STANDARDS FOR PHYSICAL REHABILITATION SERVICES

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Health Policies and Standards Department

Health Regulation Sector (2022)

INTRODUCTION

Health Regulation Sector (HRS) plays a key role in regulating the health sector. HRS is mandated by the Dubai Health Authority Law No. (6) of 2018 to perform several functions:

- Developing policy and standards to improve patient safety quality and support the growth and development of the health sector;
- Licensure and inspection of health facilities and healthcare professionals;
- Managing patient complaints and upholding patient rights;
- Regulating the use of narcotics, controlled and semi-controlled medications;
- Strengthening health tourism and assuring ongoing growth; and
- Assuring the management of e-health and innovation.

ACKNOWLEDGMENT

The Health Policy and Standards Department acknowledges rehabilitation professionals for their support toward the development of the standard and continued commitment to improve patient safety and quality of care in the Emirate of Dubai.

Health Regulation Sector

Dubai Health Authority

EXECUTIVE SUMMARY

The scope of rehabilitation is vast and stems across the health continuum (primary care, secondary care and post-acute care). The World Health Organisation considers rehabilitation to be an essential part of an integrated healthcare system and an important part of healthcare services alongside prevention, health promotion, medical treatment and palliative care. The advances in medical and surgical technologies have made it possible to diagnose and treat various conditions; however, these conditions often require some form of physical rehabilitation to optimize health and restore movement or function. The aging population also sets precedence for greater service dependence. In recent years, technologies have been used alongside empirical practices to expedite the recovery and standardization of rehabilitation treatments.

The standard for physical rehabilitation sets out the requirements for facility and professional licensure, referral, and service provision to assure high quality and safe care. Services should be inclusive to a range of patient age groups and needs. Services should have written agreements for inter-facility care arrangements or for step up and step down care. Optimization of physical rehabilitation necessitates continuous patient assessment and engagement, goal setting, involvement of specialists, multi-disciplinary team working, and adoption of evidence-based practices and technologies. Service managers are responsible to review service, staff performance, and assure the appropriate mechanisms are in place to support staff training needs.

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DEFINITIONS

Community-Based Rehabilitation (CBR) is a multi-sectoral strategy that empowers persons with disabilities to access and benefit from the different sectors within the community (education, employment, health and social services). CBR enhances the quality of life and may include people with disabilities, their families, communities, and relevant government and non-government entities.

Inpatient Rehabilitation Units are units that help individuals who are physically or cognitively deficient (e.g. stroke, brain, spinal cord or orthopaedic injury, or those who have a neurological or medically complex condition) to recover from disease or injury and become as independent as possible. An inpatient rehabilitation care typically takes place three hours per day five days a week after severe injury or illness such as multiple joint replacements and fractures to the pelvis or lower extremities, strokes, brain injuries and other neurological disorders.

Integrated care is a concept bringing together inputs, delivery, management and organization of services related to diagnosis, treatment, care, rehabilitation and health promotion. Integration is a means to improve services concerning access, quality, user satisfaction and efficiency.

Manual therapy: Includes therapeutic massage passive range of motion.

Multi-disciplinary rehabilitation is rehabilitation delivered by a team of different healthcare professionals (for example, physicians, nurses, physiotherapists) working in an organised manner to address the needs of patients with a disability.

Physical Rehabilitation includes interventions that help individuals who experience (or are likely to experience) disability to achieve and maintain optimum functioning and interaction with their environments. Service provided takes place in an inpatient or outpatient facility or home care setting with the primary purpose of providing local diagnostic and treatment services to individuals requiring restorative and adjustive services in an integrated and coordinated program of medical, psychological, social and vocational services. The service operates under the supervision of qualified rehabilitation healthcare professionals who implement treatment following a consultant/specialist prescription.

Physiotherapy Service: A facility where physiotherapy services are available, dealing with the treatment of physical dysfunction or injury by using therapeutic exercise and application of modalities intended to restore normal function or development.

