# Understanding PM&R

The Role of PM&R in Providing Quality Healthcare

# 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

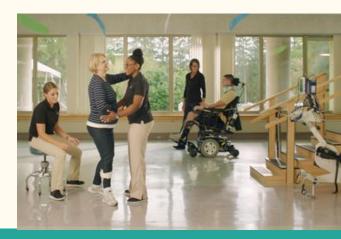
- > PT, OT, SLP
- Manual (osteopathic) medicine
- Prescription medication
- > Injections

#### Treatment

- > Prescribe physical therapy, occupational therapy, speech therapy with greater understanding of specific modalities
  - Targeted exercise and strengthening
  - Heat and cold therapy, desensitization techniques
  - o Biofeedback
  - o 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
  - o Bowel/bladder medications



#### Treatment

- Injections
  - o Steroid
  - o Trigger point
  - Botulinum toxin injection for spasticity
  - o Phenol
  - o 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
  - o constant lower back pain, decreased activity, overweight, depressed
- Previous treatment
  - Physical therapy, massage, heat packs, OTC medication

#### Low Back Pain-Epidemiology

- 45 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



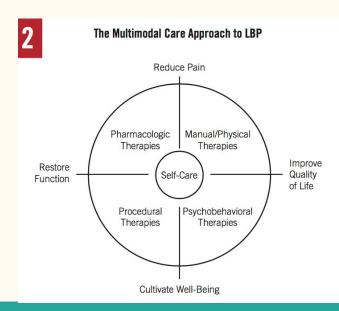
#### Low Back Pain: A PM&R Approach

- ➤ 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:
  - o 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 ¾ 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."