

RESPIRATORY FAILURE - CAUSES, CLINICAL INFORMATION, TREATMENT AND CODING CONVENTIONS

QUIZ REVIEW

The correct answer is in bold font.

1. Hypoxic respiratory failure involves:
 - a. Low oxygen
 - b. High oxygen
 - c. High carbon dioxide
 - d. PAO₂-PaO₂ gradient unchanged

*Answer: **b; Low oxygen.** Per the handout, hypoxic respiratory failure involves low oxygen, normal or low carbon dioxide, and increased PAO₂-PaO₂ gradient.*

2. The type of respiratory failure characterized by low PO₂, High PCO₂ and unchanged PAO₂-PaO₂ gradient is:
 - a. Type I respiratory failure
 - b. Type II respiratory failure
 - c. Type III respiratory failure
 - d. Type IV respiratory failure

*Answer: **b; Type II or Hypercapnic respiratory failure.** See handout.*

3. An adult patient is diagnosed with acute respiratory distress syndrome; It is not documented as to whether it is due to trauma or surgery, is not specified as to cause, and there is no further information to query. This would be assigned to code:
- a. J95.821
 - b. J80
 - c. R06.00
 - d. J96.00
 - e. P22.0

Answer: b; J80. The patient is an adult. See ICD-10-CM index.

4. A patient presents to the Emergency Department (ED) due to an overdose of Ambien and Trazadone and is intubated and placed on mechanical ventilation. The attending physician admits the patient to the ICU and documents that the patient was intubated for airway protection because of the drug overdose. There was neither documentation of nor clinical indicators to support respiratory failure. The patient was weaned from the ventilator the next day. Since the patient was intubated and placed on mechanical ventilation for airway protection, the coder assumes that the patient was in respiratory failure and either queries for or reports code J96.00, Acute respiratory failure as a diagnosis.
- True or False?

Answer: False.

Do not assign code J96.00, Acute respiratory failure, simply because the patient was intubated and received ventilatory assistance. Documentation of intubation and mechanical ventilation is neither enough to support assignment of a code for respiratory failure nor to query. The condition being treated (e.g., respiratory failure) needs to be clearly documented by the provider. In addition, there must be clinical indicators to support the diagnosis.

5. A coder reviews a record and acute respiratory failure is documented by the provider several times in progress notes. There are no ABGs done or on the record. There are no convincing clinical indicators of acute respiratory failure. The patient is placed on oxygen. The coder should:
 - a. Not assign a code for the acute respiratory failure.
 - b. Refer the case to the physician liaison or coding manager to discuss with the physician who documented the acute respiratory failure.
 - c. Query the physician and in the query, ask the physician if he can document another diagnosis because the acute respiratory failure is not supported.
 - d. Assign J96.00 as a diagnosis because the physician documented it.

Answer: b; Refer the case to the physician liaison or coding manager to discuss with the physician who documented the acute respiratory failure. The coder should not take it upon themselves to make a judgment regarding the documented respiratory failure. It is best to have another physician to discuss it peer to peer.

6. Review the following documentation: H&P (Critical Care) "...HISTORY OF PRESENTING ILLNESS: ...PMHx of COPD not on home oxygen...pt reports that she gets short of breath when walking up and down her stairs...denies any nocturnal dyspnea and only requires 1 pillow to sleep well. When she presented to the ED...noted to be hypoxic saturating 85% on 4 L nasal cannula...given a nebulizer treatment which helped her saturation increase to 95%...was then placed on nasal cannula, but desaturated to the 80's...they requested the ICU transfer for management of her respiratory failure...
 - ASSESSMENT/PLAN: 1. Acute hypoxic respiratory failure...Acute hypoxic respiratory failure...patient has a history of COPD current smoker of 1 pack per day not on home oxygen...presents today with an increased shortness of breath requiring 100% Ventimask for breathing..."
 - H&P "...ASSESSMENT/PLAN: ...1. Acute respiratory failure...DISCUSSION: 1. Secondary to COPD exacerbation vs. Community acquired PNA..."
 - H&P (Critical Care Medicine Attending) "...the patient has hypoxemic respiratory failure..."
 - PN 10/8 "...ASSESSMENT/PLAN: 1. Acute on chronic respiratory failure...secondary to COPD exacerbation due to possible community acquired pneumonia but this is less likely as pt does not have symptoms consistent with pneumonia...presented with decreased P02 in 70's and was saturating in low 80's..."
 - PN 10/9 "...ASSESSMENT/PLAN: Acute hypoxic respiratory failure...patient is currently on high flow oxygen of 45% which has decreased from 55%...patient has considerably improved since admission and can be moved out to normal floor bed"
 - PN 10/10 "...ASSESSMENT AND PLAN: 1. Acute hypoxemic respiratory failure...1. Acute respiratory failure...this is not completely explained by pulmonary edema alone, to consider is also small airway disease or viral vs. Bacterial pneumonia...cont to taper steroids as the wheezing has resolved..."

