

# **Specialist Medical and Surgical Services**

## **Service Specification Tier 1**

**September 2024**

## Contents

1. Status .....	3
2. Review History .....	3
3. Introduction .....	4
4. Service Definition .....	4
5. Service objectives .....	6
5.1 General.....	6
5.2 Māori Health .....	6
5.3 Pacific Health.....	7
6. Service Users .....	7
7. Access.....	7
7.2 Time .....	8
8. Service Components.....	8
8.1 Processes.....	8
8.2 Settings .....	10
8.3 Support Services .....	10
8.4 Equipment Related to an Episode of Care .....	11
8.5 Continence and Ostomy Supplies and Home Oxygen .....	11
8.6 Facilities .....	12
8.7 Key Inputs .....	12
9. Service Linkages.....	13
10. Exclusions .....	13
11. Quality Requirements .....	14
11.1 Safety and Efficiency .....	14
11.2 Effectiveness .....	14
12. Purchase Units and Reporting Requirements.....	15
12.1 Purchase units.....	15
13. Appendices .....	16
13.1 Appendix One: GUIDELINES FOR THE DELIVERY OF AN ORGANISED STROKE SERVICE .....	16



## 1. Status

Approved to be used for mandatory nationwide description of services to be provided.

MANDATORY  RECOMMENDED

## 2. Review History

Review History	Date
Approved by Nationwide Service Framework Coordinating Group (NCG)	2003
Published on NSFL	2003
<b>Minor Amendments:</b> replaced front sheet, updated reference to: ACC reference document <i>Accident Services</i> and Appendices one and two.	2010
<b>Minor Amendments:</b> removed purchase unit table and appendix 1 'elective services' as out of date, added Emergency Services to specialties listed under Service Definition	2016
Consideration for next Service Specification Review	within five years
Moved to Health NZ template. Updated links for PUDD and NSFL only. Amended DHB to become District/Region where appropriate. No other changes to content made.	September 2024

**Note:** In September 2024 a small programme of work moved all Service Specifications to Health New Zealand branded templates. No amendments were made to the body text or content of the Service Specification, so references to DHB, Ministry of Health or other pre-2022 reforms vocabulary will still exist. A larger programme of work to review and revise all Service Specifications is planned for late 2024 to early 2025.

**Note:** Contact the Service Specification Programme Manager, Service Commissioning, Ministry of Health to discuss the process and guidance available in developing new or updating and revising existing service specifications.

Nationwide Service Framework Library web site [here](#)

### 3. Introduction

This generic Tier One service specification covers most secondary and tertiary specialist medical and surgical services irrespective of the setting of care delivery.

These services will be person-centred, ensure there is a continuum of care for an individual, support integrated service delivery and population based models of care.

These services are usually episodic in nature and will be provided for the normally well person while also being accessed by the chronically medically ill and/or frail person. It is essential that patients with multiple co-morbidities will need to access these services as part of their integrated care needs within the continuum of care. The organisation and the development of Organised Stroke Services in Appendix one support this approach of providing integrated care within a continuum of care.

This service specification applies to all ages. It also needs to be read in conjunction with the Tier 1 service specification for Services for Children and Young People that specifies services that have been specifically developed or organised as applicable only to children and young people up to age 18 years. Where these services are delivered in a hospital setting then usually these services are traditionally for children and young people of 0 - 14 years.

### 4. Service Definition

This generic service specification is applicable to the medical and surgical services irrespective of setting that we purchase from you.

This service specification covers the following medical and surgical specialties:

Cardiology

Cardiothoracic Surgery

Clinical Genetics

Clinical Haematology, including Haemophilia Services

Dermatology

Diabetes

Emergency Services

Endocrinology

Fertility

Gastroenterology

General Medicine

General Surgery

Gynaecology

Haematology  
HIV/AIDS  
Hyperbaric Medicine  
Immunology  
Infectious Diseases  
Maxillo-facial surgery  
Medical Oncology  
Metabolic services \*  
Musculoskeletal  
Neurology  
Neurosurgery  
Ophthalmology  
Oral surgery  
Orthopaedics  
Otolaryngology/Head and Neck/ENT  
Palliative care  
Plastic Surgery and Reconstructive Surgery (including Burns)  
Pain Management  
Radiation Oncology  
Renal Medicine  
Respiratory Medicine  
Rheumatology  
Sexual Health  
Spinal Injury Services  
Transplant Services  
Urology  
Vascular Surgery

\* this service is primarily for Children and Young People so appears as a linked Tier 2 service specification, however as it is non age specific it covers adults as well.

