Silver Chain

SCOPE: National

ACCEPTANCE TO HATH CRITERIA AND PATHWAY

RED Unsuitable for community admission to HATH. Refer to ED/ Inpatient management. (May become suitable for HATH after inpatient stabilisation)	• CORB score equal or above one, see Appendix 1 • New requirement for supplementary oxygen • Chest X-ray showing multi -lobar infiltrates/consolidation and/or pleural effusion • Coexisting medical conditions requiring hospital admission • Suspected or confirmed immediate penicillin or cephalosporin hypersensitivity (anaphylaxis, angioedema and/or urticaria) • Pregnancy
ORANGE Requires discussion with Medical Governor and/or Haematologist prior to acceptance.	Risk factors for drug resistance/treatment failure: • Evidence or suspicion of multi resistant organisms. • International travel • Recent antibiotic exposure • Residential care • Immunocompromised Aged between 13 and 18, suitable for adult dosing who are not under the care of a paediatrician.
GREEN Accepted for HATH protocol.	All criteria must be met: • Mild/moderate pneumonia confirmed by chest X-ray (radiologist report to be included in the referral). • CORB score 0 or PSI (Pneumonia Severity Index) class I – III. • Unsuitable for or intolerance to oral antibiotics. • Client’s medical condition has been assessed as stable, has a clear diagnosis/prognosis and is at low risk of deterioration. • Adults 18 years or over.

PATHOLOGY WORK UP

- Full blood picture (FBP), urea and electrolytes, blood glucose, CRP.
- Blood cultures times two sets if temperature > 38 C.
- Throat/Nasal swab (dry swab) for respiratory viruses (including influenza), Chlamydia, Mycoplasma and Legionella.
- Sputum culture and sensitivity (ideally prior to antibiotics but it should not delay treatment).
- Calculate creatinine clearance using Cockcroft – Gault equation.
- CXR report confirming mild/moderate pneumonia. NB CXR confirmation may not be required for the treatment of palliative patients, but these cases must be discussed with

GENERAL MANAGEMENT

- Access blood results and most recent CXR report from referral source.
- Liaise with medical governance doctor regarding any abnormal results.
- Initiate intravenous access and commence intravenous therapy as prescribed.
- Nursing assessment and care delivery as per Clinical Pathway for Community Acquired Pneumonia.
- Twice daily visits to monitor patient's vital signs and report/escalate any deterioration to levels outlined in monitoring section.
- Educate patient and carer regarding patient's condition and action plan if condition deteriorates.
- If no clinical signs of improvement after three days liaise with medical governance doctor regarding need for referral to respiratory or infectious disease physician.

MONITORING

Indicators for urgent medical re-assessment or hospital admission:

- New onset confusion
- O2 saturation < 92%
- Respiratory rate > 30 breaths/minute
- Heart rate > 100 beats/min
- Systolic BP < 90mmHg
- Persistent fever (>38^{0}C) for > 72 hours
- Raising CRP on day three
- Drug reaction

TREATMENT

Suggested antibiotic regimen if patient requires intravenous antibiotics and suitable for HATH (moderate Community Acquired Pneumonia):

- Ceftriaxone 1g IV, daily

Plus

- Doxycycline 100mg orally, 12-hourly ***or*** Clarithromycin 500mg orally, 12 - hourly **for seven days**

Once significant improvement, consider changing to oral therapy:

- Amoxycillin 1g orally, eight - hourly, for a total of seven days (IV + oral)

Or

- Cefuroxime 500mg orally, 12 - hourly, for a total of seven days (IV + oral) for patients hypersensitive to penicillins (excluding immediate hypersensitivity).

For patients with severe hypersensitivity reaction to penicillins (anaphylaxis, angioedema and/or immediate type urticaria) use Moxifloxacin 400mg orally, once daily.

In those patients at risk of gram negative lung infections (eg pre-existing structural lung disease, previous Pseudomonas Aeruginosa infection, positive blood or sputum cultures for gram negative bacteria) consult with an Infectious Disease Physician and/or Clinical Microbiologist.

The usual duration of antimicrobial therapy for non-severe CAP is five to seven days. Early cessation is recommended if viral pneumonia is proven.

NB: During the influenza season (May to November) all admitted cases of CAP with recent onset of symptoms (< 72 hours) should also be considered for oral oseltamivir treatment after collection of influenza investigations (nose/throat swab usually). In confirmed cases, continue antiviral treatment for five days and consider cessation of antimicrobials.

Patient can be discharged to the care of their own GP once:

- Suitable for oral antibiotics.
- Afebrile > 24 hours.
- Sustained improvement in respiratory symptoms.
- No unstable comorbidities.
- Adequate social support.

MEDICAL GOVERNANCE

- The client has access to medical governance support for 24 hours per day, 7 days per week.
- Primary medical governance can be held by referring medical specialists, credentialed referring GPs or by Silver Chain medical staff.
- When governance is retained by a Silver Chain medical officer the client will have a medical review within 24 hours of admission and the medical officer will determine when the scheduled follow up and discharge will occur.
- Where the primary medical governor is unavailable the Silver Chain medical officer can provide the medical governance.
- Care delivery is planned and provided in consultation with the client, medical officer/specialist holding medical governance and nursing staff.
- In the instance when a client's condition deteriorates, the Silver Chain medical officer or nursing staff will confer with an emergency department medical officer.
- A summary of the episode of care is sent to the referrer or the client's GP at discharge.

FOLLOW UP

- Ensure the client has an appointment arranged with own General Practitioner (GP) prior to discharge to ensure continuity of care.
- Fax protocol with client discharge summary to GP.

APPENDIX 1: ASSESSMENT FOR COMMUNITY PATIENTS SUITABILITY FOR HOME HOSPITAL TREATMENT

CORB Pneumonia Severity Assessment Tool

- **C**onfusion: new onset or worsening of existing state if cognitive impairment present (= 1 point)
- **O**xygen: PaO_2 < 60mmHg or SpO_2 < 90% RA (= 1 point)
- **R**espiratory Rate: ≥ 30 breaths/min (= 1 point)
- **B**lood pressure: Systolic BP < 90mmHg or diastolic ≤ 60 mmHg (= 1 point)

CORB Score of ≥ 1 point, **NOT SUITABLE for HATH Management**.

CORB Score 0, appropriate for HATH referral.