

COVID-19

Homeless Sector Plan

Triage-Assess-Cohort-Care

Protocol modified in response to limited testing capacity

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1: Rationale and Key Components:

On 16th March 2020 the Government announced that all high-risk adults (those who meet the clinical criteria for influenza vaccination and those aged over 70 years of age) should stay at home with very minimal contact with others for a twelve-week period.

- We have previously demonstrated that 41% of homeless people are now considered at high risk - primarily due to high levels of chronic illness.
- People who are street homeless, living in hostels (with shared dining, bathroom and toileting facilities and sometimes with shared rooms), and emergency accommodation will not be able to follow government advice.
- Homeless people who develop symptoms of COVID-19 are not currently able to follow government advice to self-isolate.
- In communal settings there will be a very high likelihood of outbreaks with high attack rates.
- High levels of comorbidity will result in high case fatality rates if infected

We propose a strategy of Triage Assess Cohort and Care for homeless populations in hostels, temporary emergency accommodation, and rough sleepers to prevent high mortality and minimise impact on the NHS.

Aims

1. Protect the most vulnerable - i.e. those with clinical risk criteria for influenza vaccination and those aged ≥ 55
2. Reduce transmission risk
3. Prevent explosive outbreaks in residential services and congregate settings
4. Minimise impact on NHS and other essential services - prevent inappropriate A&E and secondary care attendance and reduce the need for hospital admission by effective supportive care in the community
5. Prevent high mortality

The key components of the strategy are:-

1. Centralised coordination and efficient deployment of resources – **HOMELESS COVID-COMMAND**
2. Identify local **COVID-CARE** and **COVID-PROTECT** accommodation with own room and bathroom facilities – e.g. local hotels or high specification hostels - to **TRIAGE** the homeless population into three **COHORTS**.
 - a. **COHORT 1** - suspected (with new or worsening cough or fever of 37.8°C or more OR self-reported fever*) or laboratory confirmed cases of COVID-19 **GO TO COVID-CARE**
 - b. **COHORT 2** - those in clinical risk groups (eligible for influenza vaccine) or aged 55¹ or over - not suspected of COVID-19 **OFFER COVID-PROTECT**
 - c. **COHORT 3** - Those aged less than 55, not in clinical risk groups, and not suspected of COVID-19 remain in the community supported by existing service provision
3. Transfer all suspected COVID-19 cases to COVID-CARE or local acute NHS services if severely unwell
4. Supportive medical care for all persons experiencing COVID-19 symptoms and/or other acute clinical needs
5. Rapid identification of clinical deterioration and escalation to NHS intensive respiratory / life support
6. Continue community targeted Triage and Assessment throughout the pandemic.

* Where thermometers are not available OR when assessing people by telephone

¹ The over 55 age bracket for people experiencing homelessness has been identified due to the premature mortality, average life expectancy is 45, and early onset frailty of this group.

2: Plan

A) ESTABLISH HOMELESS COVID-COMMAND - senior homeless sector and NHS team supported by admin and logistics to act as a coordination and information centre providing: -

1. Clinical and facilities management and logistics for all COVID-CARE and COVID-PROTECT facilities
2. Prioritisation of venues for TRIAGE AND ASSESS TEAMS to visit - based on initial prioritisation of large venues and those with high proportion with clinical risk criteria.
3. Information and awareness advice for the sector - web-based / hotline
4. Information resources and materials - hand washing/respiratory hygiene/social distancing, etc (as per PHE guidance and COVID-19 Homeless sector plan)
5. Managing logistics/distribution and stock management of PPE, hand and respiratory hygiene materials and medical equipment across the sector
6. Phone and web hotline capable of taking direct requests from across the sector and organising referrals/transfer to COVID-CARE and COVID-PROTECT facilities throughout the pandemic
7. Managing transport logistics for referrals/transfer to COVID-CARE and COVID-PROTECT facilities throughout the pandemic
8. Central registry of location, status and priority alerts for all persons identified as eligible for testing (NHS-PHE agreement) - using an Electronic Medical Record System with proven interoperable capability across NHS.
9. Central registry of staff (including peers and volunteers) to maximise efficiencies in deployment, provide direct advice, support and training and recruitment as needed.

B) ESTABLISH COVID-CARE FACILITIES:

B1) COVID-CARE FACILITIES

COVID-CARE facilities aim to minimise transmission of COVID-19 and reduce mortality through early identification of clinical deterioration and provide supportive care and rapid escalation to critical care NHS facilities if needed.

