



Minimum operating standards

Novel Coronavirus (COVID-19) Patient Pathway

Updated on 27 February 2020

Purpose

1. The purpose of this document is to set out the minimum operating standards for each element of the patient pathway (see flowcharts on pages 3 and 4) from identification of a possible COVID-19 case, through co-ordination of required steps and on to discharge.
2. The initial phase will involve the isolation of **all** individuals testing positive for COVID-19 within the High Consequence Infectious Disease (HCID) network, with that network co-ordinating the response once a positive response has been confirmed by Public Health England (PHE). This is part of the 'containment' strategy to slow/halt any outbreak.
3. If case numbers increase significantly, the strategy may change to infected but otherwise well individuals being isolated at home, or on wards (as clinically appropriate). The pathway and interfaces between decision makers should remain the same but the 'co-ordination' phase may be different.
4. Each local system must ensure it has a pathway in place that can deliver the minimum standards set out in this document from identification to discharge. These standards may be delivered in a way that best fits local/regional operating models.
5. This is a live document which will be updated as the situation develops and contains links to national guidance and should be referred to when guidance is updated to ensure that the pathway remains intact with appropriate governance mechanisms in place.

Principles

Pathway 1: Primary presentation of suspected case

There are two phases in the pathway of an individual presenting to NHS 111 with symptoms they attribute to COVID-19 or a concern they have had direct contact with a case of COVID-19.

- Phase 1: The identification phase
 - An individual, wherever they may be (healthcare setting or community), has a concern they meet the latest case definitions that would require further action.

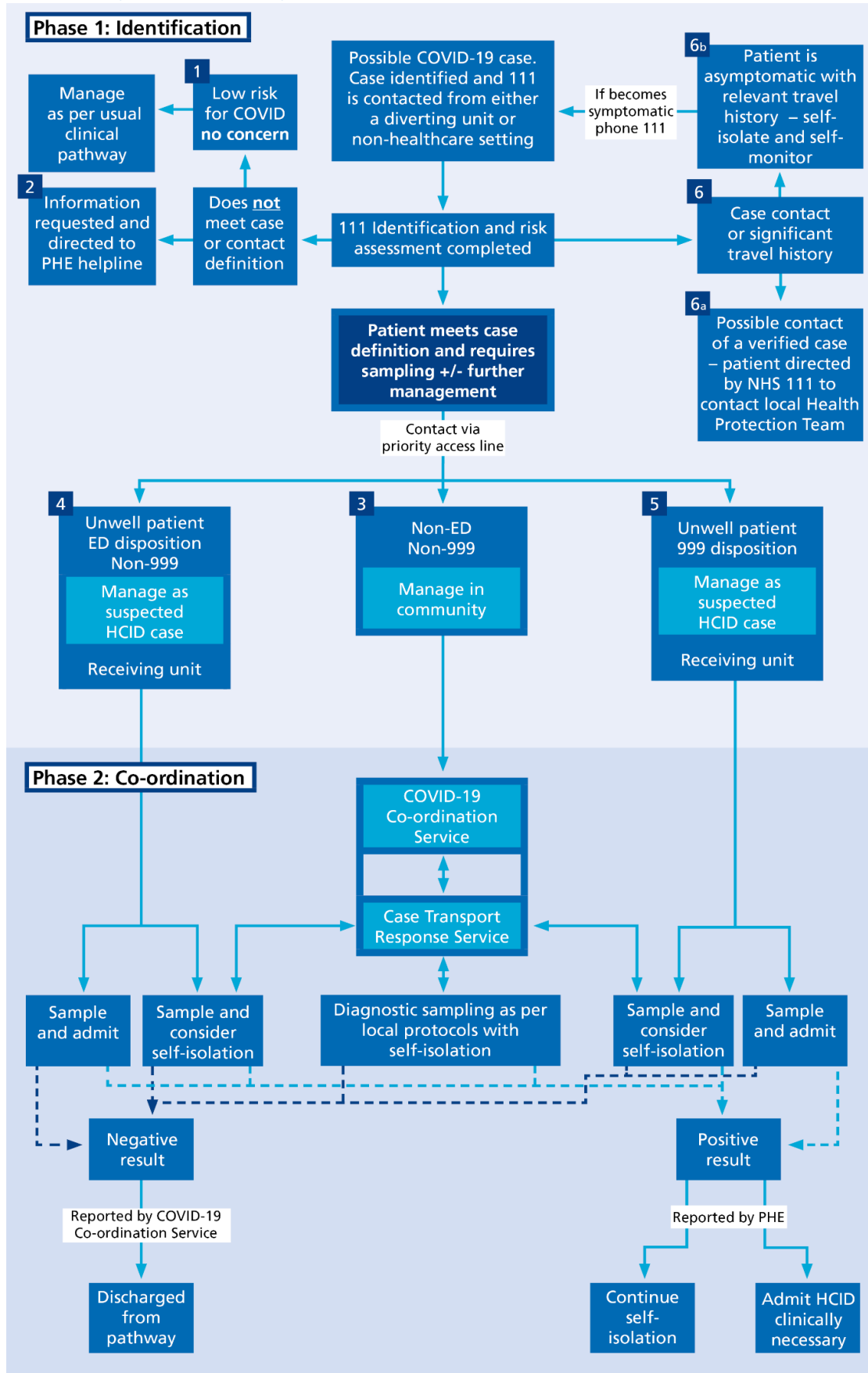
- This individual should remove themselves from other people (at home, at work/public space or in a healthcare setting) to a minimum distance of two metres and ideally in a separate room and be directed to call NHS 111.
 - NHS 111 is the gatekeeper to this pathway.
 - NHS 111 has six possible outcomes after assessing this individual.
 - If further action is required NHS 111 passes the responsibility for securing that action to the **COVID-19 co-ordination service** and the co-ordination phase begins.
- Phase 2: The co-ordination phase
 - Once the individual has been referred to the co-ordination phase, then NHS 111 no longer holds the clinical responsibility for that individual.