Rehabilitation: The assessment, treatment and rehabilitation of the human body by physical or mechanical means to obtain, prevent, maintain or restore a function(s) that has been impaired by injury or disease or for pain management and the promotion of mobility and health through education, exercise, manual therapy and technology. It includes a comprehensive range of inpatient and outpatient services and programs and may include complex continuing care needs for adults and children.

ABBREVIATIONS

CBT: Cognitive Behavioural Therapy

MT: Manual Therapy

NMES: Neuromuscular Electrical Stimulation

PQR: Prequalification Requirements

QMS: Quality Management System

MF: Magnetic Frequency

ST: Shockwave Therapy

TENS: Transcutaneous Electrical Nerve Stimulation

RF: Radio Frequency

UT: Ultrasound Therapy

BACKGROUND

The purpose of physical rehabilitation is to promote independence by improving muscle coordination, balance, flexibility, strength, movement and relieving pain. Rehabilitation programs are complex interventions that incorporate multiple specific interventions (modalities) and multiple professionals such as physiotherapists, physiatrists, occupational therapist, neurologists, orthopedic surgeons, neurosurgeons, other clinician's caregivers, and the patient. Provision of rehabilitation services can occur at different points in life and care (before or after surgery) and in different settings. Physical rehabilitation is typically personalized for individuals to accommodate their specific circumstances and need (response to injury, surgery and rehabilitation). Rehabilitation programs aim to improve strength and mobility, reduce pain, and restore overall patient function. Evidence suggests that physical rehabilitation reduces the length of stay in hospital, complications and overall cost of care. There are four interrelated considerations when providing physical rehabilitation and include:

1. **Timing:** Prior to surgery ("preoperative rehabilitation") or after surgery (postoperative rehabilitation), post traumatic or due to manifestation of neurological, rheumatological, musculoskeletal, cardiopulmonary and cancer disorders, ante and post-natal care.
2. **Type:** Rehabilitation may include various types of modalities, for example, strength training, education, balance training, physical manipulation delivered alone or in combination and may include for example Kinesiotherapy, Electrotherapy, Hydrotherapy, Mnipulation, Traction, Dry needling, Osteopathy, chiropractice, Hot or Cold therapy, Acupuncture, Acupressure, Neuromuscular Electrical Stimulation (NMES), Magnetic

Frequency (MF), Radio Frequency (RF), Shockwave Therapy (ST), Transcutaneous Electrical Nerve Stimulation (TENS) or Ultrasound Therapy (UT).

3. **Setting:** Acute inpatient, post-acute, outpatient, long term patient, supervised nursing facility, or home-based.
4. **Cost and resource use:** Specialised personnel, equipment, pathway and facility overhead.

A lack of access to rehabilitation services can increase the chance of disease or injury, delayed discharge, limited activities and can lead to significant health deterioration in day-to-day activities and overall quality of life. In many cases, the process for physical rehabilitation will start as an outpatient appointment or at home. The conditions for physical rehabilitation treatment include cancer, heart disease, stroke, lung problems, an infected wound, amputation, a severe burn including other conditions such as pains, joint conditions or joint replacement surgery. In some instances, physical rehabilitation may be used to prevent the need to have surgery or may be used to restore circulation to an affected area.

1. PURPOSE

1.1. To maximise the quality and patient safety of physical rehabilitation services in DHA licensed health facilities.

2. SCOPE

2.1. Physical rehabilitation services for adults and children.

3. APPLICABILITY

3.1. DHA licensed health facilities and professionals providing physical rehabilitation services.

4. STANDARD ONE: HEALTH FACILITY REQUIREMENTS

4.1. Healthcare Providers opting to provide physical rehabilitation services shall apply to DHA Health Regulation Sector (HRS) https://www.dha.gov.ae for licensure.

4.1.1. Physical rehabilitation services may be offered in the following health facility settings:

a. Hospital.

b. Standalone Day Surgical Centre.

c. Rehabilitation Centre.

d. Clinic.

e. Homecare.

f. Convalescence.

g. Special Needs Centre.

h. Clinical Support Service.