High specification hostels, unused hotels, student accommodation or NHS /private sector clinical spec facilities. Residents of these facilities **MUST** have their own rooms and bathrooms.

B2) REFERRAL ROUTES TO COVID-CARE:

These facilities will take referrals of **PRIORITY 1 CASES** - suspected (with new or worsening cough or fever of 37.8°C or more OR self-reported fever). Referrals will come from: -

- Homeless sector professionals working in any relevant setting
- Mobile assessment teams supporting TRIAGE in the community throughout the pandemic
- Acute NHS Hospitals - Symptomatic inpatients with or without a confirmed RT PCR diagnosis who can be appropriately discharged AND symptomatic patients attending A&E services who do not need hospital admission
- Primary Care services - patients who can be assessed and appropriately diverted from A&E services
- London Ambulance Service - patients who can be assessed and appropriately diverted from A&E services

COVID-CARE facilities will isolate suspected COVID-19 cases, minimise transmission risk to staff and other patients, monitor and manage clinical progress and escalate care through communication with acute NHS services.

B3) ISOLATION OF SUSPECTED COVID-19 CASES

In the absence of RT PCR testing **ALL SUSPECTED CASES SHOULD BE ISOLATED** in COVID-CARE facilities in a single room with own bathroom for 14 days* or until a negative RT PCR test result is available (whichever is sooner).

***Rationale for 14 days isolation**

In the absence of RT PCR testing a period of 14-days isolation is recommended for ALL new admissions to COVID-PROTECT and COVID-CARE facilities.

Current guidance in community settings is for 7 days isolation for an individual with COVID-19 symptoms OR 14 days isolation for an entire household. This 14-day household rule allows for the fact that there may be further chains of transmission within the household.

In COVID-PROTECT the number one priority is to reduce risk of outbreaks so a more precautionary approach is required for those being discharged from isolation into an institutional setting (COVID-PROTECT or a community hostel). Using a 14-day cut off will markedly reduce risk of outbreaks in COVID-PROTECT. This would enable people to come out of isolation and enter what to all intent and purpose would be a 'household setting'. This would then not require enforcing social distancing measures within the facility (which would be difficult), enable more normal activities and encourage people to remain resident.

Triaging of Suspected cases

In the absence of testing all symptomatic patients will need to be admitted to COVID-CARE. When testing becomes more widely available this protocol will be updated to TRIAGE according to test results.

- All symptomatic patients should be admitted to COVID-CARE unless they require high intensity / critical care in a hospital

The rationale is that COVID-PROTECT aims to minimise the risk of infected patients being admitted and until reliable testing is available this requires a risk minimisation approach. Therefore, they will be quarantined in COVID-CARE rather than COVID-PROTECT as the level of clinical support is greater at COVID-CARE. (see discharge criteria for future management).

B4) MINIMISING TRANSMISSION RISK TO STAFF AND OTHER PATIENTS

The primary approach to infection control in COVID-CARE is the isolation of patients in their own self-contained rooms.

Staff should follow DH guidance on infection prevention and control in healthcare settings -

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/874316/Infection_prevention_and_control_guidance_for_pandemic_coronavirus.pdf

The guidance includes information on all aspects of COVID-19 infection control in healthcare settings. Some key aspects of the guidance relating to PPE are below.

The recommended use of PPE is summarised below

Table 1: Transmission based precautions (TBPs): Personal protective equipment (PPE) for care of patients with pandemic COVID-19

	Entry to cohort area (only if necessary) no patient contact*	Within 1 metre of a patient with possible / confirmed COVID-19*
Disposable Gloves	No	Yes
Disposable Plastic Apron	No	Yes
Disposable Gown	No	No
Fluid-resistant (Type IIR) surgical mask (FRSM)	Yes	Yes
Filtering face piece (class 3) (FFP3) respirator	No	No
Disposable Eye protection	No	Risk assessment

*Personal protective equipment (PPE) for close patient contact (within 1 metre) also applies to the collection of nasal or nasopharyngeal swabs.

