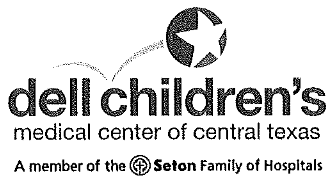


Withdrawal Assessment Tool (WAT-1) Guidelines

What is the WAT-1?

The WAT-1 is an assessment instrument for monitoring opioid and benzodiazepine withdrawal symtoms in pediatric patients where repeated observations during analgesia and sedative weaning take place. After prolonged exposure to opioid exposure, children may develop opioid-induced hyperalgesia, tolerance, and withdrawal.

When to start WAT- 1 scoring?

The provider will place a **communication order** in Compass when the WAT- 1 scoring is to be initiated along with **frequency of scoring** and **parameters for when to notify the provider**. **The WAT- 1 scoring tool will be initiated and completed by the nurse** when patients are started on scheduled dosing of methadone or ativan in an attempt to wean from narcotic and benzodiazepine continuous infusions or around the clock scheduled dosing in patients who have been on these medications for > 4 days. The WAT- 1 tool will continue to be utilized until 48 hours after the last methadone or ativan dose is given.

Where can I find the WAT- 1 scoring sheet?

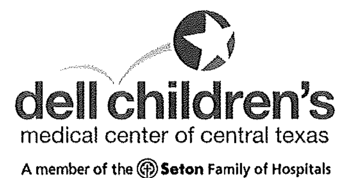
The WAT-1 scoring tool will be located at the nursing station or can be found on the intranet under Pediatric Evidence-Based Guidelines:
http://intranet.seton.org/clinicalres/pediatric_evidence-based_practice_guidelines/

How do I score the WAT- 1?

Step 1. Review WAT 1, familiarizing you with the tool.
Step 2. Review nursing documentation from the **previous 12 hours** and score

- **Loose/watery stools: Score 0** if none. **Score 1** if present.
- **Vomiting/wretching/gagging: Score 0** if none. **Score 1** if present.
- **Temperature > 37.8: Score 0** if the temperature is ≦37.8 for the majority of the 12 hour time period. **Score 1** if the temperature is >37.8 for the majority of the 12 hour time period.

Step 3. Before your assessment, complete a ***2-minute pre-stimulus observation:***



- **State: Score 0** if the patient is asleep or awake and calm/ cooperative. **Score 1** if patient is awake and distressed during the 2 minutes prior to the stimulus.
- **Tremors: Score 0** if no or mild tremors noted. **Score 1** point if moderate to severe tremors noted.
- **Sweating: Score 0** if sweating is absent. **Score 1** point if sweating present.
- **Uncoordinated/repetitive movements: Score 0** if normal movement or only mild uncoordinated or repetitive movement present. **Score 1** if moderate to severe uncoordinated or repetitive movements such as head turning, leg or arm flailing or torso arching are present.
- **Yawning/sneezing: Score 0** if none noted. **Score 1** if observe yawn or sneezing.

Step 4: 1 Minute Stimulus Observation

During normal care, stimulate the patient by calling their name in a calm voice. If no response, gently touch the patient. If there is still no response assess the patient during planned noxious procedure, such as repositioning or suctioning.

- **Startle to touch**: **Score 0** if no or only mild startle. **Score 1** if moderate to severe startle occurs when touched during the stimulus.
- **Muscle Tone: Score 0** if normal tone. **Score 1** if tone increased during the stimulus.

Step 5: Post- stimulus Recovery:

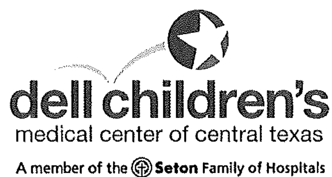
- **Score 0** if patient calm in less than 2 minutes. **Score 1** if the time to return to calm state is 2-5 minutes. **Score 2** if the time to return to calm state is greater than 5 minutes.

How do I get a score?

Sum up all of the points scored to get the WAT-1 score.

What does the number mean?

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

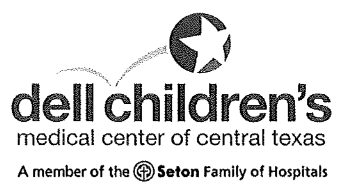


How often do I score the WAT- 1?

The WAT-1 is completed and documented **at least once per 12 hour shift at 08:00 and 20:00 ± 3 hours until 48 hours after the last PRN narcotic (opioid) and/or benzodiazepine dose**. It should also be **documented 1-2 hours after administering a rescue dose** of a narcotic or benzodiazepine. More frequent assessment may be necessary in very symptomatic patients and will require a communication order by the prescribing provider.

When to Notify the Provider?

Notify the provider for a WAT-1 score as indicated in the communication order. Usually this will be a WAT-1 score ≥ 3. If a patient has preexisting symptoms such as a baseline tremor, diarrhea due to another cause, fever from an infectious process the provider may request to be notified for a higher score.



