

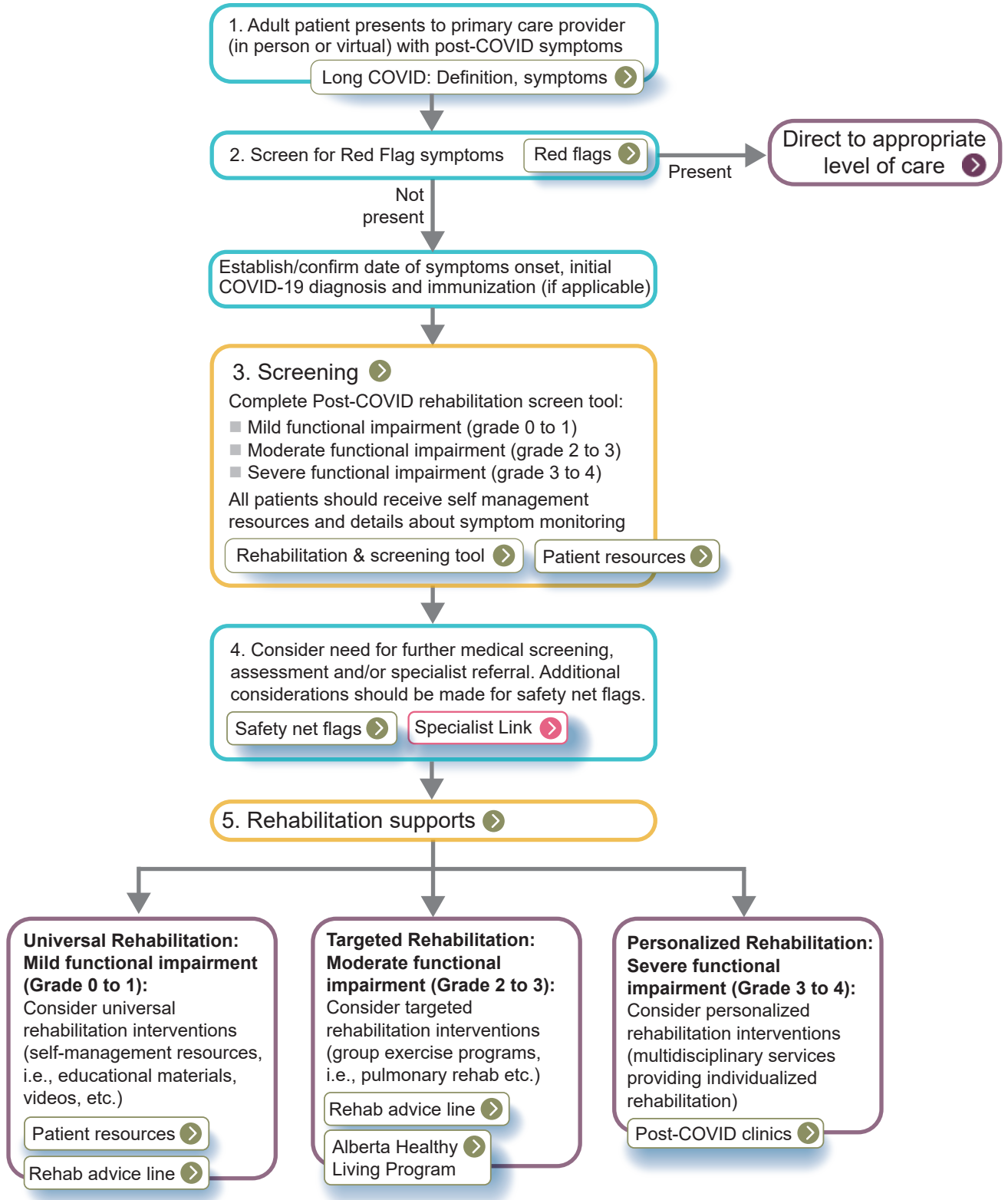
Calgary Zone Primary Care Long COVID-19 Pathway

Quick links:

[Expanded details](#)

[Provider resources](#)

[Patient resources](#)



PATHWAY PRIMER: LONG COVID

- This pathway is intended to identify rehabilitation needs for:
 - Patients aged 18 and over
 - Patients with confirmed or suspected COVID-19 diagnosis with ongoing symptoms beyond four weeks
 - Patients with long standing medical or functional issues, as a result of a previous or suspected COVID-19 diagnosis

