assessment and Activity Work Plan activities. Wherever possible at least one month's notice will be provided of meetings. Meetings may be held face to face or by teleconference or other electronic media.

7.3 Quorum

A quorum will consist of 50% of members plus one. In the absence of a quorum the meeting will continue and recommendations will be made for ratification by a quorum out of session.

7.4 Secretariat

Secretariat services will be provided through NT PHN. The role of the Secretariat will include:

- Collating and circulating meeting papers (e.g. meeting agenda, papers, action list)
- Writing and circulating the meeting minutes
- Maintaining and circulating a list/register of documents tabled during the meeting
- Arranging meeting venues, teleconference/videoconferencing arrangements and catering/refreshments.

7.6 Meeting Papers

Agenda items and meeting papers will be submitted to HWSG members three (3) days prior to the meeting by email wherever possible.

7.7 Minutes

Minutes comprising main points of a topic and agreed actions will be drafted by the Secretariat. Confidential items are not in general to be minuted. Minutes will be circulated to members by email within five (5) working days of the meeting. The Minutes will be considered to be confidential. Upon endorsement by the HWSG at the next meeting, minutes will be signed by the HWSG Chair.

13 APPENDIX 2: NTPHN Needs Assessment

phn NORTHERN TERRITORY

An Australian Government Initiative

The best health and wellbeing for Territorians

Needs Assessment

A systematic process for understanding the health and wellbeing needs of our communities.

Needs Assessment informs the strategic planning phase of NT PHN's commissioning approach and enables us to analyse, identify and prioritise activities.

The needs assessment process involves a collaborative, co-design approach underpinned by principles guiding governance, engagement and data. This diagram outlines the steps involved in doing needs assessment work within NT PHN.

Our needs assessments identify Territory-specific priorities within each of the six national priorities as set by the Australian Government Department of Health:

Mental health | Aboriginal and Torres Strait Islander health | Population health | Health workforce | Digital Health | Aged care

Understanding the needs of the population

To understand the health needs of people within the Northern Territory, NT PHN uses information available from a range of sources including datasets, surveys, literature reviews, community consultations and engagement with consumers and service providers.

Collaborative approach to define the scope

The scope of a needs assessment is defined through collaboration with stakeholders and people with local knowledge. To promote strong and successful partnerships, NT PHN is guided by co-design principles and collective impact when engaging internal and external stakeholders.

