

Northern Territory Cancer Care Strategy

March 2019 Edition

2018 – 2022

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Ministerial Foreword

All Territorians are entitled to access high-quality health services. This is especially important when you or a loved one are facing the challenges of cancer.

We know early diagnosis and access to coordinated treatment can help make the cancer journey easier, and since the release of the Northern Territory Cancer Care Strategy 2018-2022, major milestones have been reached to improve care for Territorians facing cancer.

It was timely to refresh the Strategy, to reflect the new era of cancer services available for Territorians.

The Australian and Northern Territory Governments have delivered the Territory's first Positron Emission Tomography (PET) Scanner and more than 110 Territorians have already benefited, with faster access to this specialist diagnostic service closer to home.

The Northern Territory Government has invested in the expansion of the Alan Walker Cancer Care Centre, providing additional chemotherapy capacity, enhanced areas for patients and families, and new consultation rooms.

We have engaged specialist staff to offer a wider range of services and provide expert care in these new facilities. Territorians are benefitting from improved care coordination and greater access to clinical trials, closer to home.

These achievements represent a major step forward in high-quality cancer care in the NT.

I am pleased to launch this new edition of the Cancer Care Strategy, which provides a future roadmap for cancer care in the Northern Territory.

Natasha Fyles

March 2019



Professor
Catherine Stoddart PSM

Chief Executive,
Department of Health

Chief Executive Foreword

Cancer touches the lives of everyone at some point, in one way or another. No matter how we are affected, it is reassuring to know that planning and coordination is across all health sectors and regions to drive excellence in Northern Territory's cancer care.

The Northern Territory Cancer Care Strategy 2018-2022 provides a comprehensive road map for the Northern Territory Department of Health, the two health services, clinicians, cancer care organisations, cancer patients, their families and carers to work together to develop and deliver cancer care and services over the next five years.

The Strategy builds on the solid progress from the previous Northern Territory Cancer Plan 2013-2016 and has been developed by the Northern Territory Cancer Care Network in consultation with key Northern Territory cancer care stakeholders.

The aim of the Northern Territory Cancer Care Strategy 2018-2022 is to improve the delivery of integrated, consistent and quality care, which is right for each individual. Flexibility of services to ensure the best outcomes are achieved through partnering with the person receiving care, their family and carers, and being respectful and responsive to their needs, preferences and values.

Introduction



Associate Professor
Phillip Carson

Chair, NT Cancer
Care Network

Many Territorians who develop cancer start a complex, difficult and sometimes confusing journey as the cancer is diagnosed, investigated, treated and followed up.

People with cancer meet multiple specialists and health personnel, undergo procedures and experiences that were previously unknown to them and learn to face the possibility of chronic illness, disability and death, while hoping for a cure. Their families and loved ones take this journey alongside them. The need to travel away from home often compounds the disruption to normal life.

It is in this context that the Northern Territory Cancer Care Network seeks to contribute to the coordination and development of cancer services for the benefit of all Territorians. It is always a challenge in a small, multicultural population that is spread over large distances, to provide services equivalent to those available to Australians living in larger cities.

The commitment of the Northern Territory and Australian governments, along with the dedication and skills of local health workers makes this a realistic and achievable goal. It will always require innovation and inter-sectoral cooperation to advance standards of care and to improve access geographically, culturally and financially.

The Northern Territory Cancer Care Strategy 2019-2022 contributes to this larger goal by identifying and defining areas of excellence in cancer care, providing a map for progress and benchmarks to measure improvements in care.

Purpose

The Northern Territory (NT) Cancer Care Strategy 2019-2022 has been developed by the NT Cancer Care Network on behalf of NT Health. It aims to provide collaborative focus and direction for health care professionals, consumers and organisations involved in cancer care services to achieve the goal of improved patient experiences and optimal clinical outcomes for Territorians.

The strategy will assist with integration of services across cancer care service providers including the diverse health settings of prevention and cancer screening services, primary health care, acute cancer treatment, survivorship and palliative support. It has been developed specifically to assist with managing the challenges of being a small, multicultural population that is spread over large distances.

The key priority areas are:

1. Person-centred care and communication
2. Governance and leadership
3. Workforce development
4. Quality and safety

Evaluation of performance and progress in these priority areas is vital for cancer care to be delivered in a manner that recognises patient needs and preferences while aligning with local and national strategic direction and the Optimal Cancer Care Pathways.

Acknowledgements

The contributions of Northern Territory Cancer Care Network members and other key stakeholders in NT cancer care in the development and consultation processes of the strategy are greatly appreciated.

The contributions of not-for-profit organisations who contribute to cancer management by providing early detection and risk reduction intervention through schools, workplaces, and public events as well as providing survivorship support to Territorians is also recognised and appreciated.

The Northern Territory Cancer Care Network

The Northern Territory Cancer Care Network (NTCCN) was formed in 2014 with members from cancer care providers and organisations from all sectors across the NT.

The key principles guiding the network aim to increase levels of clinician engagement and cooperation in the planning and development of services across the NT, and to improve collaboration and coordination of services in a culturally safe manner, ensuring the provision of the best possible care to every patient every time.

The NTCCN includes members who represent professional streams:

- Allied health professionals
- Cancer care coordinators
- Cancer nurses
- Clinical Trials Committee
- General practitioners
- Epidemiology and research
- Haematologists
- Aboriginal liaison officers
- Medical oncologists
- Palliative care specialists
- Pharmacists
- Physicians
- Radiation oncologists
- Surgeons.

and members who represent organisations:

- NT Primary Health Network
- Cancer Council NT, CanTeen and Leukaemia Foundation.

NTCCN collaborates with:

- Menzies School of Health Research (Menzies)
- Charles Darwin University (CDU)
- Batchelor Institute of Indigenous Tertiary Education
- Aboriginal Medical Services Alliance Northern Territory (AMSANT)
- Local Aboriginal Community Controlled Health Organisations.

Collaboration covers areas such as Aboriginal cancer research, workforce planning, cultural safety training and development, community cancer literacy programs and patient centred, gender sensitive and culturally appropriate care plans.



