Classification:	YALE NEW HAVEN HEALTH SYSTEM POLICIES & PROCEDURES	
Title: YNHHS Nurse-Driven Sedation Vacation Protocol		
Date Approved: 01/20/2015	**Approved by:** System Quality Council	
Date Effective: 01/26/2015		**Date Reviewed/Revised:** NEW
Distribution: Critical Care Registered Nurses, HealthStream, MCN Policy Manager		**Policy Type (I or II):** Type I
Supersedes: BH Sedation Vacation and Weaning Protocol		

PURPOSE

To outline the procedure for a nurse-driven sedation vacation protocol on intubated patients in adult critical care units.

APPLICABILITY

This policy applies to Yale New Haven Health System (YNHHS), and each of the affiliated entities controlled directly or indirectly by YNHHS, including each affiliated Delivery Network and its subsidiary entities.

BACKGROUND

Over use of sedation can cause delirium and prolonged mechanical ventilation, which can lead to additional complications such as barotrauma and ventilator-associated pneumonia. All of these complications can increase the patient's length of stay and cost of treatment. Evidence shows that a daily interruption of sedation of all continuous sedative infusions significantly reduces these complications.

The immediate benefits of a sedation vacation are:

1) To improve the patient's readiness to wean from the ventilator
2) To provide an opportunity for a neurologic assessment despite the patient's ability to wean from the ventilator

POLICY

Patients with an active order for the YNHHS Nurse-Driven Sedation Vacation Protocol should be assessed for a sedation vacation at minimum of daily or more frequently per provider discretion or unit standard.

The YNHHS Nurse-Driven Sedation Vacation Protocol applies to the following sedative continuous infusions:

- Opioids
  - Fentanyl
  - Hydromorphone
  - Morphine
- Benzodiazepines
  - Lorazepam
  - Midazolam
- Propofol

PROTOCOL/PROCEDURE

1. Confirm that an order to perform a sedation vacation is present.

2. Confirm patient does not meet any of the below exclusion criteria:

- **Absolute Exclusion Criteria**
  - Do not perform a sedation vacation for patients that meet any of the following criteria:
    - Continuous neuromuscular blockade
    - Therapeutic hypothermia
    - Comfort measures only

- **Relative Exclusion Criteria**
  - Do not perform a sedation vacation for patients that meet any of the following criteria (unless specific provider order is present to proceed):
    - Richmond Agitation Sedation Scale (RASS) greater than or equal to +2
    - Increasing dose of sedatives or opioids in previous 4 hours
    - Heart rate greater than 120 beats per minute
    - Increasing dose of vasopressors in previous 4 hours
    - Active large volume fluid/blood resuscitation
    - PEEP greater than 8 cm H_20
    - FiO_2 greater than 60%
    - ICP > 25 mmHg
    - Receiving sedation for ICP management
    - Neuromuscular blockade doses (intermittent or continuous) given in the past 24 hours (succinylcholine excluded) with current Train of Four less than 4 out of 4 twitches
    - Active alcohol withdrawal treatment
    - Active seizure treatment
    - Open abdomen
    - Open chest
    - Intra-aortic balloon pump (IABP)

3. Initiate sedation vacation by turning off continuous benzodiazepine, opioid, and propofol infusions per specific instructions below:

   - Benzodiazepines/Opioids
     - ➢ Turn off continuous benzodiazepine and opioid infusions
       - Keep opioids on:
         1. If patient is actively in pain (assess using an appropriate pain scale)
         2. If patient is receiving opioids for pain related to burn injuries
       - Note: If patient experiences pain during sedation vacation, treat with intermittent boluses per order.

   - Propofol
     - ➢ Initially decrease propofol by 50% of current infusion rate. If patient does not meet any failure criteria (see below) after 15 minutes, then decrease propofol by 10mcg/kg/min every 5 minutes until titrated off.
       - If patient meets failure criteria (see below) while decreasing infusion, maintain propofol at last rate patient tolerated.

4. Monitor for the duration of the sedation vacation for the following failure criteria:
   - RASS greater than or equal to +2
   - New acute cardiac arrhythmia
   - $Sp0_2$ decreased by 5% of pre-sedation vacation $Sp0_2$ for 5 minutes
   - New use of accessory muscles
   - New diaphoresis

5. Terminate sedation vacation if patient meets any of the above failure criteria per specific instructions below:

   - Benzodiazepines/Opioids
     - ➢ Obtain order and administer bolus dose of 50% of hourly dose pre-sedation vacation and
     - ➢ Restart continuous infusions at 50% of pre-sedation vacation infusion rate

   - Propofol
     - ➢ If patient meets any failure criteria after infusion has been titrated completely off, restart propofol at 50% of pre-sedation vacation infusion rate

6. When patient can open eyes to verbal stimulation or follow simple commands, notify respiratory therapist to proceed to YNHHS Adult Spontaneous Breathing Trial Protocol.

7. If patient does not meet any failure criteria after 4 hours of a sedation vacation, patient is considered to tolerate the sedation vacation. At this point, discuss with provider discontinuation of continuous infusion orders in electronic medical record, and provider to consider ordering intermittent boluses as needed.

DOCUMENTATION

RN to document the following in the EMR, as applicable:

1. Specific exclusion criteria met
2. Start time of sedation vacation
3. Dose changes made to continuous infusions
4. Patient's ability to tolerate sedation vacation and/or failure criteria

REFERENCES

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RELATED POLICIES

YNHHS Adult Spontaneous Breathing Trial Protocol