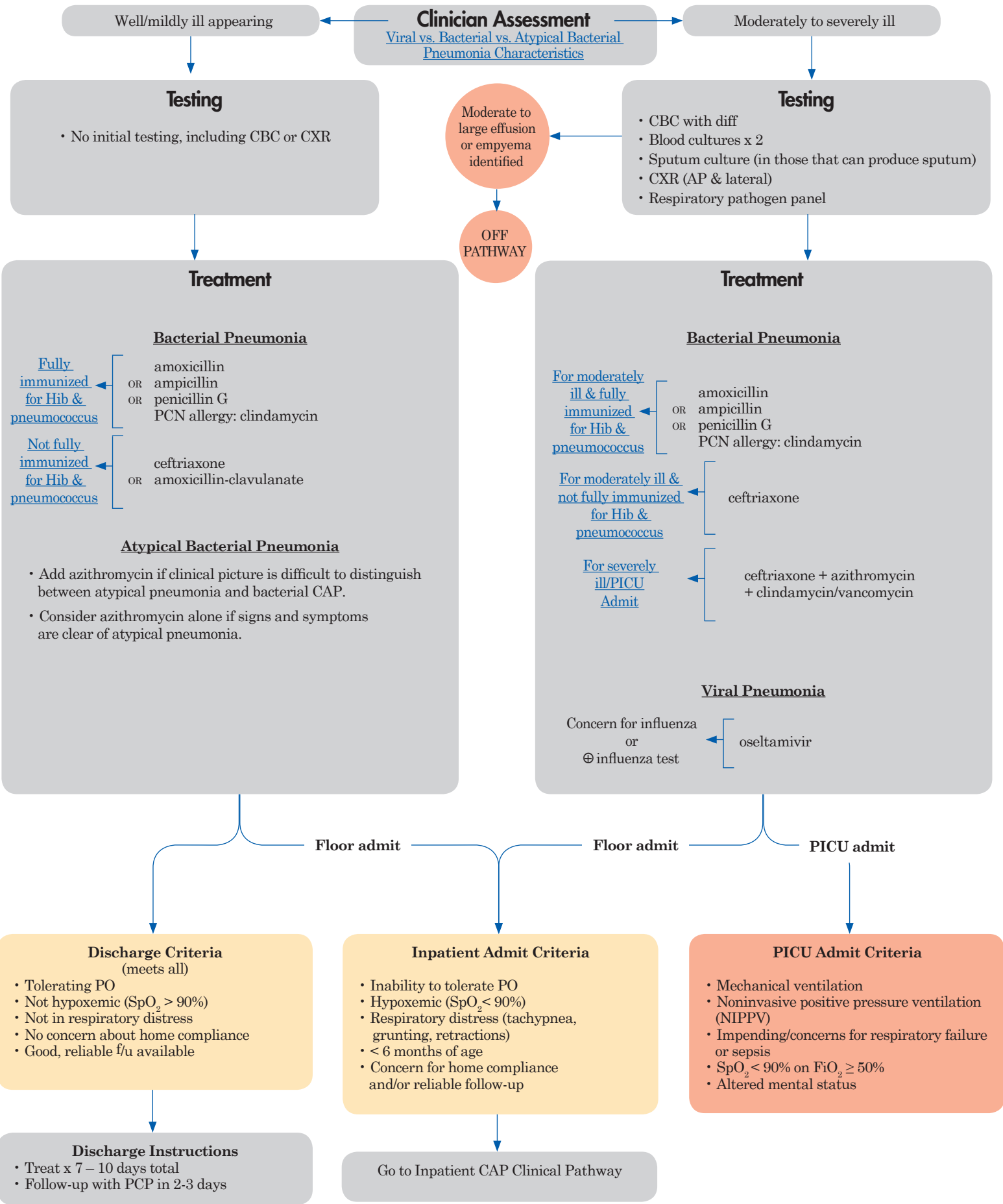


**Inclusion Criteria**

- Suspected community-acquired pneumonia in patients  $\geq 3$  months old

**Exclusion Criteria**

- Immunocompromised children – (HIV, SCID, cancer, chemotherapy, autoimmune disease requiring biologic therapy, etc.)
- Home mechanical ventilation
- Presence of empyema or moderate-large pleural effusion ( $\geq \frac{1}{4}$  thorax opacified)
- Underlying lung disease other than asthma – (CF, BPD, patients with tracheostomies, etc.)
- Risk for aspiration pneumonia – (neuromuscular disorder, etc.)



