Community Acquired Pneumonia (CAP) Pharmacist Evaluation

Goal: Improve antibiotic choice, route of administration, dose, and/or ***total duration*** (especially discharge duration) of therapy for patients diagnosed with CAP

Inclusion criteria:

- Patients who are admitted to the hospital from the community (includes nursing home patients) with a clinical diagnosis of pneumonia
- Meets criteria for clinical stability (see table below)

Exclusion criteria:

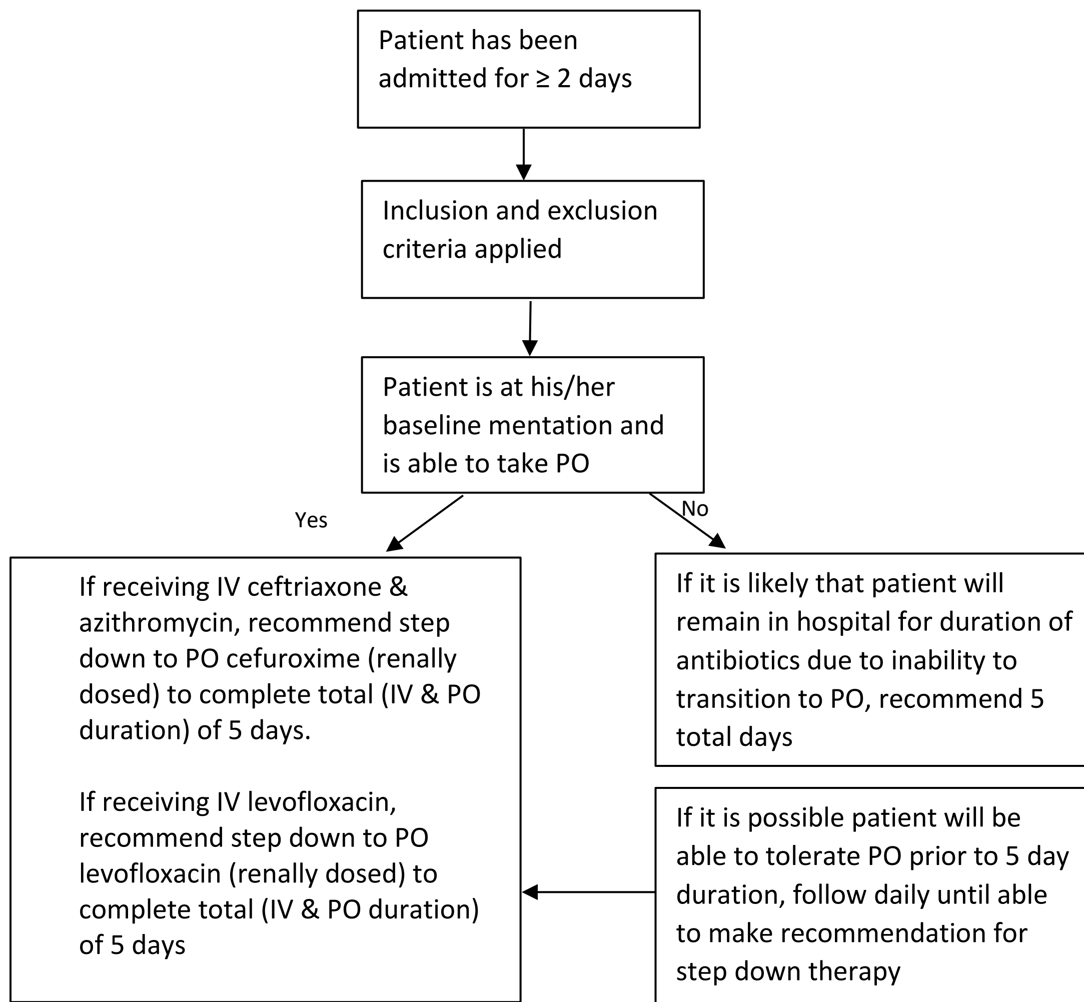
- Hospital-acquired pneumonia (diagnosis >48 hours after hospital admission)
- Ventilator associated pneumonia
- Failed standard therapy for CAP
- Empyema, lung abscess, or other complications including bacteremia
- Pneumonia caused by or suspected to be caused by MRSA, Pseudomonas, or a multi-drug resistant gram negative rod
- Receiving antibiotics during admission for non-pneumonia indication

Criteria for clinical stability
1. Afebrile for 48 hours 2. No more than 1 sign of clinical instability • SBP < 90mmhHg • HR > 100/min • RR > 24/min • Arterial O2 <90% or PaO2 <60 mmHg at room air (unless requires O2 at baseline)

Patient identification & workflow recommendation:

1) EPIC Patient list “MCTH: CAP Evaluation” & “MCTHH: CAP Evaluation”
2) Sort by length of stay & ignore patients with a length of stay ≥ 8 days as these patients are likely being followed by the antimicrobial stewardship pharmacist and/or are not CAP patients
3) Check the antibiotic medications column to see if patient is actively receiving antibiotics
4) Consider reviewing patients who have been admitted for 5 days (length of stay column) and work down to 2 days, saving patients who’ve been admitted for 6-7 days last (since stewardship pharmacist may have intervened on these already)
5) Check EPIC i-vents to make sure no interventions regarding antibiotic choice or duration have already been made
6) If able to make an intervention to provider, please do so and enter an i-vent in EPIC (Type: Antimicrobial Stewardship; Subtype: whichever is felt to be relevant for the intervention you made). In Pharmacy handoff, pharmacy to do – write “CAP intervention made.”
7) If unable to make an intervention to provider at that time, please jot down any handoff notes in pharmacy summary and/or a quick note in the to do section to help tomorrow’s pharmacist

Evaluation & intervention suggestions:



When making recommendations:

- Please keep in mind that our top priority is ensuring that discharge antibiotic prescriptions are appropriate, particularly with regards to duration of therapy. Make recommendations at the most impactful time during a patient's stay (ex: when they are able to transition to PO, when it appears they are close to discharge etc.)
- When recommending only a duration of therapy, calculate how many more days of therapy patient would need and ask if you may go ahead and place an end date in EPIC (to ensure the intervention is followed through)
- For switching to PO therapy, please include drug, route, dose, frequency, and days remaining in your communications to the provider (ex: Rm 411 has received 2 days of IV ceftriaxone & azithromycin for CAP. Based on clinical improvement, she is a good candidate for a 5 day total duration. Would consider switch to PO cefuroxime 500mg BID x 3 days to complete 5 day course.)
- If the provider is reluctant to use a 5 day duration, recommend 7 days.