



SPINAL CORD INJURIES

ANNUAL REVIEW PROGRAMME

LIFE REHABILITATION IS WELL POSITIONED AND EQUIPPED TO OFFER HOLISTIC ASSESSMENTS AND REVIEWS OF ALL BODY SYSTEMS AND FUNCTIONS AS WELL AS PROVIDING ONGOING MANAGEMENT OF PERSONS LIVING WITH SCI.

SPINAL CORD INJURIES REVIEW PROGRAMME

Life Rehabilitation has successfully treated and rehabilitated more than 2000 people affected by spinal cord injuries (SCI) since January 2006. Spinal cord and related injuries account for almost 20% of our admissions, giving the professionals at acute Life Rehabilitation units substantial experience in the field.

Life Rehabilitation is well equipped to offer holistic assessments and reviews of all body systems and functions, as well as inter-disciplinary and ongoing management and care for people living with SCI. Our seven rehabilitation units throughout South Africa are staffed with teams of highly experienced rehabilitation professionals, including one to two rehabilitation doctors per unit, nursing staff with a special interest in rehabilitation, occupational therapists, physiotherapists, speech therapists, dieticians, clinical psychologists and social workers.

Our clinical outcomes for these clients, as measured by the international benchmark FIM and FAM¹ efficiencies, have improved by 31% over the last few years.

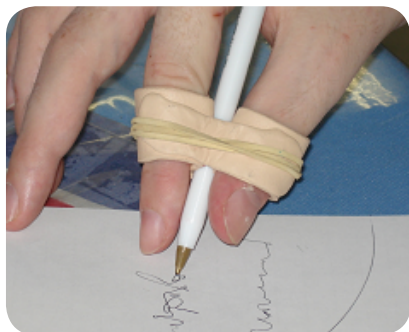


WHY REASSESS CLIENTS LIVING WITH SPINAL CORD INJURIES ON A REGULAR BASIS?

Sustaining a spinal cord injury can be devastating, but the effects can be much worse if the person does not take the necessary steps to prevent potential complications after discharge from acute rehabilitation.

Mortality rates are significantly higher during the first year after injury² and the leading cause of death is renal failure³, followed by pneumonia and septicemia.

Not only is the person with SCI at increased risk of death, but s/he is also prone to more frequent hospitalisations. The most common (45%) cause, bladder and kidney dysfunction, is usually due to stones and /or infection⁴. This highlights the importance of proper and regular assessment and management of bladder and kidney function.



The second most common cause of rehospitalisation is pressure ulcers, for which there is a life time risk of 85%. Not only do ulcers cause significant discomfort and limits a person's functioning, they have a significant financial impact with the cost of healing a single pressure ulcer ranging from R17 500⁵ to R198 700⁵ (depending on the severity or grade of pressure ulcer). Contributing to the causes of pressure ulcers are poor nutrition, depression, inappropriate wheelchair and or incorrect wheelchair cushions. It is therefore essential that persons living with spinal cord injuries attend regular follow-up visits, so that professionals can assess the person's weight and nutrition, emotional status and equipment.

Other possible complications of a SCI include spasticity, deep vein thrombosis, osteoporosis and fractures, cardiovascular disease and neuropathic pain. Postural deformities, joint stiffness, muscle shortening or imbalances (due to incorrect seating or positioning) and poor endurance are additional complications. These impact on a person's ability to live independently and cause significant suffering/morbidity. It is thus critical that a specialised team of professionals with expertise in managing acute and chronic complications in SCI, assess and manage these people with a view to anticipating and managing these complications early before they become irreversible.

People living with tetraplegia, suffer additional risk of autonomic dysreflexia and respiratory system dysfunctions (such as atelectasis, pneumonia, and aspiration) and these will be compounded if the person has additional life style diseases. People living with tetraplegia therefore require particular and precise management.

In South Africa, rigorous and routine follow up of persons with SCI, by a team of appropriate specialists, is not common practice, which explains why the SCI complications are widespread and possibly more prevalent than necessary.

- 1 Functional Independence Measure (FIM™) and Functional Assessment Measure (FAM) two clinical outcome measures used for disabled patients which measures disability and burden of care. Both tools are internationally recognized, valid and reliable.
- 2 National Spinal Cord Injury Statistical Center (NSCISC). Spinal Cord Injury Facts and Figures at a Glance Birmingham, AL: NSCISC; February 2012. Model Spinal Cord Injury Care Systems accessed at https://www.nscisc.uab.edu/PublicDocuments/fact_figures_docs/Facts%202012%20Feb%20Final.pdf in Sep 2012.
- 3 Longitudinal study done following up persons enrolled in the American National SCI Database (follow up done up to 35 years post injury).
- 4 National Spinal Cord Injury Statistical Center (NSCISC) 2011 Annual Report for the Model Spinal Cord Injury Care Systems. Birmingham, AL: NSCISC. Model Spinal Cord Injury Care Systems. accessed at <https://www.nscisc.uab.edu/PublicDocuments/reports/pdf/2011%20NSCISC%20Annual%20Statistical%20Report%20-%20Complete%20Public%20Version.pdf> in Sep 2012.
- 5 Dealey C, Posnett J and Walker A. The cost of pressure ulcers in the United Kingdom. J Wound Care. 2012 Jun;21(6):261-2, 264, 266.