Fluid-resistant (Type IIR) surgical masks (FRSMs) are worn to protect the wearer from the transmission of COVID-19 by respiratory droplets. In all healthcare settings:

- A FRSM must be worn when working in close contact (within 1 metre) of a patient with COVID-19 symptoms. This provides a physical barrier to minimise contamination of the mucosa of the mouth and nose.
- In an area where pandemic COVID-19 patients are all together, it may be more practical for staff to wear a FRSM at all times, rather than only when in close contact with a patient.
- A FRSM for COVID-19 should: – be well fitted covering both nose and mouth; – not be allowed to dangle around the neck of the wearer after or between each use; – not be touched once put on; – be changed when they become moist or damaged; – be removed outside the patient room, cohort area or 1 metre away from the patient with possible/confirmed COVID-19; and – be worn once and then discarded as healthcare (clinical) waste (hand hygiene must always be performed after disposal)
- The provision of a FRSM for patients with suspected/confirmed COVID-19 at point of assessment or triage in any healthcare setting should be considered if the patient can tolerate it (except when in a dedicated [CONFIRMED] COVID-19 area).

Filtering face piece (class 3) (FFP3) respirators

The use of FFP3 face masks is only recommended during aerosol generating procedures (AGPs).

IT IS NOT ANTICIPATED THAT THE LEVEL OF CARE PROVIDED IN COVID-CARE FACILITIES WILL REQUIRE AGPs OTHER THAN IN EXCEPTIONAL CIRCUMSTANCES.

AGPs: - Intubation, extubation and related procedures; Tracheotomy/tracheostomy procedures; Manual ventilation; Open suctioning; Bronchoscopy; Non-invasive ventilation (NIV) e.g. Bi-level Positive Airway Pressure (BiPAP) and Continuous Positive Airway Pressure ventilation (CPAP); Surgery and post-mortem procedures in which high-speed devices are used; High-frequency oscillating ventilation (HFOV); High-flow Nasal Oxygen (HFNO) Induction of sputum (see glossary); Some dental procedures (e.g. high speed drilling).

For patients with suspected/confirmed COVID-19, any of these potentially infectious AGPs should only be carried out when essential. Where possible, these procedures should be carried out in a single room with the doors shut. Only those healthcare staff who are needed to undertake the procedure should be present. A disposable, fluid repellent surgical gown, gloves, eye protection and a FFP3 respirator should be worn by those undertaking the procedure and those in the room.

Transfers within the COVID-CARE facility

The movement and transport of patients from their single room/cohort area should be limited to essential purposes only. Staff at the receiving destination must be informed that the patient is suspected to have COVID-19.

- If transport/movement is necessary, consider offering the patient a fluid-resistant (Type IIR) surgical mask (FRSM) to be worn during transportation, to minimise the dispersal of respiratory droplets when this can be tolerated.
- Patients must be taken straight to and returned from clinical departments and must not wait in communal areas. **Patients with alcohol, drug or nicotine addiction should be able to access a variety of approaches to prevent withdrawal with input from specialist addiction services to minimise their need to leave isolation.**

B5) STAFF DEPLOYMENT TO COVID-CARE

It is recognised that COVID-CARE facilities are being rapidly deployed on an emergency basis and that they will be supporting a highly complex client group which may pose additional infection control challenges. It is therefore recommended that:-

- COVID-CARE should be staffed with staff under the age of 55 years who do not have chronic illness.
- Expert advice from older or comorbid staff should be provided by telephone or video link.

COVID-CARE facilities provide 24-hour medical care - GP onsite and providing telephone advice, with Nursing and Health Care Assistant Support. Current models implemented in Westminster London have utilised existing specialist GPs, Nurses and Community Health workers who already have a detailed knowledge of the client group and strong links with local homeless sector providers, drug and alcohol services and community mental services.

This team is supported by specialist clinicians providing advice on 1) Addiction Psychiatry 2) Mental Health 3) Acute Medicine 4) Infectious Disease 5) Palliative Care and close liaison with local A&E services.

NHS will work alongside experienced workers, peers and ancillary workers who are re-deployed from existing local homeless and allied support services. The Triage process will significantly reduce demand for existing provision in the community.

B6) MONITORING, SUPPORTIVE CARE AND CLINICAL ESCALATION

On arrival at COVID-PROTECT all residents will have their temperature BP, oxygen saturation, pulse and respiratory rate recorded to guide initial care.

COVID-CARE should be supported by a local intensivist/respiratory/infectious disease clinician, ideally with experience of managing severe cases of COVID-19. The unit should follow NICE guidance on for referral into critical care [Overview | COVID-19 rapid guideline: critical care | Guidance](#)

This includes assessment according to the Critical Frailty Score to inform future decisions about escalation to critical care as per NICE guidance. The critical care algorithm which highlights that those who are frail are not likely to benefit from intensive care support and that the level of frailty therefore needs to be part of the information when discussing escalation with families and secondary care staff.

