Northern Territory Health

Hospital Services Capability Framework

5 February 2014
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Background

Considerable work and extensive consultation have gone into the creation of this Framework. It is the first document of its kind within the Northern Territory which aims to provide a set of minimum clinical service guidelines for use by clinicians, managers, and service and facility planners. It takes into account Commonwealth and Northern Territory policy decisions and legislative frameworks, and reinforces the Northern Territory Department of Health’s ongoing commitment to promote, protect and improve the health and wellbeing of all Territorians in partnership with individuals, families and the community.

The document has been based on similar frameworks from other jurisdictions, primarily the WA Health Clinical Services Framework 2010-2020 and the Queensland Clinical Services Capability Framework for Public and Licensed Private Health Facilities (Version 3.1).

The service descriptions for each speciality group have been reviewed by User Groups that were established for each independent specialty area. The User Groups included specialist clinicians and health professionals in that field and were responsible for reviewing and/or developing service descriptions, refining the requirements for the minimum capability criteria at each service level, identifying relevant reference documents, and providing other advice about the provision of a clinical service.

Two rounds of consultations were held with each User Group as the document was drafted initially as the Greater Darwin Clinical Services Framework (September 2012). Subsequently another round of consultation sessions was held (August 2013) when the scope of the project broadened to include all hospitals within the Top End Health Service.

Further amendments to the Framework will occur when consultations expand to also include service delineation descriptions for Central Australia Health Service and other non-hospital based services. This document will function as a companion document to support the development of a Northern Territory Health Clinical Services Plan including the Top End and Central Australia Health Services.
Principles and assumptions
The Framework is underpinned by a set of key principles that guide its application:

- Best practice models are applied and best available evidence underpins the delivery of safe and quality health services.
- The Framework is overarching in its application and incorporates models of care at individual health facilities.
- The Framework in no way supersedes relevant legislation, regulations or standards. There is alignment with Commonwealth and Territory legislation, regulations, legislative and non-legislative standards, guidelines, benchmarks, policies and frameworks, and relevant college standards where applicable.
- To the extent feasible, multiple service capability levels should be linked within the Top End and Central Australia Health Services and throughout the Northern Territory to appropriately facilitate the transfer and management of patients appropriate to their care needs and in the context of ability to access local services.

Assumptions which underpin the Framework assume that the health facilities included in its scope comply with:

- Relevant legislation, regulation and legislative standards, and non-legislative standards, guidelines and benchmarks;
- Health professional workforce requirements such as professional registration, codes of conduct, health and safety of employees, contractors and visitors;
- Relevant health professional credentialing and scope of clinical practice; and
- Culturally appropriate and capable service provision guidelines.

For a list of relevant NT Acts and Regulations, refer to Appendix 1.

The Department of Health Northern Territory is the document owner and single repository for the Framework.
Hospital Services Capability Framework

The process of role delineation recognises that for each level of clinical service provision, a corresponding level of clinical support services and staff profile are required to ensure services are delivered in a safe, efficient and appropriate manner. Role delineation provides a means to categorise the complexity of services required to meet the needs of the population and is a useful tool to inform discussion and planning for the development of services.

The role level of a service describes the complexity of the clinical activity undertaken by that service and is chiefly determined by the presence of:

- Medical, nursing and other health care personnel who hold qualifications compatible with the defined level of care; and,
- An appropriate level of clinical support services at the facility, or where clinically appropriate.

The Capability Framework consists of two integrated parts:

- **Core Services** that fall into seven categories – General Medicine, Cancer Services, Renal Services, Emergency Medicine, General Surgery, Maternal and Child Health Services and, Integrated Community and Hospital Services; and,

- **Clinical Support Services** which include Allied Health, Anaesthetics, Diagnostic Imaging and Nuclear Medicine, Intensive Care, Operating Theatres, Pathology and Pharmacy.

Not all services delivered by the Health Services are included in the framework, for example Palliative Care.

Core and Clinical Support Services are generally categorised into six role levels of service provision with increasing complexity (from level 1 to level 6, with 6 being the most complex). The levels are cumulative and build on each previous level’s capability requirements. It is intended that there is a level of flexibility between the margins of the levels.

Future Service Role Delineation levels may change over time in response to changes within the health industry and the jurisdiction.

The Hospital Services Capability Framework (HSCF) is a significant planning tool which provides a consistent language to describe health services and to identify and document the minimum support services, staffing, safety standards, networking arrangements, and other requirements essential to ensure Northern Territory health facilities provide safe, high quality, appropriately supported clinical services.

The levels of service in this Framework are intended to be specific to and appropriate for the Northern Territory and take into account the unique nature of health service provision in a region characterised by extreme remoteness which is home to a diverse population, with health facilities and workforce spread over a large geographical footprint.

For a list of standard terms used throughout the HSCF refer to Appendix 2.
Core Services

General Medicine
- General Medicine
- Cancer
- Cardiology
- Diabetes Services
- Gastroenterology
- Infectious Disease
- Renal Services
- Respiratory Medicine

Emergency Medicine

General Surgery
- Ear, Nose and Throat
- Gynaecology
- Neurology
- Ophthalmology
- Orthopaedics
- Urology
- Vascular

Maternal and Child Health Services
- Neonatology
- Obstetrics
- Paediatrics

Integrated Community and Hospital Services
- Mental Health
- Rehabilitation
Clinical Support Services

Allied Health
Anaesthetics
Diagnostic Imaging and Nuclear Medicine
Intensive Care Unit / High Dependency Unit
Operating Suite / Operating Theatres (see General Surgery description)
Pathology
Pharmacy

The required minimum level of Clinical Support Services is listed for each service area. Depending on the service being provided, most service areas require a minimum level of support across several or all of the above areas in order to ensure the safe and effective provision of services.

For example, to ensure the safe and effective provision of Level 5 General Medicine Services, the following levels of Clinical Support Service provision are required. (The numbers refer to the minimum role level of service required; for example, a Level 5 General Medicine Service will ideally be supported by an onsite minimum Level 4 Pathology Service).

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Where a minimum level of Clinical Support Service is specified for a given service area, it means that the Clinical Support Service must be provided onsite and staffed appropriately.
Core Services

For the purposes of this Framework, Core Services comprise: General Medicine, Cancer Services, Renal Services, Emergency Medicine, General Surgery, Maternal and Child Health Services and Integrated Community and Hospital Services.
General Medicine

General Medicine refers to the maintenance of health and the diagnosis and non-surgical treatment of diseases of the internal organs. Basic General Medicine is typically delivered by a Registered Medical Practitioner or Nurse Practitioner in ambulatory care settings. The more advanced and complex General Medicine requirements are delivered by specialists out of larger hospitals. For the purpose of this Framework the specialties of General Medicine comprise: Cancer, Cardiology, Diabetes, Gastroenterology, Infectious Disease, Renal, and Respiratory Medicine.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
Service: General Medicine

Level 1

Service Description
A Level 1 service provides a low-acuity, ambulatory medical care service. It is a nurse-led service with the ability to provide acute resuscitation and treat minor acute illnesses prior to transfer. A Level 1 service also has the ability to monitor and stabilise patients with 24 hour access to a Registered Nurse (RN) and access to a Registered Medical Practitioner (RMP) and Senior Registered Nurse (SRN). The service has access to the following, whether local, visiting or via telehealth: allied health services, scientific officers and technical support as required, basic radiology as required, and Aboriginal and Torres Strait Islander Health Practitioners, as required.

Minimum Staffing Requirements
- 24 hour access to a RN
- Access to a RMP
- Access to a SRN
- Access to Aboriginal and Torres Strait Islander Health Practitioner

Minimum Clinical Support Service Requirements

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Level 2

Service Description
A Level 2 service provides services at Level 1 plus it provides a low-acuity, multi-system medical condition ambulatory and/or inpatient service.

Service Requirements
As for Level 1 plus:
- Provides an outpatient service
- May host outreach service from lower level service within the network

Minimum Staffing Requirements
As for Level 1 plus:
- Inpatient care by a resident general physician or access to a RMP
- 24 hours cover by a RN
- Business hours access to allied health professionals, as required

Minimum Clinical Support Service Requirements

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Level 3

Service Description
A Level 3 service provides services at Level 2 plus it has the ability to transfer patients to a higher level service as well as accept transfers of patients from a higher level service where appropriate care and management can be provided. In addition to Level 2, inpatient and outpatient care is provided by resident Medical Practitioners.

Service Requirements
As for Level 2 plus:
### Service: General Medicine

- May provide some specialty services
- On-site medical imaging
- May provide access to higher level care beds
- Must have telehealth linkages to specialist medical services from a higher level service within the network

#### Minimum Staffing Requirements

As for Level 2 plus:

- Inpatient care by a resident general physician or access to a RMP or visiting Medical Practitioner
- Access to appropriate allied health services via telehealth (or local or visiting dependent on availability)

#### Minimum Clinical Support Service Requirements

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### Level 4

#### Service Description

A Level 4 service provides services at Level 3 plus inpatient care by a registered Medical Specialist and visiting outpatient consultations for a range of specialties.

#### Service Requirements

As for Level 3 plus:

- Provides a resident and outreach service across a range of medical specialties
- Advice and consultation provided to smaller sites including via telehealth where appropriate
- Must provide formal training programs for undergraduate and postgraduate medical, nursing and allied health clinicians
- Appropriate network access to nuclear medicine

#### Minimum Staffing Requirements

As for Level 3 plus:

- 24 hours access to a RMP or visiting Medical Practitioner (on call)
- 24-hour medical emergency team (see Emergency Medicine framework for details)
- Dedicated RNs with appropriate training and experience
- Access to an Aboriginal and Torres Strait Islander liaison service, as required
- Access to allied health services, as required
- May have access to a cardiologist via telehealth

#### Minimum Clinical Support Service Requirements

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### Level 5

#### Service Description

A Level 5 service provides services at Level 4 plus a multidisciplinary team approach to treat complex and critically ill medical patients. The service provides inpatient care by a resident Medical Practitioner and other Medical Practitioners covering most specialties.

#### Service Requirements

As for Level 4 plus:
Service: General Medicine

- Access to a Level 4 Intensive Care Unit (ICU)
- An endoscopy service, cardiac investigations
- Bronchoscopy services
- Network referral role
- Primary provider of approved outreach services to lower level services across a variety of appropriate specialties
- Must provide vocation specific specialist training

Minimum Staffing Requirements

As for Level 4 plus:

- Emergency services available by on-call specialist
- A RMP (excluding emergency department staff) on-site 24 hours
- Access to resident specialists across an appropriate range of specialties
- Additional RMPs appropriate to acuity and bed capacity
- Nursing staff and environment able to provide close observation/recovery care
- Registrar, Registered Medical Officer or intern
- On-site anaesthetics, cardiac care unit, endoscopy, intensive care and pathology
- Specialist consultation or diagnosis provided by telehealth or via telephone to smaller sites and services
- Access to specialised allied health services

Minimum Clinical Support Service Requirements

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Level 6

Service Description

A Level 6 service provides services at Level 5 plus the service caters for the most complex medical care. The service is usually provided at a large referral hospital by a multidisciplinary team available 24 hours a day and may include a Territory-wide and/or super-specialty service.

Service Requirements

As for Level 5 plus:

- Appropriate range of Medical Specialists and emergency medical services
- Network referral role in specialties
- May provide Territory-wide or interstate referral role
- Cardiac investigations, including interventional cardiology (therapeutic procedures) - See Cardiology framework for additional details

Minimum Staffing Requirements

As for Level 5 plus:

- Senior allied health professionals with advanced specialty skills and involved in education and research appropriate to their specialty, as required

Minimum Clinical Support Service Requirements

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Reference Documents

Health Practitioners Law - NT & Commonwealth
Royal Australian College of Physicians
Cancer Service

Cancer Service refers to the overall suite of services performed by health facilities in preventing, diagnosing and treating cancer.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required for Medical Oncology, Radiation Oncology and Haematology services within each level.

Medical Oncology is the component of cancer medicine that assesses patients with cancer and manages their care, particularly through the use of systemic therapies.

Radiation Oncology plays a major role in cancer treatment. Radiation therapy is either used alone or combined with surgery, chemotherapy, or other therapies in the curative or palliative treatment of cancer.

Clinical Haematology is the component of cancer medicine that assesses and manages patients with haematological malignancies and bone marrow failure, including leukaemias, lymphomas, and myelomas.
Service: Cancer Services – Medical Oncology

No Level 1 Service. Refer to higher level

No Level 2 Service. Refer to higher level.

Level 3

Service Description
A Level 3 service provides for a well-trained Registered Nurse (RN) with knowledge of cancer care in the region that coordinates referral to a higher level service for initial diagnosis and post treatment complications. This service may have access to multi-disciplinary teams at a higher service level via telehealth. This level of service has the capacity to provide inter and/or post treatment care.

Service Requirements
- Onsite medical imaging
- Formal link with tumour specific Clinical Nurse Consultant (CNC)
- Access to an NT Clinical Cancer Registry
- Access to Aboriginal and Torres Strait Islander Health Practitioner
- Provides outreach and support to rural and remote clinics and community health centres to ensure continuity of care for cancer patients pre-, during and post-treatment
- Must have telehealth linkages to specialist medical oncology services from a higher level service within the network

Minimum Staffing Requirements
- RN
- Access to a Cancer Care Coordination Service (in conjunction with Radiation Oncology and Haematology) with up-skilling local nurses in Cancer Care Coordination
- Access to Aboriginal and Torres Strait Islander Health Practitioner

Minimum Clinical Support Service Requirements

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Level 4

Service Description
A Level 4 service provides all services at Level 3 plus low-risk ambulatory and/or inpatient diagnostic, consultation and treatment services. This level service provides low level orally administered chemotherapy under the supervision of an oncologist or haematologist who reviews the patient locally or at a higher level service. This service will be delivered predominantly by Registered Medical Practitioners (RMP), although not necessarily on-site, RNs and visiting day-only/telehealth specialist medical services. This service has access to multi-disciplinary teams at a higher service level (may be via telehealth/teleconference).

Service Requirements
As for Level 3 plus:
- Urgent telephone consultation with referring tertiary medical oncology service, as required, for all complications of treatment requiring admission
- Capacity to provide day treatment, with designated ambulatory day beds for treatment
- Access to a higher level cancer service
- Appropriate network access to Nuclear Medicine

Minimum Staffing Requirements
As for Level 3 plus:
- A RMP available 24 hours.
- 24 hours access via telephone to a registered Medical Specialist with credentials in medical oncology for advice.
Service: Cancer Services – Medical Oncology

- 24 hours access via telephone to a registered Medical Specialist with credentials in microbiology for advice.
- Outpatient care by resident Medical Practitioner (MP) and visiting medical oncologist with support via telehealth
- 24 hour cover by a RN
- May provide multidisciplinary case conferencing with tumour specific specialist for all patients
- Access to some allied health services appropriate to Level 4 Medical Oncology service provision
- Access to an Aboriginal and Torres Strait Islander Liaison service as required

Minimum Clinical Support Service Requirements

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Level 5

Service Description

A Level 5 service provides all services at Level 4 plus the service provides treatment for all common malignancies, (with haematological malignancies covered by the Haematology service). This level of service manages relatively high-risk systemic therapy protocols and is able to administer initial (first cycle) courses of systemic therapy and supervise subsequent maintenance courses provided at a lower level medical oncology service. This level of service ideally operates as a cancer unit.

Service Requirements

As for Level 4 plus:

- Medical oncology available 24 hours, with access 24 hours to a tertiary medical oncology service
- Chemotherapy shared care with the tertiary facilities for common cancers with more complex needs
- Provides multidisciplinary case conferencing with tumour specific specialist for all patients
- Links with radiotherapy, palliative care and pain management services
- Access within 24 hours to renal dialysis, respiratory, cardiology and infectious diseases services
- Site-specific (breast, lung and colorectal) and general oncology consultative services available
- A day treatment area for ambulatory procedures
- Transfer or referral of highly complex or high-risk patients to a Level 4 service
- Network referral role

Minimum Staffing Requirements

As for Level 4 plus:

- Inpatient care by resident oncologist
- Registrar or registered Medical Officer
- Access to specialised allied health services
- An oncology pharmacist available 24 hours
- Outpatient consultation by visiting medical oncologist on regular basis with tertiary facility support for complications
- Specialist RN
- Access to an Aboriginal and Torres Strait Islander Liaison Officer

Minimum Clinical Support Service Requirements

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Level 6

Service Description

A Level 6 service provides all services at Level 5 plus delivery of all high-risk, complex systemic therapy protocols, including intensive chemotherapy protocols. The service provides initial assessment, management and treatment plans for common malignancies, in collaboration with disease-specific surgeons, radiation oncologists, pathologists and supportive care specialties. This
Service: Cancer Services – Medical Oncology

Service is usually provided at a large tertiary hospital and is usually delivered in a cancer centre. This service also serves as a reference centre for all medical oncology service levels. This service may be a referral centre for a recognised cancer specialty, such as bone or thyroid cancer.

Service Requirements
As for Level 5 plus:
- Full range of oncology services, with oncology department and emergency services
- Territory-wide or interstate referral role
- Territory mentoring and specialist leadership role
- Undergraduate and postgraduate teaching role
- Research role
- Concurrent chemoradiation treatment for all tumour types, including head and neck cancer
- Access to inpatient radiation treatment
- Access to interventional radiology services

Minimum Staffing Requirements
As for level 5 plus:
- Medical Registrar on site 24 hours
- Access to specialty surgeons, such as orthopaedics or surgical oncology management by stream (e.g. breast, colorectal, head and neck, upper gastrointestinal, lung or bladder)

Minimum Clinical Support Service Requirements

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Reference Documents
Health Practitioners Law - NT & Commonwealth

Australasian College of Physical Scientists and Engineers in Medicine. www.acpsem.org.au

Australian Council on Healthcare Standards

## Service: Cancer Services – Radiation Oncology

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<th>Level 3</th>
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<td><strong>Service Description</strong></td>
<td>A Level 3 service provides a visiting radiation oncologist working in conjunction with a comprehensive cancer service and has access to multi-disciplinary teams at a higher service level via telehealth.</td>
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<td><strong>Service Requirements</strong></td>
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<td>- Onsite medical imaging</td>
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<td>- Must have telehealth linkages to specialist medical and cancer services from a higher level service within the network</td>
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<td>- Access to an NT Clinical Cancer Registry</td>
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<td><strong>Minimum Staffing Requirements</strong></td>
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<tr>
<td>- Visiting radiation oncologist</td>
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<td>- Registered Nurse (RN) in conjunction with Medical Oncology and Haematology</td>
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<td>- Access to a Cancer Care Coordination Service (in conjunction with Medical Oncology and Haematology) with up-skilling local nurses in Cancer Care Coordination</td>
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## Level 4

| Service Description | A Level 4 service provides all services at Level 3 plus it provides a basic oncology service with access to radiation oncologists and a specialist RN. The service has links with a higher level palliative care service and access to specialised allied health services. |
| Service Requirements | As for Level 3 plus: |
| - Onsite Level 4 Diagnostic Imaging and Pathology |  |
| - Advice and consultation provided to smaller sites including via telehealth where appropriate |  |
| - Appropriate network access to Nuclear Medicine |  |
| **Minimum Staffing Requirements** | As for Level 3 plus |
| - Dedicated RN coverage |  |
| - On-call radiation oncologist (in addition to visiting) |  |
| - Dedicated RNs with appropriate training and experience |  |
| - Access to an Aboriginal and Torres Strait Islander Liaison service, as required |  |
| - Access to allied health services appropriate to Level 4 Radiation Oncology |  |
| **Minimum Clinical Support Service Requirements** |  |
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Service: Cancer Services – Radiation Oncology

Level 5

Service Description
A Level 5 service provides all services at Level 4 plus it provides a radiation oncology consultative service and a range of radiation oncology treatment services. The service is provided primarily for adult patients. Treatment services at this level include external beam therapy, but exclude specialist radiation oncology services, such as brachytherapy, total body irradiation, radiosurgery and paediatric radiotherapy. A Level 5 service has access to inpatient beds (referral from medical oncology), and participates in multidisciplinary clinics for breast, colorectal, gynaecology, lung, melanoma and skin cancers. This service may be co-located with a health service or stand-alone.

Service Requirements
As for Level 4 plus:
- Onsite, or a documented process for, access to palliative care services supporting participation in patient assessment, management and/or referral by a palliative care team
- Inclusion in a service network with higher level services ensuring access to information related to the latest evidence-based care, treatments and training
- Professional support from a higher level radiation oncology institution
- May accept referrals from lower level services and can provide long term follow up care back to lower level services via a networked visiting and telehealth service
- Links with the NT Cancer Council
- Network referral role

Minimum Staffing Requirements
As for Level 4 plus:
- A registered Medical Specialist with credentials in radiation oncology available 24 hours.
- A registered Medical Specialist with credentials in radiation oncology available for consultation services, including telephone consultation for complications of treatment and admission for complications within 24 hours
- Radiation Oncology Registrar
- Radiation Oncology Fellow
- A Senior Registered Nurse (SRN) in charge
- On-site full time Prostate Care Nurse
- Access to a dietician dedicated to cancer services
- Adequate numbers of qualified radiation oncology medical physicists and radiation therapists (or equivalent support) on-site during business hours and available after hours, as required.
- Onsite access to Level 4 (or where available Level 5) allied health professionals
- Access to a Data Manager/Clinical Trials Manager for Cancer Services
- Access to an Aboriginal and Torres Strait Islander Liaison Officer

Minimum Clinical Support Service Requirements

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Level 6

Service Description
A Level 6 service provides all services at Level 5 plus it provides a comprehensive range of specialised and highly specialised radiation oncology services, including external beam and brachytherapy services. A Level 6 service may provide total body irradiation, intraoperative radiotherapy, intensive chemoradiation schedules for head and neck cancer, prostate brachytherapy, gynaecological brachytherapy, intraluminal brachytherapy, ocular brachytherapy and brachytherapy for rare tumours.

Service Requirements
As for Level 5 plus:
- Full range of radiation oncology services, located in principle referral centre with access to all specialties
Service: Cancer Services – Radiation Oncology

- Territory-wide or interstate referral role, and mentoring and specialist leadership role
- Undergraduate and postgraduate teaching role
- Active research role
- Fully integrated computerised planning, treatment and verification systems
- Mechanical and biomedical support facilities
- Access to a specialised positron emission tomography (PET) service
- Acute inpatient beds available onsite for specialised procedures, such as brachytherapy and administration of radioactive iodine, and for supportive care (e.g. for acute radiation reactions) and insertion of percutaneous gastrostomy feeding tubes
- Appropriate linear accelerator bunker and equipment to deliver total body irradiation and total skin electron beam therapy
- Referral service to paediatric super-specialist facilities where children are treated
- Referral service to adolescent and young adult specialty services
- Referral service to a clinical genetics/medical genetics service, including genetic counseling
- Provision of appropriate anaesthetic equipment and expertise where anaesthetic procedures are undertaken (refer to the Anaesthetic service description)
- Radiation oncology staff to adequately provide specialised services (e.g. total body irradiation, stereotactic radiosurgery, stereotactic radiotherapy and brachytherapy).
- Access to allied health professionals to meet patients’ needs, as required (including dentists, speech pathologists and dieticians for head and neck patients)

Minimum Staffing Requirements
As for Level 5

Minimum Clinical Support Service Requirements

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Reference Documents

Health Practitioners Law - NT & Commonwealth

Australasian College of Physical Scientists and Engineers in Medicine. www.acpsem.org.au
Australian Council on Healthcare Standards

Service: Cancer - Haematology

No Level 1 Service. Refer to higher level.

Level 2

Service Description
A Level 2 service provides basic low-risk care as part of a remote clinic or community health centre providing a low-acuity, ambulatory medical care service. It is a nurse led service with a local Registered Nurse (RN), and visiting outreach doctor and has access to the following, whether local, visiting or via telehealth: allied health services, scientific officers and technical support as required, basic radiology as required, and Aboriginal and Torres Strait Islander Health Practitioners, as required.

Service Requirements
- Supervised provision of chronic administration of oral chemotherapy in stable patients who require periodic review
- Ability to collect bloods for pathology testing

Minimum Staffing Requirements
- 24 hour access to RN
- Access to Registered Medical Practitioner (visiting or telehealth)
- Access to consultation with Haematologist (via telehealth or teleconference)
- Access to Aboriginal and Torres Strait Islander Health Practitioner

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Level 3

Service Description
A Level 3 service provides relatively low-risk ambulatory and/or inpatient care with access to limited support services. This level service provides ambulatory care under the direct or indirect supervision of a Registered Medical Practitioner (RMP) who may have credentials in haematology, or a registered medical specialist with credentials in internal medicine/oncology under the supervision of a registered medical specialist with credentials in haematology. A Level 3 service has capability to provide limited support before, during and after malignant haematology treatment. This service has links with general practitioners, social work services, psychosocial support, supportive care and community services, as required by and appropriate to the service being provided.

Service Requirements
- Administration of conventional doses of systemic therapy under protocols that would not normally be expected to produce prolonged neutropaenia
- Provision of only relatively low-risk systemic therapy limited to mild to moderate bone marrow suppressive protocols
- Provision of chemotherapy under the supervision of a RMP with credentials in haematology/oncology who reviews the patient locally or at a higher level service
- Access to support services, particularly to tertiary medication services and on-site pathology with appropriate turnaround time
- Haematological malignancy complications of treatment requiring admission must have urgent telephone consultation with the referring haematological malignancy service
- Adherence to protocols for emergency haematology care, intravenous administration of anti-neoplastic agents, cytotoxic handling and disposal, central line care, blood transfusions and infection control
- Access to radiation oncology services within 24 hours' transport for urgent treatment (e.g. spinal cord compression)
- May manage appropriate cases locally after consultation with the haematologist.
Service: Cancer - Haematology

Minimum Staffing Requirements
- On-call Haematologist
- Registered Medical Specialist with credentials in haematology, or a registered Medical Specialist with credentials in internal medicine/oncology under the supervision of a registered Medical Specialist with credentials in haematology
- Access to a multidisciplinary consultation group, including registered Medical Specialists with credentials in medical oncology, radiation oncology and clinical haematology (haematological malignancy), who must be involved in the development of a management strategy
- A RMP available 24 hours.
- Local supervision by a RMP responsible for overall continuity of care of the patient.
- 24 hour access via telephone to a registered Medical Specialist with credentials in clinical haematology for advice.
- 24 hour access via telephone to a registered medical specialist with credentials in microbiology for advice.
- Access within 24 hours to outpatient and/or ambulatory consultative services by a registered medical specialist with credentials in clinical haematology for treatment complications and/or admission for complications
- A Senior Registered Nurse (SRN) in charge of each shift.
- Access to a minimum of two RNs.
- Access to an RN with specialised knowledge and experience at a tertiary haematological service for advice, as required.
- Access to a Cancer Care Coordination Service (in conjunction with Medical Oncology and Radiation Oncology) with upskilling local nurses in Cancer Care Coordination
- Access to allied health professionals, as required.

Minimum Clinical Support Service Requirements

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Level 4

Service Description
A Level 4 service provides services at Level 3 plus it provides ambulatory care under a visiting registered Medical Specialist with credentials in haematology and inpatient care under a RMP. This level service administers conventional doses of systemic therapy and may operate as a ‘cancer unit’. The service is part of a network with higher level services, ensuring access to information relating to the latest evidence-based care and treatment.

Service Requirements
As for Level 3 plus:
- Some dedicated haematology inpatient services
- Visiting outpatient consultative, day treatment services
- Integration of home based services with area based program
- Administers initial courses of systemic therapy where ordered and is directly supervised by a registered Medical Specialist with credentials in haematology
- Manages relatively moderate-risk systemic therapy protocols with a low risk of neutropaenic sepsis
- Provides only relatively low- and medium-risk systemic therapy with moderate bone marrow suppressive protocols
- Provides early after-care to patients receiving autologous transplants elsewhere
- Provides maintenance systemic therapy to patients diagnosed with the same conditions described for a Level 4 haematological malignancy service
Service: Cancer - Haematology
- Access to a central venous access service
- Access to palliative care, pain management and radiation oncology services
- Access to a clinical genetics/medical genetics service
- Outpatient/outreach (visiting/telehealth) services may be available.
- Some allied health undergraduate education.

