Chapter 10
Respiratory System
J00-J99

Presented by:
Jesicca Andrews
Respiratory System
Respiratory Infections

- A respiratory infection cannot be assumed from a laboratory report alone; physician concurrence and documentation are necessary.

- Remember that infectious organisms are not always identified by laboratory examination, particularly when antibiotic therapy has been started; an infection code may be assigned without laboratory evidence when it is supported by clinical documentation.
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Characters</th>
<th>Subcategories</th>
</tr>
</thead>
<tbody>
<tr>
<td>J12</td>
<td>Viral, nec</td>
<td>4-5</td>
<td>Adenoviral&lt;br&gt;Respiratory syncytial&lt;br&gt;Parainfluenza&lt;br&gt;Human metapneumovirus&lt;br&gt;Other</td>
</tr>
<tr>
<td>J13</td>
<td>Due to strep pneumoniae</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>J14</td>
<td>Due to Hemophilus influenza</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>J15</td>
<td>Bacterial, nec</td>
<td>4-6</td>
<td>Klebsiella&lt;br&gt;Pseudomonas&lt;br&gt;Strep group B&lt;br&gt;Mycoplasma pneumoniae&lt;br&gt;Other&lt;br&gt;Gram- (aerobic)&lt;br&gt;Staph&lt;br&gt;Other Strep&lt;br&gt;E-coli&lt;br&gt;Unspecified</td>
</tr>
<tr>
<td>J16</td>
<td>Due to other infectious organisms</td>
<td>4</td>
<td>Chlamydia&lt;br&gt;Other specified</td>
</tr>
<tr>
<td>J17</td>
<td>In diseases classified elsewhere</td>
<td>3</td>
<td>Rheumatic fever</td>
</tr>
<tr>
<td>J18</td>
<td>Unspecified organism</td>
<td>4</td>
<td>Bronchopneumonia&lt;br&gt;Hypostatic&lt;br&gt;Lobar&lt;br&gt;Other&lt;br&gt;Unspecified</td>
</tr>
<tr>
<td>J69</td>
<td>Aspiration</td>
<td>4</td>
<td>Food &amp; Vomit&lt;br&gt;Oil &amp; Essences&lt;br&gt;Other</td>
</tr>
<tr>
<td>J95.851</td>
<td>Ventilator Associated</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>
Pneumonia

• Pneumonia is a common respiratory infection that is coded in several ways in ICD-10-CM. Combination codes that account for both pneumonia and the responsible organism are included in chapters 1 and 10 of ICD-10-CM. Examples of appropriate codes for pneumonia include the following:

  ➢ **J15.0** Pneumonia due to *Klebsiella*
  ➢ **J15.211** Pneumonia due to *Staphylococcus aureus*
  ➢ **A02.22** Salmonella pneumonia
  ➢ **B05.2** Post-measles pneumonia
  ➢ **J11.08 + J12.9** Viral pneumonia with influenza

• Other pneumonias are coded as manifestations of underlying infections classified in chapter 1, and two codes are required in such cases. Examples of this dual classification coding include the following:

  ➢ **I00 + J17** Pneumonia in rheumatic fever
  ➢ **B65.9 + J17** Pneumonia due to schistosomiasis

• When the diagnostic statement is pneumonia without any further specification, the coder should review laboratory reports for mention of the causative organism and check with the physician to determine whether there appears to be support for a more definitive diagnosis. When the organism is not identified assign:

  ➢ **J18.9** Pneumonia, unspecified organism
Aspiration Pneumonia

• Aspiration pneumonia is a severe type of pneumonia resulting from the inhalation of foods, liquids, oils, vomitus, or microorganisms from the upper respiratory tract or the oropharyngeal area.

