Understanding the Role of PM&R

Providing Quality Healthcare
But seriously, what is PM&R?

Physical medicine and rehabilitation (PM&R), also referred to as physiatry, is a medical specialty concerned with diagnosis, evaluation, and management of persons of all ages with physical and/or cognitive impairment and disability. This specialty involves diagnosis and treatment of patients with painful or functionally limiting conditions, the management of comorbidities and co-impairments, diagnostic and therapeutic injection procedures, electrodiagnostic medicines, and emphasis on prevention of complications of disability from secondary conditions.

- The American Board of Physical Medicine and Rehabilitation
What is PM&R or Physiatry?

➢ Physical Medicine and Rehabilitation
➢ Established medical specialty that focuses on:
  ○ Enhancing and restoring functional ability and quality of life
  ○ Maximizing independence in activities of daily living (ADLs)
➢ Design comprehensive-patient centered treatment plans
➢ Multi-disciplinary, working close with PT, OT, SLP and other therapies (recreational, art, music, etc.)
What conditions do Physiatrists treat?

➢ People with physical impairments or disabilities affecting the brain, spinal cord, nerves, bones, joints, ligaments, muscles, and tendons including:

  ○ Stroke
  ○ Spinal cord Injury
  ○ Traumatic Brain Injury
  ○ Neuromuscular diseases
  ○ Cancer
  ○ Birth Defects (CP, spina bifida, etc)
  ○ Muscular Dystrophy
  ○ Multiple Sclerosis
  ○ Amputation

➢ Recovery from trauma
➢ Sports related injuries
➢ Back Pain
➢ MSK pain
➢ Arthritis, tendinitis
Education and Training

➢ Four years of college
➢ Four years of medical school
➢ Four years of residency
  ○ Preliminary intern year
  ○ 3 years of dedicated PM&R learning/reviewing all major body systems and their impact on function
  ○ Options for subspecialty training with fellowship
    ■ Brain Injury
    ■ Spinal Cord Injury
    ■ Pain Medicine
    ■ Peds
    ■ Cancer
    ■ Sports
    ■ Sports and spine (non accredited)
    ■ Palliative
Diagnosis and Treatment- *The PM&R Approach*

- Aimed at comprehensive, individualized care
- Patient-centered
- Non-surgical but do refer to nsgy/ortho if needed
- Using team approach, physiatrist serves as team leader
- Preventative medicine
- Goal-directed care with measurable goals
- Function and quality of life!
Diagnoses

➢ Physical exam
➢ Imaging
➢ EMG/Nerve conduction studies to diagnose nerve and muscle injuries/diseases
➢ Ultrasound diagnosis (and treatment)
Treatment

➢ PT, OT, SLP
➢ Manual (osteopathic) medicine
➢ Prescription medication
➢ Injections
Treatment

➢ Prescribe physical therapy, occupational therapy, speech therapy with greater understanding of specific modalities
  ○ Targeted exercise and strengthening
  ○ Heat and cold therapy, desensitization techniques
  ○ Biofeedback
  ○ Gait training- vector, lokomat
Treatment - Manual Medicine

Osteopathic Manipulation
Treatment-prescription medication

➢ Able to prescribe any and all medications deemed appropriate
➢ Some common medications used to address function:
  ○ Antispasmodics (baclofen, tizanidine, dantrolene, valium)
  ○ Neuropathic pain (Gabapentin, Lyrica)
  ○ Antidepressants
  ○ Stimulants
  ○ Bowel/bladder medications
Treatment

➢ Injections
  ○ Steroid
  ○ Trigger point
  ○ Botulinum toxin injection for spasticity
  ○ Phenol
  ○ Epidural

➢ Can be “blind” using anatomical landmarks, ultrasound guided, emg guided, or fluoroscopy guided

➢ Baclofen pumps
Low Back Pain - A case example

➢ SF is a 35yo factory worker who has been out of work for 10 months because of back pain
➢ Symptoms
  ○ constant lower back pain, decreased activity, overweight, depressed
➢ Previous treatment
  ○ Physical therapy, massage, heat packs, OTC medication
Low Back Pain—Epidemiology

➢ ⅜ Americans will experience low back pain
➢ Most common musculoskeletal problem globally and the leading cause of activity limitation and absenteeism from work and disability
➢ 6th most costly conclusion in the US with health care costs and indirect costs due to back pain ~$50 billion/year
➢ Always a top cause for primary care visit
Low Back Pain: A PM&R Approach

➢ Comprehensive medical history and physical exam paying close attention to msk and neuro exam
➢ Assessment of patient lifestyle and occupational risks
➢ Potential for future complications
➢ Goals
Low Back Pain: *Treatment Plan, looking at the whole person*

- Physical therapy program
- Pain and sleep medication
- Addressing mood
- Patient counseling and education
- Measure progress
- Injections may be considered pending progress
Low back pain: results

➢ Pain relief from comprehensive approach of medication, sleep, and PT, leading to overall improved function and quality of life
➢ Patient was able to return to work in 33 days
➢ Continues to do home exercise program and practice prevention techniques
PM&R Success in Treating Low Back Pain

➢ Back Pain Survey in New York magazine
➢ Patients report greater relief from low back pain when treated by PM&R physicians
Stroke Rehabilitation: A case example

- AM is a 78yo woman with diabetes
- Presented with left sided weakness and numbness
- Monitored and discharged:
  - Home
  - vs
  - Acute rehabilitation
Stroke Rehabilitation: A case example

➢ Discharged home
  ○ She was given medicine to prevent recurrence of stroke
  ○ One week later, she falls and is readmitted for knee injury
Stroke-statistics

➢ Leading cause of serious long term disability in the US
➢ Second leading cause of mortality
➢ There are over 7 million stroke survivors and ⅔ of them have disability
➢ >$30 billion cost to society
➢ Recovery typically involves multiple care settings and best recovery requires multidisciplinary approach
Stroke Rehabilitation: A case example

➢ Discharged to acute inpatient rehabilitation
➢ Care team includes: Physiatrist, PT, OT, SLP, case manager, nursing, psychologist, nursing
➢ Goals are placed and updated regularly
  ○ Maximize mobility
  ○ Regain functional independence and confidence
  ○ Manage comorbid depression
  ○ Prevent more falls
  ○ Safety improvements to living environment
Stroke Rehab- Outcomes

➢ She makes functional improvements and both she and family are involved in adjustment to residual deficits from new disability
➢ Her other medical problems are managed and optimized during her stay
➢ She is discharged to home with outpatient therapies and appropriate follow up is in place to ensure continuity of care
Stroke Rehab: outcome

➢ Two years later, she continues to live independently with no more falls
➢ She is able to maintain independent personal care skills and enjoy her days
➢ Alice’s mood and confidence are greatly restored
What can PM&R Physicians do for you?

★ Patient centered, multidisciplinary care
★ Looking at the whole person
★ Match resources to patient needs
★ Balance quality and cost of care
★ Team oriented
★ Measurable goals
★ Non surgical treatment to maximize function including therapy, physical modalities, medication, and injections
How to locate and PM&R Physician

- Referral/recommendation from primary care doctor
- Telephone directories
- Local medical society
- www.aapmr.org
“Quality of life has long been the goal of PM&R. We strive to achieve that goal by looking at the multiple problems of a patient, minimizing those problems, and optimizing function.”