Minimum Staffing Requirements
- All chemotherapy supervised by a registered Medical Specialist with credentials in haematology.
- Local supervision by a registered Medical Specialist with credentials in internal medicine
- A RMP, where inpatients are treated—available 24 hours.
- A registered Medical Specialist with credentials in internal medicine and experience in clinical haematology available 24 hours, with 24 hour access to tertiary haematological malignancy services for emergency advice.
- 24 hour access to a registered Medical Specialist with credentials in clinical haematology for emergency advice about treatment complications and/or admission.
- RNs competent in administering and monitoring systemic chemotherapy
- Access to designated allied health services including social workers, occupational therapists, physiotherapists, speech pathologists, psychological and emotional support services, palliative care and a nutrition team, as required

Minimum Clinical Support Service Requirements

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Level 5

Service Description
A Level 5 service provides services at Level 4 plus it provides diagnostics and treatment for haematological malignancies where the treatment is associated with a prolonged period of severe myelosuppression. This level service manages relatively high-risk systemic therapy protocols. In the public sector, the service provides inpatient care under a resident registered Medical Specialist with credentials in haematology and aligned junior medical staff (Resident and Registrar). The service is able to provide initial courses of systemic therapy and supervise subsequent maintenance courses. A Level 5 service coordinates all definitive diagnostics and development of a plan for treatment, which may take place at a lower level, this level or a higher level service. The service provides active support for lower level services and is part of a service network with a Level 4 service, ensuring access to the latest evidence-based care and treatment information. The service provides multidisciplinary management of haematology patients, including case conferences and the development of treatment plans. A medical specialist with credentials in clinical haematology may provide a consultative service in person or via telehealth, which may include initial assessment and long-term follow-up of patients of lower level services. A Level 5 service may include autologous transplantation, but not allogeneic transplantation. The service may provide haematological malignancy consultative services to lower level services.

Service Requirements
As for Level 4 plus:
- A day treatment area for procedures, such as administration of systemic therapy, biological agents and blood transfusions
- On-site, or documented processes for, access to renal dialysis, respiratory, cardiology, infectious diseases and intensive care services
- On-site access to, or documented processes with, a radiotherapy unit for patient referral and transfer
- Units providing autologous bone marrow transplants that have accreditation under relevant national accreditation bodies
- On-site pharmacy capable of reconstituting chemotherapeutical agents
Service: Cancer - Haematology
- Has a teaching and research role
- Network referral role
- Access to a full blood bank service

Minimum Staffing Requirements
As for Level 4 plus:
- Haematologist on call 24 hrs.
- Appointed Haematologist
- Service provided by a registered Medical Specialist with credentials in clinical haematology.
- A registered Medical Specialist with credentials in clinical haematology available 24 hours—a responsibility that may be shared with the registered medical specialist with credentials in medical oncology at the service.
- Access to a registered Medical Specialist with credentials in infectious diseases for advice
- Dedicated RN in charge on each shift on-site 24 hours. Additional credentialed and higher credentialed chemotherapy trained nurses to support the RN in charge of the shift
- A pharmacist.
- Access to specialised allied health services

Minimum Clinical Support Service Requirements

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Level 6

Service Description
A Level 6 service provides services at Level 5 plus it is provided at a large tertiary hospital and is most likely delivered in a cancer centre. This level service is a referral centre for low-volume haematological malignancies. Other cancer specialties are provided on-site, including radiation oncology and medical oncology, which are needed to manage this low-volume, specialised, multidisciplinary malignancy service. A Level 6 service has a critical mass of expertise and work volume... This service coordinates all definitive diagnostics and development of a plan for treatment, which may take place at either a lower level or this level service.

Service Requirements
As for Level 5 plus:
- Territory-wide referral role
- Has Haematology Department
- Has teaching and research role.
- Provides plasmapheresis/plasma exchange
- Diagnostics and treatment for haematological malignancies where the treatment is associated with a prolonged period of severe myelosuppression which, at this level service, may include acute leukaemic induction therapy and autologous transplantation
- Allogeneic transplantation services are delivered by a small subset of super-specialist haematological malignancy services across the country
- Is a reference centre for all haematological malignancy service levels
- Units performing autologous bone marrow transplants have accreditation under relevant national accreditation bodies
- Units performing bone marrow transplants have accreditation with the Australian Bone Marrow Donor Registry
- Dedicated standard isolation rooms—at least four single rooms with ensuite and clinical hand-washing facilities and where the ratio of the number of beds required is one isolation room to five inpatient beds
- May provide cell separation. If so, a cell separator available both for the collection of peripheral blood progenitor cells (for units performing bone marrow transplants) and therapeutic apheresis
Service: Cancer - Haematology

(all Level 6 units), with appropriately trained nursing staff available for the operation of cell separators.

- May perform allogeneic transplantation. If so, units performing allogeneic transplants must have accreditation under relevant national (matched family donor transplants) and international (unrelated donor transplants) accreditation bodies.
- May manage all high-risk and/or complex protocols, and deliver intensive chemotherapy protocols

Minimum Staffing Requirements
As for level 5 plus:
- Medical Registrar on site 24 hours
- Haematology Registrar on call 24 hours
- Inpatient care delivered by a multidisciplinary team
- A registered Medical Specialist with credentials in clinical haematology available 24 hours and access to at least two registered medical specialists with credentials in clinical haematology. A registered medical practitioner on-site 24 hours.
- A nurse manager.
- Nursing staff with demonstrated evidence of knowledge and skills to support patients following high-dose systemic therapy during and following transplantation.
- A registered nurse or health professional with demonstrated competence in haematology to support coordination of transplant/haematology.
- Social workers and skilled counsellors on-site. An occupational therapist, physiotherapist and speech pathologist on-site.
- A nutrition team on-site
- Clinical scientists on-site
- If performing transplantation, a RMP with credentials in haematology to act as a designated transplant coordinator to liaise with patients, relatives, nursing and medical staff, and other professional groups (e.g. scientists).
- If performing allogeneic transplants, access to a Medical Specialist with credentials in clinical haematology and at least 5 years’ experience in allogeneic bone marrow transplants in centres performing matched unrelated donor transplants.
- If providing cell separation, RNs trained, and with evidence of ongoing competency, in the collection of peripheral blood progenitor cells.

Minimum Clinical Support Service Requirements

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Reference Documents
Health Practitioners Law - NT & Commonwealth
Australasian College of Physical Scientists and Engineers in Medicine. www.acpsem.org.au

Australian Council on Healthcare Standards
Cardiology Service

Cardiology Service involves the diagnosis, treatment and management of a range of cardiac diseases, e.g. Coronary Artery Disease (CAD), Rhematic Heart Disease (RHD), Arrhythmias, heart failure, and Acute Coronary Syndromes (ACS). Services can range from emergency care, to acute care, surgery, rehabilitation, ongoing care for chronic conditions, and palliative care.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
### Service: Cardiology Services

#### Level 1

**Service Description**
A Level 1 service provides a low-acuity, ambulatory medical care service. It is a nurse-led service with the ability to provide acute resuscitation and treat minor acute illnesses prior to transfer. A Level 1 service also has the ability to monitor and stabilise patients with 24 hour access to a Registered Nurse (RN) and access to a Registered Medical Practitioner (RMP) and Senior Registered Nurse (SRN). The service has access to the following, whether local, visiting or via telehealth: allied health services, scientific officers and technical support as required, basic radiology as required, and Aboriginal and Torres Strait Islander Health Practitioners, as required.

**Service Requirements**
- Ability to effectively access eHealth and telehealth tools to enable appropriate access to and participation in the Territory-wide Integrated Cardiac Network Service (ICNS) for the management of cardiac diseases, including diagnosis and management of coronary artery disease (CAD), rheumatic heart disease (RHD), Arrhythmias, heart failure, and acute coronary syndromes (ACS) in order to ensure appropriate identification of at-risk patients and ensure proper follow-up post-treatment at a higher level service.
- Access to a network phone system for immediate access to on-call Cardiologist for ACS service as well as routine advice
- May have access to digital electrocardiograph (ECG) machine with appropriate support from higher level services within the network to safely and effectively operate and maintain equipment
- If digital ECG is present, the service has access to the central server to provide ECG data
- Has formal procedures in place to access outreach services provided by visiting Cardiologist and training registrars from higher level services within the network and Territory-wide, in line with the ICNS

**Minimum Staffing Requirements**
- Access to a RMP
- 24 hour access to a RN
- Access to a SRN
- Access to Aboriginal and Torres Strait Islander Health Practitioner

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#### Level 2

**Service Description**
A Level 2 service provides services at Level 1 plus it provides a low-acuity, single-system medical condition ambulatory and outpatient service. It is a Registered Medical Practitioner led service and may provide health promotion / disease prevention and chronic disease management programs.

**Service Requirements**
As for Level 1 plus:
- Has digital ECG machine with appropriate support from higher level services within the network to safely and effectively operate and maintain equipment
- Has access to the central server to provide ECG data
- Has access to any web based diagnostic support tools which may be in place for ACS service and cardiac rehabilitation
- Ability to access real time monitoring services provided by higher level services within the network
- Provides an outpatient service
- Ability to perform PoCT (point of care testing)
- Ability to perform emergency thrombolysis when required
- Appropriate support from higher level services within the network for supervision and consultation, in line with the ICNS
Service: Cardiology Services

Minimum Staffing Requirements
As for Level 1 plus:
- 24 hours access to a RMP or visiting Medical Practitioner (on-call)
- 24 hours cover by a RN
- Business hours access to allied health professionals, as required

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Level 3

Service Description
A Level 3 service provides services at Level 2 plus it has the ability to transfer patients to a higher level service as well as accept transfers of patients from a higher level service where appropriate care and management can be provided. In addition to Level 2, inpatient and outpatient care are provided by resident Medical Practitioners and a Cardiologist who provides a visiting service or is accessible via telehealth.

Service Requirements
As for Level 2 plus:
- Provides inpatient care led by a Registered Medical Practitioner
- Provides outpatient care by visiting general physician or via telehealth
- Provides thrombolysis, blood gas monitoring, and same day drug monitoring
- Ability to provide close care and monitoring with appropriate facilities and appropriately trained nursing staff in place
- Must have onsite Level 3 Pathology and Diagnostic Imaging services
- Must have telehealth linkages to specialist medical services from a higher level service within the network
- Formal program in place for provision of support to lower level services within the network, in line with the ICNS

Minimum Staffing Requirements
As for Level 2 plus:
- On-site 24 hours access to a RMP or registered Medical Specialist
- 24 hour cover by RN
- Must have access to allied health services appropriate to the level of Cardiology services being provided (local, visiting or via telehealth dependent on availability and clinical appropriateness) with minimum services inclusive of: exercise physiology and occupational therapy

Minimum Clinical Support Service Requirements

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Level 4

Service Description
A Level 4 service provides services at Level 3 plus inpatient Cardiology care by a registered Medical Specialist and outpatient consultation by a visiting Cardiologist.

Service Requirements
As for Level 3 plus:
- Capability and capacity to deliver multidisciplinary team-based care to Cardiology patients
- Ideally provides onsite Level 4 coronary care unit (CCU) capable of providing a dedicated ward area for patients requiring cardiac monitoring and/or resuscitation, with appropriate levels of staff and specialised resources including monitoring equipment and appropriate investigations. (Where this is not available links must be maintained with appropriate higher level service within the network until patient transfer is possible, in line with the ICNS).
- Ideally provides a range of Cardiology services inclusive of echocardiography machines,
Service: Cardiology Services

- transthoracic echocardiograph, stress echocardiogram, transesophageal echocardiography probes, Holter monitoring, implantable cardiac device checks, and exercise stress testing.
- Must have onsite Level 4 Emergency Department as per ACEM (Australasian College for Emergency Medicine) standards (see Emergency Medicine service framework for additional detail).
- Provides an outreach service to other facilities within the network (provided by visiting Cardiologist and training registrars), in line with the ICNS.
- Some undergraduate education
- Formal quality improvement program

Minimum Staffing Requirements

As for Level 3 plus:

- Registered Medical Specialist with experience in cardiology, on-call 24 hours
- Visiting Cardiologist
- Must have access to a Cardiologist via telehealth (if onsite or visiting service is not available)
- Specialist Registered Nurse
- Dedicated RNs with appropriate training and experience
- Must have access to allied health services appropriate to the level of Cardiology services being provided (local, visiting or via telehealth dependent on availability and clinical appropriateness) with minimum services as for Level 3, plus: psychology, dietetics, and social work
- Links with appropriate onsite or visiting specialists including general medicine, general surgery, vascular and cerebrovascular surgery, and rehabilitation
- On-site 24-hour medical emergency team (see Emergency Medicine framework for details)
- Access to an Aboriginal and Torres Strait Islander Liaison service, as required

Minimum Clinical Support Service Requirements

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Level 5

Service Description

A Level 5 service provides cardiology services at Level 4 plus it provides inpatient care by a resident Cardiologist and has a network referral role.

Service Requirements

As for Level 4 plus:

- Network referral role
- Provides onsite Level 5 coronary care unit (CCU) capable of providing a dedicated ward area for patients requiring cardiac monitoring and/or resuscitation, with appropriate levels of staff and specialised resources including monitoring equipment and appropriate investigations.
- Provides a range of Cardiology services inclusive of echocardiography machines, transthoracic echocardiograph, stress echocardiogram, transesophageal echocardiography probes, Holter monitoring, implantable cardiac device checks, and exercise stress testing.
- Provides Cardiac computed tomography (CT) scanning and primary angioplasty service for management of acute heart attacks.
- Provides onsite diagnostic and limited interventional cardiology services including angiography suite, i.e. diagnostic coronary angiography, permanent pacemaker, percutaneous revascularisation, and angioplasty (see above).
- Provides appropriate outpatient services, coronary risk factor clinics as well as rehabilitation and preventive patient education programs.
- May provide elective angioplasty.
- May provide emergency thoracic and emergency cardiothoracic procedures (such as closed pulmonary embolectomy) performed by visiting thoracic/cardiothoracic surgeons and specialist anaesthetists, in consultation with higher level service.
- Formal links to onsite Level 5 rehabilitation service with specific cardiac rehabilitation services.
- Formal links to Level 5 respiratory service.
### Service: Cardiology Services

- Onsite Level 5 ICU (Intensive Care Unit) / HDU (High Dependency Unit), and Cardiac Investigation Unit (CIU).
- On-site Level 5 anaesthetics, endoscopy, intensive care and pathology.
- Formal liaison with higher level service (within network or interstate) for specialist cardiology consultation, and transfer of patients for thoracic/cardiothoracic services, special investigations and thoracic/cardiothoracic surgery, in line with the ICNS.
- Provides approved program of support including specialist consultation and diagnosis to lower level services, in line with the ICNS.
- Provides an outreach service via visiting Cardiologist and training registrars (with appropriate number of visits provided) to lower level services within the network and Territory-wide, in line with the ICNS.
- Provides real time monitoring to lower level services within the network with a monitoring system that is compatible across the Territory. Houses a central server for ECG data storage, retrieval for comparison and transmission for 24 hour cardiology review and decision making, in line with the ICNS.
- Undergraduate and postgraduate teaching role
- May have research role

### Minimum Staffing Requirements

As for level 4 plus:

- Resident Cardiologist as well as access to resident or visiting specialists across an appropriate range of specialties as per Level 4, plus access to a paediatric Cardiologist
- Clinical Nurse Consultant (CNC)
- Emergency services available by on-call Cardiologists
- RMP on-site 24 hours
- Additional RMPs appropriate to acuity and bed capacity
- Nursing staff able to provide close observation care
- Cardiology Registrar, registered medical officer or intern
- Allied health service provision as per Level 4 plus liaison psychiatry and health promotion services
- Must have onsite access to Aboriginal and Torres Strait Islander Liaison Officer
- Emergency services available by on-call specialist
- On-site staff including anaesthetics, cardiac care unit, endoscopy, intensive care and pathology
- Specialist consultation or diagnosis provided by telehealth or via telephone to smaller sites and services

### Minimum Clinical Support Service Requirements

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### Level 6

#### Service Description

A Level 6 service provides services at Level 5 plus the service provides a full range of cardiac services through a dedicated cardiology department and includes cardiac sub-specialties, emergency services, and an onsite cardiac catheterisation laboratory (CCL). A Level 6 service caters for the most complex cardiologic medical care. The service is usually provided at a large referral hospital by a multidisciplinary team available 24 hours a day and includes a Territory-wide and/or interstate referral role.

#### Service Requirements

As for level 5 plus:

- Full range of cardiology services, with dedicated cardiology department, emergency care, full range of diagnostic and interventional cardiology services with onsite CCL, onsite cardiothoracic surgery, as well as full range of cardiac rehabilitation services.
- Provides elective and emergency cardiac surgery (such as mitral valvotomy).
Service: Cardiology Services

- Cardiopulmonary bypass performed regularly by cardiothoracic surgeons and specialist anaesthetists.
- Able to deal with highly complex diagnostic and treatment procedures in consultation with other specialties.
- Able to deal with full range of lung and heart surgery, such as lung cancer surgery and lung volume reduction surgery, and may undertake lung and heart transplantation.
- Territory-wide or interstate referral role
- Undergraduate and postgraduate teaching role
- Active research role
- Full participation in and, where appropriate, oversight of the ICNS, with outreach provided to lower level services, data collection and monitoring, and reporting on ICNS implementation.

Minimum Staffing Requirements
As for level 5 plus:

- Resident Cardiologist and paediatric Cardiologist, on-call 24 hours
- Registrar in cardiothoracic surgery
- Clinical Nurse Manager with experienced RNs on most shifts, with a proportion of RNs having completed or undertaking relevant post-basic training in Cardiology services
- Senior CNS staff onsite to provide specialised patient care and education
- Senior allied health professionals with advanced specialty skills and involved in education and research appropriate to their specialty, as required

Minimum Clinical Support Service Requirements

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Reference Documents
Health Practitioners Law - NT & Commonwealth
Royal Australian College of Physicians
Royal College of Nursing Australia
Royal Australasian College of Surgeons
Cardiac Society of Australia & New Zealand (CSANZ) Safety and Performance Guidelines for Clinical Exercise Stress Testing
**Diabetes Service**

Diabetes Service refers to inpatient and ambulatory medical services provided to individuals with a clinical diagnosis of diabetes (type 1 and 2 diabetes mellitus and other specific types of diabetes mellitus). Services can range from coordinated assessment, diagnosis, treatment and ongoing care to emergency or acute referrals, specialist care (e.g. acute paediatric services and endocrinology services), and secondary care / allied health support services for investigation and treatment of diabetes and its complications.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
Service: Diabetes Services

Level 1

Service Description
A Level 1 service provides a low-acuity, ambulatory medical care service. It is a nurse-led service with the ability to provide acute resuscitation and treat minor acute illnesses prior to transfer. A Level 1 service also has the ability to monitor and stabilise patients with 24 hour access to a Registered Nurse (RN) and access to a Registered Medical Practitioner (RMP) and Senior Registered Nurse (SRN). The service has access to the following, whether local, visiting or via telehealth: allied health services, scientific officers and technical support as required, basic radiology as required, and Aboriginal and Torres Strait Islander Health Practitioners, as required. The service has appropriate links with higher level facilities within the network through teleconference and, where possible, visiting services to ensure effective referral pathways, provision of diabetic education services and patient support, and transfer to an appropriate higher level service when required.

Minimum Staffing Requirements
- 24 hour access to a RN
- Access to a RMP
- Access to a SRN
- Access to an Aboriginal and Torres Strait Islander Health Practitioner

Level 2

Service Description
A Level 2 service provides services at Level 1 plus it provides a low-acuity, multi-system medical condition ambulatory and outpatient service. It is a RMP led service and provides health promotion / disease prevention and chronic disease management programs.

Service Requirements
As for Level 1 plus:
- Access via outreach, referral or teleconference to specialist diabetes services including pregnancy care

Minimum Staffing Requirements
As for Level 1 plus:
- 24 hours access to a RMP or visiting Medical Practitioner (on-call)
- 24 hours cover by a RN
- Business hours access to allied health professionals, as required

Level 3

Service Description
A Level 3 service provides services at Level 2 plus it provides outpatient and (where appropriate facilities and minimum clinical support services exist) inpatient diabetes services by a RMP with training in diabetes care. A Level 3 service has the ability to transfer patients to a higher level service as well as accept transfers of patients back from a higher level service where appropriate care and management can be provided.

Service Requirements
- Provides outpatient care by visiting Medical Practitioner or via telehealth/teleconference
- Provides RMP inpatient care
- On-site medical imaging
- Must have training and facilities to manage diabetic emergencies including keto-acidosis
- Access to network specialist diabetes consultants
- Access to nurse/s trained in diabetes care
- Must have telehealth linkages and appropriate communication pathways with higher level diabetes services within the network
- Must have appropriate links with and referral pathways to community based primary health
Service: Diabetes Services

- care services, including health promotion / disease prevention programs and chronic disease management programs
- Formal program in place for provision of support to lower level services within the network

Minimum Staffing Requirements

As for Level 2 plus:
- 24 hour cover by RN
- On-site 24 hour access to a RMP or registered Medical Specialist
- Access to diabetes care trained nurse/s
- Must have access to appropriate allied health services via telehealth, (or local or visiting service dependent on availability) with minimum services inclusive of: dietetics, diabetes educator, and podiatry

Minimum Clinical Support Service Requirements

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Level 4

Service Description

A Level 4 service provides services at Level 3 plus it provides inpatient diabetes care by a resident Medical Practitioner and outpatient consultation by a visiting endocrinologist.

Service Requirements

As for Level 3 plus:
- Diabetes education service and integrated hospital/community diabetes management service (including patient education and self-management)
- Capability and capacity to deliver multidisciplinary team-based care to diabetic patients
- Dedicated resident diabetes in pregnancy service integrated with the obstetric service
- May host/provide an outreach service
- Advice and consultation provided to smaller sites including via telehealth where appropriate
- Provide diabetes education and training for other medical and nursing staff in the hospital
- Formal quality improvement program

Minimum Staffing Requirements

As for Level 3 plus:
- Resident Medical Practitioner with experience in diabetes
- Visiting endocrinologist
- Onsite accredited diabetes educator
- On-site pharmacist with afterhours access to network pharmacist
- Onsite (or visiting / telehealth) access to allied health services as required, with minimum services as for Level 3, plus: retinal screening service, orthotics, social work and psychology
- Must have onsite access to Aboriginal and Torres Strait Islander Health Practitioner and/or Aboriginal and Torres Strait Islander Liaison Officer
- Links with appropriate onsite or visiting specialists including specialist diabetic foot surgery service, cardiologist, rehabilitation, ophthalmology, and renal services

Minimum Clinical Support Service Requirements

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Level 5

Service Description

A Level 5 service provides diabetes services at Level 4 plus it provides a multidisciplinary team approach to treat complex and critically ill diabetic patients with acute and chronic complications, multiple co-morbidities and end stage disease. The service provides inpatient care by a resident endocrinologist and has a network referral role.
Service: Diabetes Services

Service Requirements
As for Level 4 plus:
- Network referral role
- Provision of care for children and young people with diabetes, pregnancy care for women with gestational diabetes, and pre-pregnancy antenatal, intra-partum and post-partum care for women with pre-existing diabetes
- Primary provider of approved outreach services to lower level services
- Undergraduate and postgraduate teaching role
- Has a research role
- Formal links to onsite Level 5 rehabilitation service
- Onsite Level 5 Intensive Care Unit (ICU) / High Dependency Unit (HDU)
- On-site Level 5 anaesthetics, Coronary Care Unit (CCU), endoscopy and pathology
- Access to e-health and electronic record keeping

Minimum Staffing Requirements
As for Level 4 plus:
- Resident endocrinologist as well as access to resident or visiting specialists across an appropriate range of specialties as per Level 4, plus access to paediatric endocrinologist
- Credentialled Diabetes Nurse Specialist
- Emergency services available by on-call specialist
- A RMP on-site 24 hours
- Additional RMPs appropriate to acuity and bed capacity
- Appropriate medical support staff including Registrar level
- Specialist consultation or diagnosis provided by outreach or telehealth/teleconference to smaller sites and services
- Some allied health service provision dedicated to the diabetes service, including dietetics, social work and psychologist

Minimum Clinical Support Service Requirements

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Level 6

Service Description
A Level 6 service provides services at Level 5 plus it has a dedicated endocrinology department which caters for the most complex diabetic medical care. The service is usually provided at a large referral hospital by a multidisciplinary team available 24 hours a day and includes a Territory-wide and/or interstate referral role.

Service Requirements
As for Level 5 plus:
- Full range of endocrinology services, with endocrinology department and emergency care
- Territory-wide or interstate referral role
- Interventional cardiology
- Active research role

Minimum Staffing Requirements
As for Level 5 plus:
- Resident endocrinologist and paediatric endocrinologist, on-call 24 hours
- Diabetes Nurse Practitioner onsite to provide specialised diabetic patient care and education
- Senior allied health professionals with advanced specialty skills and involved in education and research appropriate to their specialty, as required

Minimum Clinical Support Service Requirements

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Gastroenterology Service

Gastroenterology refers to a branch of medicine focused on the digestive system and its disorders. Services can range from complex surgery, performed by gastroenterology surgeons/specialists in larger hospitals to ambulatory care type services delivered by Registered Medical Practitioners.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
Service: Gastroenterology

Level 1

Service Description
No Level 1 service. Refer to higher level.

Level 2

Service Description
No Level 2 service. Refer to higher level.

Level 3

Service Description
A Level 3 service provides Registered Medical practitioner (RMP) inpatient care with 24 hour cover by a Registered Nurse (RN). The service provides outpatient care by a visiting RMP and possibly gastroenterologist or by telehealth/teleconference. A fibre optic endoscopy service may be provided by an accredited Medical Practitioner (MP). The service has access to some allied health services.

Minimum Staffing Requirements
- 24 hour cover by a RN
- Visiting RMP
- Possibly gastroenterologist or by telehealth/teleconference
- Accredited MP where required
- Access to some allied health services
- Access to Aboriginal and Torres Strait Islander Health Practitioner

Minimum Clinical Support Service Requirements

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Level 4

Service Description
A Level 4 service provides services at Level 3 plus inpatient care by a RMP and outpatient consultation by a visiting gastroenterologist with support from a specialist RN. A regular endoscopy service including colonoscopy is provided and gastroenterology services are provided by integrated physician and surgical services. The service has access to designated allied health services and may provide some allied health undergraduate education.

Minimum Staffing Requirements
As for Level 3 plus:
- RMP
- Outpatient consultation by a visiting gastroenterologist
- Support from a specialist RN
- Access to designated allied health services

Minimum Clinical Support Service Requirements

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Level 5

Service Description
A Level 5 service provides services at Level 4 plus inpatient care by resident gastroenterologist with a full endoscopy service. Emergency care is available by on-call specialist and the service provides a
Service: Gastroenterology
Registrar or registered Medical Officer. The service has access to specialized allied health services, provides a network referral role and may provide some undergraduate teaching and/or participate in research.

Minimum Staffing Requirements
As for Level 4 plus:
- Resident gastroenterologist
- On-call specialist
- Registrar or registered Medical Officer
- Access to specialized allied health services

Minimum Clinical Support Service Requirements

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Level 6

Service Description
A Level 6 service provides services at Level 5 plus the service provides a full range of gastroenterology services, with a gastroenterology department and emergency care. The service has a Territory-wide or interstate referral role and provides undergraduate and postgraduate teaching and participates in research.