One of the key functions of the NTCCN is to continually lead, monitor and evaluate implementation of the NT Cancer Care Strategy 2019-2022.

Background

In 2013 the Northern Territory Cancer Plan 2013-2016 was created to guide cancer care services across the Territory. Key elements included active consumer engagement, needs-based cancer care and quality improvement for safe service delivery using evidence-based protocols and guidelines.

The 2013-2016 priority areas were:

- Improving point-of-diagnosis consumer education and information.
- Further developing and supporting multidisciplinary team discussion and care.
- Establishing a formal multidisciplinary clinical leadership within a structured NT Cancer Service.
- Building cancer care coordination capacity within the health system and its providers.
- Further developing allied health services to support the development of cancer services in the NT.
- Developing integrated data capture systems to inform quality improvement strategies.

Since implementation of the Northern Territory Cancer Plan 2013-2016 progress has been achieved including multidisciplinary team meetings being well-established for most cancer types and an increase in the number of cancer care coordinators. The NTCCN was established to give a structured approach to engaging clinicians in the planning and development of cancer services. The NTCCN was also instrumental in the implementation of the nationally endorsed Optimal Cancer Care Pathways.

To consolidate and progress this work several Strategic Planning days were held with representatives from Top End Health Service (TEHS), Central Australia Health Service (CAHS) and the Department of Health (DoH). Discussions centred on what had been achieved, what was still applicable and what new issues have arisen since the first NT Cancer Plan was released to identify the next steps and current cancer care priorities.

Consultation was conducted across a wide range of stakeholder groups.

During the development phase of the NT Cancer Care Strategy for 2019-2022 gaps and issues in services for cancer patients were identified in the following areas:

- Communication and linkage between services combined with the ongoing challenges presented by remoteness and distance.
- Knowledge of the levels of cancer health literacy of staff and consumers.
- The poor cancer related health outcomes of the vulnerable populations.
- Workforce recruitment and retention.
- Access of specialist services in the NT.

A range of development opportunities were also identified:

- Increasing the use of telehealth to prevent disruption to patients and ensure treatment adherence.
- Better education resources for cancer patients and their carers to allow for informed decision making.

Alignment with relevant NT and national strategies were also considered, including the:

- National Palliative Care Strategy 2010 – Supporting Australians to Live Well at the End of Life.
- Cultural Respect Framework 2016-2026 - For Aboriginal and Torres Strait Islander Health.
- NT Chronic Conditions Prevention and Management Strategy 2010-2020.
- NT Health Aboriginal Cultural Security Framework 2016-2026.

National collaboration and programs

The National Cancer Expert Reference Group (NCERG) was established by the Council of Australian Governments Health Council in 2012. The National Cancer Work Plan is a suite of initiatives identified by NCERG as being of the highest priority and most amenable to national gain to address significant gaps in the provision of optimal cancer care. The three priority action areas are: agreed pathways of cancer care; more efficient and effective cancer services; and better implementation of evidence-based cancer treatment.

NT currently has two members on NCERG and the NTCCN has an active role in supporting local implementation of the NCERG Optimal Cancer Care Pathways (OCP) in Practice project. The NT OCP in Practice project met all project milestones in 2016-17, with increasing local awareness and wide stakeholder acceptance and sponsorship. Nationally, NTCCN members are involved in the development and ongoing review of OCPs including the OCP for Aboriginal and Torres Strait Islander people with cancer. This OCP is the first OCP to address a specific people with cancer.

Cancer Australia (CA) leads national projects on behalf of NCERG under the National Cancer Work Plan. The NT collaborates closely with CA, including NT representation on their Leadership Group on Aboriginal and Torres Strait Islander Cancer Control. The NTCCN had input into the CA initiative, *Profiling of Regional Cancer Services*, in 2015-16 and has continuing input into the Data-driven Regional Cancer Care Initiative.

Optimal Cancer Care Pathways

The Optimal Cancer Care Pathways (OCP) are national guides to best practice cancer care for 15 specific tumour types. The pathways describe the key steps in a consumer's cancer journey and expected optimal care at each stage to ensure all people diagnosed with cancer get the best care, regardless of where they live or have their cancer treatment.

Also developed has been an Optimal Cancer Care Pathway (OCP) for Aboriginal and Torres Strait Islander people with cancer. This OCP is the first OCP to address a specific cultural group, is not tumour specific, and addresses the cultural safety and competency of services at each of the seven steps for optimal cancer care. This OCP complements the 15 tumour specific OCPs to improve cancer outcomes for Aboriginal and Torres Strait Islander peoples. It aims to help address the growing gap in cancer outcomes between Aboriginal and non-Aboriginal patients.

Effective promotion, adoption and evaluation of the OCPs as well as evaluation of the links between screening, diagnostic and treatment services have been highlighted in three of the four priority areas of this strategy. Incorporation of the OCPs into the strategy was seen as integral to the future development of cancer services in NT.

The OCP in Practice project includes education sessions, stakeholder workshops and clinical audits. It will ultimately lead to better aligned and streamlined cancer care services for consumers, better informed patients and carers, and improved

The Optimal Cancer Care key steps



data collection opportunities. To date work has focused on head and neck cancers, lung and breast cancer.

The NTCCN members provide leadership, promotion and encouragement for local adoption of OCP and support for innovation and development of local strategies. Increasing the awareness of the OCP among primary health care providers, cancer care coordinators and community organisations will make a positive contribution to the experiences of NT cancer patients including more timely detection in the primary health care setting.

Cancer in the Northern Territory

Cancer is a leading cause of illness in Australia. One in two people will have developed cancer and one in five will have died from cancer before the age of 85. Cancer is responsible for the greatest burden of disease in Australia due to premature death and disability.

At a national level, the incidence of some cancers, including breast, bowel, prostate and melanoma, is lower among Aboriginal Australians than among other Australians. However other cancers, such as lung, cervical, liver and cancers of the oral cavity and pharynx are more common. In the NT these disparities have become less marked over time but to the disadvantage of Aboriginal people. The incidence of the cancers that were formerly lower for Aboriginal people in the NT has increased without a concomitant reduction in the incidence of higher incidence cancers, some of which are smoking-related.

