

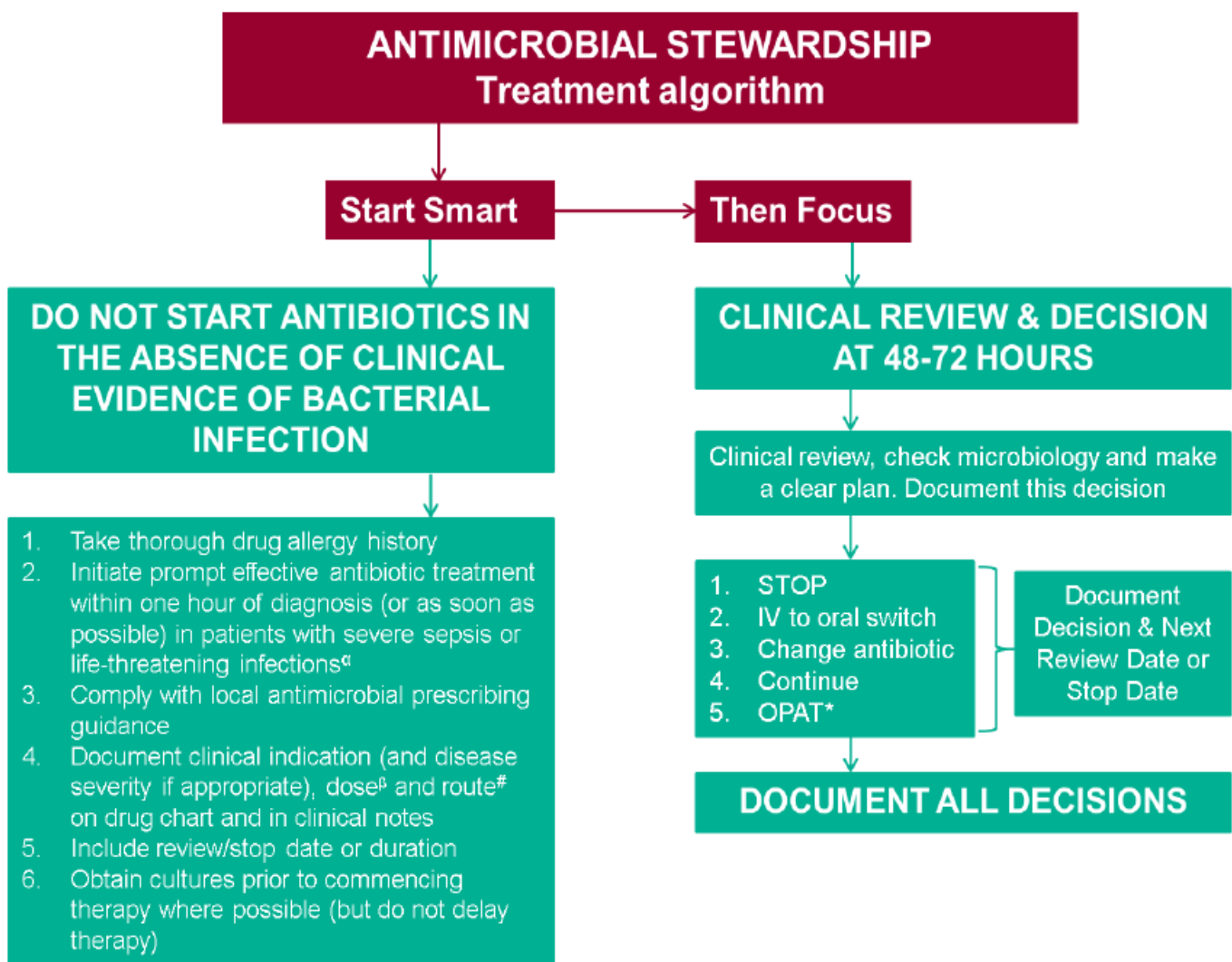
Antimicrobial Guidelines

SUSPECTED OR CONFIRMED PNEUMONIA DURING COVID 19 FOR ADULTS IN THE COMMUNITY

Start Smart then Focus

A Start Smart - then Focus approach is recommended for all antibiotic prescriptions.

