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## **1- Welcome from the Program Director:**

It gives me great pleasure to welcome you to the Physical Medicine and Rehabilitation program. Our program is small and new compared to the other programs. However, you will find yourself in a very friendly training and educational residency program.

During your 5 years training period, you will learn many new skills that you have not experienced during your undergraduate study in medical school. This would be an exciting and unique experience the other programs don't have.

The goal of our program is to prepare you to be experts in Physiatry and become the future leaders in Physical Medicine and Rehabilitation.

Dr.Ayyoub Baqer

Program Director, PM&R Training Program.

Kuwait Institution for Medical Specialties

## **2-Board Members:**

PM&R Program – Board Members 2012-2-13

Hospital/Center	Specialty	Name	Position	Mobile	Email
Mubarak-AlKabir Hosp.	PM&R	Prof.Diaa Shehab	Chairperson	66778700	diaa@hsc.edu.kw
Al Farwaniya Hosp.	PM&R	Dr. Ayyoub Baqer	Program Director	94099460	Ayyoubq8@yahoo.com
Al-Razi Hospital	PM&R	Dr.Shothour Al-Ghunaim	Assist. Program Director	99893888	shothour@hotmail.com
Al-Amiri Hospital.	PM&R	Dr. Aziz Al-Feeli	Coordinator	97248709	mrheart@rocketmail.com

### **3-Introduction:**

#### **Definition:**

Physical Medicine & Rehabilitation is that branch of medicine concerned with comprehensive diagnosis, medical management and rehabilitation of people of all ages with neuromusculoskeletal disorders and associated disabilities.

#### **Team members :**

Physical Medicine and Rehabilitation specialist (Physiatrist), Rehab Nurse, Physiotherapist, Occupational therapist, Speech therapist, Orthotist/Prosthetist, Psychologist, Social worker, the patient and his family representative .

The role of Physical Medicine & Rehabilitation specialist (Physiatrist(

Physical Medicine and Rehabilitation specialists (physiatrists) make an accurate diagnosis and give a probable prognosis for a wide range of health problems from sore shoulders to spinal cord injuries. Physiatrists are considered the medical experts in the rehabilitation of neurological diseases such as Strokes, Head injuries, Spinal cord injuries, Amputees, Chronic pain, Spasticity, Cerebral palsy and Spina Bifida, Rheumatological diseases such as inflammatory arthritis, osteoarthritis, entrapment neuropathies and fibromyalgia, as well as

neurophysiological assessment . They lead and co-ordinate the care of the patients followed by the Rehab interdisciplinary teams

### **Goals:**

Upon completion of the educational program, the resident is expected to be a competent specialist in Physical Medicine & Rehabilitation (Physiatrist) capable of assuming a consultant's role in the specialty. The resident must acquire a working knowledge of the specialty, including its foundations in the basic medical sciences and research.

Residents must demonstrate the requisite knowledge, skills, competencies and attitudes for effective patient-centered care to a diverse population. In all aspects of specialist practice, the resident must be able to address issues of gender, sexual orientation, age, culture, ethnicity and ethics in a professional manner.

### **4-Program admission:**

The followings are the prerequisites for admission of a trainee to the physical medicine and rehabilitation training program:

A. The candidate must be a holder of Bachelor Degree in Medicine and Surgery from Kuwait Medical School or an equivalent university recognized by the Kuwait Institute for Medical Specialties (KIMS)

B. The candidate must have successfully completed a year of Internship before the actual start of training.

- C. The candidate must be of good conduct and medically fit.
- D. The candidate must provide three recommendation letters from the Consultants or Specialists with whom he/she had worked confirming his/her ability and capability of training.
- E. The candidate must pass the interview.
- F. The Scientific Boards may add other conditions, which they deem appropriate.

### **5- Residency program:**

The first year will involve 12 months of clinical training in internal medicine. This will include:

- A. 6 months of training in a clinical teaching unit in internal medicine ,
- B. 2 months in Respiriology
- C. 2 months in cardiology and
- D. 2 months in geriatric medicine .

The second year will involve 12 months of training in various related subspecialties. This will include:

- A.3 months of training in neurology (Amiri and Ibn Sina hospital)
- B. 3 months in rheumatology (Amiri and, or Mubarak hospital )
- C. 3 months in orthopedic surgery in Alrazi Hospital
- D. 1 month in urology (Amiri or Mubarak)

E. 1 month in neurosurgery in Ibn Sina hospital and

F. 1 month in Plastic surgery in Albabtain center.

The third, fourth and fifth years of the residency will involve 36 months of core training in Physical Medicine and Rehabilitation including :

A. 4 months in each of the following: musculoskeletal rehabilitation, spinal cord disorders, acquired brain disorders, prosthetics and orthotics, neuromuscular disease and electrodiagnostic, pediatric rehabilitation, cardiac and respiratory rehabilitation, and cerebrovascular disease.

B. The remainder 4 months are elective residency period and may be used to pursue a clinical area of interest or in any of the following: burns rehabilitation, cancer rehabilitation, chronic pain or sports medicine. These rotations will be mainly done at the Physical Medicine and Rehabilitation Hospital in AL- Sabah area .

C. It is felt that teaching in 3 of the rotations, namely cardiac/respiratory rehabilitation, prosthetics and orthotics, and acquired brain disorders, is inadequate at the present time in Kuwait and, therefore, it is suggested that residents will have the opportunity to do them abroad.

D. Residents will also be involved in a research project(s) throughout their residency and during clinical rotations. They may be expected to present their research proposals or findings in a then established research day .

E. Finally, residents will have ongoing evaluations during their training to identify their progress. A formal evaluation sheet will be filled out at the end of each rotation .

F. There will be a clinical exam in internal medicine at the end of the first year. And as per KIMS requirement an exam after two years and the final

PGY1	PGY2	PGY3-PGY5
-6 months Internal Medicine -2 months Respiriology -2 months Cardiology -2 months Geriatrics Medicine	-3 months Orthopedic surgery -3 months Rheumatology -3 months Neurology -1 month Neurosurgery -1 month Urology -1 month Plastic surgery	-4 months MSK -4 months SCI -4 months TBI -4 months P&O -4 months Neuromuscular and Electrodiagnostic -4 months Pediatrics Rehabilitation -4 months Cardiac and Respiratory Rehabilitation -4 months Stroke Rehabilitation -4 months elective rotations

exam will be at the end of the fifth year, where external and internal examiners in Physical Medicine and Rehabilitation will be incorporated .

## **6-Evaluations, Promotions, Part I & Part II Kuwaiti**

### **Board Exam:**

#### **Evaluations:**

##### a) End of Rotation Evaluation

At the end of each training rotation, the supervising consultant / team shall provide the training committee with a written evaluation of the resident's performance during that period / rotation, as per the approved evaluation form. Periodical Reports shall be submitted to the program director .

##### b) In-training Examinations

Program shall incorporate annual written and oral examinations to prepare the residents for their specialty exam at the end of training. The results of these annual exams will only be used as a feedback for the resident and his program director about the change in the resident performance over the years.

#### **Promotions:**

After passing Part 1 Exam, the resident will be promoted to registrar.

After passing Part 2 Exam, the resident will be promoted to senior registrar.

### **Format of part 1 exam (end of second year)**

#### **A. Written Component**

The written component consists of 1 paper, which will have short-answer questions and MCQs. The duration will be three-hours. Questions will consist of traditional clinical problems related to Orthopedic, Neurology, Neurosurgery and Rheumatology

#### **B. Oral and Clinical Component**

The oral and clinical component is of the objective structured clinical format (multiple stations). Standardized patients are often utilized when clinical skills are being evaluated. Stations will consist of traditional clinical problems related to Orthopedic, Neurology, Neurosurgery and Rheumatology.

The following are examples of possible stations:

- Joint examination
- Musculoskeletal examination
- Neurological examination
- Joint injection
- Chronic pain

- Anatomy specimen
- Counsel patient and family
- Prepare and present a seminar
- X-ray and diagnostic imaging interpretation

### **Format of the End of Training Comprehensive Objective Examination in Physical Medicine and Rehabilitation Part 2 (Specialty Board Exam)**

Residents become eligible to sit for the specialty exam after successfully finishing all their required rotations.