Minimum Staffing Requirements
As for Level 5

Minimum Clinical Support Service Requirements

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Reference Documents
Health Practitioners Law - NT & Commonwealth
Infectious Disease Service

Infectious Diseases refer to clinically evident illnesses resulting from the infection, presence and growth of pathogenic biological agents in an individual host organism.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
Service: Infectious Diseases including CDC

Level 1

Service Description
No Level 1 service. Refer to higher level.

Level 2

Service Description
No Level 2 service. Refer to higher level.

Level 3

Service Description
A Level 3 service provides an ambulatory care service and may provide some inpatient services such as having staff formally trained and educated in infectious disease present within inpatient wards. The service may provide antibiotics to patients within inpatient wards as well as patients who present daily to the health setting. A Level 3 service should have access to a higher level service within the network for 24 hour on call advice and support via telehealth/teleconference.

Level 4

Service Description
A Level 4 service provides services at Level 3 plus it provides ambulatory and inpatient consulting services provided by a registered medical practitioner (RMP) with experience and formal training in infectious diseases. Facilities include isolation rooms with internal wash basins and toilets, as well as staff wash basins immediately outside the room and an area with separate air conditioning should be available.

Service Requirements
As for Level 3 plus:
- Delivery and administration of Hospital in the Home (HITH) to patients requiring intravenous antibiotic therapy
- Infection Control leadership responsibilities – supervises on-site CNM (Clinical Nurse Manager)
- Phone advice and consultation provided to smaller sites including via telehealth

Minimum Staffing Requirements
As for Level 3 plus:
- Onsite RMP with experience and formal training in infectious diseases
- Access to Aboriginal and Torres Strait Islander Liaison Officer

Minimum Clinical Support Service Requirements

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Level 5

Service Description
A Level 5 service provides services at Level 4 plus there is a Medical Registrar on call 24 hrs with a dedicated infectious diseases and/or HITH registrar available.

Service Requirements
As for Level 4 plus:
- Has a teaching and research role
- Network referral role
- May have facilities to treat some quarantinable diseases (including negative pressure rooms and
Service: Infectious Diseases including CDC

- Link with sexual health services, viral hepatitis and HIV services and microbiology department
- Specialist consultation or diagnosis provided by telehealth/teleconference to smaller sites and services

Minimum Staffing Requirements
As for level 4 plus:
- Appointed specialist (Fellowed infectious disease physician) with direct links to tertiary/quaternary level infectious disease services
- Clinical microbiologist

Minimum Clinical Support Service Requirements

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Level 6

Service Description
A Level 6 service provides services at Level 5 plus there is a Medical Registrar on site 24 hours with specialist Infectious Diseases Physicians and advanced trainee Infectious Diseases Registrar(s) and fellow(s) available. There are also Infectious Diseases Clinical Nurse Consultants (CNCs) with responsibilities in sexual health, viral hepatitis, HIV, clinical trials and infection control available.

Service Requirements
As for Level 5 plus:
- Designated inpatient area for management of infectious and communicable diseases.
- Facilities to treat most quarantinable diseases
- Major teaching and research role
- Has Territory-wide or interstate role

Minimum Staffing Requirements
As for Level 5

Minimum Clinical Support Service Requirements

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Reference Documents
Health Practitioners Law - NT & Commonwealth
Australasian Society for Infectious Diseases (ASID)
The Royal Australasian College of Physicians (RACP)
Renal Service

Renal Service is a specialised area of medicine involving the diagnosis, management and treatment of complications for patients with kidney impairment and/or disease. Kidney disease can involve a sudden onset episode (acute) or develop over months or years (chronic).

Care is typically delivered in a range of health settings by numerous health professionals and through varying treatment modalities, including surgery, dialysis and supportive care.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level for Renal Medicine and Renal Dialysis.
Service: Renal Medicine - General

Level 1
Service Description
No level 1 service. Refer to higher level.

Level 2
Service Description
No level 2 service. Refer to higher level.

Level 3
Service Description
A Level 3 service provides inpatient renal medicine services and may accommodate self care dialysis inpatients.

Service Requirements
- Must provide links to a service that offers adult patient education and training in independent home / self care
- May accommodate self care dialysis inpatients
- On-site medication

Minimum Staffing Requirement
- GP inpatient care
- 24 hour care by Registered Nurse
- Access to general physician or renal specialist visiting or by telehealth
- Outpatient care by visiting general physician and possibly renal specialist
- Access to other relevant allied health professionals experienced to manage renal patients

Minimum Clinical Support Service Requirements

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Level 4
Service Description
A Level 4 service provides services at Level 3 plus a self care dialysis unit with links to a larger renal unit.

Service Requirements
As for Level 3 plus:
- Provides a self care dialysis unit with links to a larger renal unit
- Manages renal patients with non-complex comorbidities
- Some allied health undergraduate education

Minimum Staffing Requirement
As for Level 3 plus:
- Inpatient care by resident general physician
- Outpatient consultation by visiting renal specialist
- Specialist RN
- Access to designated Allied Health services
- May have access to Aboriginal and Torres Strait Islander Liaison Officer
Service: Renal Medicine - General

Minimum Clinical Support Service Requirements

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**Level 5**

**Service Description**

A Level 5 service provides services at Level 4 plus it provides definitive renal medicine care for patients with acute renal failure and/or ESKD (excluding perioperative, operative and post-operative management of kidney transplantation patients). The service is recognised as the highest level referral centre for patients with renal impairment/disease/failure who do not require transplantation. The service provides an appropriate range of access surgery and management.

**Service Requirements**

As for Level 4 plus:

- Network referral role
- Usually all types of dialysis available and renal biopsies performed
- Provides a full range of dialysis access surgery
- Manages renal patients with all comorbidities
- Some undergraduate teaching and possibly some research role
- On-site pathology and diagnostics

**Minimum Staffing Requirement**

As for Level 4 plus:

- Inpatient care by resident renal specialists
- Registrar/RMO
- Emergency services provided by on-call specialist
- Access to specialist SRN
- Access to specialised allied health services
- Access to Aboriginal and Torres Strait Islander Liaison Officer

Minimum Clinical Support Service Requirements

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</table>

**Level 6**

**Service Description**

A Level 6 service provides services at Level 5 plus it provides renal transplantation services. Renal transplantation services include: organ donation procurement programs; live donor and deceased donor transplantation services; perioperative, operative and post-operative management; and long-term follow-up care. A paediatric Level 6 renal service provides all renal services for children younger than 14 years, including general paediatric nephrology, paediatric dialysis, paediatric renal transplantation services, and a paediatric emergency retrieval and transfer service. This service is the highest level referral centre for patients with acute renal failure/CKD/ESKD and is designated as a Territory-wide and/or super-specialty service. In addition to providing services Territory-wide, this level of service also accepts referrals from interstate and overseas, where applicable. A multidisciplinary team of medical, nursing and allied health staff manages patients undergoing all types of dialysis and renal surgery, including transplantation. Treatment occurs in different hospital-based settings and extends to specialised units where patients require higher level care.
Service Requirements
As for Level 5 plus:
- Full ranges of renal services
- Nephrology department
- Renal transplantation available
- Manage a home therapies service (providing education, and professional and technical support) to allow independent or dependent in-centre haemodialysis or peritoneal dialysis locally or in other locations
- Renal care coordination for local and Territory-wide services
- Access to a Paediatric Intensive Care Unit
- On-site paediatric dialysis, children's anaesthetics and cardiac medicine
- Territory-wide or interstate referral role
- Undergraduate and postgraduate teaching role
- Active research role

Minimum Staffing Requirement
As for Level 5 plus:
- Coordinated by full time Nephrology unit manager
- Access to a registered Medical Specialist with credentials to perform renal-related surgery (including transplantation)
- Procedures performed by a registered Medical Specialist with credentials in paediatric renal surgery
- 24 hour access to a registered Medical Specialist with credentials in paediatric renal medicine
- A registered Medical Specialist with credentials in paediatric surgery available 24 hours
- A registered Medical Specialist with credentials in paediatric anaesthesia available 24 hours
- Access to the appropriate allied health specialists dedicated to paediatric renal services

Minimum Clinical Support Service Requirements

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</tbody>
</table>

Reference Documents
Health Practitioners Law - NT & Commonwealth
Australian Kidney Foundation, Australia New Zealand Society of Nephrology. The CARI Guidelines (Caring for Australians with Renal Impairment)
Kidney Health Australia. Chronic kidney disease management in general practice
American Board of Examiners (ABE) unit of the Centre for Clinical Social Work
### Service: Renal Dialysis

#### Level 1

**Service Description**

A Level 1 service supports independent renal dialysis undertaken in an ambulatory setting. Self-care dialysis treatment (either peritoneal dialysis or haemodialysis) for adult and/or paediatric ESKD (end stage kidney disease) may be undertaken in the patient's home or in a designated dialysis area in the community, or within the grounds of a healthcare facility. Health professionals (including medical and nursing staff) are not present during the procedure of maintenance dialysis in home-care or self-care settings. A family member or support person/carer may assist the patient in the dialysis treatment.

**Minimum Staffing Requirement**

- 24 hour access to a RN
- Access to a RMP
- Access to a SRN
- Access to a social worker who has established community resources and networks to assist and support patients and their families in their own homes
- Access to a dietician who is resourced to manage renal patients
- Access to technical expertise (e.g. technician skilled in dialysis machinery maintenance, calibration and repair)
- Access to Aboriginal and Torres Strait Islander Health Practitioner

**Minimum Clinical Support Service Requirements**

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</table>

#### Level 2

**Service Description**

A Level 2 service provides services at Level 1 plus it supports dialysis treatment for low-complexity patients who can be dialysed without assistance from a registered medical practitioner, but may require the assistance of a registered nurse or dialysis technician to perform the dialysis procedure. A family member or carer may also assist the patient. Services are generally offered by a general health service/clinic. The service provides and supervises maintenance dialysis in minimal care settings, but does not include dialysis treatment for patients with acute renal failure, and will not have overnight unplanned admission facilities. This level of service may have access to a Renal Physician for consultation. Haemodialysis follow-up support may include home visits and on-call telephone contact and technical support for machines and water treatment.

**Minimum Staffing Requirement**

As for Level 1 plus:

- May have access to a Renal Physician for consultation
- Registered Nurses with training and experience in dialysis care must be available to assist the dialysis patient
- A designated clinical pharmacist, which may be a pharmacist in the community with links to a pharmacist at a network or higher level
- Access to a medication liaison and dispensary service to ensure continuity of medication management.
- Business hours access to allied health professionals (may be visiting)

**Minimum Clinical Support Service Requirements**

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</table>
Service: Renal Dialysis

Level 3

Service Description

A Level 3 service provides services at Level 2 plus it provides care to patients on maintenance dialysis, and the full spectrum of dialysis modalities, with a focus on home-based renal replacement therapies (may not be offered by every service however). Independent and dependent dialysis is provided in a designated dialysis area for patients with ESKD who require the assistance of a Registered Nurse. The service does not include dialysis treatment for patients with acute renal failure; however, it may provide long-term care of post-transplant patients, where appropriate.

Service Requirements

As for Level 2 plus:

- Must provide links to a service that offers adult patient education and training in independent home/self care
- May provide peritoneal dialysis if on-site nursing staff are appropriately trained and supervision is provided by a nephrologist
- May provide vascular access if a registered Medical Specialist credentialed to perform renal related surgery and radiology services is available
- Access to an emergency service in close proximity to a patient’s home, or a retrieval plan for emergencies such as fistula problems or peritonitis in patients receiving peritoneal dialysis
- Provision or links to a service that provides adult patient education/training in independent (home/self-care) dialysis
- On-site medication

Minimum Staffing Requirement

As for Level 2 plus:

- 24 hour access to a registered Medical Specialist with credentials in nephrology
- Direct care by Registered Nurses who have been trained to perform haemodialysis
- Access to a Registered Nurse who coordinates patients’ vascular access
- Access to a clinical social worker experienced in managing a renal patient caseload
- Access to a dietician resourced to manage admitted renal patients, ambulatory care renal patients and dialysis patients
- Access to a general clinical pharmacist or a pharmacist with dedicated renal responsibility to provide a service for inpatients
- Access to other relevant allied health professionals experienced to manage renal patients

Minimum Clinical Support Service Requirements

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Level 4

Service Description

A Level 4 service provides services at Level 3 plus the service offers renal investigation and treatment services for renal patients with complex multisystem failure. A multidisciplinary team of medical, nursing and allied health staff manages patients undergoing all types of dialysis and renal access surgery. A registered Medical Specialist with credentials in nephrology is available 24 hours.

Service Requirements

As for Level 3 plus:

- Provides peritoneal dialysis service (either as an admitted patient or at home)
- Provides tunnelled and non-tunnelled line insertion and insertion of Tenckhoff catheters
- Manages renal patients with non-complex comorbidities
- Must maintain links with a renal transplantation centre
- Some allied health undergraduate education
Service: Renal Dialysis

Minimum Staffing Requirement
As for Level 3 plus:
- There is access to a registered Medical Specialist with credentials to perform renal-related surgery for peritoneal dialysis and primary fistula creation.
- A Registered Medical Practitioner on-site
- Access to an interventional nephrologist or radiologist to perform dialysis access related procedures
- Access to a clinical social worker or health practitioner with competencies in case management and counselling, and with specialised renal knowledge to manage a designated caseload, including admitted or ambulatory patient care, haemodialysis and home therapies
- Access to both a dietician and a clinical pharmacist with designated renal responsibility and established networks with the ability to access specialised renal dietetic knowledge for management of inpatients, ambulatory care renal patients, and the haemodialysis and peritoneal dialysis units
- On-site technical expertise (e.g. technician skilled in dialysis machinery maintenance, calibration and repair available)
- On-site anaesthetic, medical imaging, intensive care, medical, surgical and perioperative services
- May have access to Aboriginal and Torres Strait Islander Liaison Officer

Minimum Clinical Support Service Requirements

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Level 5

Service Description
A Level 5 service provides services at Level 4 plus it provides an appropriate range of access surgery and management. A multidisciplinary team of medical, nursing and allied health staff manages patients undergoing all types of dialysis and renal-related surgery. Treatment occurs in different hospital-based settings and extends to specialised units where patients require a higher level of care.

Service Requirements
As for Level 4 plus:
- Network referral role
- Usually manages a home therapies service
- Manages renal patients with all comorbidities
- Some undergraduate teaching and possibly some research role

Minimum Staffing Requirement
As for Level 4 plus:
- A registered Medical Specialist with credentials in nephrology available 24 hours
- Access to a Senior Registered Nurse
- Registered Nursing at or above 6 hours/patient/day
- Access to specialised clinical social workers/health practitioners with competence in case management and counselling, with designated caseloads who provide services to admitted patients, ambulatory care patients, haemodialysis and home therapies units, as well as preliminary renal patient preparation for transplant work-up
- Access to a dietician or a team of dieticians, one of whom should be a senior, with a designated renal caseload providing services to admitted renal patients, ambulatory care renal patients, and the haemodialysis and peritoneal dialysis units
- Access to designated clinical renal pharmacists providing a clinical service to renal admitted patients, renal ambulatory care patients, and the haemodialysis and peritoneal dialysis units
- Access to specialised allied health services
- Access to Aboriginal and Torres Strait Islander Liaison Officer
### Service: Renal Dialysis

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#### Level 6

**Service Description**

A Level 6 service provides services at Level 5 plus it provides all renal services for children younger than 14 years, including general paediatric nephrology and paediatric dialysis. A Level 6 service provides education and training programs in independent (home/self-care) dialysis for paediatric patients. This level of service will be provided at a large metropolitan hospital. This service is the highest level referral centre for patients with acute renal failure/CKD/ESKD and is designated as a Territory-wide and/or super-specialty service. In addition to providing services Territory-wide, this level of service also accepts referrals from interstate and overseas, where applicable. A multidisciplinary team of medical, nursing and allied health staff manages patients undergoing all types of dialysis and renal surgery, including transplantation. Treatment occurs in different hospital-based settings and extends to specialised units where patients require higher level care.

**Service Requirements**

As for Level 5 plus:

- Manages a home therapies service (providing education, and professional and technical support) to allow independent or dependent in-centre haemodialysis or peritoneal dialysis locally or in other locations
- Renal care coordination for local and Territory-wide services
- Access to a Paediatric Intensive Care Unit
- On-site paediatric dialysis, children’s anaesthetics and cardiac medicine
- Territory-wide or interstate referral role
- Undergraduate and postgraduate teaching role
- Active research role

**Minimum Staffing Requirement**

As for Level 5 plus:

- Access to a registered Medical Specialist with credentials to perform renal-related surgery
- Procedures performed by a registered Medical Specialist with credentials in paediatric renal surgery
- 24 hour access to a registered Medical Specialist with credentials in paediatric renal medicine
- Access to the appropriate allied health specialists dedicated to paediatric renal services

### Minimum Clinical Support Service Requirements

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#### Reference Documents

- Health Practitioners Law - NT & Commonwealth
- Australian Kidney Foundation, Australia New Zealand Society of Nephrology. The CARI Guidelines (Caring for Australians with Renal Impairment)
- Kidney Health Australia. Chronic kidney disease management in general practice
- American Board of Examiners (ABE) unit of the Centre for Clinical Social Work
Respiratory Medicine Service

Respiratory Medicine is the branch of medicine that deals with diseases of the respiratory system. The service can be delivered by respiratory specialists at larger hospitals, performing emergency care and diagnostic tests through to Registered Medical Practitioners providing outpatient services in smaller facilities.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
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<td><strong>Service Description</strong></td>
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<td>A Level 3 service provides Registered Medical Practitioner (RMP) inpatient care and 24 hour cover by a Registered Nurse (RN). The service provides outpatient care by a visiting RMP and possibly a respiratory specialist or by telehealth/teleconference.</td>
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**Service Requirements**
- If there is a visiting respiratory specialist service, there is a need for a visiting basic lung function laboratory
- Access to spirometry

**Minimum Staffing Requirement**
- RMP
- Visiting RMP
- 24 hour access to a RN
- Electronic access to a specialist Senior Registered Nurse (SRN) network
- Access to some allied health services
- Access to Aboriginal and Torres Strait Islander Health Practitioner

**Minimum Clinical Support Service Requirements**

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<tr>
<td>A Level 4 service provides services at Level 3 plus it provides inpatient care by a RMP and outpatient consultation by a visiting respiratory specialist.</td>
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</table>

**Service Requirements**
As for Level 3 plus:
- Access to a basic lung function laboratory (spirometry, volumes and gas transfer)
- Link with sleep service
- Some allied health undergraduate education

**Minimum Staffing Requirement**
As for Level 3 plus:
- Access to a respiratory specialist for outpatient consultation
- Access to a specialist SRN
- Access to designated allied health services
Service: Respiratory

Minimum Clinical Support Service Requirements

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Level 5

Service Description
A Level 5 service provides services at Level 4 plus it provides inpatient care by a resident respiratory specialist. The service provides a network referral role with emergency care provided by an on-call specialist.

Service Requirements
As for Level 4 plus:
- Network referral role
- Provision of lung function laboratory and a bronchoscopy suite
- Respiratory ward, with non-invasive ventilatory (NIV) capability
- Access to high level cardiology and thoracic surgery
- Strongly linked with sleep service
- Strongly linked to community health and community nursing
- Significant undergraduate teaching

Minimum Staffing Requirement
As for Level 4 plus:
- Registrar or registered Medical Officer on call 24 hours
- On site specialist SRN
- Access to specialised allied health services

Minimum Clinical Support Service Requirements

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Level 6

Service Description
A Level 6 service provides services at Level 5 plus it provides a complete range of diagnostic services, a full range of respiratory services, with a respiratory department and provision of emergency care.

Service Requirements
As for Level 5 plus:
- Specialised respiratory ward
- Has a respiratory function laboratory
- Territory-wide or interstate referral role
- Undergraduate and postgraduate teaching role
- Active research role

Minimum Staffing Requirement
As for Level 5 plus:
- Onsite Registrar or registered Medical Officer 24 hours

Minimum Clinical Support Service Requirements

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Reference Documents
Health Practitioners Law - NT & Commonwealth
Emergency Medicine

Emergency Medicine services are responsible for the reception, triage, initial assessment, stabilisation and management of patients of all age groups presenting with acute and urgent aspects of illness and injury. Emergency departments are generally not stand-alone services. In order to provide a safe and effective service, emergency departments rely on a suite of support services from both within and external to the facility.

The term emergency department (ED) is generally used to describe facilities ranging from high level departments with emergency medicine specialists and trainees employed 24 hours a day, through to rooms in small rural and remote hospitals staffed by rostered local Registered Medical Practitioners and generalist nursing staff (as per the Australasian College for Emergency Medicine standards).

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
Service: Emergency Medicine

Level 1

Service Description
At Level 1, the service is a non-hospital based facility providing 24 hour access to basic emergency care. This is not an Emergency Department. It functions primarily as a nurse-run clinic with a Registered Nurse available 24 hours for emergency presentations and 24-hour access to a Registered Medical Practitioner and a retrieval service. The service has capacity to provide treatment for minor illnesses and injury, as well as basic life support prior to transfer to a higher level of care. There is no access to inpatient services at this level. This level service should provide ongoing observation in consultation with a higher level service until transfer to a higher level of care is possible.

Service Requirements
- Limited medication service
- Dedicated treatment area
- Access by telehealth, if available, or teleconference to specialist consultation where required
- Well-organised communication system with referral network
- 24 hour access to retrieval and/or ambulance service
- Access to an Emergency Medicine Network

Minimum Staffing Requirements
- Registered Nurse available to Triage 24 hours, with appropriate training and experience with emergency presentations
- 24 hour access to a Registered Medical Practitioner
- 24 hour access to an Aboriginal and Torres Strait Islander Health Practitioner

Minimum Clinical Support Service Requirements

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Level 2

Service Description
A Level 2 service provides all services at Level 1 including a Registered Nurse available onsite 24 hours for emergency presentations, plus it provides services led by a Registered Medical Practitioner with the capability of providing treatment for all minor injuries and illnesses and ability to manage a limited range of acute illness and injury. At Level 2, the service may be present in a primary care setting in which case the service does not meet the ACEM (Australasian College for Emergency Medicine) standard to be considered an Emergency Department (ED), but may be considered an Emergency Department if it is a hospital-based service (NB: to be considered an ED a facility has to be structurally and functionally located within a hospital). There may be limited access to inpatient services at this level. This service provides resuscitation and stabilisation prior to transfer to a higher level service.

Service Requirements
As for Level 1 plus:
- May provide short-term assisted ventilation prior to transfer to a higher level service
- May have formal quality improvement program

Minimum Staffing Requirements
As for Level 1 plus:
- 24 hour onsite nursing with training in adult and paediatric advanced life support and advanced emergency skills
- 24 hour access to medical officers able to be onsite within 10 minutes
- Be able to provide overnight observation of patients
- Access to a pharmacist (or an approved Registered Nurse) on weekdays for medication services
- Access to allied health professionals, as required (access to social work and physiotherapy at a minimum)
Service: Emergency Medicine

- Access to patient support staff and security personnel

Minimum Clinical Support Service Requirements

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Level 3

Service Description

At Level 3 and above, the service is categorised as an Emergency Department under ACEM standards. In addition, to be considered an Emergency Department a facility has to be structurally and functionally located within a hospital. A Level 3 service provides all services at Level 2 plus it has the capability of providing initial treatment and care for a range of acute illness and injury, including resuscitation, stabilisation, and short-term assisted ventilation prior to transfer to a higher level service. This service provides a local trauma service and has the ability to assist in the care of minor trauma and enable the rapid transfer of major trauma.

Service Requirements

As for Level 2 plus:

- Designated assessment and treatment area with separate resuscitation facilities
- Provides local trauma service, with stabilisation prior to transfer
- Availability of pathology, radiology, and operating theatres during normal hours, with on-call access after hours
- Formal quality improvement program
- Capability and capacity to meet National Emergency Access Targets (NEAT) appropriate for the role level of service being provided, whereby patient wait times and discharges from ED meet minimum time requirements (as is clinically appropriate)
- Capability and capacity to meet National Activity Based Funding (ABF) requirements including compliance with nationally consistent classification standards, and data collection and annual reporting requirements for care provided in ED
- Be part of an Emergency Medicine Network with a dedicated FACEM (Fellow of the Australasian College for Emergency Medicine) Network Director (at distant Level 5 or 6 ED) and facilities within the network for supervision, training, referrals, clinical governance and specialist consultation at a local level

Minimum Staffing Requirements

As for Level 2 plus:

- Designated Clinical Nurse Manager
- Designated nursing staff available 24 hours per day who conduct Triage and have completed ETEK National Triage Training (Emergency Triage Education Kit), with some RNs having completed or undertaking post-basic studies in Emergency Nursing
- Nurses capable of leading in resuscitation in line with Australian Resuscitation Council Guidelines, and in aiding in transfer of acute patients to higher level facility
- Access to Nurse Educator qualified in Emergency Nursing (if access is via telehealth, the facility should be appropriately resourced for telehealth activity)
- Local Registered Medical Practitioners rostered to provide 24 hour cover with service by Registered Nurse with appropriate training and experience with emergency presentations
- Appointed local medical practitioner to provide local emergency medicine leadership and liaison with the Network Director and preferably with credentials in emergency medicine (Diploma of ACEM).
- Access to allied health professionals, as required (access to social work, psychology, and physiotherapy at a minimum)
- 24 hour on-call access to specialist services in general surgery, general medicine, anaesthesia and paediatrics
Service: Emergency Medicine

Minimum Clinical Support Service Requirements

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Level 4

Service Description
A Level 4 service provides all services at Level 3 plus it provides a 24-hour service, which includes Triage by qualified emergency staff and ability to manage all emergency presentations, including stabilisation and assisted ventilation, as well as ability to provide definitive care for most. This level service has the ability to provide high-quality trauma care to medium and minor level trauma patients and is capable of stabilising major trauma patients prior to transfer.

