Permission to use the Withdrawal Assessment Tool-1 (WAT-1)

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Requests for any changes or alterations in the instrument or requests to translate it into another language should be made in writing to Drs Franck and Curley.

WAT-1 forms in different languages can be downloaded from:

http://familynursing.ucsf.edu/research-and-clinical-tools

Withdrawal Assessment Guidelines

Patients should have suspected iatrogenic withdrawal assessed and documented at least every 12 hours.

Pediatric Assessment:
Withdrawal assessment, especially in preverbal or nonverbal children, can be challenging. The WAT-1 is used to identify iatrogenic withdrawal syndrome. The nurse should tailor their assessments to the child's developmental level, medical status and temperament using the WAT-1.

Definition of Iatrogenic Withdrawal Syndrome:
In patients weaning from ≥ 5 days of continuous infusion or round-the-clock narcotics, any patient receiving rescue therapy (defined as an opioid or benzodiazepine bolus or an increase in opioid or benzodiazepine infusion) to manage an increase in WAT-1 symptoms after the start of weaning and not for treatment of new pain or sedation needs. Available evidence identifies iatrogenic withdrawal as a WAT-1 Score of ≥ 3. Prominent manifestations include nervous system hyperirritability, autonomic system dysregulation, gastrointestinal dysfunction and motor abnormalities.

Definition of the Start of Weaning:
The date and time associated with a deliberate attempt to discontinue narcotics (opioids) and/or benzodiazepines**.**

Assessment Frequency and Documentation:
Assess and document the patient's WAT-1 in the designated column of the Patient Care Flowsheet.

Start WAT-1 scoring from the **first day of weaning** in patients who have received narcotics (opioids) +/or benzodiazepines by infusion or regular dosing for prolonged periods (e.g., **≥** 5 days). Continue twice daily scoring until 72 hours after the last dose.

The WAT-1 is completed and documented in the PICU with the SBS at least once per 12 hour shift at 08:00 and 20:00 ± 2 hours until 72 hours after the last PRN narcotic (opioid) and/or benzodiazepine dose.

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More frequent assessment may be necessary in patients who show symptoms of withdrawal from narcotics (opioids) and/or benzodiazepines. The increased frequency of the WAT-1 assessments in these patients should follow the assessment – intervention – reassessment cycle for treating patients' withdrawal.

Description:
The WAT-1 is an 11 item/12 point scale for monitoring narcotic (opioid) and/or benzodiazepine withdrawal symptoms in pediatric patients.

Assessment Method:
1. Review the WAT-1, familiarizing yourself with the indicators and how they are scored.
2. Review nursing documentation in the previous 12 hours.
3. Complete a 2 minute observation period with the patient at rest.
4. Assess patient during a progressive arousal then assess patient during an observation period following the stimulus. Use progressive stimuli to elicit the patient's response; specifically, using a calm voice, call the patient's name. If no response, call the patient's name and gently touch the patient's body. If no response, asses the patient's response to a planned noxious procedure, e.g., endotracheal suctioning. If a noxious procedure is not planned then, using a pencil/pen, provide < 5 seconds of direct pressure to the patient's nail bed.
5. Complete a post-stimulus recovery observation period.

Scoring Method:
Presence and intensity of withdrawal symptoms consist of:

3 indicators obtained from the nursing documentation in the **previous 12 hours** are scored with one point:

1. **loose/watery stools** that are not consistent with the patient's age, medical condition or baseline stooling pattern.
2. **vomiting/retching/gagging** that cannot be attributed to other causes or interventions.
3. **temperature elevation** that remains >37.8 more frequently than not during the previous 12 hours and not believed to be associated with an infection.

5 indicators assessed during a **2 minute observation** of the patient at rest are scored with one point:

1. **state behavior** based on observation (asleep/awake/calm = 0 or awake/distressed = 1) or based on the SBS score for sedation in mechanically ventilated patients (SBS ≤ 0 = 0 or SBS ≥ +1 = 1). See SBS guidelines for instructions on completing the SBS score.
2. **tremors** that are moderate to severe and cannot be attributed to another clinical cause.
3. **sweating** that is observed and not related to an appropriate temperature regulation response .
4. **uncoordinated/repetitive movements** that are moderate to severe including head turning, leg or arm flailing or torso arching.
5. **yawning/sneezing** that is observed more than once in the 2 minute observation period.

2 indicators assessed during a **progressive arousal stimulus** scored with one point:

1. **startle to touch** that is severe
2. **muscle tone** that is increased

1 indicator assessed during an **observation period** following the stimulus scored with up to two points:

1. time to return to calm state that is greater than 5 minutes will receive 2 points. If the time to return to calm state is 2-5 minutes, it will receive 1 point.

The final WAT-1 score is the total sum of all indicators (0-12).

Interpretation:

A higher WAT-1 score indicates more withdrawal symptoms while a lower score indicates fewer

SBS

See http://www.marthaaqcurley.com/sbs.html for permission to use the SBS, guidelines and forms