



# **NRH**

**National Rehabilitation  
University Hospital**

**NATIONAL REHABILITATION HOSPITAL (NRH)**

**THE SPINAL CORD SYSTEM OF CARE (SCSC)  
PROGRAMME**

**INPATIENT SCOPE OF SERVICE**

## NATIONAL REHABILITATION HOSPITAL

### SCOPE OF SERVICE FOR THE SPINAL CORD SYSTEM OF CARE INPATIENT PROGRAMME

#### **Introduction:**

*This Scope of Service is subject to the restrictions imposed by compliance with the Covid 19 pandemic protocols both at national and local level.*

The Spinal Cord System of Care (SCSC) Programme at the National Rehabilitation Hospital (NRH) provides **specialised, interdisciplinary, coordinated and outcomes focussed** rehabilitation to persons with spinal cord dysfunction. The NRH has developed a continuum of care for people with spinal cord dysfunction, encompassing the inpatient rehabilitation phase, outpatient phase and links to community services.

Spinal cord dysfunction may result from traumatic injury or non-traumatic injury including such disorders as spinal cord tumours, (benign or malignant), demyelination, vascular or inflammatory disorders. Patients with any neurological level & ASIA impairment scale spinal cord dysfunction can be considered for admission, including patients who are ventilator dependent. The SCSC Programme also includes the management of patients with peripheral neuropathies, such as Guillain Barre Syndrome as similar principles of rehabilitation apply to these conditions.

Persons with spinal cord dysfunction may have many challenges and may face wide-ranging long-term restrictions in their ability to live independently, drive or use public transport, return to work or education, participate in leisure and social activities, fulfil family roles and maintain personal, sexual and family relationships. The SCSC Programme at the NRH is designed to assist patients and their family/carers to manage their impairments and to promote greater levels of functional independence, social participation and community reintegration.

The SCSC Programme interdisciplinary team, in conjunction with persons served and their families, provides individualised, goal directed treatment plans designed to minimise the impact of these deficits and address the unique medical, physical, cognitive, psychological, vocational, educational, cultural, family, spiritual and leisure/recreational needs of people with spinal cord dysfunction and their families and carers.

The SCSC Programme is provided through a case managed approach that addresses:

- Movement through the spinal cord dysfunction continuum of care
- Ongoing access to information about services available within a coordinated continuum of care
- Links with community and stakeholder services
- Family/ Carer education and support

- Education of persons served, their families/support systems and appropriate local support services
- Facilitation of opportunities for interaction with peers. (Due to Covid 19 this is only possible online through Spinal Injuries Ireland)

### **Rehabilitation Setting**

The National Rehabilitation Hospital is a publicly financed, voluntary, free standing **106** bed inpatient, day patient and outpatient rehabilitation hospital located in Dun Laoghaire, County Dublin, Ireland.

The inpatient SCSC Programme is a **40**-bed inpatient rehabilitation programme that provides 24 hour, 7 days a week, medical, rehabilitation and nursing care and on-call respiratory physiotherapy. Following engagement with the HSE about staffing levels to ensure safe patient care and effective treatment the total beds open following the move to the new facility is currently 28 to increase to 31 by end of December 2020 and 40 by end of Quarter 2 2021

Persons admitted to the SCSC Programme receive a minimum of 2 hours of direct therapy treatment per day, Monday through Friday. Treatment may be delivered on a one to one basis or with more than one person being treated at the same time (known as concurrent treatment). Patients may also receive group treatment and education sessions. Direct therapy intensity differs on weekends depending on resources available, and to facilitate possible gradual reintegration of person into their home and community environments through therapeutic leave.

The SCSC Programme service areas are mainly located on Level 2 in the new hospital building and in the therapy gym in the Cedars building. Depending on their assessed needs, persons within the SCSC Programme can be admitted to one of the following ward units.

- ***Fern HDU*** is a 5-bed high dependency mixed gender ward that consists of 5 single ensuite rooms
- ***Lilly Unit*** is a 15-bed mixed gender ward consisting of 15 single ensuite rooms
- ***Oak Unit*** is a 20-bed mixed gender ward consisting of 20 single ensuite rooms

### **The Spinal Cord System of Care Programme Continuum of Care**

The NRH has developed a continuum of care for people with spinal cord dysfunction, encompassing the inpatient rehabilitation phase, outpatient phase and links to community

services. This comprehensive interdisciplinary system of care ensures that all individuals can receive the most appropriate programme of care based on their spinal cord dysfunction and their individual rehabilitation needs. For those who have sustained a traumatic spinal cord injury rehabilitation can begin post medical stabilisation including respiratory stabilisation.

Important in this continuum of care is communication and working links with all internal and external stakeholders to facilitate coordination of care and access to information and services.