## 5. Service objectives

### 5.1 General

Specialist medical and surgical services provide services to people whose condition is of such severity or complexity that it is beyond the capacity and technical support of the referring service.

Services intended are to achieve an integrated continuum of care that provides effective shared care across all settings from primary to tertiary, including:

- Cure of disease
- Relief of pain
- Prolongation of good quality of life
- Effective screening and prevention of unnecessary or long term complications
- Improving the health of Māori, which includes targeting services to best meet Māori need
- Access to information by patients and other practitioners
- Changes in specific behaviour or lifestyle to promote improved health and reduce need for further episodes of specialised care
- Prevention or reduction of acute exacerbation of chronic disease, leading to improvement in quality of life and a reduction of inappropriate admissions to hospital
- Effective shared care of people with chronic disorders with primary care and disability support services - particularly liaison and co-operation with rest homes and continuing care providers contracted for disability support services
- Improved function in usual age related roles and activities
- Return to the work force or other activity with limitation of disease progression by active risk factor management and early, effective rehabilitation

### 5.2 Māori Health

Health providers, with reference to He Korowai Oranga - the Māori Health Strategy and Whakatataka – Māori Health Action plan are expected to contribute to improvements in Whanau Ora and to the reduction in Māori health inequalities. Specific Māori health priorities are outlined in the strategy under Māori i health and disability priorities ie.

the service is expected to contribute to Māori health gain objectives, in particular, targeting services to impact on asthma, diabetes, injury prevention, smoking, hearing, mental health, oral health and immunisation.

Health and disability service providers need to recognise the cultural values and beliefs that influence the effectiveness of services for Māori and must consult and include Māori in service design and delivery.

Health providers, with reference to He Korowai Oranga – the Māori Health Strategy and Whakatataka – Māori Health Action Plan are expected to contribute to improvements in Whanau Ora and to the reduction in Māori health inequalities. Specific Māori health priorities are outlined in the strategy under Māori health and disability priorities.

Health and disability service providers need to recognise the cultural values and beliefs that influence the effectiveness of services for Māori and must consult and include Māori in service design and delivery.

Provision should be given to:

Access

- Access to whānau accommodation
- Access to kaumatua / kuia/cultural support and advocacy for Māori consumers

Acceptability

- Appropriate discharge planning for Māori
- Māori client satisfaction surveys

Effectiveness

- Services implement processes including retrospective case review and analysis of treatment pathways, leading to more effective and efficient resource utilisation and improved health outcomes, especially for Māori.

## 5.3 Pacific Health

Services are expected to improve the health outcomes and reduce health inequalities for Pacific people. In particular targeting services to impact on diabetes, immunisation, meningococcal meningitis, cardiovascular disease, stroke and injury prevention, both accidental and intentional.

Providers will support initiatives that build upon current investment and innovation in Pacific programmes and services and develop effective models of service delivery that is Pacific responsive and aligned to the Pacific Health and Disability Action Plan 2002.

The Pacific Health and Disability Action Plan provides a platform for change and it is the key framework to ensure mainstream responsiveness to Pacific peoples health issues.

## 6. Service Users

People who require assessment and/or treatment for a medical or surgical condition. (Some services may be specified outside this range).

## 7. Access

### 7.1.1 Entry and Exit Criteria

Eligible people are generally those who present or have been referred by general practitioners, midwives, emergency departments and specialists for medical and/or surgical assessment and/or treatment.



Access to the service will be managed in such a way that priority is based on acuteness of need and capacity to benefit.

You will ensure and be able to demonstrate that Māori access services based on an accurate needs analysis of the Māori population within your service coverage area.

Persons whose treatment is accident related will exit the service when they meet the following criteria:

- The person is clinically stable and likely to improve, as well as there being no life threatening condition that would require emergency surgery or intensive monitoring. And
- The clinical team responsible for discharge from acute services and the rehabilitation team agree to transfer. And
- The person has been accepted, or is likely to be accepted as an ACC claimant.

