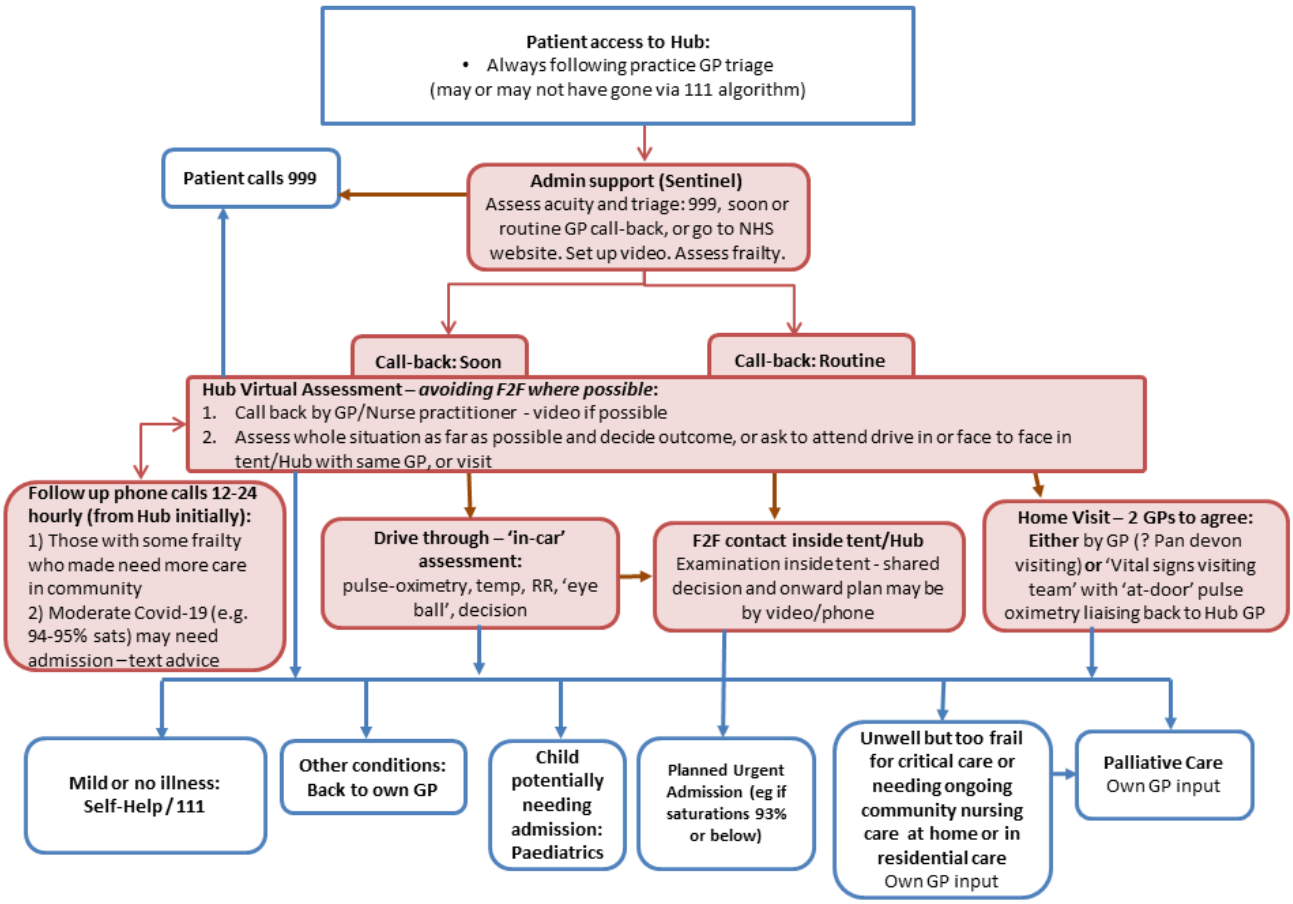
Devonport HC COVID-19 Hub

In the current COVID-19 pandemic, it is important to reduce footfall and potential exposure to virus for patients and staff. There remains a need for prompt and comprehensive assessment for people with acute illness and injury. This proposal is to promote remote assessment in primary care and to minimise contact clinical review for unplanned hospital attendance at Derriford Hospital.

