DEPARTMENT OF
HEALTH

Northern Territory Renal Services Strategy 2017 – 2022

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NORTHERN TERRITORY GOVERNMENT

Contents

Foreword

The growth in demand for renal replacement therapy in the Northern Territory is striking. More than one hundred people commence receiving renal replacement therapy each year. In a few short years, over one thousand people across the Northern Territory will be leading lives dependent on renal replacement therapy. As with other chronic conditions, the burden of disease is not only felt by the individual but also affects their family and community. In the Territory this burden is exacerbated by the requirement for many people to relocate to access renal replacement therapy.

Our collective approach to addressing the demand for renal replacement therapy must be multifaceted and focus on improving population health and wellbeing across the Territory by reducing the incidence and impact of chronic kidney disease. Our approach to service delivery must respect and enhance the lifestyles of people with chronic disease and their families. There is a need not only to support change in lifestyle habits and behaviours to enhance wellness but also to create systems and environments that support healthy behaviours.

The future of chronic disease prevention and management is reliant on a broad range of effective partnerships between individuals, families and communities and their local health services including Northern Territory Government primary care clinics, Aboriginal Community-Controlled health clinics, other non-government organisations and private sector providers.

I would like to thank all those involved in the development of the Northern Territory Renal Services Strategy 2017-2022 for their contributions to this document. I look forward to the continuing development of effective partnerships to improve health outcomes for Territorians.

The future of chronic disease prevention and management is reliant on a broad range of effective partnerships.

Professor Catherine Stoddart

Chief Executive Officer

Background and Purpose

The Northern Territory Renal Services Strategy 2017 – 2022 will build on the achievements of the Renal Services Framework 2012 – 2017. The initiatives and actions that have been identified reflect priority areas needed to address current challenges, gaps and opportunities. Development and strengthening of partnerships between consumers, health providers, government agencies, Aboriginal community controlled health organisations (ACCHOs) and other non-government agencies are vital across the Northern Territory (NT) for the delivery of efficient, effective and quality renal services to the NT population. This Strategy provides direction for the delivery of renal services in the short, medium and longer term.

The Northern Territory Renal Strategy 2017-2022 must be read in the context of the Northern Territory Chronic Conditions Prevention and Management Strategy 2010-2020. That strategy focuses on the following chronic conditions: cardiovascular disease, rheumatic heart disease, type 2 diabetes, chronic airways disease, chronic kidney disease, chronic mental illness and cancers (associated with common risk factors for other chronic conditions).

The Chronic Conditions Prevention and Management Strategy acknowledges that to make progress in chronic disease management, action must be taken in these areas: social determinants of health; primary prevention; secondary prevention; self-management support; care for people with chronic conditions; workforce planning and development; information, communication and disease management systems; and quality improvement.

The Northern Territory Renal Strategy 2017-2022 (the Strategy) is nested within the Chronic Conditions Prevention and Management Strategy and focuses on seven key priority areas for advancing renal services, identified and developed through extensive Territory-wide consultation.

In summary the priority areas for renal services focus on effective prevention, improved management and early intervention in kidney disease, ongoing coordination, stronger consumer participation, care closer to home, a skilled and culturally competent workforce and a sustainable service system. These priorities are set out comprehensively in the second part of this document.

In developing the Strategy, NT Health is seeking to respond to the unique challenges and opportunities that chronic renal kidney disease raises in the Northern Territory. (In this document, NT Health refers to the Northern Territory Department of Health, Top End Health Service and Central Australia Health Service).

The Strategy identifies that in the Northern Territory, Aboriginal people and communities face the most challenging burden from renal disease. Especially for people from remote parts of the Northern Territory, a

diagnosis of renal disease has the potential to seriously affect whole families and communities and can lead to dislocation from land and culture. As the service system develops to meet growing demand for renal services in the Territory, we need to identify and implement innovative approaches to keeping people with renal disease connected to their land, their families and their community. This will be achieved through better use of technology including telehealth, flexible models of care informed by consumer participation, and effective partnerships between health services (including Aboriginal Community-Controlled Health Services) and communities.

Underpinning the Strategy is the fundamental principle of culturally inclusive practice. NT Health recognises that a culturally inclusive environment requires mutual respect, effective relationships, clear communication, explicit understandings about expectations and critical self-reflection. We believe that in an inclusive environment, people of all cultural orientations can freely express who they are, their own opinions and points of view.

Inclusive practice is dynamic. Cultural inclusiveness addresses and supports the needs of people from diverse cultures, and values their unique contribution. It involves ongoing awareness raising, where negotiations and compromise may be necessary. At the same time, people from diverse cultures must be supported to understand the renal services administrative and social culture. Most of all, we believe it is important to regard cross-cultural interactions as an opportunity for all of us to learn.