See ACC publication '*Accident Services – a guide for DHB and ACC staff*' for more detail about the responsibilities of different funders in relation to accident-related services.)

## 7.2 Time

Service level agreements or contracts will specify which services are to be available on a 24 hour, 7 days a week basis.

Requirements related to first specialist assessments and waiting time before elective treatment are set out in Appendix two - Elective Services.

# 8. Service Components

## 8.1 Processes

You will ensure that all processes consider and meet the needs of Māori and are reviewed in conjunction with your requirements to consult with Māori and to agree a plan for the services outlined in this service specification. This plan will link to your organisational strategic plan for meeting the needs of Māori.

- Health promotion and disease prevention
- Education and counselling of patients and/or caregiver concerning:
  - disease- or condition-specific health education
  - reducing the possibility of recurrence of acute conditions
  - acceptance and management of chronic conditions including the efficient and appropriate use of medicines and equipment
  - self-care
  - prevention of further deterioration
  - personal remedial action related to lifestyle risk factors eg, smoking, diet, exercise, weight control
    - screening for early detection of disease.

- Communicable disease control activities, including:
  - timely notification on suspicion to the Medical Officer of Health, as prescribed by the Health Act 1956 and the Tuberculosis Act 1948
  - provision of antibiotic prophylaxis to defined household contacts, in conjunction with the Medical Officer of Health
  - isolation and hygiene measures

### **8.1.1 Assessment, diagnosis and treatment**

- Assessment, diagnosis, stabilisation and treatment of patients on an urgent or non-urgent basis. Those who are severely ill, or who have other circumstances that will make community-based care difficult, are likely to require inpatient care. The remaining patients will be assessed and treated in community, outpatient or day patient facilities
- Discussion of treatment options (including possible risks) and management plan with patient (and family/whānau as appropriate)
- Patients' consent is to be obtained for procedures and treatments
- Pre-operative referral to the appropriate anaesthetist for anaesthetic management during surgery and respiratory and pain management post operatively
- Preparation of the patient for surgery, surgical procedures, immediate post-operative recovery.

Management of care including:

- prompt response to emergencies
- pain control
- prevention and/or management of post-operative complications
- written care plan to be developed with patient, family and whānau and or carer

### **8.1.2 Rehabilitation**

Rehabilitation is considered to be a key component of treatment. The service will have processes in place to actively plan the provision of rehabilitation from an early stage in treatment. This includes the co-ordination and planning between the services to ensure that patients' ongoing needs are assessed and referrals or transfers to an appropriate community or hospital services are arranged in a timely manner.

*Note that sections 8.1.2 and 8.1.3 should be read in conjunction with service specifications for AT&R services*

### **8.1.3 Discharge planning or onward referral**

- A written discharge summary and (where appropriate) a care plan are to be provided - upon discharge or transfer - to the patient and general practitioner or other health service provider.
- Ensure patients and/or caregivers are familiar with their current medication and can address any concerns before leaving hospital or arrangements are with made the patient's general practitioner for this to occur.
- Compliance problems are identified and general practitioner, community pharmacist and care-giver are prepared to deal with this.
- Referral to ACC case managers where appropriate.
- Comprehensive coverage will be obtained by referral of patients to a higher level of service (including tertiary) when the severity or complexity of the condition is beyond the technical and clinical capacity of the local services.
- In conjunction with the relevant community health service, the service will assess the need for, type and amount of professional community services and personal care, home help and meals on wheels required, including related equipment eg nebulisers or ostomy supplies.
- Community health/home support services are the responsibility of the community health service where the client is domiciled
- Where the service considers the patient may require disability support services, the patient will be referred to disability assessment services for needs assessment and service coordination. Referral for assessment and access to disability support services may occur at any time.

### **8.1.4 Consultative services**

Consultation and advisory services are provided to general practitioners and other specialists concerning the condition and ongoing management of patients. This includes patients who have not been referred to the service but where a specialist opinion is sought.

## **8.2 Settings**

Services will be provided on an inpatient, day patient, outpatient and community basis. Services may also be provided in people's place of residence or workplace.