These changes are consistent with rapid increases in the prevalence of chronic diseases in the ageing NT Aboriginal population, with implications for cancer screening and treatment centres providing services to Aboriginal people. The excess burden of cancer in the NT Aboriginal population (higher incidence and lower survival) will continue until exposure to lifestyle risks are reduced, particularly the high prevalence of smoking.

On average, around 780 people were diagnosed with cancer each year in the NT during the 5-year period of 2011–2015; 58 per cent were males and 19 per cent were Aboriginal. There are gender and racial differences in cancer susceptibility. The most common cancers for non-Aboriginal males were prostate, melanoma,

bowel and lung cancers, and for non-Aboriginal females, breast, bowel, melanoma and lung cancers. The most common cancers for Aboriginal males were lung, oral and pharynx, liver and bowel, and for Aboriginal females were breast, lung, uterus, thyroid and unknown primary (NT Cancer Registry unpublished data).

Cancer is the first and third leading cause of death for non-Aboriginal and Aboriginal Territorians, accounting for 33 per cent and 16 per cent during 2006–2014 respectively.

Lower survival rates are reported for most cancers for Aboriginal Territorians, relative to their non-Aboriginal counterparts including cancers of the oral cavity and pharynx, bowel, breast, cervix, non-Hodgkin lymphoma and leukaemia.

The disparity in survival was greatest in the first year after cancer diagnosis. Diagnosis with advanced disease (regional or distant spread) is more common for Aboriginal people therefore relative risk of cancer death is higher for Aboriginal Territorians for each category of stage at diagnosis for each cancer site.

Increasing numbers of Territorians are living with cancer as a chronic disease with multiple other comorbidities such as diabetes, heart conditions, kidney and other chronic diseases. People living with cancer require specific survivorship support and planning to manage side-effects, promote ongoing wellness and participate in cancer surveillance programs. Access to new therapies such as immunotherapies is significantly prolonging progression-free survival.

Access to quality palliative care for all Territorians with life-limiting cancer is a priority so they can live well to the end of life, as close to home as possible.

Northern Territory Cancer Registry

The NT Cancer Registry is a population-based register operated by the Department of Health of all NT residents diagnosed with or who have died from cancer.

The aim is to collect accurate and complete information on cancer occurrence and deaths; and to provide reliable cancer statistics on incidence, mortality and survival for the NT population.

These statistics are used to inform and evaluate cancer control programs in the areas of prevention, screening, treatment, rehabilitation, palliative care and research (after approval by an ethics committee).

The development of a comprehensive NT Clinical Cancer Registry is an ongoing priority for the NTCCN.

Acacia clinical system

The Northern Territory Department of Health currently uses four core systems to support patient and client health services. These systems are between 15 and 25 years old, are approaching end of life and are considered technically obsolete with support from the system vendors ceasing in 2021.

In May 2017, the Core Clinical Systems Renewal Program (CCSRP) was funded by the Northern Territory Government for \$259 million over five years. The CCSRП will create a single, secure, digitally enabled, Territory-wide electronic health record across NT Health services in hospitals, primary health care centres and community health services. InterSystems Corporation was the successful vendor selected with their TrakCare system, which will be known as Acacia.

The Acacia program goal is to improve patient and client outcomes by providing essential clinical information at the point of care delivery, with an integrated, whole-of-life, client-centric electronic health record that supports the provision of public health (acute, primary and community) services to patients and clients across the Northern Territory.

Reporting and auditing efficiencies will aid cancer care quality improvement activities.

NTCCN members have been closely involved in the design of Acacia and are deeply committed to supporting its implementation.

Cancer is the first and third leading cause of death for non-Aboriginal and Aboriginal Territorians, accounting for 33 per cent and 16 per cent during 2006-2014 respectively.

Northern Territory Cancer Care Services

The Northern Territory covers a large area of 1,349,129 square kilometres and is sparsely populated with roughly 245,000 people. Over 50 per cent of the population reside in greater Darwin. Approximately one third of the NT population are Aboriginal people. This demographic has a higher birth rate and lower life expectancy resulting in a considerably younger population age profile. Over half of the Aboriginal population in the NT live in very remote areas compared with only eight percent of the non-Aboriginal population in the NT. This presents as a major challenge for service delivery, particularly for acute care management and retrievals from remote areas.

Primary health care

Comprehensive primary health care (PHC) includes health promotion, illness prevention, screening, diagnosis, treatment, care coordination and rehabilitation, support, community development and advocacy; and incorporates services relating to alcohol, tobacco and other drugs, early childhood development and family support, aged and disability, chronic disease and mental health and social and emotional wellbeing. Most Territorians will have contact with a PHC service provider on at least an annual basis.

Early steps in optimal cancer care management includes health promotion to limit lifestyle risk factors and recognition of early signs and symptoms of cancer to assist early detection of cancer. This occurs mostly in the primary health care setting.

In the NT PHC services can be accessed by consumers in different ways that include but are not limited to:

- Private general practices and allied health practices in most major centres
- Specialised clinics such as Family Planning Welfare Association NT and skin clinics in Darwin
- NT Government PHC services include community health centres, PHC centres, schools, prison and juvenile detention centres
- Aboriginal Community Controlled Health Organisations (ACCHOs).

Patients may experience functional decline, poor nutrition and suboptimal adjustment to illness and disability following surgery, radiotherapy or chemotherapy. Non-government organisations such as CanTeen, Cancer Council NT and the Leukaemia Foundation contribute to the PHC sector and other aspects of cancer care in the NT, including the provision of evidence-based psychosocial support to patients and family members impacted by cancer.

Coordination of referrals, appointments, access to treatment and patient travel arrangements is vital to integration of care and requires the support of PHC providers and care coordinators, especially when patients may be traveling from remote areas.

Primary Health Networks

Primary Health Networks (PHN) operate across Australia and are tasked by the Australian Government with coordinating primary health care delivery, and tackling local health care needs and service gaps. The NT PHN members are AMSANT, the NT DoH and Health Provider Alliance NT.

