Somerset Covid-19 Recovery Follow-up in Primary Care

1. Post-COVID patient presents to GP with ongoing symptoms

Stratification of patients presenting might include:

- High risk of complications - intensive care unit admissions/ventilated patients
- Medium risk of complications - hospital ward admissions
- Low risk of complications - ED / community patients

2. GP consultation: history and examination. Link to mental health services where appropriate. Investigations in primary care, as required based on symptoms – Management of post-acute covid-19 in primary care https://dx.doi.org/10.1136/bmj.m3026
Symptom Specific Recommended Management-see below

3. GP supports self-management of common symptoms, referrals to talking therapies (all patients to be offered emotional assessment by talking therapies) and direct to the **NHSE Post Covid-19 Online Support Tool:** www.yourcovidrecovery.nhs.uk

4. Symptoms improve

5. Care remains in primary care.

6. Symptoms do not improve (usually after 4 months post Covid-19) – Consider the following investigations prior to onward referral and depending on symptoms: Mental health assessment and referral where appropriate; Blood tests to include all or a combination of FBC, CRP, LFT, renal,, BNP, ferritin, Troponin, D Dimer. Consider ECG, chest xray at 12 weeks if discharged or earlier if not admitted. GP can also discuss referrals directly with advisory service or with **Post Covid-19 Pathway Coordinator**

7. Referral to SOMERSET POST COVID-19 ASSESSMENT CLINIC. Community led service for therapies including mental health. Clinics held virtually and in Taunton, Yeovil, and Mendip depending on need. Referrals initially triaged and then patient assessed either by video link or face to face. Clinics offer access to additional testing (CT scanning, echocardiography) and onward referrals to services.

8. Post assessment referral to physiotherapy, Speech and Language or Occupational Therapies for symptoms severely impacting on life or not improving with time and self-management advice including:
- Mobility problems
- Selfcare for daily activities
-Ongoing post viral fatigue (link to fatigue clinic of this is not resolved at 6 months)
- Swallowing problems
- Voice change

9. VIRTUAL COVID REHABILITATION MDT
Weekly meetings or discussion of complex care needs

10. Somerset Mental Health Service

If patient experiencing significant anxiety, depression, OCD, PTSD

11. Somerset Respiratory Team for:
- Ongoing respiratory shortness of breath that is limiting daily activities (that they didn't experience pre COVID-19).

Somerset Cardiology Team for

-Ongoing cardiac symptoms or arrhythmia or heart failure triggered by COVID19

Symptoms Improve?

Yes

No

11. Patient discharged with guidance for ongoing self-management

12. Referral to Virtual Covid Rehab MDT
If symptoms not improving within community services, the case is complex or there are needs spanning multiple domains, **community teams refer back to Virtual COVID Rehab MDT for discussion and advice.**

Symptom Specific Recommended Management

– PLEASE NOTE THIS GUIDANCE IS DESIGNED TO BE A GUIDE – AND SHOULD BE BASED ON A CAREFUL THOROUGH HISTORY AND AN APPROPRIATE CLINICAL EXAMINATION (general, cardiovascular, respiratory, mental health and other systems if appropriate)

Post Covid Symptom	Considerations specific to COVID-19	Initial investigations and other management to consider	When to deviate from the pathway: Red Flags
Fatigue	• Common post COVID (though most will have settled though within 6 months) • Consider impact of fatigue (work, caregiving, phased return) • Self-management advice especially NHSE/I www.yourcovidrecovery.nhs.uk • Be wary of recommending full graduated exercise or complete rest. • Reassure that with time and self-management fatigue usually improves gradually • If no improvement after 3 months, worsening of symptoms or impacting significantly on life, refer to **POST COVID ASSESSMENT SERVICE**	• Consider if blood tests are indicated in light of past medical history and assessment • Distinguish between deconditioning and postviral fatigue symptoms and consider exercise advise in light of guidelines (guidance in Your COVID recovery) May include: • FBC, CRP, Fe, B12 and Folic Acid , renal function, LFT, TFTs, vitamin D • O2 sats • Consider assess and monitor fatigue using the Modified Fatigue Impact Scale https://www.sralab.org/sites/default/files/2017-06/mfis.pdf (cognitive and physical domains should be scored separately).	**Unusual associated symptoms (for example significant continued weight loss, haemoptysis, continued vomiting or other symptoms of potential malignancy)**
Anxiety, depression and	• Common feature post COVID • Consider if fatigue/ pain/ sleep	• Consider screening tools PHQ9 for depression or GAD7 for anxiety	• Suicidal ideation or immediate risk of harm