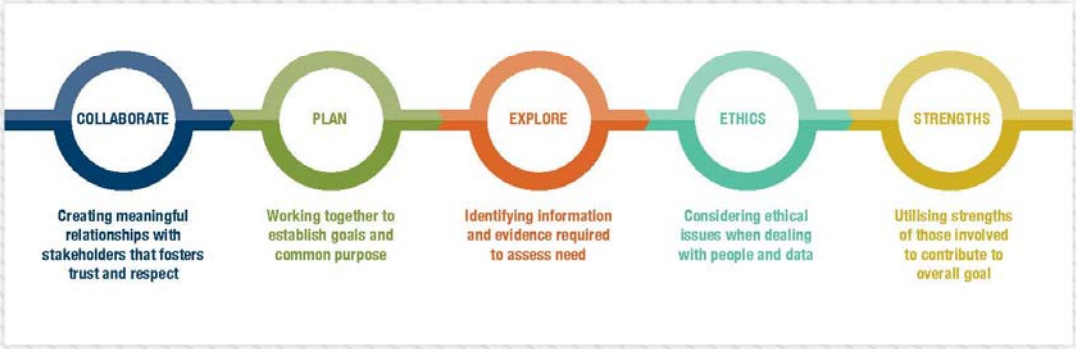
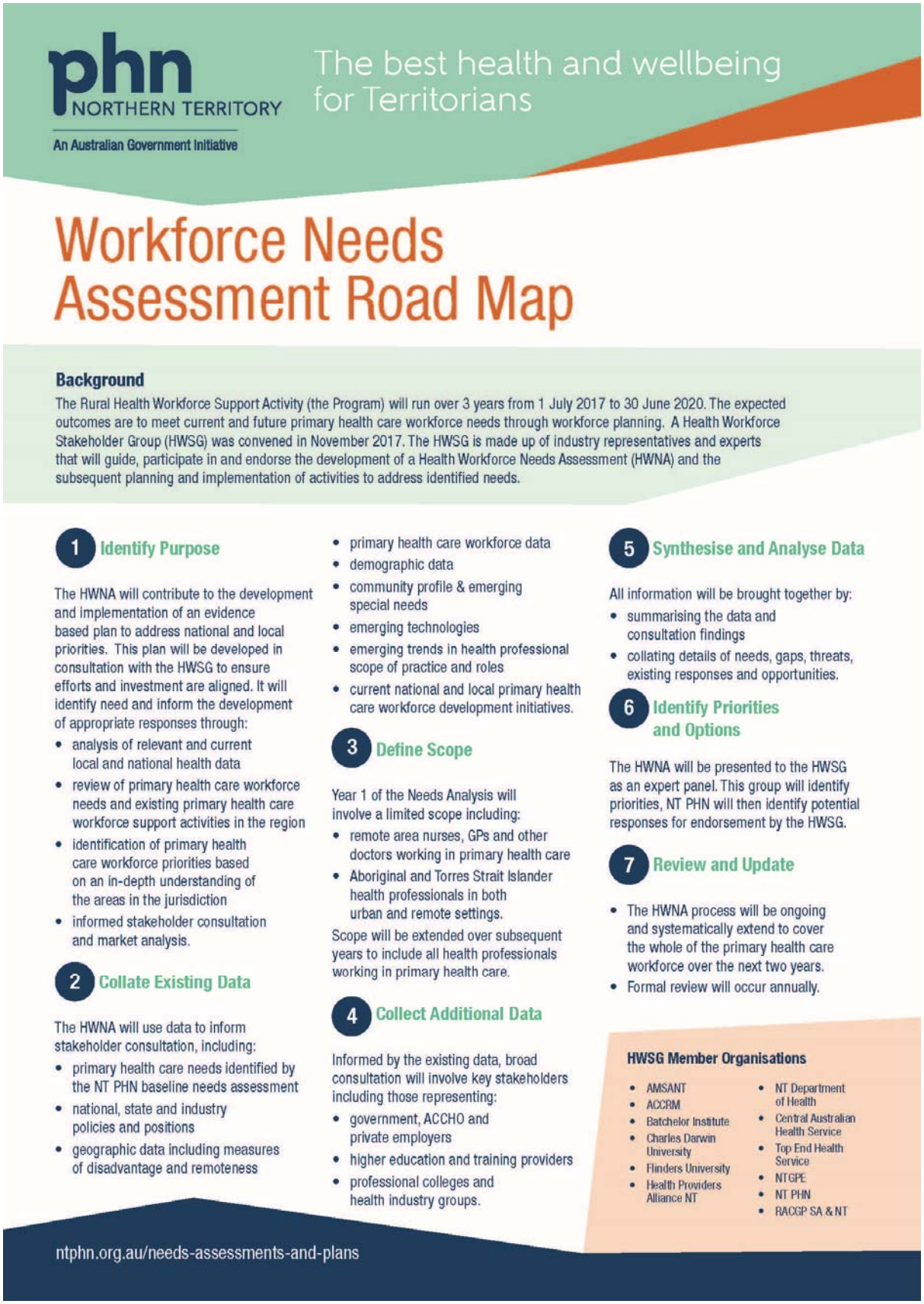


Figure 2: Consultation to determine the scope of a needs assessment

14 APPENDIX 3: Health Workforce Needs Assessment Road Map



15 APPENDIX 4: Recommendations of the Final Report: Aboriginal Health Worker Profession Review

Recommendation 1: AHW employers must ensure each AHW under their employ has a clearly stated job description and duty statement. DHF and AMSANT, in conjunction with a relevant professional association, need to create an agreed 'template' set of AHW 'roles' which employers can modify to construct job descriptions specific to their community and individual AHW context.

Recommendation 2: Health services should redesign the work in health services to (1) be entirely consistent with the needs of the community and (2) satisfy the needs of AHWs and other health services staff to better utilise their skills and clinical judgement.

Recommendation 3: It is recommended that an initial target to increase the AHW workforce annually be set at 10% or 30 new registered AHWs per year for the next three years.

Recommendation 4: The NT Aboriginal Health Forum should undertake, as a matter of urgency, work to review the current AHW workforce benchmark and establish an agreed AHW workforce size with an annual target and timeframe for the number of new entrants to meet the needs of Aboriginal Primary Health Care in the Northern Territory.

