

# BiPap in Prime Care Area

## **Inclusion Criteria:**

1. Must be **clinically stable**. They may have significant hypercarbia but are not in respiratory distress/ somnolent/tachypneic/hypoxic.
2. Both the physician and the nurse must have no objection with doing BiPap in prime care.
3. Patient must be **cooperative and tolerate** the BiPap mask well. Nurse and Respiratory Therapist should **not** need to be present continuously for the mask to stay on.
4. BiPap outside of critical care can only occur in prime care. Preferential placement of patients in rooms with good visualization to facilitate monitoring (avoid rooms such as 20 and 26, swap with another room if necessary).
5. CXR prior to BiPap strongly encouraged unless this would delay initiation of treatment.
6. If the patient clinically decompensates (somnolence, increased work of breathing, new clinical marker of distress, change in mental status, etc.), they must be moved to critical care.

# BiPap in Prime Care Area

## Equipment requirements:

1. Cardiac monitor with continuous pulse oximetry
2. Working suction set up
3. BiPap set up (Respiratory Therapy)

## Assessment requirements:

1. Hourly with documentation:
  - a. Airway patency- cough, secretions, etc.
  - b. Respiratory status-lung sounds, work of breathing, rate, dyspnea, pulse oximetry
  - c. Vital signs
  - d. GI complications-presence of nausea, gastric distension, and/or vomiting
2. VBG suggested prior to initiation of and termination (generally at 2 hours)

# What is BiPap ?

- **Continuous bi-level airway pressure**
- **Senses patient effort and releases air flow to target the set inspiratory pressure**
- **Higher level of pressure assists ventilation during inspiration by lowering CO<sub>2</sub> levels, while the lower level maintains airway patency during expiration thereby increasing oxygen levels**

## Benefits of BiPap

- **Reduces the effort involved in breathing**
- **Rests the respiratory muscles**
- **Reduces respiratory rate**
- **Reduces CO<sub>2</sub> levels**
- **Increase oxygen levels**
- **Correct pH as alveolar ventilation improves**
- **Increases tidal volume**
- **Can reduce the need for endotracheal intubation**

# Potential Complications of BiPap

- **Pneumothorax**
- **Gastric distension**
- **Aspiration**