Service Requirements
As for Level 3 plus:
- 24 hour access to emergency operating theatre
- 24 hour availability of pathology and radiology
- After hours on call access to CT and angiography where required
- 24 hour onsite capability to provide team response (i.e. arrest team, trauma team)
- Capable of stabilising trauma patients prior to transfer
- Purpose-designed area with separate resuscitation facilities, short-term assisted ventilation capacity, and invasive monitoring capacity
- Formal quality improvement program including morbidity and mortality review
- Dedicated clinical and management information system
- Formal disaster plan; may send out appropriately trained teams to disaster site
- Participation in network trauma service

Minimum Staffing Requirements
As for Level 3 plus:
- Designated Emergency Nurse
- Experienced ED RNs onsite 24 hours, some having completed post-basic studies in Emergency Nursing
- Designated Triage RN 24 hours/day, with ETEK training
- Designated Senior Registered Nurse / team leader / shift coordinator (as appropriate for facility)
- On-site CNE (Clinical Nurse Educator) with appropriate emergency training and experience
- Access to an Emergency Nurse Educator
- Appropriate numbers of emergency nursing staff to manage patient acuity, presentations, and workload of emergency presentations and admitted patients remaining in ED (due to any access block)
- Designated staff allocated to the resuscitation area
- Full-time ED Director with specialist qualifications in Emergency Medicine, supported by extended hours senior cover (specialist FACEM or HMO with Dip ACEM) 7 days per week
- Medical officers with resuscitation training, onsite 24 hours
- Specialists in intensive care, anaesthesiology, general surgery, general medicine, paediatrics, orthopaedics and liaison psychiatry on call 24 hours
- Onsite or local access to allied health professionals, as required (access to social work, psychology, and physiotherapy at a minimum)
- Access to a specialised clinical social worker or health practitioner with competencies in case management and counseling, as required

Minimum Clinical Support Service Requirements

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Service: Emergency Medicine

Level 5

Service Description
A Level 5 service provides all services at Level 4 plus it can manage all emergencies, including stabilisation and assisted ventilation, and provide definitive care for most. It provides comprehensive trauma care and stabilisation of all trauma patients until transfer. The service should provide an ED short-stay unit as per the National Health Reform Agreement, which is designated and designed for the short term treatment, observation, assessment and reassessment of patients initially triaged and assessed in the ED. This service may be the hub of a regional Emergency Medicine Network

Service Requirements
As for Level 4 plus:

- ED short-stay unit must have specific admission and discharge criteria and policies; be designed for short term stays no longer than 24 hours; be physically separated from the ED acute assessment area; have a static number of beds with oxygen, suction, patient ablution facilities; and must not be a temporary ED overflow area nor used to keep patients solely awaiting an inpatient bed nor awaiting treatment in the ED.
- Accepts transfers from other hospitals within the network
- Has resources dedicated to provide specialist consultation to lower level services within the network via telehealth
- Access to onsite Intensive Care Unit (ICU) and Coronary Care Unit (CCU) facilities
- Normal hours access to ultrasound, CT and angiography
- May have after hours on call access to CT and angiography
- May have access to Nuclear Medicine
- Participation of ED staff in principal hospital planning committees and networks
- Accredited training programs in Emergency Medicine (ACEM Cert, diploma and fellowship) and in Emergency Nursing
- Participation in undergraduate education, including some allied health undergraduate education
- May participate in ED research program

Minimum Staffing Requirements
As for Level 4 plus:

- Onsite access to an Emergency Nurse Educator and a CNE with appropriate emergency training and experience
- Dedicated CNC as clinical expert, with appropriate emergency training and experience
- 30% to 50% of nursing staff with postgraduate qualifications, or undertaking these, in emergency nursing or related fields
- Full-time Emergency Department Director who is a FACEM, supported by extended hours specialist cover (16 hours/day, 7 days)
- Medically staffed 24 hours per day
- Designated ED short-stay unit medical staff, in addition to emergency service medical staff, where relevant
- Registered emergency medicine specialists (FACEMs) onsite 16 hours a day, 7 days a week
- 24 hour emergency registrar cover in the ED with additional 24 hour resident medical officer support commensurate with workload
- Medical, surgical, paediatric, anaesthetic, ICU and some sub-specialty specialists available on-call 24 hours
- Onsite or local access to allied health professionals, as required (access to social work, physiotherapy, clinical pharmacist, psychology, and occupational therapy at a minimum)

Minimum Clinical Support Service Requirements

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Department of Health is a Smoke Free Workplace
Service: Emergency Medicine

Level 6

Service Description
A Level 6 service provides all services at Level 5 plus it provides advanced care for all emergency presentations including resuscitation, stabilisation, treatment, and advanced care, as well as the full spectrum of trauma care for all critically ill and injured patients. This service has capacity for frequent management of major trauma and other life-threatening emergencies and capacity for invasive monitoring and short-term assisted ventilation. This service has established documented processes and collaborative partnerships between the emergency department and integrated mental health services.

Service Requirements
As for Level 5 plus:
- Designated Major Trauma Service
- Provides Tertiary Referral Service to other network hospitals and advice and stabilisation for complex cases referred from other network hospitals
- Participates in network retrieval service, including aeromedical service
- Sophisticated purpose-designed area, separate resuscitation area with capacity for frequent management of major trauma and other life-threatening emergencies
- Dedicated ED short-stay unit
- Onsite ICU and CCU facilities
- 24 hour availability of pathology, radiology, CT, MRI and operating theatres and ideally extended hours access to Nuclear medicine, ultrasound, interventional radiology
- ACEM accredited training program in Emergency Medicine
- Formal ED training programs for Registrars, Residents, interns, medical students, IMGs (International Medical Graduates) and Nurses
- Designated specialist and/or nursing staff to participate in ED research program

Minimum Staffing Requirements
As for Level 5 plus:
- Dedicated Clinical Nurse Manager and Clinical Nurse Consultant with RN team in place, including experienced RNs onsite 24 hours, with most having completed post-basic training in Emergency Nursing
- Dedicated CNE with appropriate emergency training and experience
- Full time FACEM Emergency Department Director supported by extensive out of hours Emergency specialist cover (ideally 24 hours, 7 days)
- At least two FACEms onsite 0800-midnight, to provide 16 hours of cover a day, 7 days a week, with on call FACEM midnight to 0800.
- One FACEM is the Network Director for emergency services in the network.
- Advanced training Registrars onsite 24 hours
- Onsite or 24-hour on call access to specialists in intensive care, anaesthesia, paediatrics, liaison psychiatry, and medical and surgical specialties
- Access to neurosurgery and cardiothoracic surgery services
- Extended hours access to allied health professionals and social worker
- Designated ED short-stay unit with medical, nursing and allied health staffing directly responsible for the short-stay unit, in addition to ED staffing. Access to designated ED short-stay unit physiotherapist, occupational therapist and other allied health staff as appropriate to casemix.
- Specialised clinical social worker or health practitioner with competencies in case management and counseling onsite 16 hours a day during the week.
- Dedicated ED based allied health team including at a minimum: physiotherapy, social work, discharge planner, occupational therapy, dietetics, and speech pathology, ideally available 16 hours/day 7 days/week
- Dedicated ED based clinical pharmacist ideally available at least 8 hours/day 7 days/week
- Access to additional specialised allied health professionals, including neurophysiology, audiology, cardiac science, and podiatry
- Dedicated ED based Aboriginal and Torres Strait Islander Liaison Officer available 16 hours per day
Service: Emergency Medicine

- Dedicated ED based mental health team available 16 hours/day, 7 days/week
- Dedicated ED based reception, security and cleaning personnel 24 hours/day, 7 days/week

Minimum Clinical Support Service Requirements

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Reference Documents

Health Practitioners Law - NT & Commonwealth
Australian and New Zealand College of Anaesthetists. Professional Standard PS9: Guidelines on Sedation and/or Analgesia for Diagnostic and Interventional Medical or Surgical Procedures. ANZCA; 2008.
College of Emergency Nursing Australasia
National Health Reform Agreement. National Partnership on Improving Public Hospital Services. Royal College of Nursing Australia
General Surgery

Surgical services include both general and specialist surgical services. These services include emergency and elective surgery. General surgery encompasses surgery of the skin, abdominal wall and cavity, the gastrointestinal system, the peritoneum and its contents, the endocrine system, the breast and vascular systems. In some secondary facilities general surgeons routinely perform some head and neck, thorax, orthopaedics, plastic surgery, urology and gynaecology procedures. General surgery includes emergency and elective surgery with varying levels of surgical complexity.

For the purpose of this Framework the specialties of General Surgery comprise: Ear, Nose, and Throat, Gynaecology, Neurological Services / Neurosurgery, Ophthalmology, Orthopaedics, Urology, and Vascular Surgery.

The levels of surgical complexity indicate the requisite levels of clinical support services and are especially important in determining the appropriate levels of anaesthetic, perioperative and ICU services.

Patients usually access emergency surgical services via an ED or inpatient unit. If a facility routinely provides emergency or trauma services, this section should refer also to the Royal Australasian College of Surgeons’ Australasian Trauma Verification Program and the service description for Emergency Medicine within this Framework.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
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**Service: General Surgery**

**Level 1**

**Service Description**
No Level 1 service. Refer to higher level.

**Level 2**

**Service Description**
A Level 2 service performs surgery on low to medium-risk patients for Surgical Complexity I (SCI) procedures, performed by Registered Medical Practitioners or specifically trained Nurse Practitioners. Usually the surgery is performed on a minor outpatient or same-day basis.

**Service Requirements**
- Inpatient care following surgery elsewhere
- Outpatient care
- Must have one procedure room
- Onsite perioperative service

**Minimum Staffing Requirements**
- General Surgeon available for consultation
- 24 hour cover by Registered Nurse
- Registered Medical Practitioners to coordinate care
- Access to an Aboriginal and Torres Strait Islander Health Practitioner

**Minimum Clinical Support Service Requirements**

**Level 3**

**Service Description**
A Level 3 service provides services at Level 2 plus surgery is performed on low to high anaesthetic risk patients undergoing SCI and Surgical Complexity II (SCII) procedures and low to medium anaesthetic risk patients undergoing Surgical Complexity III (SCIII) and Surgical Complexity IV (SCIV) procedures. Surgery is performed by Registered Medical Practitioner with credentials in surgery.

**Service Requirements**
As for Level 2 plus:
- Requires at least one operating/procedure room with separate recovery area/room for post-operative care
- Access to intensive care services
- Access to an emergency monitored bed
- Onsite medication and General Practitioner anaesthetists
- Access to specialist anaesthetists

**Minimum Staffing Requirements**
As for Level 2 plus:
- Visiting general surgical specialist
- Visiting anaesthetist with visiting surgeon
- Theatre trained Registered Nurse
- 24 hours access to a Registered Medical Practitioner
- Visiting registered medical specialists with credentials in general surgery or other surgical specialties may be available
- Access to some allied health services
**Service: General Surgery**

### Minimum Clinical Support Service Requirements

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#### Level 4

**Service Description**

A Level 4 service provides services at Level 3 plus surgery is performed on low to high anaesthetic risk patients undergoing SCIII procedures and low anaesthetic risk patients undergoing Surgical Complexity V (SCV) procedures. Surgery is performed by one or more Registered Medical Practitioners with credentials in surgery.

**Service Requirements**

As for Level 3 plus:
- Broad range of day and general surgery and some specialty surgery
- More than one theatre
- May include high-dependency nursing unit
- Some undergraduate education
- On-site access to close observation care area/s
- On-site level 4 Intensive Care Unit (ICU) and medical imaging
- Limited outreach services may be provided

**Minimum Staffing Requirements**

As for Level 3 plus:
- More than one theatre trained Registered Nurse
- Access to designated allied health services appropriate to the level of general surgical services being provided

### Minimum Clinical Support Service Requirements

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#### Level 5

**Service Description**

A Level 5 service provides services at Level 4 plus surgery is performed on low to high anaesthetic risk patients undergoing SCIV and SCV procedures. Generally, a combination of procedures with a moderate to high level of complexity and risk are performed, and management of some patients with comorbidities and risk of intra- and post-operative complications occurs. Surgery performed by one or more Registered Medical Practitioners with the ability to support patients in the post-operative stage 24 hours a day. This service has the ability to undertake most emergency surgeries.

**Service Requirements**

As for Level 4 plus:
- A broad range of sub-specialist surgery
- Has Territory referral role
- On-site Level 5 ICU
- Has undergraduate and postgraduate teaching role
- Has an active research role
- Provides outreach support for rural and remote areas
- Provides a separate endoscopy service
- On-site pathology, diagnostic and interventional cardiac services and medical services
- Undertakes emergency surgery
Service: General Surgery

Minimum Staffing Requirements
As for Level 4 plus:
- Registered Medical Practitioners onsite
- Registrar or registered medical officer
- Access to specialised allied health services
- Access to an infection control coordinator
- Access to an Aboriginal and Torres Strait Islander Liaison Officer

Minimum Clinical Support Service Requirements

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Level 6

Service Description
A Level 6 service provides services at Level 5 plus this service manages the most complex and highly specialised surgical presentations (e.g. neurosurgery, cardiothoracic surgery, and some transplantation services) with the highest level of risk in specified areas of expertise.

Service Requirements
As for Level 5 plus:
- May include kidney and liver transplantation in selected sites
- Has interstate referral role
- On-site cardiac medicine, cardiac care unit and nuclear medicine

Minimum Staffing Requirements
As for Level 5 plus:
- Full range of surgical specialties provided on a visiting basis
- Dedicated surgical staff with clinical competency in a range of specialty areas available at close proximity 24 hours
- Registered Medical Practitioners may relieve in rural and remote areas, as the need arises
- Allied health professionals available 24 hours, as required

Minimum Clinical Support Service Requirements

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Reference Documents
Health Practitioners Law - NT & Commonwealth
Royal Australasian College of Surgeons. The Australasian Trauma Verification Program Manual.
Royal Australasian College of Surgeons. Policy and position papers.
Australian Society of Anaesthetists. Position statements and professional standards.

Notes
SCI procedures include those performed in ambulatory/office settings, requiring local anaesthetic and generally does not require support services or post-operative stay/treatment (e.g. local anaesthetic for removal of lesions)

SCII procedures usually include ambulatory, same-day or emergency department surgeries, requiring local anaesthesia, peripheral nerve block and possibly some sedation (e.g. local anaesthetic and/or sedation for excision of lesions).

SCIII procedures can be for same-day, overnight or extended-stay cases and usually require general anaesthesia and/or a regional, epidural or spinal block (e.g. general anaesthesia for inguinal hernia)

SCIV procedures involve major surgical procedures with low to medium anaesthetic risk which have the potential for perioperative complications (E.g. general anaesthesia for abdominal surgery)
### Service: General Surgery

SCV procedures include the most complex and major surgical procedures with high anaesthetic risk which carry the highest potential for intra- and post-operative complications (e.g. general anaesthesia for any major or complex surgery)


**Ear, Nose and Throat Service**

Ear, Nose and Throat (ENT) Service includes the treatment of diseases, injuries or deformations of the ears, nose, throat, head and neck areas. It covers a range of complexities from uncomplicated day procedures and elective surgery to highly complex cases including intracranial procedures.

Higher level ENT services rely on the presence of appropriate role levels of service for oncology, radiotherapy, and neurosurgery as well as appropriate access to allied health services, especially Audiology where needed.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
## Service: ENT

### Level 1

**Service Description**
No Level 1 service. Refer to higher level.

### Level 2

**Service Description**
No Level 2 service. Refer to higher level.

### Level 3

**Service Description**
A Level 3 service provides day surgery type cases, for uncomplicated elective surgery

**Minimum Staffing Requirements**
- Some sites have visiting ENT surgeon and anaesthetist
- May offer paediatric ENT service if specialist paediatric anaesthetist is accessible
- Access to an Aboriginal and Torres Strait Islander Health Practitioner

**Minimum Clinical Support Service Requirements**

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### Level 4

**Service Description**
A Level 4 service provides all services at Level 3 plus common and intermediate surgery done on low or moderate risk patients by visiting ENT surgeon.

**Minimum Staffing Requirements**
As for Level 3 plus:
- Visiting ENT surgeon
- Access to designated allied health services
- Audiology service accessible
- Designated medical officer or surgical registrar
- Specialist on call

**Minimum Clinical Support Service Requirements**

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### Level 5

**Service Description**
A Level 5 service provides all services at Level 4 plus diagnostic services and surgery on low, moderate and high risk patients by on-call ENT surgeon.

**Service Requirements**
As for Level 4 plus:
- Has Territory referral role
- Has undergraduate and postgraduate teaching role
- Has an active research role
- Links with oncology, radiotherapy and palliative care services
- Limited neuro-optic surgery
Service: ENT
- Undertakes emergency surgery

Minimum Staffing Requirements
As for Level 4 plus:
- On-call ENT surgeon
- Access to specialist Senior Registered Nurse
- Surgical registrar on call 24 hrs
- Access to specialised allied health services
- Access to an Aboriginal and Torres Strait Islander Liaison Officer

Minimum Clinical Support Service Requirements

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Level 6

Service Description
A Level 6 service provides all services at Level 5 plus the service has the ability to deal with all cases including full range of complex cases in association with other specialists including neuro-optic. May perform intracranial procedures, but only as long as level 6 neurosurgery is available on site.

Service Requirements
As for Level 5 plus:
- Emergency services available
- Has interstate referral role

Minimum Staffing Requirements
As for Level 5 plus:
- ENT registrar or registered medical officer

Minimum Clinical Support Service Requirements

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Reference Documents
Health Practitioners Law - NT & Commonwealth
Gynaecology Service

Gynaecology deals with the treatment of diseases of the female reproductive system. The service can be delivered by Gynaecologists at larger hospitals performing diagnostic tests and complex surgeries, to credentialed Registered Medical Practitioners or visiting surgeons providing outpatient procedures. Higher level gynaecological services rely on access and links to other appropriate specialists.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
Service: Gynaecology

Level 1

Service Description
No Level 1 service. Refer to higher level.

Level 2

Service Description
No Level 2 service. Refer to higher level.

Level 3

Service Description
A Level 3 service performs minor procedures on low risk patients by credentialed Registered Medical Practitioner. There are no inpatient services provided at this level.

Service Requirements
- Access to visiting outreach service that provides minor gynaecological procedures
- May have links with oncology, radiology, and palliative care

Minimum Staffing Requirements
- 24 hour access to medical officers onsite or available within 30 mins
- Consultation available from other specialties
- Access to gynaecologist visiting or by telehealth. Where telehealth is not available, access should be via teleconference.
- Access to some allied health services
- Access to pathology, pharmacy, diagnostic imaging
- Access to Aboriginal and Torres Strait Islander Health Practitioner

Minimum Clinical Support Service Requirements

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Level 4

Service Description
A Level 4 service provides services at Level 3 plus some major procedures on low and moderate risk patients performed by visiting gynaecologists. There are no inpatient gynaecological services provided at this level.

Service Requirements
As for Level 3 plus:
- Links with oncology, radiotherapy and palliative care services
- Provides a referral service for terminations and may provide a termination service
- Some allied health and undergraduate medical education
- Ability to consult with specialists from higher level service via telehealth

Minimum Staffing Requirements
As for Level 3
Service: Gynaecology

Minimum Clinical Support Service Requirements

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Level 5

Service Description
A Level 5 service provides services at Level 4 plus it provides a diagnostic service and performs surgery on all patients by on-call gynaecologists. It has the ability to manage a limited range of complex cases in association with other specialists, with appropriate formal links and referrals in place with higher level services for certain complex cases.

Service Requirements
As for level 4 plus:
- Network and possibly Territory-wide referral role
- Provides outpatient gynaecology service
- Full emergency services (as per Level 5 Emergency Medicine)
- Undergraduate and postgraduate teaching as appropriate for an accredited training site
- Research role

Minimum Staffing Requirements
As for level 4 plus:
- Designated medical officer or surgical registrar
- 24 hour access to on call specialists
- Visiting gynaecologist
- Business hours and where required weekend access to designated allied health services
- May have gynaecology registrar or registered medical officer
- Access to Aboriginal and Torres Strait Islander Liaison Officer

Minimum Clinical Support Service Requirements

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Level 6

Service Description
A Level 6 service provides services at Level 5 plus this service has the ability to manage all cases including the full range of complex cases in association with other specialists including reproductive endocrinology, infertility, and gynaecological malignancy.

Service Requirements
As for level 5 plus:
- Provides specialist consultation to lower level services interstate (visiting and via telehealth)
- Performs full range of complex gynaecological surgery
- Dedicated ward and clinical space
- Ability to accept referrals for complex cases from lower level services
- Provides reproductive medicine services
- Provides specialty training
- May provide interstate referral role

Minimum Staffing Requirements
As for level 5 plus:
- Resident gynaecological oncologist
- Gynaecology registrar or registered medical officer
- Registrars in specialties
- Fellowed specialists
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</table>

**Reference Documents**
- Health Practitioners Law - NT & Commonwealth
- Royal Australian and New Zealand College of Obstetricians and Gynaecologists
Neurology Service

Neurology is the specialty that deals with diseases of the nervous system (including the brain and spinal cord) due to trauma, congenital developmental abnormalities, degenerative or disease processes.

Appropriate levels of clinical support service provision are extremely important. Higher level neurosurgery services rely on access and links to other appropriate specialists.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.

Explanatory note

There are a number of models of grouping delineations for Neurology and Neurosurgery. From a planning perspective, both approaches are valid and have been used in other Australian states as well as internationally. It would be considered reasonable to group delineations for Neurology and Neurosurgery under Surgical Services or place Neurology under Medical Services and Neurosurgery under surgical services dependant on which approach clinicians in the jurisdiction believe is most appropriate.

By way of explanation, the NT Hospital Services Framework is quite comprehensive and more specific in terms of the range of services and description of service levels that it covers. Most Australia States have more generalised plans that do not make distinction between the categories. Of the other states, three make specific reference to neurological and neurosurgical services. WA does separate the specialties, splitting them between medical and surgical. The Queensland plan groups both under surgical and Tasmania has created a specialist category for Neuro. The approach of each state is summarised below:

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<td>- No Differentiation Combined Approach to Overall Provision of Services</td>
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<td>- No Differentiation Combined Approach to Overall Provision of Services</td>
<td>Roles for Neurology included under Medical Services. Neurosurgery included under Surgical Services.</td>
<td>- No Differentiation. Grouped together under Neuro as a specialist service.</td>
<td>- No Delineations Specified. Based on Delivery Model</td>
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In the International setting, the two services are generally coupled together under the category of Neurological Services, which is a Surgical Service. This is because Neurorological and Neurosurgical services merge together, with emergency neurosurgery falling on under neurology while other neurosurgical services fall under the surgical category.

The NT Framework is currently based on the international model, where the services are grouped together under surgical services. During the user groups for the NT Framework, the emphasis seems to have been on neurosurgery and the surgical components of the services. Hence, neurosurgical consults and emergency neurosurgery has been included in the service description at Level 4 and continue through levels 5 and 6 under surgical services.

As the NT framework is quite specific and detailed, either approach to describing these services would be appropriate.
Service: Neurology Services

Level 1

Service Description
No Level 1 service. Refer to higher level.

Level 2

Service Description
No Level 2 service. Refer to higher level.

Level 3

Neurology

Service Description
A Level 3 service provides inpatient care by a Registered Medical Practitioner (RMP) with 24 hour cover by a Registered Nurse (RN). Outpatient care may be provided by a visiting RMP and possibly a neurologist via telehealth/teleconference.

Service Requirements
- Inpatient care by RMP
- 24 hour cover by RN
- Outpatient care by visiting RMP or neurologist via telehealth/teleconference
- Access to some allied health services

Minimum Staffing Requirements
- RMP
- RN
- May have visiting RMP
- Access to Aboriginal and Torres Strait Islander Health Practitioner

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Level 4

Neurology

Service Description
A Level 4 services provides services at Level 3 plus inpatient care by a resident Medical Practitioner (MP) and outpatient consultation by a visiting neurologist. This level of service is able to provide a stroke service to patients as well as a number of investigative tests including Electroencephalogram (EEG) and nerve and muscle testing. The service may be provided from neurological inpatient beds.

Service Requirements
As for Level 3 plus:
- Provides a stroke service including 24 hour availability of thrombolysis
- Provides a number of investigative tests (EEG, nerve and muscle testing)
- Links with Level 4 geriatric and rehabilitation service
- May provide designated inpatient neurological beds
- May provide an outreach service to networked lower level services

Minimum Staffing Requirements
As for Level 3 plus:
- Resident MP
- Visiting neurologist
- Access to designated allied health services
Service: Neurology Services

Neurosurgery

Service Description
A Level 4 service provides care for patients with minor head injuries dealt with by a general surgeon.

Service Requirements
As for Level 3 plus:
- Link with Level 4 rehabilitation services
- Some allied health undergraduate education

Minimum Staffing Requirements
As for Level 3 plus:
- General surgeon
- Neurosurgical consultation available
- Access to designated allied health services

Minimum Clinical Support Service Requirements

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Level 5

Neurology

Service Description
A Level 5 service provides services at Level 4 plus it provides inpatient care by a resident neurologist.

Service Requirements
As for Level 4 plus:
- Inpatient care by resident neurologist
- Emergency services provided by an on-call neurologist
- Network referral role
- May provide some undergraduate teaching
- May have a research role

Minimum Staffing Requirements
As for Level 4 plus:
- Resident neurologist
- Registrar/registered Medical Officer
- Access to a specialist Senior Registered Nurse (SRN)
- Access to specialised allied health services

Neurosurgery

Service Description
A Level 5 service provides services at Level 4 plus it provides a diagnostic service and surgery on low, moderate and high risk patients by an on-call neurosurgeon.

Service Requirements
As for Level 4 plus:
- Network referral role
- Diagnostic services and surgery on low, moderate and high risk patients
- Operating equipment adequate for emergency neurosurgery
- Designated neurosurgical beds
- 24 hour access to CT
- Link with brain and spinal injury rehabilitation
- May have some teaching and research role
Service: Neurology Services

Minimum Staffing Requirements
As for Level 4 plus:
- On-call neurosurgeon
- Surgical Registrar on call 24 hrs
- Access to specialist Senior Registered Nurse (SRN)
- Access to specialised allied health services

Minimum Clinical Support Service Requirements

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Level 6

Neurology

Service Description
A Level 6 service provides services at Level 5 plus it provides a full range of neurological services within a neurology department.

Service Requirements
As for Level 5 plus:
- Territory-wide referral role and may have an interstate referral role
- Provides undergraduate and postgraduate teaching
- Active research role
- May have access to a Positron Emission Tomography (PET) machine

Minimum Staffing Requirements
As for Level 5

Neurosurgery

Service Description
A Level 6 service provides services at Level 5 plus it has the capability to deal with all cases including all emergency cases.

Service Requirements
As for Level 5 plus:
- Neurosurgical ward and neurosurgical Intensive Care Unit (ICU) or High Dependency Unit (HDU)
- Link with Level 5 rehabilitation service
- Territory-wide or interstate referral role
- Undergraduate and post graduate teaching role
- Research role

Minimum Staffing Requirements
As for Level 5 plus:
- Neurosurgery Registrar or registered Medical Officer on call 24 hours

Minimum Clinical Support Service Requirements

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Reference Documents
Health Practitioners Law - NT & Commonwealth
Ophthalmology Service

Ophthalmology is the specialty that deals with diseases of the eye. Services encompass medical eye health care and related services.

It includes services provided by specialist and sub-specialist Ophthalmologists, Registered Medical Practitioners, Orthoptists, Optometrists, Ophthalmic Nurses and health care professionals working in emergency departments.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
### Service: Ophthalmology

#### Level 1

**Service Description**
No Level 1 service. Refer to higher level.

#### Level 2

**Service Description**
No Level 2 service. Refer to higher level.

#### Level 3

**Service Description**
A Level 3 service performs minor procedures and diagnoses on low-risk patients by a visiting ophthalmic surgeon. Consultation may be available from other specialties.

**Minimum Clinical Support Service Requirements**

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#### Level 4

**Service Description**
A Level 4 service provides services at Level 3 plus it performs procedures on low or moderate risk patients by a visiting ophthalmic surgeon. This service also has access to orthoptists. Specialist anaesthetist is available for moderate risk patients.

**Minimum Staffing Requirement**
- Registered Medical Practitioner on call 24 hours
- Access to Aboriginal and Torres Strait Islander Health Practitioner

**Minimum Clinical Support Service Requirements**

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#### Level 5

**Service Description**
A Level 5 service provides services at Level 4 plus it provides diagnostic services and surgery on low, moderate and high risk patients by an on-call ophthalmic surgeon.

**Service Requirements**
As for Level 4 plus:
- Has Territory referral role
- Has undergraduate and postgraduate teaching role
- Has an active research role
- Undertakes emergency surgery

**Minimum Staffing Requirement**
As for Level 4 plus:
- Has designated medical officer and/or surgical registrar on call 24 hours.
- Orthoptists on staff
- Access to an Aboriginal and Torres Strait Islander Liaison Officer
## Service: Ophthalmology

### Minimum Clinical Support Service Requirements

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### Level 6

**Service Description**

A Level 6 service provides services at Level 5 plus it has the ability to deal with all cases including a full range of complex cases in association with other specialists. It provides a full emergency service and is able to undertake neuro-ophthalmology patients where a level 6 neurosurgery facility is available on-site.