<https://www.nice.org.uk/guidance/ng159/resources/critical-care-admission-algorithm-pdf-8708948893>

Clinical Frailty Scale



1 Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.



7 Severely Frail – Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).



2 Well – People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.



8 Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.



3 Managing Well – People whose medical problems are well controlled, but are not regularly active beyond routine walking.



9 Terminally Ill – Approaching the end of life. This category applies to people with a life expectancy <6 months, who are not otherwise evidently frail.



4 Vulnerable – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being “slowed up”, and/or being tired during the day.



5 Mildly Frail – These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

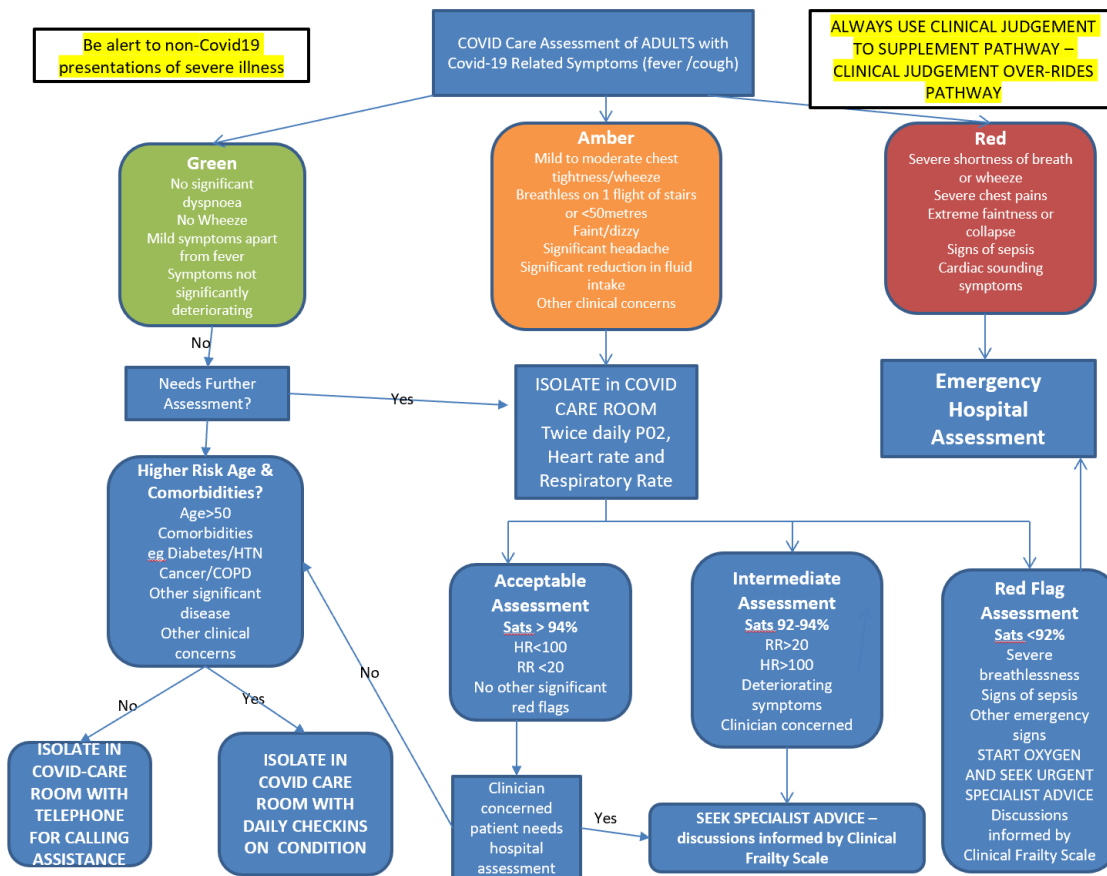
In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia**, they cannot do personal care without help.



6 Moderately Frail – People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.

Clinical monitoring should follow the schema set out below (adapted from primary care protocols for management of suspected COVID-19 patients who are self-isolating. To reduce unnecessary contact between staff and residents each room should have pulse oximeters and thermometers that can readily be used by the patient and read from a distance. COVID-CARE should also consider use of wearable wrist bands/watches that can monitor pO₂ and pulse and temperature continuously. Patients should be provided with smartphones to enable staff to use videoconferencing with patients in order to allow clinical assessment without physical exposure.



B7) DISCHARGE FROM COVID-CARE

Discharge planning should start from admission including liaison with Local Authorities' Housing Departments.