The Strategy guides the ongoing development of renal services in the NT over the next 5 years. It is important to note that this Strategy is not a static document as the goals, priorities and actions will continue to evolve in response to changing service demands.

The NT Renal Network will monitor the implementation of the Strategy by providing clinical leadership, advice, engagement and cooperation through effective clinical governance, the systematic application of clinical standards, guidelines and protocols and ensuring services are delivered in a culturally appropriate manner.

Action plans monitored and evaluated by the NT Renal Network will be established to track and report on the implementation of the Strategy. These action plans will focus on identifying measurable improvements against the priority areas of the Strategy. This will include measurement of early intervention and health promotion activities, measures of consumer satisfaction, achievement against the ambition to provide care closer to home, a skilled and culturally inclusive workforce and sustainable service delivery.

The following Strategies will be utilised to assist and direct the implementation of key priority areas identified in the NT Renal Services Strategy:

- Northern Territory Health Strategic Plan
- Northern Territory Chronic Conditions Prevention and Management Strategy 2010 – 2020
- Health Care Homes: Reform of the Primary Health Care System. Australian Government Department of Health
- Northern Territory PHN Strategic Plan 2015 – 2018
- National Aboriginal and Torres Strait Islander Health Plan 2013 – 2023
- Northern Territory Health: Aboriginal Cultural Security Framework 2016 – 2026
- Partnering with Consumers for Success: A toolkit NT Health to increase Consumer engagement 2015
- Aboriginal Health Strategic Framework 2014 – 2019
- Northern Territory Aboriginal Health Plan 2015 – 2018
- Remote Engagement and Coordination Strategy 2016
- Government – Our North, Our Future: White paper on developing Northern Australia 2015

This strategy has been guided by:

- Renal Services Framework 2012 – 2017
- Australian and New Zealand Dialysis and Transplant Registry (ANZDATA) 2015
- Caring for Australians with Renal Impairment (CARI) guidelines
- State of the Nation – Chronic Kidney Disease Hot Spots – Kidney Health Week 2016
- Kidney Health for All: A report on policy options for improving Aboriginal and Torres Strait Islander Kidney Health 2015
- International Society for Peritoneal Dialysis (ISPD)
- Renal Replacement Therapy Demand Study, Northern Territory 2001 – 2022
- Australian Department of Health and Ageing Central Australian Renal Study 2011
- Reinvigorating the Aboriginal and Torres Strait Islander Health Practitioner Workforce: A Discussion Paper 2016
- Cardiovascular disease, diabetes and chronic kidney disease: Australian facts Prevalence and incidence. 2016 Australian Institute of Health and Welfare

KIDNEY DISEASE

An Australian perspective

As documented by Kidney Health Australia (2015), approximately 1.7 million Australian adults (1 in 10) aged 18 years and over have clinical evidence of chronic kidney disease (CKD) and one in three adult Australians is estimated to be at increased risk of developing CKD. CKD is the ninth leading cause of death in Australia and is often called a 'silent disease' as up to 90% of kidney function can be lost before symptoms appear. As a result, many people are unaware they have the condition.

The term ‘chronic kidney disease’ represents the entire spectrum of disease that occurs following the initiation of kidney damage. The severity of the resulting syndrome is denoted by a staging scheme that extends from occult (hidden) kidney damage with well-preserved function (stage 1) down to the level of kidney disease requiring kidney replacement therapy (stage 5). End stage kidney disease (ESKD) occurs when kidney replacement therapy (KRT) is required to sustain life. KRT includes dialysis (haemodialysis and peritoneal dialysis) or kidney transplantation.

If CKD is detected early and managed appropriately, the otherwise inevitable deterioration in kidney function can be reduced by as much as 50%. Risk factors associated with CKD can be either modifiable or non-modifiable. Modifiable risk factors include socio-economic environmental factors, overcrowding, unemployment, low income and poverty, early life factors (birth weight), tobacco smoking, hypertension, overweight and obesity. Non modifiable risk factors include age, gender, family history, history of acute kidney injury, sixty years or older, ethnic background and Indigenous status (AIHW, 2016).

A significant number of people with CKD also suffer from co-morbidities such as cardiovascular disease (CVD) and diabetes thereby increasing the risk of premature death. Cardiovascular disease is the leading cause of morbidity and mortality in patients with CKD.

