ACUTE- Non-Invasive Ventilation Tips for RNs

Requires a MD order, order reads BIPAP or CPAP- Continuous- with appropriate parameters
Patient educated in goals of therapy and indications for use
Ensure all staff are aware of goals of care as related to NIV

RESPIRATORY THERAPY (RT) will be the only staff authorized to apply mask
Nursing may remove mask but must document time off and page/contact RT
Coordinate with RT timing of oral medication administration and skin assessment
ABSOLUTELY no wrist restraints!!
Consider a sitter if patient needs frequent redirecting
If sitter is present, review appropriate guidelines for redirection as needed
Call bell must be within reach

If patient complains of nausea defer PAP until medicated and nausea passes or place NGT
Consider anti-anxiety meds or non-pharmacologic intervention to improve compliance

Make sure patient is aware of how to remove mask
RNs/RTs may remove mask for brief separations of support, maintaining device in standby mode OR if there is a standard timeframe for prescribed intervals of NIV
RNs are allowed to titrate FiO2 ONLY in cases of hypoxemia but should be monitoring respiratory rate and must notify RT of changes ASAP (O2 saturation of 88%-90% are considered acceptable for COPD patients.)
Utilize Ambu bag for rescue breathing (BLS protocol) as needed

Alarm cable present, plugged into electrical socket and functioning properly per floor protocol
Under no circumstances can alarm cable be disabled
Review alarm settings with RT- preset minimum volume

Assess patient's vital signs, mental status and skin integrity before and after mask application
Mepilex Lite applied to forehead and bridge of nose prior to therapy
Evaluate skin condition every 3 hours along with NIV check,
Consider alternating type of mask if pressure is an issue
Monitor for & treat dry eyes and mucosa (Full face masks in particular can lead to drying.) Add humidification to the delivery system if haven't already.

Notify Respiratory Therapist of changes in the patient's respiratory status
Confirm that you know how to notify your Respiratory Therapist at the start of the shift
In case of PAP malfunction, remove mask immediately and assess patient, apply supplemental oxygen if necessary and call or page your Respiratory Therapist or PAGE the Charge Respiratory Therapist at _____ or PAGE RRT _____.

References:
CO 02.640 Non-Invasive Ventilation Positive Airway Pressure Therapy
Non-Invasive Positive Pressure Ventilation Protocol/Revision of Existing policy August 2016 Non-Invasive Positive Pressure Ventilation Protocol/Revision of Existing policy September 2016

Non-Invasive Ventilation (NIV) Tips

PAP: Positive Airway Pressure. Refers to the delivery of ventilatory support through the patient's upper airway using a mask or similar device.

The following are some of the common modes of PAP:

CPAP: ***C****ontinuous* ***P****ositive* ***A****irway* ***P****ressure* has one level of support provided continuously during inhalation and exhalation. **Example:** Cpap 10cmH2O

BiPAP: ***Bi****level* ***P****ositive* ***A****irway* ***P****ressure* has two levels of support provided during inhalation (ipap) and exhalation (epap). **Example:** Bipap 10/5 cmH2O

IVAPS and **AVAPS:** ***I****ntelligent* ***V****olume* ***A****ssured* ***P****ressure* ***S****upport* and ***A****verage* ***V****olume* ***A****ssured* ***P****ressure* ***S****upport*, relatively new modes of PAP used for advanced COPD and mixed sleep disordered breathing. Settings vary and are determined per sleep study results.

NOTES:

Initiation and titration of acute NIV requires the following:

- ➔Requires at least Intercare (Intermediate) or Intensive Care (ICU) patient placement
- ➔A pulmonary consult should be obtained when Acute NIV is required for > 24 hours
- ➔RRT Resource RNs should be notified of Acute NIV patient need.
- ➔Be aware if patient is a current user of nocturnal NIV and baseline settings should be obtained.
- ➔Acute NIV is a life saving measure, goals of care should be addressed.
- ➔We do not advise use of NIV as a bridge therapy for end of life patients.

References:
CO 02.640 Non-Invasive Ventilation Positive Airway Pressure Therapy
Non-Invasive Positive Pressure Ventilation Protocol/Revision of Existing policy August 2016 Non-Invasive Positive Pressure Ventilation Protocol/Revision of Existing policy September 2016