PTSD **(Cognitive impairment too post ICU)**	disturbance/ cognition is also contributing or co-occurring. • Can occur with any disease severity • Self-management advice especially Your COVID recovery www.yourcovidrecovery.nhs.uk • Consider local Talking Therapy referral • PTSD especially in ITU survivors ask about intrusive thoughts, flashbacks, nightmares, avoiding reminders of the event/illness. Also excessive/ obsessional cleaning/ checking, fear of going out. • Concerns re PTSD and/ or other mental health issues not improving refer to Somerset Mental Health Services. In context of significant fatigue and/ or cognitive issues neuropsychological input will be required. Other resources: https://www.bps.org.uk/coronavirus-resources; https://www.mind.org.uk/information-support/coronavirus/	• Quality of life questionnaire - Work & Social Adjustment Scale (WSAS) • PTSD more likely in context of premorbid trauma • Mood impeding recovery/ causing protracted symptoms where physical examinations are normal. • Complex presentation i.e. contribution of several factors/ lack of progress despite physical recovery/ difficulties completing ADLs or work. Consider referral to Talking therapies • Systemic distress/ carer strain contributing to reactive distress/ relationship breakdown/ loss of support. Refer to Talking Therapies.	to self or others refer to Mental health crisis team • Neurocognitive problems in the presence of a new or pre-existing neurological diagnosis; refer to Integrated Rehab Team
Breathlessness	• Common post COVID (most will have settled by 12 weeks) • Exertional breathlessness often	**CXR**. If abnormal, repeat at 6 weeks if symptomatic, or 12 weeks if symptoms have resolved.	• Acute onset (<48 hours) or severe breathlessness • O2<93% (if new for the

	persists for many weeks. Usual pattern is a gradual recovery. • Review at 3 months post Covid if not improving. • Unexplained crackles on auscultation refer for CXR. Depending on the results of this a HRCT scan may also be indicated. • Consider increased risk of VTE / PE post-COVID	• Bloods: FBC, U&E, LFT, Ca^{2+}, TFT, BNP • Consider sputum sample if productive cough • ECG • O2 sats	patient) • HR less than 60 or more than 100bpm • RR more than 25/minute • • Consider Myocardial ischaemia, heart failure, myocarditis, pulmonary embolus, secondary infection or new cause.
Cough	• Cough is a common symptom. • Dry cough likely to be post-viral and self-limiting though can persist for weeks as airways remain hyper-sensitive. (More than 30% of people with COVID however had a productive cough)	• Consider chest xray if no improvement after six weeks (or three months) • Consider following chronic cough guidance if symptoms persist (such at Chronic Cough Guidelines – Clinical Knowledge Summary)	• Haemoptysis • Unintentional weight loss • night sweats • Other potential cancer symptoms • urgent 2 week referral is appropriate
Pleuritic chest pain	• Flitting chest pains 6-8 weeks post COVID not unusual and do not signify PE in absence of other typical clinical features. Oxygen saturation normal: PLUS normal chest x-ray: • Consider non-respiratory causes (e.g. infection or inflammation elsewhere). PLUS chest x-ray abnormal/showing consolidation:	• Bloods: FBC, CRP, D-dimer • CXR • O2 sats Consider admission if suspected pulmonary embolus	• Acute hypoxia, O2<93% (if new for the patient • Acute severe breathlessness, • Tachycardia >100bpm

	• Symptoms may be explained by pneumonia and assess and treat appropriately		
Palpitations / tachycardia	• Palpitations are common. Up to 30% at 3 months • Tachycardia may be driven by infection • If symptoms persist with no clear cause or if associated with Red Flags, Refer via usual pathways	• Routine blood tests (including fbc, rnl, liver, thyroid function) • Erect and supine BP • ECG	• Syncope, • Myocardial ischaemia • Complete heart block
Anosmia	• Very common-up to 50% • 9 out of 10 patients significant improvement within four weeks • Reassurance, Olfactory training and safety advice http://www.entuk.org/loss-smell-video-interview-professor-claire-hopkins http://www.Fifthsense.org.uk http://www.abscent.org • Reassess	• Associated nasal symptoms • Neurological symptoms • ENT referral if anosmia >3 months.	• Anosmia>6 weeks with additional neurological symptoms-MRI recommended
TEST RESULT	**Comments**		

TEST RESULTS **Abnormal liver function (mild rise in liver transaminases)**	• Mild abnormalities in ALT <3xULN will be common post Covid-19 (like many viral infections) • .Check any past LFTs. • Check alcohol history • Stop any NSAIDS. Do not introduce statins at this stage. • If abnormalities are mild, statins could be continued in diabetic patients	**ALT <x3ULN and new:** Monitor monthly. It should normalise. Investigate at 3 months if not **ALT >x3ULN and new**: Monitor again 2-4 weeks. Investigate at 1 month if not normalised or reducing. • Address any history of excess alcohol, optimise diabetic control, introduce exercise as possible. • Isolated raised bilirubin: Request conjugated/unconjugated bilirubin split. • Isolated raised ALP: • Optimise vitamin D levels, • Consider Ultrasound scan (to check biliary tract); Check BNP as cardiac impairment may give this picture	• Jaundice not attributable to Gilberts syndrome or not in isolation. • Acute liver injury ALT>10xULN • Start investigations immediately and refer for specialist opinion
Reduction in kidney function following an episode of Acute kidney injury (reduced eGFR from pre-COVID baseline)	• Observed in small proportion of recovering patients • Consider referral if progressive fall in eGFR or increasing ACR	• Dip urine for blood and protein • Urinary Protein/Creatinine ratio • Monitor renal function 2 monthly or as indicated • Consider potential drug causes (ACE inhibitors, NSAIDs etc)	• Urinary Protein/Creatinine ratio > 50 • Haematuria • Sustained fall in eGFR > 5ml/min/month • eGFR<30ml/min (new for patient)

Resources / References:

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