  ➢ J69.0 Pneumonitis due to inhalation of foods or vomitus
  ➢ J69.1 Pneumonitis due to inhalation of oils and essences
  ➢ J69.8 Pneumonitis due to inhalation of other solids or liquids

• Pneumonia due to aspiration of microorganisms is classified to category

  ➢ J15 bacterial
  ➢ J12 viral

• Patients transferred from a nursing home to an acute care hospital because of pneumonia are often suffering from aspiration pneumonia due to aspirated organisms, usually gram-negative bacteria.
Ventilator-Associated Pneumonia (J95)

- Pneumonia associated with the use of a ventilator is assigned to code
  - **J95.851** Ventilator associated pneumonia
  - In addition to a code to identify the organism, if known (B95.-, B96.-, B97.-) should be assigned

For example:
- Ventilator-associated pneumonia (VAP) due to *Staphylococcus aureus*:
  **J95.851** and **B95.61**.

- Do not assign an additional code from categories J12 through J18 to identify the type of pneumonia.

**NOTE:** Code **J95.851** should be assigned only when the provider has documented VAP.

- As with all procedural or postprocedural complications, code assignment is based on the provider's documentation of the relationship between the condition and the procedure. **J95.851** should not be assigned for cases where the patient has pneumonia and is on mechanical ventilation, and where the provider has not specifically stated that the pneumonia is VAP. The provider should be queried when the documentation is unclear.

- It is clinically possible for a patient to be admitted with one type of pneumonia and to develop VAP later. The principal diagnosis is the type of pneumonia diagnosed at the time of admission (J12-J18), and code J95.851 is a secondary diagnosis.
Gram-Negative Pneumonia

• Gram-negative pneumonia requires careful management. Affects people who are hospitalized, infants, the elderly, alcoholics, and patients with chronic diseases. Patients tend to be sicker; their condition deteriorates quickly because the bacteria can rapidly destroy lung tissue. Mortality is 25 to 50 percent.

• A diagnosis of gram-negative or other bacterial pneumonia cannot be assumed by lab or clinical findings; only the physician can dx. Such findings can, however, help document a dx or serve as the basis for a query.

• Gram-positive pneumonia is far easier to treat, and requires the expenditure of fewer resources, than gram-negative pneumonia.

- [J15.6] other aerobic Gram Negative bacteria NEC
- [J15.8] other specified bacteria
- [J15.9] unspecified bacterial (Gram Positive bacteria)
Exercise 10.1

1. Lobar pneumonia with influenza

2. Klebsiella pneumonia

3. Aspiration pneumonia due to aspiration of vomitus
Exercise 10.1 Answers

1. Lobar pneumonia with influenza
   \[J11.00 + J18.1\] (see pneumonia, lobar) (see influenza with pneumonia)

2. Klebsiella pneumonia
   \[J15.0\] (see pneumonia, in (due to) Klebsiella)

3. Aspiration pneumonia due to aspiration of vomitus
   \[J69.0\] (see pneumonia, aspiration, vomitus)
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Subcategories</th>
</tr>
</thead>
</table>
| J09      | Influenza due to certain identified viruses | 1 – Pneumonia  
2 – Other Respiratory manifestations  
3 – Gastrointestinal manifestations  
9 – Other manifestations |
| J09.x    | Influenza due to identified novel influenza A virus  
- Avian  
- Bird  
- A/H5N1  
- Swine  
- Other animal origin | |
| J10      | Influenza due to other identified viruses | 0 – Pneumonia  
1 – Other Respiratory manifestations  
2 – Gastrointestinal manifestations  
8 – Other manifestations |
| J11      | Influenza due to unidentified influenza virus | 0 – Pneumonia  
1 – Other Respiratory manifestations  
2 – Gastrointestinal manifestations  
8 – Other manifestations |

**Influenza with Pneumonia, code also the specified type of Pneumonia**
Influenza Guidelines

• Codes from category J09 should be assigned only for confirmed cases of avian flu or other novel influenza A. In this context, "confirmation" does not require documentation of positive laboratory testing; however, it does require provider documentation of avian influenza or other novel influenza A.

