UEMS PRM Section & Board

Clinical Affairs Committee

Template Version 2.3

HAD & COVID Rehabilitation Program Soroka University Medical Center, Beer Sheva, Israel

08/05/2014 - uems_programme_of_care_templateV2.4_2014.doc

Issue

Version: 1
Date of the first version: 24.06.22
Date of the present version: 24.06.22

Identification

Title	Dr
Family name	Lutsky
First name	Treger
Position	Chief Rehabilitation Specialist CLALIT South Department, Director HAD & COVID Program Soroka Rehabilitation Department, Beer Sheva, Israel
Phone	+972506263552
Email	lenalu@clalit.org.il
Year of Board Certification	2007
Name of unit	Rehabilitation Department
Hospital (facility)	Soroka University Medical Center
Address	Rager Boulevard 151
Post code	84101
City	Beer Sheva
Country	Israel

Content

Quality criteria of a PRM Programme of Care
Review table

Reviewers are invited to use the table below in order to express their opinion about the programme description. Absolute criteria should be noted "yes or no". Relative criteria can be marked:

- G: Good
- F: Fare
- I: Insufficient

Reviewers should also add a short comment in each box.

Criteria	Assessment
The programme must be under the responsibility of a PRM doctor. *Comment:*	Yes / No
The description provides relevant information on each item of the template. *Comment:*	G / F / I
Foundations of the programme must be linked to EBM and/or official data and/or official documents. *Comment:*	G / F / I
PRM care principles must not be confused with the description of the programme content.	G / F / I
Environment description should be brief and not redundant with other chapters. *Comment:*	G / F / I
The goals of the programme should be expressed in ICF terms and an additional brief text. *Comment:*	G / F / I
In the PRM organization chapter, a difference should be made between the facility staff and those specifically involved in the programme. *Comment:*	G / F / I
Number of PRM specialists involved in the PRM programme should be mentioned. *Comment:*	G / F / I
Comparison with legal national standards or other available standards should be made for staff devoted to the programme and team management. *Comment:*	G / F / I
Patients' records (medical files) are mandatory. *Comment:*	Yes / No
Statistics about general organisation are required. *Comment:*	G / F / I

Sustainability of the programme (IV.C.4): Prior to final accreditation by the UEM PRM Section, a programme of care should be **submitted at a national level, at least as an oral paper in a PRM congress**.	Yes / No
References must be cited within the description of the programme; they must be freely accessible on the Internet or provided to the reviewers in a “pdf” file. *Comment:*	G / F / I
A short summary in English should be provided for the documents in other languages. *Comment:*	G / F / I

Other comments:

I. Summary

The Department of Physical Medicine and Rehabilitation at Soroka University Hospital in Beer Sheva, Israel was established in 2015. This is the first academic Physical Medicine and Rehabilitation program, established in south of Israel. The department has twenty beds and a catchment area of the entire southern half of Israel. It is a general rehabilitation ward, caring for patients with all diagnoses, including stroke, spinal cord injury, brain injury (including TBI, encephalopathy, anoxia), orthopaedic surgeries, neuropathies (such as GBS, MS), trauma, Hospital-Associated Deconditioning (HAD) and COVID-19.

We are located in a tertiary care hospital which not only allows us to provide early rehabilitation care, but also to tend for the sickest patients. The department is a part of a 1000+ bed, acute-care hospital, which is a Level 1 trauma centre servicing the entire southern half of the country. Our location in the rural periphery makes us the choice for most families as they do not have to travel to the centre of the country to be with their family member during a protracted rehabilitation stay. Also, more sicker patients, as HAD & COVID, are less likely to be able to be transferred to other facilities. This leads to a high demand for relatively few beds.

As part of the active General Medical Centre, affiliated to Ben Gurion Medical School, we work hand-in-hand with affiliated departments such as internal medicine intensive care units, COVID-19 wards, cardiology, oncology, surgery, infectious unit, interventional radiology and neurology. We specifically targeted HAD patients as a primary intervention given the large number of them in our catchment area, and the need to stay in general hospital during rehabilitation process due to medical problems. COVID-19 patients indeed joined this category very naturally.

The program was established according to ICF guidelines and other standardized treatment algorithms. We have three senior physiatrists and five resident physicians. The treatment team also consists of four physical therapists, three occupational therapists, two speech therapists, two social workers, rehabilitation psychologist, and 12 rehabilitation nurses.

Patients are insured by the National Health System, so they pay nothing for their treatment. Furthermore, as part of the largest HMO in the country, we are able to organize the smooth transition of our patients from inpatient care to the appropriate outpatient settings in the region.