Recommendation 5: All non-Aboriginal staff working in Aboriginal Primary Health Care services in the NT should receive periodic ongoing cultural awareness training and support in order to complement ongoing community experience and assist in resolving workplace issues such as absenteeism and avoidance.

Recommendation 6: An acceptable model and mechanism for the cultural mentoring of resident non-Aboriginal staff working in Aboriginal Primary Health Care services in the NT needs to be fashioned from existing approaches and its implementation appropriately funded.

Recommendation 7:

- The Review identified that health services with the following management practices were most successful in retaining their AHWs:
- consultative and collective decision making processes;
- building confidence in AHWs by affirmation of their skills and providing ongoing skills development on the job;
- reciprocal support and mentoring between AHWs and RNs in cultural awareness and professional development respectively;
- facilitating AHWs working as a team with the benefit of managing cultural requirements such as gender issues;
- making available a network of relief AHWs;
- allowing AHWs to express a preference to work as a team or to set individual work plans;
- promote AHWs as the first contact for health centre patients and then either treated by an AHW or referred on to an RN or doctor if required;
- grievance processes established and if already in place appropriately adhered to for all staff; and
- ensure RNs understand the role of AHWs and support their professional development.

It is recommended that appropriate parameters and expectations be set for each health service in line with the above management strategies and that manager practices are monitored and managers held accountable.

Recommendation 8: Employers recruiting AHWs from outside a given community should in principle offer housing/accommodation on the same terms as nursing staff and other resident health professionals or NT Aboriginal Community Police Officers.

Recommendation 9: AHWs recruited from within their local community should ideally be offered housing/accommodation on the same terms as nursing staff and other resident health professionals or NT Aboriginal Community Police Officers as:

- a recruitment strategy/benefit; and
- a means to ensure a minimum standard of home environment for AHWs in the workforce.

Recommendation 10: Work be undertaken by AHW employers to identify any gaps and provide parity in the conditions of service of AHWs and other health professionals working in the same health services.

Recommendation 11: Leadership and management programs be provided to empower AHWs to be in senior AHW and management positions in both government and community controlled health services.

Recommendation 12: AHWs be involved in all aspects of the move to community controlled health services and in order to empower their role within these services clear AHW roles definitions in community controlled health services be established (see Recommendation 1).

Recommendation 13: Clear training pathways from Certificates II and III to registration level training requirements for existing and prospective AHWs need to be established.

Recommendation 14: The Review identified that health services within town centres had utilised their senior AHWs to recruit prospective AHWs from within the community and high schools. It is recommended that a concerted effort be made to promote AHW careers to high school students by existing AHWs and AHW employers.

Recommendation 16: The Review recommends that DH&F and AMSANT request the NT Department of Education and Training undertake an audit into AHW education, training and student outcomes for the past five to ten years.

Recommendation 17: The Review recommends that DH&F and AMSANT request the NT Department of Education and Training to review their user choice policy and funding for AHW training to allow RTOs other than BIITE to access funding.

Recommendation 18: It is recommended that for the medium term a thorough review of AHW training in the NT be conducted to provide lasting improvement by:

- creating regional training centres in larger urban and town centres across the NT for example, Darwin, Katherine, Gove & Alice Springs;
- ensuring each trainee AHW has a suitable designated supervisor/mentor in the health services, preferably in a community based service;
- ensuring sufficient and suitable AHW educators who will provide regular clinical support and on the job training to all AHW trainees by visiting all trainees in their health services;
- reviewing the current ‘block release’ mode of delivery; and accepting that for some trainees the period of the training course could realistically be up to three years and include language and literacy alongside or as a pre-requisite to the conceptual and clinical training of the Certificate IV.

Recommendation 19: It is recommended that whatever training model is adopted in the future that each AHW trainee must receive regular, local access to AHW educators for clinical support and on the job training. To facilitate this outcome AHW training and support needs to be included in the core work of health services and put into the job descriptions and responsibilities of senior AHWs and other health service staff.

Recommendation 20: It is recommended that a review of AHW ongoing professional development strategies and mentoring / support systems be undertaken and resultant strategies put in place to ensure the ongoing professional development, support and empowerment of individual AHWs is achieved at all levels of the workforce.

Recommendation 21: To ensure that AHWs achieve representation at all levels of the NT health industry it is recommended that key stakeholders for the AHW workforce discuss the best way to assist AHWs achieve representation and that all AHW employers and their representatives support the National AHW Association.