Pathway 2: Presentation of self-isolated patient with intercurrent illness or exacerbation of known co-morbidity

Once a patient is placed under self-isolation for suspected or confirmed COVID-19 risk there is potential they may require further clinical input outside their ongoing COVID-19 management. Pathway 2 describes the potential routes a patient may follow for the management of intercurrent illness or an exacerbation of a co-morbidity.

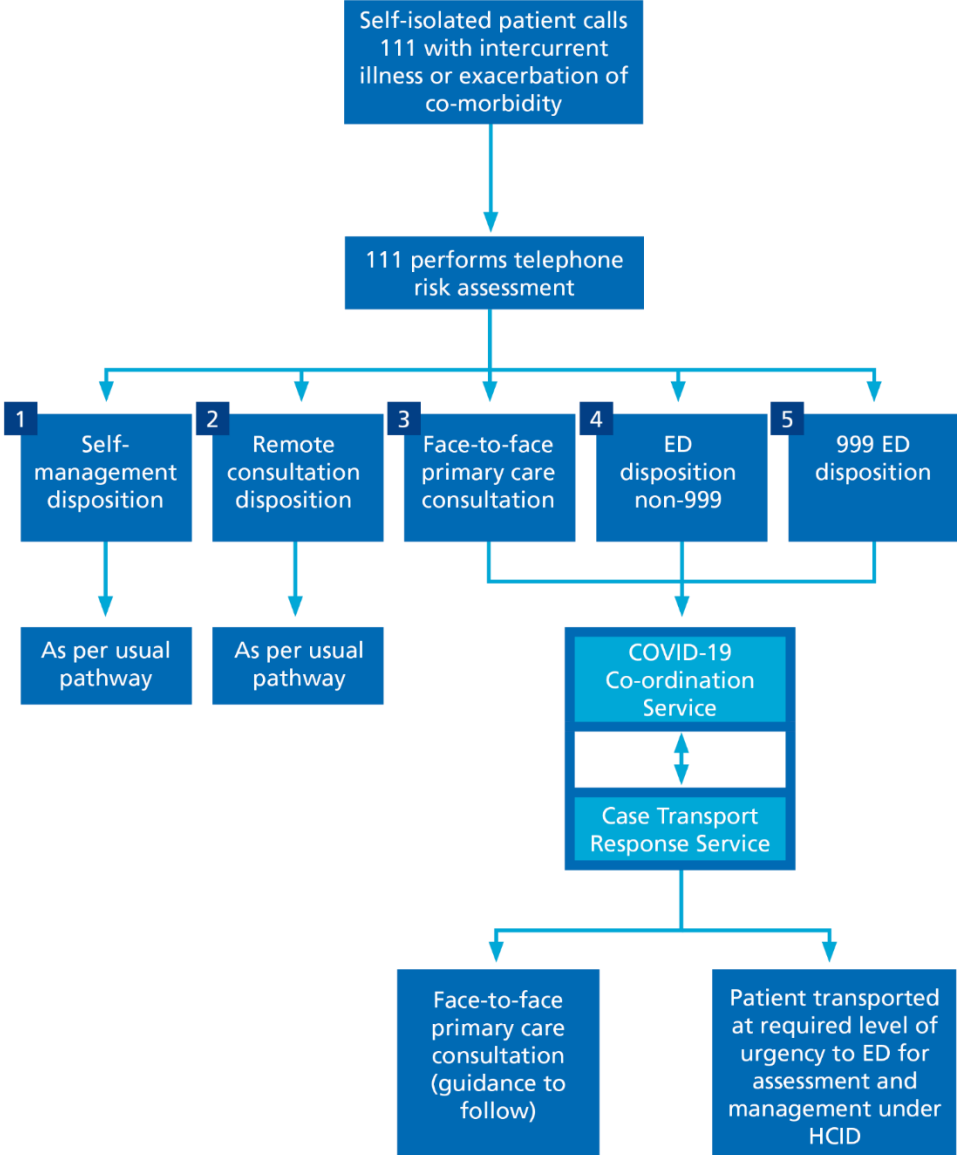
- NHS 111 is the gatekeeper to this pathway.
- The NHS 111 assessment will result in one of five possible dispositions.
- If a patient requires a face-to-face clinical review, then NHS 111 will contact the COVID-19 co-ordination service.
- The COVID-19 co-ordination service will once again assume responsibility for co-ordinating the subsequent management of the patient, including returning the patient to self-isolation once treatment is complete (should this still be needed).
- If a patient requires urgent emergency department (ED) assessment and intervention the patient will be directed to ED with the required urgency and managed as an HCID case with the ED receiving a priority call to give advance warning.

