Physical Medicine and Rehabilitation Curriculum
PGY 2 and PGY 3

Revision Date: January 23, 2010
Approved by the Curriculum Meeting: February 19, 2010

I. **Educational Purpose and Goals:** Internists provide comprehensive care for patients with diverse conditions impairing physical and cognitive functions. Internists must also be able to mobilize resources to provide a comprehensive care plan for patients with impairments. The Physical Medicine and Rehabilitation (PM&R) rotation familiarizes residents with a spectrum of rehabilitation services. The rotation emphasizes evaluation and treatment of patients with common neuromuscular and skeletal problems. Residents gain skills in formulation of physiatric assessments, determination of comprehensive physiatric care plans, and implementation of plans. Key clinical conditions evaluated and managed by PM&R physicians and the focus of the PM&R rotation include:

- Brain disorders: Stroke, traumatic brain injury, multiple sclerosis
- Diseases affecting nerves and muscles: peripheral neuropathy, myopathies
- Joint and connective tissue diseases: osteoarthritis, rheumatoid arthritis
- Spinal cord injuries and non-traumatic disorders
- Chronic pain

II. **Principal Teaching Methods:**

1. **Supervised Direct Patient Care Activities and Teaching Rounds:**
   - I. In the inpatient rehab unit setting, Internal Medicine residents observe development of a comprehensive physiatric care plan patient care, team conferences, and therapy which could include: PT, OT, Speech, Recreation Therapy, Rehab Psychology, Social Work and Rehab Nursing. The resident is invited to participate in therapy sessions. Physiatry clinical faculty arranges for the resident to follow up with a patient that they evaluated on the inpatient consult service and provide relevant bedside teaching.
   - II. Residents serve as PM&R consultants for patients on the inpatient wards at the Health South Rehabilitation Hospital. With the assistance of the attending physician, residents assess patients for appropriateness of admission to the inpatient rehabilitation unit. They also assist with recommendations for treatment modalities that will foster function in patients not requiring admission to the rehabilitation unit.
   - III. In the outpatient setting, residents are supervised by a Physiatry clinical faculty while performing PM&R assessments and formulating care plans. Residents are given the opportunity to view EMGs and aid in their interpretation.
2. Didactic Lectures:
   I. Weekly Neurology-Rehabilitation grand rounds occur Thursday mornings.
   II. Interdisciplinary didactics in subjects important to the comprehensive care of patients on the PM&R teaching service occur Mondays and Fridays.
   III. Residents continue to attend mandatory internal medicine residency conferences, including weekly Internal Medicine Grand Rounds.

3. Small Group Discussions:
   I. Selected patients are presented by the resident to the entire PM&R team. Bedside and examination room interactions are included. The teaching physician reviews, assesses, confirms and demonstrates appropriate data gathering and humanistic skills at the bedside.
   II. When appropriate, Internal Medicine residents participate in multidisciplinary team conferences for assigned patients while assigned to the inpatient rehabilitation unit.

4. Self-Study: all residents are expected to read independently about patients seen in the hospitals and in clinics, on PM&R topics assigned by faculty, and in preparation for core curriculum lectures.

III. Educational Content
1. Patient Characteristics: The demographic characteristics of encountered patients represent the diverse community at large, across socioeconomic groups. The number of patients assigned to the resident is commensurate with level of training and experience and is adjusted to ensure that the experience is educational, without excessive reliance on residents for service.

2. Disease Mix: Residents on the PM&R Rotation see a broad mix of patients and disease severity. Multiple teaching venues, including in-patient units, the outpatient clinic, and the electro-diagnostic lab lend themselves to an excellent case mix. Neuromuscular and orthopedic rehabilitation is stressed. Cardiac and pulmonary rehabilitation experiences are available. Residents also have opportunity to participate in speech therapy, EMG diagnostics, and brain injury care.

3. Learning Venues, type of clinical encounters, procedures and services:
   I. Approximately 40% of the resident experience is inpatient, including rehabilitation unit experiences at Medical Center Hospital.
   II. 60% of the rotation occurs in outpatient settings, including the electrodiagnostic lab, and Medical Center Hospital.

4. Structure of rotation:
   I. On the first Monday morning, residents should present to the physiatrist office. The Physical Medicine and Rehabilitation workday begins at 8:00 AM each weekday.
   II. Residents continue to attend mandatory Internal Medicine Residency conferences and their primary care continuity clinics.
   III. There is no call. Residents are scheduled for daily patient care duties, with averaged 1 day off per week during the rotation. Resident training may extend before 8 AM or after 5 PM at the discretion of PM&R attendings for patient care reasons, but overall averaged resident duty hours may not exceed 80 hours/week.