**Service Requirements**

As for Level 5 plus:
- Access to level 5 radiotherapy
- Has interstate referral role

**Minimum Staffing Requirement**

As for Level 5 plus:
- Ophthalmology registrar or registered medical officer on call 24 hours
- Access to a specialist Senior Registered Nurse

### Minimum Clinical Support Service Requirements

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</table>

**Reference Documents**

Health Practitioners Law - NT & Commonwealth
Orthopaedics Service

Orthopaedics is both a medical and surgical service involving the treatment of diseases and abnormalities of the musculoskeletal system due to trauma, congenital developmental abnormalities, degenerative or disease processes.

Depending on the role level of service, this service may include general orthopaedics, trauma, joint replacement, orthotics and a range of other specialised components. Treatment ranges from non-surgical management to surgical management on an acute, acute arranged and elective basis. Higher level orthopaedic services rely on access and links to other appropriate specialists.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
Service: Orthopaedics

Level 1

Service Description
No Level 1 service. Refer to higher level.

Level 2

Service Description
A Level 2 service provides minor reduction of fractures performed on low-risk patients by a Registered Medical Practitioner or visiting general surgeon with experience in orthopaedics. Regional or general anaesthesia is given by accredited medical practitioner. An orthopaedic consultation service is also available.

Minimum Clinical Support Service Requirements

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Level 3

Service Description
A Level 3 service provides services at Level 2 plus it performs common and intermediate procedures on low or moderate risk patients by a visiting orthopaedic or general surgeon credentialed in orthopaedics.

Service Requirements
As for Level 2 plus:
- General orthopaedic equipment and theatre x-ray available
- Consultation available from other specialties depending on case-mix

Minimum Staffing Requirement
As for Level 2 plus:
- Access to on-call orthopaedic Registrar
- Access to orthopaedic specialist
- Preferably has access to specialist Senior Registered Nurse
- Access to some allied health services including physiotherapist
- Access to Aboriginal and Torres Strait Islander Health Practitioner

Minimum Clinical Support Service Requirements

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Level 4

Service Description
A Level 4 service provides services at Level 3 plus it performs common and intermediate procedures on low or moderate risk patients by an on-call orthopaedic surgeon.

Service Requirements
As for Level 3 plus:
- Access to Level 4 rehabilitation service
- Some allied health undergraduate education

Minimum Staffing Requirement
As for Level 3 plus:
- Access to specialist anaesthetist
- Rostered specialists available
Service: Orthopaedics

- Access to specialist Senior Registered Nurse
- Access to designated allied health services

Minimum Clinical Support Service Requirements

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Level 5

Service Description
A Level 5 service provides services at Level 4 plus it provides a full range of major diagnostic and treatment procedures on low, moderate and high risk patients performed by on-call orthopaedic surgeons.

Service Requirements
As for Level 4 plus:
- Network referral role; acts as hub service within network
- Link to Level 5 rehabilitation service
- May have teaching and research role

Minimum Staffing Requirement
As for Level 4 plus:
- Orthopaedic registrar on-call 24 hours
- Access to specialists
- Access to specialised allied health services

Minimum Clinical Support Service Requirements

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Level 6

Service Description
A Level 6 service provides services at Level 5 plus it has the ability to deal with all cases including full range of complex cases (and all emergencies) in association with other specialists.

Service Requirements
As for Level 5 plus:
- Territory-wide or interstate referral role
- Undergraduate and post graduate teaching role
- Active research role
- Link to Level 6 rehabilitation service

Minimum Staffing Requirement
As for Level 5 plus:
- Resident orthopaedic surgeon

Minimum Clinical Support Service Requirements

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Reference Documents
Health Practitioners Law - NT & Commonwealth
**Urology Service**

Urology deals with the diagnosis and treatment of diseases of both the male and female urinary tract as well as the male reproductive tract. Depending on the role level of service provided, service components may range from day stay surgery and basic endoscopic procedures to elective and acute procedures including trans-urethral or trans-rectal procedures and trauma cases.

Appropriate levels of clinical support service provision are extremely important especially for anaesthetics, perioperative, pathology, imaging and Pharmacy as well as access to appropriate allied health services. Higher level urologic services rely on access and links to other appropriate specialists.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
Service: Urology

Level 1

Service Description
No Level 1 service. Refer to higher level.

Level 2

Service Description
No Level 2 service. Refer to higher level.

Level 3

Service Description
A Level 3 service provides common and intermediate procedures on low or moderate risk patients performed by a visiting Urologist or general surgeon credentialed in urology.

Minimum Staffing Requirement
- Visiting Urologist or general surgeon credentialed in urology
- Access to some allied health services
- Access to Aboriginal and Torres Strait Islander Health Practitioner

Minimum Clinical Support Service Requirements

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Level 4

Service Description
A Level 4 service provides services at Level 3 plus it performs some major procedures on low or moderate risk patients by a visiting Urologist.

Service Requirements
As for Level 3 plus:
- Has links with oncology, radiotherapy and palliative care services

Minimum Staffing Requirement
As for Level 3 plus:
- Visiting Urologist or credentialed General Surgeon
- 24 hour access to a Medical Practitioner (MP)
- Access to experienced Registered Nurses (RNs)
- Access to designated allied health services
- Some allied health undergraduate education

Minimum Clinical Support Service Requirements

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Level 5

Service Description
A Level 5 service provides services at Level 4 plus it provides a full range of major diagnostic and procedures on low, moderate and high risk patients performed by an on-call Urologist.
Service: Urology

Service Requirements
As for Level 4 plus:
- Provides network referral role and teaching and research role

Minimum Staffing Requirement
As for Level 4 plus:
- Surgical Registrar on call 24 hours
- Access to a Clinical Nurse Specialist
- Access to a continence nurse
- Access to specialised allied health services

Minimum Clinical Support Service Requirements

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Level 6

Service Description
A Level 6 service provides services at Level 5 plus it has the ability to deal with all cases including a full range of complex cases (and all emergencies) in association with other specialists.

Service Requirements
As for Level 5 plus:
- Territory-wide or interstate referral role
- Undergraduate and post graduate teaching role
- Active research role

Minimum Staffing Requirement
As for Level 5 plus:
- Urology Registrar or registered Medical Officer on call 24 hours

Minimum Clinical Support Service Requirements

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Reference Documents
Health Practitioners Law - NT & Commonwealth
Vascular Service

Vascular Service includes treatment for diseases of the venous, lymphatic, and arterial systems. It excludes surgery performed on the intracranial and coronary arteries. Depending on the role level of service provided, common vascular surgical procedures may include balloon angioplasty, stenting, surgery on varicose veins, thrombolysis and lower extremity amputation.

Appropriate levels of clinical support service provision are extremely important especially for anaesthetics, perioperative, pathology, imaging and Pharmacy as well as access to appropriate allied health services. Higher level vascular surgery services rely on access and links to other appropriate specialists.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
#### Service: Vascular Surgery

**Level 1**

**Service Description**
No Level 1 service. Refer to higher level.

---

**Level 2**

**Service Description**
No Level 2 service. Refer to higher level.

---

**Level 3**

**Service Description**
No Level 3 service. Refer to higher level.

---

**Level 4**

**Service Description**
A Level 4 service provides common and intermediate vascular surgical procedures on low or moderate risk patients performed by vascular or general surgeons.

**Service Requirements**
- Some surgical specialties may be available
- Access to liaison psychiatry
- Pre-operative rehabilitation specialist consultation available (for elective amputees)

**Minimum Staffing Requirement**
- Specialists on call 24 hours
- Specialist anaesthetists providing anaesthesia
- Has designated medical officer and/or surgical registrar
- Has Clinical Nurse Manager and experienced Registered Nurses
- Onsite allied health professionals
- Access to Aboriginal and Torres Strait Islander Health Practitioner

**Minimum Clinical Support Service Requirements**

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**Level 5**

**Service Description**
A Level 5 service provides services at Level 4 plus it performs major diagnostic and treatment procedures on low, moderate and high risk patients performed by vascular or general surgeons and specialist anaesthetists.

**Service Requirements**
As for Level 4 plus
- Link with Level 5 rehabilitation service
- Provides Territory referral role
- Provides undergraduate and postgraduate teaching role
- Has active research role

**Minimum Staffing Requirement**
As for Level 4 plus
- Has surgical registrar on call 24 hours
Service: Vascular Surgery

- Access to Aboriginal and Torres Strait Islander Liaison Officer

Minimum Clinical Support Service Requirements

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Level 6

Service Description

A Level 6 service provides services at Level 5 plus it has the ability to deal with complex major diagnostic and treatment procedures in association with other specialties.

Service Requirements

As for Level 5 plus

- Provides interstate referral role

Minimum Staffing Requirement

As for Level 5 plus

- Onsite surgical registrar
- Access to Clinical Nurse Consultant

Minimum Clinical Support Service Requirements

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Reference Documents

Health Practitioners Law - NT & Commonwealth
Maternal and Child Health Service

Maternal and Child Health Service involves health care delivery to women giving birth, to newborn babies and to children. The service is usually provided in a range of health settings and delivered by a multi-disciplinary team of professionals which may or may not be co-located. For the purposes of this Framework, Maternal and Child Health Service comprises Neonatology, Obstetrics, and Paediatrics.
Neonatology Service

Neonatology Service provides a range of care from well infant care to highly specialised care, for sick, low birth weight and/or premature infants, and/or infants born with congenital or other conditions.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
**Service: Neonatal Care**

### Level 1

**Service Description**
A Level 1 service provides care for healthy infants greater than or equal to 37 weeks gestational age. The service has an emphasis on education and support for parenting, bonding, feeding and lactation.

**Service Requirements**
- Capability to provide basic life support for infants and can stabilise infants who require transfer to a higher level of service
- Telephone access to emergency care and transport
- Blood collection for neonatal screening
- On-site pathology services

**Minimum Staffing Requirements**
- Access to Registered Medical Practitioners (RMPs)
- Access to allied health services within local areas or from a visiting or outreach service
- Access to Aboriginal and Torres Strait Islander Health Practitioners who have undertaken neonatal resuscitation training
- Access to Aboriginal and Torres Strait Islander Liaison Officers, as required
- Access to interpreters
- Access to pastoral care

**Minimum Clinical Support Service Requirements**

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### Level 2

**Service Description**
A Level 2 service provides services at Level 1 plus it primarily provides planned care for healthy infants greater than or equal to 37 weeks gestational age.

**Service Requirements**
As for Level 1 plus:
- Consistent protocols and links with units at higher levels of service, for referrals and transfers
- Provision for one nasogastric/orogastric tube feed
- Bedside blood glucose testing
- Consultation with a higher level service for infants requiring phototherapy
- Neopuff or similar equipment for short-term ventilation of infants awaiting transfer to higher level of service
- Audit in the event of perinatal mortality and morbidity in consultation with higher level service
- Audit of perinatal mortality in accordance with Perinatal Society of Australia and New Zealand (PSANZ) Perinatal Death Classifications
- Medication on-site

**Minimum Staffing Requirements**
As for Level 1 plus:
- Access to a clinician competent in undertaking a complete examination of the infant within 72 hours of birth
- 24 hours access to RMP able to attend within 30 minutes in normal circumstances
- Access to biomedical support for equipment maintenance

**Minimum Clinical Support Service Requirements**

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Service: Neonatal Care

Level 3

Service Description
A Level 3 service provides services at Level 2 plus it has the ability to initiate and maintain intravenous therapy and for all births, at least one clinician is available exclusively for neonatal resuscitation.

Service Requirements
As for Level 2 plus:
- Provides phototherapy
- Provides controlled oxygen therapy in consultation with a higher level of service
- Full blood count and blood group result available within 24 hours
- Provides more than one nasogastric/orogastric tube feed in consultation with a higher level of service
- Collects blood cultures
- Mobile chest/abdomen x-ray capability
- On-site medical imaging

Minimum Staffing Requirements
As for Level 2 plus:
- Nursing ratio of 1:4 cots where possible
- Obstetricians and paediatricians or accredited Medical Practitioners (MPs) on call 24 hours
- Access to outreach, community or hospital based health professionals such as dieticians, physiotherapists and social workers
- Access to outreach, community or hospital-based pastoral care workers

Minimum Clinical Support Service Requirements

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Level 4

Service Description
A Level 4 service provides services at Level 3 plus where a continuous positive airway pressure (CPAP) device is available on-site the service has the capability to plan and deliver care for infants greater than or equal to 32 weeks gestational age who have an estimated birth weight of more than 1500 grams, with no additional risk factors (if born at that hospital), or who are back-transferred from a higher level service. Where CPAP is not available on-site, a Level 4 service has the capability to plan and deliver care for infants greater than or equal to 34 weeks gestational age.

Service Requirements
As for Level 3 plus:
- Commences mechanical ventilation in consultation with a higher level neonatal service pending transfer to a Level 5 or 6 service
- Inserts and manages umbilical arterial and venous catheters
- Obtains arterial blood gas results within 30 minutes and electrolyte results, full blood count and blood group test results within 4 hours
- Capacity for heart rate and blood pressure monitoring
- Has access to cranial ultrasonography
- Provides reports to the Australian and New Zealand Neonatal Network (ANZNN) of infants born before 32 weeks gestational age or less than 1500 grams or who have been on CPAP or mechanical ventilation for more than 4 hours (and/or information consistent with ANZNN that may change from time to time)

Minimum Staffing Requirements
As for Level 3 plus:
- A RMP with experience in paediatrics available to attend within 5 minutes (in normal circumstances) when the infant is unstable or mechanically ventilated
### Service: Neonatal Care

- A registered medical specialist (specialist paediatrician) to provide neonatal care available 24 hours and able to attend within 30 minutes, in normal circumstances
- A Registered Nurse (RN) or midwife responsible for the neonatal unit
- Paediatric registrar onsite 24 hrs
- All infants admitted to the unit are referred to a registered medical specialist with credentials in paediatrics
- Maintains a minimum nurse: patient ratio of 1:1 for mechanically ventilated infants being managed for transfer
- Access to dietetic, physiotherapy, social work and speech pathology services
- Access to a lactation consultant
- On-site children’s anaesthetic

### Minimum Clinical Support Service Requirements

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#### Level 5

**Service Description**

A Level 5 service provides services at Level 4 plus it has the capability to plan and deliver care for infants who were born at the hospital or back transferred from a higher level service and who are greater than or equal to 24 weeks gestational age with an estimated birth weight of more than 500 grams. In addition, a Level 5 service performs surgery on high anaesthetic risk neonates undergoing Surgical Complexity I (SCI), Surgical Complexity II (SCII) and Surgical Complexity III (SCIII) procedures.

**Service Requirements**

As for Level 4 plus:
- Capability to plan and deliver care for infants who were born at the hospital or back-transferred from a higher level service and who are greater than or equal to 29 weeks gestational age
- Minimum of eight cots in the nursery
- Manages short to medium term mechanical ventilation (up to 1 month)
- Provides emergency exchange transfusion
- Provides parenteral nutrition under supervision
- Obtains arterial blood gas results within 30 minutes (i.e. around 15 minutes), full blood count results within 2 hours, and neonatal bilirubin results within 60 minutes, in normal circumstances
- On-site 24 hours access to cranial ultrasonography
- Collects data according to a designated data set similar to the ANZNN criteria, but including parenteral nutrition, and in public services, provides data quarterly to the Territory-wide or interstate maternity and neonatal clinical network
- On-site pathology
- Provides telehealth/teleconference services to lower level facilities
- May have undergraduate and postgraduate teaching role

**Minimum Staffing Requirements**

As for Level 4 plus:
- RMP or RMP in paediatric training program or neonatal Nurse Practitioner (NP) on-site 24 hours
- On-site access to a lactation consultant within the newborn and/or maternity service

### Minimum Clinical Support Service Requirements

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#### Level 6

**Service Description**

A Level 6 service provides services at Level 5 plus it provides the highest level of care to infants and
Service: Neonatal Care

has personnel and equipment to provide continuous life support and comprehensive multidisciplinary care for extremely high-risk newborns and those with complex and critical illnesses.

Service Requirements

As for Level 5 plus:

- Supports infants of high-risk pregnancies
- Provides services for all aspects of neonatal care, including intensive care for critically ill infants, ventilation, total parenteral nutrition, and care for complex congenital and metabolic diseases of infants
- Blood gas machine or other point-of-care laboratory equipment available within the nursery area capable of instantly measuring blood gases, electrolytes, bilirubin and haemoglobin
- Emergency access to x-rays and high-level imaging services within 10 minutes, in normal circumstances
- On-site 24 hour access to neonatal echocardiography services
- Provides consultation and leadership for emergency neonatal transport
- On-site children’s surgery and Neonatal Intensive Care Unit (NICU)
- Undergraduate and postgraduate teaching role
- Active research role

Minimum Staffing Requirements

As for Level 5 plus:

- At least one RMP with experience in neonatology and/or a neonatal NP on-site 24 hours and whose duties are solely dedicated to the provision of neonatal services
- A registered medical specialist with credentials in neonatology on-site during business hours and available after hours
- A full-time neonatal department nurse manager
- Ready access to clinical and diagnostic paediatric specialties
- Access to a genetics counsellor

Minimum Clinical Support Service Requirements

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Reference Documents

Health Practitioners Law - NT & Commonwealth
Draft National Maternity and Neonatal Services Framework
Australian College of Midwives. National Midwifery Guidelines for Consultation and Referral
Australian College of Neonatal Nurses. Competency Standards
Australian Nursing and Midwifery Council. Competency Standards
Perinatal Society of Australia and New Zealand. Clinical Practice Guideline for Perinatal Mortality
Obstetrics Service

Obstetric Service ensures the safe provision of care for mother and baby along the continuum of care. This includes during pregnancy, during labour and birth, and during the postnatal period. Ongoing health assessment of the woman will ensure she is cared for by the right maternity personnel, at the right time, in the right level of service. Care may be provided by midwives, Registered Medical Practitioners or Registered Medical Specialists with credentials in obstetrics.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
### Service: Obstetrics

#### Level 1

**Service Description**
A Level 1 service provides community antenatal and/or postnatal care for women and infants with no planned births or maternity inpatient services.

**Service Requirements**
- If required, inpatient care following birth elsewhere
- Basic equipment for antenatal and postnatal care
- Access to offsite pathology service
- Adult and neonatal emergency resuscitation capability
- Training and reliable communication systems to deal with imminent births
- Access by referral to ultrasound screening
- May have access to outreach consultation midwifery or medical services

**Minimum Staffing Requirement**
- Registered Midwives and/or Registered Medical Practitioners may provide services
- Access to physiotherapy advice or management
- Access to allied health professionals, as required, via referral from midwifery staff or Registered Medical Practitioners
- Access to a clinical pharmacist, to child health services, to a lactation service and to interpreter services where required
- Access to an Aboriginal and Torres Strait Islander Health Practitioner

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#### Level 2

**Service Description**
A Level 2 service provides services at Level 1 plus it provides access to antenatal care and inpatient postnatal stay and/or postnatal community visiting for women and infants who do not have identified risk factors. A birthing service may be provided at this level but only for normal risk pregnancies and with no operating theatre; if a birthing service is provided at this level it must have immediate transfer arrangements in place for retrieval and transfer to appropriate higher level service.

**Service Requirements**
As for Level 1 plus:
- Ability to provide limited birthing services for acute presentations and unexpected births; no inpatient birthing facility
- May have access to a cardiotocograph (CTG)
- Access to electronic foetal heart rate monitoring equipment
- May have offsite access to ultrasound
- Adult and neonatal emergency resuscitation capability
- Access to telehealth in order to access consultation from higher level service within the network; where telehealth is not available, appropriate arrangements must be in place to access consultation with network services via teleconference
- May have access to e-health

**Minimum Staffing Requirement**
As for level 1 plus:
- Onsite Registered Medical Practitioners
- Access to Registered Midwives as required
- Access to a biomedical technician for equipment maintenance
- Access to allied health services
## Service: Obstetrics

### Minimum Clinical Support Service Requirements

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#### Level 3

**Service Description**

A Level 3 service provides services at Level 2 plus it provides community and inpatient care for antenatal and postnatal women and babies who do not have identified risk factors. This level of service has planned birth care for healthy women with a pregnancy of 37 weeks gestation or more who are not expected to have labour or birth complications. The service can also perform elective caesarean section on women at or beyond 39 weeks who have experienced an uncomplicated pregnancy.

**Service Requirements**

As for Level 2 plus:

- Service is delivered by Registered Midwives and Registered Medical Practitioners who have an Advanced Diploma of Obstetrics and Gynaecology from the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (DRANZCOG) and credentialed in anaesthetics, accessible 24 hours a day
- Elective and emergency caesarean birth can be performed on-site within the service capability
- All maternity clinicians must be competent in adult and neonatal resuscitation
- On-site access to portable obstetric ultrasound
- Designated birthing rooms
- A labour-induction service for women with a relatively low-risk pregnancy
- Emergency adult and neonate resuscitation capability available 24 hours
- An on-site, functional operating theatre to perform emergency caesarean sections
- Access to inpatient maternity beds and a community midwifery service
- Midwifery and medical staff trained to conduct and interpret cardiotocography, including monitoring and assessing twin pregnancies
- On-site anaesthetics and perioperative operating suite

**Minimum Staffing Requirement**

As for Level 2 plus:

- 24 hour onsite access to a Registered Medical Practitioner with credentials in anaesthetics who is able to attend within 30 minutes in normal circumstances
- 24 hour onsite access to a DRANZCOG Registered Medical Practitioner who is able to attend within 30 minutes in normal circumstances
- Onsite Midwife Nurse Manager in charge of maternity services
- A Registered Midwife available 24 hours
- Access to a Child Health Nurse
- Access to outreach, community or hospital-based professionals as required
- Access to individual physiotherapy postnatal management
- Access to a lactation consultant and an Aboriginal and Torres Strait Islander Health Practitioner
- May have access to a psychologist

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#### Level 4

**Service Description**

A Level 4 service provides services at Level 3 plus it is able to care for pregnant women at 32 weeks gestation or more if a continuous positive airway pressure (CPAP) device is available on-site for the neonate, and the neonate is expected to have a birth weight of 1500 grams or more with no additional

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Department of Health is a Smoke Free Workplace
Service: Obstetrics

risk factors.

Service Requirements
As for Level 3 plus:
- Has dedicated birth suites, a maternity unit that provides for high-acuity women and onsite neonatal nursery and paediatric staff
- On-site access to high-acuity maternity beds
- The capacity to provide antenatal day assessment
- An on-site adult Intensive Care Unit, or a documented process with an off-site Intensive Care Unit to support care for critically ill women
- The capacity to undertake intrapartum foetal blood sampling on-site
- The capacity to undertake arterial and venous cord blood gas sampling for analysis, where the service performs caesarean sections or operative births due to concern for foetal compromise, or where a neonate is born in poor condition
- The capacity to manage clinically appropriate labour induction in line with best practice
- Access to an on-site community lactation service

Minimum Staffing Requirement
As for Level 3 plus:
- 24 hour access to a FRANZCOG (Fellow of the Royal Australian and New Zealand College of Obstetricians and Gynaecologists) registered medical specialist with credentials in obstetrics who can attend within 30 minutes, in normal circumstances
- 24 hour access to a registered medical specialist with credentials in anaesthetics who can attend within 30 minutes in normal circumstances
- A registered medical specialist with credentials in paediatrics and experience in neonatal care available 24 hours who can attend within 30 minutes in normal circumstances
- 24 hour access to a third Registered Medical Practitioner to assist at caesarean sections who can attend within 30 minutes in normal circumstances
- Access to a registered medical specialist with credentials in psychiatry and a registered medical specialist (consultant physician)
- Registered Midwives on-site 24 hours
- Access to allied health professionals as required

Minimum Clinical Support Service Requirements

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Level 5

Service Description
A Level 5 service provides services at Level 4 plus it is capable of providing planned care for women at 29 weeks gestation or more with infants who are expected to have a birth weight of 1000 grams or more. This service is a multidisciplinary service with the capacity to manage all unexpected pregnancy and neonatal emergency presentations. This level of service provides multidisciplinary care for low- to high-risk pregnancies and can undertake invasive, antenatal diagnostic procedures. An obstetric theatre is immediately accessible 24 hours a day and an obstetric anaesthetic service is on-site 24 hours a day. A registered medical specialist credentialed in obstetrics is present in the birth suite during business hours and available at all other times 24 hours a day.

Service Requirements
As for Level 4 plus:
- Network referral role
- A full range of antenatal, birthing and postnatal care facilities, including dedicated birth suites, an antenatal day assessment unit, allocated inpatient beds within a maternity unit and dedicated maternity beds for the acute care of high-acuity patients
- Facilities capable of supporting medical training
- Access to one dedicated obstetric theatre 24 hours for every 4000 births with the capacity to open a second operating theatre concurrently
- Access to adult and neonatal emergency resuscitation equipment within the unit
Service: Obstetrics

- An ultrasound machine in the birth suite 24 hours
- The capacity to measure and permanently document foetal and cord blood gases
- 24 hour access to endocrinology, infectious disease, urology and vascular services
- Offsite access to specialty services such as maternal foetal medicine, obstetric medicine or equivalent
- A referral unit within the relevant maternity services network
- Access to and support for data collection and clinical audit
- Provides termination services due to foetal anomaly
- A lactation service
- A perinatal loss service
- On-site pathology and adult and neonatal intensive care
- Undergraduate teaching role; may have postgraduate teaching role
- May have research role

Minimum Staffing Requirement
As for level 4 plus:

- FRANZCOG registered medical specialists with credentials in obstetrics and certification in obstetrical and gynaecological ultrasound from the RANZCOG
- A radiologist on-site during business hours
- A Registered Midwife in charge in birth suites
- A Registered Midwife in charge for each maternity specialty area
- 24 hour access to cardiotocograph monitoring within birth suites and inpatient areas
- Access to higher level specialist services via telehealth
- Access to specialist emergency resuscitation staff available 24 hours
- Access to midwifery and medical staff trained to conduct and interpret cardiotocography, including monitoring, assessing and managing very preterm and other high-risk pregnancies 24 hours
- A midwifery coordinator, where relevant, to support maternity network services across a rural and network service
- Business hours access to allied health professionals, as required, including lactation consultant, genetic counsellor and a drug and alcohol service
- Business hours access to a physiotherapy service, an identified pharmacist, a scientist and pastoral care worker
- Onsite business hours access to sonographers and afterhours access where required
- Onsite Aboriginal and Torres Strait Islander Liaison Officers

Minimum Clinical Support Service Requirements

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<th>Level 6 Service Description</th>
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| A Level 6 service provides services at Level 5 plus it provides all levels of care, including the highest level of complex care for women with serious obstetric and foetal conditions that require high-level multidisciplinary care. This is the only service level that provides maternal foetal medicine and maternal foetal interventional surgery. A Level 6 service provides clinical advice and support by a consultant registered medical specialist credentialed in obstetrics 24 hours a day. A Level 6 service plays a strategic role in the clinical planning of Statewide or Territory-wide services related to perinatal care. | As for level 5 plus:  
- A maternity service that provides comprehensive specialist services, including, but not restricted to, midwifery, obstetric, mental health and surgical care for women with high-risk complex needs 24 hours  
- Access to specialty services (e.g. maternal foetal medicine, obstetric medicine or equivalent) including outreach service to lower level services  
- A Statewide, Territory-wide or Interstate referral unit |
### Service: Obstetrics
- Onsite 24 hour access to an obstetric tertiary imaging service
- Onsite surgery and nuclear medicine
- Undergraduate and postgraduate teaching role
- Active research role

#### Minimum Staffing Requirement
As for level 5 plus:
- A FRANZCOG registered medical specialist with credentials in obstetrics and specialty accreditation in maternal foetal medicine from RANZCOG, providing care in the area of maternal foetal medicine
- A lead clinician with responsibility for clinical governance of the service with a Midwifery qualification as a minimum
- A Registered Midwife to coordinate the care of high-risk women

#### Minimum Clinical Support Service Requirements

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#### Reference Documents
- Health Practitioners Law - NT & Commonwealth
- Draft National Maternity and Neonatal Services Framework
- Australian College of Midwives. National midwifery guidelines for consultation and referral
- Australian Nursing and Midwifery Council. National competency standards for the midwife
- Perinatal Society of Australia and New Zealand. Clinical practice guideline for perinatal mortality
- Royal Australasian College of Physicians. National standards for the care of children and adolescents in health services
- Royal Australian and New Zealand College of Obstetricians and Gynaecologists. The RANZCOG Code of Ethical Practice
- NT Gestational Diabetes Guidelines
- SA Perinatal Practice Guidelines
**Paediatrics Service**

Paediatric Service provides a range of acute and ambulatory care for children including elective and emergency surgical services with varying levels of complexity.