## **8.3 Support Services**

The following services are to be provided as an integral part of these services:

- Professional services – medical, nursing and allied health
- pathology services, including referrals to private laboratories by hospital medical practitioners
- diagnostic imaging services, including referrals to private diagnostic imaging services by hospital medical practitioners
- other diagnostic services referred to by hospital medical practitioners, eg, cardiography, spirometry, audiology, neurological testing
- operating theatres

- anaesthetic services
- sterile supply services
- pharmacy services
- nuclear medicine
- coronary care
- intensive care
- blood transfusion services
- supply or loan of equipment to support treatment, rehabilitation or aid mobility
- infection control
- chaplaincy services
- interpreter services
- services to ensure responsiveness to Māori such as kaumatua / community health worker services; whānau facilities

## 8.4 Equipment Related to an Episode of Care

You will be responsible for ensuring that appropriate patients are assessed for their equipment and orthotics requirements by a health professional (ie, a specialist, accredited equipment assessor or registered therapist) and receive the appropriate equipment (including wheelchairs, standing frames, walking sticks and crutches) following an:

- outpatient attendance – for people receiving follow-up or after an inpatient or day case episode or those receiving recurrent care; or an
- inpatient / day patient episode of care.

For non-accident cases, you will provide this equipment/orthotics for a period of up to six months. The six months responsibility for you commences from the day of discharge from an inpatient or day patient episode of care or, in the case of a person who is not admitted to your health facility but attends as an outpatient, from the first outpatient attendance.

If the patient is transferred to another health facility on discharge, the responsibility to provide post-discharge equipment is that of the health facility accepting the transfer.

Equipment that is required for a period of longer than six months - and can be identified before the patient is discharged from your facility – will be directly referred to the disability support provider and will be purchased under another service specification. (Please refer to the service specifications for Disability Support Services and Community Services for further comment on equipment and supplies.)

## 8.5 Continence and Ostomy Supplies and Home Oxygen

You will arrange a referral to the community suppliers for continence and ostomy equipment and provide a short-term supply (usually 48 hours) to cover the period between discharge and the patient making contact with the community supplier.

You will ensure that where needed the patient will have access to home oxygen supplies. You will ensure the patient has sufficient supply to cover the period between discharge and the home oxygen service making contact with the patient.

## 8.6 Facilities

The service shall be provided within facilities suitable for inpatient, day patient and outpatient accommodation.

Equipment used shall be licensed, safe and maintained to comply with safety and use standards as detailed in the Operational Policy Framework or the PQS section of the standard contract

Provision is to be made for a whanau room and whanau accommodation

## 8.7 Key Inputs

The following is an indicative list of key inputs to be included in hospital services:

For DRG services:

- Pre-admission clinic
- Emergency department assessment
- Intensive care/coronary care
- Clinical support services – eg, radiology, laboratory, allied health and other diagnostic services
- Consumable supplies – eg, pharmaceuticals, blood products and prostheses
- Commercial support services – eg, accommodation and meals

For non-DRG services:

- Treatment, therapy, advice, diagnostic or investigatory procedures
- Other health professionals including additional medical practitioners
- Tests requested during an attendance but carried out at another place and time
- Pharmaceuticals used or consumed during assessment or treatment
- Telephone, facsimile and email consultations
- Staff travel
- Supply or loan of essential equipment

For both DRG and non-DRG services:

- Overheads related to quality requirements – eg, interpreting services, culturally appropriate facilities, infection control, staff training, civil disaster preparedness
- Overheads related to reporting requirements – eg, information systems, patient register

**Boarders:** a well person accompanying a sick person in hospital will be accommodated by you as directed by the patient's medical consultant or the senior nurse on duty. The costs associated with the boarder stay (one day's stay or more) will be an input to the particular medical or surgical service. No charge will be made to the boarder apart from the cost of meals.

## 9. Service Linkages

The services will develop relationships with services/agencies to facilitate open communication, continuity of care, smooth referral, follow-up and discharge processes to ensure: that the following principles are acknowledged:

- A continuum of care
- Safety for at risk patients
- Regional linkages and co-ordination of services to ensure clients access appropriate services
- Clinical consultation and referral services that support clinical pathways
- Emergency management and disaster response is available and appropriate
- Linkages with other funders and providers, including community and social services, support a seamless service delivery and continuity care is maintained.