II. General foundations of the Programme

A. PATHOLOGICAL AND IMPAIRMENT CONSIDERATIONS

1. Aetiology

Poor functional performance after prolonged acute hospitalization is a growing concern, especially in older adults. Medicare spending for postacute care after hospitalization has increased significantly over the last decade, representing 10% of the annual Medicare budget (1). Despite this spending, 68% of patients are discharged from postacute care settings below their prehospitalization level of function (2), which contributes to nearly 1 in 5 Medicare beneficiaries being rehospitalized within 30 days after an acute hospitalization (3). Multisystem decline in function has been described as part of a clinical sequela historically termed “medical deconditioning” or “hospital-associated deconditioning” (HAD) (4).

After prolonged acute hospitalization, this population frequently experiences significant muscular weakness, decreased stamina, diminished appetite, fatigue, and decreased ability to carry out ADLs (5). For older adults with HAD, it is accompanied with concomitant elevation in the risk for adverse health events and is strongly predictive of hospital readmission (6), institutionalization (7), and mortality (8).

Returning (or reconditioning) patients with HAD to their prior level of function is a common therapy paradigm in postacute care, in most cases ideally to be performed at home in outpatient rehabilitation settings (9). However, older adults with HAD may be functioning dangerously close to the threshold between independent functioning and dependency, meaning even a small decline in physical performance after hospital discharge may have catastrophic consequences. That is the reason, that in severe cases it is essential to hospitalize HAD patients for inpatient intensive multidisciplinary rehabilitation program (10).

The COVID-19 crisis has raised many difficulties to health systems, both, in Israel and around the world, causing the necessity to make systemic changes – often “on the run” and sometimes as an immediate, emergent solution to problems encountered throughout components of the entire system (11). Although most of patients overcome light type of disease and do not need special rehabilitation program (12), some of them have long-lasting severe illness with impressive decline of functional abilities (13). In those patients professional inpatient rehabilitation program is essential (14), and due to significant medical residual complains, it is ideal to overcome such program in rehabilitation department, located in general medical hospital, such as Soroka Medical University Center.

2. Natural history and relationship to impairment

Almost statistically most of severe HAD patients are in old age, there are a lot of young and previously healthy people, developing significant functional decline after long-lasting general illness or COVID-19. HAD can occur within days for adults of any age, during acute hospital admissions involving enforced bed rest, immobilization and/or sedentary behaviors (15). HAD was described as “declines in muscle strength, muscle mass, cognitive function, muscle protein synthesis and physical function” (5) in terms of impairments, but also as a loss of mobility (stairs, footpaths) and inability to undertake activities of daily living (such as sit-to-stand, moving around, and cutting toenails) (16) in terms of activities limitations.

3. Diagnosis approach and prognosis

At the early subacute rehabilitation stage, due to a huge amount of general medical problems, it is essential to collaborate with different medical colleagues to prevent, diagnose and manage potential medical complications. When it is done appropriately, mostly there is a very favourite prognosis from medical and functional point of view.

4. Impairment treatment principles

Following a subacute stage, initial emphasis is given to treatment and prevention of a potential medical complications. The precise regime of treatment depends on the type of medical problem. At the same time a multidisciplinary assessment is provided for finding out the list of patient's problems at impairment, activity limitation and participation restrictions level. Multistage rehabilitation program starts immediately after the program is ready and approved by PRM Doctor during the team meeting.

B. ACTIVITY LIMITATIONS AND PARTICIPATION RESTRICTIONS

Each patient's care is individualized. There is no "cookbook" approach to care. Limitations on activity, therapy participation, and weekend leave are determined on a case-by-case basis. Input is provided by the medical team, nursing staff, and multidisciplinary team. Patient and his family are involved in decision making from admission to the department till the discharge.

C. SOCIAL AND ECONOMIC CONSEQUENCES

1. Epidemiological data

As was already mentioned, 68% of patients are discharged from postacute care settings below their prehospitalization level of function (2), which contributes to nearly 1 in 5 Medicare beneficiaries being rehospitalized within 30 days after an acute hospitalization (3). There is no published data about precise number of patients with HAD and COVID-19, requiring inpatient rehabilitation in Israel. According to the data from 2012 (17), the three most common causes of HAD were pneumonia, craniotomy due to intracranial bleeding without neurological insults, and congestive heart failure exacerbation, and the mean length of rehabilitation was 20.4 +/- 13.9 days. COVID-19 patients are also the important part of this group. During 2020 – 2021 up to 50% of Soroka Rehabilitation beds were occupied with patients after severe course of COVID-19 infection.

The part of this group is going to grow next years due to ongoing improvement of acute medical treatment results and aging of the population. In Israel in 2040 the proportion of the 65 + age group within the population is expected to rise to 14.3 percent and that of the 85 + age group to 2.5 percent, in contrast to 11.1 percent and 1.4% respectively in 2015 (18).

2. Social data

Zucker, et al. documented that inpatient rehabilitation rates were lower in the peripheral districts than in the centre of the country (19). There is a large discrepancy between the doctor: patient (specifically physiatrists and geriatricians) and hospital bed: population ratio between the urban centres of the country and the more rural "periphery" where our hospital is located (20-21).