The NT PHN works to streamline a patient's journey through an integrated, comprehensive PHC system that supports coordination between the acute treatment and broader community care sectors particularly for those at risk of poor health outcomes. NT PHN aims to better coordinate care to ensure patients receive the right care in the right place at the right time by commissioning the delivery of primary health services, providing support to the PHC workforce and supporting integration across the acute and PHC sectors.

NT PHN commissions the Integrated Team Care (ITC) activities that contribute to improving health outcomes for Aboriginal and Torres Strait Islander people with chronic conditions (including cancer) through better access to co-ordinated and multidisciplinary primary health care. Care coordinators, outreach workers, allied health, specialists and supplementary services are provided at the PHC level to assist with improving Aboriginal health outcomes.

Training and education

NTCCN and Alan Walker Cancer Care Centre (AWCCC) have worked with Central Australian Remote Health Development Services (CARHDS) to develop and conduct a successful training program for chronic disease coordinators and outreach workers.

The accredited training was developed with funding and support from NT PHN and AMSANT. NTCCN members contributed to the design and delivery of the training.

Learning outcomes aimed to upskill participants in cancer care, and has resulted in the development of resources and better integration between PHC and acute cancer services.

Cancer education sessions for health practitioners in the NT promoting prevention and early detection are run by NTCCN members and AWCCC, through CDU, Menzies, Batchelor Institute, Cancer Council NT (CCNT), AMSANT, Danila Dilba and the NT PHN. CCNT conducts frequent education programs in schools and communities.

Cancer Care health professionals and managerial staff interact with community health centres and hold meetings with community elders and church groups.

Health Care Homes Program

The Australian Government's Health Care Homes Program commenced in 2017. The program offers eligible chronic condition patients (including cancer) the ability to enrol with a participating PHC provider known as their Health Care Home (HCH). Providers then supply patients with a 'home base' for the ongoing coordination and management of their chronic conditions.

Health Pathways

The Health Pathways is a web-based health information technology platform that builds relationships between General Practitioners, other PHC service providers, specialists and hospital services. It is a single source of evidence-based clinical and referral information, that is developed, agreed and maintained locally, to provide support for PHC service providers at the point of care.

A local NT Health Pathways team is working collaboratively with health stakeholders, including the NTCCN, to prioritise, implement and localise the NT Health Pathways.

Screening services

In the NT, there are screening programs in place for early detection and prevention of certain cancers. Offered as a Territory-wide service, the BreastScreenNT (BSNT) program is a free breast screening program for women aged between 50-74 years without any signs or symptoms of breast cancer.

BSNT have two permanent breast screening clinics in Darwin and Palmerston and provides screening clinics in Alice Springs which are conducted over two five-week screening blocks. BSNT also provides a 4WD bus, which provides free breast screening to women in urban, rural and remote communities in the NT.

National Cervical and bowel screening programs are supported through NT Health services.



The Alan Walker Cancer Care Centre is a co-located, purpose built radiation oncology facility that services the whole of Northern Territory.

Acute services

Cancer services in the NT are currently provided within the two health services TEHS and CAHS with policy input and support from the DoH.

The private sector provides a parallel and complimentary service and specialists involved in cancer care often work across both public and private sectors.

Essential elements of cancer diagnosis, treatment and supportive care are managed regionally or by appropriate referral to higher level services in the larger centres to access diagnostic tests, consultations, planning and treatments.

The main cancer treatments, including surgery, radiotherapy and chemotherapy, are provided at Royal Darwin Hospital (RDH) campus, which includes the Darwin

Private Hospital (DPH), and AWCCC; with a satellite chemotherapy treatment unit at Katherine Hospital. Alice Springs Hospital offers surgery and chemotherapy treatment.

A range of cancer specialists also offer outreach and telehealth services across the Territory.

Royal Darwin Hospital

The RDH is a university teaching, public hospital with 360 beds and provides a broad range of services in all specialty areas to the Darwin urban population as well as serving as a referral centre to the whole Top End of the NT. Consumers can access a 24 hour emergency department and critical care services as well as medical imaging services, including nuclear medicine.

RDH provides inpatient and outpatient cancer services including:

- Diagnostic services including pathology, radiology and nuclear medicine
- Specialised medical, oncology, haematology and surgical services
- Cancer care coordination
- Allied health services
- Special needs dentistry
- Palliative care services.

The establishment of the local PET scanning service and the associated cyclotron facility will significantly decrease the need for patients to travel interstate and will see improvements in patient outcomes through earlier diagnosis and more detailed treatment plans.

The DPH is a co-located facility which has a range of services for surgical, medical, oncology, haematology, obstetrics and rehabilitation patients. It shares specialist personnel, and some diagnostic and therapeutic facilities with the RDH.

The AWCCC is a co-located, purpose built radiation oncology facility that services the whole of NT. The facility is named in memory of Dr Alan Walker (1931-2007), a Northern Territory paediatrician credited with greatly improving Aboriginal infant mortality and child health outcomes.



The PET Scanner is a critical diagnostic tool, providing detailed medical scans that can help with the early detection and treatment of diseases like cancer, and opens up the Territory as a hub for PET scanner research in Northern Australia and the Asia Pacific Region.

Expansion of the Alan Walker Cancer Care Centre in 2018-19 included:

- An additional 12 chemotherapy chairs
- An extension of the waiting area;
- A treatment room;
- New consulting rooms;
- A new medication room;
- An allied health office; and
- Development of related support areas including storage and amenities.

The following services are offered by the combined RDH, DPH and AWCCC regional cancer service and its outreach programs for NT patients:

- Surgical oncology treatments over a range of surgical specialities and sub-specialities.
- Radiation therapy, including intensity modulated radiotherapy (IMRT), volumetric modulated arc radiotherapy (VMAT), stereotactic ablative body radiotherapy (SABR) and image guided radiotherapy (IGRT).
- Outpatient and inpatient chemotherapy units, with facilities to administer cancer immunotherapy and targeted therapy.
- Public and private medical oncology, haematology, specialist surgical and radiation oncology outpatients clinics.
- Multidisciplinary team (MDT) consultation service.
- Clinical trials, cancer research and Prostate Cancer Outcomes Registry-NT.
- Allied health cancer services including dietetics, speech pathology, psychology, occupational therapy and social work.
- Aboriginal health practitioners, Aboriginal liaison and interpreter services.
- Telehealth services for consultations and family meeting.
- Tele-oncology nursing; and
- Specialist cancer care coordinators, supporting patients with head and neck cancers, ear nose and throat cancers, breast cancer, prostate and urological cancers, haematological cancers and surgically treated cancers.