The aim is to create a safe, efficient and compassionate system:

- **Bring together the best ethos and practices of primary care**
- **Look after each other as well as the patients**
- **Minimise contact and exposure while creating a brief but important relationship with patients at a difficult time**
- **Helping ensure those who will benefit from critical care are admitted in a timely way**
- **Helping those less likely to benefit due to frailty or LTCs make the best decision for them**
- **Looking after those with or at risk of having COVID-19 but with other problems.**

Western Covid-19 – Devonport HC HUB workflow 3 4 20



Currently if patient calls 111 in hours and potentially needs further care practices will assess before referring to Hub

Patient calls 111

1. 111 automated system determines if advice only (direct to 111 website) or requires further discussion
2. Caller put through to 111 call centre
3. 111 to advise patient to contact their own GP practice
4. GP practice follows same process as GP practice to admin SOP

GP Practice care and SOP for referral to Hub admin support

1. Patient calls practice
2. Practice ask if self-isolating (due to suspected symptoms and/or family member) or has existing suspected COVID symptoms with other issues/concerns
3. If COVID-19 symptoms - patient directed to the on-line NHS 111 Covid Hotline if has not already
4. If patient has been directed back to GP practice - practice will do a full assessment by phone or video consultation preferably using the supplied COVID-19 template on Emis web or System One
5. If Practice triage indicates that a patient may require a F2F (Face-to-face) examination to make a decision the practice contacts the Hub admin team. Patient will be informed that they will receive a phone or video consultation by the Hub doctor and on-going management will be decided following that consultation. They may not be seen F2F.
6. Practice calls 01752 434102 and pass the details to a Hub admin team including the name of the practice they are calling from Practice provides full name, DOB, Address and contact phone number- preferably a mobile phone number from a smart phone with video capabilities and the name and contact number of a carer. Telephone number (preferably mobile) of the referring doctor should also accompany the referral. Please ensure anticipatory care plan is up to date if relevant
7. System one practices also need to book patient into Pathfields Hub clinic in order for Hub clinicians to access and add to clinical records (currently only EMIS web accessible if not booked in). To book in: with patient open go to appointments and select Remote Booking from drop down list and book into Hub list

Hub script for admin support on referral into Hub Team to add to a template

1) Are you currently on your own? If not is there a suitable adult available to monitor/possible drive you to be assessed?
2) Is the patient too breathless to speak – If yes – advise to call 999 or go directly to AED
3) What is the main problem today?
4) Any allergies?
5) Main long term health conditions
6) Level of frailty-
    - Walks with aid or alone or unable to walk unsupported?
    - Lives alone- if lives alone what support
    - Lives with others- level of support required

7) Access to smart phone – self/ family member/ neighbour- if yes- offer help to set up video consultation (accuRX)
8) Test video connection to make sure mic and video working etc., or need to download chrome
9) Take contact details - phone and e-mail address of patient and carer
10) Car details/Registration of transport in case needs to be seen face to face
11) Advise will be contacted by clinician via telephone/Video to discuss further

Doctor's Hub Standard Operating Procedures

1. GPs will be notified of appointments by the Sentinel admin support who will enter appointments into the EMIS appointment diary. The records should include details of whether individuals can access video, whether they live at home with someone who can bring them in by car, and some idea about their frailty
2. Sentinel EMIS web is used to manage appointments, use AccuRx, and complete summary of episode at end of day. See detailed guidance on computer use
3. Hub virtual assessments are initially by phone or preferably by video (send link and patient should be waiting to receive video call, if not then use mobile to alert them) and involve a focused assessment as to the problem following the COVID EMIS/S1 clinical template if there is a new cough or fever or worsening of an existing respiratory problem. Completing the template allows us to communicate clearly with colleagues
4. After a telephone/video assessment, options include further assessment with a drive-through in-car assessment at the Hub. Individuals will be met by the traffic warden after you have instructed them and/or sent the accuRx text to invite them to the Hub. The car park attendant will book them in and this will appear on your appointment screen. (See in-car assessment SOP). You may choose to take some individuals into the tent after the initial drive-through assessment and some will need to go straight to the tent anyway. Rarely, individuals may be invited into the building, for example, while awaiting an ambulance if they require oxygen and/or are cold
5. For those households without a car and unable to come to the Hub, home visits may be required. For most individuals, this should be via the Vital Signs visiting service where an 'at-door' pulse oximetry would be carried out followed by liaison back to the Hub GP in order to make a decision. Sometimes the vital signs team can hand over a smart phone so further assessment can be done via video
6. The range of decisions include:

- 999
- Advice to look at the 111 site if mild illness only
- For moderate cases provision of advice about observing for changes in severity by AcuRx text and a call-back by text or phone every 24 hours and every day until well
- Referral back to their own GP by tasking or other communication for ongoing other conditions
- Admission via paediatrics for children
- Admissions for treatment in hospital via Acute care admission line
- Referrals onto ongoing community care for those who are unwell but will require ongoing nursing, medical and social care but have decided not to be

admitted. Some individuals may not be able to decide immediately and a patient information sheet is available with the potential for a nurse to ring back and discuss admission decisions further; some individuals will require a palliative care at home or in a nursing home. The options are laid out in the figure

7. After episode of care (i.e. phone or video +/- Hub or vital signs visit plus final decision for day) is complete this should be summarised on the end of care EMIS template. Reflections on each case are collated to improve this rapidly evolving service

Draft SOP for face to face assessment at Hub (in-car or in-tent or in-Hub)

If patient able to be brought or drive themselves in own car to Hub –
An IN CAR assessment is performed:

1) Telephonist or Clinician ascertains that an in car assessment is feasible
2) Patient asked to drive to Hot Hub
3) On arrival driver/patient to seek security guard who will inform driver/patient where to park.
4) Stay in the car and switch off engine
5) Security guard telephones telephonist in the Hub
6) Telephonist informs Clinician that patient has arrived
7) Clinician puts on correct PPE – As per Public Health England guide
8) Clinician approaches window next to patient
9) Patient details (name and DOB) confirmed
10) Patient asked to roll down window by 5cm to allow a face mask to be passed in and patient asked wear
11) Assessment performed –assess patient visually and measure saturations and pulse. Check for cyanosis, alertness, pallor, respiratory rate. Take temperature if required. Other focused examination as necessary if need be moving patient onto a chair or couch in the tent. Try to avoid prolonged or close contact
12) Clinician to decide on management and communicate this to patient
13) If Oxygen needed to transfer patient into room
14) If prescription needed , issue electronically
15) If medication needed on site to issue
16) If discharged to home to give an accuRx Patient information text
17) If follow up needed to add to Hub diary

In-tent or in-Hub assessments:

1. If further management needed or patient needs further treatment to transfer patient to room – relatives to remain in car. Patient to remain in the car until room available.
2. Hub - If patient walks to Hub an assessment would be performed in the tent initially by video link (see unexpected person SOP below).
3. If a tent assessment is not appropriate or further treatment is required the patient should be transferred to the room. The same procedure is followed for assessment in these situations.
4. Transfers should be done by walking if patient is able, if patient more unwell or has poor mobility a wheelchair is used (if wheelchair used, a cover is applied). Face mask to remain in patient.

Vital signs visiting service

Description

The volunteer visiting service must be delivered by 2 people trained with PPE. If two volunteers are not available escalate to the Clinical and Management lead. The aim of the service is to deliver a basic diagnostic service for GPs in the COVID-19 Hub where all other options have been exhausted. Patients must be able to reach their front door or an accessible window to receive the diagnostics. Referrals from the COVID-19 Hub will have been assessed by telephone/video triage and deemed inappropriate for drive-thru assessment. Two GPs will agree together when a vital signs visit is required before being accepted by the team. The tests provided are limited to SATs and pulse.