CVD (including conditions such as high blood pressure, heart disease and stroke), diabetes and CKD often have similar underlying causes and features, and share common risk factors as well as prevention, management and treatment strategies. The burden of these diseases, in terms of prevalence, continues to grow due to risk factor trends combined with an ageing population. Australia’s ageing population and the increasing risk of developing CVD, diabetes and CKD and their co-morbidities will escalate the burden of these diseases on individuals, families and the health care system into the future.

RENAL SERVICES

in the Northern Territory

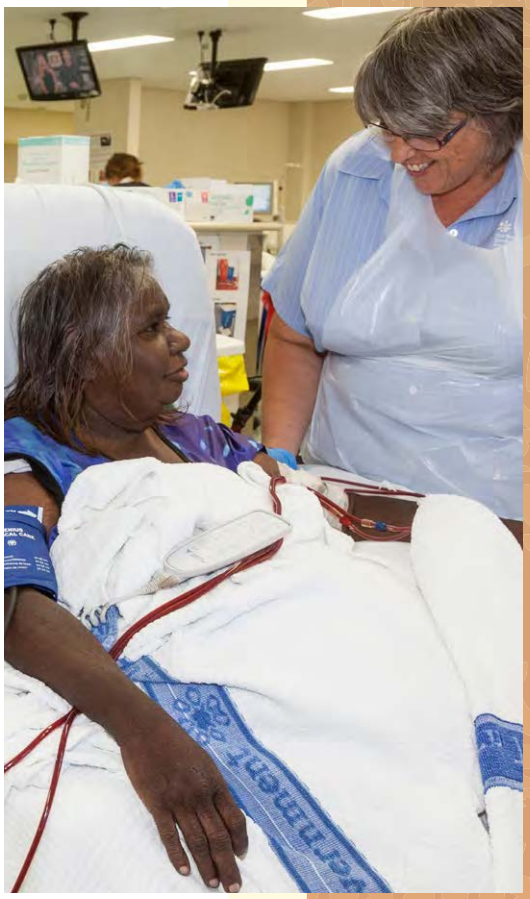
The current NT public health sector Renal Service operates a hub and spoke model with Royal Darwin Hospital (RDH) the service hub for the Top End Health Service (TEHS) and Alice Springs Hospital for the Central Australia Health Service (CAHS). This model provides for a structured and sustainable transition from an acute facility to community based care (urban or remote) for renal patients. The service hubs are responsible for acute care services related to assessment, investigation and intervention and determine management of renal patients along the care continuum in conjunction with health staff from community and remote services.

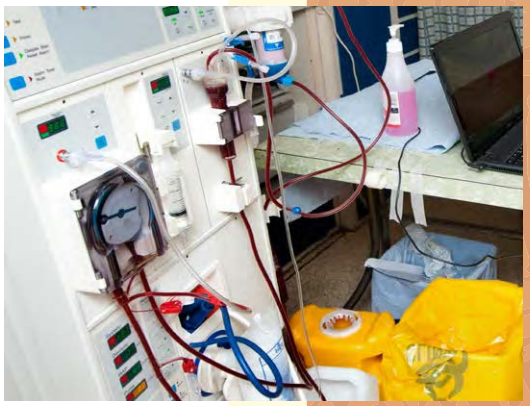
As cited in the Department of Health (DoH) Health Gains Demography Fact Sheet 2015, the catchment area for the TEHS renal services includes East Arnhem region to the Daly region, the Tiwi Islands and other island and coastal communities, the Katherine region from the border of Queensland to Lajamanu and the border of Western Australia. It has a land mass of 475,338 square kilometres with 196,573 people of which about 26% identify as Aboriginal. The Kimberley and Pilbara regions may access the TEHS services for acute renal related admissions.

The catchment area for the CAHS renal services is an area that encompasses two thirds of the Northern Territory and includes the Simpson and Tanami Deserts, the Barkly Tablelands and extends to the bordering areas of South Australia and Western Australia. It has a land mass of 872,861 square kilometres with 48,506 people of which about 44% identify as Aboriginal (DoH, 2015).

Aboriginal community controlled health services have an important role to play in assisting to prevent and manage kidney damage and disease in Aboriginal communities, and a small number are also involved in the provision of dialysis services.

There is also private sector involvement, and interest, in the delivery of dialysis in the Northern Territory.