Paediatrics require a range of clinical support services depending on the role level of service being provided and must have close and defined links with Neonatology services. This section should be read in conjunction with Neonatology.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
Service: Paediatrics

Level 1

Service Description
A Level 1 service provides care for children in paediatric medical beds by Registered Medical Practitioners (RMPs). It can provide stabilization for children prior to being transferred to an appropriate higher level of service and can access on-call paediatric medical advice from a networked higher level of service. No surgery is performed.

Minimum Clinical Support Service Requirements

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Level 2

Service Description
A Level 2 service provides services at Level 1 plus it manages low-risk paediatric patients who fall into the category of Surgical Complexity I (SCI)*. Minor simplistic diagnostic and therapeutic surgical procedures are undertaken at this level of service. Such procedures are usually on the surface of the body and only require local anaesthetic. Most procedures requiring local anaesthesia will be performed in an ambulatory, day-stay or emergency-room setting.

Service Requirements
As for Level 1 plus:
- Medical, nursing or oral health practitioner services are provided on-site or in close enough proximity for a rapid response
- At least one procedure room
- Requires access to off-site Level 4 children’s intensive care services
- Isolation capacity
- Formal consultative link with paediatrician
- May have accommodation for parents and carers
- Access to Aboriginal and Torres Strait Islander Health Practitioner

Minimum Staffing Requirement
As for Level 1 plus:
- RMPs with demonstrated competency in dosage and application of local anaesthesia for children
- Access to oral health practitioners
- May have Nurse Practitioners (NPs) with relevant advanced training
- Access to an Aboriginal Liaison Officer

Minimum Clinical Support Service Requirements

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Level 3

Service Description
A Level 3 service provides services at Level 2 plus it performs surgery on low anaesthetic risk paediatric patients undergoing Surgical Complexity II (SCII)* and Surgical Complexity III (SCIII)* procedures. This level of service provides inpatient and outpatient care by a paediatrician (may be resident, on-call or visiting).

Service Requirements
As for Level 2 plus:
- Access to a monitored bed for emergencies with the availability of paediatric surgical close observation care area/s and paediatric nurses
- Emergency services may be provided at any time, as required
- Isolation capacity in separate rooms
Service: Paediatrics

- Formal link to community child and family health services
- Specialist services/functions may be provided on a visiting basis
- Accommodation for patients and carers
- On-site children’s anaesthetics, medication and perioperative services

Minimum Staffing Requirement

As for Level 2 plus:

- Access to registered Medical Specialist with credentials in paediatric surgical specialties to provide advice on paediatric surgical patients (may be via telehealth/teleconference)
- RMP with the credentials to perform required procedures
- RMP to remain on-site until the patient has recovered from anaesthesia and meets the post-anaesthetic care service discharge criteria, as per facility guidelines and Australian and New Zealand College of Anaesthetists (ANZCA)
- RMP available 24 hours or hours of operation for day hospitals
- Paediatrician for inpatient and outpatient consultations (may be resident, on-call or visiting)
- A dedicated nurse manager in charge of surgical services
- A Senior Registered Nurse (SRN) in charge of each shift
- Access to rostered on-call staff
- May have access to allied health professionals and appropriately trained support staff
- Access to a registered dental practitioner and trained technical assistants

Minimum Clinical Support Service Requirements

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Level 4

Service Description

A Level 4 service provides services at Level 3 plus it performs surgery on high anaesthetic risk paediatric patients undergoing SCII procedures, medium anaesthetic risk paediatric patients undergoing SCII procedures and low to medium anaesthetic risk paediatric patients undergoing SCIII procedures. This level of service may also have a dedicated paediatric ward, including a short stay area.

Service Requirements

As for Level 3 plus:

- May have a designated paediatric ward, including short stay
- Surgical and/or specialty (paediatric) area is available
- Designated adolescent area
- Where facilities provide surgical services for term infants and well, ex-premature infants (>52 weeks PCA), registered medical specialists providing anaesthesia or surgery must have recognised training, currency of practice and credentials in paediatric subspecialisation,
- Must have full facilities for providing extended apnoea monitoring
- Medical services are provided on-site or in close enough proximity for a rapid response at all times
- Clinical services are provided 24 hours
- Non-inpatient family and child health services

Minimum Staffing Requirement

As for Level 3 plus:

- Access to registered Medical Specialist with credentials in paediatrics
- Access to a range of registered Medical Specialists
- Access to staff competent in providing paediatric life support
- May have resident or registered Medical Officer rotations from Level 5 or 6 facility
- Nursing services are available on-site 24 hours
- Dedicated operating theatre staff are available 24 hours
- Recognised allied health professionals and appropriately trained support staff
- Trained staff to assist with transfer of patients and positioning of equipment
- May have access to paediatric-specific allied health professionals (including access to audiology
Service: Paediatrics
services and others as required)

Minimum Clinical Support Service Requirements

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Level 5

Service Description
A Level 5 service provides services at Level 4 plus it performs surgery on high anaesthetic risk paediatric patients undergoing SCI to SCIII procedures. This level of service also provides inpatient and outpatient care by a resident paediatrician.

Service Requirements
As for Level 4 plus:
- Medical services are available on-site
- Specialist nursing, medical and surgical services are available on-site
- May have specialist endoscopy, bronchoscopy, gastroscopy and colonoscopy services available (either on-site or via visiting specialists)
- Capacity to provide close observation nursing care on-site
- May have children’s specialist ward areas on-site
- Access to Level 5 neonatal service (NICU)
- Access to a dedicated room for dental surgery or procedures
- May have dedicated endoscopy operating/procedure room/s, and day surgery facilities
- May provide a Territory-wide outreach service
- On-site medical imaging, nuclear medicine and pathology
- Network referral role and may provide a Territory-wide referral role
- May provide an undergraduate and postgraduate teaching role
- May participate in research
- 24 hour access to teleconferencing and videoconferencing facilities on-site
- On-site School Room with qualified teachers for long stay paediatric patients to access where applicable

Minimum Staffing Requirement
As for Level 4 plus:
- Access (can be via telehealth/teleconference) to appropriately credentialed registered Medical Specialists (paediatric specialist surgeons) who assist and guide assessment, treatment, case management and case review
- Registered Medical Specialists with credentials in anaesthesia and surgery of multiple specialties
- 24 hour access to a registered Medical Specialist with credentials in surgery
- RMPs available 24 hours
- Resident Paediatrician
- Registrar or registered Medical Officer
- Registered Nurses (RNs) with defined surgical nursing experience
- Clinical services are provided on-site 24 hours with combinations of medical, nursing, allied health, administrative and other staff on-site 24 hours
- Dedicated on-site operating theatre staff where emergency surgery is provided
- Access to specialised allied health services including rostered allied health professionals where required and recreational therapy
- On-site adolescent nurse consultant
- May provide 24 hour child protection services with consultant paediatrician and social worker

Minimum Clinical Support Service Requirements

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Service: Paediatrics

Level 6

Service Description
A Level 6 service provides services at Level 5 plus it manages children with the highest level of medical risk and surgical complexity in specified areas of expertise. It is a specialist, Territory-wide and, where applicable, interstate service. This level of service cares for children of all ages and will provide medical care and surgical care for complex surgical paediatric patients who require the input of multiple paediatric subspecialists and/or prolonged intensive care support that is not available in a Level 5 service.

Service Requirements
As for Level 5 plus:
- Procedures performed on patients with high-risk potential for intra and post-operative complications
- Specialist endoscopy, bronchoscopy, gastroscopy and colonoscopy services available on-site
- On-site children’s intensive care unit
- On-site Level 5 neonatal service (NICU)
- Children’s specialist ward areas
- Collaboration and coordination with maternal–foetal health diagnostics, interventions and case management planning on a local and Territory-wide basis
- Extensive range of specialist services/functions provided on a visiting basis
- A Territory-wide provider of outreach services
- Provider of education for many specialty areas
- Has a Territory-wide referral role and may provide an interstate referral role
- Undergraduate and postgraduate teaching role
- Active research role

Minimum Staffing Requirement
As for Level 5 plus:
- One or more RMPs available 24 hours to support patients in the post-operative stage
- 24 hours access to registered Medical Specialist with credentials in surgery/anaesthetics, with specialty in paediatrics
- Registered Medical Specialists from a range of paediatric specialties with responsibility for the training and upskilling of medical, nursing and technician staff
- 24 hour on-site paediatrician
- May have provision for Nurse Practitioner’s (NPs) role within specialties
- Recognised paediatric allied health professionals with experience in surgical healthcare services

Minimum Clinical Support Service Requirements

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Reference Documents
Health Practitioners Law - NT & Commonwealth
Australian and New Zealand College of Anaesthetists. Professional Standards
Australian College of Operating Room Nurses. Standards, nursing roles, guidelines and position statements
Australian Society of Anaesthetic and Paramedical Officers. Standards and guidelines
Royal Australasian College of Physicians. National Standards for the Care of Children and Adolescents in Health Services
NT Department of Child Protection

Notes
- SCI procedures include those performed in ambulatory/office settings, requiring local anaesthetic and generally does not require support services or post-operative stay/treatment
- SCII procedures usually include ambulatory, same-day or emergency department surgeries, requiring local anaesthesia, peripheral nerve block and possibly some sedation
- SCIII procedures can be for same-day, overnight or extended-stay cases and usually require general anaesthesia and/or a regional anaesthesia
Integrated Community and Hospital Service

Integrated Community and Hospital Service is delivered along a service continuum in both a hospital and community setting and by definition generally includes a broad range of services comprised of adolescent health, adult and child/adolescent mental health (inpatient care and community care), older adult mental health (inpatient care and community care), child protection services, drug and alcohol services, geriatrics, health promotion, palliative care, rehabilitation and sexual assault services.

For the purposes of this Framework, Integrated Community and Hospital Service comprises: Mental Health and Rehabilitation.
Mental Health Service

Mental Health is a specialist area of health care that promotes optimal quality of life for people with mental disorders or mental health problems. Mental health services are concerned with the assessment, diagnosis, monitoring and treatment of people who have a mental illness or disorder.

For the purposes of this Framework, Mental Health includes only adult mental health acute inpatient services with higher role levels of service able to accommodate adolescents and older persons only where clinically and developmentally appropriate and in line with policy and procedural documentation of the adult service.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
**Service: Mental Health Services**

**Level 1**

**Service Description**
No Level 1 service. Refer to higher level.

**Level 2**

**Service Description**
A Level 2 service is capable of providing limited short-term or intermittent inpatient mental health care to low-risk_complexity voluntary adult mental health patients. This service provides general healthcare and some limited mental health care 24 hours a day. This level of service is delivered predominantly by a team of general health clinicians within a facility that does not have dedicated on-site mental health staff or mental health beds. Medical services are provided on-site or in close proximity to provide a rapid response at all times.

**Service Requirements**
- Care to low-risk_complexity voluntary mental health patients
- Identification, initial acute assessment, brief intervention and monitoring of uncomplicated mental health problems
- Medication management
- Forward referrals for expert assessment/diagnosis/intervention
- Mental health assessments/interventions conducted in consultation with a mental health clinician
- Daily care coordinated by a registered medical practitioner
- Business hours access to allied health professionals

**Minimum Staffing Requirements**
- Team of general health clinicians appropriate for limited mental health care
- Access to an Aboriginal and Torres Strait Islander Health Practitioner

**Minimum Clinical Support Service Requirements**

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**Level 3**

**Service Description**
A Level 3 service provides services at Level 2 plus it has the capability of providing short to medium term or intermittent inpatient mental health care to low risk_complexity voluntary adult mental health patients. This service provides general healthcare and mental health care 24 hours a day. This level service is delivered predominantly by on-site general and mental health professionals within a general medical facility that may have a limited number of dedicated mental health beds or may operate as a mental health special care suite/area.

**Service Requirements**
As for Level 2 plus:
- Identification, acute assessment, brief intervention and monitoring of mental health problems (that may be associated with simple comorbidities and/or resistance to treatment)
- Mental health assessments, interventions and monitoring conducted by general and mental health clinicians of this service
- Capacity to cope with acutely unwell pending transfer
- Limited assessment and treatment for severe and persistent mental health conditions
- Development of a comprehensive individual mental health recovery plan within 1 week of assessment
- A limited range of primary (e.g. stress management) and secondary (e.g. weight management) prevention services
- Psychoeducation (including information about available mental health services, mental health problems and illnesses, indicated treatment options and support services)
Service: Mental Health Services

- May provide mental health outpatient service

Minimum Staffing Requirements

As for Level 2 plus:

- Business hours access to community or hospital based allied health professionals with training/experience in mental health.
- Access to a Registered Nurse (RN) (supporting the nurse in charge of the shift) with mental health experience and/or postgraduate qualifications in mental health.
- Patient admitted by/under a registered Medical Specialist with credentials in psychiatry.
- Daily care is coordinated by a registered Medical Specialist with credentials in psychiatry and/or a Registered Medical Practitioner (RMP) who has access to a registered Medical Specialist with credentials in psychiatry to assist and guide assessment, treatment, case management and case review (may be via telehealth)
- Limited access to mental health multidisciplinary team
- May have access to an Aboriginal and Torres Strait Islander Liaison Officer

Minimum Clinical Support Service Requirements

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Level 4

Service Description

A Level 4 service provides services at Level 3 plus it has the capability of providing short to medium term and intermittent inpatient mental health care to low and moderate risk/complexity voluntary adult mental health patients. Adolescent patients older than 14 years and older persons (aged 65 and older) may access this service where clinically and developmentally appropriate, and in line with policy and procedural documentation of the adult service. This service provides mental health care 24 hours a day. This level service is delivered predominantly by mental health professionals within a dedicated mental health hospital or a general hospital that has a dedicated mental health acute inpatient unit.

Service Requirements

As for Level 3 plus:

- Care to low and moderate risk/complexity voluntary mental health patients
- Identification, ongoing assessment, monitoring and interventions of mental health problems (that may be associated with comorbidities and/or indicators of treatment resistance)
- Provides an outpatient mental health service
- Integrated approach to the identification, assessment and intervention of any co-occurring substance-use disorders
- Extensive clinical data collection to inform assessment/diagnosis/intervention/recovery
- A range of primary (e.g. stress management) and secondary (e.g. weight management) prevention services
- Documented processes outlining supervisory requirements to ensure the safety of adolescents admitted to the unit
- Documented processes with a Level 5 or 6 child and youth acute inpatient mental health service
- Capacity for undergraduate and postgraduate teaching role

Minimum Staffing Requirements

As for Level 3 plus:

- Mental health assessments, interventions and monitoring conducted by a team of mental health professionals
- Mental health assessments/interventions for adolescents conducted in consultation with a child and youth mental health clinician where clinically indicated, and associated with a documented review process
- 24 hours access to a registered Medical Specialist with credentials in psychiatry for assessment, treatment, case management and case review.
- 24 hours access to a registered Medical Specialist with credentials in psychiatry and a certificate in child and adolescent psychiatry (or equivalent) to assist and guide assessment, treatment, case...
Service: Mental Health Services

- Management and case review (may be via telehealth/teleconference).
- Business hours access to community or hospital based nursing staff with training/experience in child and youth mental health.
- Business hours access to community or hospital based allied health staff with training/experience in child and youth mental health.
- Access to some on-site and/or visiting specialties in health/mental health.
- Access to an Aboriginal and Torres Strait Islander Liaison Officer.

Minimum Clinical Support Service Requirements

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Level 5

Service Description
A Level 5 service provides services at Level 4 plus it has the capability of providing short to medium term and intermittent inpatient mental health care to low, moderate and high risk/complexity voluntary and involuntary adult mental health patients. This service provides mental health care 24 hours a day. This level service is delivered predominantly by a comprehensive, multidisciplinary team of mental health professionals (psychiatrist, nurses, allied health professionals) within a dedicated mental health hospital or a general hospital that has a dedicated mental health acute inpatient unit.

Service Requirements
As for Level 4 plus:
- Care to low, moderate and high risk/complexity voluntary and involuntary mental health patients
- May provide specialist services such as a mother and baby service and forensic mental health service
- May provide a specialised Aboriginal mental health service
- An extensive range of primary (e.g. stress management), secondary (e.g. weight management) and tertiary (e.g. psychosis treatment maintenance) prevention services
- Targeted clinical programs for individuals/groups/families (e.g. group therapy for patients with Bipolar Affective Disorder)
- Is an authorised mental health service under the Mental Health Act 2000
- May provide a range of additional clinical programs and service components, such as telehealth services or a day program.
- Capacity to participate in research
- May have undergraduate and postgraduate teaching role
- Network referral role

Minimum Staffing Requirements
As for Level 4 plus:
- Comprehensive multidisciplinary team routinely available on site
- Mental health assessments, interventions and monitoring conducted by a comprehensive multidisciplinary team of mental health professionals
- Access to allied health professionals (relevant postgraduate qualifications desirable)
- Access to psychology, social work, occupational therapy, speech pathology and dietetic services
- Access to dedicated pharmacy services for mental health

Minimum Clinical Support Service Requirements

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Level 6

Service Description
A Level 6 service provides services at Level 5 plus it has the capability of providing short to medium term and intermittent inpatient mental health care to voluntary and involuntary adult mental health
Service: Mental Health Services

patients who present with the highest level of risk and complexity. The patient group accessing this level of service may be a targeted population with special care needs. They may demonstrate the most extreme comorbidities and/or indicators of treatment resistance. This service is a highly specialised and/or statewide inpatient service that is delivered from a large general hospital that incorporates a dedicated mental health unit. This service demonstrates specialist expertise in the delivery of mental health services to a patient group that cannot be safely and effectively cared for in any other level of acute inpatient mental health service. This service provides mental health care 24 hours a day. This level service is delivered by a highly specialised, comprehensive, multidisciplinary team of mental health professionals (medical practitioners, psychiatrists, nurses, allied health and other specialists). Medical services are provided on-site or are in close proximity to provide a rapid response at all times.

Service Requirements
As for Level 5 plus:

• Care to voluntary and involuntary mental health patients presenting with the highest level of risk and complexity
• Provides a specialist service such as a mother and baby service and forensic mental health service
• Provides a specialised Aboriginal mental health service
• Extensive clinical data collection to inform assessment/diagnosis/intervention/recovery and broader service delivery in all levels of service
• Territory wide clinical forums to assist the dissemination of clinical expertise
• Psychoeducation for patients, families/carers and groups (including information about available mental health services, mental health problems and illnesses, indicated treatment options and support services)
• Separate clinical services for families/carers, if required
• Service is the Hub facility in an integrated mental health service and is part of a service network that also includes a high level adult ambulatory mental health service
• Provides specialist consultation-liaison to other health and non-health services/agencies for the population
• May provide an extensive range of additional clinical programs and service components, such as an outreach service, telehealth services or a day program.
• Extended hours access to community or hospital based allied health professionals with relevant specialist mental health training/experience.
• A strong academic and research focus
• May have Territory-wide or interstate referral role

Minimum Staffing Requirements
As for Level 5

Minimum Clinical Support Service Requirements

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Reference Documents
Health Practitioners Law - NT & Commonwealth
National Standards for Mental Health Services 2010
Australian Government Dept of Health & Ageing-priorities and policies for the provision of mental health services
Mental Health Act 2000
Rehabilitation Service

Rehabilitation Service provides care for children and adults with a range of functional impairments arising from acute or sub-acute conditions, accidents or congenital abnormalities. Rehabilitation aims to improve functional status by reducing impairment, activity limitation and participation restriction. Services provided in this category range from outpatient services or those delivered in a community setting, to inpatient rehabilitation services with access to dedicated multidisciplinary teams for those with complex care needs.

Service networks and interfaces are of paramount importance in delivering rehabilitation services as is access to an appropriate mix of allied health professionals (depending on the role level of service being delivered).

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
Service: Rehabilitation

Level 1

Service Description
A Level 1 service provides ambulatory care services for clients who are medically stable and live in the community. Care is delivered on-site, and/or remotely in partnership with a higher level service. This level of service generally provides care for clients who may have been referred, transferred or returned from a higher level service to continue treatment in their local environment following a sub-acute or acute episode during which more complex care was required.

Minimum Staffing Requirement
- Business hours access to a Registered Medical Practitioner (RMP)
- Access to Registered Nurses (RNs)
- Access to child health and school nurses within one week
- Visiting access to physiotherapy and occupational therapy
- Access to Aboriginal and Torres Strait Islander Health Practitioners

Minimum Clinical Support Service Requirements

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Level 2

Service Description
A Level 2 service provides services at Level 1 plus it provides ambulatory care to clients, and has the capacity to deliver limited multidisciplinary interventions. This level of service may provide inpatient care. Rehabilitation care required is of low complexity. Care may be provided in home or community settings and/or in healthcare facilities, including multipurpose health centres if available.

Minimum Staffing Requirement
As for Level 1 plus:
- May have access to a RMP who coordinates patient care and may have advanced rural generalist training
- 24 hours access to a RN
- Business hours access to a Clinical Nurse Consultant (CNC)

Minimum Clinical Support Service Requirements

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Level 3

Service Description
A Level 3 service provides services at Level 2 plus it provides ambulatory and/or inpatient care to low-risk clients whose rehabilitation needs are not complex. Ambulatory care will include outpatient specialist clinics for ongoing treatment or review; this may be a visiting arrangement. Clients may include those in acute or post-acute phases.

Service Requirements
As for Level 2 plus:
- A coordinated and documented rehabilitation patient care plan and treatment program, formulated through multidisciplinary consultation is in place
- Ability to have multi-disciplinary assessments by a physiotherapist, occupational therapist and social worker, if required

Minimum Staffing Requirement
As for Level 2 plus:
Service: Rehabilitation

- 24 hours access to a RMP, with credentials in general surgery, internal medicine or paediatrics, where relevant
- Inpatient units have a RMP (may be a visiting arrangement), available during business hours
- Access to psychiatric consultation liaison team available within one week
- Business hours access to rehabilitation physician and/or geriatrician with skills in rehabilitation
- Local access to allied health professionals, including occupational therapist, speech pathologist, dietitian, physiotherapist, social worker/health practitioner and therapy assistant with competencies in case management and counselling
- Access to a psychogeriatric team
- Visiting access to an audiologist, orthotist, podiatrist, prosthetist and psychologist within one week

Minimum Clinical Support Service Requirements

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Level 4

Service Description
A Level 4 service provides services at Level 3 plus it provides ambulatory and/or inpatient rehabilitation services to patients in acute or post-acute phases with moderately complex care needs. Ambulatory services are provided in general rehabilitation clinics and through multidisciplinary day therapy programs. Inpatient care is provided within a designated unit.

Service Requirements
As for Level 3 plus:
- Inpatient overnight facilities submit data to the Australasian Rehabilitation Outcomes Centre
- Affiliations with local, state and/or national professional associations
- May have a network referral role
- May have a teaching role
- May have a research role

Minimum Staffing Requirement
As for Level 3 plus:
- A RMP in advanced training or a registered Medical Specialist, available 24 hours
- A RMP or an advanced or basic trainee in rehabilitation or geriatric medicine, available during business hours
- Access to a registered Medical Specialist with credentials in rehabilitation and/or geriatric medicine
- 24 hours access to registered Medical Specialists with credentials in general surgery and orthopaedic surgery
- On-site access to a range of allied health professionals to reflect the casemix of the service (physiotherapist, occupational therapist, speech pathologist, dietitian, social worker/health practitioner, audiologist, orthotist, podiatrist, prosthetist, psychologist and therapy assistant)
- Access to an acute pain service within one week
- Business hours access to a rehabilitation engineer

Minimum Clinical Support Service Requirements

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Level 5

Service Description
A Level 5 service provides services at Level 4 plus it provides specialty ambulatory as well as inpatient rehabilitation services. Ambulatory services may include specialty rehabilitation outpatient clinics and multidisciplinary day-only therapy programs. Inpatient care is provided in designated specialty units for clients with complex care needs. Where space and equipment in the health setting permits, the
Service: Rehabilitation

Rehabilitation services provided can extend to activities of daily living (ADL) and group programs. This level of service may also provide a gymnasium for rehabilitation sessions and hydrotherapy programs if a hydrotherapy pool is available (may be off-site).

Service Requirements

As for Level 4 plus:
- May provide ADL and group therapy programs, where space and equipment permits
- May provide hydrotherapy services
- May accept interstate referrals
- Staff engaged with local, state and/or national professional associations
- May provide leisure therapy and/or diversional therapy programs
- Has a network referral role

Minimum Staffing Requirements

As for Level 4 plus:
- Registered Medical Specialists (2 minimum), with credentials in rehabilitation and geriatric medicine within the service, available 24 hours
- Access to registered Medical Specialists with credentials in cardiology, neurology, neuropsychology, endocrinology, gastroenterology and rheumatology within one week
- Access to registered Medical Specialists with credentials in neurosurgery, vascular surgery and urology within one week
- Visiting access to paediatric rehabilitation specialists
- Dedicated on-site allied health rehabilitation team that reflects the casemix of the service (as per Level 4, plus an onsite physiotherapist available 5 days a week during business hours, and access to a social worker, 5 days a week during business hours)

Minimum Clinical Support Service Requirements

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Level 6

Service Description

A Level 6 service provides services at Level 5 plus it provides specialist services for clients with care needs of the highest complexity. Care is provided in designated unit/s with dedicated multidisciplinary teams. Ambulatory services include complex multidisciplinary day-only treatment, specialist outpatient clinics and specialist community outreach programs. This level of service should provide ADL and group programs. It should also provide a gymnasium for rehabilitation sessions and have access to a hydrotherapy pool for hydrotherapy programs.

Service Requirements

As for Level 5 plus:
- A range of diagnostic services relating to the individual specialty available on-site
- Networked with hydrotherapy and work conditioning programs
- Designated daily living and therapy areas for ADL and group programs
- Specialist consultancy services, and specialty outreach services are provided
- Access to a pool of specialty equipment pertaining to specialty areas
- Has a step down unit
- Has a teaching role
- Has a research role
- Territory wide referral role for specialty areas such as a spinal injury unit
- Has an interstate referral role

Minimum Staffing Requirements

As for Level 5 plus:
- A registered Medical Specialist with credentials in the practice of rehabilitation medicine pertaining to the specialty area
- A dedicated Nurse Practitioner is desirable
Service: Rehabilitation

- Access to a paediatric rehabilitation specialists
- An extensive range of allied health professionals available on-site, with demonstrated specialist-level knowledge and skills pertaining to casemix
- Onsite physiotherapist available 7 days a week during business hours, and access to a social worker, 7 days a week during business hours
- A rehabilitation engineer, available within 1 week

Minimum Clinical Support Service Requirements

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Reference Documents

Health Practitioners Law - NT & Commonwealth
Australasian Faculty of Rehabilitation Medicine. Standards 2005
Australasian Rehabilitation Outcomes Centre
Rehabilitation Consultative Committee – Guidelines for Allied Health
Clinical Support Services

Clinical Support Services are those services which are essential to the safe, appropriate and quality provision of Core Services.