Comprehensive objective examinations make it possible to obtain a more complete evaluation of the candidates' strengths and weaknesses. The important feature of comprehensive objective examinations is that candidates do not need to pass the written component in order to take the oral component. Success or failure is based on consideration of all components of the examination. The comprehensive objective examinations are considered a "whole" and cannot be fragmented. Candidates who are unsuccessful at this examination must, if within their period of eligibility, repeat all components of the examination.

#### **A. Written Component**

The written component consists of two papers; each one will have short-answer questions and MCQs. The duration of each paper will be three-hours .

#### **B. Oral and Clinical Component**

The oral and clinical component is of the objective structured clinical format (multiple stations). Some of the stations will consist of traditional

clinical problems encountered in previous examinations (musculoskeletal and neurological examination, interpretation of x-rays, etc.). Standardized patients are often utilized when clinical skills are being evaluated. The following are examples of possible stations:

- o Rehabilitation goal setting
- o Joint examination
- o Musculoskeletal examination
- o Neurological examination
- o Functional assessment
- o Joint injection
- o Chronic pain
- o Anatomy specimen
- o Counsel patient and family
- o Gait deviation
- o Structured oral (case review)
- o Prepare and present a seminar
- o X-ray and diagnostic imaging interpretation
- o Ethics station
- o Team meeting

Candidates will be asked to demonstrate their competence in areas of clinical practice commonly encountered in Physical Medicine and Rehabilitation.

Standardized patients and others involved with the stations will provide an assessment of the candidates' attitude, approach, style and presentation, which will be taken into consideration in the final pass/fail decision.

## **7-Specialty References:**

### **A- Specialty related Journal (the most popular)**

Archives of physical Medicine and Rehabilitation.

American Journal of Physical Medicine & Rehabilitation.

Pain Medicine.

Pain Physician.

Neuro-Rehabilitation.

Brain.

Cerebrovascular Disease.

Stroke.

Journal of Head Trauma Rehabilitation .

The Journal of Spinal Cord Medicine

Clinical Journal of Sport Medicine.

Journal of Sport Rehabilitation.

American Journal of Sports Medicine.

Disability Rehabilitation.

## **B- Specialty related Books:**

-PHYSICAL MEDICINE & REHABILITATION, (BRADDOM).

<http://www.braddomtext.com/default.cfm>

-PHYSICAL MEDICINE & REHABILITATION: Principles and Practice .

(DeLISA)

-Physical Medicine and Rehabilitation Board Review. (Sara J. Cuccurullo)

-GRANTS ATLAS OF ANATOMY.

-NEUROANATOMY through CLINICAL CASES, BLUMENFELD.

-Essentials of Clinical Neuroanatomy and Neurophysiology. (10th edition, F.A. Davis)

-NEUROLOGY AND NEUROSURGERY ILLUSTRATED, ( Kenneth W. Lindsay)

-Orthopedic Physical Assessment, (4th edition, Magee.)

-MUSCULOSKELETAL EXAMINATION, 2nd edition, JEFFREY GROSS & JOSEPH FETTO.(

-Physical Examination of the SPINE & EXTREMITIES. (Stanley Hoppenfeld)

-The Mental Status Examination in Neurology, (Strub-Black, 2000.)

- Neurological Examination Made Easy, (2nd edition, Fuller.(
- MUSCLES: TESTING AND FUNCTION WITH POSTURE AND PAIN. (4th edition, Kendall(
- KINESIOLOGY of the MUSCULOSKELETAL SYSTEM, Foundations for Physical Rehabilitation. (2002, Donald A. Neumann(
- Myofascial Pain and Dysfunction, The Trigger Point Manual. (TRAVELL & SIMONS)
- Clinical Anatomy of the Lumbar Spine and Sacrum, (Nikolai Bogduk, 4th edition)
- PRACTICE GUIDELINES FOR SPINAL DIAGNOSTIC AND TREATMENT PROCEDURES. (International Spine Interventions Society, Nikolai Bogduk 2004(
- PHYSICAL MEDICINE & REHABILITATION (PM&R) PEARLS.
- PM&R SECRETS.
- NEUROLOGY SECRETS.
- SPINE SECRETS.
- ORTHOPEDIC SECRETS.
- SPORTS MEDICINE SECRETS.
- RHUMATOLOGY SECRETS.
- EMG SECRETS.
- Easy EMG.
- EMG Pearls.

- Electromyography in Clinical Practice, A Case Study Approach (Katirji 1998)
- THE REHAB POCKET SURVIVAL GUIDE, (Scott Woska)
- Manual of Physical Medicine & Rehabilitation, (Brammer – Spires)
- The Rehabilitation SPECIALIST`S HANDBOOK , (Rothstein- Roy- Wolf)
- Management of Brain Injured Children, (2nd edition, APPLETON-BALDWIN(
- BRAIN INJURY MEDICINE, PRINCIPLES AND PRACTICE. (ZASLER-KATZ-ZAFONTE)
- Spinal Cord Medicine: Principles and Practice, Edited by Vernon W. Lin, New York, Demos, 2003.
- Biostatistics: A Foundation for Analysis in the Health Sciences (W. Daniel, 2005)
- Basic & Clinical Biostatistics, (Beth Dawson & Robert G, 2004).

## **8-Rotations objectives:**

### **Objectives for Internal Medicine Rotation**

#### **Medical expert:**

-Demonstrate an understanding of the basic principles relevant to internal medicine (including but not restricted to: anatomy, physiology, kinesiology and ergonomics) and the application of basic science principles to clinical care

-Formulate and implement a comprehensive medical, functional, and psychosocial problem list for patient, with a goal-oriented management plan.

-Demonstrate knowledge of clinical features, diagnostic criteria, epidemiology, natural history, pathophysiology, complications and functional consequences of clinical presentations for a patient.

-Perform common diagnostic and therapeutic procedures as required. This may include ECG analysis, bladder catheterization, pleurocentesis,

abdominocentesis, intradermal skin testing (e.g. drug allergy, Mantoux), insertion of PEG tube and nasogastric tube, arterial puncture for blood gas analysis, etc.

- Perform a relevant, focused and accurate physical examination.

- Recognize chronic and acute common conditions, how to treat and when to transfer to other specialties

**Communicator:**

- Develop rapport, trust, and ethical therapeutic relationships with patients and families

- Demonstrate a patient centered compassionate and empathetic approach to patients and their care givers that include concern for the psychosocial, cultural and economic implications of a patient's unique situation and disability.

- Gather information about a disease, but also about a patient's beliefs, concerns, expectations and illness experience.

- Address challenging communication issues effectively, such as obtaining informed consent, delivering bad news, and addressing anger, confusion and misunderstanding.

- Develop a common understanding on issues, problems and plans with patients, care givers, and other professionals to develop a shared plan of care

**Collaborator:**

- Participate effectively and appropriately in an interprofessional health care team

-Recognize and respect the diversity of roles, responsibilities and competencies of other professionals in relation to their own.

-Work with others to assess, plan and provide integrated care for amputee patients.

**Manager:**

-Work collaboratively with others.

-Demonstrate knowledge of and participate in quality improvement activities.

-Describe the structure and function of the health care system as it relates to patients with functional impairments, activity limitation and/or participation restriction, their community support and advocate groups.

-Employ information technology appropriately for patient care.

**Health advocate:**

-Demonstrate sensitivity to special issues of gender, ethnicity and social bias in dealing with patients, families and persons with disabilities.

-Identify the determinants of health of persons with disabilities, including barriers to access to care and resources.

-Promote a heightened awareness of the challenges and abilities of persons with disabilities including environmental and attitudinal barriers.

**Scholar:**

- Maintain and enhance professional activities through ongoing learning.
- Evaluate medical information and its sources critically, and apply this appropriately to practice decisions.
- Describe the principles of critical appraisal as applied to Physical Medicine & Rehabilitation and related literature
- Critically appraise retrieved evidence in order to address a clinical question

**Professional:**

- Demonstrate a commitment to their patients, profession, and society through ethical practice.
- Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism.
- Balance personal and professional priorities to ensure personal health, to ensure a sustainable practice and to optimize patient care.
- Demonstrate a commitment to delivering the highest quality care and maintenance of competence

## Objectives for Surgical Rotation

### Medical expert:

-Demonstrate an understanding of the basic principles relevant to surgery, particularly as related to rehabilitation (including but not restricted to: anatomy, physiology, kinesiology and ergonomics) and the application of basic science principles to clinical care.

-Perform relevant physical examination with special emphasis on the assessment of multiple organ systems in an organized, comprehensive and timely fashion. This should include a differential diagnosis and treatment plan

-Perform common procedures such as bladder catheterization, arterial puncture for blood gas analysis, ECG analysis and central line placement.

