Spaulding Outpatient Center – Cape Ann

Post Covid Recovery Program

Spaulding Rehabilitation has a Post Covid Recovery Program that consists of an evaluation by a physiatrist with subsequent referrals to physical, occupational, and speech therapy as needed to provide a collaborative and comprehensive approach to treating the after effects from a positive Covid-19 diagnosis. The program is covered by your insurance typically and possibly will be exempt from co pays, deductibles, and coinsurance. An added bonus is that this is part of a research study and we will be publishing results at some point in the future.

Here is a link for general information about our local center here in Gloucester that offers Physical Therapy and Occupational Therapy services.

Post COVID-19 Outpatient Rehabilitation Program

We are here to help

For many COVID-19 survivors, they will continue to face physical, cognitive, or mental health problems after diagnosis. To address these multifaceted recovery needs, Spaulding Rehabilitation Hospital is dedicated to providing specialized, multidisciplinary care for the rehabilitation of patients Post COVID-19.

Who is eligible?

Spaulding welcomes patients who have had a positive laboratory diagnosis of COVID-19 and continue to experience recovery symptoms.

What symptoms do we address?

Patients who are recovering from a critical illness may experience various symptoms. Some of the common symptoms following a critical illness that we address include:

Physical Symptoms	Cognitive Symptoms	Psychological Symptoms
Functional Impairments (ie. difficulty performing activities of daily living)	Memory difficulties	Trouble sleeping
Weakness and balance problems	Concentration or attention difficulties	Post- hospitalization anxiety or depression
Musculoskeletal pain or contractures	Slowed mental processing	
Deconditioning	Difficulty carrying out tasks	
Dysphagia		

Care and Services

Our clinic will provide a number of services based on each patient's individual need. Our multidisciplinary physician-led team consists of physiatrists, physical therapists, occupational therapists, speech language pathologists, and case managers.

- Patients will have an initial evaluation with a physiatrist to assess their neurologic, musculoskeletal, cognitive, and psychological needs.
- Physical therapists will conduct evaluations following discharge and design an individualized, home-based exercise program to address the patient's musculoskeletal, and neurologic impairments.
- Occupational therapy sessions will be offered to help patients who have difficulty performing activities of daily living including eating, bathing, dressing, and toileting.
- Speech language pathologists will be offered to provide assistance with swallowing and cognitive impairments.
- Ongoing rehabilitation care can be continued at one of our convenient Spaulding Outpatient Center sites when in person visits are appropriate.
- Translator services are available for non-English speaking patients.
- Virtual visits, outpatient rehabilitation and home-based rehabilitation are available.

How to make an appointment

For patients - please visit our website: https://spauldingrehab.org/conditions-services/post-covid-19 and call the SRH Salem Outpatient Clinic at (978) 825-8709 and ask for Dena Roberts or leave a message and she will get back to you.

For MGB providers in EPIC - please place a consult for “PMR”, choose “SRN sites”→ Location “SRN Boston- Main Campus”→ Reason for referral “COVID-19 recovery”.

For non-MGB providers - please call the SRH Boston outpatient clinic at 617-952-6220 or fax referral to 617.952-5940 ATTN: Post COVID-19 Outpatient Rehabilitation Program.

Recovering from COVID-19:
A Patient Guide

This guide was created by the Departments of Rehabilitation Medicine at Columbia University Irving Medical Center and Weill Cornell Medical Center as part of the New York-Presbyterian Hospital System. Within this packet of information, you will find information about recovering from COVID-19, the disease caused by the novel SARS-CoV-2 virus, also known as coronavirus.

The intent of this guide is to provide information on how to maximize your recovery from COVID-19 through improving your breathing muscles and the muscles in your arms and legs. Sleep and nutrition are also important.

- We appreciate the opportunity to participate in your care, and wish you the best in your recovery. **Please contact us at the Spaulding Outpatient Clinic 617-952-6220 to make an appointment to discuss your specific rehabilitation needs after discharge.** In addition, a list of Spaulding Rehab Outpatient locations providing this program is found on the following page.

