STANDARD OPERATING PROCEDURES

PHYSIOTHERAPY DEPARTMENT

PROJECT MANAGEMENT UNIT
Primary & Secondary Healthcare Department

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Please note that this is a first draft, and may be subject to revisions. All information and content in this Material is provided in good faith by Project Management Unit, Primary & Secondary Healthcare Department and is based on sources believed to be reliable and accurate at the time of development.

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REVISION SHEET

Page #	Rev. #	Date	Reason of Change	Signature

TABLE OF CONTENTS

1 ABBREVIATIONS

1	ABGs	Arterial Blood Gases
2	ADLS	Activities of Daily Life
3	AM	Ante Meridiem
4	ARDS	Acute Respiratory Distress Syndrome
5	BP	Blood Pressure
6	BSPT	Bachelor of Science in Physiotherapy
7	CNIC	Computerized National Identification Card
8	COP	Care of Patients
9	COPD	Chronic Obstructive Pulmonary Disease
10	CPM	Continuous Passive Motion
11	CQI	Continuous Quality Improvement
12	CT	Computerized Tomography
13	CVA	Cerebrovascular Accident
14	CXR	Chest X-Ray
15	HCE	Health Care Establishment
16	D/D	Differential Diagnosis
17	DHQ	District Head Quarter
18	DM	Diabetes Mellitus
19	DMS	Deputy Medical Superintendent
20	DPT	Doctor of Physiotherapy
21	DVT	Deep Venous Thrombosis
22	EAC	Equipment Audit Committee
23	EMS	Electric Muscle Stimulation
24	FAQ	Frequently Asked Question
25	FIO2	Fraction of inspired oxygen
26	FITT	Frequency, Intensity, Time and Type
27	FMS	Facility Management and Safety
28	FWB	Full Weight Bearing
29	Hb	Hemoglobin
30	HCO_3	Bicarbonate
31	HCPs	Health Care Providers
32	HCT	Hematocrit
33	HIC	Hospital Infection Control
34	HIMS	Hospital Information Management System
35	HOD	Head Of Department
36	HR	Heart Rate
37	HRM	Human Resource Management
38	HTN	Hypertension
39	ICN	Infection Control Nurse
40	ICU	Intensive Care Unit
41	ID	Identification
42	IHD	Ischemic Heart Disease
43	IMS	Information Management System
44	IRR	Infra-Red Radiation

45	IV	Intravenous
46	LL	Left Lower
47	LU	Left Upper
48	MHz	Megahertz
49	MOM	Management of Medication
50	M-phill	Master of Philosophy
51	MR	Medical Record
52	MRI	Magnetic Resonance Imaging
53	MS	Medical Superintendent
54	MSDS	Minimum Service Delivery Standards
55	NWB	No Weight Bearing
56	OPD	Outdoor Patient Department
57	P&SHD	Primary and Secondary Healthcare Department
58	PaO2	Partial Pressure of Oxygen
59	PCA	Patient Controlled Analgesia
60	PCO2	Partial Pressure of Carbon Dioxide
61	PHC	Punjab Healthcare Commission
62	PHD	Doctor of Philosophy
63	PLTs	Platelets
64	PM	Post Meridiem
65	PPD	Purified Protein Derivative
66	PPE	Personal Protective Equipment
67	PPM	Planned Preventive Maintenance
68	PT	Physical Therapy
69	PWB	Partial Weight Bearing
70	R/R	Respiratory Rate
71	RBC	Red Blood Cells
72	PH	Potential Hydrogen
73	RL	Right Lower
74	ROM	Range Of Motion
75	RU	Right Upper
76	SaO2	Oxygen Saturation
77	SLR	Straight Leg Raising
78	SNIC	Smart National Identification Card
79	SOP	Standard Operating Procedure
80	SPO2	Oxygen Saturation
81	TENS	Transcutaneous Electrical Nerve Stimulation
82	THQ	Tehsil Head Quarter
83	TV	Tidal Volume
84	UV	Ultra Violet
85	VBGs	Venous Blood Gases
86	W/cm2	Watt per Square Centimeter
87	WBC	White Blood Cell
88	WNL	Within Normal Limits

2 PREFACE

The goal of these Standard Operating Procedures (SOPs) is to provide policy guidelines to the physiotherapists at DHQ and THQ hospitals of the Punjab for effective and better health care services. The standards can only be complied with if the hospitals have proper infrastructure, material and human resource to provide the required care. The Primary and Secondary Healthcare Department aims to improve the quality of global healthcare by encouraging high standards of physical therapy practice. The addition of Allied Health Services at secondary health facilities is a revolutionary step taken by P&SHD.

3 SCOPE

Physiotherapy is a “science of healing and art of caring”. It pertains to the clinical examination, evaluation, assessment, diagnosis and treatment of musculoskeletal, Neurological, Cardio-Vascular, Respiratory and functional disorders. It deals with methods of treatment based on movement, manual therapy, physical agents, and therapeutics modalities rather than by drugs or surgery to relieve the pain and other complications. Physical therapy is used to improve a patient's physical functions through physical examination, diagnosis, prognosis, patient education, physical intervention, rehabilitation, disease prevention and health promotion.

4 LEGAL/ETHICAL CONSIDERATIONS

Primary and Secondary Healthcare Department expects physical therapists to:

1) Respect the rights and dignity of all individuals.
2) Comply with the laws and regulations governing the practice of physical therapy in the country in which they practice.
3) Provide honest, competent and accountable professional services.
4) Promote patient safety and quality standards.
5) Provide quality health care services.
6) Provide accurate information to patients/clients and the community about physical therapy and the services physical therapists provide.
7) Contribute to the planning and development of services which address the health needs of the community.
8) Establish and maintain with the patient, an ongoing collaborative process of decision-making that exists throughout the provision of services.

4.1 INFORMED CONSENT

1) The physiotherapist shall inform the patient verbally and in written about the nature of intervention, expected duration, cost, significant side effects in case of refusal, expected complications and alternate method of treatment prior to the initiation of any treatment.
2) Once consent has been received, it must be documented in the patient file.
3) Patients has a right of to be:
    a. Aware of the findings of the clinical assessment and physical examination.
    b. Given an opportunity to ask questions and discuss about the preferred interventions/treatments, including any significant side effects.
    c. Encouraged to be involved actively in the treatment process.
    d. Given an opportunity to discontinue intervention/treatment.
    e. Aware of the possible side effects in case of discontinuation.
4) For patients who are incompetent to give informed consent (e.g. children, unconscious patients, individuals with disturbed mental health and psychiatric issues etc.), consent is obtained from parents, legal guardians, or others authorized to do so.

4.2 LEGAL CONSIDERATIONS

1) The physiotherapist complies with all the laws and legal requirements of the jurisdiction in which they practice and the body which regulates the practice of physiotherapy.
2) The physiotherapist shall not release patient information to a third party without consent of the patient or legal authorization.

5 PHYSIOTHERAPY DEPARTMENT

5.1 PHYSICAL SETTING

1) Physiotherapy department should be at Ground Floor (Preferably).
2) Area of Physiotherapy department should be 1000 square feet ideally.
3) Access to Physiotherapy Department should be ensured by both stairs and ramps, clearly designed for patient arrival and departure. The pathways should facilitate free movement of patient's trolley, stretcher etc.
4) Adequate space for wheelchairs and patient trolleys should be ensured. The availability of support services must be ensured.
5) Effective and standard signage for the guidance of patients should be ensured.

5.2 THE FUNCTIONAL AREAS OF PHYSIOTHERAPY DEPARTMENT

1) Department reception/Patient registration counter
2) Doctor's Room
3) Procedure Rooms
4) Gym Area
5) Storage area for biomedical equipment/accessories
6) Waiting Area
7) Washroom for patients

6 HUMAN RESOURCE OF THE PHYSIOTHERAPY DEPARTMENT

Physiotherapist	1) 4 years BSPT/ 5 years DPT 2) Additional Qualifications: M. Phil, MS, PhD 3) Minimum of two year working experience is preferred
Physiotherapy Technician	1) 2 Years Diploma in Physical Therapy Program 2) Minimum of two year working experience is preferred

6.1 RESPONSIBILITY MATRIX

Physiotherapist	1) Assess a patient's physical abilities and needs. 2) Develop a plan of physiotherapy intervention according to the patient's individualized needs. 3) Provide direct patient care including evaluation and treatment through the use of Therapeutic Exercise, Manipulation, Mobilization, Hydrotherapy, Electro-therapeutic and Mechanical devices & Therapeutic agents. 4) Provide consultation on injury prevention and health promotion. 5) Delegate duties to other staff consistent with their education and experience. 6) Perform administrative, supervisory, in-service education and instructional duties. 7) Conduct training workshop and continuous professional development programs for newly hired physical therapists and physiotherapy technicians. 8) Maintenance and storage of all physical therapy equipment and supplies in the department. 9) Check Performance of daily start-up and shut-down of automated physical therapy equipment. 10) Patient physical therapy record Management. 11) Training of Physiotherapy staff in physical therapy procedures. 12) Quality control, quality assurance, and risk management as they relate to physical therapy Functions. 13) Day to day operations, creating reports of the department. 14) Formulating daily / monthly management reports. 15) Act as a liaison officer between the administration and Physiotherapy Department Staff. 16) Any other job assigned by the Hospital Administration.

Physiotherapy Technician	1) Perform his/her duties under the direction and supervision of the physical therapist. 2) Perform administrative functions within the department including patient appointments, proper preparation and disposition of patient records, etc. 3) Perform daily warm-up and shut down of all automated equipment in the physical therapy department. 4) Prepare a weekly order for replenishing supplies. 5) Assume other duties as deemed necessary by physical therapist/clinic supervisor 6) Ensure all personnel working in the Physical therapy department use PPE. (Lab coat for therapists and scrubs for technicians). The PPE must be removed when leaving the clinic. Gloves will be worn when performing any wound care. 7) Ensure all staff wash hands before and after each patient. 8) Ensure all Physical therapy counters and equipment shall be decontaminated with an approved surface disinfectant after each patient. 9) Ensure all contaminated material, including gauze, will be placed in a biohazard waste container and disposed of. 10) Clean all necessary equipment and counter spaces with appropriate germicidal disinfectant.

7 GENERAL POLICY GUIDELINES FOR PHYSIOTHERAPY DEPARTMENT

1) Physiotherapy Services will be made available to all out door patients six days a week, as per notified OPD timings.
2) For Inpatients, Physiotherapist are available on-call 24/7.
3) Resources should exist in the Physiotherapy department to accommodate each patient from the time of arrival for evaluation, decision making, treatment and discharge.
4) Department should be staffed by qualified personnel with sufficient knowledge and skills to evaluate and manage the patients.
5) Physiotherapy Staff must establish effective working relationships with other HCPs and entities with whom they must interact.
6) A medical record must be maintained for every individual who presents himself for physiotherapy treatment and it should be retained as per hospital policy.
7) Equipment and supplies must be of highly quality and should be appropriate to the reasonable needs of all patients.
8) All patients discharged from Physiotherapy department must be issued specific, printed or legibly written aftercare /follow-up instructions.
9) Patients and attendants must be informed of their rights, privileges and responsibilities.
10) Department staff must be informed of their rights and responsibilities.
11) Department staff shall make necessary arrangement to educate patients and their families about process of launching complaints regarding patient's clinical care or hospital services.

8 REGISTERATION OF THE PATIENT

8.1 PURPOSE

To facilitate the registration of patient in Physiotherapy Department.

8.2 RESPONSIBILITY

Receptionist appointed at Reception of Physiotherapy Department.

8.3 PROCEDURE

1) Incharge Physiotherapy will ensure the availability of Receptionist during the routine OPD hours.

2) All patients coming to Physiotherapy Department will be registered at reception regardless of their clinical status.

3) Following information must be obtained and entered during registration process: Name, age, gender, address, CNIC number, contact phone number, date of visit, referring doctor (if any).

4) A Medical Record Number will be issued to patient after recording all information on Physiotherapy Register/ HIMS. (***ANNEX-01***)

9 PHYSIOTHERAPY OUTPATIENT WORK PROCESS

9.1 PURPOSE

To provide a high quality, patient focused and professional outpatient services.

9.2 RESPONSIBILITY

Physiotherapist & Physiotherapy technician.

9.3 PROCEDURE

1) Outdoor will be conducted on all working days where patients are seen on first come-first serve basis.
2) Two types of Patient may visit for consultation with a qualified Physiotherapist which includes patient referred by other specialties and walk in patients.