-Demonstrate knowledge of clinical and radiologic features, diagnostic criteria, epidemiology, pathophysiology, classification, complications and functional consequence of conditions related to the surgery.

-Perform common diagnostic and therapeutic procedures as required. This may include the following: operating room procedure, wound care, suturing techniques and wound debridement.

-Prescribe orthoses and prostheses, exercise programs physical modalities, rehabilitation therapies and drugs as appropriate .

-Demonstrate knowledge of acute conditions, how to treat and when to refer to other specialists.

-Demonstrate knowledge , indications and interpretations of CT,MRI,U/S and other investigations.

**Communicator:**

-Convey relevant information and explanations accurately to patients and care givers, colleagues and other professionals

-Listen actively

-Deliver information to colleagues and other health professionals in a respectful, clear, concise and accurate manner to encourage and facilitate inter-professional person-centered collaborative practice.

-Respect patient confidentiality, privacy and autonomy

-Develop a common understanding on issues, problems and plans with patients, care givers, and other professionals to develop a shared plan of care

**Collaborator:**

-Participate effectively and appropriately in an interprofessional health care team

-Recognize and respect the diversity of roles, responsibilities and competencies of other professionals in relation to their own.

-Assume a leadership role on the interdisciplinary surgical team and effectively lead team and family conferences when appropriate.

-Work effectively with other health professionals to prevent, negotiate, and resolve interprofessional conflict.

**Manager:**

-Describe the structure and function of the health care system as it relates to patients with functional impairments, activity limitation and/or participation restriction, their community support and advocate groups.

-Demonstrate knowledge of and participate in quality improvement activities.

-Set priorities and manage time to balance patient care, practice requirements, outside activities and personal life.

-Employ information technology appropriately for patient care.

**Health advocate:**

-Identify the health needs of an individual patient.

-Identify opportunities for advocacy, health promotion and disease prevention with individuals to whom they provide care

-Promote a heightened awareness of the challenges and abilities of persons with disabilities including environmental and attitudinal barriers.

**Scholar:**

- Maintain and enhance professional activities through ongoing learning.
- Evaluate medical information and its sources critically, and apply this appropriately to practice decisions.
- Access and interpret the relevant evidence.
- Critically appraise retrieved evidence in order to address a clinical question

**Professional:**

- Demonstrate a commitment to their patients, profession, and society through ethical practice.
- Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism.
- Maintain appropriate relations with patients
- Manage conflicts of interest appropriately

## Objectives for Geriatrics Medicine Rotation

### Medical expert:

- Demonstrate an understanding of the basic principles relevant to Geriatrics medicine (including but not restricted to: anatomy, physiology, kinesiology and ergonomics) and the application of basic science principles to clinical care
- Formulate and implement a comprehensive medical, functional, and psychosocial problem list for patient, with a goal-oriented management plan.
- Demonstrate knowledge of clinical features, diagnostic criteria, epidemiology, natural history, pathophysiology, complications and functional consequences of clinical presentations for a patient.
- To perform and interpret a standardized assessment of cognition, depression, mobility, nutrition and physical function in the acute care and outpatient setting.
- Perform a relevant, focused and accurate physical examination including men-mental status examination..
- Recognize chronic and acute common conditions, how to treat and when to transfer to other specialties.
- Demonstrate knowledge in conditions affecting geriatric population such as delirium and dementia.

**Communicator:**

- Develop rapport, trust, and ethical therapeutic relationships with patients and families
- Demonstrate a patient centered compassionate and empathetic approach to patients and their care givers that include concern for the psychosocial, cultural and economic implications of a patient's unique situation and disability.
- Gather information about a disease, but also about a patient's beliefs, concerns, expectations and illness experience.
- Address challenging communication issues effectively, such as obtaining informed consent, delivering bad news, and addressing anger, confusion and misunderstanding.
- Develop a common understanding on issues, problems and plans with patients, care givers, and other professionals to develop a shared plan of care

**Collaborator:**

- Participate effectively and appropriately in an interprofessional health care team
- Recognize and respect the diversity of roles, responsibilities and competencies of other professionals in relation to their own.

-Work with others to assess, plan and provide integrated care for amputee patients.

**Manager:**

-Work collaboratively with others.

-Demonstrate knowledge of and participate in quality improvement activities.

-Describe the structure and function of the health care system as it relates to patients with functional impairments, activity limitation and/or participation restriction, their community support and advocate groups.

-Employ information technology appropriately for patient care.

**Health advocate:**

-Demonstrate sensitivity to special issues of gender, ethnicity and social bias in dealing with patients, families and persons with disabilities.

-Identify the determinants of health of persons with disabilities, including barriers to access to care and resources.

-Promote a heightened awareness of the challenges and abilities of persons with disabilities including environmental and attitudinal barriers.

**Scholar:**

-Maintain and enhance professional activities through ongoing learning.

-Evaluate medical information and its sources critically, and apply this appropriately to practice decisions.

-Describe the principles of critical appraisal as applied to Physical Medicine & Rehabilitation and related literature

-Critically appraise retrieved evidence in order to address a clinical question

**Professional:**

-Demonstrate a commitment to their patients, profession, and society through ethical practice.

-Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism.

-Balance personal and professional priorities to ensure personal health, to ensure a sustainable practice and to optimize patient care.

-Demonstrate a commitment to delivering the highest quality care and maintenance of competence

## **Objectives for Orthopedics Rotation**

### **Medical expert:**

-Demonstrate an understanding of the basic principles relevant to Orthopedics, particularly as related to rehabilitation (including but not restricted to: anatomy, physiology, kinesiology and ergonomics) and the application of basic science principles to clinical care.

-Perform relevant physical examination with special emphasis on the assessment of musculoskeletal system with differential diagnosis for each condition and treatment plan.

-Perform common joint injections such as knee, shoulder, ankle and soft tissue infiltration.

-Demonstrate knowledge of clinical and radiologic features, diagnostic criteria, epidemiology, pathophysiology, classification, complications and functional consequence of conditions related to Orthopedics.

-Perform common diagnostic and therapeutic procedures as required.  
This may include the following: operating room procedure, wound care, suturing techniques, wound debridement and closed reduction techniques.

-Prescribe orthoses and prostheses, exercise programs physical modalities, rehabilitation therapies and drugs as appropriate .

**Communicator:**

-Convey relevant information and explanations accurately to patients and care givers, colleagues and other professionals

-Listen actively

-Deliver information to colleagues and other health professionals in a respectful, clear, concise and accurate manner to encourage and facilitate inter-professional person-centered collaborative practice.

-Respect patient confidentiality, privacy and autonomy

-Develop a common understanding on issues, problems and plans with patients, care givers, and other professionals to develop a shared plan of care

**Collaborator:**

-Participate effectively and appropriately in an interprofessional health care team

-Recognize and respect the diversity of roles, responsibilities and competencies of other professionals in relation to their own.

- Assume a leadership role on the interdisciplinary surgical team and effectively lead team and family conferences when appropriate.
- Work effectively with other health professionals to prevent, negotiate, and resolve interprofessional conflict.

**Manager:**

- Describe the structure and function of the health care system as it relates to patients with functional impairments, activity limitation and/or participation restriction, their community support and advocate groups.
- Demonstrate knowledge of and participate in quality improvement activities.
- Set priorities and manage time to balance patient care, practice requirements, outside activities and personal life.
- Employ information technology appropriately for patient care.

**Health advocate:**

- Identify the health needs of an individual patient.
- Identify opportunities for advocacy, health promotion and disease prevention with individuals to whom they provide care
- Promote a heightened awareness of the challenges and abilities of persons with disabilities including environmental and attitudinal barriers.

**Scholar:**

- Maintain and enhance professional activities through ongoing learning.
- Evaluate medical information and its sources critically, and apply this appropriately to practice decisions.
- Access and interpret the relevant evidence.
- Critically appraise retrieved evidence in order to address a clinical question

**Professional:**

- Demonstrate a commitment to their patients, profession, and society through ethical practice.
- Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism.
- Maintain appropriate relations with patients
- Manage conflicts of interest appropriately

## Objectives for Neurology Rotation

### **Medical expert:**

- Demonstrate an understanding of the basic principles relevant to neurology (including but not restricted to: anatomy, physiology, kinesiology and ergonomics) and the application of basic science principles to clinical care
- Formulate and implement a comprehensive medical, functional, and psychosocial problem list for patients, with a goal-oriented management plan.
- Demonstrate knowledge of clinical features, diagnostic criteria, epidemiology, natural history, pathophysiology, complications and functional consequences of clinical presentations for patients.
- Perform a complete and appropriate assessment including CNS examination, dermatomes, myotomes and MRC scale (Medical Research Council)
- Perform a relevant, focused and accurate physical examination with a special emphasis on the assessment of the neuromusculoskeletal system and functional abilities/disabilities.

