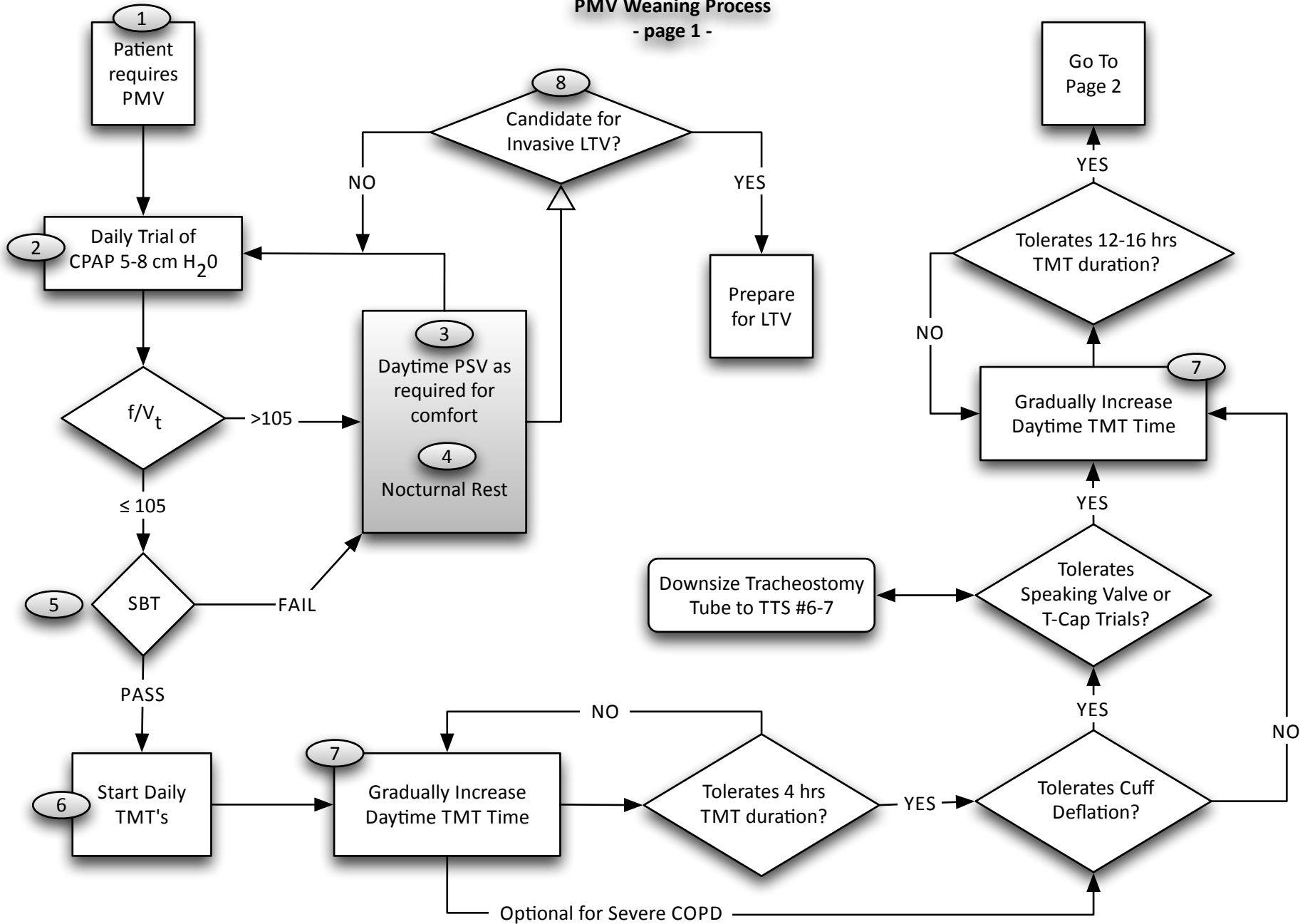