Exclusions:

- Bed-bound patients – no volunteer staff will enter a patient's home.
- Urgent/Critical Patients requiring 999 or immediate visit from health professional.

SoP:

1. Service initiation:
    a. Consultation raised by admin/clinical manager
    b. Volunteers contacted by WhatsApp (initial roll-out plan – aim for zonal teams)
    c. GP briefs clinical manager
    d. Volunteers confirm availability
    e. Volunteers briefed – risks identified and raised with team
    f. Confirm arrival time
2. Patient Contacted by GP:
    a. GP/Nurse of vital signs team member contacts patient to explain next steps
    b. Patient informed to be sat by door or contact point 10 minutes before volunteer arrival
    c. Explain to patient that a mask will be passed to them through door or window
    d. Explain to patient that the volunteers ***cannot*** enter their house
3. Volunteers arrive at site:
    a. Contact admin support to confirm arrival
    b. 1 x volunteer dons PPE as per instructions/training. Second Volunteer checks PPE (would not normally wear PPE, might use gloves)
    c. PPE Volunteer approaches door and initiates contact. Stays calm, steady, friendly, communicative, explaining this process, answering questions, acknowledging anxiety/strangeness of the situation, the PPE appearance
    d. [NOTE: See below for exacerbations]. Support volunteer 3 metres behind
    e. Volunteer instructs patient to open door slightly or posts mask through letterbox
    f. Once mask is in place then volunteer explains what is going to happen
    g. Patient opens door

   h. Hand probe over to patient (SATs and pulse) and explain how to use (e.g. switching the oximeter on), being clear the readings are good, ensure you're reading it the right way up, ask patient to call out the numbers (to involve them, even as you're looking to confirm). Some patients may need assistance in putting on probe and readings
   i. Volunteer or patient to call GP with results. If individual has no phone or GP wants video access and there is smart phone in house the volunteer can put Hub phone in bag
   j. GP to speak to patient via own or bagged phone
      i. Safety netting
      ii. Results
      iii. Care plan
   k. Phone returned to volunteer if need be and end contact
4. Contact closedown:
   a. DOFF PPE
   b. Call Admin to confirm end of contact
   c. Return to base for:
      i. Waste disposal (after each or consecutive visits)
      ii. Clinical notes back to Hub
      iii. Access support from team

In case of exacerbation:

- If the patient's condition exacerbates then the volunteers must call 999 for ambulance
- The volunteer must not enter patient's house
- The volunteer must not administer aid

SOP for patient awaiting ambulance in Hub

In a situation when a patient has been assessed as needing transfer to hospital:
1 patient to be transferred to room in Hub from place of assessment.
2 patient to continue to wear facemask during transfer.
3 if oxygen required this applied before transfer.
4 transfer takes the most direct route, relatives to remain outside building
5 clinician and or nurse to remain monitoring patient until ambulance attends, unless intervention needed, monitoring is done from door of room to avoid time in contact with patient
6 monitoring performed as medical appropriate condition
7 To avoid contamination ambulance crew remove patient by most direct route. Relatives not to travel with patient
8 room is cleaned when patient has left

SOP for an unexpected person arriving at Hub

The normal procedure would be for ALL patients to arrive at the Hub by appointment only, following triage. However, there may be unforeseen situations when a patient arrives on foot or by car unexpectedly at the HUB (e.g. homeless):

1. security guard to approach the patient, whilst remaining at > 2 metres distance.
2. security guard to talk to patient and to ascertain reason for attendance.

3. If the Security guard is concerned about the individual's immediate health then the security guard can call the Hub doctor for advice.
4. Patient could be brought to the car tent for patient to have video consultation by the Hub Doctor - if patient unwell or insisting on being seen.
5. If no immediate medical concern - patient told to go home and go to the NHS 111 online covid hotline and follow directions.
6. If no medical need identified at all the individual if asked to leave. Police may need to be called if situation escalates.