EXPANDED DETAILS

1. Long COVID Definitions¹ and symptoms

- COVID-19 clinical definitions include:
 - **Acute COVID-19:** Signs and symptoms of COVID-19 for up to four weeks.
 - **Ongoing symptomatic COVID-19:** Signs and symptoms of COVID-19 from four to 12 weeks.
 - **Post-COVID-19 Syndrome / Long COVID:** Signs and symptoms that develop during or after an infection consistent with COVID-19, continue for more than 12 weeks and not explained by an alternative diagnosis.
- Common symptoms:
 - Respiratory – dyspnea, cough, chest pain
 - Neurological – fatigue, headache, loss of smell (anosmia), cognitive impairment, loss of taste (ageusia)
 - Musculoskeletal – muscle/joint pain (myalgia/arthritis)
 - Mental health – sleep impairments, depression, anxiety

2. Screen for Red Flags

- Severe shortness of breath at rest
- Difficulty breathing
- Pain or pressure in chest
- Cold, clammy or pale mottled skin
- New onset of confusion
- Blue lips or face
- Becoming difficult to rouse
- Coughing up blood
- Reduced urine output
- Return of cough after period of improvement* may signal development of COVID-19 pneumonia
- Return of fever after afebrile period* may signal development of COVID-19 pneumonia
- Oxygen Saturation
 - Helpful tool to indicate disease severity when available
 - If previously healthy lungs or previously documented normal O2 sat – a new reading of < 92% is a red flag
 - If underlying lung disease with documented low normal O2 sat at baseline – a new reading of < 90% is a red flag



- If patient on home oxygen normally and their O2 requirements increase with COVID-19 illness – this is a red flag

Red flags: More information

Emergent Management	<p>Call 9-1-1, if:</p> <ul style="list-style-type: none"> • Patient has impaired level of consciousness • Patient has severe respiratory distress (documented hypoxia, breathless at rest, unable to speak in short sentences) • New weakness with inability to ambulate independently
Urgent < 1-hour Assessment	<p>Call RAAPID South at 1-800-661-1700 or 403-944-4486 if:</p> <ul style="list-style-type: none"> • Patient clinically stable (see Emergent Management criteria) • You feel the patient needs to be seen in Urgent Care or Emergency Department to be assessed for possible admission
Urgent < 1-hour daytime advice	<p>Use specialistlink.ca COVID-19 advice line if:</p> <ul style="list-style-type: none"> • Patient clinically stable (see Emergent Management criteria) • You are unsure of the best course of management in a deteriorating patient who is clinically stable • The advice you seek is NOT about public health issues like quarantine advice and contact management (email phc@ahs.ca)
Semi-Urgent < 24-hour assessment in residence	<p>Community Paramedics program</p> <ul style="list-style-type: none"> • Consider if patient needs in home assessment of O2 sat, vitals or fluid therapy • MAY be limited by available resources – if so, consider calling RAAPID or using specialistlink.ca <p>Community palliative care paramedic program (EMS Palliative and End of Life Care: Assess, Treat and Refer)</p> <ul style="list-style-type: none"> • Utilize if patient C1 or C2 • For end of life, supportive comfort care in the home that has been discussed and agreed to by patient/family

3. Complete Post-COVID rehabilitation screen tool

- Referral into post-COVID conditions care is based on the functional impairment determined through the screening tool which is included below (see next page). It can also be found online at <https://www.albertahealthservices.ca/frm-21820.pdf>. Consideration for symptoms should include whether they are pre-existing- worsened or the same, or new -- worsened or the same.





Post COVID-19 Functional Status Scale and Post COVID-19 Symptom Checklist

Last Name <i>(Legal)</i>		First Name <i>(Legal)</i>	
Preferred Name <input type="checkbox"/> Last <input type="checkbox"/> First		DOB <i>(dd-Mon-yyyy)</i>	
PHN	ULI <input type="checkbox"/> Same as PHN	MRN	
Administrative Gender <input type="checkbox"/> Male <input type="checkbox"/> Female		<input type="checkbox"/> Non-binary/Prefer not to disclose (X) <input type="checkbox"/> Unknown	

This tool is designed to identify rehabilitation/recovery needs of patients who have been diagnosed with or suspected to have COVID-19. Any healthcare provider can administer this tool at any time during the patient's journey.