• A code from category J09 is not assigned when the diagnostic statement indicates that the infection is "suspected," "possible," "likely," or "?". This advice is an exception to the general guideline that directs the coder to assign a code for a diagnosis qualified as "suspected" or "possible" as if it were established. Instead, a code from category J11, Influenza due to unidentified influenza virus, should be assigned.
COPD (J44)

- Chronic obstructive pulmonary disease (COPD) is a general term used to describe a variety of conditions that result in obstruction of the airway. ICD-10-CM classifies these conditions to category J44, Other chronic obstructive pulmonary disease.

- Category J44 includes the following conditions:
  - Asthma with chronic obstructive pulmonary disease
  - Chronic asthmatic (obstructive) bronchitis
  - Chronic bronchitis with airways obstruction
  - Chronic bronchitis with emphysema
  - Chronic emphysematous bronchitis
  - Chronic obstructive asthma
  - Chronic obstructive bronchitis
  - Chronic obstructive tracheobronchitis

Fourth character required to further specify:

- **J44.0** COPD w acute lower respiratory infection
- **J44.1** COPD w acute exacerbation
- **J44.9** COPD unspecified

- Use additional code to identify the infection

- If applicable, use an additional code from category J45 to specify the type of Asthma
COPD

• An acute exacerbation is a worsening or a decompensation of a chronic condition. An acute exacerbation is not equivalent to an infection superimposed on a chronic condition, though an exacerbation may be triggered by an infection.

• Examples of the terms classified to J44.1 Chronic obstructive pulmonary disease with (acute) exacerbation:
  - "exacerbation"
  - "in exacerbation"
  - "decompensated"
  - "acute exacerbation"
  - "exacerbated"
  - "uncompensated."

• When the diagnosis is stated only as COPD, the coder should review the medical record to determine whether a more definitive diagnosis is documented. Code J44.9, Chronic obstructive pulmonary disease, unspecified, is assigned only when a more specific code cannot be assigned.

• In addition to codes in category J44, codes may also be assigned to identify exposure to:
  - Z77.22 environmental tobacco smoke
  - Z87.891 history of tobacco use
  - Z57.31 occupational exposure to environmental tobacco smoke
  - F17.- tobacco dependence
  - Z72.0 or tobacco use
Asthma (J45)

- Asthma is a bronchial hypersensitivity characterized by mucosal edema, constriction of bronchial musculature, and excessive edema.
- Manifestations of asthma are wheezing, dyspnea out of proportion to exertion, and cough.
- A diagnosis of wheezing alone is not classified as asthma; code R06.2 is assigned in such a case.
- Asthma is classified to category J45:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>J45.2</td>
<td>Mild intermittent Asthma</td>
</tr>
<tr>
<td>J45.3</td>
<td>Mild persistent Asthma</td>
</tr>
<tr>
<td>J45.4</td>
<td>Moderate persistent Asthma</td>
</tr>
<tr>
<td>J45.5</td>
<td>Severe persistent Asthma</td>
</tr>
<tr>
<td>J45.9</td>
<td>Other and unspecified Asthma</td>
</tr>
<tr>
<td>J45.99</td>
<td>Other Asthma</td>
</tr>
<tr>
<td>J45.20</td>
<td>Uncomplicated</td>
</tr>
<tr>
<td>J45.30</td>
<td>Uncomplicated</td>
</tr>
<tr>
<td>J45.40</td>
<td>Uncomplicated</td>
</tr>
<tr>
<td>J45.50</td>
<td>Uncomplicated</td>
</tr>
<tr>
<td>J45.90</td>
<td>Unspecified</td>
</tr>
<tr>
<td>J45.990</td>
<td>Exercise induced bronchospasm</td>
</tr>
<tr>
<td>J45.21</td>
<td>Exacerbation</td>
</tr>
<tr>
<td>J45.31</td>
<td>Exacerbation</td>
</tr>
<tr>
<td>J45.41</td>
<td>Exacerbation</td>
</tr>
<tr>
<td>J45.51</td>
<td>Exacerbation</td>
</tr>
<tr>
<td>J45.901</td>
<td>Exacerbation</td>
</tr>
<tr>
<td>J45.991</td>
<td>Cough variant</td>
</tr>
<tr>
<td>J45.22</td>
<td>Status asthmaticus</td>
</tr>
<tr>
<td>J45.32</td>
<td>Status asthmaticus</td>
</tr>
<tr>
<td>J45.42</td>
<td>Status asthmaticus</td>
</tr>
<tr>
<td>J45.52</td>
<td>Status asthmaticus</td>
</tr>
<tr>
<td>J45.902</td>
<td>Status asthmaticus</td>
</tr>
<tr>
<td>J45.998</td>
<td>Other</td>
</tr>
<tr>
<td>J45.909</td>
<td>Uncomplicated</td>
</tr>
</tbody>
</table>
Asthma Exacerbation