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# Community Acquired Pneumonia – ED

## Illness Severity

### Mild Pneumonia

- Minimally increased work of breathing
- Not hypoxemic ( $\text{SpO}_2 > 90\%$ )
- Able to tolerate PO

### Moderate Pneumonia

- Moderately increased work of breathing
- Hypoxemic ( $\text{SpO}_2 < 90\%$ )
- Unable to tolerate PO

### Severe Pneumonia

- Significantly increased work of breathing
- Failure to maintain  $\text{SpO}_2 > 92\%$  on  $\text{FiO}_2$  of  $\geq 50\%$
- Altered mental status

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# Community Acquired Pneumonia – ED

## Definitions – Fully Immunized Pneumococcal

Age	Doses Received
< 4 months	1 dose
< 6 months	2 doses
6 – 12 months	3 doses
≥ 12 months	3 – 4 doses, one of which was given after 12 months of age
≥ 24 months	1 dose of vaccine given at or after 24 months of age

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# Community Acquired Pneumonia – ED

## Definitions – Fully Immunized Hib

Age	Doses Received
< 4 months	1 dose
< 6 months	2 doses
6 – 12 months	3 doses
$\geq 12$ months	2 total doses of vaccine, the first of which was 12 – 14 months
$\geq 12$ months	3 total doses, the first at < 12 months, the second at < 15 months and the third at $\geq 12$ months
$\geq 15$ months	first dose of vaccine was at $\geq 15$ months of age

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# Community Acquired Pneumonia – ED

## **Antibiotic Recommendations on Transfer from PICU to Floor**

Consider ID consult if not already involved

In general, ceftriaxone can be transitioned to high dose amoxicillin-clavulanate and IV clindamycin or vancomycin can be transitioned to oral clindamycin.

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# Community Acquired Pneumonia – ED

## References

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## Community Acquired Pneumonia Etiology Characteristics

	<b>Viral Pneumonia</b>	<b>Bacterial Pneumonia</b>	<b>Atypical Bacterial Pneumonia</b>
<b>Etiologies</b>	(RSV, hMPV, rhinoviruses, parainfluenza, influenza, coronaviruses, adenoviruses)	( <i>Streptococcus pneumoniae</i> , <i>Haemophilus influenzae</i> )	( <i>Mycoplasma pneumoniae</i> , <i>Chlamydia pneumoniae</i> )
<b>Age</b>	All ages; most common etiology of CAP in children < 5	All ages	Most common in ages > 5
<b>Onset</b>	Gradual	Abrupt, rapid progression	Gradual, slowly progressive
<b>Symptoms</b>	Non-productive cough typically preceded by URI symptoms (coryza, pharyngitis, mild fever, etc.)	Fever, chills, cough (+/- productive), +/- localized chest pain	Non-productive, irritative cough typically preceded by headache, malaise, pharyngitis
<b>Physical Exam Findings</b>	Non-toxic appearing; diffuse, bilateral auscultatory findings of wheezing or crackles	Ill appearance, tachypnea, respiratory distress, focal auscultatory findings of rales or “tubular” breath sounds; dullness to percussion over the involved lung area	Well-appearing; diffuse rales, crackles, rhonchi or wheezes
<b>Radiographic Findings</b>	Diffuse, bilateral Interstitial infiltrates	Alveolar infiltrates, lobar or segmental consolidation, “round pneumonia”, complications may include pleural effusion, empyema, lung abscess, necrotizing pneumonia or pneumatocele	Diffuse, bilateral interstitial infiltrates

### References

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