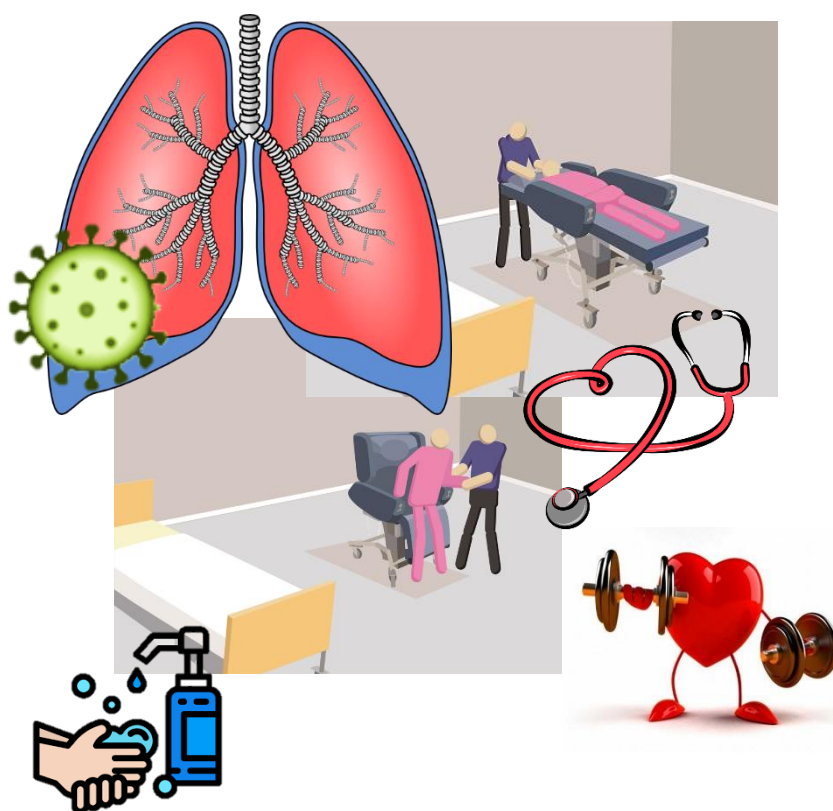


# REHABILITATION FOLLOWING CRITICAL CARE FOR COVID-19

## ADVICE & EXERCISES FOR PATIENTS TREATED ON CRITICAL CARE



THIS BOOKLET BELONGS TO: \_\_\_\_\_

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## INTRODUCTION

This booklet has been created for those patients who have been on Critical Care with Coronavirus (COVID-19) to support their recovery through hospital and when they get home. Coronavirus mostly affects people's airways and causes them respiratory issues such as cough, shortness of breath and sometimes low oxygen levels in their blood. If the level of oxygen in your blood drops very low, you may need extra support that is provided within Critical Care.

Coronavirus is passed between people via airborne droplets from coughing or sneezing, or from surfaces that an infected person has touched.

The incubation period of the virus is anywhere between 2 and 14 days, which is why if a person remains well 14 days after contact with someone with COVID-19, it is unlikely they have been infected.

## CRITICAL CARE SUPPORT



When oxygen levels in the body get critically low, they can no longer supply your organs (such as heart, brain and kidneys) with enough oxygen to work effectively. Most patients on critical care require supplementary 'pressure' as well as oxygen to help them. This is delivered by a CPAP (continuous Positive Airway Pressure) via mask or hood. Some people need a ventilator (breathing machine) to help with their breathing which means they will need to be kept asleep during that time. They may also be cared for on their fronts, this is called being 'proned', it has been shown to be effective in treating the symptoms of Coronavirus. A tracheostomy will be performed for those patients who need to be slowly weaned from the ventilator as most patients become very weak and 'deconditioned' during their stay, which will affect some more than others.

## THE TEAM



Whilst you are in Critical Care a team of expert doctors, physiotherapists, nurses, dietitians, pharmacists and speech & language therapists will work with you, to get you better. They will work together to; wean you off the support you have required, to get you out of bed, help with your nutrition, pain, speech and swallowing. Recovery can sometimes take a long time and often patients report difficult experiences like intrusive thoughts, nightmares and frustrations about their progress. This is very normal but please talk to any of the staff so that they can support you with this.

