

COVID19 Rehabilitation

Condition: COVID19 is a multisystem disease caused by the SARS CoV-2 virus from the Coronavirus family. The disease is being increasingly recognized to have long-term effects, with symptoms persisting beyond 4 weeks, referred to as *post-acute sequelae of SARS-CoV-2 (PASC) infection*, or more commonly, Long-COVID and Post-COVID syndrome.

Background: The COVID19 pandemic started in late 2019 and continues to affect the globe. The virus spreads through the air by large droplets as well as smaller particles (aerosol). These particles generated by coughing can travel several feet and stay suspended in the air for several hours. Spread through contaminated surfaces is considered a less important mechanism.

Risk Factors: *The risk of getting infected* is associated with close (less than 6 feet) and prolonged (more than 15 minutes over 24 hours) contact with persons with active COVID19 during the infective period (10-20 days since symptom onset). Compliance with social distancing and use of facemasks *decreases the risk*, while attending large gatherings especially within closed areas further *increases the risk*. *The risk of a severe course of disease* is related to age greater than 65 years, pregnancy status, medical comorbidities such as diabetes, cardiovascular disease, obesity, chronic lung disease, severe kidney disease, and an immunocompromised status such as transplant recipient, cancer and high dose steroids / immunosuppressants. Vaccines *decrease the risk* of severe disease.

History and Symptoms: Fever, cough and shortness of breath are the most common symptoms, while loss of smell and taste is among the most striking. Other non-specific symptoms include malaise, diarrhea, headaches and rashes. Severe disease can lead to additional impairments such as “brain fog” and severe generalized weakness.

Physical Exam: A comprehensive exam is required to understand the systems affected, with focus on general, cardiorespiratory, and neuromusculoskeletal systems.

Diagnostic Process: A nasopharyngeal swab sample is tested for the presence of the virus (PCR test). The illness is further categorized as mild (no shortness of breath), moderate (lower respiratory disease with oxygen saturation $\geq 94\%$ on room air), severe (requiring oxygen greater than baseline), and critical (respiratory or multisystem failure).

Rehab Management: During the acute phase of the disease, the rehabilitation management of COVID19 focuses on mobilization, cardiorespiratory endurance and strengthening as tolerated while maintaining isolation precautions. Continued rehabilitation after prolonged hospitalization is best performed in an inpatient setting with a physical medicine and rehabilitation (PM&R) physician to enable safe return to the community. This care focuses on increasing independence in mobility, daily activities, cognition, nutrition and cardiorespiratory function with physical, occupational and speech therapy, while continuing close medical monitoring with a PM&R physician. Other goals accomplished include patient and family education, mental health optimization and community resources organization for safe discharge. Persons with COVID19 should be screened after discharge for persistence of symptoms. Persistent symptoms beyond 4 weeks indicate PASC/ Long COVID. Continued care by a

team, including PM&R physician, primary care physician and other specialists is vital to ensure functional progress, medical stability and optimization of medical comorbidities. Close attention to mental health and facilitating access to self-management resources is key.

Other Resources for Patients and Families: CDC website, NHS website, peer support groups.

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.

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/findapmphysician or contact your primary care physician for a referral.