Providers should consider pre-existing conditions and functional abilities, and whether there are changes from baseline (*pre-infection*) function. Rehabilitation needs should be determined using a combination of the Post COVID-19 Functional Status Scale (PCFS) and the Post COVID-19 Symptom Checklist.

Providers are encouraged to factor in which resources and services are available in each situation to support their patient's unique needs. The majority of patients can self-manage with appropriate resources and supports.

Additional resources: [Getting Health After COVID-19](#)
[After COVID-19: Information and resources to help you recover](#)
[Recovery & Rehabilitation after COVID-19: Resources for Health Professionals](#)
[Information for Community Physicians](#)
[Together4Health](#)

Part 1: Post COVID-19 Functional Status Scale (PCFS)		
How much is the patient currently affected in their everyday life by COVID-19? <i>(Indicate the most accurate description.)</i>	Corresponding PCFS Score	Treatment Considerations
No limitations in everyday life. No symptoms, pain, depression or anxiety related to the infection.	0 – No functional limitations	Consider universal rehabilitation interventions – self-management resources.
Negligible limitations in everyday life. Can perform all usual duties/activities, although still has persistent symptoms, pain, depression or anxiety.	1 – Negligible functional limitations	Consider universal rehabilitation interventions – self-management resources.
Slight limitations in everyday life. Occasionally needs to avoid or reduce usual duties/activities or needs to spread these over time due to symptoms, pain, depression or anxiety. Is able to perform all activities without any assistance.	2 – Slight functional limitations	Consider targeted rehabilitation interventions - services designed for groups of people with a common need.
Moderate limitations in everyday life. Unable to perform all usual duties/activities due to symptoms, pain, depression or anxiety. Able to take care of oneself without any assistance.	3 – Moderate functional limitations	Consider targeted rehabilitation interventions - services designed for groups of people with a common need. OR Consider personalized rehabilitation interventions - individualized, multidisciplinary care designed to meet the unique needs of an individual.
Severe limitations in everyday life. Unable to take care of oneself and therefore is dependent on nursing care and/or assistance from another person due to symptoms, pain, depression or anxiety.	4 – Severe functional limitations	Consider personalized rehabilitation interventions - individualized, multidisciplinary care designed to meet the unique needs of an individual.
PCFS Score		
Practitioner Name	Signature/Designation	Date <i>(dd-Mon-yyyy)</i>

Adapted from: Klok FA, Boon GJAM, Barco S, et al. The Post-COVID-19 Functional Status scale: a tool to measure functional status over time after COVID-19. *Eur Respir J* 2020; 56: 2001494 [https://doi.org/10.1183/13993003.01494-2020] is licensed under CC BY NC 4.0.

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Post COVID-19 Functional Status Scale and Post COVID-19 Symptom Checklist

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Part 2: Post COVID-19 Symptom Checklist

This checklist is intended to highlight specific symptoms patients are **currently** experiencing as a result of COVID-19, so that appropriate resources and/or referrals can be provided.

Have patients indicate if their symptoms are absent, same, worse or stable/improving (*for pre-existing or new since COVID-19*).

Upon completion, providers should ask patients about **additional symptoms** that may have been missed.

Post COVID-19 Respiratory Symptoms	Absent	Pre-existing: same	Pre-existing: worse	New since COVID-19: stable/improving	New since COVID-19: worse
Shortness of breath/difficulty breathing at rest					
Shortness of breath/difficulty breathing with activity					
Cough					
Post COVID-19 Cardiovascular Symptoms	Absent	Pre-existing: same	Pre-existing: worse	New since COVID-19: stable/improving	New since COVID-19: worse
Chest pain at rest					
Chest pain with activity					
Palpitations					
Dizziness or fainting					
Post COVID-19 Gastrointestinal Symptoms	Absent	Pre-existing: same	Pre-existing: worse	New since COVID-19: stable/improving	New since COVID-19: worse
Nausea and/or vomiting					
Senses of taste/smell been affected					
Difficult eating/drinking/swallowing (<i>e.g. choking, painful swallowing, coughing while eating/drinking</i>)					
Eating less than usual for more than 1 week					
Lost/gained a significant amount of weight without trying <i>Include amount of weight gain/loss, for loss indicate a negative number: _____ (kg)</i>					
Difficulty with bowels (<i>e.g. diarrhea, constipation</i>)					
Difficulty with bladder (<i>e.g. incontinence/leakage secondary to cough</i>)					

Adapted from: Sivan M, Halpin S, Gee J. Assessing long term rehabilitation needs in COVID-19 survivors using a telephone screening tool (C19-YRS tool). ACNR. 2020; 19 (4): 14-7. doi: <https://doi.org/10.47795/NELE5960> is used under CC BY 4.0.