3) Policy for Physical Therapy Consultation

a. Referrals to the physiotherapist for evaluation and treatment will be submitted or send to physiotherapy department.
b. The request will contain the following information:
    i. Patient's name.
    ii. Patient's date of birth.
    iii. Duty station and phone number, if active duty; home phone number if non-active duty.
    iv. Complaints, medical findings, and reason of referral
    v. Patient medical history
    vi. Date of referral
    vii. Referring Doctor's name, signature, stamp along with date and time.
c. It is the responsibility of the referring doctor to describe the patient condition in detail that might effect treatment.

4) Physical Therapy Access Policy

a. A qualified physiotherapist must evaluate, assess and establish appropriate physical therapy plan for Neuro-musculoskeletal conditions.
b. Physical therapy will be provided only upon referral from a registered health care provider. The patient must be referred back to the HCP if no improvement is noted within two weeks of starting physical therapy.
c. The physiotherapist must perform a follow up evaluation every two weeks or ten treatments, whichever comes first.

d. The following health care providers are authorized to refer patients to the physical therapy department:
   i. Surgeons, Physicians, Medical Officers, and Dentists.
   ii. Outside (The Hospital) Surgeons, Physicians, and Dentists.

5) Policy for Direct Access and Walk-In Patient

a. Physical therapy professional education prepares physical therapists to be first contact autonomous practitioners, able to assess, examine, diagnose, intervene, and discharge patients without referral from another health care professional (e.g. medical practitioner).
b. P&SH Department encourages Physiotherapist for direct access and patient self-referral
   i. From National/Provincial/Regional/State Health departments, Health Professionals and other organizations.
   ii. From general public to address their health care needs and remain independent in their homes and communities.

6) Initial Physical Assessment and examination

a. The physiotherapist shall perform an initial examination and evaluation to establish a diagnosis and prognosis prior to intervention.
b. The physiotherapist examination shall:
   i. Be documented, dated, timed and appropriately authenticated by the treating physiotherapist.
   ii. Identify the Physiotherapy needs of the patient.
   iii. Produce data that are sufficient to allow evaluation, diagnosis, prognosis, and the establishment of a plan of physiotherapy care.
   iv. May result in recommendations for additional services to meet the needs of the patient.

7) Plan of Care

a. Is based on the examination, evaluation, diagnosis and prognosis.
b. Shall Identify goals of care plan?
c. Shall be interdisciplinary when necessary to meet the needs of the patient.
d. Shall describe the proposed intervention, including frequency and duration.
e. Shall be dated, timed and appropriately authenticated by the treating physiotherapist.

8) Informed Consent

Informed consent shall be obtained from the patient and his/her relative which shall be duly signed by the Patient or treating Physiotherapist prior to any intervention or modality. It shall be his responsibility to fully inform the patient and family, when indicated, of the nature, need and possible consequences or untoward effects of any procedures and to document such in the medical record.

9) Intervention

a. Is based on the examination, evaluation, diagnosis, prognosis and plan of care.
b. Shall be provided under the ongoing direction and supervision of the physiotherapist.
c. Shall be altered in accordance with changes in patient response or status.
d. Shall be provided at a level that is consistent with current physiotherapy practice.
e. Shall be dated, timed and appropriately authenticated by the physiotherapist.

10) Re-Examination/ Follow Up

a. The physiotherapist shall re-examine the patient as necessary during an episode of care to evaluate progress or change in patient status and shall modify the plan of care accordingly or discontinue physiotherapy services.
b. The physiotherapist re-examination:
    i. Shall be documented, dated, timed and appropriately authenticated by the physiotherapist who performs it.
    ii. Shall include modifications to the plan of care.

11) Discharge/Discontinuation of Intervention

a. The physiotherapist shall discharge the patient from physical therapy services when the anticipated goals or expected outcomes of the physical therapy treatment have been achieved.
b. The physiotherapist shall discontinue intervention when the patient is unable to continue to progress toward goals or when the physiotherapist determines that the patient will no longer benefit from physiotherapy.
c. Discharge documentation shall:
    i. Include the status of the patient at discharge and the outcomes attained.
    ii. Be dated and appropriately authenticated by the treating Physiotherapist.

iii. Include, when a patient is discharged prior to attainment of goals and outcomes, the status of the patient and the rationale for discontinuation.
iv. Include specific, printed or legibly written after care/ instructions and Follow-up appointment to visit physiotherapy OPD.

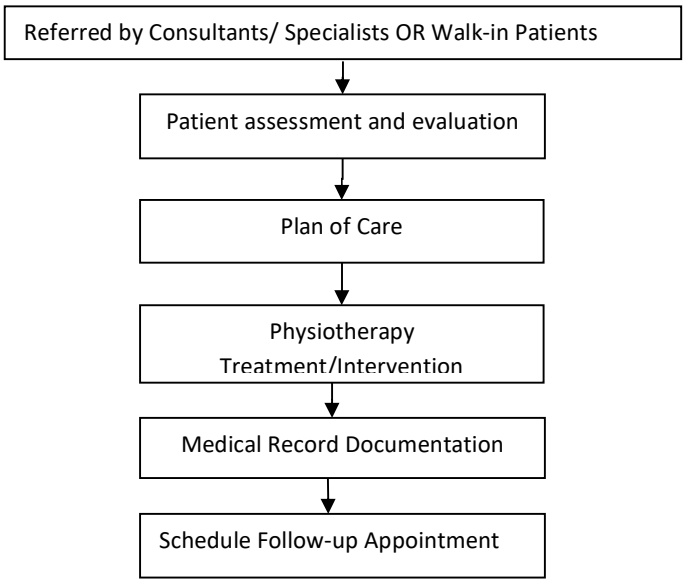
12) Referral

a. A referral system shall be in place to ensure that patients can access a physical therapist either by direct access or from an appropriate referral source.
b. Where the examination, or any change in status reveals findings outside the scope of knowledge, experience, and/or expertise of the physical therapist, the patient shall be informed and referred to the appropriate practitioner/professional.

13) Communication/Coordination/Documentation

a. The physiotherapist shall communicate, coordinate and document all aspects of patient management including the results of initial examination and evaluation, diagnosis, prognosis, plan of care, interventions, response to interventions, changes in patient status relative to the interventions, re-examination, and discharge/discontinuation of intervention and other patient management activities.
b. He shall review medical record and ensure the information is complete.
c. A qualified Physiotherapist shall conduct an evaluation and document the following.
    i. Presenting complaint and detailed history.
    ii. Physical Assessment and examination.
    iii. Interdisciplinary plan of care.
    iv. Frequency and duration of intervention and follow-up plan.
    v. Follow-up PT visits will be documented and will include the following:
        - Current subjective and objective status.
        - Current level of function.
        - Change in patient's symptoms.
        - Changes in Physical therapy treatment plan.
        - Further follow-up visits required.
d. When indicated, communication with the referring provider shall be made by the physical therapy staff and must be documented.

Referred to Physiotherapy Card attached in ***ANNEX-02***



10 PHYSIOTHERAPY INPATIENT WORK PROCESS

10.1 PURPOSE

To provide guideline instructions for treatment or management of the admitted patients.

10.2 RESPONSIBILITY

Physiotherapist & physiotherapy technician

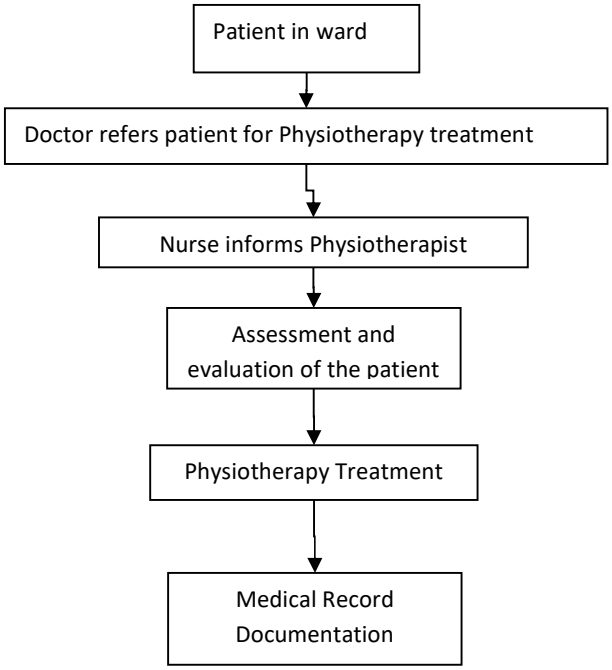
10.3 PROCEDURE

1) Requests for consultation from the In-patient department require prompt patient evaluation by Physiotherapist. Consultations should be provided within a reasonable time frame, as determined by patient condition.
2) Physiotherapy consultation shall be completed in a timely fashion by conducting a complete initial physical assessment and examination of patient.

   *Referred to Physiotherapy Assessment attached at **ANNEX-03***

   *Referred to Respiratory Therapy Assessment attached at **ANNEX-04***
3) Physiotherapist shall formulate and explain the plan of care to patient and primary Physician.
4) While administering patient care, identify patient by calling his/her name and compare with ID band applied.
5) Informed consent shall be obtained from the patient and his/her relative which will be duly signed by the Patient or treating Physiotherapist prior to any intervention or modality. It shall be his responsibility to fully inform the patient and family, when indicated, of the nature, need and possible consequences or untoward effects of any procedures and to document such in the medical record.
6) Physiotherapist shall make daily rounds and same must be documented in the Physiotherapist Notes ***(ANNEX-05).***
7) The physiotherapist shall re-examine the patient as necessary during an episode of care to evaluate progress or change in patient status and modify the plan of care accordingly or discontinue physiotherapy services.
8) The physiotherapist shall discharge the patient from physical therapy services when the anticipated goals or expected outcomes for the patient have been achieved. He shall discontinue intervention when the patient is unable to continue to progress toward goals or when the physiotherapist determines that the patient will no longer benefit from physiotherapy.

9) The Physiotherapist shall refer the patient to the appropriate practitioner on need basis.



11 FALL PRECAUTIONS

Fall Precautions: safety measures observed to protect and prevent patient from sustaining accidental fall.

11.1 PURPOSE

1) To make all staff and family members aware of the enforced precautionary measures.
2) To identify patients at risk of falls, initiate interventions to prevent falls and thus reduce the risk of injury due to falls.

11.2 RESPONSIBILITY

Treating doctor, on duty doctor, Treating Physiotherapist, on duty Nurse

11.3 INDICATIONS

1) Partial Paralysis
2) Loss of limb
3) Blindness
4) Deafness
5) Impaired mobility
6) Other physical limitation or impaired sensorium/ uncooperative patient
7) Confusion/disorientation
8) Sedation/anesthesia
9) Slow reaction time
10) Lack of coordination
11) History of syncope
12) Convulsion/seizures
13) Transient Ischemic Attack (TIA)
14) 70 years or older
15) Nocturia
16) Recent significant blood loss
17) Previous fall (date _____)

11.4 PROCEDURE

1) All patients at risk will be assessed for fall risk and evaluated immediately upon admission within a maximum of 3-4 hours after admission.
2) Registered Nurse will do the fall risk assessment by using the FALL RISK ASSESSMENT form attached in ***ANNEX-06***
3) Following assessment by the nurse, if the patient is found to be at high risk for falls, the fall protocol will be initiated. The fall protocol consists of the following:
    a. Red placard will be placed as signage at foot part of bed.
    b. The patient will need assistance for transfers, ambulation and ADLs. The patient may not be left unattended in his/her room or bathroom while up or in a chair.
    c. The patient must be positioned in the bed with all side rails up in the position
    d. Beds will be kept in the lowest position at all times with brakes locked.
    e. Ensure that head and footboard of the bed is attached.
    f. Patients will be checked at least every 2 hours with the frequency being adjusted more frequently according to assessed patient needs.
    g. Patients at high risk will be placed in beds close to nurse's station to allow more frequent observation.
    h. Patient and family will be educated regarding the fall prevention program. Education will be documented.
    i. All patients will be instructed regarding their activity level.
    j. Physical Therapy Department will be consulted for gait and/or strengthening exercises, if needed.
    k. While doing treatment, physiotherapist shall check the Patient fall risk assessment score and do the necessary measures for prevention of falls.
    l. The status of the patients at risk for falls will be a routine part of the end of shift or transfer report.
4) Reassessment must be performed for all patients at risk for fall. Following are the indications for reassessment:
    a. Every shift
    b. Following Procedural Sedation
    c. Medication effects, such as those anticipated with sedation or diuretics
    d. Immediate Postoperative (Within 48 hours post-surgery)
    e. Narcotic administration such as PCA or epidural analgesia

f. Change in conscious level or mental status
g. Changing in ambulation
h. Transfer between Nursing unit/clinic
i. Whenever there is a fall incident.