3. Economic data

As was already mentioned, Medicare spending for postacute care after hospitalization has increased significantly over the last decade, representing 10% of the annual Medicare budget (1). As was also already mentioned, this amount of money is already higher through the COVID-19 pandemics and it is going to go up in the nearest years (18).

D. LEGAL FRAMEWORK IN YOUR COUNTRY

In Israel, which has a socialized medical system, the Ministry of Health has established that initial rehabilitation services for hospitalized patients are included in the “basket” of health services – those services and medications covered under the national health system (22). The ministry later extended this to include practice guidelines that acute care wards refer patients for rehabilitation accompanied by an initiative to promote these ends. The ministry also decreed that the recommendation for rehabilitation must be made by either a rehabilitation doctor (physiatrist) or geriatrician (23). In its 2013 recommendations, further regulations were instituted to demand that every hospital discharge note include a recommendation for rehabilitation treatment and documentation of the diminished functional status of the patient as a result of the acute care stay (or illness that led to the admission in the first place) (24). Ultimately, it is the patients’ HMO’s rehabilitation administrative staff that is responsible for deciding about the specific facility for rehabilitation treatment (22-24).

III. Description of the Programme

A. ENVIRONMENT OF THE PROGRAMME

1. Clinical setting

Individual practice or part of a doctor's group practice	**No**
Individual practice in a private hospital	**No**
Part of a local (public) hospital	**No**
Part of a regional hospital (or rehabilitation centre)	**Yes**
Part of a university or national hospital	**Yes**

Comment: Part of the regional university tertiary hospital

2. Clinical programme

Inpatients in beds under PRM responsibility	**Yes**
Inpatient beds belonging to other departments	**No**
Day programme (most of the day in outpatient setting, not home)	**No**
Outpatient clinic (assessment and/or treatment, for up to 3 hours/day)	**No**
Community based (in the patient's home or workplace or other relevant community location, eg sports centre)	**No**

Comment: Inpatient beds in rehabilitation department with close professional cooperation with outpatient rehabilitation settings. Both are a part of Biggest Health Fund of Israel – Clalit Medical Services.

3. Clinical approach

Uniprofessional	**No**
Multiprofessional	**Yes**

Comment: Full multiprofessional staff under the professional responsibility of PRM doctor.

4. Facilities

Does your programme have a designated space for:	
For assessments and consultations?	**Yes**
For an ambulatory or day care programme?	**Yes**
For inpatient beds?	**Yes**
For therapeutic exercises?	**Yes**
For training in independence and daily living?	**Yes**

For vocational and/or recreational activities?	**Yes**

Comment: Ambulatory & day care program with cooperation with Soroka University Medical centre and Outpatient Rehab Settings of Clalit South Department

B. TARGET POPULATION

1. Inclusion criteria

- HAD or COVID-19 with functional decline
- Existence of rehabilitation potential according to PRM doctors' primary assessment in acute department (intensive care, internal medicine, surgery, oncology, COVID-19 department or others)

2. Criteria for refusal

- Unstable medical situation or need to have further medical management in acute-care departments
- Patient or family do not wish inpatient rehabilitation
- Complete absence of patient cooperation

3. Patients referrals

Direct access to the PRM programme	**No**
Referral from general practitioners	**Yes**
Referral from other specialists	**Yes**
Referral from specialists in PRM	**Yes**

Comment: 1. General practitioner (internal medicine doctor, surgeon, oncologist or other) refers a potential patient to physiotherapist and occupational (speech) therapist, if need, for primary assessment. 2. PRM doctor from rehabilitation department is invited for professional assessment in the acute department fir making a final decision about patients' referral to rehab department.

4. Stage of recovery before admission

Within two weeks of onset	**No**
2 weeks to 3 months after onset	**Yes**
3 months or longer after onset	**No**

Comment: Earlier – is better, but in most cases, we are dealing with long-lasting disease and when medical complications occur it takes more time.

5. Early management before admission

How are patients selected? **By primary acute department staff – doctors and nurses**

Do they benefit from PRM advice in acute settings? **Yes. On call.**

What alternate solutions are proposed to refused patients? **Other rehabilitation departments in other regions of Israel, geriatric departments (for geriatric population), outpatient rehab settings.**

C. GOALS

1. In terms of body structure and body function (impairment)

ICF code	ICF label
b730	Muscle power functions
b740	Muscle endurance functions
b130	Energy and drive functions
b140	Attention functions
b144	Memory functions
b445	Respiratory muscle function
b455	Exercise tolerance function
s430	Structure of respiratory system

Comment: In appropriate cases other categories of ICF Core Set for specific type of problem are used (https://www.icf-core-sets.org/en/page1.php)

2. In terms of activity

ICF code	ICF label
d415	Maintaining a body position
d420	Transferring oneself
d450	Walking (G)
d510	Washing oneself
d530	Toileting
d540	Dressing
d550	Eating