-Demonstrate knowledge of neuroanatomy and physiology of the brain, spinal tracts, neurology, pharmacology, kinesiology and ergonomics and the application of these basic science principles to clinical care.

-Perform diagnostic procedures such as lumbar puncture as required.

-select and prescribe medications for patients with seizures, Parkinson's disease, strokes, and neuromuscular disease.

**Communicator:**

-Develop rapport, trust, and ethical therapeutic relationships with patients and families

-Gather information about a disease, but also about a patient's beliefs, concerns, expectations and illness experience.

-Address challenging communication issues effectively, such as obtaining informed consent, delivering bad news, and addressing anger, confusion and misunderstanding.

-Develop a common understanding on issues, problems and plans with patients, care givers, and other professionals to develop a shared plan of care

**Collaborator:**

-Participate effectively and appropriately in an interprofessional health care team

-Recognize and respect the diversity of roles, responsibilities and competencies of other professionals in relation to their own.

-Work with others to assess, plan and provide integrated care for patients.

**Manager:**

-Work collaboratively with others.

-Demonstrate knowledge of and participate in quality improvement activities.

-Employ information technology appropriately for patient care.

**Health advocate:**

-Demonstrate sensitivity to special issues of gender, ethnicity and social bias in dealing with patients, families and persons with disabilities.

-Identify the determinants of health of persons with disabilities, including barriers to access to care and resources.

-Promote a heightened awareness of the challenges and abilities of persons with disabilities including environmental and attitudinal barriers.

**Scholar:**

- Maintain and enhance professional activities through ongoing learning.
- Evaluate medical information and its sources critically, and apply this appropriately to practice decisions.

**Professional:**

- Demonstrate a commitment to their patients, profession, and society through ethical practice.
- Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism.
- Balance personal and professional priorities to ensure personal health, to ensure a sustainable practice and to optimize patient care.
- Demonstrate a commitment to delivering the highest quality care and maintenance of competence

## Objectives for Rheumatology Rotation

### **Medical expert:**

- Demonstrate an understanding of the basic principles relevant to rheumatology (including but not restricted to: anatomy, physiology, kinesiology and ergonomics) and the application of basic science principles to clinical care
- Formulate and implement a comprehensive medical, functional, and psychosocial problem list for patient, with a goal-oriented management plan.
- Demonstrate knowledge of clinical features, diagnostic criteria, epidemiology, natural history, pathophysiology, complications and functional consequences of clinical presentations for a patient.
- Perform common diagnostic and therapeutic procedures as required. This may include arthrocentesis, intra-articular and soft tissue injections.
- Perform a relevant, focused and accurate physical examination specifically, per articular examination and other organ systems

commonly affected by extra-articular manifestations of systemic rheumatic disease.

- Understand the methodology and interpret the results of commonly performed diagnostic immunologic tests in rheumatology, as well as comprehensive synovial fluid analysis.

- Understand the pharmacology of commonly used hematological drugs, including anti-inflammatories (steroidal/non-steroidal), disease modifying medications, immunomodulatory/cytotoxic medications, and non-osteoporotic medications.

- Select and prescribe appropriate rehabilitation therapies including therapeutic exercise programs, physical modalities, assistive devices and medications.

**Communicator:**

- Respect patient confidentiality, privacy and autonomy

- Listen actively

- Be aware of and responsive to nonverbal cues

- Address challenging communication issues effectively, such as obtaining informed consent, delivering bad news, and addressing anger, confusion and misunderstanding.

- Synthesize the information gathered for the diagnosis and management of a particular patient problem

**Collaborator:**

- Participate effectively and appropriately in an interprofessional health care team

-Work with others to assess, plan and provide integrated care for individual patients

-Work with other professionals to prevent conflicts.

**Manager:**

-Work collaboratively with others.

-Implement processes to ensure personal practice improvement.

-Recognize and discuss the impact of health care economics on patients and their families, residents, medical staff and allied health professionals.

-Employ information technology appropriately for patient care.

**Health advocate:**

-Identify the health needs of an individual patient

-Identify the determinants of health of persons with disabilities, including barriers to access to care and resources.

-Promote a heightened awareness of the challenges and abilities of persons with disabilities including environmental and attitudinal barriers.

**Scholar:**

- Recognize and reflect learning issues in practice
- Pose an appropriate learning question.
- Evaluate the impact of any change in practice
- Critically appraise retrieved evidence in order to address a clinical question

**Professional:**

- Fulfill the regulatory and legal obligations required of current practice
- Maintain appropriate relations with patients

- Manage conflicts of interest appropriately
- Demonstrate a commitment to delivering the highest quality care and maintenance of competence

## **Objectives for Spinal Cord Rehabilitation Rotation**

### **Medical expert:**

- Demonstrate an understanding of the basic principles relevant to spinal cord injury (SCI) rehabilitation (including but not restricted to: anatomy, physiology, kinesiology and ergonomics) and the application of basic science principles to clinical care
- Formulate and implement a comprehensive medical, functional, and psychosocial problem list for SCI patient, with a goal-oriented management plan.
- Demonstrate knowledge of clinical features, diagnostic criteria, epidemiology, natural history, pathophysiology, complications and functional consequences of clinical presentations for SCI patient.

- Perform a complete and appropriate assessment including CNS examination, dermatomes, myotomes and ASIA examination.
- Perform a relevant, focused and accurate physical examination with a special emphasis on the assessment of the neuromusculoskeletal system and functional abilities/disabilities.
- Demonstrate and assess gait patterns, transfer techniques, use and need of mobility aids, and wheelchair seating.
- Demonstrate effective, appropriate, and timely application of preventive and therapeutic interventions relevant to a physiatrist practice including:
  - 1.Mobility aids
  - 2.Orthoses
  - 3.Prostheses
  - 4.Exercise prescriptions
  - 5.Physical modality prescriptions
  - 6.Rehabilitation therapies
  - 8.Pharmacotherapies: oral, injectable and topical
- Demonstrate knowledge of neuroanatomy and physiology of the spinal tracts, neurology, pharmacology, kinesiology and ergonomics and the application of these basic science principles to clinical care.
- Demonstrate knowledge of acute and chronic complications after SCI.
- Describe expected functional outcomes according to level of spinal cord injury and FIM evaluation.

**Communicator:**

- Develop rapport, trust, and ethical therapeutic relationships with patients and families
- Demonstrate a patient centered compassionate and empathetic approach to patients and their care givers that include concern for the psychosocial, cultural and economic implications of a patient's unique situation and disability.
- Gather information about a disease, but also about a patient's beliefs, concerns, expectations and illness experience.
- Address challenging communication issues effectively, such as obtaining informed consent, delivering bad news, and addressing anger, confusion and misunderstanding.
- Develop a common understanding on issues, problems and plans with patients, care givers, and other professionals to develop a shared plan of care

**Collaborator:**

- Participate effectively and appropriately in an interprofessional health care team
- Recognize and respect the diversity of roles, responsibilities and competencies of other professionals in relation to their own.
- Work with others to assess, plan and provide integrated care for SCI patients.

**Manager:**

- Work collaboratively with others.
- Demonstrate knowledge of and participate in quality improvement activities.
- Describe the structure and function of the health care system as it relates to patients with functional impairments, activity limitation and/or participation restriction, their community support and advocate groups.
- Employ information technology appropriately for patient care.

**Health advocate:**

- Demonstrate sensitivity to special issues of gender, ethnicity and social bias in dealing with patients, families and persons with disabilities.
- Identify the determinants of health of persons with disabilities, including barriers to access to care and resources.
- Promote a heightened awareness of the challenges and abilities of persons with disabilities including environmental and attitudinal barriers.

**Scholar:**

- Maintain and enhance professional activities through ongoing learning.