5) All falls will be documented and reported.
6) The environment will be kept clean and clutter-free all the times. Adequate lighting will be provided.
7) All wheeled equipment will be placed on a routine preventive maintenance program.
8) There will be a cooperative effort between the nursing staff and patient's family to ensure the safety of the patient. When present, assistance of family member may be required for patients found to be at high risk for falls.
9) Signage will be placed in patient wards to educate and inform patients, family and visitors of safety precautions.
10) Wet floor signs will be available in each unit for use in the event of a spill.

12 OPERATING PROCEDURES

12.1 PURPOSE

To provide definitive guidelines for the physical therapy treatment of patients in physiotherapy department.

12.2 RESPONSIBILITY

Physiotherapist and Physiotherapy Technician

12.3 GENERAL OPERATING PROCEDURES

12.3.1 DAILY PREPARATION

1) Turn on and check all necessary physical therapy equipment.
    a. Hydro-collator (hot), check water level and temperature.
    b. Hydro-collator (cold), check temperature.
    c. Check all the modalities
2) Check working stock and restock if necessary.

12.3.2 PROCESSING NEW PATIENTS

1) Greet the patient and receive the Physical Therapy request form. Ensure that patient information on receipt is complete.
2) The patient will be scheduled for evaluation by Physical Therapist as soon as possible within 30 minutes.
3) After evaluation the therapist shall explain the plan of physical therapy to the patient.
4) Avoid dispute with patients at all times. Refer dissatisfied patients to the department In-charge/HOD.

12.3.3 INFECTION CONTROL

1) All personnel working in the Physical therapy department will wear protective garment (Lab coat for therapists and scrubs for technicians). The protective garment must be removed when leaving the clinic. Gloves will be worn when performing any wound care.
2) Wash hands before and after each patient.
3) Physical therapy counters and equipment shall be decontaminated with an approved germicidal surface disinfectant after each procedure.
4) All contaminated material, including gauze, will be placed in a biohazard waste container and disposed off.

12.4 SPECIFIC OPERATING PROCEDURES

12.4.1 ULTRASOUND THERAPY

Ultrasound is high frequency sound waves that produce temperature elevation to the deeper structures without causing excessive heating of the superficial layers through the use of coupling agents.

1) **Preparation of the Patient**
   a. Position the patient comfortably with the area to be treated adequately supported, exposed and relaxed.
   b. Inspect the part for any cuts, abrasions, excessive swelling, warmth or any skin condition.
   c. Inform the patient about the intervention and sensation to be experienced – a mild heat.
2) **Procedure**
   a. Explain the procedure.
   b. Apply generous amount of coupling agent. Spread the gel evenly over the transducer.
   c. Slowly increase the intensity, apply the transducer to the skin and move continuously in small circular motions.
   d. Duration of the procedure is between 05-25 minutes, based on levels.
      i. Acute
      ii. Sub-acute
      iii. Chronic
3) **Precautions**
   a. Anesthetic areas should be treated with caution if a thermal dose is being applied on subcutaneous major nerves and bony prominences.
   b. Always use the lowest intensity which produces a therapeutic response.
   c. Ensure that the applicator is moved throughout the treatment.
   d. Ensure that the patient is aware of the nature of the intervention and the expected effects.
   e. If pain, discomfort or unexpected sensations are experienced by the patient, the intervention intensity should be reduced. If the symptoms persist, the physical therapy treatment shall be terminated.

f. Methyl methacrylate cement and plastic are materials used for fixation or as components of prosthetic joints. Because these materials are rapidly heated by ultrasound, it is generally recommended that ultra-sound should not be applied over a cemented prosthesis and where plastic components are used.

4) Infection control

a. Clean the transducer head with alcohol swab after every use.

5) Indications

a. Acute injury
b. Acute inflammation
c. Chronic indurated edema
d. Scar tissue
e. Soft tissue shortening (1 or 3 MHz frequency depending on the tissue depth at 1-2.5 W/cm2 intensity)
f. Pain control (Continuous ultrasound, 1 or 3 MHz frequency, 0.5 to 3.0 W/cm2 intensity)
g. Dermal ulcers (0.8 to 1W/cm2 intensity, 3 MHz frequency)
h. Surgical skin incisions (0.5 to 0.8 W/cm2 intensity, pulsed)
i. Tendon injuries (0.5 to 1.5 W/cm2 intensity, Continuous, 1 or 3 MHz frequency)
j. Resorption of calcium deposits.
k. Bone fractures (pulsed, 0.1W/cm2 intensity, 1.5MHz frequency)
l. Carpal tunnel syndrome (1 MHz frequency, 1W /cm2 intensity, pulsed)
m. Phonophoresis (3 MHz frequency, Pulsed, 0.5 to 0.75 W/cm2 intensity)
n. Plantar warts (0.6 to 0.8W/cm2 intensity, Continuous)
o. Herpes zoster infection(7)

6) Contraindications

a. Avoid exposure to the developing fetus
b. Malignancy
c. Vascular abnormalities including DVT and severe atherosclerosis
d. Acute infections
e. Joint Replacement
f. Hemophilia's
g. Specialized tissue e.g. eye and testes
h. The stellate ganglion

i. The cardiac area in advanced heart disease
j. The spinal cord following laminectomy
k. The cranium
l. Active epiphyseal regions in children

12.4.2 INFRARED RADIATION

Infrared radiation is a convenient system to heat parts of our body. It has the advantage over direct contact in that radiation can heat directly the area where the blood capillaries and neuron terminals are present. When heat comes from a direct contact source it has to heat the external layer of the skin and heat is transferred to the deeper layer by conduction.

1) Preparation of the Patient

a. Position of patient should be comfortable and adequate.
b. Avoid undue movement of the patient.
c. Test the skin sensation of the patient.
d. Expose the area which is going to be treated.
e. Remove all the metal objects like rings, safety pins etc.

2) Procedure

a. Explain the procedure to patient
b. Avoid very short distance between the patient and the infra-red radiation (IRR) lamp as it can result in burns and scalds.
c. In case of modalities like IRR lamps where intensity regulation may not be available, the amount of heat received by a patient will be determined by the distance of the lamp from the part being treated respectively.
d. The distance should be such that erythema does not occur until ten minutes after the intervention has started, while the application time should be short and under no circumstance it does not exceed 30 minutes.

3) Precautions

a. The patient should be instructed not to touch the glass bulb inside the lamp while in use to avoid burns.
b. The patient's skin must be clean and free of grease or liniment.
c. The eyes must be protected with goggles or cotton wool soaked in water, especially if any part of the face is to be irradiated.
d. Never position the lamp such that it could drop onto the patient.

4) **Indications**
   a. Acute pain
   b. Muscle spasm
   c. Prior to stretching
   d. Superficial wounds and infections
   e. Arthritic joints
   f. Antidote of excessive UV radiations

5) **Contraindications**
   a. Areas with poor or deficient skin sensation
   b. Generalized advanced cardiovascular disease
   c. Local areas of impaired peripheral circulation
   d. Extensive scar tissue
   e. Deep X Ray treatment or other ionizing radiation (in the last 6 months) in the region being treated
   f. Malignant tissue (except in terminal / palliative / hospice care)
   g. Subjects with reduced levels of consciousness or impaired understanding
   h. Acute febrile illness
   i. Some acute skin conditions e.g. eczema, dermatitis
   j. Sensitive structures (e.g. eyes and testes)

12.4.3 PARAFFIN WAX BATH

Paraffin wax bath is the utilization of paraffin wax at a temperature 40- 44 degree Celsius. The application of hot wax through dipping with the lint cloth and apply to patient's extremities .This wax has low thermal conductivity, so that the heat will stay in the tissues for a longer period.

1) **Preparation of the patient**
   a. Position the patient comfortably with the area to be treated adequately supported, exposed and relaxed.
   b. The part to be treated must be cleaned and free form cuts, rashes or infections.
   c. Inform the patient about the physical therapy treatment and sensation to be experienced – a moderate heat.

2) **Procedure**
   a. Explain the procedure.
   b. Therapist should wear gloves.

c. Dip the lint clothe in the wax bath, clear the excess wax on the cloth and wrap it around the area to be treated.

d. Duration of the procedure is 20 – 30minutes.

3) Precautions

a. Patient should be cautioned not to change position during treatment.

b. Paraffin can easily fall to the floor during treatment making the floor slippery.

c. Paraffin wax is flammable.

d. Don't use wax over the area with circulatory insufficiency.

4) Infection control

a. Change the lint cloth after every use.

b. Wax bath to be cleaned with the spirit when the wax is replaced with new.

c. Lint cloth has to be discarded if used in infectious patient.

5) Indications

a. To relieve pain in case of

i. Osteoarthritis

ii. Rheumatoid arthritis

iii. Fibromyalgia

iv. Other Joint Mobility issues etc

6) Contraindications

a. Broken skin.

b. Skin Rashes

c. Poor blood circulation

d. Numbness in hands or feet

12.4.4 MOIST HEAT THERAPY

Silicon hot packs are conductive type of superficial moist heat. The temperature has to be maintained between 70 – 100 degrees Celsius.

1) Preparation of the patient

a. Drape the patient, expose the area to be treated, place the patient in comfortable position.

b. The part to be treated must be cleaned and free form cuts, rashes or infections.

c. Inform the patient about the treatment and sensation to be experienced – a mild heat which will be increased gradually.

2) Procedure

a. Explain the procedure to the patient.

b. Place the towel between the patient's skin or treatment area and the hot packs.

c. Wrap additional towels depending on patient's tolerance to heat.

d. Duration of the procedure is 10 – 30 minutes.

3) **Precautions**
   a. Extra towel must be utilized, so heat is not transferred too quickly and results in burn.
4) **Indications**
   a. Pain control
   b. Muscle spasm
   c. Wound healing
   d. Chronic Back ache
   e. Arthritis
   f. Ankylosing spondylitis
5) **Contraindications**
   a. Acute inflammation or injury
   b. Malignancy
   c. Dermatitis
   d. Peripheral Vascular Disease
   e. Impairment of skin sensation

12.4.5 SHORT WAVE DIATHERMY

High frequency current produced deep heat with in body tissues for therapeutic purposes. It produces heat below the skin surfaces through conversion heat transmission.

1) **Preparation of the patient**
   a. Drape the patient, expose the area to be treated, place the patient in comfortable position.
   b. The part to be treated must be cleaned and free form cuts, rashes or infections.
   c. Inform the patient about the treatment and sensation to be experienced – a Deep heat.
2) **Procedure:**
   a. Explain the procedure to the patient.
   b. Place one layer of the towel over the treatment area.
   c. Position the treatment area midway between two electrodes.
   d. Allow the machine to warm up first two minutes.
   e. Increase the intensity until the patient feels a soothing sensation.
   f. Give the patient the call bell in case the heat is more.
   g. Duration of the procedure is 15 – 30 minutes.
3) **Precautions**
   a. Avoid active epiphyseal regions in children.

b. Avoid specialized tissues (e.g. eye and testes).

4) Indications

a. Sub-acute or chronic pain.
b. Muscle spasm.
c. Sprains & Strains.
d. Wound healing.
e. Sub-acute Inflammation.
f. Chronic Inflammation.
g. Rheumatoid Arthritis.
h. Tendinitis.
i. Osteoarthritis.

5) Contraindications

a. Areas of poor or deficient thermal skin sensation.
b. Metal in the tissues.
c. Circulatory compromise or deficit including ischemic tissue, thrombosis and associated conditions.
d. Advanced cardiovascular conditions.
e. Pacemakers
f. Pregnancy
g. Recent or current hemorrhage
h. Avoid irradiation of the lower trunk, abdomen or pelvis during menstruation.
i. Malignancy
j. Active tuberculosis
k. Deep X Ray therapy or other ionizing radiations (in the last 6 months) in the region to be treated Patients who are unable to cooperate.

12.4.6 ELECTRIC STIMULATION

Electrical stimulation is the use of electricity to stimulate nerves and muscles. It is used to accomplish a variety of therapeutic purposes, such as effect on de innervated muscles, innervated muscle and decreased spasm.

1) Preparation of the patient

a. The part to be treated must be cleaned and free form cuts, rashes or infections.
b. Inform the patient about the treatment and sensation to be experienced – mild pricking sensation.