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Post COVID-19 Functional Status Scale and Post COVID-19 Symptom Checklist

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Part 2: Post COVID-19 Symptom Checklist (continued)					
Post COVID-19 Neurological Symptoms	Absent	Pre-existing: same	Pre-existing: worse	New since COVID-19: stable/improving	New since COVID-19: worse
Issues with concentration, thinking or memory <i>(e.g. brain fog)</i>					
Headaches					
Difficulty hearing					
Ringing in the ears					
Pins & needles/numbness					
Post COVID-19 Psychological Symptoms	Absent	Pre-existing: same	Pre-existing: worse	New since COVID-19: stable/improving	New since COVID-19: worse
Depression <i>(e.g. recurring sadness, isolating oneself, frequent negative thoughts)</i>					
Anxiety <i>(e.g. fear, worry)</i>					
Post COVID-19 Musculoskeletal Symptoms	Absent	Pre-existing: same	Pre-existing: worse	New since COVID-19: stable/improving	New since COVID-19: worse
Pain/discomfort <i>(including muscle/joint pain)</i>					
Pain orientation <i>(e.g. right, anterior)</i> _____					
Pain location <i>(e.g. groin)</i> _____					
Generalized muscle weakness					
Difficulty controlling the movement of body <i>(loss of coordination)</i>					
Difficulty walking <i>(sense of imbalance)</i>					
Post COVID-19 Other Symptoms	Absent	Pre-existing: same	Pre-existing: worse	New since COVID-19: stable/improving	New since COVID-19: worse
Fever <i>(e.g. in the evenings, with activity, unexplained or unexplained fever that comes and goes)</i>					
Fatigue/low energy					
Difficulty sleeping					
Additional Symptoms or Concerns (from Patient)					

Adapted from: Sivan M, Halpin S, Gee J. Assessing long term rehabilitation needs in COVID-19 survivors using a telephone screening tool (C19-YRS tool). ACNR. 2020; 19 (4): 14-7. doi: <https://doi.org/10.47795/NELE5960> is used under CC BY 4.0.



4. Further medical screening, assessment or specialist referral. Mitigation of Safety Net Flags.

- Additional specialist supports are available through:
 - Specialist Link (specialistlink.ca): A variety of specialties are available for telephone advice. Specialty should be considered based on the patient's main complaint and may include: respirology, infectious disease, gastroenterology, psychiatry.
- Safety Net Flags

Safety net flags are not part of the functional impairment score, they may complicate ability to engage in self-management or rehab efforts, so should be considered in the referral process

 - Socially isolated (Lives alone, unable to connect with others through technology, little to no social network)
 - Lack of caregiver support if needed
 - Inability to maintain hydration (cognitive impairment, poor baseline intake)
 - Food/financial insecurity
 - Currently receives homecare support
 - Challenges with health literacy or ability to understand treatment recommendations or isolation expectations
 - Unable to self-manage

5. Rehabilitation Options

- For a **mild functional impairment** (grade 0 to 1), general resources are appropriate for this patient.
 - Courses that address a range of symptoms can be found through Alberta Healthy Living Program (AHLP) at <https://www.albertahealthservices.ca/assets/programs/ps-cdm-calgary-after-covid-19-online-courses.pdf>
- For **moderate functional impairment** (grade 2 to 3), consider targeted rehabilitation interventions, in addition to the self-management courses available through AHLP above.
 - If functional impairment of grade 3, Community Accessible Rehabilitation-Post COVID-19 Rehabilitation supports can be found through Alberta Referral Directory (www.albertareferraldirectory.ca) by searching “post covid” or through fax to **403-943-0578**.
- For **severe functional impairment** (grade 3 to 4), consider personalized rehabilitation interventions (multidisciplinary services providing individualized rehabilitation).
 - Specialized Long-Covid clinics*: Referral information, including referral form can be found on Alberta Referral Directory (albertareferraldirectory.ca) by searching “post-covid.” Referrals may be sent through Alberta Netcare eReferral Consult Request, or via fax to Pulmonary Central Access and Triage at **403-592-4201**.
 - *The process for referrals to long covid clinics are anticipated to change in the next several weeks. Pathway updates and communication will be updated when available.
 - Community Accessible Rehabilitation-Post COVID-19 Rehabilitation supports can be found through Alberta Referral Directory (www.albertareferraldirectory.ca) by searching “post COVID” or through fax to **403-943-0578**.