Current Accurx text templates
Here's the NHS COVID-19 advice. It gives information on staying at home, avoiding the illness and other useful tips:
https://www.nhs.uk/conditions/coronavirus-COVID-19/

Follow the link for the NHS service that provides isolation notes. This is a note for your employer that advises you to stay at home: https://111.nhs.uk/isolation-note/

If you are struggling to get your camera or microphone to work for our video consultation, you likely need to enable them in your phone settings. The steps to do this can be found here:
https://support.accurx.com/en/articles/3779266-video-consultation-problems-enabling-camera-or-microphone

Devonport Hub Accurx text Templates
Following your recent telephone or video consultation, the doctor would like you to attend the Devonport Hub for a further assessment. This can be found next to Devonport Health Centre at 53 Damerel Close, Plymouth PL1 4JZ - map and directions can be found by following the following link:
https://www.bing.com/maps?q=devonport+Health+Centre&src=IE-TopResult&FORM=IETR02&conversationid=

On arriving at the Devonport Hub, you will be met at the entrance by a security guard and directed to a parking bay. Please park up and remain in your car until you are telephoned and directed to a tented parking area where some basic clinical observations will be made. A doctor will see you at the tented bay and pass a mask through the car window and you will be asked to put the mask on. For information on how to put on a medical mask, please follow the link:
https://www.youtube.com/watch?v=0whUgkCgP0U

Once your mask is on you will be asked to put your finger out of the car window, where a device to measure the oxygen in your blood will be put on your finger. Once the basic tests have been done. You will be asked to close the car window and the doctor will telephone you to let you know what has to be done next. This may involve a further examination, a prescription, or advice.

Following your chat with the GP, further tests need to be carried out. As you are unable to come to our Hub, a visiting team will attend your home. They will arrive with masks, gloves and an apron. Please ensure that you have been sitting near the door, or an open window for 10 minutes prior to their arrival. On arrival they will pass a mask through the letterbox/window. Please put the mask on.

Once the mask is on the visiting team will check your temperature, pulse and put a device on your finger to measure the levels of Oxygen in your blood. They may pass you a mobile phone so that you can have a viseo consultation with the Hub doctor. Once the doctor has made the clinical assessment your ongoing care plan will be discussed with you by the doctor.

Patients with some respiratory compromise needing advice and follow-up
(Acurrx text unless have no text ability then paper in envelope – they pull out of envelope to avoid touch).
Thank you for coming to the Primary Care access centre today at Devonport.
Or
I'm glad we were able to come to visit you today.
Or
It was helpful to have a video consultation with you while you were in your home.
It is good that your symptoms are not bad enough to require admission. However, you need to be aware that symptoms can get worse, sometimes rapidly between days 4 and 10 of the illness caused by COVID-19. Because you are likely to have some lung involvement, it is important that you monitor your symptoms closely.
The two most important things are to check if 1) you feel generally more unwell, especially if this comes on rapidly or 2) if you become significantly more short of breath.
It can be helpful, if you have someone else living in the house, to ask them to help monitor how you are.
We will aim to call or text you back once a day. Please respond to say if you are now well, no better or need to seek advice again.
If you feel significantly worse, you should call your Practice and either they will see you again or you will go through to out-of-hours services.
We wish you well in this difficult time.

Text/paper for difficult decisions about admission or where to go
After your clinical assessment we agreed that you do have significant illness. It is important that we make the best decision together with you about where you are looked after. We did not make a final decision. The options might still include going to hospital, staying at home, or going to a nursing facility in the community.
As we discussed, you are likely to be one of those who would not benefit fully from ventilation and so the decision to go to hospital is not straightforward, especially as this would mean you would lose contact with any friends and family apart from by phone.
You may wish to discuss the best way of being looked after with people you know. Discussions might also include deciding in advance about treatments that you might or might not wish to receive.
We could also arrange for a nurse to call you back to consider all the options fully (if we have this possibility).
We will call you back at about ……

Additional material – clinical guidance to be selected to supplement below

General Practice and Critical Care Working Together (From Mike Swart and Sam Waddy ITU consultants)
We would like to share with our GP colleagues some thoughts on assessing patients with suspected or proven COVID-19. We appreciate you will be conducting most consultations by phone or telemedicine. This is written thinking how would we do this by telemedicine and no additional investigations.
COVID-19 has the same symptoms and signs as other flu. Where it differs is severe hypoxia from a pneumonitis. This cause pleuritic chest pain and pain on coughing. Myalgia can be severe.

