**Post-COVID Conditions (PCC)** 

# Your Guide to Lingering Pulmonary Symptoms

While COVID-19 infection often resolves within weeks, some people experience lingering respiratory issues. This handout explains how short-term effects of COVID-19 can lead to long-term breathlessness and explores various strategies for managing these symptoms in your patients.

# Short-term symptoms and conditions

When patients catch COVID-19, they can experience different symptoms and conditions that impact their respiratory health, some of which are pulmonary and others that are extrapulmonary.



## **Pulmonary**

- Pulmonary fibrosis
- Thromboembolic disease
- Acute respiratory distress syndrome (ARDS)



# Extrapulmonary

- Forced decrease in physical activity
- Hypoxia
- Malnutrition
- Systemic inflammation
- Extrapulmonary immune-mediated damage

# Long-term symptoms and conditions

Months later, these short-term symptoms and conditions can cause lingering issues. These might include

- · Dysfunctional breathing: assessed using a breathing pattern assessment tool (BPAT) or cardiopulmonary exercise testing (CPET)
- Post-intensive care syndrome (PICS): physical (e.g., reduced muscle mass and strength, reduced exercise tolerance) cognitive impairments, and mental health problems
- Physical deconditioning and frailty: reduced muscle mass and strength, reduced exercise tolerance and prefrailty or frailty



All these issues can lead your patients to feel breathlessness.

# **Breathlessness can be mitigated**

with management strategies and rehab such as

# Physiotherapist-led dyspnea management

- Assesses breathing and muscle weakness
- · Teaches specific breathing exercises
- Tailors exercises for lung function and air intake

### Post-ICU rehabilitation services

- Use the Post-ICU Presentation Screen (PICUPS) tool
- Physical and occupational therapy enhance strength

### COVID-19 rehabilitation

that combines tailored exercise with breathing exercises to improve lung function and reduce breathlessness in patients with pulmonary post-COVID conditions