References:

1. NICE Guideline (2020). COVID-19 rapid guideline: managing the long-term effects of COVID19. Retrieved from <https://www.nice.org.uk/guidance/ng188>
2. Alberta Health Services. (2021). Post COVID-19 Rehabilitation response Appendices: Pathways, Toolkits & Resources. Retrieved from <https://www.albertahealthservices.ca/assets/info/ppih/if-ppih-covid-19-post-covid-response-framework-sum-appendices.pdf>



BACKGROUND

About this pathway

- Long COVID Pathways were originally developed in 2021 as part of Post COVID-19 Rehabilitation Strategy Implementation Taskforce which was approved through the Emergency Coordination Centre Structure of AHS in response to the COVID-19 pandemic. They were co-developed with membership from the Mosaic Primary Care Network (PCN), Edmonton North PCN and multiple AHS partners, including Primary Health Care, Health Profession Strategy and Practice, Nutrition Services.
- This pathway has been modified by the Calgary Zone PCN Specialty Integration Task Group, to meet the needs of Calgary Zone providers.

Authors and conflict of interest declaration

- This pathway was originally developed and reviewed in September 2021. Names of participating reviewers and their conflict of interest declarations are available on request.

Pathway review process, timelines

- This primary care pathway was created with up-to-date knowledge at the time it was created. It will be reviewed on a consistent basis as the knowledge and process base evolves. If you have concerns or feedback please email info@calgaryareapcns.ca and enter 'COVID-19 Long COVID pathway feedback' in the subject line.

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DISCLAIMER

This pathway represents evidence-based best practice but does not override the individual responsibility of health care professionals to make decisions appropriate to their patients using their own clinical judgment given their patients' specific clinical conditions, in consultation with patients/alternate decision makers. The pathway is not a substitute for clinical judgment or advice of a qualified health care professional. It is expected that all users will seek advice of other appropriately qualified and regulated health care providers with any issues transcending their specific knowledge, scope of regulated practice or professional competence.



PROVIDER RESOURCES

Getting Health After COVID-19 (providers)	https://www.albertahealthservices.ca/topics/Page17540.aspx
Alberta Healthy Living Program	https://www.albertahealthservices.ca/info/Page13984.aspx
Alberta Referral Directory	Albertareferraldirectory.ca
Post COVID-19 Functional Status Scale and Post COVID-19 Symptom Checklist	https://www.albertahealthservices.ca/frm-21820.pdf
Frequently Asked Questions: Providers	https://www.albertahealthservices.ca/assets/info/ppih/if-ppih-covid-19-long-covid-provider-faq.pdf
Greenhalgh T, Knight M, A'Court C, Buxton M, Husain L. Management of post-acute covid-19 in primary care BMJ 2020; 370 :m3026 doi:10.1136/bmj.m3026	https://www.bmj.com/content/370/bmj.m3026
AMA: Managing Chronic Symptoms of COVID	https://www.albertadoctors.org/Webinars/mar-31-covid-talks-slides.pdf
Rehabilitation and Allied Health Considerations: Post COVID-19	https://www.albertahealthservices.ca/assets/info/ppih/if-ppih-covid-19-rehab-allied-health-practice-considerations-post-covid.pdf?_cldee=a2VpdGguYnJhZGZvcmlRZ2ZwY24uY2E%3d&recipientid=contact-72be383d4244e911a827000c29ee8689-66642ad814e34e5586b6f544af651d23&esid=1c94d889-7ecf-eb11-a839-000c29ee8689



PATIENT RESOURCES

Getting Health After COVID-19 (Albertans)	https://www.albertahealthservices.ca/topics/Page17397.aspx
Alberta Healthy Living Program	https://www.albertahealthservices.ca/info/Page13984.aspx
After COVID-19: Information and resources to help you	https://myhealth.alberta.ca/HealthTopics/After-COVID
Rehab advice line	https://www.albertahealthservices.ca/findhealth/Service.aspx?id=1080775&serviceAtFacilityID=1126573 or 1-833-379-0563