Services are required to demonstrate effective links with the following services:

- emergency services
- major incident management including civil defence
- mental health services
- disability support services, including needs assessment, assessment, treatment and rehabilitation, respite and continuing care services
- community health services, including professional community services, home help and meals on wheels
- palliative care
- sexual health services
- child health services
- public health service communicable disease programmes and the Medical Officer of Health
- public health programmes eg screening services
- primary care services
- Māori primary and community care services
- voluntary organisations, eg, Asthma Society, Cancer Society, National Heart Foundation
- iwi authorities and other appropriate Māori organisations
- ACC
- Accredited Employers and other accident insurers
- hospital chaplaincy services
- travel and accommodation services
- transport services including ambulance
- NZ Blood service
- Other government agencies

## 10. Exclusions

Excludes elective personal health services purchased under contract with accident insurers. Excludes follow-up after discharge from an acute accident episode except for outpatient medical and nursing clinics for six weeks following discharge. (See ACC publication

“*Accident Services* – a guide for DHB and ACC staff’ for more detail about the responsibilities of different funders in relation to accident-related services.).

Excludes nursing, allied health and technical services provided on an outpatient basis unless they form an integral part of a specialist clinic. These services are included under the service specifications for specialist community professional nursing services and specialist community allied health services.

## 11. Quality Requirements

The service is required to comply with the MOH Provider Quality Specification and the Information Standards and Organisational Reporting Requirements as set out in the Monitoring and Reporting sections of the Operational Policy Framework or the Standard Contract.

### 11.1 Safety and Efficiency

- Services are required to comply with the Health and Disability Services 2001 (Safety) Act
- Special attention is to be given to clinical audit requirements.
- Services work closely with referring clinicians, whether primary or secondary level practitioners, to ensure that as much treatment as possible is managed in the community and the continuum of care is supported
- Services take active steps to enhance the management of acute referrals. In particular, services should:
  - refine and implement clinical guidelines covering conditions for which acute referrals are commonly made;
  - explore methods to enhance the range of options for community based care;
  - develop written guidelines and processes on the communication channels between the referrer and hospital based services leading to better management of people who are referred urgently and discharged back to the community.
- Services have a strong focus on day, outpatient, and community care to reduce the need for hospital inpatient admissions where appropriate. This will be augmented and supported by primary medical care.
- The service has protocols for discharge from service to achieve appropriate and cost effective care.

### 11.2 Effectiveness

- Written evidence of quality assurance processes in place peer review and a clinical audit system which measures mortality, major morbidity and complications such as infection and readmissions
- Clinical staff regularly participate in organisational and professional colleges maintenance of competency programmes
- Effective information transfer from secondary to primary providers will occur:

- the provider will advise general practitioners of indicative waiting times for first outpatient specialist consultation following general practitioner referral as part of the provider’s regular communication with GPs (eg. newsletter)
  - discharge summary sent on the day of discharge to general practitioner and referring consultant, (if different from operating surgeon/attending physician), and letter sent within 72 hours
  - audits of delays in discharges, admission and outpatient consultation and communication with referring practitioners
  - development and implementation of practice protocols, minimum standards and procedures in relation to:
    - \* case management, including the use and regular review of written plans for shared care (shared responsibility between patient and health practitioners), and that an adequate needs assessment is conducted on all referred patients
    - \* consultative relationship with primary general practitioners, community services and community agencies
    - \* inter-relationship between specialty services, support services and allied health services
    - \* relationship with secondary general medical practitioners and other tertiary services
- Services use a multi-disciplinary team approach
  - Services work closely with primary, secondary and tertiary specialties to ensure the appropriate referral of patients with conditions which are beyond the technical and support capacity of the local medical and surgical service
  - Services implement processes including retrospective case review and analysis of care pathways, leading to more effective and efficient resource utilisation and improved health outcomes, particularly for Māori.

## 12. Purchase Units and Reporting Requirements

### 12.1 Purchase units

Purchase Units are defined in the joint District and Health New Zealand’s Nationwide Service Framework Purchase Unit Data Dictionary. The Purchase Units that apply to Specialist Medical and Surgical Services can be found in the current version of the Purchase Unit Data Dictionary that is available on the NSFL website ([here](#))

Specialist Medical and Surgical Services must comply with the requirements of national data collections where applicable.