Pathway 1: Primary presentation of suspected case



Key: Items labelled 1-6 illustrate the six potential outcomes from a COVID-19 111 call

Pathway 2: Presentation of self-isolated patient with intercurrent illness or exacerbation of known co-morbidity



1. Phase 1: Identification

1.1 Identification by NHS 111

- NHS 111 is running an COVID-19 enhanced service that will be the entry point for all individuals concerned they may meet the case definition for COVID-19.
- The NHS 111 clinical algorithm for the first presentation of a suspected case will lead to one of six possible outcomes:
 - 1) **Case definition not met** – managed as normal NHS 111 call (e.g. advice, referral back for management in general practice, referral to emergency department, etc).
 - 2) **Case definition not met** – NHS 111 redirects to PHE helpline if individual 'requesting information' about COVID-19.
 - 3) **Patient meets case definition but is clinically 'well' and requires co-ordination of diagnostic sampling and self-isolation (the patient does not need to attend ED).**
 - NHS 111 uses the 'priority access line' to contact the allocated local COVID-19 co-ordination service that then takes responsibility for the individual from this referral point.
 - 4) **Patient meets case definition – Patient requires ED attendance** (but not 999 ambulance response).
 - The ED is alerted to the patient before they arrive through notification by NHS 111 via the agreed priority access line.
 - If no appropriate private transport is available, then case transport co-ordination is required (see section 3.2).
 - In transit and arrival the patient should be managed as a suspected High Consequence Infectious Disease (HCID) case, as per local protocols.
 - 5) **Patient meets case-definition – Patient triaged as sufficiently unwell to require urgent 999 ambulance conveyance to ED.**
 - Ambulance service is alerted to patient COVID-19 risk status before vehicle arrival.
 - Ambulance service contacts receiving ED via red phone.
 - Patient managed as suspected HCID case, as per local protocols.
 - 6) **Patient identifies as a possible contact of a confirmed case or asymptomatic with strong travel history.**
 - **6a) Possible contact of confirmed case:** If a patient identifies as a possible contact of a verified case, the person should be asked to call the relevant Health Protection Team for assessment and any necessary follow up.
 - **6b) Asymptomatic patient with a relevant travel history:** If a patient presents as asymptomatic but has a strong travel history (see latest guidance on [gov.uk](https://www.gov.uk) for country risk grading), they will be asked to self-monitor symptoms and may be asked to self-isolate. If the patient

subsequently develops symptoms, they will be asked to contact NHS 111 for further assessment.”¹

NHS 111 and primary care commissioners MUST anticipate and prepare for secondary presentations of suspected or confirmed COVID-19 cases that will be in self-isolation (further guidance on preparation requirements will follow).