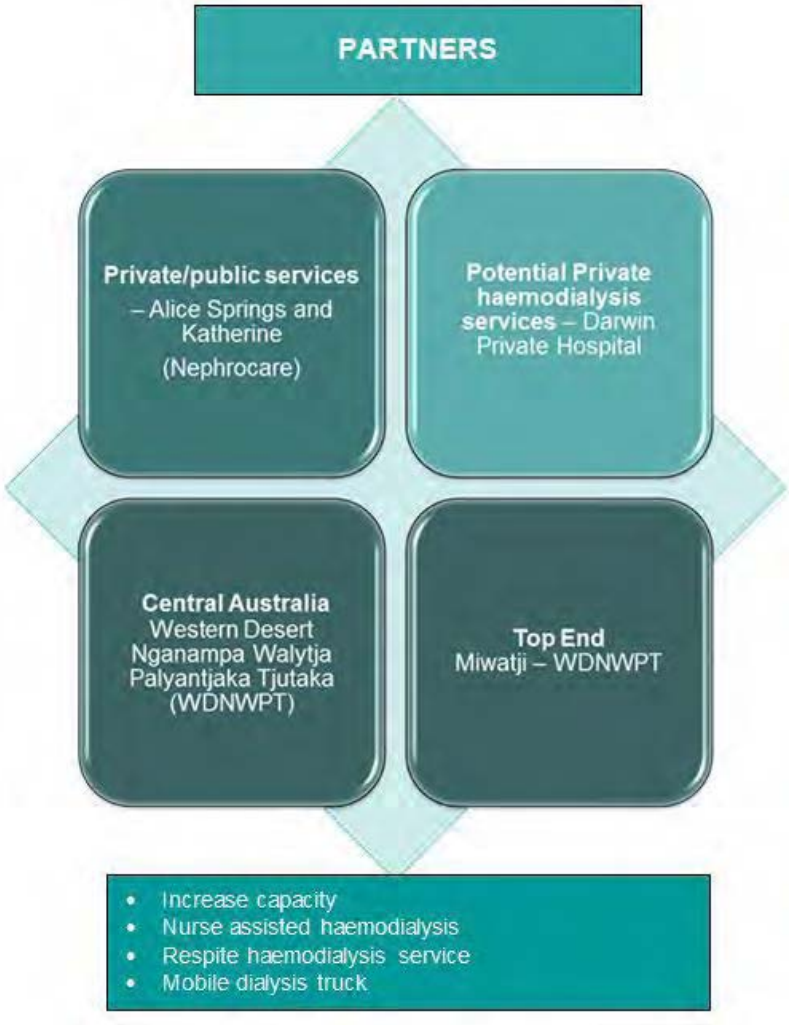
Renal Services Available in the Northern Territory, January 2017

TEHS

- Dedicated renal ward
- Acute haemodialysis and plasma exchange
- Nightcliff satellite unit
- Palmerston satellite unit
- Tiwi Islands - nurse assisted fly in/fly out
- Home haemodialysis training
- Drop in centre for home haemodialysis
- Peritoneal dialysis
- Transplantation
- Chronic kidney disease management
- Allied Health Services
- End of life care

CAHS

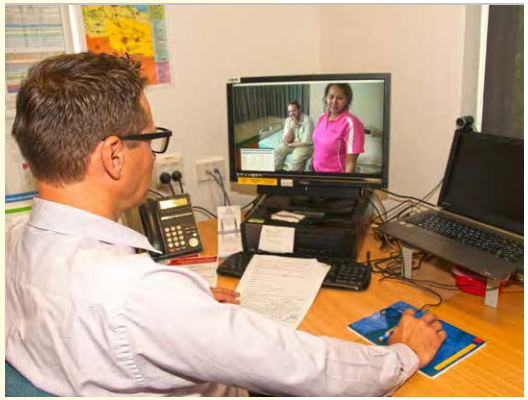
- Dedicated renal ward
- Acute haemodialysis
- Flynn Drive renal unit
- Tennant Creek renal unit
- Home haemodialysis training
- Drop in centre for home haemodialysis
- Peritoneal dialysis
- Transplantation
- Chronic kidney disease management
- Allied Health Services
- End of life care