Comment: In appropriate cases, other categories of ICF Core Set for specific type of problem are used (https://www.icf-core-sets.org/en/page1.php)

3. In terms of participation

ICF code	ICF label
e310	Immediate family
e355	Health professionals
e580	Health services, systems and policies

Comment: In appropriate cases, other categories of ICF Core Set for specific type of problem are used (https://www.icf-core-sets.org/en/page1.php)

D. CONTENT OF THE PROGRAMME

1. General scheme and time frame

- Admission to the emergency room, primary diagnosis and transfer to acute department (internal medicine, intensive care, surgery, oncology, COVID-19, cardiological, pulmonological or other) of the Soroka Medical University Center for diagnosis and treatment (days till months)
- When the basic stabilization of the patient from medical point of view is achieved, primary rehabilitation assessment by a physiotherapist, occupational and speech therapist, and PRM doctor for decision about optimal rehabilitation setting (days after stabilization)
- Admission to inpatient HAD & COVID-19 Rehab Program in the Soroka Rehabilitation Department (few days to few weeks from medical stabilization, according to patient's medical status)
- Multi-professional assessment by relevant team members (Always: nurse, PRM doctor, physiotherapist, occupational therapist, and a social worker. On staff or patients' request: Speech therapist, dietitian or psychologist) (one week)
- Staff meeting for discussion of and customization of individual Rehabilitation Project, including goals (by ICF) and time frame (one week from admission)
- Assessment, results, goal-setting, and general discussion with the patient and family (caregivers) done by PRM specialist (after first staff meeting)
- Individual Project path reassessment and discussion at staff meetings once every week or 2 – with adjustments made as necessary
- Once goals are achieved – final staff meeting with discharge planning and post-discharge management program recommendations (2 weeks – 3 months according to patient's functional situation; mean = 40 days)
- Program results, discharge plan and post- discharge treatment recommendations, discussion with patient and family (caregivers) done by PRM specialist (after last staff meeting)
- Patients discharged to appropriate outpatient setting in South Clalit Department

2. Role of PRM specialist

- Patient assessment in acute setting, at admission, and at weekly patient rounds, run by doctors and nursing staff
- Professional staff management
- Professional responsibility of the Individual Rehabilitation Project general
- Program discussion with patient and his family (caregivers) after first and last staff meeting and when needed (in some cases with all staff members)
- Medical management, including on-line consultation with other medic specialists of Soroka and additional diagnostic procedures when needed
- Specific rehabilitation medical management (pain, sleep, mood, others)
- Teaching / training rehabilitation residents and medical students
- Professional quality assessment
- Organization of research and ongoing staff education
- Academic activities in Ben Gurion University (our affiliate university) for medical and other students
- Professional organizational activity in Israeli PRM association (PRM education and exams, professional development and other activities)

3. Specific role of each team member in this programme

Nurse:

- General medical management and assessment, including acute medical conditions (cardiological and pulmonary signs, infections, edema and others) and basic chronic diseases (hypertension, diabetes and others)
- Positioning in bed, pressure sores prophylactics, wound management
- Assessment & training of Basic ADL in the department
- Urinary and bowel management
- Nutritional management in cooperation with dietician
- Pain management
- Fall prophylaxis

Physiotherapist:

- Muscle strength, muscle indurance & ROM evaluation and management
- Basic motor (sitting, standing, transferring) function training
- Gait and ambulation training, balance training
- Technological rehabilitation (VR, robot assisted therapy, biofeedback and other)
- Electrotherapy and ultrasound therapy, pain management by physical techniques, taping
- Lover limb orthotic testing and fitting, if needed
- Hydrotherapy and hydro-gymnastics
- Self-training instruction and assessment

Occupational Therapist:

- Training of participation in activities of daily living
- Assessment and training of upper limbs function and hand fine motor skills retraining, hands strengthening exercises and self-training instruction
- Cognitive function assessment and treatment
- Technological rehabilitation of upper limbs and cognitive functions (VR, robot assisted therapy, biofeedback and other)
- Special equipment and assistive technology prescribing and training
- Environmental modification in association with outpatient units and family
- Organization and training of recreational activities (art-therapy, therapeutic garden, therapeutic kitchen and other)
- Orthotics of upper and lower limbs
- Scar management

Speech and language therapist:

- Assessment and treatment of speech problems due to prolonged mechanical ventilation (in cooperation with otorhinolaryngologist)

- Assessment and treatment of swallowing difficulties (in cooperation with otorhinolaryngologist and dietitian)

Social worker:

- Advice and help in social security fields, including cooperation with the family and local municipalities about financial support and house adaptation
- Help in returning to work and founding solutions about the discharge place
- Patient's support in the department in one-to-one or group sessions
- Cooperation with community organizations for post-discharge treatment plan successful realization
- Family members support

Psychologist:

- Assessment of patient's personal factors, support, adaptation to new abilities, self-esteem rebuilding
- Assessment and treatment of neurocognitive dysfunctions
- Organization of individual and group psychological treatment sessions for patients alone and for patients with family members

External members of the team:

- Internal Medicine specialist of (from the Soroka Internal Medicine department on call) for detailed internist examinations, drug therapy consultations, cardiac and pulmonary tests, spirometry, cycloergometry, ECG monitoring, ECG interpretation, diagnosis and treatment proposals in severe cases and complications
- Infections specialist (from the Soroka infections department on call) for detailed infections examinations, management and drug therapy consultations
- Cardiologist (from the Soroka Cardiology department on call) for detailed cardiologic examinations, drug therapy consultation and cardiac pathology management
- Pulmonologist (from the Soroka Pulmonology department on call) for detailed pulmonological examinations, especially for COVID-19 patients, drug therapy consultation, pulmonological pathology management
- Neurologist (from the Soroka Neurology department on call) for detailed neurologic examinations, drug therapy consultation, EEG interpretation, and LP procedures
- Psychiatrist (from the Soroka Psychiatry department on call) for psychiatric diagnostic evaluation, medication adaptation, and counselling
- Plastic surgeon (from the Soroka Plastic medicine department on call) for plastic surgery evaluation, need for surgery assessment, performing surgical treatment of pressure ulcers and other wounds
- General surgeon (from the Soroka Surgery department on call) for surgical evaluation, need for surgery assessment, joint and soft tissue surgical corrections
- Oncologist or haemato-oncologist (from the Soroka oncology or haemato-oncology departments on call) for detailed oncologic examinations, drug management and oncological therapy consultation

- Certified Prosthetist and Orthotist (on call) for manufacturing and fitting of lower limb orthoses
- Pain specialist (from the Soroka Pain management team on call) for pain management in severe cases
- Urologist (from the Soroka Urology department on call) for urological problems diagnosis and management, neurologic bladder management, urodynamic investigations
- Sexual rehabilitation specialist (from the Soroka Sexology unit on call)
- Dietitian (from the Soroka Nutritional Centre on call) for nutritional management and Nutritional rehabilitation plan creating
- Otolaryngology specialist (from the Soroka Otolaryngology department on call) for swallowing pathology diagnostic testing, and for diagnosis of auditory problems

4. Diagnostic and assessment tools

- All relevant medical diagnostic tools are available in Soroka Medical Centre (X-ray, ultrasound, CT, CT-Angiography, MRI, FMRI, clinical and biochemical laboratory and others)
- Electrocardiography, portable ultrasound for residual urine, musculoskeletal US, EMG are available in the department

Tools for clinical assessment:

- Functional Independence Measure (FIM)
- Norton scale
- Morse Fall Scale (MFS)
- Manual Muscle Test (MMT)
- Modified Ashworth Scale
- Berg Balance Scale
- 10-meter walk Test
- 6-minute walk Test
- Timed UP & GO (TUG) test
- Dynamic Gait Index (DGI)
- Montreal Cognitive Assessment (MOCA) test
- Mini-Mental State Examination (MMSE)
- Loewenstein Occupational Therapy Cognitive Assessment (LOTCA) battery
- Box and Blocks Test (BBT)
- Fugl-Meyer Assessment (FMA) scale
- Psycholinguistic Assessment of Language Processing in Aphasia (PALPA)
- SHEMESH naming test
- TOKEN naming test
- ILAT aphasia test

5. Specific interventions

- Botox injection for spasticity management
- Dry needling for pain management
- Injections and nerve blocks for pain management
- Suctioning for secretion management
- Vacuum-assisted closure for wound care management
- Urinary bladder training before indwelling catheter removal
- Kinesio taping techniques
- Serial plaster casting for spasticity management
- CIMT – constrained induced movement therapy for upper limb

E. DISCHARGE PLANNING AND LONG TERM FOLLOW UP

1. Discharge criteria

- Achieving the goals of the interdisciplinary Individual Inpatient Rehabilitation Project based on staff-meeting decision/s
- Absence of rehabilitation potential due to staff meeting decision after completion of "Rehabilitation attempt" (about 2 weeks for HAD and COVID-19 patients)
- Ability of the patient to return home or to achieve another destination option from social, medical and functional points of view
- Availability of rehabilitation treatment options in outpatient settings (including place, intensity and professional level)
- Patient and family request to stop the inpatient treatment program and to return home for outpatient treatment

2. How patients are managed after the programme?

The Soroka Rehabilitation Department is a part of the "Clalit South Regional Rehabilitation Division", led by Soroka Hospital and the Southern Regional Department of Clalit Heath Services. This close cooperation helps us to organize outpatient rehab program from the department, when the patient is still hospitalized.