2) **Procedure**
    a. Explain the procedure to the patient.
    b. Place the dispersive electrode on an antagonistic muscle surface and active electrode over area being treated.
    c. Set the intensity based on the muscle contraction.
    d. Duration of the procedure is 10 – 30 minutes.
3) **Precautions**
    a. Use correct type of current for de innervated and innervated muscles.
    b. Equipment should be over mackintosh sheet.
    c. Make sure the intensity knob to be turned to zero prior to turning on the machine.
    d. Stimulations should not be used in Patients with pacemakers, Pregnancy (abdominal and/or pelvic area), Pain of unknown origin.
4) **Infection control**
    a. Use new cotton padding for every treatment.
5) **Indications**
    a. Acute pain
    b. Chronic intractable pain
    c. Back ache
    d. Tendinitis
    e. Bursitis
    f. Muscle weakness
    g. To improve wound contraction and scar quality
6) **Contraindications:**
    a. Altered skin sensation
    b. Patients with Pace makers
    c. Pregnancy
    d. Deep vein thrombosis
    e. Pain of unknown origin
    f. Impaired mental status
    g. Malignancy
    h. Heat Sensitivity

12.4.7 CRYOTHERAPY

Cryotherapy describes multiple types of cold application that use the type of electromagnetic energy classified as infrared radiation. When cold is applied to skin (warmer object), heat is removed or lost. This is referred to as heat abstraction. The

most common modes of heat transfer with cold application are conduction and evaporation.

1) Preparation of the patient

a. Drape the patient, expose the area to be treated, place the patient in comfortable position.

b. The part to be treated must be cleaned and free form cuts, rashes or infections.

c. Inform the patient about the treatment and sensation to be experienced – cold

2) Procedure

a. Cryotherapy is usually applied for 20 to 30 minutes for maximum cooling of both superficial and deep tissues.

b. Barriers used between the ice application and skin can affect heat abstraction. Research has shown that a dry towel or dry elastic wrap should not be used in procedure times of 30 minutes or less. Rather, the cold agent should be applied directly to the skin for optimal therapeutic effects.

c. Furthermore, ice packs can be molded to the body's contours, held in place by a cold compression wrap, and elevated above the heart to minimize swelling and pooling of fluids in the interstitial tissue spaces.

d. During the initial treatments, the skin should be checked frequently for wheal or blister formation

3) Precautions

a. Do not apply cryotherapy directly to skin for more than 30 minutes.

b. Skin integrity should be monitored during treatment

c. Extended treatment may lead to neurapraxia.

4) Indications

a. Pain
b. Hypertonicity
c. Muscle Spasm
d. Acute muscle strain
e. Acute ligament sprain
f. Bursitis
g. Tenosynovitis
h. Tendinitis
i. Acute contusion
j. Strength training

5) Contraindications

a. Decreased cold sensitivity and/or hypersensitivity

b. Cold allergy
c. Raynaud's disease or cold
d. Peripheral vascular disease
e. Urticarial
f. Hypertension
g. Uncovered open wounds

12.4.8 VAPO COOLANT SPRAYS

Fluor methane is a nonflammable, nontoxic spray that uses rapid evaporation of chemicals on the skin area to cool the skin prior to stretching a muscle. The effects are temporary and superficial.

1) Preparation of the patient

a. Drape the patient, expose the area to be treated, place the patient in comfortable position.
b. The part to be treated must be cleaned and free form cuts, rashes or infections.
c. Inform the patient about the treatment and sensation to be experienced.

2) Procedure

a. When using a Vapo-coolant spray to increase ROM in an area where no trigger point is present, the patient is comfortably positioned with the muscle passively stretched. The bottle of Vapo-coolant spray is then inverted and held at a 30° to 45° angle and sprayed approximately 12 to 18 inches away from the skin.
b. The entire length of the muscle is sprayed two to three times in a unidirectional, parallel sweeping pattern as a gradual stretch is applied by the Physical Therapist. When using this spray to treat trigger points and myofascial pain, the Physical Therapist must first determine the presence of an active trigger point.
c. This is accomplished by putting the muscle under moderate tension, followed by application of firm pressure over the painful site for 5 to 10 seconds.

3) Precautions

a. Do not spray in the eyes.
b. Do not use this product on diabetics or persons with poor circulation or insensitive skin. Over application of the product might alter skin pigmentation.

4) Indications

a. Myofascial pain

b. Local muscle spasm
c. Treating trigger points
d. Acute musculoskeletal trauma

5) Contraindications

a. Hypersensitivity
b. Poor blood circulation

12.4.9 EXERCISE THERAPY

1) Procedure

Exercise is a physical activity which improves one's health. Physicians, and physical therapist, have found that exercise plays an important role in the maintenance of brain, nerve and muscle function in the human body. Therapeutic exercises have been designed to enhance a variety of aspects of physical fitness in patients suffering from diseases and dysfunctions. New research suggests that exercise may delay mental deterioration with age and disease.

2) Goals of Exercise therapy

a. To improve blood circulation
b. Maintain balance
c. To increase muscle power
d. Joint mobility
e. To improve flexibility
f. To strengthen the muscles
g. To increase respiratory capacity

3) Preparation of the patient

a. Positioning the patient
b. Explanation and demonstration of the exercise

4) Various types of exercises are

a. Active exercise
b. Active Assistive exercise
c. Resistive exercise
d. Passive exercise
e. Mobilization
f. Independence in mobility

g. Spinal exercise
h. Respiratory exercise
i. Strengthening exercise
j. Co-ordination exercise
k. Vertigo exercise
l. Mat exercise
m. Postural drainage
n. Therapeutic Massage
o. Chest manipulation
p. Diabetic exercise
q. Antenatal exercise
r. Post natal exercise
s. Pre-operative exercise
t. Post-operative exercise
u. Pelvic floor exercise
v. Ambulation exercise

12.4.10 PULMONARY FUNCTION TEST

Pulmonary function test is performed to assess the functional states of the lungs. It measures how well the lungs take in and exhale air and how efficiently they transfer oxygen into the blood.

1) Procedure

In a pulmonary function test or spirometer test, a person breathes into mouthpiece that is connected to an instrument called a Spiro meter. The Spiro meter records the amount and the rate of air that is breathed in and out over a specified time. Some of the test measurements are obtained by normal, quiet breathing and other tests require forced inhalation or exhalation after a deep breath.It is designed to measure changes in volume and can only measure lung volume compartments that exchange gas with the atmosphere. Spiro meters with electronic signal outputs also measure flow (volume per unit of time). A device is usually attached to the Spiro-meter which measures the movement of gas in and out of the chest and is referred to as a Spiro-graph.

2) Precautions

a. Do not eat a heavy meal before the test .
b. Do not smoke for 4 – 6 hours prior to the test .

c. Do not exercise strenuously prior to the test.
d. If you have dentures, wear them during the test to help you to form a tight seal around a mouth piece of the Spiro \-meter.

3) Infection control

a. Turbine pneumotach has to be cleaned daily with cidex solution.
b. Mouth piece has to be discarded after each use.

4) Indications

a. For investigation and diagnosis of respiratory problems like asthma, COPD, allergy, chronic bronchitis, bronchiectasis, lung fibrosis, cystic fibrosis, asbestosis, sarcoidosis and respiratory infections.
b. Monitoring of patients with respiratory conditions
c. Monitoring of patients at risk of pulmonary complications

5) Contraindications

a. Unstable angina
b. Recent MI
c. Active Hemoptysis
d. Pneumothorax
e. Recent thoracic or abdominal surgery
f. Abdominal, thoracic, cerebral aneurysms

13 PHYSICAL THERAPY RECORDS MANAGEMENT (RECORD KEEPING, STORAGE, RETRIEVAL AND DISPOSAL)

13.1 PURPOSE

To ensure safe storage, retrieval and disposal of physiotherapy records.

13.2 RESPONSIBILITY

Physiotherapist, Medical Superintendent, Quality Assurance Officer

13.3 PROCEDURE

1) Systematic documentation of a single patient's history and care across time in Physiotherapy department is mandatory and it is primary responsibility of Physiotherapist.
2) Physiotherapy Medical record of a particular patient is confidential and his/her right to privacy must be respected at all times.
3) Medical records must be maintained for every individual who receives care by physiotherapist whether outdoor or as inpatient.
4) In-Patient file containing physiotherapy assessment and notes along with other medical records will remain in the custody of nursing staff during the entire stay of patient in DHQ/ THQ hospital.
5) Physiotherapist/ Physiotherapy Technician shall request the nursing staff on duty for patient's file to endorse his/her entry.
6) The author of every entry in physiotherapy medical records is identified through signatures, names and designation.
7) The author of entry must make sure that every entry fulfills the following criteria
    a. Date of entry
    b. Time of entry
    c. Authenticated by his/her legible name ,signature and designation
8) After the discharge/death/referral /admission of patient, nursing staff on duty shall complete the medical record in all aspects and hand it over to Medical Record Section
9) Patient Physiotherapy Record must contain:
    a. Medical Record Number along with patient bio-data, date and time of admission,

b. Duly signed informed written consent for any intervention by Physiotherapist/ physiotherapy Technician.
c. A complete History and initial Physical Examination shall be recorded at all times and should be completed on time by Physiotherapist.
d. A Provisional or working diagnosis must be stated at the end of the completed History and Physical Examination.
e. Plan of care shall be formulated.
f. The patient progress and further care plan shall be in writing on the appropriate Physiotherapist's Order Sheet, and authenticated by the ordering physiotherapist.
g. If the order is verbal (including by telephone). It also shall be entered on the Physiotherapist's Order Sheet, and signed by the Nurse to whom it was dictated. She should specify the name and title of the physiotherapist who dictated the order. Physical Therapist shall countersign the order as soon as possible but not later than 24 hours.
h. All progress notes must include the patient's Subjective symptoms; the Objective findings, the consultant's current Assessment, and further management Plan (i.e. SOAP).
i. If consultation is requested by a physician as outpatient/inpatient, the consulted physician shall record his or her considered opinion and recommendations on the consultation form. This report shall be authenticated.
j. Chronological details of provided care and interventions done during entire stay of patient in hospital.
k. Patient discharge along with follow-up instructions and appointment.

10) All entries must be legible, accurate, clinically relevant and authenticated.

*Referred to Physiotherapy Card for out-patient attached in **ANNEX-01***

*Referred to Physiotherapy Assessment and Respiratory Therapy Assessment Form for in-patient attached in **ANNEX-03 and ANNEX-04** respectively.*
*Physiotherapy Notes attached in **ANNEX-05***

14 STATISTICAL RECORDS

14.1 PURPOSE

To establish guidelines to maintain patient's statistical record, duties record of personnel, equipment records etc.

14.2 RESPONSIBILITY

Physiotherapist, Physiotherapy Technician, DMS, Quality Assurance Officer

14.3 PROCEDURE

1) Details of all patients visited in Physiotherapy Department must be documented in record register which will include patient demographic data, date & time of visit, diagnosis along with disposition details.
2) There should be a separate record register for indoor consultation.
3) There should be record maintained for duty replacements of physiotherapy staff inside the unit.
4) Daily generated waste in unit may be entered in waste record register.
5) Evidences of trainings conducted for staff must be maintained in training file.
6) There should be a separate file for equipment used in department with their inventory list, service history record, PPM record, inspection checklists.
7) Physiotherapist and DMS In charge will be responsible for assembling, archiving and retrieving of all these records.

*Referred to Patient Record Register attached in **ANNEX-01***

15 INFECTION PREVENTION AND CONTROL

15.1 PURPOSE

To establish guidelines and practices in the unit in conformity with the hospital- wide infection control program in order to:

1) Protect healthcare workers from health-care associated infections.
2) Minimize, if not prevent infection, from patients having blood-borne viruses and pathogenic bacteria from recognized and unrecognized sources.
3) Implement isolation precaution for infections that are virulent or communicable hence, prevention of their transmission to other patients is attained.

15.2 RESPONSIBILITY

ICN, Physiotherapist, Physiotherapy Technician, Quality Assurance Officer, Medical Superintendent.

15.3 PROCEDURES

1) Physical therapists should familiarize themselves with the standards for infection prevention and control at the facility in which they practice and also the standards recommended by their national/provincial/state/local health departments.
2) Physical therapy staff should have access to relevant and current information on infection prevention and control.
3) The Staff working in physiotherapy department must be trained on infection prevention and control policies and procedures.
4) Physical therapists shell implement best practices in infection prevention and control in clinic and procedure rooms.
5) Physiotherapist shall ensure all staff working in physiotherapy department must comply with the following standard precautions and protocols:
    a. Hand washing
    b. Use of protective PPE where appropriate
    c. Staff Vaccination
    d. Ensuring prevention of needle stick/sharp injuries
    e. Appropriate patient preparation in accordance with infection control guidelines.
    f. Ensuring environmental cleaning and professional housekeeping.

g. Cleaning and/or sterilization of equipment with 70% Isopropyl alcohol and bleaching solution.
h. Appropriate handling of biomedical and non-biomedical waste, including sharps.

(*Waste Record Register attached at **ANNEX-07**)*

16 CONTINUOUS QUALITY IMPROVEMENT

16.1 PURPOSE

To establish an effective process which leads to measurable improvement in health care services provided to the patient by identifying factors affecting service quality.