The chemotherapy suite located at AWCCC has twelve chemotherapy chairs with capacity to progressively expand to 20 chairs by 2024. This will ensure access to chemotherapy in line with existing and projected demand; and support access to and increased utilisation of PET scanning services locally. Additional consulting rooms are also included in the building expansion, with dedicated space for bone marrow biopsies.

A comprehensive model of care for the Top End cancer service has been developed. Allied health and cancer care coordinator capacity has been significantly expanded in recognition of the contribution these services offer to cancer patients.

Electronic dispensing and administration of chemotherapy medications have been implemented. There is accredited training for oncology and surgical trainees, nurses, radiation therapists, physicists and Aboriginal health practitioners.



Barbara James House (cancer accommodation), the Lorraine Brennan Centre and other Aboriginal hostels are available for NT residents who travel to Darwin for treatment. A shuttle service is provided from Barbara James House to and from the AWCCC.

Katherine Hospital

The Katherine Hospital has 60 beds and provides a broad range of services to the population of the Katherine region. It serves as a referral centre for remote areas of the Top End of the NT. General medicine and surgery services are provided including an adult medical surgical ward, with designated palliative care beds, and a paediatric ward.

Katherine Hospital has limited cancer diagnostic capacity with patients travelling to Darwin for investigations and diagnosis. There are weekly surgical clinics and a Medical oncologist conducts bimonthly clinics. Telehealth consulting supports the delivery of these specialist services.

The medical day stay unit at the hospital has four chemotherapy chairs allowing Katherine chemotherapy patients to receive their treatment closer to home, when appropriate. Other visiting specialists to Katherine Hospital also see cancer patients and refer patients to the relevant oncologists.

Alice Springs Hospital

The Alice Springs Hospital (ASH) has 181 beds and provides a general range of secondary and some tertiary inpatient and outpatient services. It is the major referral hospital for Central Australia, with a catchment area covering two thirds of the NT and extending into the bordering areas of SA and WA.

Medical oncology, surgical and radiation oncology specialists visit ASH from Darwin and Adelaide on a regular basis, supplemented by telehealth consultations. Other resident and visiting surgeons and medical specialists at ASH also see cancer patients and appropriately refer patients to the relevant oncologists. ASH provides cancer diagnostic services and chemotherapy treatment.

A new six-chair chemotherapy day unit and a new 10 bed palliative care facility at ASH opened in 2018. The Apmere Amantye-Akeme Palliative Care Facility (Comfort House), built with Australian Government and Northern Territory Government funding, offers the first dedicated inpatient end-of-life and respite care facility in Central Australia. A recent review has indicated a 50 per cent increase in activity in the chemotherapy unit from 2013–2016.

Allied health services at ASH were enhanced in 2017-18 with additional speech pathology, social work and occupational therapy services. While these roles are not specifically oncology positions they add to the overall allied health capacity to support oncology patients. Regular visiting specialist medical and surgical services and other specialised support are supplied by ASH to Tennant Creek Hospital on an as-needs basis.

Palliative care

Palliative care plays a vital role towards the end of life, reducing physical and emotional distress of dying, and optimising quality of life for individuals, their carers and the family and friends that support them.

Territory Palliative Care (TPC) provides palliative care services across the NT with teams based in Darwin and Alice Springs. TPC provides high quality palliative care that responds to the physical, psychological, social and spiritual needs of patients with an underpinning of cultural sensitivity. Palliative care services are provided for inpatients (hospital and hospice) and as an outpatient service for community patients. TPC offers a multidisciplinary approach in the provision of advice and support for patients with a life limiting diagnosis.

The Top End TPC service operates from the hospice at Royal Darwin Hospital campus, which includes a 12 bed stand-alone palliative care unit. Additionally, the inpatient and outpatient palliative care teams, including rural and remote, are also based at RDH.

The Central Australia TPC service provides inpatient support to patients in Alice Springs and Tennant Creek Hospitals. It also provides outpatient support to patients at home (urban or remote) or in aged care facilities.

Clinical trials and research

The Oncology/Haematology Clinical Trial Unit (CTU) based at AWCCC is involved in national and international clinical trials sponsored by the Australasian Leukaemia and Lymphoma Group, Australian and New Zealand Urogenital and Prostate Cancer Trials Group, Trans-Tasman Radiation Oncology, the Australasian Gastro-Intestinal Trials Group and the pharmaceutical industry. Territorians with rare cancers will also soon have access to participating in the \$50 million funded National Genomic Cancer Medicine Program.

The CTU advocates bringing to the NT the latest developments in cancer treatment and current research questions for the benefit of current and future patients. Capacity within the CTU has more than doubled to further increase

the capacity to bring trials to local patients, and is now assisted by administrative resources provided through the Clinical Innovation and Research Unit (CIRCU) at Top End Health Service and the Commonwealth Government funded NT Health Clinical Trials Coordination Unit.

Local experts also contribute research knowledge and innovation in cancer treatment through collaborations between Top End and Central Australia Health Service clinicians, Menzies School of Health Research, Charles Darwin University, Primary Health Care and Aboriginal Medical services. These collaborations are invaluable for supporting knowledge dissemination, developing technology and translational research opportunities across the range of health contexts and diversity of populations in the Northern Territory.



The Alan Walker Cancer Care Centre chemotherapy suite currently has twelve chemotherapy chairs and will expand to twenty chairs by the end of 2024

Key Priority Areas

1

Person-centred care and communication

STRATEGIC OBJECTIVE

Delivery of high quality cancer care and services that are respectful and responsive to patient priorities, needs and values, supported by engagement and communication through the patient's cancer journey, achieving the best possible health outcomes.

