COMMUNITY ACQUIRED PNEUMONIA (SIMPLE) CLINICAL PATHWAY
EMERGENCY DEPARTMENT

**Inclusion Criteria**
- ≥ 3 months old
- Exclusion Criteria
- Emphysema or moderate–large pleural effusion (≥1/3 thorax opacified)
- Immuno-compromised patient (HIV, SCID, cancer, chemotherapy, autoimmune disease requiring biologic therapy, transplant recipient, etc.)
- Home invasive or non-invasive mechanical ventilation
- Underlying lung disease other than asthma (CF, BPD, patients with bronchectasis, etc.)
- Risk of aspiration pneumonia (neuromuscular disorder, etc.)

**Symptoms**
- Non-productive cough typically preceded by URI symptoms
- Fever, chills, cough (± productive), ± localized chest pain
- Ill appearance, tachypnea, respiratory distress, focal auscultatory findings of rales or "tubular" breath sounds; dullness to precussion over the involved lung area
- Malaise, pharyngitis

**Findings**
- Alveolar infiltrates, lobar, or segmental consolidation, "round pneumonia", large effusion or empyema
- Diffuse, bilateral interstitial infiltrates
- Consolidation, "round pneumonia"
- Pleuritic chest pain
- Hemoptysis
- Nephrotic syndrome or pulmonary hypertension

**CLINICAL PATHWAY**

**PNEUMONIA (SIMPLE)**

**Onset**
- Mild
- Moderate to Severe
- Abrupt, rapid progression
- Gradual

**Age**
- Most common in ages > 5 years
- All ages

**Etiologies**
- Community Acquired Pneumonia
- Bacterial Pneumonia
- Atypical Bacterial Pneumonia
- Viral Pneumonia

**Usual Severity**
- Minimal increase in work of breathing
- Not hypoxemic (SpO2 ≥ 88%)
- Able to tolerate PO
- Moderate Pneumonia
- Moderate increase in work of breathing
- Hypoxemic (SpO2 < 88%)
- Unable to tolerate PO
- Severe
- Significant increase in work of breathing
- Failure to maintain SpO2 ≥ 88% on FiO2 ≥ 50%
- Unable to tolerate mechanical ventilation

**Recommendations**
- Antimicrobial therapy
- Respiratory support
- Supportive therapy
- Hospital admission

**Pathways**
- Inpatient Community Acquired Pneumonia Pathway
- Inpatient Community Acquired Pneumonia (Simple) Inpatient Pathway
- PICU Admit Criteria
- Mechanical ventilation
- Noninvasive positive pressure ventilation
- Impending/concerns for respiratory failure or sepsis
- SpO2 < 88% on FiO2 ≥ 50%
- Unable to tolerate mechanical ventilation

**Discharge Criteria**
- Obtained the following:
  - CBC
  - Procalcitonin
  - Blood cultures x2
  - Sputum culture (in those who can produce sputum)
  - Chest X-ray (AP & lateral)
  - Respiratory pathogen panel
- No testing indicated (including CBC or CXR)
- Mechanical ventilation
- Noninvasive positive pressure ventilation
- Concern for compliance and/or reliable follow-up
- Concern for compliance
- Failure to maintain SpO2 ≥ 88% on FiO2 ≥ 50%
- Inability to tolerate PO
- Moderate to Severe
- Unable to tolerate PO
- Significant increase in work of breathing
- Median increase in work of breathing
- Failure to maintain SpO2 ≥ 88% on FiO2 ≥ 50%
- Unable to tolerate mechanical ventilation

**Admit Inpatient to Community Acquired Pneumonia (Simple) Inpatient Pathway**

**Inpatient Admission Criteria**
- Ability to tolerate PO
- Hypoxemia (SpO2 < 88%)
- Respiratory distress
- ≤ 6 months of age
- Concern for compliance and/or reliable follow-up

**Inpatient Admit Criteria**
- Tolerating PO
- SpO2 ≥ 88% in room air
- No respiratory distress
- No concern of compliance
- Good, reliable follow up

**Inpatient Community Acquired Pneumonia Pathway**
- Refer to Community Acquired Pneumonia Diagnostics and Characteristics

**Pathways**
- Community Acquired Pneumonia Diagnostics and Characteristics

**Diagnostics**
- Respiratory pathogen panel
- CBC
- Procalcitonin
- Blood cultures x2
- Sputum culture (in those who can produce sputum)
- Chest X-ray (AP & lateral)
- Respiratory pathogen panel

**Update 02/2023**