

Publications approval reference: 001559



5 June 2020, Version 1

Contents

1. Introduction.....	3
2. Healthcare needs of COVID-19 patients following discharge	5
2.1 Combination: physical, cognitive and psychological needs	6
2.2 Physical.....	7
2.2.1 Respiratory.....	7
2.2.2 Cardiology.....	14
2.2.3 Urology.....	15
2.2.4 Neuromuscular.....	15
2.2.5 Endocrinology	17
2.2.6 General function and wellbeing.....	18
2.3 Psychological and neuro-psychological.....	

Patients with pre-existing health conditions may require immediate or longer-term changes to the management of those conditions as a result of their COVID-19 episode, however, that is not the focus of this guidance.

The guidance is focused on the clinical interventions that the NHS will lead on. However holistic care is impossible without the partnership with adult social care professionals and social care providers and we will be working with the Department for Health and Social Care to support them in their roles.

2. Healthcare needs of COVID-19 patients following discharge

This section describes the expected immediate and longer-term health needs of COVID-19 patients, following discharge from hospital (whether or not they received intensive care) into home and community settings, focused on new conditions following an episode of COVID-19.

For patients receiving palliative care, information can be found [here](#).

See Appendix 1 for further COVID-19 related guidance and information.

Below

Primary and community health services should work with families, care homes and domiciliary care to support the provision of holistic care for patients discharged from hospital after COVID-19.

2.1 Combination: physical, cognitive and psychological needs

Issue: **Post-intensive care syndrome (PICS)** describes an amalgamation of persistent physical, cognitive and psychological impairments present in 56% of patients at 12 months following prolonged ventilation.

Considerations: Individual symptoms may be recog 595.3 v (u)--3(t)8(p)-5(h)-3(ysic)12(a)-3(l,

2.2 Physical

2.2.1 Respiratory

Issue: **Management of patients requiring oxygen**

PR services exist in all areas and are usually delivered in the community. Capacity and demand for PR services is likely to be stretched when business as usual recommences, given that many were already operating with waiting lists before the pandemic, and some community therapists, e.g. occupational therapists and physiotherapists, are currently redeployed in acute settings. Further guidance on restarting PR services is expected from the British Thoracic Society in coming weeks. Risk factors should be identified and flagged, such as avoidance of flammable lotions, e.g. paraffin-based products,

Issue: **Tracheostomy wounds**

Prevalence and relevance: The expectation is that more tracheostomies will be undertaken surgically rather than percutaneously. These tend to be slower to heal and have a higher incidence of infections. This will increase demand for community nursing as early supported discharge and care in the community become best practice and business as usual.

Considerations: Community nurses are already used to caring for those with tracheostomy wounds, but not in the numbers that may be required over such a short space of time. Additional training for community and practice nurses may be required.

Resources: Community nurses with specialist skills and expertise in wound care, as above. Access to ENT services are likely to be more challenging due to hospital clinics currently not running, but this could be an opportunity to move clinicians with these skills to work in the community to support patients at home.

Issue:

Resources: Local areas should remain aware of whether any official national guidance is produced specific to which demographics of COVID-19 patients will require pulmonary physiology investigation post discharge.

Issue: **Long-term risk of bronchiectasis**

Prevalence and relevance: No clear figure available, but estimates suggest up to 5% of people with COVID-19 pneumonia may go on to develop bronchiectasis. However, causality is not yet established.

Considerations:

ischemia and can manage cardiovascular risk to reduce avoidable heart attacks and strokes by ensuring timely referrals to vascular services. Tissue viability nurses and community nursing teams could, perform arterial assessments- if appropriately trained. Given similarities in the impact on both cardiac and respiratory rehabilitation professionals and services, there may be opportunities to pool resource to meet need locally.

Issue: **Neuropathy**

Prevalence and relevance: The incidence of neuropathies varies widely in the literature, with few studies highlighting issues post-critical care discharge. Neuropathies and muscle atrophy (more frequently termed intensive care

the emergency states of hyperglycaemia with ketones, diabetic ketoacidosis (DKA), and hyperosmolar hyperglycaemic state (HHS). Also, more people with pre-existing type 2 diabetes are progressing to insulin therapy with severe COVID-19 infections, and therefore requiring insulin post-discharge. This phenomenon can manifest as atypical presentations with type 2 diabetes (new onset or in those with pre-existing type 2 diabetes), although it may be associated with greater risk of DKA in those with pre-existing type 1 diabetes as well. Such presentations are atypical, different to what would be expected with viral infections generally, and it is as yet unclear what future insulin requirements in affected individuals will be.

Considerations: The implications are that these individuals will require insulin post-discharge, as well as regular capillary glucose monitoring, associated care packages, and follow-up. Such new diagnoses of type 2 diabetes, and individuals requiring insulin treatment following discharge who did not require insulin previously, should be clearly highlighted by discharging teams to enable appropriate care post-discharge. Patients should be facilitated to self-administer insulin whilst in hospital.

Resources: These issues are outlined on the [Association of British Clinical Diabetologists website](#) in the acute phase, which can also be read as implications for care post-discharge. Dietitians are able to support with dietary management, and insulin dose adjustment, for type 1 and type 2 diabetes.

