

## Conceptual Models of Disability

**Condition:** For a person with arthritis, the inability to walk far may be a disability. To another person with a brain injury, not being able to return to work due to memory issues can be a disability as well. Parents may find their child with limb difference to be disabled, but the child may not conceptualize it as such. Hence, disability means different things to different people.

In general, disability can be thought of as a state that prevents people from living their life to the fullest. Rehabilitation programs, environmental modification, education, awareness and policy are instrumental in changing the disabled state to an “able” state.

**Background:** According to the U.S. Census in 2010, about 56.7 million Americans had a disability. While there are many models to understand and address disability, three stand out. The *individual / medical model* sees disability as arising directly from an individual’s health condition such as hearing loss that requires a medical cure. The *social model* views disability as a product of environment. Here, disability from hearing loss is a result of not having resources or supportive environment to manage the hearing loss. The *biopsychosocial model* integrates these two models into a more holistic concept. The *World Health Organization International Classification of Functioning, Disability, and Health* (WHO ICF) describes disability as combination of impairment in anatomic or physiologic systems (example amputation), activity limitation (mobility limitation), and participation restriction (restricted ability to do physical work continuously).

**Risk Factors:** Just as disability means different things to different people, the risk factors for disability become difficult to categorize. From a *medical model lens*, people with more medical conditions can be viewed as being at higher risk factors for disability. From a *social model lens*, lower socio-economic status, female gender and non-Caucasian race can be risk factors. Viewed through the *biopsychosocial lens* using the WHO ICF framework, personal habits such as smoking and drug abuse, genetic predisposition to conditions such as cancer, and environmental factor such as lead in water are additional risk factors for disability.

**Rehab Management:** Study of function and improving the functional ability of people with disability is the focus of rehabilitation. Rehabilitation requires team effort, with physical medicine and rehabilitation (PM&R) physicians, also known as physiatrists, therapists, case management, peer mentors, patient advocacy and professional groups focused on one central theme – patient and caregiver care. Some major principles include:

1. optimization of medical risk factors using medication management and exercise
2. preventing complications
3. guided therapy to focus on promoting independence and safety while the recovery is ongoing
4. provision of assistive devices for daily activities such as dressing and eating
5. mobility enabling devices such as walker, wheelchair and prosthetics
6. connecting patient to community resources such as transport for appointments, drug prescription programs, peer mentorship, recreational therapy, driving rehabilitation and vocation rehabilitation for return to driving and work, respectively

**Other Resources for Patients and Families:** Direct care in inpatient and outpatient rehabilitation and device provided following events that lead to disability can be limited by insurance mechanisms. Professional as well as patient advocacy organizations are instrumental in working toward getting resources both at the individual and societal levels. Private and government agencies can help people with obtain devices at lower or no cost.

At a macro level, government regulatory agencies have been vital for shaping disability policy with laws such as the Americans with Disabilities that ensures access to public places and workplaces for people with disabilities. Many organizations, both government and non-government, serve as resource centers for information and advocacy. There is also a major ongoing effort to bring the conversation around disability to the forefront, to expand awareness and inclusiveness, and enable people with disability to participate more in society through work, recreation and social activities, hence facilitating a better quality of life for all.

## Frequently Asked Questions

### **What is PM&R?**

Physical medicine and rehabilitation (PM&R), also known as physiatry, is a primary medical specialty that aims to enhance and restore functional ability and improve quality of life to those with injuries, physical impairments or disabilities affecting the brain, spinal cord, nerves, bones, joints, ligaments, muscles and tendons. PM&R physicians, known as physiatrists, evaluate and treat the whole body, maximize patients' independence in their daily life and are experts in designing comprehensive, patient-centered treatment plans to empower patients to achieve their goals. By taking the whole body into account, they can accurately pin-point problems, decrease pain, assist in recovery from devastating injuries and maximize overall outcomes and performance with non-surgical and peri-surgical options. To learn more, visit [www.aapmr.org/aboutpmr](http://www.aapmr.org/aboutpmr).

### **What makes PM&R physicians unique?**

PM&R physicians' training focuses not just on treating medical conditions, but on enhancing the patient's performance and quality of life in the context of those medical conditions. They focus not only on one part of the body, but instead on the development of a comprehensive program for putting the pieces of a person's life back together – medically, socially, emotionally and vocationally – after injury or disease. PM&R physicians make and manage medical diagnoses, design a treatment plan and prescribe the therapies that physical therapists or other allied therapists perform or that are carried out by the patients themselves. By providing an appropriate treatment plan, PM&R physicians help patients stay as active as possible at any age. Their broad medical expertise allows them to treat disabling conditions throughout a person's lifetime.

### **Why see a PM&R physician?**

A PM&R physician will thoroughly assess your condition, needs, and expectations and rule out any serious medical illnesses to develop a treatment plan. By understanding your condition and goals, you and your PM&R physician can develop a treatment plan suited to your unique needs.

### **How do I find a PM&R physician near me?**

Visit [www.aapmr.org/findapmrphysician](http://www.aapmr.org/findapmrphysician) or contact your primary care physician for a referral.