1.2 Minimum system requirements

- NHS 111 holds responsibility for the individual during the identification phase according to their internal algorithms/pathways.
- All relevant staff involved in the COVID-19 response should be briefed that NHS 111 is the primary entry point to this pathway for all possible COVID-19 cases, unless a life-threatening emergency in which case call 999.
- All relevant staff involved in the COVID-19 response should be aware of the six possible outcomes of the NHS 111 calls.

1.3 System interoperability

- The NHS 111 service will decide, according to its algorithms, whether an individual meets the case definition and will alert the appropriate service according to which of the six outcomes has been selected.
- NHS 111 will **not** routinely contact local health protection teams (HPTs) nor PHE by default to discuss whether or not the case definition has been met for an individual. They may do so, however, if they require support in unusual or complex cases.
- If there is uncertainty in a setting that leaves frontline clinicians unsure of how to proceed, they should isolate the patient in the locality, and phone NHS 111 which can link to the health protection team and the local COVID-19 co-ordination service for advice.
- Once NHS 111 has alerted that service co-ordinating the next pathway steps, and has passed on required patient details, this is to be regarded as a handover of the clinical responsibility for this individual’s care to the team receiving the referral.

¹ Currently, asymptomatic individuals returning from category 1 countries are the only patients classified as having a ‘strong’ travel history. If patients have returned from any other country and are asymptomatic they will be asked to self-monitor symptoms but can receive care as per normal pathways (see Box 1)

2. Phase 2: Co-ordination

Definition: In order to co-ordinate transportation, sampling and result reporting for COVID-19 patients, the NHS England and NHS Improvement regional teams must ensure there is a co-ordinating service in all healthcare systems. This will be called the **COVID-19 co-ordination service**.

2.1 Minimum service requirements

2.1.1 COVID-19 co-ordination service

This COVID-19 co-ordination service must include:

- 1) A single point of contact for enquiries about patients in COVID-19 pathways.
- 2) An agreed 'priority access line' allowing NHS 111 to pass the referral, and responsibility for the individual identified, to the care provider.
- 3) An ability to arrange transport of a possible COVID-19 case to and from the designated local care provider 24/7 if required.
- 4) The ability to access appropriate diagnostic sampling services.
- 5) Arranging transportation of samples into the appropriate PHE diagnostic testing laboratory.
- 6) A reporting mechanism to capture negative results from PHE eLab (<https://phe-elab.phe.org.uk/Authentication/Login?ReturnUrl=%2F>) and ensure the notification of results to patients and their relevant healthcare providers.² PHE is responsible for reporting positive results only to patients.
- 7) A capability to address issues arising from results received, with 24/7 access to receiving and diverting units if required.
- 8) A system for co-ordinating the logistics of any patient transport required.
- 9) The maintenance of a log for patient tracking, unit activities and recording lessons identified (good practice and incidents).
- 10) Going forward the co-ordination centre will be the source of data for situation reporting.
- 11) A single point of contact for allied health services (e.g. isolation facilities, secure facilities and mental health services).

² For patients in self-isolation in the community or home setting their GP is also to be notified of sample results.

For patients admitted into a receiving unit sample results are to be reported to the unit and the patient's GP, in this scenario the receiving unit is responsible for informing the patient.

Responsibilities

The location, hosting and resourcing of the COVID-19 co-ordination service is at the discretion of local healthcare systems. This service could reasonably sit with an STP, acute trust, LRF, regional team or other organisation that best fits local operating models.

Hospitals and other diagnostic sampling services have a responsibility to notify the COVID-19 co-ordination service of samples they have taken. This is particularly important if there are plans to return these patients home for self-isolation.

All these processes must be co-ordinated in accordance with the up-to-date guidance for:

- [Infection and prevention control](#)
- Case transport
- Home diagnostic sampling
- [Home isolation](#)
- [Suspected and confirmed High Consequence Infectious Disease \(HCID\) cases](#)
- [Public Health England notification and result reporting.](#)

Further details can be found in the [Accessories section](#).