### **Hours of Service**

The SCSC Programme provides 24-hour, 7 days a week, medical, rehabilitation and nursing care and on-call respiratory physiotherapy

### **The Services Provided For The Person Served:**

Each person receives a preadmission assessment of medical and rehabilitation needs that includes diagnosis, prognosis, morbidity, co-morbidity, premorbid level of function, mental status, ability to tolerate the intensity of the rehabilitation programme and support systems. If a person meets the admission criteria, (see p7) they are offered rehabilitation. Persons admitted and their families are offered appropriate information and opportunity for feedback at every stage of the process, and are actively involved in decisions regarding their care. An important aspect of this programme is education of both patient and family in relation to primary prevention to avert recurrence of the impairment process (where possible) and secondary prevention related to potential risks and complications due to impairment. This education will often require attendance at agreed sessions with family members and/or practical hands on interaction with the patient as part of the education process.

Following admission the interdisciplinary team members, in collaboration with the patient and family, will develop a comprehensive treatment plan that addresses the identified needs of the person, their family and support network.

### **The range of services offered in the Spinal Cord System of Care to meet these identified needs could include:**

- Activities of daily living training
- Adaptive equipment assessment and training
- Assistive technology assessment and training
- Audiology screening
- Behavioural support
- Bowel and bladder training
- Clinical psychological assessment and intervention
- Communication assessment and intervention
- Community liaison
- Coping and adjustment to disability
- Dentistry
- Discharge planning

- Driving and community transport assessments and training
- Emergency preparedness
- Family and caregiver training and education
- FEES (Fiberoptic endoscopic examination of swallow)
- Fitness and sports
- Horticulture therapy
- Hydrotherapy
- Independent living skills assessment
- Information regarding entitlements and services.
- Intensivist medical input including management of ventilator dependent patients
- Medical management of complications of SCI including autonomic dysreflexia
- Mobility training
- Nutritional counselling and management
- Occupational therapy
- Orthopaedic assessment
- Orthotics and splinting
- Pastoral and spiritual services
- Patient Advocacy Service
- Patient and family support system counselling
- Pharmaceutical Care e.g. patient counselling on medications
- Physiotherapy
- Podiatry
- Postural management
- Prosthetics
- Psychiatric review.
- Psychosocial assessment and intervention
- Radiology
- Referral to appropriate care pathway supports
- Rehabilitation nursing
- Respiratory therapy
- Safety awareness and training
- Sexuality and fertility counselling
- Skin care training
- Spasticity and pain management
- Specialist Seating Assessment
- Swallowing Disorder assessment and treatment
- Tendon transfer surgery: commencement of assessment
- Tracheostomy management and ventilator management
- Urology service including flexible cystoscopies
- Vocational assessment
- Wheelchair and Seating clinic
- Woodwork

Some persons admitted to more than one programme in the NRH will receive appropriate services from each programme. Depending on the assessed needs, some services cannot be provided on site within the SCSC Programme. If additional services are needed and not available on site, the programme can facilitate referral for specific ancillary services.

**Examples of these ancillary services could include:**

- Neurology
- Optician
- Substance abuse counselling
- Videofluoroscopy

**Palliative Care**

The NRH strives to deliver goal orientated rehabilitation for all patients who require our service. However, it is recognised that in some instances active rehabilitation is not the

appropriate or suitable approach for the patient and / or their family. In such cases, the NRH will liaise with all relevant parties to ensure the best possible outcome for all. The NRH will refer to palliative care services where this is medically indicated and in agreement with the patient and/ or their family. The NRH will support the transition to such services and aim to secure these services in the most suitable location for the patient and/ or their family.

### **The Interdisciplinary Team**

Patients with spinal cord dysfunction frequently have complex disabilities which require intervention by professionals with specialist knowledge and experience. The composition of the interdisciplinary team for each person served is determined by the assessment of the person's individual medical and rehabilitation needs.

The individuals who are always on the team are:

- The patient (person served) and family
- Rehabilitation Physician
- Rehabilitation Nurse
- Healthcare Assistant
- Pharmacist
- Liaison Nurse

And one or more Health and Social Care Professional including:

- Clinical Psychologist,
- Dietitian
- Medical Social Worker
- Occupational Therapist
- Physiotherapist
- Speech and Language Therapist

Other team members could include:

- Chaplain
- Dentist
- Intensivist
- Orthotist
- Prosthetist
- Sports therapist

Consultation with medical specialists could include, orthopaedics, plastic surgery, psychiatry, radiology, respiratory and urology.