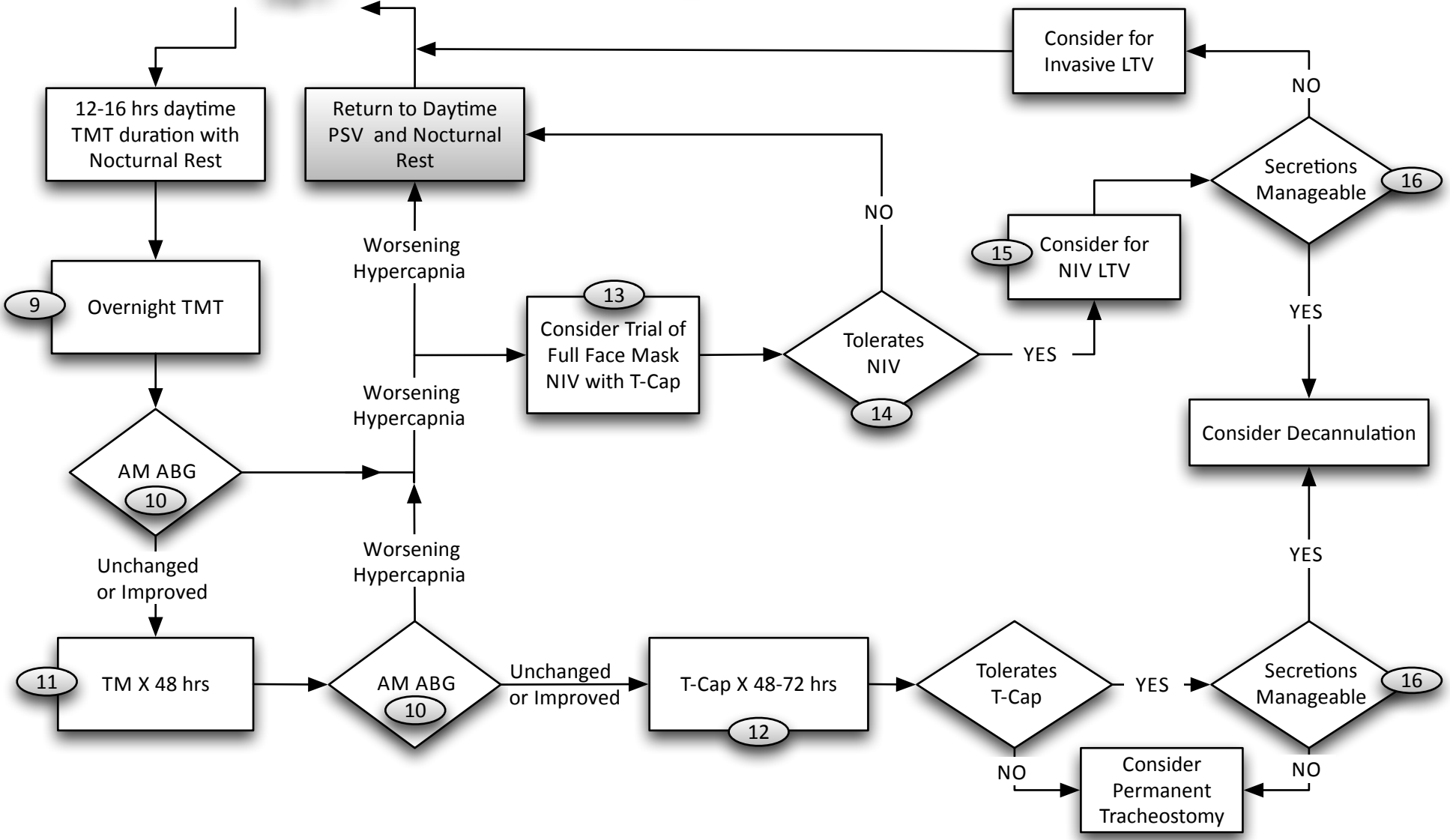