Spaulding Outpatient Center Locations:

Boston
Therapy Center Phone: 617.952.6200

Medical Clinic Phone: 617.952.6220

Braintree

617.952.6100

Brighton

617.952.6200

Cambridge

617.952.6800

Cape Ann

978.281.9560

Downtown Crossing

617.728.6050

Framingham

508.872.2200

Hanover/Emilson YMCA

617.952.6400

Hyannis

508.771.1300

Marblehead/JCC

781.639.1131

Marblehead/YMCA

781.639.0055

Lexington (Spaulding Outpatient for Children)
781.860.1742

Lynn
781.581.0484

Malden

617.952.6420

Medford

781.391.7518

Orleans

508.240.7203

Peabody

978.532.6635

Plymouth

508.927.7424

Quincy/South Shore YMCA

617.952.6990

Salem (Spaulding Outpatient for Children)

978.825.8800

Salem
978.825.8700

Sandwich
508.833.4141

Sandwich (Spaulding Outpatient for Children)

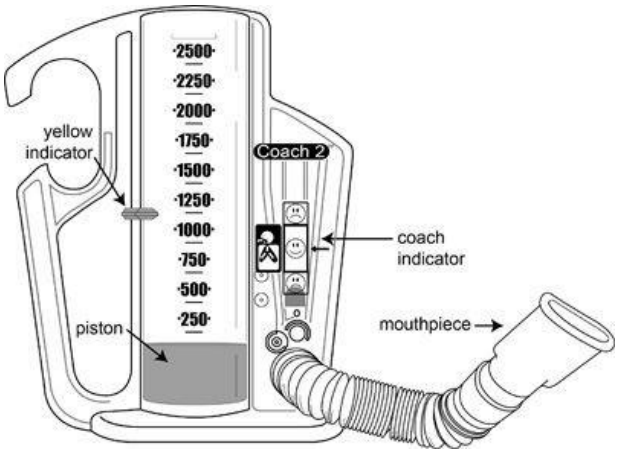
508.833.1060

Wellesley
781.431.9144

Westborough
508.872.2200

Breathing exercises

- The muscles that help you breathe need to be strengthened as you recover from your lung infection. These muscles include the diaphragm as well as the muscles in the chest wall.
- You should have received an **incentive spirometer** when you were discharged from the hospital. This device helps to strengthen the breathing muscles and open up the airspaces in your lungs. It is designed to help you take long, slow, deep breaths, like natural sighing or yawning.
- You should use the incentive spirometer for 15 minutes throughout the day, and you can break this up into 3 sessions.



- A good video on the proper use of the incentive spirometer can be found here: https://youtu.be/-O-Zawtb32o

How to use the incentive spirometer

Sit upright in a chair or at the edge of your bed.

Hold the incentive spirometer in an upright position. Breathe out

normally. Place the mouthpiece in your mouth and seal your lips

tightly around it.

Breathe in slowly and as deeply as possible. Notice the ball or piston rising toward the top of the column.

Hold your breath as long as possible (at least for 5 seconds). Take the mouthpiece out of your mouth and exhale slowly and allow the piston to fall to the bottom of the column.

Rest for a few seconds and repeat steps one to five at least 10 times.

Position the indicator on the side of the spirometer to show your best effort. Use the indicator as a goal to work toward during each slow deep breath.

Mental Health

- Engage in regular communication for social purposes while in isolation. Use phones, video calls, or social media to engage with family and friends.

- You may have feelings of regret, resentment, loneliness, helplessness, and depression. Recognize that these are naturalafter what you have gone through, and you are not to blame.

- Eating a healthy diet, engaging in the exercises outlined in this packet, and getting good sleep will improve your outlook and feelings of well being.

- Many people require emotional support in these circumstances. If you need to speak to someone immediately, call various hotlines for support including the Samaritans Statewide Helpline: 1-877-870-4673, or call 211 for Massachusetts support and referrals, or call the national NAMI hotline for COVID-related distress at 1-800-950-6264.

- Aim for at least 7 hours of sleep per night.

- Exercise during the daytime, which will help you feel more tired at night.

- Avoid caffeine after noon. Caffeine lasts in your body for many hours, and affects your sleep long after last use.

- Avoid alcohol, as it reduces REM sleep and also causes you to wake up at night to urinate.

- Avoid blue light exposure for at least 1 hour prior to bedtime by enabling night shift mode on your phone or laptop, turning off the TV.

- Consider meditating prior to bedtime with the help of guided meditation applications, such as Headspace or Calm. Allow your mind to come to rest.

- Aim to go to bed the same time each night and rise the same time each morning. Avoid spending any time awake in your bed during the day, and, if possible, avoid napping during the day

Preface to Exercise

- **Pulmonary rehabilitation** is a program of exercises that helps you improve your shortness of breath, increase your exercise capacity, and improve quality of life. These exercises include breathing exercises to strengthen the muscles of your chest as you recover from your lung infection and muscle strengthening exercises which address the weakness and muscle loss that can occur after a lengthy hospital stay.
- Home-based exercise therapy can be just as effective as an in-person hospital based program. We can help guide your progress with physician and physical therapist telemonitoring using video visits
- If you are unsure about your participation in exercise, speak with your physician. These exercises are meant to be performed alone, so do not proceed if you do not feel well enough to exercise.