Recommendation 22: The Review recommends that DHF and AMSANT should consult relevant stakeholders to review AHW classifications and job evaluation systems using the classification structure presented by this Review as a starting point.

Recommendation 23: The Review recommends that DH&F, AMSANT and the NT AHW Registration Board consider the merits and challenges of establishing a separate but linked classification stream for AHWs wishing to practice in acute services such as hospitals [14].

16 APPENDIX 5: Semi Structured Interview Questions

Providers / employers

1. Is our workforce meeting the changing needs of our community - are there pre-existing or emerging needs that future workforce will need to be better prepared to meet?
2. What challenges do we face in maintaining a workforce to meet the needs of our community? - skills/labour shortages, attraction and retention
3. What difficulties do the workforce experience in accessing CPD appropriate to their needs?
4. Are there any particular groups of health professionals that are most difficult to recruit or access? Who are they? Why?
5. Are there any locations where it is more difficult to recruit people to? Why?
6. Are there any new technologies that will impact on the type of workforce we recruit, models of service delivery that will impact on type or location of workforce or skills they need?
7. What factors have the biggest impact on recruitment and retention?
8. What sort of vacancy rates are you seeing? What proportion of positions vacant at any point in time? How long are positions vacant for? What are the reasons for this?
9. What mix of workforce do you have (agency, permanent, FIFO, other)? What do you prefer? What works best for consumers?
10. Have you, or are you considering a different mix of workforce to address shortages?

Workforce Initiatives

Are you involved in any initiatives or activities:

1. around extended scope of practice / rural generalist positions (GP/Allied Health) / nurse practitioner / allied health assistant or other emerging roles that address workforce issues?
2. that define or improve pathways for individuals from school to university / university to graduate / graduate to employment?
3. that improve Aboriginal participation & retention in the health workforce
4. addressing mentoring, support and career progression for Aboriginal staff
5. facilitating culturally supportive and respectful work environment for Aboriginal staff
6. including traineeships
7. that provide pathways for health professionals into particular specialty areas (i.e. remote nursing)
8. that provide incentives for health professionals to be recruited or to be retained in rural or remote employment?
9. that offer alternative workforce models (job sharing, FIFO) to improve workforce sustainability?
10. including alternative service delivery models to improve workforce sustainability (AHP led or RAN led clinics)
11. that provide placement support for students?
12. that provide employment or support for graduates /registrars?
13. that provide opportunities for post graduate specialisation?
14. that otherwise support the recruitment and retention of health workforce in the NT?
15. including CPD opportunities for health professionals?

Education and CPD

1. What courses are being offered, available places, fill rate, student retention/graduation rates etc?
2. Do you have any initiatives that dedicate positions to rural or Indigenous students or other specific cohorts?
3. Any factors affecting applications to the course, successful student progression, retention, placement etc.
4. Any initiatives to improve student retention, progression within the program?
5. Any initiatives to improve student retention in the NT / remote workforce after graduation?
6. Any initiatives to improve student education and awareness around Aboriginal health / cultural awareness?
7. Any trends you are noticing?
8. Scholarships / traineeships you are aware of?

Policy, Research and Data

1. Are you aware of any research, reports or publications relevant to health workforce, Aboriginal workforce etc in the Northern Territory
2. Are you aware of any upcoming policy directions or initiatives (national, state, industry or within your organisation) that impact on workforce
3. Do you have any other information or insights that will inform our understanding of the health workforce in the NT and what our priorities should be to ensure we have adequate number and quality of health professionals.

17 APPENDIX 6 : Geographically-adjusted Index of Relative Supply (GIRS) for Northern Territory Statistical Areas (2014). [8]