## 13. Appendices

### 13.1 Appendix One: GUIDELINES FOR THE DELIVERY OF AN ORGANISED STROKE SERVICE

*These are guidelines to assist you, as a provider, in moving toward delivery of this service over time. They are not service specifications and therefore do not form part of contract compliance requirements but should be used as guidance in service specification development for provision of this service.* The impact of stroke in New Zealand is significant. It is the third leading cause of death and the greatest cause of disability. Reducing the incidence and impact of cardiovascular disease is one of the thirteen New Zealand Health Strategy immediate action priority objectives for population health.

There is increasing evidence to support the development of organised stroke services in New Zealand. Organised stroke services provide the benefits of early assessment and timely intervention and have been proven beyond doubt to reduce both morbidity and mortality following stroke. The benefits apply to all patients regardless of age, stroke severity or co-morbidities, and are sustained for at least 5-10 years.

#### Introduction

The aim of this service approach is to implement organised stroke care, assist best practice through use of the stroke guidelines, and improve outcomes for people with stroke and transient ischaemic attack (TIA). This approach covers the management of patients with stroke from onset through rehabilitation, both inpatient and community-based.

Efficient and effective management of patients depends upon a well-organised, expert service that can respond to the particular needs of each patient. Consequently, the organisation of stroke services and care of patients must be considered at every level of service delivery provision including:

- Primary care
- Access to investigations
- Hospital
- Community services (including both rehabilitation and support services)
- Liaison with volunteer organisations (e.g. Stroke Foundation)

#### Definition

Stroke is defined by the World Health Organisation as a condition characterised by rapidly developing symptoms and signs of a focal brain lesion, with symptoms lasting more than 24 hours or leading to death, with no apparent cause other than that of vascular origin. Transient ischaemic attacks (TIAs) are defined as where these symptoms and signs last less than 24 hours. TIAs share the same causes as stroke and may precede a stroke. (WHO MONICA Project 1988) This service specification includes rehabilitation of people with stroke due to SAH (Subarachnoid Haemorrhage) but does not include the neurosurgical management of SAH.

The New Zealand Guidelines Group (NZGG) Stroke Guidelines (NZ Stroke Guidelines) provide more detailed information on the care of patients with stroke for District stroke

multidisciplinary team (MDT). Further information can be found on the Stoke Foundation website [www.stroke.org.nz](http://www.stroke.org.nz) and the Ministry of Health website [www.moh.govt.nz](http://www.moh.govt.nz)

## Organised Stroke Services

These guidelines are applicable to all stroke services, including services for people with TIA, which are provided in each DHB region. They cover the entire continuum of care and as such should be read in conjunction with the service specification for Specialist General Medicine and related DSD specifications e.g. AT&R service, Home Support, Environmental Support Services, Carer Support, Needs Assessment and Service Coordination specifications and the New Zealand Stroke guidelines.

All patients with a definite or presumptive diagnosis of a new stroke or TIA should be admitted to hospital unless:

- Their symptoms have fully recovered or are rapidly recovering so that there is likely to be no or minimal interference in activities of daily living within a short period of days AND
- They live with a competent carer nominated by the person with stroke who is available to provide care, or they are able to recover home alone AND
- Diagnostic and secondary prevention issues can be addressed promptly by, or in discussion with specialist stroke services (*promptly implies 100% assessed within 7-14 days*) AND
- There is a formal arrangement with primary care health practitioner AND
- Any required initial input from specialist rehabilitation and support services (such as District home help and personal care) can be instituted immediately (*immediately implies same day for support and next day for rehabilitation services*) unless minimal residual deficit only.

OR

- In the opinion of the treating doctor AND the person with stroke/family of the person with stroke, no benefit to the person is likely through admission to hospital. This might apply in situations, for example, where the person was already substantially disabled or suffering from a terminal illness.

OR

- Despite a full understanding of the benefits of admission to hospital, the person with stroke and their family may decide to have care at home. In this situation all patients should be offered and have access to specialist review and investigations, as well as community rehabilitation and support services (such as home help and personal care) which should be instituted immediately (*immediately implies same day for initial support, next day for rehabilitation services*)

## Requirements for safe and good quality Organised Stroke Services

There is now overwhelming evidence that the single most important intervention that would improve outcomes for all people with stroke is the provision of organized stroke services for the people of that region. The organisation of stroke services, as set out below, would likely result in compliance with many of the specific recommendations for “best practice” in stroke care and improve the overall outcomes.