- **Walking**. During your recovery period, we encourage you to walk, even if at home, to improve your overall conditioning.
  - Week 1: 5 minutes, 5 times per day
  - Week 2: 10 minutes, 3 times per day
  - Week 3: 15 minutes, 2 times per day

- **Positioning** – Spending many hours on your back can lead to deconditioning and other medical problems. We recommend sitting upright as much as you can during the day, walking around your space as tolerated, and changing positions regularly. Some patients have an easier time breathing on their stomachs with a pillow under their chest, which can open up different parts of the lungs.
- **Monitoring** –
  - Option 1: You may have a pulse oximeter at home with you. This will help monitor your heart rate and oxygen levels during activities and exercises. Check and log your heart rate and oxygen level before, during, and after exercises (an Exercise Log is provided for you at the end of this packet) to monitor how your body is responding to your exercises. If you can talk during exercise, you are most likely not over exerting. Normal oxygen saturation is 96-100% and it **should not go below 88% during exercise**. Stop exercising and rest if you see a drop in your oxygen saturation below 88%.
  - Option 2: If you do not have a Pulse Oximeter, you may assess how you are responding to exercise by utilizing the Borg Rate of Perceived Exertion (RPE) scale. This will allow you to self-monitor how hard you are exercising. In the beginning, even simple things may feel very difficult, but this will help you monitor improvement and functional recovery as things improve. Check and log your RPE during exercise in the Exercise Log provided.

You should aim for level 4-6 Moderate Activity as described below:

Exercise Precautions

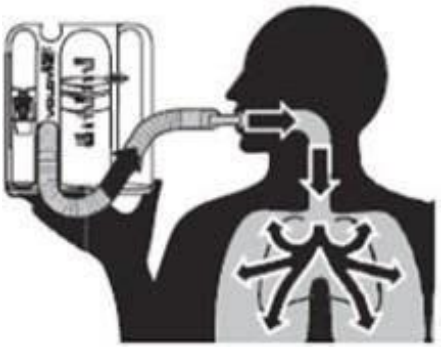
- BEGIN this exercise program after discharge from the hospital and have no fever.
- STOP exercise immediately if you get chest pain, palpitations, exhaustion, or dizziness/lightheadedness. Contact a physician promptly if these symptoms persist.
- Keep your mask on when exercising if there are others around you.
- Please refer to the YouTube links contained in the last page of this manual for further reference.

Exercise Program Instructions

General Instructions	• The 8 exercises in each Phase are the same, but the amount of time you will spend exercising will increase as you progress. • If you do not have a pulse oximeter, listen to your body. If you can talk during exercise, you are most likely not over exerting. If it is difficult to talk, then stop to take a break. Log your RPE in the Exercise Log (on the last page of this packet). • If you have a Pulse Oximeter, use it to monitor your oxygen level and heart rate while you perform all exercises. Your goal is to complete each exercise of each phase with your oxygen level never dropping below 88% - so check it often during the exercise program. Stop if it drops below 88%, and contact your physician or physical therapist. Log your oxygen level and heart rate in the Exercise Log (on the last page of this packet). • Perform all exercises with a phone nearby, or when someone else is in the home, in the event that you do not respond well and develop symptoms. ◦ Required equipment for this exercise program below includes: Incentive spirometer, Chair, and a Stabilizing surface to support your balance, such as a table, countertop, or dresser and pulse oximeter (if you have it) • If you have any questions or concerns, please consult with a physician or physical therapist at any point – We are here for you!
Phase 1:	Complete each exercise and rest in-between each exercise. Perform this circuit of exercises from start to finish **one time**, then repeat the circuit up to four times per day. As a suggestion, perform one set of exercises separated by a time period of 2-3 hours between each set, for a total of four times per day. Perform this for 7 consecutive days.
Phase 2:	Complete each exercise and rest in-between each exercise. Perform this circuit of exercises **two times**, up to 2 times per day. As a suggestion, perform one set of exercises in the morning and one in the afternoon, for a total of two times per day. Perform this for 3 consecutive days. **On the fourth day of this week, take a rest from the exercise program.**

Phase 3:	Complete each exercise and rest in-between each exercise, as prescribed. Perform this circuit of exercises **three times** consecutively, up to 2 times per day. As a suggestion, perform one set of exercises in the morning and one in the afternoon. Perform this for 3 consecutive days.
Phase 4:	At the end of 2 weeks, you may proceed to performing the YouTube videos presented below: • Pulmonary Rehab, English: https://youtu.be/PG3ThYK-bsE • Pulmonary Rehab, Spanish: https://youtu.be/exrZO6lxXmI

