Algorithm for Initiation of Noninvasive Ventilation

Based on a CHEST clinical practice guideline and expert panel report, this flowchart outlines an algorithm for initiation of noninvasive ventilation (NIV) for adult patients with neuromuscular disease experiencing fatigue, headache, concentration/memory difficulty, and/or respiratory symptoms.

1. **CONDUCT PULMONARY FUNCTION TESTING (PFT)**
   - Do results include any of the following?
     - FVC <80% predicted
     - MIP <60 cm H₂O or MEP <40 cm H₂O
     - PCF <270 L/min
     - SNIP <70 cm H₂O (males) or <60 cm H₂O (females)
   - **YES**
   - **NO**

2. **CONDUCT OVERNIGHT OXIMETRY OR ABG TESTING**
   - Do results include any of the following?
     - SpO₂ </= 90% for >/= 2% sleep time
     - PaCO₂ on ABG > 45mmHg
   - **YES**
   - **NO**

3. **CONDUCT POLYSOMNOGRAPHY**
   - Do results include any of the following?
     - AHI >/= 5
     - SpO₂ </= 88% for >/= 5 minutes continuously
   - **YES**
   - **NO**

**Repeat PFT in 6 months**

Initiate NIV