16.2 RESPONSIBILITY

MS, Physiotherapist, DMS Quality Control, Quality Assurance Officer

16.3 PROCEDURE

1) The CQI Committee comprises of the following individuals:
    a. MS of the HCE,
    b. Medical Consultant
    c. Surgical Consultant
    d. DMS Quality Control
    e. Quality Assurance Officer
2) All quality improvement efforts in unit are guided by following MSDS from MSDS reference manual of PHC.
    a. Access, Assessment and continuity of care AAC(lab and radiological services provided to patients)
    b. COP 1. Emergency services
    c. COP 2. Blood bank services provided to patients
    d. COP 4. and COP 5 for patients undergoing surgical or other procedures.
    e. Management of medication MOM
    f. Patient Rights and Education PRE
    g. Hospital Infection Control HIC
    h. Facility Management and Safety FMS
    i. Human Resource Management HRM
    j. Information Management System IMS
3) In addition to these, the Physiotherapy department participates in the required MSDS quality monitors for:
    a. Appropriate patient assessment with plan of care including physical therapy treatment and its documentation in medical record (Physiotherapy Card).
    b. Safe and effective service delivery resulting in patient satisfaction.
    c. Continuous learning and development process.
    d. Quality control and infection control programs (including defined SOPs,

implementation, documented training on SOPs, and training on occupational health and safety SOPs, external validation)

e. Monitoring of adverse events like wrong patient, wrong site, wrong intervention etc.
f. Review of physiotherapy medical records to ensure availability, content and use of medical records.
g. Risk management and surveillance, defined sentinel events and after that control and prevention of such events that affect the safety of patients, family and staff.

4) These functions are overseen by key committees, including, but not limited to,
   a. Infection control Committee
   b. Medical Record Review Committee.
   c. Continuous Quality Improvement Committee.
5) Once in a month CQI meeting will be held and all relevant information derived from quality improvement activities shall be shared to administration and concerned area of problem ,so that action can be taken at the right level to solve identified problems and to avoid duplication of effort.
6) Minutes of meeting will include defined agenda, issues discussed, conclusion/ recommendation, target date for action plan and the responsible person.
7) Documentation of review meeting shall be maintained in a confidential file by Physiotherapist and CQI coordinator.

(Refer to CQI Manual for further details)

17 EQUIPMENTS

17.1 ESSENTIAL EQUIPMENT

Sr#	Modalities	Details
1)	Cold Modalities	a. Hot/Cold Packs
		b. Refrigerator
		c. Vapo-coolant Spray
2)	Dry Heating Modalities	a. Electrical Heating Pads
		b. Infra-Red Radiations
3)	Wet Heating Modalities	a. Hot pack
		b. Hot pack unite
		c. Paraffin bath
4)	Therapeutic ULTRASOUND unit	
5)	Shortwave Diathermy unit	
6)	Transcutaneous Electrical Nerve Stimulation	
7)	Electrical Muscle Stimulation	
8)	Treadmill	
9)	Mats	
10)	Quadriceps Bench	
11)	Ergometer Cycling	
12)	Dumbell Rack – Double (Holds 10 Pairs)	
13)	Mirror	
14)	Floor Mounted Parallel Bars	
15)	Balance Boards	
16)	Wedges	
17)	Pully System	
18)	Treatment couch	
19)	Trollies	
20)	Bench	
21)	Stool	

17.2 MAINTENANCE OF EQUIPMENT

17.2.1 DEPARTMENT PERIODIC PREVENTIVE MAINTENANCE PLAN

1) Staff operating equipment will be trained in handling the equipment as per the manufacturer instruction manual.
2) The hospital will develop a routine schedule for inspection and calibration of equipment based upon original equipment manufacturer guidelines.
3) These services can be provided through an in-house arrangement or alternatively through outsourcing.

4) The P&SHD will ensure that the record regarding purchase and maintenance of equipment and machinery is properly documented and maintained.
5) An outline record card will be included with each schedule for recording measurement. The engineer should also note on the record card any item that needs to be replaced.
6) The Department will ensure that no equipment is non-functional by ensuring regular repairs, preventive maintenance, and provision of essential spares.
7) Equipment not working must be tagged "OUT OF ORDER"
8) Any work carried out by the biomedical technician or engineer should be recorded in Equipment History card as follows:
    a. Time spent for servicing.
    b. Description of service being carried out
    c. Status of equipment after servicing
    d. Name of the technician / engineer attended
    e. Date of equipment commissioned and break down during warranty period.

17.2.2 EQUIPMENT INVENTORY

1) All the relevant information about the equipment must be entered, including its installation location, record of repair and maintenance, and the manufacturer.
2) A reference number is given and written on a printed paper label, which is attached to each item. This number is recorded in a ledger of equipment with full identifying details.
3) All equipment in the hospital that is in the care of the department service workshop should be recorded on registers or cards as shown in the format of equipment service history form.

17.2.3 EQUIPMENT AUDIT

1) Equipment audit is the periodic evaluation of the quality of performance of the physiotherapy equipment by Equipment Audit Committee (EAC).
2) The EAC shall meet once every quarter of a year and will fill the maintenance of history sheet and log book of the equipment.

*Refer to Equipment Record and Maintenance attached at **ANNEX-08***

18 SAFETY MEASURES

18.1 PURPOSE

These have been designated;

1) To prevent inadvertent or hazardous event from taking place.
2) To protect the patient from any harm during the course of hospitalization.
3) To caution patient, relative, and the staff of any hazardous events.
4) To urge the patient/healthcare providers to observe safety measures to avoid dangers when performing duties.
    a. **Safety security**; freedom from danger, injury, damage, and harmful side-effects.
    b. **Precautions actions**, words, or signs by which warning is given or taken before any inadvertent or hazardous event might takes place.

18.2 RESPONSIBILITY

Physiotherapist, Physiotherapy technician, Supporting Staff

1) The physiotherapist is responsible for maintaining safety standards, developing safety rules, supervising and training of staff in departmental standards.
2) The physiotherapist is responsible to inform facility administration in case of any safety hazard.
3) All physiotherapy employees shall report defective equipment, unsafe conditions and acts, or safety hazards to the head of the department.

18.3 PROCEDURE

Safety precaution should be strictly observed at all times. It is the responsibility of every hospital employee. Patients and relatives are not excused from observing safety measures for their benefit.

18.3.1 FOR PATIENTS

1) Prior explanation of the procedure/intervention shall be done is given to patient/relative.
2) Patient shall always be identified properly and correctly when dealing with him/her.
3) Written consent shall be obtained for a procedure/intervention whenever necessary.
4) Observe fall precaution measures at all times and document them.
5) Assistance and support to patient shall be rendered whenever needed.
6) Sharps and blunt objects shall not be allowed especially to Psychiatrist patient.

7) Health teachings such as preventive maintenance; coping up with daily activities; proper ambulating techniques; instructions to take home medications; and follow-up appointment shall be given to every patient before discharge.
8) Every patient shall be accompanied by help desk officer and assisted in wheelchair from the clinic and ward to the hospital exit, if needed.
9) In-patients shall not be shifted to the physiotherapy department for procedure without an accompanying hospital staff.
10) Patients shall be lifted correctly. Get help when needed. Use mechanical aids when necessary.
11) Obtain the necessary assistance to safely aid the patient in ambulating and exercise therapy.
12) Do not leave elderly, pediatric or confused patients unattended on therapy tables or in therapeutic wax bath.
13) When transporting a patient to the procedure area by stretcher or wheelchair, take the following safety precautions.
    a. Lock the wheel brakes or otherwise secure the vehicle in place before moving patient to/from transport.
    b. Prevent the patient from falling by using safety belts or side rails.
        i. Bedside rails should always be on.
        ii. Safety belt shall always be applied in transporting patient by stretcher or wheelchair.
    c. Position yourself at the patient's head, push slowly, steadily.

18.3.2 FOR STAFF

1) Observe infection control measures at all times.
2) Submit yourself for annual physical check-up, which is provided free of charge for all hospital employees. Priority is given to high-risk staff.
3) Immunization vaccination shall be provided regularly, especially when there is an epidemic.
4) Medical investigations and treatment shall be provided to staff exposed to health-hazards showing manifestations such as allergy, pain, or trauma as a result of injury, etc.
5) Needle stick injury policy shall be followed strictly.

6) In physiotherapy procedures, PPEs are particularly important in preventing the nosocomial infection.
7) Wear proper uniform and safety gadgets or devices as required.
8) Gowns with higher water and oil resistance and smaller pore size provide the most protection. Body exhaust suits can provide additional protection from droplet transmission.
9) Wear anti-static shoes as indicated when entering sterile areas.
10) Observe proper waste disposal.
11) Label the procedure.
12) Comprehensive orientation on safety shall be given to staff that includes:
    a. Fire Safety training about how to use firefighting equipment and to evacuate patients safely in the event of fire.
    b. Infection Control.
    c. Waste Management
    d. Proper operation of new machines and medical equipment.
13) Faulty machines, electrical wiring and connections shall be labeled and sent immediately to the Maintenance Department for repair.
14) Do not insist on using defective machine. It can endanger lives.
15) Turning off all electric machines with heat producing elements when not in use.
16) Machines and electrical equipment shall be labeled properly about voltage and safety warnings.
17) Plug machines and electrical equipment into the outlet according to the correct voltage.
18) Do not use an open wire to conduct electricity.
19) Do not insist on entering a restricted area where there are danger warning signs.
20) Do not store heavy items on top shelves. Scissors, knives, pins, razor blades and other sharp instruments must be safely stored and used.
21) Do not obstruct fire equipment. Know location of fire-fighting equipment and how to use it. Know evacuation routes and what to do in case of fire.

18.4 SPECIAL CONSIDERATIONS

1) Fire safety gadgets provided within the hospital vicinity are as follows:
    a. Fire Alarm
    b. Fire Extinguisher
    c. Fire Hose
    d. Smoke Detector
2) Each physiotherapy procedure has safety measures that must be strictly followed for patients and staff safety.

    *Referred to the warning signs and displays attached at **ANNEX-10***

19 FAQS

19.1 WHAT IS PHYSIOTHERAPY AND WHO ARE PHYSIOTHERAPISTS?

Physiotherapy means Physio-therapeutic system of medicine which includes examination, diagnosis, treatment, advice and instruction to any person preparatory to or for the purpose of or in connection with movement dysfunction, bodily malfunction, physical disorder, disability, healing & pain from trauma & disease physical & mental conditions using physical agents including exercise, mobilization, manipulation, mechanical and electrotherapy activity & devices or diagnosis treatment & prevention. A professionally university trained person who administers physiotherapy treatment is known as Physiotherapist.

19.2 WHAT HAPPENS DURING MY FIRST VISIT?

During your first visit you can expect the following:

1) Arrive at your appointment with your paperwork completed.
2) You will provide us with your prescription for physical therapy.
3) You will be seen for the initial evaluation by the therapist.
4) The therapist will discuss the following:
    a. Your medical history.
    b. Your current problems/complaints.
    c. Pain intensity, what aggravates and eases the problem.
    d. How this is impacting your daily activities or your functional limitations.
    e. Your goals with physical therapy.
    f. Medications, tests, and procedures related to your health.
5) The therapist will then perform the objective evaluation which may include Palpation, ROM, Muscle testing, Neurological Screening, Special Tests, Postural assessment.
6) The therapist will then formulate a list of problems you are having, and how to treat those problems.
7) A plan is subsequently developed with the patient's input. This includes how many times you should see the therapist per week, how many weeks you will need therapy, home programs, patient education, short-term/long-term goals, and what is expected after discharge from therapy. This plan is created with input from you, your therapist, and your doctor.

19.3 WHAT DO I NEED TO BRING WITH ME?

Make sure you bring your physical therapy referral (provided to you by your doctor) , Relevant Past medical records and CNIC.

19.4 HOW SHOULD I DRESS?

You should wear loose fitting clothing so you can expose the area that we will be evaluating and treating. For example, if you have a knee problem, it is best to wear shorts. For a shoulder problem, a tank top is a good choice, and for low back problems, wear a loose fitting shirt and pants, again so we can perform a thorough examination.

19.5 HOW LONG WILL EACH TREATMENT LAST?

Treatment sessions typically last 30 to 45 minutes per visit.

19.6 HOW MANY VISITS WILL I NEED?

This is highly variable. You may need one visit or you may need months of care. It depends on your diagnosis, the severity of your impairments, your past medical history, etc. You will be re-evaluated on a monthly basis and when you see your doctor, we will provide you with a progress report with our recommendations.