2.1.2 Identification as a 'receiving' or 'diverting' unit

In acknowledgement of the complexity of the NHS landscape, sites are sensibly considered to function for the purposes of COVID-19 management as either 'receiving units' or 'diverting units'.

Whether a site is a receiving or diverting unit, all plans must be in accordance with up-to-date guidance on:

- Infection and Prevention Control
www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control/wuhan-novel-coronavirus-wn-cov-infection-prevention-and-control-guidance
- Case transport
- Home diagnostic sampling
- Home isolation www.gov.uk/government/publications/wuhan-novel-coronavirus-self-isolation-for-patients-undergoing-testing/advice-sheet-home-isolation
- Suspected and confirmed High Consequence Infectious Disease (HCID) cases www.gov.uk/guidance/high-consequence-infectious-diseases-hcid
- Public Health England notification and result reporting
<https://www.gov.uk/guidance/wuhan-novel-coronavirus-information-for-the-public>

Receiving units

Definition: Any unit that hosts a ‘Coronavirus Priority Assessment Service’ (CPAS), including an ‘NHS 111 Coronavirus Pod’ (Pod) or other COVID-19 diagnostic sampling service.

Minimum requirements

Priority access line

- A telephone number agreed between a local NHS 111 provider and a ‘receiving unit’ to alert the unit to a suspected COVID-19 case in any location.
- NHS 111 uses this line to convey patient details to the ‘receiving unit’ and hence make a formal referral for the next steps in care.

Note: The priority access line was previously proposed as being the ED ‘red phone’. However, as ambulance 999 or ED attendance disposition cases will still use the red phone, NHS 111 referral of non-ED bound cases for diagnostic swabbing must have access to a separate priority line to avoid the red phone being overwhelmed.

- Priority access lines must be staffed throughout the opening hours of the receiving unit by an individual who is able to respond; an answerphone or voicemail is not acceptable.
- Any ‘receiving units’ not open 24/7 must have regional agreement for out-of-hours cover.

Allocation as a receiving unit

- EDs and most urgent treatment centres (UTCs) should be designated as receiving units.
- Any UTC unable to provide 24/7 cover must agree out-of-hours arrangements with all relevant stakeholders.
- Walk-in-centres (WiCs) and minor injury units (MIUs) must agree with their regional teams on a case-by-case basis whether they can fulfil the minimum requirements of a receiving unit.

If a unit is unable to meet the minimum requirements of a ‘receiving unit’, then they will revert by default to being defined as a ‘diverting unit’.

Your NHS England/NHS Improvement regional operations and EPRR teams are there to support you in ensuring your local health system can provide the capability required.

Diverting units

Definition: Any unit that does not have a CPAS or a diagnostic sampling service defaults to be a diverting unit.

Minimum requirements

Local plans to avoid suspected COVID-19 cases entering the unit

If a diverting unit encounters a suspected COVID-19 case, the primary aim is to:

- Instruct the individual to return home, enter self-isolation and enter the pathway via NHS 111. This will protect NHS staff and members of the public, and ensure the individual can be treated quickly and appropriately
 - Local signage on all entrances should direct patients follow this course of action.

If unable to send the individual home:

- Isolate that individual in accordance with PHE guidance to protect NHS staff and members of the public.
- Preferably the patient, or a healthcare professional, should call NHS 111.
- After NHS 111 assessment, and if required, NHS 111 will alert the local COVID-19 co-ordination service to organise safe conveyance of the individual from that location to an appropriate setting in accordance with local plans.
- Any isolation of possible COVID-19 cases will need to be managed in line with infection and prevention control guidance.
- Following transfer of a suspected COVID-19 case:
 - A decontamination of the isolation area used should be carried out promptly in line with infection and prevention control guidance.
 - The Health Protection Team should undertake a risk assessment of the unit's healthcare workers in contact with the suspected case and advise on further actions.

Further specific guidance on how to continue to provide primary care to suspected COVID-19 cases in isolation will follow.

Section 4 describes the management pathways for patients who develop intercurrent illness or exacerbation of co-morbidities during the isolation period. If you are unsure whether an individual poses a risk, the default is to isolate at home, or in a clinically appropriate setting, and call NHS 111.

