

**Department of  
Physical Medicine and Rehabilitation**

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**Service Hours**

Monday to Friday: 9:00 am - 5:00 pm  
Saturday: 9:00 am - 1:00 pm  
Closed on Sundays and Public Holidays  
Consultation by Appointment



For enquiries and appointments,  
please contact us



# Stroke Rehabilitation Programme



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## What is Stroke Rehabilitation?

Our central nervous system regulates normal muscle tone and functions. While part of the motor nervous system can be disrupted or even damaged after stroke, some unused nerve-motor pathways are often unaffected. Individuals may learn how to activate these unused nerve-motor pathways to improve their daily activities, e.g. eating, speaking, walking and the use of arms and hands. This is often referred as neuroplasticity. The extent of improvement depends on the area in the brain affected, its size and severity as well as the age of the individual.

## What Will I Do During Rehabilitation?

The programme is tailored to an individual's neurological deficits and special requirements. With detailed evaluations and intensive multi-disciplinary treatments, you can achieve improvements in the following areas:

- Mobility skills, e.g. transfer, standing, walking or moving a wheelchair
- Self-care skills, e.g. grooming, eating and drinking, bathing and dressing
- Speech and language skills, including reading and writing
- Cognitive function, including memory or problem-solving skills

## When Does Rehabilitation Begin?

You may start rehabilitation treatments when your condition is stabilised. The earlier you begin, the more you will benefit from the treatment. It should begin in 24-48 hours after the onset of stroke, during which you can exercise the paralysed muscles and practise turning in bed. Stroke rehabilitation is most effective when conducted in concerted efforts. Working together with your family, doctors, nurses and other rehabilitation professionals, you can benefit the most from the treatments and achieve the best outcomes.

## What is Included in a Rehabilitation Programme?

Comprehensive services are provided by our multidisciplinary team of healthcare professionals.

### Rehabilitation Management

(by a Rehabilitation Specialist)

1. Comprehensive medical and functional assessment
2. Identification of risk factors of recurrent stroke and its treatment
3. Prevention of complications: pressure ulcer, dysphagia and aspiration pneumonia, etc.
4. Design of rehabilitation programme and prescription of equipment and rehabilitation intervention
5. Management of bowel and bladder dysfunction
6. Management of spasticity
7. Management of post-stroke pain (shoulder pain and central pain)
8. Management of post-stroke depression
9. Arrangement of special driving permits for patients and their families

## Physiotherapy

1. Lower limb: Body Weight Supported Treadmill Training balance training to improve walking and balance ability
2. Upper limb: Constraint-Induced Movement Therapy (CIMT), gradual and intensive hand function training of the affected arm with restraint in good arm



### 3. Advanced technologies:

- Robotic Gait Training: body weight supported gait training with exoskeleton and Virtual Reality (VR) games to improve walking pattern and endurance



- Functional Electrical Stimulation to improve upper limb and lower limb functions



4. Individualised exercise programme including strength and flexibility training as well as aerobic training





## Occupational Therapy

### 1. Wheelchair, seating and positioning devices prescription



### 2. Functional assessment and training of upper limbs

### 3. Cognitive function assessment and training



### 4. Basic and instrumental activities of daily living assessment and training

### 5. Pressure ulcer prevention

### 6. Home environmental assessment and modification



### 7. Assistive device prescription and training



## Speech Therapy

Speech Therapists work with people with communication and swallowing problems.

### 1. Communication disorders including Aphasia, Dysarthria & Apraxia of Speech

- Treatment is tailor-made according to individual needs to achieve optimal communication ability

### 2. Swallowing disorders (Dysphagia)

- Different treatment modalities may be used to optimise one's swallowing ability and ensure safe and adequate eating and drinking.

The following objective assessments may also be performed by our Speech Therapists together with our Specialists when necessary:

- Videofluoroscopic Swallowing Study (VFSS)
- Fiberoptic Endoscopic Examination of Swallowing (FEES)

## Prosthetic and Orthotic Service

### 1. Contracture-preventing orthosis

Application of various kinds of orthoses can prevent joint contracture and maximise rehabilitation potential.



### 2. Dynamic ankle foot orthosis (for drop-foot)

Drop-foot is one of the major post-stroke defects of the lower limb, leading to higher fall risk during walking. Application of various kinds of dynamic ankle-foot orthoses (AFO) can protect the affected ankle and facilitate a better walking pattern.



## Podiatry

1. Skin: Foot callosity and corn management , tinea pedis, foot wound and ulceration treatment
2. Toenail: Treatment of pathological nail, ingrown toenail and onychomycosis
3. Foot deformity: Provide foot orthoses and aids intervention, foot and ankle exercise advice
4. Footwear advice

## Other Professional Disciplines

- Rehabilitation nursing
- Audiology and ophthalmology
- Clinical psychology and psychiatry
- Rehabilitation counselling
- Chaplaincy
- Patient/Family education

Your programme may cover vocational assessment and other services to improve physical stamina and emotional conditions.



## How Long Does Rehabilitation Last?

Rehabilitation takes time and success is on your side if you can go through the whole rehabilitation programme with persistence, determination, family support and specialist assistance. To stroke patients, every improvement in functional skills is an achievement. And achievements do accumulate over time and contribute to community reintegration and independent living. Treatment in an acute hospital setting usually lasts two to four weeks, depending on severity of the stroke. Most can return home after treatment and receive outpatient therapy services for several months during recuperation.

## Stroke Rehabilitation Service Package at HKSH

We have a multidisciplinary team comprising a rehabilitation specialist and allied health team members. Detailed initial assessments by a rehabilitation specialist will be followed by a comprehensive rehabilitation programme designed to meet the needs of the patient's functional deficits and personal goals. Rehabilitation treatment by allied health team members will then be provided to the patient. Team meeting and discussion will be held regularly to monitor the progress and special needs of individual patient.



## Service Delivery:

1. Comprehensive assessment by a Rehabilitation Specialist
2. Setting of rehabilitation goals together with patients and their families
3. Treatment with medications and rehabilitation therapy prescription
  - Range of movement exercise to prevent joint stiffness and spasticity
  - Muscle strengthening
  - Balance training
  - Mobility training
  - Activities of daily living training
  - Walking aids/wheelchair prescription
  - Cognitive function training
  - Swallowing assessment and training
4. Regular team review of progress

## Stroke Rehabilitation Service Package includes:

- Two consultations by a Rehabilitation Specialist
- Eight sessions of Physiotherapy, Occupational Therapy and Speech Therapy treatment (Number of sessions of each discipline depends on the special needs of individual patient )
- Consultation by Clinical Psychologist is optional with extra charge
- Consultation by Rehabilitation Nurse is optional without extra charge
- Clinical Psychology consultation for selected patients