- Evaluate medical information and its sources critically, and apply this appropriately to practice decisions.
- Describe the principles of critical appraisal as applied to Physical Medicine & Rehabilitation and related literature
- Critically appraise retrieved evidence in order to address a clinical question

**Professional:**

- Demonstrate a commitment to their patients, profession, and society through ethical practice.
- Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism.
- Balance personal and professional priorities to ensure personal health, to ensure a sustainable practice and to optimize patient care.
- Demonstrate a commitment to delivering the highest quality care and maintenance of competence

## **Objectives for Stroke Rehabilitation Rotation**

### **Medical expert:**

- Demonstrate an understanding of the basic principles relevant to stroke rehabilitation (including but not restricted to: anatomy, physiology, kinesiology and ergonomics) and the application of basic science principles to clinical care
- Formulate and implement a comprehensive medical, functional, and psychosocial problem list for stroke patient, with a goal-oriented management plan.
- Demonstrate knowledge of clinical features, diagnostic criteria, epidemiology, natural history, pathophysiology, complications and

functional consequences of clinical presentations for stroke patient (including cognitive, psychological and behavioral problems.)

- Perform a complete and appropriate assessment including CNS examination, dermatomes, myotomes and mini-mental status.
- Perform a relevant, focused and accurate physical examination with a special emphasis on the assessment of the neuromusculoskeletal system and functional abilities/disabilities.
- Demonstrate and assess gait patterns, transfer techniques, use and need of mobility aids, and wheelchair seating.
- Demonstrate effective, appropriate, and timely application of preventive and therapeutic interventions relevant to a physiatrist practice including:
  - 1.Mobility aids
  - 2.Orthoses
  - 3.Prostheses
  - 4.Exercise prescriptions
  - 5.Physical modality prescriptions
  - 6.Rehabilitation therapies
  - 8.Pharmacotherapies: oral, injectable and topical

**Communicator:**

- Develop rapport, trust, and ethical therapeutic relationships with patients and families

- Demonstrate a patient centered compassionate and empathetic approach to patients and their care givers that include concern for the psychosocial, cultural and economic implications of a patient's unique situation and disability.
- Gather information about a disease, but also about a patient's beliefs, concerns, expectations and illness experience.
- Address challenging communication issues effectively, such as obtaining informed consent, delivering bad news, and addressing anger, confusion and misunderstanding.
- Develop a common understanding on issues, problems and plans with patients, care givers, and other professionals to develop a shared plan of care

**Collaborator:**

- Participate effectively and appropriately in an interprofessional health care team
- Recognize and respect the diversity of roles, responsibilities and competencies of other professionals in relation to their own.
- Work with others to assess, plan and provide integrated care for stroke patients.

**Manager:**

- Work collaboratively with others.

- Demonstrate knowledge of and participate in quality improvement activities.
- Describe the structure and function of the health care system as it relates to patients with functional impairments, activity limitation and/or participation restriction, their community support and advocate groups.
- Employ information technology appropriately for patient care.

**Health advocate:**

- Demonstrate sensitivity to special issues of gender, ethnicity and social bias in dealing with patients, families and persons with disabilities.
- Identify the determinants of health of persons with disabilities, including barriers to access to care and resources.
- Promote a heightened awareness of the challenges and abilities of persons with disabilities including environmental and attitudinal barriers.

**Scholar:**

- Maintain and enhance professional activities through ongoing learning.
- Evaluate medical information and its sources critically, and apply this appropriately to practice decisions.
- Describe the principles of critical appraisal as applied to Physical Medicine & Rehabilitation and related literature

-Critically appraise retrieved evidence in order to address a clinical question

**Professional:**

-Demonstrate a commitment to their patients, profession, and society through ethical practice.

-Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism.

-Balance personal and professional priorities to ensure personal health, to ensure a sustainable practice and to optimize patient care.

-Demonstrate a commitment to delivering the highest quality care and maintenance of competence

**Objectives for Traumatic Brain Injury Rehabilitation  
Rotation**

**Medical expert:**

-Demonstrate an understanding of the basic principles relevant to traumatic brain injury (TBI) rehabilitation (including but not restricted to: anatomy, physiology, kinesiology and ergonomics) and the application of basic science principles to clinical care

-Formulate and implement a comprehensive medical, functional, and psychosocial problem list for TBI patient, with a goal-oriented management plan.

- Demonstrate knowledge of clinical features, diagnostic criteria, epidemiology, natural history, pathophysiology, complications and functional consequences of clinical presentations for TBI patient.
- Perform a complete and appropriate assessment including CNS examination ,Glasgow Coma Scale, Glasgow Outcome Scale,GOAT,Mini-mental Status Examination, Rancho Los Amigos Level of Cognitive Functional Scale.
- Perform a relevant, focused and accurate physical examination with a special emphasis on the assessment of the neuromusculoskeletal system and functional abilities/disabilities.
- Demonstrate and assess gait patterns, transfer techniques, use and need of mobility aids, and wheelchair seating.
- Demonstrate effective, appropriate, and timely application of preventive and therapeutic interventions relevant to a physiatrist practice including:
  - 1.Mobility aids
  - 2.Orthoses
  - 3.Prostheses
  - 4.Exercise prescriptions
  - 5.Physical modality prescriptions
  - 6.Rehabilitation therapies
  - 8.Pharmacotherapies: oral, injectable and topical

-Demonstrate knowledge of neuroanatomy and physiology of the brain and cranial nerves, neurology, pharmacology, kinesiology and ergonomics and the application of these basic science principles to clinical care.

-Demonstrate knowledge of acute and chronic complications and management after TBI.

-Describe expected functional outcomes according to the severity of injury.

-Demonstrate knowledge in management of post traumatic agitation and return to play guidelines after head injury.

**Communicator:**

-Develop rapport, trust, and ethical therapeutic relationships with patients and families

-Demonstrate a patient centered compassionate and empathetic approach to patients and their care givers that include concern for the psychosocial, cultural and economic implications of a patient's unique situation and disability.

-Respect patient confidentiality, privacy and autonomy

-Be aware of and responsive to nonverbal cues

-Synthesize the information gathered for the diagnosis and management of a particular patient problem.

**Collaborator:**

- Participate effectively and appropriately in an interprofessional health care team
- Recognize and respect the diversity of roles, responsibilities and competencies of other professionals in relation to their own.
- Participate effectively in interprofessional team meetings, family conferences and discharge planning conferences.

**Manager:**

- Work collaboratively with others.
- Demonstrate knowledge of and participate in quality improvement activities.
- Describe the structure and function of the health care system as it relates to Psychiatry and the role of the Psychiatrist, including the management and administration of hospitals, clinical programs, academic institutions and licensing bodies.
- Implement processes to ensure personal practice improvement

**Health advocate:**

- Identify the health needs of an individual patient

- Identify the determinants of health of persons with disabilities, including barriers to access to care and resources.
- Identify and respond appropriately to issues of gender, ethnicity and social bias in dealing with persons with disabilities.

**Scholar:**

- Maintain and enhance professional activities through ongoing learning.
- Access and interpret the relevant evidence.
- Describe the principles of critical appraisal as applied to Physical Medicine & Rehabilitation and related literature
- Integrate new learning into practice.

**Professional:**

- Demonstrate a commitment to their patients, profession, and society through ethical practice.
- Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism.
- Manage conflicts of interest appropriately.
- Maintain appropriate relations with patients.

## **Objectives for Musculoskeletal Rotation**

### **Medical expert:**

- Demonstrate an understanding of the basic principles relevant to musculoskeletal(MSK) rehabilitation (including but not restricted to: anatomy, physiology, kinesiology and ergonomics) and the application of basic science principles to clinical care.
- Formulate and implement a comprehensive medical, functional, and psychosocial problem list for an MSK patient, with a goal-oriented management plan.
- Ensuring appropriate informed consent is obtained for procedures.

- Demonstrate knowledge and ability in intra-articular ,soft tissue and trigger point injection.
- Perform a relevant, focused and accurate physical examination with a special emphasis on the assessment of the neuromusculoskeletal system ,normal joints range of motion and functional abilities.
- Demonstrate knowledge in MSK anatomy, brachial plexus and lumbosacral plexus.
- Demonstrate effective, appropriate, and timely application of preventive and therapeutic interventions relevant to a physiatrist practice including:
  - 1.Mobility aids
  - 2.Orthoses
  - 3.Exercise prescriptions
  - 4.Physical modality prescriptions
  - 5.Pharmacotherapies: oral, injectable and topical

**Communicator:**

- Synthesize the information gathered for the diagnosis and management of a particular patient problem
- Listen actively

- Gather information about a disease, but also about a patient's beliefs, concerns, expectations and illness experience.
- Facilitate a structured clinical encounter effectively
- Seek out and synthesize relevant information from other sources, such as a patient's family/caregivers and other professionals and review of relevant documentation.