Our regional options for stroke program are:

- Day-care multidisciplinary rehabilitation units
- Home multidisciplinary rehabilitation programs
- Continuation of physiotherapy or occupational therapy as a monotherapy at home
- Continuation of physiotherapy, occupational therapy, speech therapy, psychological treatment, hydrotherapy as monotherapy, or any combination of those at outpatient clinics.
- Therapy, activity, and support at different social community centres

Medical and nursing management is run by outpatient regional clinics of Clalit Health Fund.

All discharged patients are invited to the Outpatient Clinic of Rehabilitation Department 6 months after discharge for follow-up assessment, performed by PRM doctor of the department.

In very specific cases of functional decline at home, there is an option for a "secondary" inpatient rehabilitation program wherein patients are admitted directly from home.

IV. Additional information about PRM organization

A. SAFETY AND PATIENT RIGHTS

1. Safety

The safety concerns of people in the unit where the programme takes place, relate to:	
Emergencies (fire, assault, escape)	**Yes**
Medical emergencies	**Yes**
Equipment	**Yes**
Handling of materials	**Yes**
Transports	**Yes**
The safety of people in the programmes of your unit is provided by:	
Written standards from National Safety Bodies	**Yes**
Written standards from National Medical Bodies	**Yes**
Unit-specific written rules	**Yes**
Periodic inspection	
Internal	**Yes**
External	**Yes**

Comment: The unit is accredited (as a part of the Hospital) by Joint Commission International (JCI)

2. Patient rights

Has your programme adopted a formal policy or statement of patients' rights?	**Yes**
Does this statement specify the influence that the patient should have in the formulation and implementation of the programme?	**Yes**
Is the statement known to all personnel involved in delivering the programme?	**Yes**
Is this checked periodically?	**Yes**
Is the statement made known to and is available to all persons visiting your unit?	**Yes**

Comment: Patient rights is defined in a law in Israel and a list of general statements of this law are available in every department

3. Advocacy

Give at least one example of how your organization advocates for people your programme deals with: **We advocate equal rights for all patients to participate in a multi-disciplinary rehabilitation program, without discrimination of gender, race, religion, or age.**

B. PRM SPECIALISTS AND TEAM MANAGEMENT

1. PRM Specialists in the Programme

Does your PRM physician have overall responsibility and direction of the multiprofessionnal team?	**Yes**
Does your PRM physician have overall responsibility and direction of the rehabilitation programme, not medical responsibility only?	**Yes**
Does he/she have a European Board Certification in PRM?	**No**
Does he/she meet National or European CME/CPD Requirements?	**No**
Number of CME or EACCME points earned in the last 3 years:	**150**
The two primary functions for the PRM specialist in your Programme are to:	
Treat comorbidity	**Yes**
Assess the rehabilitation potential of the patient	**Yes**
Analyse & treat impairments	**Yes**
Coordinate interprofessional teams	**Yes**

Comment: There are no CME requirements for doctors in Israel, but our department is very active and our PRM doctors are regularly participating in national and international PRM congresses and educational programs. One of our senior physicians participates in US CME requirements of at least 50 hours per year and maintenance of certification requirements of the ABPMR.

All 4 functions are important in PRM specialist activity in our program, but the two most important are team coordination and comorbidity treatment

2. Staff devoted to this programme

Please, don't mention staff members who do NOT participate in this specific programme!

Which rehabilitation professionals work on a regular basis (minimum of once every week) in your programme? (give the number)	
Physiotherapists	3
Occupational therapists	2
Psychologists	1
Speech & Language therapists	2
Social workers	2
Vocational specialists	-
Nurses	12

Orthotists/prosthetists assistive technicians/engineers	1
Other (please specify)	Secretary - 1

Comment: We use also a group of volunteers for support and assistance. Some of the professional functions are done by Hospital staff from other departments: Nutrition modulation from Soroka Dietology Department; Pain management from Soroka pain management team; Wound prophylaxis & management from Soroka wound team & Plastic Surgery clinic; sexual rehabilitation from Soroka sexology unit; Urinary management from Soroka Urology department.

3. Team management

How often does your staff receive formal continuing education (mark as is)?	
In team rehabilitation:	**Every year** Every second year Other period Not regularly
In their own profession:	**Every year** Every second year Other period Not regularly
Do team activities in your rehabilitation programme include the following?	
Is the patient at the centre of a multiprofessional approach?	**Yes**
Do you always give informed choices of treatment?	**Yes**
Do you regularly promote family involvement?	**Yes**
Does your organisation of multi professional team working include:	
Holding regular team meetings with patient's records only (more than 2 members)	**Yes**
Holding regular team meetings (more than 2 members) with the presence of the patients	**Yes**
Joint assessment of the patient or joint intervention	**Yes**
Regular exchanges of information between team members	**Yes**

Comment: once a week – patients' round (doctors, nurses); once a week all staff meeting without patient; once a week staff meeting (Journal club, case studies, interdisciplinary learning sessions). Team meetings with the presence of the patients according to the specific need an staff decision.

