

Your Guide to Post-COVID Patient Types and Recovery

Differences Between PICS and Long-Haulers



Based on continued evaluation of the patients suffering from and recovering from COVID-19, a new subset of patients is emerging, formally called “post-COVID.” These patients experience long-lasting symptoms and typically fit into one of two categories:

1. The sickest COVID-19 patients who spent considerable time in the hospital (often the intensive care unit) and often developed **post-intensive care syndrome (PICS)** due to their extended hospital care
2. The COVID-19 patients who did not require hospitalization originally but continue to experience symptoms, and are becoming known in medical and recovering COVID-19 communities as **long-haulers**

This guide explores some of the more common experiences of long-haulers, the need for research, the clinical conditions of PICS patients, and the positive role long-term acute care hospitals play in the care of PICS patients.

Post-COVID PICS Patients

Patients who spend considerable time in an ICU are at risk of developing post-intensive care syndrome (PICS), which can have a long-lasting impact on patient well-being.

PICS has long been a known diagnosis for patients facing complex and prolonged medical treatment. According to the Cleveland Clinic, PICS is a result of a combination of factors, including receiving care in the ICU for serious medical conditions including respiratory failure or sepsis, the use of life-sustaining equipment such as ventilators and the use of certain medications. Additionally, PICS can bring on ICU-acquired weakness, cognitive or brain dysfunction and other mental health disorders.

Hospitalized COVID-19 patients are receiving life-saving care in an ICU for much longer than the average stay of three to four days and are often reliant on a ventilator, both of which puts them at high risk.

Post ICU/CCU-level patients such as these often require the specialized, interdisciplinary care that is only available in LTAC hospitals. This is because these patients are significantly sicker – with a much higher case mix index – and benefit from care provided by a team who specializes in the care of medically complex patients through customized care pathways.

COVID-19 PICS PATIENTS

The sickest COVID-19 patients who spent considerable time in the hospital (often the intensive care unit) and often developed **POST-INTENSIVE CARE SYNDROME (PICS)** due to their extended hospital care.

vs.

COVID-19 LONG-HAULERS

The COVID-19 patients who did not require hospitalization originally, but continue to experience symptoms, and are becoming known in medical and recovering COVID-19 communities as **LONG-HAULERS**.

Approximately 10% of people who were sick with COVID-19 experience prolonged symptoms beyond three weeks.

Who Are COVID-19 Long-Haulers?

For those less severe COVID-19 patients – the long-haulers – it is becoming clear that they may develop symptoms as a result of the SARs-CoV-2 infection. They have persistent myriad chronic symptoms that may continue for weeks and months after the patient has been declared virus-free.

According to a recent study in JAMA, approximately 10% of people who were sick with COVID-19 experience prolonged symptoms beyond three weeks.

Jessica Dine, MD, a pulmonary specialist at the University of Pennsylvania's Perelman School of Medicine, noted that “most of the patients I see who are suffering from [this], were not hospitalized.” She noted that they were quite ill with COVID-19 symptoms, but remained at home.¹ Another observational study from the United Kingdom also recognized that those post-COVID patients reporting a “prolonged and debilitating course of illness” were never admitted to a hospital.² It is important to note that these patients are very different from PICS patients, who spent considerable time in an ICU during their COVID-19 treatment.

According to the Mayo Clinic, common symptoms experienced by long-haulers could include, but are not limited to: fatigue, shortness of breath or difficulty breathing, cough, joint pain, chest pain, memory or sleep problems, muscle pain, headache, fast or pounding heartbeat, loss of smell or taste, depression or anxiety, fever, and dizziness when standing.³ These symptoms typically last for more than four weeks and can persist for several months.

Challenges with Lack of Long-Haulers Research

Our understanding of SARS-CoV-2 is still in its relative infancy. Consequently, there is a notable lack of validated research on the virulence of SARS-CoV-2 and how to prevent or provide long-term interventions for long-haulers.

In March 2020, Body Politic started the COVID-19 Support Group after its founder and key members became ill and discovered the lack of online content or resources for people suffering from COVID-19. In response, they launched a patient-driven survey with 640 respondents. They are now conducting a second, patient-reported survey to help understand long-term post-COVID symptoms and experiences.

The Lancet recently noted that the main limitation of current research is data reporting/fragmentation, a high risk of reporting and recall bias and no external validation. Specifically, the authors urged strong research to understand long-haulers, highlighting that “participation of an international and interdisciplinary group of researchers is essential.”

The Path Ahead

Long-term acute care hospitals have the clinical expertise and a strong and lengthy history of providing vital intensive medical care and therapies often necessary to successfully support the recovery of PICS patients. These competencies include rehabilitative therapies to recover strengths and abilities, cognitive rehabilitation and pulmonary rehabilitation to increase lung function.

LTAC hospitals deliver care for the most difficult-to-treat, critically ill and medically complex patients – such as patients with respiratory failure, septicemia, traumatic injuries, wounds or other severe illnesses complicated by multiple chronic conditions, many of which have been symptoms of post-COVID recovery.

On the contrary, due to the limited research on the prolonged treatment for long-haulers, a definitive and validated care path is not known at this time. By recognizing that most long-haulers do not access acute level care at a typical hospital, a specialized rehabilitation hospital or long-term acute care hospital, it is probable that acute medical and rehabilitation interventions may help COVID-19 patients more fully recover and support longer-term stability and recovery.

How Kindred Can Help

Kindred's long-term acute care hospitals provide high-quality COVID-19 and post-COVID interdisciplinary medical and rehabilitative care that supports a more complete recovery and return to independence.

Data demonstrate that during the pandemic, **Kindred's LTAC hospitals cared for significantly sicker patients** (higher case mix index), discharged a greater percentage of patients back to their home or community, and **reduced rehospitalizations (during the LTACH stay) of Medicare patients to less than 7%."**

The teams of skilled and caring clinicians in Kindred's long-term acute care hospitals can be the right partner for you in caring for your patients who have been in an ICU or a critical care unit, or who are chronically ill and readmit to the hospital frequently.

Kindred has proven success in treating patients with pulmonary disease and respiratory failure, including a long history of liberating patients from mechanical ventilation and artificial airways. Kindred also has decades of experience treating post-intensive care syndrome (PICS).

Many Kindred hospitals have or are in the process of achieving disease-specific certification from The Joint Commission in key conditions such as respiratory failure and sepsis.

If you have a post-COVID patient, or other patients in need of care after a hospital stay, call a Kindred Clinical Liaison for a patient assessment. Our experts will help you determine whether an LTAC stay is appropriate for your patient. If you are unsure of who your Kindred representative is, please feel free to contact us and speak with a Registered Nurse who can assist.

References:

¹ Rubin R. *As Their Numbers Grow, COVID-19 "Long Haulers" Stump Experts*. JAMA. Published online September 23, 2020. doi:10.1001/jama.2020.17709

² Rayner C, Lokugamage AU, Molokhia M. *COVID-19: prolonged and relapsing course of illness has implications for returning workers* <https://blogs.bmj.com/bmj/2020/06/23/covid-19-prolonged-and-relapsing-course-of-illness-has-implications-for-returning-workers>

³ *COVID-19 (coronavirus): Long-term effects*. Mayo Clinic. May 6, 2021. <https://www.mayoclinic.org/diseases-conditions/coronavirus/in-depth/coronavirus-long-term-effects/art-20490351>



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