CHALLENGES

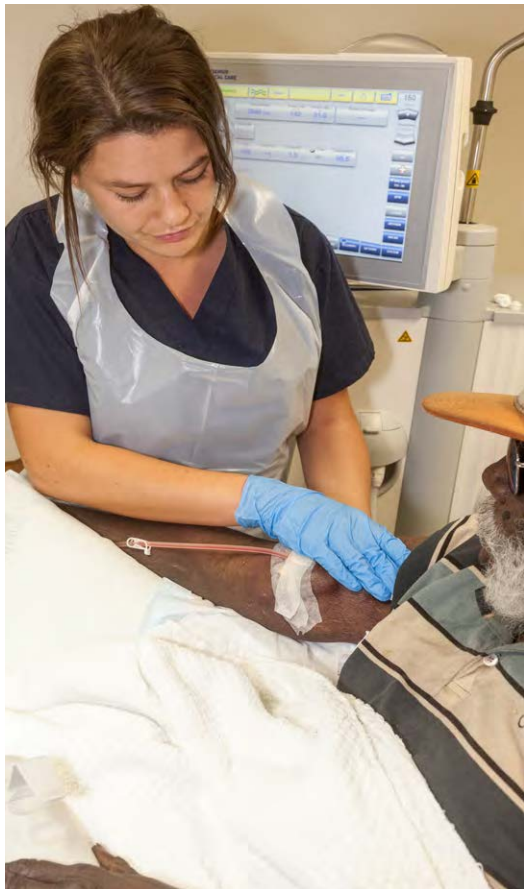
For Renal Services in the Northern Territory

Access to renal services can be challenging due to the demographics of the NT, with a small, culturally diverse population dispersed over a very large geographical area and further compounded by the proportion of that population who live in remote and very remote locations. The NT has the smallest share of Australia's population (1% of the total) with a vast landmass (17%) and the highest proportion of Aboriginal people (30%) (You et al 2015). Of the NT Indigenous population, 58.3% live in a very remote area compared with 8.2% of the NT non-Indigenous population. The NT has a higher proportion of people (23.4%) in remote and very remote areas than any other state or territory (DoH, 2015).



In Australia, chronic conditions now contribute to over 70% of the total disease burden, a figure that is expected to increase to 80% by 2020 (Northern Territory Chronic Conditions Self-Management Framework 2012-2020). The rate of burden of disease for the NT Aboriginal population is known to be disproportionately high, particularly for those who live in rural and remote areas due to both modifiable and non-modifiable risk factors. In the Northern Territory, within the Aboriginal population, chronic conditions are estimated to contribute to 77% of the life expectancy gap between Aboriginal and non-Aboriginal populations. Persons with chronic conditions account for 40-56% of public hospital resources while same day haemodialysis accounts for 50% of all hospital admissions (You et al 2015). Closing the gap in health outcomes between Indigenous and non-Indigenous populations continues to be a priority for the Commonwealth and Territory governments, the NT Health Services and all service providers.

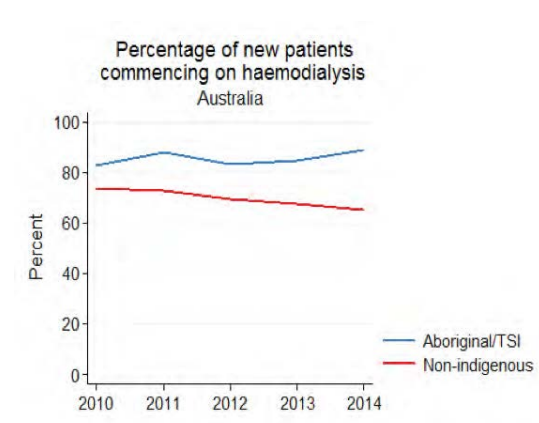
The NT has the highest incidence and prevalence of kidney disease in Australia. The 2014 Australian Bureau of Statistics (ABS) National Health Survey showed the prevalence of CKD markers amongst Indigenous Australians in the Northern Territory was 40%, compared with the national Indigenous prevalence of 22% and non-Indigenous of 9%. The greater prevalence of CKD in some Aboriginal and Torres Strait Islander communities is due to the high incidence of risk factors including diabetes, high blood pressure and smoking, increased levels of inadequate nutrition and alcohol use (Kidney Health Australia; Stumpers & Thomson 2013). Recent research is pointing to gene-environment interactions (epigenetic changes) that can influence foetal development and birth outcomes (such as low birth weight) that in turn can be associated with a higher risk of chronic disease later in life (Hilliard and El-Dahr 2016; Smyth et al 2014). This complex constellation of causal factors results in Aboriginal Territorians having the highest rates of ESKD in Australia requiring KRT.



As evidenced in Figure 1 below, the rate of Aboriginal and Torres Strait Island people commencing haemodialysis in Australia is significantly higher than for non-Indigenous Australians and is continuing to rise.

