

LONG COVID SYMPTOMS AND APPROACH

Background: Patients diagnosed with COVID-19 can have persistent symptoms after their initial recovery (2-4 weeks). Those symptoms have been termed “long COVID” throughout the medical literature with the most experience coming out of the United Kingdom. Based on research that has been done in the UK, a local group of UVMCC clinicians gathered to discuss an approach that we could use at UVMCC. Knowing that many of these patients will have follow up visits at their PCP practices, they have developed the following guidance:

SYMPTOMS THAT PATIENT IS REPORTING	IF PATIENT CALLS, ACTION THAT SHOULD BE TAKEN BY RN STAFF	PROVIDER ACTIONS
<b>Cardiac:</b> New chest pain or CHF symptoms (orthopnea, PND, DOE)	-Triage as per protocol for chest pain. Assess for acute vs chronic symptoms. Notify provider per protocol (high priority).	- consider emergent work up for myocarditis/myocardial infarction - consider urgent cardiology referral vs ER evaluation
<b>Neuro:</b> New neurologic or acute neurologic event	-Suspect acute CVA?—send patient to ER. - Triage symptoms for acute vs. chronic. -send to provider as high priority.	-If acute→ ER -If subacute, consider referral to neurology.
<b>Pulmonary:</b> New or worsening breathlessness or persistent SpO2<92%	-Triage and send to provider as high priority	- Work up for PE or pneumonia - Consider referral to Pulmonary
<b>Pulmonary:</b> shortness of breath with resuming activities (poor exercise tolerance)	-Triage for acute symptoms -Schedule in person visit (assuming isolation is complete)	-Consider if there is need for acute work up. - If no acute issues, refer to Physical Therapy for guidance on resumption of activity
<b>Cardiology:</b> elevated HR with rest/exercise, orthostatic changes	-Triage for acute symptoms -Schedule in person visit (assuming isolation is complete)	-Consider if need for acute work up -Consider referral to PT
<b>Neuro:</b> persistent headache, paresthesia, impaired balance,	-Triage for “red flag” symptoms per protocol	-Consider referral to neurology - Consider referral to PT
<b>Neuro:</b> brain “fog”, organizational issues	-assess for acute issue	-refer to OT/SLP as indicated (see table below)

<b>Musculo-skeletal:</b> persistent muscle weakness, myalgias, joint pain	-Evaluate for “red flags” (red/hot joint)	-Referral to rheumatology for more severe symptoms -Referral to PT for mild-moderate symptoms.
<b>Gastro-intestinal:</b> persistent diarrhea	-Evaluate for “red flags” (>10 stools/day, blood in stool)	- Evaluate for common causes (C Diff if recent antibiotics) -Consider referral to GI
<b>Psychological:</b> sleep disturbance, anxiety, depression, isolation, PTSD-like symptoms	-Assess for safety/acuity -schedule visit with PCP office (telehealth or in person)	-Consider need for medication -Refer to Medical Home Care Manager for referral to counseling.

**Provider Guide - Referring a Patient for Outpatient rehabilitation Therapy Service Based on Persistent Post Viral Symptoms (Call (802) 847-1902 if you have questions)**

OP Referral	Patient symptoms/ impairments/ difficulties with (that haven't improved in 2-4 wks.):
Audiology	1. Hearing difficulties
Occupational Therapy	2. Fatigue during personal care and home tasks (cooking cleaning, laundry, banking, meal preparation, other home responsibilities) and need for effective strategies for energy conservation and work simplification
	3. Fatigue related to managing roles and responsibilities in the home and community that impact work, school, leisure and social participation
	4. Attention, memory or thinking difficulties related to personal care and home tasks (banking, paying bills, medication management, meal planning, grocery shopping or other home responsibilities)
	5. Attention, memory or thinking difficulties managing roles and responsibilities that impact home, community, work, school, leisure or social participation
Physical Therapy	6. Low endurance, fatigue, low exercise tolerance, difficulty with breathing during activity and exercise, or difficulty determining a safe progressive exercise program
	7. Impaired balance and falls
	8. Dizziness and/ or vestibular impairment
	9. Loss of strength
Speech-Language Pathology	10. Swallowing difficulties with coughing, choking or respiratory difficulties with eating/ drinking
	11. ENT or Pulmonary diagnosis of vocal cord dysfunction: difficulty getting breath in, tightness in throat
	12. Voice disorders (hoarseness, difficulty getting voice volume to be heard, loss of voice)
	13. Word retrieval or other difficulties putting thoughts into words
	14. Difficulty understanding information heard or read
	15. Attention, memory or thinking difficulties impacting daily communication (speaking, listening, reading, and/ or writing)

**SPECIALTY PROVIDERS WHO ARE INTERESTED IN TREATING LONG-COVID PATIENTS:**

**Cardiology:** Ahmed Harhash, MD

**Pulmonary:** Katie Menson, DO and David Kaminsky, MD

**Infectious Disease:** Lou Polish, MD

**Rheumatology:** Bonita Libman, MD, Ralph Budd, MD

**Hematology:** Tim Plante, MD (thrombosis)

**Neurology:** Waqar Waheed, MD

**Gastroenterology:** Jane Roberts, MD

**Renal:** TBD