3 Pathway accessories required

3.1 Diagnostic sampling

The COVID-19 co-ordination service will decide which diagnostic sampling service is most appropriate on a case-by-case basis, according to what is available locally.

Minimum requirements

- Please consult the 'Coronavirus (COVID-19) Diagnostic Sampling Guidance' published by NHS England and NHS Improvement (13 February 2020) for details of the safe taking and processing of diagnostic samples.
- Diagnostic sampling arrangements are the responsibility of the COVID-19 co-ordination service.
- Local healthcare systems may decide to develop different diagnostic sampling services which best suit their local healthcare providers.
- These services must adhere to the core principles of the NHSE/I and the PHE guidance at the hyperlink below.
- Up-to-date guidance can be found [here](#)

3.2 Case transport

The COVID-19 co-ordinating service is responsible for organising the transport of suspected/confirmed COVID-19 cases around the system. The following framework is designed to enable provider organisations to implement services locally that will support existing arrangements to transport patients to and from units.

Minimum requirements

- Private cars (or other vehicles) can be used if driven by the individual if well, or family and household members who have been in regular recent contact with the individual.
- Suspected COVID-19 cases must not travel on public transport or in taxis (private or shared).
- Providers with experience in providing patient transport services should provide transportation services for suspected cases and receive training in appropriate PPE infection control management.
- We recommend that COVID-19 transport request and dispatch is provided in ambulance service Emergency Operations Centres. This should be capable of being scaled up as needed.
- Collaboration with other healthcare transport providers may be needed to ensure demand is met.

- Transportation should adhere to PHE infection and prevention control guidance. <https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control>.
- The case transport response service should be run in conjunction with the COVID-19 co-ordinating service.
- Suspected cases will be transported to the receiving unit, using the modality and urgency of transport recommended by NHS 111.

We will shortly release the case transport framework to give more detailed information on the requirements to deliver this service.

3.3 Infection prevention and control

The safety of NHS staff and the wider public is paramount in this response. Any interaction with potential cases of COVID-19 must be managed by staff trained in the relevant infection control procedures.

Minimum requirements

Personal protective equipment (PPE)

PPE requirements may differ depending on the environment the individual is being managed in. PHE provides up-to-date guidance for PPE on its gov.uk website including:

- i) [Up-to-date guidance for primary care](#)
 - ii) [Up-to-date guidance for secondary care](#)
 - iii) [Up-to-date guidance for ambulance trusts](#)
- If in any doubt regarding how to manage a patient you are concerned does not fit into this guidance, isolate the patient and contact your local health protection team for support.
 - Details of your local health protection team are at: www.gov.uk/health-protection-team

Decontamination of any area

- Any environment that has been used to isolate a possible COVID-19 case must be promptly decontaminated in line with PHE guidance provided on above hyperlinks.
- This includes any vehicles used for case transport.

- Any staff performing this role must be appropriately trained. Staff must also have access to the appropriate level of PPE and associated training in its use.
- If local plans involve any vehicles or environments that do not appear to be covered in available guidance, please escalate this to your regional operational and EPRR teams for support or contact your local Health Protection Team.

Clinical waste

Large volumes of waste may be generated by frequent use of PPE. Advice from the local waste management team should be sought in advance on how to manage this.

Dispose of all waste as clinical waste.

Waste from a possible or a confirmed case must be disposed of as Category B waste. The transport of Category B waste is described in [Health Technical Memorandum 07-01: Safe management of healthcare waste](#). The Advisory Committee on Dangerous Pathogens provided advice on waste categorisation on 31 January 2020. Further advice on clinical waste management is described www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control/wuhan-novel-coronavirus-wn-cov-infection-prevention-and-control-guidance#waste

3.4 The role of Public Health England (PHE)

i) Confirmation of meeting the case definition

NHS 111 is not required to check with local Health Protection Teams, or other functions of PHE, whether a patient is suitable for sampling and testing.

If a patient meets the case definition, as defined by the algorithm at that moment in time, then NHS 111 makes the decision to move the patient to the co-ordination phase.

ii) Follow up of self-declared 'suspected' contacts of COVID-19 cases

PHE does NOT expect to be alerted by NHS 111 of 'possible' or 'suspected' contacts who self-declare via NHS 111. These individuals are directed to self-isolate for 14 days and contact NHS 111 again should they become symptomatic.