**Collaborator:**

- Demonstrate leadership in a health care team.
- Recognize and respect the diversity of roles, responsibilities and competencies of other professionals in relation to their own.
- Enter into interdependent relationships with other professions for the provision of quality care

**Manager:**

- Apply evidence and management processes for cost-appropriate care
- Demonstrate knowledge of and participate in quality improvement activities.
- Manage their practice and career effectively
- Employ information technology appropriately for patient care.

**Health advocate:**

- Identify the health needs of an individual patient

-Identify the determinants of health of persons with disabilities, including barriers to access to care and resources.

-Promote a heightened awareness of the challenges and abilities of persons with disabilities including environmental and attitudinal barriers.

**Scholar:**

-Maintain and enhance professional activities through ongoing learning.

-Evaluate medical information and its sources critically, and apply this appropriately to practice decisions.

-Describe principles of learning relevant to medical education.

-Describe the principles of ethics with respect to teaching and learning.

**Professional:**

-Recognize other professionals in need and respond appropriately

-Manage conflicts of interest appropriately

-Balance personal and professional priorities to ensure personal health, to ensure a sustainable practice and to optimize patient care.

-Maintain appropriate relations with patients.

## **Objectives for Pediatric Rehabilitation Rotation**

### **Medical Expert:**

-Demonstrate an understanding of basic sciences relevant to Pediatric Rehabilitation (including but not restricted to: anatomy, physiology and pathology) and the application of basic science principles to clinical care.

-Demonstrate knowledge of clinical features, diagnostic criteria, epidemiology, natural history, pathophysiology, complications and functional consequences of clinical problems encountered pediatric population (including normal development, cerebral palsy, spina

bifida,juvenile rheumatoid arthritis, Duchene and Becker muscular dystrophy,myotonic dystrophy, spinal muscular atrophy and hereditary sensory motor dystrophy.

- Demonstrate knowledge of clinical features, diagnostic criteria, epidemiology, natural history, pathophysiology, complications and functional consequences of clinical problems in pediatrics head injury, stroke, burn and musculoskeletal conditions.

- The resident should know the principle of management of limb deficiency.

- Perform relevant physical examination with special emphasis on the assessment of the neurodevelopmental and musculoskeletal assessment.

- Formulate and implement a comprehensive medical, functional, and psychosocial problem list for a Physical Medicine & Rehabilitation patient, with a goal-oriented management plan.

- Demonstrate knowledge of spasticity management including botulinum toxin injection, indications and contraindications of baclofen pump.

- Demonstrate effective, appropriate, and timely application of preventive and therapeutic interventions relevant to a physiatrist practice including: Mobility aids, Orthoses, Protheses, Exercise prescriptions, Physical modality prescriptions, Rehabilitation therapies and Pharmacotherapies.

**Communicator:**

- Develop rapport, trust, and ethical therapeutic relationships with patients and families.

- Convey relevant information and explanations accurately to patients and care givers, colleagues and other professionals.
- Develop a common understanding on issues, problems and plans with patients, care givers, and other professionals to develop a shared plan of care.
- Demonstrate a patient centered, compassionate and empathetic approach to patients and their care givers that includes concern for the psychosocial, cultural and economic implications of a patient's unique situation and disability

**Collaborator:**

- Participate effectively and appropriately in an interprofessional health care team.
- Work effectively with other health professionals to prevent, negotiates, and resolves interprofessional conflict.
- Discuss the principles of interdisciplinary team functioning unique abilities of its members (including but not exclusive to Psychiatrists, other physicians physiotherapists, occupational therapists, nurses, speech and language pathologists, psychologists, social workers, orthotists, prosthetists, and community health care workers) and the special relationship of the patient and family to the team.
- Participate effectively in interprofessional team meetings, family conferences and discharge planning conferences.

**Manager:**

- Demonstrate knowledge of and participate in quality improvement activities.

- Set priorities and manage time to balance patient care, practice requirements, outside activities and personal life.
- Apply evidence and management processes for cost-appropriate care.
- Chair or participate effectively in committees and meetings.

**Health Advocate:**

- Respond to individual patient health needs and issues as part of patient care
- Identify the determinants of health of persons with disabilities, including barriers to access to care and resources.
- Identify and respond appropriately to issues of gender, ethnicity and social bias in dealing with persons with disabilities.

**Scholar:**

- Maintain and enhance professional activities through ongoing learning.
- Evaluate medical information and its sources critically, and apply this appropriately to practice decisions.
- Describe the principles of critical appraisal as applied to Physical Medicine & Rehabilitation and related literature.

**Professional:**

- Demonstrate a commitment to their patients, profession, and society through ethical practice.

-Demonstrate a commitment to their patients, profession and society through participation in profession-led regulation.

-Demonstrate a commitment to physician health and sustainable practice.

## **Objectives for Neuromuscular Rotation**

### **Medical expert:**

-Demonstrate an understanding of the basic principles relevant to neuromuscular rehabilitation (including but not restricted to: anatomy, physiology, kinesiology and ergonomics) and the application of basic science principles to clinical care

-Formulate and implement a comprehensive medical, functional, and psychosocial problem list for patient with neuromuscular disease, with a goal-oriented management plan.

-Demonstrate knowledge of clinical features, diagnostic criteria, epidemiology, natural history, pathophysiology, laboratory markers, complications and functional consequences of clinical presentations patient with neuromuscular disease (including cognitive, psychological and behavioral problems. (

-Perform a complete and appropriate assessment including CNS examination, dermatomes, myotomes and muscle tone.

-Demonstrate familiarity with the principles of clinical electrophysiology and thorough understanding of the diagnostic, prognostic and technical aspect of electrophysiological procedures especially NCS and needle EMG.

-Demonstrate and assess gait patterns, transfer techniques, use and need of mobility aids, and wheelchair seating.

-Demonstrate effective, appropriate, and timely application of preventive and therapeutic interventions relevant to a physiatrist practice including:

-1.Mobility aids

-2.Orthoses

-3.Prostheses

-4.Exercise prescriptions

-5.Physical modality prescriptions

-6.Rehabilitation therapies

-8.Pharmacotherapies: oral, injectable and topical

**Communicator:**

- Prepare complete and informative consultations, progress and medico legal reports in a timely manner
- Demonstrate a patient centered compassionate and empathetic approach to patients and their care givers that include concern for the psychosocial, cultural and economic implications of a patient's unique situation and disability.
- Gather information about a disease, but also about a patient's beliefs, concerns, expectations and illness experience.
- Respect diversity and difference, including, but not limited to the impact of gender, religion and cultural beliefs on decision-making
- Present verbal reports of clinical encounters and plans effectively

**Collaborator:**

- Participate effectively and appropriately in an interprofessional health care team
- Work with other professionals to prevent conflicts
- Demonstrate leadership in a health care team

**Manager:**

- Demonstrate knowledge of and participate in quality improvement activities
- Manage a practice including finances and human resources
- Apply evidence and management processes for cost-appropriate care.-

-Employ information technology appropriately for patient care.

**Health advocate:**

-Promote a heightened awareness of the challenges and abilities of persons with disabilities

-Assist patients and families in accessing health and social resources in the community, including patient support groups

-Promote a heightened awareness of the challenges and abilities of persons with disabilities including environmental and attitudinal barriers.

**Scholar:**

-Maintain and enhance professional activities through ongoing learning.

-Evaluate medical information and its sources critically, and apply this appropriately to practice decisions.

-Describe the principles of critical appraisal as applied to Physical Medicine & Rehabilitation and related literature

-Critically appraise retrieved evidence in order to address a clinical question

**Professional:**

- Demonstrate a commitment to their patients, profession, and society through ethical practice.
- Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism.
- Balance personal and professional priorities to ensure personal health, to ensure a sustainable practice and to optimize patient care.
- Demonstrate a commitment to delivering the highest quality care and maintenance of competence

## **Objectives for Cardiopulmonary Rehabilitation Rotation**

### **Medical Expert:**

- Demonstrate an understanding of basic sciences relevant to Cardiopulmonary Rehabilitation (including but not restricted to: anatomy, physiology and pathology) and the application of basic science principles to clinical care.
- Demonstrate knowledge of clinical features, diagnostic criteria, epidemiology, natural history, pathophysiology, complications and

functional consequences of clinical problems encountered in patients with cardiac and pulmonary conditions.