This booklet has been designed to provide patients with information, advise and exercises to support them through their recovery.

## SHORTNESS OF BREATH/ BREATHLESSNESS

We know that even after you are over the 'infective period' of Coronavirus people are still reporting feeling short of breath and easily fatigued. Breathlessness can be frightening and can cause people to feel anxious, it is important you try to remain calm and avoid panicking. Below are some positions that will help ease the feeling of breathlessness.



The muscles you use to breathe are the same muscles that support your shoulders and neck. These positions help to support your shoulders so that your muscles can be used solely for breathing.

## BREATHING EXERCISES

Performing breathing exercises can also help with breathlessness and can help clear any sputum that may have built up in your lungs.

### Relaxation Breathing for Breathlessness 'Breathing Control'

Sit or lie in a comfortable position, place a hand on your stomach and concentrate on your breathing. Relax your shoulders, allow your stomach to rise when you breathe in and fall as you breathe out. Try closing your eyes and imagine a shoreline, a wave breaking up the beach and then falling back, slow your breathing to the same rate as the wave.



## Pursed Lip Breathing



Breathe in through your nose and as you breathe out through your mouth, purse your lips as if you were going to slowly blow out a candle. Only blow out as much as is comfortable and do not force it, repeat this slowly 3-5 times.

## SCORING YOUR BREATHLESSNESS (Modified BORG Dyspnea Scale)

0	Nothing at all
0.5	Extremely Slight (just noticeable)
1	Very Slight
2	Slight
3	Moderate
4	Somewhat Severe
5	Severe
6	
7	Very Severe
8	
9	Extremely Severe (almost maximal)
10	Maximal

This is a scale that asks you to rate the difficulty of your breathing.

You can use this to score how well your lungs are recovering.

It will also be useful once you are home to guide you in how hard to exercise.

When exercising you should be **between 3-5**, stop if you get to 5+.

## PACING



Whilst you are recovering, it is normal to feel short of breath during basic activity and it is important that you pace yourself. Whilst in hospital, rehab activities will be spread out to allow time for recovery between them. Often trying to move and talk at the same time will be difficult. Whilst pacing is important, avoiding moving or exercising will only cause more weakness and loss of function.

## STRENGTHENING EXERCISES



A Physiotherapist may assess you whilst you are in Critical Care, the multidisciplinary team will plan when to get you out of bed, and they will complete exercises with you in the bed. If you have been on a ventilator, the physiotherapist will have completed stretches with your arms and legs whilst you have been asleep, but you are still likely to feel achy and your joints may feel stiff, this will improve the more you move. The team will support you getting out of bed (if needed), some patients will require a machine to assist them with transfers in and out of bed at first until they build up enough strength to safely manage without.

Below are some prescribed exercises that can be performed independently, you may be feeling tired these basic exercises will help you to regain your strength and independence quicker.

1

### Bed exercises in lying:



Lying on your back with legs straight.  
Bend your ankles and push your knees down firmly against the bed.  
Repeat \_\_\_\_\_ times.

---

2



Lying on your back.  
Tighten your thigh muscle and straighten your knee. Lift your leg \_\_\_\_\_ cm off the bed. Hold \_\_\_\_\_ secs.  
Repeat \_\_\_\_\_ times.

---

3



Lying with your knees bent and feet on the floor hip width apart. Tilt your pelvis backwards, tighten your bottom and abdominals, lower one leg out to side and return, change leg.

Keep your back flat on the floor during the exercise.

Repeat \_\_\_\_\_ times each leg.

---

4



Lying on your back with knees bent.

Squeeze your buttocks together and lift your bottom off the floor. Return to starting position. As you lift your bottom up, push your knees away from you and increase the weight through your feet. Hold at the top for 20 seconds

---

5



Lying on your back or sitting.

Bend and straighten your ankles briskly. If you keep your knees straight during the exercise you will stretch your calf muscles.

Repeat \_\_\_\_\_ times.

## Exercises in sitting:

6



Sit.

Bend and straighten your ankles.

Repeat \_\_\_\_\_ times.

7



Sit on a chair.