2

Governance and leadership

STRATEGIC OBJECTIVE

Supporting operational and clinical innovation at all levels of the healthcare system to lead NT cancer policy, improve service delivery, research, and resourcing of infrastructure, analytics and system design to support high quality service provision.

3

Workforce development

STRATEGIC OBJECTIVE

Achieving an integrated and sustainable workforce through recruitment, retention, professional development and training, recognising that multidisciplinary care is the cornerstone of best practice cancer care.

4

Quality and safety

STRATEGIC OBJECTIVE

Delivery of high quality cancer care based on contemporary evidence and data collection, application of optimal care pathways and increased participation in clinical trials.

Priority 1 Person-centred care and communication

Delivery of high quality cancer care and services that are respectful and responsive to patient priorities, needs and values, supported by engagement and communication through the patient's cancer journey, achieving the best possible health outcomes.

Strategies

1. Care and support

- Ensure a culturally secure, gender sensitive diagnostic and treatment environment to accommodate cultural priorities and allow informed decisions about the treatment received, with reference to the patient, patient's family and wider community support mechanisms.
- Involve consumers in cancer service planning, education and supportive care programs.
- Enhance communication tools across the public and private sectors to provide a seamless and functional experience for cancer patients.
- Review the number and focus of MDT meetings in alignment with the OCP recommendation that all patients with cancer should be discussed at a MDT meeting before commencing treatment.
- Support the aim of multidisciplinary case management within 10 days of referral to the MDT coordinator.
- Advocate for the representation of all disciplines in each MDT meeting.
- Facilitate inclusion of Aboriginal-specific data item collection in the upcoming territory-wide electronic medical records system, Acacia.
- Increase the participation rates of Aboriginal cancer patients in clinical trials and support their involvement in research.
- Review travel and accommodation eligibility for cancer patients and their carers with a focus on patient needs, cultural, family and wider community relationships, access to adequate psychosocial support of patient emotional

wellbeing; and appropriate financial support through the Patient Assisted Travel Scheme.

- Educate the cancer care workforce on the benefits of early palliative care referral.

2. Service delivery linkages

- Provide Territory-wide contemporary patient care, including for all stages of cancer management - awareness and prevention, diagnosis, treatment and follow up, supportive care, survivorship and end of life care.
- Strengthen systems and processes for coordination of care and referrals within NT Health.
- Explore and develop allied health service provision for oncology patients in TEHS and CAHS, across the care continuum from diagnosis/pre-treatment through acute inpatient admission and long-term outpatient follow-up.
- Develop, track and evaluate standardised pathways for referral to higher level services and/or services not available locally, for example, stem cell transplant.
- Further develop links and communication with PHC practitioners for all cancer cases, with a priority focus on the management of complex high need cases.
- Advocate for aligning resources and delivery of cancer care throughout the NT with national standards of cancer care.
- Improve access, services and facilities offered in survivorship including integration of monitoring with involvement of general practitioners, other PHC providers and specialists, wellbeing services, psychosocial and community support.
- Improve access to services and facilities offered in advanced stage care, such as advanced personal plans and access to palliative care specialists and hospice accommodation.

3. Optimal Cancer Care Pathways

- Facilitate the adoption of the Optimal Care Pathways (OCP) in NT through the participation in the NCERG Optimal Care Pathways in Practice project.
- Develop appropriate cancer care coordinator capacity to support OCP adoption and to ensure safety and quality of the seamless patient journey between PHC and acute settings.
- Develop effective links between screening, diagnostic and treatment services as specified in the OCP.
- Work with NT PHN to promote and develop the Health Pathways tool to assist the primary health care integration with tertiary care aspects of OCP.

4. Education and resources

- Develop appropriate and culturally diverse information and support resources to help all cancer patients, their families and carers feel informed and empowered, with a focus on sustaining the patient's independence and self-care.
- Develop and implement culturally appropriate resources that enhance cancer literacy that are brief, pictorial and specific to cancer type and stages of the journey.
- Collaborate with NT PHN to promote awareness of the OCPs in primary health care settings to support alignment of practice with the OCP recommendations and timeframes.

5. Telehealth

- Increase the competent and effective use of telehealth in all health settings to allow treatment and follow up to be offered as close to home as possible.

Evaluation indicators

The following indicators are to be used to evaluate the quality of person-centred care and communication through NT cancer services.

- ✓ Uptake of telehealth services.
- ✓ Well-coordinated travel and accommodation arrangements so patients do not miss appointments.
- ✓ Coordinated quality patient care through increased use of telehealth facilities for consultations, treatments and other related appointments.
- ✓ A reduction in the number of patient trips to access treatment.
- ✓ Well developed cancer education and information resources.
- ✓ Implementation and evaluation across NT cancer services of the OCP.
- ✓ Cancer management adherence to the OCPs and evidence-based protocols and guidelines across all stages and services.
- ✓ Patient journey satisfaction rates.
- ✓ Increase the number of MDT to cater for patient numbers including establishing MDT for breast and lung cancers and aiming for multidisciplinary case management within 10 days of referral to the MDT coordinator.
- ✓ Involvement of radiology and pathology in MDT and associated meetings and activities, including regular radiology involvement in existing gynaecological MDT meetings within 12 months.

Priority 2 Governance and leadership

Supporting operational and clinical innovation at all levels of the healthcare system to lead NT cancer policy, improve service delivery, research, and resourcing of infrastructure, analytics and system design to support high quality service provision.

Strategies

1. Governance

- Strengthen the role of the NTCCN as leaders of best practice cancer care in the NT, providing advice, guidance and direction and being regarded as the ideal forum for consultation.
- Formalise governance arrangements, connections and relationships between the Department of Health, the health services and cancer groups to facilitate collaboration across the NT health care system.
- Advocate for strengthening system-wide clinical governance, strategic policy and support within the Department of Health.
- Identify gaps in services and support appropriate service development responses through the collection and evaluation of accurate data.

2. Infrastructure

- Advise planning for future infrastructure to accommodate current and increasing service delivery to meet demand.
- Implement a formalised booking system for all cancer services run through AWCCC to maximize use of clinical space and resourcing.