4.2. Physical rehabilitation services shall comply with DHA Facility Design for Rehabilitation – Allied health and administrative provisions for inspection and licensure for rehabilitation services. The licensed health facility shall ensure:

4.2.1. The unit has dedicated rooms for one to one physical rehabilitation sessions.

4.2.2. There is a documented plan for monitoring electrical and mechanical equipment for safety, with monthly visual inspections for apparent defects.

4.2.3. The facility utilities shall be adequate for service provision, including but not limited to lighting, water taps, medical gases, sinks and drains, lighting, temperature controls, and electrical outlets.

4.2.4. The licensed health facility should only use the equipment required to provide physical rehabilitation services.

4.2.5. All equipment shall follow the manufacturer's specifications and undergo monthly testing.

a. A log book record of testing and electrical compliance approval should be readily available for audit and inspection.

4.2.6. The health facility should ensure all patient groups have easy access to the health facility including people of determination.

4.2.7. The health facility shall have the appropriate equipment and trained healthcare professionals to manage emergency cases.

4.3. Scope of Services

4.3.1. Written scope of services for physical rehabilitation shall be in place, including but not limited to:

a. A service description.

b. Evidence-based treatments and therapies are offered.

c. Patient groups.

d. Staffing needs.

e. Working hours.

f. Criteria for a referral.

g. Step up and step down protocols.

h. Staff development plans.

4.4. Policies, Standards and Guidelines

4.4.1. The health facility shall ensure the following documentation is in place.

a. Data security and access to patient files.

b. Patient confidentiality and patient consent.

c. Medical record-keeping and storage.

d. Ethical medical advertising.

e. Patient, admission, assessment, triage and transfer.

f. Patient care plan and follow up.

g. Patient and/or carer education.

h. Staff Privileging.

4.5. Laws and Regulations

4.5.1. Compliance with Laws and Regulations:

a. DHA Requirements (Regulations, Policy, Standards and Guidelines) and Federal Laws.

b. Ministerial Decision No. (14) of 2021 concerning the Patient Rights and Duties Charter.

c. Cabinet Decision No. (29) of 2020 concerning Federal Decree no. (4) of 2015 concerning Private Health Facilities.

d. Cabinet Decision No. (24) of 2020 concerning Publication and exchange of health information on communicable diseases and epidemics and misinformation related to human health.

e. Data and related registers must fulfil the requirements of UAE ICT Law No 2. of 2019, and Article no. (2) of the Ministerial Decision no. (51) of 2021.

f. Compliance with federal requirements for medical devices, consumables, medication, and medical advertisements.

4.6. Accreditation

4.6.1. DHA licensed physical rehabilitation services shall be accredited by either of the following:

a. Commission on Accreditation of Rehabilitation Facilities (CARF).

b. An International Society for Quality in Healthcare (ISQua)/External Evaluation Association (IEEA) approved program for physical rehabilitation.

5. **STANDARD TWO:** HEALTHCARE PROFESSIONAL REQUIREMENTS

5.1. Only DHA licensed healthcare professionals shall operate the rehabilitation service. Healthcare professionals shall be licensed in the following specialities:

5.1.1. Sport medicine.

5.1.2. Physical medicine.

5.1.3. Physiotherapy (including sport therapy).

5.2. All licensed healthcare professionals shall:

5.2.1. Have training and experience related to physical rehabilitation.

5.2.2. Submit evidence to DHA to satisfy annual CME requirements.

5.2.3. Be able to provide comprehensive, contemporary programs of care to address the impairments, activity limitations, and participation restrictions.

5.3. Only consultant/specialist physicians with rehabilitation specialities must be able to diagnose and assess a person's function associated with disability or functional decline due to injury, illness, chronic disease/ageing and offer prescription to maximize their independence and improve and maintain quality of life.

