Executive summary of the Stanford Hall consensus statement post COVID-19 rehabilitation recommendations
1. Clinicians should follow preventive measures, wear appropriate personal protective equipment according to local policy and measures should be taken to avoid, or reduce, the risk of aerosol generation during interventions and activities. Level of evidence: Level 5. Level of agreement: mean score 9.23 (95% CI 8.66 to 9.91).
2. Rehabilitation treatment plans should be individualised according to the patient's needs, taking into consideration their comorbidities. Level of evidence: Level 5. Level of agreement: mean score 9.71 (95% CI 9.46 to 9.97).
3. For patients with COVID-19, rehabilitation should be aimed at relieving symptoms of dyspnoea, psychological distress and improving participation in rehabilitation, physical function and quality of life. Level of evidence: Level 5. Level of agreement: mean score 9.48 (95% CI 9.11 to 9.85).
4. Patients should be reviewed through the rehabilitation process. Level of evidence: Level 5. Level of agreement: mean score 8.90 (95% CI 8.23 to 9.58).
5. Patients should receive education about their condition and given strategies on how to manage recovery. Level of evidence: Level 5. Level of agreement: mean score 9.23 (95% CI 8.73 to 9.85).
6. Respiratory complications should be considered in post COVID-19 patients as they may present with some degree of impairment and functional limitation, including but not exclusively, due to decreased respiratory function. Level of evidence: Level 2b. Level of agreement: mean score 9.38 (95% CI 8.92 to 9.85).
7. Initial assessment is recommended in a timely manner when safe to do so, depending on the degree of dysfunction, normocapnic respiratory failure and patient's physical and mental status. Level of evidence: Level 2b. Level of agreement: mean score 9.00 (95% CI 8.48 to 9.52).
8. Low intensity exercise (≤3 metabolic equivalent to tasks (METs), or equivalent) should be considered initially particularly for patients who required oxygen therapy, whilst concurrently monitoring vital signs (heart rate, pulse oximetry and blood pressure). Gradual increase in exercise should be based on their symptoms. Level of evidence: Level 5 Level of agreement: mean score 8.90 (95% CI 8.23 to 9.57).
9. Cardiac sequelae should be considered in all post COVID-19 patients, regardless of severity, and all patients should have an assessment of their cardiac symptoms, recovery, function and potential impairments. Depending on the patient's initial assessment and symptoms, specialist advice should be sought, and further investigations may include a specialist blood panel, electrocardiogram (ECG), 24-hour ECG, echocardiogram, cardiopulmonary exercise testing and/or cardiac magnetic resonance imaging (CMR). Level of evidence: Level 5 Level of agreement: mean score 8.52 (95% CI 7.77 to 9.28).

10. A period of rest post infection, depending on symptoms and complications, will reduce risk of post infection cardiac failure secondary to myocarditis. Level of evidence: Level 5

Level of agreement: mean score 9.19 (95% CI 8.70 to 9.68).

11. If cardiac pathology is present, specific cardiac rehabilitation programmes should be provided tailored to the individual based on their cardiac complications, impairments and rehabilitation needs assessment. Level of evidence: Level 5

Level of agreement: mean score 9.43 (95% CI 9.03 to 9.82).

12. Patients returning to high level sport or physically demanding occupation following confirmed myocarditis require a three to six-month period of complete rest. The period of rest is dependent upon the clinical severity and duration of illness, left ventricular function at onset and extent of inflammation on CMR. Level of evidence: Level 2b

Level of agreement: mean score 9.19 (95% CI 8.64 to 9.74).

13. Training and high-level sport may resume following myocarditis, if left ventricular systolic function is normal, serum biomarkers of myocardial injury are normal and if relevant arrhythmias are ruled out on 24-hour ECG monitoring and exercise testing. Level of evidence: Level 2a

Level of agreement: mean score 9.00 (95% CI 8.44 to 9.56).

14. If returning to high-level sport or physically demanding occupation following myocarditis, patients are required to undergo periodic reassessment, in particular during the first two years. Level of evidence: Level 2a

Level of agreement: mean score 9.05 (95% CI 8.65 to 9.44).

15. Patients with COVID-19 who required oxygen therapy or exhibited lymphopenia acutely should be identified and tested for radiological pulmonary changes and pulmonary function test abnormalities. Level of evidence: Level 4.

Level of agreement: mean score 8.95 (95% CI 8.49 to 9.42).

16. COVID-19 patients who experience the following symptoms: severe sore throat, body aches, shortness of breath, general fatigue, chest pain, cough, or fever should avoid exercise (>3METs or equivalent) for between two to three weeks after the cessation of those symptoms. Level of evidence: Level 5.

Level of agreement: mean score 9.19 (95% CI 8.77 to 9.61).

17. With very mild symptoms which may or may not be due to COVID-19, consider limiting activity to light activity (≤3METs or equivalent) but limit sedentary periods. Increase rest periods if symptoms deteriorate. Prolonged exhaustive or high intensity training should be avoided. Level of evidence: Level 5.

Level of agreement: mean score 8.62 (95% CI 7.86 to 9.37).

18. Asymptomatic contacts of positive COVID-19 cases should continue to exercise as they would do normally within current government restrictions. Level of evidence: Level 5.

Level of agreement: mean score 9.19 (95% CI 8.74 to 9.64).

19. On return from mild/moderate COVID-19 illness to exercise, one week of low-level stretching and light muscle strengthening activity should be trialled prior to targeted cardiovascular sessions. Patients in the severe category should be

identified as per recommendation 15 above with exercise progression following a pulmonary rehabilitation approach (defined further in pulmonary section of main text) Level of evidence: Level 5.
Level of agreement: mean score 8.52 (95% CI 7.85 to 9.19).

20. In the acute phase, effective communication, social contact (albeit remotely) and an information sheet for people admitted to acute NHS care regarding the psychological sequelae of COVID-19 could help. Level of evidence: Level 5.
Level of agreement: mean score 8.86 (95% CI 8.33 to 9.38).

21. Individuals should be reviewed in the recovery phase to identify those who may have adverse psychological outcomes as a result of their COVID-19 experiences. Healthcare workers who contracted COVID-19 should be considered a high-risk group. This review should focus on mood and wellbeing. Level of evidence: Level 5.
Level of agreement: mean score 9.14 (95% CI 8.64 to 9.65).

22. Active monitoring (ongoing review) should be undertaken for those with subthreshold psychological symptoms. Level of evidence: Level 1a.
Level of agreement: mean score 8.81 (95% CI 8.11 to 9.51).

23. Referral to psychological services and consideration of trauma focused cognitive behavioural therapy, cognitive processing therapy or eye movement desensitisation and reprocessing is appropriate for those with moderate to severe symptoms of acute stress disorder. Level of evidence: Level 1a.
Level of agreement: mean score 8.76 (95% CI 8.17 to 9.35).

24. All patients requiring rehabilitation following COVID-19 should have a functional assessment to determine residual musculoskeletal impairments in order to determine appropriate rehabilitation. Level of evidence: Level 5.
Level of agreement: mean score 9.43 (95% CI 9.03 to 9.82).

25. Patients that have had an intensive care unit (ICU) admission should have a multidisciplinary team approach for rehabilitation. Level of evidence: Level 5.
Level of agreement: mean score 9.48 (95% CI 9.11 to 9.85).

26. Patients presenting with post intensive care syndrome should include rehabilitation efforts focusing on all three domains of impairments: psychological, physical and cognitive. Level of evidence: Level 5.
Level of agreement: mean score 9.76 (95% CI 9.52 to 10.00).

27. Physical rehabilitation following COVID-19 can be delivered in a series of settings including in-patient, outpatient, in-home telehealth or patient-directed exercises determined according to patient needs. Level of evidence: Level 5.
Level of agreement: mean score 9.76 (95% CI 9.52 to 10.00).

28. All COVID-19 patients should be reviewed for any neurological symptoms, as symptoms can be immediate (at time of active infection) or delayed (in the weeks following COVID-19). Consider a cognitive screen for those at risk (post critical care or with residual cognitive impairment). Level of evidence: Level 2b.
Level of agreement: mean score 8.48 (95% CI 7.68 to 9.27).

29. Reassurance should be given that milder neurological symptoms like headache, dizziness, loss of smell or taste and sensory changes are likely to improve with minimal intervention. Level of evidence: Level 4.
Level of agreement: mean score 8.71 (95% CI 8.02 to 9.41).

30. Education should be provided that mild to moderate neurological symptoms are likely to have a full recovery. Level of evidence: Level 3b.
Level of agreement: mean score 8.86 (95% CI 8.37 to 9.34).

31. Severe symptoms potentially may result in significant or life-changing impairment, therefore inpatient multidisciplinary rehabilitation is recommended for patients with moderate to severe neurological symptoms to maximise recovery. Level of evidence: Level 5
Level of agreement: mean score 9.43 (95% CI 9.06 to 9.80).

32. Physical, cognitive and functional assessments should be considered to support return to work according to occupational setting. Level of evidence: Level 5
Level of agreement: mean score 8.71 (95% CI 7.98 to 9.45).

33. Post COVID-19 medical sequelae should be considered in all patients. Post-acute assessment should include a full medical history and if indicated, an examination and panel of blood markers. Dual energy x-ray absorptiometry (DEXA) should be considered in cases of prolonged immobilisation. Level of evidence: Level 3b
Level of agreement: mean score 8.57 (95% CI 7.59 to 9.55).

34. In the presence of multiple pathologies or specialist issues, a rehabilitation consultant assessment is recommended with a multidisciplinary approach to rehabilitation, to manage the wide range of potential sequelae including a dietician (with supplements and micro-nutrient blood panel if required). Level of evidence: Level 1a
Level of agreement: mean score 9.57 (95% CI 9.20 to 9.94).

35. If ongoing medical problems are identified, patients should be referred on to the appropriate medical specialty for further management. Level of evidence: Level 5.
Level of agreement: mean score 9.76 (95% CI 9.52 to 10.00).

36. In post COVID-19 patients with new onset shortness of breath or chest pain, life threatening medical complications should be considered. Level of evidence: Level 5
Level of agreement: mean score 9.62 (95% CI 9.25 to 9.99).