3. Aboriginal cancer care

- Provide leadership in Aboriginal cancer care in NT and national settings including through involvement with consultations and committees.
- Review alignment of NT cancer services with national Aboriginal cancer and health frameworks.

Evaluation indicators

The following indicators are to be used to evaluate the quality of governance and leadership provided to the NT cancer services.

- ✓ Collate best-practice examples and service gaps of clinical space or resourcing within the NT cancer service.
- ✓ Utilisation of formal communication lines between the NTCCN and the DoH.
- ✓ Referral tracking and evaluation system is established and monitored to enable performance indicators to be set for referral type, time frames and return rates.
- ✓ Number of representations and consultations related to national Aboriginal cancer care committees and activities.



Priority 3 Workforce development

Achieving an integrated and sustainable workforce through recruitment, retention, professional development and training, recognising that multidisciplinary care is the cornerstone of best practice cancer care.

Strategies

1. Development

- Support cancer care workforce profiling that includes benchmarking for staffing levels, roles, responsibilities, including the safety and quality impact of staffing levels.
- Create a workforce development strategy focussing on innovative methods of attraction, retention and development including NT training pathways to build an NT cancer care workforce, new options for advertising and interstate rotation of staff.
- Identify career development pathways for cancer care staff in all streams.
- Enhance access and availability of interpreter services throughout the cancer journey for all culturally and linguistically diverse (CALD) patients.

2. Recruitment and retention

- Ensure adequate staffing levels to attain critical mass in professions and thus create a sustainable and resilient workforce.
- Develop decision making processes for health professionals operating in areas of cancer care without easy access to specialised cancer support.
- Identify ways to create a specialist workforce in NT for all aspects of cancer care including support of survivorship and grief counselling.
- Further develop outpatient allied Health services to sufficient levels in intermediary hospitals and regional areas to avoid delays in discharge from Darwin services.
- Plan for growth in the allied health workforce proportional to growing demand for cancer services.

- Promote strategies to recruit, engage, develop and retain Aboriginal workforce in cancer care to enhance the Aboriginal patient's navigation through the cancer journey.

3. Education and training

- Familiarise remote and community health staff with acute cancer services, guide their access to cancer coordination services and enhance their cancer health literacy.
- Foster cultural responsiveness and the gender sensitivity of all practitioners involved in the delivery of cancer services for all patients.
- Support the growth and development of the workforce including role expansion, advanced practice, training in specialty cancer care areas (for example genetics) and professional support for staff.
- Encourage telehealth capability of staff and facilities to address gaps in services.

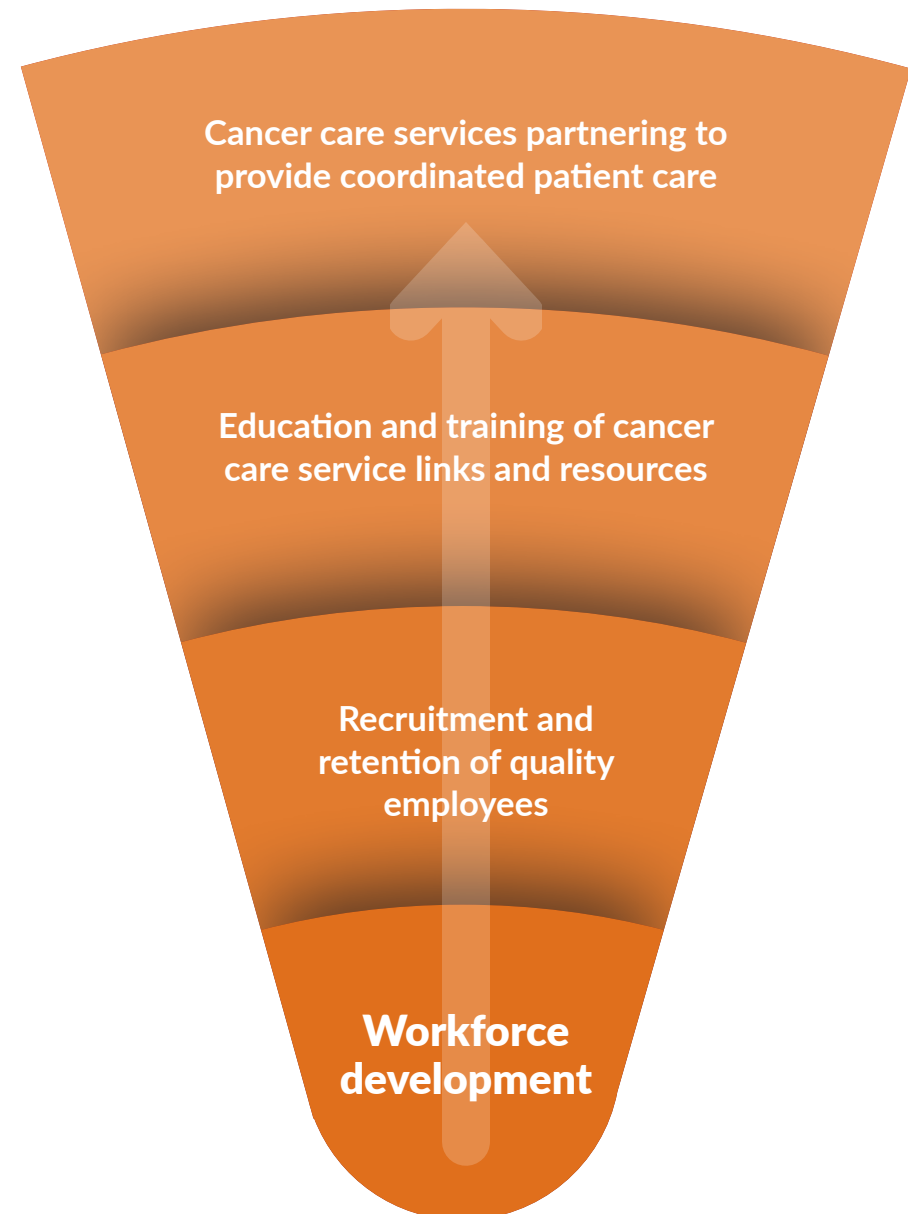
4. Partnerships

- Support the formalisation of partnerships between local generalists and interstate specialists for the co-management of patients' cancer treatment within NT as much as practical, and integration of referrals to interstate specialist centres.
- Further develop partnerships with peak primary health organisations and cancer non-government organisations.
- Aid all treatment areas of NT cancer service delivery to move towards self-sufficiency where feasible.