5.4. Consultant/specialist physicians must be responsible for the clinical management of physical rehabilitation services in inpatient and outpatient setting.

5.5. Physiotherapists with a DHA 'clinic' license may practice in the absence of a consultant/specialist.

5.5.1. Physiotherapist shall be responsible for providing the service based on the consultant/specialist physician treatment plan.

5.6. Privileging to provide rehabilitation services shall be in accordance to DHA Policy for Clinical Privileging.

6. **STANDARD THREE:** PHYSICAL REHABILITATION SERVICE REQUIREMENTS

6.1. The physical rehabilitation service shall have in place written policies and procedures for:

6.1.1. Admission, referral and discharge.

6.1.2. Care Planning and Safe care.

6.1.3. Documentation.

6.1.4. Physiotherapy Services (and programmes).

6.1.5. Staffing and qualifications.

6.1.6. Care outcomes and reviews.

6.1.7. Patient consent.

6.1.8. Confidentiality and data security.

6.1.9. Infection Control.

6.1.10. Quality Assurance.

6.1.11. Use of Restraints.

6.1.12. Public Health and Emergency Preparedness.

6.1.13. Feedback/Complaint Management.

6.1.14. Physical Environment and Amenities.

6.1.15. Step up and step down of patients to other specialised providers.

6.1.16. Administrative Policies and Procedures.

6.1.17. Operating Hours.

6.1.18. Attendance Roster.

6.1.19. Fee Schedule and Billing.

6.2. A physical rehabilitation service should include a Multi-Disciplinary Team (MDT) to maximise patient outcomes. A MDT team may include the following:

6.2.1. Acute Care Physician.

6.2.2. Acute Care Nurse.

6.2.3. Physical medicine and rehabilitation.

6.2.4. Nutritionists.

6.2.5. Internal Medicine Physician.

6.2.6. Sports medicine.

6.2.7. Physical Therapist.

6.2.8. Oesteopath.

6.2.9. Orthotist

6.2.10. Chiropractician.

6.2.11. Physiotherapist.

6.2.12. Respiratory therapist.

6.2.13. Occupational Therapist.

6.2.14. Rehabilitation Nurse.

6.2.15. Psychologist.

6.2.16. Speech therapist.

7. **STANDARD FOUR:** INDICATIONS FOR PHYSICAL REHABILITATION SERVICES

To establish a physical rehabilitation service, the health facility should have a clear and defined clinical program that includes indications for referral, care pathway, pain management ,follow up and discharge.

7.1. The service should provide comprehensive, contemporary programs of care to address identified impairments, activity limitations, and participation restrictions.

7.2. MDT hours are available to allow each patient to receive adequate and individualized nursing and allied health program. It is delivered in a way that optimizes the effectiveness and efficiency of the rehabilitation program.

7.3. The expected conditions that a physical rehabilitation service should address include but are not limited to:

7.3.1. Aged Care/Geriatric Medicine.

7.3.2. Brain injuries and other neuroscience disorders.

7.3.3. Burns.

7.3.4. Cancer.

7.3.5. Cardiovascular.

7.3.6. Chronic Fatigue Syndrome.

7.3.7. Headache.

7.3.8. Lymphedema.

7.3.9. Multiple trauma injuries.

7.3.10. Orthopaedic and musculoskeletal disorders.

7.3.11. Ante-natal and Post-natal care.

7.3.12. Pre and post-surgical care.

7.3.13. Respiratory conditions.

7.3.14. Spinal cord injuries.

7.3.15. Sports injuries.

7.3.16. Vertigo.

7.4. Exclusions

7.4.1. Patients with open wounds.

7.4.2. Patients that are undergoing treatment for an infection.

7.4.3. Unstable or Emergency patients.

8. **STANDARD FIVE:** SAFETY AND QUALITY REQUIREMENTS

8.1. The health facility shall have in place a Quality Management System (QMS) for comprehensive quality assessment, assurance, control, and improvement.