IV. Principal Ancillary Educational Materials
a. At the beginning of the rotation, each resident receives a copy of the PM&R curriculum’s Goals and Learning Objectives.
b. Rehabilitation Medicine: Principles And Practice / editor-In-Chief, Joel A. DeLisa.
c. Physical Medicine Rehabilitation / [Editor,] Randall L. Braddom.
d. Essentials of Physical Medicine and Rehabilitation, Frontera & Silver

Assigned Readings:
The following chapters from standard Rehabilitation Medicine texts have been selected by the PM&R Program Director for assigned readings by all rotating residents. Residents must pick up and sign out the DeLisa text from the TTUHSC library during rotation:

   a. Chapter 1 Clinical Evaluation
   b. Chapter 2 The Physical Examination
   c. Chapter 3 Electrodiagnostic Evaluation of the Peripheral Nervous System
   d. Chapter 28 Low Back Pain
   e. Chapter 39 Peripheral Neuropathy
   f. Chapter 72 Geriatric Rehabilitation
   g. Chapter 77 Stroke Rehabilitation
   h. Chapter 78 Rehabilitation Issues in Traumatic Brain Injury

   a. Structural Diagnosis and Manipulative Medicine History, Chapter 1, p. 3

V. Methods of Evaluation
1. Resident Performance: PM&R clinical faculty complete written resident evaluation forms provided by the Internal Medicine Residency coordinators. The evaluation is competency-based, and uses a detailed assessment of resident’s effort, progress and achievement on each core competency component. Faculty review the written evaluation in person with each resident and provide detailed feedback on resident’s performance. In addition, the following sources and methods of evaluation are included in assessing resident’s performance: a) mini-CEX and CEX. b) all other (verbal, written) evaluation comments provided to the Program Director/Associate Program Director by faculty and community physicians interacting with the resident during PM&R rotation are documented in writing. All evaluations are available for resident review (excluding direct review of evaluations completed by resident colleagues). All evaluations are part of the resident file and are incorporated into the semiannual performance review for directed resident feedback.

2. Program and Faculty Performance: By end of the PM&R rotation, the residents are asked to complete a service evaluation form commenting on the faculty, facilities, and service experience. These evaluations are returned by the residents to the residency office and are reviewed by Program Director and department chair.

VI. Rotation Specific Competency Objectives
1. Patient Care:
   I. By completion of the PM&R rotation all Internal Medicine residents will be able to obtain an orderly history, perform a physiatric physical examination, and recognize and interpret medical and functional problems involving the following:
      a. Chronic Pain
b. Cumulative trauma disorder, repetitive motion disorders, and overuse syndromes
c. Complications of prolonged bed rest and disability from acute illness
d. Adverse effects of medical interventions on function
e. Lumbosacral and cervical radiculopathy
f. Carpal tunnel syndrome and ulnar neuropathy
g. Fibromyalgia and myofacial pain
h. Orthopedic procedures (joint replacements, fractures)
i. Amputation
j. Stroke and traumatic brain injury
k. Other disabling neurologic conditions, including multiple sclerosis and spinal cord injury.

II. By completion of the PM&R rotation all Internal Medicine residents will be able to demonstrate appropriate assessment of the effects of impairment on a patient’s daily functioning and identify patients that may benefit from PM&R interventions.

2. Medical Knowledge:
   I. By the completion of the Rehabilitation rotation Internal Medicine residents will reflect knowledge of
      a. The difference between impairment, disability and handicap.
      b. How to diagnose and manage common musculoskeletal disorders, including fibromyalgia, myofacial pain, repetitive motion disorders and overuse syndromes.
      c. How to recognize the complications of prolonged bed rest (contractures, pressure sores, deep venous thrombosis, osteoporosis, muscular deconditioning and others.)
      d. Utilities and limitations of various physical medicine treatment modalities, including diathermy, ultrasound, electrical stimulation and others.
      e. The various types of therapeutic exercise.
      f. When to use various assistive devices that may reduce disabilities, including wheelchairs, prosthetics, orthotics, and others.
      g. Basic principles of evaluation and management of chronic pain.
      h. Methods for minimizing long-term disability from acute illness (prophylaxis against venous thrombosis, bed sores, contractures, deconditioning.)
   II. Additionally, the resident will be able to describe the roles of allied health professionals, including physical therapists, occupational therapists, psychologists, speech and language pathologists, prosthetists, orthotists, and others.

3. Practice Based Learning and Improvement:
   I. Rotating residents will demonstrate self-initiative in the use of information technology to access and retrieve materials for self-education.
   II. Residents will independently review PM&R source texts regarding encountered patients.

4. Interpersonal and Communication Skills:
   I. All residents on the Rehabilitation rotation will demonstrate appropriate patient communication and function as a team member, demonstrating the ability to communicate with PM&R physicians, Social Workers, Physical Therapists, Psychologists and other members of the PM&R team.
II. All residents will demonstrate ability to discuss the impact of impairment on daily function with patients and their families.

5. Professionalism:
   I. All residents will show respect, compassion, and commitment at all times, and will be respectful of patients across all cultures, ages, genders and disabilities.
   II. Residents will arrive for their assigned duties on time, stay to the completion of their duties, and promptly communicate all patient issues with the attending physician.

6. Systems Based Practice:
   I. By the end of the PM&R rotation all Internal Medicine residents will demonstrate effective function with all members of the PM&R care team, including allied health professionals such as physical therapists, occupational therapists, psychologists, speech and language pathologists, prosthetists, orthotists, and others.
   II. Residents will demonstrate ability to provide cost-effective care including the appropriate use of PM&R resources.