19.7 WHY IS PHYSICAL THERAPY A GOOD CHOICE?

Pain is a serious problem. However, many do not even know that physical therapists are well equipped to not only treat pain but also its source. Physical therapists are experts at treating movement and Neuro-musculoskeletal disorders. Pain often accompanies a movement disorder, and physical therapists can help correct the disorder and relieve the pain.Physiotherapy is the treatment of the pain and all conditions without medicines.

19.8 WHAT DO PHYSICAL THERAPISTS DO?

Physical therapists treat patients with orthopedic problems, such as low back pain or knee surgeries, to reduce pain and regain function. Physical therapists provide to assist patients recovering from a stroke, use of their limbs and walk again. The ability to maintain an upright posture and to move your arms and legs to perform all sorts of tasks and activities is an important component of your health. All of these activities require the ability to move without difficulty or pain.

Physical therapists are experts in movement and function. They also provide services to athletes at all levels to screen for potential problems and institute preventive

exercise programs. The cornerstones of physical therapy treatment are therapeutic exercise and functional training. In addition to "hands-on" care, physical therapists also educate patients to take care of themselves and to perform certain exercises on their own. Depending on the particular needs of a patient, physical therapists may also "mobilize" a joint .Physical therapists also use methods such as ultrasound (which uses high frequency waves to produce heat), hot packs, and ice.

19.9 WHY ARE PEOPLE REFERRED TO PHYSICAL THERAPY?

You and others may be referred to physical therapy because of a movement dysfunction associated with pain. Your difficulty with moving parts of your body (like bending at the low back or difficulty sleeping on your shoulder, etc.) Very likely results in limitations with your daily activities (e.g. difficulty getting out of a chair, an inability to play sports, or trouble with walking, etc.). Physical therapists treat these movement dysfunctions and their associated pains and restore your body's ability to move in a normal manner.

19.10 IS PHYSICAL THERAPY PAINFUL?

For many patients, one of the primary objectives is pain relief. This is frequently accomplished with hands-on techniques, modalities such as ultrasound, electrical stimulation, and/or heat or cold therapy. Movement often provides pain relief as well. Your physical therapist will provide you with the appropriate exercises not only for pain relief but to recover range of motion, strength, and endurance.

In some cases, physical therapy techniques can be painful. For example, recovering knee range of motion after total knee replacement or shoulder range of motion after shoulder surgery may be painful. Your physical therapist will utilize a variety of techniques to help maximize your treatment goals. It is important that you communicate the intensity, frequency, and duration of pain to your therapist. Without this information, it is difficult for the therapist to adjust your treatment plan.

19.11 CAN I GO DIRECTLY TO MY PHYSICAL THERAPIST?

All DHQ and THQ Hospitals have some form of direct access. In most cases, if you are not making significant improvement within 30 days, the therapist will refer you to/back to your physician.

19.12 ARE CHILDREN OF PATIENTS OR THEIR ATTENDANTS ALLOWED IN PHYSIOTHERAPY UNIT?

It is not recommended for families to bring children under the age of 12 to visit with patients. However, if patients have no option but to keep children with them, it is under the assumption that the family will ensure strict discipline and good behavior of the child. If the family is unable to do so, the attendants may be asked to take the children outside the Department.

19.13 CAN STAFF SMOKE AT DHQ HOSPITAL?

DHQ and THQ Hospital's clean air policy provides a safe and healthy environment for patients, visitors and employees free of smoke. Smoking is prohibited with in the premises of the hospital.

19.14 WHY IS THE DOOR TO THE TREATMENT AREA ALWAYS LOCKED?

It is important for the HCE staff to limit exit and entry into the procedure room, to ensure the safety of patients and staff.

20 ANNEXURES

20.1 (ANNEX-01)

20.1.1 PHYSIOTHERAPY OPD REGISTER

Sr No.	Patient Name	MR No.	Age / Gender	CNIC No.	Address	Date & Time of Visit	Referred By	Diagnosis	Intervention Done	Follow-up Date	Receptionist Sign / ID

20.1.2 PHYSIOTHERAPY IN PATIENTS REGISTER

Sr No.	Patient Name	MR No.	Age / Gender	CNIC No.	Address	Ward Name	Date & Time of Call	Consultation Requested by	Physiotherapist Visit Date & Time	Diagnosis	Intervention Done	Follow-up Date	Physio Technician Sign / ID

20.2 (ANNEX-02) - PHYSIOTHERAPY CARD

PRIMARY & SECONDARY HEALTHCARE DEPARTMENT

DHQ /THQ Hospital

PHYSIOTHERAPY CARD

Patient Name	Father/ Husband Name		MR. No.
CNIC ☐☐☐☐☐-☐☐☐☐☐☐☐-☐	Contact No.	Age	Gender ☐M ☐F ☐T
Address			

Date of Visit: dd /mm/ yy Time of Visit: ____:___AM/PM		
Referral From: ☐ Self ☐ Consultant ☐ Department ☐ OtherDepartment		
Reffered To (if Required)		
Clinical Diagnosis	D/D	Physiotherapy Diagnosis
Physiotherapist		

میں ہسپتال کے فزیوتھراپی کے عملے کو اپنے / اپنے مریض کے فزیوتھراپی کے ہر قسم کے علاج معالجے، ورزش اور ضروری فزیکل ٹیسٹ پر سپیشلسٹ کی اجازت دیتا / دیتی ہوں۔

مریض / رشتہ دار کا نام _____ رابطہ نمبر _____

انگوٹھے کا نشان

PATIENT MANAGEMENT DETAILS

Presenting Complaint

Brief History

Duration of Problem: _____Week / Month / Year

FUNCTIONAL STATUS

CAN PATIENT DO ADLS

☐ Independent ☐ Completely dependent
☐ Semi dependent ☐ Other

UPPER LIMB

	R	L
Grasp		
Release		
Fine Motors		
Gross Motors		

LOWER LIMB

MOBILITY	TRANSFERS
☐ Crawling ☐ walking ☐ Running ☐ stairs ☐ Crouching gait	☐ Lie to sit (& opposite) ☐ Sit to stand (& opposite) ☐ Stand to floor ☐ Sit to sit

WEIGHT BEARING	ASSISTIVE DEVICES
☐ FWB ☐ PWB ☐ NWB	☐ Cane ☐ Walker ☐ Crutches ☐ Wheelchair ☐ None

PAIN DESCRIPTION		PAIN SCORE
Onset	☐ Radiating Pain	☐ 0 - No Pain
Intensity		☐ 2 - Mild Pain
Location	Alleviating Factors	☐ 4 - Moderate Pain
Duration		☐ 6 - Severe Pain
Character	Relieving Factors	☐ 8 - Very Severe Pain
Other		☐ 10 - Worst Possible Pain

	HTN	IHD	DM	Asthma	Pace Maker	Stroke	Arthritis	Osteoporosis	Cancer	Other
Past Hx										
Family Hx										
Surgical Hx	☐ No ☐ Yes									
PT Hx	Previous PT Intervention: ☐ No ☐ Yes									
FITT Equation	Frequency				Intensity		Type		Duration	

SIGNIFICANT INVESTIGATIONS & VALUES					
Test	Value	Test	Value	Test	Value
☐ X-Ray					
☐ CT					
☐ MRI					
☐ Ultra Sound					

Scar (if present)	☐ Healed ☐ Dehisce	Location	Description
Posture	☐ Standard Good Posture ☐ Bad Posture	☐ DVT	
Muscle Wasting	☐ Muscle Contractures		

■ BALANCING			
On sitting			
Upon standing			
Upon Walking			
Gait	☐ Normal	☐ Lurching / Waddling	☐ Neurologically Deficit
☐ Limb Length Discrepancy		☐ True Leg/Limb Shortening	

MANUAL MUSCLE TESTING				
Muscle	Score	Muscle	Score	
Tremors	☐ Essential	☐ Dystonic	☐ Psychogenic	☐ Physiologic
	☐ Parkinsonian	☐ Cerebellar	☐ Orthostatic	☐ Others

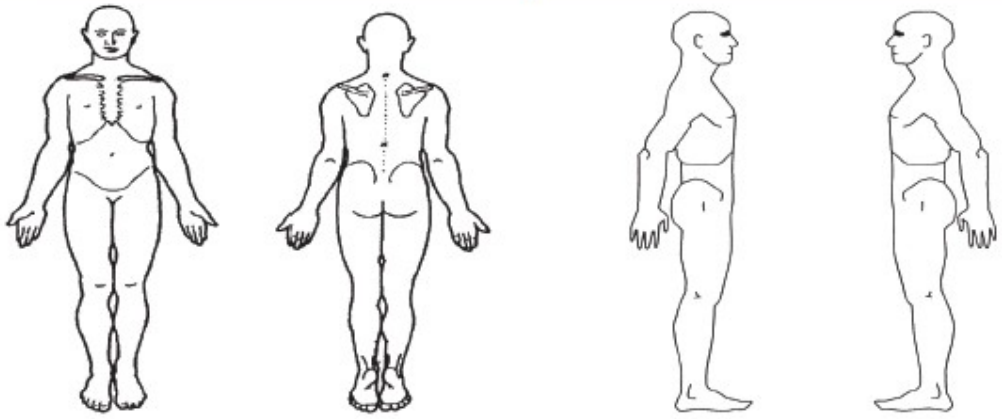
	LU	RU	LL	RL				LU	RU	LL	RL		
Circumference							Reflex integrity						
Normal	☐		☐	☐	☐	☐	Intact	☐	☐	☐	☐	☐	☐
Small	☐		☐	☐	☐	☐	Exaggerated	☐	☐	☐	☐	☐	☐
Large	☐		☐	☐	☐	☐	Sluggish	☐	☐	☐	☐	☐	☐
Signs of Inflammation							Absent	☐	☐	☐	☐	☐	☐
Swelling	☐		☐	☐	☐	☐	Alignment						
Redness	☐		☐	☐	☐	☐	Aligned	☐	☐	☐	☐	☐	☐
Discoloration	☐		☐	☐	☐	☐	Not Aligned	☐	☐	☐	☐	☐	☐
Oedema	☐		☐	☐	☐	☐	Deformity	☐	☐	☐	☐	☐	☐
Raised Temp.	☐		☐	☐	☐	☐	Amputation	☐	☐	☐	☐	☐	☐
Tenderness	☐		☐	☐	☐	☐	Rigidity						
Spasticity							Cogwheel	☐	☐	☐	☐	☐	☐
Clasp knife	☐	☐	☐	☐	☐	☐	Lead pipe	☐	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐	☐		☐	☐	☐	☐	☐	☐

NEUROLOGICAL SCREEN							
Cervical/ Shoulder		R	L	Knee / Lumber		R	L
Sensation:	Numbness			Sensation:	Numbness		
	Paraesthesia				Paraesthesia		
Reflexes:	Biceps			Reflexes:	Quads		
	Triceps				Achilles		
	Brachioradialis			Flexibility			
Resting BP							
Resting HR							

MOVEMENTS				
JOINT	Right / Left	RANGE	Passive	Active
			☐ Painful ☐ Limited ☐ Crepitus	☐ Painful ☐ Limited ☐ Crepitus
			☐ Painful ☐ Limited ☐ Crepitus	☐ Painful ☐ Limited ☐ Crepitus
			☐ Painful ☐ Limited ☐ Crepitus	☐ Painful ☐ Limited ☐ Crepitus

SPECIAL TEST (MARK + OR - OR ENCIRCLE WHERE REQUIRED)						
Cervical Evalution + / -	Lumber /SI Evaluation	R	L	Shoulder Evaluation	R	L
☐ Upper Ligament Stability Tests				☐ Impingement (end range)		
☐ Compression				☐ Impingement (#2)		
☐ Distraction	☐ Slump Test			☐ Apprehension		
☐ Brachial Plexus Squeeze Test	☐ Gillet (Stork) Test			☐ Relocation		
☐ Alar Odontoid Integrity Test	☐ Standing Flexion (PSIS)			☐ Speed's		
☐ Transverse Lig. Test	☐ Trendelenburg Test			☐ Empty Can		
☐ Neural Tension R	☐ SLR			☐ Neural Tension (Median, Passive, Active)		
☐ Neural Tension L	☐ Supine to Sit Test					
☐ Segmental motion: Up glide	☐ Fabre Test ☐ Compression Test			☐ Neural Tension (Ulnar, Passive, Active)		
☐ Segmental motion:Down glide	☐ Distraction Test			☐ other		
☐ other	☐ Gaenslen Test					
	☐ Sacral Thrust Test					