Current NHS guidance is to discharge COVID-19 cases from hospital only after two negative laboratory tests 48 hours apart. This will be done when COVID-CARE capacity and COVID-19 testing capacity enables this approach. In the interim the following approach will be used.

Patients who have been isolated for 14 day who are recovering with mild and resolving symptoms, who are less than 55 years of age with no clinical risk criteria that would make them eligible for influenza vaccination, can be considered fit for discharge to either:

- Residential Hostel accommodation
- Local Authority support to secure tenancy

- COVID-PROTECT if no suitable accommodation can be secured OR if assessed to have other vulnerabilities

Patients recovering with mild and resolving symptoms, who are 55 years of age or older with clinical risk criteria that would make them eligible for influenza vaccination, should be offered discharge to COVID-PROTECT. Those who elect to return to the community should be offered residential Hostel accommodation or Local Authority support to secure a tenancy to appropriate accommodation provided they are able to self-isolate in the community as per current PHE guidance

B8) GUIDE FOR EQUIPMENT CHECKLIST

This list is some of the essential equipment required but is obviously not exhaustive and will require local consideration.

Desktop PC with Electronic Medical Record system
 Peripheral Devices for data entry
 PPE Equipment
 Cleaning equipment and consumables
 Hand Washing consumables
 Waste disposal equipment and consumables
 Essential drugs - including paracetamol, analgesics, antibiotics
 Facilities for Oxygen administration
 Pulse Oximeters
 Thermometers
 Sphygmomanometer with disposable cuff covers
 Crash trolley
 NEWS charts
 Patient sampling kits

COVID-19 LABORATORY TESTING.

- There is currently a national shortage in capacity for conducting COVID-19 testing with priorities for testing being targeted at secondary care, NHS staff and outbreak investigation/institutional settings.
- Where testing is available in the local NHS laboratory samples should be taken on admission to the unit with couriering of specimens to the laboratory. Negative tests should be repeated at 7 days. Ideally two negative tests separated by 48 hours will be obtained prior to discharge.
- The feasibility of developing a mobile lab or labs outside of the main NHS laboratory environment is under investigation. Positive and negative tests obtained under such an arrangement would need to be reported to PHE.

C) ESTABLISH COVID-PROTECT FACILITIES:

C1) AIMS OF COVID-PROTECT FACILITIES

1. **ALLOW RESIDENTS TO SELF ISOLATE** to reduce the chance of severe COVID-19 morbidity and mortality. These facilities are for homeless people, who do not have symptoms of COVID-19, aged 55 years or over and those with clinical risk criteria for influenza vaccination. Current guidance is that COVID-PROTECT facilities are maintained for three months (April - June).
2. **PREVENT EXPLOSIVE OUTBREAKS IN UNSUITABLE CONGREGATE SETTINGS WITH SHARED FACILITIES.**
3. **REDUCE PRESSURE ON NHS ACUTE CARE SERVICES**

High specification hostels, unused hotels, student accommodation or NHS /private sector clinical spec facilities. Residents of these facilities **MUST** have their own rooms and bathrooms.

C2) REFERRAL ROUTES TO COVID-PROTECT

These facilities will take referrals of **COHORT 2 CASES** - those in clinical risk groups (eligible for influenza vaccine) or aged 55 or over - not suspected of COVID-19.

Referrals will come from: -

- Homeless sector professionals working in any relevant setting
- Patients discharged from COVID-CARE who meet the previously specified criteria for discharge (See COVID-CARE)
- Mobile TEST & ASSESS TEAMS supporting TRIAGE in the community throughout the pandemic
- Acute NHS Hospitals - inpatients not suspected of COVID-19 in clinical risk groups or aged 55 or over who can be appropriately discharged AND not suspected of COVID-19 in clinical risk groups or aged 55 or over attending A&E services who do not need hospital admission
- Primary Care services - patients not suspected of COVID-19 in clinical risk groups or aged 55 or over
- London Ambulance Service - patients not suspected of COVID-19 in clinical risk groups or aged 55 or over

C3) MINIMISING TRANSMISSION RISK TO STAFF AND OTHER PATIENTS

OUTBREAK PREVENTION

Although single room own bathroom accommodation will dramatically reduce the risk of outbreaks compared to remaining resident in a hostel with shared facilities, there remains a risk that outbreaks will occur. This requires a range of measures to minimise this risk as described below.

