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## The role of physical medicine and rehabilitation in pain management


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## What is physical medicine and rehabilitation?




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- Specialty of physicians that treat individuals with impairments and disabilities
- This group of physicians are called **physiatrists**

## What does a physiatrist do?




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- Treat patients of all ages
- Focus treatment on function
- Have a broad medical expertise that allows them to treat disabling conditions throughout a person's lifetime
- Diagnose and treat pain as a result of an injury, illness, or disabling condition
- Determine and lead a treatment/prevention plan
- Lead a team of medical professionals, which may include physical therapists, occupational therapists, and physician extenders to optimize patient care
- Work with other physicians, which may include primary care physicians, neurologists, orthopedic surgeons, and many others.
- Treat the whole person, not just the problem area  
<https://www.aapmr.org/about-physiatry/about-physical-medicine-rehabilitation/what-is-physiatry>

## What is cancer rehab??



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“Cancer rehabilitation involves helping a person with cancer to help himself or herself to attain maximum physical, social, psychological and vocational functioning within the limits imposed by the disease and its treatment” *Cromes 1978*

- Improve quality of life
- Increase functional independence
- Improve pain, weakness and other symptoms
- Prevent other complications

Cromes Jr, G. Fred. "Implementation of Interdisciplinary Cancer Rehabilitation." *Rehabilitation Counseling Bulletin* 21.3 (1978): 230-7.  
Mayo Clinic Staff. Tests and Procedures: Cancer rehabilitation in Minnesota. <http://www.mayoclinic.org/tests-procedures/cancer-rehabilitation/basics/definition/prc-20020133>

## Common impairments seen in cancer rehab




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<ul style="list-style-type: none"> <li>• <b>Fatigue</b></li> <li>• Arthralgia</li> <li>• Myalgia</li> <li>• Neuropathic pain</li> <li>• <b>Weakness</b></li> <li>• Deconditioning</li> <li>• Autonomic dysfunction</li> <li>• <b>Back pain</b></li> <li>• Balance dysfunction</li> <li>• <b>Bowel dysfunction</b></li> <li>• Chemotherapy-induced peripheral neuropathy</li> <li>• Dystonia</li> <li>• Graft-versus-host-disease</li> <li>• <b>Headache</b></li> <li>• Muscular asymmetry</li> </ul>	<ul style="list-style-type: none"> <li>• Lumbosacral plexopathy</li> <li>• <b>Neck pain</b></li> <li>• Osteopenia/osteoporosis</li> <li>• <b>Paralysis</b></li> <li>• Radiation Fibrosis</li> <li>• Radiculopathy</li> <li>• Scapular winging</li> <li>• Scar adhesions</li> <li>• <b>Sensory deficits</b></li> <li>• <b>Sexual dysfunction</b></li> <li>• Shoulder pain</li> <li>• <b>Swallowing and speech issues</b></li> <li>• Trismus</li> <li>• <b>Urinary dysfunction</b></li> <li>• <b>Visuospatial dysfunction</b></li> </ul>
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Silver, Julie K., Jennifer Blom, and R. Samuel Mayer. "Impairment-driven cancer rehabilitation: An essential component of quality care and survivorship." *CIA: a cancer rehabilitation journal* 1.1 (2013): 26-31.

## How can we help pain?



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- Take a comprehensive history and perform a physical exam
- Understand the different components contributing pain
- Diagnosing the causes of pain result in more accurate treatment
- Encourage and refer for appropriate treatments like physical therapy, occupational therapy and speech therapy
- Perform injections as appropriate to address pain

## Pain

- **Multiple reasons to have pain**
  - Tumor pain
  - Fractures
  - Muscle strain
  - Spasticity
  - Nerve pain
  - Skin breakdown
- **Treatment**
  - Medication
  - PT+OT
  - Compression garments
  - Bracing
  - Interventions/Surgery

## Weakness

- Can occur in legs + arms, depending on tumor location
- Can also involve changes in speech, swallowing, facial movement and vision
- **Treat with:**
  - **Physical therapy:** Focus on conditioning, endurance, strengthening legs/arms, standing, transfers (to/from a chair to a bed), walking and wheelchair mobility
  - **Occupational therapy:** Focus on independence with activities of daily living such as bathing, toileting, grooming, eating and dressing in addition to fine motor skills like buttons and zippers
  - **Assess equipment needs** like braces and ambulatory aids
  - **Speech therapy**
  - **Vision therapy**

## Sensation Changes

- Variable symptoms, including
  - Pins/needles
  - Burning/shooting/stabbing pain
  - Numbness
  - Loss of joint position sense and coordination → balance issues
  - Hot/cold increase or decrease
  - Hypersensitive to light touch
- Treatment includes
  - Sensitization normalization with PT/OT
  - Balance and gait training
  - Nerve pain medications

## Why care about weakness and sensory changes?

- **Risk of pressure ulcers, wounds and skin breakdown**
  - Learn pressure relief strategies
  - Regular skin checks
  - Nutrition education
  - Establish effective bowel and bladder program\*
- **Risk of aspiration and pneumonia**
  - Swallow studies
  - Modified diet
  - Speech therapy to strength mouth muscles
- **Risk of fractures**
  - Treat with PT/OT
  - May need bracing or equipment
  - May need intervention

## Spasticity

- Increased tone or stiffness
- Occurs when there is an injury to the spinal cord
- Treat with
  - Stretching exercises
  - Splinting or casting
  - Oral medications
  - Botox

## How can you find a physiatrist?

The screenshot shows the aapm&r website with a search bar and navigation menu. The main heading is "Find a PM&R Physician". Below it, there is a welcome message and a "Search Tips" section. The search tips include: "You can use the fields below to search by last name, specialty, practice area, city, state or province, zip/postal code, or country." and "Enter information in one or more of the fields to limit your search. Results may vary depending on the number of fields for which you provide information."

[https://members.aapmr.org/AAPMR/AA\\_PMR\\_FINDER.aspx](https://members.aapmr.org/AAPMR/AA_PMR_FINDER.aspx)