SA3 name	SA2 name	Estimated Population 2016	MMM	GPs GIRS score 0-1	Nurses GIRS score 0-1	Midwives GIRS score 0-1
Darwin Suburbs	Alawa	2292	2			
Darwin Suburbs	Anula	2517	2			
Palmerston	Bakewell	3237	2			
Darwin Suburbs	Berrimah	1352	2			
Darwin Suburbs	Brinkin - Nakara	3816	2			
Darwin Suburbs	Buffalo Creek	0	2			
Darwin Suburbs	Charles Darwin	0	2			
Darwin Suburbs	Coconut Grove	3216	2			
Darwin City	Darwin Airport	15	2		YES	
Darwin City	Darwin City	7130	2			
Palmerston	Driver	3045	2			
Palmerston	Durack - Marlow Lagoon	4549	2			
Darwin Suburbs	East Arm	13	2			
Darwin City	East Point	14	2			
Darwin City	Fannie Bay - The Gardens	3602	2			
Palmerston	Gray	3530	2			
Litchfield	Howard Springs	7521	2			
Litchfield	Humpty Doo	9117	2			
Darwin Suburbs	Jingili	1865	2			
Darwin Suburbs	Karama	5270	2			
Darwin City	Larrakeyah	4013	2			
Darwin Suburbs	Leanyer	4880	2			
Darwin City	Ludmilla - The Narrows	2759	2			
Darwin Suburbs	Lyons (NT)	5092	2			
Darwin Suburbs	Malak - Marrara	4842	2			
Darwin Suburbs	Millner	2746	2			
Darwin Suburbs	Moil	2142	2			
Palmerston	Moulden	3150	2			
Darwin Suburbs	Nightcliff	4150	2			
Palmerston	Palmerston - North	4475	2			
Palmerston	Palmerston - South	3192	2			
Darwin City	Parap	2967	2			
Darwin Suburbs	Rapid Creek	3460	2			
Palmerston	Rosebery - Bellamack	7062	2			
Darwin City	Stuart Park	4497	2			
Darwin Suburbs	Tiwi	2763	2			
Litchfield	Virginia	3531	2			
Darwin Suburbs	Wagaman	2337	2			
Darwin Suburbs	Wanguri	1996	2			

Litchfield	Weddell	4730	2			
Palmerston	Woodroffe	3427	2			
Darwin City	Woolner - Bayview - Winnellie	3023	2			
Darwin Suburbs	Wulagi	2557	2			
Litchfield	Koolpinyah	24	5			
Daly - Tiwi - West Arnhem	Alligator	4968	6			
Alice Springs	Charles	4616	6			
Daly - Tiwi - West Arnhem	Daly	2102	6	YES		
Alice Springs	East Side	5520	6			
Alice Springs	Flynn (NT)	4760	6			
Katherine	Katherine	10635	6	YES		
Alice Springs	Larapinta	5266	6			
Alice Springs	Mount Johns	4043	6			
Alice Springs	Ross	2618	6			
East Arnhem	Anindilyakwa	2811	7		YES	YES
Barkly	Barkly	2879	7	YES	YES	YES
East Arnhem	East Arnhem	8582	7		YES	
Katherine	Elsey	2596	7	YES		YES
Katherine	Gulf	4774	7			YES
East Arnhem	Nhulunbuy	3409	7			
Alice Springs	Petermann - Simpson	2741	7	YES		
Alice Springs	Sandover - Plenty	4623	7	YES		YES
Alice Springs	Tanami	3133	7	YES		YES
Barkly	Tennant Creek	3362	7			
Daly - Tiwi - West Arnhem	Thamarrurr	2858	7			YES
Daly - Tiwi - West Arnhem	Tiwi Islands	2805	7			YES
Katherine	Victoria River	2842	7	YES	YES	YES
Daly - Tiwi - West Arnhem	West Arnhem	5483	7	YES		YES
Alice Springs	Yuendumu - Anmatjere	2398	7	YES		YES

18 APPENDIX 7 : Health Professions

NT PHN have selected eligible health professions from the Australian and New Zealand Standard Classification of Occupations, Version 1.2. Eligible health professionals must work within one of the listed professions within the primary health care sector.

Sub-Major Group	Minor Group	Unit Group	Occupation
251	Health Diagnostic and Promotion Professionals		
	2511	Nutrition Professionals	
		251111	Dietitian
		251112	Nutritionist
	2512	Medical Imaging Professionals	
		251211	Medical Diagnostic Radiographer
		251212	Medical Radiation Therapist
		251213	Nuclear Medicine Technologist
		251214	Sonographer
	2513	Occupational and Environmental Health Professionals	
		251311	Environmental Health Officer
		251312	Occupational Health and Safety Adviser
	2514	Optometrists and Orthoptists	
		251411	Optometrist
		251412	Orthoptist
	2515	Pharmacists	
		251511	Hospital Pharmacist
		251512	Industrial Pharmacist
		251513	Retail Pharmacist
	2519	Other Health Diagnostic and Promotion Professionals	
		251911	Health Promotion Officer
		251912	Orthotist or Prosthetist
		251999	Health Diagnostic and Promotion Professionals nec
252	Health Therapy Professionals		
	2521	Chiropractors and Osteopaths	
		252111	Chiropractor
		252112	Osteopath
	2522	Complementary Health Therapists	
		252211	Acupuncturist
		252212	Homoeopath
		252213	Naturopath
		252214	Traditional Chinese Medicine Practitioner
		252215	Traditional Maori Health Practitioner
		252299	Complementary Health Therapists nec
	2523	Dental Practitioners	
		252311	Dental Specialist
		252312	Dentist
	2524	Occupational Therapists	

