

## Core Strengthening

**Condition:** Once referred to as “spinal stabilization,” core strengthening refers to building muscles in the torso area, particularly the back, abdominal, and gluteal muscles.

**Background:** People who have weak core muscles are more prone to spinal injuries and back pain. These types of injuries can lead to missed time at work. Strengthening the core increases pressure inside the abdominal area, which acts as a natural “corset” to protect the spine.

**Risk Factors:** There are various risk factors for back pain, including jobs that require manual lifting or repetitive tasks, people with a lower income, depression and those who smoke.

**History and Symptoms:** Many spinal injuries respond to core strengthening, especially in people whose spines are relatively unstable or those who have weak muscles. Most acute spinal pain can improve dramatically within weeks when a patient follows a program prescribed by a physical medicine and rehabilitation (PM&R) physician. PM&R physicians are specifically trained to diagnose and treat musculoskeletal pain and injuries, including back pain.

**Physical Exam:** Most patients can perform and benefit from core strengthening. However, it is important to have a physical exam before starting a program, to ensure there are no underlying issues that should be addressed first. Examination by a PM&R physician is an excellent place for a patient to start with acute or chronic low back pain. A thorough history and complete examination of a patient’s posture and spinal position is necessary to better understand their current core condition and how to improve it.

**Diagnostic Process:** Each patient’s diagnosis varies—some have severe pain, others lower grade pain. Additionally, patient injuries may need to heal before a core strengthening program can begin. In certain cases, imaging such as x-rays or an MRI is obtained. With some patients, no imaging is required. A PM&R physician can make the correct decision based on each patient’s symptoms.

**Rehab Management:** If a patient is experiencing severe pain, pain medications are often prescribed before core strengthening. At times, a PM&R physician will recommend starting the rehabilitation program with only gentle stretching, and then adding in strengthening exercises when the acute back pain calms down. Typically, the strengthening program intensifies over time. It’s also important to know that for some people, core strengthening can eliminate pain; for others, it may not, but can help reduce it. Pilates and yoga are two forms of exercise a PM&R physician might also recommend for a patient with back pain. Core strengthening exercises are a great treatment plan to help keep low back pain at bay and should be continued lifelong!

**Other Resources for Patients and Families:** Core strengthening is good for everyone, not just patients with pain. The [U.S. Department of Health and Human Services](https://www.hhs.gov/health/) has published examples of basic core strengthening exercises to help you get started.

## 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.