

Federal State Budgetary Institution "Novokuznetsk Scientific and Practical Centre for Medical and Social Expertise and Rehabilitation of Disabled Persons",  
Ministry of Labour and Social Protection of the Russian Federation

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# Unified rehabilitation

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# Centre structure

## **226-bed facility comprises of:**

- Department of neurosurgery – 93 beds;
- Department of vascular surgery 73 beds;
- Department of orthopaedics – 30 beds;
- Department of medical rehabilitation – 30 beds.

**Unified Rehabilitation Service facilities:** rooms for therapeutic exercises, physiotherapy, psychology, psychotherapy, social and occupational adaptation.

**Prosthetic and orthopaedic base for complex and atypical prosthesis;  
Research divisions.**

# Our interest in ISWP

- Persons with locomotor impairments is the major population in the Centre.
- Wheelchair is one the most commonly prescribed assistive device for mobility.

# Wheelchair Skills Program (WSP)\*



DALHOUSIE  
UNIVERSITY

Faculty of Medicine  
Wheelchair Skills Program

Home

Meet the Team

Conditions of Use

Skills Manual and Forms

Other Tests

Equipment

Upcoming Courses

Impact & Publications

Testimonials

Web Statistics

Videos

Pictures

Posters

Lectures

Media

Donations

Games

Related Sites

Contact Us

WHEELCHAIR  
SKILLS PROGRAM



## ABOUT US

The Wheelchair Skills Program (WSP) is a set of free online **low-tech, high-impact**, evidence-based resources for the assessment and training of the wheelchair skills of users (with or without the assistance of caregivers) of manual wheelchairs, powered wheelchairs and motorized mobility scooters.

## Warning

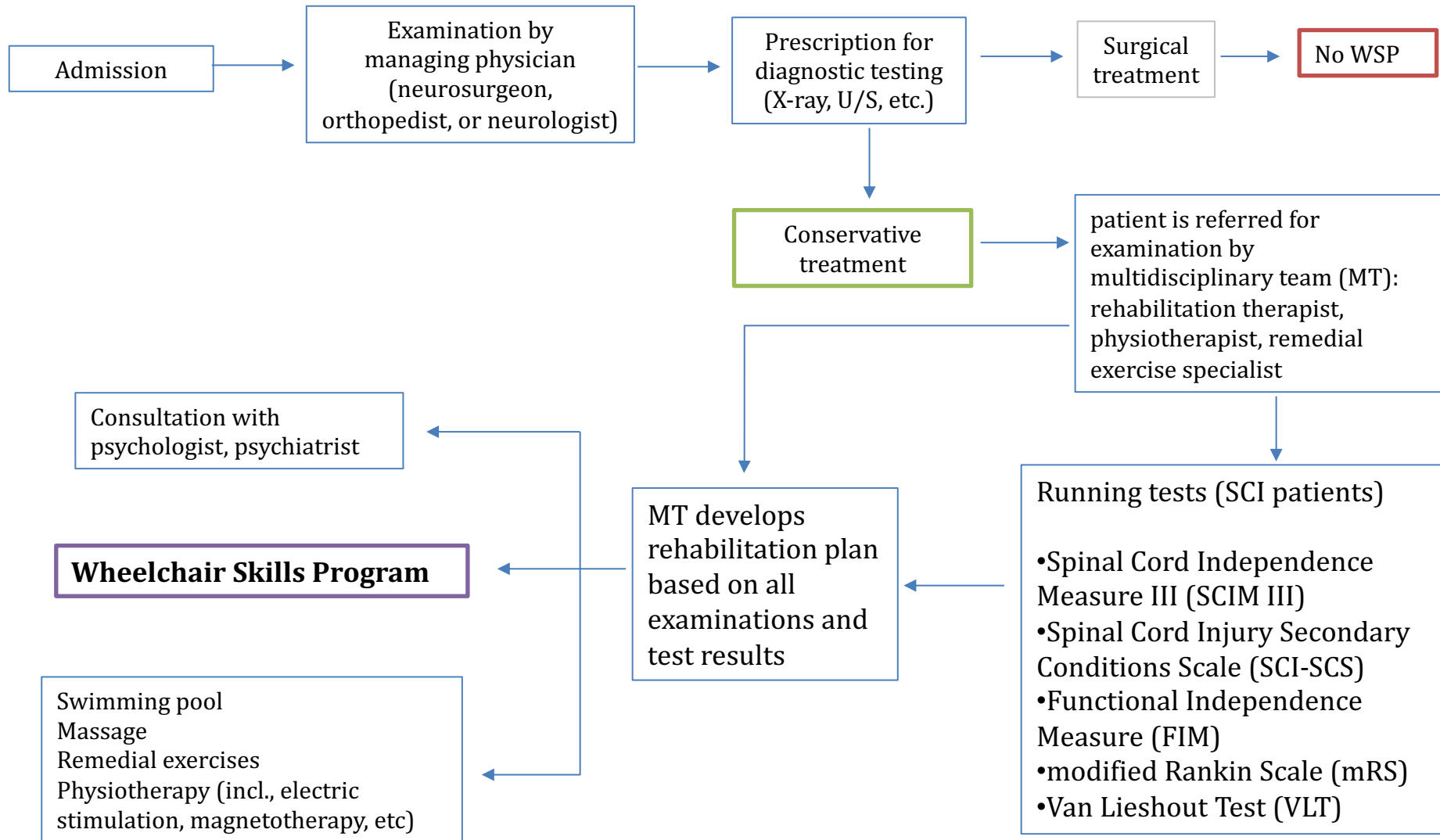
The wheelchair skills described and illustrated on this website can be dangerous and result in severe injury if attempted without the assistance of trained personnel.