Start Smart then Focus Treatment Algorithm



Version	Change Detail	Date
1	During COVID-19	April 20

For review November 2020

Reference NICE Guidance NG162 – COVID- 19 rapid guideline: managing suspected or confirmed pneumonia in adults in the community
<https://www.nice.org.uk/guidance/ng165>

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SUSPECTED OR CONFIRMED PNEUMONIA DURING COVID 19 **FOR ADULTS IN THE COMMUNITY**

Definition: Community-acquired pneumonia is a lower respiratory tract infection that is most commonly caused by bacterial infection. The main bacterial pathogen is *Streptococcus pneumoniae* however *Mycoplasma pneumoniae* occurs in outbreaks approximately every 4 years in the UK and is much more common in school-aged children. Although bacterial infection is the most common cause of community-acquired pneumonia, viral infection causes approximately 13% of cases in adults and approximately 66% of cases in children and young people.

Although the NICE guideline on pneumonia in adults: diagnosis and management recommends using the CRB65 tool, it has not been validated in people with COVID-19. It also requires blood pressure measurement, which may be difficult or undesirable during the COVID-19 pandemic and risks cross-contamination

During the COVID-19 pandemic, face to face examination of patients may not be possible. Where physical examination and other ways of making an objective diagnosis are not possible, the clinical diagnosis of community-acquired pneumonia of any cause in an adult can be informed by other clinical signs or symptoms such as:

- Temperature above 38°C
- Respiratory rate above 20 breaths per minute
- Heart rate above 100 beats per minute
- New confusion (see the CEBM's rapid diagnosis of community-acquired pneumonia for clinicians).

Assessing severity

The following symptoms and signs to help identify patients with more severe illness to help make decisions about hospital admission:

- Severe shortness of breath at rest or difficulty breathing
- Coughing up blood
- Blue lips or face
- Feeling cold and clammy with pale or mottled skin
- Collapse or fainting (syncope)
- New confusion
- Becoming difficult to rouse
- Little or no urine output.

It is difficult to determine whether pneumonia has a COVID-19 viral cause or a bacterial cause (either primary or secondary to COVID-19) in primary care, particularly during remote consultations. However, as COVID-19 becomes more prevalent in the community, patients presenting with pneumonia symptoms are more likely to have a COVID-19 viral pneumonia than a community-acquired bacterial pneumonia.

COVID-19 viral pneumonia may be more likely if the patient:

- Presents with a history of typical COVID-19 symptoms for about a week
- Severe muscle pain (myalgia)



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- Loss of sense of smell (anosmia)
- Breathless but has no pleuritic pain
- A history of exposure to known or suspected COVID-19, such as a household or workplace contact.

A bacterial cause of pneumonia may be more likely if the patient:

- Becomes rapidly unwell after only a few days of symptoms
- Does not have a history of typical COVID-19 symptoms
- Has pleuritic pain
- Has purulent sputum.

Antibiotic treatment

COVID-19 pneumonia is caused by a virus therefore antibiotics are ineffective. Inappropriate antibiotic use may reduce availability if used indiscriminately, and broad-spectrum antibiotics in particular may lead to *C difficile* infection and antimicrobial resistance.

Do not offer an antibiotic for treatment or prevention of pneumonia if:

- COVID-19 is likely to be the cause
and
- Symptoms are mild.

Offer an oral antibiotic for treatment of pneumonia in people who can or wish to be treated in the community if:

- The likely cause is bacterial
or
- It is unclear whether the cause is bacterial or viral and symptoms are more concerning
or
- The patient is at high risk of complications because, for example,
 - they are older or frail
 - have a pre-existing comorbidity such as immunosuppression or significant heart or lung disease (for example bronchiectasis or COPD)
 - have a history of severe illness following previous lung infection.

When starting antibiotic treatment, the first-choice oral antibiotic is:

Bacterial Community acquired pneumonia (CAP) during COVID- 19

Severity	1 st line	Penicillin Allergy (see explanatory notes)
Mild	<p>1st Line</p> <p>DOXYCYCLINE 200mg as a single dose on day 1 then 100mg ONCE DAILY orally</p> <p>Treatment duration: 5 days</p> <p>2nd Line and in Pregnancy</p> <p>AMOXICILLIN 500mg THREE TIMES A DAY</p> <p>Treatment duration: 5 days</p>	<p>DOXYCYCLINE 200mg as a single dose on day 1 then 100mg ONCE DAILY orally</p> <p>Treatment duration: 5 days</p>
Moderate/Severe	Refer to standard Trust LRT Guideline	