Exercise Program

Exercise	Instructions	How long	Diagram
Diaphragmatic Breathing	Lie on your back with your head on a pillow and a pillow under the knees, or your knees may be bent. Put one hand on your chest and one hand on your belly. Breathe deeply through your nose, allowing your chest and belly to expand, and out through your mouth. Perform for 1 minute. Then, rest for 30 seconds.	1 minute	[1] 
Incentive Spirometer Exercise	Sit as tall as you can, with your shoulder blades pinched back, and your chest out. Breathe out completely, then with an incentive spirometer, slowly breathe into your maximum inhalation, and slowly breathe out. Perform for 1 minute. Then, rest for 30 seconds.	5 minutes	[2] 
Sit to Stand Squats	Start by scooting toward the front of the chair. Next, lean forward at your trunk, reach forward with your arms and rise to a standing position. Lower your arms as you stand up. Use your arms as a counter-balance by reaching forward when sitting down.	30 sec	[3] 
	Repetitively stand-up and sit-down for 30 seconds at a comfortable pace. Rest in a seated position for 30 seconds.		

Exercise	Instructions	How long	Diagram
Standing March	While standing, draw up your knee with control, pause with your knee in the air for 2 seconds, then set it down and then alternate to your other side. Use one arm or both arms for support, if needed for balance and safety. Continue alternating each side continually for 30 sec. Rest in a seated position for 30 sec.	30 sec	 4
Seated Arm Reaches	In a seated position, begin by positioning your arms like the picture on the left, with your thumbs next to your opposite front pockets. Bring your arms up and across your body, turning your palms towards your face while slightly arching your back. End with your thumbs pointing backwards. Return your arms to the starting position and repeat. Continue this movement for 30 seconds. Rest for 30 seconds.	30 sec	
Standing Heel Raises	While standing, raise up on your toes as you lift your heels off the ground as high as you can. Pause for 2 seconds. Lower your heels to the ground with control. Continually repeat this full motion, up and down for 30 seconds. Rest for 30 seconds.	30 sec	 12

Exercise	Instructions	How long	Diagram
Sidestepping	Stand straight. Take a lateral step to one side. Follow with your other leg. Maintain your balance. Maintain proper posture and breathing. Repeat for the length of your counter or dresser, or ~5 steps to one direction. Repeat going in the other direction. Continue sidestepping back and forth for 30 seconds total. Rest for 30 seconds.	30 sec	
Wall Pushups	Start with your hands on the wall and elbows and trunk straight. Slowly bend your elbows, lowering yourself towards the wall. Then slowly push away from the wall. Your hands should never be higher then the level of your shoulders. Repeat this exercise for 30 sec. Rest for 30 sec.	30 sec	5 

Congratulations! You did it!

Rest & Stay Hydrated!

Additional Helpful YouTube Video Links

These videos provide additional general exercise suggestions that may be helpful for some patients. Please use discretion when performing these exercises on your own. Please do not proceed if you experience shortness of breath, chest pain, palpitations, exhaustion, or dizziness/lightheadedness, and consult with a physician or physical

therapist for further guidance.

- Upper Body, English: https://youtu.be/o7ulS3B9pnY
- Upper Body, Spanish: https://youtu.be/eq1anDP2pZ0
- Hand Exercises, English: https://youtu.be/uZY3Y00awQw
- Hand Exercises, Spanish: https://youtu.be/XLdfsBv-vHs
- Lower Body Exercise:
  - Intro: https://youtu.be/aP7kB6W78Yw
  - Supine Beginner: https://youtu.be/FMgTN78Uf6E
  - Supine Mid-level: https://youtu.be/dFdsji_YPGU
  - Supine Advanced: https://youtu.be/5GyFTphhA7Y
  - Seated: https://youtu.be/vcfHr0UrYR4
- Breathing Exercises:
  - Incentive Spirometry: https://youtu.be/ggbJLKrcx48
  - Thumbing a ride (PNF): https://youtu.be/NN3CGdOfEcI
  - Huffing: https://youtu.be/4ZdSgqUfRxY
  - Focused breathing (pursed lip): https://youtu.be/4JckzNccv90
  - Diaphragmatic breathing: https://youtu.be/WUumD29uvmg
- Relaxation (Yoga/Tai Chi):
  - Tai Chi: https://youtu.be/sx9li6V3LmY

Exercise Log					
Day	**Oxygen Level Before**	**Heart Rate Before**	**Oxygen Level After**	**Heart Rate After**	**RPE**
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11	**REST DAY**				
12					
13					
14					