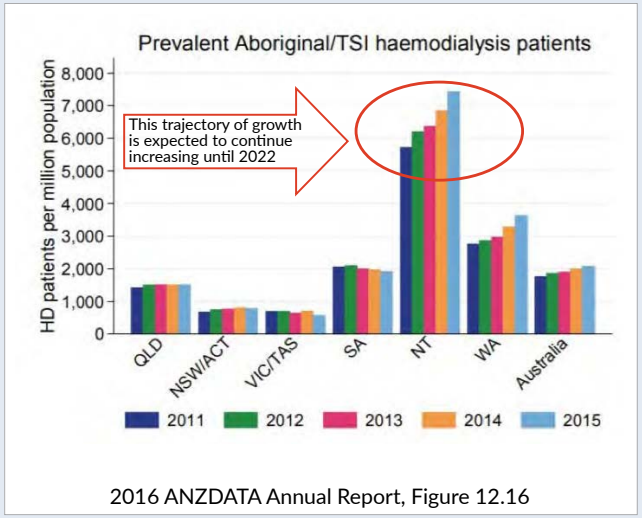
Figure 2 demonstrates the disproportionate rate of Aboriginal and Torres Strait Island people commencing haemodialysis in the Northern Territory compared with all other jurisdictions.

Figure 1.



2015 ANZDATA Annual Report, Figure 12.1

Figure 2.



2016 ANZDATA Annual Report, Figure 12.16

It is important to note these charts are for haemodialysis only and do not consider other treatment modalities, such as peritoneal dialysis, transplantation or end of life care.

Figure 3. Demand projections for facility-based haemodialysis treatments, using three statistical models, NT 2010 – 2022

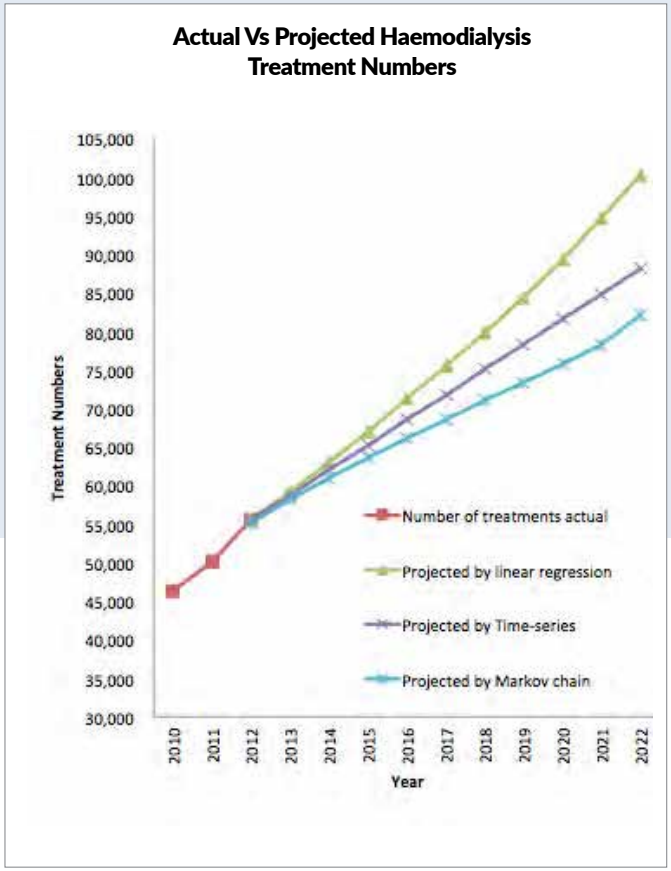


Table 1.

Actual and projected facility-based haemodialysis treatments using three statistical models, NT public hospitals 2013-2022

Year	Number of haemodialysis	Projected by linear regression	Projected by Time-series	Projected by Markov chain
2001	20,549			
2002	24,342			
2003	25,881			
2004	29,692			
2005	33,516			
2006	35,437			
2007	37,048			
2008	41,440			
2009	45,052			
2010	46,232			
2011	50,177			
2012	55,650	55,650	55,650	55,117
2013		59,070	58,798	58,260
2014		63,048	62,062	60,967
2015		67,117	65,325	63,719
2016		71,315	68,588	66,154
2017		75,487	71,851	68,541
2018		79,812	75,115	70,969
2019		84,379	78,378	73,323
2020		89,360	81,641	75,704
2021		94,776	84,904	78,262
2022		100,367	88,168	82,185

FUTURE DEMAND FOR RENAL SERVICES IN THE NT

Figure 3 and Table 1 outline the projected future demand for renal services in the NT. Historically the trends indicated that treatment numbers were aligned with projections (which used the linear regression model) however, actual treatment numbers have surpassed these projections. In 2016, total haemodialysis treatment numbers in the NT were reported as 87,194. As noted in Table 1, the demand for haemodialysis services in the NT is projected to increase by up to 70% by 2023, when it is expected that more than 1,000 Territorians will require kidney replacement therapy to sustain life (You et al 2015).