2.2.6 General function and wellbeing

Issue: **Dietary/nutrition**

Prevalence and relevance: Nutrition is a vital part of the recovery process for all patients with COVID-19, particularly those who have suffered cardiac distress, pulmonary distress, or those who have been critically ill due to the weight loss, frailty or sarcopenia associated with these conditions.²⁷ These patients require individually tailored nutrition support, started early in their journey that is sufficient and timed alongside activity, to enable metabolic

²⁷ [Canadian Critical Care Trials Group](#). One-year outcomes in survivors of the acute respiratory distress syndrome. *N Engl J Med*.

utilisation for recovery.²⁸ Nutritional rehabilitation needs to be central to community management pathways post-hospital discharge to ensure efficient and effective recovery and to reduce the risk of hospital re-admissions. There is some concern that patients requiring ongoing nutrition rehabilitation in the community will not be identified, as previous research highlighted that only 15% of discharge communications included information on nutrition.²⁹

Considerations: The anticipated need for ongoing nutritional rehabilitation as part of recovery will place an increased demand on primary care services with the potential for readmissions. Although diet enrichment should suffice for most, there seems to be an increased need to use oral nutritional supplements alongside this in malnourished patients to achieve measurable improvements. There may also be some increased need for dietetic expertise to support community enteral tube feeding in light of early supported discharge, to manage dysphagia as a result of ventilation and a need to facilitate resolution of eating while treating malnutrition. Data suggests that over 70% of patients with COVID-19 are in the overweight or obese category, despite significant muscle loss indicating sarcopenic obesity, which carries the potential for misidentification of malnutrition.³⁰

Resources: As obesity, diabetes and heart disease are major risk factors, there is expected to be an increased need for dietary counselling on disease management alongside ongoing recuperation. For many patients, individualised nutritional advice or counselling are required to enable fat-free mass improvement as opposed to overall weight gain, which is informed by their co-morbidities and nutritional status. Nutritional care plans should be included on all discharge summaries, and screening for signs of malnutrition should be encouraged by all. Nutrition support needs to continue in the community, with a focus on protein adequacy and not just energy. Community dietitians will be vital members of the MDT.

²⁸ Ingadottir AR, Beck AM et al. Oral nutrition supplements and between-meal snacks for nutrition

Issue: **Pressure ulcers**

Prevalence and relevance: Evidence specific to COVID-19 is lacking, and it is not yet known how many patients are likely to be discharged from hospital with existing pressure damage or in need of pressure ulcer prevention interventions in line with NICE guidelines.³¹ There is some anecdotal evidence that pressure ulcers are occurring on the sternum and hip bones due to being nursed in a prone position.

Considerations: It is likely that all COVID-19 discharged patients who need ongoing clinical care will also need ongoing pressure ulcer risk assessment and appropriate therapeutic intervention that includes pressure relieving equipment. This equipment will be the same as currently provided to patients receiving care from community services. Patients who continue to require oxygen support will also be at risk of facial device-related pressure damage and may require clinical input for dressing changes. Carers will need access to information about pressure ulcer prevention.

Resources: Integrated care team nursing care, dietitian, [podiatry](#), orthotic services, integrated care team occupational therapy. Using

Prevalence and relevance: The ability to communicate is essential for life. Key clinical presentations include dysphonia, disruption to language processing and cognitive-communication difficulties. More information on the [speech and language therapy rehabilitation pathway](#) can be found on the Royal College of Speech and Language Therapists website.

Considerations: Speech and language therapists (SLTs) lead the assessment and management of a range of communication impairments. Where patients have voice difficulties, this would include working jointly with ENT colleagues and carrying out specialist interventions, e.g. endoscopy. They develop and deliver strategies to meet ongoing communication needs in the community, including supporting patients to access rehabilitation provided by other members of the MDT. SLTs can conduct mental capacity assessment related to swallowing and communication issues, e.g.

drinking. They can also help to provide communication support to facilitate other members of the MDT to conduct mental capacity assessment regarding other medical issues and decisions. Patients may need counselling and support with respect to longer-term issues around communication, including strategies to enable them to return to work. SLTs also have skills in training and developing the wider MDT (including volunteers) to help deliver key interventions.

2.3 Psychological and neuro-psychological

Immediate need

Issue: **Delirium**³²

Prevalence and relevance: The prevalence of delirium in all hospitalised

While the presence of severe delirium may delay discharge, fluctuating symptoms may persist for many weeks, and hence some patients may be expected to be discharged with symptoms.

Considerations: A comprehensive discharge and support plan will be crucial in discussion with family/carers as this condition can fluctuate. A behaviour and care needs chart, conducted either in hospital or a step-down facility, can help establish the level of supervision and care provided. It is possible to discharge patients with persistent cognitive impairment following an acute episode of delirium home with a care package, once their care needs have been identified. 24-hour supervision at home, in a community bed or in a care home until symptoms have resolved substantially is not always necessary. It will not be possible to know whether the patient is experiencing mild cognitive impairment until they have had delirium for three to six months post-discharge. Delirium is also associated with post-traumatic stress disorder (PTSD) and alcohol dependence, see below.

Resources: NICE guidance on delirium,³³ states that patients with delirium should be followed up in a local memory service according to local protocol. However, it is important to note that some advice

Issue: **Insomnia**

Prevalence:

3. Next steps/actions to take

Many aspects of treatment for discharged COVID-19 patients will be normal care for primary and community providers. However, there are new challenges, primarily:

increased number of patients with post-intensive care syndrome or similar
maintaining [infection control](#)
pressures on equipment (

Chartered Society of
Physiotherapy: resources to
support discharge of patients at
risk from inactivity