Community LRTI/Pneumonia Intravenous Antibiotic pathway for Housebound/Care Home patients

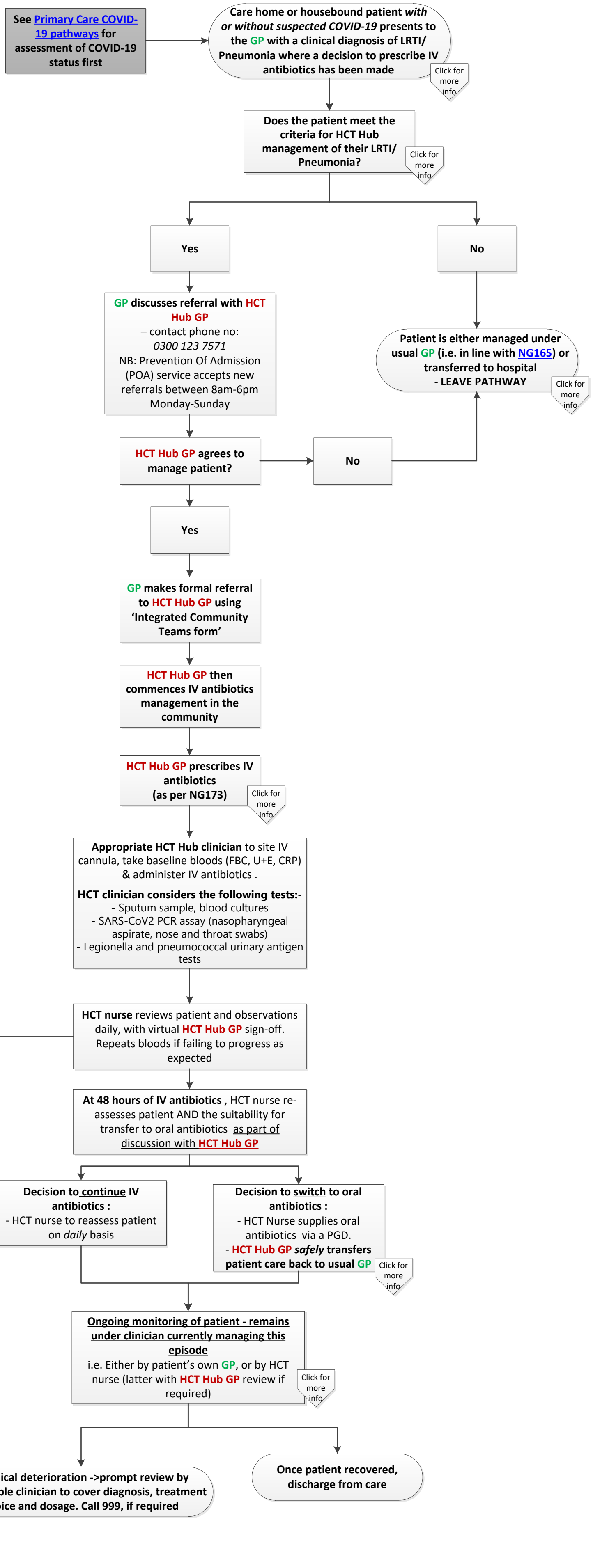
READ FIRST

1) This is an exceptional pathway. It will only be suitable for **housebound** and **care home** patients to *avoid* hospital admission. A doctor needs to have done an assessment to determine suitability for this pathway. This is for prevention of admission during the COVID-19 pandemic. Prescribing follows NICE Guidance NG173

2) **This is a guide**, and all management plans need to be reviewed on a regular basis, particularly with potential COVID-19 co-morbidity.

3) The POA service document **must be adhered to.** This includes ensuring staff IV drug competencies and access to information resources regarding administration, and also governance issues including management of scenarios such as anaphylactic reaction to drugs.

4) This pathway does **NOT** cover any oxygen monitoring or use.



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Care home or housebound patient *with or without suspected COVID-19* presents to the GP with a clinical diagnosis of LRTI/Pneumonia requiring IV antibiotics

- Patient should have already had a *COVID-19 assessment* in the first instance (see COVID-19/non-COVID-19 Primary Care pathways)
- Patient should have already had a clinical diagnosis and assessment of severity of LRTI/pneumonia (see https://www.nice.org.uk/guidance/ng173)
- There are no validated tools to assess the severity of community-acquired pneumonia in the context of the COVID-19 pandemic; severity should be based on clinical judgement.

NB: THIS IS NOT AN ASSESSMENT PATHWAY; THIS IS WHEN A DECISION HAS ALREADY BEEN MADE TO PRESCRIBE IV ANTIBIOTICS

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Does the patient meet the criteria for HCT Hub management of their LRTI/Pneumonia?

- Inclusion criteria for HCT Hub management of their LRTI/Pneumonia:
  - *Patient deemed not appropriate for hospital admission** (see below)*
  - Should ideally have an advanced decision against hospital admission and possibly a DNAR in place
  - Patient is housebound/from a care home
  - Patient not responding /deteriorating despite oral antibiotics (or oral antibiotics are not suitable/available)
  - Patient has been already clinically assessed by an in- or out-of-hours **GP** AND patient's records are shared electronically
  - Patient is for IV antibiotics
- If a patient requires either oral antibiotics or no antibiotics (for criteria, antibiotic choices and possible contraindications - see NG165), then the patient should remain under their usual **GP**.