- PN 10/10 "...ASSESSMENT AND PLAN: ...Today's Agenda: 1. Acute hypoxic respiratory failure...Acute Hypoxic Respiratory Failure...currently on high flow oxygen of 45%...saturating 86% on room air...we will try to put her on 2 L nasal cannula..."
- PN 10/10 "ASSESSMENTS AND PLANS: Acute hypoxemic respiratory failure...tolerating high flow NC..."
- PN 10/15 "...COPD; acute on chronic respiratory failure; currently stable on O2 3 L via NC, Sp O2 93%...cont prednisone...cont Spiriva, Advair and inhalers...cont O2 at 3 L via NC..."

For sequencing, the principal diagnosis should be assigned as:

- J96.00
- J96.21
- J44.1
- J96.20
- J18.9

*Answer: **b; J96.21**, Acute on chronic respiratory failure with hypoxia. See OCG below. This patient was admitted with an acute condition, acute respiratory failure on top of chronic respiratory failure. The acute respiratory failure is supported clinically, documented well and patient treated with oxygen. The acute condition necessitated admission. The sequencing rules do not require the underlying suspected cause to be coded as the pdx. The acute respiratory failure was more resource intensive.*

7. Acute respiratory distress associated with acute exacerbation of COPD and asthma not in exacerbation is coded:

- J95.3, J44.1, J45.909
- J44.1
- J45.909, J44.1
- J80, J44.1, J45.909
- R06.00, J44.1

*Answer: **b; J44.1**. Respiratory distress is a symptom code. If acute respiratory distress is associated with any type of COPD, it is not coded. The COPD code is assigned only. Only the COPD was in exacerbation so most likely is the principal diagnosis, not the asthma. Per Coding Clinic 1Q2017 page 25, asthma is not considered a form or type of asthma, so not code is assigned for the asthma.*

8. Please read the following documentation:

H&P "...HISTORY OF PRESENT ILLNESS: ...shortness of breath that started several days ago in a nursing home who was sent here and was found to have signs of volume overload on CT of the chest...ASSESSMENT: ...coming in for acute respiratory failure, probably due to volume overload...will keep her on BiPAP..."

Consultation "...HISTORY OF PRESENT ILLNESS: ...the patient was diagnosed as having volume overload in the ER in addition to atrial fibrillation with rapid ventricular response...started on Cardizem and was placed on bi-level positive airway pressure with improvement in symptoms...received Lasix 20 mg IV times 1 before the BiPAP...upon arrival to the intensive care unit, patient was initially on BiPAP, however, was able to be weaned down to nasal cannula only after Lasix IV...normally uses oxygen at 4 liters per minute at home...ASSESSMENT AND PLAN: 1. Pulmonary: Acute hypoxic respiratory failure...etiology is heart failure and contributing obesity...2. Volume overload...brought on by rapid ventricular response...8. Acute diastolic heart failure...this is secondary to rapid ventricular response...diurese...check BNP..." (BNP 980)

ABGs for patient: pH 7.54; PAO₂-62; PACO₂-54, O₂ saturation 97%.

PN 9/25 (pg 1) "...ASSESSMENT AND PLAN: Acute resp failure/volume overload on IV Lasix 40-on BiPAP...Afib-HR controlled on Cardizem drip..."

PN 9/27 (pg 10) "...Acute resp failure...pulm edema/pleural effusion-continue to diurese...Lasix to 40 Bid x 2 dose..."

PN 9/29 (pg 12) "...resp failure due to volume overload-Lasix increase today..."

PN 9/29 (pg 15) "...Resp failure/pulm edema/acute diastolic failure-on furosemide...clinically improving..."

PN 9/30 (pg 16) ".....resp failure/pulm edema/acute diastolic failure-on furosemide clinically improving."

What is the proper sequencing for this case? (Not all secondaries are coded)

- a. J96.01, I50.31, I48.91
- b. I50.31, J96.01, I48.91
- c. I48.91, J96.01, I50.31

Answer: b; I50.31, J96.01, I48.91. For this case, the patient's most resource intensive problem is the acute diastolic heart failure, treated with increasing doses of IV Lasix. The ABGs were not terribly convincing for acute respiratory failure. Only BiPAP was given and patient had already been on oxygen at home. The acute respiratory did not seem to meet the criteria for pdx clinically, nor was treatment overwhelmingly aimed at it.

9. A patient is admitted with acute respiratory failure due to an accidental valium overdose. Overdose protocol is carried out and the patient is placed on mechanical ventilation for a brief time. The case is coded:
- a. J96.00, T42.4X1A
 - b. T42.4X1A, J96.00
 - c. T42.4X1A

*Answer: **b; T42.4X1A, J96.00.** The poisoning code is sequenced first followed by manifestations. See OCG Chapter 19 (b) Poisoning; When coding a poisoning or reaction to the improper use of a medication (e.g., overdose, wrong substance given or taken in error, wrong route of administration), first assign the appropriate code from categories T36-T50. The poisoning codes have an associated intent as their 5th or 6th character (accidental, intentional self-harm, assault and undetermined. Use additional code(s) for all manifestations of poisonings.*

10. At what pH is the use of ventilatory support *considered* in patients with acute respiratory failure?
- a. pH greater than 7.45
 - b. pH between 7.45 and 7.30
 - c. pH between 7.30 and 7.25
 - d. pH less than or equal to 7.25

*Answer: **b; pH between 7.30 and 7.25** per the respiratory failure action plan document.*