Visit us!



\* <https://wheelchairskillsprogram.ca/en/>

# From admission to WSP



# Stage I

## Preparation for Wheelchair Skills Program



«EKZARTA» (REDCORD) Kinesiotherapeutic equipment for the rehabilitation of the patients with spinal cord injury for strengthening the core muscles and development of active movement skills



IMITRON WALKING SIMULATOR for strengthening the back muscles and development of motor skills

## Stage II Wheelchair Skills Program (WSP)

WSP consists of Wheelchair Skills Test (WST) and Wheelchair skills Training Program (WSTP), including:

- Rolling forward/backward short and long distances
- Turning in place
- Turning while moving forward/backward
- Maneuvering sideways
- Picking objects from floor

*[full list and materials are available at <https://wheelchairskillsprogram.ca/en/>]*





DESCENDS SLIGHT INCLINE AND STOPS



ROLLS ON SOFT SURFACE



PERFORMS LEVEL TRANSFERS



## Multidisciplinary team

Managing physician  
(neurosurgeon,  
orthopedist, neurologist)

Medical university (higher education):  
6 years (11 980 hours);  
+ 1 year of internship;  
+ 2 years of residency;  
+ further vocational education (*required every 5 years for all medical doctors with university degree*)

Rehabilitation therapist

Medical university (higher education):  
6 years (11 980 hours);  
+ 1 year of internship,  
+ 2 years of residency  
+ further vocational education in exercise therapy and sports medicine; Physiotherapy, manual therapy and acupuncture

Rehabilitation specialist

Higher education in social sciences (university degree)  
5 years (6 960 hours)  
+ further training in exercise therapy

Exercise therapist

Higher pedagogical education in physical culture and sports (university degree)  
5 years (8 640 hours)  
+ further training in exercise therapy (remedial gymnastics)

# Major Challenges ✘



- None of the educational programs include courses related to the wheelchairs (or any other type of assistive technology for mobility)
- Rehabilitation centres are not required (*not obligated*) to be able to provide wheelchair skills training to the wheelchair users and/or their caregivers
- It might take over a year for a person to receive their first 2 wheelchairs (1 indoor, and 1 outdoor)
- Environmental factors: physical environment is rarely adjusted to the wheelchair users

# Positive aspects



- Social Insurance Fund provides people with disabilities with 2 wheelchairs (1 indoor, and 1 outdoor).
- Social insurance covers wheelchair maintenance and repair,
- New outdoor wheelchair is provided every 5 years.

## Workshop for WHEELCHAIR SKILLS PROGRAM



International Scientific and Practical Conference, Novokuznetsk, 2019



# Thank you!