C. INFORMATION MANAGEMENT

1. Patient records

Do the rehabilitation records have a designated space within the medical files?	**Yes**
Do you have written criteria for:	
Admission	**Yes**
Discharge	**Yes**

Do your rehabilitation plans include written information about aims and goals, time frames and identification of responsible team members?	**Yes**
Do you produce a formal discharge report (summary) about each patient?	**Yes**

Comment: All patient records are integrated in Clalit's Electronic Medical Record system (Chameleon). Generally, most records are in electronic version, only few of them (some scales – TUG test, MOCA) are on paper, but they are scanned and attached to the electronic records.

2. Data about general organization

How many new patients (registered for the first time) are treated in your programme each year:	**60**
In your ~~day care~~ or inpatient programme: 60 in inpatient programme	
What is the mean duration spent in therapy by patients on this programme	35 Days
How many hours a day do the patients spend in therapy.	3 Hours
Give the mean duration of stay spent in the programme:	35 Days

Comment: 3 hours of therapy includes individual and group sessions; additional time is spent in self-training under professional or volunteer supervision.

3. Programme monitoring and outcomes

Does your programme have an overall monitoring system in addition to patient's records?	**Yes**
Are the long-term outcomes of patients who have completed your programme regularly monitored?	
Impairment (medical) outcomes:	**Yes**
Activity/Participation (ICF) outcomes:	**Yes**
Duration of follow up of the outcomes:	**12 months or longer**
Do you use your outcome data to bring about regular improvements in the quality of your programme's performance?	**Yes**
Do you make the long term overall outcomes of your programme available to your patients or to the public?	**Yes**

Comment: Overall monitoring system is an administration monitoring system, managed by Hospital Administration (mostly for information & payment issues).

Long-term outcomes monitoring is managed by 4 systems:

- General health data is managed by Ministry of Health of Israel (mortality, recurrent hospitalizations, outpatient visits) and it is available for us, for patients and for public.
- There are Clalit Medical data system records (Ofek) and an outpatient data of South Department after patients' discharge from our program to outpatient settings (outpatients rehab treatments in clinics and Day Rehab) are available for us by request.

- All stroke patients are invited to the Soroka Stroke Unit one year after stroke for follow up assessment, done by neurologists.
- Patients after COVID-19 are monitored by Ministry of Health and all the data is available at Website of MOH.

4. Sustainability of the programme

Does your programme show evidence of sustainability?	
Established as part of public service:	**Yes**
Has existed for more than 3 years:	**Yes**
Has received national accreditation (where available):	**Yes**
Has been accepted for oral presentation in a National or International congress (mandatory criterion for accreditation)	**Yes**
Has been the subject for papers in PRM journals	**Yes**

Comment: The unit is accredited (as a part of the Hospital) by Joint Commission International (JCI). The program data analysis in COVID-19 field was presented in few National and International congresses and was published in PRM journals (11,12 in References list)

V. Quality improvement

A. WHAT ARE THE MOST POSITIVE POINTS OF YOUR PROGRAMME?

- Our program is located in a large and modern medical university centre. We can start our rehabilitation program very early, even when the medical status is still not totally stable. We can also use the staff and medical diagnostic and medical abilities of the hospital for patients in our rehabilitation project.
- Our program is a part of the “Clalit Southern Regional Rehabilitation Division”, led by Soroka Hospital and the Southern Regional Department of Clalit Health Services. Both organizational units are under the management of the same Health Fund, making things much easier and more effective through the continuum of rehabilitation care from acute department through in-patient rehabilitation, and at the end – back home with outpatient continuation of the whole project.

B. WHAT ARE THE POINTS TO IMPROVE IN YOUR PROGRAMME?

- We are currently located in an old building in a “temporary” location, so there are not enough beds or available spaces (for example for more high technology) for maximal development of the program. A new building (planned with our staff support) for 36 beds, a therapeutic pool, and outpatient facilities is under construction. This will definitely improve the situation.
- We do not have dedicated outpatient facilities in our current setting. This limits the ability to offer day rehabilitation and follow-up clinics in our program. The establishment of those settings can be very helpful for our patients and for general management of the program. The new building will have these facilities.
- Musculoskeletal rehabilitation is not highly developed in Israel. Our department is investing a lot of effort to advance this aspect of our profession. Thus far, we have had limited success in implementing those techniques in everyday practice.

C. WHAT ACTION PLAN DO YOU INTEND TO IMPLEMENT IN ORDER TO IMPROVE YOUR PROGRAMME?

1. Extrinsic conditions that you wish to obtain

- More funding for the new centre / building
- More equipment for managing a new department (some has already been ordered)
- More staff for developing new techniques, doing research and educational activities

2. Intrinsic improvement of the programme

- Improvement of management tools in the program. The best example is every day’s patient and personal activity plan. In our present situation - 20 beds, we are successfully doing this by “pen and paper”, but for 36 beds we will need more effective tools for organizing a patient – team interaction program.
- More education and training is needed to incorporate musculoskeletal rehabilitation techniques to the residents’ every-day practice.

