***NSQIP Definition of pneumonia***

Patients with pneumonia must meet criteria from both Radiology and Signs/Symptoms/Laboratory sections listed as follows:

**Radiology:** One definitive chest radiological exam (x-ray or CT)\* with at least one of the following:

* New or progressive and persistent infiltrate
* Consolidation or opacity
* Cavitation

Note: In patients with underlying pulmonary or cardiac disease (e.g. respiratory distress syndrome, bronchopulmonary dysplasia, pulmonary edema, or chronic obstructive pulmonary disease), two or more serial chest radiological exams (x-ray or CT) are required. (Serial radiological exams should be taken no less than 12 hours apart, but not more than 7 days apart. The occurrence should be assigned on the date the patient first met all of the criteria of the definition (i.e, if the patient meets all PNA criteria on the day of the first xray, assign this date to the occurrence. Do not assign the date of the occurrence to when the second serial xray was performed).

**Signs/Symptoms/Laboratory:**

FOR ANY PATIENT, at least one of the following:

* Fever (>38 C or >100.4 F) with no other recognized cause
* Leukopenia (<4000 WBC/mm3) or leukocytosis(≥12,000 WBC/mm3)
* For adults ≥ 70 years old, altered mental status with no other recognized cause

And

At least one of the following:

* 5% Bronchoalveolar lavage (BAL) -obtained cells contain intracellular bacteria on direct microscopic exam (e.g., Gram stain)
* Positive growth in blood culture not related to another source of infection
* Positive growth in culture of pleural fluid
* Positive quantitative culture from minimally contaminated lower respiratory tract (LRT) specimen (e.g. BAL or protected specimen brushing)

OR

At least two of the following:

* New onset of purulent sputum, or change in character of sputum, or increased respiratory secretions, or increased suctioning requirements
* New onset or worsening cough, or dyspnea, or tachypnea
* Rales or rhonchi
* Worsening gas exchange (e.g. O2 desaturations (e.g., PaO2/FiO2≤ 240), increased oxygen requirements, or increased ventilator demand)

*American College of Surgeons (ACS) National Surgical Quality Improvement Program (NSQIP). ACS NSQIP Operations Manual, 2018* [*https://www.facs.org/quality-programs/acs-nsqip/joinnow/hospitalreq/scrtrain*](https://www.facs.org/quality-programs/acs-nsqip/joinnow/hospitalreq/scrtrain)*.*