• Exacerbations of asthma are acute or subacute episodes of progressively worsening shortness of breath, cough, wheezing, and chest tightness—or some combination of these symptoms. The final character "1" is used for asthma referred to as "exacerbated" or in "acute exacerbation."

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>J45.21</td>
<td>Mild intermittent asthma with acute exacerbation</td>
</tr>
<tr>
<td>J45.31</td>
<td>Mild persistent asthma with acute exacerbation</td>
</tr>
<tr>
<td>J45.41</td>
<td>Moderate persistent asthma with acute exacerbation</td>
</tr>
<tr>
<td>J45.51</td>
<td>Severe persistent asthma with acute exacerbation</td>
</tr>
<tr>
<td>J45.901</td>
<td>Unspecified asthma with acute exacerbation</td>
</tr>
</tbody>
</table>

• An asthma code with a final character "1," with acute exacerbation, may **not** be assigned with an asthma code with a final character "2," with status asthmaticus.

• When there is documentation of both acute exacerbation and status asthmaticus, only the code with the final character "2" should be assigned.
Status Asthmaticus

• Extreme wheezing in spite of therapy or an acute asthmatic attack in which the degree of obstruction is not relieved by the usual therapeutic measures.
  ➢ Early status asthmaticus represents patients who are refractory to treatment or who fail to respond to the usual therapies
  ➢ Advanced status asthmaticus: asthma attack that could result in resp failure, with signs and symptoms of hypercapnia (excess carbon dioxide in the blood).

• The final character "2" is assigned for both types of status asthmaticus. Indicates a medical emergency for treatment of acute, severe asthma.

• Other terms used to describe status asthmaticus include the following:
  ➢ Intractable asthma attack
  ➢ Refractory asthma
  ➢ Severe, intractable wheezing
  ➢ Airway obstruction not relieved by bronchodilators
  ➢ Severe, prolonged asthmatic attack

• The coder should never assume that status asthmaticus is present without a specific statement from the provider. However, asthma described as:
  ➢ Acute, prolonged wheezing, severe intractable wheezing, treated with adrenal corticosteroids

• Should alert the coder that status asthmaticus may exist and the provider should be asked whether the diagnosis is to be added.
Obstructive Asthma

• Asthma characterized as obstructive or diagnosed in conjunction with COPD is classified to category J44, Other chronic obstructive pulmonary disease.

• Code also the type of asthma (J45.-) if applicable.
Exercise 10.2

1. Chronic bronchitis with decompensated COPD

2. Acute exacerbation of chronic asthmatic bronchitis

3. Mild intermittent asthma with status asthmaticus
1. Chronic bronchitis with acute decompensated COPD: 
   J44.1 (see disease, lung, obstructive, acute, exacerbation)

2. Acute exacerbation of chronic asthmatic bronchitis: 
   J44.1 (see bronchitis, asthmatic, chronic, with exacerbation)

3. Mild intermittent asthma with status asthmaticus: 
   J45.22 (see asthma, mild intermittent, with status asthmaticus)
Atelectasis (J98.11)

- Atelectasis is a very common finding in chest X-rays and other radiological studies. Atelectasis reduces the ventilatory function. Pulmonary collapse can be a severe problem, but mild atelectasis usually has little effect on the patient's condition or the therapy provided.