PHE will not track contacts within the UK of possible or suspected infections outside high-risk geographic regions, as these cases are highly unlikely to be confirmed.

If an individual is returning from a country listed by PHE as being of high risk of COVID-19, and they are symptomatic, they will be tested for COVID-19 regardless of contact status.

If a patient states they have been a contact of a confirmed case from another country, they will require an assessment by a clinician (this could be remotely through 111) to determine risk of infection and next steps.

iii) Follow up of confirmed positive COVID-19 samples

PHE will be notified of positive results via its laboratory network and will co-ordinate the next steps for confirmed COVID-19 cases (be that entry into HCID network, or relay to the relevant COVID-19 co-ordination service if no longer in the 'isolate and contain' stage).

PHE has agreed communications protocols for notifying individuals, and the wider public, of positive results. The responsibility for this sits with the Chief Medical Officer (CMO) in England.

It remains the responsibility of the PHE laboratory to inform the local COVID-19 co-ordination service of positive results. In current conditions, the COVID-19 co-ordination service will arrange urgent ambulance transportation for the confirmed case to a HCID unit, with a paramedic team. The local clinician responsible for the patients care must undertake the following actions for any positive case:

- a. Checking if the patient is clinically stable
- b. Confirming the patient's current address and status to regional and national EPRR teams.
- c. Informing NHS England and NHS Improvement EPRR to confirm the above has taken place so the HCID network conference call can be activated.
- d. Joining the HCID network call to convey accurate clinical and demographic information; including any relevant information on the social situation (including whether there are children needing care, etc).
- e. Remaining locally responsible for patient care until the patient is being conveyed to an Infectious Diseases Unit.

Through the laboratory reporting system, PHE is notified of positive cases of COVID-19. PHE is also informed internally and then identifies the list of contacts of the case and follows up each contact. This may not always be carried out by the local Health Protection Team where the case has been identified.

iv) Contact tracing of confirmed COVID-19 cases:

PHE is responsible for identifying any contacts of confirmed positive cases. PHE does **not** follow up contacts of suspected or possible (and unconfirmed cases) as the contact tracing starts on notification of a confirmed case and is comprehensive and rigorous.

v) Follow-up of negative test results

The COVID-19 co-ordination service will be responsible for disseminating negative results to patients, providers and the local responsible clinicians.

Each region's COVID-19 co-ordination service must have be able to disseminate negative results.

Each COVID-19 co-ordination service must agree with the relevant laboratories how these results will be communicated to them and the appropriate next steps that should be taken.

4 Managing illness during self-isolation

As described in section 1, NHS 111 and regional primary care commissioners **must** anticipate and prepare for the development of intercurrent illness or exacerbation of co-morbidities during the self-isolation period.

If a patient develops new symptoms during their period of self-isolation they are advised to call 111 where risk assessment will be performed. There are five potential dispositions that could result from this interaction. Two of them follow normal, non-COVID-19 pathways but three will require involvement of the COVID-19 co-ordination service, case transport service (See Pathway 2: Presentation of self-isolated patient with intercurrent illness or exacerbation of known co-morbidity, **further guidance on this will follow**)

4.1 Illness during self-isolation dispositions

The five dispositions are:

- 1) **Self-management disposition** – Patient is well, has received advice from NHS 111 and can manage symptoms at home without further clinical input.
- 2) **Remote consultation disposition** – Patient requires virtual input from a clinician via telephone and can be managed remotely. 111 will refer this patient a suitable local service. **Remote consultation clinicians will also have access to the priority access line if, following remote consultation, they believe the patient is sufficiently unwell to require a face-to-face consultation.**
- 3) **Face-to-face primary care consultation** – Patient requires face-to-face assessment and management by primary care provider. Contact will be made via the priority access line to the COVID-19 co-ordination service who will arrange assessment and ongoing management (further guidance to follow)
- 4) **ED disposition non-999** – Patient is sufficiently unwell to require assessment in an Emergency Department, patient will be transported from self-isolation to ED for assessment and management co-ordinated via COVID-19 co-ordination service using the COVID-19 case transport service.
- 5) **ED disposition 999** – Patient is sufficiently unwell to require urgent assessment in Emergency Department, patient will be transported from self-isolation to ED for assessment and management co-ordinated via COVID-19 co-ordination service and case transport service.