For the purposes of this Framework, Clinical Support Services comprise: the Allied Health Service, Anaesthetics Service, Diagnostic Imaging and Nuclear Medicine Service, Intensive Care Unit (ICU) / High Dependency Unit (HDU), Pathology Service, and Pharmacy Service. For operating suite/theatre requirements see the General Surgery Service description.
Allied Health Service

Allied Health Service comprises a range of professionals and can be delivered in a community health or clinic setting, as a support service to a range of hospital based services, or as a dedicated department within a hospital facility. Allied health professionals deal with the delivery of health or related services involving the prevention, identification, evaluation and management of a range of diseases and disorders.

For the purposes of this Framework, allied health professionals generally comprise but are not limited to: Aboriginal and Torres Strait Islander Health Practitioners, Aboriginal and Torres Strait Islander Liaison Officers, Audiologists, Dieticians, Exercise Physiologists, Occupational Therapists, Physiotherapists, Podiatrists, Psychologists, Social Workers, Speech Pathologists, and a range of specialist allied health professionals.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
### Level 1

**Service Description**
A Level 1 service provides access to a limited range of allied health services (may be via visiting professionals or accessed locally). Patients are seen by allied health specialists in business hours. Services may be provided in patients’ homes or as an outpatient facility from small health facilities.

**Service Requirements**
- Intervention and treatment for musculoskeletal conditions (e.g. sprains, contusions etc.)
- Support and treatment for mobility problems and mobility requirements
- Psychosocial assessments
- Access to pharmacy and diagnostic imaging services (offsite)

**Minimum Staffing Requirement**
- Access to a physiotherapist and social worker
- Access to Aboriginal and Torres Strait Islander Health Practitioner

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### Level 2

**Service Description**
A Level 2 service provides services at Level 1 plus it provides access to a range of allied health services (may be via visiting specialists or accessed locally). Patients may be seen as inpatients during business hours within small hospitals.

**Service Requirements**
As for Level 1 plus:
- Ability to stabilise and treat prior to transfer
- Provides group therapy treatment
- Management and education for patients post-fall
- May provide assistance with splints, bracing and plastering
- Functional assessment of patients by occupational therapist
- Provision and/or advice regarding equipment requirements
- Crisis intervention and counselling in major trauma and assault
- Provision of education, information and referral to community based regional and remote services

**Minimum Staffing Requirement**
As for Level 1 plus:
- Access to a physiotherapist, occupational therapist and social worker
- May have access to an allied health assistant/therapy assistant
- 24 hour access to on-call Registered Medical Practitioner

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### Level 3

**Service Description**
A Level 3 service provides services at Level 2 plus it provides local access to a range of allied health services. The service has the capacity to see inpatients and outpatients and this ideally will occur in a dedicated area of the hospital.
Service: Allied Health Services

Service Requirements
As for Level 2 plus:
- Cognitive and neurological assessments (e.g. head injury, confusion)
- Liaison with other hospital and/or community based services (e.g. drug and alcohol, mental health)
- Ability to treat patients who are malnourished or who have eating disorders
- Ability to treat patients with feeding or swallowing problems and communication difficulties
- Lower limb assessment
- Management and care for patients with diabetics' feet
- Provision of coordinated access to disability, aged care, and palliative care services within the network
- Formal quality improvement program

Minimum Staffing Requirement
As for Level 2 plus:
- Local access to an Aboriginal and Torres Strait Islander Health Practitioner, physiotherapist, occupational therapist, social worker, psychologist, speech pathologist, podiatrist, and dietician
- Local access to an allied health assistant/therapy assistant

Minimum Clinical Support Service Requirements

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Level 4

Service Description
A Level 4 service provides services at Level 3 plus it provides on-site access to a range of allied health services. After-hours access to allied health staff may be available. More specialised allied health services may be offered by visiting specialists. The service will provide an outreach service to lower level services where required. A level 4 service will have a dedicated area within the hospital to see patients and may have a dedicated gymnasium and/or group therapy area.

Service Requirements
As for Level 3 plus:
- Ability to treat patients who have undergone serious injury and/or trauma (e.g. motor vehicle accidents, stroke)
- Provides medication reviews
- Provides coordinated and networked access to oral health screening and treatment
- Provides coordinated and networked access to optometry services
- Provision of education, information and referral to lower level services within the network
- May provide group therapy
- May provide an outreach service

Minimum Staffing Requirement
As for Level 3 plus:
- On-site access to an Aboriginal and Torres Strait Islander Liaison Officer, physiotherapist, occupational therapist, social worker, psychologist, speech pathologist, dietician and podiatrist, during business hours 5 days/week
- Registered Nursing staff dedicated to the Allied Health Team
- On-site access to an allied health assistant/therapy assistant
- Visiting specialists as required for the casemix of the facility (e.g. audiologist, drug and alcohol counsellor, diabetes educator, exercise physiologist, genetic counsellor, orthotist, prosthetist, diversional therapist, music therapist, and neurophysiologist)
- 24 hour access to onsite Registered Medical Practitioner
- Dedicated Allied Health Service Director (could be a Director of Nursing position)
Service: Allied Health Services

Minimum Clinical Support Service Requirements

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Level 5

Service Description
A Level 5 service provides services at Level 4 plus it provides on-site access to a wide-range of allied health services. Specialists are on-call 24 hours for emergency presentations (where necessary). A level 5 service has the ability to manage and treat patients presenting with serious, complex problems including those requiring immediate cardiorespiratory physiotherapy. This level of service provides a designated space for group therapy and provides an outreach service to lower levels. This level of service also has an education/teaching role.

Service Requirements
As for Level 4 plus:
- Provides complex discharge planning
- Provides a network referral and outreach role
- Provides education/training
- Provides cardiac rehab

Minimum Staffing Requirement
As for Level 4 plus:
- On-site access to an Aboriginal and Torres Strait Islander Liaison Officer, physiotherapist, occupational therapist, social worker, psychologist, speech pathologist, dietician, podiatrist and audiologist, during business hours 7 days/week
- On-site access to an allied health assistant/therapy assistant
- 24 hour on-call service for emergency presentations
- In addition to providing an overarching Allied Health Service, dedicated allied health teams may be allocated specifically to Emergency Department, Mental Health and Rehabilitation Services within the hospital facility.

Minimum Clinical Support Service Requirements

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Level 6

Service Description
A Level 6 service provides services at Level 5 plus it has the ability to treat and manage patients presenting with the most serious, complex, urgent problems. This level of service is usually provided from larger metropolitan hospitals in conjunction with the highest level of medical specialists. Allied health specialists are on-site 24 hours.

Service Requirements
As for Level 5 plus:
- Ability to provide multidisciplinary team-based care for patients with multiple comorbidities and complex presentations
- Provides a Territory wide or interstate referral and outreach role
- Provides undergraduate and postgraduate education/training
- Has active research role

Minimum Staffing Requirement
As for Level 5 plus:
A Level 6 service has a dedicated Allied Health skill-mix that is appropriately aligned with the facility’s overall casemix, and the ability to mobilise dedicated Allied Health teams to support Emergency
**Service: Allied Health Services**

Department (including for major trauma, burns, sexual assault, and child protection, plus complex discharge planning), Mental Health, Rehabilitation Services, Diabetes Services, Cardiology Services, Paediatrics, Cancer Services, and other service areas as required.

**Minimum Clinical Support Service Requirements**

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**Reference Documents**

Health Practitioners Law - NT & Commonwealth
Anaesthetics Service

Anaesthetics Service is a hospital-wide service provided by a multidisciplinary anaesthetic and anaesthetic-assistant workforce with a range of skills in providing procedural and operative anaesthesia. Anaesthetics may be delivered by appropriately credentialed Registered Medical Practitioners in community health or health centre settings, through to specialist anaesthetists delivering services in large tertiary referral hospitals.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
### Service: Anaesthetics

#### Level 1

**Service Description**
No Level 1 service. Refer to higher level.

#### Level 2

**Service Description**
A Level 2 service generally provides analgesia/minimal sedation performed by a visiting medical officer.

**Minimum Staffing Requirements**
- May have specialist anaesthetist appointed for consultation
- Access to Aboriginal and Torres Strait Islander Health Practitioner

#### Level 3

**Service Description**
A Level 3 service generally provides all low to medium-risk local anaesthetics, neuraxial block and regional block for low to medium anaesthetic risk patients undergoing Surgical Complexity I (SCI) and Surgical Complexity II (SCII) procedures and low to medium anaesthetic risk patients undergoing Surgical Complexity III (SCIII) and Surgical Complexity IV (SCIV) procedures. Anaesthesia should be administered by a General Practitioner Anaesthetist (GPA) with anaesthetic credentialing.

**Service Requirements**
As for Level 2 plus:
- Access to Level 3 intensive care services (may be off-site)
- At least one procedure room is provided and operating room anaesthetic staff support available
- On-site dedicated recovery area
- Elective anaesthetic services are generally provided during business hours for regularly scheduled lists
- Emergency anaesthetic services may be available
- On-site medication

**Minimum Staffing Requirements**
As for Level 2 plus:
- A GPA with anaesthetic credentialing available 24 hours
- May have a visiting specialist anaesthetist (for consultation and to provide service for medium risk patients if needed)

**Minimum Clinical Support Service Requirements**

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#### Level 4

**Service Description**
A Level 4 service generally provides all Level 3 services plus general anaesthetics on low to high anaesthetic risk patients undergoing SCI to SCIII procedures and low anaesthetic risk patients undergoing Surgical Complexity V (SCV) procedures. Anaesthesia is usually administered by a specialist anaesthetist.

**Service Requirements**
As for Level 3 plus:
- 24 hour access to perioperative services where emergency services are provided
Service: Anaesthetics

- On-site Level 4 intensive care service
- May provide emergency anaesthetic services, interventional services and outreach services
- Where services are provided 24 hours, GPAs with anaesthetic credentialing must be available to respond in a rapid manner
- May provide education/training

Minimum Staffing Requirements
As for Level 3 plus:

- Specialist anaesthetist appointed for consultation and to provide service for moderate risk patients
- Specific operating room anaesthetic staff support available on-site
- 24 hour access to specialist anaesthetist cover for low, medium and high risk patients

Minimum Clinical Support Service Requirements

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Level 5

Service Description
A Level 5 service generally provides all Level 4 services plus general anaesthetics on low to high anaesthetic risk patients undergoing SCIV and SCV procedures. The service manages procedures that have a moderate to high level of complexity and risk, with some patients who have comorbidities and risk of intra- and post-operative complications. Anaesthesia is usually administered by a specialist anaesthetist with support from an anaesthetic registrar and GPAs.

Service Requirements
As for Level 4 plus:

- Provides emergency anaesthetic services, interventional services and outreach services
- May provide some specialist anaesthetic services/functions on a visiting basis
- Provides outreach service
- Provides acute and chronic pain / palliative pain services
- Network referral role
- May provide a Territory-wide consultation and liaison service
- Usually provides telehealth services and may lead the state in provision of these services
- Active research activities and teaching of graduates and undergraduates role
- Blood bank
- May have a research role

Minimum Staffing Requirements
As for Level 4 plus:

- Specialist anaesthetist on 24 hour roster for low, moderate and high risk patients
- Anaesthetic registrar on site 24 hours
- 24 hour access to one or more GPAs with training and credentialing in anaesthetics
- 24 hour access to allied health services including ultrasound, x-ray radiography, pathology and pharmacy services

Minimum Clinical Support Service Requirements

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Level 6

Service Description
A Level 6 service manages the highest level of anaesthetic risk in a range of specialties in conjunction with the most complex surgical and medical presentations that have a high level of complexity, magnitude or risk to patients with an extensive range of comorbidities requiring specialist staff.
## Service: Anaesthetics

### Service Requirements
As for Level 5 plus:
- Procedural/operative anaesthesia performed on patients with high potential for intra and post-operative complications
- The expectation that many of the specialties of anaesthetics (and surgery) will be available with their individual staffing, equipment and processes identified and resourced
- Has a Territory-wide or interstate referral role
- Provides a Territory-wide consultation and liaison service
- Provides telehealth/teleconference service
- Provides undergraduate and postgraduate teaching and has active research role

### Minimum Staffing Requirements
As for Level 5

### Minimum Clinical Support Service Requirements

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### Reference Documents
- Health Practitioners Law - NT & Commonwealth
- Royal Australasian College of Surgeons. The Australasian Trauma Verification Program Manual - Sets forth standards for trauma service requirements (e.g. anaesthetist staffing and clinical support services required depending on the level of the trauma service)
  - Level I Trauma Service requires role delineation level 6 anaesthetics
  - Level II Trauma Service requires role delineation level 5/6 anaesthetics
  - Level III Trauma Service requires 24 hour availability of on-duty anaesthetist
- Australian and New Zealand College of Anaesthetists. Professional Standards
- Australian Council on Healthcare Standards – Clinical Indicators for Anaesthesia

### Notes
SCI procedures include those performed in ambulatory/office settings, requiring local anaesthetic and generally does not require support services or post-operative stay/treatment (E.g. local anaesthetic for removal of lesions)

SCII procedures usually include ambulatory, same-day or emergency department surgeries, requiring local anaesthesia, peripheral nerve block and possibly some sedation (E.g. local anaesthetic and/or sedation for excision of lesions).

SCIII procedures can be for same-day, overnight or extended-stay cases and usually require general anaesthesia and/or a regional, epidural or spinal block (E.g. general anaesthesia for inguinal hernia)

SCIV procedures involve major surgical procedures with low to medium anaesthetic risk which have the potential for perioperative complications (E.g. general anaesthesia for abdominal surgery)

SCV procedures include the most complex and major surgical procedures with high anaesthetic risk which carry the highest potential for intra- and post-operative complications (E.g. general anaesthesia for any major or complex surgery)
Diagnostic Imaging and Nuclear Medicine Service

Diagnostic Imaging involves the use of conventional and sophisticated diagnostic practices. It encompasses General Radiography, Ultrasound, Computed Tomography (CT) scan, Fluoroscopy, Mammography, Angiography, Interventional Radiology, and Magnetic Resonance Imaging (MRI).

Nuclear Medicine is described separately from Diagnostic Imaging as there are distinct differences in staffing, accreditation and technical requirements. Nuclear Medicine is used to diagnose and treat a variety of disease processes including cancer, neurological conditions and cardiovascular diseases, using radiopharmaceuticals (radioactive substances). Nuclear Medicine encompasses complex diagnostic procedures such as PET (Positron Emission Tomography) scanning and Bone Mineral Densitometry.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
### Service: Diagnostic Imaging and Nuclear Medicine Services

#### Level 1

**Diagnostic Imaging**

**Service Description**
A Level 1 service provides low-risk ambulatory care services during business hours and may provide some limited after-hours services. This service involves a single, mobile or fixed, general x-ray unit and is predominantly delivered by Licensed Operators. Computed radiography is present to improve image quality and facilitate image transfer.

**Minimum Staffing Requirements**
- Radiologist readily contactable to discuss findings and provide a report
- A Registered Medical Practitioner may, in certain circumstances, be responsible for interpreting and reporting the images.
- 24 hours access to an appointed radiographic advisor for supervision of Licensed Operators
- Access to Aboriginal and Torres Strait Islander Health Practitioner

**Nuclear Medicine**
No service provided at Level 1. Refer to higher level.

#### Level 2

**Diagnostic Imaging**

**Service Description**
A Level 2 service provides services at Level 1 plus it provides a low-risk ambulatory care and inpatient service. This service is predominantly delivered by a sole radiographer with support provided by Licensed Operators. There is a designated room on-site with a fixed x-ray unit and digital radiography; however, depending on the range of services provided at the facility (e.g. day hospitals), a mobile image intensifier may be the only modality available. Access to ultrasound for non-complex conditions or an outreach service may be available.

**Service Requirements**
As for Level 1 plus:
- Mobile service and limited to x-ray of extremities, chest, abdomen
- May have dedicated x-ray room with fixed x-ray unit available
- Access to non-complex ultrasound
- Interpreted by onsite doctor/health professional or by electronic means

**Minimum Staffing Requirements**
As for Level 1 plus:
- Onsite radiographer

**Nuclear Medicine**
No service provided at Level 2. Refer to higher level.

#### Level 3

**Diagnostic Imaging**

**Service Description**
A Level 3 service provides services at Level 2 plus it may have ultrasound services for more complex conditions, which may include obstetric and breast ultrasound. Sites may perform examinations involving contrast, such as intravenous pyelograms. A CT (computed tomography) service may also be available off-site and provided under arrangement with another facility.
Service: Diagnostic Imaging and Nuclear Medicine Services

Service Requirements
As for Level 2 plus:
- Onsite designated room
- Simple ultrasound capacity for foetal monitoring
- Teleradiology facility available

Minimum Staffing Requirements
As for Level 2 plus:
- Radiographer in attendance who has regular access to radiological consultation
- Where ultrasound services are provided, the imaging is undertaken by a sonographer or Registered Medical Practitioner trained in ultrasound
- 24 hours on-call access to radiographer and sonographer to provide appropriate imaging services.
- Based on the type of modality and service offered, the following staff may be required: medical imaging assistants and operational officers.

Nuclear Medicine
No service provided at Level 3. Refer to higher level.

Level 4
Diagnostic Imaging

Service Description
A Level 4 service provides services at Level 3 plus it provides fixed-room fluoroscopy, on-site CT services, complex ultrasound, basic interventional radiology and mammography and interventional breast imaging services.

Service Requirements
As for Level 3 plus:
- Facilities for general and fluoroscopy, in addition to mobile x-ray for wards, operating room and emergency department
- Mobile image intensifier in operating room and/or Intensive Care Unit (ICU)
- Always has ultrasound
- May have onsite CT or local access to CT scanner offsite
- This level of service may have access to off-site MRI (magnetic resonance imaging) and bone mineral densitometry services

Minimum Staffing Requirements
As for Level 3 plus:
- Staff radiographer on-call 24 hours
- Additional radiographers on-call to provide coverage 24 hours, 7 days/week
- Registered Nurse as required
- If the service provides a fluoroscopy service, a radiographer and a radiologist or registered medical specialist must be in attendance during this procedure
- 24 hours local access to a radiologist to interpret/report on CT images, discuss an examination and alter the conduct of the procedure, if necessary
- Where a patient requires general anaesthetics, a general practitioner with appropriate competency or an anaesthetist must be responsible for the patient’s airway and for providing care
- Local access to service engineers with qualifications, training and experience relevant to the model and make of the equipment in use by the service

Nuclear Medicine
Formal linkages with and appropriate access to a Level 5 Nuclear Medicine facility within the network.

Level 5
Diagnostic Imaging
## Service: Diagnostic Imaging and Nuclear Medicine Services

### Service Description
A Level 5 service provides services at Level 4 plus it may provide MRI, some specialised interventional radiology services and endovascular aneurysm repair.

### Service Requirements
As for Level 4 plus:
- Established Department
- Full ultrasound
- PACS may be available (picture archive and communication system)
- MRI service for certain conditions
- May provide an outreach service
- May refer patients to other jurisdictions outside the network for specialist needs
- Network referral role and provision of specialist consultation to lower level services within the network

### Minimum Staffing Requirements
As for Level 4 plus:
- Staff radiographer onsite 24 hours
- Has clinical director of Radiology
- May have radiology registrar
- Visiting specialist radiological appointment
- Has radiographer onsite 24 hours for urgent x-rays
- Access to Aboriginal and Torres Strait Islander Liaison Officer

### Nuclear Medicine

#### Service Description
A Level 5 service provides basic diagnostic and nuclear medicine studies, along with an after-hours on-call service. The service performs a network referral role and will have formal processes in place with public or suitably licensed private health facilities and will have access to a commercial or in-house supply of radiopharmaceuticals during business hours. Examples of procedures performed at this level are bone and lung scans and some interventional studies requiring the presence of a nuclear medicine specialist such as stress myocardial perfusion and captopril renal studies.

#### Service Requirements
- Onsite Level 5 Emergency Department with resuscitation and monitoring facilities available
- Preparation or reconstitution of radiopharmaceuticals with clear and appropriate documentation in place, including details of supply source, preparation date and batch number and reconstitution in line with the ANZSNM (Australian and New Zealand Society of Nuclear Medicine) Guidelines for Good Radiopharmacy Practice
- Treatment with radiopharmaceuticals available (such as radioiodine for hyperthyroidism)
- May have the facility for in vivo and/or in vitro tracer studies
- Formal quality control program in place
- Access to cardiac stress testing and stress testing equipment
- Bone mineral densitometry performed
- Formal links in place with higher level service within the network or interstate for specialist consultation and access to offsite PET (positron emission tomography) scanning facilities
- Network referral role and provision of specialist consultation to lower level services within the network
- Onsite Level 5 diagnostic imaging
- Onsite Level 5 pharmacy service
- Onsite Level 5 pathology service

#### Minimum Staffing Requirements
- Staff trained and competent in the monitoring, maintenance and use of equipment
- Registered and licensed nuclear medicine specialist present during radiopharmaceutical administration and available for consultation 24 hours
- Full-time supervision during procedures by a nuclear physician or radiologist with nuclear
## Service: Diagnostic Imaging and Nuclear Medicine Services

<table>
<thead>
<tr>
<th>Medicine qualification</th>
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</thead>
<tbody>
<tr>
<td>Registered Nurse with evidence of ongoing clinical competency and experience appropriate to the service being provided</td>
</tr>
<tr>
<td>Nursing staff on-site during the hours of operation of the department and available after-hours as required</td>
</tr>
<tr>
<td>Appropriately credentialed anaesthetist</td>
</tr>
<tr>
<td>Registered nuclear medicine technologists</td>
</tr>
<tr>
<td>Business hours access to a radiochemist/radiopharmacist</td>
</tr>
<tr>
<td>Business hours access to technical support staff (e.g., biomedical engineering scientific officers)</td>
</tr>
</tbody>
</table>

### Level 6

#### Diagnostic Imaging

**Service Description**

A Level 6 service provides services at Level 5 plus it provides complex, on-site interventional and neuro-interventional procedures, PET, and MRI services that must be available on-site.

**Service Requirements**

- Special rooms for digital angiography, neuroradiology etc., as required
- CT scan and full ultrasound service available during business hours, with available on-call access 24 hours
- Always has MRI and digital angiography
- Performs invasive procedures
- A CT service that supports increased complexity of clinical interventions, which may include diagnostic cardiac angiography
- An MRI service that supports more complex service profile/higher acuity patients
- An interventional radiology service that supports a complex service profile for complex/higher acuity and ICU patients
- PACS available
- Provides specialist consultation to lower level services within the network via telephone or electronic system such as Synapse PACS
- Provides Territory-wide or interstate referral role

#### Nuclear Medicine

**Service Description**

A Level 6 service provides services at Level 5 plus it provides the highest level of complexity of care and provides a network and/or interstate referral role. A radioisotope laboratory is available onsite and staffed by radiochemists. The service also provides therapeutic administration of high-dose radiopharmaceuticals including treatment for inpatients (e.g., radioiodine for thyroid cancer patients, and MIBG scan).

**Service Requirements**

- Onsite PET scanning facilities
- Therapeutic administration of high-dose radiopharmaceuticals, including those requiring treatment as inpatients, with appropriate isolation facilities
- A dedicated radiopharmaceutical laboratory onsite and staffed by a radiopharmacists/radiochemist with the capacity to produce radiopharmaceuticals, extending beyond the reconstitution of commercial products.
- 24-hour on-call service
- Provides Territory-wide or interstate referral role
### Service: Diagnostic Imaging and Nuclear Medicine Services

#### Minimum Staffing Requirements
As for Level 5 plus:
- One or more full-time medical physicists
- A full-time radiopharmacists/radiochemist available if radiopharmaceuticals are manufactured in-house

#### Reference Documents
- Health Practitioners Law - NT & Commonwealth
- Royal Australian College of Radiologists
- Australian Radiation Protection and Nuclear Safety Agency
- Health Insurance (Diagnostic Imaging Services Table) Regulations
- Radiation Safety Act
- Radiation Protection Act NT 2009
- Australian Council of Hospital Services
- Australasian Society for Ultrasound in Medicine
- Australian College of Operating Room Nurses
- Australian Institute of Radiography
- Australian Sonographers Association
- Interventional Radiology Society of Australasia
- Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM)
- Australian and New Zealand Society of Nuclear Medicine (ANZSNM) Guidelines for Good Radiopharmacy Practice and Minimum Quality Control Requirements for Nuclear Medicine Equipment Supervised Practice Program (SPP) Accreditation Board of the ANZSNM
- Australian and New Zealand Association of Physicians in Nuclear Medicine (ANZAPNM)
- Australian Radiation Protection and Nuclear Safety Agency Code of Practice: Radiation Protection in the Medical Applications of Ionising Radiation
- Diagnostic Imaging Accreditation Scheme Standards, Commonwealth Department of Health and Ageing (DoHA)
- Therapeutic Goods Administration. Australian Code of Good Manufacturing Practice for Medicinal Products, Commonwealth Department of Health and Ageing (DoHA)
**Intensive Care Unit / High Dependency Unit**

An Intensive Care Unit (ICU) is a specially staffed and equipped, separate and self-contained section of a hospital for the management of patients with a life threatening or potentially life threatening condition, and/or reversible or potentially reversible, organ failure. An ICU provides specialist expertise and facilities for the support of patients and their families, utilising the skills of medical, nursing and other staff trained in the management of critically ill patients. A High Dependency Unit (HDU), which may be centralised and combined with an ICU or provided as part of an inpatient unit, is a unit for patients who require more intensive observation, treatment and nursing care than can be provided at inpatient unit level.

For the purposes of this Framework, the ICU and HDU are assumed to be combined into a single service that offers the provision of graduated patient care, whereby once it is clinically appropriate patients can be discharged from the ICU to the HDU for continued high level care and close observation but where the specific services of the ICU are no longer required.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
<table>
<thead>
<tr>
<th>Service: Intensive Care and High Dependency Unit</th>
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<tbody>
<tr>
<td><strong>Level 1</strong></td>
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<tr>
<td>Service Description</td>
</tr>
<tr>
<td>No Level 1 service. Refer to higher level.</td>
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<tr>
<td><strong>Level 2</strong></td>
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<tr>
<td>No Level 2 service. Refer to higher level.</td>
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<tr>
<td><strong>Level 3</strong></td>
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<tr>
<td>No Level 3 service. Refer to higher level.</td>
</tr>
<tr>
<td><strong>Level 4 (CICM Level 1 ICU)</strong></td>
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<tr>
<td>Service Description</td>
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<tr>
<td>A Level 4 service provides a self-contained critical care area with easy access to the emergency department, operating theatres and organ imaging. A Level 4 service meets the criteria set out in the College of Intensive Care Minimum Standards for Intensive Care Units for a Level 1 ICU and other standards published by CICM (College of Intensive Care Medicine) and ANZICS (Australian and New Zealand Intensive Care Society). It has the capability of providing immediate resuscitation and short-term cardiorespiratory support for critically ill patients. It will also have a major role in the monitoring and prevention of complications in at-risk medical and surgical patients. It must be capable of providing mechanical ventilation and simple invasive cardiovascular monitoring for a period of at least several hours.</td>
</tr>
<tr>
<td>The patients likely to benefit from Level 4 care include patients with uncomplicated myocardial ischaemia, post-surgical patients requiring special observations and care, unstable medical patients requiring special observations and care beyond the scope of a general ward and patients requiring short term mechanical ventilation.</td>
</tr>
<tr>
<td>High dependency beds in a Level 4 service meet the standards set out in the CICM policy Minimum standards for High Dependency Units.</td>
</tr>
<tr>
<td>Service Requirements</td>
</tr>
<tr>
<td>• The unit has an established referral relationship with a Level 5 or Level 6 ICU that includes transfer policies and joint review process</td>
</tr>
<tr>
<td>• Training and experience in managing critically ill children</td>
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<tr>
<td>• All patients admitted to the unit must be referred for management to the registered medical specialist taking responsibility for the unit at the time of admission</td>
</tr>
<tr>
<td>• Separate and self-contained facility in the hospital capable of providing basic, multisystem life support usually for up to 24 hours</td>
</tr>
<tr>
<td>• Daily consultation with a Level 5 or Level 6 ICU Specialist for all patients mechanically ventilated and/or with multisystem failure</td>
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<tr>
<td>• Defined patient care and drug administration protocols, admission, discharge and referral policies.</td>
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<tr>
<td>• Formal audit and review of activities and outcomes through participation in the ANZICS CORE (Centre for Outcome and Resource Evaluation) database activities.</td>
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<tr>
<td>• Documented orientation program for staff</td>
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<tr>
<td>• Educational programs for medical and nursing staff</td>
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<tr>
<td>• Suitable infection control and isolation procedures and facilities</td>
</tr>
<tr>
<td>• 24 hour access to pharmacy, pathology, operating theatres and imaging services commensurate with the designated role of the hospital</td>
</tr>
<tr>
<td>• An active research program through membership of the ANZICS clinical trials group.</td>
</tr>
<tr>
<td>Minimum Staffing Requirements</td>
</tr>
<tr>
<td>• Medical Director with training and experience in intensive care who meets the CPD (continuing professional development) requirements of the CICM</td>
</tr>
<tr>
<td>• Sufficient registered specialists to provide a specialist roster of at least 1 in 3 – these specialists</td>
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</tbody>
</table>
Service: Intensive Care and High Dependency Unit

- must meet the CPD requirements of the CICM.
- In addition to the attending specialist, at least one registered medical officer with an appropriate level of experience rostered for the ICU at all times.
- A minimum nurse–patient ratio of 1:1 for ventilated and similarly critically ill patients. A minimum 1:2 nursing ratio for high dependency patients.
- Clinical Nurse Manager with critical care qualification.
- At least one critical care qualified nurse every shift.
- At least one patient care assistant every shift.
- A minimum of 2 Registered Nurses in the unit at all times when there is a patient admitted to the unit.
- Business hours access to allied health professionals, including an identified dietician, occupational therapist, pharmacist, social worker, physiotherapist and speech pathologist, as required.
- In addition weekend access to a physiotherapist as required.
- Access to technical support staff (e.g. biomedical engineers and scientific officers), as required.