VI. References

A. List of References

1. US Department of Health and Human Services. CMS Financial Report–Fiscal Year 2007. Available at: http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/CFOReport/downloads/2007_CMS_Financial_Report.pdf Accessed July 24, 2014.
2. Gill TM, Gahbauer EA, Han L, Allore HG. Functional trajectories in older persons admitted to a nursing home with disability after an acute hospitalization. J Am Geriatr Soc. 2009;57:195–201.
3. Jencks SF, Williams MV, Coleman EA. Rehospitalizations among patients in the Medicare fee-for-service program. N Engl J Med. 2009;360:1418–1428.
4. Kortebein P. Rehabilitation for hospital-associated deconditioning. Am J Phys Med Rehabil. 2009;88:66–77.
5. Falvey JR, Margione KK, Stevens-Lapsley JES. Rethinking Hospital-Associated Deconditioning: Proposed Paradigm Shift. Phys Ther. 2015 Sep; 95(9): 1307–1315.
6. Hoyer EH, Needham DM, Atanelov L, et al. Association of impaired functional status at hospital discharge and subsequent rehospitalization. J Hosp Med. 2014;9:277–282.
7. Portegijs E, Buurman BM, Essink-Bot ML, et al. Failure to regain function at 3 months after acute hospital admission predicts institutionalization within 12 months in older patients. J Am Med Dir Assoc. 2012;13:569.e561–e567.
8. Sleiman I, Rozzini R, Barbisoni P, et al. Functional trajectories during hospitalization: a prognostic sign for elderly patients. J Gerontol A Biol Sci Med Sci. 2009;64:659–663.
9. Centers for Medicare & Medicaid Services. Outpatient rehabilitation providers. Available at: https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandComplianc/OutpatientRehab.html (Accessed January 16, 2017)
10. Raj G. Munir J. Ball L. et al. An inpatient rehabilitation service for deconditioned older adults. Top Geriatr Rehabil. 2007; 23: 126-137
11. Lutsky L, Friedman A, Treger I. Rehabilitation during the COVID-19 Crisis: A View from the Periphery. Journal of Clinical Immunology & Immunotherapy, 6: 028, 2020.
12. Treger I, Lutsky L, Friedman. A. Organization of acute patients' transfer to rehabilitation services during COVID-19 crisis. European Journal of Physical and Rehabilitation Medicine, 56(3), pp 366, 2020.
13. Kakodkar P, Kaka N, Baig MN. A comprehensive literature review on the clinical presentation, and management of the pandemic coronavirus disease 2019 (COVID-19). Cureus 2020 Apr 06;12(4):e7560
14. Boldrini P, Kiekens C, Bargellesi S, Brianti R, Galeri S, Lucca L. First impact on services and their preparation. “Instant paper from the field” on rehabilitation answers to the Covid-19 emergency. Eur J Phys Rehabil Med 2020.
15. Gordon S. et al. Assessment for Inpatient Hospital-acquired Deconditioning in Acute Hospital Settings: a Systematic literature Review. Rehabil Med 2019; 51: 397–404
16. van Vliet M, Deeg DJH. Decreasing hospital length of stay: effects on daily functioning in older adults. J Am Geriatr. Soc 2017; 65: 1214–1221.
17. Guy N, Justo D, Lerman Y, Rabinovich A. [Length and outcome of acute inpatient rehabilitation for hospital-associated deconditioning in the elderly. Article in Hebrew]. Harefuah 2012 Sep;151(9):500-4, 558.
18. Lavie G. et al. Adapting to change: Clalit’s response to the COVID-19 pandemic. Israel Journal of Health Policy Research, 2021 10:68. https://doi.org/10.1186/s13584-021-00498-2
19. Zucker et al. Regional gaps in the provision of inpatient rehabilitation services for the elderly in Israel: Results of a national survey. Israel Journal of Health Policy Research 2013 2:27.
20. Treger I, Ring H, Schwartz R, Tsabari R, Bornstein NM, Tanne D. Hospital disposition after stroke in a national survey of acute cerebrovascular diseases in Israel. Arch Phys Med Rehabil 2008, 89(3):435-440

21. Greenberg E, Treger I, Ring H. Post-stroke follow-up in a rehabilitation center outpatient clinic. Isr Med Assoc J 2004;6:603-6

B. DETAILS ABOUT NATIONAL DOCUMENTS

22. Medical Administration, Ministry of Health: Rehabilitation hospitalization; 1995. http://www.health.gov.il/hozer/mr83_1995.pdf

23. Medical Administration, Ministry of Health: Criteria for granting rehabilitative care for elderly; 2009. http://www.health.gov.il/hozer/mr04_2009.pdf.

24. Medical Administration, Ministry of Health: Obligatory recommendations for rehabilitation in discharge medical report; 2013. http://www.health.gov.il/hozer/mr27_2013.pdf