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Ista, van DM, Gamel C, Tivvoel D, de HM (2007). Withdrawal symptoms in children after long-term administration of sedatives and/ or analgesics: A literature review. Assessment remains troublesome. *Intensive Care Medicine*. 1396-1406.

WITHDRAWAL ASSESSMENT TOOL VERSION 1 (WAT – 1)

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Patient Identifier														
	Date:													
	Time:													
Information from patient record, previous 12 hours														
Any loose /watery stools	No = 0 Yes = 1													
Any vomiting/wretching/gagging	No = 0 Yes = 1													
Temperature > 37.8°C	No = 0 Yes = 1													
2 minute pre-stimulus observation														
State	SBS[1] ≤ 0 or asleep/awake/calm = 0 SBS[1] ≥ +1 or awake/distressed = 1													
Tremor	None/mild = 0 Moderate/severe = 1													
Any sweating	No = 0 Yes = 1													
Uncoordinated/repetitive movement	None/mild = 0 Moderate/severe = 1													
Yawning or sneezing	None or 1 = 0 ≥2 = 1													
1 minute stimulus observation														
Startle to touch	None/mild = 0 Moderate/severe = 1													
Muscle tone	Normal = 0 Increased = 1													
Post-stimulus recovery														
Time to gain calm state (SBS[1] ≤ 0)	< 2min = 0 2 - 5min = 1 > 5 min = 2													
Total Score (0-12)														

Withdrawal Assessment Tool (WAT-1) Instructions

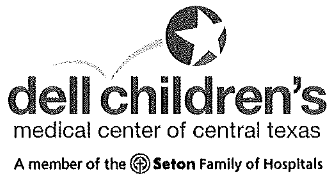
1. Review nursing documentation from the **previous 12 hours** and score
   - **Loose/watery stools: Score 0** if none. **Score 1** if present.
   - **Vomiting/wretching/gagging: Score 0** if none. **Score 1** if present.
   - **Temperature > 37.8: Score 0** if the temperature is ≦37.8 for the majority of the 12 hour time period. **Score 1** if the temperature is >37.8 for the majority of the 12 hour time period.
2. Before your assessment, complete a ***2-minute pre-stimulus observation:***
   - **State: Score 0** if the patient is asleep or awake and calm/ cooperative.
     Score 1 if patient is awake and distressed during the 2 minutes prior to the stimulus.
   - **Tremors: Score 0** if no or mild tremors noted. **Score 1** point if moderate to severe tremors noted.
   - **Sweating: Score 0** if sweating is absent. **Score 1** point if sweating present.
   - **Uncoordinated/repetitive movements: Score 0** if normal movement or only mild uncoordinated or repetitive movement present.
     Score 1 if moderate to severe uncoordinated or repetitive movements such as head turning, leg or arm flailing or torso arching are present.
   - **Yawning/sneezing: Score 0** if none noted. **Score 1** if observe yawn or sneezing.
3. One Minute Stimulus Observation

During normal care, stimulate the patient by calling their name in a calm voice. If no response, gently touch the patient. If there is still no response assess the patient during planned noxious procedure, such as repositioning or suctioning.

   - **Startle to touch: Score 0** if no or only mild startle. **Score 1** if moderate to severe startle occurs when touched during the stimulus.
   - **Muscle Tone: Score 0** if normal tone. **Score 1** if tone increased during the stimulus.

4. Post- stimulus Recovery:
   - **Score 0** if patient calm in less than 2 minutes. **Score 1** if the time to return to calm state is 2-5 minutes. **Score 2** if the time to return to calm state is greater than 5 minutes.

To Score: Sum up all of the points scored to get the WAT-1 score.



Guideline/ Protocol/Algorithm Preparation

This guideline/ protocol/ algorithm was prepared in collaboration with the Evidence-Based Practice (EBP) team and content experts at Dell Children's Medical Center (DCMC). Development of this document supports the DCMC Quality and Safety Program initiative to promote clinical guidelines and outcomes that build a culture of quality and safety within the organization.

Content Expert Team

Alexandra Wilson, MD

Robin Singh, RN

Carolyn Ragsdale, Pharmacist

Ashley Sens, MD

Ronda Machen, Pharmacist

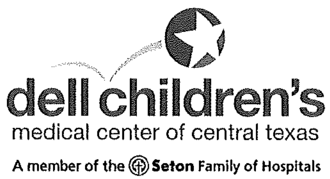
Jasmin Balderrama, RN

Elena Daguer, RN

Jodie Reed, Critical Care Nurse Practitioner

EBP Team

Vickie Simpson, MSN, RN, CPN, CPHQ, CCRN



Evidence-Based Practice Guideline, Protocol, and Algorithm

Signature Page of Support

WAT-1 Narcotic Withdawal Assessment Tool and Completion Guidelines

June 27, 2013

The signatures below indicate support for the attached guideline, protocol and/or algorithm. The intent is not to be prescriptive but to provide a cohesive, standardized, and evidence-based (when available) approach to patient care. The physician must consider each patient and family's circumstance to make the ultimate judgment regarding best care.

Name	Service/ Department
[illegible] MD	PICU.
[illegible] MD	PCRS