-The Resident should know the risk factors for cardiac disease and how to prescribe an exercise program. The resident should know the contraindications for exercise training.

-The resident should know the benefits of pulmonary rehabilitation program and classification and physiology of pulmonary dysfunction.

-The resident should know the rehabilitation of the patient with COPD/RESTRICTIVE LUNG DISEASE.

-Perform a relevant, focused and accurate physical examination with a special emphasis on the assessment of the cardiopulmonary system.

- Formulate and implement a comprehensive medical, functional, and psychosocial problem list for a patient with cardiopulmonary condition, with a goal-oriented management plan.

-Plan should include an exercise program, life style modification and secondary prevention for cardiac and pulmonary patients.

**Communicator:**

-Develop rapport, trust, and ethical therapeutic relationships with patients and families.

-Convey relevant information and explanations accurately to patients and care givers, colleagues and other professionals.

-Develop a common understanding on issues, problems and plans with patients, care givers, and other professionals to develop a shared plan of care.

**Collaborator:**

- Participate effectively and appropriately in an interprofessional health care team.
- Work effectively with other health professionals to prevent, negotiate, and resolve interprofessional conflict.

**Manager:**

- Demonstrate knowledge of and participate in quality improvement activities.
- Set priorities and manage time to balance patient care, practice requirements, outside activities and personal life.

**Health Advocate:**

- Respond to individual patient health needs and issues as part of patient care
- Describe the role of the medical profession in advocating collectively for health and patient safety.

**Scholar:**

- Maintain and enhance professional activities through ongoing learning.
- Evaluate medical information and its sources critically, and apply this appropriately to practice decisions.

**Professional:**

- Demonstrate a commitment to their patients, profession, and society through ethical practice.
- Demonstrate a commitment to their patients, profession and society through participation in profession-led regulation.
- Demonstrate a commitment to physician health and sustainable practice.

## **Objectives for P&O Rotation**

### **Medical expert:**

- Demonstrate an understanding of the basic principles relevant to amputee rehabilitation (including but not restricted to: anatomy, physiology, kinesiology and ergonomics) and the application of basic science principles to clinical care
- Formulate and implement a comprehensive medical, functional, and psychosocial problem list for an amputee patient, with a goal-oriented management plan.

- Demonstrate knowledge of clinical features, diagnostic criteria, epidemiology, natural history, pathophysiology, complications and functional consequences of clinical presentations for amputee patient.
- Perform a complete and appropriate assessment of a patient pre and post operatively.
- Perform a relevant, focused and accurate physical examination with a special emphasis on the assessment of the neuromusculoskeletal system and functional abilities.
- Demonstrate and assess gait patterns, transfer techniques, use and need of mobility aids, and wheelchair seating.
- Demonstrate effective, appropriate, and timely application of preventive and therapeutic interventions relevant to a physiatrist practice including:
  - 1.Mobility aids
  - 2.Orthoses
  - 3.Prostheses
  - 4.Exercise prescriptions
  - 5.Physical modality prescriptions
  - 6.Rehabilitation therapies
  - 8.Pharmacotherapies: oral, injectable and topical

**Communicator:**

- Develop rapport, trust, and ethical therapeutic relationships with patients and families

- Demonstrate a patient centered compassionate and empathetic approach to patients and their care givers that include concern for the psychosocial, cultural and economic implications of a patient's unique situation and disability.
- Gather information about a disease, but also about a patient's beliefs, concerns, expectations and illness experience.
- Address challenging communication issues effectively, such as obtaining informed consent, delivering bad news, and addressing anger, confusion and misunderstanding.
- Develop a common understanding on issues, problems and plans with patients, care givers, and other professionals to develop a shared plan of care

**Collaborator:**

- Participate effectively and appropriately in an interprofessional health care team
- Recognize and respect the diversity of roles, responsibilities and competencies of other professionals in relation to their own.
- Work with others to assess, plan and provide integrated care for amputee patients.

**Manager:**

- Work collaboratively with others.
- Demonstrate knowledge of and participate in quality improvement activities.
- Describe the structure and function of the health care system as it relates to patients with functional impairments, activity limitation and/or participation restriction, their community support and advocate groups.
- Employ information technology appropriately for patient care.

**Health advocate:**

- Demonstrate sensitivity to special issues of gender, ethnicity and social bias in dealing with patients, families and persons with disabilities.
- Identify the determinants of health of persons with disabilities, including barriers to access to care and resources.
- Promote a heightened awareness of the challenges and abilities of persons with disabilities including environmental and attitudinal barriers.

**Scholar:**

- Maintain and enhance professional activities through ongoing learning.
- Evaluate medical information and its sources critically, and apply this appropriately to practice decisions.

-Describe the principles of critical appraisal as applied to Physical Medicine & Rehabilitation and related literature

-Critically appraise retrieved evidence in order to address a clinical question

**Professional:**

-Demonstrate a commitment to their patients, profession, and society through ethical practice.

-Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism.

-Balance personal and professional priorities to ensure personal health, to ensure a sustainable practice and to optimize patient care.

-Demonstrate a commitment to delivering the highest quality care and maintenance of competence.

**9-Evaluation forms:**

**Residency in-training evaluation form for PM&R program**

**In Medical & surgical rotations**

**Resident name:**

**Evaluator:**

**Rotation:**

**Period observed:**

EDUCATIONAL COMPETENCIES	NA	1	2	3	4
<b>Medical expert</b> -Medical knowledge -History taking					

-Physical examination -Clinical reasoning -Medical management -Laboratory utilization -Radiology utilization					
<b>Manager</b> -Time management -Use of information technology					
<b>Communicator</b> -Verbal communication skills -Written communication skills -Consultancy skills -Referral skills -Record keeping skills					
	NA	1	2	3	4
<b>Collaborator</b> -Team relationships -Consult effectively with other physicians -Consult effectively with allied health professionals					
<b>Health advocate</b> -Identifies important determinants of health -Recognizes and responds appropriately in advocacy situations					

-Utilization of health care resources					
<b>Scholar</b> -Self-directed learning -Critical appraisal skills -Evidence based practice					
<b>Manager</b> -Time management -Use of information technology					
<b>Health professional</b> Sense of responsibility -Ethics -Law -Physician/patient relationship -Performance under stress					
	NA	1	2	3	4
<b>Overall Evaluation</b>					

NA =not applicable

1 = Unsatisfactory

2 = Below expectations

3 = Meets expectations

4 = Exceeds expectations

Areas of strength:-----  
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Areas of weaknesses:-----  
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Specific recommendations:-----  
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Length of rotation: -----  
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Days missed: -----  
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Resident comments:-----  
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Name of supervisor:-----

Signature:-----

Resident signature: -----

### Residency in-training evaluation form for PM&R rotations

**Resident name:**

**Evaluator:**

**Rotation:**

**Period observed:**

EDUCATIONAL COMPETENCIES	NA	1	2	3	4
<b>Medical expert</b> a-Demonstrates expertise in the clinical, socio- behavioral and fundamental biomedical sciences relevant to the specialty of					

<p>Physical Medicine &amp; Rehabilitation.</p> <p>b-Elicits a relevant, comprehensive and accurate history that identifies and explores issues addressed in a patient encounter for the purposes of functional assessment, prevention and health promotion, diagnosis and or management.</p> <p>c-Performs a relevant and accurate physical examination with special emphasis on the assessment of the neuro-musculoskeletal system and related functional abilities.</p> <p>d-Describes indications, contraindications and possible complications for appropriate diagnostic and therapeutic interventions</p> <p>e-Chooses and interprets appropriate diagnostic and therapeutic interventions for effective patient care in a resource-effective and ethical manner</p> <p>f- Recognizes and manages emergent conditions resulting in appropriately prioritized treatment</p>					
	NA	1	2	3	4
<p><b>Medical expert</b></p> <p>g-Effectively explores issues relevant to promoting and optimizing autonomy in persons with disability</p> <p>h-Prepares complete and informative consultation, progress, discharge and medico legal reports in a timely and accurate manner</p>					
<p><b>Collaborator</b></p> <p>a-Describes the unique abilities and contributions of the</p>					