- Slight strands of atelectasis are often noted on X-ray reports, but this finding is generally of little clinical importance and is usually not further evaluated or treated.

- Atelectasis, should **not** be assigned on the basis of an X-ray finding alone; it should be coded only when the physician identifies it as a clinical condition that meets the criteria for a reportable diagnosis.
Pleural Effusion (J90-J91)

- Pleural effusion is an abnormal accumulation of fluid within the pleural spaces. It occurs in association with pulmonary disease and certain cardiac conditions, such as congestive heart failure, or certain diseases involving other organs.

- It is almost always integral to the underlying disease and is usually addressed only by treatment of that condition. In this situation, only the code for the underlying disease is assigned.

- However, occasionally the effusion is addressed separately, with additional diagnostic studies such as decubitus X-ray or diagnostic thoracentesis. The effusion may be treated by therapeutic thoracentesis, or chest-tube drainage. When treatment is addressed only to the pleural effusion, it can be designated as the principal diagnosis; otherwise, it can be assigned as an additional code when it is further evaluated or treated.

- Pleural effusion in heart failure is not coded separately; only the code for the heart failure (I50.-) is assigned.

- Influenzal pleural effusion is coded to influenza, with respiratory manifestations (J09.x2, J10.1, or J11.1), with code J91.8, Pleural effusion in other conditions classified elsewhere, to specify the associated pleural effusion.

- Malignant pleural effusion can occur due to impaired pleural lymphatic drainage from a mediastinal tumor (especially in lymphomas) and not because of direct tumor invasion into the pleura. Malignant pleural effusion is coded to J91.0 with the underlying neoplasm assigned as the first-listed or principal diagnosis.
Respiratory Failure (J96)

- Respiratory failure is a life-threatening condition that is always due to an underlying condition. It may be the final pathway of a disease process or a combination of different processes.

- Respiratory failure can result from either acute or chronic diseases that cause airway obstruction, parenchymal infiltration, or pulmonary edema. It can arise from an abnormality in any of the components of the respiratory system, central nervous system, peripheral nervous system, respiratory muscles, and chest wall muscles.

- The diagnosis is based largely on arterial blood gas analysis findings, which vary from individual to individual, depending on several factors.

- The coder should **never assume** a diagnosis of respiratory failure without a documented diagnosis by the physician.
Respiratory Failure J96

<table>
<thead>
<tr>
<th>J96.0 Acute Respiratory Failure</th>
<th>J96.1 Chronic Respiratory Failure</th>
<th>J96.2 Acute &amp; Chronic Respiratory Failure</th>
<th>J96.9 Unspecified Respiratory Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>J96.00 unspecified whether hypoxia or hypercapnia</td>
<td>J96.10 unspecified whether hypoxia or hypercapnia</td>
<td>J96.20 unspecified whether hypoxia or hypercapnia</td>
<td>J96.90 unspecified whether hypoxia or hypercapnia</td>
</tr>
<tr>
<td>J96.01 with hypoxia</td>
<td>J96.11 with hypoxia</td>
<td>J96.21 with hypoxia</td>
<td>J96.91 with hypoxia</td>
</tr>
<tr>
<td>J96.02 with hypercapnia</td>
<td>J96.12 with hypercapnia</td>
<td>J96.22 with hypercapnia</td>
<td>J96.92 with hypercapnia</td>
</tr>
</tbody>
</table>

Note: When respiratory failure follows surgery assign code, J95.821 Acute postprocedural respiratory failure, or code J95.822 Acute and chronic postprocedural respiratory failure.
Respiratory Failure as a Principal or Secondary Diagnosis

• Careful review of the medical record is required for the coding and sequencing of respiratory failure.