Evaluation indicators

The following indicators are to be used to evaluate workforce development across NT cancer services.

- ✓ Engage with DoH People and Organisation Capability Division on cancer workforce profiling and strategies to better attract and retain cancer care staff to the NT.
- ✓ Define appropriate and sustainable self-sufficiency in treatment areas of NT cancer service delivery, identifying where changes can be made in each stream to support attaining this.
- ✓ Decrease interstate travel for common procedures in cancer care.
- ✓ Increased amount of cancer education within NT for health professionals.
- ✓ Increased retention of chemotherapy trained nurses to facilitate continuity of care.
- ✓ Enhanced access and availability of interpreter services throughout the cancer journey for all culturally and linguistically diverse (CALD) patients.
- ✓ Growth in the allied Health workforce proportional to growing demand for cancer services.
- ✓ Increase the size of the Aboriginal workforce working in cancer care.
- ✓ Cultural awareness and responsiveness education is provided to the whole cancer care workforce, responding to staff turnover and diversity.



Priority 4 Quality and safety

Delivery of high quality cancer care based on contemporary evidence and data collection, application of optimal care pathways and increased participation in clinical trials.

Strategies

1. Data and research

- Undertake a scoping project to explore funding models, legislative changes, information technology requirements and human resourcing needs for a potential NT Clinical Cancer Registry.
- Influence and guide research partnerships, locally and nationally that focus on cross-cultural communication and qualitative insights into the barriers to good cancer care.
- Wide acceptance that clinical research and trials are core components of delivering high quality care.
- Increase the capacity for clinical trials in NT, in partnership with other organisations.
- Enhance the participation of Aboriginal patients in clinical trials with culturally appropriate information and recruitment.
- Support early detection and cancer risk reduction interventions in community and PHC settings.
- Work within the context of the NT Health Acacia information system to track cancer care and OCP timeframe alignment from diagnosis to end of life.

2. Information sharing

- Development of a webpage as a repository for quality and safety information sharing, accessible to all cancer care health practitioners.

3. Evaluation

- Develop an implementation and evaluation plan for the NT Cancer Care Strategy 2019-2022.
- Identify opportunities for benchmarking and collaboration with similar regions and services in northern parts of Queensland and Western Australia.
- Consider available evidence and research, including eviQ, in implementation of activities to address the priorities of this Strategy.
- Champion the awareness and use of National Safety and Quality Health Service Standards (second edition).

Evaluation indicators

The following indicators are to be used to evaluate the quality and safety of cancer services across the NT.

- ✓ Within two years, develop a framework for the NT Clinical Cancer Registry
- ✓ Within the next two years, establish minimum clinical data sets for three identified common cancers.
- ✓ Within four years prepare a business case for a centralised NT Clinical Cancer Registry for three identified common cancers, with aim to expand this for all cancers over time.
- ✓ Increase in Aboriginal participation rate in clinical trials.

Acronyms

ACCHOs	Aboriginal Community Controlled Health Organisations
AIHW	Australian Institute of Health and Wellbeing
AMSANT	Aboriginal Medical Services Alliance Northern Territory
ASH	Alice Springs Hospital
AWCCC	Alan Walker Cancer Care Centre
BSNT	Breast Screen Northern Territory
CA	Cancer Australia
CAHS	Central Australian Health Service
CCNT	Cancer Council Northern Territory
CDU	Charles Darwin University
CTU	Clinical Trials Unit
DoH	Department of Health
DPH	Darwin Private Hospital
HCH	Health Care Home
ITC	Integrated Team Care
MDT	Multidisciplinary Team
NCERG	National Cancer Expert Reference Group
NT	Northern Territory
NTCCN	Northern Territory Cancer Care Network
NT PHN	Northern Territory Primary Health Network
OCP	Optimal Cancer Care Pathways
PHC	Primary Health Care
RDH	Royal Darwin Hospital
RDPH	Royal Darwin and Palmerston Hospitals
TEHS	Top End Health Service
TPC	Territory Palliative Care

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Definitions

Aboriginal	The term Aboriginal has been used in this document to mean Aboriginal and Torres Strait Islander peoples of Australia, inclusive of the Torres Strait Islander people.
Consumers	For the purposes of this document, a consumer is defined as a person who has used, or may potentially use, health services, or is a carer for a patient using health services. The term may have a broader context than the term 'patient'.
Culture	The practices and beliefs owned by a community or people or group. It provides distinct identity such as language and dialect, gestures, customs and traditions that define values and organise social interactions, religious and spiritual beliefs and rituals.
Cultural responsiveness	The capacity to respond to health care issues of individuals and provide person-centred care taking into account cultural, linguistic, spiritual and socioeconomic background.
Cultural safety	Identifies that health consumers are safest when health professionals consider power relations, cultural differences and patient's rights. Is defined by the consumer's experience in the care they are given, their ability to access services and to raise concerns.

Cyclotron	Cyclotron is a particle accelerator which produces short lived radioactive isotopes that are used for Position emission tomography (PET) Scanning
Health literacy	How people understand and process information about health and health care, and how they apply that information to their lives, use it to make decisions and act on it.
NT Health	NT Health includes the staff and services of the Department of Health, Top End Health Service and Central Australia Health Service.
PET Scan	Position emission tomography (PET) Scan is a nuclear medicine functional and structural imaging technique that is used to observe metabolic processes aiding in the diagnosis of cancer.
Primary health care	Primary health care (PHC) encompasses a large range of providers and services across the public, private and non-government sectors. At a clinical level, it usually involves the first (primary) layer of services encountered in health care and requires teams of health professionals working together to provide comprehensive, continuous and person-centred care.