Minimum Clinical Support Service Requirements

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<tr>
<th>Path</th>
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Level 5 (CICM Level 2 ICU)

Service Description

A Level 5 service meets the criteria set out in the College of Intensive Care Minimum Standards for Intensive Care Units for a Level 2 ICU and other standards published by CICM and ANZICS. A Level 5 service provides services at Level 4 plus it has the capability of providing a high standard of general intensive care including complex multisystem life support which supports the hospital’s delineated responsibilities. It should be capable of providing mechanical ventilation, renal replacement therapy and invasive cardiovascular monitoring for an indefinite period providing appropriate specialist support is available within the hospital. Transfer of patients to a higher level ICU will only be required where subspecialty expertise and services required for optimal patient management is not available at the facility.

Service Requirements

As for Level 4 plus:
- Critical care unit with at least 6 staffed and equipped beds
- Sufficient clinical workload to maintain clinical expertise for medical and nursing staff
- Mechanical ventilation, extra-corporeal renal support services and invasive cardiovascular monitoring for indefinite period
- Staff with training and experience in the management of critically ill children
- Provide rapid response team for the hospital including at least one medical officer and one senior nurse trained in care of the deteriorating patient and advanced life support
- May have undergraduate and postgraduate teaching role
- Accreditation for CICM basic training
- Formal Quality and Safety program
- Network referral role

Minimum Staffing Requirements

As for Level 4 plus:
- Medical Director with a full time commitment to the operation of the ICU and who is a Fellow of the College of Intensive Care Medicine.
- Sufficient specialist staff to provide reasonable working hours and leave.
- The duty specialist is rostered exclusively to the ICU at all times. The specialist sees all patients at least twice a day with the junior medical staff in a structured bedside ward round.
- All specialists must meet the CPD requirements of CICM.
- In addition to the duty specialist, at least one registered medical officer who is on site, predominantly present in the unit and exclusively rostered to the unit at all times
- Minimum 50% of nursing staff with post registration qualification in ICU
- Capacity to provide greater than 1:1 care if required
DEPARTMENT OF HEALTH

Service: Intensive Care and High Dependency Unit

- At least one access nurse per shift in addition to the bedside nurses, clinical coordinators, unit managers and educators (as per the Australian College of Critical Care Nurses minimum staffing requirements)
- Specialist nursing positions including clinical nurse educator (CNE), ICU Liaison Nurse, ICU Research and Quality Nurse Coordinator and ICU Equipment Nurse
- Ward clerk in the unit 7 days/week
- One FTE Administration manager for the unit who takes responsibility for data entry for audit in addition to supporting medical and nursing administrative and educational activities.
- Appropriate access to physiotherapist, social worker, dietitians, pastoral care and other allied health services
- 24 hours access to social work services on request
- Access to Aboriginal and Torres Strait Islander Liaison Officer

Minimum Clinical Support Service Requirements

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Level 6 (CICM Level 3 ICU)

Service Description
A Level 6 service provides services at Level 5 plus it is the highest level referral unit for intensive care patients and is capable of providing comprehensive critical care, including complex and multisystem life support for an indefinite period, and support for complex Level 6 activity. It has 24-hour access to an onsite laboratory and clinical service facilities to support the referral role.

Service Requirements
As for Level 5 plus:
- Critical care unit with at least 10 staffed and equipped beds
- Complex cardiovascular support including intra-aortic balloon pump support
- Complex respiratory support including high frequency oscillation
- Mechanical ventilation, extracorporeal renal support services and complex cardiovascular support of critically ill children not requiring transfer for subspecialty expertise
- Participates in the trauma team for the hospital
- Provides outreach expert critical care advice for patients (e.g. complex obstetric patients, patients with tracheostomies) throughout the hospital on a consultation basis
- Undergraduate and postgraduate teaching role
- Accreditation for CICM advanced training
- Formal research program
- Has Territory-wide or interstate referral role

Minimum Staffing Requirements
As for Level 5 plus:
- In addition to the duty specialist, at least one training registrar and one junior medical officer who are onsite, predominantly present in the unit and exclusively rostered to the unit at all times
- Dedicated ICU allied health staff including physiotherapist, pharmacist, dietitian, chaplain, social worker, Aboriginal and Torres Strait Islander Liaison Officer, and equipment officer
- At least two patient care assistants per shift
- 7 day social work and Aboriginal and Torres Strait Islander Liaison Officer service

Minimum Clinical Support Service Requirements

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Reference Documents
Health Practitioners Law - NT & Commonwealth
Australian and New Zealand Intensive Care Society
College of Intensive Care Medicine of Australia and New Zealand
<table>
<thead>
<tr>
<th>Service: Intensive Care and High Dependency Unit</th>
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</thead>
<tbody>
<tr>
<td>Australian College of Critical Care Nurses (ACCCN)</td>
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<tr>
<td>The Australian Council on Healthcare Standards</td>
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</tbody>
</table>
**Pathology Service**

Pathology Service involves the testing of materials, tissues or fluids from a patient to determine the cause and nature of a disease. PoCT (Point of Care Testing i.e. testing via machine outside a laboratory setting) is an important Pathology Service in reducing length of stay and in providing same day services. The level of Pathology Service provided by a health facility reflects the acuity of the patient and the number of acutely ill patients treated.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
## Service: Pathology

### Level 1

**Service Description**
A Level 1 service does not have an on-site laboratory, but may have access to PoCT (point of care testing) as well as competent operators to use this equipment and appropriate supervision and training from a higher level service within the network. No frozen sections are performed, and pathology testing services are provided remotely by laboratory staff in a facility accredited by the NATA (National Association of Testing Authorities) and the RCPA (Royal College of Pathologists of Australasia) with appropriate quality control and quality assurance activities in place. Access to pathology services are via ambulatory access or home collection of samples.

### Level 2

**Service Description**
A Level 2 service provides services at Level 1 but like Level 1, does not have an on-site laboratory. This service has access to PoCT. Trained staff are available to collect and transport specimens to the nearest laboratory. There is no on-site blood storage, but cross-matched blood managed by an off-site laboratory is available locally, where this is applicable to the facility. No frozen sections are performed.

**Service Requirements**
As for level 1 plus:
- Service has access to an approved specimen and blood collection service

### Level 3

**Service Description**
A Level 3 service provides services at Level 2 plus it usually provides a limited range of approved tests and has the ability to manage emergency pathology specimens until transfer to a higher level is available. More complex testing is usually accessible via higher level pathology services, mainly through electronic distributions, which return results promptly to the requesting laboratories/practitioner.

**Service Requirements**
As for level 2 plus:
- Routine microbiology services (including culture of blood, urine, stool) are undertaken or samples are referred as per laboratory protocols
- Routine anatomical pathology is available within 96 hours via a higher level service within the network
- Access to blood bank service
- Has blood gas analyser
- Ideally provides PoCT supervision and training to lower level services in the network
- Onsite basic biochemistry and haematology

**Minimum Staffing Requirement**
As for level 2 plus:
- Services are provided on-site by pathology personnel with appropriate tertiary qualifications in accordance with NPAAC (National Pathology Accreditation Advisory Council) guidelines
- Laboratory scientists/health professionals are on duty/available in the laboratory
- Staff participate in quality improvement activities as per NPAAC
- Staff designated as supervisory scientists have appropriate qualifications, training and experience relevant to scope of testing being performed and conduct supervision and direction in accordance with NPAAC requirements
- Laboratory staff participate in appropriate continuing professional development activities

### Level 4
### Service: Pathology

#### Service Description
A Level 4 service provides services at Level 3 plus the service has some specialist diagnostic services available. The service performs a range of basic tests (e.g. FBC, electrolytes, glucose, cross matching, basic coagulation, pregnancy testing, urine microscopy, gram staining) and has full-time laboratory scientists. The service must be linked into an integrated laboratory information system for referral and results sharing.

#### Service Requirements
As for level 3 plus:
- There is access to full haematology (including coagulation and manual differential full blood count), routine biochemistry and transfusion service with laboratory tests and blood products available 24 hours
- Has blood gas analyser
- Services surrounding areas in the network
- Provides PoCT training and supervision to lower level services in the network (visiting and via telehealth where available. Where telehealth is not available access via teleconference should be organised appropriately.)
- Has rapid access to urgently required tests within appropriate timeframes as per the ACHS (Australian Council on Healthcare Standards) (e.g. urgent test results such as serum potassium, haemoglobin, coagulation studies, small or large biopsy, cerebrospinal fluid microscopy)

#### Minimum Staffing Requirement
As for level 2 plus:
- Full-time laboratory scientists

#### Level 5

#### Service Description
A Level 5 service provides services at Level 4 plus it provides a 24 hour on-site service in a dedicated pathology department with the capacity to provide more complex testing (e.g. fine needle aspirations, frozen sections, bone marrows, liver function, cardiac enzymes, calcium, magnesium and phosphate). The service links into an integrated laboratory information system for referral and results sharing.

#### Service Requirements
As for level 4 plus:
- Frozen sections performed (provided a cryostat is on-site)
- There is access to cross-matched blood managed by other off-site laboratories and available locally
- Microbiology and histopathology available and provided as part of network supervisory role
- Network referral role
- Tertiary service and Territory-wide referral role, with population based public health service provided
- Access to anatomical pathology, chemical pathology, haematology (including blood banking), immunopathology and microbiology general and specialist services 24 hours. Ideally may also have cytopathology.
- Training and supervision provided to lower service level facilities within the network, via telehealth
- Active role in research and teaching, including Registrar training
- Some research conducted in collaboration with other sites within the network and interstate

#### Minimum Staffing Requirement
As for level 4 plus:
- Onsite accredited pathologists in accordance with staffing requirements set forth in NATA accreditation standards including clinical haematologist, anatomical pathologist, medical microbiologist, and forensic pathologist
- Laboratory staff are present 24 hours

#### Level 6
Service: Pathology

Service Description
A Level 6 service provides services at Level 5 plus includes super-specialty services and provides highly complex pathology services such as clinical investigations, transplantation services and blood banking. On-site collection and processing capabilities are available, as well as laboratory and medical staff. Some or all Level 6 services may be provided by Level 5 laboratories. These are also accessible to Level 3, 4 and 5 pathology laboratories by referral of samples where this is relevant to patient care.

Service Requirements
As for level 5 plus:
- Appropriate provision of clinical advice and supervision to other sites within and outside the network as required
- Access to a comprehensive suite of anatomical pathology, cytopathology, chemical pathology, haematology (including blood banking), immunopathology and microbiology general and specialist services 24 hours.
- Access to specialised pathology services such as microbiological virology investigations and advice
- Cytogenetic service
- Cell culture facilities and cryopreservation
- Comprehensive facilities for molecular as well as serological techniques of tissue for typing and matching
- Cryopreservation for autologous transplantation
- Specialist Registrar in training
- May have interstate referral role

Minimum Staffing Requirement
As for Level 5
Pharmacy Service

Pharmacy Service involves the preparation, dispensing and clinical monitoring of / provision of information on appropriate utilisation of drugs. Similar to Pathology, the level of Pharmacy Service provided by a health facility reflects the acuity of the patient and the number of acutely ill patients and highly complex cases treated.

The scope of this Framework describes the service, its requirements and the minimum staffing needs and clinical support services required within each level.
Service: Pharmacy

Level 1

Service Description
A Level 1 service provides services to an ambulatory population (e.g. as part of a remote health centre that accesses a community pharmacy or other health centre to provide services to the local population).

Service Requirements
- Medications supplied on individual prescription from a community pharmacy, primary health care clinic or higher level service
- Where there is no pharmacist employed, on-site medication service oversight provided by a pharmacist located elsewhere from a higher level service via telehealth where available or through a documented process with a community pharmacist
- Links to other relevant services to support patients taking medications (e.g. Aboriginal and Torres Strait Islander Health Practitioners and community nursing services)
- Telehealth facilities where this has been identified as a means of providing medication services and oversight
- A reliable internet connection with sufficient capacity to enable access to receive consultation from a higher level service
- Defined and appropriate supply chain where medications are sourced from a network hospital or community pharmacy

Minimum Staffing Requirement
- Access to registered pharmacists where not on-site
- Access to a suitable medication distribution network for supply of medications to maintain a requisite medication inventory
- Must have access to a Registered Medical Practitioner for prescriptions
- Access to a Registered Medical Practitioner, Nurse Practitioner and/or RIPRN (Rural and Isolated Practice Registered Nurse) for facilities in rural and remote areas
- Onsite Registered Nurse
- Onsite Aboriginal and Torres Strait Islander Health Practitioner or other health worker (e.g. isolated practice paramedic or physician assistant) for facilities in rural and remote areas
- Access to interpreters and Aboriginal and Torres Strait Islander Liaison Officers, as required for patient care

Minimum Clinical Support Service Requirements

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Level 2

Service Description
A Level 2 service provides services at Level 1 plus it provides a limited ambulatory and inpatient clinical pharmacy service, and complies with relevant statutory regulations regarding the provision and quality use of medications. The service is able to provide a medication service to adult and paediatric patients.

Service Requirements
As for Level 1 plus:
- Medications for inpatients (supplied on the basis of a legal and safe written order) are sourced from the hub hospital within the network
- Medications for ambulatory and inpatients on discharge supplied on individual prescription from either a community pharmacy, appropriate hospital within the network, or a higher level service with documented processes in place for the provision of medications that require compounding
Service: Pharmacy
- Staff education program in place
- Patient education provided for inpatients from nursing or visiting pharmacist staff
- If an inpatient hospital-based service is provided, the Pharmacy service must have an onsite pharmacist (either visiting or full-time)

Minimum Staffing Requirement
As for Level 1 plus:
- Access to more specialised pharmacist support from a hub facility within the network, provided by a visiting pharmacist

Minimum Clinical Support Service Requirements

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Level 3

Service Description
A Level 3 service provides services at Level 2 plus it provides a clinical pharmacy service on weekdays through an on-site pharmacy or a contracted service, and includes an out-of-hours medication mechanism and ideally has access to a pharmacist for emergency advice 24 hours a day. The service is provided to inpatients as well as rural and remote areas, includes a service to dispense medication to ambulatory patients, and provides medications to outpatients not on the PBS (Pharmaceutical Benefits Scheme), as well as providing service to regional and remote health centres within the network.

Service Requirements
As for Level 2 plus:
- Medications and clinical services for inpatients, day patients and, where applicable, ambulatory patients in specialty clinics
- Provides support to outreach and specialist services
- May provide support for maintenance
- Access to basic, non-sterile extemporaneous compounding
- Clinical service includes drug information, drug monitoring, drug utilisation evaluation (DUE), adverse drug reaction reporting, patient education and support, and membership on hospital based network committees (e.g. Drugs & Therapeutic Committee, Quality Control, and Clinical Governance Committees)
- Timely access to clinical information, including medical records and pathology results, reliable access to a dedicated desktop and/or laptop computer in the ward/clinical area, or equivalent (e.g. electronic tablet), if wireless technology is available
- Has responsibilities across a defined area within the network, providing support and medication service oversight to lower level services through intermittent visits, via outreach pharmacy or telepharmacy services if available, or through other means
- May provide pharmacy undergraduate and postgraduate teaching role
- Appropriate networking with higher level service
- Must comply with Poisons & Dangerous Drug Act and Pharmacy Board of Australia legislation regarding storage and security requirements
- Provides pharmacy support to rural and remote areas within the network

Minimum Staffing Requirement
As for Level 2 plus:
- Service provided by a pharmacy team which includes a pharmacist, pharmacy assistant and pharmacy technician.
- Pharmacist available during designated business hours. Documented processes in place to access medications and medicines information outside these hours (after-hours service may be
**Service: Pharmacy**
- provided by a higher level service under a documented process
- Access to relief/locum pharmacist services, as required
- Referral pathways and access to allied health and complementary services, as required for patient care (ideally, access to dietetics, occupational therapy, physiotherapy, interpreter services, and Aboriginal and Torres Strait Islander Liaison Officers)
- Education for nursing staff and support for medical practitioners

### Minimum Clinical Support Service Requirements

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**Level 4**

**Service Description**
A Level 4 service provides services at Level 3 plus it provides a medication service that is available 24 hours. The service is able to provide care for a full range of patient risk levels, and has the capacity and capability to care for patients that are likely to have complex and competing therapeutic needs, and multiple comorbidities that the service must consider when optimising therapy.

**Service Requirements**
As for Level 3 plus:
- Provides network consultation and accepts referrals from lower level services within the network
- Services provided to inpatients and may be provided to ambulatory patients as part of specialty clinics
- Medication distributed and stored by the facility and, as required, to any lower level service that is safe, meets legislative requirements and assures the quality of the medicinal products (e.g. maintains cold chain)
- Access to basic, non-sterile extemporaneous compounding
- Provides support for a range of specialty services (e.g. chemotherapy)
- Provides support for clinical trial medication distribution as part of a limited clinical trial management service where other clinical services sponsor or participate in clinical medication trials
- Provides visiting services to lower level services within the network

**Minimum Staffing Requirement**
As for Level 3 plus:
- An after-hours, on-call service for medication supply and clinical services, including medicines information, available 24 hours
- General or junior-level pharmacy staff mentored or clinically supervised by a specialist or advanced-level practitioners where applicable

### Minimum Clinical Support Service Requirements

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</table>

**Level 5**

**Service Description**
A Level 5 service provides services at Level 4 plus it has the capacity to act as a referral service for very high-risk patients except those who need high level specialist clinical services, such as a transplant, or the most complex patients.

**Service Requirements**
As for Level 4 plus:
Service: Pharmacy

- Basic, non-sterile, extemporaneous compounding possibly with limited small-batch manufacturing for local hospital use, and sterile, individually compounded products (e.g. chemotherapy including parenteral, targeted and oral chemotherapy) if the use of these products falls within the scope of practice of the pharmacist or trained support staff providing supporting medication services
- The capacity to respond to requests for medicines information related to direct patient care in a timely manner, either through a medicines/drug information service or a service provided internally
- A medicines/drug information service provided for the whole of the network and Territory
- The service may actively participate in multidisciplinary research
- Undergraduate and postgraduate pharmacy teaching role
- Pre- and post-graduate pharmacy training

Minimum Staffing Requirement
As for Level 4 plus:
- An extended-hours service with a pharmacist available 24 hours a day
- A pharmacy team structured to deliver services at multiple levels throughout the organisation.
- Specialist pharmacist positions which reflect the range of specialist services provided (e.g. ICU, haematology, and medical oncology)

Minimum Clinical Support Service Requirements

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Level 6

Service Description
A Level 6 service provides services at Level 5 plus it acts as a referral service for all lower level services across the Territory (i.e. a Territory-wide and/or super-specialty service), accepting referrals, including interstate, where applicable. The service has the capacity and capability to provide care for patients who have the most complex care needs. A team of pharmacists, including specialist advanced level pharmacists aligned with clinical specialist services, provides medication services.

Service Requirements
As for Level 5 plus:
- A specialised or territory medicines and drug information service, and/or poisons information service may be provided.
- Product evaluation with drug use/policy development
- Participates in research, clinical trials and clinical reviews

Minimum Staffing Requirement
As for Level 5 plus:
- A full range of specialist pharmacist positions which reflect the range of specialist services provided (e.g. ICU, haematology, medical oncology, cardiology, paediatrics, geriatrics, psychiatry, and drug information)

Minimum Clinical Support Service Requirements

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Reference Documents
Health Practitioners Law - NT & Commonwealth
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<th>Service: Pharmacy</th>
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<tbody>
<tr>
<td>Installation and Use), AS/NZ ISO 14644-4:2002 (Clean Rooms and Associated Controlled Environments - Design, Construction and Start-Up)</td>
</tr>
<tr>
<td>NT Poison and Dangerous Drugs Act (PADD)</td>
</tr>
<tr>
<td>Pharmacy Board of Australia</td>
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<tr>
<td>Australian Pharmaceutical Advisory Council</td>
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<tr>
<td>Australian Council on Healthcare Standards</td>
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<tr>
<td>International Pharmaceutical Federation’s Consensus Statement on Hospital Pharmacy</td>
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<tr>
<td>Therapeutic Goods Act</td>
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<tr>
<td>Pharmaceutical Society of Australia</td>
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<tr>
<td>Society of Hospital Pharmacists of Australia (SHPA) Practice Standards and Guidelines</td>
</tr>
<tr>
<td>Australian Pharmaceutical Advisory Council (APAC) Guiding Principles and Guidelines</td>
</tr>
<tr>
<td>Code of Good Manufacturing Practice (current edition)</td>
</tr>
<tr>
<td>The Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP) published by the Commonwealth (current edition)</td>
</tr>
<tr>
<td>Workplace Health and Safety Regulation 2008, in particular, Part 16 Hazardous Substances, Division 3.</td>
</tr>
</tbody>
</table>
Appendix 1 - Northern Territory Acts and Regulations

The following is a minimum list of relevant NT Acts and Regulations. Because legislation is continually updated, this list is not meant to be taken as conclusive or exhaustive.

Acts administered by the NT Department of Health

- Adoption of Children Act
- Adult Guardianship Act
- Cancer (Registration) Act
- Carers Recognition Act
- Disability Services Act
- Emergency Medical Operations Act
- Food Act
- Guardianship of Infants Act
- Health Practitioners Act
- Hospital Management Boards Act
- Human Tissue Transplant Act
- Medical Services Act
- Mental Health and Related Services Act
- Natural Death Act
- Notifiable Diseases Act
- Poisons and Dangerous Drugs Act
- Private Hospitals and Nursing Homes Act
- Public and Environmental Health Act
- Radiation Protection Act
- Radiographers Act
- Therapeutic Goods and Cosmetics Act
- Tobacco Control Act
- Volatile Substance Abuse Prevention Act
- Work Health Administration Act
- Workers Rehabilitation and Compensation Act

Regulations administered by the NT Department of Health

- Adoption of Children Regulations
- Cancer (Registration) Regulations
- Community Welfare Regulations
- Community Welfare (Child Care) Regulations
- Natural Death Regulations
- Poisons and Dangerous Drugs Regulations
- Public and Environmental Health Regulations
- Radiation Protection Regulations
- Tobacco Control Regulations
- Volatile Substance Abuse Prevention Regulations

## Appendix 2 – Definitions

Standard terms used throughout the CSCF are defined below.

<table>
<thead>
<tr>
<th>Term</th>
<th>Explanation</th>
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<tbody>
<tr>
<td>‘Access to…’</td>
<td>Refers to reasonable access to additional services or clinicians which are required in order for the service to be delivered safely and effectively. ‘Access to’ could mean that an additional service or consultation from a clinician is delivered via telehealth, telephone, or in person via visiting service. ‘Access to’ does not dictate that a service or clinician is available onsite.</td>
</tr>
<tr>
<td>24 hour cover by a RN</td>
<td>Refers to onsite presence a Registered Nurse 24 hours per day</td>
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<tr>
<td>‘Local access to…’</td>
<td>Refers to access that may be offsite or provided via on-call service, but that is more readily accessible when required urgently. ‘Local access to’ excludes telehealth, telephone, or visiting services.</td>
</tr>
<tr>
<td>Aboriginal and Torres Strait Islander Health Practitioner</td>
<td>Aboriginal and Torres Strait Islander Health Practitioners are registered health practitioners, and must be appropriately clinically qualified and registered with AHPRA (Australian Health Practitioner Regulation Agency) and the Aboriginal and Torres Strait Islander Health Practice Board of Australia (which works in partnership with AHPRA). Throughout this Framework, it is specified where access to, and designated appointment of, Aboriginal and Torres Strait Islander health practitioners are required in order to ensure the safe, effective and culturally appropriate provision of services.</td>
</tr>
<tr>
<td>Aboriginal and Torres Strait Islander Liaison Officer</td>
<td>Aboriginal and Torres Strait Islander Liaison Officers provide advocacy and psycho-social support for Aboriginal and Torres Strait Islander patients, and help to ensure the provision of culturally safe and appropriate care. The service provided by these staff is non-clinical, and is crucial to the delivery of health services in the NT. It is expected that certain levels of service will have some form of access to Aboriginal and Torres Strait Islander Liaison Officers, with increasing availability and in some cases dedicated personnel, as levels of service increase in complexity.</td>
</tr>
<tr>
<td>eHealth</td>
<td>eHealth refers to the Australian Government Department of Health and Ageing personally controlled electronic health record. From July 2012, anyone seeking healthcare in Australia can register for a personally controlled electronic health record, which will enable the sharing of information between healthcare professionals electronically.</td>
</tr>
<tr>
<td>Interstate referral role</td>
<td>Refers to a facility which provides support and supervision to, and accepts referrals from, lower level facilities across State borders (e.g. from Western Australia, Queensland, and possibly Southeast Asia).</td>
</tr>
<tr>
<td>Network referral role</td>
<td>Refers to a facility which provides support and supervision to, accepts referrals from, and may provide a visiting service to lower level facilities within its Hospital Network.</td>
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<tr>
<td>Research</td>
<td>It is expected that some Level 5 services will conduct and be involved in collaborative research initiatives, and that all Level 6 services will be actively</td>
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<td>Term</td>
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<tr>
<td>Teaching and training</td>
<td>It is expected that most Level 5 services, and all Level 6 services, provide some formal program for undergraduate and postgraduate teaching and training (as well as providing training to lower level services within the network, where appropriate).</td>
</tr>
<tr>
<td>Telehealth</td>
<td>Telehealth refers to the Australian Government Department of Health and Ageing initiative, which enables video consultation provided by health professionals to patients, or among health professionals for collaboration and consultation. Telehealth aims to remove some of the barriers to accessing medical services for Australians who have difficulty getting to a specialist or live in rural and remote areas.</td>
</tr>
<tr>
<td>Territory-wide referral role</td>
<td>Refers to a facility which provides support and supervision to, accepts referrals from, and may provide a visiting service to lower level facilities within the entire Northern Territory.</td>
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