• The coder must review the circumstances of admission to determine the principal diagnosis. Code J96.00, Acute respiratory failure, unspecified whether with hypoxia or hypercapnia, or code J96.20, Acute and chronic respiratory failure, unspecified whether with hypoxia or hypercapnia, may be assigned as a principal diagnosis when it is the condition established after study to be chiefly responsible for occasioning the admission to the hospital, and the selection is supported by the Alphabetic Index and Tabular List.

• Respiratory failure may be listed as a secondary diagnosis if it develops after admission.
Respiratory Failure as a Principal or Secondary Diagnosis

- When a patient is admitted with respiratory failure and another acute condition (e.g., myocardial infarction, aspiration pneumonia, cerebrovascular accident), the principal diagnosis will depend on the individual patient's situation and what caused the admission of the patient to the hospital.

- This guideline applies regardless of whether the other acute condition is a respiratory or nonrespiratory condition.

- The physician should be queried for clarification if the documentation is unclear as to which one of the two conditions was the reason for the admission.

- The guideline regarding two or more diagnoses equally meeting the definition of principal diagnosis (Section II, C) may be applied in situations when both the respiratory failure and the other acute condition are equally responsible for occasioning the admission to the hospital.
Acute Pulmonary Edema (J81.0)

• Acute pulmonary edema is a pathological state in which there is excessive, diffuse accumulation of fluid in the tissues and the alveolar spaces of the lung. It is broadly divided into two categories that reflect the origin of the condition:

  ➢ Cardiogenic and Noncardiogenic
Chronic Pulmonary Edema (J81.1)

- Chronic pulmonary edema or pulmonary edema not otherwise specified that is **not** of cardiac origin is coded as **J81.1, Chronic pulmonary edema**, unless the Alphabetic Index or the Tabular List instructs otherwise.

- Pulmonary edema caused by congestive overloads, such as pulmonary fibrosis (J84.10), congenital stenosis of the pulmonary veins (Q26.8), or pulmonary venous embolism (I26.99), is noncardiogenic. Such conditions are assigned to code **J81.0** when described as acute or **J81.1** when described as chronic or not otherwise specified.

- Be careful not to confuse this condition with edema associated with heart disease.
# Common Diagnosis

<table>
<thead>
<tr>
<th>ICD-9</th>
<th>ICD-9</th>
<th>ICD-10</th>
<th>ICD-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cough</td>
<td>786.2</td>
<td>Cough</td>
<td>R05</td>
</tr>
<tr>
<td>Shortness of Breath</td>
<td>786.05</td>
<td>Shortness of Breath</td>
<td>R06.02</td>
</tr>
</tbody>
</table>
Exercise 10.3

1. Acute on Chronic Respiratory Failure with Hypoxia
2. Swine Influenza with Pleural Effusion
3. Chronic Pulmonary Edema
Exercise 10.3 Answers

1. **Acute on Chronic Respiratory Failure with Hypoxia**
   - **J96.21** (see failure, respiratory, acute on chronic, with hypoxia)

2. **Swine Influenza with Pleural Effusion**
   - **J09.x2 + J91.8** (see influenza, swine – tabular instructs to add J91.8 for the effusion)

3. **Chronic Pulmonary Edema**
   - **J81.1** (see edema, lung, chronic)
Online Education

I need educational materials
Badge Tap Logon Process
CareNotes Patient Education
Clinical Desktop Web Portal Log On Process
Clinical Pharmacology Online
Dollof Medical Library
Education Video List
Halogen Performance Review
Infection Prevention Resources
ICD-10 Training Materials New!
One Source Documents
Online Education
Parenteral Medication Manual
Recognizing and Preventing Acute Stroke in Women
SCM 5.5 Training
UpToDate Online