

## RESPIRATORY FAILURE CODING

### Post procedural respiratory failure

- This diagnosis results in a significant payment increase; however, it can adversely affect quality scores for both the hospital and the surgeon.
  - **The recommendation is to avoid documenting “post-op respiratory failure” in the setting of elective admissions/surgeries.**
- Alternatively, respiratory failure following surgery attributed to preexisting or other underlying conditions by the provider is acceptable. For example:
  - **Documenting respiratory failure following surgery due to aspiration pneumonitis or pneumothorax or due to preexisting conditions such as severe COPD or heart failure is acceptable.**

### Post-operative mechanical ventilation

- Relates specifically to the assignment of postop MVS, not the diagnosis of respiratory failure
- Code for mechanical ventilation should not be assigned postoperatively for mechanical ventilation that is considered a normal part of surgery.
- If the patient remains on mechanical ventilation for an extended period meaning “48 hours”, beginning counting from the time of intubation in the OR, the mechanical ventilation should be coded.
- However, similar to post procedure respiratory failure, if mechanical ventilation is not expected after a certain period of time depending on the type of surgery, it would be expected that an underlying problem is present (not the surgery itself) that caused the need for mechanical ventilation. The underlying problem should be documented, and mechanical ventilation should be coded regardless of timing.

### Intubation for airway protection

- Is only applicable for coding for MVS not for respiratory failure
- However, if the patient has a PaO<sub>2</sub>/FiO<sub>2</sub> ratio <300, the diagnosis of hypoxemic respiratory failure due to functional, metabolic or structural encephalopathy is valid

## DEFINITIONS

### Acute hypoxemic respiratory failure

- PaO<sub>2</sub> <60 mmHg on RA, or
- SpO<sub>2</sub> <91 % on RA, or
- PaO<sub>2</sub>/FiO<sub>2</sub> ratio <300

When an ABG is not available, O<sub>2</sub> Sat can be used as a surrogate to approximate the PO<sub>2</sub> and the flow rate in L/min to approximate the FiO<sub>2</sub> in order to calculate the PF ratio (refer to tables O<sub>2</sub>Sat/PaO<sub>2</sub> and L/FiO<sub>2</sub> tables in CDI pocket guide). For example,

- 95% O<sub>2</sub>Sat = 80 PaO<sub>2</sub>
- 4 L NC = 0.36 FiO<sub>2</sub>
- The PF ratio is 80/0.36 = 222. The patient meets criteria for respiratory failure (PF ratio <300).

### Acute hypercapnic respiratory failure

- PaCO<sub>2</sub> >50 mmHg with pH <7.35
- VBGs can be used for diagnosing hypercapnic respiratory failure but not for evaluating hypoxemia

**Acute respiratory distress**

- If a patient has acute respiratory distress and does not meet criteria for acute respiratory failure, either hypoxemic or hypercapnic, there is now a separate code for “acute respiratory distress”

**Chronic hypoxemic respiratory failure**

- Chronic hypoxemia (baseline PaO<sub>2</sub> <60 mmHg on RA or SpO<sub>2</sub> <91 % on RA)
- The use of home O<sub>2</sub> is a reliable indicator of chronic hypoxemic respiratory failure since O<sub>2</sub>Sat <88% is required to meet medical necessity criteria for home O<sub>2</sub>.

**Chronic hypercapnic respiratory failure**

Elevated PaCO<sub>2</sub> >50 mmHg with normal pH

**Acute on chronic respiratory failure**

Acute exacerbation of chronic respiratory failure recognized by any of the following:

- PaO<sub>2</sub> <60 mmHg or SpO<sub>2</sub>, 91% on the patient’s usual home O<sub>2</sub> flow rate, or
- PaCO<sub>2</sub> >50 mmHg with pH <7.35, or
- Worsening dyspnea requiring an increase in chronic supplemental O<sub>2</sub>.

Example: Pt on home O<sub>2</sub> 2L/min admitted with dyspnea and SpO<sub>2</sub> 93% on 4 L/min. Pt is expected to have SpO<sub>2</sub> >91% on 2 L/min and now requires 4 L/min indicating acute exacerbation of chronic respiratory failure.