- On arrival at COVID-PROTECT all residents will have their temperature taken and if they have a fever of > 37.8 will be transferred to COVID-CARE.
- In order to prevent residents who are in the incubation period of COVID-19 from spreading infection, COVID-PROTECT facilities must initially quarantine residents in their own rooms for the first fourteen days or, when testing becomes available, until a negative swab result taken after 7 days of admission (whichever is sooner).
- After the quarantine period residents will be offered free movement and socialisation provided they remain within the facility.
- COVID-PROTECT facilities MUST maintain a VERY HIGH INDEX OF SUSPICION for COVID-19 symptoms and PROMPT TRANSFER TO COVID-CARE (ASSESSMENT) for all symptomatic cases. To prevent outbreaks of COVID-19, residents will need to participate in daily active surveillance of symptoms and temperature throughout their stay. All residents should be provided with a smartphone enabling video consultation to assess symptom, or for those who are sufficiently compliant for this to be done using existing app-based survey technology.
- COVID-PROTECT facilities should consider the use of wearable devices that enable monitoring of P02, temperature and pulse. These will enable rapid identification of those developing fever for confirmatory testing and will have the added advantage of identifying overdose events sufficiently early to administer Naloxone. These devices can be centrally monitored automatically and trigger alerts.
- COVID-CARE and COVID-PROTECT FACILITIES IDEALLY NEED TO BE IN SEPARATE BUILDINGS WITH SEPARATE STAFF. Where this is not possible there needs to be clear separation so that there is no risk of COVID-PROTECT residents being exposed to COVID-CARE patients. COVID-CARE staff should ideally not enter COVID-PROTECT facilities.
- Residents that refuse to remain in the facility will be denied access to the social areas and either accommodated in a separated area with access to an exit or requested to leave the facility.
- COVID-PROTECT Facilities Are CLOSED TO UNAUTHORISED VISITORS
- COVID-PROTECT facilities will support continued HAND AND RESPIRATORY HYGIENE MEASURES as per PHE guidance for Healthcare settings.
- OWN ROOM AND BATHROOM facilities with access to TV and internet and telephone.
- COMMUNAL SOCIALISATION / DINING / ENTERTAINMENT AREAS FOR ASYMPTOMATIC RESIDENTS POST 14 DAYS QUARANTINE (See B3 **Rationale for 14 days isolation**)

- STAFF should follow PHE guidance for self-isolation if they or their household members develop symptoms and must not enter COVID-PROTECT facilities if they have symptoms of COVID-19 .

Use of PPE

COVID PROTECT facilities are low risk environments for homeless people without new symptoms of COVID-19. The infection control emphasis is on protecting vulnerable homeless people who are at high risk of severe morbidity and mortality.

PPE is only required in COVID-PROTECT facilities during the following procedures/situations:

- Clinical assessment and management of those who develop symptoms of COVID-19
- Taking swabs from residents.
- Transfer of symptomatic patients to COVID-CARE

Use of PPE in these circumstances should follow guidance as per previously detailed for COVID-CARE.

C4) STAFF DEPLOYMENT FOR COVID-PROTECT:

These facilities provide 24-hour support with visiting (daily) medical teams and on demand medical telephone advice. It is essential to ensure that a very high proportion of residents elect to remain in COVID-PROTECT facilities during the period of intense community transmission.

As in COVID-CARE, these facilities will require experienced workers, peers and ancillary workers who are re-deployed from existing local homeless and allied support services. The Triage process will significantly reduce demand for existing provision in the community

Non-clinical staff team with floating clinical support including mental health and addiction and chronic disease management.

C5) DISCHARGE FROM COVID-PROTECT

- Remaining in COVID-PROTECT facilities is voluntary so residents are free to self-discharge but cannot be guaranteed readmission.

- Residents who self-discharge and then return will need to be isolated for 14 days as per a new admission (See B3 **Rationale for 14 days isolation**).
- Residents developing symptoms of COVID-19 will be transferred to COVID-CARE facilities.
- Discharge planning should start early including liaison with Local Authorities' Housing Departments.
- At an undetermined point after peak COVID-19 transmission, the Government will advise lifting of restrictions and advice on self-isolation of vulnerable patients. This is not anticipated until at least the end of June. The admission to COVID-PROTECT should be used as an opportunity to seek stable housing arrangements for all those admitted to COVID-PROTECT.

D) IMPLEMENTING THE COVID-19 TRIAGE AND ASSESS PROTOCOL

The aim of the triage and assess protocol is to enable front line workers to determine who to refer to COVID-CARE and COVID PROTECT facilities and who can remain in the community.