8.1.1. An action plan for improvement should be readily available for DHA inspection.

8.1.2. The plan should include different parts of QMS and be reviewed regularly to ensure the identified actions are implemented with the recommended timeframe.

8.2. Patients should be assessed and advised of the treatment plan and milestones prior to treatment.

8.2.1. The timeframe from physician referral to assessment should not exceed ten (10) days.

8.2.2. Regular assessments should be undertaken to review progress against the treatment plan, the patient needs and agreed milestones.

8.2.3. Inpatients prescribed for physical rehabilitation should have a timely discharge to home plan or an ongoing outpatient care plan.

8.3. Evidence-based protocols and clinical rehabilitation guidelines should be utilised and tailored to meet the patient needs.

8.3.1. Make use of a variety of established evidence-based interventions to improve patient outcomes, e.g. Cognitive Behavioural Therapy (CBT), technology, exercise.

8.4. Patient fears and/or concerns regarding their treatment plan should be discussed.

8.4.1. Patients (or their carers) should be educated on the treatment needed.

8.4.2. Motivate patients to ensure confidence is maintained during their recovery.

8.4.3. Patients who lack motivation for treatment should be counselled and, where necessary, referred to an expert counsellor.

8.5. The physical rehabilitation service should include a Multi-Disciplinary Team (MDT) working.

8.5.1. MDTs should meet regularly to discuss patient cases.

a. Alternative treatment plans should be discussed and approved by the referring physician and the interdisciplinary team.

8.5.2. Where there is a need, patients should be referred to specialised rehabilitation centres as part of integrated multi-agency rehabilitation or Community-Based Rehabilitation (CBR).

a. Services that offer integrated multi-agency rehabilitation should have written agreements to step up or step down patients.

8.6. The service providers shall:

8.6.1. Ensure care is tailored to patient needs and provided in a safe and friendly environment.

a. Tailoring may include one to one, group sessions, educational sessions, peer support, carer support, bedside care, onward rehabilitation, hydrotherapy, onsite gym, homecare and telehealth support.

8.6.2. Direct its efforts toward preventive measures to reduce the need for frequent or irregular physical therapy and promote independence.

8.6.3. Maximise the opportunity to improve quality of life and life expectancy.

8.6.4. Help patients to recover from ill-health or injury.

8.6.5. Adopt appropriate communications techniques and aids to suit the patient.

8.6.6. Direct their efforts to ensure patients and their carers have a positive experience of care.

8.7. Management shall:

8.7.1. Have a system for managing staff skill mix and capacity, medical equipment, and medical devices.

8.7.2. Capture a variety of data sets to inform service improvement.

a. Data sets may include but not be limited to patient satisfaction, pain score, level of confidence, environment.

8.7.3. Ensure only scientific, validated tools and functional scores to assess and evaluate patients are adopted.

8.7.4. Ensure staff are supported with training needs to maximise the opportunities to provide a high quality and safe service.

a. Annual training needs should be documented and reviewed by the line manager and staff on a monthly or quarterly basis.

8.7.5. Ensure approvals are granted by DHA to undertake training and support events.

9. **STANDARD SIX:** KEY PERFORMANCE INDICATORS

9.1. Service managers shall capture performance measures for each patient and for the rehabilitation service (**Appendix 1 and Appendix 2**).