The NT survival rate for dialysis patients has improved substantially in the last 10 years. The unadjusted NT median survival improved from 4.5 years in 1995-99 to 6 years in 2005-09 which exceeded the recent national median survival of 5 years. Traditionally the Northern Territory has had a younger population however this trend is changing as people choose to retire in the NT and health outcomes for the Aboriginal population improve. The ageing population for both Aboriginal and non-Aboriginal people is expected to increase the demand for renal services into the future.

STRATEGIC PRIORITY AREAS

The Renal Strategy 2017 – 2022 is built on the foundation of seven key priority areas which will drive the efforts and priorities for renal services in the NT.

PREVENTION

1

Increase the focus on primary prevention to prevent and reduce risk factors

INTERVENTION

2

Detect, manage and decrease chronic kidney disease through early intervention and health promotion

COLLABORATION

3

Deliver a co-ordinated, collaborative and integrated renal service

PARTICIPATION

4

Support consumer participation

ACCESSIBILITY

5

Care closer to home

SKILLS

6

Promote a suitably skilled and culturally inclusive workforce

SUSTAINABILTY

7

Achieve financial sustainability while meeting service growth and demand

KEY PRIORITY AREA 1: Increase the focus on primary prevention to prevent and reduce risk factors

Reduce the impact of behavioural and lifestyle risk factors and create supportive environments for healthy behaviours.

Strategies	Outcomes
1.1 Increase community awareness about risk factors and promote consistent messages. 1.2 Encourage behaviours that promote health and wellbeing. 1.3 Support communities to create healthy environments. 1.4 Increase the focus on the early years of life, children and young people. 1.5 Build workforce capacity to plan, implement and evaluate primary prevention strategies. 1.6 Ensure health sector reforms are responsive to the need for primary prevention. 1.7 Increase monitoring and surveillance, evaluation and intervention research.	• Increased community awareness of risk factors and impact on chronic conditions. • Increased knowledge, understanding and action among health and other human services providers on the prevention of chronic conditions. • Strong inter-agency collaboration and whole-of-community engagement at a local level aimed at supporting behaviours and environments that promote health and wellbeing. • Increased capacity for individuals and families to take responsibility for making healthy choices. • Evidence-based, sustained local initiatives that focus on early years of life, children and young people. • Greater use of risk factor data and evidence of best practice to drive investment in primary prevention.

KEY PRIORITY AREA 2: Detect, manage and decrease chronic kidney disease through early intervention and health promotion

Use strategies and trends in care to assist in the identification and slow the progression of chronic kidney disease.

Strategies	Outcomes
2.1 Develop pathways to identify and slow the progression of CKD in conjunction with the NT Primary Health Network. 2.2 Develop partnership initiatives with other government agencies and the community sector to promote healthy lifestyles. 2.3 Collaborate to strengthen primary health care led prevention and early intervention programs that are evidence based and evaluated. 2.4 Improve the quality and accessibility of clinical data across health care and community sectors. 2.5 Contribute in the development of community based renal services in the NT.	• Reduction in the incidence, progression and impact of CKD through an integrated primary health care led approach. • Increase in the number of health promotion partnerships including in schools. • Increase in screening and health checks for high risk groups in the primary health care sector. • Decrease in preventable hospital admissions and re-admissions. • Improved electronic medical records system with up-to-date patient-related clinical information accessible across all health services and settings. • Increased use of interpreters and system navigators. • Collaboration in regional initiatives to improve service delivery and outcomes for consumers.

KEY PRIORITY AREA 3: Deliver a coordinated, collaborative and integrated renal service

Build and strengthen key renal sector relationships (across all sectors, services and settings) aimed at delivering integrated and coordinated patient centred models of care to individual consumers.

Strategies	Outcomes
3.1 Co-ordinated and integrated partnership for the care of persons with CKD, diabetes, cardiovascular disease and other co-morbidities. 3.2 Provide a smooth patient journey for CKD patients through strong partnerships which encompass primary, secondary and tertiary care and a multidisciplinary team approach. 3.3 Map the patient journey for transplant patients, and identify and act on key blockages. 3.4 Plan, develop and implement patient centred models of care with health partners. 3.5 Develop a renal infrastructure investment master plan for the integrated development of renal services across the NT (taking into account all service providers). 3.6 Implement a uniform intake and referral system.	• Establishment of a regional services planning network to inform the development of local models of care within available resource allocations. • Integrated renal service implementation plans developed by Top End Health Service and Central Australia Health Service to support the Strategy. • Patient journey is mapped from CKD, kidney replacement therapy through to end of life care. • Patient centred models of care are delivered. • Patient reported experience and outcome measures developed. • Improved communication with all stakeholders. • Increase in number/proportion of patients being assessed for kidney transplant. • Increase in number/proportion of people having a kidney transplant. • Increase in number/proportion of patients being assessed for self-care dialysis. • Increase in number/proportion of people self-dialysing. • All service providers use a uniform intake and referral system. • Increase in the number of interdisciplinary staff appointments.

KEY PRIORITY AREA 4: Support consumer participation

Promote consumer and local community engagement to encourage empowerment and ownership in the development of renal services. Participate in active listening and open communication to improve health literacy.

Strategies	Outcomes
4.1 Educate consumers about available treatment options with a focus on choice. 4.2 Improve the provision and access to culturally inclusive renal services across the NT, identifying gaps in service delivery. 4.3 Increase utilisation of Interpreter services and Aboriginal Liaison Officers to improve health literacy. 4.4 Establish mechanisms for consumer input into renal facilities and services to improve service delivery.	• Increased health literacy relevant to each stage of the disease. • Improved communication with renal service consumers. • Consumer groups are actively involved in NT Renal Network. • Improved interpreter services are available. • Aboriginal Liaison Officers are utilised to assist with cultural brokerage. • Increased levels of local community engagement, decision-making, capacity and advocacy. • Consumer advocacy group formalised. • Development and support of mechanisms for consumer involvement and consumer input into the development of renal services related policy. • Education tools and resources updated.

KEY PRIORITY AREA 5: Care closer to home

Increase the utilisation and continued improvement of home based models of care through collaborative partnerships.

Strategies	Outcomes
5.1 Continually improve the provision and access to culturally inclusive renal services closer to home. 5.2 Develop health service networks and support regional partnerships with ACCHOs including cross agency collaboration (in relation to, eg. housing, infrastructure, utilities and local government) to improve delivery and sustainability of home based renal care. 5.3 Incorporate the management of CKD, renal replacement therapy and end of life care in units closer to home. 5.4 Maximise the utilisation rates and population needs of dialysis facilities in remote and regional areas of the NT.	• Increased utilisation of electronic health systems to improve timely access to care eg. TeleHealth. • Established high level inter-agency working groups in clinical services planning, including ACCHO representation. • Regional hospitals provide a range of renal services. • Partnerships developed with primary health centres, ACCHOs, private providers, NGOs and other significant organisations. • Guidelines developed and implemented for the delivery of holistic renal services throughout the NT. • Increased number of consumers receiving care on country. • Primary health care centres participating in the care for all renal service consumers across the care continuum.

KEY PRIORITY AREA 6: Promote a suitably skilled and culturally inclusive workforce

Attract and retain qualified staff within a dynamic and educated workforce while providing a culturally inclusive place to work.

Strategies	Outcomes
6.1 Attract and retain appropriately skilled, flexible and competent staff. 6.2 Promote and support a culture of teaching, performance improvement and continuous learning for all staff. 6.3 Develop and support a culturally inclusive workforce. 6.4 Ensure renal services workforce has knowledge and skills to provide evidence based best practice care.	• Improved staff retention. • Increased Aboriginal workforce. • Increased workforce in urban, rural and remote areas. • Increased staff numbers attending training and/or undertaking post graduate education. • Establishment of the NT as a centre of excellence in renal care. • Established strong governance structures (including clinical governance) enabling partnerships in care delivery.

KEY PRIORITY AREA 7: Financial sustainability while meeting service growth and demand

Improve service planning for effective resource management by undertaking regular cost reviews.

Develop a renal infrastructure investment master plan and identify appropriate funding in response to increasing demands.

Strategies	Outcomes
7.1 Conduct a needs assessment to inform strategies for effective and responsive resource management. 7.2 Complete a renal cost analysis study annually to understand the cost of the service and identify cost saving opportunities. 7.3 Improve service planning through the enhancement of data collection, reporting and analysis of patient outcomes to inform future service requirements. 7.4 Seek appropriate capital, infrastructure investment and recurrent expenditure in response to increasing demands for renal health services, contingent on evidence of efficient use of existing resources.	• Prudent financial management of renal services in the NT. • Prioritised service development in areas with the greatest need. • Effectiveness and efficiency of the renal services monitored. • All renal facilities utilised efficiently and to their maximum capacity. • Innovative models of care will be identified and adopted where appropriate. • Centralised analysis of data to understand trajectory of disease. • Improved fit-for-purpose infrastructure to meet demand in a timely manner.

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