Pull your toes up, tighten your thigh muscle and straighten your knee. Hold approx. 5 secs. and slowly relax your leg.

Repeat \_\_\_\_\_ times.

8



Sitting on a chair.

Lift your leg up off the seat keeping the knee bent. Return to starting position.

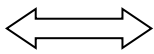
Repeat \_\_\_\_\_ times.

## Neck Exercises:

Sit with your back straight and your feet on the floor.

Complete the marked neck exercises below *slowly* and repeat each one \_\_\_\_\_ times.

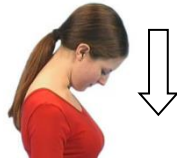
9



Look right & left



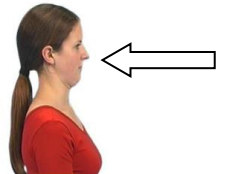
Look up



Look down



Tilt your head to your shoulder, both sides



## Shoulder Exercises:

10



Sit or stand.

Roll your shoulders in both directions.

Repeat \_\_\_\_\_ times.

11



Sit or stand.

Lift your arm up letting the thumb lead the way.

Repeat \_\_\_\_\_ times.

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12



Stand or sit.

Stretch one arm over to the opposite shoulder by pushing it at the elbow with your other arm. Hold the stretching approx. 20 secs. - relax.

Repeat \_\_\_\_\_ times.

---

13



Stand or sit.

Lift your arm up sideways with thumb leading the way.

Repeat \_\_\_\_\_ times.

## PROGRESS

The Critical Care Team will try to keep you up to date with your progress and they will update your next of kin. The physiotherapists complete daily functional scores this enables us to monitor each patients physical recovery- we encourage you to discuss this with the physiotherapists so that you can track your progress. Gradually increase the amount of repetitions you are able to complete up to 10-12 of each.

Once you are independently mobile or your therapist has instructed you, progress to the 'Advanced Exercises' (found on page 10).



## FAMILY INVOLVEMENT



Due to current restrictions, your family might not be able to visit. They can still provide support and encouragement remotely via the use of a phone or digital device –if you don't have your own please ask a member of the team if they can support you with this.

## ACHIEVEMENTS



We love to celebrate our patients' achievements, below is a box to be completed to show what rehabilitation achievements have been made during your hospital stay- please add your achievements!

DATE	REHABILITATION RECORD

## BEING DISCHARGED TO THE WARD

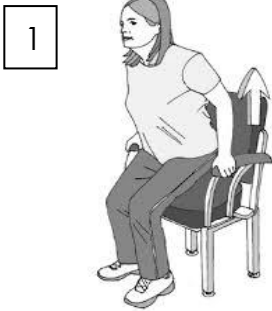


Moving to the ward is a positive step in the recovery process. Patients will find that they are expected to do more for themselves and physiotherapy sessions will reflect a return to independence assisted by the nursing staff and occupational therapists.

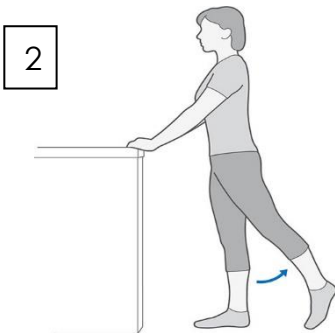
It is difficult to place a time scale on recovery as everyone recovers at a different rate. It also depends on a number of factors; such as age, previous level of fitness, degree and nature of the illness and the effort put into rehabilitation- this can take several months and can continue in the community setting.

## ADVANCED EXERCISES

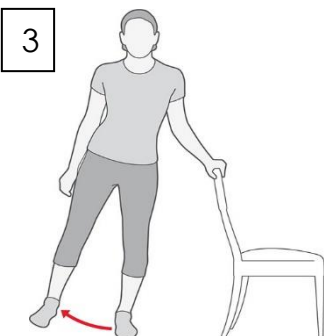
Only try these exercises once you have discussed them through with your nurse or physiotherapist or if you can walk independently.



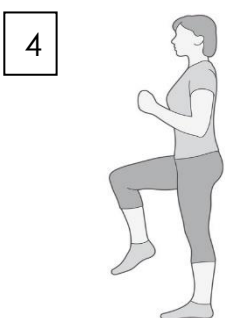
Practice standing from a seated position, use the arms of the chair to help you push up if you need to. Start with trying 3-5 of these and build up over time once you are home.