***Deciding about hospital admission:*

1) Be aware that older people, or those with comorbidities, frailty, impaired immunity or a reduced ability to cough and clear secretions, are more likely to develop severe pneumonia. Because this can lead to respiratory failure and death, hospital admission would have been the usual recommendation for these people before the COVID-19 pandemic.

2) When making decisions about hospital admission, take into account:
- the severity of the pneumonia, including symptoms and signs of more severe illness
- the benefits, risks and disadvantages of hospital admission
- the care that can be offered in hospital compared with at home
- the patient's wishes and care plans (see NICE guideline [NG165])
- service delivery issues and local NHS resources during the COVID-19 pandemic.

3) Explain to patients +/- relatives that:
- the benefits of hospital admission include improved diagnostic tests (chest X-ray, microbiological tests and blood tests) and respiratory support
- the risks and disadvantages of hospital admission include spreading or catching COVID-19 and loss of contact with families.

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HCT Hub GP prescribes IV antibiotics (as per NG173)

- **HCT Hub GP** references NICE guideline [NG173] 'COVID-19 rapid guideline: antibiotics for pneumonia in adults in hospital'
  - *particularly where concerns of potential drug interactions (e.g. clarithromycin with statin/warfarin), renal/hepatic impairment (where dose adjustments required e.g. IV co-amoxiclav), pregnancy etc.*
  - *also, where there is a penicillin allergy, then co-amoxiclav should be avoided and cefuroxime used with caution*
- Do NOT routinely offer corticosteroids unless specifically indicated e.g. asthma, COPD

Antibiotics for people 18 and older with suspected community-acquired pneumonia

Empirical treatment	Antibiotics and dosage (oral doses are for immediate-release medicines)
Oral antibiotics for moderate or severe pneumonia	**Options include:** **Doxycycline:** 200 mg on first day, then 100 mg once a day **Co-amoxiclav:** 500 mg/125 mg three times a day **with** **Clarithromycin:** 500 mg twice a day **In severe pneumonia, and if the other options are unsuitable:** **Levofloxacin:** 500 mg once or twice a day (consider the safety issues with fluoroquinolones)
Intravenous antibiotics for moderate or severe pneumonia	**Options include:** **Co-amoxiclav:** 1.2 g three times a day **with** **Clarithromycin:** 500 mg twice a day **Cefuroxime:** 750 mg three or four times a day (increased to 1.5 g three times a day if infection is severe) **with** **Clarithromycin:** 500 mg twice a day **In severe pneumonia and if the other options are unsuitable:** **Levofloxacin:** 500 mg once or twice a day (consider the safety issues with fluoroquinolones)

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Patient is either managed under usual GP (i.e. in line with NG165) or transferred to hospital

- If a patient needs to be transferred to hospital, see Primary Care COVID-19 pathways.
- If a patient is not for management by the HCT Hub GP, then the 'usual' GP (in- or out-of-hours) will manage the patient.

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Decision to switch to oral antibiotics

HCT Hub GP safely transfers patient care to usual **GP**

- Patients will have their electronic records updated on Systm1 or EMIS by the HCT Hub.
- Patient's **GP** will receive an additional verbal handover from **HCT Hub GP** if patient requires follow-up or the **GP** needs to be aware of the patient

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Ongoing monitoring of patient- remains under clinician currently managing this episode

- *If patient is suspected to be COVID-19 positive, contact should also be at **Day 5*** (as many patients deteriorate at this point).
- Aim to give antibiotics for a total of 5 days - extended if clinical judgement/ expert advice says so (NB - see NG173 for further details).

- Safety netting and review:

  1) Advise patients to seek medical help without delay if their symptoms do not improve as expected or worsen rapidly or significantly, whether they are taking an antibiotic or not.
  2) On reassessment, reconsider whether the patient has symptoms and signs of more severe illness and whether to admit to hospital.

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If clinical deterioration ->prompt review by responsible clinician to cover diagnosis, treatment choice and dosage. Call 999, if required

- If required, seek advice from on-call medical/respiratory registrar (as appropriate) or whichever service is available 24/7 at the hospital as next step.
- If specialist input is required on drug choice, contact hospital microbiologist on-call.

- *Deciding about hospital admission:*

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  - the severity of the pneumonia, including symptoms and signs of more severe illness
  - the benefits, risks and disadvantages of hospital admission
  - the care that can be offered in hospital compared with at home
  - the patient's wishes and care plans (see NICE guideline [NG173])
  - service delivery issues and local NHS resources during the COVID-19 pandemic.

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  - the benefits of hospital admission include improved diagnostic tests (chest X-ray, microbiological tests and blood tests) and respiratory support
  - the risks and disadvantages of hospital admission include spreading or catching COVID-19 and loss of contact with families.

- If a patient needs to be transferred to hospital, see COVID-19/non-COVID-19 Primary Care pathways