PMV Weaning Process
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PMV Weaning Process
- page 2 -

- page 1 -



Definitions:

¹ **PMV:** Patients requiring prolonged mechanical ventilation ≥ 21 days.

² **Daily Trial of CPAP 5-8 cm H₂O:** Assess daily the patient's readiness to tolerate T-mask trials. Measure the f/V_t ratio following 2 minutes of CPAP 5-8 cm H₂O or at the lowest reachable PSV, if V_t ratio remains >105 .

³ **Daytime PSV:** Use a level of PSV during the daytime hours that provides objective respiratory comfort, e.g., f/V_t ratio $< 80-90$.

⁴ **Nocturnal Rest:** Use a level of PSV or PCV during the nighttime hours that provides objective respiratory comfort, e.g., f/V_t ratio $< 60-80$. Continue nocturnal rest until step 9.

⁵ **Spontaneous Breathing Trial (SBTs):** Perform for 30 minutes using PSV 5 cm H₂O / PEEP 5 cm H₂O. See failure criteria of a SBT/TMT.

⁶ **Start Daily Tracheostomy Mask Trial (TMT):** First day accept 5-60 (maximum) minutes. See failure criteria of a SBT/TMT.

⁷ **Gradually Increase Daytime TMT Time:** Aim to increase total duration by 30-60 minutes daily. Consider multiple TMTs with rest in between. See failure criteria of a SBT/TMT.

⁸ **Candidate for Invasive LTV:** Consider whether patient would best be managed as invasive LTV. Refer to the 'Home Invasive Ventilation Appropriateness' criteria.

⁹ **Overnight TMT:** Use a one-way speaking valve or leave the tracheostomy tube uncapped. Provide oxygen and humidity as required.

¹⁰ **AM ABG:** Early morning ABG or capillary gas.

¹¹ **TM x 48 hrs:** Use tracheostomy mask for 48 hours, if tolerated. Use a one-way speaking valve or leave the tracheostomy tube uncapped. Provide oxygen and humidity as required.

¹² **T-Cap x 48 hrs:** Cap the tracheostomy tube. Further downsize the tracheostomy tube, if necessary. Provide oxygen and humidity as required.

¹³ **Consider Trial of Full Face Mask NIV with T-Cap:** Cap the tracheostomy tube. Further downsize the tracheostomy tube, if necessary. Provide oxygen and humidity as required. Assess tolerance to using full face mask NIV starting with IPAP 10 cm H₂O/ EPAP 5 cm H₂O/ ST mode 10 breaths/minute.

Definitions:

¹⁴ **Tolerates NIV:** Refer to 'NIV Titration Algorithm'.

¹⁵ **Consider LTV NIV:** Refer to the 'NIV Appropriateness' criteria.

¹⁶ **Manageable Secretions:** Secretions are considered to be manageable using cough assist maneuvers (e.g., breathing stacking bag and valve, manually-assisted cough, insufflator-exsufflator) once decannulation occurs.

Failure Criteria of a Spontaneous Breathing Trial or Tracheostomy Mask Trial

Clinical assessment and subjective indices

Agitation and anxiety

Depressed mental status

Diaphoresis

Cyanosis

Evidence of increasing effort

- Increased accessory muscle activity
- Facial signs of distress
- Dyspnoea

Objective measurements

PaO₂ <50–60 mmHg on FIO₂ >0.5 or SaO₂ <90%

PaCO₂ >50 mmHg or an increase in PaCO₂ >8 mmHg

pH <7.32 or a decrease in pH ≥0.07 pH units

f/Vt >105

f >35 breaths/min or increased by ≥50%

HR >140 beats/min or increased by ≥20%

Systolic BP >180 mmHg or increased by ≥20%

Systolic BP <90 mmHg

Cardiac arrhythmias