<p>interprofessional team members and community based health care providers</p> <p>b-Participates effectively in interprofessional meetings (team, family and discharge planning conferences) and provides leadership, as appropriate</p> <p>c-Works effectively with other interprofessional team members to create realistic patient centered rehabilitation goals</p> <p>d-Manages conflict involving interprofessional team members, peers, colleagues and other health professionals in a respectful and professional manner</p>					
<p><b>Health advocate</b></p> <p>a-Responds to individual patient health needs and issues as part of patient care with a focus on persons with limitations in activity and participation</p> <p>b-Identifies and responds to determinants of health for the population of persons with disabilities</p>	NA	1	2	3	4
<p><b>Health advocate</b></p> <p>d-Describes the role of the Physiatrist in shaping public policy related to the care of persons with disabilities</p> <p>e-Recognizes and responds appropriately in the advocacy of the individual patient in the context of their social and community situation</p>					
<p><b>Scholar</b></p>					

<p>a-Develops and implements an effective personal learning strategy for continuous learning</p> <p>b-Critically appraises medical information and appropriately integrates information from a variety of sources into evidence-informed practice decisions</p>					
<p><b>Manager</b></p> <p>a-Describes the structure and functioning of the health care system as it relates to physiatrists and the population they serve</p> <p>b-Makes cost-effective use of health care resources</p> <p>c-Sets realistic priorities and uses time effectively in order to optimize professional performance</p> <p>d-Performs management and administrative functions in an efficient and organized manner</p>					
<p><b>Health professional</b></p> <p>a-Demonstrates honesty, integrity, commitment, compassion, respect, and altruism within their professional practice</p> <p>b-Demonstrates an understanding of the medical, legal and professional obligations of a Physiatrist</p>					
	NA	1	2	3	4
<p><b>Health professional</b></p> <p>c-Recognizes the principles and limits of patient confidentiality and understands legislation regarding privacy protection rights</p> <p>d-Demonstrates an awareness of professional limitations, seeking advice when necessary. Accepts advice graciously</p>					
<b>Overall Evaluation</b>					

NA =not applicable

- 1 =Unsatisfactory
- 2 =Below expectations
- 3 =Meets expectations
- 4 =Exceeds expectations

Areas of strength:-----  
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Areas of weaknesses:-----  
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Specific recommendations:-----  
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Length of rotation: -----  
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Days missed: -----  
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Resident comments:-----  
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Name of supervisor: -----

Signature: -----

Resident signature: -----

### Residency in-training evaluation form for P&O rotation

**Resident name:**

**Evaluator:**

**Rotation:**

**Period observed:**

EDUCATIONAL COMPETENCIES	NA	1	2	3	4
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<p><b>Medical expert</b></p> <p>a-Demonstrates expertise in the clinical, socio-behavioral and fundamental biomedical sciences relevant to the specialty of Physical Medicine &amp; Rehabilitation.</p> <p>b-Elicits a relevant, comprehensive and accurate history that identifies and explores issues addressed in a patient encounter for the purposes of functional assessment, prevention and health promotion, diagnosis and or management.</p> <p>c-Performs a relevant and accurate physical examination with special emphasis on the assessment of the neuro-musculoskeletal system and related functional abilities.</p> <p>d-Describes indications, contraindications and possible complications for appropriate diagnostic and therapeutic interventions</p> <p>e-Chooses and interprets appropriate diagnostic and therapeutic interventions for effective patient care in a resource-effective and ethical manner</p> <p>f- Recognizes and manages emergent conditions resulting in appropriately prioritized treatment</p>					
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	NA	1	2	3	4
<p><b>Medical expert</b></p> <p>g-Effectively explores issues relevant to promoting and optimizing autonomy in persons with disability</p>					

h-Prepares complete and informative consultation, progress, discharge and medico legal reports in a timely and accurate manner					
<b>Collaborator</b> a-Describes the unique abilities and contributions of the interprofessional team members and community based health care providers b-Participates effectively in interprofessional meetings (team, family and discharge planning conferences) and provides leadership, as appropriate c-Works effectively with other interprofessional team members to create realistic patient centered rehabilitation goals d-Manages conflict involving interprofessional team members, peers, colleagues and other health professionals in a respectful and professional manner					
<b>Health advocate</b> a-Responds to individual patient health needs and issues as part of patient care with a focus on persons with limitations in activity and participation b-Identifies and responds to determinants of health for the population of persons with disabilities					

	NA	1	2	3	4
<b>Health advocate</b>					

<p>d-Describes the role of the Psychiatrist in shaping public policy related to the care of persons with disabilities</p> <p>e-Recognizes and responds appropriately in the advocacy of the individual patient in the context of their social and community situation</p>					
<p><b>Scholar</b></p> <p>a-Develops and implements an effective personal learning strategy for continuous learning</p> <p>b-Critically appraises medical information and appropriately integrates information from a variety of sources into evidence-informed practice decisions</p>					
<p><b>Manager</b></p> <p>a-Describes the structure and functioning of the health care system as it relates to psychiatrists and the population they serve</p> <p>b-Makes cost-effective use of health care resources</p> <p>c-Sets realistic priorities and uses time effectively in order to optimize professional performance</p> <p>d-Performs management and administrative functions in an efficient and organized manner</p>					
<p><b>Health professional</b></p> <p>a-Demonstrates honesty, integrity, commitment, compassion, respect, and altruism within their professional practice</p> <p>b-Demonstrates an understanding of the medical, legal and professional obligations of a Psychiatrist</p>					

	NA	1	2	3	4
<b>Health professional</b>					
c-Recognizes the principles and limits of patient confidentiality and understands legislation regarding privacy protection rights					
d-Demonstrates an awareness of professional limitations, seeking advice when necessary. Accepts advice graciously					
<b>Overall Evaluation</b>					

	1	2	3	4
Knowledge of normal gait				
Knowledge of prosthetic fabrication				
Knowledge of prosthetic components				
Knowledge of phantom phenomena				
Ability to describe expected level of function				
Knowledge of advantages and disadvantages of various levels of amputation				
Gait analysis of amputees				
Ability to perform a focused functional examination of amputee				
Ability to identify indications of prosthetic use				
Ability to prescribe appropriate prosthetic Rx				
Ability to decide when prosthetic fitting is appropriate				
Ability to perform figure of 8 wrapping				
Ability to prescribe appropriately walking aids				

NA =not applicable

- 1 =Unsatisfactory
- 2 =Below expectations
- 3 =Meets expectations
- 4 =Exceeds expectations

Areas of strength:-----  
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Areas of weaknesses :-----  
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Specific recommendations:-----  
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Length of rotation:-----  
-----

Days missed:-----  
-----

Resident comments:-----  
-----  
-----  
-----

Name of supervisor:-----

Signature :-----

Resident signature:-----

## Rotation evaluation by resident

Resident name:-----

Tutor name:-----

Rotation:-----

Rotation date:-----

PGY:-----

	1	2	3	4
Quality of clinical material available for teaching				
Amount of teaching relevant toward the objectives of training				
Amount of patient responsibility you were given in relation to your level of training was adequate				
The extent of which you were allowed to participate in the discharge planning and administrative aspects of patient care was adequate				
The degree to which the attending staff person was available for discussion and assistance in problem cases was appropriate				
The quality of the overall organization of the rotation was appropriate				
The overall quality of teaching was appropriate				
Service /Education ratio was appropriate				
Organized sessions were scheduled				
Clinical exposure was appropriate				

1= Strongly disagree

2= Disagree

3= Agree

4= Strongly disagree

Were the goals and expectations of this rotation explained to you at the onset of the rotation?

No

Yes

Did you achieve your goals?

No

Yes

Date:-----

Resident signature:-----

## PM&R Grand Round Evaluation Form

Topic: -----

Date:-----

Presenter:-----

Supervisor: -----

	1	2	3	4	5
The choice of topic was relevant to me					
Information was presented in an organized manner					
Quality of audiovisual aids					
Volume and complexity of the information was appropriate					
Will you change your practice in any way as a result of attending this activity?					
Related content to current evidence in the literature					
Overall rating					

1=Poor    2=Fair    3=Average    4=Good    5=Excellent

Comments:-----

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Evaluator: -----

Signature:-----

Date :-----

## Request to change rotation

Name of resident:-----

Date submitted:-----

Current Rotation:-----

Period:-----

Request to change to:-----

Reason(s) for request:-----

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Approval of Doctor (1) in charge:-----

Approval of Doctor (2) in charge:-----

Approval of Program Director:-----

Date :-----