THE SCI REVIEW PROGRAMME PROVIDES PATIENTS AND FAMILIES WITH CONTINUED ACCESS TO A REHABILITATION DOCTOR AND A TEAM OF EXPERT REHABILITATION PROFESSIONALS.

BENEFITS OF A REVIEW PROGRAMME OF CLIENTS LIVING WITH SPINAL CORD INJURIES

This SCI annual review programme provides patients and families with continued access to a rehabilitation doctor and a team of expert rehabilitation professionals. This team provides a variety of services to help patients maintain or regain their level of physical function and good health. This is a proactive approach to reduce complications and to prevent future hospitalisation by managing a person's condition. Life Rehabilitation has streamlined its SCI follow-up service into a focused and structured annual programme, which is run over a period of five days.

The benefits of Life Rehabilitation's annual review programme include the following:

- Prevention and management of short term and long term complications which if left untreated, can ultimately result in death.
- Increased patient and family's understanding of the causes of possible complications such as pressure ulcers, bone density loss, urinary tract infections, postural deformities and how to combat these and how to manage them pro-actively.
- Empowered individuals who are able to integrate back into their communities and resume life as productive citizens.
- Assessment of bladder and kidney function will determine the risk of renal failure which is the leading cause of death in persons living with SCI.



WHICH CLIENTS WITH SPINAL CORD INJURIES SHOULD BE SENT FOR FOLLOW UP?

- All persons who have sustained a SCI should be followed up on an annual basis, more especially persons with tetraplegia. They should be referred in an effort to assess current health status and to prevent any future complications.
- Clients who have impaired bladder function will benefit from the urodynamic studies offered on an annual basis.

HOW TO GO ABOUT REFERRING A CLIENT FOR THE PROGRAMME

Case management is carried out according to the Life Rehabilitation standard process. A client with SCI should be referred for a routine annual follow up or when complications arise. The specialist or general practitioner should contact the nearest Life Rehabilitation unit. The rehabilitation admissions consultant will conduct a pre-admission assessment of the client within 24 hours of the referral, in order to determine the potential benefits of rehabilitation and to optimise the timing of admission.

The admissions consultant will discuss the admission and any queries regarding the rehabilitation process with the referring specialist or general practitioner, the client and his/her family.

Authorisation for admission will be requested from the funder.





OUT-PATIENT SERVICES CAN BE CONSIDERED FOR PERSONS LIVING IN THE VICINITY OF THE UNIT. IN-PATIENT SERVICES ARE RECOMMENDED FOR THOSE WHO LIVE FURTHER AWAY.

FIVE DAY SPINAL CORD INJURY FOLLOW UP PROGRAMME OFFERED ON AN INPATIENT OR OUTPATIENT BASIS

The week long review programme is run from Monday to Friday and includes:

- identification and management of current, as well as potential problems;
- review of genito-urinary system and further management of incontinence and sexual health;
- regarding continence and sexual health management;
- review of assistive devices, and identification of the need for additional assistive devices;
- review of coping and adjustment, and the implementation of coping strategies;
- review of function and independence within the home, community and work environments;
- assessment of vocational skills and recommendation for vocational training;
- liaison with the employer and recommendations regarding return to work options; and
- assessment of caregiver knowledge, skills and provision of caregiver support.

Outpatient services can be considered for persons living in the vicinity of the unit. Inpatient services are recommended for those who live further away.

On discharge, referral will be made to available community resources.

TARIFF

The aim of Life Rehabilitation's follow-up programme is to offer an affordable solution to improve the quality of life for people living with SCI. The tariff constitutes a substantial saving compared to individual fee for services billing, making it accessible for more people and ensuring that our expertise reaches and positively changes more lives. The cost effective and comprehensive tariff is inclusive of all acute rehabilitation professional services as well as one urodynamic study. Medication, investigations for diagnostic purposes, specialist consults, blood tests and assistive devices (if necessary) are excluded from the global tariff.



"I am happy – I can transfer from the bed to my chair on my own. My balance is much better. When I transfer myself – it's very simple, it's not as difficult as before. I can do it. They taught me more things, like how to help myself. Most of the things I can do myself. I can wash myself. Because it is better now, it is simpler. It was very good and this programme is a good idea. Even though I have a spinal problem, I realize I can still do lots of things."

Mr NF Selapa, paraplegic client, 1st review

"I am so grateful that they all persevered with me, that I was taught how to cope and the importance of carrying myself the same way as I did before – with confidence. They were all happy to see my progress which made me feel good about myself – I'm very glad they gave me back my life."

Ms N Nxumalo, paraplegic, 1st review