		252411	Occupational Therapist
	2525	Physiotherapists	
		252511	Physiotherapist
	2526	Podiatrists	
		252611	Podiatrist
	2527	Audiologists and Speech Pathologists \ Therapists	
		252711	Audiologist
		252712	Speech Pathologist (Aus) \ Speech Language Therapist (NZ)
253	Medical Practitioners		
	2531	General Practitioners and Resident Medical Officers	
		253111	General Practitioner
		253311	Specialist Physician (General Medicine)
254	Midwifery and Nursing Professionals		
	2541	Midwives	
		254111	Midwife
	2542	Nurse Educators and Researchers	
		254211	Nurse Educator
		254212	Nurse Researcher
	2543	Nurse Managers	
		254311	Nurse Manager
	2544	Registered Nurses	
		254411	Nurse Practitioner
		254412	Registered Nurse
4115	Indigenous Health Workers		
	411511	Aboriginal and Torres Strait Islander Health Worker	
	4112	Dental Hygienists, Technicians and Therapists	
		411211	Dental Hygienist
		411212	Dental Prosthetist
		411213	Dental Technician
		411214	Dental Therapist
272	Social and Welfare Professionals		
	2721	Counsellors	
		272111	Careers Counsellor
		272112	Drug and Alcohol Counsellor
		272113	Family and Marriage Counsellor
		272114	Rehabilitation Counsellor
		272115	Student Counsellor
		272199	Counsellors nec
	2723	Psychologists	
		272311	Clinical Psychologist
		272312	Educational Psychologist
		272313	Organisational Psychologist
		272314	Psychotherapist
		272399	Psychologists nec
	2724	Social Professionals	
	2725	Social Workers	
		272511	Social Worker
	2726	Welfare, Recreation and Community Arts Workers	

	272611	Community Arts Worker
	272612	Recreation Officer (Aus) \ Recreation Coordinator (NZ)
	272613	Welfare Worker

The following additional list is also provided and applies to individuals working within MMM 7 locations and/or Aboriginal or Torres Strait Islander persons. This list acknowledges that:

- support staff are of great importance to health outcomes in remote communities, particularly where there is a temporary or visiting professional presence.
- Aboriginal support staff are particularly important as they also play a vital role in connecting health professionals with the community.
- These roles play a significant part in pathways to professional health careers.

Sub-Major Group	Minor Group	Unit Group	Occupation
Health and Welfare Support Workers			
411	Health and Welfare Support Workers		
	4111	Ambulance Officers and Paramedics	
		411111	Ambulance Officer
		411112	Intensive Care Ambulance Paramedic (Aus) \ Ambulance Paramedic (NZ)
	4113	Diversional Therapists	
		411311	Diversional Therapist
	4114	Enrolled and Mothercraft Nurses	
		411411	Enrolled Nurse
		411412	Mothercraft Nurse
	4116	Massage Therapists	
		411611	Massage Therapist
	4117	Welfare Support Workers	
		411711	Community Worker
		411712	Disabilities Services Officer
		411713	Family Support Worker
		411715	Residential Care Officer
		411716	Youth Worker
Carers and Aides			
423	Personal Carers and Assistants		
	4231	Aged and Disabled Carers	
		423111	Aged or Disabled Carer
	4232	Dental Assistants	
		423211	Dental Assistant
	4233	Nursing Support and Personal Care Workers	
		423311	Hospital Orderly
		423312	Nursing Support Worker
		423313	Personal Care Assistant
		423314	Therapy Aide
	4234	Special Care Workers	
		423411	Child or Youth Residential Care Assistant
		423412	Hostel Parent

	423413	Refuge Worker