

1 Minute sit to stand test

This protocol was created for GPs using clinical judgement and is currently not evidenced based.

Responsibility for interpretation of results and actions remain the responsibility of individual clinicians based on their clinical assessment of patient.

As per NICE NG188 (Covid-19 Rapid Guideline-Managing the long term effects of Covid-19)

If appropriate, offer an exercise tolerance test suited to the person's ability (for example the 1-minute sit-to-stand test). During the exercise test, record level of breathlessness, heart rate and oxygen saturation.

Follow an appropriate protocol (example below) to carry out the test safely.

Protocol

The 1STST should ideally (only) be undertaken in supervised clinical setting (e.g GP Surgery) in patients whose baseline resting O₂ saturation is >94%.

The 1STST is with a chair of standard height (46 cm) without arm rests positioned against a wall. The patient is seated upright on the chair with knees and hips flexed at 90°, feet placed flat on the floor a hip-width apart, and arms held stationary by placing their hands on their hips. Patients are asked to perform repetitions of standing upright and then sitting down in the same position at a self-paced speed (safe and comfortable) as many times as possible for 1 min. They are instructed not to use their arms for support while rising or sitting. Patients are permitted to rest during the 1-min period. The number of repetitions is recorded. A finger oximeter is connected throughout the test for continuous recording of SpO₂ and heart rate (HR).

Results

Interpretation of results is based on assessment in patients without preexisting lung disease (COPD, Idiopathic Pulmonary Fibrosis)

For advice on patients with COPD or IPL please contact Community Respiratory Team directly

An oxygen desaturation level **below 93%** is considered clinically significant and requires further assessment (see Pathway).

An oxygen desaturation level **of $\geq 4\%$ from baseline** is considered clinically significant and requires further assessment (see Pathway)

Development of new onset oxygen desaturation **post discharge of $\geq 4\%$ from baseline or below 93%** is considered clinically significant and requires further acute assessment to exclude PE/VTE

An oxygen desaturation drop of **$\geq 4\%$ AND below 93%** is significant requires further assessment (see Pathway)

Caution should be exercised and further assessment is required if oxygen saturations are maintained, but a Tachycardia **>130 and/or a respiratory rate of > 30 is observed.**

Results

- **If <4 weeks post-acute Covid-19 – and SpO₂<93% or $\geq 4\%$ drop from baseline**
- **Acute assessment (PCAL)**
- **If ≥ 4 weeks post-acute Covid-19**
SpO₂<93% or $\geq 4\%$ drop from baseline
-**Refer to Community Respiratory Service for Ambulatory oxygen Assessment.**