Holding onto a stable surface in standing, practice lifting your leg out behind you and back to centre. Complete 5-10 repetitions on both legs.



Holding onto a stable surface in standing, practice lifting your leg out to the side, not too far, and back to centre. Complete 5-10 repetitions on both legs.



Holding onto a stable surface in standing, practice marching on the spot, do this slowly and lift your knees as high as is comfortable. Start with 10 and slowly build up.

Not all exercises need to be done at once so break them down into manageable sessions. Take regular rests particularly if you are feeling short of breath. These exercises should be manageable, **stop if you are in pain or severely short of breath.**



## **BEING DISCHARGED FROM HOSPITAL**

The decision for you to be discharged from hospital will ultimately be made by your Consultant. These decisions will be made in close consultation with other members of the team who have been taking care of you during your recovery including the nursing staff and the wider MDT.

The support that you will require when you are discharged will vary depending on many factors including your personal circumstances, illness and length of hospital stay. Some patients will require support with their activities of daily living when they return home, if required, this will be arranged in hospital. You can discuss any difficulties in daily living with the Occupational Therapist.

Once you have been discharged from hospital your recovery will be well underway and will continue after discharge. It may take some time for people to see a 'full' recovery, and thus the recovery phase can lead to understandable frustrations, stress, worry and low mood. The emotional impact of having been so unwell can last for some time. Reflecting on the progress you have already made to get home and the celebrating other signs of progress and achievements, can be helpful in keeping motivated and engaged in continuing your rehabilitation after hospital.

After being severely ill it can take many months before you start to feel completely better, however you should notice there will be many things you start to get back to doing easier, quicker on the way. The speed of your recovery can depend on lots of things. For example, how unwell you were, how fit you were before coming into hospital, how well you are able to join in with the rehabilitation process. It is important to remember you have been critically ill, and to be kind to yourself, as you and your body recondition.

Your medication may have been changed from what you were taking prior to your admission. A supply of tablets will be given to you before you leave the hospital with information and instructions. Your GP will prescribe the medications required. Please discuss any concerns you have regarding your medication with the medical team. You will be invited back to a 'Critical Care Follow up Clinic' in 2-3 months following discharge home.

If you feel there will be a difficulty with your relatives or friends collecting you or your travel home, please discuss this with your nurse.

## **RECOVERING AT HOME**

The best thing you can do for your recovery is to start moving. Start with your normal daily activities such as getting out of bed, washing, feeding yourself then, sitting out in a chair. 'Reconditioning' yourself after a period of 'deconditioning' takes time and is a journey, don't expect too much from yourself too soon.

## SELF ISOLATION AT HOME



Once home, you should self-isolate for 14 days after the onset of symptoms in order to minimise transmission. This is longer than the 7 days of isolation for individual who remain at home with symptoms, since those admitted to hospital have a higher viral load at the time of illness (meaning you are contagious for a longer period).

Please discuss your particular case with the Doctor discharging you before you leave the hospital.

Public Health England have guidance online that fully explains the importance of self-isolation and how this should be followed-



<https://www.gov.uk/government/publications/covid-19-stay-at-home-guidance/stay-at-home-guidance-for-households-with-possible-coronavirus-covid-19-infection>

## EXERCISING AT HOME



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Whilst you were unwell, your body will have used energy needed to survive from its stores in your muscles. Combine this with reduced activity levels, your muscles may be smaller and weaker.

Activities may seem harder and more tiring than you are used to. Patients have found this could lead to them becoming increasingly inactive or doing lots of jobs together when they have a good day. This can lead to a flare-up of pain or general weakness and the need to rest for a few days. This can feel frustrating and like you're not improving.

Make sure you pace yourself—little and often is the best course of action.

**Try to gently exercise at least twice a week once you are home, to build up your strength and balance.**

## PACING AT HOME



- Spread activities out over the day by prioritising what needs to be done.
- Take frequent breaks to avoid an overactivity/under activity cycle.
- Try not to talk and move at the same time.
- Give yourself time to recover your breath and conserve your energy for the task.