This TRIAGE AND ASSESS protocol should be implemented as soon as COVID-CARE and COVID-PROTECT facilities are established.

Given the rapidly increasing case numbers in England this protocol should be initiated as soon as it can be safely implemented.

D1) SETTINGS WHERE THE PROTOCOL CAN BE IMPLEMENTED

- A) Community setting: Hostels, Day Centres, Emergency Accommodation, Street services for rough sleepers.
- B) A&E departments and Hospitals
- C) Primary Care settings
- D) Ambulance Services

- This protocol will be implemented by local staff following guidance and in-person or remote (telephone) instruction from NHS professionals
- The aim is to achieve a rapid cohort process of symptomatic suspected cases (COHORT 1) and high-risk asymptomatic cases (COHORT 2) who meet government clinical criteria for influenza vaccination OR are over 55 years of age.
- After this initial period homeless residential services and services supporting rough sleepers should CONTINUE TO IMPLEMENT THE PROTOCOL throughout the pandemic.
- Implementing the protocol should result in a significant reduction in numbers of service users. This would enable a coordinated redeployment of some staff to cover COVID-CARE and COVID-PROTECT facilities.

D2) PRACTICAL STEPS TO IMPLEMENTING THE PROTOCOL INCLUDING MINIMISING TRANSMISSION RISK TO STAFF AND SERVICE USERS

Achieving a high level of engagement and acceptance from service users is **CRITICAL** to prevent high levels of serious illness and death.

TRIAGING and ASSESSING homeless people into the three defined cohorts can be done by non-clinical staff utilising a simple series of questions (see below).

These questions can be asked either at a distance of greater than two metres or over the telephone and therefore **PPE is not required for triaging.**

Local staff and teams should organise implementation taking their local circumstances into account. Examples could include: -

- a) obtaining a list of phone numbers of hostel residents and calling to undertake triage
- b) Marking out areas on the pavement to allow regulated queues with spacing of 2 metres and staff conducting triaging behind a table with a distance marker for residents to stand behind

D3) TRIAGE ASSESS QUESTIONNAIRE

The questionnaire aims to identify patients with new or worsening cough or shortness of breath or symptoms of fever - (for Transfer to COVID-CARE) and to identify those aged 55 or over or with a chronic illness that fits the clinical criteria for influenza vaccination (for offer of Transfer to COVID-PROTECT)

HAS THE PERSON GOT COVID-19 SYMPTOMS?

Q1. Have you got a cough?

If Yes - go to Q2

If No - go to Q4

Q2. Is your cough new?

If Yes - Transfer to COVID-CARE

Q3. Has your cough got worse in the last week?

If Yes - Transfer to COVID-CARE

If No - go to question 4

Q4. Do you feel short of breath?

If Yes - go to Q5

If no go to Q7

Q5. Is this shortness of breath new?

If Yes - transfer to COVID-CARE

If No go to Q6

Q6. Has your shortness of breath got worse in the last week?

If Yes - Transfer to COVID-CARE

If No go to Q7

Q7. Do you feel like you have a high temperature or fever?

If Yes - Transfer to COVID-CARE

If No- Go to Q8

IDENTIFYING PEOPLE AT HIGH RISK OF DEATH FROM COVID-19

Q8. How old are you?

If aged \geq 55 years - Offer transfer to COVID-PROTECT

If aged $<$ 55 - Go to Q 9

Q9. Has your doctor ever offered you Flu vaccine?

If Yes - Offer transfer to COVID-PROTECT

If No - Go to Q 9

Q9. Do you have any of the following chronic illnesses?

A problem with your lungs, heart, kidneys, liver or spleen?

Diabetes?

Parkinson's disease or motor neurone disease?

Have you got a learning disability?

A weak immune system from an illness like HIV?

Are you on steroids?

If yes to any of these questions or the person is visibly very obese - Offer transfer to COVID-PROTECT

If No. Inform and Advise about action to be taken if symptoms develop, respiratory and hand hygiene

D4) TRANSFER ARRANGEMENTS

Transfer to COVID-PROTECT (asymptomatic at risk).

Where available public transport or taxis can be used with no special arrangements for PPE. If a shared minibus is used to transfer groups of people to COVID-PROTECT then windows should be left open to maximise ventilation.

Transfer to COVID-CARE (symptomatic).

Public Transport should not be used. If travelling in a car or minibus with no partition between the driver and patient, both should wear a surgical mask and the windows should be left open for the duration of the journey.

Surface cleaning of passenger areas should be performed after transfer.