There is good advice on setting up a telephone consultation, symptoms and red flags in a BMJ article in the link below:
https://www.bmj.com/content/bmj/368/bmj.m1182.full.pdf

How do I as an ICU consultant assess if a patient is deteriorating?

- Ask are you getting better, worse or staying the same?
- Increasing shortness of breath, count the respiratory rate.
- Able to talk in full sentences, able to talk in short bursts of words, struggling to talk.
- Increasing confusion or delirium.
- Drowsy or a reduced level of consciousness.
- Tachycardia.
- The main life threatening problem is hypoxia.
- If available use a pulse oximeter.
- Cold and clammy.
- Unconscious.
- Assessing patients with chronic lung disease and the elderly is more difficult than assessing young fit patients.
- Auscultation adds little to the above.
- Change in symptoms over time is important.

How do I know a patient is getting better?

- The above symptoms and signs are improving.
- Fatigue and chest pain persist into the recovery period.
- Fatigue can still be present when close to a full recovery.
- Return of appetite.
- Wants to spend more time out of bed.

There are a number of very useful and informative videos on ICU for patients and clinicians at the following link: Critical Care Information Gateway

General Practice and ITU Working Together
We would like to share with our GP colleagues some thoughts on shared decision making with patients and their families on treatment escalation to ventilation on an Intensive Care Unit (ITU) for patients with suspected or proven COVID-19.

- At the moment decision making on admission to ITU has not changed. If patients will benefit from ITU and they want to be ventilated the treatment is available.
- The expected benefit is survival and return to the community with a quality of life that is acceptable to the patient.
- Patients who are frail or have medical comorbidities may have their death prolonged but not prevented by ventilation in ITU.
- Ventilation in ITU comes with a burden of suffering pain and distress.
- In Derriford Hospital we are using the attached criteria to identify who is unlikely to return home after ventilation in ITU. When possible this is shared with patients and a shared decision is reached. If this is not possible it is shared with their family or carers to explore what the patient would want. If they have no friends or family and the situation is time critical then a best interests decision is made.
- The criteria we use are not black and white. They are used to determine when we need to have a discussion with the patient about suffering without an expected benefit.
- Patients admitted to Derriford Hospital will have restricted access to their friends and family.

Background to current knowledge about COVID-19 and admission to hospital. This may change as we learn more about the disease. This knowledge comes from medical publications and our experience from the ITU Follow Up Clinic:

- Overall mortality 1-5%. Probably closer to 1%.
- Mortality in patients over 80 years of age is 15-20%.
- Time from onset of symptoms to need for ventilation 7 days (range 2-10 days).
- Average duration of ventilation is 7-10 days.
- Recovery from 7-10 days of ventilation in a young and fit patient is 3-6 months. Full recovery may not happen.
- Psychological and physical morbidity is significant.

We know GPs are experts in shared decision making and starting discussions on end of life care. We would like to offer our help and support on advice from an Intensive Care perspective. This advice is initially available by telephone, the duty ICU consultant can be paged via Derriford Switchboard.