9.2. Performance measures for the service should be readily available upon request.

9.2.1. The service provider shall report on any additional performance requirements or measures issued by DHA.

9.3. Reports should be retrospective and reflect outcomes achieved in the previous quarter.

9.4. All treating physiotherapists maintain an up to date log of treatment and patient outcomes using validated tools.

9.4.1. Follow up on patient outcomes should be done once patient complications have been resolved.

9.5. Adverse and sentinel events shall be logged and reported to the Medical Director.

REFERENCES

1. Australasian Faculty of Rehabilitation Medicine (2019). Standards for the provision of Inpatient Adult Rehabilitation Medicine Services in Public and Private Hospitals.
2. Australasian Faculty of Medicine (2015). Standards for the Provision of Paediatric Rehabilitation Medicine Inpatient Services in Public and Private Hospitals.
3. British Society of Rehabilitation Medicine (2009). BSRM Standards for Rehabilitation Services. Mapped on to the National Service Framework for Long-Term Conditions.
4. Chen, Y., Abel, K. T., Janecek, J. T., Chen, Y., Zheng, K., & Cramer, S. C. (2019). Home-based technologies for stroke rehabilitation: A systematic review. International journal of medical informatics, 123, 11–22. https://doi.org/10.1016/j.ijmedinf.2018.12.001
5. Chris Joyce, Michael Schneider, Joel M Stevans, Jason M Beneciuk (2018). Improving Physical Therapy Pain Care, Quality, and Cost Through Effectiveness-Implementation Research, *Physical Therapy*, Volume 98, Issue 5, May 2018, Pages 447–456, https://doi.org/10.1093/ptj/pzy031
6. Darzi, A. J., Officer, A., Abualghaib, O., & Akl, E. A. (2016). Stakeholders' perceptions of rehabilitation services for individuals living with disability: a survey study. *Health and quality of life outcomes*, *14*, 2. https://doi.org/10.1186/s12955-016-0406-x
7. De Vries, N. M., Staal, J. B., van der Wees, P. J., Adang, E. M., Akkermans, R., Olde Rikkert, M. G., & Nijhuis-van der Sanden, M. W. (2016). Patient-centred physical therapy is (cost-) effective in increasing physical activity and reducing frailty in older adults with

mobility problems: a randomized controlled trial with 6 months follow-up. *Journal of cachexia, sarcopenia and muscle*, *7*(4), 422–435. https://doi.org/10.1002/jcsm.12091

8. DHA Health Facility Guidelines (2019). Part B – Health Facility Briefing & Design 390 – Rehabilitation – Allied Health.
9. Health Authority Abu Dhabi (2011). Service Standards for Post-Acute Rehabilitation Services in the Emirate of Abu Dhabi.
10. Ministry of Health Singapore (2021). Service Requirements for Community Rehabilitation Service.
11. National Institute for Clinical Excellence (2018). Chapter 31 Enhanced inpatient access to physiotherapy and occupational therapy. Emergency and acute medical care in over 16s: service.
12. Owens, J. G., Rauzi, M. R., Kittelson, A., Graber, J., Bade, M. J., Johnson, J., & Nabhan, D. (2020). How New Technology Is Improving Physical Therapy. *Current reviews in musculoskeletal medicine*, *13*(2), 200–211. https://doi.org/10.1007/s12178-020-09610-6
13. Physiotherapy Board of New Zealand (2018). Fostering Excellence in Physiotherapy. Physiotherapy Standards framework 2018.
14. Royal College of Physicians (2010). Medical rehabilitation in 2011 and beyond. Report of a joint working party of the Royal College of Physicians and the British Society of Rehabilitation Medicine.

APPENDIX 1: BASELINE ASSESSMENT TABLE

Patient ID	**Reason for Referral/ Diagnosis**	**Date and recommended intervention**	**Assessment Tool** (e.g., biological testing, cardiology, pulmonology and renal tests, echo test, pulmonary function tests, pain score, FLP, ADL, patient experience)	**Baseline Assessment**	**Treatment Method, dosage and start date**	**Primary outcome measure**

Name and signature of Treating Physiotherapist:

Name and signature of Referring Physician:

APPENDIX 2: POST-INTERVENTION ASSESSMENT TABLE

Patient ID	**1-month outcome**	**Adverse Event at 1- month** (no, if yes provide details)	**3-month outcome**	**Adverse Event at 3- months** (no, if yes provide details)	**6-month outcome**	**Adverse Event at 6-months** (no, if yes, provide details)	**12-month outcome**	**Adverse Event at 12 months** (no, if yes provide details)

Name and signature of Treating Physiotherapist:

Name and signature of Referring Physician: