COVID 19 and Respiratory Physiotherapy Referral Guideline

Coronavirus disease 2019 (COVID-19) is a respiratory tract infection caused by a newly emergent coronavirus SARS-CoV-2. Genetic sequencing of the virus suggests that it is a closely linked to the SARS virus and most likely to affect the airway epithelial cells. With this in mind the majority of people with COVID-19 have uncomplicated or mild illness (81%), some will develop severe illness requiring oxygen therapy (14%) and approximately 5% will require intensive care unit treatment. Of those critically ill, most will require mechanical ventilation due to severe viral pneumonia.

Many patients presenting with COVID 19 will have no specific airway clearance needs. It is important that staff contact is kept to a minimum with positive patients to help reduce the risk of transmission (follow usual on call policies and criteria)

COVID 19 patients (to date) who require hospitalisation are presenting with pneumonia features and bilateral patchy shadows or ground glass opacity in the lungs.

There have not been reports that COVID 19 positive patients have high secretion loads requiring intensive respiratory physiotherapy/airway clearance. This may change as things evolve and for that reason all presenting patients should be discussed with Consultant Respiratory Clinicians/Critical Care Consultants before any mechanical devices are used with patients and trust guidance on this followed. It is important to note some therapeutic interventions will be contraindicated for COVID 19 positive patients.

There may be patients with existing respiratory conditions who require personalised physiotherapy treatments which may include mechanical airway clearance or oscillating devices. In this scenario it is important that the risk and benefit of continuing with the regime is discussed with Consultant Respiratory Clinicians/Critical Care Consultants

It may be decided that airway clearance regimes are continued in this scenario ensuring COVID 19 suspected/positive patients are managed in isolation and full PPE and decontamination advice followed as per COVID 19: Respiratory Physiotherapy On Call Information and Guidance V2

Criteria for respiratory physiotherapy (please see full indications below)

Patients with:

- an increase in oxygen therapy to FiO2 >60%
- evidence of retained pulmonary secretions with difficulty expectorating
- Ineffective cough/airway clearance

Criteria not appropriate for emergency call-out

- Patients with a diagnosis of COVID 19 with a dry unproductive cough
- Patients with a diagnosis of COVID 19 with a severe hypoxaemia requiring intubation
- Routine respiratory patients e.g. post-operatively, unless criteria above is met.
- Patients who are requiring suction only
GUIDELINES FOR CONTACTING THE ON-CALL PHYSIOTHERAPIST

Criteria for emergency treatment:
Any patient whose respiratory status would deteriorate without physiotherapy intervention before the start of the next working day.

Respiratory Compromised Patient = presenting with more than one of the following:
- Respiratory depression, RR>23/min, increased work of breathing, retention of and inability to clear secretions independently, deteriorating ABGs/ reduced SaO2

Chronic Respiratory Problem with no acute deterioration

Acute Respiratory Problem being actively managed

NO CALLOUT REQUIRED
Make arrangements for physio review in normal working

Evidence of worsening signs and symptoms i.e. worsening ABGs/SaO2 and/or reduced status → CXR in last 24hrs

APPROPRIATE FOR ON-CALL PHYSIOTHERAPY REFERRAL—call must be made by Registrar or above. Contact physiotherapist via hospital switchboard.
Please have all information available (SBAR)
Physiotherapist will attend within 60 minutes of call as priorities allow.

ACUTE DETERIORATION or patient at significant risk of further deterioration

Appropriate medical management optimised e.g. adequate analgesia, O2, humidification, systemic hydration, antibiotics and nebulisers

Rachael Moses, Consultant Respiratory Physiotherapist, Lancashire Teaching Hospitals V1 17th March 2020
Additional Information when contacting the On-Call Physiotherapist

- If patient requires suction **ONLY**, consider as a nursing technique
- **Mobilise** any patient who is well enough—this is the most natural way of encouraging optimal pulmonary function. Such a patient is unlikely to require emergency physiotherapy.

**INCLUSION CRITERIA:** patient likely to benefit from on-call physiotherapy

- Infective exacerbation of COPD with acute deterioration
- Controlled asthma with evidence of infection, retained secretions, increased work of breathing
- Infective exacerbation of bronchiectasis or cystic fibrosis with difficulty managing retained secretions
- Significant consolidation with compromised respiratory status
- Atelectasis causing respiratory insufficiency
- **Resolving and productive** pneumonia with ineffective cough
- Recent extubation with associated retention of sputum and deteriorating ABGs/SaO2 or significant risk of deterioration of respiratory status

**EXCLUSION CRITERIA:** patient unlikely to benefit from on-call physiotherapy

- Viral Pneumonia
- ARDS
- Cardiovascular instability
- Uncooperative patient
- Unstable intracranial pressure
- Uncontrolled bronchospasm
- Pulmonary Embolism
- Non-acute COPD

Although essentially exclusion criteria; if the following co-exist with pre-existing infection or symptoms identified in the inclusion criteria they may be considered for treatment: pleural effusion, pulmonary oedema, pneumothorax, empyema, pulmonary fibrosis

**NB** The above criteria are not prescriptive but to **GUIDE** the referring clinician