### **The Services Provided For The Families/Carers/ Support Systems Of Person Served:**

Families and carers are partners in the rehabilitation process and are encouraged to participate in all phases of the programme. Information, counselling, emotional and psychological support can reduce the emotional sequelae experienced by the family/carer. This support may help them to adapt and come to terms with the life changes, and so result in better long-term outcomes for both the patient and the family. Many services are available within the SCSC Programme to meet the needs of the patient's family including:

- Education about spinal cord dysfunction.

- Education on what typically happens for families / carers who have been affected by spinal cord dysfunction
- Annual joint events with the voluntary agency Spinal Injuries Ireland (SII).
- Psychological support
- Pastoral services
- Peer support through interaction with other families
- Peer support through the onsite service from SII trained peer support staff
- Psychosocial assessment and intervention
- Family / support system counselling
- Information about support and advocacy resources, local accommodation and assistive technology resources.
- Short stay on site facility for family / carers to trial living independently with patient in the Corofin Lodge (**Due to Covid 19 restrictions this is currently not possible**)

### **Discharge Outcomes and Environments**

Rehabilitation is a continuous and often lifelong process. The effects of spinal cord dysfunction are long lasting and patients and their families require continued care and support, often for the rest of their lives. The carry-over of skills gained in treatment into daily activities and into home environments is critical to the success of any rehabilitation programme.

Monitoring of outcomes from the programme is important to determine the extent to which the interventions and services have achieved their aims. An assessment of the attainment of rehabilitation goals and discharge outcomes is essential.

The majority of persons are prepared for discharge home and are discharged to home. The NRH Discharge Liaison Occupational Therapist or Community Occupational Therapist will complete home assessments and provide recommendations about any adaptations or equipment required for safe discharge.. Some persons at discharge are referred to others services within the continuum of care or to external disability support services. Alternative discharge destinations such as long-term care facilities, assisted living residences, group home or post-acute rehabilitation programmes may be recommended based on level of functional independence and services available. Discharge to an acute hospital setting may be necessary in the event of medical illness or to await access to local community support services.

### **Admission Criteria for Inpatient Program**

The patient must -

1. Have a spinal cord dysfunction due to trauma or other cause. The SCSC Programme is equipped to care for patients with respiratory insufficiencies including those with tracheostomies and ventilator dependent patients. Patients with any neurological level & ASIA impairment scale spinal cord dysfunction can be considered for admission.

2. Have a peripheral neuropathy resulting in a physical impairment, where the condition is severe enough to warrant in-patient rehabilitation in the NRH and where the patient cannot avail of rehabilitation elsewhere.
3. Be at least 16 years of age
4. Be medically stable and fit to participate in a rehabilitation programme
5. Be willing and able to participate
6. Have rehabilitation goals

Patients under the age of 16 years requiring the services of the Spinal Cord System of Care are admitted under the Paediatric Family Centred Programme.

Admission to the Spinal Cord System of Care Programme is based on the preadmission assessment of level of need and the meeting of the programme's admission criteria. However, the timing of admission to the programme may be influenced by the preadmission assessment of the complexity of the individual's needs and the level of dependency in relation to the Spinal Cord System of Care Programme's capacity to best meet these specific needs at that time.

Acute referring hospitals must give a written commitment to resume care of the patient if no other discharge destination is available following completion of the rehabilitation programme.

#### **Continuing Stay Criteria:**

1. Demonstrate measurable progress towards their goals/targets
2. Demonstrate willingness and ability to participate in the prescribed programme
3. Continue to have the potential to benefit from the interdisciplinary programme prescribed
4. Medical necessity for the 24-hour medical and rehabilitation nursing care.
5. Rehabilitation goals are achieved but the patient and his/her family are making measurable progress towards achieving home discharge (as agreed with the rehabilitation team) which are affected by barriers external to the NRH.
6. Comply with NRH policies including those addressing anti-social behaviour or drug or alcohol use.

#### **Discharge / Transition Criteria for Inpatient Programme**

To be discharged from the Spinal Cord System of Care programme, one or more of the following conditions must be met:

1. The person has received maximum benefit from the inpatient programme



2. The person has improved to the projected functional level that will allow discharge to a specified environment with or without personal assistance.
3. The person's rehabilitation needs can be met equally well in an alternative environment.
4. The person has experienced a major intervening surgical, medical or psychiatric problem that precludes benefit from a continued intensive rehabilitation programme.
5. The person is no longer willing to be an active participant in the rehabilitation process.

**Exclusion Criteria:**

Patients are not admitted to the service where other needs make it likely that they will be currently unable to benefit from an inpatient programme. e.g. where medical or psychiatric or behavioural or drug and substance misuse predominates over the physical, psychosocial and cognitive needs of the patient. This includes Functional Neurological Disorder (FND). FND provides an umbrella term for a variety of symptoms of apparent neurological origin but which current models struggle to explain psychologically or organically.

In these cases, recommendations may be made to the referring person regarding appropriate services.