Dr Sam Waddy Dr Rob Jackson
V1.1 19th March 2020

Purpose	**1. Community Staff Operational guidance for suspected and confirmed cases of Novel Coronavirus (COVID-19)**
	The following guidance is for all Community staff caring for patients that are suspected or positive with COVID-19 Only.
Key info	**Contacts:** • Infection control team (University Hospitals Plymouth) 01752 432115 • Incident Control room (Windsor House, Plymouth) • PHE - PHE Health Protection Team 0300 0308162 Opt 1 then Opt 2 (skip Opt 1 if OOHS) PLEASE READ ALL INSTRUCTIONS CAREFULLY AND FOLLOW STEP BY STEP
	Care in Devonport Hub or Visiting a household where there is a person with confirmed COVID-19 (to provide care within the household)
Equipment	**Before leaving for this visit, change into a pair of scrubs – on returning to base change out of scrubs and put them in double acetate red bags and put into a linen bag, do not fill more than three quarters full. Each HUB will need to arrange a suitable room for changing and storing linen waiting to be collected.** Ensure you have supplies of the PPE you require (check you have the right size): • Fluid-resistant (Type IIR) surgical mask • Goggles or face shield (eye glasses are not appropriate protection) • Plastic disposable apron • Clinell hand wash wipes and alcohol hand gel • Disposable pairs of gloves • This instruction sheet • Chlorox wipes • At least 2 yellow waste bags (double bagging) and red tags to tie waste bags
Donning & Doffing of PPE	1. It is envisaged the team will work in pairs- one will don PPE and provide the care - the other will remain by the door to provide support with donning but then withdraw outside. The second person will assist and man the phone during the procedure to take calls if required. 2. Telephone to book a time to visit - check the parking arrangements outside and close to the property. Check lone worker arrangements: o Ask patient if they can have a well family/friend to open the door and then go into a separate room so that the staff can Don PPE o If the patient is alone, ask them to open the door and move into a separate room so that staff can Don PPE inside the front door 3. As per phone instructions to the patient, ask whoever opens the door to move to another room before you enter the property and remain there until

you have full PPE on (no time delay is required from the person exiting the front door area and you entering)

4. Put on your PPE as follows:

Perform hand hygiene before putting on PPE.

Put on apron and tie at waist.

Put on facemask – position upper straps on the crown of your head, lower strap at nape of neck.

With both hands, mould the metal strap over the bridge of your nose.

Put on gloves.

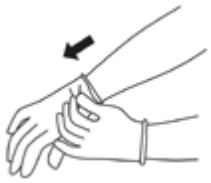
5. Doffing of PPE as follows:

PPE must be removed in the order shown below to minimise the potential for cross contamination. Request that the patient and family stay in a separate room whilst you remove your PPE.

Place all waste in a yellow waste bag as you remove it.

Remove gloves. Grasp the outside of glove with the opposite gloved hand; peel off.

Hold the removed glove in the remaining gloved hand.



Slide the fingers of the un-gloved hand under the remaining glove at the wrist. Peel the remaining glove off over the first glove and discard.

Clean hands.

Buddy unfastens or breaks apron ties at the neck and let the apron fold down on itself.

Buddy unfastens or beaks ties at waist then fold apron in on itself – do not touch the outside – this will be contaminated. Discard and decontaminate hands.

Remove goggles once your clinical work is completed and use both hands to handle the arms by pulling away from face and place on a hard surface ready to be decontaminated, as per Standard Operating Procedure (SOP) See Appendix1.

Clean hands.

Remove facemask once your clinical work is completed. Untie or break bottom ties, followed by top ties or elastic, and remove by handling the ties only. Lean forward slightly. Discard. DO NOT reuse once removed.

	Clean hands with soap and water/Hand wipes if soap and water not available.  6. Put on a clean pair of gloves and apron and decontaminate your goggles as per SOP Appendix1. 7. **Waste Disposal:** Ensure all waste is doubled bagged in yellow waste bags and tied with red tags. **Waste collection and disposal** Waste from possible and confirmed cases and cleaning of areas where possible cases have been (including disposable cloths and tissues): 1. Should be put in a yellow plastic rubbish bag and tied; wipe the bag over with a Chlorox wipe. 2. The plastic bag should then be placed in a second bin bag and tied; wipe the bag over with a Chlorox wipe. 3. It should be put in a suitable and secure place and marked for storage for 72 hours. Waste should be stored safely and kept away from children. If the collection date is more than 72 hours away you can store it in the bin. If collection day is less than 72 hours away then keep the bag somewhere inside the house for 72 hours and then put into the bin/seagull sack. You should not put your waste in communal waste areas until the waste has been stored for at least 72 hours **For Plymouth City Waste** Requests for a clinical waste collection can be requested here: https://www.plymouth.gov.uk/binsrecyclingandwaste/healthcarewasteclinicalwasteandsharps