D5) ESTABLISH COVID-19 TEST AND ASSESS TEAMS TO OPERATE IN THE COMMUNITY THROUGHOUT THE PANDEMIC

These teams can consist of trained NHS and homeless sector staff, peers and volunteers with access to private transport facilities (Car or minibus).

Further guidance on outreach will be provided.

The current situation is fast moving and evolving on a regular basis. Always refer to the single source of advice and keep up to date with the latest guidance on COVID-19 (coronavirus) via the NHS (www.nhs.uk/conditions/coronavirus-covid-19/) and government websites (www.gov.uk/coronavirus) and follow the advice.

Annex 1: Minimising the impact of COVID-19 in the homeless – Evidence Statement.

COVID 19 infection has high mortality amongst the elderly and those with chronic illness. For example, in diagnosed cases in China the mortality rates in those aged 50-59 were 1.3%, in those aged 60-69 were 3.6%, in those aged 70-79 were 8% and in those aged 80 plus years were 14.8%. (Figure 1- China CDC Weekly) For confirmed cases with chronic diseases the mortality rates were: cardiovascular disease 10.5%, diabetes 7.3%, chronic respiratory disease, 6.3%, hypertension 6%, cancer 5.6% , no chronic illness 0.9%. (Figure 2 – China CDC weekly).

Homeless people age prematurely and have very high rates of chronic disease placing them at very high risk of death if infected with COVID-19.

A systematic review identified very high levels of morbidity and premature mortality in people experiencing homelessness. (Aldridge et al). A survey of 1336 homeless people in London and Birmingham (modal age group 35-44 years) found 34% had one or more of the following conditions (asthma, chronic obstructive pulmonary disease, heart problems, epilepsy, stroke or diabetes) compared to 12% of the housed population. (Lewer et al). A recent electronic health record study of 8492 homeless people registered with primary care in England compared the prevalence of chronic disease to that seen in the housed population of the same age. The mean age was 39 years. The proportions of the homeless with chronic disease compared to the general population were: cardiovascular disease 11.6% vs 6.5%, diabetes 5.5% vs 3.1% chronic obstructive pulmonary disease 22.8% vs 14.8%. (Personal communication Ami Banerjee – UCL Institute of Health Informatics). A recent assessment of frailty in a London Hostel assessed 33 people with a mean age of 56 years. Using a standardised frailty score 55% were assessed as frail. Participants met a mean of 2.6 out of 5 frailty phenotype criteria, comparable to the mean for 89-year olds in the general population (personal communication Dr Rafi Rogans-Watson – Clinical Fellow Pathway). In a survey 41% of homeless people met criteria for influenza vaccination. (Story) This is the group the government recommend use intense social distancing.

In addition to physical health problems a high proportion of those using homeless accommodation projects have mental health issues (43%), drug issues (31%) or alcohol issues (24%). (Homeless Link)

People experiencing homelessness are often frequent users of emergency services. (Bowen)

Respiratory symptoms are common in people experiencing homelessness and are therefore unlikely to be a good method of identifying cases. A survey of 221 homeless people in Marseille during February found 50% had respiratory signs or symptoms including 41% with chronic cough, 16% with shortness of breath and 33% coughing up phlegm.

COVID-19 can cause explosive outbreaks in multiple occupancy settings. For example, on the Princess Diamond cruise ship despite intensive measures to

separate those with symptoms from others, the universal availability of private rooms with ensuite facilities and the removal of known positives to hospital, the attack rate reached 17% (619/3700) of passengers and crew. It is modelled that without these control measures the attack rate could have reached 75% (2920/3700) but that if passengers and crew had not been kept on board the attack rate would only have been 72/3700. (1.9%). In the United States a 120 bedded nursing home had 50 residents infected and 23 deaths (19 of which were confirmed as COVID-19) in the course of 2-3 weeks. (Life Care Centre – Kirkland- Washington).

In Wuhan there have been large outbreaks in prisons infecting at least 800 inmates (Yang Z) as well as in a long-term care facility (WHO China Joint Mission). In South Korea a cluster of 114 cases primarily from a psychiatric ward caused five reported deaths. (Shim et al) We also know that high mortality outbreaks of influenza and other respiratory infections occur frequently in nursing homes (Lansbury et al) and outbreaks of respiratory infection are common in homeless shelters (O'Connell). Across England in 2018 there were 34900 beds across 1085 accommodation projects (average size 32 occupants) as well as 186-day centres where homeless people congregate for long periods in crowded settings. (Homeless Link).

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