The management of the individual by stroke services involves a complex sequence of relationships and events. The level of intervention will depend on the condition of the individual, their consent for treatment, the qualifications, training and experience of the clinical staff and the level of clinical support available. Services provided should include:

- Designated beds within a general ward or specialist Assessment, Treatment and Rehabilitation (AT&R) or Stroke Unit with sufficient capacity to manage most patients admitted to hospital with stroke (see level of service 5.7)
- Lead clinician of the service
- A co-ordinated multidisciplinary team
- Staff with specialist expertise in stroke and rehabilitation
- Education programmes for staff, patients and carers
- Agreed protocols for common problems
- An outpatient neurovascular service or clinic for the rapid assessment of transient ischaemic attack and minor stroke
- Timely access to brain and vascular imaging services
- For patients not admitted to hospital, timely assessment, investigation and on-going treatment/management in the community.
- Integration of all the above service components including primary and secondary services for stroke
- Community based rehabilitation and support services

The level of organisation of stroke services at a particular hospital or in a particular region will depend to some extent on the number of people with stroke admitted per year. This will vary according to the size and demographics of the population served.

**Organised Stroke Services Key Components.** – *Inpatient organisation for different-sized District Health Boards will also be reflected in the new Stroke guidelines that are under consultation, the table below is a suggested configuration*

Organised Services Components	Stroke Key	Large DISTRICT (pop. >180,00)	Medium DISTRICT	Small DISTRICT (pop < 80,000)
Lead Physician		a nominated physician for leadership, planning, implementation, and accountability for best practice management of people with stroke.	a nominated physician for leadership, planning, implementation, and accountability for best practice management of people with stroke.	a nominated physician for leadership, planning, implementation, and accountability for best practice management of people with stroke.
Level of Stroke expertise for clinical overview of patients		Stroke expert physician responsible for all patients with stroke	Stroke expert physician in the team caring for patients	Stroke expert physician in the team caring for patients

Organised Stroke Services Components	Stroke Key	Large DISTRICT (pop. >180,00)	Medium DISTRICT	Small DISTRICT (pop < 80,000)
Location and type of stroke inpatient care/facility – Acute Care Beds		Either in a combined acute & rehabilitation stroke unit or an acute stroke unit	Either an acute stroke unit or aggregation of stroke patients in a general ward	Aggregation of stroke patients in a general ward
Location and type of stroke inpatient care/facility – Rehabilitation Beds		Either in a combined acute & rehabilitation stroke unit or a rehabilitation stroke unit	Either a rehabilitation stroke unit or aggregation of patients in an AT&R ward	Aggregation of patients in an AT&R ward
Inpatient Multi Disciplinary Team (MDT) expertise and specialization in stroke and rehabilitation		A MDT with expertise in stroke and rehabilitation, dedicated to stroke	A MDT with expertise in stroke and rehabilitation but not dedicated solely to stroke	A MDT with expertise in rehabilitation
Community Rehabilitation service		close links should exist between inpatient and community rehabilitation services		
		A dedicated community MDT with expertise in stroke and rehabilitation. Some team members may be “stroke dedicated” (eg nurse) while others may have an additional non-stroke caseload (eg physician, Speech Language Therapist)	A community MDT with expertise in rehabilitation and the management of stroke. It is expected that all team members would have an interest and expertise in stroke, but it is likely they will also have an additional non-stroke caseload.	A community MDT with expertise in rehabilitation. These professionals should also have close linkages with “stroke specific’ community rehabilitation teams within larger DISTRICTs to enhance their stroke expertise.
Neurovascular Outpatient Services	or	diagnosis and secondary prevention issues in those patients with minor stroke or transient ischaemic attack in the community or not admitted to hospital. Patients should have access to specialist advice, outpatient assessment and investigations within 7-14 days.		

Organised Services Components	Stroke Key	Large DISTRICT (pop. >180,00)	Medium DISTRICT	Small DISTRICT (pop < 80,000)
		This assessment should be via a specialised neurovascular clinic or service.	This assessment should ideally be via a specialised neurovascular clinic or service but may occur via other specialist clinics and services.	This assessment could be via a specialised neurovascular clinic but is likely to be provided via other specialist clinics

### Linkages

Integration and organisation are the keys to good Stroke Services thus key linkages are required across the entire continuum. The organised stroke service should act as a model for the integrated continuum of care.