KNEE JOINT EVALUATION						
			R	L	R	L
☐ Varus test					☐ McMurray's	
☐ Valgus test					☐ Post Sag _____	
☐ Lachman's					☐ Steinman	
☐ Apprehension					☐ Pat. Grind	
☐ 6" step test	☐ R	☐ WNL	☐ painful		☐ weakness/ ☐ control	☐ Unable to perform
	☐ L	☐ WNL	☐ painful		☐ weakness/ ☐ control	☐ Unable to perform
☐ Single leg squat	☐ R	☐ WNL	☐ painful		☐ weakness/ ☐ control	☐ Unable to perform
	☐ L	☐ WNL	☐ painful		☐ weakness/ ☐ control	☐ Unable to perform
☐ Other						



Mark physical finding on appropriate area

PATIENT FOLOW UP SCHEDULE					
Date	Time	Subjective / Objective findings	Assessment	Plan	Physiotherapist's Sign. & ID
dd /mm/ yy	__:__AM/PM				
dd /mm/ yy	__:__AM/PM				
dd /mm/ yy	__:__AM/PM				
dd /mm/ yy	__:__AM/PM				
dd /mm/ yy	__:__AM/PM				
dd /mm/ yy	__:__AM/PM				
dd /mm/ yy	__:__AM/PM				
dd /mm/ yy	__:__AM/PM				
dd /mm/ yy	__:__AM/PM				
dd /mm/ yy	__:__AM/PM				

PRIMARY & SECONDARY HEALTHCARE DEPARTMENT

DHQ /THQ Hospital

PHYSIOTHERAPY CARD

Patient Name:	Father/ Husband Name:	MR. No.
CNIC ☐☐☐☐☐-☐☐☐☐☐☐☐-☐ Age:		Gender: ☐ M ☐ F ☐ T
Mobile No.	Address	
Date of Visit: dd / mm / yy Time of Visit: ___:___AM/PM	Diagnosis	
Type of Visit: ☐ Referral ☐ Self ☐ Follow Up		
Physiotherapist:		
Significant Findings	Plan of Care	
Intervention Done	Discharge from Physical Therapy Treatment ☐ Home Plan ☐ Follow Up ☐ Discontinue	

ہدایات برائے مریضاں

درج ذیل تاریخ کو ہسپتال ہذا کے فزیوتھراپی ڈیپارٹمنٹ میں تشریف لائیں

تاریخ معائنہ _____ dd / mm / yy

Physiotherapist Name:	Signature/ ID	Date	Time
		dd / mm / yy	.... : .... AM / PM

PLAN OF CARE

PROCEDURAL INTERVENTION

MODALITIES				
1. ☐ Shortwave Diathermy	Duration:	Plane:	Mode:	
2. ☐ Therapeutic Ultrasound Unit	Mode: Continuous/Pulse		Frequency:	Percentage:
	Intensity:	Duration:		
3. ☐ Paraffin Bath	Duration		Repetition	
4. ☐ Infra-Red Radiations	Duration		Distance	
5. ☐ Moist Therapy	Duration	6. ☐ Cold Therapy	Duration	
7. ☐ Transcutaneous Electrical Nerve Stimulation	Duration	Intensity	Mode	
8. ☐ Pulley System		9. ☐ Quadriceps Bench		
10. ☐ Treadmill	Duration	Intensity	Mode	
11. ☐ Ergometer Cycling	Duration	Intensity	Mode	
12. ☐ Therapeutic Exercises				
13. ☐ Patients given Home Plan				
14. ☐ Other/Manual Therapy				

Prognosis:	☐ Poor ☐ Satisfactory ☐ Good	Time estimated for Recovery :	_____ Days/Weeks/Months

DISCHARGE FROM PHYSIOTHERAPY TREATMENT
☐ Home Plan ☐ Follow up ☐ Discontinue

20.3 (ANNEX-03) - PHYSICAL THERAPY AND REHABILITATION ASSESSMENT

PRIMARY & SECONDARY HEALTH CARE DEPARTMENT, DHQ HOSPITAL

PHYSICAL THERAPY AND REHABILITATION ASSESSMENT

Patient Name:	Father/ Husband Name:	MR. No.
CNIC ☐☐☐☐☐-☐☐☐☐☐☐☐-☐	Age:	Gender: ☐ M ☐ F ☐T
Referral From: ☐ ICU ☐ Ward ☐ Other	**Clinical Diagnosis**	
Physiotherapy Diagnosis		

Presenting Complaint:

Brief History:

Problem's since: _____Week / Month / Year

Functional Status

CAN PATIENT DO ADLS	UPPER LIMB
☐ Independent ☐ Semi dependent ☐ Completely dependent ☐ Other	☐ Grasp ☐ Release ☐ Fine manipulation ☐ Holding
	LOWER LIMB
	MOBILITY
	☐ Crawling ☐ walking ☐ Running ☐ stairs ☐ Crouching gait
	TRANSFERS
	☐ Lie to sit (& opposite) ☐ Sit to stand (& opposite) ☐ Stand to floor (& opposite) ☐ Sit to sit

Past Medical History

☐ HTN	☐ IHD	☐ DM	☐ Asthma	☐ Pace Maker
☐ Stroke	☐ Arthritis	☐ Osteoporosis	☐ Cancer	☐ Other

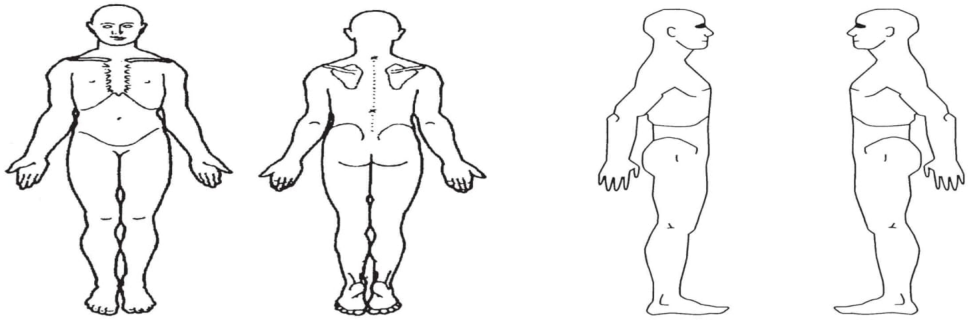
Past Surgical History

☐ No ☐ Yes Specify .....

Previous PT Intervention

☐ No ☐ Yes Specify .....

Pain Description		Pain score	
Onset	Alleviating Factors	☐ 0 - No Pain	**WEIGHT BEARING**
Intensity		☐ 2 - Mild Pain	☐ FWB ☐ PWB ☐ NWB
Location		☐ 4 - Moderate Pain	**ASSISTIVE DEVICES**
Duration	Relieving Factors	☐ 6 - Severe Pain	☐ Cane ☐ Walker
Character		☐ 8 - Very Severe Pain	☐ Crutches
☐ Radiating Pain		☐ 10 - Worst Possible Pain	☐ Wheelchair ☐ None



EXAMINATION

Scar	☐ Healed ☐ Dehisce Location_____ Description_____			
Posture	☐ Standard Good Posture ☐ Bad Posture	☐ Muscle Wasting ☐ Muscle Contractures ☐ Muscle Weakness ☐ DVT		
Balance	☐ Normal ☐ Disturbed → ☐ On sitting ☐ Upon standing ☐ Upon Walking			
Gait	☐ Normal ☐ Lurching ☐ Neurologically Deficit	☐ Paralysis → Limb Affected _____		
☐ Edema → Area Affected _____		☐ Deformities → Joint Affected _____		
☐ Limb Length Discrepancy*(If present)*		☐ True Leg/Limb Shortening		
Tremors	☐ Essential	☐ Dystonic	☐ Psychogenic	☐ Physiologic
	☐ Parkinsonian	☐ Cerebellar	☐ Orthostatic	☐ _____

	LU	RU	LL	RL	Other		LU	RU	LL	RL	Other
Circumference comparison						**Reflex integrity**					
Same	☐	☐	☐	☐	☐	Intact	☐	☐	☐	☐	☐
Small	☐	☐	☐	☐	☐	Exaggerated	☐	☐	☐	☐	☐
Large	☐	☐	☐	☐	☐	Sluggish	☐	☐	☐	☐	☐
Signs of Inflammation						Absent	☐	☐	☐	☐	☐
Swelling	☐	☐	☐	☐	☐	**Alignment**					
Redness	☐	☐	☐	☐	☐	Aligned	☐	☐	☐	☐	☐
Discoloration	☐	☐	☐	☐	☐	Not Aligned	☐	☐	☐	☐	☐
Oedema	☐	☐	☐	☐	☐	Deformity	☐	☐	☐	☐	☐
Raised Temp.	☐	☐	☐	☐	☐	Amputation	☐	☐	☐	☐	☐
Tenderness	☐	☐	☐	☐	☐	**Rigidity**					
Spasticity						Cogwheel	☐	☐	☐	☐	☐
Clasp knife	☐	☐	☐	☐	☐	Lead pipe	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐						

TEST & MEASUREMENTS

Range of Motion Record

Joint	Motion	Range	Right	Left

Muscle Testing Record

Joint	Muscle Group	Right	Left

Neuromuscular System

Muscle Tone:	Reflex Integrity:
Cranial Nerves Integrity:	Others:

ACTION NEEDED

☐ Exercises & Functional Rehabilitation:

☐ Active & Assisted Exercises →	☐ Joint Involved ..... ☐ Repetition / Joint .....
☐ Balance Exercises →	☐ Duration .....
☐ Passive Exercises →	☐ Joint Involved ..... ☐ Repetition / Joint .....
☐ Strengthening Exercises →	☐ Muscles Involved ..... ☐ Repetition / Joint .....
	☐ Amount of Resistance .....
☐ Stretching Exercise →	☐ Muscles Involved ..... ☐ Repetition / Joint .....
	☐ Hold Time ..... ☐ Positioning:
☐ Other →	

☐ Functional & Conditioning Training

☐ Sitting on Edge of Bed Duration.....	☐ Bed Side Sit to Stand Ex Duration.....
☐ Bed side Standing Ex Duration.....	☐ Bed Side Marching on Place Duration.....
☐ Bed Side Walking Duration.....	
☐ Other	

☐ INTERVENTIONS

☐ Cold Packs	☐ CPM	☐ EMS	☐ Gym Training → Used Tools.....			
☐ Hot Packs	☐ Infra-Red Rays	☐ Locomotion	☐ TENS	☐ Tilting Table	☐ Ultrasound	☐ Short Wave
☐ Others						

Physiotherapist Name	Sign & ID	Date: ..... / ..... /	Time: ..... : ..... AM/PM

20.4 (ANNEX-04) - RESPIRATORY THERAPY ASSESSMENT

PRIMARY & SECONDARY HEALTHCARE DEPARTMENT
DHQ / THQ HOSPITAL -

Patient Name:	Father / Husband Name:	MR No:
CNIC/SNIC:	Age:	Gender: ☐ M ☐ F ☐ T
Ward No. / Bed No. / Unit	Diagnosis	

RESPIRATORY THERAPY ASSESSMENT

Chief Complaint(s): _____

Diagnosis: _____

Vital Signs	Temp:	HR:	R/R:	BP:	SpO2:	FiO2:
☐ABGs ☐VBGs	FiO2:	PH:	PCO2:	PO2:	HCO3:	SaO2:
Lab Data	Hb:	HCt:	WBC:	RBC:	Plts:	Sputum Cult:

PATIENT ASSESSMENT

Points	0	1	2	3	4	Total
Surgical	No Surgery ☐	General Surgery ☐	Lower Abdominal Surgery ☐	Thoracic or Upper Abdominal / Neurosurgery ☐	Thoracic with Pulmonary Disease ☐	
Chest X-ray	Clear ☐	Chronic X-Ray Changes: Pleural Effusions Pulmonary Edema ☐	Infiltrates or Atelectasis Opacities ☐	Infiltrates / Collapse In more than one Lobe, Contusions ☐	ARDS / Pneumonia ☐	
Pulmonary History	(-) Smoking History ☐	Smoking Hx < 10 years Now < 1 PPD ☐ / Smoking Hx <10 Years Now >1 PPD ☐	Smoking Hx > 10 years Now < 1 PPD ☐ / Smoking Hx >10 Years Now >1 PPD ☐	Pulmonary Disease ☐	Acute Exacerbation ☐	
Respiratory Pattern	Normal ☐	Increased or irregular rate or apnea ☐	Dyspnea on exertion ☐	Slight use of Accessory Muscles, vent Dependent ☐	Severe dyspnea / peak flows ☐	
Mental Status	Alert. Oriented. Cooperative ☐	Lethargic, follows commands ☐	Disoriented, uncooperative ☐	Obtunded, sedated Unresponsive ☐	Comatose sedated / paralyzed ☐	
Breath Sounds	Clear ☐	Slightly decreased bases. Mild wheezes / chronic ☐	Decreased or with Moderate Crackles / wheezes ☐	Decreased or with severe crackles / Wheezes ☐	Decreased to Absent / poor Aeration ☐	
Cough Secretions	Non-productive Good effort ☐	Weak productive small – Moderate secretions ☐	Weak productive Moderate large Secretions ☐	Unable to clear, Loose non-Productive, large Amount secretions / weak ☐	No Spontaneous cough, copious secretions ☐	
Level of Activity	Ambulatory ☐	Ambulatory with assistance ☐	Non-Ambulatory ☐	Paraplegic ☐	Quadriplegic ☐	
Comments: **Ventilator settings**					Total Score Points	

ASSESSMENT LEVEL

☐ Level 1 (>20 Points) ☐ Level 2(16-20 Points) ☐ Level 3 (11-15 Points) ☐ Level 4 (6-10 Points) ☐ Level 5 (0-5 Points)

CLINICAL INDICATIONS

Aerosol Therapy	Broncho pulmonary hygiene	Hyperinflation Technique	Suctioning
☐ Bronchospasm	☐ Excessive Secretions	☐ Atelectasis	☐ Presence of Secretions
☐ History or bronchospasm	☐ Aspiration	☐ Decreased TV, 5 ml/kg	☐ Ineffective cough
☐ Inflammation / mucosal edema	☐ History of mucus producing disease	☐ Prophylactic prevent atelectasis	☐ Altered Consciousness
☐ Proteinaceous Secretions	☐ Collapse on CXR	☐ Dried Secretions	☐ Pneumonia

Physical Therapist Name:		Date: / /
Name:	Sign & ID:	Time: : AM/PM

20.5 (ANNEX-05) - PHYSIOTHERAPIST NOTES

PRIMARY & SECONDARY HEALTHCARE DEPARTMENT
DHQ / THQ HOSPITAL -

Patient Name:			Father / Husband Name:				MR No:
CNIC/SNIC:					Age:	Gender: ☐ M ☐ F ☐ T	
Ward No.	Bed No.	Unit	Diagnosis				

PHYSIOTHERAPIST NOTES			
Date	Time	Notes:	Physiotherapist, Signature & ID
Date	Time	Notes:	Physiotherapist, Signature & ID
Date	Time	Notes:	Physiotherapist, Signature & ID

20.6 (ANNEX-06) - FALL RISK ASSESSMENT AND PREVENTIVE MEASURES

PRIMARY & SECONDARY HEALTHCARE DEPARTMENT

DHQ / THQ HOSPITAL -

Patient Name:		Father / Husband Name:		MR No:
CNIC/SNIC:		Age:	Gender: ☐ M ☐ F ☐ T	
Ward No.	Bed No.	Unit	Diagnosis	

FALL RISK ASSESSMENT

DIAGNSOSIS | DATE: | TIME:

	PARAMETER	SCORE	ASSESSMENT
MENTAL STATUS	**A** Level of Consciousness / Mental Status	0	Alert, Oriented, Reliable, Safety Awareness, or Comatose
		2	Diminished, Safety Awareness
		4	Poor Recall, Judgment, Safety Awareness
MOBILITY / CONSTEMENT	**B** Ambulatory Status	0	Ambulatory / continent
		2	Impaired Mobility / Continent (Assist with toileting) / with Urinary Catheter
		4	Ambulatory / Incontinent
	C Gait / Balance		**To assess the patient's Gait/Balance, observe him/her while standing on both feet without holding onto anything; Walk straight forward; walk through a doorway; make a turn. Score each area with 1, if condition is present and N/A if problem is not determined. Note: Score 0 if patient is normal after doing assessment of Gait / Balance.**
		0	No Balance problem while standing
		1	Problem while walking
		1	Decreased Muscular Coordination
		1	Change in gait pattern when walking through doorway
		1	Jerking or unstable when making turn
		1	Requires use of assistive devices (cane, walker, furniture, etc.)
MEDICAL STATUS / HISTORY	D Vision Status	0	Adequate (with or without glasses)
		2	Poor (with or without glasses)
		4	Legitimate Blind
	E Orthostatic Blood Pressure (Systolic)	0	No note drop between lying or sitting and standing
		2	Drop **LESS THAN** 20mmHg between lying or sitting and standing
		4	Drop **MORE THAN** 20mmHg between lying or sitting and standing
	F Falls History (Immediately / Past 3 months)	0	No Falls in past 3 months
		2	1-2 Falls in past 3 Months
		4	3 or **MORE FALLS** in past 3 months
	G Medications (if Total is greater than 2, may refer to physician for assessment)		**Respond below based on the following types medications: Anesthetics, Antihypertensive, Antiselzure, Benzodiazepines, Diuretics, Hypoglycemic, Narcotics, psychotropic, and Sedatives / Hypnotics, Laxatives**
		0	NONE of these medication taken currently within 7 days
		2	TAKES 1-2 of these medications currently and/or within 7 days
		4	TAKES 3-4 of these medications currently and/or within 7 days
		+1	If patient has had a change in medication and/or change in dosage in the past 5 days ---- Score 1 additional point
	H Predisposing Diseases / Conditions		**Respond below based on the following predisposing conditions: Hypotension, Hypertension, Vertigo, CVA, Parkinson's Disease, Loss of Limb(s), Seizure, Arthritis, Osteoporosis, Fracture, Dementia, Anemia, Wandering, Anger, Diabetes, Guilin Barre' Syndrome, Myasthenia Gravis, COPD**
		0	NON PRESENT
		2	1-2 PRESENT
		4	3 OR MORE PRESENT
		+1	If patient's Age ≥ 60 Years old, Score 1 Additional Point

RISK LEVEL				
	Low	0-5	Implement Standard Fall Precaution	TOTAL SCORE
	Moderate	6-9	Implement Standard Fall Precaution and Moderate Risk Precaution	Nurse Name
	High	≥ 10	High Risk fall prevention interventions, plus standard and moderate fall precautions Precaution	Signature & ID
				Date ……/……/…… Time: …… : …… AM/PM

NURSING MEASURES

LOW RISK – STANDARD FALLS PRECAUTIONS & MODERATE RISK FALL PREVENTION INTERVENTION

- ☐ Patient Teaching – Orientation To Room, Call Bell, Fall Risk Medication Information, Location For Ambulation Following Sedation / Analgesia, Call For Assistance With Ambulation, Use Rubber Or Non-Slip Footwear To Prevent Slipping.
- ☐ Secure Call Bell, Phone And Bed Table Within Reach.
- ☐ Ensure Clothing Does Not Interfere With Mobility.
- ☐ Keep Bathroom Lights On, Floor Dry.
- ☐ Use Raised Toilet Seat Or Stool In The Shower As Necessary.
- ☐ Maintain Bed In The Lower Position, Ensure Wheels Locked.
- ☐ Use Safety Straps On Stretcher, Wheelchair While Transporting Patient.
- ☐ Identity As **Fall Risk** On Medical Record & **WHITE Placard** As A Signage At Foot-Part Of The Bed.
- ☐ Assist And / Or Supervise Ambulation.
- ☐ Monitor For Reversal Causes – Orthostatic Hypotension, Hydration & Blood Sugar.
- ☐ Move Patient Closer To Nursing Station.
- ☐ Add Round The Clock Lighting Such As Night Light The Room
- ☐ Hourly Safety Checks, Attending To The 4 P's Concerns Of The Patient.
- ☐ Regular Pain Assessment, Provide Lowest Dose Of Analgesia
- ☐ Raise Side Rails, Assess Patient After Visitors Leave To Ensure Safety Measures In Place.
- ☐ Patient, Families, Watcher Teachings – Calls For Assistance With Ambulation, Do Not Lower Side Rails Notify Nurse If Leaving The Patient.

HIGH RISK FALL PRESENTATION INTERVENTIONS (PLUS ALL LOW AND MODERATE RISK INTERVENTIONS)

- ☐ **RED Placard** As A Signage At Foot-Part Of The Bed.
- ☐ Raise Both Upper And Lower Side Rails & Apply Gap Protectors.
- ☐ Place Mattress On Floor, As Appropriate.
- ☐ Healthcare Providers Collaboratively Review Medication.
- ☐ Consult Physical Therapy For Gait And/Or Strengthening Exercise If Needed.
- ☐ Initiate Constant Observation As Appropriate To Patient Need.

INDICATIONS FOR REASSESSMENT

- ☐ Every Shift.
- ☐ Following Procedural Sedation.
- ☐ Medication Effects, Such As Those Anticipated With Sedation Or Diuretics.
- ☐ Immediate Postoperative (Within 48 Hours Post Surgery)
- ☐ Narcotic Administration Such As PCA Or Epidural Analgesia.
- ☐ Change In Conscious Level Or Mental Status
- ☐ Changing In Ambulation
- ☐ Transfer Between Nursing Unit / Clinic
- ☐ After Whenever There Is A Fall Incident

20.7 (ANNEX-07) - WASTE RECORD REGISTER

DAILY BIOMEDICAL WASTE GENERATION RECORD REGISTER													
Date	Time	Ward / Unit	No of Beds	Total Occupied Beds	Total No. of RED bags	Total No. of Yellow bags	Total Weight (All Bags) KGS	Shifts / Collection Frequency			Signature	
								Morning	Evening	Night	On duty Staff Physiotherapy Technician	Infection Control Nurse

20.8 (ANNEX-08) - EQUIPMENT RECORD AND MAINTENANCE

BIO MEDICAL EQUIPMENT REPAIR AND MAINTENANCE LOG BOOK												
Equipment Name:			Model:		Serial No:			Manufacturer:				
Department:			Date of Installation :		Warranty Status							
Sr. No	Date & Time of Fault	Fault reported	Fault Reported by	Reported to Engineer At	Fault Found / Action Taken	Maintenance done by	Date & Time of report sent to Engineer	Date & Time of response by the Engineer	Date & Time of rectification of fault	Total Breakdown Time	Signature of Engineer	Remarks

BIOMEDICAL EQUIPMENT PPM / CALIBRATION RECORD REGISTER																	
Sr. No	QR Code	Department	Equipment	Make / Origin	Model	Serial No.	Date of Installation	Warranty Status	Functional Status	Calibration Frequency			Calibration Date	Calibration Due Date	Calibration Done By	PPM Schedule Date	Remarks
										Quarterly	Half Yearly	Yearly					

STOCK INVENTORY REGISTER					
DHQ / THQ …….. Hospital					
Department Name:					
S. No	Particulars	Receiving Date	Quantity		Remarks
			Received	Current Stock	

20.9 (ANNEX-09) - DISPLAYS FOR PHYSIOTHERAPY DEPARTMENT

کمر درد سے بچاؤ کے چند مفید مشورے

زیادہ دیر کھڑے رہنے کی صورت میں اپنے جسم کا وزن ایک پیر سے دوسرے پیر پر منتقل کریں

بہت ملائم کشن/صوفوں پر بیٹھنے سے گریز کریں

کرسی پر ہمیشہ آرام سے بیٹھیں، پشت کو ہمیشہ سیدھا رکھیں

پیروں کو بغیر موڑے آگے کی جانب فرش پر سے کوئی چیز نہ اُٹھائیں، اپنے گھٹنوں کو موڑنے کے باوجود اپنی پیٹھ کو سیدھی رکھیں

سیدھے اور سخت بستر پر سوئیں

اُونچی ایڑی والے جوتے/سینڈل کے استعمال سے گریز کریں

نیم گرم پانی کے استعمال سے کمر کے درد میں آرام ملتا ہے

روزانہ آدھا گھنٹہ تیز چلیں

زیادہ وزن اُٹھانے سے گریز کریں

Linkers

BENEFITS OF PHYSICAL THERAPY

As evidence-based health care professionals, physical therapists are experts in mobility and physical performance.

Decreases and/or eliminates **Pain**

Improves coordination, **BALANCE** and muscle strength

IMPROVES your breathing, cardiovascular functioning and endurance

Promotes wound healing

RESTORES NORMAL MOVEMENT for standing walking and running

Augments **EFFECTIVE RECOVERY** from Surgery, major illnesses or disabilities

Provide an **ALTERNATIVE TO SURGERY** and prescription drug

PREVENTS Injuries

OPTIMIZES Physical activity and sport **PERFORMANCE**

Reduces swelling and inflammation of **YOUR JOINTS**

پراجیکٹ مینجمنٹ یونٹ
محکمہ پرائمری و سیکنڈری ہیلتھ کیئر

حکومتِ پنجاب

شکایات یا مزید معلومات کیلئے مفت کال کریں

0800-99-000

20.10 (ANNEX-10) WARNING SIGNS AND DISPLAYS

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